Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
1	2	1	0	32	1	30.8	0.5	0.56	0	-7.07	10	3.57	1.78	-1.44	-0.72	-5.01	347.67
1	3	2	1	48	0.888889	35.87	0.583333	0.53	5.44	0	2.47	8.62	2.87	4.31	1.44	-4.32	-100.22
1	4	3	2	64	0.75	36.66	0.625	0.54	18.38	-5	1.22	4.65	1.16	7.28	1.82	2.63	36.1
1	5	4	3	80	0.64	36.3	0.65	0.55	35.28	0	0.8	8.67	1.73	6.34	1.27	-2.32	-36.66
1	6	5	4	96	0.555556	35.59	0.666667	0.58	54.44	-4.08	0.61	1.92	0.32	5.64	0.94	3.72	66.01
1	7	6	5	112	0.489796	34.77	0.678571	0.6	75	0	0.5	2.12	0.3	2.26	0.32	0.14	6.13
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
2	3	1	-1	48	0.888889	35.87	0.416667	2.07	5.44	0	2.47	7.08	2.36	4.64	1.55	-2.44	-52.59
2	4	2	0	64	1	48.88	0.5	1.79	0	5	10	28.33	7.08	16.63	4.16	-11.69	-70.28
2	5	3	1	80	0.96	54.46	0.55	1.7	3.92	0	4.32	24.24	4.85	18.71	3.74	-5.53	-29.54
2	6	4	2	96	0.888889	56.94	0.583333	1.67	13.61	4.08	2.47	30.32	5.05	25.34	4.22	-4.98	-19.67
2	7	5	3	112	0.816327	57.95	0.607143	1.68	27	0	1.65	27.02	3.86	24.35	3.48	-2.67	-10.96
2	8	6	4	128	0.75	58.2	0.625	1.7	42.88	3.54	1.22	29.99	3.75	27.56	3.44	-2.43	-8.81
2	9	7	5	144	0.691358	58.03	0.638889	1.73	60.49	0	0.97	24.72	2.75	24.51	2.72	-0.2	-0.82
2	10	8	6	160	0.64	57.63	0.65	1.76	79.38	3.16	0.8	25.2	2.52	25.52	2.55	0.32	1.27
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
3	5	2	-1	80	0.96	54.46	0.45	3.81	3.92	0	4.32	22.13	4.43	21.69	4.34	-0.45	-2.07
3	6	3	0	96	1	64.06	0.5	3.52	0	-4.08	10	34.34	5.72	29.67	4.94	-4.68	-15.76
3	7	4	1	112	0.979592	69.54	0.535714	3.38	3	0	5.49	41.57	5.94	35.29	5.04	-6.28	-17.81
3	8	5	2	128	0.9375	72.75	0.5625	3.31	10.72	-3.54	3.5	41.18	5.15	40.11	5.01	-1.07	-2.67
3	9	6	3	144	0.888889	74.61	0.583333	3.29	21.78	0	2.47	46.79	5.2	42.53	4.73	-4.25	-10
3	10	7	4	160	0.84	75.64	0.6	3.29	35.28	-3.16	1.86	44.49	4.45	44.82	4.48	0.33	0.73
3	11	8	5	176	0.793388	76.13	0.613636	3.31	50.62	0	1.48	47.42	4.31	44.97	4.09	-2.45	-5.46
3	12	9	6	192	0.75	76.26	0.625	3.34	67.38	-2.89	1.22	43.36	3.61	45.39	3.78	2.03	4.47
3	13	10	7	208	0.710059	76.16	0.634615	3.38	85.24	0	1.04	44.26	3.4	43.9	3.38	-0.36	-0.81
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
4	7	3	-1	112	0.979592	69.54	0.464286	6	3	0	5.49	38.95	5.56	38.12	5.45	-0.83	-2.18
4	8	4	0	128	1	77.6	0.5	5.68	0	3.54	10	58.26	7.28	49.67	6.21	-8.59	-17.29
4	9	5	1	144	0.987654	82.9	0.527778	5.5	2.42	0	6.27	59.45	6.61	53.57	5.95	-5.88	-10.98
4	10	6	2	160	0.96	86.44	0.55	5.39	8.82	3.16	4.32	66.82	6.68	61.47	6.15	-5.35	-8.71
4	11	7	3	176	0.92562	88.82	0.568182	5.34	18.22	0	3.18	66.8	6.07	62.87	5.72	-3.93	-6.26
4	12	8	4	192	0.888889	90.39	0.583333	5.31	29.94	2.89	2.47	71.71	5.98	68.05	5.67	-3.66	-5.38
4	13	9	5	208	0.852071	91.39	0.596154	5.32	43.49	0	1.99	69.79	5.37	67.53	5.19	-2.26	-3.35
4	14	10	6	224	0.816327	91.99	0.607143	5.33	58.5	2.67	1.65	72.5	5.18	70.66	5.05	-1.84	-2.61
4	15	11	7	240	0.782222	92.3	0.616667	5.36	74.7	0	1.41	69.05	4.6	68.67	4.58	-0.38	-0.56
4	16	12	8	256	0.75	92.39	0.625	5.4	91.88	2.5	1.22	70.07	4.38	70.23	4.39	0.17	0.24
4	17	13	9	272	0.719723	92.31	0.632353	5.44	109.87	0	1.08	65.46	3.85	67.1	3.95	1.64	2.45
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
5	9	4	-1	144	0.987654	82.9	0.472222	8.58	2.42	0	6.27	56.36	6.26	55.72	6.19	-0.64	-1.16
5	10	5	0	160	1	90.05	0.5	8.24	0	-3.16	10	68.55	6.86	64.83	6.48	-3.72	-5.74
5	11	6	1	176	0.991736	95.16	0.522727	8.02	2.02	0	6.83	77.62	7.06	71.83	6.53	-5.79	-8.06
5	12	7	2	192	0.972222	98.86	0.541667	7.87	7.49	-2.89	4.97	79.86	6.66	78.09	6.51	-1.77	-2.27
5	13	8	3	208	0.946746	101.55	0.557692	7.78	15.66	0	3.79	86.81	6.68	82.35	6.33	-4.46	-5.41
5	14	9	4	224	0.918367	103.49	0.571429	7.73	26	-2.67	3.01	87.12	6.22	86.34	6.17	-0.77	-0.9
5	15	10	5	240	0.888889	104.88	0.583333	7.71	38.11	0	2.47	91.76	6.12	88.5	5.9	-3.26	-3.68
5	16	11	6	256	0.859375	105.86	0.59375	7.71	51.68	-2.5	2.07	90.32	5.65	90.72	5.67	0.4	0.44
5	17	12	7	272	0.83045	106.52	0.602941	7.72	66.46	0	1.77	93.07	5.47	91.25	5.37	-1.82	-2
5	18	13	8	288	0.802469	106.92	0.611111	7.75	82.27	-2.36	1.55	90.25	5.01	92.05	5.11	1.81	1.96
5	19	14	9	304	0.775623	107.14	0.618421	7.78	98.95	0	1.37	91.49	4.82	91.29	4.8	-0.2	-0.22
5	20	15	10	320	0.75	107.21	0.625	7.83	116.38	-2.24	1.22	87.58	4.38	90.95	4.55	3.37	3.71
5	21	16	11	336	0.725624	107.15	0.630952	7.88	134.44	0	1.11	87.64	4.17	89.15	4.25	1.51	1.69
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
6	11	5	-1	176	0.991736	95.16	0.477273	11.54	2.02	0	6.83	74.1	6.74	73.32	6.67	-0.78	-1.07
6	12	6	0	192	1	101.68	0.5	11.16	0	2.89	10	92.04	7.67	85.36	7.11	-6.68	-7.82
6	13	7	1	208	0.994083	106.62	0.519231	10.9	1.74	0	7.24	95.97	7.38	90.72	6.98	-5.26	-5.79
6	14	8	2	224	0.979592	110.39	0.535714	10.72	6.5	2.67	5.49	104.55	7.47	99.66	7.12	-4.89	-4.91
6	15	9	3	240	0.96	113.27	0.55	10.6	13.72	0	4.32	106.72	7.11	102.72	6.85	-4.01	-3.9
6	16	10	4	256	0.9375	115.48	0.5625	10.52	22.97	2.5	3.5	113.03	7.06	109.24	6.83	-3.79	-3.47
6	17	11	5	272	0.913495	117.17	0.573529	10.47	33.91	0	2.91	113.36	6.67	110.47	6.5	-2.89	-2.61
6	18	12	6	288	0.888889	118.44	0.583333	10.45	46.28	2.36	2.47	117.66	6.54	115.09	6.39	-2.57	-2.23
6	19	13	7	304	0.864266	119.39	0.592105	10.44	59.86	0	2.13	116.44	6.13	114.86	6.05	-1.59	-1.38
6	20	14	8	320	0.84	120.07	0.6	10.45	74.48	2.24	1.86	119.1	5.95	117.94	5.9	-1.16	-0.98
6	21	15	9	336	0.816327	120.54	0.607143	10.48	90	0	1.65	116.63	5.55	116.51	5.55	-0.12	-0.1
6	22	16	10	352	0.793388	120.85	0.613636	10.51	106.3	2.13	1.48	117.95	5.36	118.34	5.38	0.38	0.32
6	23	17	11	368	0.771267	121.01	0.619565	10.56	123.29	0	1.34	114.49	4.98	115.93	5.04	1.44	1.24
6	24	18	12	384	0.75	121.06	0.625	10.61	140.88	2.04	1.22	114.72	4.78	116.71	4.86	1.99	1.7
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
7	13	6	-1	208	0.994083	106.62	0.480769	14.84	1.74	0	7.24	92.04	7.08	91.48	7.04	-0.55	-0.61
7	14	7	0	224	1	112.69	0.5	14.43	0	-2.67	10	104.2	7.44	101.4	7.24	-2.8	-2.77
7	15	8	1	240	0.995556	117.47	0.516667	14.14	1.52	0	7.56	114.42	7.63	109.43	7.3	-5	-4.56
7	16	9	2	256	0.984375	121.26	0.53125	13.92	5.74	-2.5	5.92	118.49	7.41	116.77	7.3	-1.72	-1.48
7	17	10	3	272	0.968858	124.27	0.544118	13.77	12.21	0	4.77	126.52	7.44	122.35	7.2	-4.18	-3.41
7	18	11	4	288	0.950617	126.66	0.555556	13.65	20.57	-2.36	3.93	128.69	7.15	127.61	7.09	-1.08	-0.85
7	19	12	5	304	0.930748	128.57	0.565789	13.58	30.54	0	3.31	134.62	7.09	131.23	6.91	-3.39	-2.59
7	20	13	6	320	0.91	130.08	0.575	13.53	41.89	-2.24	2.84	135.1	6.75	134.8	6.74	-0.3	-0.22
7	21	14	7	336	0.888889	131.26	0.583333	13.51	54.44	0	2.47	139.26	6.63	136.84	6.52	-2.41	-1.76
7	22	15	8	352	0.867769	132.18	0.590909	13.5	68.03	-2.13	2.17	138.33	6.29	139.03	6.32	0.7	0.5
7	23	16	9	368	0.846881	132.87	0.597826	13.51	82.53	0	1.93	141.02	6.13	139.77	6.08	-1.25	-0.89
7	24	17	10	384	0.826389	133.39	0.604167	13.53	97.83	-2.04	1.74	138.94	5.79	140.79	5.87	1.85	1.31
7	25	18	11	400	0.8064	133.76	0.61	13.57	113.84	0	1.58	140.42	5.62	140.45	5.62	0.03	0.02

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
7	26	19	12	416	0.786982	133.99	0.615385	13.61	130.47	-1.96	1.44	137.4	5.28	140.5	5.4	3.1	2.2
7	27	20	13	432	0.768176	134.12	0.62037	13.66	147.67	0	1.32	137.87	5.11	139.25	5.16	1.38	0.99
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
8	15	7	-1	240	0.995556	117.47	0.483333	18.46	1.52	0	7.56	110.1	7.34	109.59	7.31	-0.51	-0.46
8	16	8	0	256	1	123.18	0.5	18.03	0	2.5	10	127.28	7.96	122.04	7.63	-5.25	-4.3
8	17	9	1	272	0.99654	127.82	0.514706	17.7	1.36	0	7.81	132.93	7.82	128.45	7.56	-4.48	-3.49
8	18	10	2	288	0.987654	131.6	0.527778	17.45	5.14	2.36	6.27	142.43	7.91	138.19	7.68	-4.24	-3.07
8	19	11	3	304	0.975069	134.69	0.539474	17.26	10.99	0	5.15	146.2	7.69	142.49	7.5	-3.71	-2.61
8	20	12	4	320	0.96	137.22	0.55	17.12	18.62	2.24	4.32	153.59	7.68	150.04	7.5	-3.55	-2.36
8	21	13	5	336	0.943311	139.3	0.559524	17.02	27.78	0	3.68	155.59	7.41	152.61	7.27	-2.98	-1.95
8	22	14	6	352	0.92562	140.99	0.568182	16.94	38.27	2.13	3.18	161.11	7.32	158.38	7.2	-2.73	-1.73
8	23	15	7	368	0.907372	142.37	0.576087	16.9	49.93	0	2.79	161.59	7.03	159.52	6.94	-2.08	-1.3
8	24	16	8	384	0.888889	143.48	0.583333	16.87	62.61	2.04	2.47	165.54	6.9	163.8	6.83	-1.74	-1.06
8	25	17	9	400	0.8704	144.37	0.59	16.87	76.2	0	2.2	164.76	6.59	163.75	6.55	-1.01	-0.62
8	26	18	10	416	0.852071	145.08	0.596154	16.87	90.61	1.96	1.99	167.39	6.44	166.79	6.41	-0.61	-0.36
8	27	19	11	432	0.834019	145.62	0.601852	16.89	105.73	0	1.81	165.56	6.13	165.72	6.14	0.16	0.1
8	28	20	12	448	0.816327	146.03	0.607143	16.93	121.5	1.89	1.65	167.09	5.97	167.7	5.99	0.61	0.37
8	29	21	13	464	0.799049	146.32	0.612069	16.97	137.85	0	1.52	164.38	5.67	165.78	5.72	1.4	0.84
8	30	22	14	480	0.782222	146.51	0.616667	17.02	154.73	1.83	1.41	164.97	5.5	166.85	5.56	1.88	1.12
8	31	23	15	496	0.765869	146.62	0.620968	17.07	172.09	0	1.31	161.53	5.21	164.19	5.3	2.66	1.62
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
9	17	8	-1	272	0.99654	127.82	0.485294	22.4	1.36	0	7.81	128.23	7.54	127.99	7.53	-0.24	-0.19
9	18	9	0	288	1	133.24	0.5	21.94	0	-2.36	10	140.45	7.8	138.48	7.69	-1.97	-1.42
9	19	10	1	304	0.99723	137.75	0.513158	21.58	1.22	0	8.02	151.46	7.97	147.28	7.75	-4.18	-2.84
9	20	11	2	320	0.99	141.51	0.525	21.3	4.65	-2.24	6.57	156.87	7.84	155.45	7.77	-1.42	-0.91
9	21	12	3	336	0.979592	144.65	0.535714	21.08	10	0	5.49	165.76	7.89	162.03	7.72	-3.73	-2.3
9	22	13	4	352	0.966942	147.28	0.545455	20.9	17.01	-2.13	4.66	169.33	7.7	168.28	7.65	-1.05	-0.63
9	23	14	5	368	0.952741	149.48	0.554348	20.77	25.47	0	4.01	176.28	7.66	173.04	7.52	-3.25	-1.88
9	24	15	6	384	0.9375	151.33	0.5625	20.67	35.22	-2.04	3.5	178.24	7.43	177.69	7.4	-0.55	-0.31
9	25	16	7	400	0.9216	152.86	0.57	20.61	46.1	0	3.09	183.52	7.34	180.93	7.24	-2.59	-1.43
9	26	17	8	416	0.905325	154.14	0.576923	20.56	57.99	-1.96	2.75	184.1	7.08	184.23	7.09	0.14	0.07
9	27	18	9	432	0.888889	155.2	0.583333	20.53	70.78	0	2.47	187.95	6.96	186.2	6.9	-1.76	-0.94
9	28	19	10	448	0.872449	156.07	0.589286	20.52	84.38	-1.89	2.23	187.37	6.69	188.35	6.73	0.98	0.52
9	29	20	11	464	0.856124	156.77	0.594828	20.53	98.7	0	2.03	190.03	6.55	189.23	6.53	-0.8	-0.42
9	30	21	12	480	0.84	157.34	0.6	20.55	113.68	-1.83	1.86	188.47	6.28	190.4	6.35	1.92	1.01
9	31	22	13	496	0.824142	157.78	0.604839	20.58	129.26	0	1.72	190.11	6.13	190.34	6.14	0.24	0.12
9	32	23	14	512	0.808594	158.11	0.609375	20.62	145.37	-1.77	1.59	187.72	5.87	190.65	5.96	2.93	1.54
9	33	24	15	528	0.793388	158.35	0.613636	20.67	161.98	0	1.48	188.48	5.71	189.79	5.75	1.31	0.69
9	34	25	16	544	0.778547	158.52	0.617647	20.72	179.04	-1.71	1.39	185.39	5.45	189.35	5.57	3.96	2.09
9	35	26	17	560	0.764082	158.61	0.621429	20.78	196.52	0	1.3	185.39	5.3	187.78	5.37	2.39	1.27

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
10	19	9	-1	304	0.99723	137.75	0.486842	26.64	1.22	0	8.02	146.4	7.71	146.29	7.7	-0.11	-0.07
10	20	10	0	320	1	142.94	0.5	26.16	0	2.24	10	163.14	8.16	159.06	7.95	-4.08	-2.56
10	21	11	1	336	0.997732	147.33	0.511905	25.76	1.11	0	8.19	169.98	8.09	166.28	7.92	-3.7	-2.23
10	22	12	2	352	0.991736	151.06	0.522727	25.45	4.25	2.13	6.83	180.2	8.19	176.63	8.03	-3.57	-2.02
10	23	13	3	368	0.982987	154.23	0.532609	25.2	9.17	0	5.78	185.19	8.05	181.9	7.91	-3.28	-1.81
10	24	14	4	384	0.972222	156.93	0.541667	24.99	15.65	2.04	4.97	193.43	8.06	190.26	7.93	-3.17	-1.66
10	25	15	5	400	0.96	159.23	0.55	24.83	23.52	0	4.32	196.73	7.87	193.9	7.76	-2.83	-1.46
10	26	16	6	416	0.946746	161.19	0.557692	24.71	32.62	1.96	3.79	203.23	7.82	200.59	7.71	-2.64	-1.32
10	27	17	7	432	0.932785	162.86	0.564815	24.62	42.82	0	3.37	205.07	7.6	202.85	7.51	-2.22	-1.09
10	28	18	8	448	0.918367	164.28	0.571429	24.55	54	1.89	3.01	210.07	7.5	208.12	7.43	-1.95	-0.94
10	29	19	9	464	0.903686	165.48	0.577586	24.5	66.07	0	2.72	210.66	7.26	209.2	7.21	-1.46	-0.7
10	30	20	10	480	0.888889	166.49	0.583333	24.48	78.94	1.83	2.47	214.38	7.15	213.25	7.11	-1.13	-0.53
10	31	21	11	496	0.874089	167.34	0.58871	24.46	92.54	0	2.25	213.9	6.9	213.33	6.88	-0.58	-0.27
10	32	22	12	512	0.859375	168.04	0.59375	24.47	106.8	1.77	2.07	216.52	6.77	216.32	6.76	-0.2	-0.09
10	33	23	13	528	0.844812	168.62	0.598485	24.49	121.67	0	1.91	215.14	6.52	215.52	6.53	0.38	0.18
10	34	24	14	544	0.83045	169.08	0.602941	24.51	137.08	1.71	1.77	216.81	6.38	217.6	6.4	0.79	0.36
10	35	25	15	560	0.816327	169.45	0.607143	24.55	153	0	1.65	214.65	6.13	216.03	6.17	1.38	0.64
10	36	26	16	576	0.802469	169.73	0.611111	24.6	169.38	1.67	1.55	215.5	5.99	217.3	6.04	1.8	0.83
10	37	27	17	592	0.788897	169.94	0.614865	24.65	186.19	0	1.45	212.67	5.75	215.06	5.81	2.39	1.11
10	38	28	18	608	0.775623	170.08	0.618421	24.71	203.4	1.62	1.37	212.81	5.6	215.62	5.67	2.81	1.3
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
11	21	10	-1	336	0.997732	147.33	0.488095	31.17	1.11	0	8.19	164.57	7.84	164.74	7.84	0.17	0.1
11	22	11	0	352	1	152.32	0.5	30.66	0	-2.13	10	176.89	8.04	175.67	7.99	-1.22	-0.69
11	23	12	1	368	0.99811	156.6	0.51087	30.24	1.02	0	8.33	188.47	8.19	185.06	8.05	-3.41	-1.84
11	24	13	2	384	0.993056	160.29	0.520833	29.89	3.91	-2.04	7.05	194.91	8.12	193.89	8.08	-1.02	-0.52
11	25	14	3	400	0.9856	163.48	0.53	29.61	8.47	0	6.04	204.49	8.18	201.26	8.05	-3.23	-1.6
11	26	15	4	416	0.976331	166.23	0.538462	29.38	14.5	-1.96	5.24	209.17	8.05	208.31	8.01	-0.87	-0.42
11	27	16	5	432	0.965706	168.61	0.546296	29.19	21.84	0	4.59	216.95	8.04	213.98	7.93	-2.97	-1.39
11	28	17	6	448	0.954082	170.67	0.553571	29.04	30.38	-1.89	4.07	220.09	7.86	219.52	7.84	-0.58	-0.26
11	29	18	7	464	0.941736	172.45	0.560345	28.92	39.97	0	3.63	226.29	7.8	223.74	7.72	-2.55	-1.14
11	30	19	8	480	0.928889	173.99	0.566667	28.83	50.52	-1.83	3.26	228.1	7.6	227.98	7.6	-0.12	-0.05
11	31	20	9	496	0.915713	175.31	0.572581	28.76	61.95	0	2.95	232.93	7.51	230.96	7.45	-1.97	-0.85
11	32	21	10	512	0.902344	176.44	0.578125	28.72	74.17	-1.77	2.69	233.59	7.3	234.07	7.31	0.48	0.2
11	33	22	11	528	0.888889	177.42	0.583333	28.69	87.11	0	2.47	237.25	7.19	235.98	7.15	-1.27	-0.54
11	34	23	12	544	0.875433	178.24	0.588235	28.68	100.71	-1.71	2.27	236.92	6.97	238.11	7	1.19	0.5
11	35	24	13	560	0.862041	178.94	0.592857	28.68	114.92	0	2.1	239.56	6.84	239.09	6.83	-0.47	-0.2
11	36	25	14	576	0.848765	179.52	0.597222	28.69	129.68	-1.67	1.95	238.38	6.62	240.35	6.68	1.97	0.82
11	37	26	15	592	0.835646	180.01	0.601351	28.72	144.96	0	1.82	240.13	6.49	240.5	6.5	0.37	0.15
11	38	27	16	608	0.822715	180.4	0.605263	28.76	160.71	-1.62	1.71	238.22	6.27	241.01	6.34	2.79	1.16
11	39	28	17	624	0.809993	180.71	0.608974	28.8	176.9	0	1.6	239.19	6.13	240.43	6.16	1.24	0.52
11	40	29	18	640	0.7975	180.96	0.6125	28.85	193.49	-1.58	1.51	236.63	5.92	240.26	6.01	3.63	1.51

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
11	41	30	19	656	0.785247	181.13	0.615854	28.91	210.46	0	1.43	236.92	5.78	239.03	5.83	2.11	0.88
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
12	23	11	-1	368	0.99811	156.6	0.48913	35.98	1.02	0	8.33	182.73	7.94	183.07	7.96	0.35	0.19
12	24	12	0	384	1	161.41	0.5	35.44	0	2.04	10	199.18	8.3	196.1	8.17	-3.09	-1.57
12	25	13	1	400	0.9984	165.6	0.51	34.99	0.94	0	8.45	206.92	8.28	203.94	8.16	-2.97	-1.46
12	26	14	2	416	0.994083	169.25	0.519231	34.62	3.62	1.96	7.24	217.7	8.37	214.8	8.26	-2.9	-1.35
12	27	15	3	432	0.987654	172.44	0.527778	34.3	7.86	0	6.27	223.66	8.28	220.85	8.18	-2.81	-1.27
12	28	16	4	448	0.979592	175.23	0.535714	34.04	13.5	1.89	5.49	232.6	8.31	229.87	8.21	-2.73	-1.19
12	29	17	5	464	0.970273	177.68	0.543103	33.83	20.39	0	4.85	236.95	8.17	234.39	8.08	-2.57	-1.09
12	30	18	6	480	0.96	179.81	0.55	33.65	28.42	1.83	4.32	244.26	8.14	241.83	8.06	-2.43	-1
12	31	19	7	496	0.949011	181.68	0.556452	33.51	37.48	0	3.87	247.21	7.97	245.03	7.9	-2.18	-0.89
12	32	20	8	512	0.9375	183.32	0.5625	33.39	47.47	1.77	3.5	253.09	7.91	251.12	7.85	-1.97	-0.78
12	33	21	9	528	0.92562	184.75	0.568182	33.31	58.31	0	3.18	254.81	7.72	253.17	7.67	-1.65	-0.65
12	34	22	10	544	0.913495	185.99	0.573529	33.24	69.94	1.71	2.91	259.45	7.63	258.08	7.59	-1.37	-0.53
12	35	23	11	560	0.901224	187.07	0.578571	33.19	82.28	0	2.67	260.12	7.43	259.13	7.4	-1	-0.38
12	36	24	12	576	0.888889	188.01	0.583333	33.17	95.28	1.67	2.47	263.68	7.32	263	7.31	-0.68	-0.26
12	37	25	13	592	0.876552	188.82	0.587838	33.15	108.88	0	2.29	263.43	7.12	263.17	7.11	-0.26	-0.1
12	38	26	14	608	0.864266	189.51	0.592105	33.15	123.04	1.62	2.13	266.04	7	266.13	7	0.09	0.03
12	39	27	15	624	0.852071	190.1	0.596154	33.17	137.72	0	1.99	265	6.79	265.52	6.81	0.53	0.2
12	40	28	16	640	0.84	190.6	0.6	33.19	152.88	1.58	1.86	266.77	6.67	267.67	6.69	0.9	0.34
12	41	29	17	656	0.828079	191.01	0.603659	33.23	168.48	0	1.75	265.03	6.46	266.37	6.5	1.34	0.5
12	42	30	18	672	0.816327	191.35	0.607143	33.27	184.5	1.54	1.65	266.07	6.34	267.8	6.38	1.72	0.64
12	43	31	19	688	0.804759	191.62	0.610465	33.32	200.9	0	1.56	263.72	6.13	265.88	6.18	2.16	0.81
12	44	32	20	704	0.793388	191.83	0.613636	33.38	217.67	1.51	1.48	264.11	6	266.65	6.06	2.54	0.95
12	45	33	21	720	0.782222	191.99	0.616667	33.44	234.76	0	1.41	261.21	5.8	264.18	5.87	2.97	1.12
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
13	25	12	-1	400	0.9984	165.6	0.49	41.07	0.94	0	8.45	200.84	8.03	201.46	8.06	0.62	0.31
13	26	13	0	416	1	170.26	0.5	40.5	0	-1.96	10	213.27	8.2	212.74	8.18	-0.53	-0.25
13	27	14	1	432	0.998628	174.36	0.509259	40.02	0.87	0	8.56	225.3	8.34	222.61	8.24	-2.69	-1.21
13	28	15	2	448	0.994898	177.97	0.517857	39.62	3.38	-1.89	7.41	232.55	8.31	231.97	8.28	-0.58	-0.25
13	29	16	3	464	0.989298	181.16	0.525862	39.28	7.34	0	6.48	242.7	8.37	239.99	8.28	-2.71	-1.13
13	30	17	4	480	0.982222	183.98	0.533333	38.99	12.63	-1.83	5.71	248.29	8.28	247.69	8.26	-0.6	-0.24
13	31	18	5	496	0.973985	186.46	0.540323	38.74	19.12	0	5.08	256.75	8.28	254.12	8.2	-2.63	-1.04
13	32	19	6	512	0.964844	188.67	0.546875	38.54	26.7	-1.77	4.55	260.87	8.15	260.4	8.14	-0.48	-0.18
13	33	20	7	528	0.955005	190.61	0.55303	38.37	35.28	0	4.1	267.84	8.12	265.44	8.04	-2.4	-0.9
13	34	21	8	544	0.944637	192.33	0.558824	38.24	44.76	-1.71	3.72	270.68	7.96	270.47	7.96	-0.2	-0.08
13	35	22	9	560	0.933878	193.85	0.564286	38.13	55.08	0	3.4	276.34	7.9	274.32	7.84	-2.01	-0.73
13	36	23	10	576	0.92284	195.19	0.569444	38.04	66.17	-1.67	3.11	278.05	7.72	278.26	7.73	0.21	0.07
13	37	24	11	592	0.911614	196.37	0.574324	37.97	77.96	0	2.87	282.57	7.64	281.06	7.6	-1.51	-0.54
13	38	25	12	608	0.900277	197.41	0.578947	37.93	90.4	-1.62	2.65	283.3	7.46	284.03	7.47	0.73	0.26
13	39	26	13	624	0.888889	198.32	0.583333	37.9	103.44	0	2.47	286.81	7.35	285.89	7.33	-0.91	-0.32
13	40	27	14	640	0.8775	199.11	0.5875	37.89	117.05	-1.58	2.3	286.68	7.17	288	7.2	1.33	0.46

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
13	41	28	15	656	0.866151	199.8	0.591463	37.88	131.17	0	2.15	289.3	7.06	289.05	7.05	-0.25	-0.09
13	42	29	16	672	0.854875	200.39	0.595238	37.9	145.78	-1.54	2.02	288.41	6.87	290.39	6.91	1.98	0.68
13	43	30	17	688	0.843699	200.89	0.598837	37.92	160.83	0	1.9	290.25	6.75	290.7	6.76	0.44	0.15
13	44	31	18	704	0.832645	201.32	0.602273	37.95	176.31	-1.51	1.79	288.7	6.56	291.35	6.62	2.65	0.91
13	45	32	19	720	0.821728	201.68	0.605556	37.99	192.18	0	1.7	289.84	6.44	291	6.47	1.15	0.4
13	46	33	20	736	0.810964	201.98	0.608696	38.04	208.41	-1.47	1.61	287.7	6.25	291.03	6.33	3.33	1.14
13	47	34	21	752	0.800362	202.22	0.611702	38.1	224.99	0	1.53	288.22	6.13	290.08	6.17	1.86	0.64
13	48	35	22	768	0.789931	202.4	0.614583	38.17	241.89	-1.44	1.46	285.55	5.95	289.55	6.03	4	1.38
13	49	36	23	784	0.779675	202.54	0.617347	38.24	259.1	0	1.39	285.51	5.83	288.06	5.88	2.54	0.88
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
14	27	13	-1	432	0.998628	174.36	0.490741	46.42	0.87	0	8.56	218.91	8.11	219.72	8.14	0.81	0.37
14	28	14	0	448	1	178.88	0.5	45.83	0	1.89	10	235.18	8.4	232.96	8.32	-2.22	-0.95
14	29	15	1	464	0.998811	182.9	0.508621	45.32	0.82	0	8.65	243.61	8.4	241.32	8.32	-2.29	-0.95
14	30	16	2	480	0.995556	186.47	0.516667	44.89	3.16	1.83	7.56	254.86	8.5	252.59	8.42	-2.27	-0.9
14	31	17	3	496	0.990635	189.65	0.524194	44.52	6.88	0	6.66	261.61	8.44	259.29	8.36	-2.32	-0.89
14	32	18	4	512	0.984375	192.48	0.53125	44.2	11.87	1.77	5.92	271.13	8.47	268.85	8.4	-2.28	-0.85
14	33	19	5	528	0.977043	195.01	0.537879	43.93	18	0	5.29	276.35	8.37	274.1	8.31	-2.25	-0.82
14	34	20	6	544	0.968858	197.26	0.544118	43.7	25.18	1.71	4.77	284.34	8.36	282.19	8.3	-2.15	-0.76
14	35	21	7	560	0.96	199.27	0.55	43.51	33.32	0	4.32	288.21	8.23	286.18	8.18	-2.03	-0.71
14	36	22	8	576	0.950617	201.07	0.555556	43.35	42.35	1.67	3.93	294.84	8.19	292.97	8.14	-1.87	-0.64
14	37	23	9	592	0.940833	202.67	0.560811	43.22	52.19	0	3.6	297.53	8.04	295.85	8	-1.68	-0.57
14	38	24	10	608	0.930748	204.09	0.565789	43.11	62.78	1.62	3.31	302.96	7.97	301.5	7.93	-1.46	-0.48
14	39	25	11	624	0.920447	205.36	0.570513	43.02	74.06	0	3.06	304.61	7.81	303.4	7.78	-1.22	-0.4
14	40	26	12	640	0.91	206.48	0.575	42.96	85.99	1.58	2.84	308.98	7.72	308.04	7.7	-0.95	-0.31
14	41	27	13	656	0.899465	207.48	0.579268	42.91	98.52	0	2.64	309.72	7.55	309.06	7.54	-0.66	-0.21
14	42	28	14	672	0.888889	208.36	0.583333	42.88	111.61	1.54	2.47	313.16	7.46	312.8	7.45	-0.36	-0.11
14	43	29	15	688	0.878313	209.14	0.587209	42.87	125.22	0	2.31	313.09	7.28	313.04	7.28	-0.05	-0.01
14	44	30	16	704	0.867769	209.82	0.590909	42.86	139.31	1.51	2.17	315.69	7.17	315.97	7.18	0.28	0.09
14	45	31	17	720	0.857284	210.41	0.594444	42.87	153.85	0	2.05	314.91	7	315.52	7.01	0.61	0.19
14	46	32	18	736	0.846881	210.93	0.597826	42.9	168.81	1.47	1.93	316.77	6.89	317.72	6.91	0.94	0.3
14	47	33	19	752	0.836578	211.37	0.601064	42.93	184.18	0	1.83	315.36	6.71	316.63	6.74	1.28	0.4
14	48	34	20	768	0.826389	211.75	0.604167	42.97	199.91	1.44	1.74	316.56	6.59	318.17	6.63	1.62	0.51
14	49	35	21	784	0.816327	212.06	0.607143	43.02	216	0	1.65	314.58	6.42	316.52	6.46	1.94	0.61
14	50	36	22	800	0.8064	212.32	0.61	43.07	232.42	1.41	1.58	315.18	6.3	317.46	6.35	2.28	0.72
14	51	37	23	816	0.796617	212.54	0.612745	43.14	249.14	0	1.5	312.69	6.13	315.29	6.18	2.6	0.82
14	52	38	24	832	0.786982	212.7	0.615385	43.21	266.17	1.39	1.44	312.75	6.01	315.68	6.07	2.93	0.93
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
15	29	14	-1	464	0.998811	182.9	0.491379	52.03	0.82	0	8.65	236.91	8.17	237.98	8.21	1.07	0.45
15	30	15	0	480	1	187.3	0.5	51.41	0	-1.83	10	249.46	8.32	249.56	8.32	0.1	0.04
15	31	16	1	496	0.998959	191.25	0.508065	50.88	0.76	0	8.73	261.84	8.45	259.82	8.38	-2.02	-0.78
15	32	17	2	512	0.996094	194.78	0.515625	50.42	2.97	-1.77	7.69	269.76	8.43	269.63	8.43	-0.13	-0.05
15	33	18	3	528	0.991736	197.94	0.522727	50.02	6.48	0	6.83	280.38	8.5	278.18	8.43	-2.2	-0.79

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
15	34	19	4	544	0.986159	200.79	0.529412	49.68	11.19	-1.71	6.1	286.73	8.43	286.44	8.42	-0.29	-0.1
15	35	20	5	560	0.979592	203.34	0.535714	49.38	17	0	5.49	295.77	8.45	293.5	8.39	-2.26	-0.77
15	36	21	6	576	0.972222	205.64	0.541667	49.12	23.82	-1.67	4.97	300.72	8.35	300.41	8.34	-0.31	-0.1
15	37	22	7	592	0.964207	207.7	0.547297	48.91	31.57	0	4.52	308.34	8.33	306.16	8.27	-2.18	-0.71
15	38	23	8	608	0.955679	209.56	0.552632	48.72	40.18	-1.62	4.13	312.05	8.21	311.87	8.21	-0.18	-0.06
15	39	24	9	624	0.946746	211.22	0.557692	48.57	49.58	0	3.79	318.42	8.16	316.47	8.11	-1.95	-0.62
15	40	25	10	640	0.9375	212.72	0.5625	48.44	59.72	-1.58	3.5	321.04	8.03	321.12	8.03	0.08	0.03
15	41	26	11	656	0.928019	214.07	0.567073	48.33	70.54	0	3.24	326.3	7.96	324.69	7.92	-1.61	-0.49
15	42	27	12	672	0.918367	215.27	0.571429	48.25	82	-1.54	3.01	327.95	7.81	328.4	7.82	0.45	0.14
15	43	28	13	688	0.908599	216.35	0.575581	48.18	94.05	0	2.81	332.22	7.73	331.06	7.7	-1.17	-0.35
15	44	29	14	704	0.89876	217.31	0.579545	48.14	106.66	-1.51	2.63	333.02	7.57	333.91	7.59	0.9	0.27
15	45	30	15	720	0.888889	218.17	0.583333	48.11	119.78	0	2.47	336.41	7.48	335.75	7.46	-0.66	-0.2
15	46	31	16	736	0.879017	218.93	0.586957	48.09	133.38	-1.47	2.32	336.44	7.31	337.84	7.34	1.4	0.41
15	47	32	17	752	0.869172	219.6	0.590426	48.09	147.44	0	2.19	339.05	7.21	338.94	7.21	-0.11	-0.03
15	48	33	18	768	0.859375	220.2	0.59375	48.1	161.93	-1.44	2.07	338.4	7.05	340.34	7.09	1.94	0.57
15	49	34	19	784	0.849646	220.72	0.596939	48.12	176.82	0	1.96	340.31	6.95	340.77	6.95	0.46	0.13
15	50	35	20	800	0.84	221.17	0.6	48.14	192.08	-1.41	1.86	339.05	6.78	341.55	6.83	2.49	0.73
15	51	36	21	816	0.83045	221.56	0.602941	48.18	207.7	0	1.77	340.33	6.67	341.37	6.69	1.04	0.3
15	52	37	22	832	0.821006	221.9	0.605769	48.23	223.65	-1.39	1.69	338.52	6.51	341.57	6.57	3.05	0.89
15	53	38	23	848	0.811677	222.18	0.608491	48.29	239.92	0	1.62	339.23	6.4	340.84	6.43	1.61	0.47
15	54	39	24	864	0.802469	222.41	0.611111	48.35	256.49	-1.36	1.55	336.93	6.24	340.52	6.31	3.59	1.05
15	55	40	25	880	0.793388	222.6	0.613636	48.42	273.35	0	1.48	337.12	6.13	339.28	6.17	2.17	0.64
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
16	31	15	-1	496	0.998959	191.25	0.491935	57.89	0.76	0	8.73	254.83	8.22	256.11	8.26	1.27	0.5
16	32	16	0	512	1	195.54	0.5	57.25	0	1.77	10	270.98	8.47	269.53	8.42	-1.45	-0.54
16	33	17	1	528	0.999082	199.41	0.507576	56.69	0.72	0	8.8	279.98	8.48	278.33	8.43	-1.65	-0.59
16	34	18	2	544	0.99654	202.9	0.514706	56.21	2.8	1.71	7.81	291.62	8.58	289.94	8.53	-1.68	-0.58
16	35	19	3	560	0.992653	206.05	0.521429	55.78	6.12	0	6.98	299.02	8.54	297.19	8.49	-1.84	-0.62
16	36	20	4	576	0.987654	208.9	0.527778	55.41	10.59	1.67	6.27	309.04	8.58	307.21	8.53	-1.83	-0.59
16	37	21	5	592	0.981738	211.48	0.533784	55.09	16.11	0	5.67	315	8.51	313.09	8.46	-1.9	-0.61
16	38	22	6	608	0.975069	213.81	0.539474	54.8	22.6	1.62	5.15	323.56	8.51	321.73	8.47	-1.83	-0.57
16	39	23	7	624	0.967784	215.92	0.544872	54.56	29.99	0	4.71	328.23	8.42	326.4	8.37	-1.83	-0.56
16	40	24	8	640	0.96	217.83	0.55	54.35	38.22	1.58	4.32	335.5	8.39	333.8	8.34	-1.7	-0.51
16	41	25	9	656	0.951814	219.55	0.554878	54.18	47.22	0	3.98	339.02	8.27	337.4	8.23	-1.63	-0.48
16	42	26	10	672	0.943311	221.12	0.559524	54.03	56.94	1.54	3.68	345.13	8.22	343.7	8.18	-1.44	-0.42
16	43	27	11	688	0.934559	222.53	0.563953	53.9	67.34	0	3.41	347.65	8.08	346.34	8.05	-1.31	-0.38
16	44	28	12	704	0.92562	223.8	0.568182	53.8	78.36	1.51	3.18	352.73	8.02	351.65	7.99	-1.08	-0.31
16	45	29	13	720	0.916543	224.96	0.572222	53.71	89.97	0	2.97	354.34	7.87	353.43	7.85	-0.9	-0.26
16	46	30	14	736	0.907372	225.99	0.576087	53.65	102.12	1.47	2.79	358.5	7.79	357.86	7.78	-0.64	-0.18
16	47	31	15	752	0.898144	226.92	0.579787	53.6	114.79	0	2.62	359.3	7.64	358.87	7.64	-0.43	-0.12
16	48	32	16	768	0.888889	227.76	0.583333	53.57	127.94	1.44	2.47	362.64	7.55	362.49	7.55	-0.14	-0.04
16	49	33	17	784	0.879633	228.51	0.586735	53.55	141.55	0	2.33	362.72	7.4	362.8	7.4	0.09	0.02
16	50	34	18	800	0.8704	229.18	0.59	53.55	155.58	1.41	2.2	365.31	7.31	365.7	7.31	0.39	0.11
16	51	35	19	816	0.861207	229.77	0.593137	53.55	170.02	0	2.09	364.75	7.15	365.37	7.16	0.63	0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
16	52	36	20	832	0.852071	230.29	0.596154	53.57	184.84	1.39	1.99	366.67	7.05	367.61	7.07	0.94	0.25
16	53	37	21	848	0.843005	230.75	0.599057	53.6	200.01	0	1.89	365.53	6.9	366.7	6.92	1.18	0.32
16	54	38	22	864	0.834019	231.16	0.601852	53.64	215.53	1.36	1.81	366.85	6.79	368.33	6.82	1.49	0.4
16	55	39	23	880	0.825124	231.51	0.604545	53.68	231.36	0	1.73	365.18	6.64	366.9	6.67	1.72	0.47
16	56	40	24	896	0.816327	231.81	0.607143	53.74	247.5	1.34	1.65	365.95	6.53	367.97	6.57	2.03	0.55
16	57	41	25	912	0.807633	232.06	0.609649	53.8	263.93	0	1.58	363.8	6.38	366.05	6.42	2.26	0.62
16	58	42	26	928	0.799049	232.27	0.612069	53.87	280.63	1.31	1.52	364.07	6.28	366.62	6.32	2.55	0.7
16	59	43	27	944	0.790577	232.44	0.614407	53.94	297.59	0	1.46	361.49	6.13	364.25	6.17	2.76	0.76
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
17	33	16	-1	528	0.999082	199.41	0.492424	64	0.72	0	8.8	272.68	8.26	274.2	8.31	1.52	0.56
17	34	17	0	544	1	203.6	0.5	63.34	0	-1.71	10	285.34	8.39	286.02	8.41	0.68	0.24
17	35	18	1	560	0.999184	207.41	0.507143	62.75	0.68	0	8.87	298.03	8.52	296.63	8.48	-1.4	-0.47
17	36	19	2	576	0.996914	210.86	0.513889	62.24	2.65	-1.67	7.92	306.5	8.51	306.81	8.52	0.31	0.1
17	37	20	3	592	0.993426	214	0.52027	61.79	5.8	0	7.11	317.53	8.58	315.82	8.54	-1.71	-0.54
17	38	21	4	608	0.98892	216.85	0.526316	61.39	10.04	-1.62	6.43	324.52	8.54	324.56	8.54	0.03	0.01
17	39	22	5	624	0.983563	219.44	0.532051	61.04	15.3	0	5.84	334.05	8.57	332.16	8.52	-1.89	-0.57
17	40	23	6	640	0.9775	221.8	0.5375	60.74	21.5	-1.58	5.33	339.71	8.49	339.61	8.49	-0.1	-0.03
17	41	24	7	656	0.970851	223.95	0.542683	60.47	28.57	0	4.88	347.9	8.49	345.97	8.44	-1.93	-0.56
17	42	25	8	672	0.963719	225.9	0.547619	60.24	36.44	-1.54	4.49	352.37	8.39	352.28	8.39	-0.09	-0.02
17	43	26	9	688	0.956193	227.68	0.552326	60.04	45.08	0	4.15	359.36	8.36	357.53	8.31	-1.83	-0.51
17	44	27	10	704	0.948347	229.3	0.556818	59.86	54.42	-1.51	3.85	362.76	8.24	362.81	8.25	0.05	0.01
17	45	28	11	720	0.940247	230.77	0.561111	59.72	64.41	0	3.58	368.68	8.19	367.07	8.16	-1.61	-0.44
17	46	29	12	736	0.931947	232.11	0.565217	59.59	75.03	-1.47	3.34	371.13	8.07	371.42	8.07	0.29	0.08
17	47	30	13	752	0.923495	233.33	0.569149	59.49	86.22	0	3.13	376.09	8	374.78	7.97	-1.31	-0.35
17	48	31	14	768	0.914931	234.43	0.572917	59.41	97.96	-1.44	2.94	377.69	7.87	378.3	7.88	0.61	0.16
17	49	32	15	784	0.906289	235.43	0.576531	59.35	110.2	0	2.76	381.78	7.79	380.85	7.77	-0.93	-0.24
17	50	33	16	800	0.8976	236.34	0.58	59.3	122.93	-1.41	2.61	382.63	7.65	383.62	7.67	0.99	0.26
17	51	34	17	816	0.888889	237.15	0.583333	59.27	136.11	0	2.47	385.94	7.57	385.43	7.56	-0.5	-0.13
17	52	35	18	832	0.880178	237.89	0.586538	59.25	149.72	-1.39	2.34	386.1	7.42	387.51	7.45	1.41	0.36
17	53	36	19	848	0.871485	238.55	0.589623	59.24	163.73	0	2.22	388.7	7.33	388.65	7.33	-0.05	-0.01
17	54	37	20	864	0.862826	239.14	0.592593	59.25	178.12	-1.36	2.11	388.24	7.19	390.1	7.22	1.86	0.48
17	55	38	21	880	0.854215	239.67	0.595455	59.26	192.87	0	2.01	390.21	7.09	390.63	7.1	0.43	0.11
17	56	39	22	896	0.845663	240.14	0.598214	59.29	207.97	-1.34	1.92	389.19	6.95	391.5	6.99	2.31	0.59
17	57	40	23	912	0.837181	240.55	0.600877	59.33	223.39	0	1.84	390.57	6.85	391.47	6.87	0.9	0.23
17	58	41	24	928	0.828775	240.91	0.603448	59.37	239.12	-1.31	1.76	389.05	6.71	391.81	6.76	2.76	0.71
17	59	42	25	944	0.820454	241.23	0.605932	59.42	255.14	0	1.69	389.9	6.61	391.27	6.63	1.37	0.35
17	60	43	26	960	0.812222	241.5	0.608333	59.48	271.43	-1.29	1.62	387.92	6.47	391.12	6.52	3.2	0.82
17	61	44	27	976	0.804085	241.73	0.610656	59.55	288	0	1.56	388.29	6.37	390.1	6.4	1.81	0.46
17	62	45	28	992	0.796046	241.92	0.612903	59.62	304.81	-1.27	1.5	385.88	6.22	389.5	6.28	3.62	0.93
17	63	46	29	1008	0.788108	242.07	0.615079	59.7	321.86	0	1.45	385.81	6.12	388.04	6.16	2.23	0.58
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
18	35	17	-1	560	0.999184	207.41	0.492857	70.35	0.68	0	8.87	290.43	8.3	292.15	8.35	1.72	0.59

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
18	36	18	0	576	1	211.51	0.5	69.67	0	1.67	10	306.49	8.51	305.73	8.49	-0.75	-0.25
18	37	19	1	592	0.99927	215.25	0.506757	69.06	0.64	0	8.93	315.97	8.54	314.9	8.51	-1.06	-0.34
18	38	20	2	608	0.99723	218.67	0.513158	68.52	2.51	1.62	8.02	327.94	8.63	326.81	8.6	-1.12	-0.34
18	39	21	3	624	0.994083	221.79	0.519231	68.04	5.51	0	7.24	335.9	8.61	334.53	8.58	-1.37	-0.41
18	40	22	4	640	0.99	224.63	0.525	67.62	9.55	1.58	6.57	346.34	8.66	344.96	8.62	-1.38	-0.4
18	41	23	5	656	0.985128	227.24	0.530488	67.25	14.57	0	5.99	352.93	8.61	351.38	8.57	-1.55	-0.44
18	42	24	6	672	0.979592	229.62	0.535714	66.91	20.5	1.54	5.49	362	8.62	360.49	8.58	-1.51	-0.42
18	43	25	7	688	0.973499	231.8	0.540698	66.62	27.27	0	5.05	367.35	8.54	365.76	8.51	-1.59	-0.44
18	44	26	8	704	0.966942	233.8	0.545455	66.37	34.83	1.51	4.66	375.18	8.53	373.69	8.49	-1.49	-0.4
18	45	27	9	720	0.96	235.62	0.55	66.14	43.12	0	4.32	379.43	8.43	377.92	8.4	-1.51	-0.4
18	46	28	10	736	0.952741	237.29	0.554348	65.95	52.1	1.47	4.01	386.14	8.39	384.79	8.36	-1.35	-0.35
18	47	29	11	752	0.945224	238.82	0.558511	65.78	61.73	0	3.74	389.41	8.29	388.09	8.26	-1.32	-0.34
18	48	30	12	768	0.9375	240.22	0.5625	65.64	71.97	1.44	3.5	395.12	8.23	394	8.21	-1.12	-0.28
18	49	31	13	784	0.929613	241.49	0.566327	65.52	82.78	0	3.28	397.5	8.11	396.46	8.09	-1.03	-0.26
18	50	32	14	800	0.9216	242.66	0.57	65.42	94.12	1.41	3.09	402.31	8.05	401.51	8.03	-0.8	-0.2
18	51	33	15	816	0.913495	243.72	0.573529	65.34	105.97	0	2.91	403.88	7.92	403.2	7.91	-0.68	-0.17
18	52	34	16	832	0.905325	244.69	0.576923	65.27	118.3	1.39	2.75	407.88	7.84	407.45	7.84	-0.43	-0.1
18	53	35	17	848	0.897116	245.57	0.580189	65.22	131.07	0	2.6	408.74	7.71	408.45	7.71	-0.28	-0.07
18	54	36	18	864	0.888889	246.36	0.583333	65.19	144.28	1.36	2.47	411.99	7.63	411.98	7.63	-0.01	0
18	55	37	19	880	0.880661	247.09	0.586364	65.17	157.89	0	2.34	412.2	7.49	412.35	7.5	0.15	0.04
18	56	38	20	896	0.872449	247.74	0.589286	65.16	171.88	1.34	2.23	414.79	7.41	415.22	7.41	0.43	0.1
18	57	39	21	912	0.864266	248.33	0.592105	65.17	186.23	0	2.13	414.4	7.27	415	7.28	0.6	0.14
18	58	40	22	928	0.856124	248.86	0.594828	65.18	200.92	1.31	2.03	416.38	7.18	417.26	7.19	0.88	0.21
18	59	41	23	944	0.848032	249.33	0.597458	65.21	215.95	0	1.95	415.46	7.04	416.51	7.06	1.05	0.25
18	60	42	24	960	0.84	249.76	0.6	65.24	231.28	1.29	1.86	416.88	6.95	418.21	6.97	1.33	0.32
18	61	43	25	976	0.832034	250.13	0.602459	65.28	246.91	0	1.79	415.47	6.81	416.96	6.84	1.5	0.36
18	62	44	26	992	0.824142	250.46	0.604839	65.33	262.82	1.27	1.72	416.38	6.72	418.15	6.74	1.77	0.42
18	63	45	27	1008	0.816327	250.74	0.607143	65.39	279	0	1.65	414.52	6.58	416.44	6.61	1.93	0.46
18	64	46	28	1024	0.808594	250.99	0.609375	65.46	295.44	1.25	1.59	414.96	6.48	417.15	6.52	2.19	0.53
18	65	47	29	1040	0.800947	251.2	0.611538	65.53	312.12	0	1.54	412.69	6.35	415.02	6.38	2.33	0.56
18	66	48	30	1056	0.793388	251.37	0.613636	65.61	329.03	1.23	1.48	412.7	6.25	415.29	6.29	2.58	0.62
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
19	37	18	-1	592	0.99927	215.25	0.493243	76.95	0.64	0	8.93	308.08	8.33	310.04	8.38	1.96	0.63
19	38	19	0	608	1	219.28	0.5	76.24	0	-1.62	10	320.86	8.44	322.08	8.48	1.22	0.38
19	39	20	1	624	0.999343	222.96	0.50641	75.61	0.61	0	8.98	333.8	8.56	332.98	8.54	-0.82	-0.25
19	40	21	2	640	0.9975	226.34	0.5125	75.04	2.39	-1.58	8.11	342.76	8.57	343.49	8.59	0.73	0.21
19	41	22	3	656	0.994646	229.43	0.518293	74.54	5.25	0	7.35	354.13	8.64	352.9	8.61	-1.24	-0.35
19	42	23	4	672	0.99093	232.28	0.52381	74.09	9.11	-1.54	6.7	361.68	8.61	362.05	8.62	0.36	0.1
19	43	24	5	688	0.986479	234.89	0.52907	73.69	13.91	0	6.14	371.64	8.64	370.12	8.61	-1.52	-0.41
19	44	25	6	704	0.981405	237.29	0.534091	73.33	19.59	-1.51	5.64	377.92	8.59	378.05	8.59	0.14	0.04
19	45	26	7	720	0.975802	239.5	0.538889	73.02	26.08	0	5.2	386.6	8.59	384.95	8.55	-1.65	-0.43
19	46	27	8	736	0.969754	241.53	0.543478	72.74	33.35	-1.47	4.82	391.73	8.52	391.78	8.52	0.05	0.01
19	47	28	9	752	0.963332	243.39	0.547872	72.49	41.33	0	4.47	399.26	8.49	397.6	8.46	-1.66	-0.42
19	48	29	10	768	0.956597	245.11	0.552083	72.28	49.98	-1.44	4.17	403.36	8.4	403.44	8.41	0.08	0.02

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
19	49	30	11	784	0.949604	246.68	0.556122	72.09	59.27	0	3.9	409.86	8.36	408.3	8.33	-1.56	-0.38
19	50	31	12	800	0.9424	248.13	0.56	71.92	69.15	-1.41	3.65	413.03	8.26	413.24	8.26	0.21	0.05
19	51	32	13	816	0.935025	249.46	0.563725	71.78	79.59	0	3.43	418.59	8.21	417.23	8.18	-1.36	-0.33
19	52	33	14	832	0.927515	250.68	0.567308	71.66	90.57	-1.39	3.23	420.92	8.09	421.35	8.1	0.43	0.1
19	53	34	15	848	0.9199	251.8	0.570755	71.57	102.05	0	3.05	425.63	8.03	424.54	8.01	-1.09	-0.26
19	54	35	16	864	0.912209	252.83	0.574074	71.48	114	-1.36	2.88	427.21	7.91	427.92	7.92	0.71	0.16
19	55	36	17	880	0.904463	253.77	0.577273	71.42	126.4	0	2.73	431.15	7.84	430.38	7.83	-0.77	-0.18
19	56	37	18	896	0.896684	254.62	0.580357	71.37	139.22	-1.34	2.59	432.04	7.72	433.07	7.73	1.03	0.24
19	57	38	19	912	0.888889	255.41	0.583333	71.34	152.44	0	2.47	435.28	7.64	434.86	7.63	-0.42	-0.1
19	58	39	20	928	0.881094	256.12	0.586207	71.32	166.05	-1.31	2.35	435.55	7.51	436.93	7.53	1.38	0.32
19	59	40	21	944	0.873312	256.77	0.588983	71.31	180.02	0	2.24	438.15	7.43	438.11	7.43	-0.04	-0.01
19	60	41	22	960	0.865556	257.35	0.591667	71.31	194.34	-1.29	2.14	437.85	7.3	439.6	7.33	1.75	0.4
19	61	42	23	976	0.857834	257.88	0.594262	71.32	208.98	0	2.05	439.86	7.21	440.21	7.22	0.35	0.08
19	62	43	24	992	0.850156	258.36	0.596774	71.35	223.94	-1.27	1.97	439.05	7.08	441.16	7.12	2.12	0.48
19	63	44	25	1008	0.84253	258.79	0.599206	71.38	239.2	0	1.89	440.52	6.99	441.26	7	0.74	0.17
19	64	45	26	1024	0.834961	259.17	0.601562	71.42	254.74	-1.25	1.82	439.23	6.86	441.72	6.9	2.48	0.56
19	65	46	27	1040	0.827456	259.51	0.603846	71.47	270.55	0	1.75	440.22	6.77	441.33	6.79	1.11	0.25
19	66	47	28	1056	0.820018	259.81	0.606061	71.53	286.62	-1.23	1.68	438.49	6.64	441.33	6.69	2.83	0.64
19	67	48	29	1072	0.812653	260.07	0.608209	71.59	302.94	0	1.62	439.02	6.55	440.49	6.57	1.47	0.33
19	68	49	30	1088	0.805363	260.3	0.610294	71.66	319.5	-1.21	1.57	436.9	6.42	440.06	6.47	3.16	0.72
19	69	50	31	1104	0.798152	260.49	0.612319	71.74	336.28	0	1.52	437.01	6.33	438.81	6.36	1.8	0.41
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
20	39	19	-1	624	0.999343	222.96	0.49359	83.77	0.61	0	8.98	325.63	8.35	327.79	8.4	2.15	0.66
20	40	20	0	640	1	226.9	0.5	83.04	0	1.58	10	341.64	8.54	341.51	8.54	-0.12	-0.04
20	41	21	1	656	0.999405	230.53	0.506098	82.39	0.58	0	9.03	351.52	8.57	351.01	8.56	-0.51	-0.15
20	42	22	2	672	0.997732	233.87	0.511905	81.8	2.28	1.54	8.19	363.78	8.66	363.18	8.65	-0.6	-0.17
20	43	23	3	688	0.995133	236.95	0.517442	81.27	5.01	0	7.46	372.23	8.66	371.31	8.64	-0.92	-0.25
20	44	24	4	704	0.991736	239.79	0.522727	80.8	8.71	1.51	6.83	383.04	8.71	382.08	8.68	-0.96	-0.25
20	45	25	5	720	0.987654	242.41	0.527778	80.37	13.31	0	6.27	390.18	8.67	388.99	8.64	-1.2	-0.31
20	46	26	6	736	0.982987	244.82	0.532609	79.99	18.76	1.47	5.78	399.69	8.69	398.51	8.66	-1.18	-0.29
20	47	27	7	752	0.977818	247.05	0.537234	79.65	25	0	5.35	405.65	8.63	404.31	8.6	-1.34	-0.33
20	48	28	8	768	0.972222	249.11	0.541667	79.35	31.99	1.44	4.97	413.96	8.62	412.7	8.6	-1.26	-0.31
20	49	29	9	784	0.966264	251.01	0.545918	79.08	39.67	0	4.62	418.86	8.55	417.5	8.52	-1.36	-0.32
20	50	30	10	800	0.96	252.77	0.55	78.84	48.02	1.41	4.32	426.1	8.52	424.88	8.5	-1.23	-0.29
20	51	31	11	816	0.953479	254.39	0.553922	78.63	56.99	0	4.04	430.04	8.43	428.77	8.41	-1.27	-0.3
20	52	32	12	832	0.946746	255.88	0.557692	78.45	66.54	1.39	3.79	436.31	8.39	435.22	8.37	-1.1	-0.25
20	53	33	13	848	0.939836	257.26	0.561321	78.29	76.65	0	3.57	439.38	8.29	438.29	8.27	-1.09	-0.25
20	54	34	14	864	0.932785	258.53	0.564815	78.15	87.28	1.36	3.37	444.77	8.24	443.88	8.22	-0.88	-0.2
20	55	35	15	880	0.92562	259.7	0.568182	78.03	98.4	0	3.18	447.04	8.13	446.2	8.11	-0.84	-0.19
20	56	36	16	896	0.918367	260.78	0.571429	77.93	110	1.34	3.01	451.63	8.06	451.02	8.05	-0.61	-0.14
20	57	37	17	912	0.91105	261.77	0.574561	77.85	122.04	0	2.86	453.19	7.95	452.65	7.94	-0.54	-0.12
20	58	38	18	928	0.903686	262.69	0.577586	77.79	134.5	1.31	2.72	457.05	7.88	456.76	7.88	-0.29	-0.06
20	59	39	19	944	0.896294	263.52	0.580508	77.74	147.37	0	2.59	457.96	7.76	457.75	7.76	-0.2	-0.04
20	60	40	20	960	0.888889	264.29	0.583333	77.7	160.61	1.29	2.47	461.15	7.69	461.21	7.69	0.06	0.01

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
20	61	41	21	976	0.881483	264.99	0.586066	77.68	174.22	0	2.36	461.46	7.56	461.62	7.57	0.16	0.03
20	62	42	22	992	0.874089	265.64	0.58871	77.67	188.17	1.27	2.25	464.04	7.48	464.46	7.49	0.42	0.09
20	63	43	23	1008	0.866717	266.22	0.59127	77.67	202.46	0	2.16	463.81	7.36	464.34	7.37	0.53	0.11
20	64	44	24	1024	0.859375	266.75	0.59375	77.69	217.05	1.25	2.07	465.83	7.28	466.62	7.29	0.79	0.17
20	65	45	25	1040	0.852071	267.23	0.596154	77.71	231.95	0	1.99	465.1	7.16	465.99	7.17	0.9	0.19
20	66	46	26	1056	0.844812	267.66	0.598485	77.74	247.14	1.23	1.91	466.6	7.07	467.76	7.09	1.16	0.25
20	67	47	27	1072	0.837603	268.05	0.600746	77.78	262.6	0	1.84	465.41	6.95	466.67	6.97	1.26	0.27
20	68	48	28	1088	0.83045	268.4	0.602941	77.83	278.32	1.21	1.77	466.44	6.86	467.95	6.88	1.51	0.32
20	69	49	29	1104	0.823356	268.71	0.605072	77.88	294.29	0	1.71	464.83	6.74	466.43	6.76	1.6	0.34
20	70	50	30	1120	0.816327	268.99	0.607143	77.95	310.5	1.2	1.65	465.41	6.65	467.26	6.68	1.85	0.4
20	71	51	31	1136	0.809363	269.23	0.609155	78.02	326.94	0	1.6	463.41	6.53	465.34	6.55	1.93	0.41
20	72	52	32	1152	0.802469	269.43	0.611111	78.09	343.6	1.18	1.55	463.59	6.44	465.75	6.47	2.16	0.46
20	73	53	33	1168	0.795646	269.61	0.613014	78.18	360.48	0	1.5	461.23	6.32	463.45	6.35	2.22	0.48
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
21	41	20	-1	656	0.999405	230.53	0.493902	90.83	0.58	0	9.03	343.08	8.37	345.46	8.43	2.38	0.69
21	42	21	0	672	1	234.41	0.5	90.08	0	-1.54	10	355.97	8.48	357.69	8.52	1.72	0.48
21	43	22	1	688	0.999459	237.98	0.505814	89.4	0.56	0	9.07	369.13	8.58	368.84	8.58	-0.29	-0.08
21	44	23	2	704	0.997934	241.29	0.511364	88.78	2.18	-1.51	8.26	378.5	8.6	379.64	8.63	1.14	0.3
21	45	24	3	720	0.995556	244.35	0.516667	88.23	4.79	0	7.56	390.19	8.67	389.4	8.65	-0.79	-0.2
21	46	25	4	736	0.992439	247.18	0.521739	87.73	8.34	-1.47	6.94	398.22	8.66	398.91	8.67	0.69	0.17
21	47	26	5	752	0.988683	249.8	0.526596	87.28	12.75	0	6.4	408.56	8.69	407.41	8.67	-1.15	-0.28
21	48	27	6	768	0.984375	252.23	0.53125	86.88	17.99	-1.44	5.92	415.37	8.65	415.76	8.66	0.39	0.09
21	49	28	7	784	0.979592	254.47	0.535714	86.52	24	0	5.49	424.5	8.66	423.12	8.64	-1.37	-0.32
21	50	29	8	800	0.9744	256.56	0.54	86.19	30.73	-1.41	5.11	430.21	8.6	430.42	8.61	0.21	0.05
21	51	30	9	816	0.968858	258.49	0.544118	85.9	38.15	0	4.77	438.23	8.59	436.76	8.56	-1.47	-0.34
21	52	31	10	832	0.963018	260.28	0.548077	85.64	46.21	-1.39	4.46	442.95	8.52	443.1	8.52	0.15	0.03
21	53	32	11	848	0.956924	261.94	0.551887	85.41	54.88	0	4.18	449.96	8.49	448.5	8.46	-1.46	-0.33
21	54	33	12	864	0.950617	263.47	0.555556	85.2	64.12	-1.36	3.93	453.77	8.4	453.97	8.41	0.2	0.04
21	55	34	13	880	0.944132	264.9	0.559091	85.02	73.91	0	3.71	459.87	8.36	458.52	8.34	-1.36	-0.3
21	56	35	14	896	0.9375	266.21	0.5625	84.87	84.22	-1.34	3.5	462.86	8.27	463.19	8.27	0.32	0.07
21	57	36	15	912	0.930748	267.43	0.565789	84.73	95.01	0	3.31	468.13	8.21	466.95	8.19	-1.18	-0.25
21	58	37	16	928	0.9239	268.56	0.568966	84.61	106.27	-1.31	3.14	470.38	8.11	470.88	8.12	0.51	0.11
21	59	38	17	944	0.916978	269.61	0.572034	84.52	117.97	0	2.98	474.88	8.05	473.93	8.03	-0.95	-0.2
21	60	39	18	960	0.91	270.57	0.575	84.44	130.09	-1.29	2.84	476.45	7.94	477.19	7.95	0.74	0.16
21	61	40	19	976	0.902983	271.46	0.577869	84.37	142.61	0	2.7	480.26	7.87	479.58	7.86	-0.68	-0.14
21	62	41	20	992	0.895942	272.28	0.580645	84.32	155.52	-1.27	2.58	481.2	7.76	482.21	7.78	1.01	0.21
21	63	42	21	1008	0.888889	273.03	0.583333	84.29	168.78	0	2.47	484.37	7.69	483.99	7.68	-0.39	-0.08
21	64	43	22	1024	0.881836	273.72	0.585938	84.26	182.39	-1.25	2.36	484.74	7.57	486.04	7.59	1.3	0.27
21	65	44	23	1040	0.874793	274.36	0.588462	84.25	196.32	0	2.26	487.33	7.5	487.26	7.5	-0.07	-0.02
21	66	45	24	1056	0.867769	274.94	0.590909	84.25	210.58	-1.23	2.17	487.17	7.38	488.77	7.41	1.6	0.33
21	67	46	25	1072	0.860771	275.47	0.593284	84.26	225.13	0	2.09	489.22	7.3	489.46	7.31	0.24	0.05
21	68	47	26	1088	0.853806	275.95	0.595588	84.28	239.98	-1.21	2.01	488.58	7.19	490.48	7.21	1.9	0.39
21	69	48	27	1104	0.846881	276.39	0.597826	84.31	255.1	0	1.93	490.13	7.1	490.69	7.11	0.55	0.11
21	70	49	28	1120	0.84	276.79	0.6	84.35	270.48	-1.2	1.86	489.05	6.99	491.24	7.02	2.19	0.45

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
21	71	50	29	1136	0.833168	277.14	0.602113	84.4	286.12	0	1.8	490.14	6.9	490.99	6.92	0.85	0.17
21	72	51	30	1152	0.826389	277.46	0.604167	84.45	302	-1.18	1.74	488.64	6.79	491.12	6.82	2.47	0.5
21	73	52	31	1168	0.819666	277.75	0.606164	84.52	318.11	0	1.68	489.31	6.7	490.44	6.72	1.14	0.23
21	74	53	32	1184	0.813002	278	0.608108	84.59	334.45	-1.16	1.63	487.43	6.59	490.16	6.62	2.73	0.56
21	75	54	33	1200	0.8064	278.22	0.61	84.66	351	0	1.58	487.7	6.5	489.09	6.52	1.39	0.28
21	76	55	34	1216	0.799861	278.41	0.611842	84.74	367.75	-1.15	1.53	485.47	6.39	488.42	6.43	2.96	0.61
21	77	56	35	1232	0.793388	278.58	0.613636	84.83	384.71	0	1.48	485.36	6.3	486.98	6.32	1.62	0.33
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
22	43	21	-1	688	0.999459	237.98	0.494186	98.11	0.56	0	9.07	360.42	8.38	362.98	8.44	2.57	0.71
22	44	22	0	704	1	241.79	0.5	97.34	0	1.51	10	376.38	8.55	376.84	8.56	0.46	0.12
22	45	23	1	720	0.999506	245.32	0.505556	96.64	0.53	0	9.11	386.62	8.59	386.62	8.59	0	0
22	46	24	2	736	0.99811	248.59	0.51087	96	2.08	1.47	8.33	399.13	8.68	399.02	8.67	-0.11	-0.03
22	47	25	3	752	0.995926	251.63	0.515957	95.42	4.59	0	7.65	408	8.68	407.51	8.67	-0.49	-0.12
22	48	26	4	768	0.993056	254.45	0.520833	94.9	8	1.44	7.05	419.14	8.73	418.6	8.72	-0.55	-0.13
22	49	27	5	784	0.989588	257.07	0.52551	94.43	12.24	0	6.51	426.77	8.71	425.92	8.69	-0.85	-0.2
22	50	28	6	800	0.9856	259.51	0.53	94	17.29	1.41	6.04	436.66	8.73	435.82	8.72	-0.85	-0.19
22	51	29	7	816	0.981161	261.77	0.534314	93.61	23.08	0	5.62	443.16	8.69	442.08	8.67	-1.07	-0.24
22	52	30	8	832	0.976331	263.88	0.538462	93.26	29.57	1.39	5.24	451.91	8.69	450.9	8.67	-1.02	-0.23
22	53	31	9	848	0.971164	265.83	0.542453	92.95	36.74	0	4.9	457.38	8.63	456.2	8.61	-1.18	-0.26
22	54	32	10	864	0.965706	267.66	0.546296	92.67	44.53	1.36	4.59	465.1	8.61	464.03	8.59	-1.07	-0.23
22	55	33	11	880	0.96	269.35	0.55	92.41	52.92	0	4.32	469.64	8.54	468.46	8.52	-1.18	-0.25
22	56	34	12	896	0.954082	270.92	0.553571	92.19	61.88	1.34	4.07	476.42	8.51	475.39	8.49	-1.03	-0.22
22	57	35	13	912	0.947984	272.39	0.557018	91.99	71.37	0	3.84	480.1	8.42	479.01	8.4	-1.09	-0.23
22	58	36	14	928	0.941736	273.75	0.560345	91.81	81.37	1.31	3.63	486.02	8.38	485.11	8.36	-0.91	-0.19
22	59	37	15	944	0.935363	275.01	0.563559	91.66	91.85	0	3.44	488.92	8.29	487.99	8.27	-0.93	-0.19
22	60	38	16	960	0.928889	276.18	0.566667	91.53	102.79	1.29	3.26	494.05	8.23	493.33	8.22	-0.72	-0.15
22	61	39	17	976	0.922333	277.27	0.569672	91.41	114.17	0	3.1	496.25	8.14	495.53	8.12	-0.71	-0.14
22	62	40	18	992	0.915713	278.28	0.572581	91.31	125.97	1.27	2.95	500.66	8.08	500.17	8.07	-0.49	-0.1
22	63	41	19	1008	0.909045	279.22	0.575397	91.23	138.16	0	2.82	502.2	7.97	501.74	7.96	-0.46	-0.09
22	64	42	20	1024	0.902344	280.09	0.578125	91.17	150.73	1.25	2.69	505.95	7.91	505.73	7.9	-0.22	-0.04
22	65	43	21	1040	0.895621	280.89	0.580769	91.12	163.67	0	2.57	506.9	7.8	506.72	7.8	-0.18	-0.04
22	66	44	22	1056	0.888889	281.63	0.583333	91.08	176.94	1.23	2.47	510.04	7.73	510.11	7.73	0.07	0.01
22	67	45	23	1072	0.882156	282.31	0.585821	91.06	190.55	0	2.37	510.44	7.62	510.56	7.62	0.12	0.02
22	68	46	24	1088	0.875433	282.94	0.588235	91.04	204.48	1.21	2.27	513.02	7.54	513.39	7.55	0.37	0.07
22	69	47	25	1104	0.868725	283.52	0.59058	91.04	218.7	0	2.18	512.92	7.43	513.34	7.44	0.42	0.08
22	70	48	26	1120	0.862041	284.05	0.592857	91.05	233.22	1.2	2.1	514.97	7.36	515.64	7.37	0.67	0.13
22	71	49	27	1136	0.855386	284.54	0.59507	91.07	248.01	0	2.02	514.4	7.25	515.13	7.26	0.72	0.14
22	72	50	28	1152	0.848765	284.98	0.597222	91.1	263.07	1.18	1.95	515.98	7.17	516.94	7.18	0.96	0.19
22	73	51	29	1168	0.842184	285.38	0.599315	91.14	278.39	0	1.89	514.98	7.05	515.99	7.07	1.01	0.2
22	74	52	30	1184	0.835646	285.75	0.601351	91.18	293.95	1.16	1.82	516.11	6.97	517.35	6.99	1.25	0.24
22	75	53	31	1200	0.829156	286.07	0.603333	91.24	309.74	0	1.76	514.71	6.86	516	6.88	1.29	0.25
22	76	54	32	1216	0.822715	286.37	0.605263	91.3	325.76	1.15	1.71	515.42	6.78	516.93	6.8	1.51	0.29
22	77	55	33	1232	0.816327	286.63	0.607143	91.37	342	0	1.65	513.65	6.67	515.19	6.69	1.54	0.3
22	78	56	34	1248	0.809993	286.87	0.608974	91.44	358.45	1.13	1.6	513.98	6.59	515.73	6.61	1.75	0.34

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
22	79	57	35	1264	0.803717	287.07	0.610759	91.52	375.1	0	1.56	511.87	6.48	513.63	6.5	1.76	0.34
22	80	58	36	1280	0.7975	287.25	0.6125	91.61	391.94	1.12	1.51	511.83	6.4	513.79	6.42	1.96	0.38
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
23	45	22	-1	720	0.999506	245.32	0.494444	105.62	0.53	0	9.11	377.64	8.39	380.42	8.45	2.78	0.73
23	46	23	0	736	1	249.06	0.5	104.82	0	-1.47	10	390.64	8.49	392.82	8.54	2.18	0.56
23	47	24	1	752	0.999547	252.54	0.505319	104.1	0.51	0	9.15	403.99	8.6	404.2	8.6	0.21	0.05
23	48	25	2	768	0.998264	255.78	0.510417	103.44	2	-1.44	8.39	413.73	8.62	415.26	8.65	1.53	0.37
23	49	26	3	784	0.996252	258.8	0.515306	102.84	4.41	0	7.73	425.68	8.69	425.32	8.68	-0.36	-0.09
23	50	27	4	800	0.9936	261.61	0.52	102.29	7.68	-1.41	7.15	434.14	8.68	435.16	8.7	1.02	0.23
23	51	28	5	816	0.990388	264.23	0.52451	101.79	11.77	0	6.62	444.82	8.72	444.03	8.71	-0.8	-0.18
23	52	29	6	832	0.986686	266.68	0.528846	101.34	16.64	-1.39	6.16	452.12	8.69	452.76	8.71	0.64	0.14
23	53	30	7	848	0.982556	268.95	0.533019	100.93	22.22	0	5.74	461.63	8.71	460.54	8.69	-1.09	-0.24
23	54	31	8	864	0.978052	271.08	0.537037	100.56	28.5	-1.36	5.37	467.87	8.66	468.26	8.67	0.39	0.08
23	55	32	9	880	0.973223	273.06	0.540909	100.22	35.43	0	5.03	476.32	8.66	475.06	8.64	-1.27	-0.27
23	56	33	10	896	0.968112	274.91	0.544643	99.92	42.97	-1.34	4.72	481.59	8.6	481.85	8.6	0.26	0.05
23	57	34	11	912	0.962758	276.63	0.548246	99.65	51.1	0	4.45	489.07	8.58	487.74	8.56	-1.33	-0.27
23	58	35	12	928	0.957194	278.24	0.551724	99.4	59.78	-1.31	4.19	493.46	8.51	493.68	8.51	0.22	0.05
23	59	36	13	944	0.951451	279.74	0.555085	99.18	68.99	0	3.96	500.05	8.48	498.74	8.45	-1.31	-0.26
23	60	37	14	960	0.945556	281.14	0.558333	98.99	78.7	-1.29	3.75	503.64	8.39	503.9	8.4	0.27	0.05
23	61	38	15	976	0.939532	282.44	0.561475	98.81	88.89	0	3.56	509.42	8.35	508.2	8.33	-1.22	-0.24
23	62	39	16	992	0.933403	283.66	0.564516	98.66	99.53	-1.27	3.38	512.26	8.26	512.64	8.27	0.38	0.07
23	63	40	17	1008	0.927186	284.79	0.56746	98.53	110.6	0	3.22	517.29	8.21	516.23	8.19	-1.07	-0.21
23	64	41	18	1024	0.920898	285.85	0.570312	98.42	122.09	-1.25	3.07	519.46	8.12	520	8.13	0.54	0.1
23	65	42	19	1040	0.914556	286.83	0.573077	98.32	133.98	0	2.93	523.81	8.06	522.93	8.05	-0.87	-0.17
23	66	43	20	1056	0.908173	287.74	0.575758	98.24	146.24	-1.23	2.8	525.36	7.96	526.09	7.97	0.74	0.14
23	67	44	21	1072	0.90176	288.59	0.578358	98.17	158.85	0	2.68	529.07	7.9	528.42	7.89	-0.65	-0.12
23	68	45	22	1088	0.895329	289.37	0.580882	98.12	171.82	-1.21	2.57	530.04	7.79	531	7.81	0.96	0.18
23	69	46	23	1104	0.888889	290.1	0.583333	98.09	185.11	0	2.47	533.17	7.73	532.77	7.72	-0.4	-0.08
23	70	47	24	1120	0.882449	290.77	0.585714	98.06	198.72	-1.2	2.37	533.62	7.62	534.81	7.64	1.19	0.22
23	71	48	25	1136	0.876017	291.4	0.588028	98.05	212.63	0	2.28	536.2	7.55	536.05	7.55	-0.15	-0.03
23	72	49	26	1152	0.869599	291.97	0.590278	98.04	226.83	-1.18	2.19	536.17	7.45	537.6	7.47	1.44	0.27
23	73	50	27	1168	0.863201	292.5	0.592466	98.05	241.31	0	2.12	538.25	7.37	538.35	7.37	0.11	0.02
23	74	51	28	1184	0.85683	292.99	0.594595	98.07	256.06	-1.16	2.04	537.76	7.27	539.43	7.29	1.68	0.31
23	75	52	29	1200	0.850489	293.43	0.596667	98.1	271.06	0	1.97	539.38	7.19	539.73	7.2	0.35	0.07
23	76	53	30	1216	0.844183	293.84	0.598684	98.13	286.31	-1.15	1.91	538.47	7.09	540.37	7.11	1.9	0.35
23	77	54	31	1232	0.837915	294.21	0.600649	98.18	301.8	0	1.84	539.65	7.01	540.24	7.02	0.59	0.11
23	78	55	32	1248	0.83169	294.55	0.602564	98.23	317.52	-1.13	1.79	538.36	6.9	540.47	6.93	2.12	0.39
23	79	56	33	1264	0.825509	294.85	0.60443	98.29	333.45	0	1.73	539.13	6.82	539.94	6.83	0.81	0.15
23	80	57	34	1280	0.819375	295.13	0.60625	98.36	349.6	-1.12	1.68	537.48	6.72	539.79	6.75	2.31	0.43
23	81	58	35	1296	0.813291	295.37	0.608025	98.43	365.95	0	1.63	537.88	6.64	538.88	6.65	1	0.19
23	82	59	36	1312	0.807258	295.59	0.609756	98.51	382.5	-1.1	1.58	535.88	6.54	538.36	6.57	2.48	0.46
23	83	60	37	1328	0.801277	295.78	0.611446	98.59	399.23	0	1.54	535.93	6.46	537.1	6.47	1.17	0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
24	47	23	-1	752	0.999547	252.54	0.494681	113.35	0.51	0	9.15	394.74	8.4	397.7	8.46	2.96	0.74
24	48	24	0	768	1	256.23	0.5	112.53	0	1.44	10	410.68	8.56	411.68	8.58	0.99	0.24
24	49	25	1	784	0.999584	259.67	0.505102	111.78	0.49	0	9.18	421.24	8.6	421.72	8.61	0.48	0.11
24	50	26	2	800	0.9984	262.88	0.51	111.1	1.92	1.41	8.45	433.97	8.68	434.32	8.69	0.35	0.08
24	51	27	3	816	0.99654	265.87	0.514706	110.48	4.24	0	7.81	443.22	8.69	443.14	8.69	-0.09	-0.02
24	52	28	4	832	0.994083	268.67	0.519231	109.91	7.39	1.39	7.24	454.65	8.74	454.5	8.74	-0.16	-0.03
24	53	29	5	848	0.9911	271.29	0.523585	109.38	11.34	0	6.73	462.71	8.73	462.2	8.72	-0.51	-0.11
24	54	30	6	864	0.987654	273.74	0.527778	108.91	16.03	1.36	6.27	472.95	8.76	472.43	8.75	-0.53	-0.11
24	55	31	7	880	0.983802	276.03	0.531818	108.48	21.43	0	5.86	479.93	8.73	479.12	8.71	-0.81	-0.17
24	56	32	8	896	0.979592	278.17	0.535714	108.08	27.5	1.34	5.49	489.08	8.73	488.31	8.72	-0.77	-0.16
24	57	33	9	912	0.975069	280.17	0.539474	107.72	34.2	0	5.15	495.06	8.69	494.07	8.67	-0.99	-0.2
24	58	34	10	928	0.970273	282.04	0.543103	107.4	41.51	1.31	4.85	503.21	8.68	502.31	8.66	-0.9	-0.18
24	59	35	11	944	0.96524	283.8	0.54661	107.1	49.39	0	4.57	508.28	8.61	507.22	8.6	-1.06	-0.21
24	60	36	12	960	0.96	285.43	0.55	106.84	57.82	1.29	4.32	515.52	8.59	514.58	8.58	-0.94	-0.18
24	61	37	13	976	0.954582	286.97	0.553279	106.6	66.76	0	4.09	519.76	8.52	518.71	8.5	-1.05	-0.2
24	62	38	14	992	0.949011	288.4	0.556452	106.38	76.2	1.27	3.87	526.16	8.49	525.27	8.47	-0.89	-0.17
24	63	39	15	1008	0.943311	289.75	0.559524	106.19	86.11	0	3.68	529.63	8.41	528.67	8.39	-0.97	-0.18
24	64	40	16	1024	0.9375	291	0.5625	106.02	96.47	1.25	3.5	535.26	8.36	534.48	8.35	-0.78	-0.15
24	65	41	17	1040	0.931598	292.17	0.565385	105.87	107.25	0	3.33	538.04	8.28	537.21	8.26	-0.83	-0.15
24	66	42	18	1056	0.92562	293.27	0.568182	105.74	118.45	1.23	3.18	542.95	8.23	542.33	8.22	-0.62	-0.11
24	67	43	19	1072	0.919581	294.29	0.570896	105.63	130.04	0	3.04	545.09	8.14	544.44	8.13	-0.65	-0.12
24	68	44	20	1088	0.913495	295.24	0.573529	105.53	142	1.21	2.91	549.35	8.08	548.92	8.07	-0.43	-0.08
24	69	45	21	1104	0.907372	296.13	0.576087	105.45	154.32	0	2.79	550.88	7.98	550.45	7.98	-0.43	-0.08
24	70	46	22	1120	0.901224	296.96	0.578571	105.39	166.98	1.2	2.67	554.54	7.92	554.33	7.92	-0.21	-0.04
24	71	47	23	1136	0.895061	297.73	0.580986	105.33	179.97	0	2.57	555.53	7.82	555.33	7.82	-0.2	-0.04
24	72	48	24	1152	0.888889	298.45	0.583333	105.3	193.28	1.18	2.47	558.62	7.76	558.65	7.76	0.03	0.01
24	73	49	25	1168	0.882717	299.12	0.585616	105.27	206.89	0	2.37	559.1	7.66	559.14	7.66	0.04	0.01
24	74	50	26	1184	0.876552	299.73	0.587838	105.25	220.79	1.16	2.29	561.68	7.59	561.95	7.59	0.28	0.05
24	75	51	27	1200	0.8704	300.3	0.59	105.25	234.96	0	2.2	561.68	7.49	561.97	7.49	0.29	0.05
24	76	52	28	1216	0.864266	300.83	0.592105	105.26	249.41	1.15	2.13	563.77	7.42	564.29	7.42	0.52	0.09
24	77	53	29	1232	0.858155	301.32	0.594156	105.27	264.12	0	2.06	563.35	7.32	563.87	7.32	0.53	0.09
24	78	54	30	1248	0.852071	301.77	0.596154	105.3	279.07	1.13	1.99	564.98	7.24	565.74	7.25	0.75	0.13
24	79	55	31	1264	0.846018	302.18	0.598101	105.34	294.26	0	1.92	564.15	7.14	564.91	7.15	0.76	0.13
24	80	56	32	1280	0.84	302.56	0.6	105.38	309.68	1.12	1.86	565.37	7.07	566.34	7.08	0.98	0.17
24	81	57	33	1296	0.834019	302.9	0.601852	105.43	325.32	0	1.81	564.15	6.96	565.13	6.98	0.97	0.17
24	82	58	34	1312	0.828079	303.21	0.603659	105.49	341.18	1.1	1.75	564.98	6.89	566.16	6.9	1.18	0.21
24	83	59	35	1328	0.82218	303.5	0.605422	105.55	357.24	0	1.7	563.41	6.79	564.58	6.8	1.16	0.21
24	84	60	36	1344	0.816327	303.75	0.607143	105.62	373.5	1.09	1.65	563.87	6.71	565.22	6.73	1.36	0.24
24	85	61	37	1360	0.810519	303.98	0.608824	105.7	389.95	0	1.61	561.97	6.61	563.3	6.63	1.33	0.24
24	86	62	38	1376	0.804759	304.18	0.610465	105.79	406.59	1.08	1.56	562.08	6.54	563.59	6.55	1.51	0.27
24	87	63	39	1392	0.799049	304.36	0.612069	105.88	423.4	0	1.52	559.88	6.44	561.35	6.45	1.47	0.26

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
25	49	24	-1	784	0.999584	259.67	0.494898	121.29	0.49	0	9.18	411.73	8.4	414.89	8.47	3.16	0.76
25	50	25	0	800	1	263.3	0.5	120.45	0	-1.41	10	424.83	8.5	427.45	8.55	2.61	0.61
25	51	26	1	816	0.999616	266.69	0.504902	119.68	0.47	0	9.21	438.36	8.6	439.03	8.61	0.67	0.15
25	52	27	2	832	0.998521	269.87	0.509615	118.98	1.85	-1.39	8.51	448.42	8.62	450.32	8.66	1.9	0.42
25	53	28	3	848	0.996796	272.85	0.514151	118.33	4.08	0	7.88	460.62	8.69	460.66	8.69	0.04	0.01
25	54	29	4	864	0.994513	275.64	0.518519	117.74	7.12	-1.36	7.33	469.46	8.69	470.79	8.72	1.33	0.28
25	55	30	5	880	0.991736	278.25	0.522727	117.19	10.93	0	6.83	480.45	8.74	479.99	8.73	-0.45	-0.09
25	56	31	6	896	0.98852	280.7	0.526786	116.69	15.47	-1.34	6.38	488.17	8.72	489.07	8.73	0.89	0.18
25	57	32	7	912	0.984918	283	0.530702	116.24	20.69	0	5.97	498.04	8.74	497.23	8.72	-0.81	-0.16
25	58	33	8	928	0.980975	285.15	0.534483	115.82	26.57	-1.31	5.6	504.75	8.7	505.33	8.71	0.58	0.11
25	59	34	9	944	0.976731	287.17	0.538136	115.44	33.07	0	5.27	513.59	8.7	512.54	8.69	-1.05	-0.21
25	60	35	10	960	0.972222	289.07	0.541667	115.09	40.15	-1.29	4.97	519.36	8.66	519.74	8.66	0.38	0.07
25	61	36	11	976	0.967482	290.85	0.545082	114.78	47.8	0	4.69	527.26	8.64	526.07	8.62	-1.19	-0.23
25	62	37	12	992	0.962539	292.51	0.548387	114.49	55.99	-1.27	4.44	532.18	8.58	532.45	8.59	0.28	0.05
25	63	38	13	1008	0.95742	294.08	0.551587	114.23	64.68	0	4.2	539.21	8.56	537.97	8.54	-1.24	-0.23
25	64	39	14	1024	0.952148	295.55	0.554688	114	73.86	-1.25	3.99	543.34	8.49	543.59	8.49	0.25	0.05
25	65	40	15	1040	0.946746	296.92	0.557692	113.79	83.5	0	3.79	549.58	8.46	548.37	8.44	-1.22	-0.22
25	66	41	16	1056	0.94123	298.21	0.560606	113.6	93.59	-1.23	3.61	552.98	8.38	553.28	8.38	0.3	0.05
25	67	42	17	1072	0.93562	299.42	0.563433	113.43	104.1	0	3.44	558.49	8.34	557.36	8.32	-1.13	-0.2
25	68	43	18	1088	0.929931	300.56	0.566176	113.28	115.02	-1.21	3.29	561.22	8.25	561.61	8.26	0.39	0.07
25	69	44	19	1104	0.924176	301.62	0.568841	113.15	126.32	0	3.15	566.05	8.2	565.05	8.19	-1	-0.18
25	70	45	20	1120	0.918367	302.61	0.571429	113.04	138	-1.2	3.01	568.16	8.12	568.69	8.12	0.52	0.09
25	71	46	21	1136	0.912517	303.54	0.573944	112.95	150.03	0	2.89	572.37	8.06	571.53	8.05	-0.84	-0.15
25	72	47	22	1152	0.906636	304.41	0.576389	112.87	162.41	-1.18	2.77	573.91	7.97	574.6	7.98	0.69	0.12
25	73	48	23	1168	0.900732	305.22	0.578767	112.8	175.11	0	2.66	577.53	7.91	576.88	7.9	-0.66	-0.11
25	74	49	24	1184	0.894814	305.98	0.581081	112.75	188.13	-1.16	2.56	578.55	7.82	579.41	7.83	0.87	0.15
25	75	50	25	1200	0.888889	306.68	0.583333	112.71	201.44	0	2.47	581.63	7.76	581.17	7.75	-0.46	-0.08
25	76	51	26	1216	0.882964	307.34	0.585526	112.68	215.05	-1.15	2.38	582.15	7.66	583.21	7.67	1.06	0.18
25	77	52	27	1232	0.877045	307.95	0.587662	112.67	228.94	0	2.29	584.73	7.59	584.48	7.59	-0.26	-0.04
25	78	53	28	1248	0.871137	308.52	0.589744	112.66	243.1	-1.13	2.21	584.8	7.5	586.05	7.51	1.25	0.21
25	79	54	29	1264	0.865246	309.05	0.591772	112.67	257.51	0	2.14	586.91	7.43	586.86	7.43	-0.05	-0.01
25	80	55	30	1280	0.859375	309.54	0.59375	112.68	272.18	-1.12	2.07	586.55	7.33	587.99	7.35	1.44	0.24
25	81	56	31	1296	0.853528	309.99	0.595679	112.71	287.08	0	2	588.23	7.26	588.37	7.26	0.14	0.02
25	82	57	32	1312	0.84771	310.4	0.597561	112.74	302.22	-1.1	1.94	587.48	7.16	589.09	7.18	1.61	0.27
25	83	58	33	1328	0.841922	310.78	0.599398	112.78	317.58	0	1.88	588.74	7.09	589.06	7.1	0.32	0.05
25	84	59	34	1344	0.836168	311.13	0.60119	112.83	333.15	-1.09	1.83	587.62	7	589.39	7.02	1.77	0.3
25	85	60	35	1360	0.83045	311.45	0.602941	112.89	348.93	0	1.77	588.5	6.92	588.98	6.93	0.48	0.08
25	86	61	36	1376	0.82477	311.75	0.604651	112.95	364.92	-1.08	1.72	587.03	6.83	588.95	6.85	1.91	0.33
25	87	62	37	1392	0.819131	312.01	0.606322	113.02	381.09	0	1.68	587.55	6.75	588.18	6.76	0.62	0.11
25	88	63	38	1408	0.813533	312.25	0.607955	113.1	397.45	-1.07	1.63	585.76	6.66	587.79	6.68	2.03	0.35
25	89	64	39	1424	0.807979	312.46	0.609551	113.18	414	0	1.59	585.95	6.58	586.68	6.59	0.74	0.13
25	90	65	40	1440	0.802469	312.65	0.611111	113.27	430.72	-1.05	1.55	583.85	6.49	585.97	6.51	2.12	0.36
25	91	66	41	1456	0.797005	312.82	0.612637	113.37	447.6	0	1.51	583.72	6.41	584.54	6.42	0.82	0.14

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
26	51	25	-1	816	0.999616	266.69	0.495098	129.45	0.47	0	9.21	428.59	8.4	431.93	8.47	3.34	0.77
26	52	26	0	832	1	270.27	0.5	128.59	0	1.39	10	444.52	8.55	446.01	8.58	1.49	0.33
26	53	27	1	848	0.999644	273.63	0.504717	127.8	0.45	0	9.24	455.36	8.59	456.28	8.61	0.93	0.2
26	54	28	2	864	0.998628	276.78	0.509259	127.07	1.78	1.36	8.56	468.29	8.67	469.07	8.69	0.78	0.17
26	55	29	3	880	0.997025	279.74	0.513636	126.4	3.94	0	7.95	477.88	8.69	478.18	8.69	0.3	0.06
26	56	30	4	896	0.994898	282.51	0.517857	125.78	6.88	1.34	7.41	489.57	8.74	489.79	8.75	0.22	0.04
26	57	31	5	912	0.992305	285.12	0.52193	125.22	10.56	0	6.92	498.02	8.74	497.84	8.73	-0.19	-0.04
26	58	32	6	928	0.989298	287.57	0.525862	124.7	14.94	1.31	6.48	508.58	8.77	508.36	8.76	-0.21	-0.04
26	59	33	7	944	0.985924	289.88	0.529661	124.22	20	0	6.08	515.98	8.75	515.44	8.74	-0.54	-0.11
26	60	34	8	960	0.982222	292.04	0.533333	123.78	25.7	1.29	5.71	525.49	8.76	524.96	8.75	-0.52	-0.1
26	61	35	9	976	0.978232	294.08	0.536885	123.37	32	0	5.38	531.93	8.72	531.14	8.71	-0.79	-0.15
26	62	36	10	992	0.973985	295.99	0.540323	123.01	38.88	1.27	5.08	540.47	8.72	539.75	8.71	-0.72	-0.13
26	63	37	11	1008	0.969514	297.79	0.543651	122.67	46.31	0	4.8	546.03	8.67	545.1	8.65	-0.93	-0.17
26	64	38	12	1024	0.964844	299.49	0.546875	122.36	54.26	1.25	4.55	553.69	8.65	552.87	8.64	-0.82	-0.15
26	65	39	13	1040	0.96	301.08	0.55	122.08	62.72	0	4.32	558.44	8.59	557.45	8.58	-0.98	-0.18
26	66	40	14	1056	0.955005	302.58	0.55303	121.83	71.66	1.23	4.1	565.27	8.56	564.43	8.55	-0.84	-0.15
26	67	41	15	1072	0.949877	303.99	0.55597	121.6	81.05	0	3.91	569.27	8.5	568.3	8.48	-0.97	-0.17
26	68	42	16	1088	0.944637	305.31	0.558824	121.39	90.88	1.21	3.72	575.36	8.46	574.55	8.45	-0.8	-0.14
26	69	43	17	1104	0.939298	306.55	0.561594	121.21	101.13	0	3.55	578.66	8.39	577.77	8.37	-0.9	-0.16
26	70	44	18	1120	0.933878	307.72	0.564286	121.04	111.78	1.2	3.4	584.05	8.34	583.34	8.33	-0.71	-0.12
26	71	45	19	1136	0.928387	308.82	0.566901	120.9	122.82	0	3.25	586.72	8.26	585.94	8.25	-0.78	-0.13
26	72	46	20	1152	0.92284	309.85	0.569444	120.77	134.22	1.18	3.11	591.45	8.21	590.88	8.21	-0.58	-0.1
26	73	47	21	1168	0.917245	310.82	0.571918	120.66	145.98	0	2.99	593.54	8.13	592.91	8.12	-0.63	-0.11
26	74	48	22	1184	0.911614	311.72	0.574324	120.56	158.08	1.16	2.87	597.67	8.08	597.26	8.07	-0.41	-0.07
26	75	49	23	1200	0.905956	312.57	0.576667	120.48	170.5	0	2.76	599.2	7.99	598.75	7.98	-0.45	-0.08
26	76	50	24	1216	0.900277	313.37	0.578947	120.42	183.24	1.15	2.65	602.78	7.93	602.55	7.93	-0.23	-0.04
26	77	51	25	1232	0.894586	314.11	0.581169	120.36	196.28	0	2.56	603.8	7.84	603.54	7.84	-0.26	-0.04
26	78	52	26	1248	0.888889	314.81	0.583333	120.32	209.61	1.13	2.47	606.86	7.78	606.82	7.78	-0.04	-0.01
26	79	53	27	1264	0.883192	315.46	0.585443	120.29	223.22	0	2.38	607.41	7.69	607.34	7.69	-0.06	-0.01
26	80	54	28	1280	0.8775	316.06	0.5875	120.28	237.1	1.12	2.3	609.98	7.62	610.13	7.63	0.16	0.03
26	81	55	29	1296	0.871818	316.63	0.589506	120.27	251.24	0	2.22	610.09	7.53	610.22	7.53	0.13	0.02
26	82	56	30	1312	0.866151	317.15	0.591463	120.28	265.62	1.1	2.15	612.2	7.47	612.55	7.47	0.35	0.06
26	83	57	31	1328	0.860502	317.64	0.593373	120.29	280.25	0	2.08	611.9	7.37	612.22	7.38	0.32	0.05
26	84	58	32	1344	0.854875	318.1	0.595238	120.31	295.11	1.09	2.02	613.59	7.3	614.12	7.31	0.53	0.09
26	85	59	33	1360	0.849273	318.51	0.597059	120.35	310.2	0	1.96	612.9	7.21	613.4	7.22	0.5	0.08
26	86	60	34	1376	0.843699	318.9	0.598837	120.39	325.5	1.08	1.9	614.2	7.14	614.9	7.15	0.7	0.11
26	87	61	35	1392	0.838156	319.26	0.600575	120.43	341.01	0	1.85	613.15	7.05	613.81	7.06	0.66	0.11
26	88	62	36	1408	0.832645	319.58	0.602273	120.49	356.72	1.07	1.79	614.07	6.98	614.92	6.99	0.85	0.14
26	89	63	37	1424	0.827168	319.88	0.603933	120.55	372.63	0	1.74	612.69	6.88	613.49	6.89	0.8	0.13
26	90	64	38	1440	0.821728	320.15	0.605556	120.62	388.72	1.05	1.7	613.25	6.81	614.24	6.82	0.98	0.16
26	91	65	39	1456	0.816327	320.4	0.607143	120.7	405	0	1.65	611.55	6.72	612.47	6.73	0.92	0.15
26	92	66	40	1472	0.810964	320.62	0.608696	120.78	421.46	1.04	1.61	611.79	6.65	612.88	6.66	1.08	0.18
26	93	67	41	1488	0.805642	320.82	0.610215	120.87	438.08	0	1.57	609.79	6.56	610.8	6.57	1.01	0.16

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
26	94	68	42	1504	0.800362	321	0.611702	120.96	454.87	1.03	1.53	609.72	6.49	610.88	6.5	1.16	0.19
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
27	53	26	-1	848	0.999644	273.63	0.495283	137.82	0.45	0	9.24	445.34	8.4	448.86	8.47	3.53	0.79
27	54	27	0	864	1	277.16	0.5	136.94	0	-1.36	10	458.54	8.49	461.56	8.55	3.02	0.65
27	55	28	1	880	0.999669	280.48	0.504545	136.12	0.44	0	9.26	472.22	8.59	473.33	8.61	1.11	0.23
27	56	29	2	896	0.998724	283.6	0.508929	135.38	1.72	-1.34	8.61	482.58	8.62	484.83	8.66	2.26	0.47
27	57	30	3	912	0.99723	286.54	0.513158	134.68	3.8	0	8.02	495	8.68	495.42	8.69	0.42	0.09
27	58	31	4	928	0.995244	289.3	0.517241	134.04	6.64	-1.31	7.49	504.19	8.69	505.82	8.72	1.63	0.32
27	59	32	5	944	0.992818	291.9	0.521186	133.45	10.21	0	7.01	515.44	8.74	515.32	8.73	-0.12	-0.02
27	60	33	6	960	0.99	294.35	0.525	132.91	14.46	-1.29	6.57	523.56	8.73	524.7	8.74	1.14	0.22
27	61	34	7	976	0.986831	296.66	0.528689	132.41	19.36	0	6.18	533.74	8.75	533.21	8.74	-0.54	-0.1
27	62	35	8	992	0.983351	298.84	0.532258	131.95	24.88	-1.27	5.82	540.88	8.72	541.65	8.74	0.77	0.14
27	63	36	9	1008	0.979592	300.89	0.535714	131.52	31	0	5.49	550.08	8.73	549.24	8.72	-0.84	-0.15
27	64	37	10	1024	0.975586	302.82	0.539062	131.13	37.68	-1.25	5.19	556.3	8.69	556.82	8.7	0.52	0.09
27	65	38	11	1040	0.971361	304.64	0.542308	130.78	44.91	0	4.91	564.59	8.69	563.55	8.67	-1.04	-0.18
27	66	39	12	1056	0.966942	306.36	0.545455	130.45	52.64	-1.23	4.66	569.98	8.64	570.33	8.64	0.35	0.06
27	67	40	13	1072	0.962352	307.98	0.548507	130.15	60.88	0	4.43	577.43	8.62	576.28	8.6	-1.15	-0.2
27	68	41	14	1088	0.957612	309.5	0.551471	129.87	69.58	-1.21	4.21	582.04	8.56	582.31	8.56	0.27	0.05
27	69	42	15	1104	0.952741	310.94	0.554348	129.63	78.73	0	4.01	588.71	8.53	587.53	8.51	-1.18	-0.2
27	70	43	16	1120	0.947755	312.29	0.557143	129.4	88.32	-1.2	3.83	592.62	8.47	592.87	8.47	0.25	0.04
27	71	44	17	1136	0.94267	313.57	0.559859	129.2	98.32	0	3.66	598.57	8.43	597.41	8.41	-1.16	-0.19
27	72	45	18	1152	0.9375	314.77	0.5625	129.02	108.72	-1.18	3.5	601.82	8.36	602.1	8.36	0.29	0.05
27	73	46	19	1168	0.932257	315.9	0.565068	128.85	119.5	0	3.35	607.1	8.32	606.01	8.3	-1.09	-0.18
27	74	47	20	1184	0.926954	316.97	0.567568	128.71	130.64	-1.16	3.21	609.73	8.24	610.1	8.24	0.36	0.06
27	75	48	21	1200	0.9216	317.97	0.57	128.58	142.14	0	3.09	614.4	8.19	613.41	8.18	-0.99	-0.16
27	76	49	22	1216	0.916205	318.91	0.572368	128.47	153.97	-1.15	2.96	616.46	8.11	616.94	8.12	0.47	0.08
27	77	50	23	1232	0.910778	319.8	0.574675	128.37	166.13	0	2.85	620.55	8.06	619.69	8.05	-0.86	-0.14
27	78	51	24	1248	0.905325	320.63	0.576923	128.29	178.6	-1.13	2.75	622.09	7.98	622.69	7.98	0.6	0.1
27	79	52	25	1264	0.899856	321.41	0.579114	128.23	191.38	0	2.65	625.63	7.92	624.93	7.91	-0.71	-0.11
27	80	53	26	1280	0.894375	322.14	0.58125	128.17	204.44	-1.12	2.55	626.68	7.83	627.43	7.84	0.75	0.12
27	81	54	27	1296	0.888889	322.83	0.583333	128.13	217.78	0	2.47	629.73	7.77	629.18	7.77	-0.55	-0.09
27	82	55	28	1312	0.883403	323.47	0.585366	128.1	231.39	-1.1	2.38	630.32	7.69	631.21	7.7	0.9	0.14
27	83	56	29	1328	0.877921	324.07	0.587349	128.09	245.26	0	2.31	632.89	7.63	632.5	7.62	-0.39	-0.06
27	84	57	30	1344	0.872449	324.63	0.589286	128.08	259.38	-1.09	2.23	633.05	7.54	634.1	7.55	1.05	0.16
27	85	58	31	1360	0.86699	325.16	0.591176	128.08	273.74	0	2.16	635.18	7.47	634.95	7.47	-0.23	-0.04
27	86	59	32	1376	0.861547	325.65	0.593023	128.1	288.33	-1.08	2.1	634.95	7.38	636.13	7.4	1.19	0.19
27	87	60	33	1392	0.856124	326.1	0.594828	128.12	303.15	0	2.03	636.67	7.32	636.58	7.32	-0.08	-0.01
27	88	61	34	1408	0.850723	326.52	0.596591	128.15	318.18	-1.07	1.97	636.05	7.23	637.37	7.24	1.32	0.21
27	89	62	35	1424	0.845348	326.91	0.598315	128.19	333.43	0	1.92	637.39	7.16	637.44	7.16	0.05	0.01
27	90	63	36	1440	0.84	327.27	0.6	128.23	348.88	-1.05	1.86	636.42	7.07	637.86	7.09	1.43	0.22
27	91	64	37	1456	0.834682	327.6	0.601648	128.29	364.53	0	1.81	637.39	7	637.56	7.01	0.17	0.03
27	92	65	38	1472	0.829395	327.91	0.603261	128.35	380.36	-1.04	1.76	636.1	6.91	637.63	6.93	1.53	0.24
27	93	66	39	1488	0.824142	328.19	0.604839	128.42	396.39	0	1.72	636.72	6.85	636.98	6.85	0.26	0.04
27	94	67	40	1504	0.818923	328.45	0.606383	128.49	412.58	-1.03	1.67	635.12	6.76	636.72	6.77	1.6	0.25

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
27	95	68	41	1520	0.81374	328.68	0.607895	128.58	428.96	0	1.63	635.42	6.69	635.75	6.69	0.33	0.05
27	96	69	42	1536	0.808594	328.89	0.609375	128.66	445.5	-1.02	1.59	633.52	6.6	635.17	6.62	1.65	0.26
27	97	70	43	1552	0.803486	329.07	0.610825	128.76	462.2	0	1.55	633.52	6.53	633.89	6.53	0.37	0.06
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
28	55	27	-1	880	0.999669	280.48	0.495455	146.39	0.44	0	9.26	461.95	8.4	465.65	8.47	3.69	0.79
28	56	28	0	896	1	283.96	0.5	145.49	0	1.34	10	477.88	8.53	479.83	8.57	1.95	0.41
28	57	29	1	912	0.999692	287.24	0.504386	144.66	0.42	0	9.29	488.96	8.58	490.31	8.6	1.35	0.27
28	58	30	2	928	0.998811	290.34	0.508621	143.89	1.66	1.31	8.65	502.08	8.66	503.27	8.68	1.19	0.24
28	59	31	3	944	0.997415	293.26	0.512712	143.17	3.67	0	8.08	511.97	8.68	512.64	8.69	0.67	0.13
28	60	32	4	960	0.995556	296.01	0.516667	142.51	6.42	1.29	7.56	523.9	8.73	524.47	8.74	0.57	0.11
28	61	33	5	976	0.993281	298.6	0.520492	141.9	9.88	0	7.09	532.71	8.73	532.84	8.74	0.13	0.02
28	62	34	6	992	0.990635	301.05	0.524194	141.34	14	1.27	6.66	543.54	8.77	543.63	8.77	0.09	0.02
28	63	35	7	1008	0.987654	303.37	0.527778	140.81	18.75	0	6.27	551.34	8.75	551.06	8.75	-0.28	-0.05
28	64	36	8	1024	0.984375	305.55	0.53125	140.33	24.12	1.25	5.92	561.17	8.77	560.89	8.76	-0.28	-0.05
28	65	37	9	1040	0.980828	307.61	0.534615	139.88	30.06	0	5.59	568.03	8.74	567.45	8.73	-0.58	-0.1
28	66	38	10	1056	0.977043	309.56	0.537879	139.47	36.56	1.23	5.29	576.93	8.74	576.4	8.73	-0.53	-0.09
28	67	39	11	1072	0.973045	311.4	0.541045	139.09	43.59	0	5.02	582.94	8.7	582.16	8.69	-0.78	-0.13
28	68	40	12	1088	0.968858	313.14	0.544118	138.74	51.12	1.21	4.77	590.98	8.69	590.29	8.68	-0.69	-0.12
28	69	41	13	1104	0.964503	314.78	0.547101	138.42	59.14	0	4.53	596.19	8.64	595.29	8.63	-0.9	-0.15
28	70	42	14	1120	0.96	316.33	0.55	138.13	67.62	1.2	4.32	603.43	8.62	602.66	8.61	-0.78	-0.13
28	71	43	15	1136	0.955366	317.79	0.552817	137.86	76.55	0	4.12	607.91	8.56	606.97	8.55	-0.94	-0.16
28	72	44	16	1152	0.950617	319.18	0.555556	137.62	85.9	1.18	3.93	614.41	8.53	613.62	8.52	-0.79	-0.13
28	73	45	17	1168	0.945768	320.48	0.558219	137.4	95.66	0	3.76	618.22	8.47	617.29	8.46	-0.93	-0.15
28	74	46	18	1184	0.940833	321.71	0.560811	137.2	105.82	1.16	3.6	624.03	8.43	623.27	8.42	-0.76	-0.12
28	75	47	19	1200	0.935822	322.88	0.563333	137.02	116.35	0	3.45	627.2	8.36	626.33	8.35	-0.87	-0.14
28	76	48	20	1216	0.930748	323.97	0.565789	136.86	127.25	1.15	3.31	632.38	8.32	631.7	8.31	-0.68	-0.11
28	77	49	21	1232	0.92562	325.01	0.568182	136.72	138.5	0	3.18	634.96	8.25	634.19	8.24	-0.77	-0.12
28	78	50	22	1248	0.920447	325.98	0.570513	136.59	150.08	1.13	3.06	639.54	8.2	638.97	8.19	-0.57	-0.09
28	79	51	23	1264	0.915238	326.9	0.572785	136.48	161.98	0	2.94	641.58	8.12	640.93	8.11	-0.65	-0.1
28	80	52	24	1280	0.91	327.77	0.575	136.38	174.19	1.12	2.84	645.61	8.07	645.17	8.06	-0.44	-0.07
28	81	53	25	1296	0.90474	328.59	0.57716	136.3	186.71	0	2.74	647.14	7.99	646.63	7.98	-0.5	-0.08
28	82	54	26	1312	0.899465	329.35	0.579268	136.24	199.51	1.1	2.64	650.64	7.93	650.35	7.93	-0.29	-0.04
28	83	55	27	1328	0.894179	330.07	0.581325	136.18	212.59	0	2.55	651.7	7.85	651.35	7.85	-0.35	-0.05
28	84	56	28	1344	0.888889	330.75	0.583333	136.14	225.94	1.09	2.47	654.72	7.79	654.58	7.79	-0.14	-0.02
28	85	57	29	1360	0.883599	331.39	0.585294	136.11	239.55	0	2.39	655.33	7.71	655.14	7.71	-0.2	-0.03
28	86	58	30	1376	0.878313	331.98	0.587209	136.09	253.41	1.08	2.31	657.9	7.65	657.92	7.65	0.02	0
28	87	59	31	1392	0.873035	332.54	0.58908	136.08	267.52	0	2.24	658.1	7.56	658.06	7.56	-0.04	-0.01
28	88	60	32	1408	0.867769	333.06	0.590909	136.09	281.85	1.07	2.17	660.24	7.5	660.4	7.5	0.16	0.02
28	89	61	33	1424	0.862517	333.55	0.592697	136.1	296.41	0	2.11	660.05	7.42	660.15	7.42	0.1	0.02
28	90	62	34	1440	0.857284	334.01	0.594444	136.12	311.19	1.05	2.05	661.78	7.35	662.09	7.36	0.3	0.05
28	91	63	35	1456	0.852071	334.43	0.596154	136.15	326.18	0	1.99	661.23	7.27	661.46	7.27	0.24	0.04
28	92	64	36	1472	0.846881	334.82	0.597826	136.18	341.38	1.04	1.93	662.59	7.2	663.02	7.21	0.43	0.06
28	93	65	37	1488	0.841716	335.19	0.599462	136.23	356.77	0	1.88	661.69	7.11	662.04	7.12	0.35	0.05
28	94	66	38	1504	0.836578	335.53	0.601064	136.28	372.36	1.03	1.83	662.69	7.05	663.23	7.06	0.53	0.08

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
28	95	67	39	1520	0.831468	335.84	0.602632	136.34	388.13	0	1.78	661.47	6.96	661.92	6.97	0.45	0.07
28	96	68	40	1536	0.826389	336.12	0.604167	136.41	404.08	1.02	1.74	662.14	6.9	662.76	6.9	0.62	0.09
28	97	69	41	1552	0.821341	336.39	0.60567	136.49	420.21	0	1.69	660.62	6.81	661.14	6.82	0.52	0.08
28	98	70	42	1568	0.816327	336.63	0.607143	136.57	436.5	1.01	1.65	660.97	6.74	661.65	6.75	0.68	0.1
28	99	71	43	1584	0.811346	336.85	0.608586	136.65	452.96	0	1.61	659.16	6.66	659.73	6.66	0.57	0.09
28	100	72	44	1600	0.8064	337.04	0.61	136.75	469.58	1	1.58	659.21	6.59	659.92	6.6	0.71	0.11
28	101	73	45	1616	0.80149	337.22	0.611386	136.84	486.35	0	1.54	657.13	6.51	657.71	6.51	0.59	0.09
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
29	57	28	-1	912	0.999692	287.24	0.495614	155.18	0.42	0	9.29	478.45	8.39	482.32	8.46	3.87	0.8
29	58	29	0	928	1	290.68	0.5	154.26	0	-1.31	10	491.75	8.48	495.15	8.54	3.4	0.69
29	59	30	1	944	0.999713	293.93	0.504237	153.4	0.41	0	9.31	505.57	8.57	507.09	8.59	1.52	0.3
29	60	31	2	960	0.998889	297	0.508333	152.61	1.61	-1.29	8.69	516.19	8.6	518.78	8.65	2.59	0.5
29	61	32	3	976	0.997581	299.9	0.512295	151.87	3.56	0	8.13	528.81	8.67	529.6	8.68	0.79	0.15
29	62	33	4	992	0.995838	302.63	0.516129	151.19	6.22	-1.27	7.63	538.31	8.68	540.23	8.71	1.92	0.36
29	63	34	5	1008	0.993701	305.22	0.519841	150.56	9.57	0	7.17	549.82	8.73	550.01	8.73	0.19	0.04
29	64	35	6	1024	0.991211	307.67	0.523438	149.97	13.57	-1.25	6.75	558.29	8.72	559.67	8.74	1.38	0.25
29	65	36	7	1040	0.988402	309.99	0.526923	149.42	18.19	0	6.36	568.77	8.75	568.49	8.75	-0.27	-0.05
29	66	37	8	1056	0.985308	312.18	0.530303	148.92	23.4	-1.23	6.01	576.29	8.73	577.25	8.75	0.97	0.17
29	67	38	9	1072	0.981956	314.25	0.533582	148.45	29.18	0	5.69	585.81	8.74	585.19	8.73	-0.62	-0.11
29	68	39	10	1088	0.978374	316.21	0.536765	148.02	35.5	-1.21	5.39	592.45	8.71	593.11	8.72	0.66	0.11
29	69	40	11	1104	0.974585	318.07	0.539855	147.62	42.34	0	5.12	601.09	8.71	600.22	8.7	-0.87	-0.15
29	70	41	12	1120	0.970612	319.83	0.542857	147.25	49.68	-1.2	4.87	606.92	8.67	607.36	8.68	0.44	0.07
29	71	42	13	1136	0.966475	321.49	0.545775	146.91	57.5	0	4.63	614.74	8.66	613.7	8.64	-1.04	-0.17
29	72	43	14	1152	0.962191	323.06	0.548611	146.6	65.77	-1.18	4.42	619.81	8.61	620.12	8.61	0.31	0.05
29	73	44	15	1168	0.957778	324.55	0.55137	146.31	74.48	0	4.22	626.88	8.59	625.75	8.57	-1.13	-0.18
29	74	45	16	1184	0.953251	325.96	0.554054	146.05	83.61	-1.16	4.03	631.25	8.53	631.49	8.53	0.24	0.04
29	75	46	17	1200	0.948622	327.29	0.556667	145.81	93.15	0	3.86	637.61	8.5	636.45	8.49	-1.16	-0.18
29	76	47	18	1216	0.943906	328.55	0.559211	145.59	103.07	-1.15	3.7	641.33	8.44	641.55	8.44	0.22	0.03
29	77	48	19	1232	0.939113	329.75	0.561688	145.39	113.37	0	3.55	647.03	8.4	645.89	8.39	-1.15	-0.18
29	78	49	20	1248	0.934254	330.87	0.564103	145.22	124.03	-1.13	3.41	650.15	8.34	650.4	8.34	0.25	0.04
29	79	50	21	1264	0.929338	331.94	0.566456	145.06	135.03	0	3.27	655.24	8.29	654.15	8.28	-1.09	-0.17
29	80	51	22	1280	0.924375	332.95	0.56875	144.92	146.37	-1.12	3.15	657.8	8.22	658.1	8.23	0.31	0.05
29	81	52	23	1296	0.919372	333.9	0.570988	144.79	158.03	0	3.03	662.31	8.18	661.31	8.16	-1.01	-0.15
29	82	53	24	1312	0.914337	334.8	0.573171	144.68	170	-1.1	2.93	664.34	8.1	664.74	8.11	0.39	0.06
29	83	54	25	1328	0.909276	335.65	0.575301	144.59	182.27	0	2.82	668.32	8.05	667.42	8.04	-0.9	-0.14
29	84	55	26	1344	0.904195	336.45	0.577381	144.5	194.82	-1.09	2.73	669.86	7.97	670.36	7.98	0.49	0.07
29	85	56	27	1360	0.8991	337.2	0.579412	144.44	207.65	0	2.63	673.34	7.92	672.56	7.91	-0.79	-0.12
29	86	57	28	1376	0.893997	337.91	0.581395	144.38	220.75	-1.08	2.55	674.42	7.84	675.03	7.85	0.61	0.09
29	87	58	29	1392	0.888889	338.58	0.583333	144.34	234.11	0	2.47	677.43	7.79	676.77	7.78	-0.66	-0.1
29	88	59	30	1408	0.883781	339.21	0.585227	144.31	247.72	-1.07	2.39	678.08	7.71	678.8	7.71	0.72	0.11
29	89	60	31	1424	0.878677	339.8	0.587079	144.29	261.57	0	2.32	680.65	7.65	680.11	7.64	-0.54	-0.08
29	90	61	32	1440	0.87358	340.36	0.588889	144.28	275.66	-1.05	2.25	680.9	7.57	681.73	7.57	0.83	0.12
29	91	62	33	1456	0.868494	340.88	0.590659	144.28	289.97	0	2.18	683.05	7.51	682.63	7.5	-0.42	-0.06
29	92	63	34	1472	0.863422	341.36	0.592391	144.29	304.5	-1.04	2.12	682.92	7.42	683.85	7.43	0.94	0.14

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
29	93	64	35	1488	0.858365	341.82	0.594086	144.31	319.24	0	2.06	684.68	7.36	684.37	7.36	-0.31	-0.05
29	94	65	36	1504	0.853327	342.24	0.595745	144.34	334.19	-1.03	2	684.19	7.28	685.22	7.29	1.03	0.15
29	95	66	37	1520	0.84831	342.64	0.597368	144.38	349.34	0	1.95	685.59	7.22	685.37	7.21	-0.22	-0.03
29	96	67	38	1536	0.843316	343.01	0.598958	144.42	364.68	-1.02	1.9	684.76	7.13	685.87	7.14	1.1	0.16
29	97	68	39	1552	0.838346	343.35	0.600515	144.47	380.21	0	1.85	685.81	7.07	685.67	7.07	-0.15	-0.02
29	98	69	40	1568	0.833403	343.67	0.602041	144.53	395.92	-1.01	1.8	684.67	6.99	685.83	7	1.16	0.17
29	99	70	41	1584	0.828487	343.96	0.603535	144.6	411.8	0	1.76	685.39	6.92	685.3	6.92	-0.09	-0.01
29	100	71	42	1600	0.8236	344.23	0.605	144.67	427.86	-1	1.71	683.95	6.84	685.15	6.85	1.19	0.17
29	101	72	43	1616	0.818743	344.48	0.606436	144.75	444.08	0	1.67	684.36	6.78	684.3	6.78	-0.06	-0.01
29	102	73	44	1632	0.813918	344.71	0.607843	144.84	460.46	-0.99	1.63	682.64	6.69	683.84	6.7	1.2	0.18
29	103	74	45	1648	0.809124	344.91	0.609223	144.93	477	0	1.6	682.76	6.63	682.7	6.63	-0.06	-0.01
29	104	75	46	1664	0.804364	345.1	0.610577	145.02	493.69	-0.98	1.56	680.77	6.55	681.95	6.56	1.18	0.17
29	105	76	47	1680	0.799637	345.27	0.611905	145.13	510.52	0	1.53	680.61	6.48	680.53	6.48	-0.08	-0.01
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
30	59	29	-1	944	0.999713	293.93	0.495763	164.16	0.41	0	9.31	494.81	8.39	498.84	8.45	4.03	0.81
30	60	30	0	960	1	297.33	0.5	163.22	0	1.29	10	510.74	8.51	513.11	8.55	2.37	0.46
30	61	31	1	976	0.999731	300.54	0.504098	162.35	0.4	0	9.33	522.05	8.56	523.79	8.59	1.74	0.33
30	62	32	2	992	0.998959	303.58	0.508065	161.54	1.56	1.27	8.73	535.33	8.63	536.9	8.66	1.57	0.29
30	63	33	3	1008	0.997732	306.46	0.511905	160.78	3.44	0	8.19	545.5	8.66	546.52	8.67	1.02	0.19
30	64	34	4	1024	0.996094	309.19	0.515625	160.07	6.03	1.25	7.69	557.65	8.71	558.56	8.73	0.91	0.16
30	65	35	5	1040	0.994083	311.77	0.519231	159.42	9.28	0	7.24	566.77	8.72	567.21	8.73	0.43	0.08
30	66	36	6	1056	0.991736	314.21	0.522727	158.81	13.16	1.23	6.83	577.87	8.76	578.25	8.76	0.38	0.07
30	67	37	7	1072	0.989084	316.53	0.526119	158.24	17.65	0	6.45	586.02	8.75	586	8.75	-0.03	-0.01
30	68	38	8	1088	0.986159	318.73	0.529412	157.71	22.72	1.21	6.1	596.15	8.77	596.12	8.77	-0.04	-0.01
30	69	39	9	1104	0.982987	320.81	0.532609	157.22	28.34	0	5.78	603.4	8.74	603.02	8.74	-0.38	-0.06
30	70	40	10	1120	0.979592	322.78	0.535714	156.77	34.5	1.2	5.49	612.63	8.75	612.29	8.75	-0.34	-0.06
30	71	41	11	1136	0.975997	324.66	0.538732	156.35	41.17	0	5.22	619.05	8.72	618.41	8.71	-0.63	-0.1
30	72	42	12	1152	0.972222	326.43	0.541667	155.96	48.32	1.18	4.97	627.43	8.71	626.88	8.71	-0.56	-0.09
30	73	43	13	1168	0.968287	328.11	0.544521	155.6	55.94	0	4.73	633.08	8.67	632.28	8.66	-0.8	-0.13
30	74	44	14	1184	0.964207	329.71	0.547297	155.27	64.01	1.16	4.52	640.69	8.66	640	8.65	-0.69	-0.11
30	75	45	15	1200	0.96	331.22	0.55	154.96	72.52	0	4.32	645.62	8.61	644.72	8.6	-0.9	-0.14
30	76	46	16	1216	0.955679	332.65	0.552632	154.68	81.44	1.15	4.13	652.5	8.59	651.74	8.58	-0.76	-0.12
30	77	47	17	1232	0.951257	334.01	0.555195	154.43	90.76	0	3.96	656.76	8.53	655.82	8.52	-0.94	-0.14
30	78	48	18	1248	0.946746	335.3	0.557692	154.19	100.46	1.13	3.79	662.97	8.5	662.2	8.49	-0.78	-0.12
30	79	49	19	1264	0.942157	336.52	0.560127	153.98	110.54	0	3.64	666.61	8.44	665.68	8.43	-0.93	-0.14
30	80	50	20	1280	0.9375	337.68	0.5625	153.78	120.97	1.12	3.5	672.19	8.4	671.44	8.39	-0.75	-0.11
30	81	51	21	1296	0.932785	338.77	0.564815	153.61	131.74	0	3.37	675.25	8.34	674.37	8.33	-0.88	-0.13
30	82	52	22	1312	0.928019	339.81	0.567073	153.45	142.85	1.1	3.24	680.24	8.3	679.55	8.29	-0.69	-0.1
30	83	53	23	1328	0.923211	340.79	0.569277	153.31	154.27	0	3.12	682.76	8.23	681.96	8.22	-0.8	-0.12
30	84	54	24	1344	0.918367	341.72	0.571429	153.18	166	1.09	3.01	687.2	8.18	686.6	8.17	-0.6	-0.09
30	85	55	25	1360	0.913495	342.6	0.573529	153.07	178.03	0	2.91	689.21	8.11	688.51	8.1	-0.7	-0.1
30	86	56	26	1376	0.908599	343.43	0.575581	152.98	190.34	1.08	2.81	693.14	8.06	692.64	8.05	-0.5	-0.07
30	87	57	27	1392	0.903686	344.22	0.577586	152.9	202.93	0	2.72	694.67	7.98	694.08	7.98	-0.59	-0.08
30	88	58	28	1408	0.89876	344.96	0.579545	152.83	215.79	1.07	2.63	698.11	7.93	697.73	7.93	-0.38	-0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
30	89	59	29	1424	0.893827	345.66	0.581461	152.77	228.91	0	2.54	699.2	7.86	698.74	7.85	-0.47	-0.07
30	90	60	30	1440	0.888889	346.32	0.583333	152.73	242.28	1.05	2.47	702.19	7.8	701.93	7.8	-0.26	-0.04
30	91	61	31	1456	0.883951	346.94	0.585165	152.7	255.89	0	2.39	702.86	7.72	702.52	7.72	-0.35	-0.05
30	92	62	32	1472	0.879017	347.53	0.586957	152.68	269.73	1.04	2.32	705.42	7.67	705.28	7.67	-0.14	-0.02
30	93	63	33	1488	0.874089	348.08	0.58871	152.67	283.8	0	2.25	705.7	7.59	705.47	7.59	-0.23	-0.03
30	94	64	34	1504	0.869172	348.6	0.590426	152.67	298.09	1.03	2.19	707.86	7.53	707.83	7.53	-0.03	0
30	95	65	35	1520	0.864266	349.09	0.592105	152.68	312.6	0	2.13	707.77	7.45	707.65	7.45	-0.12	-0.02
30	96	66	36	1536	0.859375	349.54	0.59375	152.69	327.3	1.02	2.07	709.55	7.39	709.62	7.39	0.07	0.01
30	97	67	37	1552	0.854501	349.97	0.595361	152.72	342.21	0	2.01	709.11	7.31	709.08	7.31	-0.03	0
30	98	68	38	1568	0.849646	350.37	0.596939	152.76	357.32	1.01	1.96	710.53	7.25	710.69	7.25	0.15	0.02
30	99	69	39	1584	0.844812	350.74	0.598485	152.8	372.61	0	1.91	709.77	7.17	709.82	7.17	0.05	0.01
30	100	70	40	1600	0.84	351.09	0.6	152.85	388.08	1	1.86	710.85	7.11	711.07	7.11	0.22	0.03
30	101	71	41	1616	0.835212	351.41	0.601485	152.91	403.73	0	1.82	709.77	7.03	709.88	7.03	0.11	0.02
30	102	72	42	1632	0.83045	351.71	0.602941	152.97	419.55	0.99	1.77	710.53	6.97	710.8	6.97	0.27	0.04
30	103	73	43	1648	0.825714	351.98	0.604369	153.05	435.54	0	1.73	709.16	6.89	709.31	6.89	0.14	0.02
30	104	74	44	1664	0.821006	352.24	0.605769	153.12	451.69	0.98	1.69	709.62	6.82	709.91	6.83	0.29	0.04
30	105	75	45	1680	0.816327	352.47	0.607143	153.21	468	0	1.65	707.97	6.74	708.13	6.74	0.16	0.02
30	106	76	46	1696	0.811677	352.69	0.608491	153.3	484.46	0.97	1.62	708.14	6.68	708.43	6.68	0.29	0.04
30	107	77	47	1712	0.807057	352.88	0.609813	153.39	501.07	0	1.58	706.23	6.6	706.37	6.6	0.14	0.02
30	108	78	48	1728	0.802469	353.06	0.611111	153.5	517.83	0.96	1.55	706.13	6.54	706.38	6.54	0.26	0.04
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
31	61	30	-1	976	0.999731	300.54	0.495902	173.35	0.4	0	9.33	511.05	8.38	515.25	8.45	4.2	0.82
31	62	31	0	992	1	303.9	0.5	172.39	0	-1.27	10	524.44	8.46	528.2	8.52	3.76	0.71
31	63	32	1	1008	0.999748	307.08	0.503968	171.5	0.38	0	9.36	538.39	8.55	540.3	8.58	1.9	0.35
31	64	33	2	1024	0.999023	310.1	0.507812	170.66	1.51	-1.25	8.77	549.25	8.58	552.16	8.63	2.91	0.53
31	65	34	3	1040	0.99787	312.96	0.511538	169.88	3.34	0	8.24	562.06	8.65	563.19	8.66	1.13	0.2
31	66	35	4	1056	0.996327	315.67	0.515152	169.16	5.85	-1.23	7.75	571.85	8.66	574.05	8.7	2.2	0.38
31	67	36	5	1072	0.994431	318.24	0.518657	168.48	9.01	0	7.31	583.58	8.71	584.08	8.72	0.5	0.09
31	68	37	6	1088	0.992215	320.69	0.522059	167.85	12.78	-1.21	6.9	592.38	8.71	594	8.74	1.62	0.27
31	69	38	7	1104	0.989708	323	0.525362	167.26	17.15	0	6.53	603.12	8.74	603.11	8.74	-0.01	0
31	70	39	8	1120	0.986939	325.21	0.528571	166.71	22.08	-1.2	6.19	611	8.73	612.16	8.75	1.16	0.19
31	71	40	9	1136	0.983932	327.29	0.53169	166.2	27.56	0	5.87	620.82	8.74	620.41	8.74	-0.41	-0.07
31	72	41	10	1152	0.98071	329.28	0.534722	165.73	33.56	-1.18	5.58	627.84	8.72	628.65	8.73	0.81	0.13
31	73	42	11	1168	0.977294	331.16	0.537671	165.29	40.05	0	5.31	636.81	8.72	636.1	8.71	-0.71	-0.11
31	74	43	12	1184	0.973703	332.95	0.540541	164.88	47.03	-1.16	5.06	643.04	8.69	643.58	8.7	0.54	0.08
31	75	44	13	1200	0.969956	334.65	0.543333	164.5	54.47	0	4.83	651.21	8.68	650.28	8.67	-0.92	-0.14
31	76	45	14	1216	0.966066	336.27	0.546053	164.15	62.35	-1.15	4.61	656.7	8.64	657.06	8.65	0.36	0.05
31	77	46	15	1232	0.962051	337.8	0.548701	163.82	70.66	0	4.41	664.13	8.63	663.06	8.61	-1.06	-0.16
31	78	47	16	1248	0.957922	339.26	0.551282	163.52	79.38	-1.13	4.23	668.93	8.58	669.18	8.58	0.24	0.04
31	79	48	17	1264	0.953693	340.64	0.553797	163.25	88.49	0	4.05	675.67	8.55	674.53	8.54	-1.14	-0.17
31	80	49	18	1280	0.949375	341.95	0.55625	162.99	97.98	-1.12	3.89	679.84	8.5	680.02	8.5	0.18	0.03
31	81	50	19	1296	0.944978	343.2	0.558642	162.76	107.84	0	3.73	685.93	8.47	684.76	8.45	-1.17	-0.17
31	82	51	20	1312	0.940512	344.38	0.560976	162.55	118.05	-1.1	3.59	689.5	8.41	689.66	8.41	0.16	0.02
31	83	52	21	1328	0.935985	345.51	0.563253	162.36	128.61	0	3.46	694.99	8.37	693.82	8.36	-1.16	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
31	84	53	22	1344	0.931406	346.57	0.565476	162.18	139.49	-1.09	3.33	698	8.31	698.17	8.31	0.18	0.03
31	85	54	23	1360	0.926782	347.58	0.567647	162.03	150.68	0	3.21	702.92	8.27	701.79	8.26	-1.12	-0.16
31	86	55	24	1376	0.92212	348.54	0.569767	161.89	162.18	-1.08	3.1	705.41	8.2	705.63	8.2	0.22	0.03
31	87	56	25	1392	0.917426	349.45	0.571839	161.76	173.98	0	2.99	709.8	8.16	708.74	8.15	-1.06	-0.15
31	88	57	26	1408	0.912707	350.31	0.573864	161.65	186.07	-1.07	2.89	711.79	8.09	712.08	8.09	0.29	0.04
31	89	58	27	1424	0.907966	351.13	0.575843	161.56	198.42	0	2.8	715.69	8.04	714.71	8.03	-0.98	-0.14
31	90	59	28	1440	0.90321	351.9	0.577778	161.48	211.05	-1.05	2.71	717.23	7.97	717.59	7.97	0.36	0.05
31	91	60	29	1456	0.898442	352.63	0.57967	161.41	223.93	0	2.62	720.65	7.92	719.76	7.91	-0.89	-0.12
31	92	61	30	1472	0.893667	353.32	0.581522	161.35	237.07	-1.04	2.54	721.76	7.85	722.2	7.85	0.45	0.06
31	93	62	31	1488	0.888889	353.97	0.583333	161.31	250.44	0	2.47	724.74	7.79	723.94	7.78	-0.8	-0.11
31	94	63	32	1504	0.88411	354.59	0.585106	161.28	264.05	-1.03	2.39	725.44	7.72	725.97	7.72	0.53	0.07
31	95	64	33	1520	0.879335	355.17	0.586842	161.25	277.89	0	2.32	728.01	7.66	727.3	7.66	-0.71	-0.1
31	96	65	34	1536	0.874566	355.72	0.588542	161.24	291.95	-1.02	2.26	728.33	7.59	728.93	7.59	0.61	0.08
31	97	66	35	1552	0.869806	356.24	0.590206	161.24	306.22	0	2.2	730.5	7.53	729.88	7.52	-0.62	-0.09
31	98	67	36	1568	0.865056	356.72	0.591837	161.25	320.69	-1.01	2.14	730.46	7.45	731.14	7.46	0.68	0.09
31	99	68	37	1584	0.86032	357.18	0.593434	161.27	335.37	0	2.08	732.26	7.4	731.71	7.39	-0.55	-0.08
31	100	69	38	1600	0.8556	357.61	0.595	161.29	350.24	-1	2.03	731.89	7.32	732.62	7.33	0.74	0.1
31	101	70	39	1616	0.850897	358.01	0.596535	161.33	365.3	0	1.98	733.34	7.26	732.85	7.26	-0.49	-0.07
31	102	71	40	1632	0.846213	358.38	0.598039	161.37	380.55	-0.99	1.93	732.64	7.18	733.42	7.19	0.78	0.11
31	103	72	41	1648	0.84155	358.73	0.599515	161.42	395.97	0	1.88	733.76	7.12	733.31	7.12	-0.45	-0.06
31	104	73	42	1664	0.836908	359.06	0.600962	161.47	411.56	-0.98	1.83	732.76	7.05	733.56	7.05	0.8	0.11
31	105	74	43	1680	0.83229	359.37	0.602381	161.54	427.32	0	1.79	733.56	6.99	733.13	6.98	-0.43	-0.06
31	106	75	44	1696	0.827697	359.65	0.603774	161.61	443.25	-0.97	1.75	732.27	6.91	733.07	6.92	0.8	0.11
31	107	76	45	1712	0.823129	359.91	0.60514	161.69	459.33	0	1.71	732.78	6.85	732.35	6.84	-0.43	-0.06
31	108	77	46	1728	0.818587	360.15	0.606481	161.77	475.57	-0.96	1.67	731.22	6.77	731.99	6.78	0.78	0.11
31	109	78	47	1744	0.814073	360.37	0.607798	161.86	491.96	0	1.63	731.44	6.71	730.98	6.71	-0.46	-0.06
31	110	79	48	1760	0.809587	360.57	0.609091	161.95	508.5	-0.95	1.6	729.62	6.63	730.35	6.64	0.73	0.1
31	111	80	49	1776	0.805129	360.76	0.61036	162.06	525.18	0	1.57	729.58	6.57	729.06	6.57	-0.52	-0.07
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
32	63	31	-1	1008	0.999748	307.08	0.496032	182.74	0.38	0	9.36	527.15	8.37	531.51	8.44	4.35	0.82
32	64	32	0	1024	1	310.4	0.5	181.76	0	1.25	10	543.09	8.49	545.87	8.53	2.78	0.51
32	65	33	1	1040	0.999763	313.55	0.503846	180.84	0.37	0	9.37	554.61	8.53	556.72	8.56	2.11	0.38
32	66	34	2	1056	0.999082	316.54	0.507576	179.99	1.46	1.23	8.8	568.04	8.61	569.97	8.64	1.93	0.34
32	67	35	3	1072	0.997995	319.38	0.511194	179.19	3.24	0	8.29	578.47	8.63	579.82	8.65	1.35	0.23
32	68	36	4	1088	0.99654	322.08	0.514706	178.44	5.68	1.21	7.81	590.82	8.69	592.05	8.71	1.23	0.21
32	69	37	5	1104	0.994749	324.65	0.518116	177.74	8.75	0	7.38	600.24	8.7	600.96	8.71	0.72	0.12
32	70	38	6	1120	0.992653	327.09	0.521429	177.09	12.42	1.2	6.98	611.57	8.74	612.23	8.75	0.66	0.11
32	71	39	7	1136	0.99028	329.41	0.524648	176.48	16.67	0	6.61	620.05	8.73	620.27	8.74	0.22	0.03
32	72	40	8	1152	0.987654	331.61	0.527778	175.91	21.48	1.18	6.27	630.45	8.76	630.65	8.76	0.2	0.03
32	73	41	9	1168	0.9848	333.71	0.530822	175.38	26.81	0	5.96	638.06	8.74	637.88	8.74	-0.18	-0.03
32	74	42	10	1184	0.981738	335.7	0.533784	174.89	32.66	1.16	5.67	647.58	8.75	647.43	8.75	-0.15	-0.02
32	75	43	11	1200	0.978489	337.6	0.536667	174.42	39	0	5.4	654.38	8.73	653.9	8.72	-0.48	-0.07
32	76	44	12	1216	0.975069	339.4	0.539474	173.99	45.81	1.15	5.15	663.09	8.72	662.68	8.72	-0.41	-0.06
32	77	45	13	1232	0.971496	341.12	0.542208	173.6	53.07	0	4.92	669.13	8.69	668.44	8.68	-0.69	-0.1

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
32	78	46	14	1248	0.967784	342.75	0.544872	173.22	60.77	1.13	4.71	677.09	8.68	676.49	8.67	-0.6	-0.09
32	79	47	15	1264	0.963948	344.3	0.547468	172.88	68.9	0	4.5	682.43	8.64	681.59	8.63	-0.84	-0.12
32	80	48	16	1280	0.96	345.78	0.55	172.56	77.42	1.12	4.32	689.67	8.62	688.96	8.61	-0.71	-0.1
32	81	49	17	1296	0.955952	347.19	0.552469	172.27	86.33	0	4.14	694.35	8.57	693.43	8.56	-0.92	-0.13
32	82	50	18	1312	0.951814	348.52	0.554878	172	95.62	1.1	3.98	700.94	8.55	700.16	8.54	-0.78	-0.11
32	83	51	19	1328	0.947598	349.79	0.557229	171.75	105.28	0	3.82	705.01	8.49	704.05	8.48	-0.96	-0.14
32	84	52	20	1344	0.943311	351	0.559524	171.52	115.28	1.09	3.68	710.97	8.46	710.18	8.45	-0.79	-0.11
32	85	53	21	1360	0.938962	352.15	0.561765	171.31	125.62	0	3.54	714.46	8.41	713.51	8.39	-0.95	-0.13
32	86	54	22	1376	0.934559	353.24	0.563953	171.12	136.28	1.08	3.41	719.85	8.37	719.08	8.36	-0.77	-0.11
32	87	55	23	1392	0.93011	354.28	0.566092	170.95	147.26	0	3.29	722.81	8.31	721.89	8.3	-0.91	-0.13
32	88	56	24	1408	0.92562	355.27	0.568182	170.79	158.54	1.07	3.18	727.64	8.27	726.92	8.26	-0.73	-0.1
32	89	57	25	1424	0.921096	356.2	0.570225	170.65	170.12	0	3.07	730.1	8.2	729.24	8.19	-0.85	-0.12
32	90	58	26	1440	0.916543	357.09	0.572222	170.53	181.98	1.05	2.97	734.42	8.16	733.76	8.15	-0.66	-0.09
32	91	59	27	1456	0.911967	357.94	0.574176	170.42	194.11	0	2.88	736.4	8.09	735.63	8.08	-0.78	-0.11
32	92	60	28	1472	0.907372	358.74	0.576087	170.33	206.51	1.04	2.79	740.25	8.05	739.67	8.04	-0.58	-0.08
32	93	61	29	1488	0.902763	359.5	0.577957	170.24	219.17	0	2.7	741.78	7.98	741.09	7.97	-0.69	-0.09
32	94	62	30	1504	0.898144	360.22	0.579787	170.18	232.08	1.03	2.62	745.18	7.93	744.68	7.92	-0.49	-0.07
32	95	63	31	1520	0.893518	360.9	0.581579	170.12	245.23	0	2.54	746.29	7.86	745.69	7.85	-0.6	-0.08
32	96	64	32	1536	0.888889	361.55	0.583333	170.07	258.61	1.02	2.47	749.25	7.8	748.85	7.8	-0.4	-0.05
32	97	65	33	1552	0.88426	362.16	0.585052	170.04	272.22	0	2.4	749.98	7.73	749.47	7.73	-0.51	-0.07
32	98	66	34	1568	0.879633	362.73	0.586735	170.02	286.05	1.01	2.33	752.54	7.68	752.22	7.68	-0.32	-0.04
32	99	67	35	1584	0.875013	363.28	0.588384	170.01	300.09	0	2.27	752.89	7.6	752.46	7.6	-0.43	-0.06
32	100	68	36	1600	0.8704	363.79	0.59	170	314.34	1	2.2	755.06	7.55	754.82	7.55	-0.24	-0.03
32	101	69	37	1616	0.865797	364.28	0.591584	170.01	328.8	0	2.15	755.06	7.48	754.71	7.47	-0.35	-0.05
32	102	70	38	1632	0.861207	364.73	0.593137	170.03	343.44	0.99	2.09	756.88	7.42	756.71	7.42	-0.17	-0.02
32	103	71	39	1648	0.856631	365.16	0.59466	170.05	358.28	0	2.04	756.55	7.35	756.25	7.34	-0.29	-0.04
32	104	72	40	1664	0.852071	365.57	0.596154	170.08	373.3	0.98	1.99	758.02	7.29	757.9	7.29	-0.12	-0.02
32	105	73	41	1680	0.847528	365.94	0.597619	170.12	388.5	0	1.94	757.37	7.21	757.13	7.21	-0.25	-0.03
32	106	74	42	1696	0.843005	366.3	0.599057	170.17	403.87	0.97	1.89	758.52	7.16	758.44	7.16	-0.09	-0.01
32	107	75	43	1712	0.838501	366.63	0.600467	170.23	419.41	0	1.85	757.58	7.08	757.36	7.08	-0.22	-0.03
32	108	76	44	1728	0.834019	366.94	0.601852	170.29	435.12	0.96	1.81	758.42	7.02	758.35	7.02	-0.07	-0.01
32	109	77	45	1744	0.82956	367.23	0.603211	170.36	450.98	0	1.77	757.19	6.95	756.98	6.94	-0.22	-0.03
32	110	78	46	1760	0.825124	367.49	0.604545	170.44	467.01	0.95	1.73	757.74	6.89	757.66	6.89	-0.08	-0.01
32	111	79	47	1776	0.820713	367.74	0.605856	170.52	483.18	0	1.69	756.25	6.81	756.01	6.81	-0.24	-0.03
32	112	80	48	1792	0.816327	367.97	0.607143	170.61	499.5	0.94	1.65	756.52	6.75	756.41	6.75	-0.11	-0.01
32	113	81	49	1808	0.811966	368.18	0.608407	170.7	515.96	0	1.62	754.77	6.68	754.49	6.68	-0.28	-0.04
32	114	82	50	1824	0.807633	368.37	0.609649	170.8	532.57	0.94	1.58	754.78	6.62	754.61	6.62	-0.17	-0.02
32	115	83	51	1840	0.803327	368.55	0.61087	170.91	549.31	0	1.55	752.79	6.55	752.44	6.54	-0.36	-0.05
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
33	65	32	-1	1040	0.999763	313.55	0.496154	192.32	0.37	0	9.37	543.13	8.36	547.64	8.43	4.51	0.82
33	66	33	0	1056	1	316.83	0.5	191.32	0	-1.23	10	556.61	8.43	560.71	8.5	4.1	0.73
33	67	34	1	1072	0.999777	319.95	0.503731	190.39	0.36	0	9.39	570.69	8.52	572.95	8.55	2.27	0.4
33	68	35	2	1088	0.999135	322.92	0.507353	189.51	1.42	-1.21	8.84	581.77	8.56	584.98	8.6	3.21	0.55
33	69	36	3	1104	0.99811	325.75	0.51087	188.69	3.15	0	8.33	594.74	8.62	596.2	8.64	1.46	0.24

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
33	70	37	4	1120	0.996735	328.43	0.514286	187.92	5.52	-1.2	7.87	604.79	8.64	607.26	8.68	2.47	0.41
33	71	38	5	1136	0.995041	330.99	0.517606	187.21	8.51	0	7.44	616.74	8.69	617.53	8.7	0.79	0.13
33	72	39	6	1152	0.993056	333.42	0.520833	186.53	12.08	-1.18	7.05	625.83	8.69	627.69	8.72	1.85	0.3
33	73	40	7	1168	0.990805	335.74	0.523973	185.9	16.22	0	6.68	636.82	8.72	637.06	8.73	0.24	0.04
33	74	41	8	1184	0.988313	337.95	0.527027	185.31	20.9	-1.16	6.35	645.03	8.72	646.38	8.73	1.35	0.21
33	75	42	9	1200	0.9856	340.05	0.53	184.76	26.11	0	6.04	655.13	8.74	654.92	8.73	-0.2	-0.03
33	76	43	10	1216	0.982687	342.05	0.532895	184.24	31.81	-1.15	5.75	662.5	8.72	663.45	8.73	0.96	0.14
33	77	44	11	1232	0.979592	343.96	0.535714	183.76	38	0	5.49	671.77	8.72	671.22	8.72	-0.54	-0.08
33	78	45	12	1248	0.976331	345.78	0.538462	183.31	44.65	-1.13	5.24	678.37	8.7	679.02	8.71	0.65	0.1
33	79	46	13	1264	0.972921	347.51	0.541139	182.89	51.75	0	5.01	686.86	8.69	686.06	8.68	-0.8	-0.12
33	80	47	14	1280	0.969375	349.16	0.54375	182.5	59.27	-1.12	4.8	692.74	8.66	693.17	8.66	0.42	0.06
33	81	48	15	1296	0.965706	350.73	0.546296	182.14	67.22	0	4.59	700.51	8.65	699.53	8.64	-0.99	-0.14
33	82	49	16	1312	0.961927	352.22	0.54878	181.8	75.56	-1.1	4.41	705.72	8.61	705.98	8.61	0.26	0.04
33	83	50	17	1328	0.958049	353.65	0.551205	181.49	84.28	0	4.23	712.81	8.59	711.7	8.57	-1.11	-0.16
33	84	51	18	1344	0.954082	355.01	0.553571	181.2	93.38	-1.09	4.07	717.39	8.54	717.55	8.54	0.16	0.02
33	85	52	19	1360	0.950035	356.3	0.555882	180.93	102.83	0	3.91	723.84	8.52	722.66	8.5	-1.18	-0.16
33	86	53	20	1376	0.945917	357.54	0.55814	180.69	112.63	-1.08	3.77	727.83	8.46	727.93	8.46	0.1	0.01
33	87	54	21	1392	0.941736	358.71	0.560345	180.46	122.76	0	3.63	733.69	8.43	732.48	8.42	-1.21	-0.17
33	88	55	22	1408	0.9375	359.83	0.5625	180.26	133.22	-1.07	3.5	737.13	8.38	737.21	8.38	0.08	0.01
33	89	56	23	1424	0.933216	360.89	0.564607	180.07	143.99	0	3.38	742.43	8.34	741.22	8.33	-1.21	-0.16
33	90	57	24	1440	0.928889	361.9	0.566667	179.9	155.06	-1.05	3.26	745.35	8.28	745.44	8.28	0.09	0.01
33	91	58	25	1456	0.924526	362.87	0.568681	179.74	166.42	0	3.15	750.12	8.24	748.94	8.23	-1.18	-0.16
33	92	59	26	1472	0.920132	363.78	0.570652	179.61	178.06	-1.04	3.05	752.55	8.18	752.67	8.18	0.12	0.02
33	93	60	27	1488	0.915713	364.66	0.572581	179.48	189.98	0	2.95	756.83	8.14	755.7	8.13	-1.13	-0.15
33	94	61	28	1504	0.911272	365.48	0.574468	179.37	202.17	-1.03	2.86	758.81	8.07	758.97	8.07	0.16	0.02
33	95	62	29	1520	0.906814	366.27	0.576316	179.28	214.61	0	2.77	762.62	8.03	761.54	8.02	-1.08	-0.14
33	96	63	30	1536	0.902344	367.02	0.578125	179.2	227.29	-1.02	2.69	764.16	7.96	764.38	7.96	0.21	0.03
33	97	64	31	1552	0.897864	367.73	0.579897	179.13	240.22	0	2.61	767.53	7.91	766.52	7.9	-1.01	-0.13
33	98	65	32	1568	0.893378	368.4	0.581633	179.07	253.39	-1.01	2.54	768.67	7.84	768.94	7.85	0.27	0.04
33	99	66	33	1584	0.888889	369.04	0.583333	179.02	266.78	0	2.47	771.62	7.79	770.68	7.78	-0.95	-0.12
33	100	67	34	1600	0.8844	369.64	0.585	178.99	280.39	-1	2.4	772.38	7.72	772.7	7.73	0.33	0.04
33	101	68	35	1616	0.879914	370.22	0.586634	178.97	294.21	0	2.33	774.94	7.67	774.05	7.66	-0.89	-0.11
33	102	69	36	1632	0.875433	370.76	0.588235	178.95	308.24	-0.99	2.27	775.33	7.6	775.7	7.6	0.38	0.05
33	103	70	37	1648	0.870959	371.27	0.589806	178.95	322.47	0	2.21	777.52	7.55	776.69	7.54	-0.83	-0.11
33	104	71	38	1664	0.866494	371.75	0.591346	178.96	336.9	-0.98	2.16	777.56	7.48	777.98	7.48	0.42	0.05
33	105	72	39	1680	0.862041	372.21	0.592857	178.97	351.52	0	2.1	779.4	7.42	778.61	7.42	-0.79	-0.1
33	106	73	40	1696	0.857601	372.64	0.59434	178.99	366.32	-0.97	2.05	779.12	7.35	779.57	7.35	0.45	0.06
33	107	74	41	1712	0.853175	373.05	0.595794	179.02	381.3	0	2	780.63	7.3	779.86	7.29	-0.76	-0.1
33	108	75	42	1728	0.848765	373.43	0.597222	179.06	396.46	-0.96	1.95	780.04	7.22	780.5	7.23	0.46	0.06
33	109	76	43	1744	0.844373	373.78	0.598624	179.11	411.79	0	1.91	781.22	7.17	780.47	7.16	-0.75	-0.1
33	110	77	44	1760	0.84	374.12	0.6	179.17	427.28	-0.95	1.86	780.35	7.09	780.8	7.1	0.45	0.06
33	111	78	45	1776	0.835646	374.43	0.601351	179.23	442.93	0	1.82	781.23	7.04	780.47	7.03	-0.76	-0.1
33	112	79	46	1792	0.831314	374.72	0.602679	179.3	458.74	-0.94	1.78	780.07	6.96	780.5	6.97	0.43	0.05
33	113	80	47	1808	0.827003	375	0.603982	179.37	474.7	0	1.74	780.67	6.91	779.88	6.9	-0.79	-0.1
33	114	81	48	1824	0.822715	375.25	0.605263	179.45	490.81	-0.94	1.71	779.25	6.84	779.63	6.84	0.38	0.05
33	115	82	49	1840	0.81845	375.48	0.606522	179.54	507.07	0	1.67	779.58	6.78	778.73	6.77	-0.84	-0.11

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
33	116	83	50	1856	0.814209	375.7	0.607759	179.63	523.47	-0.93	1.64	777.91	6.71	778.21	6.71	0.3	0.04
33	117	84	51	1872	0.809993	375.9	0.608974	179.73	540	0	1.6	777.97	6.65	777.05	6.64	-0.93	-0.12
33	118	85	52	1888	0.805803	376.08	0.610169	179.84	556.67	-0.92	1.57	776.06	6.58	776.27	6.58	0.2	0.03
33	119	86	53	1904	0.801638	376.25	0.611345	179.94	573.46	0	1.54	775.88	6.52	774.85	6.51	-1.03	-0.13
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
34	67	33	-1	1072	0.999777	319.95	0.496269	202.1	0.36	0	9.39	558.97	8.34	563.63	8.41	4.66	0.83
34	68	34	0	1088	1	323.2	0.5	201.09	0	1.21	10	574.93	8.45	578.08	8.5	3.15	0.55
34	69	35	1	1104	0.99979	326.29	0.503623	200.13	0.35	0	9.41	586.63	8.5	589.1	8.54	2.46	0.42
34	70	36	2	1120	0.999184	329.24	0.507143	199.23	1.38	1.2	8.87	600.21	8.57	602.48	8.61	2.27	0.38
34	71	37	3	1136	0.998215	332.05	0.510563	198.39	3.06	0	8.37	610.87	8.6	612.54	8.63	1.67	0.27
34	72	38	4	1152	0.996914	334.72	0.513889	197.6	5.37	1.18	7.92	623.41	8.66	624.94	8.68	1.53	0.25
34	73	39	5	1168	0.995309	337.27	0.517123	196.86	8.28	0	7.5	633.09	8.67	634.09	8.69	1	0.16
34	74	40	6	1184	0.993426	339.7	0.52027	196.17	11.76	1.16	7.11	644.65	8.71	645.58	8.72	0.92	0.14
34	75	41	7	1200	0.991289	342.01	0.523333	195.52	15.79	0	6.76	653.43	8.71	653.89	8.72	0.45	0.07
34	76	42	8	1216	0.98892	344.22	0.526316	194.91	20.36	1.15	6.43	664.09	8.74	664.51	8.74	0.43	0.06
34	77	43	9	1232	0.986338	346.33	0.529221	194.33	25.44	0	6.12	672.02	8.73	672.04	8.73	0.02	0
34	78	44	10	1248	0.983563	348.34	0.532051	193.8	31.01	1.13	5.84	681.83	8.74	681.86	8.74	0.03	0
34	79	45	11	1264	0.980612	350.25	0.53481	193.3	37.05	0	5.57	688.97	8.72	688.65	8.72	-0.32	-0.05
34	80	46	12	1280	0.9775	352.08	0.5375	192.83	43.55	1.12	5.33	697.99	8.72	697.72	8.72	-0.27	-0.04
34	81	47	13	1296	0.974242	353.83	0.540123	192.39	50.49	0	5.1	704.4	8.7	703.81	8.69	-0.58	-0.08
34	82	48	14	1312	0.970851	355.49	0.542683	191.98	57.85	1.1	4.88	712.67	8.69	712.17	8.69	-0.5	-0.07
34	83	49	15	1328	0.967339	357.08	0.545181	191.6	65.62	0	4.68	718.39	8.66	717.62	8.65	-0.77	-0.11
34	84	50	16	1344	0.963719	358.6	0.547619	191.24	73.78	1.09	4.49	725.97	8.64	725.32	8.63	-0.66	-0.09
34	85	51	17	1360	0.96	360.04	0.55	190.91	82.32	0	4.32	731.05	8.6	730.15	8.59	-0.89	-0.12
34	86	52	18	1376	0.956193	361.42	0.552326	190.6	91.23	1.08	4.15	737.98	8.58	737.22	8.57	-0.76	-0.1
34	87	53	19	1392	0.952305	362.74	0.554598	190.32	100.49	0	4	742.45	8.53	741.48	8.52	-0.97	-0.13
34	88	54	20	1408	0.948347	363.99	0.556818	190.06	110.1	1.07	3.85	748.77	8.51	747.96	8.5	-0.82	-0.11
34	89	55	21	1424	0.944325	365.19	0.558989	189.81	120.03	0	3.71	752.68	8.46	751.67	8.45	-1	-0.13
34	90	56	22	1440	0.940247	366.33	0.561111	189.59	130.29	1.05	3.58	758.42	8.43	757.59	8.42	-0.84	-0.11
34	91	57	23	1456	0.936119	367.42	0.563187	189.39	140.86	0	3.46	761.8	8.37	760.79	8.36	-1	-0.13
34	92	58	24	1472	0.931947	368.46	0.565217	189.2	151.72	1.04	3.34	767.01	8.34	766.18	8.33	-0.82	-0.11
34	93	59	25	1488	0.927737	369.44	0.567204	189.03	162.88	0	3.23	769.88	8.28	768.9	8.27	-0.98	-0.13
34	94	60	26	1504	0.923495	370.39	0.569149	188.88	174.32	1.03	3.13	774.58	8.24	773.79	8.23	-0.79	-0.1
34	95	61	27	1520	0.919224	371.28	0.571053	188.74	186.03	0	3.03	776.98	8.18	776.05	8.17	-0.94	-0.12
34	96	62	28	1536	0.914931	372.14	0.572917	188.62	198	1.02	2.94	781.2	8.14	780.46	8.13	-0.74	-0.1
34	97	63	29	1552	0.910617	372.95	0.574742	188.51	210.23	0	2.85	783.16	8.07	782.28	8.06	-0.88	-0.11
34	98	64	30	1568	0.906289	373.73	0.576531	188.41	222.7	1.01	2.76	786.93	8.03	786.25	8.02	-0.69	-0.09
34	99	65	31	1584	0.901949	374.46	0.578283	188.33	235.42	0	2.68	788.47	7.96	787.65	7.96	-0.82	-0.1
34	100	66	32	1600	0.8976	375.16	0.58	188.26	248.37	1	2.61	791.81	7.92	791.19	7.91	-0.62	-0.08
34	101	67	33	1616	0.893246	375.83	0.581683	188.2	261.55	0	2.54	792.96	7.85	792.21	7.84	-0.75	-0.09
34	102	68	34	1632	0.888889	376.46	0.583333	188.16	274.94	0.99	2.47	795.9	7.8	795.34	7.8	-0.56	-0.07
34	103	69	35	1648	0.884532	377.06	0.584951	188.12	288.55	0	2.4	796.67	7.73	795.98	7.73	-0.69	-0.09
34	104	70	36	1664	0.880178	377.63	0.586538	188.1	302.37	0.98	2.34	799.22	7.68	798.72	7.68	-0.5	-0.06
34	105	71	37	1680	0.875828	378.16	0.588095	188.08	316.39	0	2.28	799.64	7.62	799.01	7.61	-0.63	-0.08

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
34	106	72	38	1696	0.871485	378.67	0.589623	188.08	330.61	0.97	2.22	801.83	7.56	801.38	7.56	-0.45	-0.06
34	107	73	39	1712	0.86715	379.16	0.591121	188.08	345.01	0	2.16	801.91	7.49	801.33	7.49	-0.59	-0.07
34	108	74	40	1728	0.862826	379.61	0.592593	188.1	359.6	0.96	2.11	803.76	7.44	803.35	7.44	-0.41	-0.05
34	109	75	41	1744	0.858514	380.04	0.594037	188.12	374.37	0	2.06	803.53	7.37	802.97	7.37	-0.55	-0.07
34	110	76	42	1760	0.854215	380.45	0.595455	188.15	389.32	0.95	2.01	805.05	7.32	804.66	7.32	-0.39	-0.05
34	111	77	43	1776	0.849931	380.83	0.596847	188.19	404.44	0	1.97	804.51	7.25	803.97	7.24	-0.54	-0.07
34	112	78	44	1792	0.845663	381.19	0.598214	188.23	419.72	0.94	1.92	805.72	7.19	805.34	7.19	-0.38	-0.05
34	113	79	45	1808	0.841413	381.53	0.599558	188.29	435.16	0	1.88	804.9	7.12	804.36	7.12	-0.54	-0.07
34	114	80	46	1824	0.837181	381.85	0.600877	188.35	450.77	0.94	1.84	805.81	7.07	805.42	7.07	-0.4	-0.05
34	115	81	47	1840	0.832968	382.15	0.602174	188.41	466.52	0	1.8	804.72	7	804.15	6.99	-0.56	-0.07
34	116	82	48	1856	0.828775	382.42	0.603448	188.49	482.43	0.93	1.76	805.35	6.94	804.92	6.94	-0.43	-0.05
34	117	83	49	1872	0.824604	382.68	0.604701	188.57	498.48	0	1.72	804	6.87	803.39	6.87	-0.61	-0.08
34	118	84	50	1888	0.820454	382.92	0.605932	188.65	514.67	0.92	1.69	804.36	6.82	803.87	6.81	-0.49	-0.06
34	119	85	51	1904	0.816327	383.15	0.607143	188.75	531	0	1.65	802.76	6.75	802.08	6.74	-0.68	-0.08
34	120	86	52	1920	0.812222	383.35	0.608333	188.84	547.47	0.91	1.62	802.87	6.69	802.29	6.69	-0.58	-0.07
34	121	87	53	1936	0.808142	383.54	0.609504	188.95	564.06	0	1.59	801.04	6.62	800.26	6.61	-0.78	-0.1
34	122	88	54	1952	0.804085	383.72	0.610656	189.06	580.79	0.91	1.56	800.9	6.56	800.21	6.56	-0.69	-0.09
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
35	69	34	-1	1104	0.99979	326.29	0.496377	212.08	0.35	0	9.41	574.69	8.33	579.5	8.4	4.81	0.83
35	70	35	0	1120	1	329.51	0.5	211.04	0	-1.2	10	588.26	8.4	592.67	8.47	4.42	0.75
35	71	36	1	1136	0.999802	332.57	0.503521	210.06	0.34	0	9.43	602.45	8.49	605.06	8.52	2.61	0.43
35	72	37	2	1152	0.999228	335.5	0.506944	209.15	1.34	-1.18	8.9	613.73	8.52	617.24	8.57	3.5	0.57
35	73	38	3	1168	0.998311	338.29	0.510274	208.29	2.98	0	8.41	626.86	8.59	628.63	8.61	1.77	0.28
35	74	39	4	1184	0.997078	340.95	0.513514	207.48	5.23	-1.16	7.97	637.16	8.61	639.88	8.65	2.72	0.43
35	75	40	5	1200	0.995556	343.49	0.516667	206.72	8.06	0	7.56	649.3	8.66	650.36	8.67	1.06	0.16
35	76	41	6	1216	0.993767	345.91	0.519737	206	11.45	-1.15	7.18	658.67	8.67	660.74	8.69	2.07	0.31
35	77	42	7	1232	0.991736	348.22	0.522727	205.33	15.39	0	6.83	669.89	8.7	670.36	8.71	0.48	0.07
35	78	43	8	1248	0.989481	350.43	0.525641	204.7	19.84	-1.13	6.5	678.39	8.7	679.93	8.72	1.54	0.23
35	79	44	9	1264	0.987021	352.54	0.528481	204.1	24.8	0	6.2	688.75	8.72	688.75	8.72	0	0
35	80	45	10	1280	0.984375	354.56	0.53125	203.55	30.24	-1.12	5.92	696.45	8.71	697.55	8.72	1.1	0.16
35	81	46	11	1296	0.981558	356.48	0.533951	203.02	36.15	0	5.65	706	8.72	705.62	8.71	-0.38	-0.05
35	82	47	12	1312	0.978584	358.32	0.536585	202.54	42.5	-1.1	5.41	712.94	8.69	713.71	8.7	0.76	0.11
35	83	48	13	1328	0.975468	360.08	0.539157	202.08	49.28	0	5.18	721.74	8.7	721.06	8.69	-0.68	-0.09
35	84	49	14	1344	0.972222	361.76	0.541667	201.65	56.49	-1.09	4.97	727.98	8.67	728.48	8.67	0.49	0.07
35	85	50	15	1360	0.968858	363.36	0.544118	201.25	64.09	0	4.77	736.06	8.66	735.16	8.65	-0.9	-0.12
35	86	51	16	1376	0.965387	364.9	0.546512	200.87	72.08	-1.08	4.58	741.65	8.62	741.94	8.63	0.3	0.04
35	87	52	17	1392	0.961818	366.36	0.548851	200.52	80.45	0	4.4	749.07	8.61	748.01	8.6	-1.06	-0.14
35	88	53	18	1408	0.958161	367.76	0.551136	200.2	89.18	-1.07	4.24	754.03	8.57	754.19	8.57	0.15	0.02
35	89	54	19	1424	0.954425	369.09	0.553371	199.9	98.26	0	4.08	760.83	8.55	759.66	8.54	-1.17	-0.15
35	90	55	20	1440	0.950617	370.37	0.555556	199.62	107.68	-1.05	3.93	765.21	8.5	765.27	8.5	0.06	0.01
35	91	56	21	1456	0.946746	371.59	0.557692	199.36	117.43	0	3.79	771.42	8.48	770.18	8.46	-1.24	-0.16
35	92	57	22	1472	0.942817	372.75	0.559783	199.12	127.49	-1.04	3.66	775.26	8.43	775.26	8.43	0	0
35	93	58	23	1488	0.938837	373.86	0.561828	198.9	137.86	0	3.54	780.91	8.4	779.64	8.38	-1.27	-0.16
35	94	59	24	1504	0.934812	374.93	0.56383	198.7	148.53	-1.03	3.42	784.24	8.34	784.21	8.34	-0.02	0

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
35	95	60	25	1520	0.930748	375.94	0.565789	198.51	159.49	0	3.31	789.37	8.31	788.1	8.3	-1.28	-0.16
35	96	61	26	1536	0.926649	376.9	0.567708	198.34	170.72	-1.02	3.21	792.21	8.25	792.19	8.25	-0.02	0
35	97	62	27	1552	0.922521	377.83	0.569588	198.19	182.23	0	3.11	796.86	8.22	795.6	8.2	-1.26	-0.16
35	98	63	28	1568	0.918367	378.71	0.571429	198.06	194	-1.01	3.01	799.24	8.16	799.23	8.16	-0.01	0
35	99	64	29	1584	0.914192	379.54	0.573232	197.93	206.02	0	2.92	803.42	8.12	802.19	8.1	-1.23	-0.15
35	100	65	30	1600	0.91	380.34	0.575	197.82	218.29	-1	2.84	805.37	8.05	805.39	8.05	0.02	0
35	101	66	31	1616	0.905794	381.11	0.576733	197.73	230.81	0	2.76	809.12	8.01	807.92	8	-1.19	-0.15
35	102	67	32	1632	0.901576	381.83	0.578431	197.65	243.55	-0.99	2.68	810.66	7.95	810.71	7.95	0.05	0.01
35	103	68	33	1648	0.897351	382.52	0.580097	197.58	256.52	0	2.6	813.99	7.9	812.83	7.89	-1.15	-0.14
35	104	69	34	1664	0.893121	383.18	0.581731	197.52	269.71	-0.98	2.53	815.15	7.84	815.23	7.84	0.09	0.01
35	105	70	35	1680	0.888889	383.8	0.583333	197.47	283.11	0	2.47	818.08	7.79	816.97	7.78	-1.11	-0.14
35	106	71	36	1696	0.884656	384.4	0.584906	197.44	296.72	-0.97	2.4	818.88	7.73	819	7.73	0.12	0.01
35	107	72	37	1712	0.880426	384.96	0.586449	197.41	310.53	0	2.34	821.44	7.68	820.36	7.67	-1.07	-0.13
35	108	73	38	1728	0.8762	385.5	0.587963	197.39	324.54	-0.96	2.28	821.89	7.61	822.03	7.61	0.14	0.02
35	109	74	39	1744	0.87198	386	0.58945	197.39	338.74	0	2.23	824.09	7.56	823.05	7.55	-1.05	-0.13
35	110	75	40	1760	0.867769	386.49	0.590909	197.39	353.12	-0.95	2.17	824.22	7.49	824.38	7.49	0.16	0.02
35	111	76	41	1776	0.863566	386.94	0.592342	197.4	367.69	0	2.12	826.09	7.44	825.06	7.43	-1.03	-0.12
35	112	77	42	1792	0.859375	387.37	0.59375	197.42	382.43	-0.94	2.07	825.9	7.37	826.06	7.38	0.16	0.02
35	113	78	43	1808	0.855196	387.78	0.595133	197.45	397.34	0	2.02	827.45	7.32	826.42	7.31	-1.03	-0.12
35	114	79	44	1824	0.851031	388.17	0.596491	197.49	412.42	-0.94	1.98	826.96	7.25	827.11	7.26	0.15	0.02
35	115	80	45	1840	0.846881	388.53	0.597826	197.54	427.66	0	1.93	828.21	7.2	827.17	7.19	-1.04	-0.13
35	116	81	46	1856	0.842747	388.87	0.599138	197.59	443.06	-0.93	1.89	827.44	7.13	827.56	7.13	0.12	0.01
35	117	82	47	1872	0.83863	389.19	0.600427	197.65	458.61	0	1.85	828.4	7.08	827.32	7.07	-1.08	-0.13
35	118	83	48	1888	0.83453	389.49	0.601695	197.71	474.32	-0.92	1.81	827.37	7.01	827.44	7.01	0.07	0.01
35	119	84	49	1904	0.83045	389.77	0.602941	197.79	490.17	0	1.77	828.04	6.96	826.91	6.95	-1.13	-0.14
35	120	85	50	1920	0.826389	390.04	0.604167	197.86	506.16	-0.91	1.74	826.76	6.89	826.75	6.89	0	0
35	121	86	51	1936	0.822348	390.28	0.605372	197.95	522.3	0	1.7	827.17	6.84	825.96	6.83	-1.21	-0.15
35	122	87	52	1952	0.818328	390.51	0.606557	198.04	538.57	-0.91	1.67	825.64	6.77	825.54	6.77	-0.1	-0.01
35	123	88	53	1968	0.81433	390.73	0.607724	198.14	554.97	0	1.64	825.81	6.71	824.49	6.7	-1.31	-0.16
35	124	89	54	1984	0.810354	390.92	0.608871	198.24	571.5	-0.9	1.61	824.05	6.65	823.82	6.64	-0.22	-0.03
35	125	90	55	2000	0.8064	391.1	0.61	198.35	588.16	0	1.58	823.97	6.59	822.53	6.58	-1.44	-0.18
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
36	71	35	-1	1136	0.999802	332.57	0.496479	222.24	0.34	0	9.43	590.27	8.31	595.22	8.38	4.95	0.83
36	72	36	0	1152	1	335.76	0.5	221.18	0	1.18	10	606.24	8.42	609.74	8.47	3.5	0.57
36	73	37	1	1168	0.999812	338.79	0.503425	220.19	0.33	0	9.44	618.13	8.47	620.92	8.51	2.79	0.45
36	74	38	2	1184	0.99927	341.7	0.506757	219.25	1.31	1.16	8.93	631.83	8.54	634.43	8.57	2.59	0.41
36	75	39	3	1200	0.9984	344.47	0.51	218.37	2.9	0	8.45	642.71	8.57	644.68	8.6	1.96	0.3
36	76	40	4	1216	0.99723	347.11	0.513158	217.54	5.09	1.15	8.02	655.42	8.62	657.24	8.65	1.82	0.28
36	77	41	5	1232	0.995783	349.64	0.516234	216.76	7.85	0	7.61	665.36	8.64	666.62	8.66	1.26	0.19
36	78	42	6	1248	0.994083	352.06	0.519231	216.02	11.16	1.13	7.24	677.12	8.68	678.3	8.7	1.18	0.17
36	79	43	7	1264	0.992149	354.38	0.522152	215.33	15	0	6.89	686.18	8.69	686.87	8.69	0.68	0.1
36	80	44	8	1280	0.99	356.59	0.525	214.68	19.36	1.12	6.57	697.07	8.71	697.71	8.72	0.65	0.09
36	81	45	9	1296	0.987654	358.7	0.527778	214.07	24.2	0	6.27	705.31	8.71	705.52	8.71	0.21	0.03
36	82	46	10	1312	0.985128	360.72	0.530488	213.49	29.51	1.1	5.99	715.37	8.72	715.59	8.73	0.22	0.03

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
36	83	47	11	1328	0.982436	362.65	0.533133	212.95	35.29	0	5.73	722.84	8.71	722.68	8.71	-0.17	-0.02
36	84	48	12	1344	0.979592	364.5	0.535714	212.44	41.5	1.09	5.49	732.14	8.72	732.01	8.71	-0.13	-0.02
36	85	49	13	1360	0.976609	366.27	0.538235	211.96	48.14	0	5.26	738.89	8.69	738.43	8.69	-0.46	-0.06
36	86	50	14	1376	0.973499	367.96	0.540698	211.51	55.19	1.08	5.05	747.46	8.69	747.07	8.69	-0.39	-0.05
36	87	51	15	1392	0.970273	369.58	0.543103	211.09	62.63	0	4.85	753.54	8.66	752.85	8.65	-0.69	-0.09
36	88	52	16	1408	0.966942	371.13	0.545455	210.7	70.46	1.07	4.66	761.43	8.65	760.85	8.65	-0.59	-0.08
36	89	53	17	1424	0.963515	372.61	0.547753	210.33	78.66	0	4.48	766.88	8.62	766.02	8.61	-0.85	-0.11
36	90	54	18	1440	0.96	374.03	0.55	209.99	87.22	1.05	4.32	774.13	8.6	773.41	8.59	-0.73	-0.09
36	91	55	19	1456	0.956406	375.38	0.552198	209.67	96.12	0	4.16	778.98	8.56	778.02	8.55	-0.97	-0.12
36	92	56	20	1472	0.952741	376.68	0.554348	209.37	105.36	1.04	4.01	785.64	8.54	784.82	8.53	-0.82	-0.1
36	93	57	21	1488	0.949011	377.92	0.556452	209.1	114.93	0	3.87	789.93	8.49	788.9	8.48	-1.04	-0.13
36	94	58	22	1504	0.945224	379.1	0.558511	208.84	124.81	1.03	3.74	796.02	8.47	795.15	8.46	-0.88	-0.11
36	95	59	23	1520	0.941385	380.23	0.560526	208.61	134.99	0	3.62	799.79	8.42	798.72	8.41	-1.07	-0.13
36	96	60	24	1536	0.9375	381.32	0.5625	208.39	145.47	1.02	3.5	805.35	8.39	804.45	8.38	-0.9	-0.11
36	97	61	25	1552	0.933574	382.35	0.564433	208.19	156.23	0	3.39	808.61	8.34	807.53	8.33	-1.08	-0.13
36	98	62	26	1568	0.929613	383.34	0.566327	208	167.28	1.01	3.28	813.67	8.3	812.77	8.29	-0.9	-0.11
36	99	63	27	1584	0.92562	384.29	0.568182	207.84	178.59	0	3.18	816.47	8.25	815.4	8.24	-1.06	-0.13
36	100	64	28	1600	0.9216	385.19	0.57	207.69	190.16	1	3.09	821.05	8.21	820.17	8.2	-0.88	-0.11
36	101	65	29	1616	0.917557	386.05	0.571782	207.55	201.99	0	2.99	823.4	8.15	822.37	8.14	-1.04	-0.13
36	102	66	30	1632	0.913495	386.88	0.573529	207.43	214.06	0.99	2.91	827.53	8.11	826.69	8.1	-0.85	-0.1
36	103	67	31	1648	0.909417	387.66	0.575243	207.32	226.37	0	2.82	829.47	8.05	828.48	8.04	-1	-0.12
36	104	68	32	1664	0.905325	388.41	0.576923	207.22	238.91	0.98	2.75	833.18	8.01	832.37	8	-0.81	-0.1
36	105	69	33	1680	0.901224	389.13	0.578571	207.14	251.68	0	2.67	834.72	7.95	833.76	7.94	-0.96	-0.11
36	106	70	34	1696	0.897116	389.81	0.580189	207.07	264.67	0.97	2.6	838.02	7.91	837.25	7.9	-0.77	-0.09
36	107	71	35	1712	0.893004	390.46	0.581776	207.01	277.87	0	2.53	839.19	7.84	838.28	7.83	-0.91	-0.11
36	108	72	36	1728	0.888889	391.08	0.583333	206.96	291.28	0.96	2.47	842.11	7.8	841.38	7.79	-0.73	-0.09
36	109	73	37	1744	0.884774	391.67	0.584862	206.93	304.89	0	2.4	842.92	7.73	842.05	7.73	-0.87	-0.1
36	110	74	38	1760	0.880661	392.23	0.586364	206.9	318.69	0.95	2.34	845.47	7.69	844.78	7.68	-0.69	-0.08
36	111	75	39	1776	0.876552	392.76	0.587838	206.88	332.69	0	2.29	845.95	7.62	845.11	7.61	-0.84	-0.1
36	112	76	40	1792	0.872449	393.27	0.589286	206.88	346.88	0.94	2.23	848.16	7.57	847.49	7.57	-0.67	-0.08
36	113	77	41	1808	0.868353	393.75	0.590708	206.88	361.24	0	2.18	848.31	7.51	847.49	7.5	-0.82	-0.1
36	114	78	42	1824	0.864266	394.2	0.592105	206.89	375.78	0.94	2.13	850.19	7.46	849.54	7.45	-0.65	-0.08
36	115	79	43	1840	0.860189	394.63	0.593478	206.91	390.49	0	2.08	850.04	7.39	849.23	7.38	-0.81	-0.1
36	116	80	44	1856	0.856124	395.04	0.594828	206.94	405.37	0.93	2.03	851.61	7.34	850.95	7.34	-0.66	-0.08
36	117	81	45	1872	0.852071	395.43	0.596154	206.97	420.41	0	1.99	851.17	7.27	850.35	7.27	-0.82	-0.1
36	118	82	46	1888	0.848032	395.79	0.597458	207.02	435.62	0.92	1.95	852.44	7.22	851.76	7.22	-0.67	-0.08
36	119	83	47	1904	0.844008	396.14	0.598739	207.07	450.97	0	1.9	851.73	7.16	850.88	7.15	-0.85	-0.1
36	120	84	48	1920	0.84	396.46	0.6	207.13	466.48	0.91	1.86	852.71	7.11	852	7.1	-0.71	-0.08
36	121	85	49	1936	0.836008	396.77	0.60124	207.19	482.14	0	1.83	851.73	7.04	850.84	7.03	-0.9	-0.11
36	122	86	50	1952	0.832034	397.05	0.602459	207.26	497.93	0.91	1.79	852.44	6.99	851.67	6.98	-0.77	-0.09
36	123	87	51	1968	0.828079	397.32	0.603659	207.34	513.87	0	1.75	851.22	6.92	850.25	6.91	-0.97	-0.11
36	124	88	52	1984	0.824142	397.57	0.604839	207.43	529.95	0.9	1.72	851.67	6.87	850.82	6.86	-0.85	-0.1
36	125	89	53	2000	0.820224	397.81	0.606	207.52	546.16	0	1.69	850.2	6.8	849.14	6.79	-1.06	-0.12
36	126	90	54	2016	0.816327	398.03	0.607143	207.61	562.5	0.89	1.65	850.41	6.75	849.45	6.74	-0.96	-0.11
36	127	91	55	2032	0.81245	398.23	0.608268	207.71	578.97	0	1.62	848.71	6.68	847.54	6.67	-1.18	-0.14
36	128	92	56	2048	0.808594	398.42	0.609375	207.82	595.56	0.88	1.59	848.68	6.63	847.59	6.62	-1.09	-0.13

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
36	129	93	57	2064	0.804759	398.59	0.610465	207.93	612.27	0	1.56	846.77	6.56	845.45	6.55	-1.32	-0.16
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
37	73	36	-1	1168	0.999812	338.79	0.496575	232.59	0.33	0	9.44	605.72	8.3	610.82	8.37	5.09	0.83
37	74	37	0	1184	1	341.94	0.5	231.52	0	-1.16	10	619.37	8.37	624.09	8.43	4.72	0.76
37	75	38	1	1200	0.999822	344.96	0.503333	230.5	0.32	0	9.46	633.67	8.45	636.6	8.49	2.93	0.46
37	76	39	2	1216	0.999307	347.84	0.506579	229.55	1.27	-1.15	8.95	645.15	8.49	648.92	8.54	3.77	0.58
37	77	40	3	1232	0.998482	350.59	0.50974	228.65	2.83	0	8.49	658.42	8.55	660.49	8.58	2.06	0.31
37	78	41	4	1248	0.99737	353.23	0.512821	227.8	4.96	-1.13	8.06	668.94	8.58	671.91	8.61	2.97	0.44
37	79	42	5	1264	0.995994	355.75	0.515823	227	7.66	0	7.67	681.27	8.62	682.59	8.64	1.33	0.19
37	80	43	6	1280	0.994375	358.16	0.51875	226.24	10.89	-1.12	7.3	690.89	8.64	693.18	8.66	2.29	0.33
37	81	44	7	1296	0.992532	360.47	0.521605	225.53	14.64	0	6.96	702.32	8.67	703.03	8.68	0.71	0.1
37	82	45	8	1312	0.990482	362.68	0.52439	224.85	18.89	-1.1	6.64	711.11	8.67	712.83	8.69	1.72	0.24
37	83	46	9	1328	0.988242	364.8	0.527108	224.22	23.62	0	6.34	721.7	8.7	721.9	8.7	0.2	0.03
37	84	47	10	1344	0.985828	366.82	0.529762	223.62	28.82	-1.09	6.07	729.71	8.69	730.96	8.7	1.25	0.17
37	85	48	11	1360	0.983253	368.76	0.532353	223.06	34.47	0	5.81	739.52	8.7	739.3	8.7	-0.22	-0.03
37	86	49	12	1376	0.98053	370.62	0.534884	222.53	40.55	-1.08	5.57	746.79	8.68	747.66	8.69	0.87	0.12
37	87	50	13	1392	0.977672	372.4	0.537356	222.04	47.04	0	5.34	755.86	8.69	755.31	8.68	-0.55	-0.07
37	88	51	14	1408	0.97469	374.1	0.539773	221.57	53.95	-1.07	5.13	762.44	8.66	763.01	8.67	0.57	0.08
37	89	52	15	1424	0.971594	375.73	0.542135	221.13	61.24	0	4.93	770.82	8.66	770.01	8.65	-0.81	-0.11
37	90	53	16	1440	0.968395	377.3	0.544444	220.72	68.91	-1.05	4.74	776.75	8.63	777.09	8.63	0.34	0.04
37	91	54	17	1456	0.965101	378.79	0.546703	220.33	76.95	0	4.56	784.48	8.62	783.48	8.61	-1.01	-0.13
37	92	55	18	1472	0.96172	380.23	0.548913	219.97	85.34	-1.04	4.4	789.81	8.58	789.97	8.59	0.16	0.02
37	93	56	19	1488	0.958261	381.6	0.551075	219.64	94.08	0	4.24	796.92	8.57	795.77	8.56	-1.15	-0.14
37	94	57	20	1504	0.954731	382.91	0.553191	219.32	103.15	-1.03	4.09	801.68	8.53	801.71	8.53	0.03	0
37	95	58	21	1520	0.951136	384.17	0.555263	219.03	112.53	0	3.95	808.22	8.51	806.96	8.49	-1.25	-0.16
37	96	59	22	1536	0.947483	385.38	0.557292	218.76	122.23	-1.02	3.82	812.43	8.46	812.37	8.46	-0.06	-0.01
37	97	60	23	1552	0.943777	386.53	0.559278	218.5	132.24	0	3.69	818.42	8.44	817.11	8.42	-1.32	-0.16
37	98	61	24	1568	0.940025	387.64	0.561224	218.27	142.53	-1.01	3.58	822.13	8.39	822.02	8.39	-0.11	-0.01
37	99	62	25	1584	0.936231	388.69	0.563131	218.05	153.11	0	3.46	827.6	8.36	826.25	8.35	-1.35	-0.16
37	100	63	26	1600	0.9324	389.71	0.565	217.86	163.96	-1	3.36	830.83	8.31	830.69	8.31	-0.14	-0.02
37	101	64	27	1616	0.928536	390.67	0.566832	217.67	175.09	0	3.25	835.82	8.28	834.45	8.26	-1.36	-0.16
37	102	65	28	1632	0.924644	391.6	0.568627	217.51	186.47	-0.99	3.16	838.59	8.22	838.44	8.22	-0.15	-0.02
37	103	66	29	1648	0.920728	392.49	0.570388	217.36	198.1	0	3.07	843.12	8.19	841.76	8.17	-1.36	-0.16
37	104	67	30	1664	0.91679	393.33	0.572115	217.22	209.98	-0.98	2.98	845.46	8.13	845.31	8.13	-0.15	-0.02
37	105	68	31	1680	0.912834	394.14	0.57381	217.1	222.1	0	2.89	849.55	8.09	848.21	8.08	-1.35	-0.16
37	106	69	32	1696	0.908864	394.92	0.575472	216.99	234.45	-0.97	2.81	851.49	8.03	851.35	8.03	-0.14	-0.02
37	107	70	33	1712	0.904883	395.65	0.577103	216.9	247.02	0	2.74	855.17	7.99	853.84	7.98	-1.33	-0.16
37	108	71	34	1728	0.900892	396.36	0.578704	216.81	259.81	-0.96	2.67	856.72	7.93	856.6	7.93	-0.12	-0.01
37	109	72	35	1744	0.896894	397.03	0.580275	216.74	272.82	0	2.6	860	7.89	858.7	7.88	-1.3	-0.15
37	110	73	36	1760	0.892893	397.68	0.581818	216.68	286.03	-0.95	2.53	861.19	7.83	861.08	7.83	-0.11	-0.01
37	111	74	37	1776	0.888889	398.29	0.583333	216.63	299.44	0	2.47	864.1	7.78	862.82	7.77	-1.28	-0.15
37	112	75	38	1792	0.884885	398.87	0.584821	216.6	313.05	-0.94	2.41	864.94	7.72	864.84	7.72	-0.09	-0.01
37	113	76	39	1808	0.880883	399.43	0.586283	216.57	326.86	0	2.35	867.49	7.68	866.23	7.67	-1.27	-0.15
37	114	77	40	1824	0.876885	399.96	0.587719	216.55	340.84	-0.94	2.29	868	7.61	867.91	7.61	-0.09	-0.01

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
37	115	78	41	1840	0.872892	400.46	0.58913	216.54	355.01	0	2.24	870.22	7.57	868.96	7.56	-1.26	-0.15
37	116	79	42	1856	0.868906	400.94	0.590517	216.54	369.36	-0.93	2.19	870.42	7.5	870.32	7.5	-0.1	-0.01
37	117	80	43	1872	0.864928	401.4	0.59188	216.55	383.87	0	2.14	872.31	7.46	871.04	7.44	-1.27	-0.15
37	118	81	44	1888	0.860959	401.83	0.59322	216.57	398.56	-0.92	2.09	872.21	7.39	872.09	7.39	-0.12	-0.01
37	119	82	45	1904	0.857002	402.24	0.594538	216.6	413.41	0	2.04	873.8	7.34	872.51	7.33	-1.29	-0.15
37	120	83	46	1920	0.853056	402.62	0.595833	216.63	428.42	-0.91	2	873.41	7.28	873.26	7.28	-0.15	-0.02
37	121	84	47	1936	0.849122	402.99	0.597107	216.68	443.58	0	1.96	874.71	7.23	873.38	7.22	-1.32	-0.15
37	122	85	48	1952	0.845203	403.34	0.598361	216.73	458.9	-0.91	1.92	874.05	7.16	873.85	7.16	-0.2	-0.02
37	123	86	49	1968	0.841298	403.67	0.599593	216.78	474.36	0	1.88	875.07	7.11	873.69	7.1	-1.38	-0.16
37	124	87	50	1984	0.837409	403.97	0.600806	216.85	489.97	-0.9	1.84	874.15	7.05	873.88	7.05	-0.27	-0.03
37	125	88	51	2000	0.833536	404.26	0.602	216.92	505.72	0	1.8	874.9	7	873.45	6.99	-1.46	-0.17
37	126	89	52	2016	0.82968	404.54	0.603175	216.99	521.6	-0.89	1.77	873.74	6.93	873.37	6.93	-0.37	-0.04
37	127	90	53	2032	0.825842	404.79	0.604331	217.08	537.63	0	1.73	874.23	6.88	872.68	6.87	-1.55	-0.18
37	128	91	54	2048	0.822021	405.03	0.605469	217.17	553.78	-0.88	1.7	872.83	6.82	872.35	6.82	-0.48	-0.06
37	129	92	55	2064	0.81822	405.26	0.606589	217.26	570.06	0	1.67	873.09	6.77	871.41	6.76	-1.68	-0.19
37	130	93	56	2080	0.814438	405.47	0.607692	217.36	586.47	-0.88	1.64	871.46	6.7	870.84	6.7	-0.62	-0.07
37	131	94	57	2096	0.810675	405.66	0.608779	217.47	603	0	1.61	871.48	6.65	869.66	6.64	-1.82	-0.21
37	132	95	58	2112	0.806933	405.84	0.609848	217.58	619.65	-0.87	1.58	869.64	6.59	868.85	6.58	-0.79	-0.09
37	133	96	59	2128	0.803211	406.01	0.610902	217.7	636.42	0	1.55	869.43	6.54	867.44	6.52	-2	-0.23
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
38	75	37	-1	1200	0.999822	344.96	0.496667	243.13	0.32	0	9.46	621.04	8.28	626.27	8.35	5.22	0.83
38	76	38	0	1216	1	348.08	0.5	242.04	0	1.15	10	637.03	8.38	640.86	8.43	3.84	0.6
38	77	39	1	1232	0.999831	351.07	0.503247	241.01	0.31	0	9.47	649.08	8.43	652.19	8.47	3.11	0.48
38	78	40	2	1248	0.999343	353.93	0.50641	240.03	1.24	1.13	8.98	662.91	8.5	665.81	8.54	2.9	0.44
38	79	41	3	1264	0.998558	356.66	0.509494	239.11	2.76	0	8.53	673.99	8.53	676.24	8.56	2.25	0.33
38	80	42	4	1280	0.9975	359.29	0.5125	238.24	4.84	1.12	8.11	686.86	8.59	688.95	8.61	2.1	0.3
38	81	43	5	1296	0.99619	361.8	0.515432	237.42	7.47	0	7.72	697.03	8.61	698.55	8.62	1.52	0.22
38	82	44	6	1312	0.994646	364.21	0.518293	236.64	10.62	1.1	7.35	708.98	8.65	710.41	8.66	1.42	0.2
38	83	45	7	1328	0.992887	366.51	0.521084	235.91	14.29	0	7.02	718.31	8.65	719.21	8.67	0.91	0.13
38	84	46	8	1344	0.99093	368.72	0.52381	235.22	18.44	1.09	6.7	729.41	8.68	730.27	8.69	0.86	0.12
38	85	47	9	1360	0.988789	370.84	0.526471	234.57	23.07	0	6.41	737.93	8.68	738.33	8.69	0.4	0.05
38	86	48	10	1376	0.986479	372.87	0.52907	233.95	28.16	1.08	6.14	748.24	8.7	748.63	8.71	0.39	0.05
38	87	49	11	1392	0.984014	374.81	0.531609	233.37	33.68	0	5.88	756.02	8.69	756	8.69	-0.02	0
38	88	50	12	1408	0.981405	376.68	0.534091	232.82	39.64	1.07	5.64	765.57	8.7	765.59	8.7	0.02	0
38	89	51	13	1424	0.978664	378.47	0.536517	232.3	46	0	5.41	772.64	8.68	772.3	8.68	-0.35	-0.04
38	90	52	14	1440	0.975802	380.18	0.538889	231.82	52.76	1.05	5.2	781.5	8.68	781.21	8.68	-0.28	-0.04
38	91	53	15	1456	0.972829	381.83	0.541209	231.36	59.91	0	5	787.91	8.66	787.3	8.65	-0.61	-0.08
38	92	54	16	1472	0.969754	383.4	0.543478	230.93	67.43	1.04	4.82	796.09	8.65	795.58	8.65	-0.51	-0.06
38	93	55	17	1488	0.966586	384.91	0.545699	230.53	75.32	0	4.64	801.89	8.62	801.08	8.61	-0.81	-0.1
38	94	56	18	1504	0.963332	386.36	0.547872	230.15	83.55	1.03	4.47	809.45	8.61	808.76	8.6	-0.69	-0.09
38	95	57	19	1520	0.96	387.75	0.55	229.79	92.12	0	4.32	814.65	8.58	813.7	8.57	-0.95	-0.12
38	96	58	20	1536	0.956597	389.09	0.552083	229.46	101.02	1.02	4.17	821.62	8.56	820.81	8.55	-0.82	-0.1
38	97	59	21	1552	0.95313	390.36	0.554124	229.15	110.24	0	4.03	826.28	8.52	825.22	8.51	-1.05	-0.13
38	98	60	22	1568	0.949604	391.59	0.556122	228.86	119.77	1.01	3.9	832.69	8.5	831.79	8.49	-0.9	-0.11

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
38	99	61	23	1584	0.946026	392.76	0.558081	228.59	129.59	0	3.77	836.82	8.45	835.7	8.44	-1.12	-0.13
38	100	62	24	1600	0.9424	393.89	0.56	228.34	139.71	1	3.65	842.71	8.43	841.76	8.42	-0.96	-0.11
38	101	63	25	1616	0.938731	394.96	0.561881	228.11	150.11	0	3.54	846.35	8.38	845.2	8.37	-1.16	-0.14
38	102	64	26	1632	0.935025	396	0.563725	227.9	160.78	0.99	3.43	851.74	8.35	850.76	8.34	-0.98	-0.12
38	103	65	27	1648	0.931285	396.99	0.565534	227.7	171.72	0	3.33	854.92	8.3	853.75	8.29	-1.17	-0.14
38	104	66	28	1664	0.927515	397.93	0.567308	227.52	182.92	0.98	3.23	859.84	8.27	858.85	8.26	-0.99	-0.12
38	105	67	29	1680	0.923719	398.84	0.569048	227.36	194.36	0	3.13	862.57	8.21	861.4	8.2	-1.17	-0.14
38	106	68	30	1696	0.9199	399.71	0.570755	227.21	206.06	0.97	3.05	867.04	8.18	866.06	8.17	-0.98	-0.11
38	107	69	31	1712	0.916063	400.54	0.57243	227.07	217.99	0	2.96	869.36	8.12	868.21	8.11	-1.15	-0.13
38	108	70	32	1728	0.912209	401.34	0.574074	226.95	230.15	0.96	2.88	873.41	8.09	872.44	8.08	-0.97	-0.11
38	109	71	33	1744	0.908341	402.1	0.575688	226.84	242.53	0	2.8	875.33	8.03	874.2	8.02	-1.13	-0.13
38	110	72	34	1760	0.904463	402.83	0.577273	226.74	255.13	0.95	2.73	878.98	7.99	878.03	7.98	-0.94	-0.11
38	111	73	35	1776	0.900576	403.53	0.578829	226.66	267.95	0	2.66	880.53	7.93	879.42	7.92	-1.11	-0.13
38	112	74	36	1792	0.896684	404.19	0.580357	226.59	280.97	0.94	2.59	883.79	7.89	882.87	7.88	-0.92	-0.1
38	113	75	37	1808	0.892787	404.83	0.581858	226.53	294.19	0	2.53	884.98	7.83	883.9	7.82	-1.08	-0.12
38	114	76	38	1824	0.888889	405.43	0.583333	226.48	307.61	0.94	2.47	887.88	7.79	886.98	7.78	-0.9	-0.1
38	115	77	39	1840	0.884991	406.01	0.584783	226.44	321.22	0	2.41	888.73	7.73	887.67	7.72	-1.07	-0.12
38	116	78	40	1856	0.881094	406.56	0.586207	226.41	335.02	0.93	2.35	891.28	7.68	890.39	7.68	-0.89	-0.1
38	117	79	41	1872	0.877201	407.09	0.587607	226.39	349	0	2.3	891.81	7.62	890.76	7.61	-1.05	-0.12
38	118	80	42	1888	0.873312	407.59	0.588983	226.39	363.15	0.92	2.24	894.04	7.58	893.15	7.57	-0.89	-0.1
38	119	81	43	1904	0.86943	408.07	0.590336	226.39	377.48	0	2.19	894.26	7.51	893.2	7.51	-1.06	-0.12
38	120	82	44	1920	0.865556	408.52	0.591667	226.39	391.97	0.91	2.14	896.17	7.47	895.27	7.46	-0.89	-0.1
38	121	83	45	1936	0.86169	408.96	0.592975	226.41	406.63	0	2.1	896.1	7.41	895.03	7.4	-1.07	-0.12
38	122	84	46	1952	0.857834	409.37	0.594262	226.44	421.45	0.91	2.05	897.7	7.36	896.79	7.35	-0.92	-0.1
38	123	85	47	1968	0.853989	409.75	0.595528	226.47	436.43	0	2.01	897.36	7.3	896.26	7.29	-1.1	-0.12
38	124	86	48	1984	0.850156	410.12	0.596774	226.51	451.55	0.9	1.97	898.67	7.25	897.72	7.24	-0.96	-0.11
38	125	87	49	2000	0.846336	410.47	0.598	226.56	466.83	0	1.93	898.06	7.18	896.92	7.18	-1.15	-0.13
38	126	88	50	2016	0.84253	410.8	0.599206	226.62	482.25	0.89	1.89	899.11	7.14	898.09	7.13	-1.01	-0.11
38	127	89	51	2032	0.838738	411.12	0.600394	226.68	497.82	0	1.85	898.24	7.07	897.03	7.06	-1.21	-0.14
38	128	90	52	2048	0.834961	411.41	0.601562	226.75	513.52	0.88	1.82	899.02	7.02	897.93	7.02	-1.09	-0.12
38	129	91	53	2064	0.8312	411.69	0.602713	226.82	529.36	0	1.78	897.91	6.96	896.61	6.95	-1.3	-0.15
38	130	92	54	2080	0.827456	411.95	0.603846	226.91	545.33	0.88	1.75	898.44	6.91	897.25	6.9	-1.19	-0.13
38	131	93	55	2096	0.823728	412.19	0.604962	226.99	561.43	0	1.71	897.1	6.85	895.69	6.84	-1.41	-0.16
38	132	94	56	2112	0.820018	412.42	0.606061	227.09	577.65	0.87	1.68	897.39	6.8	896.08	6.79	-1.32	-0.15
38	133	95	57	2128	0.816327	412.64	0.607143	227.19	594	0	1.65	895.83	6.74	894.28	6.72	-1.55	-0.17
38	134	96	58	2144	0.812653	412.84	0.608209	227.29	610.47	0.86	1.62	895.89	6.69	894.42	6.67	-1.46	-0.16
38	135	97	59	2160	0.808999	413.02	0.609259	227.4	627.06	0	1.6	894.11	6.62	892.4	6.61	-1.71	-0.19
38	136	98	60	2176	0.805363	413.19	0.610294	227.52	643.76	0.86	1.57	893.95	6.57	892.31	6.56	-1.64	-0.18
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
39	77	38	-1	1232	0.999831	351.07	0.496753	253.86	0.31	0	9.47	636.23	8.26	641.59	8.33	5.36	0.84
39	78	39	0	1248	1	354.16	0.5	252.75	0	-1.13	10	649.96	8.33	654.96	8.4	5	0.76
39	79	40	1	1264	0.99984	357.12	0.503165	251.7	0.31	0	9.48	664.36	8.41	667.59	8.45	3.23	0.48
39	80	41	2	1280	0.999375	359.96	0.50625	250.7	1.21	-1.12	9	676.01	8.45	680.04	8.5	4.03	0.59
39	81	42	3	1296	0.998628	362.68	0.509259	249.76	2.69	0	8.56	689.42	8.51	691.76	8.54	2.34	0.34

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
39	82	43	4	1312	0.99762	365.29	0.512195	248.87	4.72	-1.1	8.15	700.15	8.54	703.35	8.58	3.2	0.46
39	83	44	5	1328	0.996371	367.8	0.51506	248.03	7.29	0	7.76	712.64	8.59	714.22	8.61	1.58	0.22
39	84	45	6	1344	0.994898	370.2	0.517857	247.24	10.38	-1.09	7.41	722.51	8.6	725	8.63	2.49	0.34
39	85	46	7	1360	0.993218	372.5	0.520588	246.48	13.96	0	7.08	734.14	8.64	735.07	8.65	0.93	0.13
39	86	47	8	1376	0.991347	374.71	0.523256	245.77	18.02	-1.08	6.77	743.19	8.64	745.08	8.66	1.9	0.25
39	87	48	9	1392	0.989298	376.83	0.525862	245.1	22.55	0	6.48	754	8.67	754.39	8.67	0.39	0.05
39	88	49	10	1408	0.987087	378.86	0.528409	244.46	27.52	-1.07	6.2	762.29	8.66	763.69	8.68	1.4	0.18
39	89	50	11	1424	0.984724	380.81	0.530899	243.86	32.93	0	5.95	772.34	8.68	772.29	8.68	-0.06	-0.01
39	90	51	12	1440	0.982222	382.68	0.533333	243.29	38.76	-1.05	5.71	779.92	8.67	780.9	8.68	0.99	0.13
39	91	52	13	1456	0.979592	384.48	0.535714	242.76	45	0	5.49	789.25	8.67	788.83	8.67	-0.42	-0.05
39	92	53	14	1472	0.976843	386.21	0.538043	242.25	51.63	-1.04	5.28	796.15	8.65	796.8	8.66	0.65	0.08
39	93	54	15	1488	0.973985	387.86	0.540323	241.78	58.64	0	5.08	804.81	8.65	804.09	8.65	-0.72	-0.09
39	94	55	16	1504	0.971028	389.45	0.542553	241.33	66.01	-1.03	4.89	811.07	8.63	811.46	8.63	0.39	0.05
39	95	56	17	1520	0.967978	390.98	0.544737	240.91	73.75	0	4.72	819.09	8.62	818.14	8.61	-0.95	-0.12
39	96	57	18	1536	0.964844	392.44	0.546875	240.51	81.83	-1.02	4.55	824.75	8.59	824.93	8.59	0.18	0.02
39	97	58	19	1552	0.961632	393.85	0.548969	240.14	90.24	0	4.39	832.17	8.58	831.05	8.57	-1.12	-0.14
39	98	59	20	1568	0.958351	395.19	0.55102	239.79	98.98	-1.01	4.24	837.27	8.54	837.29	8.54	0.02	0
39	99	60	21	1584	0.955005	396.49	0.55303	239.46	108.03	0	4.1	844.12	8.53	842.87	8.51	-1.25	-0.15
39	100	61	22	1600	0.9516	397.73	0.555	239.15	117.39	-1	3.97	848.69	8.49	848.59	8.49	-0.1	-0.01
39	101	62	23	1616	0.948142	398.92	0.556931	238.87	127.05	0	3.84	855	8.47	853.65	8.45	-1.35	-0.16
39	102	63	24	1632	0.944637	400.07	0.558824	238.6	137	-0.99	3.72	859.06	8.42	858.88	8.42	-0.18	-0.02
39	103	64	25	1648	0.941088	401.17	0.56068	238.36	147.22	0	3.61	864.86	8.4	863.45	8.38	-1.41	-0.16
39	104	65	26	1664	0.9375	402.22	0.5625	238.13	157.72	-0.98	3.5	868.45	8.35	868.22	8.35	-0.24	-0.03
39	105	66	27	1680	0.933878	403.23	0.564286	237.92	168.48	0	3.4	873.77	8.32	872.32	8.31	-1.45	-0.17
39	106	67	28	1696	0.930224	404.2	0.566038	237.72	179.5	-0.97	3.3	876.91	8.27	876.64	8.27	-0.27	-0.03
39	107	68	29	1712	0.926544	405.13	0.567757	237.54	190.77	0	3.2	881.77	8.24	880.3	8.23	-1.47	-0.17
39	108	69	30	1728	0.92284	406.02	0.569444	237.38	202.28	-0.96	3.11	884.48	8.19	884.19	8.19	-0.29	-0.03
39	109	70	31	1744	0.919115	406.87	0.571101	237.23	214.02	0	3.03	888.91	8.16	887.43	8.14	-1.48	-0.17
39	110	71	32	1760	0.915372	407.69	0.572727	237.09	226	-0.95	2.95	891.21	8.1	890.91	8.1	-0.3	-0.03
39	111	72	33	1776	0.911614	408.47	0.574324	236.97	238.2	0	2.87	895.23	8.07	893.75	8.05	-1.47	-0.16
39	112	73	34	1792	0.907844	409.22	0.575893	236.86	250.62	-0.94	2.79	897.15	8.01	896.85	8.01	-0.3	-0.03
39	113	74	35	1808	0.904065	409.94	0.577434	236.77	263.25	0	2.72	900.77	7.97	899.3	7.96	-1.47	-0.16
39	114	75	36	1824	0.900277	410.63	0.578947	236.68	276.08	-0.94	2.65	902.32	7.92	902.02	7.91	-0.3	-0.03
39	115	76	37	1840	0.896484	411.28	0.580435	236.61	289.12	0	2.59	905.57	7.87	904.11	7.86	-1.46	-0.16
39	116	77	38	1856	0.892687	411.91	0.581897	236.55	302.35	-0.93	2.53	906.78	7.82	906.48	7.81	-0.3	-0.03
39	117	78	39	1872	0.888889	412.52	0.583333	236.5	315.78	0	2.47	909.67	7.77	908.21	7.76	-1.46	-0.16
39	118	79	40	1888	0.88509	413.09	0.584746	236.46	329.39	-0.92	2.41	910.55	7.72	910.24	7.71	-0.31	-0.03
39	119	80	41	1904	0.881294	413.64	0.586134	236.43	343.18	0	2.35	913.1	7.67	911.64	7.66	-1.46	-0.16
39	120	81	42	1920	0.8775	414.16	0.5875	236.41	357.15	-0.91	2.3	913.66	7.61	913.34	7.61	-0.32	-0.04
39	121	82	43	1936	0.873711	414.66	0.588843	236.4	371.29	0	2.25	915.89	7.57	914.42	7.56	-1.48	-0.16
39	122	83	44	1952	0.869927	415.14	0.590164	236.4	385.6	-0.91	2.2	916.16	7.51	915.81	7.51	-0.35	-0.04
39	123	84	45	1968	0.866151	415.59	0.591463	236.41	400.07	0	2.15	918.08	7.46	916.58	7.45	-1.5	-0.16
39	124	85	46	1984	0.862383	416.02	0.592742	236.43	414.71	-0.9	2.11	918.05	7.4	917.66	7.4	-0.39	-0.04
39	125	86	47	2000	0.858624	416.43	0.594	236.45	429.5	0	2.06	919.68	7.36	918.14	7.35	-1.54	-0.17
39	126	87	48	2016	0.854875	416.82	0.595238	236.48	444.44	-0.89	2.02	919.38	7.3	918.94	7.29	-0.44	-0.05
39	127	88	49	2032	0.851138	417.19	0.596457	236.52	459.54	0	1.98	920.72	7.25	919.13	7.24	-1.6	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
39	128	89	50	2048	0.847412	417.54	0.597656	236.57	474.78	-0.88	1.94	920.16	7.19	919.65	7.18	-0.51	-0.06
39	129	90	51	2064	0.843699	417.88	0.598837	236.62	490.16	0	1.9	921.24	7.14	919.57	7.13	-1.67	-0.18
39	130	91	52	2080	0.84	418.19	0.6	236.69	505.68	-0.88	1.86	920.43	7.08	919.83	7.08	-0.6	-0.07
39	131	92	53	2096	0.836315	418.49	0.601145	236.75	521.34	0	1.83	921.25	7.03	919.48	7.02	-1.77	-0.19
39	132	93	54	2112	0.832645	418.77	0.602273	236.83	537.13	-0.87	1.79	920.2	6.97	919.49	6.97	-0.71	-0.08
39	133	94	55	2128	0.82899	419.04	0.603383	236.91	553.05	0	1.76	920.77	6.92	918.89	6.91	-1.88	-0.2
39	134	95	56	2144	0.825351	419.29	0.604478	237	569.09	-0.86	1.73	919.49	6.86	918.65	6.86	-0.84	-0.09
39	135	96	57	2160	0.821728	419.52	0.605556	237.09	585.27	0	1.7	919.82	6.81	917.8	6.8	-2.02	-0.22
39	136	97	58	2176	0.818123	419.74	0.606618	237.19	601.56	-0.86	1.67	918.32	6.75	917.33	6.75	-1	-0.11
39	137	98	59	2192	0.814535	419.94	0.607664	237.29	617.97	0	1.64	918.43	6.7	916.25	6.69	-2.18	-0.24
39	138	99	60	2208	0.810964	420.14	0.608696	237.4	634.5	-0.85	1.61	916.72	6.64	915.54	6.63	-1.18	-0.13
39	139	100	61	2224	0.807412	420.31	0.609712	237.52	651.14	0	1.58	916.61	6.59	914.24	6.58	-2.37	-0.26
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
40	79	39	-1	1264	0.99984	357.12	0.496835	264.77	0.31	0	9.48	651.28	8.24	656.77	8.31	5.49	0.84
40	80	40	0	1280	1	360.19	0.5	263.64	0	1.12	10	667.29	8.34	671.44	8.39	4.15	0.62
40	81	41	1	1296	0.999848	363.13	0.503086	262.57	0.3	0	9.49	679.5	8.39	682.9	8.43	3.4	0.5
40	82	42	2	1312	0.999405	365.95	0.506098	261.56	1.18	1.1	9.03	693.44	8.46	696.63	8.5	3.19	0.46
40	83	43	3	1328	0.998694	368.65	0.509036	260.6	2.62	0	8.59	704.71	8.49	707.23	8.52	2.52	0.36
40	84	44	4	1344	0.997732	371.25	0.511905	259.69	4.61	1.09	8.19	717.72	8.54	720.08	8.57	2.36	0.33
40	85	45	5	1360	0.99654	373.75	0.514706	258.83	7.12	0	7.81	728.12	8.57	729.87	8.59	1.76	0.24
40	86	46	6	1376	0.995133	376.14	0.517442	258.01	10.14	1.08	7.46	740.25	8.61	741.91	8.63	1.66	0.22
40	87	47	7	1392	0.993526	378.44	0.520115	257.24	13.64	0	7.13	749.81	8.62	750.93	8.63	1.12	0.15
40	88	48	8	1408	0.991736	380.64	0.522727	256.51	17.62	1.07	6.83	761.12	8.65	762.19	8.66	1.06	0.14
40	89	49	9	1424	0.989774	382.76	0.525281	255.82	22.05	0	6.54	769.91	8.65	770.49	8.66	0.58	0.08
40	90	50	10	1440	0.987654	384.8	0.527778	255.16	26.92	1.05	6.27	780.45	8.67	781.01	8.68	0.57	0.07
40	91	51	11	1456	0.985388	386.76	0.53022	254.54	32.22	0	6.02	788.51	8.66	788.64	8.67	0.13	0.02
40	92	52	12	1472	0.982987	388.63	0.532609	253.95	37.93	1.04	5.78	798.31	8.68	798.47	8.68	0.16	0.02
40	93	53	13	1488	0.98046	390.44	0.534946	253.4	44.04	0	5.56	805.68	8.66	805.45	8.66	-0.23	-0.03
40	94	54	14	1504	0.977818	392.17	0.537234	252.87	50.54	1.03	5.35	814.79	8.67	814.62	8.67	-0.17	-0.02
40	95	55	15	1520	0.975069	393.84	0.539474	252.38	57.42	0	5.15	821.52	8.65	821	8.64	-0.52	-0.06
40	96	56	16	1536	0.972222	395.44	0.541667	251.91	64.65	1.02	4.97	829.98	8.65	829.54	8.64	-0.44	-0.05
40	97	57	17	1552	0.969285	396.98	0.543814	251.47	72.24	0	4.79	836.1	8.62	835.35	8.61	-0.75	-0.09
40	98	58	18	1568	0.966264	398.46	0.545918	251.06	80.17	1.01	4.62	843.95	8.61	843.3	8.61	-0.64	-0.08
40	99	59	19	1584	0.963167	399.88	0.54798	250.67	88.44	0	4.47	849.49	8.58	848.56	8.57	-0.93	-0.11
40	100	60	20	1600	0.96	401.24	0.55	250.3	97.02	1	4.32	856.75	8.57	855.95	8.56	-0.8	-0.09
40	101	61	21	1616	0.956769	402.55	0.55198	249.96	105.92	0	4.18	861.75	8.53	860.69	8.52	-1.06	-0.12
40	102	62	22	1632	0.953479	403.81	0.553922	249.63	115.12	0.99	4.04	868.47	8.51	867.55	8.51	-0.92	-0.11
40	103	63	23	1648	0.950137	405.02	0.555825	249.33	124.61	0	3.91	872.95	8.48	871.79	8.46	-1.16	-0.13
40	104	64	24	1664	0.946746	406.19	0.557692	249.05	134.39	0.98	3.79	879.15	8.45	878.15	8.44	-1	-0.11
40	105	65	25	1680	0.943311	407.3	0.559524	248.79	144.44	0	3.68	883.14	8.41	881.93	8.4	-1.22	-0.14
40	106	66	26	1696	0.939836	408.37	0.561321	248.54	154.77	0.97	3.57	888.85	8.39	887.8	8.38	-1.05	-0.12
40	107	67	27	1712	0.936326	409.4	0.563084	248.32	165.36	0	3.47	892.38	8.34	891.13	8.33	-1.26	-0.14
40	108	68	28	1728	0.932785	410.39	0.564815	248.11	176.21	0.96	3.37	897.62	8.31	896.54	8.3	-1.08	-0.12
40	109	69	29	1744	0.929215	411.34	0.566514	247.91	187.3	0	3.27	900.72	8.26	899.44	8.25	-1.28	-0.14

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
40	110	70	30	1760	0.92562	412.25	0.568182	247.73	198.63	0.95	3.18	905.52	8.23	904.42	8.22	-1.1	-0.12
40	111	71	31	1776	0.922003	413.13	0.56982	247.57	210.2	0	3.09	908.2	8.18	906.91	8.17	-1.29	-0.14
40	112	72	32	1792	0.918367	413.96	0.571429	247.42	222	0.94	3.01	912.57	8.15	911.47	8.14	-1.1	-0.12
40	113	73	33	1808	0.914715	414.77	0.573009	247.29	234.02	0	2.93	914.85	8.1	913.57	8.08	-1.28	-0.14
40	114	74	34	1824	0.91105	415.54	0.574561	247.17	246.26	0.94	2.86	918.83	8.06	917.73	8.05	-1.1	-0.12
40	115	75	35	1840	0.907372	416.28	0.576087	247.06	258.71	0	2.79	920.74	8.01	919.46	8	-1.27	-0.14
40	116	76	36	1856	0.903686	416.99	0.577586	246.96	271.36	0.93	2.72	924.33	7.97	923.24	7.96	-1.09	-0.12
40	117	77	37	1872	0.899993	417.67	0.57906	246.88	284.22	0	2.65	925.88	7.91	924.62	7.9	-1.27	-0.14
40	118	78	38	1888	0.896294	418.32	0.580508	246.8	297.27	0.92	2.59	929.11	7.87	928.03	7.86	-1.08	-0.12
40	119	79	39	1904	0.892592	418.94	0.581933	246.74	310.52	0	2.52	930.32	7.82	929.06	7.81	-1.26	-0.14
40	120	80	40	1920	0.888889	419.54	0.583333	246.69	323.94	0.91	2.47	933.2	7.78	932.12	7.77	-1.08	-0.12
40	121	81	41	1936	0.885185	420.11	0.584711	246.65	337.55	0	2.41	934.1	7.72	932.84	7.71	-1.26	-0.13
40	122	82	42	1952	0.881483	420.65	0.586066	246.62	351.34	0.91	2.36	936.64	7.68	935.56	7.67	-1.09	-0.12
40	123	83	43	1968	0.877784	421.17	0.587398	246.6	365.3	0	2.3	937.23	7.62	935.96	7.61	-1.27	-0.14
40	124	84	44	1984	0.874089	421.67	0.58871	246.59	379.43	0.9	2.25	939.46	7.58	938.36	7.57	-1.1	-0.12
40	125	85	45	2000	0.8704	422.14	0.59	246.59	393.72	0	2.2	939.75	7.52	938.46	7.51	-1.29	-0.14
40	126	86	46	2016	0.866717	422.6	0.59127	246.6	408.18	0.89	2.16	941.68	7.47	940.55	7.46	-1.13	-0.12
40	127	87	47	2032	0.863042	423.03	0.59252	246.61	422.79	0	2.11	941.68	7.41	940.37	7.4	-1.32	-0.14
40	128	88	48	2048	0.859375	423.44	0.59375	246.63	437.55	0.88	2.07	943.33	7.37	942.16	7.36	-1.17	-0.12
40	129	89	49	2064	0.855718	423.83	0.594961	246.67	452.47	0	2.03	943.06	7.31	941.7	7.3	-1.37	-0.15
40	130	90	50	2080	0.852071	424.2	0.596154	246.7	467.53	0.88	1.99	944.43	7.26	943.2	7.26	-1.23	-0.13
40	131	91	51	2096	0.848435	424.56	0.597328	246.75	482.73	0	1.95	943.91	7.21	942.48	7.19	-1.43	-0.15
40	132	92	52	2112	0.844812	424.89	0.598485	246.8	498.08	0.87	1.91	945.01	7.16	943.71	7.15	-1.3	-0.14
40	133	93	53	2128	0.841201	425.21	0.599624	246.87	513.56	0	1.88	944.24	7.1	942.73	7.09	-1.52	-0.16
40	134	94	54	2144	0.837603	425.51	0.600746	246.93	529.17	0.86	1.84	945.09	7.05	943.69	7.04	-1.4	-0.15
40	135	95	55	2160	0.834019	425.79	0.601852	247.01	544.91	0	1.81	944.09	6.99	942.47	6.98	-1.62	-0.17
40	136	96	56	2176	0.83045	426.06	0.602941	247.09	560.79	0.86	1.77	944.69	6.95	943.18	6.94	-1.51	-0.16
40	137	97	57	2192	0.826895	426.32	0.604015	247.17	576.78	0	1.74	943.47	6.89	941.72	6.87	-1.75	-0.19
40	138	98	58	2208	0.823356	426.56	0.605072	247.26	592.9	0.85	1.71	943.84	6.84	942.19	6.83	-1.65	-0.18
40	139	99	59	2224	0.819833	426.78	0.606115	247.36	609.14	0	1.68	942.4	6.78	940.5	6.77	-1.9	-0.2
40	140	100	60	2240	0.816327	426.99	0.607143	247.46	625.5	0.85	1.65	942.54	6.73	940.73	6.72	-1.82	-0.19
40	141	101	61	2256	0.812836	427.19	0.608156	247.57	641.97	0	1.63	940.89	6.67	938.82	6.66	-2.07	-0.22
40	142	102	62	2272	0.809363	427.37	0.609155	247.69	658.55	0.84	1.6	940.83	6.63	938.82	6.61	-2	-0.21
40	143	103	63	2288	0.805907	427.54	0.61014	247.81	675.25	0	1.57	938.98	6.57	936.71	6.55	-2.27	-0.24
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
41	81	40	-1	1296	0.999848	363.13	0.496914	275.87	0.3	0	9.49	666.2	8.22	671.82	8.29	5.61	0.84
41	82	41	0	1312	1	366.17	0.5	274.72	0	-1.1	10	680.01	8.29	685.28	8.36	5.27	0.77
41	83	42	1	1328	0.999855	369.08	0.503012	273.63	0.29	0	9.51	694.5	8.37	698.02	8.41	3.52	0.5
41	84	43	2	1344	0.999433	371.88	0.505952	272.6	1.15	-1.09	9.05	706.32	8.41	710.6	8.46	4.28	0.6
41	85	44	3	1360	0.998754	374.58	0.508824	271.62	2.56	0	8.62	719.86	8.47	722.47	8.5	2.6	0.36
41	86	45	4	1376	0.997837	377.16	0.511628	270.69	4.51	-1.08	8.23	730.79	8.5	734.21	8.54	3.42	0.47
41	87	46	5	1392	0.996697	379.65	0.514368	269.81	6.96	0	7.86	743.44	8.55	745.26	8.57	1.81	0.24
41	88	47	6	1408	0.995351	382.03	0.517045	268.97	9.91	-1.07	7.51	753.53	8.56	756.22	8.59	2.69	0.36
41	89	48	7	1424	0.993814	384.33	0.519663	268.18	13.34	0	7.19	765.34	8.6	766.48	8.61	1.14	0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
41	90	49	8	1440	0.992099	386.53	0.522222	267.43	17.23	-1.05	6.88	774.64	8.61	776.7	8.63	2.07	0.27
41	91	50	9	1456	0.990219	388.65	0.524725	266.72	21.57	0	6.6	785.66	8.63	786.24	8.64	0.57	0.07
41	92	51	10	1472	0.988185	390.69	0.527174	266.04	26.34	-1.04	6.33	794.22	8.63	795.76	8.65	1.54	0.19
41	93	52	11	1488	0.98601	392.65	0.52957	265.4	31.53	0	6.08	804.5	8.65	804.59	8.65	0.1	0.01
41	94	53	12	1504	0.983703	394.53	0.531915	264.8	37.13	-1.03	5.85	812.36	8.64	813.45	8.65	1.1	0.14
41	95	54	13	1520	0.981274	396.35	0.534211	264.22	43.13	0	5.63	821.93	8.65	821.64	8.65	-0.3	-0.04
41	96	55	14	1536	0.978733	398.09	0.536458	263.68	49.5	-1.02	5.42	829.13	8.64	829.87	8.64	0.74	0.09
41	97	56	15	1552	0.976087	399.76	0.53866	263.17	56.24	0	5.22	838.05	8.64	837.43	8.63	-0.62	-0.07
41	98	57	16	1568	0.973344	401.38	0.540816	262.68	63.35	-1.01	5.04	844.62	8.62	845.06	8.62	0.44	0.05
41	99	58	17	1584	0.970513	402.93	0.542929	262.22	70.8	0	4.86	852.91	8.62	852.03	8.61	-0.88	-0.1
41	100	59	18	1600	0.9676	404.42	0.545	261.79	78.59	-1	4.7	858.9	8.59	859.1	8.59	0.2	0.02
41	101	60	19	1616	0.964611	405.85	0.54703	261.38	86.7	0	4.54	866.6	8.58	865.51	8.57	-1.09	-0.13
41	102	61	20	1632	0.961553	407.23	0.54902	261	95.14	-0.99	4.39	872.03	8.55	872.05	8.55	0.02	0
41	103	62	21	1648	0.958432	408.56	0.550971	260.64	103.88	0	4.25	879.17	8.54	877.92	8.52	-1.25	-0.14
41	104	63	22	1664	0.955251	409.83	0.552885	260.3	112.92	-0.98	4.11	884.08	8.5	883.95	8.5	-0.13	-0.01
41	105	64	23	1680	0.952018	411.06	0.554762	259.98	122.26	0	3.99	890.68	8.48	889.32	8.47	-1.37	-0.15
41	106	65	24	1696	0.948736	412.24	0.556604	259.68	131.88	-0.97	3.86	895.09	8.44	894.85	8.44	-0.24	-0.03
41	107	66	25	1712	0.94541	413.38	0.558411	259.41	141.77	0	3.75	901.2	8.42	899.74	8.41	-1.45	-0.16
41	108	67	26	1728	0.942044	414.47	0.560185	259.15	151.93	-0.96	3.64	905.13	8.38	904.82	8.38	-0.32	-0.04
41	109	68	27	1744	0.938642	415.51	0.561927	258.9	162.35	0	3.53	910.76	8.36	909.25	8.34	-1.52	-0.17
41	110	69	28	1760	0.935207	416.52	0.563636	258.68	173.03	-0.95	3.43	914.25	8.31	913.87	8.31	-0.38	-0.04
41	111	70	29	1776	0.931743	417.49	0.565315	258.47	183.95	0	3.34	919.42	8.28	917.87	8.27	-1.56	-0.17
41	112	71	30	1792	0.928253	418.42	0.566964	258.28	195.12	-0.94	3.25	922.49	8.24	922.07	8.23	-0.42	-0.05
41	113	72	31	1808	0.92474	419.31	0.568584	258.1	206.51	0	3.16	927.23	8.21	925.64	8.19	-1.59	-0.17
41	114	73	32	1824	0.921207	420.17	0.570175	257.94	218.14	-0.94	3.08	929.89	8.16	929.45	8.15	-0.44	-0.05
41	115	74	33	1840	0.917656	421	0.571739	257.79	229.99	0	3	934.22	8.12	932.62	8.11	-1.6	-0.17
41	116	75	34	1856	0.91409	421.79	0.573276	257.65	242.05	-0.93	2.92	936.5	8.07	936.04	8.07	-0.46	-0.05
41	117	76	35	1872	0.910512	422.55	0.574786	257.53	254.32	0	2.85	940.44	8.04	938.83	8.02	-1.61	-0.17
41	118	77	36	1888	0.906923	423.28	0.576271	257.42	266.8	-0.92	2.78	942.35	7.99	941.87	7.98	-0.48	-0.05
41	119	78	37	1904	0.903326	423.98	0.577731	257.33	279.48	0	2.71	945.92	7.95	944.3	7.94	-1.62	-0.17
41	120	79	38	1920	0.899722	424.65	0.579167	257.24	292.36	-0.91	2.64	947.48	7.9	946.99	7.89	-0.49	-0.05
41	121	80	39	1936	0.896114	425.29	0.580579	257.17	305.43	0	2.58	950.69	7.86	949.06	7.84	-1.63	-0.17
41	122	81	40	1952	0.892502	425.91	0.581967	257.11	318.68	-0.91	2.52	951.92	7.8	951.42	7.8	-0.5	-0.05
41	123	82	41	1968	0.888889	426.5	0.583333	257.06	332.11	0	2.47	954.8	7.76	953.16	7.75	-1.64	-0.17
41	124	83	42	1984	0.885276	427.07	0.584677	257.02	345.72	-0.9	2.41	955.71	7.71	955.18	7.7	-0.53	-0.06
41	125	84	43	2000	0.881664	427.61	0.586	256.99	359.5	0	2.36	958.26	7.67	956.6	7.65	-1.66	-0.17
41	126	85	44	2016	0.878055	428.12	0.587302	256.96	373.46	-0.89	2.31	958.87	7.61	958.31	7.61	-0.56	-0.06
41	127	86	45	2032	0.87445	428.62	0.588583	256.95	387.57	0	2.26	961.11	7.57	959.42	7.55	-1.69	-0.18
41	128	87	46	2048	0.87085	429.09	0.589844	256.95	401.85	-0.88	2.21	961.43	7.51	960.84	7.51	-0.6	-0.06
41	129	88	47	2064	0.867256	429.54	0.591085	256.95	416.29	0	2.16	963.38	7.47	961.65	7.45	-1.73	-0.18
41	130	89	48	2080	0.863669	429.98	0.592308	256.97	430.88	-0.88	2.12	963.42	7.41	962.77	7.41	-0.65	-0.07
41	131	90	49	2096	0.86009	430.39	0.593511	256.99	445.61	0	2.08	965.09	7.37	963.3	7.35	-1.79	-0.19
41	132	91	50	2112	0.85652	430.78	0.594697	257.02	460.5	-0.87	2.04	964.87	7.31	964.15	7.3	-0.72	-0.07
41	133	92	51	2128	0.852959	431.15	0.595865	257.06	475.53	0	2	966.26	7.27	964.4	7.25	-1.86	-0.19
41	134	93	52	2144	0.84941	431.51	0.597015	257.1	490.7	-0.86	1.96	965.78	7.21	964.98	7.2	-0.81	-0.08
41	135	94	53	2160	0.845871	431.85	0.598148	257.16	506.01	0	1.92	966.92	7.16	964.97	7.15	-1.95	-0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
41	136	95	54	2176	0.842344	432.17	0.599265	257.22	521.45	-0.86	1.89	966.2	7.1	965.29	7.1	-0.91	-0.09
41	137	96	55	2192	0.83883	432.47	0.600365	257.28	537.02	0	1.85	967.08	7.06	965.02	7.04	-2.06	-0.21
41	138	97	56	2208	0.835329	432.76	0.601449	257.35	552.72	-0.85	1.82	966.14	7	965.1	6.99	-1.03	-0.11
41	139	98	57	2224	0.831841	433.03	0.602518	257.43	568.55	0	1.79	966.78	6.96	964.59	6.94	-2.19	-0.23
41	140	99	58	2240	0.828367	433.29	0.603571	257.52	584.5	-0.85	1.76	965.61	6.9	964.43	6.89	-1.18	-0.12
41	141	100	59	2256	0.824908	433.53	0.60461	257.61	600.56	0	1.72	966.02	6.85	963.68	6.83	-2.34	-0.24
41	142	101	60	2272	0.821464	433.76	0.605634	257.71	616.75	-0.84	1.7	964.64	6.79	963.29	6.78	-1.35	-0.14
41	143	102	61	2288	0.818035	433.97	0.606643	257.81	633.06	0	1.67	964.83	6.75	962.31	6.73	-2.52	-0.26
41	144	103	62	2304	0.814622	434.18	0.607639	257.92	649.47	-0.83	1.64	963.24	6.69	961.7	6.68	-1.54	-0.16
41	145	104	63	2320	0.811225	434.37	0.608621	258.03	666	0	1.61	963.22	6.64	960.5	6.62	-2.71	-0.28
41	146	105	64	2336	0.807844	434.54	0.609589	258.15	682.63	-0.83	1.59	961.44	6.59	959.68	6.57	-1.76	-0.18
41	147	106	65	2352	0.80448	434.71	0.610544	258.27	699.38	0	1.56	961.21	6.54	958.27	6.52	-2.94	-0.31
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
42	83	41	-1	1328	0.999855	369.08	0.496988	287.14	0.29	0	9.51	680.99	8.2	686.73	8.27	5.74	0.84
42	84	42	0	1344	1	372.1	0.5	285.98	0	1.09	10	697.02	8.3	701.46	8.35	4.44	0.63
42	85	43	1	1360	0.999862	374.99	0.502941	284.87	0.28	0	9.52	709.37	8.35	713.05	8.39	3.68	0.52
42	86	44	2	1376	0.999459	377.77	0.505814	283.82	1.13	1.08	9.07	723.43	8.41	726.89	8.45	3.46	0.48
42	87	45	3	1392	0.998811	380.45	0.508621	282.82	2.51	0	8.65	734.87	8.45	737.64	8.48	2.77	0.38
42	88	46	4	1408	0.997934	383.02	0.511364	281.87	4.4	1.07	8.26	748.03	8.5	750.63	8.53	2.61	0.35
42	89	47	5	1424	0.996844	385.5	0.514045	280.97	6.8	0	7.9	758.62	8.52	760.61	8.55	1.99	0.26
42	90	48	6	1440	0.995556	387.88	0.516667	280.12	9.69	1.05	7.56	770.92	8.57	772.8	8.59	1.88	0.24
42	91	49	7	1456	0.994083	390.17	0.519231	279.31	13.05	0	7.24	780.72	8.58	782.04	8.59	1.32	0.17
42	92	50	8	1472	0.992439	392.37	0.521739	278.54	16.86	1.04	6.94	792.22	8.61	793.47	8.62	1.26	0.16
42	93	51	9	1488	0.990635	394.49	0.524194	277.8	21.11	0	6.66	801.26	8.62	802.01	8.62	0.76	0.09
42	94	52	10	1504	0.988683	396.53	0.526596	277.11	25.79	1.03	6.4	812	8.64	812.73	8.65	0.73	0.09
42	95	53	11	1520	0.986593	398.49	0.528947	276.45	30.88	0	6.15	820.33	8.64	820.61	8.64	0.28	0.03
42	96	54	12	1536	0.984375	400.38	0.53125	275.82	36.37	1.02	5.92	830.36	8.65	830.66	8.65	0.3	0.04
42	97	55	13	1552	0.982038	402.2	0.533505	275.23	42.25	0	5.7	838.02	8.64	837.9	8.64	-0.11	-0.01
42	98	56	14	1568	0.979592	403.95	0.535714	274.67	48.5	1.01	5.49	847.37	8.65	847.31	8.65	-0.06	-0.01
42	99	57	15	1584	0.977043	405.64	0.537879	274.14	55.12	0	5.29	854.4	8.63	853.96	8.63	-0.43	-0.05
42	100	58	16	1600	0.9744	407.26	0.54	273.64	62.09	1	5.11	863.12	8.63	862.76	8.63	-0.36	-0.04
42	101	59	17	1616	0.971669	408.82	0.542079	273.16	69.41	0	4.93	869.54	8.61	868.85	8.6	-0.69	-0.08
42	102	60	18	1632	0.968858	410.33	0.544118	272.71	77.06	0.99	4.77	877.66	8.6	877.07	8.6	-0.59	-0.07
42	103	61	19	1648	0.965972	411.77	0.546117	272.28	85.04	0	4.61	883.52	8.58	882.62	8.57	-0.9	-0.1
42	104	62	20	1664	0.963018	413.17	0.548077	271.88	93.32	0.98	4.46	891.07	8.57	890.29	8.56	-0.78	-0.09
42	105	63	21	1680	0.96	414.51	0.55	271.51	101.92	0	4.32	896.38	8.54	895.33	8.53	-1.06	-0.12
42	106	64	22	1696	0.956924	415.8	0.551887	271.15	110.81	0.97	4.18	903.39	8.52	902.47	8.51	-0.92	-0.1
42	107	65	23	1712	0.953795	417.04	0.553738	270.81	119.99	0	4.05	908.2	8.49	907.02	8.48	-1.18	-0.13
42	108	66	24	1728	0.950617	418.24	0.555556	270.5	129.46	0.96	3.93	914.7	8.47	913.67	8.46	-1.03	-0.11
42	109	67	25	1744	0.947395	419.39	0.557339	270.21	139.19	0	3.82	919.03	8.43	917.76	8.42	-1.27	-0.14
42	110	68	26	1760	0.944132	420.5	0.559091	269.93	149.19	0.95	3.71	925.04	8.41	923.93	8.4	-1.11	-0.12
42	111	69	27	1776	0.940833	421.56	0.560811	269.67	159.46	0	3.6	928.91	8.37	927.58	8.36	-1.33	-0.14
42	112	70	28	1792	0.9375	422.59	0.5625	269.43	169.97	0.94	3.5	934.45	8.34	933.29	8.33	-1.16	-0.12
42	113	71	29	1808	0.934137	423.58	0.564159	269.21	180.73	0	3.4	937.89	8.3	936.52	8.29	-1.37	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
42	114	72	30	1824	0.930748	424.53	0.565789	269	191.72	0.94	3.31	943	8.27	941.8	8.26	-1.2	-0.13
42	115	73	31	1840	0.927335	425.44	0.567391	268.81	202.95	0	3.22	946.02	8.23	944.62	8.21	-1.4	-0.15
42	116	74	32	1856	0.9239	426.32	0.568966	268.63	214.41	0.93	3.14	950.7	8.2	949.49	8.19	-1.22	-0.13
42	117	75	33	1872	0.920447	427.16	0.570513	268.47	226.09	0	3.06	953.34	8.15	951.92	8.14	-1.41	-0.15
42	118	76	34	1888	0.916978	427.97	0.572034	268.33	237.98	0.92	2.98	957.62	8.12	956.39	8.11	-1.23	-0.13
42	119	77	35	1904	0.913495	428.75	0.573529	268.19	250.09	0	2.91	959.88	8.07	958.46	8.05	-1.42	-0.15
42	120	78	36	1920	0.91	429.5	0.575	268.07	262.4	0.91	2.84	963.78	8.03	962.55	8.02	-1.24	-0.13
42	121	79	37	1936	0.906495	430.22	0.576446	267.96	274.9	0	2.77	965.68	7.98	964.26	7.97	-1.43	-0.15
42	122	80	38	1952	0.902983	430.91	0.577869	267.86	287.61	0.91	2.7	969.23	7.94	967.98	7.93	-1.24	-0.13
42	123	81	39	1968	0.899465	431.57	0.579268	267.78	300.5	0	2.64	970.79	7.89	969.36	7.88	-1.43	-0.15
42	124	82	40	1984	0.895942	432.21	0.580645	267.71	313.58	0.9	2.58	973.98	7.85	972.73	7.84	-1.25	-0.13
42	125	83	41	2000	0.892416	432.82	0.582	267.64	326.84	0	2.52	975.22	7.8	973.78	7.79	-1.44	-0.15
42	126	84	42	2016	0.888889	433.41	0.583333	267.59	340.28	0.89	2.47	978.08	7.76	976.82	7.75	-1.27	-0.13
42	127	85	43	2032	0.885362	433.97	0.584646	267.55	353.89	0	2.41	979.01	7.71	977.55	7.7	-1.45	-0.15
42	128	86	44	2048	0.881836	434.51	0.585938	267.52	367.67	0.88	2.36	981.55	7.67	980.27	7.66	-1.29	-0.13
42	129	87	45	2064	0.878313	435.02	0.587209	267.5	381.61	0	2.31	982.18	7.61	980.7	7.6	-1.48	-0.15
42	130	88	46	2080	0.874793	435.51	0.588462	267.48	395.72	0.88	2.26	984.43	7.57	983.11	7.56	-1.32	-0.13
42	131	89	47	2096	0.871278	435.99	0.589695	267.48	409.98	0	2.22	984.77	7.52	983.26	7.51	-1.51	-0.15
42	132	90	48	2112	0.867769	436.44	0.590909	267.48	424.4	0.87	2.17	986.72	7.48	985.37	7.46	-1.36	-0.14
42	133	91	49	2128	0.864266	436.87	0.592105	267.5	438.96	0	2.13	986.8	7.42	985.24	7.41	-1.56	-0.16
42	134	92	50	2144	0.860771	437.28	0.593284	267.52	453.68	0.86	2.09	988.47	7.38	987.06	7.37	-1.41	-0.14
42	135	93	51	2160	0.857284	437.67	0.594444	267.55	468.54	0	2.05	988.29	7.32	986.67	7.31	-1.62	-0.16
42	136	94	52	2176	0.853806	438.05	0.595588	267.58	483.54	0.86	2.01	989.7	7.28	988.21	7.27	-1.49	-0.15
42	137	95	53	2192	0.850338	438.4	0.596715	267.63	498.67	0	1.97	989.27	7.22	987.56	7.21	-1.7	-0.17
42	138	96	54	2208	0.846881	438.74	0.597826	267.68	513.94	0.85	1.93	990.42	7.18	988.84	7.17	-1.58	-0.16
42	139	97	55	2224	0.843435	439.07	0.598921	267.74	529.35	0	1.9	989.75	7.12	987.95	7.11	-1.8	-0.18
42	140	98	56	2240	0.84	439.37	0.6	267.8	544.88	0.85	1.86	990.65	7.08	988.97	7.06	-1.69	-0.17
42	141	99	57	2256	0.836578	439.66	0.601064	267.87	560.54	0	1.83	989.76	7.02	987.83	7.01	-1.92	-0.19
42	142	100	58	2272	0.833168	439.94	0.602113	267.95	576.32	0.84	1.8	990.43	6.97	988.61	6.96	-1.82	-0.18
42	143	101	59	2288	0.829772	440.2	0.603147	268.03	592.22	0	1.77	989.31	6.92	987.25	6.9	-2.06	-0.21
42	144	102	60	2304	0.826389	440.45	0.604167	268.12	608.25	0.83	1.74	989.75	6.87	987.78	6.86	-1.97	-0.2
42	145	103	61	2320	0.82302	440.68	0.605172	268.22	624.38	0	1.71	988.42	6.82	986.2	6.8	-2.22	-0.23
42	146	104	62	2336	0.819666	440.9	0.606164	268.32	640.64	0.83	1.68	988.65	6.77	986.51	6.76	-2.14	-0.22
42	147	105	63	2352	0.816327	441.11	0.607143	268.43	657	0	1.65	987.12	6.72	984.71	6.7	-2.41	-0.24
42	148	106	64	2368	0.813002	441.3	0.608108	268.54	673.47	0.82	1.63	987.13	6.67	984.79	6.65	-2.34	-0.24
42	149	107	65	2384	0.809693	441.48	0.60906	268.66	690.05	0	1.6	985.41	6.61	982.79	6.6	-2.62	-0.27
42	150	108	66	2400	0.8064	441.65	0.61	268.78	706.74	0.82	1.58	985.22	6.57	982.66	6.55	-2.56	-0.26
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
43	85	42	-1	1360	0.999862	374.99	0.497059	298.6	0.28	0	9.52	695.64	8.18	701.5	8.25	5.86	0.83
43	86	43	0	1376	1	377.98	0.5	297.41	0	-1.08	10	709.53	8.25	715.05	8.31	5.52	0.77
43	87	44	1	1392	0.999868	380.85	0.502874	296.29	0.28	0	9.53	724.11	8.32	727.9	8.37	3.79	0.52
43	88	45	2	1408	0.999483	383.62	0.505682	295.22	1.1	-1.07	9.09	736.08	8.36	740.6	8.42	4.51	0.61
43	89	46	3	1424	0.998864	386.28	0.508427	294.2	2.45	0	8.68	749.75	8.42	752.6	8.46	2.85	0.38
43	90	47	4	1440	0.998025	388.84	0.511111	293.24	4.31	-1.05	8.3	760.86	8.45	764.49	8.49	3.64	0.48

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
43	91	48	5	1456	0.996981	391.31	0.513736	292.32	6.66	0	7.94	773.66	8.5	775.7	8.52	2.04	0.26
43	92	49	6	1472	0.995747	393.68	0.516304	291.44	9.48	-1.04	7.6	783.96	8.52	786.83	8.55	2.88	0.37
43	93	50	7	1488	0.994335	395.96	0.518817	290.61	12.77	0	7.29	795.94	8.56	797.29	8.57	1.34	0.17
43	94	51	8	1504	0.992757	398.17	0.521277	289.82	16.5	-1.03	6.99	805.47	8.57	807.7	8.59	2.23	0.28
43	95	52	9	1520	0.991025	400.28	0.523684	289.07	20.67	0	6.72	816.69	8.6	817.44	8.6	0.75	0.09
43	96	53	10	1536	0.989149	402.33	0.526042	288.36	25.25	-1.02	6.46	825.5	8.6	827.17	8.62	1.68	0.2
43	97	54	11	1552	0.98714	404.29	0.528351	287.68	30.25	0	6.21	835.99	8.62	836.24	8.62	0.25	0.03
43	98	55	12	1568	0.985006	406.19	0.530612	287.03	35.63	-1.01	5.98	844.12	8.61	845.33	8.63	1.21	0.14
43	99	56	13	1584	0.982757	408.01	0.532828	286.42	41.4	0	5.76	853.93	8.63	853.75	8.62	-0.18	-0.02
43	100	57	14	1600	0.9804	409.77	0.535	285.84	47.54	-1	5.55	861.4	8.61	862.22	8.62	0.82	0.1
43	101	58	15	1616	0.977943	411.46	0.537129	285.29	54.04	0	5.36	870.57	8.62	870.04	8.61	-0.53	-0.06
43	102	59	16	1632	0.975394	413.09	0.539216	284.77	60.89	-0.99	5.17	877.43	8.6	877.93	8.61	0.5	0.06
43	103	60	17	1648	0.972759	414.67	0.541262	284.28	68.08	0	5	885.98	8.6	885.17	8.59	-0.81	-0.09
43	104	61	18	1664	0.970044	416.18	0.543269	283.81	75.59	-0.98	4.83	892.27	8.58	892.5	8.58	0.23	0.03
43	105	62	19	1680	0.967256	417.64	0.545238	283.37	83.43	0	4.68	900.24	8.57	899.19	8.56	-1.04	-0.12
43	106	63	20	1696	0.9644	419.05	0.54717	282.95	91.58	-0.97	4.53	905.98	8.55	906	8.55	0.02	0
43	107	64	21	1712	0.961481	420.4	0.549065	282.55	100.03	0	4.39	913.4	8.54	912.17	8.52	-1.23	-0.13
43	108	65	22	1728	0.958505	421.71	0.550926	282.18	108.78	-0.96	4.25	918.62	8.51	918.47	8.5	-0.15	-0.02
43	109	66	23	1744	0.955475	422.97	0.552752	281.83	117.81	0	4.12	925.51	8.49	924.14	8.48	-1.38	-0.15
43	110	67	24	1760	0.952397	424.18	0.554545	281.5	127.12	-0.95	4	930.24	8.46	929.96	8.45	-0.28	-0.03
43	111	68	25	1776	0.949274	425.35	0.556306	281.19	136.71	0	3.88	936.64	8.44	935.15	8.42	-1.49	-0.16
43	112	69	26	1792	0.94611	426.47	0.558036	280.9	146.55	-0.94	3.77	940.9	8.4	940.52	8.4	-0.38	-0.04
43	113	70	27	1808	0.942909	427.55	0.559735	280.62	156.66	0	3.67	946.83	8.38	945.26	8.37	-1.57	-0.17
43	114	71	28	1824	0.939674	428.6	0.561404	280.37	167.01	-0.94	3.56	950.65	8.34	950.19	8.33	-0.46	-0.05
43	115	72	29	1840	0.936408	429.6	0.563043	280.13	177.61	0	3.47	956.12	8.31	954.49	8.3	-1.63	-0.17
43	116	73	30	1856	0.933115	430.57	0.564655	279.91	188.45	-0.93	3.37	959.52	8.27	959	8.27	-0.52	-0.05
43	117	74	31	1872	0.929798	431.5	0.566239	279.7	199.52	0	3.29	964.57	8.24	962.89	8.23	-1.68	-0.17
43	118	75	32	1888	0.926458	432.4	0.567797	279.51	210.81	-0.92	3.2	967.56	8.2	967	8.19	-0.57	-0.06
43	119	76	33	1904	0.923099	433.26	0.569328	279.34	222.32	0	3.12	972.2	8.17	970.49	8.16	-1.71	-0.18
43	120	77	34	1920	0.919722	434.09	0.570833	279.18	234.05	-0.91	3.04	974.81	8.12	974.21	8.12	-0.6	-0.06
43	121	78	35	1936	0.916331	434.89	0.572314	279.03	245.99	0	2.97	979.06	8.09	977.32	8.08	-1.74	-0.18
43	122	79	36	1952	0.912927	435.66	0.57377	278.9	258.13	-0.91	2.9	981.31	8.04	980.68	8.04	-0.63	-0.06
43	123	80	37	1968	0.909512	436.4	0.575203	278.78	270.47	0	2.83	985.19	8.01	983.43	8	-1.76	-0.18
43	124	81	38	1984	0.906087	437.11	0.576613	278.67	283.01	-0.9	2.76	987.09	7.96	986.43	7.96	-0.65	-0.07
43	125	82	39	2000	0.902656	437.79	0.578	278.57	295.73	0	2.7	990.61	7.92	988.83	7.91	-1.78	-0.18
43	126	83	40	2016	0.899219	438.44	0.579365	278.48	308.64	-0.89	2.64	992.17	7.87	991.5	7.87	-0.68	-0.07
43	127	84	41	2032	0.895778	439.07	0.580709	278.41	321.73	0	2.58	995.36	7.84	993.56	7.82	-1.8	-0.18
43	128	85	42	2048	0.892334	439.68	0.582031	278.35	335	-0.88	2.52	996.61	7.79	995.9	7.78	-0.71	-0.07
43	129	86	43	2064	0.888889	440.26	0.583333	278.29	348.44	0	2.47	999.47	7.75	997.64	7.73	-1.82	-0.18
43	130	87	44	2080	0.885444	440.82	0.584615	278.25	362.05	-0.88	2.41	1000.41	7.7	999.67	7.69	-0.74	-0.07
43	131	88	45	2096	0.882	441.35	0.585878	278.22	375.83	0	2.36	1002.96	7.66	1001.1	7.64	-1.86	-0.19
43	132	89	46	2112	0.878558	441.86	0.587121	278.2	389.77	-0.87	2.31	1003.62	7.6	1002.83	7.6	-0.78	-0.08
43	133	90	47	2128	0.87512	442.35	0.588346	278.18	403.86	0	2.27	1005.87	7.56	1003.97	7.55	-1.9	-0.19
43	134	91	48	2144	0.871686	442.82	0.589552	278.18	418.11	-0.86	2.22	1006.25	7.51	1005.41	7.5	-0.84	-0.08
43	135	92	49	2160	0.868258	443.27	0.590741	278.18	432.51	0	2.18	1008.21	7.47	1006.26	7.45	-1.96	-0.19
43	136	93	50	2176	0.864836	443.71	0.591912	278.19	447.06	-0.86	2.14	1008.32	7.41	1007.42	7.41	-0.91	-0.09

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
43	137	94	51	2192	0.86142	444.12	0.593066	278.21	461.75	0	2.09	1010.02	7.37	1007.99	7.36	-2.03	-0.2
43	138	95	52	2208	0.858013	444.51	0.594203	278.24	476.58	-0.85	2.05	1009.87	7.32	1008.88	7.31	-0.99	-0.1
43	139	96	53	2224	0.854614	444.89	0.595324	278.28	491.55	0	2.02	1011.3	7.28	1009.19	7.26	-2.11	-0.21
43	140	97	54	2240	0.851224	445.24	0.596429	278.32	506.65	-0.85	1.98	1010.92	7.22	1009.83	7.21	-1.09	-0.11
43	141	98	55	2256	0.847845	445.59	0.597518	278.37	521.89	0	1.94	1012.1	7.18	1009.88	7.16	-2.22	-0.22
43	142	99	56	2272	0.844475	445.91	0.598592	278.43	537.26	-0.84	1.91	1011.47	7.12	1010.27	7.11	-1.2	-0.12
43	143	100	57	2288	0.841117	446.22	0.59965	278.49	552.75	0	1.87	1012.41	7.08	1010.07	7.06	-2.34	-0.23
43	144	101	58	2304	0.83777	446.51	0.600694	278.56	568.37	-0.83	1.84	1011.56	7.02	1010.22	7.02	-1.34	-0.13
43	145	102	59	2320	0.834435	446.79	0.601724	278.64	584.11	0	1.81	1012.27	6.98	1009.79	6.96	-2.48	-0.25
43	146	103	60	2336	0.831113	447.06	0.60274	278.72	599.97	-0.83	1.78	1011.2	6.93	1009.7	6.92	-1.5	-0.15
43	147	104	61	2352	0.827803	447.31	0.603741	278.81	615.95	0	1.75	1011.68	6.88	1009.04	6.86	-2.64	-0.26
43	148	105	62	2368	0.824507	447.55	0.60473	278.9	632.04	-0.82	1.72	1010.41	6.83	1008.74	6.82	-1.68	-0.17
43	149	106	63	2384	0.821224	447.77	0.605705	279	648.24	0	1.69	1010.68	6.78	1007.85	6.76	-2.83	-0.28
43	150	107	64	2400	0.817956	447.98	0.606667	279.11	664.55	-0.82	1.67	1009.21	6.73	1007.33	6.72	-1.88	-0.19
43	151	108	65	2416	0.814701	448.18	0.607616	279.22	680.97	0	1.64	1009.27	6.68	1006.23	6.66	-3.04	-0.3
43	152	109	66	2432	0.811461	448.37	0.608553	279.34	697.5	-0.81	1.61	1007.6	6.63	1005.5	6.62	-2.1	-0.21
43	153	110	67	2448	0.808236	448.54	0.609477	279.46	714.13	0	1.59	1007.46	6.58	1004.19	6.56	-3.27	-0.33
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
44	87	43	-1	1392	0.999868	380.85	0.497126	310.23	0.28	0	9.53	710.17	8.16	716.14	8.23	5.97	0.83
44	88	44	0	1408	1	383.82	0.5	309.03	0	1.07	10	726.22	8.25	730.94	8.31	4.72	0.65
44	89	45	1	1424	0.999874	386.67	0.502809	307.89	0.27	0	9.54	738.71	8.3	742.65	8.34	3.94	0.53
44	90	46	2	1440	0.999506	389.42	0.505556	306.8	1.08	1.05	9.11	752.87	8.37	756.58	8.41	3.72	0.49
44	91	47	3	1456	0.998913	392.06	0.508242	305.77	2.4	0	8.71	764.48	8.4	767.49	8.43	3.01	0.39
44	92	48	4	1472	0.99811	394.61	0.51087	304.78	4.21	1.04	8.33	777.76	8.45	780.61	8.48	2.84	0.36
44	93	49	5	1488	0.997109	397.07	0.513441	303.84	6.52	0	7.98	788.55	8.48	790.76	8.5	2.21	0.28
44	94	50	6	1504	0.995926	399.44	0.515957	302.95	9.28	1.03	7.65	801.01	8.52	803.1	8.54	2.09	0.26
44	95	51	7	1520	0.994571	401.72	0.518421	302.1	12.5	0	7.34	811.02	8.54	812.53	8.55	1.51	0.19
44	96	52	8	1536	0.993056	403.91	0.520833	301.29	16.16	1.02	7.05	822.7	8.57	824.14	8.58	1.44	0.18
44	97	53	9	1552	0.991391	406.03	0.523196	300.52	20.25	0	6.77	831.97	8.58	832.9	8.59	0.92	0.11
44	98	54	10	1568	0.989588	408.08	0.52551	299.79	24.74	1.01	6.51	842.92	8.6	843.81	8.61	0.89	0.11
44	99	55	11	1584	0.987654	410.04	0.527778	299.09	29.64	0	6.27	851.5	8.6	851.92	8.61	0.42	0.05
44	100	56	12	1600	0.9856	411.94	0.53	298.43	34.93	1	6.04	861.75	8.62	862.18	8.62	0.43	0.05
44	101	57	13	1616	0.983433	413.77	0.532178	297.8	40.59	0	5.82	869.67	8.61	869.67	8.61	0	0
44	102	58	14	1632	0.981161	415.54	0.534314	297.2	46.62	0.99	5.62	879.26	8.62	879.3	8.62	0.04	0
44	103	59	15	1648	0.978792	417.24	0.536408	296.63	53	0	5.42	886.56	8.61	886.21	8.6	-0.35	-0.04
44	104	60	16	1664	0.976331	418.88	0.538462	296.09	59.73	0.98	5.24	895.53	8.61	895.25	8.61	-0.28	-0.03
44	105	61	17	1680	0.973787	420.46	0.540476	295.58	66.79	0	5.07	902.24	8.59	901.61	8.59	-0.63	-0.07
44	106	62	18	1696	0.971164	421.99	0.542453	295.09	74.18	0.97	4.9	910.62	8.59	910.08	8.59	-0.54	-0.06
44	107	63	19	1712	0.968469	423.46	0.544393	294.63	81.89	0	4.74	916.77	8.57	915.91	8.56	-0.86	-0.09
44	108	64	20	1728	0.965706	424.88	0.546296	294.19	89.9	0.96	4.59	924.58	8.56	923.83	8.55	-0.75	-0.08
44	109	65	21	1744	0.962882	426.24	0.548165	293.78	98.21	0	4.45	930.21	8.53	929.16	8.52	-1.05	-0.11
44	110	66	22	1760	0.96	427.56	0.55	293.39	106.82	0.95	4.32	937.49	8.52	936.57	8.51	-0.92	-0.1
44	111	67	23	1776	0.957065	428.84	0.551802	293.03	115.71	0	4.19	942.62	8.49	941.42	8.48	-1.19	-0.13
44	112	68	24	1792	0.954082	430.06	0.553571	292.68	124.88	0.94	4.07	949.39	8.48	948.34	8.47	-1.05	-0.11

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
44	113	69	25	1808	0.951053	431.25	0.55531	292.35	134.31	0	3.95	954.04	8.44	952.73	8.43	-1.31	-0.14
44	114	70	26	1824	0.947984	432.39	0.557018	292.05	144.01	0.94	3.84	960.33	8.42	959.19	8.41	-1.15	-0.12
44	115	71	27	1840	0.944877	433.49	0.558696	291.76	153.96	0	3.73	964.53	8.39	963.14	8.38	-1.39	-0.14
44	116	72	28	1856	0.941736	434.55	0.560345	291.49	164.16	0.93	3.63	970.36	8.37	969.14	8.35	-1.22	-0.13
44	117	73	29	1872	0.938564	435.57	0.561966	291.23	174.6	0	3.53	974.13	8.33	972.67	8.31	-1.45	-0.15
44	118	74	30	1888	0.935363	436.55	0.563559	291	185.28	0.92	3.44	979.53	8.3	978.25	8.29	-1.28	-0.13
44	119	75	31	1904	0.932138	437.5	0.565126	290.78	196.19	0	3.35	982.88	8.26	981.38	8.25	-1.5	-0.15
44	120	76	32	1920	0.928889	438.42	0.566667	290.57	207.32	0.91	3.26	987.86	8.23	986.54	8.22	-1.32	-0.13
44	121	77	33	1936	0.92562	439.3	0.568182	290.39	218.68	0	3.18	990.82	8.19	989.29	8.18	-1.53	-0.15
44	122	78	34	1952	0.922333	440.15	0.569672	290.21	230.24	0.91	3.1	995.41	8.16	994.06	8.15	-1.35	-0.14
44	123	79	35	1968	0.91903	440.96	0.571138	290.05	242.02	0	3.03	997.99	8.11	996.45	8.1	-1.55	-0.16
44	124	80	36	1984	0.915713	441.75	0.572581	289.9	254	0.9	2.95	1002.2	8.08	1000.83	8.07	-1.37	-0.14
44	125	81	37	2000	0.912384	442.51	0.574	289.77	266.18	0	2.88	1004.43	8.04	1002.87	8.02	-1.57	-0.16
44	126	82	38	2016	0.909045	443.24	0.575397	289.65	278.55	0.89	2.82	1008.28	8	1006.89	7.99	-1.39	-0.14
44	127	83	39	2032	0.905698	443.94	0.576772	289.54	291.11	0	2.75	1010.17	7.95	1008.59	7.94	-1.58	-0.16
44	128	84	40	2048	0.902344	444.61	0.578125	289.44	303.86	0.88	2.69	1013.67	7.92	1012.26	7.91	-1.4	-0.14
44	129	85	41	2064	0.898984	445.26	0.579457	289.36	316.78	0	2.63	1015.23	7.87	1013.63	7.86	-1.6	-0.16
44	130	86	42	2080	0.895621	445.88	0.580769	289.28	329.89	0.88	2.57	1018.4	7.83	1016.97	7.82	-1.42	-0.14
44	131	87	43	2096	0.892256	446.48	0.582061	289.22	343.17	0	2.52	1019.65	7.78	1018.03	7.77	-1.62	-0.16
44	132	88	44	2112	0.888889	447.06	0.583333	289.16	356.61	0.87	2.47	1022.5	7.75	1021.05	7.74	-1.45	-0.14
44	133	89	45	2128	0.885522	447.61	0.584586	289.12	370.22	0	2.41	1023.46	7.7	1021.81	7.68	-1.65	-0.16
44	134	90	46	2144	0.882156	448.14	0.585821	289.09	383.99	0.86	2.37	1026	7.66	1024.52	7.65	-1.48	-0.14
44	135	91	47	2160	0.878793	448.65	0.587037	289.06	397.92	0	2.32	1026.68	7.61	1024.99	7.59	-1.68	-0.16
44	136	92	48	2176	0.875433	449.14	0.588235	289.05	412.01	0.86	2.27	1028.93	7.57	1027.41	7.55	-1.52	-0.15
44	137	93	49	2192	0.872076	449.61	0.589416	289.04	426.24	0	2.23	1029.33	7.51	1027.6	7.5	-1.73	-0.17
44	138	94	50	2208	0.868725	450.06	0.59058	289.05	440.62	0.85	2.18	1031.31	7.47	1029.72	7.46	-1.58	-0.15
44	139	95	51	2224	0.86538	450.49	0.591727	289.06	455.15	0	2.14	1031.44	7.42	1029.65	7.41	-1.79	-0.17
44	140	96	52	2240	0.862041	450.9	0.592857	289.07	469.82	0.85	2.1	1033.15	7.38	1031.5	7.37	-1.65	-0.16
44	141	97	53	2256	0.858709	451.3	0.593972	289.1	484.63	0	2.06	1033.04	7.33	1031.17	7.31	-1.87	-0.18
44	142	98	54	2272	0.855386	451.67	0.59507	289.14	499.57	0.84	2.02	1034.49	7.29	1032.75	7.27	-1.74	-0.17
44	143	99	55	2288	0.852071	452.03	0.596154	289.18	514.64	0	1.99	1034.13	7.23	1032.17	7.22	-1.96	-0.19
44	144	100	56	2304	0.848765	452.37	0.597222	289.23	529.85	0.83	1.95	1035.33	7.19	1033.5	7.18	-1.84	-0.18
44	145	101	57	2320	0.84547	452.7	0.598276	289.28	545.18	0	1.92	1034.75	7.14	1032.68	7.12	-2.07	-0.2
44	146	102	58	2336	0.842184	453.01	0.599315	289.35	560.64	0.83	1.89	1035.71	7.09	1033.75	7.08	-1.96	-0.19
44	147	103	59	2352	0.83891	453.31	0.60034	289.42	576.22	0	1.85	1034.91	7.04	1032.7	7.03	-2.2	-0.21
44	148	104	60	2368	0.835646	453.59	0.601351	289.49	591.92	0.82	1.82	1035.64	7	1033.54	6.98	-2.1	-0.2
44	149	105	61	2384	0.832395	453.86	0.602349	289.57	607.74	0	1.79	1034.62	6.94	1032.27	6.93	-2.35	-0.23
44	150	106	62	2400	0.829156	454.11	0.603333	289.66	623.67	0.82	1.76	1035.14	6.9	1032.87	6.89	-2.26	-0.22
44	151	107	63	2416	0.825929	454.36	0.604305	289.75	639.71	0	1.73	1033.91	6.85	1031.38	6.83	-2.53	-0.25
44	152	108	64	2432	0.822715	454.58	0.605263	289.85	655.87	0.81	1.71	1034.21	6.8	1031.77	6.79	-2.45	-0.24
44	153	109	65	2448	0.819514	454.8	0.606209	289.96	672.13	0	1.68	1032.79	6.75	1030.07	6.73	-2.72	-0.26
44	154	110	66	2464	0.816327	455	0.607143	290.07	688.5	0.81	1.65	1032.89	6.71	1030.23	6.69	-2.65	-0.26
44	155	111	67	2480	0.813153	455.19	0.608065	290.18	704.97	0	1.63	1031.28	6.65	1028.34	6.63	-2.94	-0.29
44	156	112	68	2496	0.809993	455.37	0.608974	290.31	721.55	0.8	1.6	1031.18	6.61	1028.29	6.59	-2.89	-0.28
44	157	113	69	2512	0.806848	455.54	0.609873	290.43	738.23	0	1.58	1029.38	6.56	1026.2	6.54	-3.18	-0.31

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
45	89	44	-1	1424	0.999874	386.67	0.497191	322.04	0.27	0	9.54	724.55	8.14	730.64	8.21	6.09	0.83
45	90	45	0	1440	1	389.61	0.5	320.83	0	-1.05	10	738.51	8.21	744.27	8.27	5.76	0.77
45	91	46	1	1456	0.999879	392.44	0.502747	319.67	0.27	0	9.55	753.17	8.28	757.22	8.32	4.05	0.53
45	92	47	2	1472	0.999527	395.17	0.505435	318.56	1.05	-1.04	9.13	765.3	8.32	770.03	8.37	4.73	0.61
45	93	48	3	1488	0.998959	397.81	0.508065	317.51	2.35	0	8.73	779.08	8.38	782.17	8.41	3.09	0.4
45	94	49	4	1504	0.998189	400.34	0.510638	316.5	4.13	-1.03	8.36	790.36	8.41	794.2	8.45	3.84	0.48
45	95	50	5	1520	0.99723	402.79	0.513158	315.54	6.38	0	8.02	803.3	8.46	805.56	8.48	2.26	0.28
45	96	51	6	1536	0.996094	405.15	0.515625	314.63	9.09	-1.02	7.69	813.8	8.48	816.85	8.51	3.06	0.37
45	97	52	7	1552	0.994792	407.43	0.518041	313.76	12.25	0	7.39	825.95	8.51	827.49	8.53	1.54	0.19
45	98	53	8	1568	0.993336	409.62	0.520408	312.93	15.84	-1.01	7.1	835.7	8.53	838.08	8.55	2.39	0.28
45	99	54	9	1584	0.991736	411.74	0.522727	312.14	19.84	0	6.83	847.1	8.56	848.02	8.57	0.92	0.11
45	100	55	10	1600	0.99	413.78	0.525	311.39	24.25	-1	6.57	856.14	8.56	857.95	8.58	1.81	0.21
45	101	56	11	1616	0.988138	415.75	0.527228	310.68	29.06	0	6.33	866.84	8.58	867.23	8.59	0.39	0.05
45	102	57	12	1632	0.986159	417.65	0.529412	309.99	34.25	-0.99	6.1	875.21	8.58	876.53	8.59	1.32	0.15
45	103	58	13	1648	0.98407	419.49	0.531553	309.35	39.81	0	5.89	885.24	8.59	885.19	8.59	-0.06	-0.01
45	104	59	14	1664	0.981879	421.26	0.533654	308.73	45.73	-0.98	5.68	892.98	8.59	893.89	8.6	0.9	0.1
45	105	60	15	1680	0.979592	422.97	0.535714	308.14	52	0	5.49	902.38	8.59	901.95	8.59	-0.43	-0.05
45	106	61	16	1696	0.977216	424.62	0.537736	307.58	58.61	-0.97	5.3	909.52	8.58	910.08	8.59	0.56	0.06
45	107	62	17	1712	0.974758	426.21	0.53972	307.05	65.55	0	5.13	918.32	8.58	917.57	8.58	-0.74	-0.08
45	108	63	18	1728	0.972222	427.74	0.541667	306.55	72.82	-0.96	4.97	924.89	8.56	925.16	8.57	0.27	0.03
45	109	64	19	1744	0.969615	429.23	0.543578	306.07	80.4	0	4.81	933.11	8.56	932.11	8.55	-1	-0.11
45	110	65	20	1760	0.966942	430.66	0.545455	305.62	88.28	-0.95	4.66	939.15	8.54	939.18	8.54	0.03	0
45	111	66	21	1776	0.964207	432.04	0.547297	305.19	96.46	0	4.52	946.83	8.53	945.62	8.52	-1.21	-0.13
45	112	67	22	1792	0.961416	433.37	0.549107	304.79	104.93	-0.94	4.38	952.35	8.5	952.19	8.5	-0.16	-0.02
45	113	68	23	1808	0.958572	434.66	0.550885	304.4	113.68	0	4.25	959.52	8.49	958.14	8.48	-1.38	-0.14
45	114	69	24	1824	0.955679	435.9	0.552632	304.04	122.7	-0.94	4.13	964.55	8.46	964.24	8.46	-0.32	-0.03
45	115	70	25	1840	0.952741	437.09	0.554348	303.7	131.99	0	4.01	971.23	8.45	969.72	8.43	-1.51	-0.16
45	116	71	26	1856	0.949762	438.25	0.556034	303.37	141.55	-0.93	3.9	975.8	8.41	975.36	8.41	-0.44	-0.05
45	117	72	27	1872	0.946746	439.37	0.557692	303.07	151.35	0	3.79	982.01	8.39	980.39	8.38	-1.62	-0.16
45	118	73	28	1888	0.943694	440.44	0.559322	302.78	161.4	-0.92	3.69	986.15	8.36	985.61	8.35	-0.54	-0.05
45	119	74	29	1904	0.940612	441.48	0.560924	302.52	171.69	0	3.59	991.91	8.34	990.21	8.32	-1.7	-0.17
45	120	75	30	1920	0.9375	442.48	0.5625	302.27	182.22	-0.91	3.5	995.62	8.3	995.01	8.29	-0.61	-0.06
45	121	76	31	1936	0.934362	443.45	0.56405	302.03	192.97	0	3.41	1000.96	8.27	999.2	8.26	-1.76	-0.18
45	122	77	32	1952	0.931201	444.38	0.565574	301.81	203.95	-0.91	3.32	1004.27	8.23	1003.6	8.23	-0.67	-0.07
45	123	78	33	1968	0.928019	445.28	0.567073	301.61	215.15	0	3.24	1009.2	8.2	1007.4	8.19	-1.81	-0.18
45	124	79	34	1984	0.924818	446.14	0.568548	301.42	226.56	-0.9	3.16	1012.14	8.16	1011.42	8.16	-0.72	-0.07
45	125	80	35	2000	0.9216	446.98	0.57	301.25	238.18	0	3.09	1016.68	8.13	1014.84	8.12	-1.85	-0.18
45	126	81	36	2016	0.918367	447.78	0.571429	301.09	250	-0.89	3.01	1019.25	8.09	1018.49	8.08	-0.76	-0.07
45	127	82	37	2032	0.915122	448.56	0.572835	300.94	262.02	0	2.94	1023.43	8.06	1021.55	8.04	-1.88	-0.18
45	128	83	38	2048	0.911865	449.3	0.574219	300.81	274.23	-0.88	2.87	1025.65	8.01	1024.85	8.01	-0.8	-0.08
45	129	84	39	2064	0.908599	450.02	0.575581	300.69	286.63	0	2.81	1029.47	7.98	1027.56	7.97	-1.91	-0.19
45	130	85	40	2080	0.905325	450.72	0.576923	300.58	299.22	-0.88	2.75	1031.36	7.93	1030.53	7.93	-0.83	-0.08
45	131	86	41	2096	0.902045	451.38	0.578244	300.48	311.99	0	2.69	1034.84	7.9	1032.9	7.88	-1.94	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
45	132	87	42	2112	0.89876	452.02	0.579545	300.39	324.93	-0.87	2.63	1036.41	7.85	1035.55	7.85	-0.87	-0.08
45	133	88	43	2128	0.895472	452.64	0.580827	300.32	338.04	0	2.57	1039.57	7.82	1037.6	7.8	-1.97	-0.19
45	134	89	44	2144	0.892181	453.24	0.58209	300.25	351.33	-0.86	2.52	1040.84	7.77	1039.93	7.76	-0.9	-0.09
45	135	90	45	2160	0.888889	453.81	0.583333	300.2	364.78	0	2.47	1043.68	7.73	1041.67	7.72	-2.01	-0.19
45	136	91	46	2176	0.885597	454.36	0.584559	300.16	378.39	-0.86	2.42	1044.66	7.68	1043.71	7.67	-0.95	-0.09
45	137	92	47	2192	0.882306	454.88	0.585766	300.12	392.16	0	2.37	1047.2	7.64	1045.15	7.63	-2.05	-0.2
45	138	93	48	2208	0.879017	455.39	0.586957	300.1	406.08	-0.85	2.32	1047.9	7.59	1046.89	7.59	-1.01	-0.1
45	139	94	49	2224	0.875731	455.88	0.588129	300.08	420.15	0	2.28	1050.16	7.56	1048.06	7.54	-2.11	-0.2
45	140	95	50	2240	0.872449	456.35	0.589286	300.07	434.38	-0.85	2.23	1050.59	7.5	1049.52	7.5	-1.07	-0.1
45	141	96	51	2256	0.869172	456.79	0.590426	300.08	448.74	0	2.19	1052.58	7.47	1050.4	7.45	-2.17	-0.21
45	142	97	52	2272	0.8659	457.22	0.591549	300.09	463.25	-0.84	2.15	1052.75	7.41	1051.6	7.41	-1.15	-0.11
45	143	98	53	2288	0.862634	457.63	0.592657	300.1	477.9	0	2.11	1054.47	7.37	1052.22	7.36	-2.26	-0.21
45	144	99	54	2304	0.859375	458.03	0.59375	300.13	492.68	-0.83	2.07	1054.4	7.32	1053.15	7.31	-1.25	-0.12
45	145	100	55	2320	0.856124	458.41	0.594828	300.16	507.6	0	2.03	1055.87	7.28	1053.52	7.27	-2.35	-0.22
45	146	101	56	2336	0.85288	458.77	0.59589	300.2	522.64	-0.83	2	1055.56	7.23	1054.2	7.22	-1.35	-0.13
45	147	102	57	2352	0.849646	459.11	0.596939	300.25	537.82	0	1.96	1056.78	7.19	1054.32	7.17	-2.47	-0.23
45	148	103	58	2368	0.846421	459.44	0.597973	300.31	553.12	-0.82	1.93	1056.24	7.14	1054.76	7.13	-1.48	-0.14
45	149	104	59	2384	0.843205	459.75	0.598993	300.37	568.54	0	1.9	1057.24	7.1	1054.64	7.08	-2.6	-0.25
45	150	105	60	2400	0.84	460.05	0.6	300.44	584.08	-0.82	1.86	1056.48	7.04	1054.85	7.03	-1.63	-0.15
45	151	106	61	2416	0.836805	460.34	0.600993	300.51	599.74	0	1.83	1057.24	7	1054.49	6.98	-2.75	-0.26
45	152	107	62	2432	0.833622	460.61	0.601974	300.59	615.52	-0.81	1.8	1056.27	6.95	1054.48	6.94	-1.79	-0.17
45	153	108	63	2448	0.83045	460.87	0.602941	300.68	631.4	0	1.77	1056.82	6.91	1053.9	6.89	-2.92	-0.28
45	154	109	64	2464	0.82729	461.11	0.603896	300.77	647.4	-0.81	1.75	1055.65	6.85	1053.67	6.84	-1.98	-0.19
45	155	110	65	2480	0.824142	461.34	0.604839	300.87	663.51	0	1.72	1055.99	6.81	1052.87	6.79	-3.12	-0.3
45	156	111	66	2496	0.821006	461.56	0.605769	300.97	679.73	-0.8	1.69	1054.62	6.76	1052.43	6.75	-2.19	-0.21
45	157	112	67	2512	0.817883	461.77	0.606688	301.08	696.05	0	1.67	1054.76	6.72	1051.43	6.7	-3.33	-0.32
45	158	113	68	2528	0.814773	461.97	0.607595	301.2	712.47	-0.8	1.64	1053.21	6.67	1050.78	6.65	-2.42	-0.23
45	159	114	69	2544	0.811677	462.15	0.608491	301.32	729	0	1.62	1053.15	6.62	1049.58	6.6	-3.57	-0.34
45	160	115	70	2560	0.808594	462.32	0.609375	301.44	745.62	-0.79	1.59	1051.41	6.57	1048.74	6.55	-2.68	-0.26
45	161	116	71	2576	0.805524	462.49	0.610248	301.57	762.34	0	1.57	1051.17	6.53	1047.33	6.51	-3.83	-0.37
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
46	91	45	-1	1456	0.999879	392.44	0.497253	334.03	0.27	0	9.55	738.81	8.12	745	8.19	6.2	0.83
46	92	46	0	1472	1	395.36	0.5	332.8	0	1.04	10	754.89	8.21	759.87	8.26	4.98	0.66
46	93	47	1	1488	0.999884	398.17	0.502688	331.62	0.26	0	9.56	767.51	8.25	771.7	8.3	4.19	0.54
46	94	48	2	1504	0.999547	400.89	0.505319	330.49	1.03	1.03	9.15	781.76	8.32	785.72	8.36	3.96	0.5
46	95	49	3	1520	0.999003	403.51	0.507895	329.42	2.3	0	8.76	793.53	8.35	796.77	8.39	3.24	0.41
46	96	50	4	1536	0.998264	406.03	0.510417	328.4	4.04	1.02	8.39	806.94	8.41	810.01	8.44	3.07	0.38
46	97	51	5	1552	0.997343	408.47	0.512887	327.42	6.25	0	8.05	817.91	8.43	820.33	8.46	2.42	0.29
46	98	52	6	1568	0.996252	410.82	0.515306	326.49	8.91	1.01	7.73	830.52	8.47	832.81	8.5	2.29	0.28
46	99	53	7	1584	0.995001	413.09	0.517677	325.6	12	0	7.43	840.73	8.49	842.43	8.51	1.7	0.2
46	100	54	8	1600	0.9936	415.29	0.52	324.76	15.52	1	7.15	852.58	8.53	854.2	8.54	1.62	0.19
46	101	55	9	1616	0.99206	417.4	0.522277	323.95	19.45	0	6.88	862.07	8.54	863.16	8.55	1.09	0.13
46	102	56	10	1632	0.990388	419.44	0.52451	323.18	23.78	0.99	6.62	873.21	8.56	874.26	8.57	1.05	0.12
46	103	57	11	1648	0.988595	421.42	0.526699	322.44	28.5	0	6.39	882.02	8.56	882.59	8.57	0.56	0.06

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
46	104	58	12	1664	0.986686	423.32	0.528846	321.74	33.6	0.98	6.16	892.48	8.58	893.04	8.59	0.56	0.06
46	105	59	13	1680	0.984671	425.16	0.530952	321.07	39.06	0	5.95	900.65	8.58	900.77	8.58	0.12	0.01
46	106	60	14	1696	0.982556	426.94	0.533019	320.44	44.87	0.97	5.74	910.46	8.59	910.61	8.59	0.15	0.02
46	107	61	15	1712	0.980348	428.65	0.535047	319.83	51.04	0	5.55	918.03	8.58	917.77	8.58	-0.26	-0.03
46	108	62	16	1728	0.978052	430.31	0.537037	319.26	57.54	0.96	5.37	927.23	8.59	927.03	8.58	-0.2	-0.02
46	109	63	17	1744	0.975675	431.91	0.538991	318.71	64.36	0	5.19	934.21	8.57	933.64	8.57	-0.57	-0.06
46	110	64	18	1760	0.973223	433.45	0.540909	318.19	71.51	0.95	5.03	942.83	8.57	942.35	8.57	-0.48	-0.05
46	111	65	19	1776	0.9707	434.95	0.542793	317.69	78.96	0	4.87	949.27	8.55	948.44	8.54	-0.83	-0.09
46	112	66	20	1792	0.968112	436.39	0.544643	317.22	86.72	0.94	4.72	957.34	8.55	956.62	8.54	-0.72	-0.08
46	113	67	21	1808	0.965463	437.78	0.54646	316.78	94.77	0	4.58	963.25	8.52	962.22	8.52	-1.03	-0.11
46	114	68	22	1824	0.962758	439.13	0.548246	316.36	103.11	0.94	4.45	970.8	8.52	969.89	8.51	-0.91	-0.09
46	115	69	23	1840	0.96	440.42	0.55	315.96	111.72	0	4.32	976.22	8.49	975.02	8.48	-1.2	-0.12
46	116	70	24	1856	0.957194	441.68	0.551724	315.58	120.61	0.93	4.19	983.26	8.48	982.2	8.47	-1.06	-0.11
46	117	71	25	1872	0.954343	442.89	0.553419	315.22	129.76	0	4.08	988.21	8.45	986.87	8.43	-1.34	-0.14
46	118	72	26	1888	0.951451	444.06	0.555085	314.88	139.17	0.92	3.96	994.78	8.43	993.59	8.42	-1.18	-0.12
46	119	73	27	1904	0.948521	445.19	0.556723	314.56	148.83	0	3.86	999.28	8.4	997.84	8.39	-1.44	-0.14
46	120	74	28	1920	0.945556	446.28	0.558333	314.26	158.73	0.91	3.75	1005.39	8.38	1004.11	8.37	-1.28	-0.13
46	121	75	29	1936	0.942559	447.34	0.559917	313.98	168.88	0	3.65	1009.46	8.34	1007.94	8.33	-1.52	-0.15
46	122	76	30	1952	0.939532	448.35	0.561475	313.71	179.26	0.91	3.56	1015.15	8.32	1013.8	8.31	-1.35	-0.13
46	123	77	31	1968	0.93648	449.33	0.563008	313.46	189.86	0	3.47	1018.81	8.28	1017.23	8.27	-1.58	-0.16
46	124	78	32	1984	0.933403	450.28	0.564516	313.23	200.69	0.9	3.38	1024.08	8.26	1022.67	8.25	-1.41	-0.14
46	125	79	33	2000	0.930304	451.2	0.566	313.01	211.74	0	3.3	1027.35	8.22	1025.73	8.21	-1.63	-0.16
46	126	80	34	2016	0.927186	452.08	0.56746	312.81	222.99	0.89	3.22	1032.23	8.19	1030.78	8.18	-1.45	-0.14
46	127	81	35	2032	0.92405	452.93	0.568898	312.62	234.46	0	3.14	1035.13	8.15	1033.47	8.14	-1.66	-0.16
46	128	82	36	2048	0.920898	453.75	0.570312	312.45	246.12	0.88	3.07	1039.62	8.12	1038.14	8.11	-1.48	-0.14
46	129	83	37	2064	0.917733	454.55	0.571705	312.29	257.99	0	3	1042.17	8.08	1040.48	8.07	-1.69	-0.16
46	130	84	38	2080	0.914556	455.31	0.573077	312.14	270.05	0.88	2.93	1046.31	8.05	1044.8	8.04	-1.51	-0.14
46	131	85	39	2096	0.911369	456.05	0.574427	312.01	282.29	0	2.86	1048.52	8	1046.8	7.99	-1.72	-0.16
46	132	86	40	2112	0.908173	456.76	0.575758	311.89	294.72	0.87	2.8	1052.3	7.97	1050.77	7.96	-1.54	-0.15
46	133	87	41	2128	0.904969	457.44	0.577068	311.78	307.33	0	2.74	1054.19	7.93	1052.45	7.91	-1.74	-0.17
46	134	88	42	2144	0.90176	458.1	0.578358	311.68	320.12	0.86	2.68	1057.64	7.89	1056.08	7.88	-1.56	-0.15
46	135	89	43	2160	0.898546	458.74	0.57963	311.6	333.07	0	2.62	1059.22	7.85	1057.45	7.83	-1.77	-0.17
46	136	90	44	2176	0.895329	459.35	0.580882	311.52	346.2	0.86	2.57	1062.36	7.81	1060.76	7.8	-1.59	-0.15
46	137	91	45	2192	0.892109	459.94	0.582117	311.46	359.49	0	2.52	1063.63	7.76	1061.83	7.75	-1.8	-0.17
46	138	92	46	2208	0.888889	460.51	0.583333	311.4	372.94	0.85	2.47	1066.47	7.73	1064.84	7.72	-1.63	-0.15
46	139	93	47	2224	0.885668	461.05	0.584532	311.36	386.55	0	2.42	1067.45	7.68	1065.62	7.67	-1.84	-0.17
46	140	94	48	2240	0.882449	461.58	0.585714	311.32	400.32	0.85	2.37	1070	7.64	1068.32	7.63	-1.67	-0.16
46	141	95	49	2256	0.879231	462.08	0.586879	311.3	414.24	0	2.32	1070.71	7.59	1068.83	7.58	-1.89	-0.18
46	142	96	50	2272	0.876017	462.57	0.588028	311.28	428.3	0.84	2.28	1072.97	7.56	1071.25	7.54	-1.73	-0.16
46	143	97	51	2288	0.872806	463.03	0.589161	311.27	442.51	0	2.24	1073.43	7.51	1071.48	7.49	-1.95	-0.18
46	144	98	52	2304	0.869599	463.48	0.590278	311.27	456.86	0.83	2.19	1075.42	7.47	1073.62	7.46	-1.8	-0.17
46	145	99	53	2320	0.866397	463.91	0.591379	311.28	471.35	0	2.15	1075.62	7.42	1073.6	7.4	-2.02	-0.19
46	146	100	54	2336	0.863201	464.32	0.592466	311.3	485.98	0.83	2.12	1077.35	7.38	1075.47	7.37	-1.88	-0.17
46	147	101	55	2352	0.860012	464.71	0.593537	311.32	500.74	0	2.08	1077.31	7.33	1075.2	7.31	-2.11	-0.2
46	148	102	56	2368	0.85683	465.09	0.594595	311.35	515.63	0.82	2.04	1078.79	7.29	1076.82	7.28	-1.97	-0.18
46	149	103	57	2384	0.853655	465.45	0.595638	311.39	530.65	0	2.01	1078.51	7.24	1076.3	7.22	-2.21	-0.21

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
46	150	104	58	2400	0.850489	465.8	0.596667	311.44	545.79	0.82	1.97	1079.76	7.2	1077.67	7.18	-2.09	-0.19
46	151	105	59	2416	0.847331	466.13	0.597682	311.49	561.06	0	1.94	1079.26	7.15	1076.93	7.13	-2.33	-0.22
46	152	106	60	2432	0.844183	466.45	0.598684	311.55	576.45	0.81	1.91	1080.27	7.11	1078.05	7.09	-2.22	-0.21
46	153	107	61	2448	0.841044	466.75	0.599673	311.62	591.95	0	1.87	1079.55	7.06	1077.08	7.04	-2.47	-0.23
46	154	108	62	2464	0.837915	467.03	0.600649	311.7	607.57	0.81	1.84	1080.35	7.02	1077.98	7	-2.37	-0.22
46	155	109	63	2480	0.834797	467.31	0.601613	311.78	623.31	0	1.81	1079.42	6.96	1076.79	6.95	-2.63	-0.24
46	156	110	64	2496	0.83169	467.57	0.602564	311.86	639.16	0.8	1.79	1080	6.92	1077.46	6.91	-2.54	-0.24
46	157	111	65	2512	0.828593	467.82	0.603503	311.95	655.12	0	1.76	1078.87	6.87	1076.06	6.85	-2.81	-0.26
46	158	112	66	2528	0.825509	468.05	0.60443	312.05	671.18	0.8	1.73	1079.24	6.83	1076.51	6.81	-2.73	-0.25
46	159	113	67	2544	0.822436	468.28	0.605346	312.15	687.35	0	1.7	1077.92	6.78	1074.91	6.76	-3.01	-0.28
46	160	114	68	2560	0.819375	468.49	0.60625	312.26	703.62	0.79	1.68	1078.1	6.74	1075.15	6.72	-2.94	-0.27
46	161	115	69	2576	0.816327	468.69	0.607143	312.38	720	0	1.65	1076.59	6.69	1073.35	6.67	-3.24	-0.3
46	162	116	70	2592	0.813291	468.88	0.608025	312.49	736.48	0.79	1.63	1076.57	6.65	1073.39	6.63	-3.18	-0.3
46	163	117	71	2608	0.810268	469.05	0.608896	312.62	753.05	0	1.61	1074.89	6.59	1071.4	6.57	-3.48	-0.33
46	164	118	72	2624	0.807258	469.22	0.609756	312.75	769.72	0.78	1.58	1074.68	6.55	1071.24	6.53	-3.44	-0.32
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
47	93	46	-1	1488	0.999884	398.17	0.497312	346.19	0.26	0	9.56	752.93	8.1	759.23	8.16	6.3	0.83
47	94	47	0	1504	1	401.07	0.5	344.94	0	-1.03	10	766.96	8.16	772.94	8.22	5.99	0.77
47	95	48	1	1520	0.999889	403.86	0.502632	343.75	0.26	0	9.57	781.7	8.23	785.99	8.27	4.29	0.55
47	96	49	2	1536	0.999566	406.56	0.505208	342.6	1.01	-1.02	9.16	793.96	8.27	798.91	8.32	4.94	0.62
47	97	50	3	1552	0.999043	409.17	0.507732	341.51	2.25	0	8.78	807.85	8.33	811.17	8.36	3.32	0.41
47	98	51	4	1568	0.998334	411.68	0.510204	340.47	3.96	-1.01	8.42	819.3	8.36	823.33	8.4	4.03	0.49
47	99	52	5	1584	0.997449	414.11	0.512626	339.48	6.12	0	8.09	832.38	8.41	834.84	8.43	2.46	0.3
47	100	53	6	1600	0.9964	416.46	0.515	338.53	8.73	-1	7.77	843.06	8.43	846.29	8.46	3.23	0.38
47	101	54	7	1616	0.995197	418.72	0.517327	337.62	11.77	0	7.47	855.36	8.47	857.09	8.49	1.72	0.2
47	102	55	8	1632	0.993849	420.91	0.519608	336.75	15.22	-0.99	7.19	865.32	8.48	867.85	8.51	2.54	0.29
47	103	56	9	1648	0.992365	423.02	0.521845	335.93	19.08	0	6.93	876.9	8.51	877.98	8.52	1.08	0.12
47	104	57	10	1664	0.990754	425.07	0.524038	335.14	23.33	-0.98	6.68	886.16	8.52	888.1	8.54	1.94	0.22
47	105	58	11	1680	0.989025	427.04	0.52619	334.38	27.96	0	6.44	897.05	8.54	897.58	8.55	0.53	0.06
47	106	59	12	1696	0.987184	428.95	0.528302	333.67	32.97	-0.97	6.22	905.66	8.54	907.09	8.56	1.42	0.16
47	107	60	13	1712	0.985239	430.79	0.530374	332.98	38.33	0	6	915.9	8.56	915.96	8.56	0.06	0.01
47	108	61	14	1728	0.983196	432.57	0.532407	332.33	44.05	-0.96	5.8	923.89	8.55	924.88	8.56	0.99	0.11
47	109	62	15	1744	0.981062	434.29	0.534404	331.7	50.11	0	5.61	933.51	8.56	933.17	8.56	-0.34	-0.04
47	110	63	16	1760	0.978843	435.96	0.536364	331.11	56.5	-0.95	5.43	940.91	8.55	941.53	8.56	0.62	0.07
47	111	64	17	1776	0.976544	437.56	0.538288	330.54	63.21	0	5.26	949.93	8.56	949.26	8.55	-0.67	-0.07
47	112	65	18	1792	0.974171	439.12	0.540179	330	70.24	-0.94	5.09	956.78	8.54	957.09	8.55	0.3	0.03
47	113	66	19	1808	0.971728	440.62	0.542035	329.49	77.58	0	4.94	965.24	8.54	964.29	8.53	-0.95	-0.1
47	114	67	20	1824	0.969221	442.07	0.54386	329.01	85.21	-0.94	4.79	971.56	8.52	971.61	8.52	0.05	0
47	115	68	21	1840	0.966654	443.48	0.545652	328.54	93.14	0	4.64	979.49	8.52	978.3	8.51	-1.18	-0.12
47	116	69	22	1856	0.964031	444.83	0.547414	328.1	101.34	-0.93	4.51	985.3	8.49	985.13	8.49	-0.17	-0.02
47	117	70	23	1872	0.961356	446.15	0.549145	327.69	109.83	0	4.38	992.72	8.48	991.35	8.47	-1.37	-0.14
47	118	71	24	1888	0.958633	447.41	0.550847	327.29	118.58	-0.92	4.26	998.05	8.46	997.71	8.46	-0.34	-0.03
47	119	72	25	1904	0.955865	448.64	0.552521	326.92	127.6	0	4.14	1004.99	8.45	1003.46	8.43	-1.53	-0.15
47	120	73	26	1920	0.953056	449.82	0.554167	326.56	136.87	-0.91	4.03	1009.86	8.42	1009.37	8.41	-0.49	-0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
47	121	74	27	1936	0.950208	450.97	0.555785	326.23	146.39	0	3.92	1016.34	8.4	1014.68	8.39	-1.65	-0.16
47	122	75	28	1952	0.947326	452.07	0.557377	325.91	156.15	-0.91	3.81	1020.77	8.37	1020.17	8.36	-0.6	-0.06
47	123	76	29	1968	0.944411	453.14	0.558943	325.61	166.15	0	3.71	1026.81	8.35	1025.06	8.33	-1.75	-0.17
47	124	77	30	1984	0.941467	454.17	0.560484	325.33	176.39	-0.9	3.62	1030.83	8.31	1030.13	8.31	-0.69	-0.07
47	125	78	31	2000	0.938496	455.17	0.562	325.07	186.85	0	3.53	1036.44	8.29	1034.61	8.28	-1.83	-0.18
47	126	79	32	2016	0.9355	456.13	0.563492	324.82	197.53	-0.89	3.44	1040.06	8.25	1039.29	8.25	-0.77	-0.07
47	127	80	33	2032	0.932482	457.06	0.564961	324.59	208.43	0	3.36	1045.27	8.23	1043.38	8.22	-1.89	-0.18
47	128	81	34	2048	0.929443	457.96	0.566406	324.38	219.54	-0.88	3.28	1048.52	8.19	1047.68	8.19	-0.83	-0.08
47	129	82	35	2064	0.926387	458.83	0.567829	324.18	230.85	0	3.2	1053.34	8.17	1051.4	8.15	-1.94	-0.18
47	130	83	36	2080	0.923314	459.67	0.569231	323.99	242.37	-0.88	3.13	1056.22	8.12	1055.34	8.12	-0.88	-0.08
47	131	84	37	2096	0.920226	460.48	0.570611	323.82	254.08	0	3.05	1060.68	8.1	1058.69	8.08	-1.99	-0.19
47	132	85	38	2112	0.917126	461.26	0.57197	323.66	265.98	-0.87	2.98	1063.21	8.05	1062.28	8.05	-0.93	-0.09
47	133	86	39	2128	0.914014	462.01	0.573308	323.51	278.08	0	2.92	1067.31	8.02	1065.29	8.01	-2.02	-0.19
47	134	87	40	2144	0.910893	462.74	0.574627	323.38	290.35	-0.86	2.85	1069.52	7.98	1068.55	7.97	-0.97	-0.09
47	135	88	41	2160	0.907764	463.44	0.575926	323.26	302.81	0	2.79	1073.28	7.95	1071.22	7.93	-2.06	-0.19
47	136	89	42	2176	0.904628	464.12	0.577206	323.15	315.44	-0.86	2.73	1075.17	7.91	1074.16	7.9	-1.01	-0.09
47	137	90	43	2192	0.901486	464.77	0.578467	323.05	328.25	0	2.68	1078.61	7.87	1076.51	7.86	-2.1	-0.19
47	138	91	44	2208	0.898341	465.4	0.57971	322.96	341.22	-0.85	2.62	1080.19	7.83	1079.13	7.82	-1.05	-0.1
47	139	92	45	2224	0.895192	466.01	0.580935	322.89	354.36	0	2.57	1083.32	7.79	1081.18	7.78	-2.14	-0.2
47	140	93	46	2240	0.892041	466.59	0.582143	322.82	367.65	-0.85	2.52	1084.6	7.75	1083.5	7.74	-1.1	-0.1
47	141	94	47	2256	0.888889	467.16	0.583333	322.77	381.11	0	2.47	1087.43	7.71	1085.25	7.7	-2.19	-0.2
47	142	95	48	2272	0.885737	467.7	0.584507	322.72	394.72	-0.84	2.42	1088.44	7.67	1087.28	7.66	-1.16	-0.11
47	143	96	49	2288	0.882586	468.22	0.585664	322.68	408.48	0	2.37	1090.98	7.63	1088.74	7.61	-2.24	-0.21
47	144	97	50	2304	0.879437	468.72	0.586806	322.66	422.39	-0.83	2.33	1091.72	7.58	1090.5	7.57	-1.22	-0.11
47	145	98	51	2320	0.87629	469.2	0.587931	322.64	436.45	0	2.28	1093.99	7.54	1091.68	7.53	-2.31	-0.21
47	146	99	52	2336	0.873147	469.67	0.589041	322.63	450.65	-0.83	2.24	1094.47	7.5	1093.17	7.49	-1.3	-0.12
47	147	100	53	2352	0.870008	470.11	0.590136	322.63	464.98	0	2.2	1096.47	7.46	1094.09	7.44	-2.38	-0.22
47	148	101	54	2368	0.866874	470.54	0.591216	322.64	479.45	-0.82	2.16	1096.7	7.41	1095.32	7.4	-1.39	-0.13
47	149	102	55	2384	0.863745	470.95	0.592282	322.65	494.06	0	2.12	1098.45	7.37	1095.98	7.36	-2.48	-0.23
47	150	103	56	2400	0.860622	471.35	0.593333	322.68	508.8	-0.82	2.08	1098.44	7.32	1096.96	7.31	-1.49	-0.14
47	151	104	57	2416	0.857506	471.73	0.594371	322.71	523.66	0	2.05	1099.95	7.28	1097.37	7.27	-2.58	-0.24
47	152	105	58	2432	0.854398	472.09	0.595395	322.75	538.66	-0.81	2.01	1099.71	7.23	1098.1	7.22	-1.61	-0.15
47	153	106	59	2448	0.851297	472.44	0.596405	322.79	553.77	0	1.98	1100.98	7.2	1098.27	7.18	-2.7	-0.25
47	154	107	60	2464	0.848204	472.77	0.597403	322.85	569.01	-0.81	1.95	1100.52	7.15	1098.77	7.13	-1.74	-0.16
47	155	108	61	2480	0.84512	473.09	0.598387	322.9	584.36	0	1.91	1101.56	7.11	1098.71	7.09	-2.84	-0.26
47	156	109	62	2496	0.842045	473.39	0.599359	322.97	599.84	-0.8	1.88	1100.89	7.06	1098.99	7.04	-1.9	-0.17
47	157	110	63	2512	0.838979	473.68	0.600318	323.04	615.42	0	1.85	1101.71	7.02	1098.7	7	-3	-0.27
47	158	111	64	2528	0.835924	473.96	0.601266	323.12	631.12	-0.8	1.82	1100.83	6.97	1098.76	6.95	-2.07	-0.19
47	159	112	65	2544	0.832878	474.22	0.602201	323.21	646.93	0	1.8	1101.44	6.93	1098.26	6.91	-3.18	-0.29
47	160	113	66	2560	0.829844	474.47	0.603125	323.3	662.84	-0.79	1.77	1100.36	6.88	1098.1	6.86	-2.26	-0.21
47	161	114	67	2576	0.82682	474.71	0.604037	323.39	678.87	0	1.74	1100.77	6.84	1097.39	6.82	-3.38	-0.31
47	162	115	68	2592	0.823807	474.94	0.604938	323.5	694.99	-0.79	1.72	1099.5	6.79	1097.02	6.77	-2.48	-0.23
47	163	116	69	2608	0.820806	475.15	0.605828	323.6	711.22	0	1.69	1099.71	6.75	1096.11	6.72	-3.61	-0.33
47	164	117	70	2624	0.817817	475.36	0.606707	323.72	727.55	-0.78	1.67	1098.26	6.7	1095.54	6.68	-2.72	-0.25
47	165	118	71	2640	0.814839	475.55	0.607576	323.83	743.98	0	1.64	1098.28	6.66	1094.43	6.63	-3.85	-0.35
47	166	119	72	2656	0.811874	475.73	0.608434	323.96	760.5	-0.78	1.62	1096.65	6.61	1093.68	6.59	-2.98	-0.27

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
47	167	120	73	2672	0.808921	475.9	0.609281	324.09	777.12	0	1.59	1096.49	6.57	1092.37	6.54	-4.12	-0.38
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
48	95	47	-1	1520	0.999889	403.86	0.497368	358.53	0.26	0	9.57	766.92	8.07	773.33	8.14	6.41	0.83
48	96	48	0	1536	1	406.74	0.5	357.26	0	1.02	10	783.02	8.16	788.25	8.21	5.23	0.66
48	97	49	1	1552	0.999894	409.52	0.502577	356.05	0.25	0	9.58	795.76	8.2	800.19	8.25	4.43	0.55
48	98	50	2	1568	0.999584	412.2	0.505102	354.89	0.99	1.01	9.18	810.11	8.27	814.3	8.31	4.19	0.51
48	99	51	3	1584	0.999082	414.79	0.507576	353.78	2.2	0	8.8	822.03	8.3	825.49	8.34	3.46	0.42
48	100	52	4	1600	0.9984	417.29	0.51	352.72	3.88	1	8.45	835.56	8.36	838.84	8.39	3.28	0.39
48	101	53	5	1616	0.997549	419.71	0.512376	351.71	6	0	8.12	846.7	8.38	849.32	8.41	2.61	0.31
48	102	54	6	1632	0.99654	422.05	0.514706	350.74	8.56	0.99	7.81	859.45	8.43	861.94	8.45	2.48	0.29
48	103	55	7	1648	0.995381	424.31	0.51699	349.81	11.54	0	7.52	869.85	8.45	871.73	8.46	1.88	0.22
48	104	56	8	1664	0.994083	426.49	0.519231	348.93	14.93	0.98	7.24	881.87	8.48	883.66	8.5	1.79	0.2
48	105	57	9	1680	0.992653	428.61	0.521429	348.08	18.72	0	6.98	891.57	8.49	892.81	8.5	1.24	0.14
48	106	58	10	1696	0.9911	430.65	0.523585	347.27	22.9	0.97	6.73	902.88	8.52	904.08	8.53	1.2	0.13
48	107	59	11	1712	0.989431	432.62	0.525701	346.5	27.45	0	6.49	911.92	8.52	912.61	8.53	0.69	0.08
48	108	60	12	1728	0.987654	434.53	0.527778	345.76	32.36	0.96	6.27	922.57	8.54	923.26	8.55	0.69	0.07
48	109	61	13	1744	0.985776	436.38	0.529817	345.06	37.64	0	6.06	930.98	8.54	931.21	8.54	0.22	0.02
48	110	62	14	1760	0.983802	438.17	0.531818	344.39	43.26	0.95	5.86	941	8.55	941.25	8.56	0.25	0.03
48	111	63	15	1776	0.981738	439.89	0.533784	343.75	49.21	0	5.67	948.82	8.55	948.64	8.55	-0.17	-0.02
48	112	64	16	1792	0.979592	441.56	0.535714	343.14	55.5	0.94	5.49	958.24	8.56	958.12	8.55	-0.12	-0.01
48	113	65	17	1808	0.977367	443.18	0.537611	342.55	62.1	0	5.32	965.48	8.54	964.97	8.54	-0.51	-0.05
48	114	66	18	1824	0.975069	444.74	0.539474	342	69.02	0.94	5.15	974.33	8.55	973.9	8.54	-0.43	-0.04
48	115	67	19	1840	0.972703	446.25	0.541304	341.47	76.24	0	5	981.04	8.53	980.25	8.52	-0.79	-0.08
48	116	68	20	1856	0.970273	447.71	0.543103	340.96	83.75	0.93	4.85	989.34	8.53	988.66	8.52	-0.69	-0.07
48	117	69	21	1872	0.967784	449.13	0.544872	340.48	91.56	0	4.71	995.54	8.51	994.52	8.5	-1.02	-0.1
48	118	70	22	1888	0.96524	450.5	0.54661	340.03	99.64	0.92	4.57	1003.33	8.5	1002.43	8.5	-0.9	-0.09
48	119	71	23	1904	0.962644	451.82	0.548319	339.59	108	0	4.44	1009.03	8.48	1007.83	8.47	-1.2	-0.12
48	120	72	24	1920	0.96	453.1	0.55	339.18	116.62	0.91	4.32	1016.33	8.47	1015.26	8.46	-1.07	-0.11
48	121	73	25	1936	0.957312	454.34	0.551653	338.79	125.5	0	4.2	1021.57	8.44	1020.21	8.43	-1.36	-0.13
48	122	74	26	1952	0.954582	455.53	0.553279	338.42	134.64	0.91	4.09	1028.39	8.43	1027.18	8.42	-1.21	-0.12
48	123	75	27	1968	0.951814	456.69	0.554878	338.07	144.03	0	3.98	1033.19	8.4	1031.71	8.39	-1.48	-0.14
48	124	76	28	1984	0.949011	457.81	0.556452	337.74	153.65	0.9	3.87	1039.57	8.38	1038.24	8.37	-1.32	-0.13
48	125	77	29	2000	0.946176	458.9	0.558	337.43	163.52	0	3.77	1043.94	8.35	1042.36	8.34	-1.58	-0.15
48	126	78	30	2016	0.943311	459.94	0.559524	337.13	173.61	0.89	3.68	1049.89	8.33	1048.47	8.32	-1.41	-0.13
48	127	79	31	2032	0.940418	460.95	0.561024	336.85	183.93	0	3.59	1053.85	8.3	1052.2	8.29	-1.65	-0.16
48	128	80	32	2048	0.9375	461.93	0.5625	336.59	194.47	0.88	3.5	1059.39	8.28	1057.91	8.26	-1.48	-0.14
48	129	81	33	2064	0.934559	462.88	0.563953	336.35	205.22	0	3.41	1062.97	8.24	1061.25	8.23	-1.71	-0.16
48	130	82	34	2080	0.931598	463.79	0.565385	336.12	216.19	0.88	3.33	1068.11	8.22	1066.58	8.2	-1.54	-0.14
48	131	83	35	2096	0.928617	464.68	0.566794	335.9	227.35	0	3.26	1071.32	8.18	1069.56	8.16	-1.76	-0.16
48	132	84	36	2112	0.92562	465.53	0.568182	335.7	238.72	0.87	3.18	1076.09	8.15	1074.51	8.14	-1.58	-0.15
48	133	85	37	2128	0.922607	466.36	0.569549	335.52	250.29	0	3.11	1078.94	8.11	1077.14	8.1	-1.8	-0.17
48	134	86	38	2144	0.919581	467.16	0.570896	335.35	262.04	0.86	3.04	1083.36	8.08	1081.74	8.07	-1.62	-0.15
48	135	87	39	2160	0.916543	467.93	0.572222	335.19	273.99	0	2.97	1085.87	8.04	1084.03	8.03	-1.84	-0.17
48	136	88	40	2176	0.913495	468.67	0.573529	335.04	286.12	0.86	2.91	1089.94	8.01	1088.28	8	-1.65	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
48	137	89	41	2192	0.910437	469.39	0.574818	334.91	298.42	0	2.85	1092.13	7.97	1090.26	7.96	-1.87	-0.17
48	138	90	42	2208	0.907372	470.08	0.576087	334.79	310.9	0.85	2.79	1095.86	7.94	1094.18	7.93	-1.69	-0.15
48	139	91	43	2224	0.904301	470.75	0.577338	334.68	323.56	0	2.73	1097.74	7.9	1095.84	7.88	-1.9	-0.17
48	140	92	44	2240	0.901224	471.4	0.578571	334.58	336.38	0.85	2.67	1101.16	7.87	1099.44	7.85	-1.72	-0.16
48	141	93	45	2256	0.898144	472.02	0.579787	334.49	349.37	0	2.62	1102.74	7.82	1100.81	7.81	-1.94	-0.18
48	142	94	46	2272	0.895061	472.62	0.580986	334.41	362.51	0.84	2.57	1105.86	7.79	1104.09	7.78	-1.76	-0.16
48	143	95	47	2288	0.891975	473.2	0.582168	334.35	375.82	0	2.51	1107.15	7.74	1105.17	7.73	-1.98	-0.18
48	144	96	48	2304	0.888889	473.76	0.583333	334.29	389.28	0.83	2.47	1109.97	7.71	1108.16	7.7	-1.81	-0.16
48	145	97	49	2320	0.885803	474.3	0.584483	334.25	402.89	0	2.42	1110.99	7.66	1108.96	7.65	-2.02	-0.18
48	146	98	50	2336	0.882717	474.82	0.585616	334.21	416.65	0.83	2.37	1113.53	7.63	1111.67	7.61	-1.86	-0.17
48	147	99	51	2352	0.879633	475.32	0.586735	334.18	430.55	0	2.33	1114.28	7.58	1112.2	7.57	-2.08	-0.19
48	148	100	52	2368	0.876552	475.8	0.587838	334.16	444.6	0.82	2.29	1116.55	7.54	1114.63	7.53	-1.93	-0.17
48	149	101	53	2384	0.873474	476.26	0.588926	334.15	458.78	0	2.24	1117.05	7.5	1114.9	7.48	-2.15	-0.19
48	150	102	54	2400	0.8704	476.7	0.59	334.15	473.1	0.82	2.2	1119.06	7.46	1117.06	7.45	-2	-0.18
48	151	103	55	2416	0.86733	477.13	0.59106	334.16	487.56	0	2.17	1119.32	7.41	1117.08	7.4	-2.23	-0.2
48	152	104	56	2432	0.864266	477.54	0.592105	334.17	502.15	0.81	2.13	1121.08	7.38	1118.98	7.36	-2.09	-0.19
48	153	105	57	2448	0.861207	477.94	0.593137	334.2	516.86	0	2.09	1121.1	7.33	1118.77	7.31	-2.33	-0.21
48	154	106	58	2464	0.858155	478.32	0.594156	334.23	531.71	0.81	2.06	1122.61	7.29	1120.42	7.28	-2.2	-0.2
48	155	107	59	2480	0.855109	478.68	0.595161	334.26	546.67	0	2.02	1122.41	7.24	1119.97	7.23	-2.44	-0.22
48	156	108	60	2496	0.852071	479.03	0.596154	334.31	561.76	0.8	1.99	1123.69	7.2	1121.37	7.19	-2.32	-0.21
48	157	109	61	2512	0.849041	479.36	0.597134	334.36	576.97	0	1.96	1123.27	7.15	1120.7	7.14	-2.57	-0.23
48	158	110	62	2528	0.846018	479.68	0.598101	334.42	592.29	0.8	1.92	1124.33	7.12	1121.87	7.1	-2.46	-0.22
48	159	111	63	2544	0.843005	479.99	0.599057	334.48	607.73	0	1.89	1123.69	7.07	1120.98	7.05	-2.72	-0.24
48	160	112	64	2560	0.84	480.28	0.6	334.55	623.28	0.79	1.86	1124.54	7.03	1121.92	7.01	-2.62	-0.23
48	161	113	65	2576	0.837005	480.56	0.600932	334.63	638.94	0	1.83	1123.7	6.98	1120.82	6.96	-2.88	-0.26
48	162	114	66	2592	0.834019	480.83	0.601852	334.72	654.71	0.79	1.81	1124.34	6.94	1121.55	6.92	-2.79	-0.25
48	163	115	67	2608	0.831044	481.08	0.602761	334.81	670.59	0	1.78	1123.31	6.89	1120.24	6.87	-3.07	-0.27
48	164	116	68	2624	0.828079	481.32	0.603659	334.9	686.57	0.78	1.75	1123.74	6.85	1120.75	6.83	-2.99	-0.27
48	165	117	69	2640	0.825124	481.55	0.604545	335	702.65	0	1.73	1122.52	6.8	1119.24	6.78	-3.28	-0.29
48	166	118	70	2656	0.82218	481.77	0.605422	335.11	718.84	0.78	1.7	1122.76	6.76	1119.55	6.74	-3.21	-0.29
48	167	119	71	2672	0.819248	481.98	0.606287	335.22	735.12	0	1.68	1121.36	6.71	1117.85	6.69	-3.51	-0.31
48	168	120	72	2688	0.816327	482.18	0.607143	335.34	751.5	0.77	1.65	1121.41	6.68	1117.96	6.65	-3.45	-0.31
48	169	121	73	2704	0.813417	482.36	0.607988	335.46	767.98	0	1.63	1119.83	6.63	1116.07	6.6	-3.76	-0.34
48	170	122	74	2720	0.810519	482.54	0.608824	335.59	784.55	0.77	1.61	1119.7	6.59	1115.99	6.56	-3.71	-0.33
48	171	123	75	2736	0.807633	482.7	0.609649	335.72	801.21	0	1.58	1117.96	6.54	1113.92	6.51	-4.03	-0.36
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
49	97	48	-1	1552	0.999894	409.52	0.497423	371.04	0.25	0	9.58	780.77	8.05	787.29	8.12	6.51	0.83
49	98	49	0	1568	1	412.37	0.5	369.75	0	-1.01	10	794.87	8.11	801.07	8.17	6.2	0.77
49	99	50	1	1584	0.999898	415.13	0.502525	368.52	0.24	0	9.58	809.69	8.18	814.21	8.22	4.52	0.56
49	100	51	2	1600	0.9996	417.79	0.505	367.34	0.97	-1	9.19	822.09	8.22	827.23	8.27	5.14	0.62
49	101	52	3	1616	0.999118	420.37	0.507426	366.22	2.16	0	8.83	836.08	8.28	839.61	8.31	3.53	0.42
49	102	53	4	1632	0.998462	422.86	0.509804	365.14	3.81	-0.99	8.48	847.68	8.31	851.89	8.35	4.21	0.49
49	103	54	5	1648	0.997644	425.27	0.512136	364.11	5.89	0	8.16	860.89	8.36	863.55	8.38	2.66	0.31
49	104	55	6	1664	0.996672	427.6	0.514423	363.12	8.4	-0.98	7.85	871.74	8.38	875.14	8.41	3.39	0.39

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
49	105	56	7	1680	0.995556	429.86	0.516667	362.18	11.32	0	7.56	884.2	8.42	886.1	8.44	1.9	0.21
49	106	57	8	1696	0.994304	432.04	0.518868	361.27	14.65	-0.97	7.28	894.35	8.44	897.03	8.46	2.68	0.3
49	107	58	9	1712	0.992925	434.15	0.521028	360.41	18.37	0	7.02	906.09	8.47	907.33	8.48	1.24	0.14
49	108	59	10	1728	0.991427	436.19	0.523148	359.58	22.48	-0.96	6.78	915.57	8.48	917.63	8.5	2.06	0.22
49	109	60	11	1744	0.989816	438.17	0.525229	358.79	26.95	0	6.55	926.64	8.5	927.3	8.51	0.67	0.07
49	110	61	12	1760	0.988099	440.08	0.527273	358.04	31.78	-0.95	6.32	935.47	8.5	937	8.52	1.53	0.16
49	111	62	13	1776	0.986284	441.93	0.529279	357.31	36.97	0	6.11	945.91	8.52	946.08	8.52	0.17	0.02
49	112	63	14	1792	0.984375	443.72	0.53125	356.62	42.49	-0.94	5.92	954.14	8.52	955.2	8.53	1.07	0.11
49	113	64	15	1808	0.982379	445.45	0.533186	355.97	48.35	0	5.73	963.96	8.53	963.71	8.53	-0.25	-0.03
49	114	65	16	1824	0.980302	447.13	0.535088	355.34	54.53	-0.94	5.55	971.61	8.52	972.29	8.53	0.68	0.07
49	115	66	17	1840	0.978147	448.75	0.536957	354.73	61.03	0	5.37	980.86	8.53	980.25	8.52	-0.6	-0.06
49	116	67	18	1856	0.975922	450.32	0.538793	354.16	67.84	-0.93	5.21	987.96	8.52	988.3	8.52	0.34	0.03
49	117	68	19	1872	0.973628	451.84	0.540598	353.61	74.95	0	5.06	996.65	8.52	995.75	8.51	-0.91	-0.09
49	118	69	20	1888	0.971273	453.31	0.542373	353.09	82.35	-0.92	4.91	1003.23	8.5	1003.3	8.5	0.06	0.01
49	119	70	21	1904	0.968858	454.74	0.544118	352.6	90.03	0	4.77	1011.4	8.5	1010.24	8.49	-1.16	-0.11
49	120	71	22	1920	0.966389	456.12	0.545833	352.12	97.99	-0.91	4.63	1017.49	8.48	1017.31	8.48	-0.17	-0.02
49	121	72	23	1936	0.963869	457.45	0.547521	351.67	106.23	0	4.5	1025.15	8.47	1023.78	8.46	-1.37	-0.13
49	122	73	24	1952	0.961301	458.74	0.54918	351.25	114.72	-0.91	4.38	1030.76	8.45	1030.4	8.45	-0.37	-0.04
49	123	74	25	1968	0.958689	459.99	0.550813	350.84	123.48	0	4.26	1037.95	8.44	1036.41	8.43	-1.54	-0.15
49	124	75	26	1984	0.956035	461.2	0.552419	350.45	132.49	-0.9	4.15	1043.11	8.41	1042.58	8.41	-0.53	-0.05
49	125	76	27	2000	0.953344	462.37	0.554	350.09	141.74	0	4.04	1049.84	8.4	1048.16	8.39	-1.68	-0.16
49	126	77	28	2016	0.950617	463.51	0.555556	349.74	151.23	-0.89	3.93	1054.56	8.37	1053.9	8.36	-0.66	-0.06
49	127	78	29	2032	0.947858	464.6	0.557087	349.41	160.96	0	3.83	1060.86	8.35	1059.06	8.34	-1.8	-0.17
49	128	79	30	2048	0.945068	465.66	0.558594	349.1	170.92	-0.88	3.74	1065.17	8.32	1064.4	8.32	-0.77	-0.07
49	129	80	31	2064	0.942251	466.69	0.560078	348.81	181.1	0	3.64	1071.04	8.3	1069.15	8.29	-1.89	-0.18
49	130	81	32	2080	0.939408	467.68	0.561538	348.53	191.5	-0.88	3.56	1074.96	8.27	1074.11	8.26	-0.85	-0.08
49	131	82	33	2096	0.936542	468.64	0.562977	348.28	202.11	0	3.47	1080.44	8.25	1078.47	8.23	-1.97	-0.18
49	132	83	34	2112	0.933655	469.57	0.564394	348.03	212.94	-0.87	3.39	1083.98	8.21	1083.05	8.2	-0.93	-0.09
49	133	84	35	2128	0.930748	470.47	0.565789	347.8	223.96	0	3.31	1089.07	8.19	1087.04	8.17	-2.03	-0.19
49	134	85	36	2144	0.927824	471.34	0.567164	347.59	235.19	-0.86	3.24	1092.25	8.15	1091.26	8.14	-0.99	-0.09
49	135	86	37	2160	0.924883	472.18	0.568519	347.39	246.61	0	3.16	1096.98	8.13	1094.9	8.11	-2.08	-0.19
49	136	87	38	2176	0.921929	473	0.569853	347.21	258.22	-0.86	3.09	1099.81	8.09	1098.77	8.08	-1.04	-0.09
49	137	88	39	2192	0.918962	473.78	0.571168	347.04	270.02	0	3.03	1104.19	8.06	1102.06	8.04	-2.13	-0.19
49	138	89	40	2208	0.915984	474.54	0.572464	346.88	282	-0.85	2.96	1106.69	8.02	1105.6	8.01	-1.09	-0.1
49	139	90	41	2224	0.912996	475.28	0.573741	346.73	294.16	0	2.9	1110.73	7.99	1108.56	7.98	-2.17	-0.2
49	140	91	42	2240	0.91	475.99	0.575	346.6	306.49	-0.85	2.84	1112.91	7.95	1111.77	7.94	-1.14	-0.1
49	141	92	43	2256	0.906997	476.67	0.576241	346.48	319	0	2.78	1116.63	7.92	1114.41	7.9	-2.21	-0.2
49	142	93	44	2272	0.903987	477.33	0.577465	346.37	331.68	-0.84	2.72	1118.51	7.88	1117.32	7.87	-1.19	-0.11
49	143	94	45	2288	0.900973	477.97	0.578671	346.27	344.51	0	2.67	1121.91	7.85	1119.65	7.83	-2.26	-0.2
49	144	95	46	2304	0.897955	478.59	0.579861	346.18	357.51	-0.83	2.61	1123.5	7.8	1122.26	7.79	-1.24	-0.11
49	145	96	47	2320	0.894935	479.19	0.581034	346.1	370.67	0	2.56	1126.6	7.77	1124.3	7.75	-2.31	-0.21
49	146	97	48	2336	0.891912	479.76	0.582192	346.04	383.98	-0.83	2.51	1127.91	7.73	1126.61	7.72	-1.29	-0.11
49	147	98	49	2352	0.888889	480.32	0.583333	345.98	397.44	0	2.47	1130.73	7.69	1128.36	7.68	-2.36	-0.21
49	148	99	50	2368	0.885866	480.85	0.584459	345.93	411.06	-0.82	2.42	1131.76	7.65	1130.4	7.64	-1.36	-0.12
49	149	100	51	2384	0.882843	481.37	0.58557	345.89	424.81	0	2.38	1134.3	7.61	1131.88	7.6	-2.42	-0.21
49	150	101	52	2400	0.879822	481.86	0.586667	345.87	438.71	-0.82	2.33	1135.08	7.57	1133.65	7.56	-1.43	-0.13

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
49	151	102	53	2416	0.876804	482.34	0.587748	345.85	452.75	0	2.29	1137.35	7.53	1134.86	7.52	-2.5	-0.22
49	152	103	54	2432	0.873788	482.8	0.588816	345.84	466.92	-0.81	2.25	1137.88	7.49	1136.36	7.48	-1.51	-0.13
49	153	104	55	2448	0.870776	483.25	0.589869	345.83	481.23	0	2.21	1139.9	7.45	1137.32	7.43	-2.58	-0.23
49	154	105	56	2464	0.867769	483.67	0.590909	345.84	495.67	-0.81	2.17	1140.18	7.4	1138.57	7.39	-1.61	-0.14
49	155	106	57	2480	0.864766	484.08	0.591935	345.85	510.24	0	2.13	1141.96	7.37	1139.27	7.35	-2.68	-0.24
49	156	107	58	2496	0.861769	484.48	0.592949	345.87	524.93	-0.8	2.1	1142.01	7.32	1140.29	7.31	-1.72	-0.15
49	157	108	59	2512	0.858777	484.86	0.593949	345.9	539.75	0	2.06	1143.55	7.28	1140.75	7.27	-2.8	-0.25
49	158	109	60	2528	0.855792	485.22	0.594937	345.94	554.69	-0.8	2.03	1143.38	7.24	1141.53	7.22	-1.85	-0.16
49	159	110	61	2544	0.852814	485.57	0.595912	345.98	569.76	0	2	1144.68	7.2	1141.76	7.18	-2.93	-0.26
49	160	111	62	2560	0.849844	485.91	0.596875	346.03	584.93	-0.79	1.96	1144.3	7.15	1142.31	7.14	-1.99	-0.17
49	161	112	63	2576	0.846881	486.23	0.597826	346.09	600.23	0	1.93	1145.38	7.11	1142.31	7.1	-3.07	-0.27
49	162	113	64	2592	0.843926	486.54	0.598765	346.16	615.63	-0.79	1.9	1144.79	7.07	1142.64	7.05	-2.15	-0.19
49	163	114	65	2608	0.84098	486.83	0.599693	346.23	631.15	0	1.87	1145.66	7.03	1142.43	7.01	-3.24	-0.28
49	164	115	66	2624	0.838043	487.11	0.60061	346.3	646.78	-0.78	1.84	1144.87	6.98	1142.54	6.97	-2.33	-0.2
49	165	116	67	2640	0.835115	487.38	0.601515	346.39	662.51	0	1.82	1145.54	6.94	1142.11	6.92	-3.42	-0.3
49	166	117	68	2656	0.832196	487.64	0.60241	346.47	678.35	-0.78	1.79	1144.55	6.89	1142.03	6.88	-2.53	-0.22
49	167	118	69	2672	0.829288	487.89	0.603293	346.57	694.29	0	1.76	1145.02	6.86	1141.39	6.83	-3.63	-0.32
49	168	119	70	2688	0.826389	488.12	0.604167	346.67	710.33	-0.77	1.74	1143.85	6.81	1141.1	6.79	-2.75	-0.24
49	169	120	71	2704	0.823501	488.34	0.60503	346.77	726.47	0	1.71	1144.13	6.77	1140.27	6.75	-3.86	-0.34
49	170	121	72	2720	0.820623	488.55	0.605882	346.89	742.71	-0.77	1.69	1142.77	6.72	1139.79	6.7	-2.99	-0.26
49	171	122	73	2736	0.817756	488.75	0.606725	347	759.05	0	1.66	1142.86	6.68	1138.76	6.66	-4.1	-0.36
49	172	123	74	2752	0.8149	488.94	0.607558	347.12	775.48	-0.76	1.64	1141.34	6.64	1138.09	6.62	-3.25	-0.29
49	173	124	75	2768	0.812055	489.12	0.608382	347.25	792	0	1.62	1141.25	6.6	1136.87	6.57	-4.37	-0.38
49	174	125	76	2784	0.809222	489.29	0.609195	347.38	808.61	-0.76	1.6	1139.55	6.55	1136.02	6.53	-3.53	-0.31
49	175	126	77	2800	0.8064	489.45	0.61	347.52	825.32	0	1.58	1139.29	6.51	1134.62	6.48	-4.66	-0.41
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
50	99	49	-1	1584	0.999898	415.13	0.497475	383.71	0.24	0	9.58	794.5	8.03	801.11	8.09	6.61	0.83
50	100	50	0	1600	1	417.96	0.5	382.41	0	1	10	810.63	8.11	816.09	8.16	5.46	0.67
50	101	51	1	1616	0.999902	420.7	0.502475	381.16	0.24	0	9.59	823.49	8.15	828.14	8.2	4.65	0.56
50	102	52	2	1632	0.999616	423.35	0.504902	379.97	0.95	0.99	9.21	837.93	8.21	842.33	8.26	4.41	0.52
50	103	53	3	1648	0.999152	425.92	0.507282	378.83	2.12	0	8.85	849.99	8.25	853.65	8.29	3.67	0.43
50	104	54	4	1664	0.998521	428.4	0.509615	377.73	3.73	0.98	8.51	863.63	8.3	867.11	8.34	3.48	0.4
50	105	55	5	1680	0.997732	430.8	0.511905	376.68	5.78	0	8.19	874.93	8.33	877.73	8.36	2.8	0.32
50	106	56	6	1696	0.996796	433.12	0.514151	375.68	8.24	0.97	7.88	887.81	8.38	890.48	8.4	2.67	0.3
50	107	57	7	1712	0.99572	435.37	0.516355	374.71	11.11	0	7.6	898.4	8.4	900.44	8.42	2.05	0.23
50	108	58	8	1728	0.994513	437.55	0.518519	373.79	14.38	0.96	7.33	910.56	8.43	912.52	8.45	1.96	0.21
50	109	59	9	1744	0.993182	439.66	0.520642	372.91	18.04	0	7.07	920.46	8.44	921.85	8.46	1.39	0.15
50	110	60	10	1760	0.991736	441.7	0.522727	372.06	22.07	0.95	6.83	931.95	8.47	933.29	8.48	1.34	0.14
50	111	61	11	1776	0.990179	443.67	0.524775	371.26	26.47	0	6.6	941.2	8.48	942.02	8.49	0.82	0.09
50	112	62	12	1792	0.98852	445.59	0.526786	370.48	31.22	0.94	6.38	952.03	8.5	952.84	8.51	0.81	0.08
50	113	63	13	1808	0.986765	447.44	0.528761	369.74	36.32	0	6.17	960.67	8.5	961	8.5	0.33	0.03
50	114	64	14	1824	0.984918	449.23	0.530702	369.03	41.75	0.94	5.97	970.89	8.52	971.24	8.52	0.35	0.04
50	115	65	15	1840	0.982987	450.97	0.532609	368.36	47.52	0	5.78	978.94	8.51	978.85	8.51	-0.09	-0.01
50	116	66	16	1856	0.980975	452.65	0.534483	367.71	53.6	0.93	5.6	988.57	8.52	988.53	8.52	-0.04	0

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
50	117	67	17	1872	0.978888	454.28	0.536325	367.09	60	0	5.43	996.06	8.51	995.62	8.51	-0.44	-0.04
50	118	68	18	1888	0.976731	455.86	0.538136	366.5	66.7	0.92	5.27	1005.13	8.52	1004.76	8.51	-0.37	-0.04
50	119	69	19	1904	0.974507	457.39	0.539916	365.94	73.7	0	5.11	1012.09	8.5	1011.35	8.5	-0.74	-0.07
50	120	70	20	1920	0.972222	458.87	0.541667	365.4	80.99	0.91	4.97	1020.63	8.51	1019.98	8.5	-0.65	-0.06
50	121	71	21	1936	0.969879	460.3	0.543388	364.88	88.56	0	4.82	1027.08	8.49	1026.09	8.48	-0.99	-0.1
50	122	72	22	1952	0.967482	461.69	0.545082	364.39	96.4	0.91	4.69	1035.11	8.48	1034.23	8.48	-0.88	-0.09
50	123	73	23	1968	0.965034	463.04	0.546748	363.93	104.51	0	4.56	1041.08	8.46	1039.88	8.45	-1.2	-0.12
50	124	74	24	1984	0.962539	464.34	0.548387	363.48	112.89	0.9	4.44	1048.62	8.46	1047.55	8.45	-1.07	-0.1
50	125	75	25	2000	0.96	465.6	0.55	363.06	121.52	0	4.32	1054.14	8.43	1052.76	8.42	-1.37	-0.13
50	126	76	26	2016	0.95742	466.82	0.551587	362.66	130.4	0.89	4.2	1061.21	8.42	1059.98	8.41	-1.23	-0.12
50	127	77	27	2032	0.954802	468.01	0.55315	362.28	139.53	0	4.09	1066.29	8.4	1064.77	8.38	-1.51	-0.14
50	128	78	28	2048	0.952148	469.15	0.554688	361.92	148.89	0.88	3.99	1072.92	8.38	1071.56	8.37	-1.36	-0.13
50	129	79	29	2064	0.949462	470.26	0.556202	361.57	158.49	0	3.89	1077.57	8.35	1075.94	8.34	-1.63	-0.15
50	130	80	30	2080	0.946746	471.34	0.557692	361.25	168.31	0.88	3.79	1083.78	8.34	1082.31	8.33	-1.46	-0.14
50	131	81	31	2096	0.944001	472.38	0.55916	360.94	178.36	0	3.7	1088.03	8.31	1086.31	8.29	-1.72	-0.16
50	132	82	32	2112	0.94123	473.38	0.560606	360.65	188.62	0.87	3.61	1093.83	8.29	1092.28	8.27	-1.55	-0.14
50	133	83	33	2128	0.938436	474.36	0.56203	360.38	199.1	0	3.53	1097.69	8.25	1095.9	8.24	-1.79	-0.16
50	134	84	34	2144	0.93562	475.3	0.563433	360.12	209.78	0.86	3.44	1103.1	8.23	1101.49	8.22	-1.62	-0.15
50	135	85	35	2160	0.932785	476.22	0.564815	359.88	220.67	0	3.37	1106.6	8.2	1104.75	8.18	-1.85	-0.17
50	136	86	36	2176	0.929931	477.1	0.566176	359.65	231.75	0.86	3.29	1111.64	8.17	1109.97	8.16	-1.67	-0.15
50	137	87	37	2192	0.927061	477.96	0.567518	359.44	243.03	0	3.22	1114.78	8.14	1112.88	8.12	-1.9	-0.17
50	138	88	38	2208	0.924176	478.79	0.568841	359.24	254.5	0.85	3.15	1119.46	8.11	1117.74	8.1	-1.72	-0.15
50	139	89	39	2224	0.921277	479.59	0.570144	359.06	266.16	0	3.08	1122.27	8.07	1120.33	8.06	-1.94	-0.17
50	140	90	40	2240	0.918367	480.36	0.571429	358.89	278	0.85	3.01	1126.61	8.05	1124.85	8.03	-1.76	-0.16
50	141	91	41	2256	0.915447	481.11	0.572695	358.73	290.02	0	2.95	1129.09	8.01	1127.11	7.99	-1.98	-0.18
50	142	92	42	2272	0.912517	481.84	0.573944	358.58	302.21	0.84	2.89	1133.1	7.98	1131.3	7.97	-1.8	-0.16
50	143	93	43	2288	0.90958	482.54	0.575175	358.45	314.57	0	2.83	1135.27	7.94	1133.25	7.92	-2.02	-0.18
50	144	94	44	2304	0.906636	483.22	0.576389	358.33	327.1	0.83	2.77	1138.96	7.91	1137.12	7.9	-1.84	-0.16
50	145	95	45	2320	0.903686	483.87	0.577586	358.22	339.8	0	2.72	1140.83	7.87	1138.77	7.85	-2.06	-0.18
50	146	96	46	2336	0.900732	484.51	0.578767	358.12	352.65	0.83	2.66	1144.22	7.84	1142.33	7.82	-1.88	-0.16
50	147	97	47	2352	0.897774	485.12	0.579932	358.03	365.66	0	2.61	1145.8	7.79	1143.7	7.78	-2.1	-0.18
50	148	98	48	2368	0.894814	485.71	0.581081	357.95	378.83	0.82	2.56	1148.89	7.76	1146.97	7.75	-1.93	-0.17
50	149	99	49	2384	0.891852	486.28	0.582215	357.88	392.15	0	2.51	1150.2	7.72	1148.06	7.71	-2.15	-0.19
50	150	100	50	2400	0.888889	486.83	0.583333	357.83	405.61	0.82	2.47	1153.01	7.69	1151.03	7.67	-1.98	-0.17
50	151	101	51	2416	0.885926	487.36	0.584437	357.78	419.22	0	2.42	1154.06	7.64	1151.85	7.63	-2.2	-0.19
50	152	102	52	2432	0.882964	487.87	0.585526	357.74	432.97	0.81	2.38	1156.6	7.61	1154.56	7.6	-2.04	-0.18
50	153	103	53	2448	0.880003	488.37	0.586601	357.71	446.87	0	2.33	1157.39	7.56	1155.12	7.55	-2.27	-0.2
50	154	104	54	2464	0.877045	488.84	0.587662	357.69	460.9	0.81	2.29	1159.67	7.53	1157.55	7.52	-2.11	-0.18
50	155	105	55	2480	0.874089	489.3	0.58871	357.68	475.06	0	2.25	1160.21	7.49	1157.86	7.47	-2.35	-0.2
50	156	106	56	2496	0.871137	489.75	0.589744	357.68	489.36	0.8	2.21	1162.24	7.45	1160.04	7.44	-2.2	-0.19
50	157	107	57	2512	0.868189	490.17	0.590764	357.68	503.78	0	2.18	1162.54	7.4	1160.11	7.39	-2.44	-0.21
50	158	108	58	2528	0.865246	490.58	0.591772	357.69	518.33	0.8	2.14	1164.33	7.37	1162.03	7.35	-2.3	-0.2
50	159	109	59	2544	0.862308	490.98	0.592767	357.71	533.01	0	2.1	1164.4	7.32	1161.87	7.31	-2.54	-0.22
50	160	110	60	2560	0.859375	491.36	0.59375	357.74	547.8	0.79	2.07	1165.96	7.29	1163.55	7.27	-2.41	-0.21
50	161	111	61	2576	0.856448	491.72	0.59472	357.78	562.72	0	2.04	1165.81	7.24	1163.16	7.22	-2.66	-0.23
50	162	112	62	2592	0.853528	492.07	0.595679	357.82	577.76	0.79	2	1167.14	7.2	1164.6	7.19	-2.54	-0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
50	163	113	63	2608	0.850615	492.41	0.596626	357.87	592.91	0	1.97	1166.78	7.16	1163.99	7.14	-2.79	-0.24
50	164	114	64	2624	0.84771	492.73	0.597561	357.93	608.17	0.78	1.94	1167.89	7.12	1165.21	7.1	-2.68	-0.23
50	165	115	65	2640	0.844812	493.04	0.598485	357.99	623.55	0	1.91	1167.33	7.07	1164.39	7.06	-2.95	-0.25
50	166	116	66	2656	0.841922	493.34	0.599398	358.06	639.03	0.78	1.88	1168.23	7.04	1165.39	7.02	-2.84	-0.24
50	167	117	67	2672	0.83904	493.62	0.600299	358.13	654.62	0	1.85	1167.47	6.99	1164.36	6.97	-3.12	-0.27
50	168	118	68	2688	0.836168	493.9	0.60119	358.22	670.32	0.77	1.83	1168.17	6.95	1165.14	6.94	-3.03	-0.26
50	169	119	69	2704	0.833304	494.15	0.602071	358.3	686.12	0	1.8	1167.22	6.91	1163.91	6.89	-3.31	-0.28
50	170	120	70	2720	0.83045	494.4	0.602941	358.4	702.02	0.77	1.77	1167.72	6.87	1164.49	6.85	-3.23	-0.28
50	171	121	71	2736	0.827605	494.64	0.603801	358.5	718.02	0	1.75	1166.59	6.82	1163.07	6.8	-3.52	-0.3
50	172	122	72	2752	0.82477	494.87	0.604651	358.6	734.13	0.76	1.72	1166.89	6.78	1163.44	6.76	-3.45	-0.3
50	173	123	73	2768	0.821945	495.08	0.605491	358.71	750.32	0	1.7	1165.59	6.74	1161.83	6.72	-3.75	-0.32
50	174	124	74	2784	0.819131	495.28	0.606322	358.83	766.61	0.76	1.68	1165.71	6.7	1162.01	6.68	-3.7	-0.32
50	175	125	75	2800	0.816327	495.48	0.607143	358.95	783	0	1.65	1164.23	6.65	1160.22	6.63	-4.01	-0.35
50	176	126	76	2816	0.813533	495.66	0.607955	359.07	799.48	0.75	1.63	1164.17	6.61	1160.21	6.59	-3.96	-0.34
50	177	127	77	2832	0.81075	495.84	0.608757	359.2	816.04	0	1.61	1162.53	6.57	1158.24	6.54	-4.29	-0.37
50	178	128	78	2848	0.807979	496	0.609551	359.34	832.7	0.75	1.59	1162.3	6.53	1158.05	6.51	-4.25	-0.37
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
51	101	50	-1	1616	0.999902	420.7	0.497525	396.56	0.24	0	9.59	808.09	8	814.79	8.07	6.71	0.82
51	102	51	0	1632	1	423.51	0.5	395.24	0	-0.99	10	822.25	8.06	828.66	8.12	6.4	0.77
51	103	52	1	1648	0.999906	426.24	0.502427	393.98	0.24	0	9.6	837.15	8.13	841.89	8.17	4.74	0.56
51	104	53	2	1664	0.99963	428.87	0.504808	392.77	0.93	-0.98	9.22	849.67	8.17	855	8.22	5.33	0.62
51	105	54	3	1680	0.999184	431.43	0.507143	391.61	2.08	0	8.87	863.76	8.23	867.49	8.26	3.73	0.43
51	106	55	4	1696	0.998576	433.9	0.509434	390.49	3.66	-0.97	8.53	875.51	8.26	879.9	8.3	4.38	0.5
51	107	56	5	1712	0.997816	436.29	0.511682	389.42	5.67	0	8.22	888.83	8.31	891.68	8.33	2.85	0.32
51	108	57	6	1728	0.996914	438.61	0.513889	388.4	8.09	-0.96	7.92	899.86	8.33	903.41	8.36	3.55	0.39
51	109	58	7	1744	0.995876	440.85	0.516055	387.42	10.91	0	7.64	912.45	8.37	914.52	8.39	2.07	0.23
51	110	59	8	1760	0.994711	443.02	0.518182	386.48	14.12	-0.95	7.37	922.78	8.39	925.6	8.41	2.82	0.3
51	111	60	9	1776	0.993426	445.13	0.52027	385.58	17.72	0	7.11	934.69	8.42	936.07	8.43	1.39	0.15
51	112	61	10	1792	0.992028	447.17	0.522321	384.72	21.68	-0.94	6.87	944.36	8.43	946.54	8.45	2.18	0.23
51	113	62	11	1808	0.990524	449.14	0.524336	383.89	26	0	6.64	955.61	8.46	956.4	8.46	0.79	0.08
51	114	63	12	1824	0.98892	451.06	0.526316	383.1	30.68	-0.94	6.43	964.66	8.46	966.28	8.48	1.62	0.17
51	115	64	13	1840	0.987221	452.91	0.528261	382.34	35.69	0	6.22	975.28	8.48	975.56	8.48	0.28	0.03
51	116	65	14	1856	0.985434	454.71	0.530172	381.61	41.04	-0.93	6.02	983.73	8.48	984.88	8.49	1.15	0.12
51	117	66	15	1872	0.983563	456.45	0.532051	380.92	46.71	0	5.84	993.75	8.49	993.59	8.49	-0.16	-0.02
51	118	67	16	1888	0.981614	458.14	0.533898	380.25	52.7	-0.92	5.66	1001.64	8.49	1002.38	8.49	0.73	0.07
51	119	68	17	1904	0.979592	459.77	0.535714	379.62	59	0	5.49	1011.1	8.5	1010.56	8.49	-0.54	-0.05
51	120	69	18	1920	0.9775	461.36	0.5375	379.01	65.6	-0.91	5.33	1018.45	8.49	1018.83	8.49	0.38	0.04
51	121	70	19	1936	0.975343	462.9	0.539256	378.43	72.49	0	5.17	1027.36	8.49	1026.5	8.48	-0.86	-0.08
51	122	71	20	1952	0.973126	464.38	0.540984	377.87	79.67	-0.91	5.02	1034.19	8.48	1034.27	8.48	0.08	0.01
51	123	72	21	1968	0.970851	465.83	0.542683	377.34	87.13	0	4.88	1042.59	8.48	1041.46	8.47	-1.13	-0.11
51	124	73	22	1984	0.968522	467.22	0.544355	376.84	94.86	-0.9	4.75	1048.93	8.46	1048.76	8.46	-0.17	-0.02
51	125	74	23	2000	0.966144	468.58	0.546	376.35	102.85	0	4.62	1056.83	8.45	1055.47	8.44	-1.36	-0.13
51	126	75	24	2016	0.963719	469.89	0.547619	375.89	111.11	-0.89	4.49	1062.71	8.43	1062.32	8.43	-0.38	-0.04
51	127	76	25	2032	0.96125	471.17	0.549213	375.45	119.62	0	4.37	1070.13	8.43	1068.59	8.41	-1.55	-0.14

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
51	128	77	26	2048	0.95874	472.4	0.550781	375.04	128.38	-0.88	4.26	1075.56	8.4	1075	8.4	-0.56	-0.05
51	129	78	27	2064	0.956193	473.59	0.552326	374.64	137.38	0	4.15	1082.54	8.39	1080.83	8.38	-1.7	-0.16
51	130	79	28	2080	0.953609	474.75	0.553846	374.26	146.62	-0.88	4.05	1087.54	8.37	1086.83	8.36	-0.71	-0.07
51	131	80	29	2096	0.950994	475.88	0.555344	373.9	156.09	0	3.95	1094.08	8.35	1092.25	8.34	-1.83	-0.17
51	132	81	30	2112	0.948347	476.96	0.556818	373.56	165.78	-0.87	3.85	1098.67	8.32	1097.84	8.32	-0.83	-0.08
51	133	82	31	2128	0.945672	478.02	0.558271	373.24	175.7	0	3.76	1104.8	8.31	1102.86	8.29	-1.94	-0.18
51	134	83	32	2144	0.942972	479.04	0.559701	372.94	185.83	-0.86	3.67	1109	8.28	1108.07	8.27	-0.93	-0.08
51	135	84	33	2160	0.940247	480.03	0.561111	372.65	196.17	0	3.58	1114.73	8.26	1112.7	8.24	-2.03	-0.18
51	136	85	34	2176	0.9375	480.99	0.5625	372.38	206.72	-0.86	3.5	1118.56	8.22	1117.54	8.22	-1.02	-0.09
51	137	86	35	2192	0.934733	481.91	0.563869	372.12	217.47	0	3.42	1123.91	8.2	1121.81	8.19	-2.1	-0.19
51	138	87	36	2208	0.931947	482.81	0.565217	371.88	228.42	-0.85	3.34	1127.38	8.17	1126.29	8.16	-1.09	-0.1
51	139	88	37	2224	0.929144	483.68	0.566547	371.66	239.56	0	3.27	1132.37	8.15	1130.2	8.13	-2.17	-0.19
51	140	89	38	2240	0.926327	484.53	0.567857	371.45	250.89	-0.85	3.2	1135.48	8.11	1134.33	8.1	-1.15	-0.1
51	141	90	39	2256	0.923495	485.34	0.569149	371.25	262.41	0	3.13	1140.12	8.09	1137.9	8.07	-2.22	-0.2
51	142	91	40	2272	0.920651	486.13	0.570423	371.07	274.11	-0.84	3.06	1142.91	8.05	1141.71	8.04	-1.21	-0.11
51	143	92	41	2288	0.917795	486.9	0.571678	370.89	285.99	0	3	1147.22	8.02	1144.95	8.01	-2.27	-0.2
51	144	93	42	2304	0.914931	487.64	0.572917	370.74	298.04	-0.83	2.94	1149.69	7.98	1148.43	7.98	-1.26	-0.11
51	145	94	43	2320	0.912057	488.36	0.574138	370.59	310.26	0	2.88	1153.67	7.96	1151.35	7.94	-2.32	-0.2
51	146	95	44	2336	0.909176	489.05	0.575342	370.46	322.65	-0.83	2.82	1155.83	7.92	1154.53	7.91	-1.31	-0.11
51	147	96	45	2352	0.906289	489.72	0.576531	370.34	335.2	0	2.76	1159.51	7.89	1157.14	7.87	-2.36	-0.2
51	148	97	46	2368	0.903397	490.37	0.577703	370.23	347.92	-0.82	2.71	1161.38	7.85	1160.02	7.84	-1.36	-0.12
51	149	98	47	2384	0.9005	490.99	0.578859	370.13	360.79	0	2.66	1164.75	7.82	1162.34	7.8	-2.41	-0.21
51	150	99	48	2400	0.8976	491.6	0.58	370.04	373.81	-0.82	2.61	1166.34	7.78	1164.92	7.77	-1.42	-0.12
51	151	100	49	2416	0.894698	492.19	0.581126	369.96	386.99	0	2.56	1169.43	7.74	1166.96	7.73	-2.47	-0.21
51	152	101	50	2432	0.891794	492.75	0.582237	369.89	400.31	-0.81	2.51	1170.75	7.7	1169.27	7.69	-1.48	-0.13
51	153	102	51	2448	0.888889	493.3	0.583333	369.83	413.78	0	2.47	1173.55	7.67	1171.02	7.65	-2.53	-0.22
51	154	103	52	2464	0.885984	493.83	0.584416	369.79	427.39	-0.81	2.42	1174.61	7.63	1173.07	7.62	-1.55	-0.13
51	155	104	53	2480	0.88308	494.34	0.585484	369.75	441.14	0	2.38	1177.16	7.59	1174.56	7.58	-2.6	-0.22
51	156	105	54	2496	0.880178	494.83	0.586538	369.72	455.03	-0.8	2.34	1177.96	7.55	1176.34	7.54	-1.63	-0.14
51	157	106	55	2512	0.877277	495.3	0.58758	369.7	469.05	0	2.3	1180.25	7.52	1177.57	7.5	-2.68	-0.23
51	158	107	56	2528	0.874379	495.76	0.588608	369.68	483.2	-0.8	2.26	1180.82	7.47	1179.1	7.46	-1.72	-0.15
51	159	108	57	2544	0.871485	496.2	0.589623	369.68	497.48	0	2.22	1182.85	7.44	1180.08	7.42	-2.77	-0.24
51	160	109	58	2560	0.868594	496.63	0.590625	369.68	511.89	-0.79	2.18	1183.19	7.39	1181.37	7.38	-1.82	-0.15
51	161	110	59	2576	0.865707	497.04	0.591615	369.69	526.43	0	2.15	1184.99	7.36	1182.11	7.34	-2.88	-0.24
51	162	111	60	2592	0.862826	497.43	0.592593	369.71	541.08	-0.79	2.11	1185.09	7.32	1183.16	7.3	-1.94	-0.16
51	163	112	61	2608	0.85995	497.81	0.593558	369.74	555.86	0	2.08	1186.66	7.28	1183.66	7.26	-3	-0.25
51	164	113	62	2624	0.857079	498.18	0.594512	369.77	570.75	-0.78	2.04	1186.55	7.24	1184.49	7.22	-2.07	-0.17
51	165	114	63	2640	0.854215	498.53	0.595455	369.82	585.76	0	2.01	1187.9	7.2	1184.77	7.18	-3.13	-0.26
51	166	115	64	2656	0.851357	498.87	0.596386	369.86	600.89	-0.78	1.98	1187.58	7.15	1185.37	7.14	-2.22	-0.19
51	167	116	65	2672	0.848507	499.19	0.597305	369.92	616.12	0	1.95	1188.71	7.12	1185.43	7.1	-3.29	-0.28
51	168	117	66	2688	0.845663	499.5	0.598214	369.98	631.47	-0.77	1.92	1188.19	7.07	1185.81	7.06	-2.38	-0.2
51	169	118	67	2704	0.842828	499.8	0.599112	370.05	646.92	0	1.89	1189.12	7.04	1185.66	7.02	-3.46	-0.29
51	170	119	68	2720	0.84	500.09	0.6	370.12	662.48	-0.77	1.86	1188.4	6.99	1185.84	6.98	-2.56	-0.22
51	171	120	69	2736	0.837181	500.36	0.600877	370.21	678.14	0	1.84	1189.13	6.95	1185.48	6.93	-3.65	-0.31
51	172	121	70	2752	0.83437	500.63	0.601744	370.29	693.91	-0.76	1.81	1188.22	6.91	1185.46	6.89	-2.77	-0.23
51	173	122	71	2768	0.831568	500.88	0.602601	370.38	709.77	0	1.78	1188.75	6.87	1184.9	6.85	-3.85	-0.33

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
51	174	123	72	2784	0.828775	501.12	0.603448	370.48	725.74	-0.76	1.76	1187.67	6.83	1184.68	6.81	-2.99	-0.25
51	175	124	73	2800	0.825992	501.34	0.604286	370.59	741.8	0	1.73	1188.01	6.79	1183.92	6.77	-4.08	-0.34
51	176	125	74	2816	0.823218	501.56	0.605114	370.7	757.95	-0.75	1.71	1186.75	6.74	1183.51	6.72	-3.23	-0.27
51	177	126	75	2832	0.820454	501.77	0.605932	370.81	774.2	0	1.69	1186.9	6.71	1182.57	6.68	-4.33	-0.37
51	178	127	76	2848	0.8177	501.97	0.606742	370.93	790.54	-0.75	1.66	1185.47	6.66	1181.98	6.64	-3.49	-0.3
51	179	128	77	2864	0.814956	502.16	0.607542	371.05	806.98	0	1.64	1185.46	6.62	1180.85	6.6	-4.6	-0.39
51	180	129	78	2880	0.812222	502.33	0.608333	371.18	823.5	-0.75	1.62	1183.86	6.58	1180.08	6.56	-3.78	-0.32
51	181	130	79	2896	0.809499	502.5	0.609116	371.32	840.11	0	1.6	1183.67	6.54	1178.77	6.51	-4.9	-0.42
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
52	103	51	-1	1648	0.999906	426.24	0.497573	409.58	0.24	0	9.6	821.55	7.98	828.35	8.04	6.8	0.82
52	104	52	0	1664	1	429.03	0.5	408.24	0	0.98	10	837.7	8.05	843.38	8.11	5.68	0.67
52	105	53	1	1680	0.999909	431.74	0.502381	406.96	0.23	0	9.61	850.67	8.1	855.53	8.15	4.86	0.57
52	106	54	2	1696	0.999644	434.36	0.504717	405.73	0.92	0.97	9.24	865.2	8.16	869.81	8.21	4.62	0.53
52	107	55	3	1712	0.999214	436.9	0.507009	404.55	2.04	0	8.89	877.39	8.2	881.25	8.24	3.86	0.44
52	108	56	4	1728	0.998628	439.36	0.509259	403.42	3.6	0.96	8.56	891.14	8.25	894.81	8.29	3.67	0.41
52	109	57	5	1744	0.997896	441.74	0.511468	402.34	5.57	0	8.25	902.6	8.28	905.58	8.31	2.98	0.33
52	110	58	6	1760	0.997025	444.05	0.513636	401.3	7.95	0.95	7.95	915.61	8.32	918.45	8.35	2.84	0.31
52	111	59	7	1776	0.996023	446.29	0.515766	400.3	10.72	0	7.67	926.36	8.35	928.57	8.37	2.21	0.24
52	112	60	8	1792	0.994898	448.46	0.517857	399.34	13.88	0.94	7.41	938.68	8.38	940.79	8.4	2.11	0.22
52	113	61	9	1808	0.993657	450.56	0.519912	398.42	17.41	0	7.16	948.76	8.4	950.3	8.41	1.53	0.16
52	114	62	10	1824	0.992305	452.6	0.52193	397.54	21.3	0.94	6.92	960.41	8.42	961.88	8.44	1.48	0.15
52	115	63	11	1840	0.990851	454.58	0.523913	396.7	25.55	0	6.69	969.86	8.43	970.81	8.44	0.94	0.1
52	116	64	12	1856	0.989298	456.49	0.525862	395.89	30.15	0.93	6.48	980.87	8.46	981.8	8.46	0.92	0.09
52	117	65	13	1872	0.987654	458.35	0.527778	395.11	35.09	0	6.27	989.73	8.46	990.16	8.46	0.43	0.04
52	118	66	14	1888	0.985924	460.15	0.529661	394.37	40.35	0.92	6.08	1000.13	8.48	1000.58	8.48	0.45	0.04
52	119	67	15	1904	0.984111	461.9	0.531513	393.65	45.93	0	5.89	1008.41	8.47	1008.4	8.47	-0.01	0
52	120	68	16	1920	0.982222	463.59	0.533333	392.97	51.83	0.91	5.71	1018.24	8.49	1018.27	8.49	0.04	0
52	121	69	17	1936	0.980261	465.23	0.535124	392.32	58.03	0	5.54	1025.96	8.48	1025.58	8.48	-0.38	-0.04
52	122	70	18	1952	0.978232	466.82	0.536885	391.69	64.53	0.91	5.38	1035.24	8.49	1034.93	8.48	-0.31	-0.03
52	123	71	19	1968	0.976139	468.36	0.538618	391.09	71.32	0	5.23	1042.45	8.48	1041.75	8.47	-0.7	-0.07
52	124	72	20	1984	0.973985	469.86	0.540323	390.52	78.39	0.9	5.08	1051.2	8.48	1050.59	8.47	-0.61	-0.06
52	125	73	21	2000	0.971776	471.31	0.542	389.97	85.74	0	4.94	1057.91	8.46	1056.94	8.46	-0.97	-0.09
52	126	74	22	2016	0.969514	472.72	0.543651	389.45	93.36	0.89	4.8	1066.16	8.46	1065.3	8.45	-0.86	-0.08
52	127	75	23	2032	0.967202	474.08	0.545276	388.95	101.25	0	4.67	1072.39	8.44	1071.19	8.43	-1.2	-0.11
52	128	76	24	2048	0.964844	475.41	0.546875	388.47	109.39	0.88	4.55	1080.16	8.44	1079.09	8.43	-1.07	-0.1
52	129	77	25	2064	0.962442	476.69	0.54845	388.02	117.78	0	4.43	1085.94	8.42	1084.55	8.41	-1.39	-0.13
52	130	78	26	2080	0.96	477.93	0.55	387.59	126.42	0.88	4.32	1093.25	8.41	1092.01	8.4	-1.25	-0.11
52	131	79	27	2096	0.95752	479.14	0.551527	387.17	135.3	0	4.21	1098.59	8.39	1097.05	8.37	-1.54	-0.14
52	132	80	28	2112	0.955005	480.31	0.55303	386.78	144.41	0.87	4.1	1105.47	8.37	1104.08	8.36	-1.39	-0.13
52	133	81	29	2128	0.952456	481.45	0.554511	386.41	153.76	0	4	1110.39	8.35	1108.72	8.34	-1.67	-0.15
52	134	82	30	2144	0.949877	482.55	0.55597	386.05	163.32	0.86	3.91	1116.85	8.33	1115.34	8.32	-1.51	-0.14
52	135	83	31	2160	0.94727	483.61	0.557407	385.72	173.11	0	3.81	1121.37	8.31	1119.6	8.29	-1.78	-0.16
52	136	84	32	2176	0.944637	484.65	0.558824	385.4	183.11	0.86	3.72	1127.42	8.29	1125.81	8.28	-1.61	-0.14
52	137	85	33	2192	0.941979	485.65	0.560219	385.09	193.33	0	3.64	1131.56	8.26	1129.7	8.25	-1.86	-0.16

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
52	138	86	34	2208	0.939298	486.62	0.561594	384.81	203.74	0.85	3.55	1137.23	8.24	1135.54	8.23	-1.69	-0.15
52	139	87	35	2224	0.936597	487.56	0.56295	384.54	214.36	0	3.47	1141.01	8.21	1139.07	8.19	-1.93	-0.17
52	140	88	36	2240	0.933878	488.48	0.564286	384.29	225.18	0.85	3.4	1146.3	8.19	1144.55	8.18	-1.75	-0.15
52	141	89	37	2256	0.93114	489.36	0.565603	384.05	236.19	0	3.32	1149.73	8.15	1147.73	8.14	-1.99	-0.17
52	142	90	38	2272	0.928387	490.22	0.566901	383.82	247.39	0.84	3.25	1154.66	8.13	1152.85	8.12	-1.81	-0.16
52	143	91	39	2288	0.92562	491.05	0.568182	383.61	258.77	0	3.18	1157.75	8.1	1155.71	8.08	-2.04	-0.18
52	144	92	40	2304	0.92284	491.85	0.569444	383.42	270.33	0.83	3.11	1162.35	8.07	1160.49	8.06	-1.86	-0.16
52	145	93	41	2320	0.920048	492.63	0.57069	383.23	282.07	0	3.05	1165.11	8.04	1163.02	8.02	-2.09	-0.18
52	146	94	42	2336	0.917245	493.39	0.571918	383.06	293.99	0.83	2.99	1169.38	8.01	1167.47	8	-1.9	-0.16
52	147	95	43	2352	0.914434	494.12	0.573129	382.9	306.07	0	2.93	1171.83	7.97	1169.7	7.96	-2.13	-0.18
52	148	96	44	2368	0.911614	494.83	0.574324	382.76	318.32	0.82	2.87	1175.78	7.94	1173.84	7.93	-1.95	-0.17
52	149	97	45	2384	0.908788	495.51	0.575503	382.63	330.74	0	2.81	1177.94	7.91	1175.77	7.89	-2.17	-0.18
52	150	98	46	2400	0.905956	496.18	0.576667	382.5	343.31	0.82	2.76	1181.58	7.88	1179.59	7.86	-1.99	-0.17
52	151	99	47	2416	0.903118	496.82	0.577815	382.39	356.04	0	2.71	1183.45	7.84	1181.24	7.82	-2.21	-0.19
52	152	100	48	2432	0.900277	497.44	0.578947	382.29	368.93	0.81	2.65	1186.81	7.81	1184.77	7.79	-2.04	-0.17
52	153	101	49	2448	0.897433	498.04	0.580065	382.21	381.96	0	2.61	1188.4	7.77	1186.14	7.75	-2.26	-0.19
52	154	102	50	2464	0.894586	498.62	0.581169	382.13	395.14	0.81	2.56	1191.47	7.74	1189.38	7.72	-2.09	-0.18
52	155	103	51	2480	0.891738	499.18	0.582258	382.06	408.47	0	2.51	1192.8	7.7	1190.48	7.68	-2.32	-0.19
52	156	104	52	2496	0.888889	499.73	0.583333	382	421.94	0.8	2.47	1195.6	7.66	1193.45	7.65	-2.15	-0.18
52	157	105	53	2512	0.88604	500.25	0.584395	381.95	435.56	0	2.42	1196.67	7.62	1194.29	7.61	-2.38	-0.2
52	158	106	54	2528	0.883192	500.76	0.585443	381.91	449.3	0.8	2.38	1199.2	7.59	1196.99	7.58	-2.22	-0.19
52	159	107	55	2544	0.880345	501.25	0.586478	381.88	463.18	0	2.34	1200.03	7.55	1197.58	7.53	-2.45	-0.2
52	160	108	56	2560	0.8775	501.72	0.5875	381.86	477.2	0.79	2.3	1202.31	7.51	1200.02	7.5	-2.29	-0.19
52	161	109	57	2576	0.874658	502.18	0.588509	381.84	491.34	0	2.26	1202.9	7.47	1200.37	7.46	-2.53	-0.21
52	162	110	58	2592	0.871818	502.62	0.589506	381.84	505.61	0.79	2.22	1204.94	7.44	1202.56	7.42	-2.38	-0.2
52	163	111	59	2608	0.868983	503.04	0.590491	381.84	520.01	0	2.19	1205.3	7.39	1202.67	7.38	-2.63	-0.22
52	164	112	60	2624	0.866151	503.45	0.591463	381.85	534.53	0.78	2.15	1207.1	7.36	1204.62	7.35	-2.49	-0.21
52	165	113	61	2640	0.863324	503.85	0.592424	381.87	549.16	0	2.12	1207.24	7.32	1204.5	7.3	-2.74	-0.23
52	166	114	62	2656	0.860502	504.23	0.593373	381.9	563.92	0.78	2.08	1208.82	7.28	1206.21	7.27	-2.61	-0.22
52	167	115	63	2672	0.857686	504.59	0.594311	381.93	578.79	0	2.05	1208.74	7.24	1205.88	7.22	-2.86	-0.24
52	168	116	64	2688	0.854875	504.94	0.595238	381.97	593.78	0.77	2.02	1210.1	7.2	1207.36	7.19	-2.74	-0.23
52	169	117	65	2704	0.852071	505.28	0.596154	382.02	608.88	0	1.99	1209.81	7.16	1206.81	7.14	-3	-0.25
52	170	118	66	2720	0.849273	505.61	0.597059	382.07	624.08	0.77	1.96	1210.96	7.12	1208.07	7.11	-2.89	-0.24
52	171	119	67	2736	0.846483	505.92	0.597953	382.13	639.4	0	1.93	1210.47	7.08	1207.32	7.06	-3.16	-0.26
52	172	120	68	2752	0.843699	506.22	0.598837	382.2	654.82	0.76	1.9	1211.42	7.04	1208.36	7.03	-3.06	-0.25
52	173	121	69	2768	0.840924	506.51	0.599711	382.27	670.35	0	1.87	1210.74	7	1207.41	6.98	-3.33	-0.28
52	174	122	70	2784	0.838156	506.79	0.600575	382.35	685.98	0.76	1.85	1211.49	6.96	1208.24	6.94	-3.24	-0.27
52	175	123	71	2800	0.835396	507.05	0.601429	382.44	701.71	0	1.82	1210.62	6.92	1207.09	6.9	-3.53	-0.29
52	176	124	72	2816	0.832645	507.31	0.602273	382.53	717.54	0.75	1.79	1211.18	6.88	1207.73	6.86	-3.45	-0.29
52	177	125	73	2832	0.829902	507.55	0.603107	382.63	733.46	0	1.77	1210.13	6.84	1206.39	6.82	-3.74	-0.31
52	178	126	74	2848	0.827168	507.78	0.603933	382.73	749.48	0.75	1.74	1210.5	6.8	1206.83	6.78	-3.67	-0.3
52	179	127	75	2864	0.824444	508	0.604749	382.84	765.6	0	1.72	1209.28	6.76	1205.3	6.73	-3.98	-0.33
52	180	128	76	2880	0.821728	508.21	0.605556	382.95	781.81	0.75	1.7	1209.47	6.72	1205.55	6.7	-3.92	-0.32
52	181	129	77	2896	0.819023	508.41	0.606354	383.07	798.11	0	1.68	1208.08	6.67	1203.85	6.65	-4.23	-0.35
52	182	130	78	2912	0.816327	508.6	0.607143	383.19	814.5	0.74	1.65	1208.1	6.64	1203.91	6.61	-4.18	-0.35
52	183	131	79	2928	0.81364	508.79	0.607923	383.32	830.98	0	1.63	1206.54	6.59	1202.03	6.57	-4.51	-0.38

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
52	184	132	80	2944	0.810964	508.96	0.608696	383.46	847.54	0.74	1.61	1206.39	6.56	1201.92	6.53	-4.47	-0.37
52	185	133	81	2960	0.808298	509.12	0.609459	383.59	864.19	0	1.59	1204.68	6.51	1199.87	6.49	-4.81	-0.4
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
53	105	52	-1	1680	0.999909	431.74	0.497619	422.77	0.23	0	9.61	834.87	7.95	841.76	8.02	6.89	0.82
53	106	53	0	1696	1	434.52	0.5	421.41	0	-0.97	10	849.1	8.01	855.7	8.07	6.6	0.77
53	107	54	1	1712	0.999913	437.21	0.502336	420.11	0.23	0	9.62	864.07	8.08	869.01	8.12	4.94	0.57
53	108	55	2	1728	0.999657	439.81	0.50463	418.87	0.9	-0.96	9.25	876.71	8.12	882.22	8.17	5.51	0.62
53	109	56	3	1744	0.999242	442.34	0.506881	417.67	2	0	8.91	890.89	8.17	894.82	8.21	3.92	0.44
53	110	57	4	1760	0.998678	444.79	0.509091	416.52	3.53	-0.95	8.58	902.79	8.21	907.33	8.25	4.55	0.5
53	111	58	5	1776	0.997971	447.17	0.511261	415.42	5.47	0	8.28	916.22	8.25	919.25	8.28	3.02	0.33
53	112	59	6	1792	0.99713	449.47	0.513393	414.36	7.8	-0.94	7.99	927.41	8.28	931.1	8.31	3.7	0.4
53	113	60	7	1808	0.996163	451.7	0.515487	413.34	10.53	0	7.71	940.13	8.32	942.36	8.34	2.23	0.24
53	114	61	8	1824	0.995075	453.87	0.517544	412.37	13.63	-0.94	7.45	950.64	8.34	953.59	8.36	2.95	0.31
53	115	62	9	1840	0.993875	455.97	0.519565	411.43	17.11	0	7.2	962.7	8.37	964.22	8.38	1.53	0.16
53	116	63	10	1856	0.992568	458	0.521552	410.53	20.94	-0.93	6.96	972.56	8.38	974.85	8.4	2.29	0.24
53	117	64	11	1872	0.991161	459.98	0.523504	409.67	25.12	0	6.74	983.97	8.41	984.89	8.42	0.92	0.09
53	118	65	12	1888	0.989658	461.89	0.525424	408.84	29.64	-0.92	6.52	993.22	8.42	994.94	8.43	1.72	0.17
53	119	66	13	1904	0.988066	463.75	0.527311	408.05	34.5	0	6.32	1004.02	8.44	1004.41	8.44	0.39	0.04
53	120	67	14	1920	0.986389	465.55	0.529167	407.29	39.68	-0.91	6.13	1012.69	8.44	1013.91	8.45	1.22	0.12
53	121	68	15	1936	0.984632	467.3	0.530992	406.56	45.18	0	5.94	1022.9	8.45	1022.83	8.45	-0.07	-0.01
53	122	69	16	1952	0.9828	469	0.532787	405.86	50.99	-0.91	5.76	1031.01	8.45	1031.81	8.46	0.79	0.08
53	123	70	17	1968	0.980898	470.65	0.534553	405.18	57.1	0	5.6	1040.67	8.46	1040.2	8.46	-0.47	-0.05
53	124	71	18	1984	0.978928	472.24	0.53629	404.54	63.5	-0.9	5.44	1048.25	8.45	1048.67	8.46	0.42	0.04
53	125	72	19	2000	0.976896	473.79	0.538	403.93	70.19	0	5.28	1057.37	8.46	1056.56	8.45	-0.81	-0.08
53	126	73	20	2016	0.974805	475.3	0.539683	403.34	77.16	-0.89	5.13	1064.45	8.45	1064.55	8.45	0.1	0.01
53	127	74	21	2032	0.972658	476.76	0.541339	402.77	84.4	0	4.99	1073.06	8.45	1071.96	8.44	-1.1	-0.1
53	128	75	22	2048	0.970459	478.17	0.542969	402.23	91.92	-0.88	4.86	1079.65	8.43	1079.48	8.43	-0.17	-0.02
53	129	76	23	2064	0.968211	479.55	0.544574	401.72	99.69	0	4.73	1087.77	8.43	1086.43	8.42	-1.34	-0.12
53	130	77	24	2080	0.965917	480.88	0.546154	401.22	107.72	-0.88	4.61	1093.9	8.41	1093.51	8.41	-0.4	-0.04
53	131	78	25	2096	0.96358	482.17	0.54771	400.75	116	0	4.49	1101.56	8.41	1100.01	8.4	-1.55	-0.14
53	132	79	26	2112	0.961203	483.43	0.549242	400.3	124.52	-0.87	4.37	1107.25	8.39	1106.66	8.38	-0.59	-0.05
53	133	80	27	2128	0.958788	484.65	0.550752	399.88	133.28	0	4.26	1114.46	8.38	1112.74	8.37	-1.72	-0.15
53	134	81	28	2144	0.956338	485.83	0.552239	399.47	142.27	-0.86	4.16	1119.72	8.36	1118.97	8.35	-0.75	-0.07
53	135	82	29	2160	0.953855	486.97	0.553704	399.08	151.5	0	4.06	1126.51	8.34	1124.64	8.33	-1.87	-0.17
53	136	83	30	2176	0.951341	488.09	0.555147	398.71	160.94	-0.86	3.96	1131.36	8.32	1130.48	8.31	-0.89	-0.08
53	137	84	31	2192	0.948799	489.17	0.556569	398.36	170.6	0	3.87	1137.74	8.3	1135.75	8.29	-1.99	-0.18
53	138	85	32	2208	0.94623	490.21	0.557971	398.02	180.48	-0.85	3.78	1142.21	8.28	1141.21	8.27	-1	-0.09
53	139	86	33	2224	0.943636	491.23	0.559353	397.71	190.57	0	3.69	1148.19	8.26	1146.1	8.25	-2.09	-0.18
53	140	87	34	2240	0.94102	492.21	0.560714	397.41	200.86	-0.85	3.61	1152.28	8.23	1151.19	8.22	-1.1	-0.1
53	141	88	35	2256	0.938383	493.17	0.562057	397.13	211.35	0	3.53	1157.89	8.21	1155.71	8.2	-2.17	-0.19
53	142	89	36	2272	0.935727	494.09	0.56338	396.86	222.03	-0.84	3.45	1161.63	8.18	1160.45	8.17	-1.18	-0.1
53	143	90	37	2288	0.933053	494.99	0.564685	396.61	232.91	0	3.37	1166.87	8.16	1164.62	8.14	-2.24	-0.19
53	144	91	38	2304	0.930363	495.86	0.565972	396.37	243.97	-0.83	3.3	1170.26	8.13	1169.02	8.12	-1.25	-0.11
53	145	92	39	2320	0.927658	496.71	0.567241	396.14	255.22	0	3.23	1175.15	8.1	1172.85	8.09	-2.31	-0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
53	146	93	40	2336	0.924939	497.53	0.568493	395.93	266.65	-0.83	3.16	1178.22	8.07	1176.91	8.06	-1.31	-0.11
53	147	94	41	2352	0.922208	498.32	0.569728	395.74	278.26	0	3.1	1182.78	8.05	1180.42	8.03	-2.36	-0.2
53	148	95	42	2368	0.919467	499.09	0.570946	395.56	290.04	-0.82	3.04	1185.53	8.01	1184.16	8	-1.37	-0.12
53	149	96	43	2384	0.916715	499.84	0.572148	395.39	301.99	0	2.98	1189.76	7.98	1187.35	7.97	-2.41	-0.2
53	150	97	44	2400	0.913956	500.56	0.573333	395.23	314.11	-0.82	2.92	1192.21	7.95	1190.79	7.94	-1.42	-0.12
53	151	98	45	2416	0.911188	501.26	0.574503	395.08	326.38	0	2.86	1196.13	7.92	1193.67	7.91	-2.46	-0.21
53	152	99	46	2432	0.908414	501.94	0.575658	394.95	338.82	-0.81	2.81	1198.29	7.88	1196.81	7.87	-1.47	-0.12
53	153	100	47	2448	0.905635	502.59	0.576797	394.83	351.42	0	2.75	1201.91	7.86	1199.4	7.84	-2.51	-0.21
53	154	101	48	2464	0.90285	503.23	0.577922	394.72	364.17	-0.81	2.7	1203.78	7.82	1202.25	7.81	-1.53	-0.13
53	155	102	49	2480	0.900062	503.84	0.579032	394.62	377.06	0	2.65	1207.12	7.79	1204.56	7.77	-2.57	-0.21
53	156	103	50	2496	0.897272	504.44	0.580128	394.53	390.11	-0.8	2.6	1208.72	7.75	1207.13	7.74	-1.59	-0.13
53	157	104	51	2512	0.894478	505.02	0.58121	394.45	403.3	0	2.56	1211.79	7.72	1209.16	7.7	-2.63	-0.22
53	158	105	52	2528	0.891684	505.57	0.582278	394.38	416.64	-0.8	2.51	1213.12	7.68	1211.47	7.67	-1.66	-0.14
53	159	106	53	2544	0.888889	506.11	0.583333	394.32	430.11	0	2.47	1215.92	7.65	1213.23	7.63	-2.69	-0.22
53	160	107	54	2560	0.886094	506.63	0.584375	394.27	443.72	-0.79	2.42	1217.01	7.61	1215.27	7.6	-1.73	-0.14
53	161	108	55	2576	0.883299	507.14	0.585404	394.23	457.47	0	2.38	1219.55	7.57	1216.78	7.56	-2.77	-0.23
53	162	109	56	2592	0.880506	507.63	0.58642	394.2	471.34	-0.79	2.34	1220.39	7.53	1218.57	7.52	-1.82	-0.15
53	163	110	57	2608	0.877715	508.1	0.587423	394.18	485.35	0	2.3	1222.68	7.5	1219.82	7.48	-2.85	-0.23
53	164	111	58	2624	0.874926	508.55	0.588415	394.16	499.48	-0.78	2.26	1223.29	7.46	1221.37	7.45	-1.91	-0.16
53	165	112	59	2640	0.87214	508.99	0.589394	394.15	513.74	0	2.23	1225.34	7.43	1222.39	7.41	-2.95	-0.24
53	166	113	60	2656	0.869357	509.42	0.590361	394.16	528.12	-0.78	2.19	1225.72	7.38	1223.7	7.37	-2.02	-0.16
53	167	114	61	2672	0.866578	509.82	0.591317	394.17	542.63	0	2.16	1227.54	7.35	1224.48	7.33	-3.06	-0.25
53	168	115	62	2688	0.863804	510.22	0.592262	394.18	557.25	-0.77	2.12	1227.7	7.31	1225.56	7.3	-2.14	-0.17
53	169	116	63	2704	0.861034	510.6	0.593195	394.21	571.98	0	2.09	1229.3	7.27	1226.11	7.26	-3.19	-0.26
53	170	117	64	2720	0.85827	510.97	0.594118	394.24	586.83	-0.77	2.06	1229.25	7.23	1226.98	7.22	-2.27	-0.19
53	171	118	65	2736	0.855511	511.32	0.595029	394.28	601.8	0	2.03	1230.63	7.2	1227.3	7.18	-3.33	-0.27
53	172	119	66	2752	0.852758	511.66	0.59593	394.33	616.87	-0.76	2	1230.38	7.15	1227.95	7.14	-2.43	-0.2
53	173	120	67	2768	0.850012	511.99	0.596821	394.38	632.05	0	1.97	1231.55	7.12	1228.07	7.1	-3.48	-0.28
53	174	121	68	2784	0.847272	512.3	0.597701	394.44	647.34	-0.76	1.94	1231.1	7.08	1228.51	7.06	-2.59	-0.21
53	175	122	69	2800	0.844539	512.6	0.598571	394.51	662.73	0	1.91	1232.07	7.04	1228.41	7.02	-3.66	-0.3
53	176	123	70	2816	0.841813	512.89	0.599432	394.58	678.23	-0.75	1.88	1231.43	7	1228.65	6.98	-2.78	-0.23
53	177	124	71	2832	0.839095	513.17	0.600282	394.66	693.82	0	1.85	1232.2	6.96	1228.36	6.94	-3.85	-0.31
53	178	125	72	2848	0.836384	513.44	0.601124	394.74	709.52	-0.75	1.83	1231.38	6.92	1228.4	6.9	-2.98	-0.24
53	179	126	73	2864	0.833682	513.69	0.601955	394.83	725.31	0	1.8	1231.96	6.88	1227.91	6.86	-4.06	-0.33
53	180	127	74	2880	0.830988	513.94	0.602778	394.93	741.2	-0.75	1.78	1230.96	6.84	1227.75	6.82	-3.21	-0.26
53	181	128	75	2896	0.828302	514.17	0.603591	395.03	757.19	0	1.75	1231.36	6.8	1227.07	6.78	-4.29	-0.35
53	182	129	76	2912	0.825625	514.4	0.604396	395.14	773.27	-0.74	1.73	1230.19	6.76	1226.74	6.74	-3.45	-0.28
53	183	130	77	2928	0.822957	514.61	0.605191	395.25	789.44	0	1.71	1230.41	6.72	1225.87	6.7	-4.54	-0.37
53	184	131	78	2944	0.820298	514.82	0.605978	395.37	805.7	-0.74	1.69	1229.07	6.68	1225.35	6.66	-3.72	-0.3
53	185	132	79	2960	0.817648	515.01	0.606757	395.49	822.04	0	1.66	1229.12	6.64	1224.31	6.62	-4.81	-0.39
53	186	133	80	2976	0.815008	515.2	0.607527	395.62	838.48	-0.73	1.64	1227.62	6.6	1223.61	6.58	-4	-0.33
53	187	134	81	2992	0.812377	515.37	0.608289	395.75	855	0	1.62	1227.5	6.56	1222.4	6.54	-5.1	-0.42
53	188	135	82	3008	0.809756	515.54	0.609043	395.89	871.6	-0.73	1.6	1225.84	6.52	1221.53	6.5	-4.31	-0.35
53	189	136	83	3024	0.807144	515.7	0.609788	396.03	888.29	0	1.58	1225.56	6.48	1220.14	6.46	-5.42	-0.44

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
54	107	53	-1	1712	0.999913	437.21	0.497664	436.12	0.23	0	9.62	848.06	7.93	855.05	7.99	6.98	0.82
54	108	54	0	1728	1	439.96	0.5	434.75	0	0.96	10	864.25	8	870.14	8.06	5.89	0.68
54	109	55	1	1744	0.999916	442.64	0.502294	433.43	0.22	0	9.62	877.33	8.05	882.39	8.1	5.06	0.57
54	110	56	2	1760	0.999669	445.23	0.504545	432.17	0.88	0.95	9.26	891.93	8.11	896.74	8.15	4.81	0.54
54	111	57	3	1776	0.99927	447.75	0.506757	430.96	1.97	0	8.93	904.26	8.15	908.3	8.18	4.05	0.45
54	112	58	4	1792	0.998724	450.19	0.508929	429.79	3.47	0.94	8.61	918.11	8.2	921.96	8.23	3.85	0.42
54	113	59	5	1808	0.998042	452.55	0.511062	428.67	5.37	0	8.3	929.71	8.23	932.86	8.26	3.15	0.34
54	114	60	6	1824	0.99723	454.85	0.513158	427.59	7.67	0.94	8.02	942.84	8.27	945.85	8.3	3.01	0.32
54	115	61	7	1840	0.996295	457.08	0.515217	426.56	10.35	0	7.74	953.76	8.29	956.12	8.31	2.36	0.25
54	116	62	8	1856	0.995244	459.24	0.517241	425.56	13.4	0.93	7.49	966.21	8.33	968.47	8.35	2.26	0.23
54	117	63	9	1872	0.994083	461.33	0.519231	424.61	16.82	0	7.24	976.48	8.35	978.15	8.36	1.67	0.17
54	118	64	10	1888	0.992818	463.37	0.521186	423.69	20.59	0.92	7.01	988.28	8.38	989.88	8.39	1.61	0.16
54	119	65	11	1904	0.991455	465.34	0.523109	422.81	24.7	0	6.78	997.93	8.39	998.99	8.39	1.06	0.11
54	120	66	12	1920	0.99	467.26	0.525	421.97	29.16	0.91	6.57	1009.1	8.41	1010.14	8.42	1.03	0.1
54	121	67	13	1936	0.988457	469.12	0.52686	421.15	33.94	0	6.37	1018.16	8.41	1018.69	8.42	0.53	0.05
54	122	68	14	1952	0.986831	470.92	0.528689	420.37	39.04	0.91	6.18	1028.74	8.43	1029.28	8.44	0.54	0.05
54	123	69	15	1968	0.985128	472.68	0.530488	419.63	44.45	0	5.99	1037.24	8.43	1037.31	8.43	0.07	0.01
54	124	70	16	1984	0.983351	474.38	0.532258	418.91	50.17	0.9	5.82	1047.25	8.45	1047.36	8.45	0.11	0.01
54	125	71	17	2000	0.981504	476.03	0.534	418.22	56.19	0	5.65	1055.21	8.44	1054.89	8.44	-0.32	-0.03
54	126	72	18	2016	0.979592	477.63	0.535714	417.56	62.5	0.89	5.49	1064.69	8.45	1064.43	8.45	-0.26	-0.02
54	127	73	19	2032	0.977618	479.19	0.537402	416.93	69.09	0	5.33	1072.12	8.44	1071.47	8.44	-0.66	-0.06
54	128	74	20	2048	0.975586	480.7	0.539062	416.32	75.96	0.88	5.19	1081.09	8.45	1080.51	8.44	-0.58	-0.05
54	129	75	21	2064	0.973499	482.17	0.540698	415.74	83.11	0	5.05	1088.03	8.43	1087.09	8.43	-0.95	-0.09
54	130	76	22	2080	0.971361	483.59	0.542308	415.19	90.51	0.88	4.91	1096.5	8.43	1095.66	8.43	-0.84	-0.08
54	131	77	23	2096	0.969174	484.97	0.543893	414.65	98.18	0	4.78	1102.98	8.42	1101.79	8.41	-1.19	-0.11
54	132	78	24	2112	0.966942	486.32	0.545455	414.14	106.1	0.87	4.66	1110.97	8.42	1109.9	8.41	-1.07	-0.1
54	133	79	25	2128	0.964667	487.62	0.546992	413.66	114.27	0	4.54	1117	8.4	1115.6	8.39	-1.4	-0.13
54	134	80	26	2144	0.962352	488.88	0.548507	413.19	122.67	0.86	4.43	1124.54	8.39	1123.28	8.38	-1.26	-0.11
54	135	81	27	2160	0.96	490.11	0.55	412.75	131.32	0	4.32	1130.14	8.37	1128.57	8.36	-1.57	-0.14
54	136	82	28	2176	0.957612	491.3	0.551471	412.32	140.2	0.86	4.21	1137.24	8.36	1135.82	8.35	-1.42	-0.12
54	137	83	29	2192	0.955192	492.46	0.55292	411.92	149.3	0	4.11	1142.43	8.34	1140.72	8.33	-1.71	-0.15
54	138	84	30	2208	0.952741	493.59	0.554348	411.54	158.62	0.85	4.01	1149.12	8.33	1147.57	8.32	-1.55	-0.14
54	139	85	31	2224	0.950261	494.68	0.555755	411.17	168.17	0	3.92	1153.91	8.3	1152.08	8.29	-1.83	-0.16
54	140	86	32	2240	0.947755	495.74	0.557143	410.82	177.92	0.85	3.83	1160.2	8.29	1158.54	8.28	-1.66	-0.14
54	141	87	33	2256	0.945224	496.76	0.558511	410.49	187.88	0	3.74	1164.61	8.26	1162.68	8.25	-1.93	-0.17
54	142	88	34	2272	0.94267	497.76	0.559859	410.18	198.05	0.84	3.66	1170.51	8.24	1168.76	8.23	-1.75	-0.15
54	143	89	35	2288	0.940095	498.73	0.561189	409.88	208.41	0	3.58	1174.56	8.21	1172.55	8.2	-2.01	-0.17
54	144	90	36	2304	0.9375	499.67	0.5625	409.6	218.97	0.83	3.5	1180.1	8.2	1178.27	8.18	-1.83	-0.16
54	145	91	37	2320	0.934887	500.58	0.563793	409.33	229.72	0	3.42	1183.79	8.16	1181.72	8.15	-2.07	-0.18
54	146	92	38	2336	0.932257	501.46	0.565068	409.08	240.66	0.83	3.35	1188.98	8.14	1187.09	8.13	-1.89	-0.16
54	147	93	39	2352	0.929613	502.32	0.566327	408.84	251.78	0	3.28	1192.34	8.11	1190.21	8.1	-2.13	-0.18
54	148	94	40	2368	0.926954	503.15	0.567568	408.62	263.08	0.82	3.21	1197.18	8.09	1195.24	8.08	-1.95	-0.16
54	149	95	41	2384	0.924283	503.96	0.568792	408.41	274.55	0	3.15	1200.22	8.06	1198.04	8.04	-2.18	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
54	150	96	42	2400	0.9216	504.74	0.57	408.22	286.2	0.82	3.09	1204.74	8.03	1202.74	8.02	-2	-0.17
54	151	97	43	2416	0.918907	505.5	0.571192	408.04	298.02	0	3.02	1207.47	8	1205.24	7.98	-2.23	-0.18
54	152	98	44	2432	0.916205	506.24	0.572368	407.87	310	0.81	2.96	1211.67	7.97	1209.62	7.96	-2.04	-0.17
54	153	99	45	2448	0.913495	506.95	0.573529	407.71	322.15	0	2.91	1214.1	7.94	1211.83	7.92	-2.27	-0.19
54	154	100	46	2464	0.910778	507.65	0.574675	407.57	334.45	0.81	2.85	1218	7.91	1215.91	7.9	-2.09	-0.17
54	155	101	47	2480	0.908054	508.32	0.575806	407.43	346.91	0	2.8	1220.14	7.87	1217.82	7.86	-2.32	-0.19
54	156	102	48	2496	0.905325	508.97	0.576923	407.31	359.53	0.8	2.75	1223.74	7.84	1221.61	7.83	-2.14	-0.17
54	157	103	49	2512	0.902592	509.6	0.578025	407.2	372.29	0	2.7	1225.61	7.81	1223.24	7.79	-2.36	-0.19
54	158	104	50	2528	0.899856	510.21	0.579114	407.1	385.2	0.8	2.65	1228.93	7.78	1226.75	7.76	-2.19	-0.18
54	159	105	51	2544	0.897116	510.8	0.580189	407.01	398.26	0	2.6	1230.53	7.74	1228.11	7.72	-2.42	-0.2
54	160	106	52	2560	0.894375	511.37	0.58125	406.93	411.46	0.79	2.55	1233.58	7.71	1231.34	7.7	-2.24	-0.18
54	161	107	53	2576	0.891632	511.92	0.582298	406.86	424.8	0	2.51	1234.93	7.67	1232.45	7.65	-2.48	-0.2
54	162	108	54	2592	0.888889	512.46	0.583333	406.8	438.28	0.79	2.47	1237.72	7.64	1235.41	7.63	-2.31	-0.19
54	163	109	55	2608	0.886146	512.98	0.584356	406.75	451.89	0	2.42	1238.81	7.6	1236.27	7.58	-2.54	-0.21
54	164	110	56	2624	0.883403	513.48	0.585366	406.71	465.63	0.78	2.38	1241.35	7.57	1238.97	7.55	-2.38	-0.19
54	165	111	57	2640	0.880661	513.96	0.586364	406.67	479.5	0	2.34	1242.2	7.53	1239.58	7.51	-2.62	-0.21
54	166	112	58	2656	0.877921	514.43	0.587349	406.65	493.5	0.78	2.31	1244.49	7.5	1242.03	7.48	-2.46	-0.2
54	167	113	59	2672	0.875184	514.89	0.588323	406.63	507.63	0	2.27	1245.12	7.46	1242.41	7.44	-2.71	-0.22
54	168	114	60	2688	0.872449	515.33	0.589286	406.63	521.88	0.77	2.23	1247.17	7.42	1244.62	7.41	-2.56	-0.21
54	169	115	61	2704	0.869717	515.75	0.590237	406.63	536.24	0	2.2	1247.58	7.38	1244.77	7.37	-2.81	-0.23
54	170	116	62	2720	0.86699	516.16	0.591176	406.64	550.73	0.77	2.16	1249.4	7.35	1246.74	7.33	-2.67	-0.21
54	171	117	63	2736	0.864266	516.55	0.592105	406.65	565.33	0	2.13	1249.59	7.31	1246.67	7.29	-2.92	-0.23
54	172	118	64	2752	0.861547	516.93	0.593023	406.68	580.05	0.76	2.1	1251.2	7.27	1248.41	7.26	-2.79	-0.22
54	173	119	65	2768	0.858833	517.3	0.593931	406.71	594.88	0	2.06	1251.18	7.23	1248.13	7.21	-3.05	-0.24
54	174	120	66	2784	0.856124	517.65	0.594828	406.75	609.82	0.76	2.03	1252.57	7.2	1249.65	7.18	-2.92	-0.23
54	175	121	67	2800	0.85342	517.99	0.595714	406.79	624.87	0	2	1252.35	7.16	1249.16	7.14	-3.19	-0.26
54	176	122	68	2816	0.850723	518.32	0.596591	406.85	640.02	0.75	1.97	1253.54	7.12	1250.46	7.1	-3.08	-0.25
54	177	123	69	2832	0.848032	518.64	0.597458	406.9	655.29	0	1.95	1253.12	7.08	1249.77	7.06	-3.35	-0.27
54	178	124	70	2848	0.845348	518.94	0.598315	406.97	670.65	0.75	1.92	1254.11	7.05	1250.86	7.03	-3.25	-0.26
54	179	125	71	2864	0.84267	519.23	0.599162	407.04	686.11	0	1.89	1253.5	7	1249.97	6.98	-3.53	-0.28
54	180	126	72	2880	0.84	519.51	0.6	407.12	701.68	0.75	1.86	1254.3	6.97	1250.86	6.95	-3.44	-0.27
54	181	127	73	2896	0.837337	519.78	0.600829	407.2	717.34	0	1.84	1253.51	6.93	1249.78	6.9	-3.73	-0.3
54	182	128	74	2912	0.834682	520.04	0.601648	407.29	733.1	0.74	1.81	1254.12	6.89	1250.48	6.87	-3.64	-0.29
54	183	129	75	2928	0.832034	520.29	0.602459	407.39	748.96	0	1.79	1253.15	6.85	1249.21	6.83	-3.94	-0.32
54	184	130	76	2944	0.829395	520.53	0.603261	407.49	764.91	0.74	1.76	1253.58	6.81	1249.71	6.79	-3.87	-0.31
54	185	131	77	2960	0.826764	520.75	0.604054	407.59	780.95	0	1.74	1252.45	6.77	1248.27	6.75	-4.18	-0.33
54	186	132	78	2976	0.824142	520.97	0.604839	407.71	797.08	0.73	1.72	1252.7	6.73	1248.58	6.71	-4.12	-0.33
54	187	133	79	2992	0.821528	521.18	0.605615	407.82	813.3	0	1.7	1251.4	6.69	1246.96	6.67	-4.43	-0.36
54	188	134	80	3008	0.818923	521.37	0.606383	407.94	829.61	0.73	1.67	1251.48	6.66	1247.1	6.63	-4.38	-0.35
54	189	135	81	3024	0.816327	521.56	0.607143	408.07	846	0	1.65	1250.02	6.61	1245.31	6.59	-4.71	-0.38
54	190	136	82	3040	0.81374	521.74	0.607895	408.2	862.48	0.73	1.63	1249.93	6.58	1245.26	6.55	-4.67	-0.38
54	191	137	83	3056	0.811162	521.91	0.608639	408.34	879.04	0	1.61	1248.32	6.54	1243.31	6.51	-5.01	-0.4
54	192	138	84	3072	0.808594	522.08	0.609375	408.48	895.69	0.72	1.59	1248.07	6.5	1243.09	6.47	-4.98	-0.4
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
55	109	54	-1	1744	0.999916	442.64	0.497706	449.63	0.22	0	9.62	861.13	7.9	868.19	7.97	7.07	0.81
55	110	55	0	1760	1	445.38	0.5	448.25	0	-0.95	10	875.42	7.96	882.19	8.02	6.78	0.77
55	111	56	1	1776	0.999919	448.04	0.502252	446.92	0.22	0	9.63	890.45	8.02	895.59	8.07	5.14	0.57
55	112	57	2	1792	0.999681	450.62	0.504464	445.64	0.87	-0.94	9.28	903.21	8.06	908.89	8.12	5.68	0.62
55	113	58	3	1808	0.999295	453.12	0.506637	444.41	1.93	0	8.94	917.48	8.12	921.59	8.16	4.11	0.45
55	114	59	4	1824	0.998769	455.55	0.508772	443.22	3.41	-0.94	8.63	929.51	8.15	934.22	8.19	4.7	0.5
55	115	60	5	1840	0.99811	457.91	0.51087	442.08	5.28	0	8.33	943.06	8.2	946.25	8.23	3.19	0.34
55	116	61	6	1856	0.997325	460.2	0.512931	440.99	7.54	-0.93	8.05	954.4	8.23	958.23	8.26	3.84	0.4
55	117	62	7	1872	0.99642	462.42	0.514957	439.94	10.17	0	7.78	967.25	8.27	969.63	8.29	2.38	0.25
55	118	63	8	1888	0.995404	464.57	0.516949	438.93	13.18	-0.92	7.52	977.93	8.29	981	8.31	3.07	0.31
55	119	64	9	1904	0.99428	466.67	0.518908	437.95	16.54	0	7.28	990.12	8.32	991.78	8.33	1.66	0.17
55	120	65	10	1920	0.993056	468.7	0.520833	437.02	20.25	-0.91	7.05	1000.17	8.33	1002.57	8.35	2.4	0.24
55	121	66	11	1936	0.991736	470.68	0.522727	436.12	24.3	0	6.83	1011.73	8.36	1012.77	8.37	1.03	0.1
55	122	67	12	1952	0.990325	472.59	0.52459	435.26	28.68	-0.91	6.62	1021.18	8.37	1022.99	8.39	1.81	0.18
55	123	68	13	1968	0.988829	474.45	0.526423	434.43	33.39	0	6.42	1032.15	8.39	1032.63	8.4	0.49	0.05
55	124	69	14	1984	0.987253	476.26	0.528226	433.63	38.41	-0.9	6.22	1041.02	8.4	1042.32	8.41	1.29	0.12
55	125	70	15	2000	0.9856	478.02	0.53	432.86	43.75	0	6.04	1051.41	8.41	1051.42	8.41	0.01	0
55	126	71	16	2016	0.983875	479.72	0.531746	432.13	49.38	-0.89	5.87	1059.74	8.41	1060.59	8.42	0.85	0.08
55	127	72	17	2032	0.982082	481.38	0.533465	431.42	55.31	0	5.7	1069.59	8.42	1069.18	8.42	-0.41	-0.04
55	128	73	18	2048	0.980225	482.99	0.535156	430.75	61.53	-0.88	5.54	1077.39	8.42	1077.85	8.42	0.46	0.04
55	129	74	19	2064	0.978307	484.55	0.536822	430.1	68.03	0	5.39	1086.71	8.42	1085.95	8.42	-0.76	-0.07
55	130	75	20	2080	0.976331	486.07	0.538462	429.47	74.8	-0.88	5.24	1094.02	8.42	1094.14	8.42	0.12	0.01
55	131	76	21	2096	0.974302	487.54	0.540076	428.88	81.85	0	5.1	1102.84	8.42	1101.77	8.41	-1.07	-0.1
55	132	77	22	2112	0.972222	488.97	0.541667	428.3	89.15	-0.87	4.97	1109.67	8.41	1109.5	8.41	-0.16	-0.01
55	133	78	23	2128	0.970094	490.36	0.543233	427.76	96.71	0	4.84	1118	8.41	1116.67	8.4	-1.33	-0.12
55	134	79	24	2144	0.967922	491.71	0.544776	427.23	104.53	-0.86	4.71	1124.38	8.39	1123.97	8.39	-0.41	-0.04
55	135	80	25	2160	0.965706	493.03	0.546296	426.73	112.59	0	4.59	1132.25	8.39	1130.7	8.38	-1.55	-0.14
55	136	81	26	2176	0.963452	494.3	0.547794	426.25	120.88	-0.86	4.48	1138.19	8.37	1137.58	8.36	-0.61	-0.05
55	137	82	27	2192	0.961159	495.54	0.54927	425.79	129.42	0	4.37	1145.63	8.36	1143.89	8.35	-1.74	-0.15
55	138	83	28	2208	0.958832	496.74	0.550725	425.35	138.18	-0.85	4.26	1151.14	8.34	1150.35	8.34	-0.79	-0.07
55	139	84	29	2224	0.956472	497.91	0.552158	424.93	147.17	0	4.16	1158.16	8.33	1156.26	8.32	-1.9	-0.16
55	140	85	30	2240	0.954082	499.04	0.553571	424.53	156.38	-0.85	4.07	1163.27	8.31	1162.33	8.3	-0.94	-0.08
55	141	86	31	2256	0.951662	500.15	0.554965	424.15	165.8	0	3.97	1169.88	8.3	1167.85	8.28	-2.03	-0.17
55	142	87	32	2272	0.949216	501.22	0.556338	423.79	175.43	-0.84	3.88	1174.61	8.27	1173.54	8.26	-1.06	-0.09
55	143	88	33	2288	0.946746	502.26	0.557692	423.44	185.27	0	3.79	1180.82	8.26	1178.68	8.24	-2.14	-0.18
55	144	89	34	2304	0.944252	503.27	0.559028	423.11	195.31	-0.83	3.71	1185.18	8.23	1184.01	8.22	-1.17	-0.1
55	145	90	35	2320	0.941736	504.25	0.560345	422.8	205.56	0	3.63	1191.03	8.21	1188.79	8.2	-2.24	-0.19
55	146	91	36	2336	0.939201	505.2	0.561644	422.51	215.99	-0.83	3.55	1195.03	8.19	1193.77	8.18	-1.26	-0.11
55	147	92	37	2352	0.936647	506.12	0.562925	422.23	226.61	0	3.47	1200.51	8.17	1198.2	8.15	-2.31	-0.19
55	148	93	38	2368	0.934076	507.02	0.564189	421.96	237.43	-0.82	3.4	1204.17	8.14	1202.84	8.13	-1.34	-0.11
55	149	94	39	2384	0.93149	507.89	0.565436	421.71	248.42	0	3.33	1209.31	8.12	1206.93	8.1	-2.38	-0.2
55	150	95	40	2400	0.928889	508.74	0.566667	421.48	259.59	-0.82	3.26	1212.64	8.08	1211.24	8.07	-1.4	-0.12
55	151	96	41	2416	0.926275	509.56	0.567881	421.26	270.94	0	3.2	1217.45	8.06	1215	8.05	-2.44	-0.2
55	152	97	42	2432	0.92365	510.35	0.569079	421.05	282.46	-0.81	3.13	1220.46	8.03	1219	8.02	-1.47	-0.12
55	153	98	43	2448	0.921013	511.13	0.570261	420.85	294.15	0	3.07	1224.94	8.01	1222.45	7.99	-2.5	-0.2
55	154	99	44	2464	0.918367	511.88	0.571429	420.67	306	-0.81	3.01	1227.66	7.97	1226.13	7.96	-1.52	-0.12

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
55	155	100	45	2480	0.915713	512.6	0.572581	420.5	318.02	0	2.95	1231.83	7.95	1229.28	7.93	-2.55	-0.21
55	156	101	46	2496	0.913051	513.31	0.573718	420.35	330.19	-0.8	2.9	1234.25	7.91	1232.67	7.9	-1.58	-0.13
55	157	102	47	2512	0.910382	513.99	0.574841	420.2	342.52	0	2.84	1238.13	7.89	1235.52	7.87	-2.6	-0.21
55	158	103	48	2528	0.907707	514.66	0.575949	420.07	355	-0.8	2.79	1240.27	7.85	1238.63	7.84	-1.63	-0.13
55	159	104	49	2544	0.905027	515.3	0.577044	419.95	367.64	0	2.74	1243.86	7.82	1241.2	7.81	-2.66	-0.21
55	160	105	50	2560	0.902344	515.93	0.578125	419.83	380.42	-0.79	2.69	1245.72	7.79	1244.03	7.78	-1.69	-0.14
55	161	106	51	2576	0.899657	516.53	0.579193	419.73	393.35	0	2.64	1249.03	7.76	1246.32	7.74	-2.72	-0.22
55	162	107	52	2592	0.896967	517.12	0.580247	419.64	406.41	-0.79	2.6	1250.64	7.72	1248.88	7.71	-1.76	-0.14
55	163	108	53	2608	0.894275	517.68	0.581288	419.56	419.62	0	2.55	1253.68	7.69	1250.91	7.67	-2.78	-0.22
55	164	109	54	2624	0.891582	518.23	0.582317	419.49	432.97	-0.78	2.51	1255.04	7.65	1253.21	7.64	-1.83	-0.15
55	165	110	55	2640	0.888889	518.77	0.583333	419.43	446.44	0	2.47	1257.82	7.62	1254.97	7.61	-2.85	-0.23
55	166	111	56	2656	0.886195	519.28	0.584337	419.38	460.06	-0.78	2.42	1258.93	7.58	1257.03	7.57	-1.91	-0.15
55	167	112	57	2672	0.883502	519.78	0.585329	419.34	473.8	0	2.38	1261.47	7.55	1258.54	7.54	-2.93	-0.23
55	168	113	58	2688	0.880811	520.26	0.58631	419.3	487.66	-0.77	2.35	1262.34	7.51	1260.35	7.5	-1.99	-0.16
55	169	114	59	2704	0.878121	520.73	0.587278	419.28	501.66	0	2.31	1264.64	7.48	1261.62	7.47	-3.02	-0.24
55	170	115	60	2720	0.875433	521.18	0.588235	419.26	515.77	-0.77	2.27	1265.29	7.44	1263.19	7.43	-2.09	-0.17
55	171	116	61	2736	0.872747	521.62	0.589181	419.26	530.01	0	2.24	1267.35	7.41	1264.23	7.39	-3.12	-0.25
55	172	117	62	2752	0.870065	522.04	0.590116	419.26	544.36	-0.76	2.2	1267.78	7.37	1265.57	7.36	-2.2	-0.17
55	173	118	63	2768	0.867386	522.45	0.59104	419.26	558.83	0	2.17	1269.62	7.34	1266.39	7.32	-3.23	-0.26
55	174	119	64	2784	0.864711	522.84	0.591954	419.28	573.42	-0.76	2.13	1269.83	7.3	1267.5	7.28	-2.33	-0.18
55	175	120	65	2800	0.862041	523.22	0.592857	419.3	588.12	0	2.1	1271.45	7.27	1268.09	7.25	-3.36	-0.26
55	176	121	66	2816	0.859375	523.59	0.59375	419.33	602.93	-0.75	2.07	1271.46	7.22	1269	7.21	-2.47	-0.19
55	177	122	67	2832	0.856714	523.95	0.594633	419.37	617.85	0	2.04	1272.88	7.19	1269.37	7.17	-3.5	-0.28
55	178	123	68	2848	0.854059	524.29	0.595506	419.41	632.87	-0.75	2.01	1272.68	7.15	1270.07	7.14	-2.62	-0.21
55	179	124	69	2864	0.851409	524.62	0.596369	419.47	648	0	1.98	1273.89	7.12	1270.23	7.1	-3.66	-0.29
55	180	125	70	2880	0.848765	524.93	0.597222	419.52	663.24	-0.75	1.95	1273.51	7.08	1270.72	7.06	-2.79	-0.22
55	181	126	71	2896	0.846128	525.24	0.598066	419.59	678.58	0	1.93	1274.52	7.04	1270.69	7.02	-3.84	-0.3
55	182	127	72	2912	0.843497	525.53	0.598901	419.66	694.01	-0.74	1.9	1273.96	7	1270.98	6.98	-2.98	-0.23
55	183	128	73	2928	0.840873	525.81	0.599727	419.73	709.55	0	1.87	1274.78	6.97	1270.75	6.94	-4.03	-0.32
55	184	129	74	2944	0.838256	526.09	0.600543	419.82	725.18	-0.74	1.85	1274.03	6.92	1270.85	6.91	-3.18	-0.25
55	185	130	75	2960	0.835646	526.35	0.601351	419.91	740.91	0	1.82	1274.66	6.89	1270.42	6.87	-4.24	-0.33
55	186	131	76	2976	0.833044	526.6	0.602151	420	756.73	-0.73	1.8	1273.74	6.85	1270.33	6.83	-3.41	-0.27
55	187	132	77	2992	0.83045	526.84	0.602941	420.1	772.64	0	1.77	1274.2	6.81	1269.73	6.79	-4.47	-0.35
55	188	133	78	3008	0.827863	527.07	0.603723	420.21	788.64	-0.73	1.75	1273.11	6.77	1269.46	6.75	-3.65	-0.29
55	189	134	79	3024	0.825285	527.29	0.604497	420.32	804.74	0	1.73	1273.39	6.74	1268.67	6.71	-4.72	-0.37
55	190	135	80	3040	0.822715	527.5	0.605263	420.43	820.92	-0.73	1.71	1272.13	6.7	1268.22	6.67	-3.91	-0.31
55	191	136	81	3056	0.820153	527.7	0.606021	420.55	837.19	0	1.68	1272.25	6.66	1267.25	6.63	-4.99	-0.39
55	192	137	82	3072	0.8176	527.89	0.606771	420.68	853.54	-0.72	1.66	1270.83	6.62	1266.63	6.6	-4.2	-0.33
55	193	138	83	3088	0.815055	528.07	0.607513	420.81	869.98	0	1.64	1270.78	6.58	1265.5	6.56	-5.28	-0.42
55	194	139	84	3104	0.81252	528.25	0.608247	420.95	886.5	-0.72	1.62	1269.21	6.54	1264.71	6.52	-4.5	-0.36
55	195	140	85	3120	0.809993	528.41	0.608974	421.09	903.1	0	1.6	1269	6.51	1263.41	6.48	-5.59	-0.44
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
56	111	55	-1	1776	0.999919	448.04	0.497748	463.32	0.22	0	9.63	874.06	7.87	881.21	7.94	7.15	0.81
56	112	56	0	1792	1	450.76	0.5	461.91	0	0.94	10	890.27	7.95	896.36	8	6.09	0.68

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
56	113	57	1	1808	0.999922	453.41	0.502212	460.57	0.21	0	9.64	903.45	8	908.7	8.04	5.25	0.58
56	114	58	2	1824	0.999692	455.97	0.504386	459.27	0.85	0.94	9.29	918.13	8.05	923.13	8.1	5	0.54
56	115	59	3	1840	0.999319	458.46	0.506522	458.02	1.9	0	8.96	930.58	8.09	934.8	8.13	4.22	0.45
56	116	60	4	1856	0.998811	460.88	0.508621	456.82	3.35	0.93	8.65	944.53	8.14	948.55	8.18	4.02	0.42
56	117	61	5	1872	0.998174	463.23	0.510684	455.66	5.19	0	8.36	956.27	8.17	959.58	8.2	3.31	0.35
56	118	62	6	1888	0.997415	465.51	0.512712	454.55	7.41	0.92	8.08	969.52	8.22	972.68	8.24	3.16	0.33
56	119	63	7	1904	0.99654	467.73	0.514706	453.48	10	0	7.81	980.6	8.24	983.1	8.26	2.51	0.25
56	120	64	8	1920	0.995556	469.88	0.516667	452.45	12.96	0.91	7.56	993.18	8.28	995.58	8.3	2.4	0.24
56	121	65	9	1936	0.994468	471.97	0.518595	451.46	16.27	0	7.32	1003.62	8.29	1005.41	8.31	1.8	0.18
56	122	66	10	1952	0.993281	474	0.520492	450.51	19.92	0.91	7.09	1015.56	8.32	1017.29	8.34	1.73	0.17
56	123	67	11	1968	0.992002	475.98	0.522358	449.59	23.91	0	6.87	1025.39	8.34	1026.56	8.35	1.17	0.11
56	124	68	12	1984	0.990635	477.89	0.524194	448.71	28.22	0.9	6.66	1036.73	8.36	1037.87	8.37	1.14	0.11
56	125	69	13	2000	0.989184	479.75	0.526	447.87	32.86	0	6.46	1045.98	8.37	1046.61	8.37	0.62	0.06
56	126	70	14	2016	0.987654	481.56	0.527778	447.05	37.81	0.89	6.27	1056.74	8.39	1057.36	8.39	0.63	0.06
56	127	71	15	2032	0.98605	483.32	0.529528	446.27	43.06	0	6.09	1065.43	8.39	1065.58	8.39	0.15	0.01
56	128	72	16	2048	0.984375	485.03	0.53125	445.52	48.62	0.88	5.92	1075.63	8.4	1075.81	8.4	0.18	0.02
56	129	73	17	2064	0.982633	486.69	0.532946	444.79	54.46	0	5.75	1083.8	8.4	1083.54	8.4	-0.26	-0.02
56	130	74	18	2080	0.980828	488.3	0.534615	444.1	60.59	0.88	5.59	1093.47	8.41	1093.26	8.41	-0.21	-0.02
56	131	75	19	2096	0.978964	489.87	0.53626	443.43	67	0	5.44	1101.13	8.41	1100.51	8.4	-0.62	-0.06
56	132	76	20	2112	0.977043	491.4	0.537879	442.79	73.68	0.87	5.29	1110.29	8.41	1109.75	8.41	-0.54	-0.05
56	133	77	21	2128	0.975069	492.88	0.539474	442.18	80.63	0	5.15	1117.47	8.4	1116.55	8.4	-0.92	-0.08
56	134	78	22	2144	0.973045	494.32	0.541045	441.59	87.83	0.86	5.02	1126.14	8.4	1125.32	8.4	-0.82	-0.07
56	135	79	23	2160	0.970974	495.71	0.542593	441.03	95.29	0	4.89	1132.86	8.39	1131.67	8.38	-1.18	-0.1
56	136	80	24	2176	0.968858	497.07	0.544118	440.48	103	0.86	4.77	1141.06	8.39	1140	8.38	-1.07	-0.09
56	137	81	25	2192	0.9667	498.4	0.54562	439.97	110.95	0	4.65	1147.33	8.37	1145.93	8.36	-1.4	-0.12
56	138	82	26	2208	0.964503	499.68	0.547101	439.47	119.14	0.85	4.53	1155.09	8.37	1153.82	8.36	-1.27	-0.11
56	139	83	27	2224	0.962269	500.93	0.548561	438.99	127.57	0	4.42	1160.93	8.35	1159.34	8.34	-1.59	-0.14
56	140	84	28	2240	0.96	502.14	0.55	438.54	136.22	0.85	4.32	1168.26	8.34	1166.82	8.33	-1.44	-0.12
56	141	85	29	2256	0.957698	503.32	0.551418	438.11	145.09	0	4.22	1173.7	8.32	1171.95	8.31	-1.74	-0.15
56	142	86	30	2272	0.955366	504.46	0.552817	437.69	154.19	0.84	4.12	1180.61	8.31	1179.03	8.3	-1.59	-0.13
56	143	87	31	2288	0.953005	505.58	0.554196	437.29	163.5	0	4.02	1185.66	8.29	1183.78	8.28	-1.87	-0.16
56	144	88	32	2304	0.950617	506.66	0.555556	436.92	173.01	0.83	3.93	1192.18	8.28	1190.47	8.27	-1.71	-0.14
56	145	89	33	2320	0.948205	507.71	0.556897	436.56	182.73	0	3.84	1196.84	8.25	1194.86	8.24	-1.98	-0.17
56	146	90	34	2336	0.945768	508.73	0.558219	436.22	192.66	0.83	3.76	1202.98	8.24	1201.17	8.23	-1.81	-0.15
56	147	91	35	2352	0.943311	509.72	0.559524	435.89	202.78	0	3.68	1207.29	8.21	1205.21	8.2	-2.07	-0.17
56	148	92	36	2368	0.940833	510.69	0.560811	435.58	213.09	0.82	3.6	1213.06	8.2	1211.17	8.18	-1.9	-0.16
56	149	93	37	2384	0.938336	511.62	0.562081	435.29	223.59	0	3.52	1217.02	8.17	1214.87	8.15	-2.15	-0.18
56	150	94	38	2400	0.935822	512.53	0.563333	435.01	234.28	0.82	3.45	1222.44	8.15	1220.48	8.14	-1.97	-0.16
56	151	95	39	2416	0.933292	513.42	0.56457	434.75	245.15	0	3.38	1226.07	8.12	1223.85	8.1	-2.21	-0.18
56	152	96	40	2432	0.930748	514.28	0.565789	434.5	256.2	0.81	3.31	1231.15	8.1	1229.12	8.09	-2.03	-0.17
56	153	97	41	2448	0.92819	515.11	0.566993	434.26	267.42	0	3.24	1234.45	8.07	1232.18	8.05	-2.27	-0.18
56	154	98	42	2464	0.92562	515.92	0.568182	434.04	278.81	0.81	3.18	1239.21	8.05	1237.13	8.03	-2.08	-0.17
56	155	99	43	2480	0.923039	516.71	0.569355	433.84	290.38	0	3.12	1242.2	8.01	1239.88	8	-2.32	-0.19
56	156	100	44	2496	0.920447	517.47	0.570513	433.64	302.1	0.8	3.06	1246.65	7.99	1244.51	7.98	-2.13	-0.17
56	157	101	45	2512	0.917847	518.21	0.571656	433.46	313.99	0	3	1249.34	7.96	1246.97	7.94	-2.37	-0.19
56	158	102	46	2528	0.915238	518.93	0.572785	433.29	326.04	0.8	2.94	1253.48	7.93	1251.3	7.92	-2.18	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
56	159	103	47	2544	0.912622	519.63	0.573899	433.14	338.24	0	2.89	1255.89	7.9	1253.47	7.88	-2.41	-0.19
56	160	104	48	2560	0.91	520.3	0.575	432.99	350.6	0.79	2.84	1259.74	7.87	1257.51	7.86	-2.23	-0.18
56	161	105	49	2576	0.907372	520.96	0.576087	432.86	363.1	0	2.79	1261.87	7.84	1259.41	7.82	-2.46	-0.2
56	162	106	50	2592	0.90474	521.6	0.57716	432.74	375.75	0.79	2.74	1265.44	7.81	1263.16	7.8	-2.28	-0.18
56	163	107	51	2608	0.902104	522.22	0.578221	432.62	388.55	0	2.69	1267.3	7.77	1264.79	7.76	-2.51	-0.2
56	164	108	52	2624	0.899465	522.82	0.579268	432.52	401.49	0.78	2.64	1270.6	7.75	1268.26	7.73	-2.33	-0.18
56	165	109	53	2640	0.896823	523.4	0.580303	432.43	414.57	0	2.59	1272.2	7.71	1269.63	7.69	-2.57	-0.2
56	166	110	54	2656	0.894179	523.96	0.581325	432.35	427.78	0.78	2.55	1275.23	7.68	1272.84	7.67	-2.39	-0.19
56	167	111	55	2672	0.891534	524.51	0.582335	432.28	441.13	0	2.51	1276.59	7.64	1273.96	7.63	-2.63	-0.21
56	168	112	56	2688	0.888889	525.04	0.583333	432.22	454.61	0.77	2.47	1279.37	7.62	1276.91	7.6	-2.46	-0.19
56	169	113	57	2704	0.886243	525.55	0.58432	432.17	468.22	0	2.43	1280.49	7.58	1277.79	7.56	-2.7	-0.21
56	170	114	58	2720	0.883599	526.04	0.585294	432.12	481.96	0.77	2.39	1283.02	7.55	1280.49	7.53	-2.54	-0.2
56	171	115	59	2736	0.880955	526.53	0.586257	432.09	495.82	0	2.35	1283.91	7.51	1281.13	7.49	-2.78	-0.22
56	172	116	60	2752	0.878313	526.99	0.587209	432.06	509.81	0.76	2.31	1286.21	7.48	1283.59	7.46	-2.62	-0.2
56	173	117	61	2768	0.875672	527.44	0.58815	432.05	523.92	0	2.27	1286.87	7.44	1284	7.42	-2.87	-0.22
56	174	118	62	2784	0.873035	527.88	0.58908	432.04	538.14	0.76	2.24	1288.94	7.41	1286.22	7.39	-2.72	-0.21
56	175	119	63	2800	0.8704	528.3	0.59	432.04	552.48	0	2.2	1289.38	7.37	1286.41	7.35	-2.97	-0.23
56	176	120	64	2816	0.867769	528.71	0.590909	432.04	566.94	0.75	2.17	1291.23	7.34	1288.4	7.32	-2.83	-0.22
56	177	121	65	2832	0.865141	529.1	0.591808	432.06	581.51	0	2.14	1291.47	7.3	1288.38	7.28	-3.09	-0.24
56	178	122	66	2848	0.862517	529.48	0.592697	432.08	596.19	0.75	2.11	1293.1	7.26	1290.15	7.25	-2.96	-0.23
56	179	123	67	2864	0.859898	529.85	0.593575	432.11	610.98	0	2.08	1293.14	7.22	1289.92	7.21	-3.22	-0.25
56	180	124	68	2880	0.857284	530.2	0.594444	432.15	625.88	0.75	2.05	1294.56	7.19	1291.47	7.17	-3.09	-0.24
56	181	125	69	2896	0.854675	530.54	0.595304	432.19	640.88	0	2.02	1294.4	7.15	1291.03	7.13	-3.37	-0.26
56	182	126	70	2912	0.852071	530.87	0.596154	432.24	655.99	0.74	1.99	1295.62	7.12	1292.37	7.1	-3.25	-0.25
56	183	127	71	2928	0.849473	531.19	0.596995	432.3	671.2	0	1.96	1295.27	7.08	1291.74	7.06	-3.53	-0.27
56	184	128	72	2944	0.846881	531.5	0.597826	432.36	686.51	0.74	1.93	1296.3	7.05	1292.88	7.03	-3.42	-0.26
56	185	129	73	2960	0.844295	531.79	0.598649	432.43	701.92	0	1.91	1295.77	7	1292.06	6.98	-3.71	-0.29
56	186	130	74	2976	0.841716	532.08	0.599462	432.5	717.42	0.73	1.88	1296.61	6.97	1293	6.95	-3.61	-0.28
56	187	131	75	2992	0.839143	532.35	0.600267	432.59	733.02	0	1.86	1295.89	6.93	1291.99	6.91	-3.91	-0.3
56	188	132	76	3008	0.836578	532.61	0.601064	432.67	748.72	0.73	1.83	1296.55	6.9	1292.73	6.88	-3.82	-0.3
56	189	133	77	3024	0.834019	532.87	0.601852	432.77	764.51	0	1.81	1295.66	6.86	1291.54	6.83	-4.12	-0.32
56	190	134	78	3040	0.831468	533.11	0.602632	432.87	780.39	0.73	1.78	1296.15	6.82	1292.1	6.8	-4.04	-0.31
56	191	135	79	3056	0.828925	533.34	0.603403	432.97	796.36	0	1.76	1295.09	6.78	1290.74	6.76	-4.36	-0.34
56	192	136	80	3072	0.826389	533.56	0.604167	433.08	812.41	0.72	1.74	1295.4	6.75	1291.11	6.72	-4.29	-0.33
56	193	137	81	3088	0.823861	533.78	0.604922	433.2	828.56	0	1.72	1294.18	6.71	1289.57	6.68	-4.61	-0.36
56	194	138	82	3104	0.821341	533.98	0.60567	433.32	844.79	0.72	1.69	1294.33	6.67	1289.77	6.65	-4.56	-0.35
56	195	139	83	3120	0.81883	534.18	0.60641	433.44	861.1	0	1.67	1292.95	6.63	1288.07	6.61	-4.89	-0.38
56	196	140	84	3136	0.816327	534.36	0.607143	433.57	877.5	0.71	1.65	1292.93	6.6	1288.09	6.57	-4.84	-0.38
56	197	141	85	3152	0.813832	534.54	0.607868	433.71	893.98	0	1.63	1291.41	6.56	1286.23	6.53	-5.18	-0.4
56	198	142	86	3168	0.811346	534.71	0.608586	433.85	910.54	0.71	1.61	1291.23	6.52	1286.08	6.5	-5.15	-0.4
56	199	143	87	3184	0.808868	534.87	0.609296	433.99	927.18	0	1.59	1289.56	6.48	1284.06	6.45	-5.5	-0.43
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
57	113	56	-1	1808	0.999922	453.41	0.497788	477.16	0.21	0	9.64	886.85	7.85	894.09	7.91	7.24	0.81
57	114	57	0	1824	1	456.11	0.5	475.74	0	-0.94	10	901.21	7.91	908.16	7.97	6.95	0.77

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
57	115	58	1	1840	0.999924	458.74	0.502174	474.38	0.21	0	9.64	916.31	7.97	921.63	8.01	5.32	0.58
57	116	59	2	1856	0.999703	461.29	0.50431	473.06	0.84	-0.93	9.3	929.18	8.01	935.02	8.06	5.84	0.62
57	117	60	3	1872	0.999343	463.77	0.50641	471.8	1.87	0	8.98	943.54	8.06	947.82	8.1	4.28	0.45
57	118	61	4	1888	0.998851	466.18	0.508475	470.58	3.29	-0.92	8.67	955.69	8.1	960.55	8.14	4.85	0.51
57	119	62	5	1904	0.998235	468.52	0.510504	469.41	5.1	0	8.38	969.35	8.15	972.69	8.17	3.35	0.34
57	120	63	6	1920	0.9975	470.8	0.5125	468.28	7.29	-0.91	8.11	980.83	8.17	984.8	8.21	3.97	0.4
57	121	64	7	1936	0.996653	473.01	0.514463	467.19	9.84	0	7.84	993.8	8.21	996.32	8.23	2.52	0.25
57	122	65	8	1952	0.9957	475.16	0.516393	466.15	12.75	-0.91	7.59	1004.64	8.23	1007.83	8.26	3.19	0.32
57	123	66	9	1968	0.994646	477.24	0.518293	465.14	16	0	7.35	1016.97	8.27	1018.76	8.28	1.79	0.18
57	124	67	10	1984	0.993496	479.27	0.520161	464.17	19.6	-0.9	7.13	1027.19	8.28	1029.69	8.3	2.5	0.24
57	125	68	11	2000	0.992256	481.24	0.522	463.23	23.53	0	6.91	1038.91	8.31	1040.05	8.32	1.15	0.11
57	126	69	12	2016	0.99093	483.16	0.52381	462.34	27.78	-0.89	6.7	1048.54	8.32	1050.44	8.34	1.9	0.18
57	127	70	13	2032	0.989522	485.02	0.525591	461.47	32.35	0	6.51	1059.67	8.34	1060.25	8.35	0.58	0.05
57	128	71	14	2048	0.988037	486.83	0.527344	460.64	37.22	-0.88	6.32	1068.74	8.35	1070.1	8.36	1.36	0.13
57	129	72	15	2064	0.986479	488.6	0.52907	459.84	42.4	0	6.14	1079.3	8.37	1079.39	8.37	0.09	0.01
57	130	73	16	2080	0.984852	490.31	0.530769	459.07	47.88	-0.88	5.96	1087.83	8.37	1088.73	8.37	0.9	0.08
57	131	74	17	2096	0.983159	491.97	0.532443	458.33	53.64	0	5.8	1097.86	8.38	1097.52	8.38	-0.34	-0.03
57	132	75	18	2112	0.981405	493.59	0.534091	457.62	59.68	-0.87	5.64	1105.88	8.38	1106.38	8.38	0.5	0.04
57	133	76	19	2128	0.979592	495.16	0.535714	456.94	66	0	5.49	1115.39	8.39	1114.67	8.38	-0.72	-0.06
57	134	77	20	2144	0.977723	496.69	0.537313	456.28	72.59	-0.86	5.34	1122.92	8.38	1123.06	8.38	0.15	0.01
57	135	78	21	2160	0.975802	498.18	0.538889	455.65	79.44	0	5.2	1131.93	8.38	1130.9	8.38	-1.04	-0.09
57	136	79	22	2176	0.973832	499.63	0.540441	455.04	86.55	-0.86	5.07	1138.99	8.37	1138.84	8.37	-0.16	-0.01
57	137	80	23	2192	0.971815	501.03	0.541971	454.46	93.91	0	4.94	1147.53	8.38	1146.22	8.37	-1.32	-0.11
57	138	81	24	2208	0.969754	502.4	0.543478	453.9	101.52	-0.85	4.82	1154.14	8.36	1153.73	8.36	-0.42	-0.04
57	139	82	25	2224	0.967652	503.73	0.544964	453.37	109.37	0	4.7	1162.23	8.36	1160.68	8.35	-1.55	-0.13
57	140	83	26	2240	0.96551	505.02	0.546429	452.86	117.45	-0.85	4.58	1168.4	8.35	1167.77	8.34	-0.64	-0.05
57	141	84	27	2256	0.963332	506.28	0.547872	452.37	125.77	0	4.47	1176.06	8.34	1174.3	8.33	-1.75	-0.15
57	142	85	28	2272	0.961119	507.5	0.549296	451.9	134.32	-0.84	4.37	1181.82	8.32	1180.99	8.32	-0.83	-0.07
57	143	86	29	2288	0.958873	508.69	0.550699	451.45	143.08	0	4.27	1189.05	8.32	1187.13	8.3	-1.92	-0.16
57	144	87	30	2304	0.956597	509.85	0.552083	451.02	152.06	-0.83	4.17	1194.41	8.29	1193.42	8.29	-0.99	-0.08
57	145	88	31	2320	0.954293	510.97	0.553448	450.61	161.26	0	4.07	1201.24	8.28	1199.17	8.27	-2.07	-0.17
57	146	89	32	2336	0.951961	512.06	0.554795	450.21	170.66	-0.83	3.98	1206.22	8.26	1205.1	8.25	-1.12	-0.09
57	147	90	33	2352	0.949604	513.12	0.556122	449.84	180.27	0	3.9	1212.67	8.25	1210.48	8.23	-2.19	-0.18
57	148	91	34	2368	0.947224	514.16	0.557432	449.48	190.07	-0.82	3.81	1217.28	8.22	1216.04	8.22	-1.24	-0.1
57	149	92	35	2384	0.944822	515.16	0.558725	449.14	200.07	0	3.73	1223.35	8.21	1221.06	8.2	-2.29	-0.19
57	150	93	36	2400	0.9424	516.14	0.56	448.82	210.27	-0.82	3.65	1227.61	8.18	1226.27	8.18	-1.34	-0.11
57	151	94	37	2416	0.939959	517.08	0.561258	448.51	220.65	0	3.57	1233.32	8.17	1230.94	8.15	-2.38	-0.19
57	152	95	38	2432	0.9375	518.01	0.5625	448.22	231.22	-0.81	3.5	1237.24	8.14	1235.82	8.13	-1.42	-0.11
57	153	96	39	2448	0.935025	518.9	0.563725	447.95	241.97	0	3.43	1242.61	8.12	1240.16	8.11	-2.45	-0.2
57	154	97	40	2464	0.932535	519.77	0.564935	447.68	252.89	-0.81	3.36	1246.2	8.09	1244.71	8.08	-1.49	-0.12
57	155	98	41	2480	0.930031	520.62	0.566129	447.44	263.99	0	3.29	1251.24	8.07	1248.72	8.06	-2.52	-0.2
57	156	99	42	2496	0.927515	521.44	0.567308	447.2	275.26	-0.8	3.23	1254.52	8.04	1252.96	8.03	-1.56	-0.12
57	157	100	43	2512	0.924987	522.24	0.568471	446.98	286.7	0	3.17	1259.24	8.02	1256.66	8	-2.58	-0.21
57	158	101	44	2528	0.922448	523.02	0.56962	446.78	298.3	-0.8	3.1	1262.21	7.99	1260.59	7.98	-1.62	-0.13
57	159	102	45	2544	0.9199	523.77	0.570755	446.59	310.07	0	3.05	1266.63	7.97	1263.99	7.95	-2.63	-0.21
57	160	103	46	2560	0.917344	524.5	0.571875	446.4	321.99	-0.79	2.99	1269.31	7.93	1267.63	7.92	-1.68	-0.13

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
57	161	104	47	2576	0.91478	525.21	0.572981	446.24	334.06	0	2.93	1273.42	7.91	1270.73	7.89	-2.69	-0.21
57	162	105	48	2592	0.912209	525.9	0.574074	446.08	346.29	-0.79	2.88	1275.82	7.88	1274.09	7.86	-1.73	-0.14
57	163	106	49	2608	0.909632	526.57	0.575153	445.93	358.67	0	2.83	1279.65	7.85	1276.91	7.83	-2.74	-0.21
57	164	107	50	2624	0.907049	527.22	0.57622	445.8	371.2	-0.78	2.78	1281.78	7.82	1279.99	7.8	-1.79	-0.14
57	165	108	51	2640	0.904463	527.86	0.577273	445.68	383.87	0	2.73	1285.33	7.79	1282.53	7.77	-2.8	-0.22
57	166	109	52	2656	0.901873	528.47	0.578313	445.57	396.68	-0.78	2.68	1287.19	7.75	1285.34	7.74	-1.85	-0.14
57	167	110	53	2672	0.899279	529.06	0.579341	445.46	409.63	0	2.64	1290.48	7.73	1287.62	7.71	-2.86	-0.22
57	168	111	54	2688	0.896684	529.64	0.580357	445.37	422.72	-0.77	2.59	1292.09	7.69	1290.17	7.68	-1.92	-0.15
57	169	112	55	2704	0.894086	530.2	0.581361	445.29	435.94	0	2.55	1295.12	7.66	1292.2	7.65	-2.92	-0.23
57	170	113	56	2720	0.891488	530.74	0.582353	445.22	449.29	-0.77	2.51	1296.48	7.63	1294.49	7.61	-1.99	-0.15
57	171	114	57	2736	0.888889	531.27	0.583333	445.16	462.78	0	2.47	1299.26	7.6	1296.27	7.58	-2.99	-0.23
57	172	115	58	2752	0.88629	531.78	0.584302	445.11	476.39	-0.76	2.43	1300.39	7.56	1298.32	7.55	-2.07	-0.16
57	173	116	59	2768	0.883691	532.27	0.58526	445.06	490.12	0	2.39	1302.93	7.53	1299.85	7.51	-3.08	-0.24
57	174	117	60	2784	0.881094	532.75	0.586207	445.03	503.98	-0.76	2.35	1303.83	7.49	1301.67	7.48	-2.16	-0.17
57	175	118	61	2800	0.878498	533.21	0.587143	445	517.96	0	2.31	1306.14	7.46	1302.97	7.45	-3.17	-0.24
57	176	119	62	2816	0.875904	533.66	0.588068	444.98	532.06	-0.75	2.28	1306.82	7.43	1304.56	7.41	-2.26	-0.17
57	177	120	63	2832	0.873312	534.1	0.588983	444.97	546.28	0	2.24	1308.9	7.39	1305.62	7.38	-3.27	-0.25
57	178	121	64	2848	0.870723	534.52	0.589888	444.97	560.61	-0.75	2.21	1309.36	7.36	1306.99	7.34	-2.37	-0.18
57	179	122	65	2864	0.868138	534.92	0.590782	444.98	575.05	0	2.18	1311.22	7.33	1307.83	7.31	-3.39	-0.26
57	180	123	66	2880	0.865556	535.32	0.591667	444.99	589.61	-0.75	2.14	1311.48	7.29	1308.98	7.27	-2.5	-0.19
57	181	124	67	2896	0.862977	535.7	0.592541	445.01	604.27	0	2.11	1313.13	7.25	1309.62	7.24	-3.52	-0.27
57	182	125	68	2912	0.860403	536.07	0.593407	445.04	619.04	-0.74	2.08	1313.19	7.22	1310.55	7.2	-2.64	-0.2
57	183	126	69	2928	0.857834	536.42	0.594262	445.08	633.92	0	2.05	1314.64	7.18	1310.98	7.16	-3.66	-0.28
57	184	127	70	2944	0.855269	536.76	0.595109	445.12	648.9	-0.74	2.02	1314.5	7.14	1311.71	7.13	-2.79	-0.21
57	185	128	71	2960	0.85271	537.09	0.595946	445.17	663.98	0	2	1315.75	7.11	1311.93	7.09	-3.82	-0.29
57	186	129	72	2976	0.850156	537.41	0.596774	445.22	679.17	-0.73	1.97	1315.43	7.07	1312.46	7.06	-2.97	-0.23
57	187	130	73	2992	0.847608	537.72	0.597594	445.28	694.45	0	1.94	1316.48	7.04	1312.49	7.02	-4	-0.3
57	188	131	74	3008	0.845066	538.02	0.598404	445.35	709.83	-0.73	1.91	1315.98	7	1312.83	6.98	-3.15	-0.24
57	189	132	75	3024	0.84253	538.3	0.599206	445.43	725.31	0	1.89	1316.85	6.97	1312.66	6.95	-4.19	-0.32
57	190	133	76	3040	0.84	538.58	0.6	445.51	740.88	-0.73	1.86	1316.17	6.93	1312.81	6.91	-3.36	-0.26
57	191	134	77	3056	0.837477	538.84	0.600785	445.6	756.54	0	1.84	1316.86	6.89	1312.45	6.87	-4.4	-0.34
57	192	135	78	3072	0.834961	539.1	0.601562	445.69	772.3	-0.72	1.82	1316.01	6.85	1312.42	6.84	-3.58	-0.27
57	193	136	79	3088	0.832452	539.34	0.602332	445.79	788.15	0	1.79	1316.52	6.82	1311.89	6.8	-4.63	-0.35
57	194	137	80	3104	0.82995	539.58	0.603093	445.89	804.08	-0.72	1.77	1315.5	6.78	1311.68	6.76	-3.82	-0.29
57	195	138	81	3120	0.827456	539.8	0.603846	446	820.1	0	1.75	1315.84	6.75	1310.96	6.72	-4.88	-0.37
57	196	139	82	3136	0.824969	540.02	0.604592	446.11	836.21	-0.71	1.73	1314.67	6.71	1310.58	6.69	-4.09	-0.31
57	197	140	83	3152	0.82249	540.23	0.60533	446.23	852.4	0	1.7	1314.84	6.67	1309.69	6.65	-5.15	-0.39
57	198	141	84	3168	0.820018	540.43	0.606061	446.36	868.68	-0.71	1.68	1313.51	6.63	1309.14	6.61	-4.37	-0.33
57	199	142	85	3184	0.817555	540.61	0.606784	446.49	885.04	0	1.66	1313.52	6.6	1308.09	6.57	-5.44	-0.42
57	200	143	86	3200	0.8151	540.79	0.6075	446.62	901.48	-0.71	1.64	1312.04	6.56	1307.37	6.54	-4.67	-0.36
57	201	144	87	3216	0.812653	540.97	0.608209	446.76	918	0	1.62	1311.9	6.53	1306.15	6.5	-5.74	-0.44
57	202	145	88	3232	0.810215	541.13	0.608911	446.9	934.6	-0.7	1.6	1310.27	6.49	1305.28	6.46	-4.99	-0.38
57	203	146	89	3248	0.807785	541.29	0.609606	447.05	951.27	0	1.59	1309.98	6.45	1303.9	6.42	-6.07	-0.47
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
58	115	57	-1	1840	0.999924	458.74	0.497826	491.17	0.21	0	9.64	899.52	7.82	906.84	7.89	7.32	0.81
58	116	58	0	1856	1	461.43	0.5	489.74	0	0.93	10	915.76	7.89	922.04	7.95	6.27	0.68
58	117	59	1	1872	0.999927	464.05	0.502137	488.35	0.21	0	9.65	929.04	7.94	934.47	7.99	5.43	0.58
58	118	60	2	1888	0.999713	466.59	0.504237	487.02	0.82	0.92	9.31	943.8	8	948.97	8.04	5.17	0.54
58	119	61	3	1904	0.999364	469.05	0.506303	485.74	1.84	0	9	956.36	8.04	960.75	8.07	4.39	0.46
58	120	62	4	1920	0.998889	471.45	0.508333	484.51	3.24	0.91	8.69	970.41	8.09	974.59	8.12	4.19	0.43
58	121	63	5	1936	0.998292	473.79	0.510331	483.32	5.02	0	8.41	982.28	8.12	985.75	8.15	3.47	0.35
58	122	64	6	1952	0.997581	476.05	0.512295	482.17	7.17	0.91	8.13	995.64	8.16	998.95	8.19	3.31	0.33
58	123	65	7	1968	0.996761	478.26	0.514228	481.07	9.68	0	7.87	1006.87	8.19	1009.51	8.21	2.64	0.26
58	124	66	8	1984	0.995838	480.4	0.516129	480	12.54	0.9	7.63	1019.58	8.22	1022.11	8.24	2.53	0.25
58	125	67	9	2000	0.994816	482.49	0.518	478.98	15.75	0	7.39	1030.18	8.24	1032.1	8.26	1.92	0.19
58	126	68	10	2016	0.993701	484.51	0.519841	477.99	19.29	0.89	7.17	1042.27	8.27	1044.11	8.29	1.85	0.18
58	127	69	11	2032	0.992498	486.48	0.521654	477.04	23.16	0	6.95	1052.27	8.29	1053.55	8.3	1.28	0.12
58	128	70	12	2048	0.991211	488.4	0.523438	476.12	27.35	0.88	6.75	1063.76	8.31	1065	8.32	1.24	0.12
58	129	71	13	2064	0.989844	490.26	0.525194	475.24	31.85	0	6.55	1073.2	8.32	1073.91	8.32	0.71	0.07
58	130	72	14	2080	0.988402	492.07	0.526923	474.39	36.65	0.88	6.36	1084.12	8.34	1084.83	8.34	0.71	0.07
58	131	73	15	2096	0.986889	493.84	0.528626	473.57	41.76	0	6.18	1093.01	8.34	1093.23	8.35	0.22	0.02
58	132	74	16	2112	0.985308	495.55	0.530303	472.79	47.16	0.87	6.01	1103.39	8.36	1103.63	8.36	0.25	0.02
58	133	75	17	2128	0.983662	497.22	0.531955	472.03	52.84	0	5.85	1111.76	8.36	1111.55	8.36	-0.21	-0.02
58	134	76	18	2144	0.981956	498.84	0.533582	471.3	58.8	0.86	5.69	1121.61	8.37	1121.46	8.37	-0.15	-0.01
58	135	77	19	2160	0.980192	500.42	0.535185	470.6	65.03	0	5.54	1129.49	8.37	1128.91	8.36	-0.58	-0.05
58	136	78	20	2176	0.978374	501.96	0.536765	469.93	71.53	0.86	5.39	1138.84	8.37	1138.33	8.37	-0.5	-0.04
58	137	79	21	2192	0.976504	503.45	0.538321	469.28	78.29	0	5.25	1146.23	8.37	1145.34	8.36	-0.9	-0.08
58	138	80	22	2208	0.974585	504.9	0.539855	468.66	85.3	0.85	5.12	1155.1	8.37	1154.3	8.36	-0.8	-0.07
58	139	81	23	2224	0.97262	506.32	0.541367	468.06	92.57	0	4.99	1162.04	8.36	1160.87	8.35	-1.17	-0.1
58	140	82	24	2240	0.970612	507.69	0.542857	467.49	100.08	0.85	4.87	1170.45	8.36	1169.39	8.35	-1.06	-0.09
58	141	83	25	2256	0.968563	509.03	0.544326	466.94	107.83	0	4.75	1176.95	8.35	1175.55	8.34	-1.41	-0.12
58	142	84	26	2272	0.966475	510.33	0.545775	466.41	115.81	0.84	4.63	1184.92	8.34	1183.64	8.34	-1.28	-0.11
58	143	85	27	2288	0.96435	511.6	0.547203	465.9	124.03	0	4.52	1191	8.33	1189.39	8.32	-1.61	-0.14
58	144	86	28	2304	0.962191	512.83	0.548611	465.42	132.46	0.83	4.42	1198.54	8.32	1197.08	8.31	-1.46	-0.12
58	145	87	29	2320	0.96	514.03	0.55	464.95	141.12	0	4.32	1204.22	8.3	1202.44	8.29	-1.77	-0.15
58	146	88	30	2336	0.957778	515.19	0.55137	464.51	149.99	0.83	4.22	1211.35	8.3	1209.73	8.29	-1.62	-0.13
58	147	89	31	2352	0.955528	516.33	0.552721	464.08	159.08	0	4.12	1216.64	8.28	1214.72	8.26	-1.92	-0.16
58	148	90	32	2368	0.953251	517.43	0.554054	463.68	168.37	0.82	4.03	1223.38	8.27	1221.63	8.25	-1.75	-0.14
58	149	91	33	2384	0.950948	518.5	0.555369	463.29	177.86	0	3.94	1228.3	8.24	1226.26	8.23	-2.04	-0.17
58	150	92	34	2400	0.948622	519.54	0.556667	462.92	187.55	0.82	3.86	1234.66	8.23	1232.8	8.22	-1.86	-0.15
58	151	93	35	2416	0.946274	520.56	0.557947	462.56	197.44	0	3.78	1239.21	8.21	1237.08	8.19	-2.13	-0.17
58	152	94	36	2432	0.943906	521.55	0.559211	462.22	207.52	0.81	3.7	1245.22	8.19	1243.26	8.18	-1.96	-0.16
58	153	95	37	2448	0.941518	522.51	0.560458	461.9	217.79	0	3.62	1249.43	8.17	1247.21	8.15	-2.22	-0.18
58	154	96	38	2464	0.939113	523.44	0.561688	461.6	228.24	0.81	3.55	1255.08	8.15	1253.04	8.14	-2.04	-0.16
58	155	97	39	2480	0.936691	524.35	0.562903	461.31	238.87	0	3.48	1258.95	8.12	1256.66	8.11	-2.29	-0.18
58	156	98	40	2496	0.934254	525.23	0.564103	461.03	249.67	0.8	3.41	1264.27	8.1	1262.17	8.09	-2.1	-0.17
58	157	99	41	2512	0.931803	526.09	0.565287	460.77	260.65	0	3.34	1267.83	8.08	1265.47	8.06	-2.35	-0.19
58	158	100	42	2528	0.929338	526.92	0.566456	460.53	271.8	0.8	3.27	1272.82	8.06	1270.65	8.04	-2.16	-0.17
58	159	101	43	2544	0.926862	527.73	0.56761	460.3	283.12	0	3.21	1276.06	8.03	1273.66	8.01	-2.41	-0.19
58	160	102	44	2560	0.924375	528.52	0.56875	460.08	294.6	0.79	3.15	1280.74	8	1278.53	7.99	-2.22	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
58	161	103	45	2576	0.921878	529.29	0.569876	459.87	306.24	0	3.09	1283.69	7.97	1281.24	7.96	-2.45	-0.19
58	162	104	46	2592	0.919372	530.03	0.570988	459.68	318.04	0.79	3.03	1288.07	7.95	1285.8	7.94	-2.27	-0.18
58	163	105	47	2608	0.916858	530.76	0.572086	459.5	329.99	0	2.98	1290.73	7.92	1288.23	7.9	-2.5	-0.19
58	164	106	48	2624	0.914337	531.46	0.573171	459.33	342.1	0.78	2.93	1294.82	7.9	1292.5	7.88	-2.31	-0.18
58	165	107	49	2640	0.911809	532.14	0.574242	459.17	354.35	0	2.87	1297.2	7.86	1294.66	7.85	-2.55	-0.2
58	166	108	50	2656	0.909276	532.81	0.575301	459.03	366.75	0.78	2.82	1301.01	7.84	1298.65	7.82	-2.36	-0.18
58	167	109	51	2672	0.906737	533.45	0.576347	458.9	379.3	0	2.77	1303.13	7.8	1300.53	7.79	-2.6	-0.2
58	168	110	52	2688	0.904195	534.08	0.577381	458.77	391.99	0.77	2.73	1306.66	7.78	1304.25	7.76	-2.41	-0.19
58	169	111	53	2704	0.901649	534.68	0.578402	458.66	404.81	0	2.68	1308.52	7.74	1305.87	7.73	-2.65	-0.2
58	170	112	54	2720	0.8991	535.27	0.579412	458.56	417.78	0.77	2.63	1311.79	7.72	1309.32	7.7	-2.47	-0.19
58	171	113	55	2736	0.896549	535.85	0.580409	458.47	430.87	0	2.59	1313.4	7.68	1310.7	7.66	-2.71	-0.21
58	172	114	56	2752	0.893997	536.4	0.581395	458.39	444.1	0.76	2.55	1316.42	7.65	1313.89	7.64	-2.53	-0.19
58	173	115	57	2768	0.891443	536.94	0.58237	458.31	457.46	0	2.51	1317.79	7.62	1315.02	7.6	-2.77	-0.21
58	174	116	58	2784	0.888889	537.46	0.583333	458.25	470.94	0.76	2.47	1320.57	7.59	1317.96	7.57	-2.6	-0.2
58	175	117	59	2800	0.886335	537.97	0.584286	458.2	484.56	0	2.43	1321.7	7.55	1318.86	7.54	-2.84	-0.22
58	176	118	60	2816	0.883781	538.46	0.585227	458.15	498.29	0.75	2.39	1324.24	7.52	1321.56	7.51	-2.68	-0.2
58	177	119	61	2832	0.881228	538.94	0.586158	458.12	512.14	0	2.35	1325.15	7.49	1322.23	7.47	-2.93	-0.22
58	178	120	62	2848	0.878677	539.4	0.587079	458.09	526.12	0.75	2.32	1327.46	7.46	1324.69	7.44	-2.77	-0.21
58	179	121	63	2864	0.876127	539.85	0.587989	458.07	540.21	0	2.28	1328.15	7.42	1325.13	7.4	-3.02	-0.23
58	180	122	64	2880	0.87358	540.28	0.588889	458.06	554.41	0.75	2.25	1330.24	7.39	1327.37	7.37	-2.87	-0.22
58	181	123	65	2896	0.871036	540.7	0.589779	458.06	568.73	0	2.21	1330.72	7.35	1327.6	7.33	-3.12	-0.24
58	182	124	66	2912	0.868494	541.11	0.590659	458.06	583.16	0.74	2.18	1332.59	7.32	1329.61	7.31	-2.98	-0.22
58	183	125	67	2928	0.865956	541.5	0.59153	458.08	597.7	0	2.15	1332.87	7.28	1329.63	7.27	-3.24	-0.24
58	184	126	68	2944	0.863422	541.88	0.592391	458.1	612.35	0.74	2.12	1334.53	7.25	1331.42	7.24	-3.11	-0.23
58	185	127	69	2960	0.860891	542.25	0.593243	458.12	627.1	0	2.09	1334.61	7.21	1331.24	7.2	-3.37	-0.25
58	186	128	70	2976	0.858365	542.6	0.594086	458.16	641.96	0.73	2.06	1336.07	7.18	1332.82	7.17	-3.25	-0.24
58	187	129	71	2992	0.855844	542.95	0.59492	458.2	656.92	0	2.03	1335.96	7.14	1332.44	7.13	-3.52	-0.26
58	188	130	72	3008	0.853327	543.28	0.595745	458.25	671.98	0.73	2	1337.23	7.11	1333.82	7.09	-3.4	-0.26
58	189	131	73	3024	0.850816	543.6	0.596561	458.3	687.14	0	1.97	1336.93	7.07	1333.25	7.05	-3.69	-0.28
58	190	132	74	3040	0.84831	543.91	0.597368	458.36	702.4	0.73	1.95	1338	7.04	1334.43	7.02	-3.58	-0.27
58	191	133	75	3056	0.84581	544.21	0.598168	458.43	717.75	0	1.92	1337.53	7	1333.67	6.98	-3.86	-0.29
58	192	134	76	3072	0.843316	544.49	0.598958	458.5	733.2	0.72	1.9	1338.42	6.97	1334.65	6.95	-3.77	-0.28
58	193	135	77	3088	0.840828	544.77	0.599741	458.58	748.75	0	1.87	1337.77	6.93	1333.71	6.91	-4.06	-0.3
58	194	136	78	3104	0.838346	545.04	0.600515	458.67	764.38	0.72	1.85	1338.48	6.9	1334.51	6.88	-3.97	-0.3
58	195	137	79	3120	0.835871	545.29	0.601282	458.76	780.1	0	1.82	1337.67	6.86	1333.39	6.84	-4.28	-0.32
58	196	138	80	3136	0.833403	545.54	0.602041	458.86	795.92	0.71	1.8	1338.2	6.83	1334	6.81	-4.2	-0.31
58	197	139	81	3152	0.830941	545.78	0.602792	458.96	811.82	0	1.78	1337.22	6.79	1332.71	6.77	-4.51	-0.34
58	198	140	82	3168	0.828487	546.01	0.603535	459.07	827.81	0.71	1.76	1337.59	6.76	1333.14	6.73	-4.44	-0.33
58	199	141	83	3184	0.82604	546.22	0.604271	459.18	843.88	0	1.73	1336.45	6.72	1331.68	6.69	-4.76	-0.36
58	200	142	84	3200	0.8236	546.43	0.605	459.3	860.04	0.71	1.71	1336.65	6.68	1331.94	6.66	-4.7	-0.35
58	201	143	85	3216	0.821168	546.64	0.605721	459.42	876.28	0	1.69	1335.36	6.64	1330.32	6.62	-5.04	-0.38
58	202	144	86	3232	0.818743	546.83	0.606436	459.55	892.6	0.7	1.67	1335.4	6.61	1330.41	6.59	-4.99	-0.37
58	203	145	87	3248	0.816327	547.01	0.607143	459.68	909	0	1.65	1333.96	6.57	1328.63	6.54	-5.33	-0.4
58	204	146	88	3264	0.813918	547.19	0.607843	459.82	925.48	0.7	1.63	1333.84	6.54	1328.55	6.51	-5.29	-0.4
58	205	147	89	3280	0.811517	547.35	0.608537	459.97	942.04	0	1.61	1332.26	6.5	1326.62	6.47	-5.64	-0.43
58	206	148	90	3296	0.809124	547.51	0.609223	460.11	958.67	0.7	1.6	1331.99	6.47	1326.38	6.44	-5.61	-0.42

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
59	117	58	-1	1872	0.999927	464.05	0.497863	505.34	0.21	0	9.65	912.06	7.8	919.45	7.86	7.39	0.8
59	118	59	0	1888	1	466.72	0.5	503.89	0	-0.92	10	926.47	7.85	933.58	7.91	7.11	0.76
59	119	60	1	1904	0.999929	469.32	0.502101	502.49	0.2	0	9.65	941.64	7.91	947.14	7.96	5.5	0.58
59	120	61	2	1920	0.999722	471.85	0.504167	501.14	0.81	-0.91	9.32	954.61	7.96	960.6	8.01	5.99	0.62
59	121	62	3	1936	0.999385	474.31	0.506198	499.85	1.81	0	9.01	969.05	8.01	973.49	8.05	4.44	0.46
59	122	63	4	1952	0.998925	476.7	0.508197	498.59	3.19	-0.91	8.71	981.33	8.04	986.32	8.08	4.99	0.51
59	123	64	5	1968	0.998348	479.02	0.510163	497.39	4.94	0	8.43	995.09	8.09	998.58	8.12	3.5	0.35
59	124	65	6	1984	0.997659	481.28	0.512097	496.22	7.06	-0.9	8.16	1006.7	8.12	1010.8	8.15	4.1	0.41
59	125	66	7	2000	0.996864	483.48	0.514	495.1	9.53	0	7.9	1019.8	8.16	1022.46	8.18	2.66	0.26
59	126	67	8	2016	0.995969	485.62	0.515873	494.02	12.35	-0.89	7.66	1030.79	8.18	1034.09	8.21	3.3	0.32
59	127	68	9	2032	0.994978	487.7	0.517717	492.98	15.5	0	7.43	1043.25	8.21	1045.16	8.23	1.91	0.18
59	128	69	10	2048	0.993896	489.72	0.519531	491.97	18.99	-0.88	7.2	1053.63	8.23	1056.23	8.25	2.6	0.25
59	129	70	11	2064	0.992729	491.69	0.521318	491	22.8	0	6.99	1065.49	8.26	1066.75	8.27	1.25	0.12
59	130	71	12	2080	0.991479	493.61	0.523077	490.07	26.93	-0.88	6.79	1075.3	8.27	1077.28	8.29	1.98	0.18
59	131	72	13	2096	0.990152	495.47	0.524809	489.17	31.37	0	6.59	1086.58	8.29	1087.26	8.3	0.67	0.06
59	132	73	14	2112	0.988751	497.28	0.526515	488.3	36.1	-0.87	6.41	1095.84	8.3	1097.27	8.31	1.43	0.13
59	133	74	15	2128	0.98728	499.05	0.528195	487.47	41.14	0	6.23	1106.57	8.32	1106.73	8.32	0.16	0.01
59	134	75	16	2144	0.985743	500.77	0.529851	486.67	46.46	-0.86	6.06	1115.3	8.32	1116.25	8.33	0.95	0.09
59	135	76	17	2160	0.984143	502.44	0.531481	485.89	52.06	0	5.89	1125.5	8.34	1125.22	8.33	-0.28	-0.03
59	136	77	18	2176	0.982483	504.06	0.533088	485.15	57.94	-0.86	5.74	1133.73	8.34	1134.26	8.34	0.53	0.05
59	137	78	19	2192	0.980766	505.65	0.534672	484.43	64.09	0	5.59	1143.42	8.35	1142.75	8.34	-0.67	-0.06
59	138	79	20	2208	0.978996	507.19	0.536232	483.74	70.5	-0.85	5.44	1151.16	8.34	1151.33	8.34	0.17	0.01
59	139	80	21	2224	0.977175	508.69	0.53777	483.08	77.17	0	5.3	1160.37	8.35	1159.36	8.34	-1.01	-0.09
59	140	81	22	2240	0.975306	510.15	0.539286	482.44	84.09	-0.85	5.17	1167.64	8.34	1167.49	8.34	-0.15	-0.01
59	141	82	23	2256	0.973392	511.57	0.54078	481.83	91.27	0	5.04	1176.38	8.34	1175.08	8.33	-1.3	-0.11
59	142	83	24	2272	0.971434	512.95	0.542254	481.24	98.68	-0.84	4.92	1183.21	8.33	1182.79	8.33	-0.42	-0.04
59	143	84	25	2288	0.969436	514.29	0.543706	480.67	106.33	0	4.8	1191.5	8.33	1189.95	8.32	-1.55	-0.13
59	144	85	26	2304	0.9674	515.6	0.545139	480.13	114.22	-0.83	4.68	1197.91	8.32	1197.25	8.31	-0.66	-0.05
59	145	86	27	2320	0.965327	516.88	0.546552	479.6	122.33	0	4.57	1205.77	8.32	1204	8.3	-1.77	-0.15
59	146	87	28	2336	0.96322	518.12	0.547945	479.1	130.66	-0.83	4.47	1211.76	8.3	1210.9	8.29	-0.86	-0.07
59	147	88	29	2352	0.961081	519.33	0.54932	478.62	139.21	0	4.37	1219.2	8.29	1217.26	8.28	-1.95	-0.16
59	148	89	30	2368	0.958912	520.5	0.550676	478.16	147.98	-0.82	4.27	1224.8	8.28	1223.77	8.27	-1.03	-0.08
59	149	90	31	2384	0.956714	521.64	0.552013	477.72	156.96	0	4.17	1231.85	8.27	1229.75	8.25	-2.1	-0.17
59	150	91	32	2400	0.954489	522.76	0.553333	477.3	166.14	-0.82	4.08	1237.07	8.25	1235.89	8.24	-1.18	-0.1
59	151	92	33	2416	0.952239	523.84	0.554636	476.9	175.52	0	3.99	1243.73	8.24	1241.5	8.22	-2.23	-0.18
59	152	93	34	2432	0.949965	524.89	0.555921	476.51	185.1	-0.81	3.91	1248.59	8.21	1247.29	8.21	-1.3	-0.1
59	153	94	35	2448	0.94767	525.92	0.55719	476.14	194.88	0	3.83	1254.88	8.2	1252.54	8.19	-2.35	-0.19
59	154	95	36	2464	0.945353	526.92	0.558442	475.79	204.84	-0.81	3.75	1259.39	8.18	1257.98	8.17	-1.41	-0.11
59	155	96	37	2480	0.943018	527.89	0.559677	475.46	214.99	0	3.67	1265.33	8.16	1262.89	8.15	-2.44	-0.19
59	156	97	38	2496	0.940664	528.83	0.560897	475.14	225.33	-0.8	3.59	1269.49	8.14	1268	8.13	-1.5	-0.12
59	157	98	39	2512	0.938294	529.75	0.562102	474.84	235.84	0	3.52	1275.09	8.12	1272.57	8.11	-2.52	-0.2
59	158	99	40	2528	0.935908	530.65	0.563291	474.55	246.53	-0.8	3.45	1278.93	8.09	1277.35	8.08	-1.58	-0.12
59	159	100	41	2544	0.933507	531.52	0.564465	474.28	257.39	0	3.39	1284.2	8.08	1281.61	8.06	-2.59	-0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
59	160	101	42	2560	0.931094	532.36	0.565625	474.02	268.42	-0.79	3.32	1287.72	8.05	1286.08	8.04	-1.65	-0.13
59	161	102	43	2576	0.928668	533.19	0.56677	473.77	279.62	0	3.26	1292.68	8.03	1290.02	8.01	-2.65	-0.21
59	162	103	44	2592	0.926231	533.99	0.567901	473.54	290.98	-0.79	3.2	1295.9	8	1294.19	7.99	-1.71	-0.13
59	163	104	45	2608	0.923783	534.77	0.569018	473.32	302.5	0	3.14	1300.54	7.98	1297.83	7.96	-2.71	-0.21
59	164	105	46	2624	0.921327	535.52	0.570122	473.12	314.18	-0.78	3.08	1303.47	7.95	1301.71	7.94	-1.77	-0.14
59	165	106	47	2640	0.918861	536.26	0.571212	472.93	326.02	0	3.02	1307.82	7.93	1305.06	7.91	-2.77	-0.21
59	166	107	48	2656	0.916388	536.97	0.572289	472.75	338	-0.78	2.97	1310.47	7.89	1308.65	7.88	-1.82	-0.14
59	167	108	49	2672	0.913909	537.67	0.573353	472.58	350.13	0	2.92	1314.54	7.87	1311.72	7.85	-2.82	-0.21
59	168	109	50	2688	0.911423	538.35	0.574405	472.42	362.41	-0.77	2.87	1316.91	7.84	1315.03	7.83	-1.88	-0.14
59	169	110	51	2704	0.908932	539	0.575444	472.28	374.84	0	2.82	1320.7	7.81	1317.83	7.8	-2.87	-0.22
59	170	111	52	2720	0.906436	539.64	0.576471	472.14	387.4	-0.77	2.77	1322.82	7.78	1320.88	7.77	-1.94	-0.15
59	171	112	53	2736	0.903936	540.26	0.577485	472.02	400.11	0	2.72	1326.33	7.76	1323.41	7.74	-2.93	-0.22
59	172	113	54	2752	0.901433	540.86	0.578488	471.91	412.95	-0.76	2.68	1328.2	7.72	1326.2	7.71	-2	-0.15
59	173	114	55	2768	0.898927	541.45	0.57948	471.81	425.92	0	2.63	1331.46	7.7	1328.47	7.68	-2.99	-0.23
59	174	115	56	2784	0.89642	542.02	0.58046	471.71	439.03	-0.76	2.59	1333.07	7.66	1331.01	7.65	-2.07	-0.16
59	175	116	57	2800	0.89391	542.57	0.581429	471.63	452.26	0	2.55	1336.09	7.63	1333.03	7.62	-3.06	-0.23
59	176	117	58	2816	0.8914	543.1	0.582386	471.56	465.62	-0.75	2.51	1337.47	7.6	1335.33	7.59	-2.14	-0.16
59	177	118	59	2832	0.888889	543.62	0.583333	471.49	479.11	0	2.47	1340.24	7.57	1337.11	7.55	-3.13	-0.23
59	178	119	60	2848	0.886378	544.13	0.58427	471.44	492.72	-0.75	2.43	1341.39	7.54	1339.17	7.52	-2.22	-0.17
59	179	120	61	2864	0.883868	544.62	0.585196	471.4	506.45	0	2.39	1343.92	7.51	1340.71	7.49	-3.21	-0.24
59	180	121	62	2880	0.881358	545.09	0.586111	471.36	520.3	-0.75	2.35	1344.85	7.47	1342.54	7.46	-2.31	-0.17
59	181	122	63	2896	0.87885	545.55	0.587017	471.33	534.27	0	2.32	1347.16	7.44	1343.86	7.42	-3.31	-0.25
59	182	123	64	2912	0.876343	546	0.587912	471.31	548.36	-0.74	2.28	1347.88	7.41	1345.46	7.39	-2.42	-0.18
59	183	124	65	2928	0.873839	546.43	0.588798	471.3	562.55	0	2.25	1349.97	7.38	1346.56	7.36	-3.41	-0.25
59	184	125	66	2944	0.871337	546.85	0.589674	471.3	576.86	-0.74	2.22	1350.48	7.34	1347.95	7.33	-2.53	-0.19
59	185	126	67	2960	0.868839	547.25	0.590541	471.3	591.28	0	2.18	1352.36	7.31	1348.83	7.29	-3.53	-0.26
59	186	127	68	2976	0.866343	547.65	0.591398	471.31	605.8	-0.73	2.15	1352.66	7.27	1350.01	7.26	-2.66	-0.2
59	187	128	69	2992	0.863851	548.03	0.592246	471.33	620.43	0	2.12	1354.33	7.24	1350.67	7.22	-3.66	-0.27
59	188	129	70	3008	0.861363	548.39	0.593085	471.36	635.17	-0.73	2.09	1354.45	7.2	1351.65	7.19	-2.8	-0.21
59	189	130	71	3024	0.858879	548.75	0.593915	471.39	650.01	0	2.06	1355.92	7.17	1352.11	7.15	-3.8	-0.28
59	190	131	72	3040	0.856399	549.09	0.594737	471.43	664.94	-0.73	2.04	1355.84	7.14	1352.89	7.12	-2.95	-0.22
59	191	132	73	3056	0.853924	549.43	0.59555	471.48	679.98	0	2.01	1357.12	7.11	1353.16	7.08	-3.96	-0.29
59	192	133	74	3072	0.851454	549.75	0.596354	471.53	695.12	-0.72	1.98	1356.86	7.07	1353.74	7.05	-3.12	-0.23
59	193	134	75	3088	0.848989	550.06	0.59715	471.59	710.35	0	1.96	1357.95	7.04	1353.81	7.01	-4.14	-0.31
59	194	135	76	3104	0.84653	550.36	0.597938	471.66	725.68	-0.72	1.93	1357.51	7	1354.2	6.98	-3.31	-0.24
59	195	136	77	3120	0.844076	550.65	0.598718	471.73	741.11	0	1.9	1358.42	6.97	1354.09	6.94	-4.33	-0.32
59	196	137	78	3136	0.841628	550.93	0.59949	471.81	756.62	-0.71	1.88	1357.81	6.93	1354.3	6.91	-3.51	-0.26
59	197	138	79	3152	0.839187	551.19	0.600254	471.89	772.23	0	1.86	1358.54	6.9	1354	6.87	-4.54	-0.34
59	198	139	80	3168	0.836751	551.45	0.60101	471.98	787.92	-0.71	1.83	1357.76	6.86	1354.03	6.84	-3.74	-0.28
59	199	140	81	3184	0.834322	551.7	0.601759	472.08	803.7	0	1.81	1358.33	6.83	1353.55	6.8	-4.77	-0.35
59	200	141	82	3200	0.8319	551.94	0.6025	472.18	819.57	-0.71	1.79	1357.39	6.79	1353.41	6.77	-3.98	-0.29
59	201	142	83	3216	0.829484	552.17	0.603234	472.29	835.53	0	1.77	1357.78	6.76	1352.76	6.73	-5.02	-0.37
59	202	143	84	3232	0.827076	552.39	0.60396	472.4	851.57	-0.7	1.74	1356.68	6.72	1352.45	6.7	-4.23	-0.31
59	203	144	85	3248	0.824674	552.61	0.60468	472.52	867.69	0	1.72	1356.91	6.68	1351.63	6.66	-5.28	-0.39
59	204	145	86	3264	0.82228	552.81	0.605392	472.64	883.89	-0.7	1.7	1355.66	6.65	1351.15	6.62	-4.51	-0.33
59	205	146	87	3280	0.819893	553	0.606098	472.77	900.18	0	1.68	1355.73	6.61	1350.17	6.59	-5.57	-0.41

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
59	206	147	88	3296	0.817513	553.19	0.606796	472.9	916.54	-0.7	1.66	1354.33	6.57	1349.53	6.55	-4.81	-0.36
59	207	148	89	3312	0.815142	553.37	0.607488	473.04	932.98	0	1.64	1354.25	6.54	1348.38	6.51	-5.87	-0.44
59	208	149	90	3328	0.812777	553.54	0.608173	473.18	949.5	-0.69	1.62	1352.71	6.5	1347.58	6.48	-5.13	-0.38
59	209	150	91	3344	0.810421	553.7	0.608852	473.33	966.09	0	1.61	1352.48	6.47	1346.29	6.44	-6.2	-0.46
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
60	119	59	-1	1904	0.999929	469.32	0.497899	519.67	0.2	0	9.65	924.46	7.77	931.93	7.83	7.47	0.8
60	120	60	0	1920	1	471.98	0.5	518.2	0	0.91	10	940.73	7.84	947.18	7.89	6.45	0.68
60	121	61	1	1936	0.999932	474.56	0.502066	516.79	0.2	0	9.66	954.1	7.89	959.7	7.93	5.6	0.58
60	122	62	2	1952	0.999731	477.08	0.504098	515.43	0.8	0.91	9.33	968.94	7.94	974.27	7.99	5.34	0.55
60	123	63	3	1968	0.999405	479.53	0.506098	514.11	1.78	0	9.03	981.61	7.98	986.16	8.02	4.55	0.46
60	124	64	4	1984	0.998959	481.91	0.508065	512.84	3.14	0.9	8.73	995.75	8.03	1000.09	8.07	4.34	0.43
60	125	65	5	2000	0.9984	484.22	0.51	511.62	4.86	0	8.45	1007.75	8.06	1011.36	8.09	3.61	0.36
60	126	66	6	2016	0.997732	486.48	0.511905	510.44	6.94	0.89	8.19	1021.22	8.1	1024.67	8.13	3.45	0.34
60	127	67	7	2032	0.996962	488.67	0.51378	509.3	9.38	0	7.93	1032.59	8.13	1035.36	8.15	2.78	0.27
60	128	68	8	2048	0.996094	490.8	0.515625	508.2	12.15	0.88	7.69	1045.42	8.17	1048.08	8.19	2.66	0.25
60	129	69	9	2064	0.995133	492.88	0.517442	507.14	15.26	0	7.46	1056.17	8.19	1058.21	8.2	2.03	0.19
60	130	70	10	2080	0.994083	494.9	0.519231	506.12	18.7	0.88	7.24	1068.39	8.22	1070.35	8.23	1.96	0.18
60	131	71	11	2096	0.992949	496.87	0.520992	505.13	22.46	0	7.03	1078.57	8.23	1079.95	8.24	1.38	0.13
60	132	72	12	2112	0.991736	498.79	0.522727	504.18	26.52	0.87	6.83	1090.21	8.26	1091.54	8.27	1.34	0.12
60	133	73	13	2128	0.990446	500.65	0.524436	503.27	30.9	0	6.63	1099.82	8.27	1100.62	8.28	0.8	0.07
60	134	74	14	2144	0.989084	502.46	0.526119	502.38	35.57	0.86	6.45	1110.9	8.29	1111.69	8.3	0.79	0.07
60	135	75	15	2160	0.987654	504.23	0.527778	501.53	40.53	0	6.27	1119.98	8.3	1120.27	8.3	0.29	0.03
60	136	76	16	2176	0.986159	505.95	0.529412	500.71	45.78	0.86	6.1	1130.52	8.31	1130.83	8.31	0.31	0.03
60	137	77	17	2192	0.984602	507.62	0.531022	499.92	51.31	0	5.94	1139.09	8.31	1138.94	8.31	-0.15	-0.01
60	138	78	18	2208	0.982987	509.26	0.532609	499.16	57.1	0.85	5.78	1149.12	8.33	1149.01	8.33	-0.11	-0.01
60	139	79	19	2224	0.981316	510.84	0.534173	498.42	63.17	0	5.63	1157.19	8.33	1156.66	8.32	-0.54	-0.05
60	140	80	20	2240	0.979592	512.39	0.535714	497.72	69.5	0.85	5.49	1166.73	8.33	1166.26	8.33	-0.47	-0.04
60	141	81	21	2256	0.977818	513.89	0.537234	497.04	76.08	0	5.35	1174.34	8.33	1173.46	8.32	-0.87	-0.07
60	142	82	22	2272	0.975997	515.36	0.538732	496.38	82.92	0.84	5.22	1183.4	8.33	1182.61	8.33	-0.78	-0.07
60	143	83	23	2288	0.974131	516.78	0.54021	495.75	90	0	5.09	1190.55	8.33	1189.39	8.32	-1.16	-0.1
60	144	84	24	2304	0.972222	518.17	0.541667	495.15	97.32	0.83	4.97	1199.16	8.33	1198.11	8.32	-1.05	-0.09
60	145	85	25	2320	0.970273	519.53	0.543103	494.56	104.88	0	4.85	1205.88	8.32	1204.47	8.31	-1.41	-0.12
60	146	86	26	2336	0.968287	520.84	0.544521	494	112.66	0.83	4.73	1214.05	8.32	1212.76	8.31	-1.29	-0.11
60	147	87	27	2352	0.966264	522.13	0.545918	493.47	120.67	0	4.62	1220.36	8.3	1218.73	8.29	-1.62	-0.13
60	148	88	28	2368	0.964207	523.38	0.547297	492.95	128.91	0.82	4.52	1228.11	8.3	1226.62	8.29	-1.48	-0.12
60	149	89	29	2384	0.962119	524.59	0.548658	492.46	137.36	0	4.42	1234.01	8.28	1232.21	8.27	-1.8	-0.15
60	150	90	30	2400	0.96	525.78	0.55	491.98	146.02	0.82	4.32	1241.36	8.28	1239.71	8.26	-1.65	-0.13
60	151	91	31	2416	0.957853	526.93	0.551325	491.53	154.89	0	4.22	1246.88	8.26	1244.92	8.24	-1.96	-0.16
60	152	92	32	2432	0.955679	528.05	0.552632	491.09	163.97	0.81	4.13	1253.83	8.25	1252.04	8.24	-1.79	-0.14
60	153	93	33	2448	0.953479	529.14	0.553922	490.67	173.24	0	4.04	1258.98	8.23	1256.9	8.22	-2.08	-0.17
60	154	94	34	2464	0.951257	530.21	0.555195	490.27	182.71	0.81	3.96	1265.57	8.22	1263.65	8.21	-1.91	-0.15
60	155	95	35	2480	0.949011	531.24	0.556452	489.89	192.38	0	3.87	1270.36	8.2	1268.17	8.18	-2.19	-0.17
60	156	96	36	2496	0.946746	532.25	0.557692	489.52	202.23	0.8	3.79	1276.58	8.18	1274.57	8.17	-2.02	-0.16
60	157	97	37	2512	0.94446	533.23	0.558917	489.18	212.27	0	3.72	1281.03	8.16	1278.75	8.14	-2.28	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
60	158	98	38	2528	0.942157	534.19	0.560127	488.84	222.49	0.8	3.64	1286.91	8.14	1284.81	8.13	-2.1	-0.16
60	159	99	39	2544	0.939836	535.12	0.561321	488.53	232.89	0	3.57	1291.03	8.12	1288.67	8.1	-2.36	-0.18
60	160	100	40	2560	0.9375	536.03	0.5625	488.23	243.47	0.79	3.5	1296.57	8.1	1294.39	8.09	-2.17	-0.17
60	161	101	41	2576	0.935149	536.91	0.563665	487.94	254.22	0	3.43	1300.37	8.08	1297.94	8.06	-2.43	-0.19
60	162	102	42	2592	0.932785	537.77	0.564815	487.67	265.13	0.79	3.37	1305.59	8.06	1303.35	8.05	-2.24	-0.17
60	163	103	43	2608	0.930408	538.6	0.565951	487.41	276.21	0	3.3	1309.08	8.03	1306.6	8.02	-2.48	-0.19
60	164	104	44	2624	0.928019	539.41	0.567073	487.17	287.46	0.78	3.24	1313.99	8.01	1311.69	8	-2.29	-0.17
60	165	105	45	2640	0.92562	540.2	0.568182	486.94	298.86	0	3.18	1317.18	7.98	1314.65	7.97	-2.54	-0.19
60	166	106	46	2656	0.923211	540.97	0.569277	486.72	310.42	0.78	3.12	1321.79	7.96	1319.44	7.95	-2.35	-0.18
60	167	107	47	2672	0.920793	541.72	0.570359	486.51	322.13	0	3.07	1324.7	7.93	1322.11	7.92	-2.58	-0.2
60	168	108	48	2688	0.918367	542.45	0.571429	486.32	334	0.77	3.01	1329.01	7.91	1326.62	7.9	-2.39	-0.18
60	169	109	49	2704	0.915934	543.16	0.572485	486.14	346.01	0	2.96	1331.65	7.88	1329.02	7.86	-2.63	-0.2
60	170	110	50	2720	0.913495	543.84	0.573529	485.98	358.17	0.77	2.91	1335.68	7.86	1333.24	7.84	-2.44	-0.18
60	171	111	51	2736	0.91105	544.51	0.574561	485.82	370.48	0	2.86	1338.05	7.82	1335.37	7.81	-2.68	-0.2
60	172	112	52	2752	0.908599	545.16	0.575581	485.67	382.92	0.76	2.81	1341.81	7.8	1339.32	7.79	-2.49	-0.19
60	173	113	53	2768	0.906145	545.8	0.57659	485.54	395.51	0	2.76	1343.92	7.77	1341.19	7.75	-2.73	-0.2
60	174	114	54	2784	0.903686	546.41	0.577586	485.42	408.23	0.76	2.72	1347.42	7.74	1344.88	7.73	-2.54	-0.19
60	175	115	55	2800	0.901224	547.01	0.578571	485.3	421.08	0	2.67	1349.28	7.71	1346.5	7.69	-2.78	-0.21
60	176	116	56	2816	0.89876	547.59	0.579545	485.2	434.07	0.75	2.63	1352.53	7.68	1349.93	7.67	-2.6	-0.19
60	177	117	57	2832	0.896294	548.15	0.580508	485.11	447.18	0	2.59	1354.15	7.65	1351.31	7.63	-2.84	-0.21
60	178	118	58	2848	0.893827	548.7	0.581461	485.03	460.42	0.75	2.54	1357.15	7.62	1354.48	7.61	-2.66	-0.2
60	179	119	59	2864	0.891358	549.23	0.582402	484.95	473.79	0	2.5	1358.53	7.59	1355.63	7.57	-2.9	-0.21
60	180	120	60	2880	0.888889	549.75	0.583333	484.89	487.28	0.75	2.47	1361.3	7.56	1358.56	7.55	-2.73	-0.2
60	181	121	61	2896	0.88642	550.25	0.584254	484.83	500.89	0	2.43	1362.46	7.53	1359.48	7.51	-2.98	-0.22
60	182	122	62	2912	0.883951	550.74	0.585165	484.79	514.62	0.74	2.39	1364.99	7.5	1362.18	7.48	-2.81	-0.21
60	183	123	63	2928	0.881483	551.21	0.586066	484.75	528.47	0	2.36	1365.93	7.46	1362.87	7.45	-3.06	-0.22
60	184	124	64	2944	0.879017	551.67	0.586957	484.72	542.43	0.74	2.32	1368.24	7.44	1365.34	7.42	-2.9	-0.21
60	185	125	65	2960	0.876552	552.11	0.587838	484.7	556.5	0	2.29	1368.97	7.4	1365.81	7.38	-3.16	-0.23
60	186	126	66	2976	0.874089	552.54	0.58871	484.69	570.69	0.73	2.25	1371.06	7.37	1368.06	7.36	-3	-0.22
60	187	127	67	2992	0.871629	552.96	0.589572	484.68	584.99	0	2.22	1371.59	7.33	1368.33	7.32	-3.26	-0.24
60	188	128	68	3008	0.869172	553.37	0.590426	484.69	599.39	0.73	2.19	1373.47	7.31	1370.36	7.29	-3.12	-0.23
60	189	129	69	3024	0.866717	553.76	0.59127	484.7	613.9	0	2.16	1373.8	7.27	1370.42	7.25	-3.38	-0.25
60	190	130	70	3040	0.864266	554.14	0.592105	484.72	628.52	0.73	2.13	1375.48	7.24	1372.24	7.22	-3.24	-0.24
60	191	131	71	3056	0.861818	554.51	0.592932	484.74	643.23	0	2.1	1375.62	7.2	1372.1	7.18	-3.51	-0.26
60	192	132	72	3072	0.859375	554.86	0.59375	484.77	658.05	0.72	2.07	1377.1	7.17	1373.72	7.15	-3.39	-0.25
60	193	133	73	3088	0.856936	555.21	0.59456	484.81	672.97	0	2.04	1377.05	7.13	1373.39	7.12	-3.66	-0.27
60	194	134	74	3104	0.854501	555.54	0.595361	484.86	687.99	0.72	2.01	1378.34	7.1	1374.8	7.09	-3.54	-0.26
60	195	135	75	3120	0.852071	555.86	0.596154	484.91	703.11	0	1.99	1378.11	7.07	1374.28	7.05	-3.82	-0.28
60	196	136	76	3136	0.849646	556.17	0.596939	484.97	718.32	0.71	1.96	1379.22	7.04	1375.5	7.02	-3.71	-0.27
60	197	137	77	3152	0.847226	556.47	0.597716	485.04	733.62	0	1.94	1378.81	7	1374.8	6.98	-4	-0.29
60	198	138	78	3168	0.844812	556.76	0.598485	485.11	749.02	0.71	1.91	1379.73	6.97	1375.83	6.95	-3.9	-0.28
60	199	139	79	3184	0.842403	557.05	0.599246	485.19	764.5	0	1.89	1379.15	6.93	1374.95	6.91	-4.2	-0.31
60	200	140	80	3200	0.84	557.32	0.6	485.27	780.08	0.71	1.86	1379.91	6.9	1375.8	6.88	-4.11	-0.3
60	201	141	81	3216	0.837603	557.58	0.600746	485.36	795.75	0	1.84	1379.16	6.86	1374.75	6.84	-4.41	-0.32
60	202	142	82	3232	0.835212	557.83	0.601485	485.45	811.5	0.7	1.82	1379.74	6.83	1375.41	6.81	-4.33	-0.31
60	203	143	83	3248	0.832828	558.07	0.602217	485.56	827.34	0	1.8	1378.84	6.79	1374.19	6.77	-4.64	-0.34

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
60	204	144	84	3264	0.83045	558.3	0.602941	485.66	843.26	0.7	1.77	1379.25	6.76	1374.68	6.74	-4.57	-0.33
60	205	145	85	3280	0.828079	558.52	0.603659	485.77	859.26	0	1.75	1378.19	6.72	1373.3	6.7	-4.89	-0.36
60	206	146	86	3296	0.825714	558.74	0.604369	485.89	875.35	0.7	1.73	1378.45	6.69	1373.62	6.67	-4.83	-0.35
60	207	147	87	3312	0.823356	558.95	0.605072	486.01	891.52	0	1.71	1377.23	6.65	1372.07	6.63	-5.16	-0.38
60	208	148	88	3328	0.821006	559.14	0.605769	486.14	907.77	0.69	1.69	1377.33	6.62	1372.23	6.6	-5.11	-0.37
60	209	149	89	3344	0.818663	559.33	0.606459	486.27	924.1	0	1.67	1375.97	6.58	1370.52	6.56	-5.45	-0.4
60	210	150	90	3360	0.816327	559.52	0.607143	486.41	940.5	0.69	1.65	1375.92	6.55	1370.51	6.53	-5.41	-0.39
60	211	151	91	3376	0.813998	559.69	0.60782	486.55	956.98	0	1.63	1374.42	6.51	1368.66	6.49	-5.76	-0.42
60	212	152	92	3392	0.811677	559.85	0.608491	486.69	973.54	0.69	1.62	1374.22	6.48	1368.49	6.46	-5.73	-0.42
60	213	153	93	3408	0.809363	560.01	0.609155	486.84	990.17	0	1.6	1372.57	6.44	1366.49	6.42	-6.09	-0.45
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
61	121	60	-1	1936	0.999932	474.56	0.497934	534.16	0.2	0	9.66	936.73	7.74	944.28	7.8	7.54	0.8
61	122	61	0	1952	1	477.21	0.5	532.68	0	-0.91	10	951.21	7.8	958.47	7.86	7.26	0.76
61	123	62	1	1968	0.999934	479.78	0.502033	531.25	0.2	0	9.66	966.44	7.86	972.1	7.9	5.66	0.58
61	124	63	2	1984	0.99974	482.28	0.504032	529.87	0.78	-0.9	9.35	979.51	7.9	985.65	7.95	6.14	0.62
61	125	64	3	2000	0.999424	484.72	0.506	528.54	1.75	0	9.04	994.03	7.95	998.63	7.99	4.6	0.46
61	126	65	4	2016	0.998992	487.09	0.507937	527.25	3.09	-0.89	8.75	1006.43	7.99	1011.56	8.03	5.12	0.51
61	127	66	5	2032	0.99845	489.4	0.509843	526.01	4.78	0	8.48	1020.28	8.03	1023.92	8.06	3.64	0.36
61	128	67	6	2048	0.997803	491.65	0.511719	524.81	6.84	-0.88	8.21	1032.03	8.06	1036.25	8.1	4.22	0.41
61	129	68	7	2064	0.997055	493.83	0.513566	523.66	9.23	0	7.96	1045.24	8.1	1048.03	8.12	2.79	0.27
61	130	69	8	2080	0.996213	495.96	0.515385	522.54	11.97	-0.88	7.72	1056.37	8.13	1059.78	8.15	3.41	0.32
61	131	70	9	2096	0.99528	498.04	0.517176	521.46	15.03	0	7.49	1068.96	8.16	1070.99	8.18	2.03	0.19
61	132	71	10	2112	0.994261	500.06	0.518939	520.42	18.42	-0.87	7.27	1079.51	8.18	1082.2	8.2	2.69	0.25
61	133	72	11	2128	0.99316	502.02	0.520677	519.42	22.12	0	7.07	1091.5	8.21	1092.86	8.22	1.35	0.12
61	134	73	12	2144	0.99198	503.94	0.522388	518.45	26.13	-0.86	6.87	1101.48	8.22	1103.54	8.24	2.06	0.19
61	135	74	13	2160	0.990727	505.8	0.524074	517.52	30.44	0	6.67	1112.91	8.24	1113.67	8.25	0.76	0.07
61	136	75	14	2176	0.989403	507.61	0.525735	516.62	35.05	-0.86	6.49	1122.35	8.25	1123.84	8.26	1.49	0.13
61	137	76	15	2192	0.988012	509.38	0.527372	515.75	39.94	0	6.31	1133.24	8.27	1133.47	8.27	0.23	0.02
61	138	77	16	2208	0.986557	511.11	0.528986	514.91	45.12	-0.85	6.14	1142.16	8.28	1143.16	8.28	1	0.09
61	139	78	17	2224	0.985042	512.78	0.530576	514.11	50.57	0	5.98	1152.52	8.29	1152.29	8.29	-0.23	-0.02
61	140	79	18	2240	0.983469	514.42	0.532143	513.33	56.3	-0.85	5.83	1160.94	8.29	1161.51	8.3	0.57	0.05
61	141	80	19	2256	0.981842	516.01	0.533688	512.58	62.28	0	5.68	1170.81	8.3	1170.18	8.3	-0.63	-0.05
61	142	81	20	2272	0.980163	517.56	0.535211	511.85	68.53	-0.84	5.53	1178.76	8.3	1178.94	8.3	0.19	0.02
61	143	82	21	2288	0.978434	519.07	0.536713	511.16	75.03	0	5.4	1188.14	8.31	1187.16	8.3	-0.98	-0.08
61	144	83	22	2304	0.976659	520.54	0.538194	510.49	81.78	-0.83	5.26	1195.63	8.3	1195.49	8.3	-0.14	-0.01
61	145	84	23	2320	0.974839	521.97	0.539655	509.84	88.77	0	5.14	1204.56	8.31	1203.27	8.3	-1.29	-0.11
61	146	85	24	2336	0.972978	523.37	0.541096	509.22	96	-0.83	5.01	1211.6	8.3	1211.17	8.3	-0.43	-0.04
61	147	86	25	2352	0.971077	524.73	0.542517	508.62	103.46	0	4.9	1220.09	8.3	1218.54	8.29	-1.55	-0.13
61	148	87	26	2368	0.969138	526.05	0.543919	508.05	111.15	-0.82	4.78	1226.71	8.29	1226.04	8.28	-0.68	-0.06
61	149	88	27	2384	0.967164	527.34	0.545302	507.49	119.06	0	4.67	1234.77	8.29	1233	8.28	-1.78	-0.14
61	150	89	28	2400	0.965156	528.6	0.546667	506.96	127.2	-0.82	4.57	1240.99	8.27	1240.1	8.27	-0.89	-0.07
61	151	90	29	2416	0.963116	529.82	0.548013	506.45	135.55	0	4.46	1248.64	8.27	1246.67	8.26	-1.97	-0.16
61	152	91	30	2432	0.961046	531.02	0.549342	505.96	144.11	-0.81	4.37	1254.47	8.25	1253.39	8.25	-1.07	-0.09
61	153	92	31	2448	0.958947	532.18	0.550654	505.49	152.88	0	4.27	1261.72	8.25	1259.59	8.23	-2.13	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
61	154	93	32	2464	0.956822	533.31	0.551948	505.04	161.85	-0.81	4.18	1267.17	8.23	1265.95	8.22	-1.23	-0.1
61	155	94	33	2480	0.954672	534.41	0.553226	504.61	171.02	0	4.09	1274.05	8.22	1271.77	8.2	-2.28	-0.18
61	156	95	34	2496	0.952498	535.49	0.554487	504.19	180.39	-0.8	4	1279.14	8.2	1277.78	8.19	-1.36	-0.11
61	157	96	35	2512	0.950302	536.53	0.555732	503.8	189.94	0	3.92	1285.65	8.19	1283.25	8.17	-2.4	-0.19
61	158	97	36	2528	0.948085	537.55	0.556962	503.42	199.69	-0.8	3.84	1290.39	8.17	1288.91	8.16	-1.47	-0.11
61	159	98	37	2544	0.945849	538.54	0.558176	503.05	209.62	0	3.76	1296.54	8.15	1294.05	8.14	-2.5	-0.19
61	160	99	38	2560	0.943594	539.51	0.559375	502.71	219.73	-0.79	3.69	1300.95	8.13	1299.38	8.12	-1.57	-0.12
61	161	100	39	2576	0.941322	540.45	0.560559	502.38	230.02	0	3.62	1306.77	8.12	1304.18	8.1	-2.58	-0.2
61	162	101	40	2592	0.939034	541.37	0.561728	502.06	240.48	-0.79	3.55	1310.85	8.09	1309.19	8.08	-1.65	-0.13
61	163	102	41	2608	0.936731	542.26	0.562883	501.76	251.12	0	3.48	1316.34	8.08	1313.68	8.06	-2.66	-0.2
61	164	103	42	2624	0.934414	543.13	0.564024	501.48	261.92	-0.78	3.41	1320.1	8.05	1318.38	8.04	-1.73	-0.13
61	165	104	43	2640	0.932084	543.98	0.565152	501.21	272.88	0	3.35	1325.28	8.03	1322.55	8.02	-2.72	-0.21
61	166	105	44	2656	0.929743	544.8	0.566265	500.95	284.01	-0.78	3.28	1328.74	8	1326.95	7.99	-1.79	-0.14
61	167	106	45	2672	0.927391	545.6	0.567365	500.71	295.3	0	3.22	1333.61	7.99	1330.83	7.97	-2.78	-0.21
61	168	107	46	2688	0.925028	546.38	0.568452	500.48	306.75	-0.77	3.17	1336.79	7.96	1334.93	7.95	-1.85	-0.14
61	169	108	47	2704	0.922657	547.14	0.569527	500.26	318.34	0	3.11	1341.36	7.94	1338.52	7.92	-2.84	-0.21
61	170	109	48	2720	0.920277	547.88	0.570588	500.06	330.09	-0.77	3.05	1344.25	7.91	1342.34	7.9	-1.91	-0.14
61	171	110	49	2736	0.917889	548.6	0.571637	499.87	341.99	0	3	1348.54	7.89	1345.65	7.87	-2.89	-0.21
61	172	111	50	2752	0.915495	549.3	0.572674	499.69	354.03	-0.76	2.95	1351.16	7.86	1349.2	7.84	-1.96	-0.15
61	173	112	51	2768	0.913094	549.98	0.573699	499.52	366.22	0	2.9	1355.17	7.83	1352.23	7.82	-2.94	-0.22
61	174	113	52	2784	0.910688	550.64	0.574713	499.37	378.55	-0.76	2.85	1357.53	7.8	1355.52	7.79	-2.02	-0.15
61	175	114	53	2800	0.908278	551.29	0.575714	499.22	391.01	0	2.8	1361.28	7.78	1358.28	7.76	-3	-0.22
61	176	115	54	2816	0.905863	551.92	0.576705	499.09	403.61	-0.75	2.76	1363.39	7.75	1361.31	7.73	-2.08	-0.15
61	177	116	55	2832	0.903444	552.52	0.577684	498.96	416.35	0	2.71	1366.87	7.72	1363.82	7.71	-3.05	-0.22
61	178	117	56	2848	0.901023	553.12	0.578652	498.85	429.22	-0.75	2.67	1368.73	7.69	1366.6	7.68	-2.14	-0.16
61	179	118	57	2864	0.898599	553.69	0.579609	498.75	442.21	0	2.63	1371.97	7.66	1368.86	7.65	-3.11	-0.23
61	180	119	58	2880	0.896173	554.25	0.580556	498.65	455.33	-0.75	2.58	1373.6	7.63	1371.39	7.62	-2.21	-0.16
61	181	120	59	2896	0.893746	554.8	0.581492	498.57	468.58	0	2.54	1376.59	7.61	1373.41	7.59	-3.18	-0.23
61	182	121	60	2912	0.891317	555.33	0.582418	498.5	481.95	-0.74	2.5	1377.99	7.57	1375.71	7.56	-2.28	-0.17
61	183	122	61	2928	0.888889	555.84	0.583333	498.43	495.44	0	2.47	1380.75	7.55	1377.49	7.53	-3.26	-0.24
61	184	123	62	2944	0.88646	556.34	0.584239	498.38	509.06	-0.74	2.43	1381.92	7.51	1379.56	7.5	-2.36	-0.17
61	185	124	63	2960	0.884032	556.82	0.585135	498.33	522.78	0	2.39	1384.46	7.48	1381.12	7.47	-3.34	-0.24
61	186	125	64	2976	0.881605	557.29	0.586022	498.29	536.63	-0.73	2.36	1385.41	7.45	1382.96	7.44	-2.45	-0.18
61	187	126	65	2992	0.879179	557.75	0.586898	498.26	550.58	0	2.32	1387.73	7.42	1384.29	7.4	-3.43	-0.25
61	188	127	66	3008	0.876754	558.19	0.587766	498.24	564.65	-0.73	2.29	1388.47	7.39	1385.92	7.37	-2.56	-0.18
61	189	128	67	3024	0.874332	558.62	0.588624	498.23	578.83	0	2.26	1390.58	7.36	1387.04	7.34	-3.54	-0.26
61	190	129	68	3040	0.871911	559.04	0.589474	498.22	593.11	-0.73	2.22	1391.12	7.32	1388.45	7.31	-2.67	-0.19
61	191	130	69	3056	0.869494	559.44	0.590314	498.22	607.51	0	2.19	1393.02	7.29	1389.36	7.27	-3.66	-0.26
61	192	131	70	3072	0.867079	559.84	0.591146	498.23	622	-0.72	2.16	1393.37	7.26	1390.57	7.24	-2.8	-0.2
61	193	132	71	3088	0.864668	560.22	0.591969	498.25	636.6	0	2.13	1395.06	7.23	1391.27	7.21	-3.79	-0.27
61	194	133	72	3104	0.86226	560.58	0.592784	498.28	651.31	-0.72	2.1	1395.22	7.19	1392.28	7.18	-2.94	-0.21
61	195	134	73	3120	0.859855	560.94	0.59359	498.31	666.11	0	2.08	1396.72	7.16	1392.79	7.14	-3.93	-0.28
61	196	135	74	3136	0.857455	561.29	0.594388	498.35	681.01	-0.71	2.05	1396.69	7.13	1393.6	7.11	-3.09	-0.22
61	197	136	75	3152	0.855059	561.62	0.595178	498.39	696	0	2.02	1398.01	7.1	1393.92	7.08	-4.09	-0.29
61	198	137	76	3168	0.852668	561.94	0.59596	498.44	711.1	-0.71	1.99	1397.8	7.06	1394.54	7.04	-3.26	-0.23
61	199	138	77	3184	0.850282	562.25	0.596734	498.5	726.28	0	1.97	1398.93	7.03	1394.66	7.01	-4.26	-0.31

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
61	200	139	78	3200	0.8479	562.56	0.5975	498.57	741.56	-0.71	1.94	1398.55	6.99	1395.1	6.98	-3.45	-0.25
61	201	140	79	3216	0.845524	562.85	0.598259	498.64	756.93	0	1.92	1399.5	6.96	1395.05	6.94	-4.46	-0.32
61	202	141	80	3232	0.843153	563.13	0.59901	498.71	772.39	-0.7	1.89	1398.95	6.93	1395.31	6.91	-3.65	-0.26
61	203	142	81	3248	0.840787	563.4	0.599754	498.8	787.94	0	1.87	1399.73	6.9	1395.07	6.87	-4.66	-0.33
61	204	143	82	3264	0.838428	563.66	0.60049	498.88	803.58	-0.7	1.85	1399.02	6.86	1395.15	6.84	-3.87	-0.28
61	205	144	83	3280	0.836074	563.92	0.60122	498.98	819.3	0	1.83	1399.63	6.83	1394.74	6.8	-4.89	-0.35
61	206	145	84	3296	0.833726	564.16	0.601942	499.08	835.11	-0.7	1.8	1398.76	6.79	1394.65	6.77	-4.1	-0.29
61	207	146	85	3312	0.831385	564.4	0.602657	499.18	851	0	1.78	1399.2	6.76	1394.07	6.73	-5.13	-0.37
61	208	147	86	3328	0.82905	564.62	0.603365	499.29	866.98	-0.69	1.76	1398.18	6.72	1393.82	6.7	-4.36	-0.31
61	209	148	87	3344	0.826721	564.84	0.604067	499.41	883.03	0	1.74	1398.46	6.69	1393.07	6.67	-5.39	-0.39
61	210	149	88	3360	0.824399	565.05	0.604762	499.53	899.16	-0.69	1.72	1397.29	6.65	1392.66	6.63	-4.63	-0.33
61	211	150	89	3376	0.822084	565.25	0.60545	499.66	915.38	0	1.7	1397.42	6.62	1391.75	6.6	-5.67	-0.41
61	212	151	90	3392	0.819776	565.44	0.606132	499.79	931.67	-0.69	1.68	1396.1	6.59	1391.17	6.56	-4.93	-0.35
61	213	152	91	3408	0.817474	565.63	0.606808	499.92	948.04	0	1.66	1396.08	6.55	1390.1	6.53	-5.97	-0.43
61	214	153	92	3424	0.81518	565.8	0.607477	500.06	964.48	-0.68	1.64	1394.61	6.52	1389.38	6.49	-5.24	-0.38
61	215	154	93	3440	0.812893	565.97	0.60814	500.21	981	0	1.63	1394.45	6.49	1388.16	6.46	-6.29	-0.45
61	216	155	94	3456	0.810614	566.13	0.608796	500.36	997.59	-0.68	1.61	1392.85	6.45	1387.28	6.42	-5.57	-0.4
61	217	156	95	3472	0.808342	566.29	0.609447	500.51	1014.26	0	1.59	1392.54	6.42	1385.91	6.39	-6.63	-0.48
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
62	123	61	-1	1968	0.999934	479.78	0.497967	548.81	0.2	0	9.66	948.88	7.71	956.49	7.78	7.62	0.8
62	124	62	0	1984	1	482.41	0.5	547.31	0	0.9	10	965.18	7.78	971.79	7.84	6.62	0.68
62	125	63	1	2000	0.999936	484.97	0.502	545.87	0.19	0	9.67	978.64	7.83	984.4	7.88	5.76	0.58
62	126	64	2	2016	0.999748	487.46	0.503968	544.47	0.77	0.89	9.36	993.54	7.89	999.04	7.93	5.49	0.55
62	127	65	3	2032	0.999442	489.89	0.505906	543.12	1.72	0	9.06	1006.33	7.92	1011.02	7.96	4.7	0.46
62	128	66	4	2048	0.999023	492.25	0.507812	541.82	3.04	0.88	8.77	1020.55	7.97	1025.03	8.01	4.49	0.44
62	129	67	5	2064	0.998498	494.55	0.50969	540.56	4.71	0	8.5	1032.68	8.01	1036.42	8.03	3.75	0.36
62	130	68	6	2080	0.99787	496.79	0.511538	539.35	6.73	0.88	8.24	1046.25	8.05	1049.83	8.08	3.58	0.34
62	131	69	7	2096	0.997145	498.97	0.513359	538.17	9.09	0	7.99	1057.75	8.07	1060.65	8.1	2.9	0.27
62	132	70	8	2112	0.996327	501.09	0.515152	537.04	11.79	0.87	7.75	1070.7	8.11	1073.48	8.13	2.78	0.26
62	133	71	9	2128	0.995421	503.16	0.516917	535.95	14.81	0	7.53	1081.61	8.13	1083.75	8.15	2.14	0.2
62	134	72	10	2144	0.994431	505.18	0.518657	534.89	18.15	0.86	7.31	1093.96	8.16	1096.02	8.18	2.06	0.19
62	135	73	11	2160	0.993361	507.14	0.52037	533.87	21.8	0	7.1	1104.29	8.18	1105.76	8.19	1.47	0.13
62	136	74	12	2176	0.992215	509.06	0.522059	532.89	25.75	0.86	6.9	1116.07	8.21	1117.5	8.22	1.43	0.13
62	137	75	13	2192	0.990996	510.92	0.523723	531.94	30	0	6.71	1125.85	8.22	1126.74	8.22	0.88	0.08
62	138	76	14	2208	0.989708	512.74	0.525362	531.02	34.54	0.85	6.53	1137.08	8.24	1137.95	8.25	0.87	0.08
62	139	77	15	2224	0.988355	514.51	0.526978	530.13	39.37	0	6.36	1146.34	8.25	1146.7	8.25	0.36	0.03
62	140	78	16	2240	0.986939	516.23	0.528571	529.28	44.48	0.85	6.19	1157.04	8.26	1157.42	8.27	0.37	0.03
62	141	79	17	2256	0.985464	517.91	0.530142	528.45	49.86	0	6.03	1165.8	8.27	1165.7	8.27	-0.1	-0.01
62	142	80	18	2272	0.983932	519.55	0.53169	527.66	55.51	0.84	5.87	1176	8.28	1175.94	8.28	-0.06	0
62	143	81	19	2288	0.982346	521.14	0.533217	526.89	61.42	0	5.72	1184.27	8.28	1183.77	8.28	-0.5	-0.04
62	144	82	20	2304	0.98071	522.7	0.534722	526.15	67.58	0.83	5.58	1193.98	8.29	1193.55	8.29	-0.44	-0.04
62	145	83	21	2320	0.979025	524.21	0.536207	525.44	74	0	5.44	1201.79	8.29	1200.94	8.28	-0.85	-0.07
62	146	84	22	2336	0.977294	525.69	0.537671	524.75	80.66	0.83	5.31	1211.03	8.29	1210.27	8.29	-0.76	-0.06
62	147	85	23	2352	0.975519	527.13	0.539116	524.09	87.57	0	5.18	1218.4	8.29	1217.25	8.28	-1.15	-0.09

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
62	148	86	24	2368	0.973703	528.53	0.540541	523.45	94.71	0.82	5.06	1227.19	8.29	1226.15	8.28	-1.05	-0.09
62	149	87	25	2384	0.971848	529.9	0.541946	522.84	102.08	0	4.94	1234.13	8.28	1232.71	8.27	-1.41	-0.11
62	150	88	26	2400	0.969956	531.23	0.543333	522.25	109.68	0.82	4.83	1242.49	8.28	1241.2	8.27	-1.29	-0.1
62	151	89	27	2416	0.968028	532.53	0.544702	521.68	117.5	0	4.72	1249.02	8.27	1247.38	8.26	-1.64	-0.13
62	152	90	28	2432	0.966066	533.79	0.546053	521.13	125.54	0.81	4.61	1256.96	8.27	1255.46	8.26	-1.5	-0.12
62	153	91	29	2448	0.964074	535.02	0.547386	520.61	133.79	0	4.51	1263.09	8.26	1261.26	8.24	-1.83	-0.15
62	154	92	30	2464	0.962051	536.22	0.548701	520.1	142.25	0.81	4.41	1270.64	8.25	1268.96	8.24	-1.68	-0.13
62	155	93	31	2480	0.96	537.4	0.55	519.62	150.92	0	4.32	1276.39	8.23	1274.39	8.22	-1.99	-0.16
62	156	94	32	2496	0.957922	538.54	0.551282	519.15	159.79	0.8	4.23	1283.55	8.23	1281.72	8.22	-1.83	-0.14
62	157	95	33	2512	0.95582	539.65	0.552548	518.7	168.86	0	4.14	1288.93	8.21	1286.8	8.2	-2.13	-0.17
62	158	96	34	2528	0.953693	540.73	0.553797	518.27	178.12	0.8	4.05	1295.72	8.2	1293.76	8.19	-1.96	-0.15
62	159	97	35	2544	0.951545	541.79	0.555031	517.86	187.57	0	3.97	1300.75	8.18	1298.5	8.17	-2.25	-0.17
62	160	98	36	2560	0.949375	542.82	0.55625	517.47	197.21	0.79	3.89	1307.18	8.17	1305.11	8.16	-2.07	-0.16
62	161	99	37	2576	0.947186	543.82	0.557453	517.09	207.03	0	3.81	1311.86	8.15	1309.52	8.13	-2.34	-0.18
62	162	100	38	2592	0.944978	544.8	0.558642	516.73	217.03	0.79	3.73	1317.96	8.14	1315.79	8.12	-2.16	-0.16
62	163	101	39	2608	0.942753	545.75	0.559816	516.39	227.21	0	3.66	1322.31	8.11	1319.88	8.1	-2.43	-0.18
62	164	102	40	2624	0.940512	546.67	0.560976	516.06	237.57	0.78	3.59	1328.07	8.1	1325.83	8.08	-2.24	-0.17
62	165	103	41	2640	0.938255	547.58	0.562121	515.75	248.09	0	3.52	1332.1	8.07	1329.61	8.06	-2.5	-0.19
62	166	104	42	2656	0.935985	548.46	0.563253	515.45	258.78	0.78	3.46	1337.54	8.06	1335.23	8.04	-2.31	-0.17
62	167	105	43	2672	0.933701	549.31	0.564371	515.17	269.64	0	3.39	1341.27	8.03	1338.71	8.02	-2.56	-0.19
62	168	106	44	2688	0.931406	550.15	0.565476	514.9	280.65	0.77	3.33	1346.4	8.01	1344.03	8	-2.37	-0.18
62	169	107	45	2704	0.929099	550.96	0.566568	514.65	291.83	0	3.27	1349.83	7.99	1347.22	7.97	-2.61	-0.19
62	170	108	46	2720	0.926782	551.75	0.567647	514.4	303.16	0.77	3.21	1354.66	7.97	1352.24	7.95	-2.42	-0.18
62	171	109	47	2736	0.924455	552.52	0.568713	514.17	314.64	0	3.15	1357.81	7.94	1355.15	7.92	-2.66	-0.2
62	172	110	48	2752	0.92212	553.28	0.569767	513.96	326.28	0.76	3.1	1362.35	7.92	1359.88	7.91	-2.47	-0.18
62	173	111	49	2768	0.919777	554.01	0.570809	513.76	338.06	0	3.04	1365.22	7.89	1362.51	7.88	-2.71	-0.2
62	174	112	50	2784	0.917426	554.72	0.571839	513.56	349.99	0.76	2.99	1369.48	7.87	1366.96	7.86	-2.52	-0.18
62	175	113	51	2800	0.915069	555.41	0.572857	513.39	362.06	0	2.94	1372.08	7.84	1369.33	7.82	-2.75	-0.2
62	176	114	52	2816	0.912707	556.09	0.573864	513.22	374.27	0.75	2.89	1376.07	7.82	1373.51	7.8	-2.56	-0.19
62	177	115	53	2832	0.910339	556.74	0.574859	513.06	386.62	0	2.84	1378.42	7.79	1375.62	7.77	-2.8	-0.2
62	178	116	54	2848	0.907966	557.38	0.575843	512.92	399.1	0.75	2.8	1382.14	7.76	1379.53	7.75	-2.61	-0.19
62	179	117	55	2864	0.90559	558	0.576816	512.78	411.72	0	2.75	1384.24	7.73	1381.4	7.72	-2.85	-0.21
62	180	118	56	2880	0.90321	558.61	0.577778	512.66	424.47	0.75	2.71	1387.71	7.71	1385.05	7.69	-2.66	-0.19
62	181	119	57	2896	0.900827	559.19	0.578729	512.55	437.35	0	2.66	1389.57	7.68	1386.67	7.66	-2.9	-0.21
62	182	120	58	2912	0.898442	559.77	0.57967	512.44	450.36	0.74	2.62	1392.8	7.65	1390.08	7.64	-2.72	-0.2
62	183	121	59	2928	0.896055	560.32	0.580601	512.35	463.49	0	2.58	1394.42	7.62	1391.46	7.6	-2.96	-0.21
62	184	122	60	2944	0.893667	560.86	0.581522	512.27	476.74	0.74	2.54	1397.41	7.59	1394.63	7.58	-2.78	-0.2
62	185	123	61	2960	0.891278	561.39	0.582432	512.19	490.12	0	2.5	1398.81	7.56	1395.78	7.54	-3.03	-0.22
62	186	124	62	2976	0.888889	561.9	0.583333	512.13	503.61	0.73	2.47	1401.56	7.54	1398.71	7.52	-2.85	-0.2
62	187	125	63	2992	0.886499	562.39	0.584225	512.07	517.22	0	2.43	1402.74	7.5	1399.64	7.48	-3.1	-0.22
62	188	126	64	3008	0.88411	562.88	0.585106	512.02	530.95	0.73	2.39	1405.28	7.47	1402.34	7.46	-2.93	-0.21
62	189	127	65	3024	0.881722	563.35	0.585979	511.98	544.79	0	2.36	1406.24	7.44	1403.06	7.42	-3.18	-0.23
62	190	128	66	3040	0.879335	563.8	0.586842	511.95	558.74	0.73	2.32	1408.56	7.41	1405.53	7.4	-3.02	-0.22
62	191	129	67	3056	0.87695	564.24	0.587696	511.93	572.8	0	2.29	1409.32	7.38	1406.04	7.36	-3.28	-0.23
62	192	130	68	3072	0.874566	564.67	0.588542	511.92	586.97	0.72	2.26	1411.43	7.35	1408.3	7.33	-3.13	-0.22
62	193	131	69	3088	0.872184	565.09	0.589378	511.91	601.24	0	2.23	1411.99	7.32	1408.6	7.3	-3.38	-0.24

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
62	194	132	70	3104	0.869806	565.49	0.590206	511.91	615.62	0.72	2.2	1413.89	7.29	1410.65	7.27	-3.24	-0.23
62	195	133	71	3120	0.867429	565.88	0.591026	511.92	630.11	0	2.17	1414.26	7.25	1410.75	7.23	-3.5	-0.25
62	196	134	72	3136	0.865056	566.26	0.591837	511.94	644.69	0.71	2.14	1415.96	7.22	1412.6	7.21	-3.36	-0.24
62	197	135	73	3152	0.862686	566.63	0.59264	511.96	659.38	0	2.11	1416.14	7.19	1412.51	7.17	-3.64	-0.26
62	198	136	74	3168	0.86032	566.99	0.593434	511.99	674.16	0.71	2.08	1417.65	7.16	1414.15	7.14	-3.5	-0.25
62	199	137	75	3184	0.857958	567.33	0.594221	512.03	689.05	0	2.05	1417.65	7.12	1413.87	7.1	-3.78	-0.27
62	200	138	76	3200	0.8556	567.67	0.595	512.07	704.02	0.71	2.03	1418.97	7.09	1415.32	7.08	-3.66	-0.26
62	201	139	77	3216	0.853246	567.99	0.595771	512.12	719.09	0	2	1418.8	7.06	1414.85	7.04	-3.94	-0.28
62	202	140	78	3232	0.850897	568.3	0.596535	512.18	734.26	0.7	1.98	1419.94	7.03	1416.11	7.01	-3.83	-0.27
62	203	141	79	3248	0.848553	568.61	0.597291	512.24	749.51	0	1.95	1419.59	6.99	1415.47	6.97	-4.12	-0.29
62	204	142	80	3264	0.846213	568.9	0.598039	512.31	764.86	0.7	1.93	1420.56	6.96	1416.54	6.94	-4.02	-0.28
62	205	143	81	3280	0.843879	569.18	0.59878	512.39	780.29	0	1.9	1420.04	6.93	1415.72	6.91	-4.31	-0.3
62	206	144	82	3296	0.84155	569.46	0.599515	512.47	795.82	0.7	1.88	1420.83	6.9	1416.62	6.88	-4.22	-0.3
62	207	145	83	3312	0.839226	569.72	0.600242	512.56	811.43	0	1.86	1420.15	6.86	1415.63	6.84	-4.52	-0.32
62	208	146	84	3328	0.836908	569.97	0.600962	512.65	827.12	0.69	1.83	1420.78	6.83	1416.34	6.81	-4.44	-0.31
62	209	147	85	3344	0.834596	570.22	0.601675	512.75	842.9	0	1.81	1419.95	6.79	1415.19	6.77	-4.75	-0.34
62	210	148	86	3360	0.83229	570.46	0.602381	512.85	858.76	0.69	1.79	1420.41	6.76	1415.74	6.74	-4.68	-0.33
62	211	149	87	3376	0.82999	570.68	0.603081	512.96	874.7	0	1.77	1419.42	6.73	1414.42	6.7	-5	-0.35
62	212	150	88	3392	0.827697	570.9	0.603774	513.08	890.72	0.69	1.75	1419.73	6.7	1414.8	6.67	-4.93	-0.35
62	213	151	89	3408	0.825409	571.12	0.60446	513.2	906.82	0	1.73	1418.59	6.66	1413.33	6.64	-5.26	-0.37
62	214	152	90	3424	0.823129	571.32	0.60514	513.32	923	0.68	1.71	1418.75	6.63	1413.54	6.61	-5.21	-0.37
62	215	153	91	3440	0.820855	571.51	0.605814	513.45	939.26	0	1.69	1417.46	6.59	1411.92	6.57	-5.55	-0.39
62	216	154	92	3456	0.818587	571.7	0.606481	513.59	955.59	0.68	1.67	1417.47	6.56	1411.97	6.54	-5.5	-0.39
62	217	155	93	3472	0.816327	571.88	0.607143	513.73	972	0	1.65	1416.04	6.53	1410.2	6.5	-5.85	-0.41
62	218	156	94	3488	0.814073	572.05	0.607798	513.87	988.48	0.68	1.63	1415.91	6.49	1410.09	6.47	-5.81	-0.41
62	219	157	95	3504	0.811826	572.22	0.608447	514.02	1005.04	0	1.62	1414.34	6.46	1408.17	6.43	-6.17	-0.44
62	220	158	96	3520	0.809587	572.37	0.609091	514.17	1021.66	0.67	1.6	1414.06	6.43	1407.92	6.4	-6.15	-0.44
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
63	125	62	-1	2000	0.999936	484.97	0.498	563.62	0.19	0	9.67	960.89	7.69	968.58	7.75	7.69	0.79
63	126	63	0	2016	1	487.58	0.5	562.1	0	-0.89	10	975.42	7.74	982.83	7.8	7.41	0.75
63	127	64	1	2032	0.999938	490.13	0.501969	560.64	0.19	0	9.67	990.71	7.8	996.53	7.85	5.82	0.58
63	128	65	2	2048	0.999756	492.61	0.503906	559.23	0.76	-0.88	9.36	1003.88	7.84	1010.15	7.89	6.27	0.62
63	129	66	3	2064	0.999459	495.02	0.505814	557.86	1.7	0	9.07	1018.48	7.9	1023.23	7.93	4.74	0.46
63	130	67	4	2080	0.999053	497.38	0.507692	556.55	2.99	-0.88	8.79	1031	7.93	1036.24	7.97	5.25	0.51
63	131	68	5	2096	0.998543	499.67	0.509542	555.27	4.64	0	8.52	1044.94	7.98	1048.71	8.01	3.77	0.36
63	132	69	6	2112	0.997934	501.9	0.511364	554.04	6.63	-0.87	8.26	1056.82	8.01	1061.15	8.04	4.33	0.41
63	133	70	7	2128	0.99723	504.08	0.513158	552.85	8.96	0	8.02	1070.13	8.05	1073.04	8.07	2.91	0.27
63	134	71	8	2144	0.996436	506.2	0.514925	551.7	11.61	-0.86	7.78	1081.41	8.07	1084.92	8.1	3.51	0.32
63	135	72	9	2160	0.995556	508.26	0.516667	550.59	14.59	0	7.56	1094.11	8.1	1096.25	8.12	2.14	0.19
63	136	73	10	2176	0.994593	510.28	0.518382	549.52	17.88	-0.86	7.34	1104.81	8.12	1107.59	8.14	2.78	0.25
63	137	74	11	2192	0.993553	512.24	0.520073	548.48	21.48	0	7.14	1116.94	8.15	1118.39	8.16	1.45	0.13
63	138	75	12	2208	0.992439	514.15	0.521739	547.48	25.38	-0.85	6.94	1127.08	8.17	1129.21	8.18	2.13	0.19
63	139	76	13	2224	0.991253	516.02	0.523381	546.51	29.57	0	6.75	1138.65	8.19	1139.49	8.2	0.84	0.07
63	140	77	14	2240	0.99	517.83	0.525	545.58	34.05	-0.85	6.57	1148.26	8.2	1149.82	8.21	1.55	0.14

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
63	141	78	15	2256	0.988683	519.6	0.526596	544.67	38.82	0	6.4	1159.3	8.22	1159.6	8.22	0.3	0.03
63	142	79	16	2272	0.987304	521.33	0.528169	543.8	43.86	-0.84	6.23	1168.4	8.23	1169.45	8.24	1.05	0.09
63	143	80	17	2288	0.985867	523.01	0.52972	542.96	49.17	0	6.07	1178.93	8.24	1178.76	8.24	-0.17	-0.01
63	144	81	18	2304	0.984375	524.65	0.53125	542.15	54.74	-0.83	5.92	1187.54	8.25	1188.14	8.25	0.6	0.05
63	145	82	19	2320	0.98283	526.25	0.532759	541.37	60.58	0	5.77	1197.58	8.26	1196.98	8.26	-0.59	-0.05
63	146	83	20	2336	0.981235	527.81	0.534247	540.61	66.66	-0.83	5.63	1205.72	8.26	1205.92	8.26	0.21	0.02
63	147	84	21	2352	0.979592	529.33	0.535714	539.88	73	0	5.49	1215.28	8.27	1214.32	8.26	-0.96	-0.08
63	148	85	22	2368	0.977904	530.81	0.537162	539.18	79.58	-0.82	5.36	1222.97	8.26	1222.83	8.26	-0.14	-0.01
63	149	86	23	2384	0.976172	532.25	0.538591	538.5	86.4	0	5.23	1232.08	8.27	1230.8	8.26	-1.27	-0.1
63	150	87	24	2400	0.9744	533.66	0.54	537.85	93.45	-0.82	5.11	1239.33	8.26	1238.89	8.26	-0.44	-0.04
63	151	88	25	2416	0.972589	535.04	0.541391	537.22	100.74	0	4.99	1248	8.26	1246.45	8.25	-1.55	-0.12
63	152	89	26	2432	0.970741	536.37	0.542763	536.61	108.24	-0.81	4.88	1254.84	8.26	1254.14	8.25	-0.7	-0.06
63	153	90	27	2448	0.968858	537.68	0.544118	536.02	115.97	0	4.77	1263.09	8.26	1261.3	8.24	-1.79	-0.14
63	154	91	28	2464	0.966942	538.95	0.545455	535.46	123.92	-0.81	4.66	1269.52	8.24	1268.6	8.24	-0.92	-0.07
63	155	92	29	2480	0.964995	540.19	0.546774	534.92	132.07	0	4.56	1277.37	8.24	1275.38	8.23	-1.99	-0.16
63	156	93	30	2496	0.963018	541.4	0.548077	534.4	140.44	-0.8	4.46	1283.42	8.23	1282.31	8.22	-1.11	-0.09
63	157	94	31	2512	0.961013	542.58	0.549363	533.9	149.01	0	4.36	1290.87	8.22	1288.71	8.21	-2.17	-0.17
63	158	95	32	2528	0.958981	543.73	0.550633	533.42	157.78	-0.8	4.27	1296.55	8.21	1295.27	8.2	-1.28	-0.1
63	159	96	33	2544	0.956924	544.85	0.551887	532.96	166.75	0	4.18	1303.63	8.2	1301.31	8.18	-2.31	-0.18
63	160	97	34	2560	0.954844	545.94	0.553125	532.52	175.91	-0.79	4.1	1308.94	8.18	1307.52	8.17	-1.42	-0.11
63	161	98	35	2576	0.952741	547.01	0.554348	532.09	185.26	0	4.01	1315.66	8.17	1313.22	8.16	-2.44	-0.19
63	162	99	36	2592	0.950617	548.05	0.555556	531.68	194.79	-0.79	3.93	1320.63	8.15	1319.09	8.14	-1.54	-0.12
63	163	100	37	2608	0.948474	549.06	0.556748	531.29	204.51	0	3.85	1326.99	8.14	1324.44	8.13	-2.55	-0.19
63	164	101	38	2624	0.946312	550.05	0.557927	530.92	214.4	-0.78	3.78	1331.63	8.12	1329.99	8.11	-1.64	-0.12
63	165	102	39	2640	0.944132	551.01	0.559091	530.56	224.48	0	3.71	1337.66	8.11	1335.02	8.09	-2.64	-0.2
63	166	103	40	2656	0.941936	551.94	0.560241	530.22	234.72	-0.78	3.63	1341.97	8.08	1340.24	8.07	-1.73	-0.13
63	167	104	41	2672	0.939725	552.86	0.561377	529.9	245.14	0	3.57	1347.67	8.07	1344.95	8.05	-2.72	-0.2
63	168	105	42	2688	0.9375	553.75	0.5625	529.59	255.72	-0.77	3.5	1351.68	8.05	1349.87	8.03	-1.8	-0.13
63	169	106	43	2704	0.935261	554.62	0.563609	529.29	266.46	0	3.43	1357.07	8.03	1354.27	8.01	-2.79	-0.21
63	170	107	44	2720	0.93301	555.46	0.564706	529.01	277.37	-0.77	3.37	1360.77	8	1358.89	7.99	-1.87	-0.14
63	171	108	45	2736	0.930748	556.29	0.565789	528.74	288.43	0	3.31	1365.85	7.99	1363	7.97	-2.85	-0.21
63	172	109	46	2752	0.928475	557.09	0.56686	528.49	299.65	-0.76	3.25	1369.26	7.96	1367.33	7.95	-1.93	-0.14
63	173	110	47	2768	0.926192	557.87	0.567919	528.24	311.03	0	3.19	1374.05	7.94	1371.14	7.93	-2.91	-0.21
63	174	111	48	2784	0.9239	558.63	0.568966	528.02	322.55	-0.76	3.14	1377.18	7.91	1375.19	7.9	-1.99	-0.14
63	175	112	49	2800	0.9216	559.37	0.57	527.8	334.22	0	3.09	1381.69	7.9	1378.73	7.88	-2.96	-0.21
63	176	113	50	2816	0.919292	560.1	0.571023	527.6	346.03	-0.75	3.03	1384.55	7.87	1382.51	7.86	-2.04	-0.15
63	177	114	51	2832	0.916978	560.8	0.572034	527.41	357.99	0	2.98	1388.78	7.85	1385.77	7.83	-3.01	-0.22
63	178	115	52	2848	0.914657	561.49	0.573034	527.23	370.09	-0.75	2.93	1391.38	7.82	1389.28	7.8	-2.1	-0.15
63	179	116	53	2864	0.912331	562.16	0.574022	527.06	382.32	0	2.88	1395.34	7.8	1392.28	7.78	-3.06	-0.22
63	180	117	54	2880	0.91	562.81	0.575	526.91	394.7	-0.75	2.84	1397.68	7.76	1395.54	7.75	-2.15	-0.15
63	181	118	55	2896	0.907665	563.44	0.575967	526.76	407.2	0	2.79	1401.39	7.74	1398.28	7.73	-3.11	-0.22
63	182	119	56	2912	0.905325	564.05	0.576923	526.63	419.83	-0.74	2.75	1403.49	7.71	1401.28	7.7	-2.21	-0.16
63	183	120	57	2928	0.902983	564.65	0.577869	526.5	432.6	0	2.7	1406.95	7.69	1403.78	7.67	-3.17	-0.23
63	184	121	58	2944	0.900638	565.24	0.578804	526.39	445.49	-0.74	2.66	1408.81	7.66	1406.54	7.64	-2.27	-0.16
63	185	122	59	2960	0.898291	565.8	0.57973	526.29	458.51	0	2.62	1412.02	7.63	1408.8	7.62	-3.23	-0.23
63	186	123	60	2976	0.895942	566.36	0.580645	526.19	471.64	-0.73	2.58	1413.65	7.6	1411.32	7.59	-2.33	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
63	187	124	61	2992	0.893591	566.89	0.581551	526.11	484.9	0	2.54	1416.64	7.58	1413.34	7.56	-3.3	-0.23
63	188	125	62	3008	0.89124	567.42	0.582447	526.03	498.28	-0.73	2.5	1418.04	7.54	1415.64	7.53	-2.41	-0.17
63	189	126	63	3024	0.888889	567.92	0.583333	525.97	511.78	0	2.47	1420.8	7.52	1417.43	7.5	-3.37	-0.24
63	190	127	64	3040	0.886537	568.42	0.584211	525.91	525.39	-0.73	2.43	1421.99	7.48	1419.5	7.47	-2.49	-0.18
63	191	128	65	3056	0.884186	568.9	0.585079	525.86	539.11	0	2.39	1424.52	7.46	1421.07	7.44	-3.45	-0.24
63	192	129	66	3072	0.881836	569.36	0.585938	525.82	552.95	-0.72	2.36	1425.5	7.42	1422.92	7.41	-2.58	-0.18
63	193	130	67	3088	0.879487	569.82	0.586788	525.79	566.89	0	2.33	1427.82	7.4	1424.28	7.38	-3.55	-0.25
63	194	131	68	3104	0.877139	570.26	0.587629	525.77	580.95	-0.72	2.29	1428.6	7.36	1425.92	7.35	-2.68	-0.19
63	195	132	69	3120	0.874793	570.69	0.588462	525.75	595.11	0	2.26	1430.72	7.34	1427.06	7.32	-3.65	-0.26
63	196	133	70	3136	0.872449	571.1	0.589286	525.74	609.38	-0.71	2.23	1431.3	7.3	1428.5	7.29	-2.8	-0.2
63	197	134	71	3152	0.870107	571.5	0.590102	525.75	623.74	0	2.2	1433.21	7.28	1429.44	7.26	-3.77	-0.26
63	198	135	72	3168	0.867769	571.89	0.590909	525.75	638.21	-0.71	2.17	1433.6	7.24	1430.68	7.23	-2.92	-0.2
63	199	136	73	3184	0.865433	572.27	0.591709	525.77	652.79	0	2.14	1435.31	7.21	1431.42	7.19	-3.9	-0.27
63	200	137	74	3200	0.8631	572.64	0.5925	525.79	667.46	-0.71	2.11	1435.52	7.18	1432.46	7.16	-3.06	-0.21
63	201	138	75	3216	0.860771	573	0.593284	525.82	682.22	0	2.09	1437.04	7.15	1433	7.13	-4.04	-0.28
63	202	139	76	3232	0.858445	573.34	0.594059	525.86	697.09	-0.7	2.06	1437.07	7.11	1433.86	7.1	-3.21	-0.22
63	203	140	77	3248	0.856124	573.68	0.594828	525.9	712.04	0	2.03	1438.41	7.09	1434.21	7.07	-4.2	-0.29
63	204	141	78	3264	0.853806	574	0.595588	525.95	727.09	-0.7	2.01	1438.26	7.05	1434.88	7.03	-3.38	-0.24
63	205	142	79	3280	0.851493	574.32	0.596341	526.01	742.24	0	1.98	1439.42	7.02	1435.05	7	-4.37	-0.3
63	206	143	80	3296	0.849185	574.62	0.597087	526.07	757.47	-0.7	1.96	1439.1	6.99	1435.54	6.97	-3.56	-0.25
63	207	144	81	3312	0.846881	574.92	0.597826	526.14	772.79	0	1.93	1440.09	6.96	1435.53	6.93	-4.56	-0.32
63	208	145	82	3328	0.844582	575.2	0.598558	526.21	788.2	-0.69	1.91	1439.6	6.92	1435.84	6.9	-3.76	-0.26
63	209	146	83	3344	0.842288	575.48	0.599282	526.29	803.7	0	1.89	1440.42	6.89	1435.66	6.87	-4.76	-0.33
63	210	147	84	3360	0.84	575.74	0.6	526.38	819.28	-0.69	1.86	1439.77	6.86	1435.8	6.84	-3.98	-0.28
63	211	148	85	3376	0.837717	576	0.600711	526.47	834.95	0	1.84	1440.43	6.83	1435.44	6.8	-4.98	-0.35
63	212	149	86	3392	0.83544	576.25	0.601415	526.57	850.69	-0.69	1.82	1439.62	6.79	1435.41	6.77	-4.21	-0.29
63	213	150	87	3408	0.833168	576.48	0.602113	526.67	866.53	0	1.8	1440.12	6.76	1434.89	6.74	-5.22	-0.36
63	214	151	88	3424	0.830902	576.71	0.602804	526.78	882.44	-0.68	1.78	1439.16	6.73	1434.7	6.7	-4.46	-0.31
63	215	152	89	3440	0.828643	576.94	0.603488	526.9	898.43	0	1.76	1439.5	6.7	1434.02	6.67	-5.48	-0.38
63	216	153	90	3456	0.826389	577.15	0.604167	527.01	914.5	-0.68	1.74	1438.4	6.66	1433.67	6.64	-4.73	-0.33
63	217	154	91	3472	0.824142	577.36	0.604839	527.14	930.64	0	1.72	1438.58	6.63	1432.83	6.6	-5.75	-0.4
63	218	155	92	3488	0.821901	577.55	0.605505	527.27	946.87	-0.68	1.7	1437.33	6.59	1432.32	6.57	-5.02	-0.35
63	219	156	93	3504	0.819666	577.74	0.606164	527.4	963.16	0	1.68	1437.37	6.56	1431.32	6.54	-6.05	-0.42
63	220	157	94	3520	0.817438	577.93	0.606818	527.54	979.54	-0.67	1.66	1435.99	6.53	1430.66	6.5	-5.32	-0.37
63	221	158	95	3536	0.815217	578.1	0.607466	527.68	995.98	0	1.64	1435.88	6.5	1429.52	6.47	-6.36	-0.45
63	222	159	96	3552	0.813002	578.27	0.608108	527.83	1012.5	-0.67	1.63	1434.36	6.46	1428.71	6.44	-5.65	-0.4
63	223	160	97	3568	0.810795	578.43	0.608744	527.98	1029.09	0	1.61	1434.11	6.43	1427.41	6.4	-6.69	-0.47
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
64	127	63	-1	2032	0.999938	490.13	0.498031	578.58	0.19	0	9.67	972.77	7.66	980.53	7.72	7.76	0.79
64	128	64	0	2048	1	492.73	0.5	577.05	0	0.88	10	989.1	7.73	995.88	7.78	6.77	0.68
64	129	65	1	2064	0.99994	495.26	0.501938	575.57	0.19	0	9.68	1002.65	7.77	1008.56	7.82	5.91	0.59
64	130	66	2	2080	0.999763	497.73	0.503846	574.15	0.75	0.88	9.37	1017.63	7.83	1023.27	7.87	5.64	0.55
64	131	67	3	2096	0.999476	500.14	0.505725	572.76	1.67	0	9.08	1030.51	7.87	1035.35	7.9	4.84	0.47
64	132	68	4	2112	0.999082	502.48	0.507576	571.43	2.95	0.87	8.8	1044.82	7.92	1049.44	7.95	4.62	0.44

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
64	133	69	5	2128	0.998587	504.76	0.509398	570.14	4.57	0	8.54	1057.07	7.95	1060.94	7.98	3.88	0.37
64	134	70	6	2144	0.997995	506.99	0.511194	568.89	6.53	0.86	8.29	1070.74	7.99	1074.44	8.02	3.71	0.35
64	135	71	7	2160	0.997311	509.16	0.512963	567.68	8.83	0	8.04	1082.37	8.02	1085.39	8.04	3.02	0.28
64	136	72	8	2176	0.99654	511.28	0.514706	566.52	11.44	0.86	7.81	1095.43	8.05	1098.32	8.08	2.89	0.26
64	137	73	9	2192	0.995684	513.34	0.516423	565.39	14.38	0	7.59	1106.48	8.08	1108.73	8.09	2.25	0.2
64	138	74	10	2208	0.994749	515.35	0.518116	564.3	17.62	0.85	7.38	1118.95	8.11	1121.12	8.12	2.16	0.19
64	139	75	11	2224	0.993737	517.31	0.519784	563.25	21.17	0	7.17	1129.44	8.13	1131.01	8.14	1.56	0.14
64	140	76	12	2240	0.992653	519.22	0.521429	562.23	25.02	0.85	6.98	1141.35	8.15	1142.87	8.16	1.51	0.13
64	141	77	13	2256	0.991499	521.08	0.52305	561.24	29.16	0	6.79	1151.31	8.17	1152.26	8.17	0.96	0.08
64	142	78	14	2272	0.99028	522.9	0.524648	560.29	33.58	0.84	6.61	1162.68	8.19	1163.62	8.19	0.94	0.08
64	143	79	15	2288	0.988997	524.67	0.526224	559.37	38.28	0	6.44	1172.11	8.2	1172.53	8.2	0.42	0.04
64	144	80	16	2304	0.987654	526.4	0.527778	558.48	43.25	0.83	6.27	1182.97	8.22	1183.4	8.22	0.43	0.04
64	145	81	17	2320	0.986254	528.08	0.52931	557.63	48.49	0	6.11	1191.91	8.22	1191.85	8.22	-0.05	0
64	146	82	18	2336	0.9848	529.73	0.530822	556.8	54	0.83	5.96	1202.26	8.23	1202.25	8.23	-0.01	0
64	147	83	19	2352	0.983294	531.33	0.532313	556	59.76	0	5.81	1210.73	8.24	1210.26	8.23	-0.47	-0.04
64	148	84	20	2368	0.981738	532.89	0.533784	555.23	65.77	0.82	5.67	1220.6	8.25	1220.2	8.24	-0.41	-0.03
64	149	85	21	2384	0.980136	534.42	0.535235	554.48	72.03	0	5.53	1228.61	8.25	1227.78	8.24	-0.83	-0.07
64	150	86	22	2400	0.978489	535.9	0.536667	553.76	78.53	0.82	5.4	1238.03	8.25	1237.28	8.25	-0.75	-0.06
64	151	87	23	2416	0.976799	537.35	0.538079	553.07	85.26	0	5.27	1245.59	8.25	1244.45	8.24	-1.15	-0.09
64	152	88	24	2432	0.975069	538.77	0.539474	552.4	92.23	0.81	5.15	1254.57	8.25	1253.53	8.25	-1.04	-0.08
64	153	89	25	2448	0.973301	540.14	0.54085	551.75	99.43	0	5.03	1261.71	8.25	1260.29	8.24	-1.42	-0.11
64	154	90	26	2464	0.971496	541.49	0.542208	551.13	106.85	0.81	4.92	1270.26	8.25	1268.96	8.24	-1.3	-0.1
64	155	91	27	2480	0.969657	542.8	0.543548	550.53	114.49	0	4.81	1276.99	8.24	1275.34	8.23	-1.65	-0.13
64	156	92	28	2496	0.967784	544.08	0.544872	549.95	122.34	0.8	4.71	1285.13	8.24	1283.61	8.23	-1.52	-0.12
64	157	93	29	2512	0.965881	545.33	0.546178	549.4	130.4	0	4.6	1291.47	8.23	1289.62	8.21	-1.86	-0.14
64	158	94	30	2528	0.963948	546.55	0.547468	548.86	138.67	0.8	4.5	1299.22	8.22	1297.51	8.21	-1.71	-0.13
64	159	95	31	2544	0.961987	547.73	0.548742	548.35	147.15	0	4.41	1305.18	8.21	1303.15	8.2	-2.03	-0.16
64	160	96	32	2560	0.96	548.89	0.55	547.85	155.82	0.79	4.32	1312.55	8.2	1310.68	8.19	-1.87	-0.14
64	161	97	33	2576	0.957988	550.02	0.551242	547.37	164.69	0	4.23	1318.14	8.19	1315.97	8.17	-2.17	-0.17
64	162	98	34	2592	0.955952	551.12	0.552469	546.92	173.75	0.79	4.14	1325.14	8.18	1323.13	8.17	-2.01	-0.15
64	163	99	35	2608	0.953894	552.2	0.553681	546.48	183	0	4.06	1330.39	8.16	1328.09	8.15	-2.3	-0.17
64	164	100	36	2624	0.951814	553.24	0.554878	546.06	192.43	0.78	3.98	1337.03	8.15	1334.91	8.14	-2.12	-0.16
64	165	101	37	2640	0.949715	554.27	0.556061	545.65	202.04	0	3.9	1341.94	8.13	1339.53	8.12	-2.4	-0.18
64	166	102	38	2656	0.947598	555.26	0.557229	545.27	211.84	0.78	3.82	1348.24	8.12	1346.01	8.11	-2.22	-0.17
64	167	103	39	2672	0.945462	556.23	0.558383	544.89	221.8	0	3.75	1352.82	8.1	1350.33	8.09	-2.49	-0.18
64	168	104	40	2688	0.943311	557.18	0.559524	544.54	231.94	0.77	3.68	1358.79	8.09	1356.48	8.07	-2.3	-0.17
64	169	105	41	2704	0.941144	558.1	0.560651	544.2	242.25	0	3.61	1363.05	8.07	1360.48	8.05	-2.57	-0.19
64	170	106	42	2720	0.938962	559	0.561765	543.88	252.73	0.77	3.54	1368.7	8.05	1366.32	8.04	-2.38	-0.17
64	171	107	43	2736	0.936767	559.88	0.562865	543.57	263.37	0	3.48	1372.66	8.03	1370.03	8.01	-2.63	-0.19
64	172	108	44	2752	0.934559	560.74	0.563953	543.27	274.16	0.76	3.41	1378	8.01	1375.56	8	-2.44	-0.18
64	173	109	45	2768	0.93234	561.57	0.565029	542.99	285.12	0	3.35	1381.67	7.99	1378.98	7.97	-2.69	-0.19
64	174	110	46	2784	0.93011	562.39	0.566092	542.73	296.23	0.76	3.29	1386.71	7.97	1384.22	7.96	-2.49	-0.18
64	175	111	47	2800	0.927869	563.18	0.567143	542.47	307.49	0	3.24	1390.09	7.94	1387.35	7.93	-2.74	-0.2
64	176	112	48	2816	0.92562	563.95	0.568182	542.23	318.9	0.75	3.18	1394.84	7.93	1392.3	7.91	-2.54	-0.18
64	177	113	49	2832	0.923362	564.71	0.569209	542.01	330.46	0	3.13	1397.95	7.9	1395.17	7.88	-2.78	-0.2
64	178	114	50	2848	0.921096	565.44	0.570225	541.79	342.17	0.75	3.07	1402.42	7.88	1399.84	7.86	-2.59	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
64	179	115	51	2864	0.918823	566.16	0.571229	541.59	354.01	0	3.02	1405.26	7.85	1402.44	7.83	-2.83	-0.2
64	180	116	52	2880	0.916543	566.85	0.572222	541.4	366	0.75	2.97	1409.47	7.83	1406.84	7.82	-2.63	-0.19
64	181	117	53	2896	0.914258	567.53	0.573204	541.22	378.12	0	2.92	1412.05	7.8	1409.18	7.79	-2.87	-0.2
64	182	118	54	2912	0.911967	568.19	0.574176	541.05	390.38	0.74	2.88	1415.99	7.78	1413.31	7.77	-2.68	-0.19
64	183	119	55	2928	0.909672	568.84	0.575137	540.9	402.77	0	2.83	1418.32	7.75	1415.41	7.73	-2.91	-0.21
64	184	120	56	2944	0.907372	569.46	0.576087	540.75	415.3	0.74	2.79	1422.01	7.73	1419.29	7.71	-2.72	-0.19
64	185	121	57	2960	0.905069	570.07	0.577027	540.62	427.95	0	2.74	1424.1	7.7	1421.14	7.68	-2.96	-0.21
64	186	122	58	2976	0.902763	570.67	0.577957	540.49	440.73	0.73	2.7	1427.54	7.67	1424.77	7.66	-2.77	-0.19
64	187	123	59	2992	0.900455	571.25	0.578877	540.38	453.63	0	2.66	1429.4	7.64	1426.39	7.63	-3.01	-0.21
64	188	124	60	3008	0.898144	571.81	0.579787	540.28	466.65	0.73	2.62	1432.61	7.62	1429.78	7.61	-2.83	-0.2
64	189	125	61	3024	0.895832	572.36	0.580688	540.18	479.8	0	2.58	1434.24	7.59	1431.17	7.57	-3.07	-0.21
64	190	126	62	3040	0.893518	572.89	0.581579	540.1	493.06	0.73	2.54	1437.21	7.56	1434.32	7.55	-2.89	-0.2
64	191	127	63	3056	0.891204	573.41	0.582461	540.02	506.45	0	2.5	1438.62	7.53	1435.49	7.52	-3.14	-0.22
64	192	128	64	3072	0.888889	573.92	0.583333	539.95	519.94	0.72	2.47	1441.37	7.51	1438.41	7.49	-2.96	-0.21
64	193	129	65	3088	0.886574	574.41	0.584197	539.9	533.56	0	2.43	1442.57	7.47	1439.36	7.46	-3.21	-0.22
64	194	130	66	3104	0.88426	574.89	0.585052	539.85	547.28	0.72	2.4	1445.1	7.45	1442.06	7.43	-3.04	-0.21
64	195	131	67	3120	0.881946	575.35	0.585897	539.81	561.11	0	2.36	1446.09	7.42	1442.8	7.4	-3.29	-0.23
64	196	132	68	3136	0.879633	575.8	0.586735	539.78	575.05	0.71	2.33	1448.41	7.39	1445.28	7.37	-3.13	-0.22
64	197	133	69	3152	0.877322	576.24	0.587563	539.75	589.1	0	2.3	1449.2	7.36	1445.82	7.34	-3.39	-0.23
64	198	134	70	3168	0.875013	576.67	0.588384	539.74	603.25	0.71	2.27	1451.32	7.33	1448.09	7.31	-3.23	-0.22
64	199	135	71	3184	0.872705	577.08	0.589196	539.73	617.51	0	2.23	1451.92	7.3	1448.43	7.28	-3.49	-0.24
64	200	136	72	3200	0.8704	577.48	0.59	539.73	631.86	0.71	2.2	1453.84	7.27	1450.49	7.25	-3.34	-0.23
64	201	137	73	3216	0.868097	577.88	0.590796	539.73	646.32	0	2.18	1454.24	7.24	1450.63	7.22	-3.61	-0.25
64	202	138	74	3232	0.865797	578.25	0.591584	539.75	660.88	0.7	2.15	1455.97	7.21	1452.5	7.19	-3.47	-0.24
64	203	139	75	3248	0.863501	578.62	0.592365	539.77	675.54	0	2.12	1456.19	7.17	1452.45	7.15	-3.74	-0.26
64	204	140	76	3264	0.861207	578.98	0.593137	539.8	690.29	0.7	2.09	1457.73	7.15	1454.12	7.13	-3.61	-0.25
64	205	141	77	3280	0.858917	579.33	0.593902	539.83	705.13	0	2.06	1457.77	7.11	1453.89	7.09	-3.88	-0.27
64	206	142	78	3296	0.856631	579.66	0.59466	539.88	720.07	0.7	2.04	1459.13	7.08	1455.37	7.06	-3.76	-0.26
64	207	143	79	3312	0.854349	579.99	0.595411	539.92	735.1	0	2.01	1459	7.05	1454.96	7.03	-4.04	-0.28
64	208	144	80	3328	0.852071	580.3	0.596154	539.98	750.22	0.69	1.99	1460.18	7.02	1456.25	7	-3.93	-0.27
64	209	145	81	3344	0.849797	580.61	0.59689	540.04	765.43	0	1.96	1459.88	6.99	1455.67	6.96	-4.22	-0.29
64	210	146	82	3360	0.847528	580.9	0.597619	540.11	780.73	0.69	1.94	1460.89	6.96	1456.78	6.94	-4.11	-0.28
64	211	147	83	3376	0.845264	581.19	0.598341	540.18	796.12	0	1.92	1460.43	6.92	1456.02	6.9	-4.41	-0.3
64	212	148	84	3392	0.843005	581.46	0.599057	540.26	811.59	0.69	1.89	1461.27	6.89	1456.96	6.87	-4.31	-0.3
64	213	149	85	3408	0.84075	581.73	0.599765	540.35	827.14	0	1.87	1460.65	6.86	1456.03	6.84	-4.62	-0.32
64	214	150	86	3424	0.838501	581.99	0.600467	540.44	842.78	0.68	1.85	1461.32	6.83	1456.8	6.81	-4.53	-0.31
64	215	151	87	3440	0.836257	582.24	0.601163	540.54	858.5	0	1.83	1460.55	6.79	1455.71	6.77	-4.84	-0.33
64	216	152	88	3456	0.834019	582.48	0.601852	540.64	874.3	0.68	1.81	1461.07	6.76	1456.31	6.74	-4.76	-0.33
64	217	153	89	3472	0.831787	582.71	0.602535	540.75	890.19	0	1.79	1460.14	6.73	1455.06	6.71	-5.08	-0.35
64	218	154	90	3488	0.82956	582.94	0.603211	540.86	906.15	0.68	1.77	1460.5	6.7	1455.49	6.68	-5.01	-0.34
64	219	155	91	3504	0.827339	583.15	0.603881	540.98	922.18	0	1.75	1459.43	6.66	1454.09	6.64	-5.34	-0.37
64	220	156	92	3520	0.825124	583.36	0.604545	541.1	938.3	0.67	1.73	1459.64	6.63	1454.36	6.61	-5.28	-0.36
64	221	157	93	3536	0.822915	583.56	0.605204	541.23	954.49	0	1.71	1458.43	6.6	1452.81	6.57	-5.62	-0.39
64	222	158	94	3552	0.820713	583.75	0.605856	541.36	970.75	0.67	1.69	1458.49	6.57	1452.93	6.54	-5.57	-0.38
64	223	159	95	3568	0.818516	583.94	0.606502	541.5	987.09	0	1.67	1457.14	6.53	1451.23	6.51	-5.92	-0.41
64	224	160	96	3584	0.816327	584.11	0.607143	541.64	1003.5	0.67	1.65	1457.06	6.5	1451.19	6.48	-5.87	-0.4

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
64	225	161	97	3600	0.814143	584.28	0.607778	541.79	1019.98	0	1.64	1455.58	6.47	1449.35	6.44	-6.23	-0.43
64	226	162	98	3616	0.811966	584.45	0.608407	541.94	1036.53	0.67	1.62	1455.36	6.44	1449.16	6.41	-6.2	-0.43
64	227	163	99	3632	0.809796	584.6	0.609031	542.1	1053.16	0	1.6	1453.74	6.4	1447.18	6.38	-6.57	-0.45
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
65	129	64	-1	2064	0.99994	495.26	0.498062	593.7	0.19	0	9.68	984.53	7.63	992.35	7.69	7.82	0.79
65	130	65	0	2080	1	497.85	0.5	592.16	0	-0.88	10	999.12	7.69	1006.66	7.74	7.54	0.75
65	131	66	1	2096	0.999942	500.37	0.501908	590.66	0.19	0	9.68	1014.47	7.74	1020.43	7.79	5.96	0.58
65	132	67	2	2112	0.99977	502.83	0.503788	589.22	0.74	-0.87	9.38	1027.73	7.79	1034.13	7.83	6.4	0.62
65	133	68	3	2128	0.999491	505.22	0.505639	587.82	1.65	0	9.1	1042.41	7.84	1047.29	7.87	4.88	0.47
65	134	69	4	2144	0.999109	507.56	0.507463	586.47	2.9	-0.86	8.82	1055.03	7.87	1060.39	7.91	5.37	0.51
65	135	70	5	2160	0.998628	509.83	0.509259	585.16	4.5	0	8.56	1069.06	7.92	1072.96	7.95	3.9	0.36
65	136	71	6	2176	0.998054	512.05	0.511029	583.9	6.44	-0.86	8.31	1081.06	7.95	1085.5	7.98	4.44	0.41
65	137	72	7	2192	0.997389	514.22	0.512774	582.68	8.7	0	8.07	1094.48	7.99	1097.5	8.01	3.03	0.28
65	138	73	8	2208	0.996639	516.33	0.514493	581.49	11.28	-0.85	7.84	1105.89	8.01	1109.49	8.04	3.61	0.33
65	139	74	9	2224	0.995808	518.39	0.516187	580.35	14.17	0	7.62	1118.71	8.05	1120.95	8.06	2.24	0.2
65	140	75	10	2240	0.994898	520.39	0.517857	579.24	17.38	-0.85	7.41	1129.55	8.07	1132.42	8.09	2.86	0.25
65	141	76	11	2256	0.993914	522.35	0.519504	578.17	20.88	0	7.21	1141.81	8.1	1143.35	8.11	1.54	0.13
65	142	77	12	2272	0.992859	524.26	0.521127	577.14	24.67	-0.84	7.01	1152.11	8.11	1154.31	8.13	2.2	0.19
65	143	78	13	2288	0.991736	526.12	0.522727	576.13	28.75	0	6.83	1163.82	8.14	1164.73	8.14	0.92	0.08
65	144	79	14	2304	0.990548	527.94	0.524306	575.17	33.12	-0.83	6.65	1173.59	8.15	1175.2	8.16	1.61	0.14
65	145	80	15	2320	0.989298	529.71	0.525862	574.23	37.76	0	6.48	1184.78	8.17	1185.14	8.17	0.36	0.03
65	146	81	16	2336	0.98799	531.44	0.527397	573.33	42.66	-0.83	6.31	1194.05	8.18	1195.14	8.19	1.09	0.09
65	147	82	17	2352	0.986626	533.13	0.528912	572.45	47.84	0	6.15	1204.73	8.2	1204.61	8.19	-0.12	-0.01
65	148	83	18	2368	0.985208	534.77	0.530405	571.61	53.27	-0.82	6	1213.52	8.2	1214.15	8.2	0.63	0.05
65	149	84	19	2384	0.983739	536.38	0.531879	570.79	58.96	0	5.85	1223.72	8.21	1223.17	8.21	-0.55	-0.05
65	150	85	20	2400	0.982222	537.95	0.533333	570	64.9	-0.82	5.71	1232.05	8.21	1232.27	8.22	0.22	0.02
65	151	86	21	2416	0.980659	539.47	0.534768	569.24	71.08	0	5.58	1241.78	8.22	1240.85	8.22	-0.93	-0.08
65	152	87	22	2432	0.979051	540.97	0.536184	568.5	77.5	-0.81	5.44	1249.66	8.22	1249.53	8.22	-0.13	-0.01
65	153	88	23	2448	0.977402	542.42	0.537582	567.79	84.16	0	5.32	1258.95	8.23	1257.69	8.22	-1.26	-0.1
65	154	89	24	2464	0.975713	543.84	0.538961	567.11	91.04	-0.81	5.2	1266.4	8.22	1265.96	8.22	-0.44	-0.04
65	155	90	25	2480	0.973985	545.22	0.540323	566.45	98.15	0	5.08	1275.25	8.23	1273.71	8.22	-1.55	-0.12
65	156	91	26	2496	0.972222	546.58	0.541667	565.81	105.49	-0.8	4.97	1282.29	8.22	1281.58	8.22	-0.71	-0.06
65	157	92	27	2512	0.970425	547.89	0.542994	565.19	113.04	0	4.86	1290.73	8.22	1288.93	8.21	-1.8	-0.14
65	158	93	28	2528	0.968595	549.18	0.544304	564.6	120.8	-0.8	4.75	1297.37	8.21	1296.43	8.21	-0.95	-0.07
65	159	94	29	2544	0.966734	550.44	0.545597	564.03	128.77	0	4.65	1305.41	8.21	1303.4	8.2	-2.01	-0.15
65	160	95	30	2560	0.964844	551.66	0.546875	563.48	136.95	-0.79	4.55	1311.67	8.2	1310.52	8.19	-1.15	-0.09
65	161	96	31	2576	0.962926	552.86	0.548137	562.95	145.33	0	4.45	1319.32	8.19	1317.12	8.18	-2.19	-0.17
65	162	97	32	2592	0.960982	554.02	0.549383	562.44	153.91	-0.79	4.36	1325.21	8.18	1323.89	8.17	-1.32	-0.1
65	163	98	33	2608	0.959012	555.16	0.550613	561.95	162.68	0	4.27	1332.48	8.17	1330.13	8.16	-2.35	-0.18
65	164	99	34	2624	0.95702	556.27	0.551829	561.48	171.64	-0.78	4.19	1338.02	8.16	1336.55	8.15	-1.47	-0.11
65	165	100	35	2640	0.955005	557.35	0.55303	561.02	180.79	0	4.1	1344.94	8.15	1342.45	8.14	-2.49	-0.19
65	166	101	36	2656	0.952969	558.41	0.554217	560.59	190.12	-0.78	4.02	1350.12	8.13	1348.53	8.12	-1.6	-0.12
65	167	102	37	2672	0.950913	559.44	0.555389	560.17	199.64	0	3.94	1356.69	8.12	1354.09	8.11	-2.6	-0.19
65	168	103	38	2688	0.948838	560.45	0.556548	559.77	209.33	-0.77	3.87	1361.55	8.1	1359.85	8.09	-1.71	-0.13

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
65	169	104	39	2704	0.946746	561.43	0.557692	559.38	219.2	0	3.79	1367.79	8.09	1365.09	8.08	-2.7	-0.2
65	170	105	40	2720	0.944637	562.38	0.558824	559.02	229.23	-0.77	3.72	1372.32	8.07	1370.53	8.06	-1.8	-0.13
65	171	106	41	2736	0.942512	563.32	0.559942	558.66	239.44	0	3.65	1378.24	8.06	1375.45	8.04	-2.78	-0.2
65	172	107	42	2752	0.940373	564.23	0.561047	558.33	249.81	-0.76	3.59	1382.46	8.04	1380.58	8.03	-1.88	-0.14
65	173	108	43	2768	0.93822	565.12	0.562139	558.01	260.34	0	3.52	1388.06	8.02	1385.21	8.01	-2.85	-0.21
65	174	109	44	2784	0.936055	565.98	0.563218	557.7	271.03	-0.76	3.46	1391.99	8	1390.04	7.99	-1.95	-0.14
65	175	110	45	2800	0.933878	566.83	0.564286	557.4	281.88	0	3.4	1397.28	7.98	1394.37	7.97	-2.92	-0.21
65	176	111	46	2816	0.931689	567.65	0.565341	557.13	292.88	-0.75	3.34	1400.92	7.96	1398.91	7.95	-2.01	-0.14
65	177	112	47	2832	0.92949	568.45	0.566384	556.86	304.04	0	3.28	1405.93	7.94	1402.95	7.93	-2.97	-0.21
65	178	113	48	2848	0.927282	569.24	0.567416	556.61	315.34	-0.75	3.22	1409.28	7.92	1407.22	7.91	-2.07	-0.15
65	179	114	49	2864	0.925065	570	0.568436	556.37	326.79	0	3.17	1414	7.9	1410.98	7.88	-3.02	-0.21
65	180	115	50	2880	0.92284	570.75	0.569444	556.14	338.39	-0.75	3.11	1417.09	7.87	1414.97	7.86	-2.12	-0.15
65	181	116	51	2896	0.920607	571.47	0.570442	555.93	350.12	0	3.06	1421.54	7.85	1418.46	7.84	-3.07	-0.22
65	182	117	52	2912	0.918367	572.18	0.571429	555.73	362	-0.74	3.01	1424.36	7.83	1422.2	7.81	-2.17	-0.15
65	183	118	53	2928	0.916122	572.87	0.572404	555.54	374.01	0	2.96	1428.54	7.81	1425.42	7.79	-3.12	-0.22
65	184	119	54	2944	0.913871	573.54	0.57337	555.36	386.16	-0.74	2.92	1431.12	7.78	1428.9	7.77	-2.22	-0.16
65	185	120	55	2960	0.911614	574.2	0.574324	555.19	398.44	0	2.87	1435.04	7.76	1431.87	7.74	-3.17	-0.22
65	186	121	56	2976	0.909354	574.83	0.575269	555.04	410.85	-0.73	2.82	1437.37	7.73	1435.09	7.72	-2.27	-0.16
65	187	122	57	2992	0.907089	575.46	0.576203	554.89	423.39	0	2.78	1441.04	7.71	1437.82	7.69	-3.22	-0.22
65	188	123	58	3008	0.904821	576.06	0.577128	554.76	436.06	-0.73	2.74	1443.13	7.68	1440.8	7.66	-2.33	-0.16
65	189	124	59	3024	0.90255	576.65	0.578042	554.63	448.85	0	2.7	1446.56	7.65	1443.29	7.64	-3.27	-0.23
65	190	125	60	3040	0.900277	577.23	0.578947	554.52	461.77	-0.73	2.65	1448.42	7.62	1446.03	7.61	-2.39	-0.16
65	191	126	61	3056	0.898002	577.79	0.579843	554.41	474.8	0	2.61	1451.61	7.6	1448.28	7.58	-3.33	-0.23
65	192	127	62	3072	0.895725	578.33	0.580729	554.32	487.96	-0.72	2.58	1453.25	7.57	1450.8	7.56	-2.45	-0.17
65	193	128	63	3088	0.893447	578.86	0.581606	554.23	501.23	0	2.54	1456.22	7.55	1452.82	7.53	-3.4	-0.23
65	194	129	64	3104	0.891168	579.38	0.582474	554.16	514.61	-0.72	2.5	1457.64	7.51	1455.12	7.5	-2.52	-0.17
65	195	130	65	3120	0.888889	579.88	0.583333	554.09	528.11	0	2.47	1460.39	7.49	1456.91	7.47	-3.47	-0.24
65	196	131	66	3136	0.88661	580.37	0.584184	554.03	541.72	-0.71	2.43	1461.59	7.46	1458.99	7.44	-2.6	-0.18
65	197	132	67	3152	0.884331	580.85	0.585025	553.98	555.44	0	2.4	1464.13	7.43	1460.57	7.41	-3.55	-0.24
65	198	133	68	3168	0.882053	581.31	0.585859	553.94	569.27	-0.71	2.36	1465.13	7.4	1462.44	7.39	-2.69	-0.18
65	199	134	69	3184	0.879776	581.76	0.586683	553.91	583.21	0	2.33	1467.46	7.37	1463.81	7.36	-3.65	-0.25
65	200	135	70	3200	0.8775	582.2	0.5875	553.88	597.25	-0.71	2.3	1468.27	7.34	1465.47	7.33	-2.79	-0.19
65	201	136	71	3216	0.875226	582.62	0.588308	553.87	611.39	0	2.27	1470.39	7.32	1466.64	7.3	-3.75	-0.26
65	202	137	72	3232	0.872954	583.03	0.589109	553.86	625.64	-0.7	2.24	1471	7.28	1468.1	7.27	-2.9	-0.2
65	203	138	73	3248	0.870684	583.44	0.589901	553.86	639.99	0	2.21	1472.93	7.26	1469.07	7.24	-3.86	-0.26
65	204	139	74	3264	0.868416	583.83	0.590686	553.86	654.43	-0.7	2.18	1473.36	7.22	1470.33	7.21	-3.03	-0.21
65	205	140	75	3280	0.866151	584.2	0.591463	553.87	668.98	0	2.15	1475.1	7.2	1471.11	7.18	-3.99	-0.27
65	206	141	76	3296	0.863889	584.57	0.592233	553.9	683.62	-0.7	2.12	1475.34	7.16	1472.18	7.15	-3.16	-0.21
65	207	142	77	3312	0.86163	584.93	0.592995	553.92	698.35	0	2.1	1476.89	7.13	1472.76	7.11	-4.13	-0.28
65	208	143	78	3328	0.859375	585.28	0.59375	553.96	713.18	-0.69	2.07	1476.96	7.1	1473.65	7.08	-3.31	-0.22
65	209	144	79	3344	0.857123	585.61	0.594498	554	728.1	0	2.04	1478.33	7.07	1474.05	7.05	-4.29	-0.29
65	210	145	80	3360	0.854875	585.94	0.595238	554.05	743.11	-0.69	2.02	1478.23	7.04	1474.76	7.02	-3.48	-0.24
65	211	146	81	3376	0.852631	586.25	0.595972	554.1	758.21	0	1.99	1479.43	7.01	1474.97	6.99	-4.45	-0.3
65	212	147	82	3392	0.850392	586.56	0.596698	554.16	773.4	-0.69	1.97	1479.16	6.98	1475.5	6.96	-3.66	-0.25
65	213	148	83	3408	0.848156	586.85	0.597418	554.23	788.68	0	1.95	1480.19	6.95	1475.55	6.93	-4.64	-0.31
65	214	149	84	3424	0.845925	587.14	0.598131	554.3	804.04	-0.68	1.92	1479.76	6.91	1475.9	6.9	-3.85	-0.26

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
65	215	150	85	3440	0.843699	587.42	0.598837	554.38	819.48	0	1.9	1480.62	6.89	1475.78	6.86	-4.84	-0.33
65	216	151	86	3456	0.841478	587.69	0.599537	554.46	835.01	-0.68	1.88	1480.03	6.85	1475.97	6.83	-4.07	-0.28
65	217	152	87	3472	0.839262	587.95	0.60023	554.55	850.63	0	1.86	1480.73	6.82	1475.67	6.8	-5.06	-0.34
65	218	153	88	3488	0.837051	588.2	0.600917	554.65	866.32	-0.68	1.84	1479.99	6.79	1475.69	6.77	-4.29	-0.29
65	219	154	89	3504	0.834845	588.44	0.601598	554.75	882.09	0	1.81	1480.53	6.76	1475.24	6.74	-5.29	-0.36
65	220	155	90	3520	0.832645	588.68	0.602273	554.86	897.95	-0.67	1.79	1479.64	6.73	1475.1	6.71	-4.54	-0.31
65	221	156	91	3536	0.83045	588.9	0.602941	554.97	913.88	0	1.77	1480.03	6.7	1474.48	6.67	-5.54	-0.38
65	222	157	92	3552	0.828261	589.12	0.603604	555.09	929.88	-0.67	1.75	1478.99	6.66	1474.19	6.64	-4.8	-0.33
65	223	158	93	3568	0.826077	589.33	0.60426	555.21	945.97	0	1.74	1479.23	6.63	1473.42	6.61	-5.81	-0.39
65	224	159	94	3584	0.8239	589.53	0.604911	555.34	962.12	-0.67	1.72	1478.05	6.6	1472.97	6.58	-5.08	-0.35
65	225	160	95	3600	0.821728	589.73	0.605556	555.47	978.35	0	1.7	1478.14	6.57	1472.04	6.54	-6.1	-0.41
65	226	161	96	3616	0.819563	589.92	0.606195	555.61	994.66	-0.67	1.68	1476.83	6.53	1471.45	6.51	-5.38	-0.37
65	227	162	97	3632	0.817404	590.1	0.606828	555.75	1011.04	0	1.66	1476.78	6.51	1470.38	6.48	-6.41	-0.44
65	228	163	98	3648	0.815251	590.27	0.607456	555.9	1027.48	-0.66	1.64	1475.34	6.47	1469.63	6.45	-5.7	-0.39
65	229	164	99	3664	0.813104	590.43	0.608079	556.05	1044	0	1.63	1475.15	6.44	1468.41	6.41	-6.73	-0.46
65	230	165	100	3680	0.810964	590.59	0.608696	556.2	1060.59	-0.66	1.61	1473.57	6.41	1467.53	6.38	-6.04	-0.41
65	231	166	101	3696	0.80883	590.75	0.609307	556.36	1077.24	0	1.59	1473.25	6.38	1466.17	6.35	-7.08	-0.48
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
66	131	65	-1	2096	0.999942	500.37	0.498092	608.98	0.19	0	9.68	996.15	7.6	1004.04	7.66	7.89	0.79
66	132	66	0	2112	1	502.94	0.5	607.42	0	0.87	10	1012.51	7.67	1019.43	7.72	6.92	0.68
66	133	67	1	2128	0.999943	505.45	0.50188	605.91	0.18	0	9.69	1026.15	7.72	1032.19	7.76	6.05	0.59
66	134	68	2	2144	0.999777	507.9	0.503731	604.45	0.73	0.86	9.39	1041.18	7.77	1046.97	7.81	5.78	0.55
66	135	69	3	2160	0.999506	510.28	0.505556	603.04	1.62	0	9.11	1054.17	7.81	1059.14	7.85	4.97	0.47
66	136	70	4	2176	0.999135	512.61	0.507353	601.67	2.86	0.86	8.84	1068.56	7.86	1073.31	7.89	4.75	0.44
66	137	71	5	2192	0.998668	514.88	0.509124	600.34	4.44	0	8.58	1080.92	7.89	1084.92	7.92	4	0.37
66	138	72	6	2208	0.99811	517.09	0.51087	599.06	6.34	0.85	8.33	1094.68	7.93	1098.51	7.96	3.83	0.35
66	139	73	7	2224	0.997464	519.25	0.51259	597.82	8.57	0	8.09	1106.45	7.96	1109.57	7.98	3.13	0.28
66	140	74	8	2240	0.996735	521.35	0.514286	596.62	11.12	0.85	7.87	1119.61	8	1122.61	8.02	3	0.27
66	141	75	9	2256	0.995926	523.41	0.515957	595.46	13.97	0	7.65	1130.8	8.02	1133.15	8.04	2.35	0.21
66	142	76	10	2272	0.995041	525.41	0.517606	594.34	17.13	0.84	7.44	1143.39	8.05	1145.65	8.07	2.26	0.2
66	143	77	11	2288	0.994083	527.37	0.519231	593.25	20.59	0	7.24	1154.03	8.07	1155.68	8.08	1.65	0.14
66	144	78	12	2304	0.993056	529.28	0.520833	592.2	24.33	0.83	7.05	1166.07	8.1	1167.67	8.11	1.59	0.14
66	145	79	13	2320	0.991962	531.14	0.522414	591.18	28.36	0	6.86	1176.18	8.11	1177.21	8.12	1.03	0.09
66	146	80	14	2336	0.990805	532.96	0.523973	590.2	32.67	0.83	6.68	1187.69	8.13	1188.7	8.14	1.01	0.08
66	147	81	15	2352	0.989588	534.73	0.52551	589.25	37.24	0	6.51	1197.29	8.14	1197.77	8.15	0.48	0.04
66	148	82	16	2368	0.988313	536.46	0.527027	588.32	42.09	0.82	6.35	1208.3	8.16	1208.78	8.17	0.49	0.04
66	149	83	17	2384	0.986983	538.15	0.528523	587.43	47.2	0	6.19	1217.41	8.17	1217.4	8.17	-0.01	0
66	150	84	18	2400	0.9856	539.8	0.53	586.57	52.57	0.82	6.04	1227.92	8.19	1227.95	8.19	0.03	0
66	151	85	19	2416	0.984167	541.4	0.531457	585.74	58.18	0	5.9	1236.57	8.19	1236.13	8.19	-0.43	-0.04
66	152	86	20	2432	0.982687	542.97	0.532895	584.93	64.05	0.81	5.75	1246.61	8.2	1246.23	8.2	-0.38	-0.03
66	153	87	21	2448	0.981161	544.51	0.534314	584.16	70.16	0	5.62	1254.8	8.2	1253.99	8.2	-0.81	-0.06
66	154	88	22	2464	0.979592	546	0.535714	583.4	76.5	0.81	5.49	1264.39	8.21	1263.66	8.21	-0.73	-0.06
66	155	89	23	2480	0.977981	547.46	0.537097	582.68	83.08	0	5.36	1272.15	8.21	1271.01	8.2	-1.14	-0.09
66	156	90	24	2496	0.976331	548.89	0.538462	581.98	89.88	0.8	5.24	1281.3	8.21	1280.26	8.21	-1.04	-0.08

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
66	157	91	25	2512	0.974644	550.28	0.539809	581.3	96.91	0	5.12	1288.64	8.21	1287.21	8.2	-1.42	-0.11
66	158	92	26	2528	0.972921	551.63	0.541139	580.65	104.16	0.8	5.01	1297.37	8.21	1296.06	8.2	-1.31	-0.1
66	159	93	27	2544	0.971164	552.96	0.542453	580.02	111.62	0	4.9	1304.3	8.2	1302.63	8.19	-1.67	-0.13
66	160	94	28	2560	0.969375	554.25	0.54375	579.41	119.3	0.79	4.8	1312.63	8.2	1311.09	8.19	-1.54	-0.12
66	161	95	29	2576	0.967555	555.51	0.545031	578.82	127.18	0	4.69	1319.17	8.19	1317.29	8.18	-1.88	-0.14
66	162	96	30	2592	0.965706	556.75	0.546296	578.26	135.27	0.79	4.59	1327.11	8.19	1325.37	8.18	-1.74	-0.13
66	163	97	31	2608	0.96383	557.95	0.547546	577.71	143.56	0	4.5	1333.28	8.18	1331.22	8.17	-2.06	-0.15
66	164	98	32	2624	0.961927	559.12	0.54878	577.19	152.04	0.78	4.41	1340.84	8.18	1338.93	8.16	-1.91	-0.14
66	165	99	33	2640	0.96	560.27	0.55	576.68	160.72	0	4.32	1346.65	8.16	1344.43	8.15	-2.22	-0.16
66	166	100	34	2656	0.958049	561.39	0.551205	576.19	169.59	0.78	4.23	1353.84	8.16	1351.79	8.14	-2.05	-0.15
66	167	101	35	2672	0.956076	562.48	0.552395	575.73	178.64	0	4.15	1359.3	8.14	1356.96	8.13	-2.35	-0.17
66	168	102	36	2688	0.954082	563.54	0.553571	575.28	187.88	0.77	4.07	1366.14	8.13	1363.97	8.12	-2.17	-0.16
66	169	103	37	2704	0.952068	564.58	0.554734	574.85	197.29	0	3.99	1371.27	8.11	1368.81	8.1	-2.46	-0.18
66	170	104	38	2720	0.950035	565.6	0.555882	574.43	206.88	0.77	3.91	1377.77	8.1	1375.49	8.09	-2.28	-0.17
66	171	105	39	2736	0.947984	566.59	0.557018	574.03	216.65	0	3.84	1382.57	8.09	1380.02	8.07	-2.55	-0.18
66	172	106	40	2752	0.945917	567.55	0.55814	573.65	226.58	0.76	3.77	1388.74	8.07	1386.38	8.06	-2.37	-0.17
66	173	107	41	2768	0.943834	568.5	0.559249	573.28	236.68	0	3.7	1393.23	8.05	1390.6	8.04	-2.63	-0.19
66	174	108	42	2784	0.941736	569.42	0.560345	572.93	246.95	0.76	3.63	1399.08	8.04	1396.64	8.03	-2.44	-0.17
66	175	109	43	2800	0.939624	570.31	0.561429	572.6	257.38	0	3.56	1403.27	8.02	1400.57	8	-2.7	-0.19
66	176	110	44	2816	0.9375	571.19	0.5625	572.28	267.97	0.75	3.5	1408.81	8	1406.31	7.99	-2.5	-0.18
66	177	111	45	2832	0.935363	572.05	0.563559	571.97	278.71	0	3.44	1412.7	7.98	1409.95	7.97	-2.76	-0.2
66	178	112	46	2848	0.933216	572.88	0.564607	571.68	289.61	0.75	3.38	1417.95	7.97	1415.39	7.95	-2.56	-0.18
66	179	113	47	2864	0.931057	573.69	0.565642	571.4	300.66	0	3.32	1421.56	7.94	1418.75	7.93	-2.81	-0.2
66	180	114	48	2880	0.928889	574.49	0.566667	571.14	311.86	0.75	3.26	1426.52	7.93	1423.91	7.91	-2.61	-0.18
66	181	115	49	2896	0.926712	575.26	0.56768	570.89	323.2	0	3.21	1429.86	7.9	1427	7.88	-2.85	-0.2
66	182	116	50	2912	0.924526	576.02	0.568681	570.65	334.69	0.74	3.15	1434.54	7.88	1431.89	7.87	-2.65	-0.19
66	183	117	51	2928	0.922333	576.75	0.569672	570.42	346.32	0	3.1	1437.61	7.86	1434.71	7.84	-2.89	-0.2
66	184	118	52	2944	0.920132	577.47	0.570652	570.21	358.09	0.74	3.05	1442.02	7.84	1439.32	7.82	-2.7	-0.19
66	185	119	53	2960	0.917925	578.17	0.571622	570.01	369.99	0	3	1444.83	7.81	1441.89	7.79	-2.93	-0.2
66	186	120	54	2976	0.915713	578.85	0.572581	569.82	382.03	0.73	2.95	1448.98	7.79	1446.24	7.78	-2.74	-0.19
66	187	121	55	2992	0.913495	579.52	0.573529	569.64	394.2	0	2.91	1451.54	7.76	1448.57	7.75	-2.98	-0.21
66	188	122	56	3008	0.911272	580.17	0.574468	569.47	406.51	0.73	2.86	1455.44	7.74	1452.66	7.73	-2.78	-0.19
66	189	123	57	3024	0.909045	580.8	0.575397	569.32	418.94	0	2.82	1457.76	7.71	1454.74	7.7	-3.02	-0.21
66	190	124	58	3040	0.906814	581.42	0.576316	569.17	431.5	0.73	2.77	1461.41	7.69	1458.59	7.68	-2.82	-0.19
66	191	125	59	3056	0.90458	582.02	0.577225	569.04	444.18	0	2.73	1463.5	7.66	1460.43	7.65	-3.06	-0.21
66	192	126	60	3072	0.902344	582.61	0.578125	568.91	456.98	0.72	2.69	1466.91	7.64	1464.04	7.63	-2.87	-0.2
66	193	127	61	3088	0.900105	583.18	0.579016	568.8	469.91	0	2.65	1468.77	7.61	1465.65	7.59	-3.11	-0.21
66	194	128	62	3104	0.897864	583.73	0.579897	568.69	482.95	0.72	2.61	1471.95	7.59	1469.02	7.57	-2.93	-0.2
66	195	129	63	3120	0.895621	584.27	0.580769	568.6	496.11	0	2.57	1473.59	7.56	1470.42	7.54	-3.17	-0.22
66	196	130	64	3136	0.893378	584.8	0.581633	568.51	509.39	0.71	2.54	1476.55	7.53	1473.56	7.52	-2.99	-0.2
66	197	131	65	3152	0.891133	585.31	0.582487	568.44	522.78	0	2.5	1477.97	7.5	1474.74	7.49	-3.23	-0.22
66	198	132	66	3168	0.888889	585.81	0.583333	568.37	536.28	0.71	2.47	1480.72	7.48	1477.66	7.46	-3.06	-0.21
66	199	133	67	3184	0.886644	586.3	0.584171	568.31	549.89	0	2.43	1481.93	7.45	1478.63	7.43	-3.31	-0.22
66	200	134	68	3200	0.8844	586.77	0.585	568.26	563.61	0.71	2.4	1484.46	7.42	1481.33	7.41	-3.14	-0.21
66	201	135	69	3216	0.882156	587.23	0.585821	568.22	577.43	0	2.37	1485.48	7.39	1482.09	7.37	-3.39	-0.23
66	202	136	70	3232	0.879914	587.68	0.586634	568.18	591.36	0.7	2.33	1487.81	7.37	1484.58	7.35	-3.22	-0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
66	203	137	71	3248	0.877672	588.12	0.587438	568.16	605.4	0	2.3	1488.63	7.33	1485.14	7.32	-3.48	-0.23
66	204	138	72	3264	0.875433	588.54	0.588235	568.14	619.54	0.7	2.27	1490.75	7.31	1487.43	7.29	-3.32	-0.22
66	205	139	73	3280	0.873195	588.95	0.589024	568.13	633.77	0	2.24	1491.38	7.28	1487.8	7.26	-3.58	-0.24
66	206	140	74	3296	0.870959	589.36	0.589806	568.13	648.11	0.7	2.21	1493.31	7.25	1489.88	7.23	-3.43	-0.23
66	207	141	75	3312	0.868725	589.75	0.59058	568.13	662.54	0	2.18	1493.76	7.22	1490.06	7.2	-3.7	-0.25
66	208	142	76	3328	0.866494	590.12	0.591346	568.15	677.08	0.69	2.16	1495.5	7.19	1491.95	7.17	-3.56	-0.24
66	209	143	77	3344	0.864266	590.49	0.592105	568.17	691.7	0	2.13	1495.77	7.16	1491.94	7.14	-3.83	-0.26
66	210	144	78	3360	0.862041	590.85	0.592857	568.19	706.42	0.69	2.1	1497.33	7.13	1493.64	7.11	-3.69	-0.25
66	211	145	79	3376	0.859819	591.19	0.593602	568.23	721.23	0	2.08	1497.42	7.1	1493.45	7.08	-3.97	-0.27
66	212	146	80	3392	0.857601	591.53	0.59434	568.27	736.13	0.69	2.05	1498.81	7.07	1494.96	7.05	-3.84	-0.26
66	213	147	81	3408	0.855386	591.86	0.59507	568.31	751.13	0	2.02	1498.73	7.04	1494.6	7.02	-4.13	-0.28
66	214	148	82	3424	0.853175	592.17	0.595794	568.37	766.21	0.68	2	1499.94	7.01	1495.93	6.99	-4.01	-0.27
66	215	149	83	3440	0.850968	592.48	0.596512	568.43	781.37	0	1.98	1499.7	6.98	1495.4	6.96	-4.3	-0.29
66	216	150	84	3456	0.848765	592.78	0.597222	568.49	796.63	0.68	1.95	1500.74	6.95	1496.55	6.93	-4.18	-0.28
66	217	151	85	3472	0.846567	593.07	0.597926	568.56	811.97	0	1.93	1500.33	6.91	1495.85	6.89	-4.48	-0.3
66	218	152	86	3488	0.844373	593.34	0.598624	568.64	827.39	0.68	1.91	1501.21	6.89	1496.83	6.87	-4.38	-0.29
66	219	153	87	3504	0.842184	593.62	0.599315	568.73	842.89	0	1.89	1500.65	6.85	1495.97	6.83	-4.69	-0.31
66	220	154	88	3520	0.84	593.88	0.6	568.82	858.48	0.67	1.86	1501.37	6.82	1496.77	6.8	-4.59	-0.31
66	221	155	89	3536	0.837821	594.13	0.600679	568.91	874.15	0	1.84	1500.66	6.79	1495.75	6.77	-4.9	-0.33
66	222	156	90	3552	0.835646	594.37	0.601351	569.01	889.89	0.67	1.82	1501.22	6.76	1496.4	6.74	-4.82	-0.32
66	223	157	91	3568	0.833477	594.61	0.602018	569.12	905.72	0	1.8	1500.36	6.73	1495.22	6.71	-5.14	-0.34
66	224	158	92	3584	0.831314	594.84	0.602679	569.23	921.62	0.67	1.78	1500.77	6.7	1495.7	6.68	-5.07	-0.34
66	225	159	93	3600	0.829156	595.06	0.603333	569.34	937.59	0	1.76	1499.77	6.67	1494.37	6.64	-5.39	-0.36
66	226	160	94	3616	0.827003	595.27	0.603982	569.47	953.65	0.67	1.74	1500.03	6.64	1494.7	6.61	-5.33	-0.36
66	227	161	95	3632	0.824856	595.48	0.604626	569.59	969.77	0	1.72	1498.88	6.6	1493.22	6.58	-5.67	-0.38
66	228	162	96	3648	0.822715	595.67	0.605263	569.72	985.97	0.66	1.71	1499	6.57	1493.39	6.55	-5.61	-0.38
66	229	163	97	3664	0.820579	595.86	0.605895	569.86	1002.24	0	1.69	1497.72	6.54	1491.76	6.51	-5.96	-0.4
66	230	164	98	3680	0.81845	596.05	0.606522	570	1018.59	0.66	1.67	1497.7	6.51	1491.79	6.49	-5.91	-0.4
66	231	165	99	3696	0.816327	596.22	0.607143	570.15	1035	0	1.65	1496.29	6.48	1490.02	6.45	-6.26	-0.42
66	232	166	100	3712	0.814209	596.39	0.607759	570.3	1051.48	0.66	1.64	1496.12	6.45	1489.89	6.42	-6.23	-0.42
66	233	167	101	3728	0.812098	596.55	0.608369	570.45	1068.03	0	1.62	1494.58	6.41	1487.99	6.39	-6.59	-0.44
66	234	168	102	3744	0.809993	596.71	0.608974	570.61	1084.65	0.65	1.6	1494.29	6.39	1487.72	6.36	-6.57	-0.44
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
67	133	66	-1	2128	0.999943	505.45	0.49812	624.41	0.18	0	9.69	1007.65	7.58	1015.59	7.64	7.95	0.78
67	134	67	0	2144	1	508.01	0.5	622.84	0	-0.86	10	1022.29	7.63	1029.96	7.69	7.67	0.74
67	135	68	1	2160	0.999945	510.51	0.501852	621.31	0.18	0	9.69	1037.7	7.69	1043.8	7.73	6.1	0.58
67	136	69	2	2176	0.999784	512.94	0.503676	619.83	0.72	-0.86	9.4	1051.05	7.73	1057.57	7.78	6.52	0.62
67	137	70	3	2192	0.99952	515.32	0.505474	618.41	1.6	0	9.12	1065.8	7.78	1070.81	7.82	5.01	0.47
67	138	71	4	2208	0.99916	517.63	0.507246	617.02	2.82	-0.85	8.85	1078.53	7.82	1084	7.86	5.48	0.51
67	139	72	5	2224	0.998706	519.9	0.508993	615.68	4.37	0	8.6	1092.65	7.86	1096.67	7.89	4.02	0.37
67	140	73	6	2240	0.998163	522.1	0.510714	614.38	6.25	-0.85	8.35	1104.77	7.89	1109.31	7.92	4.54	0.41
67	141	74	7	2256	0.997535	524.26	0.512411	613.13	8.45	0	8.12	1118.28	7.93	1121.42	7.95	3.13	0.28
67	142	75	8	2272	0.996826	526.36	0.514085	611.91	10.96	-0.84	7.89	1129.82	7.96	1133.52	7.98	3.7	0.33
67	143	76	9	2288	0.996039	528.41	0.515734	610.73	13.78	0	7.68	1142.76	7.99	1145.09	8.01	2.34	0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
67	144	77	10	2304	0.995177	530.41	0.517361	609.59	16.9	-0.83	7.47	1153.74	8.01	1156.68	8.03	2.94	0.25
67	145	78	11	2320	0.994245	532.36	0.518966	608.49	20.3	0	7.27	1166.12	8.04	1167.74	8.05	1.63	0.14
67	146	79	12	2336	0.993245	534.27	0.520548	607.42	24	-0.83	7.08	1176.57	8.06	1178.83	8.07	2.27	0.19
67	147	80	13	2352	0.992179	536.13	0.522109	606.39	27.98	0	6.9	1188.41	8.08	1189.4	8.09	0.99	0.08
67	148	81	14	2368	0.991052	537.95	0.523649	605.38	32.23	-0.82	6.72	1198.34	8.1	1200	8.11	1.66	0.14
67	149	82	15	2384	0.989865	539.72	0.525168	604.42	36.75	0	6.55	1209.67	8.12	1210.09	8.12	0.42	0.04
67	150	83	16	2400	0.988622	541.45	0.526667	603.48	41.53	-0.82	6.39	1219.11	8.13	1220.24	8.13	1.13	0.09
67	151	84	17	2416	0.987325	543.14	0.528146	602.57	46.58	0	6.23	1229.94	8.15	1229.86	8.14	-0.08	-0.01
67	152	85	18	2432	0.985976	544.79	0.529605	601.69	51.88	-0.81	6.08	1238.9	8.15	1239.56	8.16	0.66	0.05
67	153	86	19	2448	0.984579	546.4	0.531046	600.84	57.43	0	5.94	1249.26	8.17	1248.74	8.16	-0.52	-0.04
67	154	87	20	2464	0.983134	547.98	0.532468	600.02	63.22	-0.81	5.8	1257.77	8.17	1258.01	8.17	0.24	0.02
67	155	88	21	2480	0.981644	549.51	0.533871	599.23	69.26	0	5.66	1267.66	8.18	1266.75	8.17	-0.91	-0.07
67	156	89	22	2496	0.980112	551.01	0.535256	598.46	75.53	-0.8	5.53	1275.73	8.18	1275.6	8.18	-0.13	-0.01
67	157	90	23	2512	0.978539	552.48	0.536624	597.72	82.03	0	5.4	1285.18	8.19	1283.94	8.18	-1.25	-0.1
67	158	91	24	2528	0.976927	553.9	0.537975	597	88.75	-0.8	5.28	1292.83	8.18	1292.38	8.18	-0.45	-0.03
67	159	92	25	2544	0.975278	555.3	0.539308	596.31	95.7	0	5.17	1301.86	8.19	1300.31	8.18	-1.55	-0.12
67	160	93	26	2560	0.973594	556.66	0.540625	595.64	102.87	-0.79	5.05	1309.09	8.18	1308.36	8.18	-0.73	-0.06
67	161	94	27	2576	0.971876	557.99	0.541925	594.99	110.25	0	4.94	1317.71	8.18	1315.9	8.17	-1.81	-0.14
67	162	95	28	2592	0.970127	559.29	0.54321	594.37	117.84	-0.79	4.84	1324.55	8.18	1323.58	8.17	-0.97	-0.07
67	163	96	29	2608	0.968347	560.56	0.544479	593.77	125.63	0	4.74	1332.77	8.18	1330.74	8.16	-2.03	-0.15
67	164	97	30	2624	0.966538	561.8	0.545732	593.19	133.63	-0.78	4.64	1339.23	8.17	1338.05	8.16	-1.18	-0.09
67	165	98	31	2640	0.964702	563.01	0.54697	592.63	141.83	0	4.54	1347.07	8.16	1344.85	8.15	-2.22	-0.17
67	166	99	32	2656	0.962839	564.19	0.548193	592.09	150.22	-0.78	4.45	1353.17	8.15	1351.8	8.14	-1.37	-0.1
67	167	100	33	2672	0.960952	565.35	0.549401	591.57	158.81	0	4.36	1360.64	8.15	1358.25	8.13	-2.39	-0.18
67	168	101	34	2688	0.959042	566.47	0.550595	591.07	167.58	-0.77	4.27	1366.38	8.13	1364.86	8.12	-1.52	-0.11
67	169	102	35	2704	0.957109	567.57	0.551775	590.59	176.54	0	4.19	1373.49	8.13	1370.96	8.11	-2.53	-0.18
67	170	103	36	2720	0.955156	568.65	0.552941	590.12	185.68	-0.77	4.11	1378.9	8.11	1377.24	8.1	-1.66	-0.12
67	171	104	37	2736	0.953182	569.69	0.554094	589.68	195	0	4.03	1385.66	8.1	1383.01	8.09	-2.65	-0.19
67	172	105	38	2752	0.95119	570.72	0.555233	589.25	204.49	-0.76	3.95	1390.73	8.09	1388.97	8.08	-1.77	-0.13
67	173	106	39	2768	0.94918	571.72	0.556358	588.84	214.16	0	3.88	1397.17	8.08	1394.42	8.06	-2.75	-0.2
67	174	107	40	2784	0.947153	572.69	0.557471	588.44	223.99	-0.76	3.81	1401.92	8.06	1400.06	8.05	-1.87	-0.13
67	175	108	41	2800	0.94511	573.64	0.558571	588.06	234	0	3.74	1408.04	8.05	1405.19	8.03	-2.84	-0.2
67	176	109	42	2816	0.943053	574.57	0.559659	587.7	244.16	-0.75	3.67	1412.48	8.03	1410.53	8.01	-1.95	-0.14
67	177	110	43	2832	0.940981	575.48	0.560734	587.35	254.49	0	3.6	1418.28	8.01	1415.37	8	-2.92	-0.21
67	178	111	44	2848	0.938897	576.37	0.561798	587.02	264.97	-0.75	3.54	1422.43	7.99	1420.41	7.98	-2.02	-0.14
67	179	112	45	2864	0.9368	577.23	0.562849	586.7	275.62	0	3.48	1427.93	7.98	1424.95	7.96	-2.98	-0.21
67	180	113	46	2880	0.934691	578.08	0.563889	586.4	286.41	-0.75	3.42	1431.79	7.95	1429.71	7.94	-2.08	-0.15
67	181	114	47	2896	0.932572	578.9	0.564917	586.1	297.36	0	3.36	1437	7.94	1433.96	7.92	-3.04	-0.21
67	182	115	48	2912	0.930443	579.7	0.565934	585.83	308.45	-0.74	3.3	1440.58	7.92	1438.44	7.9	-2.14	-0.15
67	183	116	49	2928	0.928305	580.49	0.56694	585.56	319.69	0	3.25	1445.51	7.9	1442.42	7.88	-3.09	-0.21
67	184	117	50	2944	0.926158	581.25	0.567935	585.31	331.07	-0.74	3.19	1448.82	7.87	1446.63	7.86	-2.19	-0.15
67	185	118	51	2960	0.924003	582	0.568919	585.08	342.59	0	3.14	1453.47	7.86	1450.34	7.84	-3.13	-0.22
67	186	119	52	2976	0.921841	582.73	0.569892	584.85	354.26	-0.73	3.09	1456.52	7.83	1454.28	7.82	-2.24	-0.15
67	187	120	53	2992	0.919672	583.44	0.570856	584.64	366.06	0	3.04	1460.91	7.81	1457.73	7.8	-3.18	-0.22
67	188	121	54	3008	0.917497	584.13	0.571809	584.44	377.99	-0.73	2.99	1463.7	7.79	1461.42	7.77	-2.29	-0.16
67	189	122	55	3024	0.915316	584.81	0.572751	584.25	390.05	0	2.95	1467.83	7.77	1464.61	7.75	-3.22	-0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
67	190	123	56	3040	0.91313	585.47	0.573684	584.07	402.25	-0.73	2.9	1470.38	7.74	1468.05	7.73	-2.33	-0.16
67	191	124	57	3056	0.91094	586.11	0.574607	583.9	414.57	0	2.86	1474.27	7.72	1471	7.7	-3.27	-0.22
67	192	125	58	3072	0.908746	586.74	0.575521	583.75	427.02	-0.72	2.81	1476.58	7.69	1474.2	7.68	-2.38	-0.16
67	193	126	59	3088	0.906548	587.35	0.576425	583.6	439.6	0	2.77	1480.22	7.67	1476.9	7.65	-3.32	-0.22
67	194	127	60	3104	0.904347	587.95	0.57732	583.47	452.3	-0.72	2.73	1482.3	7.64	1479.87	7.63	-2.43	-0.16
67	195	128	61	3120	0.902143	588.53	0.578205	583.34	465.11	0	2.69	1485.71	7.62	1482.34	7.6	-3.37	-0.23
67	196	129	62	3136	0.899938	589.09	0.579082	583.23	478.05	-0.71	2.65	1487.56	7.59	1485.07	7.58	-2.49	-0.17
67	197	130	63	3152	0.89773	589.65	0.579949	583.12	491.1	0	2.61	1490.74	7.57	1487.32	7.55	-3.42	-0.23
67	198	131	64	3168	0.895521	590.18	0.580808	583.03	504.27	-0.71	2.57	1492.38	7.54	1489.83	7.52	-2.55	-0.17
67	199	132	65	3184	0.893311	590.71	0.581658	582.94	517.55	0	2.54	1495.34	7.51	1491.85	7.5	-3.49	-0.23
67	200	133	66	3200	0.8911	591.22	0.5825	582.86	530.94	-0.71	2.5	1496.77	7.48	1494.15	7.47	-2.62	-0.18
67	201	134	67	3216	0.888889	591.72	0.583333	582.79	544.44	0	2.47	1499.51	7.46	1495.95	7.44	-3.56	-0.24
67	202	135	68	3232	0.886678	592.2	0.584158	582.73	558.06	-0.7	2.43	1500.74	7.43	1498.04	7.42	-2.7	-0.18
67	203	136	69	3248	0.884467	592.67	0.584975	582.68	571.77	0	2.4	1503.27	7.41	1499.63	7.39	-3.64	-0.24
67	204	137	70	3264	0.882257	593.13	0.585784	582.64	585.6	-0.7	2.37	1504.3	7.37	1501.51	7.36	-2.79	-0.19
67	205	138	71	3280	0.880048	593.58	0.586585	582.61	599.52	0	2.33	1506.63	7.35	1502.9	7.33	-3.73	-0.25
67	206	139	72	3296	0.87784	594.01	0.587379	582.58	613.55	-0.7	2.3	1507.46	7.32	1504.58	7.3	-2.89	-0.19
67	207	140	73	3312	0.875633	594.43	0.588164	582.56	627.68	0	2.27	1509.6	7.29	1505.77	7.27	-3.83	-0.25
67	208	141	74	3328	0.873428	594.85	0.588942	582.55	641.91	-0.69	2.24	1510.25	7.26	1507.25	7.25	-3	-0.2
67	209	142	75	3344	0.871225	595.25	0.589713	582.55	656.23	0	2.22	1512.19	7.24	1508.24	7.22	-3.94	-0.26
67	210	143	76	3360	0.869025	595.63	0.590476	582.55	670.66	-0.69	2.19	1512.65	7.2	1509.53	7.19	-3.12	-0.21
67	211	144	77	3376	0.866827	596.01	0.591232	582.56	685.18	0	2.16	1514.41	7.18	1510.34	7.16	-4.07	-0.27
67	212	145	78	3392	0.864632	596.38	0.591981	582.58	699.79	-0.69	2.13	1514.7	7.14	1511.44	7.13	-3.25	-0.22
67	213	146	79	3408	0.862439	596.74	0.592723	582.61	714.49	0	2.11	1516.27	7.12	1512.06	7.1	-4.2	-0.28
67	214	147	80	3424	0.86025	597.08	0.593458	582.64	729.29	-0.68	2.08	1516.39	7.09	1512.99	7.07	-3.4	-0.22
67	215	148	81	3440	0.858064	597.42	0.594186	582.68	744.17	0	2.05	1517.78	7.06	1513.43	7.04	-4.36	-0.29
67	216	149	82	3456	0.855881	597.75	0.594907	582.73	759.15	-0.68	2.03	1517.73	7.03	1514.17	7.01	-3.56	-0.24
67	217	150	83	3472	0.853703	598.06	0.595622	582.78	774.21	0	2.01	1518.96	7	1514.44	6.98	-4.52	-0.3
67	218	151	84	3488	0.851528	598.37	0.59633	582.84	789.35	-0.68	1.98	1518.74	6.97	1515.01	6.95	-3.73	-0.25
67	219	152	85	3504	0.849357	598.67	0.597032	582.9	804.59	0	1.96	1519.8	6.94	1515.1	6.92	-4.7	-0.31
67	220	153	86	3520	0.84719	598.96	0.597727	582.97	819.9	-0.67	1.94	1519.43	6.91	1515.5	6.89	-3.93	-0.26
67	221	154	87	3536	0.845028	599.24	0.598416	583.05	835.3	0	1.91	1520.32	6.88	1515.43	6.86	-4.9	-0.32
67	222	155	88	3552	0.84287	599.51	0.599099	583.13	850.78	-0.67	1.89	1519.8	6.85	1515.66	6.83	-4.13	-0.27
67	223	156	89	3568	0.840717	599.77	0.599776	583.22	866.34	0	1.87	1520.53	6.82	1515.42	6.8	-5.11	-0.34
67	224	157	90	3584	0.838568	600.03	0.600446	583.31	881.98	-0.67	1.85	1519.86	6.79	1515.5	6.77	-4.35	-0.29
67	225	158	91	3600	0.836425	600.27	0.601111	583.41	897.7	0	1.83	1520.44	6.76	1515.1	6.73	-5.34	-0.35
67	226	159	92	3616	0.834286	600.51	0.60177	583.52	913.5	-0.67	1.81	1519.61	6.72	1515.02	6.7	-4.59	-0.3
67	227	160	93	3632	0.832153	600.74	0.602423	583.63	929.37	0	1.79	1520.05	6.7	1514.46	6.67	-5.58	-0.37
67	228	161	94	3648	0.830025	600.97	0.60307	583.75	945.32	-0.66	1.77	1519.08	6.66	1514.23	6.64	-4.85	-0.32
67	229	162	95	3664	0.827902	601.18	0.603712	583.87	961.34	0	1.75	1519.37	6.63	1513.52	6.61	-5.85	-0.39
67	230	163	96	3680	0.825784	601.39	0.604348	583.99	977.44	-0.66	1.73	1518.26	6.6	1513.13	6.58	-5.13	-0.34
67	231	164	97	3696	0.823673	601.59	0.604978	584.12	993.6	0	1.71	1518.4	6.57	1512.27	6.55	-6.13	-0.41
67	232	165	98	3712	0.821567	601.78	0.605603	584.26	1009.84	-0.66	1.7	1517.16	6.54	1511.74	6.52	-5.42	-0.36
67	233	166	99	3728	0.819466	601.96	0.606223	584.4	1026.15	0	1.68	1517.16	6.51	1510.74	6.48	-6.43	-0.43
67	234	167	100	3744	0.817372	602.14	0.606838	584.54	1042.53	-0.65	1.66	1515.79	6.48	1510.06	6.45	-5.73	-0.38
67	235	168	101	3760	0.815283	602.31	0.607447	584.69	1058.98	0	1.64	1515.66	6.45	1508.91	6.42	-6.74	-0.45

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
67	236	169	102	3776	0.8132	602.48	0.608051	584.85	1075.5	-0.65	1.63	1514.15	6.42	1508.1	6.39	-6.06	-0.4
67	237	170	103	3792	0.811124	602.63	0.60865	585	1092.08	0	1.61	1513.89	6.39	1506.81	6.36	-7.08	-0.47
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
68	135	67	-1	2160	0.999945	510.51	0.498148	640	0.18	0	9.69	1019.01	7.55	1027.02	7.61	8.01	0.78
68	136	68	0	2176	1	513.05	0.5	638.41	0	0.86	10	1035.4	7.61	1042.46	7.67	7.06	0.68
68	137	69	1	2192	0.999947	515.54	0.501825	636.87	0.18	0	9.7	1049.12	7.66	1055.3	7.7	6.18	0.59
68	138	70	2	2208	0.99979	517.96	0.503623	635.37	0.7	0.85	9.41	1064.22	7.71	1070.13	7.75	5.91	0.55
68	139	71	3	2224	0.999534	520.33	0.505396	633.93	1.57	0	9.13	1077.3	7.75	1082.4	7.79	5.09	0.47
68	140	72	4	2240	0.999184	522.64	0.507143	632.53	2.78	0.85	8.87	1091.77	7.8	1096.64	7.83	4.87	0.44
68	141	73	5	2256	0.998743	524.89	0.508865	631.17	4.31	0	8.62	1104.24	7.83	1108.35	7.86	4.11	0.37
68	142	74	6	2272	0.998215	527.09	0.510563	629.86	6.17	0.84	8.37	1118.1	7.87	1122.04	7.9	3.94	0.35
68	143	75	7	2288	0.997604	529.24	0.512238	628.59	8.34	0	8.14	1129.98	7.9	1133.21	7.92	3.23	0.29
68	144	76	8	2304	0.996914	531.33	0.513889	627.35	10.81	0.83	7.92	1143.25	7.94	1146.35	7.96	3.1	0.27
68	145	77	9	2320	0.996147	533.38	0.515517	626.16	13.59	0	7.71	1154.57	7.96	1157.01	7.98	2.44	0.21
68	146	78	10	2336	0.995309	535.38	0.517123	625	16.67	0.83	7.5	1167.28	8	1169.63	8.01	2.34	0.2
68	147	79	11	2352	0.9944	537.33	0.518707	623.88	20.03	0	7.3	1178.06	8.01	1179.79	8.03	1.73	0.15
68	148	80	12	2368	0.993426	539.24	0.52027	622.8	23.68	0.82	7.11	1190.23	8.04	1191.9	8.05	1.67	0.14
68	149	81	13	2384	0.992388	541.1	0.521812	621.75	27.6	0	6.93	1200.49	8.06	1201.59	8.06	1.1	0.09
68	150	82	14	2400	0.991289	542.91	0.523333	620.73	31.8	0.82	6.76	1212.13	8.08	1213.21	8.09	1.07	0.09
68	151	83	15	2416	0.990132	544.69	0.524834	619.74	36.26	0	6.59	1221.9	8.09	1222.43	8.1	0.53	0.04
68	152	84	16	2432	0.98892	546.42	0.526316	618.79	40.99	0.81	6.43	1233.04	8.11	1233.58	8.12	0.54	0.04
68	153	85	17	2448	0.987654	548.11	0.527778	617.86	45.98	0	6.27	1242.32	8.12	1242.36	8.12	0.04	0
68	154	86	18	2464	0.986338	549.76	0.529221	616.97	51.21	0.81	6.12	1252.98	8.14	1253.05	8.14	0.07	0.01
68	155	87	19	2480	0.984974	551.38	0.530645	616.1	56.69	0	5.98	1261.8	8.14	1261.4	8.14	-0.4	-0.03
68	156	88	20	2496	0.983563	552.95	0.532051	615.27	62.42	0.8	5.84	1272	8.15	1271.65	8.15	-0.35	-0.03
68	157	89	21	2512	0.982109	554.49	0.533439	614.46	68.38	0	5.7	1280.37	8.16	1279.58	8.15	-0.79	-0.06
68	158	90	22	2528	0.980612	555.99	0.53481	613.67	74.58	0.8	5.57	1290.12	8.17	1289.41	8.16	-0.72	-0.06
68	159	91	23	2544	0.979075	557.46	0.536164	612.92	81	0	5.45	1298.07	8.16	1296.94	8.16	-1.13	-0.09
68	160	92	24	2560	0.9775	558.9	0.5375	612.18	87.65	0.79	5.33	1307.39	8.17	1306.35	8.16	-1.03	-0.08
68	161	93	25	2576	0.975888	560.3	0.53882	611.48	94.52	0	5.21	1314.92	8.17	1313.49	8.16	-1.43	-0.11
68	162	94	26	2592	0.974242	561.67	0.540123	610.79	101.6	0.79	5.1	1323.82	8.17	1322.51	8.16	-1.31	-0.1
68	163	95	27	2608	0.972562	563	0.541411	610.13	108.9	0	4.99	1330.95	8.17	1329.27	8.16	-1.68	-0.13
68	164	96	28	2624	0.970851	564.31	0.542683	609.49	116.41	0.78	4.88	1339.46	8.17	1337.9	8.16	-1.55	-0.12
68	165	97	29	2640	0.969109	565.58	0.543939	608.87	124.12	0	4.78	1346.2	8.16	1344.3	8.15	-1.9	-0.14
68	166	98	30	2656	0.967339	566.83	0.545181	608.28	132.03	0.78	4.68	1354.32	8.16	1352.56	8.15	-1.76	-0.13
68	167	99	31	2672	0.965542	568.05	0.546407	607.7	140.14	0	4.59	1360.69	8.15	1358.6	8.14	-2.09	-0.15
68	168	100	32	2688	0.963719	569.23	0.547619	607.15	148.44	0.77	4.49	1368.44	8.15	1366.5	8.13	-1.94	-0.14
68	169	101	33	2704	0.961871	570.4	0.548817	606.61	156.94	0	4.4	1374.45	8.13	1372.2	8.12	-2.26	-0.16
68	170	102	34	2720	0.96	571.53	0.55	606.1	165.62	0.77	4.32	1381.83	8.13	1379.74	8.12	-2.09	-0.15
68	171	103	35	2736	0.958107	572.64	0.55117	605.6	174.49	0	4.23	1387.51	8.11	1385.11	8.1	-2.4	-0.17
68	172	104	36	2752	0.956193	573.72	0.552326	605.13	183.53	0.76	4.15	1394.54	8.11	1392.32	8.09	-2.22	-0.16
68	173	105	37	2768	0.954258	574.78	0.553468	604.67	192.76	0	4.07	1399.88	8.09	1397.36	8.08	-2.51	-0.18
68	174	106	38	2784	0.952305	575.81	0.554598	604.22	202.15	0.76	4	1406.57	8.08	1404.24	8.07	-2.33	-0.17
68	175	107	39	2800	0.950335	576.82	0.555714	603.8	211.72	0	3.92	1411.59	8.07	1408.97	8.05	-2.61	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
68	176	108	40	2816	0.948347	577.8	0.556818	603.39	221.46	0.75	3.85	1417.95	8.06	1415.53	8.04	-2.42	-0.17
68	177	109	41	2832	0.946344	578.76	0.55791	603	231.37	0	3.78	1422.66	8.04	1419.96	8.02	-2.69	-0.19
68	178	110	42	2848	0.944325	579.7	0.558989	602.62	241.43	0.75	3.71	1428.71	8.03	1426.21	8.01	-2.5	-0.18
68	179	111	43	2864	0.942293	580.62	0.560056	602.26	251.66	0	3.65	1433.11	8.01	1430.34	7.99	-2.77	-0.19
68	180	112	44	2880	0.940247	581.51	0.561111	601.91	262.05	0.75	3.58	1438.86	7.99	1436.29	7.98	-2.57	-0.18
68	181	113	45	2896	0.938189	582.39	0.562155	601.58	272.59	0	3.52	1442.97	7.97	1440.14	7.96	-2.82	-0.2
68	182	114	46	2912	0.936119	583.24	0.563187	601.26	283.28	0.74	3.46	1448.42	7.96	1445.79	7.94	-2.62	-0.18
68	183	115	47	2928	0.934038	584.07	0.564208	600.96	294.12	0	3.4	1452.24	7.94	1449.37	7.92	-2.88	-0.2
68	184	116	48	2944	0.931947	584.89	0.565217	600.67	305.12	0.74	3.34	1457.41	7.92	1454.73	7.91	-2.67	-0.18
68	185	117	49	2960	0.929847	585.68	0.566216	600.4	316.25	0	3.29	1460.96	7.9	1458.04	7.88	-2.92	-0.2
68	186	118	50	2976	0.927737	586.46	0.567204	600.13	327.53	0.73	3.23	1465.85	7.88	1463.13	7.87	-2.72	-0.19
68	187	119	51	2992	0.92562	587.21	0.568182	599.88	338.95	0	3.18	1469.13	7.86	1466.17	7.84	-2.96	-0.2
68	188	120	52	3008	0.923495	587.95	0.569149	599.65	350.51	0.73	3.13	1473.75	7.84	1470.99	7.82	-2.76	-0.19
68	189	121	53	3024	0.921363	588.67	0.570106	599.42	362.2	0	3.08	1476.78	7.81	1473.78	7.8	-3	-0.2
68	190	122	54	3040	0.919224	589.38	0.571053	599.21	374.03	0.73	3.03	1481.14	7.8	1478.34	7.78	-2.8	-0.19
68	191	123	55	3056	0.91708	590.06	0.57199	599.01	385.99	0	2.98	1483.92	7.77	1480.88	7.75	-3.04	-0.2
68	192	124	56	3072	0.914931	590.73	0.572917	598.82	398.08	0.72	2.94	1488.02	7.75	1485.19	7.74	-2.83	-0.19
68	193	125	57	3088	0.912776	591.39	0.573834	598.64	410.3	0	2.89	1490.56	7.72	1487.49	7.71	-3.07	-0.21
68	194	126	58	3104	0.910617	592.02	0.574742	598.48	422.65	0.72	2.85	1494.42	7.7	1491.55	7.69	-2.87	-0.19
68	195	127	59	3120	0.908455	592.65	0.575641	598.32	435.11	0	2.81	1496.73	7.68	1493.61	7.66	-3.11	-0.21
68	196	128	60	3136	0.906289	593.25	0.576531	598.17	447.7	0.71	2.76	1500.35	7.65	1497.43	7.64	-2.92	-0.19
68	197	129	61	3152	0.90412	593.84	0.577411	598.04	460.41	0	2.72	1502.43	7.63	1499.27	7.61	-3.16	-0.21
68	198	130	62	3168	0.901949	594.42	0.578283	597.91	473.24	0.71	2.68	1505.82	7.61	1502.85	7.59	-2.96	-0.2
68	199	131	63	3184	0.899775	594.98	0.579146	597.8	486.19	0	2.65	1507.67	7.58	1504.47	7.56	-3.2	-0.21
68	200	132	64	3200	0.8976	595.53	0.58	597.69	499.25	0.71	2.61	1510.84	7.55	1507.82	7.54	-3.02	-0.2
68	201	133	65	3216	0.895423	596.07	0.580846	597.6	512.43	0	2.57	1512.48	7.52	1509.22	7.51	-3.26	-0.22
68	202	134	66	3232	0.893246	596.59	0.581683	597.51	525.71	0.7	2.54	1515.43	7.5	1512.36	7.49	-3.08	-0.2
68	203	135	67	3248	0.891067	597.09	0.582512	597.43	539.11	0	2.5	1516.87	7.47	1513.55	7.46	-3.32	-0.22
68	204	136	68	3264	0.888889	597.59	0.583333	597.36	552.61	0.7	2.47	1519.6	7.45	1516.46	7.43	-3.14	-0.21
68	205	137	69	3280	0.88671	598.07	0.584146	597.3	566.22	0	2.43	1520.84	7.42	1517.45	7.4	-3.39	-0.22
68	206	138	70	3296	0.884532	598.54	0.584951	597.25	579.94	0.7	2.4	1523.37	7.39	1520.15	7.38	-3.22	-0.21
68	207	139	71	3312	0.882354	599	0.585749	597.21	593.76	0	2.37	1524.4	7.36	1520.94	7.35	-3.47	-0.23
68	208	140	72	3328	0.880178	599.44	0.586538	597.17	607.68	0.69	2.34	1526.73	7.34	1523.43	7.32	-3.3	-0.22
68	209	141	73	3344	0.878002	599.88	0.587321	597.15	621.7	0	2.31	1527.58	7.31	1524.02	7.29	-3.56	-0.23
68	210	142	74	3360	0.875828	600.3	0.588095	597.13	635.82	0.69	2.28	1529.72	7.28	1526.32	7.27	-3.4	-0.22
68	211	143	75	3376	0.873655	600.71	0.588863	597.12	650.04	0	2.25	1530.38	7.25	1526.72	7.24	-3.66	-0.24
68	212	144	76	3392	0.871485	601.11	0.589623	597.11	664.36	0.69	2.22	1532.33	7.23	1528.82	7.21	-3.51	-0.23
68	213	145	77	3408	0.869316	601.5	0.590376	597.11	678.77	0	2.19	1532.81	7.2	1529.04	7.18	-3.77	-0.25
68	214	146	78	3424	0.86715	601.87	0.591121	597.13	693.28	0.68	2.16	1534.57	7.17	1530.95	7.15	-3.63	-0.24
68	215	147	79	3440	0.864986	602.24	0.59186	597.14	707.88	0	2.14	1534.88	7.14	1530.98	7.12	-3.9	-0.25
68	216	148	80	3456	0.862826	602.6	0.592593	597.17	722.57	0.68	2.11	1536.46	7.11	1532.7	7.1	-3.76	-0.25
68	217	149	81	3472	0.860668	602.94	0.593318	597.2	737.34	0	2.09	1536.6	7.08	1532.56	7.06	-4.04	-0.26
68	218	150	82	3488	0.858514	603.28	0.594037	597.24	752.21	0.68	2.06	1538.01	7.06	1534.1	7.04	-3.9	-0.25
68	219	151	83	3504	0.856362	603.61	0.594749	597.28	767.17	0	2.04	1537.98	7.02	1533.79	7	-4.19	-0.27
68	220	152	84	3520	0.854215	603.93	0.595455	597.33	782.21	0.67	2.01	1539.22	7	1535.15	6.98	-4.06	-0.26
68	221	153	85	3536	0.852071	604.23	0.596154	597.39	797.34	0	1.99	1539.02	6.96	1534.67	6.94	-4.35	-0.28

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
68	222	154	86	3552	0.849931	604.53	0.596847	597.46	812.55	0.67	1.97	1540.1	6.94	1535.86	6.92	-4.24	-0.28
68	223	155	87	3568	0.847795	604.82	0.597534	597.53	827.84	0	1.94	1539.75	6.9	1535.21	6.88	-4.54	-0.3
68	224	156	88	3584	0.845663	605.11	0.598214	597.6	843.22	0.67	1.92	1540.66	6.88	1536.23	6.86	-4.43	-0.29
68	225	157	89	3600	0.843536	605.38	0.598889	597.68	858.68	0	1.9	1540.16	6.85	1535.43	6.82	-4.73	-0.31
68	226	158	90	3616	0.841413	605.64	0.599558	597.77	874.21	0.67	1.88	1540.92	6.82	1536.28	6.8	-4.64	-0.3
68	227	159	91	3632	0.839294	605.9	0.60022	597.86	889.83	0	1.86	1540.27	6.79	1535.32	6.76	-4.95	-0.32
68	228	160	92	3648	0.837181	606.15	0.600877	597.96	905.52	0.66	1.84	1540.87	6.76	1536.01	6.74	-4.86	-0.32
68	229	161	93	3664	0.835072	606.39	0.601528	598.07	921.29	0	1.82	1540.07	6.73	1534.9	6.7	-5.18	-0.34
68	230	162	94	3680	0.832968	606.62	0.602174	598.18	937.13	0.66	1.8	1540.53	6.7	1535.43	6.68	-5.1	-0.33
68	231	163	95	3696	0.830869	606.84	0.602814	598.29	953.05	0	1.78	1539.59	6.66	1534.17	6.64	-5.43	-0.35
68	232	164	96	3712	0.828775	607.06	0.603448	598.41	969.05	0.66	1.76	1539.9	6.64	1534.54	6.61	-5.36	-0.35
68	233	165	97	3728	0.826687	607.27	0.604077	598.54	985.11	0	1.74	1538.83	6.6	1533.13	6.58	-5.69	-0.37
68	234	166	98	3744	0.824604	607.47	0.604701	598.67	1001.25	0.65	1.72	1538.99	6.58	1533.36	6.55	-5.63	-0.37
68	235	167	99	3760	0.822526	607.66	0.605319	598.8	1017.46	0	1.7	1537.78	6.54	1531.81	6.52	-5.97	-0.39
68	236	168	100	3776	0.820454	607.85	0.605932	598.94	1033.74	0.65	1.69	1537.81	6.52	1531.89	6.49	-5.92	-0.39
68	237	169	101	3792	0.818387	608.03	0.60654	599.08	1050.08	0	1.67	1536.47	6.48	1530.2	6.46	-6.27	-0.41
68	238	170	102	3808	0.816327	608.21	0.607143	599.23	1066.5	0.65	1.65	1536.36	6.46	1530.13	6.43	-6.23	-0.41
68	239	171	103	3824	0.814271	608.37	0.607741	599.39	1082.98	0	1.64	1534.9	6.42	1528.3	6.39	-6.59	-0.43
68	240	172	104	3840	0.812222	608.53	0.608333	599.54	1099.53	0.65	1.62	1534.66	6.39	1528.1	6.37	-6.56	-0.43
68	241	173	105	3856	0.810179	608.69	0.608921	599.7	1116.15	0	1.6	1533.06	6.36	1526.13	6.33	-6.93	-0.45
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
69	137	68	-1	2192	0.999947	515.54	0.498175	655.73	0.18	0	9.7	1030.25	7.52	1038.32	7.58	8.07	0.78
69	138	69	0	2208	1	518.07	0.5	654.13	0	-0.85	10	1044.95	7.57	1052.74	7.63	7.79	0.74
69	139	70	1	2224	0.999948	520.54	0.501799	652.57	0.17	0	9.7	1060.41	7.63	1066.65	7.67	6.23	0.58
69	140	71	2	2240	0.999796	522.96	0.503571	651.07	0.69	-0.85	9.42	1073.86	7.67	1080.49	7.72	6.63	0.61
69	141	72	3	2256	0.999547	525.31	0.505319	649.61	1.55	0	9.15	1088.67	7.72	1093.81	7.76	5.13	0.47
69	142	73	4	2272	0.999207	527.61	0.507042	648.19	2.74	-0.84	8.88	1101.5	7.76	1107.08	7.8	5.58	0.5
69	143	74	5	2288	0.998777	529.86	0.508741	646.82	4.25	0	8.63	1115.7	7.8	1119.84	7.83	4.13	0.37
69	144	75	6	2304	0.998264	532.05	0.510417	645.49	6.08	-0.83	8.39	1127.94	7.83	1132.57	7.87	4.63	0.41
69	145	76	7	2320	0.997669	534.2	0.512069	644.2	8.22	0	8.16	1141.55	7.87	1144.79	7.9	3.24	0.28
69	146	77	8	2336	0.996998	536.29	0.513699	642.95	10.67	-0.83	7.94	1153.21	7.9	1156.99	7.92	3.78	0.33
69	147	78	9	2352	0.996252	538.33	0.515306	641.74	13.41	0	7.73	1166.26	7.93	1168.68	7.95	2.43	0.21
69	148	79	10	2368	0.995435	540.33	0.516892	640.56	16.44	-0.82	7.53	1177.37	7.96	1180.39	7.98	3.01	0.26
69	149	80	11	2384	0.99455	542.27	0.518456	639.43	19.76	0	7.33	1189.87	7.99	1191.57	8	1.71	0.14
69	150	81	12	2400	0.9936	544.18	0.52	638.33	23.36	-0.82	7.15	1200.46	8	1202.79	8.02	2.33	0.19
69	151	82	13	2416	0.992588	546.04	0.521523	637.26	27.24	0	6.97	1212.43	8.03	1213.49	8.04	1.06	0.09
69	152	83	14	2432	0.991517	547.85	0.523026	636.22	31.38	-0.81	6.79	1222.52	8.04	1224.23	8.05	1.71	0.14
69	153	84	15	2448	0.990388	549.63	0.52451	635.22	35.79	0	6.62	1233.98	8.07	1234.46	8.07	0.48	0.04
69	154	85	16	2464	0.989206	551.36	0.525974	634.25	40.46	-0.81	6.46	1243.58	8.08	1244.75	8.08	1.17	0.09
69	155	86	17	2480	0.987971	553.05	0.527419	633.31	45.39	0	6.31	1254.56	8.09	1254.52	8.09	-0.03	0
69	156	87	18	2496	0.986686	554.71	0.528846	632.4	50.56	-0.8	6.16	1263.69	8.1	1264.37	8.1	0.68	0.05
69	157	88	19	2512	0.985354	556.32	0.530255	631.52	55.98	0	6.02	1274.2	8.12	1273.71	8.11	-0.49	-0.04
69	158	89	20	2528	0.983977	557.9	0.531646	630.67	61.63	-0.8	5.88	1282.88	8.12	1283.13	8.12	0.25	0.02
69	159	90	21	2544	0.982556	559.44	0.533019	629.84	67.53	0	5.74	1292.93	8.13	1292.04	8.13	-0.89	-0.07

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
69	160	91	22	2560	0.981094	560.95	0.534375	629.04	73.65	-0.79	5.61	1301.18	8.13	1301.05	8.13	-0.13	-0.01
69	161	92	23	2576	0.979592	562.42	0.535714	628.27	80	0	5.49	1310.8	8.14	1309.56	8.13	-1.24	-0.09
69	162	93	24	2592	0.978052	563.86	0.537037	627.52	86.57	-0.79	5.37	1318.63	8.14	1318.17	8.14	-0.46	-0.03
69	163	94	25	2608	0.976476	565.27	0.538344	626.8	93.37	0	5.25	1327.82	8.15	1326.27	8.14	-1.55	-0.12
69	164	95	26	2624	0.974866	566.64	0.539634	626.1	100.37	-0.78	5.14	1335.25	8.14	1334.5	8.14	-0.75	-0.06
69	165	96	27	2640	0.973223	567.98	0.540909	625.42	107.59	0	5.03	1344.04	8.15	1342.22	8.13	-1.82	-0.14
69	166	97	28	2656	0.971549	569.3	0.542169	624.77	115.01	-0.78	4.92	1351.07	8.14	1350.07	8.13	-1	-0.07
69	167	98	29	2672	0.969845	570.58	0.543413	624.13	122.64	0	4.82	1359.47	8.14	1357.42	8.13	-2.05	-0.15
69	168	99	30	2688	0.968112	571.83	0.544643	623.52	130.47	-0.77	4.72	1366.13	8.13	1364.91	8.12	-1.22	-0.09
69	169	100	31	2704	0.966353	573.05	0.545858	622.93	138.49	0	4.63	1374.15	8.13	1371.9	8.12	-2.25	-0.16
69	170	101	32	2720	0.964567	574.25	0.547059	622.36	146.71	-0.77	4.54	1380.45	8.12	1379.04	8.11	-1.41	-0.1
69	171	102	33	2736	0.962758	575.42	0.548246	621.82	155.11	0	4.45	1388.1	8.12	1385.68	8.1	-2.42	-0.17
69	172	103	34	2752	0.960925	576.56	0.549419	621.29	163.71	-0.76	4.36	1394.05	8.1	1392.47	8.1	-1.57	-0.11
69	173	104	35	2768	0.95907	577.67	0.550578	620.77	172.48	0	4.28	1401.35	8.1	1398.77	8.09	-2.57	-0.18
69	174	105	36	2784	0.957194	578.76	0.551724	620.28	181.43	-0.76	4.19	1406.96	8.09	1405.24	8.08	-1.71	-0.12
69	175	106	37	2800	0.955298	579.83	0.552857	619.81	190.56	0	4.11	1413.91	8.08	1411.21	8.06	-2.7	-0.19
69	176	107	38	2816	0.953383	580.87	0.553977	619.35	199.87	-0.75	4.04	1419.19	8.06	1417.36	8.05	-1.83	-0.13
69	177	108	39	2832	0.951451	581.88	0.555085	618.91	209.34	0	3.96	1425.82	8.06	1423.01	8.04	-2.81	-0.2
69	178	109	40	2848	0.949501	582.88	0.55618	618.49	218.99	-0.75	3.89	1430.79	8.04	1428.85	8.03	-1.93	-0.14
69	179	110	41	2864	0.947536	583.85	0.557263	618.08	228.8	0	3.82	1437.09	8.03	1434.2	8.01	-2.9	-0.2
69	180	111	42	2880	0.945556	584.8	0.558333	617.69	238.77	-0.75	3.75	1441.75	8.01	1439.73	8	-2.02	-0.14
69	181	112	43	2896	0.943561	585.72	0.559392	617.32	248.9	0	3.69	1447.75	8	1444.77	7.98	-2.98	-0.21
69	182	113	44	2912	0.941553	586.63	0.56044	616.96	259.18	-0.74	3.62	1452.11	7.98	1450.02	7.97	-2.09	-0.14
69	183	114	45	2928	0.939532	587.51	0.561475	616.62	269.63	0	3.56	1457.81	7.97	1454.77	7.95	-3.04	-0.21
69	184	115	46	2944	0.9375	588.37	0.5625	616.29	280.22	-0.74	3.5	1461.88	7.95	1459.73	7.93	-2.16	-0.15
69	185	116	47	2960	0.935457	589.21	0.563514	615.97	290.96	0	3.44	1467.29	7.93	1464.19	7.91	-3.1	-0.21
69	186	117	48	2976	0.933403	590.04	0.564516	615.67	301.85	-0.73	3.38	1471.09	7.91	1468.88	7.9	-2.21	-0.15
69	187	118	49	2992	0.931339	590.84	0.565508	615.38	312.89	0	3.33	1476.22	7.89	1473.07	7.88	-3.15	-0.21
69	188	119	50	3008	0.929267	591.63	0.566489	615.11	324.06	-0.73	3.27	1479.74	7.87	1477.48	7.86	-2.26	-0.15
69	189	120	51	3024	0.927186	592.39	0.56746	614.85	335.38	0	3.22	1484.6	7.86	1481.4	7.84	-3.19	-0.22
69	190	121	52	3040	0.925097	593.14	0.568421	614.6	346.84	-0.73	3.17	1487.86	7.83	1485.56	7.82	-2.31	-0.16
69	191	122	53	3056	0.923001	593.87	0.569372	614.36	358.43	0	3.12	1492.45	7.81	1489.22	7.8	-3.23	-0.22
69	192	123	54	3072	0.920898	594.59	0.570312	614.14	370.16	-0.72	3.07	1495.47	7.79	1493.12	7.78	-2.35	-0.16
69	193	124	55	3088	0.91879	595.28	0.571244	613.93	382.01	0	3.02	1499.8	7.77	1496.52	7.75	-3.27	-0.22
69	194	125	56	3104	0.916676	595.96	0.572165	613.73	394	-0.72	2.97	1502.57	7.75	1500.17	7.73	-2.39	-0.16
69	195	126	57	3120	0.914556	596.63	0.573077	613.54	406.11	0	2.93	1506.65	7.73	1503.34	7.71	-3.32	-0.22
69	196	127	58	3136	0.912432	597.27	0.57398	613.36	418.35	-0.71	2.89	1509.18	7.7	1506.75	7.69	-2.44	-0.16
69	197	128	59	3152	0.910304	597.91	0.574873	613.19	430.72	0	2.84	1513.03	7.68	1509.67	7.66	-3.36	-0.22
69	198	129	60	3168	0.908173	598.52	0.575758	613.04	443.2	-0.71	2.8	1515.33	7.65	1512.84	7.64	-2.48	-0.16
69	199	130	61	3184	0.906038	599.12	0.576633	612.89	455.81	0	2.76	1518.93	7.63	1515.53	7.62	-3.4	-0.22
69	200	131	62	3200	0.9039	599.71	0.5775	612.76	468.54	-0.71	2.72	1521.01	7.61	1518.48	7.59	-2.53	-0.17
69	201	132	63	3216	0.90176	600.28	0.578358	612.63	481.38	0	2.68	1524.39	7.58	1520.94	7.57	-3.45	-0.23
69	202	133	64	3232	0.899618	600.84	0.579208	612.51	494.33	-0.7	2.64	1526.25	7.56	1523.66	7.54	-2.59	-0.17
69	203	134	65	3248	0.897474	601.39	0.580049	612.41	507.4	0	2.61	1529.41	7.53	1525.9	7.52	-3.5	-0.23
69	204	135	66	3264	0.895329	601.92	0.580882	612.31	520.58	-0.7	2.57	1531.06	7.51	1528.41	7.49	-2.65	-0.17
69	205	136	67	3280	0.893183	602.44	0.581707	612.22	533.87	0	2.53	1534	7.48	1530.43	7.47	-3.57	-0.23

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
69	206	137	68	3296	0.891036	602.94	0.582524	612.15	547.27	-0.7	2.5	1535.44	7.45	1532.73	7.44	-2.71	-0.18
69	207	138	69	3312	0.888889	603.43	0.583333	612.08	560.78	0	2.47	1538.18	7.43	1534.54	7.41	-3.63	-0.24
69	208	139	70	3328	0.886742	603.91	0.584135	612.02	574.39	-0.69	2.43	1539.42	7.4	1536.63	7.39	-2.79	-0.18
69	209	140	71	3344	0.884595	604.38	0.584928	611.96	588.1	0	2.4	1541.95	7.38	1538.24	7.36	-3.71	-0.24
69	210	141	72	3360	0.882449	604.84	0.585714	611.92	601.92	-0.69	2.37	1543	7.35	1540.13	7.33	-2.87	-0.19
69	211	142	73	3376	0.880304	605.28	0.586493	611.88	615.84	0	2.34	1545.34	7.32	1541.54	7.31	-3.8	-0.25
69	212	143	74	3392	0.878159	605.71	0.587264	611.86	629.85	-0.69	2.31	1546.2	7.29	1543.23	7.28	-2.97	-0.19
69	213	144	75	3408	0.876017	606.13	0.588028	611.84	643.97	0	2.28	1548.34	7.27	1544.45	7.25	-3.9	-0.25
69	214	145	76	3424	0.873875	606.54	0.588785	611.82	658.18	-0.68	2.25	1549.02	7.24	1545.95	7.22	-3.07	-0.2
69	215	146	77	3440	0.871736	606.94	0.589535	611.82	672.49	0	2.22	1550.98	7.21	1546.97	7.2	-4.01	-0.26
69	216	147	78	3456	0.869599	607.33	0.590278	611.82	686.89	-0.68	2.19	1551.48	7.18	1548.29	7.17	-3.19	-0.21
69	217	148	79	3472	0.867464	607.71	0.591014	611.83	701.38	0	2.17	1553.25	7.16	1549.12	7.14	-4.13	-0.27
69	218	149	80	3488	0.865331	608.07	0.591743	611.85	715.97	-0.68	2.14	1553.58	7.13	1550.26	7.11	-3.32	-0.21
69	219	150	81	3504	0.863201	608.43	0.592466	611.87	730.64	0	2.12	1555.17	7.1	1550.91	7.08	-4.26	-0.27
69	220	151	82	3520	0.861074	608.78	0.593182	611.9	745.41	-0.67	2.09	1555.33	7.07	1551.87	7.05	-3.46	-0.22
69	221	152	83	3536	0.85895	609.11	0.593891	611.94	760.26	0	2.07	1556.76	7.04	1552.35	7.02	-4.41	-0.28
69	222	153	84	3552	0.85683	609.44	0.594595	611.98	775.2	-0.67	2.04	1556.75	7.01	1553.13	7	-3.62	-0.23
69	223	154	85	3568	0.854713	609.76	0.595291	612.03	790.22	0	2.02	1558.01	6.99	1553.44	6.97	-4.57	-0.29
69	224	155	86	3584	0.852599	610.07	0.595982	612.09	805.33	-0.67	1.99	1557.84	6.95	1554.05	6.94	-3.79	-0.24
69	225	156	87	3600	0.850489	610.37	0.596667	612.15	820.52	0	1.97	1558.93	6.93	1554.19	6.91	-4.74	-0.31
69	226	157	88	3616	0.848383	610.66	0.597345	612.22	835.79	-0.67	1.95	1558.61	6.9	1554.64	6.88	-3.98	-0.26
69	227	158	89	3632	0.846281	610.94	0.598018	612.3	851.14	0	1.93	1559.54	6.87	1554.61	6.85	-4.93	-0.32
69	228	159	90	3648	0.844183	611.22	0.598684	612.38	866.58	-0.66	1.91	1559.07	6.84	1554.89	6.82	-4.18	-0.27
69	229	160	91	3664	0.842089	611.48	0.599345	612.46	882.09	0	1.88	1559.85	6.81	1554.71	6.79	-5.14	-0.33
69	230	161	92	3680	0.84	611.74	0.6	612.56	897.68	-0.66	1.86	1559.23	6.78	1554.83	6.76	-4.39	-0.28
69	231	162	93	3696	0.837915	611.99	0.600649	612.65	913.35	0	1.84	1559.85	6.75	1554.49	6.73	-5.36	-0.35
69	232	163	94	3712	0.835835	612.23	0.601293	612.76	929.09	-0.66	1.82	1559.09	6.72	1554.46	6.7	-4.63	-0.3
69	233	164	95	3728	0.83376	612.46	0.601931	612.87	944.91	0	1.8	1559.57	6.69	1553.96	6.67	-5.6	-0.36
69	234	165	96	3744	0.83169	612.69	0.602564	612.98	960.8	-0.65	1.79	1558.66	6.66	1553.79	6.64	-4.88	-0.31
69	235	166	97	3760	0.829624	612.91	0.603191	613.1	976.76	0	1.77	1559	6.63	1553.14	6.61	-5.86	-0.38
69	236	167	98	3776	0.827564	613.12	0.603814	613.22	992.8	-0.65	1.75	1557.95	6.6	1552.81	6.58	-5.14	-0.33
69	237	168	99	3792	0.825509	613.32	0.60443	613.35	1008.91	0	1.73	1558.15	6.57	1552.01	6.55	-6.13	-0.4
69	238	169	100	3808	0.823459	613.52	0.605042	613.49	1025.09	-0.65	1.71	1556.97	6.54	1551.54	6.52	-5.43	-0.35
69	239	170	101	3824	0.821414	613.71	0.605649	613.62	1041.33	0	1.7	1557.03	6.51	1550.6	6.49	-6.42	-0.41
69	240	171	102	3840	0.819375	613.89	0.60625	613.77	1057.65	-0.65	1.68	1555.72	6.48	1549.99	6.46	-5.73	-0.37
69	241	172	103	3856	0.817341	614.07	0.606846	613.92	1074.03	0	1.66	1555.64	6.45	1548.91	6.43	-6.73	-0.43
69	242	173	104	3872	0.815313	614.24	0.607438	614.07	1090.48	-0.64	1.64	1554.21	6.42	1548.16	6.4	-6.05	-0.39
69	243	174	105	3888	0.813291	614.4	0.608025	614.22	1107	0	1.63	1554	6.4	1546.94	6.37	-7.06	-0.46
69	244	175	106	3904	0.811274	614.56	0.608607	614.39	1123.58	-0.64	1.61	1552.45	6.36	1546.06	6.34	-6.39	-0.41
69	245	176	107	3920	0.809263	614.71	0.609184	614.55	1140.23	0	1.6	1552.11	6.34	1544.71	6.3	-7.4	-0.48
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
70	139	69	-1	2224	0.999948	520.54	0.498201	671.63	0.17	0	9.7	1041.36	7.49	1049.48	7.55	8.12	0.77
70	140	70	0	2240	1	523.06	0.5	670.01	0	0.85	10	1057.78	7.56	1064.97	7.61	7.19	0.68
70	141	71	1	2256	0.99995	525.52	0.501773	668.43	0.17	0	9.71	1071.58	7.6	1077.88	7.64	6.31	0.59

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
70	142	72	2	2272	0.999802	527.93	0.503521	666.91	0.69	0.84	9.43	1086.74	7.65	1092.78	7.7	6.04	0.55
70	143	73	3	2288	0.99956	530.28	0.505245	665.44	1.53	0	9.16	1099.92	7.69	1105.13	7.73	5.21	0.47
70	144	74	4	2304	0.999228	532.57	0.506944	664	2.7	0.83	8.9	1114.46	7.74	1119.45	7.77	4.99	0.45
70	145	75	5	2320	0.998811	534.81	0.508621	662.61	4.2	0	8.65	1127.03	7.77	1131.26	7.8	4.22	0.37
70	146	76	6	2336	0.998311	536.99	0.510274	661.27	6	0.83	8.41	1140.98	7.81	1145.02	7.84	4.04	0.35
70	147	77	7	2352	0.997732	539.13	0.511905	659.96	8.11	0	8.19	1152.98	7.84	1156.31	7.87	3.33	0.29
70	148	78	8	2368	0.997078	541.22	0.513514	658.7	10.52	0.82	7.97	1166.35	7.88	1169.54	7.9	3.19	0.27
70	149	79	9	2384	0.996352	543.26	0.515101	657.47	13.23	0	7.76	1177.8	7.9	1180.33	7.92	2.53	0.21
70	150	80	10	2400	0.995556	545.25	0.516667	656.28	16.22	0.82	7.56	1190.62	7.94	1193.05	7.95	2.43	0.2
70	151	81	11	2416	0.994693	547.2	0.518212	655.13	19.5	0	7.36	1201.54	7.96	1203.34	7.97	1.8	0.15
70	152	82	12	2432	0.993767	549.1	0.519737	654.01	23.06	0.81	7.18	1213.82	7.99	1215.57	8	1.74	0.14
70	153	83	13	2448	0.992781	550.95	0.521242	652.93	26.89	0	7	1224.23	8	1225.39	8.01	1.16	0.09
70	154	84	14	2464	0.991736	552.77	0.522727	651.88	30.98	0.81	6.83	1236.01	8.03	1237.14	8.03	1.13	0.09
70	155	85	15	2480	0.990635	554.54	0.524194	650.86	35.34	0	6.66	1245.92	8.04	1246.51	8.04	0.59	0.05
70	156	86	16	2496	0.989481	556.28	0.525641	649.87	39.95	0.8	6.5	1257.2	8.06	1257.79	8.06	0.59	0.05
70	157	87	17	2512	0.988275	557.97	0.52707	648.91	44.81	0	6.35	1266.65	8.07	1266.72	8.07	0.08	0.01
70	158	88	18	2528	0.987021	559.63	0.528481	647.99	49.92	0.8	6.2	1277.45	8.09	1277.56	8.09	0.1	0.01
70	159	89	19	2544	0.985721	561.25	0.529874	647.09	55.28	0	6.05	1286.44	8.09	1286.06	8.09	-0.38	-0.03
70	160	90	20	2560	0.984375	562.83	0.53125	646.22	60.87	0.79	5.92	1296.79	8.1	1296.46	8.1	-0.33	-0.03
70	161	91	21	2576	0.982987	564.37	0.532609	645.38	66.69	0	5.78	1305.34	8.11	1304.56	8.1	-0.78	-0.06
70	162	92	22	2592	0.981558	565.88	0.533951	644.56	72.75	0.79	5.65	1315.25	8.12	1314.54	8.11	-0.7	-0.05
70	163	93	23	2608	0.98009	567.36	0.535276	643.77	79.02	0	5.53	1323.37	8.12	1322.24	8.11	-1.13	-0.09
70	164	94	24	2624	0.978584	568.8	0.536585	643.01	85.52	0.78	5.41	1332.85	8.13	1331.82	8.12	-1.03	-0.08
70	165	95	25	2640	0.977043	570.21	0.537879	642.27	92.24	0	5.29	1340.57	8.12	1339.13	8.12	-1.43	-0.11
70	166	96	26	2656	0.975468	571.59	0.539157	641.56	99.17	0.78	5.18	1349.64	8.13	1348.32	8.12	-1.32	-0.1
70	167	97	27	2672	0.973861	572.94	0.540419	640.86	106.31	0	5.07	1356.96	8.13	1355.26	8.12	-1.7	-0.13
70	168	98	28	2688	0.972222	574.26	0.541667	640.19	113.65	0.77	4.97	1365.63	8.13	1364.06	8.12	-1.57	-0.12
70	169	99	29	2704	0.970554	575.55	0.542899	639.55	121.2	0	4.86	1372.57	8.12	1370.64	8.11	-1.93	-0.14
70	170	100	30	2720	0.968858	576.8	0.544118	638.92	128.94	0.77	4.77	1380.86	8.12	1379.08	8.11	-1.79	-0.13
70	171	101	31	2736	0.967135	578.03	0.545322	638.32	136.88	0	4.67	1387.44	8.11	1385.31	8.1	-2.13	-0.15
70	172	102	32	2752	0.965387	579.24	0.546512	637.73	145.01	0.76	4.58	1395.36	8.11	1393.38	8.1	-1.97	-0.14
70	173	103	33	2768	0.963614	580.41	0.547688	637.17	153.33	0	4.49	1401.58	8.1	1399.28	8.09	-2.3	-0.16
70	174	104	34	2784	0.961818	581.56	0.548851	636.63	161.83	0.76	4.4	1409.14	8.1	1407.01	8.09	-2.13	-0.15
70	175	105	35	2800	0.96	582.68	0.55	636.1	170.52	0	4.32	1415.01	8.09	1412.57	8.07	-2.44	-0.17
70	176	106	36	2816	0.958161	583.78	0.551136	635.59	179.38	0.75	4.24	1422.23	8.08	1419.96	8.07	-2.27	-0.16
70	177	107	37	2832	0.956302	584.85	0.55226	635.11	188.42	0	4.16	1427.77	8.07	1425.21	8.05	-2.57	-0.18
70	178	108	38	2848	0.954425	585.9	0.553371	634.64	197.64	0.75	4.08	1434.66	8.06	1432.27	8.05	-2.38	-0.17
70	179	109	39	2864	0.95253	586.92	0.554469	634.18	207.02	0	4	1439.88	8.04	1437.21	8.03	-2.67	-0.19
70	180	110	40	2880	0.950617	587.93	0.555556	633.75	216.57	0.75	3.93	1446.44	8.04	1443.96	8.02	-2.48	-0.17
70	181	111	41	2896	0.948689	588.9	0.55663	633.33	226.28	0	3.86	1451.35	8.02	1448.59	8	-2.76	-0.19
70	182	112	42	2912	0.946746	589.86	0.557692	632.92	236.16	0.74	3.79	1457.59	8.01	1455.03	7.99	-2.56	-0.18
70	183	113	43	2928	0.944788	590.79	0.558743	632.54	246.19	0	3.73	1462.2	7.99	1459.38	7.97	-2.83	-0.19
70	184	114	44	2944	0.942817	591.71	0.559783	632.16	256.38	0.74	3.66	1468.15	7.98	1465.52	7.96	-2.63	-0.18
70	185	115	45	2960	0.940833	592.6	0.560811	631.81	266.73	0	3.6	1472.47	7.96	1469.58	7.94	-2.89	-0.2
70	186	116	46	2976	0.938837	593.47	0.561828	631.47	277.22	0.73	3.54	1478.11	7.95	1475.42	7.93	-2.69	-0.18
70	187	117	47	2992	0.93683	594.32	0.562834	631.14	287.87	0	3.48	1482.15	7.93	1479.21	7.91	-2.94	-0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
70	188	118	48	3008	0.934812	595.16	0.56383	630.82	298.66	0.73	3.42	1487.51	7.91	1484.77	7.9	-2.74	-0.18
70	189	119	49	3024	0.932785	595.97	0.564815	630.52	309.59	0	3.37	1491.28	7.89	1488.29	7.87	-2.99	-0.2
70	190	120	50	3040	0.930748	596.76	0.565789	630.24	320.67	0.73	3.31	1496.36	7.88	1493.58	7.86	-2.78	-0.19
70	191	121	51	3056	0.928703	597.54	0.566754	629.96	331.89	0	3.26	1499.86	7.85	1496.84	7.84	-3.02	-0.2
70	192	122	52	3072	0.926649	598.3	0.567708	629.7	343.24	0.72	3.21	1504.68	7.84	1501.86	7.82	-2.82	-0.19
70	193	123	53	3088	0.924589	599.04	0.568653	629.46	354.74	0	3.16	1507.93	7.81	1504.87	7.8	-3.06	-0.2
70	194	124	54	3104	0.922521	599.76	0.569588	629.22	366.36	0.72	3.11	1512.48	7.8	1509.63	7.78	-2.85	-0.19
70	195	125	55	3120	0.920447	600.47	0.570513	629	378.12	0	3.06	1515.48	7.77	1512.38	7.76	-3.09	-0.2
70	196	126	56	3136	0.918367	601.16	0.571429	628.79	390	0.71	3.01	1519.78	7.75	1516.89	7.74	-2.89	-0.19
70	197	127	57	3152	0.916282	601.83	0.572335	628.59	402.01	0	2.97	1522.54	7.73	1519.41	7.71	-3.13	-0.21
70	198	128	58	3168	0.914192	602.49	0.573232	628.4	414.15	0.71	2.92	1526.6	7.71	1523.67	7.7	-2.92	-0.19
70	199	129	59	3184	0.912098	603.13	0.574121	628.22	426.41	0	2.88	1529.12	7.68	1525.96	7.67	-3.16	-0.21
70	200	130	60	3200	0.91	603.76	0.575	628.05	438.8	0.71	2.84	1532.94	7.66	1529.98	7.65	-2.96	-0.19
70	201	131	61	3216	0.907898	604.37	0.575871	627.9	451.3	0	2.8	1535.23	7.64	1532.04	7.62	-3.2	-0.21
70	202	132	62	3232	0.905794	604.97	0.576733	627.75	463.92	0.7	2.76	1538.82	7.62	1535.82	7.6	-3	-0.2
70	203	133	63	3248	0.903686	605.55	0.577586	627.61	476.66	0	2.72	1540.89	7.59	1537.66	7.57	-3.24	-0.21
70	204	134	64	3264	0.901576	606.12	0.578431	627.49	489.51	0.7	2.68	1544.26	7.57	1541.22	7.55	-3.04	-0.2
70	205	135	65	3280	0.899465	606.67	0.579268	627.37	502.48	0	2.64	1546.12	7.54	1542.84	7.53	-3.28	-0.21
70	206	136	66	3296	0.897351	607.21	0.580097	627.27	515.55	0.7	2.6	1549.27	7.52	1546.18	7.51	-3.09	-0.2
70	207	137	67	3312	0.895237	607.74	0.580918	627.17	528.74	0	2.57	1550.92	7.49	1547.58	7.48	-3.33	-0.22
70	208	138	68	3328	0.893121	608.26	0.581731	627.08	542.04	0.69	2.53	1553.85	7.47	1550.71	7.46	-3.15	-0.2
70	209	139	69	3344	0.891005	608.76	0.582536	627	555.44	0	2.5	1555.3	7.44	1551.91	7.43	-3.39	-0.22
70	210	140	70	3360	0.888889	609.25	0.583333	626.93	568.94	0.69	2.47	1558.03	7.42	1554.82	7.4	-3.21	-0.21
70	211	141	71	3376	0.886773	609.73	0.584123	626.87	582.56	0	2.43	1559.28	7.39	1555.82	7.37	-3.46	-0.22
70	212	142	72	3392	0.884656	610.19	0.584906	626.82	596.27	0.69	2.4	1561.81	7.37	1558.53	7.35	-3.28	-0.21
70	213	143	73	3408	0.882541	610.65	0.585681	626.77	610.08	0	2.37	1562.87	7.34	1559.33	7.32	-3.53	-0.23
70	214	144	74	3424	0.880426	611.09	0.586449	626.74	624	0.68	2.34	1565.2	7.31	1561.84	7.3	-3.37	-0.22
70	215	145	75	3440	0.878313	611.52	0.587209	626.71	638.01	0	2.31	1566.08	7.28	1562.46	7.27	-3.62	-0.23
70	216	146	76	3456	0.8762	611.94	0.587963	626.69	652.12	0.68	2.28	1568.22	7.26	1564.76	7.24	-3.46	-0.22
70	217	147	77	3472	0.874089	612.35	0.58871	626.67	666.32	0	2.25	1568.91	7.23	1565.2	7.21	-3.72	-0.24
70	218	148	78	3488	0.87198	612.74	0.58945	626.67	680.62	0.68	2.23	1570.87	7.21	1567.31	7.19	-3.56	-0.23
70	219	149	79	3504	0.869873	613.13	0.590183	626.67	695.01	0	2.2	1571.39	7.18	1567.56	7.16	-3.83	-0.24
70	220	150	80	3520	0.867769	613.51	0.590909	626.68	709.49	0.67	2.17	1573.17	7.15	1569.49	7.13	-3.68	-0.23
70	221	151	81	3536	0.865666	613.88	0.591629	626.69	724.06	0	2.15	1573.52	7.12	1569.57	7.1	-3.95	-0.25
70	222	152	82	3552	0.863566	614.23	0.592342	626.72	738.72	0.67	2.12	1575.12	7.1	1571.32	7.08	-3.81	-0.24
70	223	153	83	3568	0.861469	614.58	0.593049	626.75	753.47	0	2.09	1575.3	7.06	1571.22	7.05	-4.08	-0.26
70	224	154	84	3584	0.859375	614.92	0.59375	626.78	768.3	0.67	2.07	1576.73	7.04	1572.79	7.02	-3.95	-0.25
70	225	155	85	3600	0.857284	615.25	0.594444	626.83	783.23	0	2.05	1576.75	7.01	1572.52	6.99	-4.23	-0.27
70	226	156	86	3616	0.855196	615.56	0.595133	626.88	798.23	0.67	2.02	1578.02	6.98	1573.91	6.96	-4.1	-0.26
70	227	157	87	3632	0.853112	615.87	0.595815	626.93	813.32	0	2	1577.87	6.95	1573.48	6.93	-4.39	-0.28
70	228	158	88	3648	0.851031	616.17	0.596491	626.99	828.49	0.66	1.98	1578.98	6.93	1574.71	6.91	-4.27	-0.27
70	229	159	89	3664	0.848954	616.47	0.597162	627.06	843.74	0	1.95	1578.68	6.89	1574.11	6.87	-4.57	-0.29
70	230	160	90	3680	0.846881	616.75	0.597826	627.14	859.07	0.66	1.93	1579.63	6.87	1575.17	6.85	-4.46	-0.28
70	231	161	91	3696	0.844812	617.03	0.598485	627.22	874.49	0	1.91	1579.19	6.84	1574.42	6.82	-4.76	-0.3
70	232	162	92	3712	0.842747	617.29	0.599138	627.3	889.97	0.66	1.89	1579.98	6.81	1575.32	6.79	-4.66	-0.3
70	233	163	93	3728	0.840686	617.55	0.599785	627.39	905.54	0	1.87	1579.39	6.78	1574.42	6.76	-4.97	-0.32

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
70	234	164	94	3744	0.83863	617.8	0.600427	627.49	921.18	0.65	1.85	1580.03	6.75	1575.15	6.73	-4.88	-0.31
70	235	165	95	3760	0.836578	618.04	0.601064	627.59	936.9	0	1.83	1579.29	6.72	1574.1	6.7	-5.19	-0.33
70	236	166	96	3776	0.83453	618.28	0.601695	627.7	952.69	0.65	1.81	1579.79	6.69	1574.68	6.67	-5.11	-0.32
70	237	167	97	3792	0.832488	618.51	0.602321	627.81	968.56	0	1.79	1578.92	6.66	1573.48	6.64	-5.43	-0.35
70	238	168	98	3808	0.83045	618.73	0.602941	627.93	984.49	0.65	1.77	1579.27	6.64	1573.91	6.61	-5.36	-0.34
70	239	169	99	3824	0.828417	618.94	0.603556	628.05	1000.5	0	1.76	1578.26	6.6	1572.57	6.58	-5.69	-0.36
70	240	170	100	3840	0.826389	619.15	0.604167	628.18	1016.58	0.65	1.74	1578.48	6.58	1572.85	6.55	-5.62	-0.36
70	241	171	101	3856	0.824366	619.35	0.604772	628.31	1032.73	0	1.72	1577.33	6.54	1571.37	6.52	-5.97	-0.38
70	242	172	102	3872	0.822348	619.54	0.605372	628.45	1048.95	0.64	1.7	1577.41	6.52	1571.5	6.49	-5.91	-0.38
70	243	173	103	3888	0.820336	619.72	0.605967	628.59	1065.23	0	1.69	1576.14	6.49	1569.88	6.46	-6.26	-0.4
70	244	174	104	3904	0.818328	619.9	0.606557	628.74	1081.58	0.64	1.67	1576.08	6.46	1569.87	6.43	-6.21	-0.4
70	245	175	105	3920	0.816327	620.07	0.607143	628.89	1098	0	1.65	1574.69	6.43	1568.12	6.4	-6.57	-0.42
70	246	176	106	3936	0.81433	620.24	0.607724	629.05	1114.48	0.64	1.64	1574.5	6.4	1567.97	6.37	-6.53	-0.42
70	247	177	107	3952	0.812339	620.4	0.6083	629.21	1131.03	0	1.62	1572.98	6.37	1566.08	6.34	-6.9	-0.44
70	248	178	108	3968	0.810354	620.55	0.608871	629.37	1147.64	0.64	1.61	1572.67	6.34	1565.8	6.31	-6.87	-0.44
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
71	141	70	-1	2256	0.99995	525.52	0.498227	687.67	0.17	0	9.71	1052.34	7.46	1060.52	7.52	8.18	0.77
71	142	71	0	2272	1	528.03	0.5	686.03	0	-0.84	10	1067.09	7.51	1075	7.57	7.9	0.74
71	143	72	1	2288	0.999951	530.48	0.501748	684.45	0.17	0	9.71	1082.61	7.57	1088.97	7.62	6.36	0.58
71	144	73	2	2304	0.999807	532.88	0.503472	682.91	0.68	-0.83	9.43	1096.14	7.61	1102.88	7.66	6.74	0.61
71	145	74	3	2320	0.999572	535.21	0.505172	681.42	1.51	0	9.17	1111.03	7.66	1116.27	7.7	5.25	0.47
71	146	75	4	2336	0.999249	537.5	0.506849	679.97	2.67	-0.83	8.91	1123.95	7.7	1129.63	7.74	5.68	0.5
71	147	76	5	2352	0.998843	539.73	0.508503	678.57	4.14	0	8.67	1138.23	7.74	1142.48	7.77	4.24	0.37
71	148	77	6	2368	0.998356	541.91	0.510135	677.2	5.92	-0.82	8.43	1150.58	7.77	1155.3	7.81	4.72	0.41
71	149	78	7	2384	0.997793	544.04	0.511745	675.88	8	0	8.21	1164.28	7.81	1167.61	7.84	3.33	0.29
71	150	79	8	2400	0.997156	546.13	0.513333	674.6	10.38	-0.82	7.99	1176.07	7.84	1179.93	7.87	3.86	0.33
71	151	80	9	2416	0.996448	548.16	0.514901	673.36	13.06	0	7.79	1189.21	7.88	1191.73	7.89	2.51	0.21
71	152	81	10	2432	0.995672	550.15	0.516447	672.15	16.01	-0.81	7.59	1200.46	7.9	1203.54	7.92	3.08	0.26
71	153	82	11	2448	0.994831	552.09	0.517974	670.98	19.25	0	7.39	1213.07	7.93	1214.85	7.94	1.78	0.15
71	154	83	12	2464	0.993928	553.99	0.519481	669.85	22.76	-0.81	7.21	1223.8	7.95	1226.19	7.96	2.38	0.19
71	155	84	13	2480	0.992966	555.85	0.520968	668.75	26.54	0	7.03	1235.89	7.97	1237.02	7.98	1.12	0.09
71	156	85	14	2496	0.991946	557.66	0.522436	667.68	30.58	-0.8	6.86	1246.13	7.99	1247.89	8	1.76	0.14
71	157	86	15	2512	0.990872	559.44	0.523885	666.65	34.89	0	6.69	1257.72	8.01	1258.26	8.01	0.53	0.04
71	158	87	16	2528	0.989745	561.17	0.525316	665.64	39.44	-0.8	6.54	1267.48	8.02	1268.68	8.03	1.2	0.09
71	159	88	17	2544	0.988568	562.87	0.52673	664.67	44.25	0	6.38	1278.59	8.04	1278.6	8.04	0.01	0
71	160	89	18	2560	0.987344	564.53	0.528125	663.73	49.3	-0.79	6.23	1287.89	8.05	1288.59	8.05	0.7	0.05
71	161	90	19	2576	0.986073	566.15	0.529503	662.81	54.59	0	6.09	1298.54	8.07	1298.08	8.06	-0.46	-0.04
71	162	91	20	2592	0.984758	567.73	0.530864	661.93	60.12	-0.79	5.95	1307.39	8.07	1307.65	8.07	0.26	0.02
71	163	92	21	2608	0.983402	569.28	0.532209	661.07	65.88	0	5.82	1317.59	8.08	1316.72	8.08	-0.87	-0.07
71	164	93	22	2624	0.982005	570.79	0.533537	660.24	71.86	-0.78	5.69	1326.02	8.09	1325.89	8.08	-0.12	-0.01
71	165	94	23	2640	0.980569	572.27	0.534848	659.43	78.07	0	5.57	1335.79	8.1	1334.56	8.09	-1.23	-0.09
71	166	95	24	2656	0.979097	573.72	0.536145	658.65	84.5	-0.78	5.45	1343.8	8.1	1343.33	8.09	-0.47	-0.03
71	167	96	25	2672	0.97759	575.13	0.537425	657.9	91.14	0	5.33	1353.16	8.1	1351.61	8.09	-1.55	-0.11
71	168	97	26	2688	0.976049	576.52	0.53869	657.17	98	-0.77	5.22	1360.77	8.1	1360	8.1	-0.77	-0.06

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
71	169	98	27	2704	0.974476	577.87	0.539941	656.46	105.06	0	5.11	1369.72	8.1	1367.89	8.09	-1.83	-0.13
71	170	99	28	2720	0.972872	579.19	0.541176	655.78	112.32	-0.77	5.01	1376.95	8.1	1375.92	8.09	-1.03	-0.07
71	171	100	29	2736	0.971239	580.49	0.542398	655.11	119.79	0	4.91	1385.51	8.1	1383.44	8.09	-2.07	-0.15
71	172	101	30	2752	0.969578	581.75	0.543605	654.47	127.45	-0.76	4.81	1392.37	8.1	1391.11	8.09	-1.26	-0.09
71	173	102	31	2768	0.967891	582.99	0.544798	653.86	135.31	0	4.71	1400.56	8.1	1398.28	8.08	-2.28	-0.16
71	174	103	32	2784	0.966178	584.2	0.545977	653.26	143.36	-0.76	4.62	1407.05	8.09	1405.6	8.08	-1.45	-0.1
71	175	104	33	2800	0.964441	585.38	0.547143	652.68	151.59	0	4.53	1414.88	8.09	1412.42	8.07	-2.46	-0.17
71	176	105	34	2816	0.962681	586.53	0.548295	652.12	160.01	-0.75	4.44	1421.03	8.07	1419.41	8.06	-1.62	-0.11
71	177	106	35	2832	0.960899	587.66	0.549435	651.58	168.6	0	4.36	1428.51	8.07	1425.9	8.06	-2.61	-0.18
71	178	107	36	2848	0.959096	588.77	0.550562	651.06	177.38	-0.75	4.28	1434.32	8.06	1432.55	8.05	-1.77	-0.12
71	179	108	37	2864	0.957273	589.85	0.551676	650.56	186.33	0	4.2	1441.46	8.05	1438.71	8.04	-2.75	-0.19
71	180	109	38	2880	0.955432	590.9	0.552778	650.07	195.45	-0.75	4.12	1446.95	8.04	1445.05	8.03	-1.89	-0.13
71	181	110	39	2896	0.953573	591.94	0.553867	649.61	204.74	0	4.05	1453.76	8.03	1450.9	8.02	-2.86	-0.2
71	182	111	40	2912	0.951697	592.95	0.554945	649.16	214.2	-0.74	3.97	1458.93	8.02	1456.93	8.01	-2	-0.14
71	183	112	41	2928	0.949804	593.93	0.556011	648.72	223.82	0	3.9	1465.42	8.01	1462.47	7.99	-2.95	-0.2
71	184	113	42	2944	0.947897	594.9	0.557065	648.31	233.6	-0.74	3.83	1470.29	7.99	1468.2	7.98	-2.09	-0.14
71	185	114	43	2960	0.945975	595.84	0.558108	647.91	243.54	0	3.77	1476.48	7.98	1473.44	7.96	-3.03	-0.21
71	186	115	44	2976	0.94404	596.76	0.55914	647.52	253.64	-0.73	3.7	1481.05	7.96	1478.88	7.95	-2.16	-0.15
71	187	116	45	2992	0.942092	597.66	0.56016	647.15	263.89	0	3.64	1486.94	7.95	1483.84	7.93	-3.1	-0.21
71	188	117	46	3008	0.940131	598.54	0.56117	646.8	274.29	-0.73	3.58	1491.22	7.93	1488.99	7.92	-2.23	-0.15
71	189	118	47	3024	0.93816	599.4	0.562169	646.46	284.84	0	3.52	1496.82	7.92	1493.66	7.9	-3.16	-0.21
71	190	119	48	3040	0.936177	600.25	0.563158	646.13	295.53	-0.73	3.46	1500.83	7.9	1498.55	7.89	-2.28	-0.15
71	191	120	49	3056	0.934185	601.07	0.564136	645.82	306.37	0	3.4	1506.15	7.89	1502.94	7.87	-3.21	-0.21
71	192	121	50	3072	0.932183	601.87	0.565104	645.52	317.35	-0.72	3.35	1509.89	7.86	1507.56	7.85	-2.33	-0.15
71	193	122	51	3088	0.930173	602.66	0.566062	645.23	328.47	0	3.3	1514.94	7.85	1511.69	7.83	-3.25	-0.22
71	194	123	52	3104	0.928154	603.42	0.56701	644.96	339.72	-0.72	3.24	1518.42	7.83	1516.04	7.81	-2.37	-0.16
71	195	124	53	3120	0.926128	604.17	0.567949	644.7	351.12	0	3.19	1523.2	7.81	1519.91	7.79	-3.29	-0.22
71	196	125	54	3136	0.924094	604.91	0.568878	644.46	362.64	-0.71	3.14	1526.43	7.79	1524.01	7.78	-2.41	-0.16
71	197	126	55	3152	0.922054	605.62	0.569797	644.22	374.3	0	3.1	1530.96	7.77	1527.63	7.75	-3.33	-0.22
71	198	127	56	3168	0.920008	606.32	0.570707	644	386.08	-0.71	3.05	1533.94	7.75	1531.48	7.73	-2.45	-0.16
71	199	128	57	3184	0.917957	607.01	0.571608	643.79	397.99	0	3	1538.22	7.73	1534.86	7.71	-3.36	-0.22
71	200	129	58	3200	0.9159	607.67	0.5725	643.59	410.03	-0.71	2.96	1540.96	7.7	1538.47	7.69	-2.49	-0.16
71	201	130	59	3216	0.913839	608.32	0.573383	643.4	422.19	0	2.91	1545	7.69	1541.6	7.67	-3.4	-0.22
71	202	131	60	3232	0.911773	608.96	0.574257	643.22	434.47	-0.7	2.87	1547.51	7.66	1544.99	7.65	-2.53	-0.16
71	203	132	61	3248	0.909704	609.58	0.575123	643.05	446.87	0	2.83	1551.32	7.64	1547.89	7.63	-3.44	-0.22
71	204	133	62	3264	0.907632	610.19	0.57598	642.9	459.39	-0.7	2.79	1553.61	7.62	1551.04	7.6	-2.57	-0.17
71	205	134	63	3280	0.905556	610.78	0.576829	642.75	472.03	0	2.75	1557.19	7.6	1553.71	7.58	-3.48	-0.22
71	206	135	64	3296	0.903478	611.36	0.57767	642.62	484.78	-0.7	2.71	1559.26	7.57	1556.64	7.56	-2.62	-0.17
71	207	136	65	3312	0.901398	611.93	0.578502	642.49	497.64	0	2.67	1562.62	7.55	1559.09	7.53	-3.52	-0.23
71	208	137	66	3328	0.899316	612.48	0.579327	642.37	510.62	-0.69	2.64	1564.48	7.52	1561.81	7.51	-2.67	-0.17
71	209	138	67	3344	0.897232	613.01	0.580144	642.27	523.7	0	2.6	1567.62	7.5	1564.04	7.48	-3.57	-0.23
71	210	139	68	3360	0.895147	613.54	0.580952	642.17	536.9	-0.69	2.57	1569.27	7.47	1566.55	7.46	-2.72	-0.17
71	211	140	69	3376	0.893062	614.05	0.581754	642.08	550.2	0	2.53	1572.2	7.45	1568.57	7.43	-3.63	-0.23
71	212	141	70	3392	0.890975	614.55	0.582547	642	563.6	-0.69	2.5	1573.66	7.42	1570.87	7.41	-2.79	-0.18
71	213	142	71	3408	0.888889	615.04	0.583333	641.93	577.11	0	2.47	1576.39	7.4	1572.69	7.38	-3.7	-0.23
71	214	143	72	3424	0.886802	615.51	0.584112	641.87	590.72	-0.68	2.43	1577.65	7.37	1574.79	7.36	-2.86	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
71	215	144	73	3440	0.884716	615.98	0.584884	641.81	604.43	0	2.4	1580.18	7.35	1576.41	7.33	-3.77	-0.24
71	216	145	74	3456	0.88263	616.43	0.585648	641.77	618.24	-0.68	2.37	1581.25	7.32	1578.31	7.31	-2.94	-0.19
71	217	146	75	3472	0.880545	616.87	0.586406	641.73	632.15	0	2.34	1583.59	7.3	1579.74	7.28	-3.85	-0.24
71	218	147	76	3488	0.878461	617.3	0.587156	641.7	646.16	-0.68	2.31	1584.48	7.27	1581.44	7.25	-3.03	-0.19
71	219	148	77	3504	0.876379	617.72	0.5879	641.68	660.26	0	2.28	1586.63	7.24	1582.68	7.23	-3.95	-0.25
71	220	149	78	3520	0.874298	618.12	0.588636	641.67	674.46	-0.67	2.26	1587.33	7.22	1584.2	7.2	-3.13	-0.2
71	221	150	79	3536	0.872218	618.52	0.589367	641.66	688.74	0	2.23	1589.3	7.19	1585.25	7.17	-4.05	-0.26
71	222	151	80	3552	0.87014	618.91	0.59009	641.66	703.12	-0.67	2.2	1589.84	7.16	1586.59	7.15	-3.25	-0.2
71	223	152	81	3568	0.868065	619.28	0.590807	641.67	717.59	0	2.17	1591.63	7.14	1587.46	7.12	-4.17	-0.26
71	224	153	82	3584	0.865992	619.65	0.591518	641.68	732.15	-0.67	2.15	1591.99	7.11	1588.62	7.09	-3.37	-0.21
71	225	154	83	3600	0.863921	620.01	0.592222	641.71	746.8	0	2.12	1593.61	7.08	1589.31	7.06	-4.3	-0.27
71	226	155	84	3616	0.861853	620.36	0.59292	641.73	761.54	-0.67	2.1	1593.81	7.05	1590.3	7.04	-3.51	-0.22
71	227	156	85	3632	0.859788	620.69	0.593612	641.77	776.36	0	2.07	1595.26	7.03	1590.82	7.01	-4.44	-0.28
71	228	157	86	3648	0.857725	621.02	0.594298	641.81	791.26	-0.66	2.05	1595.3	7	1591.64	6.98	-3.66	-0.23
71	229	158	87	3664	0.855666	621.34	0.594978	641.86	806.25	0	2.03	1596.58	6.97	1591.98	6.95	-4.59	-0.29
71	230	159	88	3680	0.853611	621.65	0.595652	641.92	821.32	-0.66	2	1596.46	6.94	1592.64	6.92	-3.83	-0.24
71	231	160	89	3696	0.851558	621.95	0.59632	641.98	836.47	0	1.98	1597.58	6.92	1592.82	6.9	-4.77	-0.3
71	232	161	90	3712	0.84951	622.25	0.596983	642.04	851.7	-0.66	1.96	1597.31	6.88	1593.31	6.87	-4.01	-0.25
71	233	162	91	3728	0.847464	622.53	0.597639	642.12	867.01	0	1.94	1598.28	6.86	1593.33	6.84	-4.95	-0.31
71	234	163	92	3744	0.845423	622.81	0.598291	642.2	882.4	-0.65	1.92	1597.86	6.83	1593.66	6.81	-4.2	-0.26
71	235	164	93	3760	0.843386	623.07	0.598936	642.28	897.87	0	1.9	1598.68	6.8	1593.52	6.78	-5.15	-0.32
71	236	165	94	3776	0.841353	623.33	0.599576	642.37	913.41	-0.65	1.88	1598.11	6.77	1593.7	6.75	-4.41	-0.28
71	237	166	95	3792	0.839324	623.59	0.600211	642.47	929.03	0	1.86	1598.78	6.75	1593.41	6.72	-5.37	-0.34
71	238	167	96	3808	0.8373	623.83	0.60084	642.57	944.72	-0.65	1.84	1598.07	6.71	1593.43	6.7	-4.64	-0.29
71	239	168	97	3824	0.835279	624.07	0.601464	642.67	960.49	0	1.82	1598.59	6.69	1592.99	6.67	-5.6	-0.35
71	240	169	98	3840	0.833264	624.3	0.602083	642.79	976.32	-0.65	1.8	1597.75	6.66	1592.87	6.64	-4.88	-0.31
71	241	170	99	3856	0.831253	624.52	0.602697	642.9	992.23	0	1.78	1598.12	6.63	1592.28	6.61	-5.85	-0.37
71	242	171	100	3872	0.829247	624.73	0.603306	643.03	1008.21	-0.64	1.76	1597.15	6.6	1592.01	6.58	-5.14	-0.32
71	243	172	101	3888	0.827245	624.94	0.603909	643.15	1024.26	0	1.75	1597.39	6.57	1591.27	6.55	-6.11	-0.38
71	244	173	102	3904	0.825249	625.14	0.604508	643.29	1040.38	-0.64	1.73	1596.28	6.54	1590.86	6.52	-5.41	-0.34
71	245	174	103	3920	0.823257	625.34	0.605102	643.42	1056.57	0	1.71	1596.38	6.52	1589.99	6.49	-6.39	-0.4
71	246	175	104	3936	0.82127	625.52	0.605691	643.56	1072.82	-0.64	1.69	1595.14	6.48	1589.44	6.46	-5.71	-0.36
71	247	176	105	3952	0.819289	625.71	0.606275	643.71	1089.15	0	1.68	1595.12	6.46	1588.42	6.43	-6.69	-0.42
71	248	177	106	3968	0.817313	625.88	0.606855	643.86	1105.53	-0.64	1.66	1593.75	6.43	1587.73	6.4	-6.02	-0.38
71	249	178	107	3984	0.815342	626.05	0.60743	644.02	1121.98	0	1.65	1593.6	6.4	1586.58	6.37	-7.01	-0.44
71	250	179	108	4000	0.813376	626.21	0.608	644.18	1138.5	-0.63	1.63	1592.11	6.37	1585.76	6.34	-6.35	-0.4
71	251	180	109	4016	0.811416	626.37	0.608566	644.34	1155.08	0	1.61	1591.83	6.34	1584.48	6.31	-7.35	-0.46
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
72	143	71	-1	2288	0.999951	530.48	0.498252	703.86	0.17	0	9.71	1063.19	7.43	1071.43	7.49	8.23	0.77
72	144	72	0	2304	1	532.98	0.5	702.21	0	0.83	10	1079.64	7.5	1086.96	7.55	7.32	0.67
72	145	73	1	2320	0.999952	535.42	0.501724	700.61	0.17	0	9.71	1093.52	7.54	1099.94	7.59	6.43	0.58
72	146	74	2	2336	0.999812	537.8	0.503425	699.06	0.67	0.83	9.44	1108.74	7.59	1114.89	7.64	6.15	0.55
72	147	75	3	2352	0.999584	540.13	0.505102	697.55	1.49	0	9.18	1122.01	7.63	1127.33	7.67	5.32	0.47
72	148	76	4	2368	0.99927	542.41	0.506757	696.09	2.63	0.82	8.93	1136.62	7.68	1141.72	7.71	5.1	0.45

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
72	149	77	5	2384	0.998874	544.63	0.508389	694.67	4.08	0	8.69	1149.3	7.71	1153.63	7.74	4.32	0.37
72	150	78	6	2400	0.9984	546.81	0.51	693.29	5.84	0.82	8.45	1163.33	7.76	1167.48	7.78	4.14	0.35
72	151	79	7	2416	0.997851	548.93	0.511589	691.95	7.9	0	8.23	1175.45	7.78	1178.87	7.81	3.42	0.29
72	152	80	8	2432	0.99723	551.01	0.513158	690.65	10.25	0.81	8.02	1188.92	7.82	1192.2	7.84	3.28	0.28
72	153	81	9	2448	0.99654	553.04	0.514706	689.39	12.89	0	7.81	1200.49	7.85	1203.1	7.86	2.61	0.22
72	154	82	10	2464	0.995783	555.03	0.516234	688.17	15.81	0.81	7.61	1213.41	7.88	1215.92	7.9	2.51	0.21
72	155	83	11	2480	0.994964	556.97	0.517742	686.99	19	0	7.42	1224.47	7.9	1226.34	7.91	1.88	0.15
72	156	84	12	2496	0.994083	558.87	0.519231	685.84	22.47	0.8	7.24	1236.87	7.93	1238.68	7.94	1.81	0.15
72	157	85	13	2512	0.993144	560.72	0.520701	684.72	26.2	0	7.06	1247.42	7.95	1248.64	7.95	1.22	0.1
72	158	86	14	2528	0.992149	562.54	0.522152	683.64	30.2	0.8	6.89	1259.32	7.97	1260.5	7.98	1.19	0.09
72	159	87	15	2544	0.9911	564.31	0.523585	682.59	34.45	0	6.73	1269.38	7.98	1270.02	7.99	0.63	0.05
72	160	88	16	2560	0.99	566.04	0.525	681.57	38.95	0.79	6.57	1280.8	8	1281.42	8.01	0.63	0.05
72	161	89	17	2576	0.988851	567.74	0.526398	680.58	43.71	0	6.42	1290.39	8.01	1290.51	8.02	0.11	0.01
72	162	90	18	2592	0.987654	569.4	0.527778	679.62	48.7	0.79	6.27	1301.34	8.03	1301.48	8.03	0.13	0.01
72	163	91	19	2608	0.986413	571.02	0.529141	678.69	53.93	0	6.13	1310.49	8.04	1310.14	8.04	-0.35	-0.03
72	164	92	20	2624	0.985128	572.61	0.530488	677.79	59.39	0.78	5.99	1320.99	8.05	1320.68	8.05	-0.3	-0.02
72	165	93	21	2640	0.983802	574.16	0.531818	676.91	65.08	0	5.86	1329.7	8.06	1328.94	8.05	-0.76	-0.06
72	166	94	22	2656	0.982436	575.68	0.533133	676.07	71	0.78	5.73	1339.76	8.07	1339.07	8.07	-0.69	-0.05
72	167	95	23	2672	0.981032	577.16	0.534431	675.25	77.14	0	5.61	1348.06	8.07	1346.94	8.07	-1.12	-0.08
72	168	96	24	2688	0.979592	578.61	0.535714	674.45	83.5	0.77	5.49	1357.7	8.08	1356.67	8.08	-1.03	-0.08
72	169	97	25	2704	0.978117	580.03	0.536982	673.68	90.07	0	5.37	1365.59	8.08	1364.15	8.07	-1.44	-0.11
72	170	98	26	2720	0.976609	581.42	0.538235	672.93	96.85	0.77	5.26	1374.82	8.09	1373.49	8.08	-1.33	-0.1
72	171	99	27	2736	0.975069	582.78	0.539474	672.21	103.84	0	5.15	1382.33	8.08	1380.61	8.07	-1.71	-0.12
72	172	100	28	2752	0.973499	584.1	0.540698	671.51	111.03	0.76	5.05	1391.17	8.09	1389.58	8.08	-1.59	-0.11
72	173	101	29	2768	0.9719	585.4	0.541908	670.84	118.41	0	4.95	1398.3	8.08	1396.34	8.07	-1.95	-0.14
72	174	102	30	2784	0.970273	586.67	0.543103	670.18	126	0.76	4.85	1406.76	8.08	1404.94	8.07	-1.81	-0.13
72	175	103	31	2800	0.96862	587.91	0.544286	669.55	133.77	0	4.75	1413.52	8.08	1411.36	8.06	-2.16	-0.15
72	176	104	32	2816	0.966942	589.13	0.545455	668.93	141.74	0.75	4.66	1421.62	8.08	1419.61	8.07	-2.01	-0.14
72	177	105	33	2832	0.96524	590.32	0.54661	668.34	149.89	0	4.57	1428.03	8.07	1425.69	8.05	-2.34	-0.16
72	178	106	34	2848	0.963515	591.48	0.547753	667.77	158.22	0.75	4.48	1435.77	8.07	1433.59	8.05	-2.17	-0.15
72	179	107	35	2864	0.961768	592.62	0.548883	667.21	166.73	0	4.4	1441.84	8.05	1439.35	8.04	-2.49	-0.17
72	180	108	36	2880	0.96	593.73	0.55	666.68	175.42	0.75	4.32	1449.24	8.05	1446.92	8.04	-2.32	-0.16
72	181	109	37	2896	0.958213	594.82	0.551105	666.16	184.28	0	4.24	1454.98	8.04	1452.36	8.02	-2.62	-0.18
72	182	110	38	2912	0.956406	595.88	0.552198	665.66	193.32	0.74	4.16	1462.04	8.03	1459.61	8.02	-2.44	-0.17
72	183	111	39	2928	0.954582	596.92	0.553279	665.18	202.52	0	4.09	1467.46	8.02	1464.74	8	-2.72	-0.19
72	184	112	40	2944	0.952741	597.94	0.554348	664.72	211.89	0.74	4.01	1474.21	8.01	1471.67	8	-2.54	-0.17
72	185	113	41	2960	0.950884	598.93	0.555405	664.27	221.42	0	3.94	1479.32	8	1476.51	7.98	-2.82	-0.19
72	186	114	42	2976	0.949011	599.9	0.556452	663.84	231.11	0.73	3.87	1485.75	7.99	1483.13	7.97	-2.62	-0.18
72	187	115	43	2992	0.947125	600.86	0.557487	663.43	240.95	0	3.81	1490.57	7.97	1487.68	7.96	-2.89	-0.19
72	188	116	44	3008	0.945224	601.79	0.558511	663.03	250.96	0.73	3.74	1496.7	7.96	1494.01	7.95	-2.69	-0.18
72	189	117	45	3024	0.943311	602.7	0.559524	662.65	261.11	0	3.68	1501.22	7.94	1498.27	7.93	-2.95	-0.2
72	190	118	46	3040	0.941385	603.58	0.560526	662.28	271.42	0.73	3.62	1507.06	7.93	1504.31	7.92	-2.75	-0.18
72	191	119	47	3056	0.939448	604.45	0.561518	661.93	281.87	0	3.56	1511.3	7.91	1508.3	7.9	-3.01	-0.2
72	192	120	48	3072	0.9375	605.3	0.5625	661.59	292.47	0.72	3.5	1516.86	7.9	1514.06	7.89	-2.8	-0.18
72	193	121	49	3088	0.935542	606.14	0.563472	661.27	303.21	0	3.44	1520.83	7.88	1517.78	7.86	-3.05	-0.2
72	194	122	50	3104	0.933574	606.95	0.564433	660.95	314.09	0.72	3.39	1526.11	7.87	1523.27	7.85	-2.84	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
72	195	123	51	3120	0.931598	607.74	0.565385	660.66	325.12	0	3.33	1529.82	7.85	1526.73	7.83	-3.09	-0.2
72	196	124	52	3136	0.929613	608.52	0.566327	660.37	336.28	0.71	3.28	1534.83	7.83	1531.95	7.82	-2.88	-0.19
72	197	125	53	3152	0.92762	609.28	0.567259	660.1	347.57	0	3.23	1538.28	7.81	1535.16	7.79	-3.12	-0.2
72	198	126	54	3168	0.92562	610.02	0.568182	659.84	359	0.71	3.18	1543.03	7.79	1540.12	7.78	-2.91	-0.19
72	199	127	55	3184	0.923613	610.75	0.569095	659.6	370.55	0	3.13	1546.24	7.77	1543.09	7.75	-3.15	-0.2
72	200	128	56	3200	0.9216	611.45	0.57	659.36	382.24	0.71	3.09	1550.74	7.75	1547.8	7.74	-2.94	-0.19
72	201	129	57	3216	0.919581	612.15	0.570896	659.14	394.05	0	3.04	1553.7	7.73	1550.52	7.71	-3.18	-0.2
72	202	130	58	3232	0.917557	612.82	0.571782	658.93	405.99	0.7	2.99	1557.95	7.71	1554.99	7.7	-2.97	-0.19
72	203	131	59	3248	0.915528	613.49	0.57266	658.73	418.05	0	2.95	1560.68	7.69	1557.48	7.67	-3.21	-0.21
72	204	132	60	3264	0.913495	614.13	0.573529	658.54	430.23	0.7	2.91	1564.7	7.67	1561.7	7.66	-3	-0.19
72	205	133	61	3280	0.911457	614.76	0.57439	658.36	442.54	0	2.87	1567.2	7.64	1563.97	7.63	-3.24	-0.21
72	206	134	62	3296	0.909417	615.38	0.575243	658.2	454.96	0.7	2.82	1570.99	7.63	1567.96	7.61	-3.03	-0.19
72	207	135	63	3312	0.907372	615.98	0.576087	658.04	467.49	0	2.79	1573.27	7.6	1570	7.58	-3.27	-0.21
72	208	136	64	3328	0.905325	616.57	0.576923	657.89	480.14	0.69	2.75	1576.83	7.58	1573.77	7.57	-3.07	-0.19
72	209	137	65	3344	0.903276	617.14	0.577751	657.76	492.91	0	2.71	1578.9	7.55	1575.6	7.54	-3.3	-0.21
72	210	138	66	3360	0.901224	617.7	0.578571	657.63	505.78	0.69	2.67	1582.25	7.53	1579.14	7.52	-3.11	-0.2
72	211	139	67	3376	0.899171	618.25	0.579384	657.51	518.76	0	2.64	1584.1	7.51	1580.76	7.49	-3.35	-0.21
72	212	140	68	3392	0.897116	618.79	0.580189	657.41	531.86	0.69	2.6	1587.24	7.49	1584.08	7.47	-3.15	-0.2
72	213	141	69	3408	0.895061	619.31	0.580986	657.31	545.06	0	2.57	1588.89	7.46	1585.5	7.44	-3.39	-0.21
72	214	142	70	3424	0.893004	619.82	0.581776	657.22	558.36	0.68	2.53	1591.82	7.44	1588.61	7.42	-3.21	-0.2
72	215	143	71	3440	0.890946	620.32	0.582558	657.14	571.77	0	2.5	1593.28	7.41	1589.83	7.39	-3.45	-0.22
72	216	144	72	3456	0.888889	620.8	0.583333	657.07	585.28	0.68	2.47	1596	7.39	1592.73	7.37	-3.27	-0.21
72	217	145	73	3472	0.886831	621.27	0.584101	657.01	598.89	0	2.43	1597.27	7.36	1593.75	7.34	-3.51	-0.22
72	218	146	74	3488	0.884774	621.73	0.584862	656.95	612.6	0.68	2.4	1599.8	7.34	1596.46	7.32	-3.33	-0.21
72	219	147	75	3504	0.882717	622.18	0.585616	656.91	626.41	0	2.37	1600.88	7.31	1597.29	7.29	-3.59	-0.22
72	220	148	76	3520	0.880661	622.62	0.586364	656.87	640.31	0.67	2.34	1603.21	7.29	1599.8	7.27	-3.41	-0.21
72	221	149	77	3536	0.878606	623.05	0.587104	656.84	654.31	0	2.31	1604.11	7.26	1600.44	7.24	-3.67	-0.23
72	222	150	78	3552	0.876552	623.47	0.587838	656.81	668.41	0.67	2.29	1606.27	7.24	1602.76	7.22	-3.5	-0.22
72	223	151	79	3568	0.8745	623.88	0.588565	656.8	682.6	0	2.26	1606.99	7.21	1603.23	7.19	-3.76	-0.23
72	224	152	80	3584	0.872449	624.27	0.589286	656.79	696.88	0.67	2.23	1608.96	7.18	1605.36	7.17	-3.6	-0.22
72	225	153	81	3600	0.8704	624.66	0.59	656.79	711.24	0	2.2	1609.51	7.15	1605.64	7.14	-3.86	-0.24
72	226	154	82	3616	0.868353	625.03	0.590708	656.8	725.7	0.67	2.18	1611.31	7.13	1607.59	7.11	-3.71	-0.23
72	227	155	83	3632	0.866308	625.4	0.59141	656.81	740.25	0	2.15	1611.69	7.1	1607.71	7.08	-3.98	-0.25
72	228	156	84	3648	0.864266	625.76	0.592105	656.84	754.89	0.66	2.13	1613.31	7.08	1609.48	7.06	-3.84	-0.24
72	229	157	85	3664	0.862226	626.1	0.592795	656.86	769.6	0	2.1	1613.53	7.05	1609.42	7.03	-4.11	-0.26
72	230	158	86	3680	0.860189	626.44	0.593478	656.9	784.41	0.66	2.08	1614.99	7.02	1611.02	7	-3.97	-0.25
72	231	159	87	3696	0.858155	626.77	0.594156	656.94	799.3	0	2.06	1615.05	6.99	1610.8	6.97	-4.25	-0.26
72	232	160	88	3712	0.856124	627.09	0.594828	656.99	814.27	0.66	2.03	1616.34	6.97	1612.22	6.95	-4.12	-0.26
72	233	161	89	3728	0.854096	627.4	0.595494	657.04	829.32	0	2.01	1616.25	6.94	1611.84	6.92	-4.41	-0.27
72	234	162	90	3744	0.852071	627.7	0.596154	657.1	844.45	0.65	1.99	1617.38	6.91	1613.1	6.89	-4.29	-0.27
72	235	163	91	3760	0.85005	628	0.596809	657.17	859.66	0	1.97	1617.14	6.88	1612.56	6.86	-4.58	-0.28
72	236	164	92	3776	0.848032	628.28	0.597458	657.24	874.95	0.65	1.95	1618.12	6.86	1613.65	6.84	-4.47	-0.28
72	237	165	93	3792	0.846018	628.56	0.598101	657.32	890.32	0	1.92	1617.72	6.83	1612.96	6.81	-4.77	-0.3
72	238	166	94	3808	0.844008	628.83	0.598739	657.4	905.77	0.65	1.9	1618.55	6.8	1613.89	6.78	-4.66	-0.29
72	239	167	95	3824	0.842002	629.09	0.599372	657.49	921.29	0	1.88	1618.02	6.77	1613.05	6.75	-4.97	-0.31
72	240	168	96	3840	0.84	629.34	0.6	657.59	936.88	0.65	1.86	1618.7	6.74	1613.83	6.72	-4.87	-0.3

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
72	241	169	97	3856	0.838002	629.59	0.600622	657.69	952.55	0	1.84	1618.02	6.71	1612.84	6.69	-5.19	-0.32
72	242	170	98	3872	0.836008	629.83	0.60124	657.79	968.29	0.64	1.83	1618.56	6.69	1613.46	6.67	-5.1	-0.32
72	243	171	99	3888	0.834019	630.06	0.601852	657.9	984.1	0	1.81	1617.74	6.66	1612.33	6.64	-5.42	-0.34
72	244	172	100	3904	0.832034	630.28	0.602459	658.02	999.98	0.64	1.79	1618.14	6.63	1612.81	6.61	-5.34	-0.33
72	245	173	101	3920	0.830054	630.5	0.603061	658.14	1015.94	0	1.77	1617.19	6.6	1611.53	6.58	-5.67	-0.35
72	246	174	102	3936	0.828079	630.71	0.603659	658.27	1031.96	0.64	1.75	1617.45	6.58	1611.86	6.55	-5.6	-0.35
72	247	175	103	3952	0.826108	630.91	0.604251	658.4	1048.05	0	1.74	1616.37	6.54	1610.44	6.52	-5.93	-0.37
72	248	176	104	3968	0.824142	631.11	0.604839	658.53	1064.21	0.64	1.72	1616.5	6.52	1610.63	6.49	-5.87	-0.36
72	249	177	105	3984	0.82218	631.3	0.605422	658.67	1080.43	0	1.7	1615.3	6.49	1609.08	6.46	-6.22	-0.39
72	250	178	106	4000	0.820224	631.48	0.606	658.82	1096.72	0.63	1.69	1615.29	6.46	1609.13	6.44	-6.16	-0.38
72	251	179	107	4016	0.818273	631.66	0.606574	658.97	1113.08	0	1.67	1613.96	6.43	1607.44	6.4	-6.52	-0.41
72	252	180	108	4032	0.816327	631.83	0.607143	659.12	1129.5	0.63	1.65	1613.83	6.4	1607.35	6.38	-6.47	-0.4
72	253	181	109	4048	0.814385	631.99	0.607708	659.28	1145.98	0	1.64	1612.38	6.37	1605.54	6.35	-6.84	-0.43
72	254	182	110	4064	0.81245	632.15	0.608268	659.45	1162.53	0.63	1.62	1612.12	6.35	1605.32	6.32	-6.8	-0.42
72	255	183	111	4080	0.810519	632.3	0.608824	659.61	1179.14	0	1.61	1610.55	6.32	1603.38	6.29	-7.17	-0.45
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
73	145	72	-1	2320	0.999952	535.42	0.498276	720.21	0.17	0	9.71	1073.92	7.41	1082.2	7.46	8.28	0.77
73	146	73	0	2336	1	537.9	0.5	718.54	0	-0.83	10	1088.73	7.46	1096.74	7.51	8.01	0.73
73	147	74	1	2352	0.999954	540.33	0.501701	716.93	0.17	0	9.72	1104.29	7.51	1110.77	7.56	6.47	0.58
73	148	75	2	2368	0.999817	542.7	0.503378	715.36	0.66	-0.82	9.45	1117.91	7.55	1124.74	7.6	6.84	0.61
73	149	76	3	2384	0.999595	545.03	0.505034	713.83	1.47	0	9.19	1132.86	7.6	1138.21	7.64	5.35	0.47
73	150	77	4	2400	0.999289	547.29	0.506667	712.36	2.6	-0.82	8.94	1145.88	7.64	1151.65	7.68	5.77	0.5
73	151	78	5	2416	0.998904	549.51	0.508278	710.92	4.03	0	8.7	1160.24	7.68	1164.58	7.71	4.34	0.37
73	152	79	6	2432	0.998442	551.68	0.509868	709.53	5.76	-0.81	8.47	1172.69	7.72	1177.5	7.75	4.8	0.41
73	153	80	7	2448	0.997907	553.8	0.511438	708.17	7.8	0	8.25	1186.48	7.75	1189.91	7.78	3.42	0.29
73	154	81	8	2464	0.997301	555.87	0.512987	706.86	10.12	-0.81	8.04	1198.39	7.78	1202.32	7.81	3.93	0.33
73	155	82	9	2480	0.996629	557.9	0.514516	705.58	12.72	0	7.84	1211.63	7.82	1214.23	7.83	2.6	0.21
73	156	83	10	2496	0.995891	559.88	0.516026	704.34	15.6	-0.8	7.64	1223.01	7.84	1226.15	7.86	3.14	0.26
73	157	84	11	2512	0.995091	561.82	0.517516	703.14	18.76	0	7.45	1235.73	7.87	1237.58	7.88	1.85	0.15
73	158	85	12	2528	0.994232	563.72	0.518987	701.98	22.19	-0.8	7.27	1246.59	7.89	1249.03	7.91	2.44	0.19
73	159	86	13	2544	0.993315	565.57	0.52044	700.84	25.88	0	7.09	1258.8	7.92	1259.98	7.92	1.18	0.09
73	160	87	14	2560	0.992344	567.38	0.521875	699.74	29.82	-0.79	6.92	1269.18	7.93	1270.98	7.94	1.8	0.14
73	161	88	15	2576	0.99132	569.16	0.523292	698.68	34.03	0	6.76	1280.9	7.96	1281.48	7.96	0.58	0.05
73	162	89	16	2592	0.990245	570.89	0.524691	697.64	38.48	-0.79	6.6	1290.81	7.97	1292.04	7.98	1.23	0.1
73	163	90	17	2608	0.989123	572.59	0.526074	696.64	43.17	0	6.45	1302.05	7.99	1302.1	7.99	0.05	0
73	164	91	18	2624	0.987954	574.25	0.527439	695.66	48.11	-0.78	6.31	1311.51	8	1312.23	8	0.72	0.06
73	165	92	19	2640	0.98674	575.87	0.528788	694.72	53.28	0	6.17	1322.3	8.01	1321.87	8.01	-0.43	-0.03
73	166	93	20	2656	0.985484	577.46	0.53012	693.8	58.68	-0.78	6.03	1331.31	8.02	1331.58	8.02	0.27	0.02
73	167	94	21	2672	0.984187	579.02	0.531437	692.91	64.31	0	5.9	1341.66	8.03	1340.81	8.03	-0.85	-0.06
73	168	95	22	2688	0.982851	580.54	0.532738	692.05	70.16	-0.77	5.77	1350.25	8.04	1350.13	8.04	-0.13	-0.01
73	169	96	23	2704	0.981478	582.02	0.534024	691.21	76.24	0	5.65	1360.18	8.05	1358.95	8.04	-1.23	-0.09
73	170	97	24	2720	0.980069	583.48	0.535294	690.4	82.52	-0.77	5.53	1368.36	8.05	1367.88	8.05	-0.48	-0.03
73	171	98	25	2736	0.978626	584.9	0.53655	689.61	89.02	0	5.41	1377.87	8.06	1376.32	8.05	-1.55	-0.11
73	172	99	26	2752	0.97715	586.29	0.537791	688.85	95.73	-0.76	5.3	1385.66	8.06	1384.87	8.05	-0.79	-0.06

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
73	173	100	27	2768	0.975642	587.66	0.539017	688.12	102.64	0	5.19	1394.78	8.06	1392.94	8.05	-1.84	-0.13
73	174	101	28	2784	0.974105	588.99	0.54023	687.4	109.76	-0.76	5.09	1402.18	8.06	1401.13	8.05	-1.06	-0.08
73	175	102	29	2800	0.972539	590.29	0.541429	686.71	117.07	0	4.99	1410.92	8.06	1408.83	8.05	-2.09	-0.15
73	176	103	30	2816	0.970945	591.57	0.542614	686.04	124.57	-0.75	4.89	1417.96	8.06	1416.66	8.05	-1.29	-0.09
73	177	104	31	2832	0.969326	592.82	0.543785	685.39	132.27	0	4.79	1426.32	8.06	1424.01	8.05	-2.31	-0.16
73	178	105	32	2848	0.967681	594.04	0.544944	684.76	140.15	-0.75	4.7	1433	8.05	1431.5	8.04	-1.5	-0.1
73	179	106	33	2864	0.966012	595.23	0.546089	684.15	148.22	0	4.61	1441	8.05	1438.51	8.04	-2.5	-0.17
73	180	107	34	2880	0.964321	596.4	0.547222	683.57	156.47	-0.75	4.52	1447.34	8.04	1445.67	8.03	-1.67	-0.12
73	181	108	35	2896	0.962608	597.54	0.548343	683	164.9	0	4.44	1455	8.04	1452.34	8.02	-2.66	-0.18
73	182	109	36	2912	0.960874	598.66	0.549451	682.45	173.5	-0.74	4.36	1461	8.03	1459.18	8.02	-1.82	-0.12
73	183	110	37	2928	0.959121	599.76	0.550546	681.92	182.28	0	4.28	1468.32	8.02	1465.53	8.01	-2.79	-0.19
73	184	111	38	2944	0.957349	600.83	0.55163	681.41	191.23	-0.74	4.2	1474	8.01	1472.05	8	-1.95	-0.13
73	185	112	39	2960	0.955559	601.88	0.552703	680.91	200.34	0	4.13	1481	8.01	1478.09	7.99	-2.91	-0.2
73	186	113	40	2976	0.953752	602.9	0.553763	680.44	209.62	-0.73	4.05	1486.36	7.99	1484.3	7.98	-2.06	-0.14
73	187	114	41	2992	0.951929	603.9	0.554813	679.98	219.06	0	3.98	1493.04	7.98	1490.03	7.97	-3.01	-0.2
73	188	115	42	3008	0.950091	604.88	0.555851	679.53	228.66	-0.73	3.91	1498.11	7.97	1495.95	7.96	-2.15	-0.14
73	189	116	43	3024	0.948238	605.84	0.556878	679.11	238.42	0	3.85	1504.48	7.96	1501.39	7.94	-3.09	-0.21
73	190	117	44	3040	0.946371	606.78	0.557895	678.7	248.33	-0.73	3.78	1509.25	7.94	1507.02	7.93	-2.23	-0.15
73	191	118	45	3056	0.944492	607.7	0.558901	678.3	258.39	0	3.72	1515.33	7.93	1512.17	7.92	-3.16	-0.21
73	192	119	46	3072	0.9426	608.6	0.559896	677.92	268.6	-0.72	3.66	1519.81	7.92	1517.52	7.9	-2.3	-0.15
73	193	120	47	3088	0.940696	609.48	0.560881	677.55	278.96	0	3.6	1525.6	7.9	1522.39	7.89	-3.22	-0.21
73	194	121	48	3104	0.938782	610.33	0.561856	677.2	289.47	-0.72	3.54	1529.81	7.89	1527.46	7.87	-2.35	-0.15
73	195	122	49	3120	0.936857	611.17	0.562821	676.86	300.12	0	3.48	1535.32	7.87	1532.06	7.86	-3.27	-0.21
73	196	123	50	3136	0.934923	612	0.563776	676.54	310.91	-0.71	3.43	1539.27	7.85	1536.87	7.84	-2.4	-0.16
73	197	124	51	3152	0.932979	612.8	0.564721	676.23	321.83	0	3.37	1544.51	7.84	1541.2	7.82	-3.31	-0.21
73	198	125	52	3168	0.931027	613.58	0.565657	675.94	332.9	-0.71	3.32	1548.19	7.82	1545.75	7.81	-2.44	-0.16
73	199	126	53	3184	0.929067	614.35	0.566583	675.65	344.09	0	3.27	1553.17	7.8	1549.82	7.79	-3.34	-0.22
73	200	127	54	3200	0.9271	615.1	0.5675	675.38	355.42	-0.71	3.22	1556.6	7.78	1554.12	7.77	-2.48	-0.16
73	201	128	55	3216	0.925126	615.84	0.568408	675.12	366.88	0	3.17	1561.32	7.77	1557.95	7.75	-3.38	-0.22
73	202	129	56	3232	0.923145	616.56	0.569307	674.88	378.47	-0.7	3.12	1564.51	7.75	1562	7.73	-2.51	-0.16
73	203	130	57	3248	0.921158	617.26	0.570197	674.64	390.19	0	3.07	1568.98	7.73	1565.58	7.71	-3.41	-0.22
73	204	131	58	3264	0.919166	617.94	0.571078	674.42	402.03	-0.7	3.03	1571.93	7.71	1569.39	7.69	-2.54	-0.16
73	205	132	59	3280	0.917168	618.61	0.571951	674.21	413.99	0	2.99	1576.17	7.69	1572.73	7.67	-3.44	-0.22
73	206	133	60	3296	0.915166	619.27	0.572816	674.01	426.08	-0.7	2.94	1578.89	7.66	1576.31	7.65	-2.58	-0.16
73	207	134	61	3312	0.91316	619.91	0.573671	673.82	438.28	0	2.9	1582.88	7.65	1579.42	7.63	-3.47	-0.22
73	208	135	62	3328	0.91115	620.54	0.574519	673.65	450.6	-0.69	2.86	1585.38	7.62	1582.77	7.61	-2.61	-0.16
73	209	136	63	3344	0.909137	621.15	0.575359	673.48	463.04	0	2.82	1589.15	7.6	1585.65	7.59	-3.5	-0.22
73	210	137	64	3360	0.90712	621.75	0.57619	673.32	475.59	-0.69	2.78	1591.43	7.58	1588.78	7.57	-2.65	-0.17
73	211	138	65	3376	0.905101	622.33	0.577014	673.18	488.26	0	2.74	1594.98	7.56	1591.44	7.54	-3.54	-0.22
73	212	139	66	3392	0.903079	622.9	0.57783	673.04	501.03	-0.69	2.7	1597.05	7.53	1594.36	7.52	-2.69	-0.17
73	213	140	67	3408	0.901056	623.46	0.578638	672.91	513.92	0	2.67	1600.38	7.51	1596.8	7.5	-3.58	-0.22
73	214	141	68	3424	0.89903	624	0.579439	672.8	526.91	-0.68	2.63	1602.24	7.49	1599.51	7.47	-2.73	-0.17
73	215	142	69	3440	0.897004	624.53	0.580233	672.69	540.01	0	2.6	1605.37	7.47	1601.74	7.45	-3.63	-0.23
73	216	143	70	3456	0.894976	625.05	0.581019	672.59	553.21	-0.68	2.56	1607.03	7.44	1604.24	7.43	-2.79	-0.17
73	217	144	71	3472	0.892947	625.56	0.581797	672.5	566.52	0	2.53	1609.95	7.42	1606.27	7.4	-3.68	-0.23
73	218	145	72	3488	0.890918	626.05	0.582569	672.42	579.93	-0.68	2.5	1611.41	7.39	1608.57	7.38	-2.85	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
73	219	146	73	3504	0.888889	626.53	0.583333	672.35	593.44	0	2.47	1614.14	7.37	1610.4	7.35	-3.74	-0.23
73	220	147	74	3520	0.88686	627.01	0.584091	672.29	607.06	-0.67	2.43	1615.41	7.34	1612.5	7.33	-2.91	-0.18
73	221	148	75	3536	0.88483	627.47	0.584842	672.23	620.76	0	2.4	1617.94	7.32	1614.13	7.3	-3.81	-0.24
73	222	149	76	3552	0.882802	627.91	0.585586	672.18	634.57	-0.67	2.37	1619.04	7.29	1616.04	7.28	-2.99	-0.19
73	223	150	77	3568	0.880774	628.35	0.586323	672.15	648.47	0	2.35	1621.38	7.27	1617.49	7.25	-3.89	-0.24
73	224	151	78	3584	0.878747	628.78	0.587054	672.11	662.47	-0.67	2.32	1622.29	7.24	1619.21	7.23	-3.08	-0.19
73	225	152	79	3600	0.876721	629.19	0.587778	672.09	676.56	0	2.29	1624.45	7.22	1620.47	7.2	-3.98	-0.25
73	226	153	80	3616	0.874697	629.6	0.588496	672.08	690.74	-0.67	2.26	1625.19	7.19	1622.01	7.18	-3.17	-0.2
73	227	154	81	3632	0.872674	630	0.589207	672.07	705.01	0	2.23	1627.17	7.17	1623.09	7.15	-4.08	-0.25
73	228	155	82	3648	0.870653	630.38	0.589912	672.07	719.37	-0.66	2.21	1627.73	7.14	1624.45	7.12	-3.28	-0.2
73	229	156	83	3664	0.868633	630.76	0.590611	672.07	733.81	0	2.18	1629.54	7.12	1625.35	7.1	-4.19	-0.26
73	230	157	84	3680	0.866616	631.12	0.591304	672.09	748.35	-0.66	2.16	1629.94	7.09	1626.54	7.07	-3.4	-0.21
73	231	158	85	3696	0.864601	631.48	0.591991	672.11	762.97	0	2.13	1631.58	7.06	1627.26	7.04	-4.32	-0.27
73	232	159	86	3712	0.862589	631.83	0.592672	672.13	777.68	-0.66	2.11	1631.82	7.03	1628.28	7.02	-3.54	-0.22
73	233	160	87	3728	0.860579	632.16	0.593348	672.17	792.47	0	2.08	1633.29	7.01	1628.83	6.99	-4.45	-0.27
73	234	161	88	3744	0.858573	632.49	0.594017	672.21	807.34	-0.65	2.06	1633.37	6.98	1629.69	6.96	-3.68	-0.23
73	235	162	89	3760	0.856569	632.81	0.594681	672.25	822.29	0	2.04	1634.68	6.96	1630.08	6.94	-4.6	-0.28
73	236	163	90	3776	0.854568	633.13	0.595339	672.31	837.33	-0.65	2.02	1634.61	6.93	1630.77	6.91	-3.84	-0.24
73	237	164	91	3792	0.85257	633.43	0.595992	672.37	852.44	0	1.99	1635.76	6.9	1630.99	6.88	-4.77	-0.29
73	238	165	92	3808	0.850576	633.72	0.596639	672.43	867.63	-0.65	1.97	1635.54	6.87	1631.52	6.86	-4.01	-0.25
73	239	166	93	3824	0.848585	634.01	0.59728	672.5	882.9	0	1.95	1636.54	6.85	1631.59	6.83	-4.94	-0.3
73	240	167	94	3840	0.846597	634.29	0.597917	672.58	898.25	-0.65	1.93	1636.17	6.82	1631.97	6.8	-4.2	-0.26
73	241	168	95	3856	0.844614	634.56	0.598548	672.66	913.67	0	1.91	1637.02	6.79	1631.88	6.77	-5.14	-0.31
73	242	169	96	3872	0.842634	634.82	0.599174	672.75	929.17	-0.64	1.89	1636.51	6.76	1632.1	6.74	-4.4	-0.27
73	243	170	97	3888	0.840658	635.08	0.599794	672.84	944.74	0	1.87	1637.21	6.74	1631.86	6.72	-5.35	-0.33
73	244	171	98	3904	0.838686	635.32	0.60041	672.94	960.38	-0.64	1.85	1636.56	6.71	1631.94	6.69	-4.62	-0.28
73	245	172	99	3920	0.836718	635.56	0.60102	673.05	976.1	0	1.83	1637.12	6.68	1631.55	6.66	-5.57	-0.34
73	246	173	100	3936	0.834754	635.8	0.601626	673.16	991.89	-0.64	1.81	1636.33	6.65	1631.48	6.63	-4.86	-0.3
73	247	174	101	3952	0.832795	636.02	0.602227	673.27	1007.74	0	1.8	1636.76	6.63	1630.94	6.6	-5.81	-0.36
73	248	175	102	3968	0.83084	636.24	0.602823	673.4	1023.67	-0.64	1.78	1635.84	6.6	1630.73	6.58	-5.11	-0.31
73	249	176	103	3984	0.82889	636.45	0.603414	673.52	1039.67	0	1.76	1636.12	6.57	1630.05	6.55	-6.07	-0.37
73	250	177	104	4000	0.826944	636.66	0.604	673.65	1055.73	-0.63	1.74	1635.08	6.54	1629.7	6.52	-5.38	-0.33
73	251	178	105	4016	0.825003	636.85	0.604582	673.79	1071.86	0	1.73	1635.23	6.51	1628.88	6.49	-6.34	-0.39
73	252	179	106	4032	0.823066	637.05	0.605159	673.93	1088.05	-0.63	1.71	1634.05	6.48	1628.39	6.46	-5.66	-0.35
73	253	180	107	4048	0.821135	637.23	0.605731	674.07	1104.32	0	1.69	1634.08	6.46	1627.44	6.43	-6.63	-0.41
73	254	181	108	4064	0.819208	637.41	0.606299	674.22	1120.64	-0.63	1.68	1632.78	6.43	1626.82	6.4	-5.96	-0.37
73	255	182	109	4080	0.817286	637.58	0.606863	674.37	1137.03	0	1.66	1632.67	6.4	1625.73	6.38	-6.94	-0.43
73	256	183	110	4096	0.815369	637.75	0.607422	674.53	1153.48	-0.62	1.65	1631.26	6.37	1624.97	6.35	-6.28	-0.39
73	257	184	111	4112	0.813457	637.91	0.607977	674.7	1170	0	1.63	1631.03	6.35	1623.76	6.32	-7.27	-0.45
73	258	185	112	4128	0.81155	638.06	0.608527	674.86	1186.58	-0.62	1.61	1629.49	6.32	1622.87	6.29	-6.62	-0.41
73	259	186	113	4144	0.809648	638.21	0.609073	675.03	1203.21	0	1.6	1629.14	6.29	1621.53	6.26	-7.61	-0.47
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
74	147	73	-1	2352	0.999954	540.33	0.498299	736.7	0.17	0	9.72	1084.52	7.38	1092.85	7.43	8.34	0.76
74	148	74	0	2368	1	542.8	0.5	735.02	0	0.82	10	1100.99	7.44	1108.43	7.49	7.43	0.67

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
74	149	75	1	2384	0.999955	545.22	0.501678	733.39	0.16	0	9.72	1114.95	7.48	1121.49	7.53	6.54	0.58
74	150	76	2	2400	0.999822	547.59	0.503333	731.81	0.65	0.82	9.46	1130.23	7.53	1136.49	7.58	6.26	0.55
74	151	77	3	2416	0.999605	549.9	0.504967	730.27	1.45	0	9.2	1143.58	7.57	1149.01	7.61	5.43	0.47
74	152	78	4	2432	0.999307	552.16	0.506579	728.77	2.56	0.81	8.95	1158.27	7.62	1163.47	7.65	5.2	0.45
74	153	79	5	2448	0.998932	554.37	0.50817	727.32	3.98	0	8.72	1171.05	7.65	1175.47	7.68	4.42	0.38
74	154	80	6	2464	0.998482	556.53	0.50974	725.91	5.69	0.81	8.49	1185.16	7.7	1189.4	7.72	4.23	0.36
74	155	81	7	2480	0.99796	558.65	0.51129	724.54	7.7	0	8.27	1197.39	7.73	1200.89	7.75	3.51	0.29
74	156	82	8	2496	0.99737	560.71	0.512821	723.21	9.99	0.8	8.06	1210.95	7.76	1214.31	7.78	3.36	0.28
74	157	83	9	2512	0.996714	562.74	0.514331	721.92	12.56	0	7.86	1222.64	7.79	1225.32	7.8	2.68	0.22
74	158	84	10	2528	0.995994	564.72	0.515823	720.67	15.41	0.8	7.67	1235.67	7.82	1238.25	7.84	2.58	0.21
74	159	85	11	2544	0.995214	566.65	0.517296	719.45	18.53	0	7.48	1246.85	7.84	1248.79	7.85	1.94	0.16
74	160	86	12	2560	0.994375	568.55	0.51875	718.27	21.91	0.79	7.3	1259.36	7.87	1261.23	7.88	1.87	0.15
74	161	87	13	2576	0.99348	570.4	0.520186	717.12	25.56	0	7.12	1270.05	7.89	1271.32	7.9	1.27	0.1
74	162	88	14	2592	0.992532	572.21	0.521605	716	29.46	0.79	6.96	1282.07	7.91	1283.31	7.92	1.24	0.1
74	163	89	15	2608	0.991531	573.98	0.523006	714.92	33.61	0	6.79	1292.28	7.93	1292.96	7.93	0.68	0.05
74	164	90	16	2624	0.990482	575.72	0.52439	713.87	38.01	0.78	6.64	1303.82	7.95	1304.49	7.95	0.67	0.05
74	165	91	17	2640	0.989385	577.42	0.525758	712.85	42.65	0	6.49	1313.57	7.96	1313.71	7.96	0.14	0.01
74	166	92	18	2656	0.988242	579.08	0.527108	711.86	47.53	0.78	6.34	1324.65	7.98	1324.81	7.98	0.16	0.01
74	167	93	19	2672	0.987056	580.7	0.528443	710.9	52.64	0	6.2	1333.96	7.99	1333.63	7.99	-0.33	-0.02
74	168	94	20	2688	0.985828	582.29	0.529762	709.96	57.99	0.77	6.07	1344.59	8	1344.31	8	-0.28	-0.02
74	169	95	21	2704	0.984559	583.85	0.531065	709.06	63.55	0	5.93	1353.47	8.01	1352.72	8	-0.75	-0.06
74	170	96	22	2720	0.983253	585.37	0.532353	708.18	69.34	0.77	5.81	1363.68	8.02	1363	8.02	-0.68	-0.05
74	171	97	23	2736	0.981909	586.86	0.533626	707.33	75.35	0	5.68	1372.14	8.02	1371.02	8.02	-1.12	-0.08
74	172	98	24	2752	0.98053	588.32	0.534884	706.5	81.57	0.76	5.57	1381.93	8.03	1380.9	8.03	-1.03	-0.07
74	173	99	25	2768	0.979117	589.75	0.536127	705.7	88	0	5.45	1390	8.03	1388.56	8.03	-1.45	-0.1
74	174	100	26	2784	0.977672	591.15	0.537356	704.92	94.64	0.76	5.34	1399.39	8.04	1398.05	8.03	-1.34	-0.1
74	175	101	27	2800	0.976196	592.51	0.538571	704.17	101.48	0	5.23	1407.07	8.04	1405.34	8.03	-1.73	-0.12
74	176	102	28	2816	0.97469	593.85	0.539773	703.44	108.52	0.75	5.13	1416.07	8.05	1414.47	8.04	-1.61	-0.11
74	177	103	29	2832	0.973156	595.16	0.54096	702.73	115.75	0	5.03	1423.38	8.04	1421.4	8.03	-1.98	-0.14
74	178	104	30	2848	0.971594	596.44	0.542135	702.05	123.18	0.75	4.93	1432.01	8.04	1430.17	8.03	-1.84	-0.13
74	179	105	31	2864	0.970007	597.69	0.543296	701.38	130.8	0	4.83	1438.96	8.04	1436.76	8.03	-2.19	-0.15
74	180	106	32	2880	0.968395	598.92	0.544444	700.74	138.6	0.75	4.74	1447.22	8.04	1445.18	8.03	-2.04	-0.14
74	181	107	33	2896	0.966759	600.12	0.54558	700.12	146.59	0	4.65	1453.82	8.03	1451.44	8.02	-2.38	-0.16
74	182	108	34	2912	0.965101	601.3	0.546703	699.52	154.76	0.74	4.56	1461.73	8.03	1459.51	8.02	-2.21	-0.15
74	183	109	35	2928	0.963421	602.45	0.547814	698.94	163.11	0	4.48	1467.99	8.02	1465.46	8.01	-2.53	-0.17
74	184	110	36	2944	0.96172	603.57	0.548913	698.37	171.63	0.74	4.4	1475.56	8.02	1473.2	8.01	-2.36	-0.16
74	185	111	37	2960	0.96	604.67	0.55	697.83	180.32	0	4.32	1481.5	8.01	1478.83	7.99	-2.67	-0.18
74	186	112	38	2976	0.958261	605.75	0.551075	697.3	189.18	0.73	4.24	1488.74	8	1486.25	7.99	-2.49	-0.17
74	187	113	39	2992	0.956504	606.81	0.552139	696.79	198.21	0	4.16	1494.35	7.99	1491.57	7.98	-2.78	-0.19
74	188	114	40	3008	0.954731	607.84	0.553191	696.3	207.4	0.73	4.09	1501.28	7.99	1498.69	7.97	-2.59	-0.17
74	189	115	41	3024	0.952941	608.85	0.554233	695.83	216.75	0	4.02	1506.59	7.97	1503.71	7.96	-2.87	-0.19
74	190	116	42	3040	0.951136	609.84	0.555263	695.37	226.27	0.73	3.95	1513.2	7.96	1510.52	7.95	-2.68	-0.18
74	191	117	43	3056	0.949316	610.8	0.556283	694.93	235.93	0	3.88	1518.21	7.95	1515.26	7.93	-2.95	-0.19
74	192	118	44	3072	0.947483	611.75	0.557292	694.51	245.75	0.72	3.82	1524.53	7.94	1521.78	7.93	-2.75	-0.18
74	193	119	45	3088	0.945636	612.68	0.55829	694.1	255.73	0	3.76	1529.25	7.92	1526.24	7.91	-3.02	-0.2
74	194	120	46	3104	0.943777	613.58	0.559278	693.71	265.85	0.72	3.69	1535.27	7.91	1532.46	7.9	-2.81	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
74	195	121	47	3120	0.941907	614.47	0.560256	693.33	276.12	0	3.63	1539.72	7.9	1536.65	7.88	-3.07	-0.2
74	196	122	48	3136	0.940025	615.34	0.561224	692.96	286.53	0.71	3.58	1545.46	7.88	1542.6	7.87	-2.86	-0.19
74	197	123	49	3152	0.938133	616.18	0.562183	692.62	297.09	0	3.52	1549.63	7.87	1546.52	7.85	-3.11	-0.2
74	198	124	50	3168	0.936231	617.01	0.563131	692.28	307.78	0.71	3.46	1555.1	7.85	1552.2	7.84	-2.9	-0.19
74	199	125	51	3184	0.93432	617.83	0.56407	691.96	318.61	0	3.41	1559.01	7.83	1555.86	7.82	-3.15	-0.2
74	200	126	52	3200	0.9324	618.62	0.565	691.65	329.58	0.71	3.36	1564.21	7.82	1561.27	7.81	-2.94	-0.19
74	201	127	53	3216	0.930472	619.4	0.56592	691.36	340.69	0	3.3	1567.86	7.8	1564.69	7.78	-3.18	-0.2
74	202	128	54	3232	0.928536	620.16	0.566832	691.07	351.92	0.7	3.25	1572.81	7.79	1569.84	7.77	-2.97	-0.19
74	203	129	55	3248	0.926594	620.9	0.567734	690.8	363.29	0	3.2	1576.21	7.76	1573.01	7.75	-3.21	-0.2
74	204	130	56	3264	0.924644	621.63	0.568627	690.55	374.78	0.7	3.16	1580.9	7.75	1577.91	7.73	-2.99	-0.19
74	205	131	57	3280	0.922689	622.34	0.569512	690.3	386.4	0	3.11	1584.07	7.73	1580.84	7.71	-3.23	-0.2
74	206	132	58	3296	0.920728	623.03	0.570388	690.07	398.15	0.7	3.07	1588.52	7.71	1585.5	7.7	-3.02	-0.19
74	207	133	59	3312	0.918761	623.71	0.571256	689.85	410.01	0	3.02	1591.45	7.69	1588.2	7.67	-3.25	-0.2
74	208	134	60	3328	0.91679	624.38	0.572115	689.64	422	0.69	2.98	1595.66	7.67	1592.62	7.66	-3.04	-0.19
74	209	135	61	3344	0.914814	625.03	0.572967	689.44	434.11	0	2.94	1598.36	7.65	1595.09	7.63	-3.28	-0.21
74	210	136	62	3360	0.912834	625.66	0.57381	689.25	446.33	0.69	2.89	1602.34	7.63	1599.28	7.62	-3.06	-0.19
74	211	137	63	3376	0.910851	626.28	0.574645	689.07	458.67	0	2.85	1604.83	7.61	1601.53	7.59	-3.3	-0.21
74	212	138	64	3392	0.908864	626.89	0.575472	688.9	471.13	0.69	2.81	1608.58	7.59	1605.49	7.57	-3.09	-0.19
74	213	139	65	3408	0.906875	627.48	0.576291	688.75	483.69	0	2.78	1610.85	7.56	1607.52	7.55	-3.33	-0.21
74	214	140	66	3424	0.904883	628.06	0.577103	688.6	496.37	0.68	2.74	1614.39	7.54	1611.26	7.53	-3.12	-0.19
74	215	141	67	3440	0.902888	628.63	0.577907	688.46	509.16	0	2.7	1616.45	7.52	1613.09	7.5	-3.36	-0.21
74	216	142	68	3456	0.900892	629.18	0.578704	688.34	522.05	0.68	2.67	1619.77	7.5	1616.61	7.48	-3.16	-0.2
74	217	143	69	3472	0.898894	629.72	0.579493	688.22	535.06	0	2.63	1621.63	7.47	1618.23	7.46	-3.4	-0.21
74	218	144	70	3488	0.896894	630.25	0.580275	688.11	548.16	0.68	2.6	1624.75	7.45	1621.55	7.44	-3.2	-0.2
74	219	145	71	3504	0.894894	630.77	0.58105	688.01	561.37	0	2.56	1626.41	7.43	1622.97	7.41	-3.44	-0.21
74	220	146	72	3520	0.892893	631.27	0.581818	687.92	574.68	0.67	2.53	1629.32	7.41	1626.08	7.39	-3.25	-0.2
74	221	147	73	3536	0.890891	631.76	0.582579	687.84	588.1	0	2.5	1630.79	7.38	1627.3	7.36	-3.49	-0.21
74	222	148	74	3552	0.888889	632.24	0.583333	687.77	601.61	0.67	2.47	1633.51	7.36	1630.21	7.34	-3.3	-0.2
74	223	149	75	3568	0.886887	632.71	0.584081	687.71	615.22	0	2.44	1634.79	7.33	1631.24	7.31	-3.55	-0.22
74	224	150	76	3584	0.884885	633.17	0.584821	687.65	628.93	0.67	2.41	1637.32	7.31	1633.95	7.29	-3.37	-0.21
74	225	151	77	3600	0.882884	633.62	0.585556	687.6	642.73	0	2.38	1638.42	7.28	1634.8	7.27	-3.62	-0.22
74	226	152	78	3616	0.880883	634.05	0.586283	687.56	656.63	0.67	2.35	1640.77	7.26	1637.32	7.24	-3.44	-0.21
74	227	153	79	3632	0.878884	634.48	0.587004	687.53	670.62	0	2.32	1641.69	7.23	1637.99	7.22	-3.7	-0.23
74	228	154	80	3648	0.876885	634.89	0.587719	687.51	684.7	0.66	2.29	1643.85	7.21	1640.32	7.19	-3.53	-0.22
74	229	155	81	3664	0.874888	635.3	0.588428	687.49	698.88	0	2.26	1644.6	7.18	1640.81	7.17	-3.79	-0.23
74	230	156	82	3680	0.872892	635.69	0.58913	687.48	713.14	0.66	2.24	1646.58	7.16	1642.96	7.14	-3.62	-0.22
74	231	157	83	3696	0.870898	636.08	0.589827	687.48	727.49	0	2.21	1647.16	7.13	1643.28	7.11	-3.89	-0.24
74	232	158	84	3712	0.868906	636.45	0.590517	687.49	741.93	0.66	2.19	1648.98	7.11	1645.25	7.09	-3.73	-0.23
74	233	159	85	3728	0.866916	636.82	0.591202	687.5	756.45	0	2.16	1649.39	7.08	1645.4	7.06	-4	-0.24
74	234	160	86	3744	0.864928	637.18	0.59188	687.52	771.06	0.65	2.14	1651.04	7.06	1647.19	7.04	-3.85	-0.23
74	235	161	87	3760	0.862943	637.52	0.592553	687.54	785.75	0	2.11	1651.3	7.03	1647.18	7.01	-4.12	-0.25
74	236	162	88	3776	0.860959	637.86	0.59322	687.58	800.53	0.65	2.09	1652.78	7	1648.8	6.99	-3.98	-0.24
74	237	163	89	3792	0.858979	638.19	0.593882	687.62	815.38	0	2.07	1652.88	6.97	1648.62	6.96	-4.26	-0.26
74	238	164	90	3808	0.857002	638.51	0.594538	687.66	830.32	0.65	2.04	1654.2	6.95	1650.08	6.93	-4.12	-0.25
74	239	165	91	3824	0.855027	638.82	0.595188	687.71	845.34	0	2.02	1654.15	6.92	1649.74	6.9	-4.41	-0.27
74	240	166	92	3840	0.853056	639.13	0.595833	687.77	860.43	0.65	2	1655.31	6.9	1651.03	6.88	-4.28	-0.26

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
74	241	167	93	3856	0.851087	639.42	0.596473	687.84	875.61	0	1.98	1655.11	6.87	1650.54	6.85	-4.57	-0.28
74	242	168	94	3872	0.849122	639.71	0.597107	687.91	890.86	0.64	1.96	1656.13	6.84	1651.68	6.83	-4.45	-0.27
74	243	169	95	3888	0.847161	639.99	0.597737	687.98	906.18	0	1.94	1655.78	6.81	1651.03	6.79	-4.75	-0.29
74	244	170	96	3904	0.845203	640.26	0.598361	688.06	921.58	0.64	1.92	1656.65	6.79	1652.01	6.77	-4.64	-0.28
74	245	171	97	3920	0.843249	640.52	0.59898	688.15	937.06	0	1.9	1656.16	6.76	1651.22	6.74	-4.95	-0.3
74	246	172	98	3936	0.841298	640.78	0.599593	688.24	952.61	0.64	1.88	1656.88	6.74	1652.04	6.72	-4.84	-0.29
74	247	173	99	3952	0.839352	641.03	0.600202	688.34	968.23	0	1.86	1656.26	6.71	1651.1	6.68	-5.15	-0.31
74	248	174	100	3968	0.837409	641.27	0.600806	688.45	983.92	0.64	1.84	1656.84	6.68	1651.78	6.66	-5.06	-0.31
74	249	175	101	3984	0.83547	641.5	0.601406	688.56	999.68	0	1.82	1656.08	6.65	1650.7	6.63	-5.38	-0.33
74	250	176	102	4000	0.833536	641.73	0.602	688.67	1015.51	0.63	1.8	1656.52	6.63	1651.23	6.6	-5.29	-0.32
74	251	177	103	4016	0.831606	641.95	0.60259	688.79	1031.41	0	1.78	1655.63	6.6	1650.01	6.57	-5.62	-0.34
74	252	178	104	4032	0.82968	642.16	0.603175	688.92	1047.38	0.63	1.77	1655.93	6.57	1650.39	6.55	-5.54	-0.34
74	253	179	105	4048	0.827759	642.37	0.603755	689.05	1063.42	0	1.75	1654.92	6.54	1649.04	6.52	-5.88	-0.36
74	254	180	106	4064	0.825842	642.57	0.604331	689.18	1079.52	0.63	1.73	1655.09	6.52	1649.28	6.49	-5.81	-0.35
74	255	181	107	4080	0.823929	642.76	0.604902	689.32	1095.69	0	1.72	1653.95	6.49	1647.79	6.46	-6.15	-0.37
74	256	182	108	4096	0.822021	642.95	0.605469	689.46	1111.92	0.62	1.7	1653.99	6.46	1647.9	6.44	-6.09	-0.37
74	257	183	109	4112	0.820118	643.13	0.606031	689.61	1128.22	0	1.68	1652.72	6.43	1646.28	6.41	-6.44	-0.39
74	258	184	110	4128	0.81822	643.31	0.606589	689.76	1144.58	0.62	1.67	1652.64	6.41	1646.25	6.38	-6.39	-0.39
74	259	185	111	4144	0.816327	643.48	0.607143	689.92	1161	0	1.65	1651.26	6.38	1644.5	6.35	-6.75	-0.41
74	260	186	112	4160	0.814438	643.64	0.607692	690.08	1177.48	0.62	1.64	1651.05	6.35	1644.34	6.32	-6.71	-0.41
74	261	187	113	4176	0.812554	643.8	0.608238	690.25	1194.03	0	1.62	1649.55	6.32	1642.47	6.29	-7.08	-0.43
74	262	188	114	4192	0.810675	643.95	0.608779	690.42	1210.64	0.62	1.61	1649.22	6.29	1642.18	6.27	-7.05	-0.43
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
75	149	74	-1	2384	0.999955	545.22	0.498322	753.35	0.16	0	9.72	1094.99	7.35	1103.37	7.41	8.38	0.76
75	150	75	0	2400	1	547.68	0.5	751.65	0	-0.82	10	1109.85	7.4	1117.96	7.45	8.11	0.73
75	151	76	1	2416	0.999956	550.09	0.501656	750.01	0.16	0	9.73	1125.47	7.45	1132.05	7.5	6.58	0.58
75	152	77	2	2432	0.999827	552.44	0.503289	748.41	0.64	-0.81	9.46	1139.16	7.49	1146.09	7.54	6.93	0.6
75	153	78	3	2448	0.999616	554.75	0.504902	746.85	1.43	0	9.21	1154.18	7.54	1159.63	7.58	5.46	0.47
75	154	79	4	2464	0.999325	557	0.506494	745.34	2.53	-0.81	8.97	1167.29	7.58	1173.14	7.62	5.86	0.5
75	155	80	5	2480	0.998959	559.2	0.508065	743.88	3.93	0	8.73	1181.73	7.62	1186.16	7.65	4.43	0.37
75	156	81	6	2496	0.998521	561.36	0.509615	742.45	5.62	-0.8	8.51	1194.28	7.66	1199.16	7.69	4.88	0.41
75	157	82	7	2512	0.998012	563.47	0.511146	741.06	7.6	0	8.29	1208.16	7.7	1211.67	7.72	3.51	0.29
75	158	83	8	2528	0.997436	565.53	0.512658	739.72	9.86	-0.8	8.08	1220.18	7.72	1224.17	7.75	4	0.33
75	159	84	9	2544	0.996796	567.55	0.514151	738.41	12.4	0	7.88	1233.52	7.76	1236.19	7.77	2.67	0.22
75	160	85	10	2560	0.996094	569.53	0.515625	737.14	15.22	-0.79	7.69	1245.01	7.78	1248.22	7.8	3.2	0.26
75	161	86	11	2576	0.995332	571.46	0.517081	735.91	18.3	0	7.51	1257.84	7.81	1259.75	7.82	1.91	0.15
75	162	87	12	2592	0.994513	573.35	0.518519	734.71	21.64	-0.79	7.33	1268.84	7.83	1271.32	7.85	2.48	0.2
75	163	88	13	2608	0.993639	575.2	0.519939	733.54	25.25	0	7.15	1281.16	7.86	1282.39	7.87	1.23	0.1
75	164	89	14	2624	0.992713	577.02	0.521341	732.41	29.1	-0.78	6.99	1291.68	7.88	1293.51	7.89	1.84	0.14
75	165	90	15	2640	0.991736	578.79	0.522727	731.31	33.21	0	6.83	1303.52	7.9	1304.14	7.9	0.63	0.05
75	166	91	16	2656	0.99071	580.52	0.524096	730.25	37.56	-0.78	6.67	1313.57	7.91	1314.83	7.92	1.26	0.1
75	167	92	17	2672	0.989637	582.22	0.525449	729.21	42.14	0	6.52	1324.94	7.93	1325.02	7.93	0.08	0.01
75	168	93	18	2688	0.98852	583.88	0.526786	728.2	46.97	-0.77	6.38	1334.55	7.94	1335.29	7.95	0.74	0.06
75	169	94	19	2704	0.98736	585.51	0.528107	727.23	52.02	0	6.24	1345.47	7.96	1345.07	7.96	-0.41	-0.03

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
75	170	95	20	2720	0.986159	587.1	0.529412	726.28	57.31	-0.77	6.1	1354.65	7.97	1354.93	7.97	0.28	0.02
75	171	96	21	2736	0.984918	588.66	0.530702	725.36	62.81	0	5.97	1365.14	7.98	1364.3	7.98	-0.84	-0.06
75	172	97	22	2752	0.98364	590.19	0.531977	724.46	68.54	-0.76	5.84	1373.89	7.99	1373.76	7.99	-0.13	-0.01
75	173	98	23	2768	0.982325	591.68	0.533237	723.59	74.48	0	5.72	1383.96	8	1382.74	7.99	-1.22	-0.09
75	174	99	24	2784	0.980975	593.14	0.534483	722.75	80.64	-0.76	5.6	1392.31	8	1391.82	8	-0.49	-0.04
75	175	100	25	2800	0.979592	594.57	0.535714	721.94	87	0	5.49	1401.98	8.01	1400.42	8	-1.56	-0.11
75	176	101	26	2816	0.978177	595.97	0.536932	721.14	93.57	-0.75	5.38	1409.94	8.01	1409.13	8.01	-0.81	-0.06
75	177	102	27	2832	0.976731	597.35	0.538136	720.38	100.34	0	5.27	1419.21	8.02	1417.36	8.01	-1.85	-0.13
75	178	103	28	2848	0.975256	598.69	0.539326	719.63	107.3	-0.75	5.17	1426.79	8.02	1425.71	8.01	-1.09	-0.08
75	179	104	29	2864	0.973752	600	0.540503	718.91	114.47	0	5.06	1435.69	8.02	1433.58	8.01	-2.11	-0.15
75	180	105	30	2880	0.972222	601.29	0.541667	718.21	121.82	-0.75	4.97	1442.91	8.02	1441.58	8.01	-1.33	-0.09
75	181	106	31	2896	0.970666	602.55	0.542818	717.53	129.36	0	4.87	1451.43	8.02	1449.1	8.01	-2.34	-0.16
75	182	107	32	2912	0.969086	603.78	0.543956	716.87	137.09	-0.74	4.78	1458.3	8.01	1456.76	8	-1.54	-0.11
75	183	108	33	2928	0.967482	604.99	0.545082	716.24	145	0	4.69	1466.47	8.01	1463.94	8	-2.53	-0.17
75	184	109	34	2944	0.965855	606.17	0.546196	715.62	153.09	-0.74	4.6	1472.99	8.01	1471.27	8	-1.72	-0.12
75	185	110	35	2960	0.964207	607.32	0.547297	715.02	161.35	0	4.52	1480.82	8	1478.12	7.99	-2.7	-0.18
75	186	111	36	2976	0.962539	608.46	0.548387	714.45	169.79	-0.73	4.44	1487.01	7.99	1485.13	7.98	-1.88	-0.13
75	187	112	37	2992	0.960851	609.56	0.549465	713.89	178.4	0	4.36	1494.5	7.99	1491.66	7.98	-2.84	-0.19
75	188	113	38	3008	0.959144	610.65	0.550532	713.35	187.18	-0.73	4.28	1500.37	7.98	1498.36	7.97	-2.01	-0.13
75	189	114	39	3024	0.95742	611.71	0.551587	712.83	196.12	0	4.2	1507.54	7.98	1504.58	7.96	-2.96	-0.2
75	190	115	40	3040	0.955679	612.75	0.552632	712.32	205.23	-0.73	4.13	1513.1	7.96	1510.98	7.95	-2.12	-0.14
75	191	116	41	3056	0.953921	613.77	0.553665	711.84	214.5	0	4.06	1519.96	7.96	1516.9	7.94	-3.06	-0.2
75	192	117	42	3072	0.952148	614.76	0.554688	711.37	223.92	-0.72	3.99	1525.22	7.94	1523	7.93	-2.22	-0.15
75	193	118	43	3088	0.950361	615.74	0.555699	710.91	233.5	0	3.92	1531.77	7.94	1528.63	7.92	-3.15	-0.21
75	194	119	44	3104	0.94856	616.69	0.556701	710.47	243.23	-0.72	3.86	1536.74	7.92	1534.44	7.91	-2.3	-0.15
75	195	120	45	3120	0.946746	617.62	0.557692	710.05	253.12	0	3.79	1543	7.91	1539.78	7.9	-3.22	-0.21
75	196	121	46	3136	0.944919	618.54	0.558673	709.65	263.15	-0.71	3.73	1547.68	7.9	1545.32	7.88	-2.36	-0.15
75	197	122	47	3152	0.94308	619.43	0.559645	709.26	273.33	0	3.67	1553.65	7.89	1550.38	7.87	-3.27	-0.21
75	198	123	48	3168	0.94123	620.31	0.560606	708.88	283.65	-0.71	3.61	1558.06	7.87	1555.64	7.86	-2.42	-0.16
75	199	124	49	3184	0.93937	621.17	0.561558	708.52	294.12	0	3.56	1563.76	7.86	1560.43	7.84	-3.32	-0.21
75	200	125	50	3200	0.9375	622	0.5625	708.17	304.72	-0.71	3.5	1567.9	7.84	1565.44	7.83	-2.47	-0.16
75	201	126	51	3216	0.93562	622.82	0.563433	707.84	315.46	0	3.44	1573.33	7.83	1569.96	7.81	-3.36	-0.21
75	202	127	52	3232	0.933732	623.63	0.564356	707.52	326.34	-0.7	3.39	1577.21	7.81	1574.7	7.8	-2.5	-0.16
75	203	128	53	3248	0.931835	624.41	0.565271	707.21	337.35	0	3.34	1582.37	7.79	1578.97	7.78	-3.4	-0.22
75	204	129	54	3264	0.929931	625.18	0.566176	706.91	348.49	-0.7	3.29	1586.01	7.77	1583.47	7.76	-2.54	-0.16
75	205	130	55	3280	0.928019	625.93	0.567073	706.63	359.76	0	3.24	1590.91	7.76	1587.49	7.74	-3.43	-0.22
75	206	131	56	3296	0.9261	626.67	0.567961	706.36	371.16	-0.7	3.19	1594.3	7.74	1591.73	7.73	-2.57	-0.16
75	207	132	57	3312	0.924176	627.39	0.568841	706.11	382.69	0	3.15	1598.96	7.72	1595.51	7.71	-3.45	-0.22
75	208	133	58	3328	0.922245	628.09	0.569712	705.86	394.34	-0.69	3.1	1602.12	7.7	1599.52	7.69	-2.6	-0.16
75	209	134	59	3344	0.920309	628.78	0.570574	705.63	406.11	0	3.06	1606.54	7.69	1603.06	7.67	-3.48	-0.22
75	210	135	60	3360	0.918367	629.45	0.571429	705.41	418	-0.69	3.01	1609.46	7.66	1606.84	7.65	-2.62	-0.16
75	211	136	61	3376	0.916421	630.11	0.572275	705.2	430.01	0	2.97	1613.65	7.65	1610.14	7.63	-3.5	-0.22
75	212	137	62	3392	0.914471	630.76	0.573113	705	442.14	-0.69	2.93	1616.34	7.62	1613.69	7.61	-2.65	-0.16
75	213	138	63	3408	0.912517	631.39	0.573944	704.81	454.38	0	2.89	1620.3	7.61	1616.77	7.59	-3.53	-0.22
75	214	139	64	3424	0.91056	632	0.574766	704.64	466.74	-0.68	2.85	1622.78	7.58	1620.1	7.57	-2.68	-0.17
75	215	140	65	3440	0.908599	632.61	0.575581	704.47	479.21	0	2.81	1626.52	7.57	1622.96	7.55	-3.56	-0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
75	216	141	66	3456	0.906636	633.19	0.576389	704.31	491.8	-0.68	2.77	1628.79	7.54	1626.08	7.53	-2.71	-0.17
75	217	142	67	3472	0.90467	633.77	0.577189	704.16	504.49	0	2.73	1632.31	7.52	1628.72	7.51	-3.59	-0.22
75	218	143	68	3488	0.902702	634.33	0.577982	704.03	517.29	-0.68	2.7	1634.37	7.5	1631.63	7.48	-2.75	-0.17
75	219	144	69	3504	0.900732	634.88	0.578767	703.9	530.19	0	2.66	1637.69	7.48	1634.06	7.46	-3.62	-0.22
75	220	145	70	3520	0.89876	635.42	0.579545	703.78	543.2	-0.67	2.63	1639.55	7.45	1636.76	7.44	-2.79	-0.17
75	221	146	71	3536	0.896788	635.94	0.580317	703.67	556.32	0	2.59	1642.66	7.43	1638.99	7.42	-3.67	-0.22
75	222	147	72	3552	0.894814	636.46	0.581081	703.58	569.53	-0.67	2.56	1644.33	7.41	1641.49	7.39	-2.84	-0.17
75	223	148	73	3568	0.892839	636.96	0.581839	703.48	582.85	0	2.53	1647.24	7.39	1643.52	7.37	-3.72	-0.23
75	224	149	74	3584	0.890864	637.45	0.582589	703.4	596.26	-0.67	2.5	1648.71	7.36	1645.82	7.35	-2.89	-0.18
75	225	150	75	3600	0.888889	637.93	0.583333	703.33	609.78	0	2.47	1651.43	7.34	1647.66	7.32	-3.77	-0.23
75	226	151	76	3616	0.886914	638.39	0.584071	703.27	623.39	-0.67	2.44	1652.72	7.31	1649.77	7.3	-2.95	-0.18
75	227	152	77	3632	0.884939	638.85	0.584802	703.21	637.1	0	2.41	1655.25	7.29	1651.42	7.27	-3.84	-0.23
75	228	153	78	3648	0.882964	639.29	0.585526	703.16	650.9	-0.66	2.38	1656.36	7.26	1653.34	7.25	-3.03	-0.18
75	229	154	79	3664	0.88099	639.73	0.586245	703.12	664.79	0	2.35	1658.71	7.24	1654.8	7.23	-3.91	-0.24
75	230	155	80	3680	0.879017	640.15	0.586957	703.09	678.78	-0.66	2.32	1659.64	7.22	1656.54	7.2	-3.11	-0.19
75	231	156	81	3696	0.877045	640.57	0.587662	703.06	692.85	0	2.29	1661.81	7.19	1657.82	7.18	-4	-0.24
75	232	157	82	3712	0.875074	640.97	0.588362	703.05	707.02	-0.66	2.27	1662.58	7.17	1659.38	7.15	-3.2	-0.19
75	233	158	83	3728	0.873105	641.37	0.589056	703.04	721.27	0	2.24	1664.57	7.14	1660.48	7.13	-4.09	-0.25
75	234	159	84	3744	0.871137	641.75	0.589744	703.03	735.61	-0.65	2.21	1665.17	7.12	1661.86	7.1	-3.3	-0.2
75	235	160	85	3760	0.869172	642.12	0.590426	703.04	750.04	0	2.19	1666.99	7.09	1662.79	7.08	-4.2	-0.25
75	236	161	86	3776	0.867208	642.49	0.591102	703.05	764.55	-0.65	2.16	1667.42	7.07	1664.01	7.05	-3.42	-0.21
75	237	162	87	3792	0.865246	642.85	0.591772	703.07	779.15	0	2.14	1669.08	7.04	1664.76	7.02	-4.32	-0.26
75	238	163	88	3808	0.863286	643.19	0.592437	703.09	793.83	-0.65	2.12	1669.36	7.01	1665.81	7	-3.54	-0.21
75	239	164	89	3824	0.861329	643.53	0.593096	703.12	808.59	0	2.09	1670.85	6.99	1666.4	6.97	-4.45	-0.27
75	240	165	90	3840	0.859375	643.86	0.59375	703.16	823.43	-0.65	2.07	1670.97	6.96	1667.29	6.95	-3.68	-0.22
75	241	166	91	3856	0.857423	644.18	0.594398	703.21	838.35	0	2.05	1672.31	6.94	1667.72	6.92	-4.59	-0.28
75	242	167	92	3872	0.855474	644.49	0.595041	703.26	853.35	-0.64	2.03	1672.28	6.91	1668.44	6.89	-3.83	-0.23
75	243	168	93	3888	0.853528	644.8	0.595679	703.32	868.43	0	2	1673.46	6.89	1668.71	6.87	-4.75	-0.28
75	244	169	94	3904	0.851586	645.09	0.596311	703.38	883.59	-0.64	1.98	1673.28	6.86	1669.28	6.84	-4	-0.24
75	245	170	95	3920	0.849646	645.38	0.596939	703.45	898.82	0	1.96	1674.31	6.83	1669.4	6.81	-4.92	-0.29
75	246	171	96	3936	0.84771	645.66	0.597561	703.52	914.12	-0.64	1.94	1673.99	6.8	1669.81	6.79	-4.18	-0.25
75	247	172	97	3952	0.845777	645.94	0.598178	703.61	929.5	0	1.92	1674.88	6.78	1669.77	6.76	-5.1	-0.31
75	248	173	98	3968	0.843848	646.2	0.59879	703.69	944.96	-0.64	1.9	1674.42	6.75	1670.04	6.73	-4.38	-0.26
75	249	174	99	3984	0.841922	646.46	0.599398	703.78	960.48	0	1.88	1675.16	6.73	1669.85	6.71	-5.31	-0.32
75	250	175	100	4000	0.84	646.71	0.6	703.88	976.08	-0.63	1.86	1674.56	6.7	1669.97	6.68	-4.59	-0.27
75	251	176	101	4016	0.838082	646.95	0.600598	703.99	991.75	0	1.85	1675.16	6.67	1669.64	6.65	-5.52	-0.33
75	252	177	102	4032	0.836168	647.19	0.60119	704.09	1007.49	-0.63	1.83	1674.43	6.64	1669.62	6.63	-4.81	-0.29
75	253	178	103	4048	0.834258	647.41	0.601779	704.21	1023.29	0	1.81	1674.89	6.62	1669.14	6.6	-5.75	-0.34
75	254	179	104	4064	0.832352	647.64	0.602362	704.33	1039.17	-0.63	1.79	1674.03	6.59	1668.98	6.57	-5.06	-0.3
75	255	180	105	4080	0.83045	647.85	0.602941	704.45	1055.11	0	1.77	1674.36	6.57	1668.36	6.54	-6	-0.36
75	256	181	106	4096	0.828552	648.06	0.603516	704.58	1071.12	-0.62	1.76	1673.37	6.54	1668.06	6.52	-5.31	-0.32
75	257	182	107	4112	0.826659	648.26	0.604086	704.71	1087.19	0	1.74	1673.57	6.51	1667.31	6.49	-6.27	-0.38
75	258	183	108	4128	0.82477	648.46	0.604651	704.85	1103.33	-0.62	1.72	1672.46	6.48	1666.87	6.46	-5.59	-0.34
75	259	184	109	4144	0.822886	648.65	0.605212	704.99	1119.54	0	1.71	1672.53	6.46	1665.98	6.43	-6.55	-0.39
75	260	185	110	4160	0.821006	648.83	0.605769	705.14	1135.81	-0.62	1.69	1671.29	6.43	1665.41	6.41	-5.88	-0.35
75	261	186	111	4176	0.819131	649.01	0.606322	705.29	1152.14	0	1.68	1671.24	6.4	1664.39	6.38	-6.85	-0.41

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
75	262	187	112	4192	0.81726	649.18	0.60687	705.45	1168.53	-0.62	1.66	1669.89	6.37	1663.7	6.35	-6.19	-0.37
75	263	188	113	4208	0.815394	649.34	0.607414	705.61	1184.98	0	1.65	1669.71	6.35	1662.55	6.32	-7.16	-0.43
75	264	189	114	4224	0.813533	649.5	0.607955	705.78	1201.5	-0.62	1.63	1668.24	6.32	1661.72	6.29	-6.51	-0.39
75	265	190	115	4240	0.811677	649.65	0.608491	705.95	1218.07	0	1.62	1667.94	6.29	1660.45	6.27	-7.49	-0.45
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
76	151	75	-1	2416	0.999956	550.09	0.498344	770.14	0.16	0	9.73	1105.33	7.32	1113.77	7.38	8.43	0.76
76	152	76	0	2432	1	552.54	0.5	768.43	0	0.81	10	1121.84	7.38	1129.38	7.43	7.54	0.67
76	153	77	1	2448	0.999957	554.94	0.501634	766.77	0.16	0	9.73	1135.86	7.42	1142.51	7.47	6.65	0.58
76	154	78	2	2464	0.999831	557.28	0.503247	765.15	0.63	0.81	9.47	1151.21	7.48	1157.57	7.52	6.36	0.55
76	155	79	3	2480	0.999625	559.58	0.504839	763.58	1.41	0	9.22	1164.64	7.51	1170.17	7.55	5.53	0.47
76	156	80	4	2496	0.999343	561.82	0.50641	762.06	2.5	0.8	8.98	1179.4	7.56	1184.69	7.59	5.29	0.45
76	157	81	5	2512	0.998986	564.02	0.507962	760.58	3.88	0	8.75	1192.28	7.59	1196.78	7.62	4.51	0.38
76	158	82	6	2528	0.998558	566.17	0.509494	759.14	5.55	0.8	8.53	1206.47	7.64	1210.79	7.66	4.32	0.36
76	159	83	7	2544	0.998062	568.27	0.511006	757.73	7.5	0	8.31	1218.8	7.67	1222.39	7.69	3.59	0.29
76	160	84	8	2560	0.9975	570.33	0.5125	756.37	9.74	0.79	8.11	1232.45	7.7	1235.89	7.72	3.44	0.28
76	161	85	9	2576	0.996875	572.35	0.513975	755.05	12.25	0	7.91	1244.26	7.73	1247.01	7.75	2.75	0.22
76	162	86	10	2592	0.99619	574.32	0.515432	753.76	15.03	0.79	7.72	1257.39	7.76	1260.03	7.78	2.65	0.21
76	163	87	11	2608	0.995446	576.25	0.516871	752.51	18.08	0	7.53	1268.69	7.78	1270.69	7.8	2	0.16
76	164	88	12	2624	0.994646	578.14	0.518293	751.3	21.38	0.78	7.35	1281.32	7.81	1283.24	7.82	1.93	0.15
76	165	89	13	2640	0.993792	579.99	0.519697	750.12	24.94	0	7.18	1292.13	7.83	1293.46	7.84	1.32	0.1
76	166	90	14	2656	0.992887	581.8	0.521084	748.97	28.75	0.78	7.02	1304.27	7.86	1305.55	7.86	1.28	0.1
76	167	91	15	2672	0.991932	583.57	0.522455	747.86	32.81	0	6.86	1314.62	7.87	1315.34	7.88	0.72	0.05
76	168	92	16	2688	0.99093	585.31	0.52381	746.77	37.11	0.77	6.7	1326.28	7.89	1326.99	7.9	0.71	0.05
76	169	93	17	2704	0.989881	587.01	0.525148	745.72	41.65	0	6.55	1336.18	7.91	1336.35	7.91	0.17	0.01
76	170	94	18	2720	0.988789	588.67	0.526471	744.7	46.42	0.77	6.41	1347.39	7.93	1347.58	7.93	0.19	0.01
76	171	95	19	2736	0.987654	590.3	0.527778	743.71	51.42	0	6.27	1356.85	7.93	1356.54	7.93	-0.31	-0.02
76	172	96	20	2752	0.986479	591.89	0.52907	742.74	56.65	0.76	6.14	1367.62	7.95	1367.35	7.95	-0.27	-0.02
76	173	97	21	2768	0.985265	593.45	0.530347	741.8	62.09	0	6.01	1376.66	7.96	1375.92	7.95	-0.74	-0.05
76	174	98	22	2784	0.984014	594.98	0.531609	740.89	67.76	0.76	5.88	1387.01	7.97	1386.33	7.97	-0.68	-0.05
76	175	99	23	2800	0.982727	596.48	0.532857	740.01	73.64	0	5.76	1395.63	7.98	1394.51	7.97	-1.12	-0.08
76	176	100	24	2816	0.981405	597.94	0.534091	739.15	79.73	0.75	5.64	1405.57	7.99	1404.54	7.98	-1.04	-0.07
76	177	101	25	2832	0.98005	599.38	0.535311	738.32	86.02	0	5.53	1413.81	7.99	1412.35	7.98	-1.45	-0.1
76	178	102	26	2848	0.978664	600.78	0.536517	737.51	92.52	0.75	5.41	1423.35	8	1422	7.99	-1.35	-0.1
76	179	103	27	2864	0.977248	602.16	0.537709	736.73	99.22	0	5.31	1431.2	8	1429.45	7.99	-1.75	-0.12
76	180	104	28	2880	0.975802	603.5	0.538889	735.97	106.12	0.75	5.2	1440.36	8	1438.73	7.99	-1.63	-0.11
76	181	105	29	2896	0.974329	604.82	0.540055	735.23	113.21	0	5.1	1447.84	8	1445.84	7.99	-2	-0.14
76	182	106	30	2912	0.972829	606.11	0.541209	734.52	120.49	0.74	5	1456.63	8	1454.76	7.99	-1.87	-0.13
76	183	107	31	2928	0.971304	607.38	0.54235	733.83	127.96	0	4.91	1463.75	8	1461.53	7.99	-2.23	-0.15
76	184	108	32	2944	0.969754	608.61	0.543478	733.15	135.61	0.74	4.82	1472.18	8	1470.1	7.99	-2.08	-0.14
76	185	109	33	2960	0.968181	609.83	0.544595	732.5	143.44	0	4.73	1478.96	7.99	1476.54	7.98	-2.42	-0.16
76	186	110	34	2976	0.966586	611.01	0.545699	731.87	151.45	0.73	4.64	1487.04	7.99	1484.78	7.98	-2.26	-0.15
76	187	111	35	2992	0.964969	612.18	0.546791	731.26	159.64	0	4.56	1493.48	7.99	1490.9	7.97	-2.58	-0.17
76	188	112	36	3008	0.963332	613.31	0.547872	730.67	168	0.73	4.47	1501.22	7.99	1498.82	7.97	-2.41	-0.16
76	189	113	37	3024	0.961675	614.43	0.548942	730.1	176.52	0	4.39	1507.34	7.98	1504.63	7.96	-2.72	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
76	190	114	38	3040	0.96	615.52	0.55	729.54	185.22	0.73	4.32	1514.76	7.97	1512.22	7.96	-2.54	-0.17
76	191	115	39	3056	0.958307	616.59	0.551047	729.01	194.08	0	4.24	1520.56	7.96	1517.73	7.95	-2.83	-0.19
76	192	116	40	3072	0.956597	617.63	0.552083	728.49	203.1	0.72	4.17	1527.66	7.96	1525.02	7.94	-2.65	-0.17
76	193	117	41	3088	0.954871	618.66	0.553109	727.99	212.29	0	4.1	1533.16	7.94	1530.23	7.93	-2.93	-0.19
76	194	118	42	3104	0.95313	619.66	0.554124	727.51	221.62	0.72	4.03	1539.95	7.94	1537.22	7.92	-2.74	-0.18
76	195	119	43	3120	0.951374	620.64	0.555128	727.04	231.12	0	3.96	1545.16	7.92	1542.14	7.91	-3.01	-0.2
76	196	120	44	3136	0.949604	621.61	0.556122	726.59	240.77	0.71	3.9	1551.65	7.92	1548.84	7.9	-2.81	-0.18
76	197	121	45	3152	0.947821	622.55	0.557107	726.15	250.56	0	3.83	1556.57	7.9	1553.49	7.89	-3.08	-0.2
76	198	122	46	3168	0.946026	623.47	0.558081	725.74	260.51	0.71	3.77	1562.77	7.89	1559.9	7.88	-2.87	-0.18
76	199	123	47	3184	0.944219	624.37	0.559045	725.33	270.6	0	3.71	1567.41	7.88	1564.28	7.86	-3.13	-0.2
76	200	124	48	3200	0.9424	625.25	0.56	724.94	280.83	0.71	3.65	1573.33	7.87	1570.41	7.85	-2.92	-0.19
76	201	125	49	3216	0.940571	626.12	0.560945	724.57	291.2	0	3.59	1577.7	7.85	1574.53	7.83	-3.18	-0.2
76	202	126	50	3232	0.938731	626.97	0.561881	724.21	301.72	0.7	3.54	1583.35	7.84	1580.39	7.82	-2.96	-0.19
76	203	127	51	3248	0.936883	627.79	0.562808	723.86	312.37	0	3.48	1587.46	7.82	1584.25	7.8	-3.21	-0.2
76	204	128	52	3264	0.935025	628.61	0.563725	723.53	323.15	0.7	3.43	1592.84	7.81	1589.85	7.79	-2.99	-0.19
76	205	129	53	3280	0.933159	629.4	0.564634	723.21	334.07	0	3.38	1596.69	7.79	1593.46	7.77	-3.24	-0.2
76	206	130	54	3296	0.931285	630.18	0.565534	722.91	345.12	0.7	3.33	1601.82	7.78	1598.8	7.76	-3.02	-0.19
76	207	131	55	3312	0.929403	630.94	0.566425	722.61	356.3	0	3.28	1605.42	7.76	1602.16	7.74	-3.26	-0.2
76	208	132	56	3328	0.927515	631.68	0.567308	722.33	367.61	0.69	3.23	1610.3	7.74	1607.26	7.73	-3.04	-0.19
76	209	133	57	3344	0.92562	632.41	0.568182	722.06	379.04	0	3.18	1613.67	7.72	1610.39	7.71	-3.28	-0.2
76	210	134	58	3360	0.923719	633.12	0.569048	721.81	390.6	0.69	3.13	1618.3	7.71	1615.23	7.69	-3.06	-0.19
76	211	135	59	3376	0.921812	633.82	0.569905	721.56	402.28	0	3.09	1621.43	7.68	1618.13	7.67	-3.3	-0.2
76	212	136	60	3392	0.9199	634.5	0.570755	721.33	414.08	0.69	3.05	1625.82	7.67	1622.74	7.65	-3.08	-0.19
76	213	137	61	3408	0.917984	635.17	0.571596	721.11	425.99	0	3	1628.73	7.65	1625.41	7.63	-3.31	-0.2
76	214	138	62	3424	0.916063	635.82	0.57243	720.9	438.03	0.68	2.96	1632.89	7.63	1629.79	7.62	-3.1	-0.19
76	215	139	63	3440	0.914137	636.46	0.573256	720.7	450.18	0	2.92	1635.58	7.61	1632.25	7.59	-3.33	-0.2
76	216	140	64	3456	0.912209	637.09	0.574074	720.52	462.44	0.68	2.88	1639.52	7.59	1636.4	7.58	-3.12	-0.19
76	217	141	65	3472	0.910276	637.7	0.574885	720.34	474.82	0	2.84	1641.99	7.57	1638.64	7.55	-3.35	-0.2
76	218	142	66	3488	0.908341	638.3	0.575688	720.17	487.3	0.68	2.8	1645.71	7.55	1642.57	7.53	-3.14	-0.19
76	219	143	67	3504	0.906403	638.88	0.576484	720.01	499.9	0	2.77	1647.97	7.52	1644.6	7.51	-3.38	-0.21
76	220	144	68	3520	0.904463	639.45	0.577273	719.87	512.6	0.67	2.73	1651.48	7.51	1648.31	7.49	-3.17	-0.19
76	221	145	69	3536	0.90252	640.01	0.578054	719.73	525.41	0	2.69	1653.54	7.48	1650.14	7.47	-3.4	-0.21
76	222	146	70	3552	0.900576	640.56	0.578829	719.6	538.33	0.67	2.66	1656.84	7.46	1653.64	7.45	-3.2	-0.19
76	223	147	71	3568	0.898631	641.09	0.579596	719.48	551.35	0	2.63	1658.7	7.44	1655.27	7.42	-3.43	-0.21
76	224	148	72	3584	0.896684	641.61	0.580357	719.38	564.47	0.67	2.59	1661.8	7.42	1658.57	7.4	-3.23	-0.2
76	225	149	73	3600	0.894736	642.12	0.581111	719.28	577.69	0	2.56	1663.47	7.39	1660	7.38	-3.47	-0.21
76	226	150	74	3616	0.892787	642.62	0.581858	719.18	591.01	0.67	2.53	1666.38	7.37	1663.1	7.36	-3.28	-0.2
76	227	151	75	3632	0.890838	643.11	0.582599	719.1	604.43	0	2.5	1667.86	7.35	1664.34	7.33	-3.52	-0.21
76	228	152	76	3648	0.888889	643.58	0.583333	719.03	617.94	0.66	2.47	1670.57	7.33	1667.24	7.31	-3.33	-0.2
76	229	153	77	3664	0.88694	644.05	0.584061	718.96	631.56	0	2.44	1671.87	7.3	1668.29	7.29	-3.57	-0.21
76	230	154	78	3680	0.884991	644.5	0.584783	718.91	645.26	0.66	2.41	1674.4	7.28	1671.01	7.27	-3.39	-0.2
76	231	155	79	3696	0.883042	644.95	0.585498	718.86	659.06	0	2.38	1675.51	7.25	1671.88	7.24	-3.64	-0.22
76	232	156	80	3712	0.881094	645.38	0.586207	718.82	672.95	0.66	2.35	1677.86	7.23	1674.4	7.22	-3.46	-0.21
76	233	157	81	3728	0.879147	645.8	0.58691	718.78	686.93	0	2.32	1678.81	7.21	1675.1	7.19	-3.71	-0.22
76	234	158	82	3744	0.877201	646.22	0.587607	718.76	701	0.65	2.3	1680.98	7.18	1677.44	7.17	-3.54	-0.21
76	235	159	83	3760	0.875256	646.62	0.588298	718.74	715.16	0	2.27	1681.75	7.16	1677.96	7.14	-3.79	-0.23

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76	236	160	84	3776	0.873312	647.01	0.588983	718.73	729.4	0.65	2.24	1683.75	7.13	1680.12	7.12	-3.63	-0.22
76	237	161	85	3792	0.87137	647.4	0.589662	718.73	743.74	0	2.22	1684.36	7.11	1680.47	7.09	-3.89	-0.23
76	238	162	86	3808	0.86943	647.77	0.590336	718.73	758.15	0.65	2.19	1686.19	7.08	1682.46	7.07	-3.73	-0.22
76	239	163	87	3824	0.867492	648.14	0.591004	718.74	772.66	0	2.17	1686.64	7.06	1682.64	7.04	-3.99	-0.24
76	240	164	88	3840	0.865556	648.49	0.591667	718.76	787.24	0.65	2.14	1688.3	7.03	1684.46	7.02	-3.84	-0.23
76	241	165	89	3856	0.863621	648.84	0.592324	718.78	801.91	0	2.12	1688.59	7.01	1684.48	6.99	-4.11	-0.24
76	242	166	90	3872	0.86169	649.18	0.592975	718.81	816.65	0.64	2.1	1690.1	6.98	1686.13	6.97	-3.96	-0.24
76	243	167	91	3888	0.859761	649.51	0.593621	718.85	831.48	0	2.07	1690.24	6.96	1686	6.94	-4.24	-0.25
76	244	168	92	3904	0.857834	649.83	0.594262	718.89	846.39	0.64	2.05	1691.59	6.93	1687.48	6.92	-4.1	-0.24
76	245	169	93	3920	0.85591	650.14	0.594898	718.94	861.37	0	2.03	1691.58	6.9	1687.19	6.89	-4.38	-0.26
76	246	170	94	3936	0.853989	650.45	0.595528	719	876.43	0.64	2.01	1692.77	6.88	1688.52	6.86	-4.25	-0.25
76	247	171	95	3952	0.852071	650.74	0.596154	719.06	891.57	0	1.99	1692.62	6.85	1688.07	6.83	-4.54	-0.27
76	248	172	96	3968	0.850156	651.03	0.596774	719.13	906.78	0.64	1.97	1693.66	6.83	1689.24	6.81	-4.42	-0.26
76	249	173	97	3984	0.848244	651.31	0.59739	719.21	922.07	0	1.95	1693.36	6.8	1688.65	6.78	-4.71	-0.28
76	250	174	98	4000	0.846336	651.59	0.598	719.29	937.43	0.63	1.93	1694.26	6.78	1689.66	6.76	-4.6	-0.27
76	251	175	99	4016	0.844431	651.85	0.598606	719.37	952.86	0	1.91	1693.83	6.75	1688.92	6.73	-4.9	-0.29
76	252	176	100	4032	0.84253	652.11	0.599206	719.46	968.36	0.63	1.89	1694.58	6.72	1689.79	6.71	-4.79	-0.28
76	253	177	101	4048	0.840632	652.36	0.599802	719.56	983.94	0	1.87	1694.01	6.7	1688.91	6.68	-5.1	-0.3
76	254	178	102	4064	0.838738	652.6	0.600394	719.66	999.58	0.63	1.85	1694.63	6.67	1689.63	6.65	-5	-0.3
76	255	179	103	4080	0.836847	652.84	0.60098	719.77	1015.3	0	1.83	1693.92	6.64	1688.6	6.62	-5.32	-0.31
76	256	180	104	4096	0.834961	653.07	0.601562	719.88	1031.08	0.62	1.82	1694.4	6.62	1689.18	6.6	-5.23	-0.31
76	257	181	105	4112	0.833078	653.3	0.60214	720	1046.93	0	1.8	1693.57	6.59	1688.02	6.57	-5.55	-0.33
76	258	182	106	4128	0.8312	653.51	0.602713	720.12	1062.85	0.62	1.78	1693.92	6.57	1688.45	6.54	-5.47	-0.32
76	259	183	107	4144	0.829326	653.72	0.603282	720.25	1078.83	0	1.76	1692.96	6.54	1687.16	6.51	-5.8	-0.34
76	260	184	108	4160	0.827456	653.93	0.603846	720.38	1094.88	0.62	1.75	1693.18	6.51	1687.45	6.49	-5.72	-0.34
76	261	185	109	4176	0.82559	654.12	0.604406	720.52	1110.99	0	1.73	1692.09	6.48	1686.03	6.46	-6.06	-0.36
76	262	186	110	4192	0.823728	654.31	0.604962	720.66	1127.17	0.62	1.71	1692.18	6.46	1686.19	6.44	-6	-0.36
76	263	187	111	4208	0.821871	654.5	0.605513	720.81	1143.41	0	1.7	1690.98	6.43	1684.63	6.41	-6.34	-0.38
76	264	188	112	4224	0.820018	654.68	0.606061	720.96	1159.71	0.62	1.68	1690.95	6.41	1684.66	6.38	-6.29	-0.37
76	265	189	113	4240	0.81817	654.85	0.606604	721.12	1176.08	0	1.67	1689.62	6.38	1682.98	6.35	-6.64	-0.39
76	266	190	114	4256	0.816327	655.02	0.607143	721.28	1192.5	0.61	1.65	1689.47	6.35	1682.87	6.33	-6.6	-0.39
76	267	191	115	4272	0.814488	655.18	0.607678	721.44	1208.98	0	1.64	1688.03	6.32	1681.07	6.3	-6.96	-0.41
76	268	192	116	4288	0.812653	655.34	0.608209	721.61	1225.53	0.61	1.62	1687.76	6.3	1680.84	6.27	-6.92	-0.41
76	269	193	117	4304	0.810824	655.49	0.608736	721.79	1242.13	0	1.61	1686.21	6.27	1678.92	6.24	-7.29	-0.43
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
77	153	76	-1	2448	0.999957	554.94	0.498366	787.08	0.16	0	9.73	1115.55	7.29	1124.03	7.35	8.47	0.75
77	154	77	0	2464	1	557.38	0.5	785.36	0	-0.81	10	1130.46	7.34	1138.67	7.39	8.2	0.72
77	155	78	1	2480	0.999958	559.76	0.501613	783.68	0.16	0	9.73	1146.13	7.39	1152.82	7.44	6.68	0.58
77	156	79	2	2496	0.999836	562.1	0.503205	782.05	0.62	-0.8	9.48	1159.9	7.44	1166.92	7.48	7.02	0.6
77	157	80	3	2512	0.999635	564.39	0.504777	780.46	1.4	0	9.23	1174.98	7.48	1180.53	7.52	5.55	0.47
77	158	81	4	2528	0.999359	566.62	0.506329	778.92	2.47	-0.8	8.99	1188.18	7.52	1194.12	7.56	5.94	0.5
77	159	82	5	2544	0.999011	568.81	0.507862	777.43	3.83	0	8.76	1202.7	7.56	1207.22	7.59	4.52	0.37
77	160	83	6	2560	0.998594	570.96	0.509375	775.97	5.48	-0.79	8.54	1215.35	7.6	1220.3	7.63	4.95	0.41
77	161	84	7	2576	0.99811	573.06	0.51087	774.55	7.41	0	8.33	1229.31	7.64	1232.9	7.66	3.59	0.29

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
77	162	85	8	2592	0.997561	575.11	0.512346	773.18	9.62	-0.79	8.13	1241.44	7.66	1245.5	7.69	4.06	0.33
77	163	86	9	2608	0.996951	577.12	0.513804	771.84	12.1	0	7.93	1254.87	7.7	1257.61	7.72	2.74	0.22
77	164	87	10	2624	0.996282	579.09	0.515244	770.53	14.85	-0.78	7.74	1266.49	7.72	1269.74	7.74	3.26	0.26
77	165	88	11	2640	0.995556	581.02	0.516667	769.27	17.86	0	7.56	1279.41	7.75	1281.39	7.77	1.97	0.15
77	166	89	12	2656	0.994774	582.91	0.518072	768.04	21.12	-0.78	7.38	1290.54	7.77	1293.06	7.79	2.53	0.2
77	167	90	13	2672	0.99394	584.75	0.519461	766.84	24.64	0	7.21	1302.97	7.8	1304.26	7.81	1.29	0.1
77	168	91	14	2688	0.993056	586.56	0.520833	765.68	28.41	-0.77	7.05	1313.62	7.82	1315.49	7.83	1.87	0.14
77	169	92	15	2704	0.992122	588.33	0.522189	764.55	32.43	0	6.89	1325.58	7.84	1326.25	7.85	0.67	0.05
77	170	93	16	2720	0.991142	590.07	0.523529	763.45	36.68	-0.77	6.73	1335.77	7.86	1337.06	7.87	1.28	0.1
77	171	94	17	2736	0.990117	591.77	0.524854	762.38	41.16	0	6.59	1347.27	7.88	1347.38	7.88	0.11	0.01
77	172	95	18	2752	0.989048	593.43	0.526163	761.34	45.88	-0.76	6.44	1357.02	7.89	1357.78	7.89	0.76	0.06
77	173	96	19	2768	0.987938	595.06	0.527457	760.33	50.83	0	6.3	1368.08	7.91	1367.69	7.91	-0.39	-0.03
77	174	97	20	2784	0.986788	596.66	0.528736	759.35	56	-0.76	6.17	1377.4	7.92	1377.69	7.92	0.29	0.02
77	175	98	21	2800	0.9856	598.22	0.53	758.4	61.39	0	6.04	1388.03	7.93	1387.2	7.93	-0.83	-0.06
77	176	99	22	2816	0.984375	599.75	0.53125	757.48	66.99	-0.75	5.92	1396.94	7.94	1396.81	7.94	-0.13	-0.01
77	177	100	23	2832	0.983115	601.25	0.532486	756.58	72.81	0	5.79	1407.16	7.95	1405.94	7.94	-1.22	-0.09
77	178	101	24	2848	0.98182	602.72	0.533708	755.71	78.84	-0.75	5.68	1415.67	7.95	1415.17	7.95	-0.5	-0.04
77	179	102	25	2864	0.980494	604.16	0.534916	754.86	85.07	0	5.56	1425.48	7.96	1423.92	7.95	-1.57	-0.11
77	180	103	26	2880	0.979136	605.56	0.536111	754.03	91.5	-0.75	5.45	1433.61	7.96	1432.78	7.96	-0.83	-0.06
77	181	104	27	2896	0.977748	606.94	0.537293	753.24	98.13	0	5.34	1443.03	7.97	1441.16	7.96	-1.87	-0.13
77	182	105	28	2912	0.976331	608.29	0.538462	752.46	104.96	-0.74	5.24	1450.79	7.97	1449.67	7.97	-1.11	-0.08
77	183	106	29	2928	0.974887	609.62	0.539617	751.71	111.98	0	5.14	1459.84	7.98	1457.7	7.97	-2.14	-0.15
77	184	107	30	2944	0.973417	610.91	0.540761	750.98	119.19	-0.74	5.04	1467.23	7.97	1465.86	7.97	-1.36	-0.09
77	185	108	31	2960	0.971921	612.18	0.541892	750.27	126.58	0	4.95	1475.91	7.98	1473.55	7.97	-2.37	-0.16
77	186	109	32	2976	0.970401	613.43	0.543011	749.59	134.16	-0.73	4.85	1482.95	7.97	1481.37	7.96	-1.58	-0.11
77	187	110	33	2992	0.968858	614.64	0.544118	748.92	141.91	0	4.77	1491.29	7.97	1488.72	7.96	-2.57	-0.17
77	188	111	34	3008	0.967293	615.84	0.545213	748.27	149.85	-0.73	4.68	1497.99	7.97	1496.22	7.96	-1.77	-0.12
77	189	112	35	3024	0.965706	617	0.546296	747.65	157.96	0	4.59	1505.98	7.97	1503.25	7.95	-2.74	-0.18
77	190	113	36	3040	0.9641	618.15	0.547368	747.04	166.24	-0.73	4.51	1512.36	7.96	1510.43	7.95	-1.93	-0.13
77	191	114	37	3056	0.962474	619.27	0.548429	746.46	174.69	0	4.43	1520.02	7.96	1517.13	7.94	-2.89	-0.19
77	192	115	38	3072	0.960829	620.37	0.549479	745.89	183.3	-0.72	4.36	1526.08	7.95	1524.01	7.94	-2.07	-0.14
77	193	116	39	3088	0.959167	621.44	0.550518	745.34	192.08	0	4.28	1533.42	7.95	1530.41	7.93	-3.01	-0.2
77	194	117	40	3104	0.957488	622.5	0.551546	744.81	201.02	-0.72	4.21	1539.16	7.93	1536.98	7.92	-2.18	-0.14
77	195	118	41	3120	0.955792	623.53	0.552564	744.3	210.12	0	4.14	1546.19	7.93	1543.08	7.91	-3.11	-0.2
77	196	119	42	3136	0.954082	624.54	0.553571	743.8	219.38	-0.71	4.07	1551.64	7.92	1549.36	7.9	-2.28	-0.15
77	197	120	43	3152	0.952356	625.53	0.554569	743.32	228.78	0	4	1558.37	7.91	1555.17	7.89	-3.2	-0.21
77	198	121	44	3168	0.950617	626.49	0.555556	742.85	238.35	-0.71	3.93	1563.53	7.9	1561.16	7.88	-2.36	-0.15
77	199	122	45	3184	0.948865	627.44	0.556533	742.41	248.06	0	3.87	1569.96	7.89	1566.69	7.87	-3.27	-0.21
77	200	123	46	3200	0.9471	628.37	0.5575	741.97	257.91	-0.71	3.81	1574.84	7.87	1572.41	7.86	-2.43	-0.15
77	201	124	47	3216	0.945323	629.28	0.558458	741.56	267.92	0	3.75	1580.99	7.87	1577.65	7.85	-3.33	-0.21
77	202	125	48	3232	0.943535	630.17	0.559406	741.16	278.06	-0.7	3.69	1585.59	7.85	1583.1	7.84	-2.49	-0.16
77	203	126	49	3248	0.941736	631.05	0.560345	740.77	288.35	0	3.63	1591.46	7.84	1588.08	7.82	-3.38	-0.21
77	204	127	50	3264	0.939927	631.9	0.561275	740.4	298.77	-0.7	3.57	1595.8	7.82	1593.27	7.81	-2.53	-0.16
77	205	128	51	3280	0.938108	632.74	0.562195	740.04	309.33	0	3.52	1601.41	7.81	1597.99	7.8	-3.42	-0.21
77	206	129	52	3296	0.936281	633.56	0.563107	739.69	320.03	-0.7	3.46	1605.48	7.79	1602.92	7.78	-2.57	-0.16
77	207	130	53	3312	0.934444	634.36	0.56401	739.36	330.86	0	3.41	1610.83	7.78	1607.38	7.77	-3.45	-0.21

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
77	208	131	54	3328	0.9326	635.14	0.564904	739.05	341.82	-0.69	3.36	1614.66	7.76	1612.06	7.75	-2.6	-0.16
77	209	132	55	3344	0.930748	635.91	0.565789	738.74	352.91	0	3.31	1619.75	7.75	1616.27	7.73	-3.48	-0.22
77	210	133	56	3360	0.928889	636.67	0.566667	738.45	364.12	-0.69	3.26	1623.33	7.73	1620.71	7.72	-2.63	-0.16
77	211	134	57	3376	0.927023	637.4	0.567536	738.17	375.47	0	3.22	1628.18	7.72	1624.68	7.7	-3.5	-0.22
77	212	135	58	3392	0.925151	638.12	0.568396	737.9	386.93	-0.69	3.17	1631.53	7.7	1628.88	7.68	-2.65	-0.16
77	213	136	59	3408	0.923274	638.83	0.569249	737.65	398.52	0	3.12	1636.13	7.68	1632.61	7.66	-3.52	-0.22
77	214	137	60	3424	0.921391	639.52	0.570093	737.4	410.22	-0.68	3.08	1639.25	7.66	1636.58	7.65	-2.67	-0.16
77	215	138	61	3440	0.919502	640.2	0.57093	737.17	422.05	0	3.04	1643.62	7.64	1640.08	7.63	-3.54	-0.22
77	216	139	62	3456	0.91761	640.86	0.571759	736.95	433.99	-0.68	3	1646.51	7.62	1643.82	7.61	-2.69	-0.16
77	217	140	63	3472	0.915713	641.51	0.572581	736.74	446.05	0	2.95	1650.66	7.61	1647.1	7.59	-3.56	-0.22
77	218	141	64	3488	0.913812	642.14	0.573394	736.54	458.22	-0.68	2.91	1653.33	7.58	1650.62	7.57	-2.71	-0.16
77	219	142	65	3504	0.911908	642.76	0.574201	736.36	470.5	0	2.87	1657.26	7.57	1653.68	7.55	-3.58	-0.22
77	220	143	66	3520	0.91	643.37	0.575	736.18	482.9	-0.67	2.84	1659.72	7.54	1656.99	7.53	-2.73	-0.16
77	221	144	67	3536	0.90809	643.96	0.575792	736.01	495.4	0	2.8	1663.43	7.53	1659.83	7.51	-3.6	-0.22
77	222	145	68	3552	0.906176	644.54	0.576577	735.86	508.01	-0.67	2.76	1665.69	7.5	1662.93	7.49	-2.76	-0.17
77	223	146	69	3568	0.904261	645.11	0.577354	735.71	520.72	0	2.73	1669.19	7.49	1665.56	7.47	-3.62	-0.22
77	224	147	70	3584	0.902344	645.66	0.578125	735.57	533.54	-0.67	2.69	1671.25	7.46	1668.45	7.45	-2.79	-0.17
77	225	148	71	3600	0.900425	646.21	0.578889	735.44	546.47	0	2.66	1674.54	7.44	1670.88	7.43	-3.66	-0.22
77	226	149	72	3616	0.898504	646.74	0.579646	735.32	559.5	-0.67	2.62	1676.4	7.42	1673.57	7.41	-2.83	-0.17
77	227	150	73	3632	0.896583	647.26	0.580396	735.21	572.62	0	2.59	1679.5	7.4	1675.8	7.38	-3.69	-0.22
77	228	151	74	3648	0.89466	647.76	0.58114	735.11	585.85	-0.66	2.56	1681.17	7.37	1678.3	7.36	-2.87	-0.17
77	229	152	75	3664	0.892737	648.26	0.581878	735.02	599.17	0	2.53	1684.07	7.35	1680.33	7.34	-3.74	-0.22
77	230	153	76	3680	0.890813	648.74	0.582609	734.94	612.59	-0.66	2.5	1685.56	7.33	1682.64	7.32	-2.92	-0.17
77	231	154	77	3696	0.888889	649.22	0.583333	734.87	626.11	0	2.47	1688.27	7.31	1684.48	7.29	-3.79	-0.22
77	232	155	78	3712	0.886965	649.68	0.584052	734.8	639.72	-0.66	2.44	1689.58	7.28	1686.6	7.27	-2.98	-0.18
77	233	156	79	3728	0.885041	650.13	0.584764	734.74	653.43	0	2.41	1692.11	7.26	1688.26	7.25	-3.85	-0.23
77	234	157	80	3744	0.883118	650.58	0.58547	734.69	667.22	-0.65	2.38	1693.24	7.24	1690.19	7.22	-3.04	-0.18
77	235	158	81	3760	0.881195	651.01	0.58617	734.65	681.11	0	2.35	1695.58	7.22	1691.67	7.2	-3.92	-0.23
77	236	159	82	3776	0.879273	651.43	0.586864	734.62	695.08	-0.65	2.32	1696.54	7.19	1693.42	7.18	-3.12	-0.18
77	237	160	83	3792	0.877352	651.84	0.587553	734.59	709.15	0	2.3	1698.72	7.17	1694.72	7.15	-3.99	-0.24
77	238	161	84	3808	0.875433	652.24	0.588235	734.57	723.3	-0.65	2.27	1699.51	7.14	1696.3	7.13	-3.2	-0.19
77	239	162	85	3824	0.873514	652.63	0.588912	734.56	737.54	0	2.25	1701.51	7.12	1697.43	7.1	-4.08	-0.24
77	240	163	86	3840	0.871597	653.02	0.589583	734.56	751.86	-0.65	2.22	1702.14	7.09	1698.84	7.08	-3.3	-0.19
77	241	164	87	3856	0.869682	653.39	0.590249	734.56	766.27	0	2.2	1703.98	7.07	1699.79	7.05	-4.18	-0.25
77	242	165	88	3872	0.867769	653.76	0.590909	734.57	780.76	-0.64	2.17	1704.44	7.04	1701.03	7.03	-3.41	-0.2
77	243	166	89	3888	0.865857	654.11	0.591564	734.59	795.33	0	2.15	1706.12	7.02	1701.82	7	-4.3	-0.25
77	244	167	90	3904	0.863948	654.46	0.592213	734.61	809.99	-0.64	2.12	1706.43	6.99	1702.9	6.98	-3.53	-0.21
77	245	168	91	3920	0.862041	654.8	0.592857	734.64	824.72	0	2.1	1707.95	6.97	1703.52	6.95	-4.42	-0.26
77	246	169	92	3936	0.860136	655.13	0.593496	734.68	839.53	-0.64	2.08	1708.11	6.94	1704.44	6.93	-3.66	-0.21
77	247	170	93	3952	0.858234	655.45	0.59413	734.72	854.42	0	2.06	1709.47	6.92	1704.91	6.9	-4.56	-0.27
77	248	171	94	3968	0.856335	655.76	0.594758	734.77	869.39	-0.64	2.04	1709.48	6.89	1705.67	6.88	-3.81	-0.22
77	249	172	95	3984	0.854438	656.07	0.595382	734.82	884.44	0	2.01	1710.69	6.87	1705.98	6.85	-4.71	-0.28
77	250	173	96	4000	0.852544	656.36	0.596	734.88	899.56	-0.63	1.99	1710.56	6.84	1706.59	6.83	-3.97	-0.23
77	251	174	97	4016	0.850653	656.65	0.596614	734.95	914.75	0	1.97	1711.62	6.82	1706.75	6.8	-4.87	-0.29
77	252	175	98	4032	0.848765	656.94	0.597222	735.03	930.02	-0.63	1.95	1711.34	6.79	1707.2	6.77	-4.14	-0.24
77	253	176	99	4048	0.846881	657.21	0.597826	735.1	945.36	0	1.93	1712.26	6.77	1707.21	6.75	-5.05	-0.3

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
77	254	177	100	4064	0.845	657.48	0.598425	735.19	960.77	-0.63	1.91	1711.85	6.74	1707.52	6.72	-4.33	-0.25
77	255	178	101	4080	0.843122	657.74	0.59902	735.28	976.25	0	1.89	1712.63	6.72	1707.38	6.7	-5.24	-0.31
77	256	179	102	4096	0.841248	657.99	0.599609	735.38	991.81	-0.62	1.88	1712.08	6.69	1707.55	6.67	-4.53	-0.27
77	257	180	103	4112	0.839377	658.23	0.600195	735.48	1007.43	0	1.86	1712.72	6.66	1707.27	6.64	-5.45	-0.32
77	258	181	104	4128	0.83751	658.47	0.600775	735.58	1023.12	-0.62	1.84	1712.04	6.64	1707.29	6.62	-4.75	-0.28
77	259	182	105	4144	0.835646	658.7	0.601351	735.7	1038.88	0	1.82	1712.54	6.61	1706.87	6.59	-5.67	-0.33
77	260	183	106	4160	0.833787	658.93	0.601923	735.81	1054.7	-0.62	1.8	1711.74	6.58	1706.76	6.56	-4.98	-0.29
77	261	184	107	4176	0.831931	659.15	0.60249	735.94	1070.6	0	1.79	1712.11	6.56	1706.2	6.54	-5.91	-0.35
77	262	185	108	4192	0.83008	659.36	0.603053	736.06	1086.55	-0.62	1.77	1711.18	6.53	1705.95	6.51	-5.23	-0.31
77	263	186	109	4208	0.828232	659.57	0.603612	736.19	1102.58	0	1.75	1711.42	6.51	1705.25	6.48	-6.17	-0.36
77	264	187	110	4224	0.826389	659.76	0.604167	736.33	1118.66	-0.62	1.74	1710.36	6.48	1704.87	6.46	-5.49	-0.32
77	265	188	111	4240	0.82455	659.96	0.604717	736.47	1134.81	0	1.72	1710.48	6.45	1704.04	6.43	-6.44	-0.38
77	266	189	112	4256	0.822715	660.14	0.605263	736.62	1151.02	-0.61	1.71	1709.31	6.43	1703.53	6.4	-5.77	-0.34
77	267	190	113	4272	0.820884	660.32	0.605805	736.77	1167.3	0	1.69	1709.3	6.4	1702.57	6.38	-6.72	-0.39
77	268	191	114	4288	0.819058	660.5	0.606343	736.92	1183.63	-0.61	1.68	1708.01	6.37	1701.94	6.35	-6.07	-0.36
77	269	192	115	4304	0.817236	660.67	0.606877	737.08	1200.03	0	1.66	1707.88	6.35	1700.85	6.32	-7.03	-0.41
77	270	193	116	4320	0.815418	660.83	0.607407	737.25	1216.49	-0.61	1.65	1706.47	6.32	1700.09	6.3	-6.39	-0.38
77	271	194	117	4336	0.813605	660.99	0.607934	737.42	1233	0	1.63	1706.23	6.3	1698.88	6.27	-7.35	-0.43
77	272	195	118	4352	0.811797	661.14	0.608456	737.59	1249.57	-0.61	1.62	1704.71	6.27	1697.99	6.24	-6.72	-0.4
77	273	196	119	4368	0.809993	661.29	0.608974	737.76	1266.2	0	1.6	1704.34	6.24	1696.66	6.21	-7.69	-0.45
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
78	155	77	-1	2480	0.999958	559.76	0.498387	804.17	0.16	0	9.73	1125.65	7.26	1134.17	7.32	8.52	0.75
78	156	78	0	2496	1	562.19	0.5	802.43	0	0.8	10	1142.18	7.32	1149.82	7.37	7.64	0.66
78	157	79	1	2512	0.999959	564.57	0.501592	800.74	0.16	0	9.74	1156.27	7.36	1163.02	7.41	6.74	0.58
78	158	80	2	2528	0.99984	566.9	0.503165	799.09	0.62	0.8	9.48	1171.67	7.42	1178.13	7.46	6.46	0.55
78	159	81	3	2544	0.999644	569.17	0.504717	797.49	1.38	0	9.24	1185.19	7.45	1190.81	7.49	5.62	0.47
78	160	82	4	2560	0.999375	571.4	0.50625	795.94	2.43	0.79	9	1200.02	7.5	1205.4	7.53	5.38	0.45
78	161	83	5	2576	0.999036	573.59	0.507764	794.42	3.78	0	8.78	1212.99	7.53	1217.58	7.56	4.59	0.38
78	162	84	6	2592	0.998628	575.73	0.509259	792.95	5.41	0.79	8.56	1227.26	7.58	1231.66	7.6	4.4	0.36
78	163	85	7	2608	0.998156	577.82	0.510736	791.52	7.32	0	8.35	1239.69	7.61	1243.35	7.63	3.66	0.29
78	164	86	8	2624	0.99762	579.87	0.512195	790.13	9.5	0.78	8.15	1253.43	7.64	1256.94	7.66	3.51	0.28
78	165	87	9	2640	0.997025	581.88	0.513636	788.77	11.95	0	7.95	1265.35	7.67	1268.17	7.69	2.82	0.22
78	166	88	10	2656	0.996371	583.84	0.51506	787.45	14.67	0.78	7.76	1278.58	7.7	1281.28	7.72	2.71	0.21
78	167	89	11	2672	0.995661	585.77	0.516467	786.17	17.65	0	7.58	1290	7.72	1292.06	7.74	2.06	0.16
78	168	90	12	2688	0.994898	587.65	0.517857	784.93	20.88	0.77	7.41	1302.73	7.75	1304.71	7.77	1.98	0.15
78	169	91	13	2704	0.994083	589.5	0.519231	783.71	24.36	0	7.24	1313.67	7.77	1315.05	7.78	1.37	0.1
78	170	92	14	2720	0.993218	591.31	0.520588	782.53	28.08	0.77	7.08	1325.92	7.8	1327.25	7.81	1.33	0.1
78	171	93	15	2736	0.992305	593.08	0.52193	781.39	32.05	0	6.92	1336.41	7.82	1337.16	7.82	0.75	0.06
78	172	94	16	2752	0.991347	594.81	0.523256	780.27	36.25	0.76	6.77	1348.19	7.84	1348.93	7.84	0.74	0.05
78	173	95	17	2768	0.990344	596.51	0.524566	779.19	40.69	0	6.62	1358.23	7.85	1358.43	7.85	0.2	0.01
78	174	96	18	2784	0.989298	598.18	0.525862	778.14	45.36	0.76	6.48	1369.57	7.87	1369.78	7.87	0.21	0.02
78	175	97	19	2800	0.988212	599.81	0.527143	777.11	50.25	0	6.34	1379.17	7.88	1378.88	7.88	-0.29	-0.02
78	176	98	20	2816	0.987087	601.4	0.528409	776.11	55.37	0.75	6.2	1390.08	7.9	1389.82	7.9	-0.25	-0.02
78	177	99	21	2832	0.985924	602.97	0.529661	775.15	60.7	0	6.08	1399.26	7.91	1398.53	7.9	-0.73	-0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
78	178	100	22	2848	0.984724	604.5	0.530899	774.21	66.24	0.75	5.95	1409.75	7.92	1409.08	7.92	-0.67	-0.05
78	179	101	23	2864	0.98349	606	0.532123	773.29	72	0	5.83	1418.53	7.92	1417.41	7.92	-1.12	-0.08
78	180	102	24	2880	0.982222	607.47	0.533333	772.4	77.96	0.75	5.71	1428.62	7.94	1427.58	7.93	-1.04	-0.07
78	181	103	25	2896	0.980922	608.91	0.53453	771.54	84.13	0	5.6	1437.01	7.94	1435.55	7.93	-1.46	-0.1
78	182	104	26	2912	0.979592	610.32	0.535714	770.7	90.5	0.74	5.49	1446.7	7.95	1445.34	7.94	-1.36	-0.09
78	183	105	27	2928	0.978232	611.71	0.536885	769.89	97.07	0	5.38	1454.72	7.95	1452.95	7.94	-1.77	-0.12
78	184	106	28	2944	0.976843	613.06	0.538043	769.1	103.82	0.74	5.28	1464.03	7.96	1462.38	7.95	-1.65	-0.11
78	185	107	29	2960	0.975427	614.39	0.539189	768.33	110.77	0	5.18	1471.68	7.96	1469.65	7.94	-2.03	-0.14
78	186	108	30	2976	0.973985	615.69	0.540323	767.59	117.91	0.73	5.08	1480.62	7.96	1478.73	7.95	-1.9	-0.13
78	187	109	31	2992	0.972519	616.97	0.541444	766.87	125.23	0	4.98	1487.92	7.96	1485.66	7.94	-2.26	-0.15
78	188	110	32	3008	0.971028	618.21	0.542553	766.17	132.74	0.73	4.89	1496.51	7.96	1494.39	7.95	-2.11	-0.14
78	189	111	33	3024	0.969514	619.44	0.543651	765.49	140.42	0	4.8	1503.46	7.95	1501.01	7.94	-2.46	-0.16
78	190	112	34	3040	0.967978	620.63	0.544737	764.83	148.28	0.73	4.72	1511.7	7.96	1509.41	7.94	-2.3	-0.15
78	191	113	35	3056	0.966421	621.81	0.545812	764.19	156.31	0	4.63	1518.33	7.95	1515.7	7.94	-2.63	-0.17
78	192	114	36	3072	0.964844	622.96	0.546875	763.57	164.51	0.72	4.55	1526.23	7.95	1523.78	7.94	-2.45	-0.16
78	193	115	37	3088	0.963247	624.09	0.547927	762.97	172.88	0	4.47	1532.53	7.94	1529.76	7.93	-2.77	-0.18
78	194	116	38	3104	0.961632	625.19	0.548969	762.39	181.42	0.72	4.39	1540.11	7.94	1537.53	7.93	-2.59	-0.17
78	195	117	39	3120	0.96	626.27	0.55	761.82	190.12	0	4.32	1546.1	7.93	1543.21	7.91	-2.89	-0.19
78	196	118	40	3136	0.958351	627.33	0.55102	761.28	198.98	0.71	4.24	1553.37	7.93	1550.67	7.91	-2.7	-0.17
78	197	119	41	3152	0.956685	628.37	0.55203	760.75	208	0	4.17	1559.06	7.91	1556.07	7.9	-2.99	-0.19
78	198	120	42	3168	0.955005	629.39	0.55303	760.24	217.17	0.71	4.1	1566.02	7.91	1563.22	7.9	-2.79	-0.18
78	199	121	43	3184	0.953309	630.38	0.55402	759.75	226.5	0	4.04	1571.41	7.9	1568.34	7.88	-3.07	-0.2
78	200	122	44	3200	0.9516	631.36	0.555	759.27	235.97	0.71	3.97	1578.08	7.89	1575.21	7.88	-2.87	-0.18
78	201	123	45	3216	0.949877	632.31	0.55597	758.81	245.6	0	3.91	1583.18	7.88	1580.04	7.86	-3.14	-0.2
78	202	124	46	3232	0.948142	633.25	0.556931	758.36	255.37	0.7	3.84	1589.56	7.87	1586.63	7.85	-2.93	-0.18
78	203	125	47	3248	0.946395	634.17	0.557882	757.93	265.29	0	3.78	1594.39	7.85	1591.2	7.84	-3.19	-0.2
78	204	126	48	3264	0.944637	635.07	0.558824	757.52	275.35	0.7	3.72	1600.49	7.85	1597.51	7.83	-2.98	-0.19
78	205	127	49	3280	0.942867	635.95	0.559756	757.12	285.55	0	3.66	1605.05	7.83	1601.81	7.81	-3.24	-0.2
78	206	128	50	3296	0.941088	636.81	0.56068	756.73	295.89	0.7	3.61	1610.87	7.82	1607.85	7.81	-3.02	-0.19
78	207	129	51	3312	0.939298	637.65	0.561594	756.36	306.36	0	3.55	1615.17	7.8	1611.9	7.79	-3.27	-0.2
78	208	130	52	3328	0.9375	638.48	0.5625	756.01	316.97	0.69	3.5	1620.73	7.79	1617.68	7.78	-3.05	-0.19
78	209	131	53	3344	0.935693	639.29	0.563397	755.66	327.71	0	3.45	1624.78	7.77	1621.49	7.76	-3.3	-0.2
78	210	132	54	3360	0.933878	640.09	0.564286	755.33	338.58	0.69	3.4	1630.09	7.76	1627.01	7.75	-3.07	-0.19
78	211	133	55	3376	0.932055	640.86	0.565166	755.02	349.58	0	3.35	1633.89	7.74	1630.57	7.73	-3.32	-0.2
78	212	134	56	3392	0.930224	641.62	0.566038	754.71	360.71	0.69	3.3	1638.94	7.73	1635.85	7.72	-3.09	-0.19
78	213	135	57	3408	0.928387	642.37	0.566901	754.42	371.96	0	3.25	1642.5	7.71	1639.17	7.7	-3.33	-0.2
78	214	136	58	3424	0.926544	643.1	0.567757	754.15	383.33	0.68	3.2	1647.31	7.7	1644.2	7.68	-3.11	-0.19
78	215	137	59	3440	0.924694	643.81	0.568605	753.88	394.83	0	3.16	1650.64	7.68	1647.3	7.66	-3.34	-0.2
78	216	138	60	3456	0.92284	644.51	0.569444	753.62	406.44	0.68	3.11	1655.22	7.66	1652.09	7.65	-3.12	-0.19
78	217	139	61	3472	0.920979	645.2	0.570276	753.38	418.18	0	3.07	1658.32	7.64	1654.96	7.63	-3.35	-0.2
78	218	140	62	3488	0.919115	645.87	0.571101	753.15	430.03	0.68	3.03	1662.66	7.63	1659.53	7.61	-3.13	-0.19
78	219	141	63	3504	0.917245	646.52	0.571918	752.93	441.99	0	2.99	1665.54	7.61	1662.18	7.59	-3.36	-0.2
78	220	142	64	3520	0.915372	647.16	0.572727	752.72	454.07	0.67	2.95	1669.66	7.59	1666.52	7.58	-3.15	-0.19
78	221	143	65	3536	0.913495	647.79	0.573529	752.52	466.26	0	2.91	1672.33	7.57	1668.95	7.55	-3.38	-0.2
78	222	144	66	3552	0.911614	648.41	0.574324	752.34	478.56	0.67	2.87	1676.23	7.55	1673.07	7.54	-3.16	-0.19
78	223	145	67	3568	0.909731	649.01	0.575112	752.16	490.97	0	2.83	1678.69	7.53	1675.3	7.51	-3.39	-0.2

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78	224	146	68	3584	0.907844	649.6	0.575893	751.99	503.49	0.67	2.79	1682.38	7.51	1679.2	7.5	-3.18	-0.19
78	225	147	69	3600	0.905956	650.18	0.576667	751.83	516.12	0	2.76	1684.63	7.49	1681.23	7.47	-3.41	-0.2
78	226	148	70	3616	0.904065	650.74	0.577434	751.69	528.84	0.67	2.72	1688.12	7.47	1684.92	7.46	-3.2	-0.19
78	227	149	71	3632	0.902172	651.29	0.578194	751.55	541.68	0	2.69	1690.17	7.45	1686.74	7.43	-3.43	-0.2
78	228	150	72	3648	0.900277	651.83	0.578947	751.42	554.61	0.66	2.65	1693.46	7.43	1690.23	7.41	-3.22	-0.19
78	229	151	73	3664	0.898381	652.36	0.579694	751.3	567.64	0	2.62	1695.32	7.4	1691.86	7.39	-3.46	-0.2
78	230	152	74	3680	0.896484	652.87	0.580435	751.19	580.78	0.66	2.59	1698.41	7.38	1695.15	7.37	-3.25	-0.19
78	231	153	75	3696	0.894586	653.38	0.581169	751.09	594.01	0	2.56	1700.08	7.36	1696.59	7.34	-3.49	-0.21
78	232	154	76	3712	0.892687	653.87	0.581897	751	607.34	0.66	2.53	1702.97	7.34	1699.68	7.33	-3.29	-0.19
78	233	155	77	3728	0.890788	654.36	0.582618	750.92	620.76	0	2.5	1704.47	7.32	1700.93	7.3	-3.53	-0.21
78	234	156	78	3744	0.888889	654.83	0.583333	750.84	634.28	0.65	2.47	1707.17	7.3	1703.84	7.28	-3.34	-0.2
78	235	157	79	3760	0.88699	655.29	0.584043	750.77	647.89	0	2.44	1708.49	7.27	1704.9	7.25	-3.58	-0.21
78	236	158	80	3776	0.88509	655.74	0.584746	750.72	661.59	0.65	2.41	1711.01	7.25	1707.62	7.24	-3.39	-0.2
78	237	159	81	3792	0.883192	656.18	0.585443	750.67	675.39	0	2.38	1712.15	7.22	1708.51	7.21	-3.64	-0.21
78	238	160	82	3808	0.881294	656.61	0.586134	750.62	689.27	0.65	2.35	1714.5	7.2	1711.05	7.19	-3.45	-0.2
78	239	161	83	3824	0.879396	657.03	0.58682	750.59	703.24	0	2.33	1715.47	7.18	1711.76	7.16	-3.71	-0.22
78	240	162	84	3840	0.8775	657.44	0.5875	750.56	717.3	0.65	2.3	1717.64	7.16	1714.12	7.14	-3.53	-0.21
78	241	163	85	3856	0.875605	657.84	0.588174	750.54	731.44	0	2.27	1718.45	7.13	1714.66	7.11	-3.78	-0.22
78	242	164	86	3872	0.873711	658.23	0.588843	750.53	745.67	0.64	2.25	1720.45	7.11	1716.84	7.09	-3.61	-0.21
78	243	165	87	3888	0.871818	658.62	0.589506	750.52	759.99	0	2.22	1721.09	7.08	1717.22	7.07	-3.87	-0.23
78	244	166	88	3904	0.869927	658.99	0.590164	750.53	774.39	0.64	2.2	1722.94	7.06	1719.23	7.05	-3.71	-0.22
78	245	167	89	3920	0.868038	659.35	0.590816	750.54	788.87	0	2.17	1723.42	7.03	1719.45	7.02	-3.97	-0.23
78	246	168	90	3936	0.866151	659.71	0.591463	750.55	803.43	0.64	2.15	1725.1	7.01	1721.29	7	-3.81	-0.22
78	247	169	91	3952	0.864266	660.06	0.592105	750.57	818.07	0	2.13	1725.43	6.99	1721.35	6.97	-4.08	-0.24
78	248	170	92	3968	0.862383	660.39	0.592742	750.6	832.79	0.64	2.11	1726.95	6.96	1723.02	6.95	-3.93	-0.23
78	249	171	93	3984	0.860502	660.72	0.593373	750.64	847.59	0	2.08	1727.13	6.94	1722.93	6.92	-4.2	-0.24
78	250	172	94	4000	0.858624	661.05	0.594	750.68	862.46	0.63	2.06	1728.5	6.91	1724.44	6.9	-4.06	-0.24
78	251	173	95	4016	0.856748	661.36	0.594622	750.73	877.42	0	2.04	1728.54	6.89	1724.19	6.87	-4.34	-0.25
78	252	174	96	4032	0.854875	661.67	0.595238	750.78	892.44	0.63	2.02	1729.76	6.86	1725.55	6.85	-4.2	-0.24
78	253	175	97	4048	0.853005	661.96	0.59585	750.84	907.55	0	2	1729.64	6.84	1725.15	6.82	-4.49	-0.26
78	254	176	98	4064	0.851138	662.25	0.596457	750.91	922.72	0.63	1.98	1730.72	6.81	1726.36	6.8	-4.36	-0.25
78	255	177	99	4080	0.849273	662.54	0.597059	750.98	937.97	0	1.96	1730.47	6.79	1725.81	6.77	-4.66	-0.27
78	256	178	100	4096	0.847412	662.81	0.597656	751.06	953.29	0.62	1.94	1731.4	6.76	1726.86	6.75	-4.53	-0.26
78	257	179	101	4112	0.845554	663.08	0.598249	751.15	968.68	0	1.92	1731.01	6.74	1726.18	6.72	-4.83	-0.28
78	258	180	102	4128	0.843699	663.34	0.598837	751.24	984.15	0.62	1.9	1731.8	6.71	1727.08	6.69	-4.72	-0.27
78	259	181	103	4144	0.841848	663.59	0.599421	751.33	999.68	0	1.88	1731.28	6.68	1726.25	6.67	-5.03	-0.29
78	260	182	104	4160	0.84	663.84	0.6	751.43	1015.28	0.62	1.86	1731.93	6.66	1727.01	6.64	-4.92	-0.28
78	261	183	105	4176	0.838156	664.08	0.600575	751.54	1030.95	0	1.85	1731.28	6.63	1726.05	6.61	-5.23	-0.3
78	262	184	106	4192	0.836315	664.31	0.601145	751.65	1046.68	0.62	1.83	1731.8	6.61	1726.66	6.59	-5.14	-0.3
78	263	185	107	4208	0.834478	664.54	0.601711	751.76	1062.49	0	1.81	1731.02	6.58	1725.56	6.56	-5.46	-0.32
78	264	186	108	4224	0.832645	664.76	0.602273	751.88	1078.35	0.62	1.79	1731.41	6.56	1726.04	6.54	-5.37	-0.31
78	265	187	109	4240	0.830815	664.97	0.60283	752.01	1094.29	0	1.78	1730.51	6.53	1724.81	6.51	-5.7	-0.33
78	266	188	110	4256	0.82899	665.18	0.603383	752.14	1110.28	0.61	1.76	1730.77	6.51	1725.15	6.49	-5.62	-0.33
78	267	189	111	4272	0.827168	665.38	0.603933	752.28	1126.34	0	1.74	1729.74	6.48	1723.79	6.46	-5.95	-0.35
78	268	190	112	4288	0.825351	665.57	0.604478	752.42	1142.47	0.61	1.73	1729.88	6.45	1724	6.43	-5.88	-0.34
78	269	191	113	4304	0.823538	665.76	0.605019	752.56	1158.65	0	1.71	1728.73	6.43	1722.51	6.4	-6.22	-0.36

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
78	270	192	114	4320	0.821728	665.95	0.605556	752.71	1174.9	0.61	1.7	1728.75	6.4	1722.59	6.38	-6.16	-0.36
78	271	193	115	4336	0.819923	666.12	0.606089	752.87	1191.21	0	1.68	1727.49	6.37	1720.98	6.35	-6.51	-0.38
78	272	194	116	4352	0.818123	666.29	0.606618	753.03	1207.57	0.61	1.67	1727.38	6.35	1720.92	6.33	-6.45	-0.38
78	273	195	117	4368	0.816327	666.46	0.607143	753.19	1224	0	1.65	1726	6.32	1719.19	6.3	-6.81	-0.4
78	274	196	118	4384	0.814535	666.62	0.607664	753.36	1240.49	0.6	1.64	1725.78	6.3	1719.01	6.27	-6.77	-0.39
78	275	197	119	4400	0.812747	666.77	0.608182	753.53	1257.03	0	1.62	1724.29	6.27	1717.16	6.24	-7.13	-0.42
78	276	198	120	4416	0.810964	666.92	0.608696	753.71	1273.63	0.6	1.61	1723.95	6.25	1716.86	6.22	-7.1	-0.41
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
79	157	78	-1	2512	0.999959	564.57	0.498408	821.4	0.16	0	9.74	1135.61	7.23	1144.17	7.29	8.56	0.75
79	158	79	0	2528	1	566.99	0.5	819.65	0	-0.8	10	1150.57	7.28	1158.86	7.33	8.29	0.72
79	159	80	1	2544	0.99996	569.35	0.501572	817.94	0.15	0	9.74	1166.29	7.34	1173.07	7.38	6.78	0.58
79	160	81	2	2560	0.999844	571.67	0.503125	816.28	0.61	-0.79	9.49	1180.14	7.38	1187.23	7.42	7.1	0.6
79	161	82	3	2576	0.999653	573.94	0.504658	814.67	1.36	0	9.25	1195.28	7.42	1200.92	7.46	5.64	0.47
79	162	83	4	2592	0.99939	576.17	0.506173	813.1	2.4	-0.79	9.01	1208.56	7.46	1214.57	7.5	6.01	0.49
79	163	84	5	2608	0.999059	578.34	0.507669	811.57	3.73	0	8.79	1223.15	7.5	1227.75	7.53	4.6	0.37
79	164	85	6	2624	0.998662	580.47	0.509146	810.08	5.35	-0.78	8.58	1235.9	7.54	1240.92	7.57	5.02	0.4
79	165	86	7	2640	0.9982	582.56	0.510606	808.63	7.23	0	8.37	1249.94	7.58	1253.6	7.6	3.66	0.29
79	166	87	8	2656	0.997677	584.61	0.512048	807.22	9.39	-0.78	8.17	1262.17	7.6	1266.29	7.63	4.12	0.33
79	167	88	9	2672	0.997096	586.61	0.513473	805.85	11.81	0	7.97	1275.7	7.64	1278.5	7.66	2.8	0.22
79	168	89	10	2688	0.996457	588.57	0.514881	804.52	14.5	-0.77	7.79	1287.43	7.66	1290.73	7.68	3.31	0.26
79	169	90	11	2704	0.995763	590.49	0.516272	803.22	17.44	0	7.61	1300.45	7.69	1302.48	7.71	2.03	0.16
79	170	91	12	2720	0.995017	592.38	0.517647	801.96	20.63	-0.77	7.43	1311.7	7.72	1314.27	7.73	2.57	0.2
79	171	92	13	2736	0.99422	594.22	0.519006	800.73	24.07	0	7.27	1324.24	7.74	1325.57	7.75	1.33	0.1
79	172	93	14	2752	0.993375	596.03	0.520349	799.54	27.76	-0.76	7.1	1335.02	7.76	1336.92	7.77	1.9	0.14
79	173	94	15	2768	0.992482	597.8	0.521676	798.37	31.68	0	6.95	1347.09	7.79	1347.8	7.79	0.7	0.05
79	174	95	16	2784	0.991544	599.53	0.522989	797.24	35.84	-0.76	6.8	1357.42	7.8	1358.73	7.81	1.3	0.1
79	175	96	17	2800	0.990563	601.23	0.524286	796.14	40.23	0	6.65	1369.04	7.82	1369.18	7.82	0.14	0.01
79	176	97	18	2816	0.98954	602.9	0.525568	795.08	44.85	-0.75	6.51	1378.94	7.83	1379.7	7.84	0.77	0.06
79	177	98	19	2832	0.988477	604.53	0.526836	794.04	49.69	0	6.37	1390.12	7.85	1389.75	7.85	-0.37	-0.03
79	178	99	20	2848	0.987375	606.13	0.52809	793.02	54.75	-0.75	6.24	1399.59	7.86	1399.88	7.86	0.29	0.02
79	179	100	21	2864	0.986236	607.69	0.52933	792.04	60.02	0	6.11	1410.35	7.88	1409.53	7.87	-0.82	-0.06
79	180	101	22	2880	0.985062	609.23	0.530556	791.08	65.51	-0.75	5.98	1419.41	7.89	1419.28	7.88	-0.14	-0.01
79	181	102	23	2896	0.983853	610.73	0.531768	790.16	71.21	0	5.86	1429.77	7.9	1428.55	7.89	-1.22	-0.09
79	182	103	24	2912	0.982611	612.21	0.532967	789.25	77.11	-0.74	5.75	1438.44	7.9	1437.92	7.9	-0.52	-0.04
79	183	104	25	2928	0.981337	613.65	0.534153	788.37	83.22	0	5.63	1448.39	7.91	1446.82	7.91	-1.57	-0.11
79	184	105	26	2944	0.980033	615.06	0.535326	787.52	89.52	-0.74	5.52	1456.68	7.92	1455.83	7.91	-0.85	-0.06
79	185	106	27	2960	0.9787	616.45	0.536486	786.69	96.02	0	5.42	1466.25	7.93	1464.37	7.92	-1.89	-0.13
79	186	107	28	2976	0.977338	617.81	0.537634	785.89	102.71	-0.73	5.31	1474.17	7.93	1473.02	7.92	-1.14	-0.08
79	187	108	29	2992	0.97595	619.14	0.53877	785.11	109.6	0	5.21	1483.37	7.93	1481.21	7.92	-2.16	-0.15
79	188	109	30	3008	0.974536	620.45	0.539894	784.35	116.66	-0.73	5.12	1490.93	7.93	1489.53	7.92	-1.4	-0.09
79	189	110	31	3024	0.973097	621.73	0.541005	783.61	123.91	0	5.02	1499.77	7.94	1497.37	7.92	-2.4	-0.16
79	190	111	32	3040	0.971634	622.98	0.542105	782.89	131.35	-0.73	4.93	1506.98	7.93	1505.36	7.92	-1.63	-0.11
79	191	112	33	3056	0.970149	624.21	0.543194	782.2	138.96	0	4.84	1515.48	7.93	1512.87	7.92	-2.6	-0.17
79	192	113	34	3072	0.968641	625.41	0.544271	781.53	146.74	-0.72	4.75	1522.35	7.93	1520.53	7.92	-1.82	-0.12

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
79	193	114	35	3088	0.967113	626.59	0.545337	780.87	154.7	0	4.67	1530.51	7.93	1527.73	7.92	-2.78	-0.18
79	194	115	36	3104	0.965565	627.75	0.546392	780.24	162.83	-0.72	4.59	1537.06	7.92	1535.07	7.91	-1.99	-0.13
79	195	116	37	3120	0.963997	628.88	0.547436	779.62	171.12	0	4.51	1544.88	7.92	1541.95	7.91	-2.93	-0.19
79	196	117	38	3136	0.962411	629.99	0.548469	779.03	179.58	-0.71	4.43	1551.12	7.91	1548.99	7.9	-2.13	-0.14
79	197	118	39	3152	0.960808	631.08	0.549492	778.45	188.2	0	4.35	1558.63	7.91	1555.56	7.9	-3.06	-0.2
79	198	119	40	3168	0.959188	632.14	0.550505	777.89	196.98	-0.71	4.28	1564.55	7.9	1562.31	7.89	-2.25	-0.14
79	199	120	41	3184	0.957552	633.19	0.551508	777.35	205.92	0	4.21	1571.75	7.9	1568.58	7.88	-3.17	-0.2
79	200	121	42	3200	0.9559	634.21	0.5525	776.83	215.01	-0.71	4.14	1577.38	7.89	1575.04	7.88	-2.35	-0.15
79	201	122	43	3216	0.954234	635.21	0.553483	776.32	224.25	0	4.07	1584.28	7.88	1581.02	7.87	-3.26	-0.21
79	202	123	44	3232	0.952554	636.2	0.554455	775.83	233.65	-0.7	4.01	1589.62	7.87	1587.19	7.86	-2.43	-0.15
79	203	124	45	3248	0.95086	637.16	0.555419	775.36	243.19	0	3.94	1596.23	7.86	1592.9	7.85	-3.33	-0.21
79	204	125	46	3264	0.949154	638.1	0.556373	774.9	252.88	-0.7	3.88	1601.29	7.85	1598.8	7.84	-2.5	-0.16
79	205	126	47	3280	0.947436	639.03	0.557317	774.46	262.71	0	3.82	1607.62	7.84	1604.23	7.83	-3.39	-0.21
79	206	127	48	3296	0.945706	639.94	0.558252	774.03	272.69	-0.7	3.76	1612.41	7.83	1609.85	7.81	-2.55	-0.16
79	207	128	49	3312	0.943966	640.82	0.559179	773.62	282.8	0	3.7	1618.46	7.82	1615.02	7.8	-3.44	-0.21
79	208	129	50	3328	0.942215	641.69	0.560096	773.22	293.06	-0.69	3.64	1622.98	7.8	1620.38	7.79	-2.6	-0.16
79	209	130	51	3344	0.940455	642.55	0.561005	772.84	303.44	0	3.59	1628.76	7.79	1625.29	7.78	-3.47	-0.21
79	210	131	52	3360	0.938685	643.38	0.561905	772.47	313.96	-0.69	3.53	1633.03	7.78	1630.4	7.76	-2.63	-0.16
79	211	132	53	3376	0.936906	644.2	0.562796	772.11	324.62	0	3.48	1638.55	7.77	1635.05	7.75	-3.5	-0.21
79	212	133	54	3392	0.935119	645	0.563679	771.77	335.4	-0.69	3.43	1642.57	7.75	1639.91	7.74	-2.66	-0.16
79	213	134	55	3408	0.933325	645.78	0.564554	771.44	346.31	0	3.38	1647.84	7.74	1644.31	7.72	-3.53	-0.21
79	214	135	56	3424	0.931522	646.55	0.565421	771.13	357.35	-0.68	3.33	1651.62	7.72	1648.93	7.71	-2.68	-0.16
79	215	136	57	3440	0.929713	647.31	0.566279	770.83	368.51	0	3.28	1656.64	7.71	1653.09	7.69	-3.54	-0.21
79	216	137	58	3456	0.927898	648.04	0.56713	770.54	379.8	-0.68	3.24	1660.18	7.69	1657.48	7.67	-2.7	-0.16
79	217	138	59	3472	0.926076	648.77	0.567972	770.26	391.2	0	3.19	1664.96	7.67	1661.4	7.66	-3.56	-0.21
79	218	139	60	3488	0.924249	649.47	0.568807	769.99	402.73	-0.68	3.15	1668.27	7.65	1665.56	7.64	-2.72	-0.16
79	219	140	61	3504	0.922416	650.17	0.569635	769.74	414.38	0	3.1	1672.82	7.64	1669.25	7.62	-3.57	-0.21
79	220	141	62	3520	0.920579	650.85	0.570455	769.5	426.14	-0.67	3.06	1675.91	7.62	1673.18	7.61	-2.73	-0.16
79	221	142	63	3536	0.918736	651.51	0.571267	769.27	438.01	0	3.02	1680.23	7.6	1676.65	7.59	-3.58	-0.21
79	222	143	64	3552	0.91689	652.16	0.572072	769.05	450	-0.67	2.98	1683.1	7.58	1680.36	7.57	-2.74	-0.16
79	223	144	65	3568	0.91504	652.8	0.57287	768.84	462.1	0	2.94	1687.21	7.57	1683.61	7.55	-3.6	-0.21
79	224	145	66	3584	0.913186	653.42	0.573661	768.64	474.31	-0.67	2.9	1689.86	7.54	1687.11	7.53	-2.76	-0.16
79	225	146	67	3600	0.911328	654.03	0.574444	768.45	486.63	0	2.86	1693.75	7.53	1690.14	7.51	-3.61	-0.21
79	226	147	68	3616	0.909468	654.63	0.575221	768.27	499.06	-0.67	2.83	1696.2	7.51	1693.43	7.49	-2.78	-0.16
79	227	148	69	3632	0.907605	655.21	0.575991	768.11	511.59	0	2.79	1699.88	7.49	1696.25	7.47	-3.63	-0.21
79	228	149	70	3648	0.90574	655.79	0.576754	767.95	524.23	-0.66	2.75	1702.13	7.47	1699.34	7.45	-2.8	-0.16
79	229	150	71	3664	0.903873	656.35	0.577511	767.8	536.97	0	2.72	1705.61	7.45	1701.96	7.43	-3.65	-0.21
79	230	151	72	3680	0.902004	656.89	0.578261	767.66	549.81	-0.66	2.69	1707.66	7.42	1704.84	7.41	-2.82	-0.17
79	231	152	73	3696	0.900133	657.43	0.579004	767.54	562.75	0	2.65	1710.94	7.41	1707.26	7.39	-3.67	-0.22
79	232	153	74	3712	0.898261	657.96	0.579741	767.42	575.79	-0.66	2.62	1712.8	7.38	1709.95	7.37	-2.85	-0.17
79	233	154	75	3728	0.896388	658.47	0.580472	767.31	588.93	0	2.59	1715.88	7.36	1712.18	7.35	-3.7	-0.22
79	234	155	76	3744	0.894514	658.97	0.581197	767.2	602.17	-0.65	2.56	1717.56	7.34	1714.67	7.33	-2.89	-0.17
79	235	156	77	3760	0.892639	659.46	0.581915	767.11	615.5	0	2.53	1720.45	7.32	1716.71	7.31	-3.74	-0.22
79	236	157	78	3776	0.890764	659.94	0.582627	767.03	628.93	-0.65	2.5	1721.95	7.3	1719.02	7.28	-2.93	-0.17
79	237	158	79	3792	0.888889	660.41	0.583333	766.95	642.44	0	2.47	1724.66	7.28	1720.87	7.26	-3.79	-0.22
79	238	159	80	3808	0.887014	660.87	0.584034	766.89	656.06	-0.65	2.44	1725.98	7.25	1722.99	7.24	-2.98	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
79	239	160	81	3824	0.885139	661.32	0.584728	766.83	669.76	0	2.41	1728.51	7.23	1724.66	7.22	-3.84	-0.22
79	240	161	82	3840	0.883264	661.76	0.585417	766.78	683.55	-0.65	2.38	1729.65	7.21	1726.61	7.19	-3.04	-0.18
79	241	162	83	3856	0.88139	662.19	0.5861	766.73	697.43	0	2.35	1732.01	7.19	1728.1	7.17	-3.9	-0.23
79	242	163	84	3872	0.879516	662.61	0.586777	766.7	711.4	-0.64	2.33	1732.99	7.16	1729.87	7.15	-3.11	-0.18
79	243	164	85	3888	0.877644	663.02	0.587449	766.67	725.45	0	2.3	1735.17	7.14	1731.19	7.12	-3.98	-0.23
79	244	165	86	3904	0.875773	663.42	0.588115	766.65	739.59	-0.64	2.28	1735.98	7.11	1732.79	7.1	-3.19	-0.18
79	245	166	87	3920	0.873903	663.81	0.588776	766.64	753.81	0	2.25	1738	7.09	1733.94	7.08	-4.06	-0.23
79	246	167	88	3936	0.872034	664.19	0.589431	766.63	768.12	-0.64	2.23	1738.65	7.07	1735.37	7.05	-3.28	-0.19
79	247	168	89	3952	0.870167	664.56	0.590081	766.63	782.51	0	2.2	1740.5	7.05	1736.35	7.03	-4.15	-0.24
79	248	169	90	3968	0.868301	664.93	0.590726	766.64	796.97	-0.64	2.18	1741	7.02	1737.62	7.01	-3.38	-0.19
79	249	170	91	3984	0.866438	665.28	0.591365	766.65	811.52	0	2.15	1742.69	7	1738.44	6.98	-4.26	-0.24
79	250	171	92	4000	0.864576	665.63	0.592	766.68	826.15	-0.63	2.13	1743.04	6.97	1739.54	6.96	-3.5	-0.2
79	251	172	93	4016	0.862716	665.97	0.592629	766.7	840.86	0	2.11	1744.58	6.95	1740.2	6.93	-4.37	-0.25
79	252	173	94	4032	0.860859	666.3	0.593254	766.74	855.65	-0.63	2.09	1744.78	6.92	1741.15	6.91	-3.62	-0.21
79	253	174	95	4048	0.859004	666.62	0.593874	766.78	870.51	0	2.07	1746.16	6.9	1741.65	6.88	-4.5	-0.26
79	254	175	96	4064	0.857152	666.93	0.594488	766.83	885.45	-0.63	2.04	1746.21	6.87	1742.45	6.86	-3.76	-0.22
79	255	176	97	4080	0.855302	667.24	0.595098	766.88	900.46	0	2.02	1747.45	6.85	1742.8	6.83	-4.65	-0.27
79	256	177	98	4096	0.853455	667.54	0.595703	766.94	915.54	-0.62	2	1747.36	6.83	1743.45	6.81	-3.91	-0.22
79	257	178	99	4112	0.85161	667.83	0.596304	767.01	930.7	0	1.98	1748.45	6.8	1743.64	6.78	-4.8	-0.28
79	258	179	100	4128	0.849769	668.11	0.596899	767.08	945.93	-0.62	1.96	1748.22	6.78	1744.14	6.76	-4.08	-0.23
79	259	180	101	4144	0.84793	668.39	0.59749	767.16	961.23	0	1.94	1749.17	6.75	1744.19	6.73	-4.97	-0.29
79	260	181	102	4160	0.846095	668.66	0.598077	767.24	976.61	-0.62	1.92	1748.8	6.73	1744.55	6.71	-4.26	-0.24
79	261	182	103	4176	0.844262	668.92	0.598659	767.33	992.05	0	1.91	1749.61	6.7	1744.46	6.68	-5.16	-0.3
79	262	183	104	4192	0.842433	669.17	0.599237	767.42	1007.56	-0.62	1.89	1749.12	6.68	1744.67	6.66	-4.45	-0.26
79	263	184	105	4208	0.840608	669.42	0.59981	767.52	1023.14	0	1.87	1749.79	6.65	1744.43	6.63	-5.36	-0.31
79	264	185	106	4224	0.838786	669.66	0.600379	767.63	1038.79	-0.62	1.85	1749.16	6.63	1744.51	6.61	-4.66	-0.27
79	265	186	107	4240	0.836967	669.9	0.600943	767.74	1054.5	0	1.83	1749.7	6.6	1744.13	6.58	-5.57	-0.32
79	266	187	108	4256	0.835152	670.12	0.601504	767.85	1070.28	-0.61	1.82	1748.95	6.58	1744.07	6.56	-4.88	-0.28
79	267	188	109	4272	0.83334	670.34	0.60206	767.97	1086.12	0	1.8	1749.36	6.55	1743.56	6.53	-5.8	-0.33
79	268	189	110	4288	0.831533	670.56	0.602612	768.1	1102.03	-0.61	1.78	1748.49	6.52	1743.37	6.51	-5.12	-0.29
79	269	190	111	4304	0.829729	670.77	0.60316	768.23	1118	0	1.77	1748.77	6.5	1742.73	6.48	-6.04	-0.35
79	270	191	112	4320	0.827929	670.97	0.603704	768.36	1134.04	-0.61	1.75	1747.77	6.47	1742.4	6.45	-5.37	-0.31
79	271	192	113	4336	0.826133	671.17	0.604244	768.5	1150.13	0	1.74	1747.93	6.45	1741.63	6.43	-6.3	-0.36
79	272	193	114	4352	0.82434	671.36	0.604779	768.65	1166.29	-0.61	1.72	1746.82	6.42	1741.17	6.4	-5.64	-0.32
79	273	194	115	4368	0.822552	671.54	0.605311	768.8	1182.51	0	1.7	1746.85	6.4	1740.28	6.37	-6.58	-0.38
79	274	195	116	4384	0.820768	671.72	0.605839	768.95	1198.79	-0.6	1.69	1745.62	6.37	1739.69	6.35	-5.93	-0.34
79	275	196	117	4400	0.818988	671.89	0.606364	769.11	1215.13	0	1.67	1745.54	6.35	1738.67	6.32	-6.87	-0.4
79	276	197	118	4416	0.817213	672.06	0.606884	769.27	1231.53	-0.6	1.66	1744.2	6.32	1737.97	6.3	-6.23	-0.36
79	277	198	119	4432	0.815441	672.22	0.607401	769.44	1247.99	0	1.65	1744	6.3	1736.82	6.27	-7.18	-0.41
79	278	199	120	4448	0.813674	672.38	0.607914	769.61	1264.5	-0.6	1.63	1742.54	6.27	1735.99	6.24	-6.55	-0.38
79	279	200	121	4464	0.811911	672.53	0.608423	769.78	1281.07	0	1.62	1742.23	6.24	1734.72	6.22	-7.51	-0.43
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
80	159	79	-1	2544	0.99996	569.35	0.498428	838.78	0.15	0	9.74	1145.45	7.2	1154.06	7.26	8.6	0.75
80	160	80	0	2560	1	571.76	0.5	837.01	0	0.79	10	1162.02	7.26	1169.76	7.31	7.74	0.66

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
80	161	81	1	2576	0.999961	574.12	0.501553	835.29	0.15	0	9.74	1176.18	7.31	1183.02	7.35	6.84	0.58
80	162	82	2	2592	0.999848	576.43	0.503086	833.62	0.6	0.79	9.49	1191.63	7.36	1198.18	7.4	6.55	0.55
80	163	83	3	2608	0.999661	578.69	0.504601	831.99	1.34	0	9.26	1205.23	7.39	1210.94	7.43	5.7	0.47
80	164	84	4	2624	0.999405	580.91	0.506098	830.4	2.38	0.78	9.03	1220.12	7.44	1225.59	7.47	5.46	0.45
80	165	85	5	2640	0.999082	583.08	0.507576	828.86	3.69	0	8.8	1233.18	7.47	1237.85	7.5	4.67	0.38
80	166	86	6	2656	0.998694	585.2	0.509036	827.35	5.28	0.78	8.59	1247.53	7.52	1252.01	7.54	4.48	0.36
80	167	87	7	2672	0.998243	587.29	0.510479	825.89	7.15	0	8.39	1260.06	7.55	1263.8	7.57	3.73	0.3
80	168	88	8	2688	0.997732	589.33	0.511905	824.47	9.28	0.77	8.19	1273.89	7.58	1277.47	7.6	3.58	0.28
80	169	89	9	2704	0.997164	591.32	0.513314	823.08	11.67	0	8	1285.92	7.61	1288.8	7.63	2.88	0.22
80	170	90	10	2720	0.99654	593.28	0.514706	821.73	14.33	0.77	7.81	1299.24	7.64	1302	7.66	2.77	0.21
80	171	91	11	2736	0.995862	595.2	0.516082	820.42	17.23	0	7.63	1310.78	7.67	1312.89	7.68	2.11	0.16
80	172	92	12	2752	0.995133	597.08	0.517442	819.14	20.39	0.76	7.46	1323.61	7.7	1325.64	7.71	2.03	0.15
80	173	93	13	2768	0.994353	598.93	0.518786	817.9	23.8	0	7.29	1334.67	7.71	1336.09	7.72	1.41	0.11
80	174	94	14	2784	0.993526	600.73	0.520115	816.69	27.44	0.76	7.13	1347.03	7.74	1348.4	7.75	1.37	0.1
80	175	95	15	2800	0.992653	602.5	0.521429	815.51	31.32	0	6.98	1357.65	7.76	1358.43	7.76	0.79	0.06
80	176	96	16	2816	0.991736	604.24	0.522727	814.36	35.43	0.75	6.83	1369.55	7.78	1370.32	7.79	0.77	0.06
80	177	97	17	2832	0.990775	605.93	0.524011	813.25	39.78	0	6.68	1379.72	7.8	1379.95	7.8	0.22	0.02
80	178	98	18	2848	0.989774	607.6	0.525281	812.16	44.34	0.75	6.54	1391.18	7.82	1391.42	7.82	0.23	0.02
80	179	99	19	2864	0.988733	609.23	0.526536	811.11	49.13	0	6.4	1400.93	7.83	1400.65	7.82	-0.28	-0.02
80	180	100	20	2880	0.987654	610.83	0.527778	810.08	54.14	0.75	6.27	1411.96	7.84	1411.72	7.84	-0.24	-0.02
80	181	101	21	2896	0.986539	612.4	0.529006	809.08	59.36	0	6.14	1421.3	7.85	1420.57	7.85	-0.73	-0.05
80	182	102	22	2912	0.985388	613.94	0.53022	808.11	64.8	0.74	6.02	1431.92	7.87	1431.25	7.86	-0.67	-0.05
80	183	103	23	2928	0.984204	615.44	0.531421	807.17	70.44	0	5.9	1440.85	7.87	1439.73	7.87	-1.13	-0.08
80	184	104	24	2944	0.982987	616.92	0.532609	806.25	76.28	0.74	5.78	1451.07	7.89	1450.03	7.88	-1.05	-0.07
80	185	105	25	2960	0.981738	618.37	0.533784	805.35	82.32	0	5.67	1459.63	7.89	1458.15	7.88	-1.48	-0.1
80	186	106	26	2976	0.98046	619.78	0.534946	804.49	88.56	0.73	5.56	1469.46	7.9	1468.08	7.89	-1.38	-0.09
80	187	107	27	2992	0.979153	621.17	0.536096	803.64	95	0	5.45	1477.64	7.9	1475.85	7.89	-1.79	-0.12
80	188	108	28	3008	0.977818	622.54	0.537234	802.82	101.63	0.73	5.35	1487.09	7.91	1485.42	7.9	-1.67	-0.11
80	189	109	29	3024	0.976456	623.87	0.53836	802.03	108.44	0	5.25	1494.91	7.91	1492.85	7.9	-2.06	-0.14
80	190	110	30	3040	0.975069	625.18	0.539474	801.25	115.44	0.73	5.15	1504	7.92	1502.08	7.91	-1.93	-0.13
80	191	111	31	3056	0.973658	626.47	0.540576	800.5	122.62	0	5.06	1511.47	7.91	1509.18	7.9	-2.29	-0.15
80	192	112	32	3072	0.972222	627.72	0.541667	799.77	129.99	0.72	4.97	1520.21	7.92	1518.06	7.91	-2.15	-0.14
80	193	113	33	3088	0.970764	628.96	0.542746	799.06	137.52	0	4.88	1527.33	7.91	1524.84	7.9	-2.5	-0.16
80	194	114	34	3104	0.969285	630.16	0.543814	798.37	145.24	0.72	4.79	1535.73	7.92	1533.4	7.9	-2.34	-0.15
80	195	115	35	3120	0.967784	631.35	0.544872	797.7	153.12	0	4.71	1542.53	7.91	1539.86	7.9	-2.67	-0.17
80	196	116	36	3136	0.966264	632.51	0.545918	797.06	161.17	0.71	4.62	1550.6	7.91	1548.1	7.9	-2.5	-0.16
80	197	117	37	3152	0.964725	633.65	0.546954	796.43	169.39	0	4.54	1557.07	7.9	1554.25	7.89	-2.82	-0.18
80	198	118	38	3168	0.963167	634.77	0.54798	795.82	177.77	0.71	4.47	1564.82	7.9	1562.18	7.89	-2.64	-0.17
80	199	119	39	3184	0.961592	635.86	0.548995	795.23	186.32	0	4.39	1570.98	7.89	1568.04	7.88	-2.94	-0.19
80	200	120	40	3200	0.96	636.93	0.55	794.66	195.02	0.71	4.32	1578.42	7.89	1575.66	7.88	-2.75	-0.17
80	201	121	41	3216	0.958392	637.98	0.550995	794.1	203.88	0	4.25	1584.28	7.88	1581.24	7.87	-3.05	-0.19
80	202	122	42	3232	0.956769	639.01	0.55198	793.56	212.89	0.7	4.18	1591.41	7.88	1588.56	7.86	-2.85	-0.18
80	203	123	43	3248	0.955131	640.02	0.552956	793.04	222.06	0	4.11	1596.99	7.87	1593.85	7.85	-3.13	-0.2
80	204	124	44	3264	0.953479	641.01	0.553922	792.54	231.37	0.7	4.04	1603.82	7.86	1600.89	7.85	-2.93	-0.18
80	205	125	45	3280	0.951814	641.98	0.554878	792.05	240.83	0	3.98	1609.11	7.85	1605.91	7.83	-3.2	-0.2
80	206	126	46	3296	0.950137	642.93	0.555825	791.58	250.44	0.7	3.91	1615.66	7.84	1612.67	7.83	-2.99	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
80	207	127	47	3312	0.948447	643.87	0.556763	791.13	260.19	0	3.85	1620.67	7.83	1617.42	7.81	-3.26	-0.2
80	208	128	48	3328	0.946746	644.78	0.557692	790.69	270.08	0.69	3.79	1626.94	7.82	1623.9	7.81	-3.04	-0.19
80	209	129	49	3344	0.945033	645.67	0.558612	790.26	280.11	0	3.74	1631.69	7.81	1628.39	7.79	-3.3	-0.2
80	210	130	50	3360	0.943311	646.55	0.559524	789.85	290.28	0.69	3.68	1637.69	7.8	1634.61	7.78	-3.08	-0.19
80	211	131	51	3376	0.941578	647.41	0.560427	789.46	300.58	0	3.62	1642.17	7.78	1638.84	7.77	-3.33	-0.2
80	212	132	52	3392	0.939836	648.25	0.561321	789.08	311.02	0.69	3.57	1647.91	7.77	1644.8	7.76	-3.11	-0.19
80	213	133	53	3408	0.938085	649.08	0.562207	788.71	321.58	0	3.52	1652.14	7.76	1648.79	7.74	-3.35	-0.2
80	214	134	54	3424	0.936326	649.89	0.563084	788.36	332.28	0.68	3.47	1657.62	7.75	1654.49	7.73	-3.13	-0.19
80	215	135	55	3440	0.934559	650.68	0.563953	788.02	343.11	0	3.41	1661.61	7.73	1658.24	7.71	-3.37	-0.2
80	216	136	56	3456	0.932785	651.46	0.564815	787.69	354.06	0.68	3.37	1666.84	7.72	1663.7	7.7	-3.14	-0.19
80	217	137	57	3472	0.931003	652.22	0.565668	787.38	365.13	0	3.32	1670.59	7.7	1667.21	7.68	-3.38	-0.2
80	218	138	58	3488	0.929215	652.96	0.566514	787.07	376.33	0.68	3.27	1675.58	7.69	1672.43	7.67	-3.16	-0.19
80	219	139	59	3504	0.92742	653.69	0.567352	786.78	387.65	0	3.23	1679.1	7.67	1675.71	7.65	-3.39	-0.2
80	220	140	60	3520	0.92562	654.41	0.568182	786.51	399.09	0.67	3.18	1683.85	7.65	1680.69	7.64	-3.16	-0.19
80	221	141	61	3536	0.923814	655.11	0.569005	786.24	410.64	0	3.14	1687.14	7.63	1683.75	7.62	-3.39	-0.2
80	222	142	62	3552	0.922003	655.8	0.56982	785.99	422.31	0.67	3.09	1691.66	7.62	1688.5	7.61	-3.17	-0.19
80	223	143	63	3568	0.920187	656.47	0.570628	785.75	434.1	0	3.05	1694.73	7.6	1691.34	7.58	-3.4	-0.2
80	224	144	64	3584	0.918367	657.13	0.571429	785.52	446	0.67	3.01	1699.03	7.58	1695.86	7.57	-3.17	-0.19
80	225	145	65	3600	0.916543	657.77	0.572222	785.3	458.01	0	2.97	1701.89	7.56	1698.49	7.55	-3.4	-0.2
80	226	146	66	3616	0.914715	658.41	0.573009	785.09	470.13	0.67	2.93	1705.97	7.55	1702.79	7.53	-3.18	-0.19
80	227	147	67	3632	0.912884	659.02	0.573789	784.89	482.36	0	2.89	1708.62	7.53	1705.21	7.51	-3.41	-0.2
80	228	148	68	3648	0.91105	659.63	0.574561	784.7	494.7	0.66	2.86	1712.49	7.51	1709.3	7.5	-3.19	-0.19
80	229	149	69	3664	0.909212	660.22	0.575328	784.53	507.14	0	2.82	1714.93	7.49	1711.51	7.47	-3.42	-0.2
80	230	150	70	3680	0.907372	660.8	0.576087	784.36	519.69	0.66	2.79	1718.59	7.47	1715.4	7.46	-3.2	-0.19
80	231	151	71	3696	0.90553	661.37	0.57684	784.2	532.34	0	2.75	1720.84	7.45	1717.41	7.43	-3.43	-0.2
80	232	152	72	3712	0.903686	661.93	0.577586	784.05	545.09	0.66	2.72	1724.3	7.43	1721.09	7.42	-3.21	-0.19
80	233	153	73	3728	0.90184	662.47	0.578326	783.92	557.94	0	2.68	1726.35	7.41	1722.91	7.39	-3.44	-0.2
80	234	154	74	3744	0.899993	663.01	0.57906	783.79	570.89	0.65	2.65	1729.62	7.39	1726.39	7.38	-3.23	-0.19
80	235	155	75	3760	0.898144	663.53	0.579787	783.67	583.94	0	2.62	1731.48	7.37	1728.01	7.35	-3.47	-0.2
80	236	156	76	3776	0.896294	664.04	0.580508	783.56	597.09	0.65	2.59	1734.55	7.35	1731.3	7.34	-3.26	-0.19
80	237	157	77	3792	0.894444	664.54	0.581224	783.46	610.33	0	2.55	1736.23	7.33	1732.74	7.31	-3.49	-0.2
80	238	158	78	3808	0.892592	665.03	0.581933	783.36	623.66	0.65	2.52	1739.12	7.31	1735.83	7.29	-3.29	-0.19
80	239	159	79	3824	0.890741	665.51	0.582636	783.28	637.09	0	2.5	1740.62	7.28	1737.09	7.27	-3.53	-0.2
80	240	160	80	3840	0.888889	665.97	0.583333	783.2	650.61	0.65	2.47	1743.33	7.26	1740	7.25	-3.33	-0.19
80	241	161	81	3856	0.887037	666.43	0.584025	783.13	664.22	0	2.44	1744.65	7.24	1741.08	7.22	-3.57	-0.21
80	242	162	82	3872	0.885185	666.88	0.584711	783.07	677.92	0.64	2.41	1747.18	7.22	1743.8	7.21	-3.38	-0.19
80	243	163	83	3888	0.883334	667.32	0.585391	783.02	691.71	0	2.38	1748.33	7.19	1744.71	7.18	-3.62	-0.21
80	244	164	84	3904	0.881483	667.74	0.586066	782.98	705.59	0.64	2.36	1750.69	7.17	1747.25	7.16	-3.44	-0.2
80	245	165	85	3920	0.879633	668.16	0.586735	782.94	719.55	0	2.33	1751.68	7.15	1747.99	7.13	-3.68	-0.21
80	246	166	86	3936	0.877784	668.57	0.587398	782.91	733.6	0.64	2.3	1753.86	7.13	1750.36	7.12	-3.5	-0.2
80	247	167	87	3952	0.875936	668.97	0.588057	782.89	747.73	0	2.28	1754.69	7.1	1750.93	7.09	-3.75	-0.21
80	248	168	88	3968	0.874089	669.36	0.58871	782.88	761.95	0.64	2.25	1756.7	7.08	1753.13	7.07	-3.58	-0.2
80	249	169	89	3984	0.872244	669.74	0.589357	782.87	776.25	0	2.23	1757.37	7.06	1753.54	7.04	-3.84	-0.22
80	250	170	90	4000	0.8704	670.11	0.59	782.87	790.62	0.63	2.2	1759.23	7.04	1755.56	7.02	-3.67	-0.21
80	251	171	91	4016	0.868558	670.48	0.590637	782.88	805.08	0	2.18	1759.74	7.01	1755.81	7	-3.93	-0.22
80	252	172	92	4032	0.866717	670.83	0.59127	782.89	819.62	0.63	2.16	1761.44	6.99	1757.68	6.97	-3.77	-0.21

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
80	253	173	93	4048	0.864878	671.18	0.591897	782.91	834.24	0	2.14	1761.8	6.96	1757.77	6.95	-4.03	-0.23
80	254	174	94	4064	0.863042	671.52	0.59252	782.94	848.94	0.63	2.11	1763.35	6.94	1759.47	6.93	-3.88	-0.22
80	255	175	95	4080	0.861207	671.85	0.593137	782.98	863.71	0	2.09	1763.56	6.92	1759.41	6.9	-4.15	-0.24
80	256	176	96	4096	0.859375	672.17	0.59375	783.02	878.55	0.62	2.07	1764.96	6.89	1760.96	6.88	-4	-0.23
80	257	177	97	4112	0.857545	672.48	0.594358	783.06	893.48	0	2.05	1765.03	6.87	1760.75	6.85	-4.28	-0.24
80	258	178	98	4128	0.855718	672.79	0.594961	783.12	908.47	0.62	2.03	1766.27	6.85	1762.14	6.83	-4.14	-0.23
80	259	179	99	4144	0.853893	673.09	0.59556	783.17	923.54	0	2.01	1766.2	6.82	1761.78	6.8	-4.42	-0.25
80	260	180	100	4160	0.852071	673.38	0.596154	783.24	938.68	0.62	1.99	1767.31	6.8	1763.02	6.78	-4.29	-0.24
80	261	181	101	4176	0.850252	673.66	0.596743	783.31	953.9	0	1.97	1767.1	6.77	1762.52	6.75	-4.58	-0.26
80	262	182	102	4192	0.848435	673.94	0.597328	783.39	969.18	0.62	1.95	1768.06	6.75	1763.61	6.73	-4.45	-0.25
80	263	183	103	4208	0.846622	674.21	0.597909	783.47	984.53	0	1.93	1767.72	6.72	1762.97	6.7	-4.75	-0.27
80	264	184	104	4224	0.844812	674.47	0.598485	783.56	999.96	0.62	1.91	1768.54	6.7	1763.92	6.68	-4.63	-0.26
80	265	185	105	4240	0.843005	674.73	0.599057	783.65	1015.45	0	1.89	1768.07	6.67	1763.14	6.65	-4.93	-0.28
80	266	186	106	4256	0.841201	674.98	0.599624	783.75	1031	0.61	1.88	1768.76	6.65	1763.94	6.63	-4.82	-0.27
80	267	187	107	4272	0.8394	675.22	0.600187	783.85	1046.63	0	1.86	1768.16	6.62	1763.03	6.6	-5.13	-0.29
80	268	188	108	4288	0.837603	675.46	0.600746	783.96	1062.32	0.61	1.84	1768.72	6.6	1763.69	6.58	-5.02	-0.28
80	269	189	109	4304	0.835809	675.68	0.601301	784.08	1078.08	0	1.82	1767.99	6.57	1762.65	6.55	-5.34	-0.3
80	270	190	110	4320	0.834019	675.91	0.601852	784.2	1093.9	0.61	1.81	1768.42	6.55	1763.17	6.53	-5.25	-0.3
80	271	191	111	4336	0.832233	676.12	0.602399	784.32	1109.78	0	1.79	1767.57	6.52	1762	6.5	-5.57	-0.32
80	272	192	112	4352	0.83045	676.33	0.602941	784.45	1125.73	0.61	1.77	1767.87	6.5	1762.39	6.48	-5.48	-0.31
80	273	193	113	4368	0.828671	676.54	0.60348	784.58	1141.74	0	1.76	1766.9	6.47	1761.08	6.45	-5.81	-0.33
80	274	194	114	4384	0.826895	676.74	0.604015	784.72	1157.81	0.6	1.74	1767.08	6.45	1761.34	6.43	-5.74	-0.33
80	275	195	115	4400	0.825124	676.93	0.604545	784.87	1173.94	0	1.73	1765.99	6.42	1759.92	6.4	-6.07	-0.35
80	276	196	116	4416	0.823356	677.11	0.605072	785.01	1190.14	0.6	1.71	1766.05	6.4	1760.04	6.38	-6	-0.34
80	277	197	117	4432	0.821593	677.3	0.605596	785.17	1206.39	0	1.7	1764.85	6.37	1758.5	6.35	-6.35	-0.36
80	278	198	118	4448	0.819833	677.47	0.606115	785.32	1222.7	0.6	1.68	1764.79	6.35	1758.5	6.33	-6.29	-0.36
80	279	199	119	4464	0.818078	677.64	0.606631	785.49	1239.07	0	1.67	1763.47	6.32	1756.83	6.3	-6.64	-0.38
80	280	200	120	4480	0.816327	677.8	0.607143	785.65	1255.5	0.6	1.65	1763.29	6.3	1756.7	6.27	-6.59	-0.38
80	281	201	121	4496	0.814579	677.96	0.607651	785.82	1271.99	0	1.64	1761.87	6.27	1754.92	6.25	-6.95	-0.4
80	282	202	122	4512	0.812836	678.12	0.608156	786	1288.53	0.6	1.63	1761.58	6.25	1754.67	6.22	-6.91	-0.39
80	283	203	123	4528	0.811098	678.26	0.608657	786.18	1305.13	0	1.61	1760.05	6.22	1752.77	6.19	-7.28	-0.42
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
81	161	80	-1	2576	0.999961	574.12	0.498447	856.3	0.15	0	9.74	1155.17	7.17	1163.81	7.23	8.64	0.74
81	162	81	0	2592	1	576.52	0.5	854.52	0	-0.79	10	1170.18	7.22	1178.55	7.27	8.37	0.71
81	163	82	1	2608	0.999962	578.86	0.501534	852.79	0.15	0	9.75	1185.94	7.28	1192.81	7.32	6.87	0.58
81	164	83	2	2624	0.999851	581.17	0.503049	851.1	0.59	-0.78	9.5	1199.86	7.32	1207.04	7.36	7.17	0.59
81	165	84	3	2640	0.999669	583.42	0.504545	849.45	1.33	0	9.26	1215.06	7.36	1220.79	7.4	5.72	0.47
81	166	85	4	2656	0.999419	585.63	0.506024	847.85	2.35	-0.78	9.04	1228.43	7.4	1234.51	7.44	6.08	0.49
81	167	86	5	2672	0.999104	587.79	0.507485	846.29	3.65	0	8.82	1243.09	7.44	1247.77	7.47	4.68	0.37
81	168	87	6	2688	0.998724	589.91	0.508929	844.77	5.22	-0.77	8.61	1255.93	7.48	1261.01	7.51	5.08	0.4
81	169	88	7	2704	0.998284	591.99	0.510355	843.3	7.06	0	8.4	1270.06	7.52	1273.78	7.54	3.73	0.29
81	170	89	8	2720	0.997785	594.03	0.511765	841.86	9.17	-0.77	8.21	1282.39	7.54	1286.56	7.57	4.17	0.32
81	171	90	9	2736	0.99723	596.02	0.513158	840.46	11.54	0	8.02	1296	7.58	1298.87	7.6	2.86	0.22
81	172	91	10	2752	0.99662	597.98	0.514535	839.09	14.16	-0.76	7.83	1307.84	7.6	1311.19	7.62	3.35	0.26

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
81	173	92	11	2768	0.995957	599.89	0.515896	837.76	17.04	0	7.66	1320.97	7.64	1323.05	7.65	2.08	0.16
81	174	93	12	2784	0.995244	601.77	0.517241	836.47	20.16	-0.76	7.49	1332.33	7.66	1334.93	7.67	2.6	0.2
81	175	94	13	2800	0.994482	603.61	0.518571	835.21	23.52	0	7.32	1344.97	7.69	1346.35	7.69	1.37	0.1
81	176	95	14	2816	0.993673	605.42	0.519886	833.98	27.13	-0.75	7.16	1355.88	7.7	1357.81	7.71	1.93	0.14
81	177	96	15	2832	0.992818	607.18	0.521186	832.79	30.97	0	7.01	1368.06	7.73	1368.8	7.73	0.74	0.05
81	178	97	16	2848	0.99192	608.92	0.522472	831.63	35.04	-0.75	6.86	1378.52	7.74	1379.85	7.75	1.32	0.1
81	179	98	17	2864	0.99098	610.62	0.523743	830.5	39.33	0	6.71	1390.26	7.77	1390.42	7.77	0.16	0.01
81	180	99	18	2880	0.99	612.28	0.525	829.4	43.86	-0.75	6.57	1400.29	7.78	1401.07	7.78	0.78	0.06
81	181	100	19	2896	0.988981	613.92	0.526243	828.33	48.59	0	6.43	1411.6	7.8	1411.25	7.8	-0.35	-0.03
81	182	101	20	2912	0.987924	615.52	0.527473	827.28	53.55	-0.74	6.3	1421.21	7.81	1421.5	7.81	0.29	0.02
81	183	102	21	2928	0.986831	617.09	0.528689	826.27	58.72	0	6.18	1432.1	7.83	1431.29	7.82	-0.81	-0.06
81	184	103	22	2944	0.985704	618.62	0.529891	825.28	64.1	-0.74	6.05	1441.31	7.83	1441.17	7.83	-0.15	-0.01
81	185	104	23	2960	0.984543	620.13	0.531081	824.32	69.68	0	5.93	1451.8	7.85	1450.58	7.84	-1.22	-0.08
81	186	105	24	2976	0.983351	621.61	0.532258	823.39	75.46	-0.73	5.82	1460.62	7.85	1460.09	7.85	-0.53	-0.04
81	187	106	25	2992	0.982127	623.06	0.533422	822.48	81.45	0	5.7	1470.71	7.86	1469.13	7.86	-1.58	-0.11
81	188	107	26	3008	0.980874	624.48	0.534574	821.6	87.63	-0.73	5.59	1479.16	7.87	1478.28	7.86	-0.87	-0.06
81	189	108	27	3024	0.979592	625.88	0.535714	820.74	94	0	5.49	1488.87	7.88	1486.97	7.87	-1.9	-0.13
81	190	109	28	3040	0.978283	627.24	0.536842	819.9	100.56	-0.73	5.39	1496.95	7.88	1495.77	7.87	-1.18	-0.08
81	191	110	29	3056	0.976947	628.58	0.537958	819.09	107.31	0	5.29	1506.3	7.89	1504.11	7.87	-2.18	-0.15
81	192	111	30	3072	0.975586	629.89	0.539062	818.3	114.25	-0.72	5.19	1514.02	7.89	1512.58	7.88	-1.44	-0.1
81	193	112	31	3088	0.974201	631.18	0.540155	817.54	121.36	0	5.09	1523.01	7.89	1520.58	7.88	-2.43	-0.16
81	194	113	32	3104	0.972792	632.45	0.541237	816.79	128.65	-0.72	5	1530.39	7.89	1528.72	7.88	-1.67	-0.11
81	195	114	33	3120	0.971361	633.68	0.542308	816.07	136.12	0	4.91	1539.04	7.89	1536.4	7.88	-2.64	-0.17
81	196	115	34	3136	0.969908	634.9	0.543367	815.37	143.76	-0.71	4.83	1546.09	7.89	1544.22	7.88	-1.87	-0.12
81	197	116	35	3152	0.968435	636.09	0.544416	814.69	151.57	0	4.74	1554.4	7.89	1551.57	7.88	-2.82	-0.18
81	198	117	36	3168	0.966942	637.25	0.545455	814.02	159.55	-0.71	4.66	1561.12	7.88	1559.08	7.87	-2.04	-0.13
81	199	118	37	3184	0.96543	638.4	0.546482	813.38	167.7	0	4.58	1569.1	7.88	1566.12	7.87	-2.98	-0.19
81	200	119	38	3200	0.9639	639.52	0.5475	812.76	176.01	-0.71	4.5	1575.51	7.88	1573.33	7.87	-2.19	-0.14
81	201	120	39	3216	0.962352	640.62	0.548507	812.15	184.47	0	4.43	1583.18	7.88	1580.07	7.86	-3.11	-0.2
81	202	121	40	3232	0.960788	641.7	0.549505	811.57	193.1	-0.7	4.35	1589.29	7.87	1586.98	7.86	-2.31	-0.15
81	203	122	41	3248	0.959208	642.75	0.550493	811	201.88	0	4.28	1596.65	7.87	1593.43	7.85	-3.22	-0.2
81	204	123	42	3264	0.957612	643.79	0.551471	810.45	210.81	-0.7	4.21	1602.46	7.86	1600.05	7.84	-2.41	-0.15
81	205	124	43	3280	0.956002	644.81	0.552439	809.91	219.9	0	4.14	1609.52	7.85	1606.21	7.84	-3.31	-0.21
81	206	125	44	3296	0.954378	645.8	0.553398	809.4	229.13	-0.7	4.08	1615.04	7.84	1612.55	7.83	-2.5	-0.15
81	207	126	45	3312	0.952741	646.78	0.554348	808.9	238.52	0	4.01	1621.82	7.83	1618.43	7.82	-3.39	-0.21
81	208	127	46	3328	0.951091	647.74	0.555288	808.41	248.04	-0.69	3.95	1627.06	7.82	1624.5	7.81	-2.56	-0.16
81	209	128	47	3344	0.949429	648.68	0.55622	807.95	257.71	0	3.89	1633.56	7.82	1630.11	7.8	-3.45	-0.21
81	210	129	48	3360	0.947755	649.6	0.557143	807.49	267.52	-0.69	3.83	1638.53	7.8	1635.91	7.79	-2.62	-0.16
81	211	130	49	3376	0.94607	650.5	0.558057	807.06	277.47	0	3.77	1644.75	7.8	1641.25	7.78	-3.49	-0.21
81	212	131	50	3392	0.944375	651.38	0.558962	806.63	287.55	-0.69	3.71	1649.46	7.78	1646.79	7.77	-2.66	-0.16
81	213	132	51	3408	0.94267	652.25	0.559859	806.23	297.77	0	3.66	1655.41	7.77	1651.88	7.76	-3.53	-0.21
81	214	133	52	3424	0.940956	653.1	0.560748	805.83	308.12	-0.68	3.6	1659.86	7.76	1657.17	7.74	-2.7	-0.16
81	215	134	53	3440	0.939232	653.93	0.561628	805.45	318.61	0	3.55	1665.56	7.75	1662	7.73	-3.56	-0.21
81	216	135	54	3456	0.9375	654.75	0.5625	805.09	329.22	-0.68	3.5	1669.76	7.73	1667.04	7.72	-2.72	-0.16
81	217	136	55	3472	0.93576	655.55	0.563364	804.74	339.96	0	3.45	1675.2	7.72	1671.63	7.7	-3.58	-0.21
81	218	137	56	3488	0.934012	656.33	0.56422	804.4	350.82	-0.68	3.4	1679.17	7.7	1676.43	7.69	-2.74	-0.16

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
81	219	138	57	3504	0.932257	657.1	0.565068	804.07	361.81	0	3.35	1684.36	7.69	1680.77	7.67	-3.59	-0.21
81	220	139	58	3520	0.930496	657.86	0.565909	803.76	372.92	-0.67	3.3	1688.09	7.67	1685.34	7.66	-2.75	-0.16
81	221	140	59	3536	0.928728	658.59	0.566742	803.46	384.16	0	3.26	1693.05	7.66	1689.45	7.64	-3.6	-0.21
81	222	141	60	3552	0.926954	659.32	0.567568	803.17	395.51	-0.67	3.21	1696.55	7.64	1693.78	7.63	-2.76	-0.16
81	223	142	61	3568	0.925174	660.03	0.568386	802.89	406.98	0	3.17	1701.27	7.63	1697.67	7.61	-3.61	-0.21
81	224	143	62	3584	0.92339	660.72	0.569196	802.63	418.56	-0.67	3.13	1704.55	7.61	1701.78	7.6	-2.77	-0.16
81	225	144	63	3600	0.9216	661.4	0.57	802.38	430.26	0	3.09	1709.05	7.6	1705.43	7.58	-3.61	-0.21
81	226	145	64	3616	0.919806	662.07	0.570796	802.14	442.07	-0.67	3.04	1712.1	7.58	1709.33	7.56	-2.78	-0.16
81	227	146	65	3632	0.918007	662.72	0.571586	801.91	453.99	0	3	1716.38	7.56	1712.77	7.55	-3.62	-0.21
81	228	147	66	3648	0.916205	663.36	0.572368	801.69	466.03	-0.66	2.96	1719.23	7.54	1716.44	7.53	-2.78	-0.16
81	229	148	67	3664	0.914399	663.99	0.573144	801.48	478.17	0	2.93	1723.29	7.53	1719.67	7.51	-3.62	-0.21
81	230	149	68	3680	0.91259	664.6	0.573913	801.28	490.41	-0.66	2.89	1725.93	7.5	1723.14	7.49	-2.79	-0.16
81	231	150	69	3696	0.910778	665.2	0.574675	801.09	502.77	0	2.85	1729.79	7.49	1726.16	7.47	-3.63	-0.21
81	232	151	70	3712	0.908963	665.79	0.575431	800.91	515.23	-0.66	2.82	1732.22	7.47	1729.42	7.45	-2.8	-0.16
81	233	152	71	3728	0.907145	666.37	0.57618	800.75	527.79	0	2.78	1735.88	7.45	1732.24	7.43	-3.64	-0.21
81	234	153	72	3744	0.905325	666.94	0.576923	800.59	540.45	-0.65	2.75	1738.12	7.43	1735.3	7.42	-2.82	-0.16
81	235	154	73	3760	0.903504	667.49	0.57766	800.44	553.21	0	2.71	1741.57	7.41	1737.92	7.4	-3.65	-0.21
81	236	155	74	3776	0.901681	668.03	0.57839	800.3	566.07	-0.65	2.68	1743.62	7.39	1740.79	7.38	-2.84	-0.16
81	237	156	75	3792	0.899856	668.56	0.579114	800.17	579.03	0	2.65	1746.88	7.37	1743.21	7.36	-3.67	-0.21
81	238	157	76	3808	0.89803	669.08	0.579832	800.05	592.09	-0.65	2.62	1748.74	7.35	1745.88	7.34	-2.86	-0.16
81	239	158	77	3824	0.896203	669.59	0.580544	799.94	605.24	0	2.58	1751.81	7.33	1748.11	7.31	-3.7	-0.21
81	240	159	78	3840	0.894375	670.08	0.58125	799.84	618.49	-0.65	2.55	1753.5	7.31	1750.61	7.29	-2.89	-0.17
81	241	160	79	3856	0.892547	670.57	0.58195	799.75	631.83	0	2.52	1756.38	7.29	1752.65	7.27	-3.73	-0.21
81	242	161	80	3872	0.890718	671.05	0.582645	799.66	645.26	-0.64	2.49	1757.89	7.26	1754.96	7.25	-2.93	-0.17
81	243	162	81	3888	0.888889	671.51	0.583333	799.59	658.78	0	2.47	1760.59	7.25	1756.82	7.23	-3.77	-0.21
81	244	163	82	3904	0.88706	671.97	0.584016	799.52	672.39	-0.64	2.44	1761.92	7.22	1758.95	7.21	-2.97	-0.17
81	245	164	83	3920	0.885231	672.41	0.584694	799.46	686.09	0	2.41	1764.45	7.2	1760.63	7.19	-3.82	-0.22
81	246	165	84	3936	0.883403	672.85	0.585366	799.4	699.88	-0.64	2.38	1765.62	7.18	1762.59	7.17	-3.03	-0.17
81	247	166	85	3952	0.881575	673.27	0.586032	799.36	713.75	0	2.36	1767.97	7.16	1764.1	7.14	-3.87	-0.22
81	248	167	86	3968	0.879748	673.69	0.586694	799.32	727.71	-0.64	2.33	1768.97	7.13	1765.88	7.12	-3.09	-0.17
81	249	168	87	3984	0.877921	674.1	0.587349	799.29	741.75	0	2.31	1771.16	7.11	1767.22	7.1	-3.94	-0.22
81	250	169	88	4000	0.876096	674.5	0.588	799.27	755.88	-0.63	2.28	1772	7.09	1768.84	7.08	-3.16	-0.18
81	251	170	89	4016	0.874272	674.89	0.588645	799.26	770.08	0	2.26	1774.03	7.07	1770.01	7.05	-4.02	-0.23
81	252	171	90	4032	0.872449	675.27	0.589286	799.25	784.38	-0.63	2.23	1774.71	7.04	1771.46	7.03	-3.25	-0.18
81	253	172	91	4048	0.870628	675.64	0.589921	799.25	798.75	0	2.21	1776.57	7.02	1772.47	7.01	-4.1	-0.23
81	254	173	92	4064	0.868808	676	0.590551	799.26	813.2	-0.63	2.18	1777.1	7	1773.76	6.98	-3.34	-0.19
81	255	174	93	4080	0.86699	676.36	0.591176	799.27	827.72	0	2.16	1778.81	6.98	1774.61	6.96	-4.2	-0.24
81	256	175	94	4096	0.865173	676.7	0.591797	799.29	842.33	-0.62	2.14	1779.19	6.95	1775.75	6.94	-3.44	-0.19
81	257	176	95	4112	0.863359	677.04	0.592412	799.32	857.01	0	2.12	1780.75	6.93	1776.44	6.91	-4.31	-0.24
81	258	177	96	4128	0.861547	677.37	0.593023	799.35	871.77	-0.62	2.1	1780.98	6.9	1777.42	6.89	-3.56	-0.2
81	259	178	97	4144	0.859737	677.69	0.593629	799.39	886.6	0	2.07	1782.39	6.88	1777.96	6.86	-4.43	-0.25
81	260	179	98	4160	0.857929	678.01	0.594231	799.43	901.51	-0.62	2.05	1782.48	6.86	1778.79	6.84	-3.69	-0.21
81	261	180	99	4176	0.856124	678.32	0.594828	799.49	916.49	0	2.03	1783.74	6.83	1779.17	6.82	-4.57	-0.26
81	262	181	100	4192	0.854321	678.62	0.59542	799.54	931.55	-0.62	2.01	1783.69	6.81	1779.86	6.79	-3.84	-0.22
81	263	182	101	4208	0.852521	678.91	0.596008	799.61	946.67	0	1.99	1784.81	6.79	1780.09	6.77	-4.71	-0.26
81	264	183	102	4224	0.850723	679.19	0.596591	799.68	961.87	-0.62	1.97	1784.62	6.76	1780.63	6.74	-3.99	-0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
81	265	184	103	4240	0.848928	679.47	0.59717	799.75	977.13	0	1.95	1785.6	6.74	1780.73	6.72	-4.88	-0.27
81	266	185	104	4256	0.847137	679.74	0.597744	799.83	992.47	-0.61	1.94	1785.28	6.71	1781.12	6.7	-4.16	-0.23
81	267	186	105	4272	0.845348	680	0.598315	799.92	1007.87	0	1.92	1786.12	6.69	1781.07	6.67	-5.05	-0.28
81	268	187	106	4288	0.843562	680.26	0.598881	800.01	1023.34	-0.61	1.9	1785.68	6.66	1781.33	6.65	-4.35	-0.24
81	269	188	107	4304	0.841779	680.51	0.599442	800.11	1038.88	0	1.88	1786.38	6.64	1781.14	6.62	-5.24	-0.29
81	270	189	108	4320	0.84	680.75	0.6	800.21	1054.48	-0.61	1.86	1785.81	6.61	1781.26	6.6	-4.54	-0.26
81	271	190	109	4336	0.838224	680.99	0.600554	800.32	1070.15	0	1.85	1786.38	6.59	1780.94	6.57	-5.44	-0.31
81	272	191	110	4352	0.836451	681.22	0.601103	800.44	1085.88	-0.61	1.83	1785.68	6.57	1780.93	6.55	-4.76	-0.27
81	273	192	111	4368	0.834682	681.45	0.601648	800.55	1101.68	0	1.81	1786.13	6.54	1780.47	6.52	-5.66	-0.32
81	274	193	112	4384	0.832916	681.66	0.60219	800.68	1117.54	-0.6	1.8	1785.31	6.52	1780.32	6.5	-4.99	-0.28
81	275	194	113	4400	0.831154	681.88	0.602727	800.81	1133.47	0	1.78	1785.63	6.49	1779.74	6.47	-5.9	-0.33
81	276	195	114	4416	0.829395	682.08	0.603261	800.94	1149.45	-0.6	1.76	1784.69	6.47	1779.46	6.45	-5.23	-0.29
81	277	196	115	4432	0.82764	682.28	0.603791	801.08	1165.5	0	1.75	1784.89	6.44	1778.75	6.42	-6.15	-0.35
81	278	197	116	4448	0.825889	682.47	0.604317	801.22	1181.6	-0.6	1.73	1783.83	6.42	1778.34	6.4	-5.49	-0.31
81	279	198	117	4464	0.824142	682.66	0.604839	801.37	1197.77	0	1.72	1783.91	6.39	1777.5	6.37	-6.41	-0.36
81	280	199	118	4480	0.822398	682.85	0.605357	801.52	1214	-0.6	1.7	1782.74	6.37	1776.98	6.35	-5.76	-0.32
81	281	200	119	4496	0.820658	683.02	0.605872	801.68	1230.28	0	1.69	1782.7	6.34	1776.01	6.32	-6.69	-0.38
81	282	201	120	4512	0.818923	683.19	0.606383	801.84	1246.63	-0.6	1.67	1781.42	6.32	1775.37	6.3	-6.05	-0.34
81	283	202	121	4528	0.817191	683.36	0.60689	802	1263.03	0	1.66	1781.27	6.29	1774.28	6.27	-6.99	-0.39
81	284	203	122	4544	0.815463	683.52	0.607394	802.17	1279.49	-0.59	1.65	1779.87	6.27	1773.51	6.24	-6.36	-0.36
81	285	204	123	4560	0.81374	683.68	0.607895	802.35	1296	0	1.63	1779.61	6.24	1772.31	6.22	-7.3	-0.41
81	286	205	124	4576	0.81202	683.83	0.608392	802.52	1312.57	-0.59	1.62	1778.11	6.22	1771.42	6.19	-6.68	-0.38
81	287	206	125	4592	0.810305	683.97	0.608885	802.71	1329.19	0	1.61	1777.73	6.19	1770.1	6.17	-7.63	-0.43
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
82	163	81	-1	2608	0.999962	578.86	0.498466	873.97	0.15	0	9.75	1164.76	7.15	1173.44	7.2	8.68	0.74
82	164	82	0	2624	1	581.25	0.5	872.18	0	0.78	10	1181.35	7.2	1189.18	7.25	7.83	0.66
82	165	83	1	2640	0.999963	583.59	0.501515	870.43	0.15	0	9.75	1195.58	7.25	1202.5	7.29	6.92	0.58
82	166	84	2	2656	0.999855	585.88	0.503012	868.72	0.59	0.78	9.51	1211.09	7.3	1217.72	7.34	6.63	0.54
82	167	85	3	2672	0.999677	588.13	0.504491	867.06	1.31	0	9.27	1224.77	7.33	1230.55	7.37	5.78	0.47
82	168	86	4	2688	0.999433	590.33	0.505952	865.45	2.32	0.77	9.05	1239.72	7.38	1245.26	7.41	5.54	0.45
82	169	87	5	2704	0.999125	592.49	0.507396	863.87	3.6	0	8.83	1252.87	7.41	1257.61	7.44	4.74	0.38
82	170	88	6	2720	0.998754	594.6	0.508824	862.34	5.16	0.77	8.62	1267.29	7.45	1271.84	7.48	4.55	0.36
82	171	89	7	2736	0.998324	596.67	0.510234	860.85	6.98	0	8.42	1279.92	7.48	1283.72	7.51	3.8	0.3
82	172	90	8	2752	0.997837	598.71	0.511628	859.39	9.06	0.76	8.23	1293.83	7.52	1297.47	7.54	3.64	0.28
82	173	91	9	2768	0.997294	600.7	0.513006	857.97	11.4	0	8.04	1305.96	7.55	1308.9	7.57	2.94	0.22
82	174	92	10	2784	0.996697	602.65	0.514368	856.59	14	0.76	7.86	1319.37	7.58	1322.19	7.6	2.82	0.21
82	175	93	11	2800	0.996049	604.56	0.515714	855.25	16.84	0	7.68	1331.02	7.61	1333.18	7.62	2.16	0.16
82	176	94	12	2816	0.995351	606.44	0.517045	853.94	19.93	0.75	7.51	1343.95	7.64	1346.03	7.65	2.07	0.15
82	177	95	13	2832	0.994606	608.28	0.518362	852.67	23.26	0	7.35	1355.14	7.66	1356.59	7.66	1.45	0.11
82	178	96	14	2848	0.993814	610.08	0.519663	851.43	26.83	0.75	7.19	1367.61	7.68	1369.01	7.69	1.4	0.1
82	179	97	15	2864	0.992978	611.85	0.52095	850.22	30.62	0	7.03	1378.35	7.7	1379.16	7.7	0.82	0.06
82	180	98	16	2880	0.992099	613.58	0.522222	849.04	34.65	0.75	6.88	1390.36	7.72	1391.15	7.73	0.8	0.06
82	181	99	17	2896	0.991179	615.28	0.523481	847.89	38.9	0	6.74	1400.67	7.74	1400.91	7.74	0.24	0.02
82	182	100	18	2912	0.990219	616.95	0.524725	846.78	43.38	0.74	6.6	1412.24	7.76	1412.5	7.76	0.25	0.02

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
82	183	101	19	2928	0.98922	618.58	0.525956	845.69	48.07	0	6.47	1422.13	7.77	1421.86	7.77	-0.27	-0.02
82	184	102	20	2944	0.988185	620.18	0.527174	844.63	52.97	0.74	6.33	1433.29	7.79	1433.05	7.79	-0.24	-0.02
82	185	103	21	2960	0.987115	621.75	0.528378	843.6	58.09	0	6.21	1442.77	7.8	1442.04	7.79	-0.72	-0.05
82	186	104	22	2976	0.98601	623.29	0.52957	842.6	63.41	0.73	6.08	1453.51	7.81	1452.85	7.81	-0.67	-0.05
82	187	105	23	2992	0.984872	624.8	0.530749	841.63	68.94	0	5.97	1462.6	7.82	1461.47	7.82	-1.13	-0.08
82	188	106	24	3008	0.983703	626.28	0.531915	840.68	74.66	0.73	5.85	1472.95	7.83	1471.9	7.83	-1.05	-0.07
82	189	107	25	3024	0.982503	627.74	0.533069	839.75	80.59	0	5.74	1481.66	7.84	1480.17	7.83	-1.49	-0.1
82	190	108	26	3040	0.981274	629.16	0.534211	838.86	86.71	0.73	5.63	1491.63	7.85	1490.23	7.84	-1.4	-0.09
82	191	109	27	3056	0.980017	630.56	0.53534	837.98	93.02	0	5.52	1499.96	7.85	1498.15	7.84	-1.81	-0.12
82	192	110	28	3072	0.978733	631.93	0.536458	837.13	99.52	0.72	5.42	1509.56	7.86	1507.87	7.85	-1.69	-0.11
82	193	111	29	3088	0.977422	633.27	0.537565	836.31	106.21	0	5.32	1517.54	7.86	1515.45	7.85	-2.09	-0.14
82	194	112	30	3104	0.976087	634.59	0.53866	835.5	113.07	0.72	5.22	1526.78	7.87	1524.82	7.86	-1.96	-0.13
82	195	113	31	3120	0.974727	635.88	0.539744	834.72	120.12	0	5.13	1534.41	7.87	1532.08	7.86	-2.33	-0.15
82	196	114	32	3136	0.973344	637.15	0.540816	833.96	127.35	0.71	5.04	1543.3	7.87	1541.11	7.86	-2.18	-0.14
82	197	115	33	3152	0.971939	638.39	0.541878	833.22	134.75	0	4.95	1550.59	7.87	1548.05	7.86	-2.54	-0.16
82	198	116	34	3168	0.970513	639.61	0.542929	832.51	142.32	0.71	4.86	1559.14	7.87	1556.76	7.86	-2.38	-0.15
82	199	117	35	3184	0.969066	640.8	0.54397	831.81	150.06	0	4.78	1566.1	7.87	1563.39	7.86	-2.72	-0.17
82	200	118	36	3200	0.9676	641.97	0.545	831.14	157.97	0.71	4.7	1574.33	7.87	1571.78	7.86	-2.55	-0.16
82	201	119	37	3216	0.966115	643.12	0.54602	830.48	166.04	0	4.62	1580.98	7.87	1578.1	7.85	-2.87	-0.18
82	202	120	38	3232	0.964611	644.25	0.54703	829.84	174.27	0.7	4.54	1588.88	7.87	1586.19	7.85	-2.69	-0.17
82	203	121	39	3248	0.963091	645.36	0.54803	829.22	182.66	0	4.46	1595.22	7.86	1592.22	7.84	-3	-0.19
82	204	122	40	3264	0.961553	646.44	0.54902	828.62	191.21	0.7	4.39	1602.81	7.86	1600	7.84	-2.81	-0.18
82	205	123	41	3280	0.96	647.5	0.55	828.04	199.92	0	4.32	1608.85	7.85	1605.75	7.83	-3.11	-0.19
82	206	124	42	3296	0.958432	648.55	0.550971	827.48	208.78	0.7	4.25	1616.14	7.85	1613.24	7.83	-2.91	-0.18
82	207	125	43	3312	0.956848	649.57	0.551932	826.93	217.79	0	4.18	1621.89	7.84	1618.7	7.82	-3.19	-0.2
82	208	126	44	3328	0.955251	650.57	0.552885	826.4	226.94	0.69	4.11	1628.89	7.83	1625.9	7.82	-2.99	-0.18
82	209	127	45	3344	0.953641	651.55	0.553828	825.89	236.24	0	4.05	1634.36	7.82	1631.1	7.8	-3.26	-0.2
82	210	128	46	3360	0.952018	652.52	0.554762	825.39	245.69	0.69	3.99	1641.07	7.81	1638.02	7.8	-3.05	-0.19
82	211	129	47	3376	0.950383	653.46	0.555687	824.91	255.28	0	3.92	1646.27	7.8	1642.95	7.79	-3.32	-0.2
82	212	130	48	3392	0.948736	654.39	0.556604	824.44	265.01	0.69	3.86	1652.71	7.8	1649.6	7.78	-3.1	-0.19
82	213	131	49	3408	0.947078	655.3	0.557512	824	274.87	0	3.81	1657.63	7.78	1654.27	7.77	-3.36	-0.2
82	214	132	50	3424	0.94541	656.19	0.558411	823.56	284.88	0.68	3.75	1663.8	7.77	1660.66	7.76	-3.14	-0.19
82	215	133	51	3440	0.943732	657.07	0.559302	823.14	295.01	0	3.69	1668.47	7.76	1665.08	7.74	-3.39	-0.2
82	216	134	52	3456	0.942044	657.92	0.560185	822.73	305.28	0.68	3.64	1674.38	7.75	1671.21	7.74	-3.17	-0.19
82	217	135	53	3472	0.940347	658.76	0.56106	822.34	315.68	0	3.59	1678.79	7.74	1675.38	7.72	-3.41	-0.2
82	218	136	54	3488	0.938642	659.59	0.561927	821.97	326.21	0.68	3.53	1684.44	7.73	1681.26	7.71	-3.18	-0.19
82	219	137	55	3504	0.936928	660.4	0.562785	821.6	336.87	0	3.48	1688.62	7.71	1685.19	7.69	-3.43	-0.2
82	220	138	56	3520	0.935207	661.19	0.563636	821.25	347.65	0.67	3.43	1694.02	7.7	1690.82	7.69	-3.2	-0.19
82	221	139	57	3536	0.933478	661.96	0.56448	820.91	358.55	0	3.38	1697.95	7.68	1694.52	7.67	-3.43	-0.2
82	222	140	58	3552	0.931743	662.72	0.565315	820.59	369.58	0.67	3.34	1703.12	7.67	1699.91	7.66	-3.2	-0.19
82	223	141	59	3568	0.930001	663.47	0.566143	820.28	380.73	0	3.29	1706.82	7.65	1703.38	7.64	-3.44	-0.2
82	224	142	60	3584	0.928253	664.2	0.566964	819.98	391.99	0.67	3.25	1711.74	7.64	1708.54	7.63	-3.21	-0.19
82	225	143	61	3600	0.926499	664.92	0.567778	819.69	403.37	0	3.2	1715.22	7.62	1711.78	7.61	-3.44	-0.2
82	226	144	62	3616	0.92474	665.62	0.568584	819.42	414.87	0.67	3.16	1719.92	7.61	1716.71	7.6	-3.2	-0.19
82	227	145	63	3632	0.922975	666.31	0.569383	819.15	426.49	0	3.12	1723.17	7.59	1719.74	7.58	-3.43	-0.2
82	228	146	64	3648	0.921207	666.98	0.570175	818.9	438.21	0.66	3.08	1727.65	7.58	1724.44	7.56	-3.2	-0.19

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82	229	147	65	3664	0.919433	667.64	0.570961	818.66	450.05	0	3.04	1730.69	7.56	1727.26	7.54	-3.43	-0.2
82	230	148	66	3680	0.917656	668.29	0.571739	818.43	461.99	0.66	3	1734.94	7.54	1731.74	7.53	-3.2	-0.18
82	231	149	67	3696	0.915875	668.93	0.572511	818.21	474.04	0	2.96	1737.78	7.52	1734.35	7.51	-3.43	-0.2
82	232	150	68	3712	0.91409	669.55	0.573276	818	486.21	0.66	2.92	1741.82	7.51	1738.62	7.49	-3.2	-0.18
82	233	151	69	3728	0.912303	670.16	0.574034	817.8	498.47	0	2.88	1744.45	7.49	1741.02	7.47	-3.43	-0.2
82	234	152	70	3744	0.910512	670.76	0.574786	817.62	510.84	0.65	2.85	1748.29	7.47	1745.08	7.46	-3.2	-0.18
82	235	153	71	3760	0.908719	671.34	0.575532	817.44	523.31	0	2.81	1750.72	7.45	1747.29	7.44	-3.43	-0.2
82	236	154	72	3776	0.906923	671.91	0.576271	817.27	535.89	0.65	2.78	1754.35	7.43	1751.15	7.42	-3.21	-0.18
82	237	155	73	3792	0.905126	672.48	0.577004	817.11	548.56	0	2.74	1756.59	7.41	1753.16	7.4	-3.43	-0.2
82	238	156	74	3808	0.903326	673.02	0.577731	816.97	561.34	0.65	2.71	1760.03	7.4	1756.82	7.38	-3.21	-0.18
82	239	157	75	3824	0.901525	673.56	0.578452	816.83	574.21	0	2.68	1762.08	7.37	1758.64	7.36	-3.44	-0.2
82	240	158	76	3840	0.899722	674.09	0.579167	816.7	587.18	0.65	2.64	1765.33	7.36	1762.1	7.34	-3.23	-0.18
82	241	159	77	3856	0.897918	674.61	0.579876	816.58	600.24	0	2.61	1767.19	7.33	1763.73	7.32	-3.46	-0.2
82	242	160	78	3872	0.896114	675.11	0.580579	816.47	613.4	0.64	2.58	1770.25	7.32	1767.01	7.3	-3.25	-0.18
82	243	161	79	3888	0.894308	675.61	0.581276	816.36	626.65	0	2.55	1771.94	7.29	1768.46	7.28	-3.48	-0.2
82	244	162	80	3904	0.892502	676.09	0.581967	816.27	639.99	0.64	2.52	1774.82	7.27	1771.54	7.26	-3.27	-0.18
82	245	163	81	3920	0.890696	676.56	0.582653	816.18	653.42	0	2.49	1776.33	7.25	1772.82	7.24	-3.51	-0.2
82	246	164	82	3936	0.888889	677.03	0.583333	816.11	666.94	0.64	2.47	1779.03	7.23	1775.72	7.22	-3.31	-0.19
82	247	165	83	3952	0.887082	677.48	0.584008	816.04	680.56	0	2.44	1780.36	7.21	1776.82	7.19	-3.54	-0.2
82	248	166	84	3968	0.885276	677.92	0.584677	815.98	694.25	0.64	2.41	1782.89	7.19	1779.54	7.18	-3.35	-0.19
82	249	167	85	3984	0.88347	678.36	0.585341	815.92	708.04	0	2.38	1784.06	7.16	1780.47	7.15	-3.59	-0.2
82	250	168	86	4000	0.881664	678.78	0.586	815.88	721.91	0.63	2.36	1786.42	7.15	1783.02	7.13	-3.4	-0.19
82	251	169	87	4016	0.879859	679.2	0.586653	815.84	735.86	0	2.33	1787.43	7.12	1783.79	7.11	-3.64	-0.2
82	252	170	88	4032	0.878055	679.61	0.587302	815.81	749.9	0.63	2.31	1789.62	7.1	1786.16	7.09	-3.46	-0.19
82	253	171	89	4048	0.876252	680	0.587945	815.79	764.02	0	2.28	1790.47	7.08	1786.76	7.06	-3.71	-0.21
82	254	172	90	4064	0.87445	680.39	0.588583	815.77	778.22	0.63	2.26	1792.5	7.06	1788.97	7.04	-3.53	-0.2
82	255	173	91	4080	0.872649	680.77	0.589216	815.76	792.51	0	2.23	1793.19	7.03	1789.41	7.02	-3.78	-0.21
82	256	174	92	4096	0.87085	681.14	0.589844	815.76	806.87	0.62	2.21	1795.06	7.01	1791.46	7	-3.61	-0.2
82	257	175	93	4112	0.869052	681.51	0.590467	815.77	821.31	0	2.19	1795.61	6.99	1791.74	6.97	-3.87	-0.22
82	258	176	94	4128	0.867256	681.86	0.591085	815.78	835.83	0.62	2.16	1797.32	6.97	1793.62	6.95	-3.7	-0.21
82	259	177	95	4144	0.865461	682.21	0.591699	815.8	850.42	0	2.14	1797.72	6.94	1793.75	6.93	-3.96	-0.22
82	260	178	96	4160	0.863669	682.54	0.592308	815.83	865.09	0.62	2.12	1799.28	6.92	1795.48	6.91	-3.8	-0.21
82	261	179	97	4176	0.861878	682.88	0.592912	815.86	879.84	0	2.1	1799.53	6.89	1795.46	6.88	-4.07	-0.23
82	262	180	98	4192	0.86009	683.2	0.593511	815.9	894.66	0.62	2.08	1800.95	6.87	1797.03	6.86	-3.92	-0.22
82	263	181	99	4208	0.858304	683.51	0.594106	815.94	909.55	0	2.06	1801.06	6.85	1796.86	6.83	-4.19	-0.23
82	264	182	100	4224	0.85652	683.82	0.594697	815.99	924.52	0.62	2.04	1802.33	6.83	1798.28	6.81	-4.05	-0.23
82	265	183	101	4240	0.854738	684.12	0.595283	816.05	939.55	0	2.02	1802.3	6.8	1797.97	6.78	-4.33	-0.24
82	266	184	102	4256	0.852959	684.41	0.595865	816.11	954.66	0.61	2	1803.43	6.78	1799.24	6.76	-4.19	-0.23
82	267	185	103	4272	0.851183	684.7	0.596442	816.18	969.84	0	1.98	1803.26	6.75	1798.79	6.74	-4.47	-0.25
82	268	186	104	4288	0.84941	684.98	0.597015	816.26	985.09	0.61	1.96	1804.25	6.73	1799.91	6.72	-4.34	-0.24
82	269	187	105	4304	0.847639	685.25	0.597584	816.34	1000.4	0	1.94	1803.96	6.71	1799.32	6.69	-4.63	-0.26
82	270	188	106	4320	0.845871	685.51	0.598148	816.42	1015.79	0.61	1.92	1804.81	6.68	1800.3	6.67	-4.51	-0.25
82	271	189	107	4336	0.844106	685.77	0.598708	816.51	1031.24	0	1.9	1804.38	6.66	1799.57	6.64	-4.81	-0.27
82	272	190	108	4352	0.842344	686.02	0.599265	816.61	1046.76	0.61	1.89	1805.11	6.64	1800.42	6.62	-4.69	-0.26
82	273	191	109	4368	0.840586	686.27	0.599817	816.71	1062.34	0	1.87	1804.55	6.61	1799.56	6.59	-5	-0.28
82	274	192	110	4384	0.83883	686.5	0.600365	816.82	1077.99	0.6	1.85	1805.15	6.59	1800.26	6.57	-4.89	-0.27

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82	275	193	111	4400	0.837078	686.74	0.600909	816.93	1093.7	0	1.84	1804.47	6.56	1799.27	6.54	-5.2	-0.29
82	276	194	112	4416	0.835329	686.96	0.601449	817.05	1109.47	0.6	1.82	1804.94	6.54	1799.84	6.52	-5.1	-0.28
82	277	195	113	4432	0.833583	687.18	0.601986	817.17	1125.31	0	1.8	1804.14	6.51	1798.72	6.49	-5.42	-0.3
82	278	196	114	4448	0.831841	687.39	0.602518	817.3	1141.21	0.6	1.79	1804.48	6.49	1799.16	6.47	-5.33	-0.3
82	279	197	115	4464	0.830102	687.6	0.603047	817.43	1157.17	0	1.77	1803.56	6.46	1797.91	6.44	-5.65	-0.31
82	280	198	116	4480	0.828367	687.8	0.603571	817.57	1173.2	0.6	1.76	1803.79	6.44	1798.22	6.42	-5.57	-0.31
82	281	199	117	4496	0.826636	688	0.604093	817.71	1189.28	0	1.74	1802.75	6.42	1796.85	6.39	-5.9	-0.33
82	282	200	118	4512	0.824908	688.19	0.60461	817.86	1205.42	0.6	1.72	1802.85	6.39	1797.03	6.37	-5.83	-0.32
82	283	201	119	4528	0.823184	688.37	0.605124	818.01	1221.62	0	1.71	1801.71	6.37	1795.54	6.34	-6.17	-0.34
82	284	202	120	4544	0.821464	688.55	0.605634	818.17	1237.88	0.59	1.7	1801.69	6.34	1795.59	6.32	-6.1	-0.34
82	285	203	121	4560	0.819748	688.72	0.60614	818.33	1254.2	0	1.68	1800.44	6.32	1793.99	6.29	-6.45	-0.36
82	286	204	122	4576	0.818035	688.89	0.606643	818.49	1270.57	0.59	1.67	1800.31	6.29	1793.92	6.27	-6.39	-0.36
82	287	205	123	4592	0.816327	689.05	0.607143	818.66	1287	0	1.65	1798.94	6.27	1792.2	6.24	-6.74	-0.38
82	288	206	124	4608	0.814622	689.21	0.607639	818.83	1303.49	0.59	1.64	1798.7	6.25	1792.01	6.22	-6.69	-0.37
82	289	207	125	4624	0.812921	689.36	0.608131	819.01	1320.03	0	1.63	1797.22	6.22	1790.17	6.19	-7.06	-0.39
82	290	208	126	4640	0.811225	689.51	0.608621	819.19	1336.62	0.59	1.61	1796.87	6.2	1789.86	6.17	-7.01	-0.39
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
83	165	82	-1	2640	0.999963	583.59	0.498485	891.79	0.15	0	9.75	1174.22	7.12	1182.94	7.17	8.72	0.74
83	166	83	0	2656	1	585.97	0.5	889.98	0	-0.78	10	1189.28	7.16	1197.73	7.22	8.45	0.71
83	167	84	1	2672	0.999964	588.3	0.501497	888.21	0.15	0	9.75	1205.1	7.22	1212.05	7.26	6.95	0.57
83	168	85	2	2688	0.999858	590.58	0.502976	886.49	0.58	-0.77	9.51	1219.09	7.26	1226.33	7.3	7.24	0.59
83	169	86	3	2704	0.999685	592.82	0.504438	884.82	1.3	0	9.28	1234.35	7.3	1240.15	7.34	5.8	0.47
83	170	87	4	2720	0.999446	595.01	0.505882	883.19	2.29	-0.77	9.06	1247.8	7.34	1253.94	7.38	6.14	0.49
83	171	88	5	2736	0.999145	597.16	0.50731	881.6	3.56	0	8.84	1262.52	7.38	1267.27	7.41	4.75	0.37
83	172	89	6	2752	0.998783	599.27	0.508721	880.05	5.1	-0.76	8.64	1275.45	7.42	1280.59	7.45	5.14	0.4
83	173	90	7	2768	0.998363	601.34	0.510116	878.54	6.9	0	8.44	1289.66	7.45	1293.45	7.48	3.79	0.29
83	174	91	8	2784	0.997886	603.37	0.511494	877.07	8.96	-0.76	8.24	1302.09	7.48	1306.31	7.51	4.22	0.32
83	175	92	9	2800	0.997355	605.36	0.512857	875.64	11.28	0	8.06	1315.79	7.52	1318.71	7.54	2.92	0.22
83	176	93	10	2816	0.996772	607.3	0.514205	874.24	13.84	-0.75	7.88	1327.73	7.54	1331.13	7.56	3.39	0.25
83	177	94	11	2832	0.996138	609.21	0.515537	872.88	16.65	0	7.7	1340.95	7.58	1343.08	7.59	2.13	0.16
83	178	95	12	2848	0.995455	611.09	0.516854	871.56	19.71	-0.75	7.53	1352.43	7.6	1355.07	7.61	2.64	0.19
83	179	96	13	2864	0.994726	612.92	0.518156	870.27	23	0	7.37	1365.18	7.63	1366.59	7.63	1.41	0.1
83	180	97	14	2880	0.993951	614.73	0.519444	869.01	26.53	-0.75	7.21	1376.2	7.65	1378.15	7.66	1.95	0.14
83	181	98	15	2896	0.993132	616.49	0.520718	867.79	30.29	0	7.06	1388.49	7.67	1389.26	7.68	0.76	0.06
83	182	99	16	2912	0.992271	618.22	0.521978	866.6	34.27	-0.74	6.91	1399.08	7.69	1400.42	7.69	1.34	0.1
83	183	100	17	2928	0.99137	619.92	0.523224	865.43	38.48	0	6.77	1410.93	7.71	1411.11	7.71	0.18	0.01
83	184	101	18	2944	0.99043	621.59	0.524457	864.3	42.91	-0.74	6.63	1421.09	7.72	1421.88	7.73	0.78	0.06
83	185	102	19	2960	0.989452	623.22	0.525676	863.2	47.55	0	6.5	1432.52	7.74	1432.18	7.74	-0.34	-0.02
83	186	103	20	2976	0.988438	624.83	0.526882	862.13	52.4	-0.73	6.37	1442.27	7.75	1442.56	7.76	0.29	0.02
83	187	104	21	2992	0.987389	626.4	0.528075	861.08	57.47	0	6.24	1453.29	7.77	1452.48	7.77	-0.81	-0.06
83	188	105	22	3008	0.986306	627.94	0.529255	860.06	62.74	-0.73	6.12	1462.64	7.78	1462.49	7.78	-0.16	-0.01
83	189	106	23	3024	0.985191	629.45	0.530423	859.07	68.21	0	6	1473.26	7.8	1472.03	7.79	-1.23	-0.08
83	190	107	24	3040	0.984044	630.94	0.531579	858.11	73.88	-0.73	5.88	1482.23	7.8	1481.68	7.8	-0.55	-0.04
83	191	108	25	3056	0.982868	632.39	0.532723	857.17	79.75	0	5.77	1492.46	7.81	1490.86	7.81	-1.6	-0.11

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
83	192	109	26	3072	0.981662	633.82	0.533854	856.26	85.81	-0.72	5.66	1501.05	7.82	1500.15	7.81	-0.9	-0.06
83	193	110	27	3088	0.980429	635.22	0.534974	855.37	92.06	0	5.56	1510.91	7.83	1508.98	7.82	-1.92	-0.13
83	194	111	28	3104	0.979169	636.59	0.536082	854.51	98.5	-0.72	5.45	1519.14	7.83	1517.93	7.82	-1.21	-0.08
83	195	112	29	3120	0.977883	637.94	0.537179	853.66	105.12	0	5.35	1528.63	7.84	1526.42	7.83	-2.21	-0.14
83	196	113	30	3136	0.976572	639.26	0.538265	852.85	111.93	-0.71	5.26	1536.51	7.84	1535.03	7.83	-1.48	-0.1
83	197	114	31	3152	0.975238	640.55	0.53934	852.05	118.91	0	5.16	1545.65	7.85	1543.19	7.83	-2.46	-0.16
83	198	115	32	3168	0.97388	641.83	0.540404	851.28	126.07	-0.71	5.07	1553.19	7.84	1551.48	7.84	-1.72	-0.11
83	199	116	33	3184	0.972501	643.07	0.541457	850.53	133.4	0	4.98	1561.99	7.85	1559.31	7.84	-2.68	-0.17
83	200	117	34	3200	0.9711	644.3	0.5425	849.79	140.9	-0.71	4.9	1569.2	7.85	1567.28	7.84	-1.92	-0.12
83	201	118	35	3216	0.969679	645.5	0.543532	849.08	148.57	0	4.81	1577.66	7.85	1574.79	7.83	-2.87	-0.18
83	202	119	36	3232	0.968238	646.67	0.544554	848.39	156.41	-0.7	4.73	1584.55	7.84	1582.46	7.83	-2.09	-0.13
83	203	120	37	3248	0.966779	647.83	0.545567	847.72	164.41	0	4.65	1592.69	7.85	1589.66	7.83	-3.03	-0.19
83	204	121	38	3264	0.965302	648.96	0.546569	847.07	172.57	-0.7	4.57	1599.27	7.84	1597.02	7.83	-2.24	-0.14
83	205	122	39	3280	0.963807	650.07	0.547561	846.44	180.89	0	4.5	1607.09	7.84	1603.93	7.82	-3.16	-0.2
83	206	123	40	3296	0.962296	651.16	0.548544	845.83	189.37	-0.7	4.42	1613.37	7.83	1611	7.82	-2.37	-0.15
83	207	124	41	3312	0.960769	652.23	0.549517	845.23	198	0	4.35	1620.89	7.83	1617.62	7.81	-3.28	-0.2
83	208	125	42	3328	0.959227	653.28	0.550481	844.65	206.78	-0.69	4.28	1626.88	7.82	1624.4	7.81	-2.47	-0.15
83	209	126	43	3344	0.95767	654.31	0.551435	844.09	215.71	0	4.21	1634.1	7.82	1630.73	7.8	-3.37	-0.21
83	210	127	44	3360	0.9561	655.32	0.552381	843.55	224.79	-0.69	4.15	1639.8	7.81	1637.24	7.8	-2.56	-0.16
83	211	128	45	3376	0.954516	656.31	0.553318	843.02	234.02	0	4.08	1646.74	7.8	1643.29	7.79	-3.45	-0.21
83	212	129	46	3392	0.952919	657.28	0.554245	842.51	243.38	-0.69	4.02	1652.16	7.79	1649.53	7.78	-2.63	-0.16
83	213	130	47	3408	0.95131	658.23	0.555164	842.02	252.89	0	3.96	1658.81	7.79	1655.31	7.77	-3.51	-0.21
83	214	131	48	3424	0.94969	659.16	0.556075	841.54	262.54	-0.68	3.9	1663.97	7.78	1661.28	7.76	-2.69	-0.16
83	215	132	49	3440	0.948058	660.08	0.556977	841.08	272.33	0	3.84	1670.35	7.77	1666.8	7.75	-3.55	-0.21
83	216	133	50	3456	0.946416	660.98	0.55787	840.63	282.25	-0.68	3.78	1675.24	7.76	1672.51	7.74	-2.73	-0.16
83	217	134	51	3472	0.944764	661.86	0.558756	840.2	292.31	0	3.73	1681.36	7.75	1677.77	7.73	-3.59	-0.21
83	218	135	52	3488	0.943102	662.72	0.559633	839.78	302.5	-0.68	3.67	1685.99	7.73	1683.23	7.72	-2.76	-0.16
83	219	136	53	3504	0.941432	663.57	0.560502	839.38	312.81	0	3.62	1691.86	7.73	1688.24	7.71	-3.61	-0.21
83	220	137	54	3520	0.939752	664.4	0.561364	838.99	323.26	-0.67	3.57	1696.24	7.71	1693.46	7.7	-2.78	-0.16
83	221	138	55	3536	0.938064	665.22	0.562217	838.61	333.83	0	3.52	1701.85	7.7	1698.23	7.68	-3.63	-0.21
83	222	139	56	3552	0.936369	666.01	0.563063	838.25	344.53	-0.67	3.47	1706	7.68	1703.2	7.67	-2.8	-0.16
83	223	140	57	3568	0.934666	666.8	0.563901	837.9	355.35	0	3.42	1711.37	7.67	1707.73	7.66	-3.64	-0.21
83	224	141	58	3584	0.932956	667.57	0.564732	837.57	366.29	-0.67	3.37	1715.27	7.66	1712.47	7.64	-2.81	-0.16
83	225	142	59	3600	0.93124	668.32	0.565556	837.24	377.36	0	3.32	1720.4	7.65	1716.76	7.63	-3.64	-0.21
83	226	143	60	3616	0.929517	669.06	0.566372	836.93	388.54	-0.67	3.28	1724.08	7.63	1721.27	7.62	-2.81	-0.16
83	227	144	61	3632	0.927788	669.78	0.567181	836.63	399.84	0	3.23	1728.98	7.62	1725.34	7.6	-3.64	-0.21
83	228	145	62	3648	0.926054	670.49	0.567982	836.35	411.25	-0.66	3.19	1732.44	7.6	1729.63	7.59	-2.81	-0.16
83	229	146	63	3664	0.924315	671.19	0.568777	836.07	422.78	0	3.15	1737.11	7.59	1733.47	7.57	-3.64	-0.21
83	230	147	64	3680	0.922571	671.87	0.569565	835.81	434.42	-0.66	3.11	1740.35	7.57	1737.54	7.55	-2.81	-0.16
83	231	148	65	3696	0.920822	672.54	0.570346	835.56	446.17	0	3.07	1744.8	7.55	1741.16	7.54	-3.64	-0.21
83	232	149	66	3712	0.91907	673.2	0.571121	835.32	458.03	-0.66	3.03	1747.83	7.53	1745.02	7.52	-2.81	-0.16
83	233	150	67	3728	0.917313	673.84	0.571888	835.09	469.99	0	2.99	1752.07	7.52	1748.43	7.5	-3.64	-0.21
83	234	151	68	3744	0.915553	674.47	0.57265	834.87	482.07	-0.65	2.95	1754.89	7.5	1752.08	7.49	-2.81	-0.16
83	235	152	69	3760	0.913789	675.09	0.573404	834.66	494.25	0	2.91	1758.92	7.48	1755.28	7.47	-3.64	-0.21
83	236	153	70	3776	0.912022	675.69	0.574153	834.46	506.53	-0.65	2.88	1761.54	7.46	1758.73	7.45	-2.81	-0.16
83	237	154	71	3792	0.910253	676.28	0.574895	834.27	518.92	0	2.84	1765.36	7.45	1761.73	7.43	-3.64	-0.21

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
83	238	155	72	3808	0.908481	676.87	0.57563	834.1	531.4	-0.65	2.81	1767.79	7.43	1764.98	7.42	-2.82	-0.16
83	239	156	73	3824	0.906707	677.43	0.57636	833.93	543.99	0	2.77	1771.42	7.41	1767.78	7.4	-3.64	-0.21
83	240	157	74	3840	0.904931	677.99	0.577083	833.77	556.68	-0.65	2.74	1773.65	7.39	1770.83	7.38	-2.82	-0.16
83	241	158	75	3856	0.903152	678.54	0.577801	833.62	569.46	0	2.71	1777.08	7.37	1773.43	7.36	-3.65	-0.21
83	242	159	76	3872	0.901373	679.07	0.578512	833.48	582.34	-0.64	2.67	1779.13	7.35	1776.29	7.34	-2.83	-0.16
83	243	160	77	3888	0.899592	679.6	0.579218	833.36	595.32	0	2.64	1782.37	7.33	1778.71	7.32	-3.66	-0.21
83	244	161	78	3904	0.89781	680.11	0.579918	833.23	608.39	-0.64	2.61	1784.24	7.31	1781.38	7.3	-2.85	-0.16
83	245	162	79	3920	0.896027	680.61	0.580612	833.12	621.55	0	2.58	1787.29	7.3	1783.61	7.28	-3.68	-0.21
83	246	163	80	3936	0.894243	681.1	0.581301	833.02	634.81	-0.64	2.55	1788.98	7.27	1786.11	7.26	-2.88	-0.16
83	247	164	81	3952	0.892458	681.59	0.581984	832.92	648.15	0	2.52	1791.86	7.25	1788.15	7.24	-3.7	-0.21
83	248	165	82	3968	0.890674	682.06	0.582661	832.84	661.59	-0.64	2.49	1793.37	7.23	1790.47	7.22	-2.91	-0.16
83	249	166	83	3984	0.888889	682.52	0.583333	832.76	675.11	0	2.47	1796.07	7.21	1792.34	7.2	-3.74	-0.21
83	250	167	84	4000	0.887104	682.97	0.584	832.69	688.72	-0.63	2.44	1797.42	7.19	1794.48	7.18	-2.95	-0.16
83	251	168	85	4016	0.885319	683.41	0.584661	832.63	702.42	0	2.41	1799.95	7.17	1796.17	7.16	-3.78	-0.21
83	252	169	86	4032	0.883535	683.85	0.585317	832.58	716.2	-0.63	2.39	1801.13	7.15	1798.14	7.14	-2.99	-0.17
83	253	170	87	4048	0.881751	684.27	0.585968	832.53	730.07	0	2.36	1803.49	7.13	1799.66	7.11	-3.83	-0.21
83	254	171	88	4064	0.879968	684.69	0.586614	832.49	744.02	-0.63	2.33	1804.51	7.1	1801.46	7.09	-3.05	-0.17
83	255	172	89	4080	0.878185	685.09	0.587255	832.46	758.05	0	2.31	1806.7	7.09	1802.82	7.07	-3.89	-0.22
83	256	173	90	4096	0.876404	685.49	0.587891	832.44	772.17	-0.62	2.28	1807.57	7.06	1804.45	7.05	-3.11	-0.17
83	257	174	91	4112	0.874623	685.87	0.588521	832.42	786.36	0	2.26	1809.6	7.04	1805.65	7.03	-3.95	-0.22
83	258	175	92	4128	0.872844	686.25	0.589147	832.41	800.64	-0.62	2.24	1810.31	7.02	1807.12	7	-3.19	-0.18
83	259	176	93	4144	0.871066	686.62	0.589768	832.41	814.99	0	2.21	1812.19	7	1808.16	6.98	-4.03	-0.22
83	260	177	94	4160	0.86929	686.99	0.590385	832.41	829.42	-0.62	2.19	1812.75	6.97	1809.47	6.96	-3.28	-0.18
83	261	178	95	4176	0.867515	687.34	0.590996	832.43	843.93	0	2.17	1814.47	6.95	1810.35	6.94	-4.12	-0.23
83	262	179	96	4192	0.865742	687.69	0.591603	832.44	858.51	-0.62	2.15	1814.88	6.93	1811.51	6.91	-3.37	-0.19
83	263	180	97	4208	0.863971	688.03	0.592205	832.47	873.17	0	2.12	1816.46	6.91	1812.23	6.89	-4.22	-0.23
83	264	181	98	4224	0.862202	688.36	0.592803	832.5	887.9	-0.62	2.1	1816.73	6.88	1813.24	6.87	-3.48	-0.19
83	265	182	99	4240	0.860434	688.68	0.593396	832.54	902.71	0	2.08	1818.15	6.86	1813.82	6.84	-4.34	-0.24
83	266	183	100	4256	0.858669	688.99	0.593985	832.58	917.59	-0.61	2.06	1818.28	6.84	1814.68	6.82	-3.6	-0.2
83	267	184	101	4272	0.856906	689.3	0.594569	832.63	932.54	0	2.04	1819.57	6.81	1815.1	6.8	-4.46	-0.25
83	268	185	102	4288	0.855146	689.6	0.595149	832.69	947.56	-0.61	2.02	1819.56	6.79	1815.82	6.78	-3.74	-0.21
83	269	186	103	4304	0.853388	689.9	0.595725	832.75	962.66	0	2	1820.7	6.77	1816.1	6.75	-4.6	-0.25
83	270	187	104	4320	0.851632	690.18	0.596296	832.82	977.82	-0.61	1.98	1820.56	6.74	1816.67	6.73	-3.89	-0.21
83	271	188	105	4336	0.849879	690.46	0.596863	832.89	993.05	0	1.96	1821.57	6.72	1816.81	6.7	-4.76	-0.26
83	272	189	106	4352	0.848129	690.73	0.597426	832.97	1008.35	-0.61	1.95	1821.29	6.7	1817.24	6.68	-4.05	-0.22
83	273	190	107	4368	0.846382	691	0.597985	833.06	1023.71	0	1.93	1822.16	6.67	1817.24	6.66	-4.92	-0.27
83	274	191	108	4384	0.844637	691.26	0.59854	833.15	1039.14	-0.6	1.91	1821.76	6.65	1817.54	6.63	-4.22	-0.23
83	275	192	109	4400	0.842896	691.51	0.599091	833.24	1054.64	0	1.89	1822.5	6.63	1817.4	6.61	-5.1	-0.28
83	276	193	110	4416	0.841157	691.75	0.599638	833.34	1070.2	-0.6	1.88	1821.97	6.6	1817.56	6.59	-4.41	-0.24
83	277	194	111	4432	0.839422	691.99	0.600181	833.45	1085.83	0	1.86	1822.58	6.58	1817.29	6.56	-5.29	-0.29
83	278	195	112	4448	0.83769	692.23	0.600719	833.56	1101.52	-0.6	1.84	1821.93	6.55	1817.32	6.54	-4.61	-0.25
83	279	196	113	4464	0.83596	692.45	0.601254	833.68	1117.27	0	1.82	1822.42	6.53	1816.92	6.51	-5.5	-0.3
83	280	197	114	4480	0.834235	692.67	0.601786	833.8	1133.09	-0.6	1.81	1821.65	6.51	1816.82	6.49	-4.83	-0.27
83	281	198	115	4496	0.832512	692.89	0.602313	833.93	1148.97	0	1.79	1822.01	6.48	1816.28	6.46	-5.73	-0.32
83	282	199	116	4512	0.830793	693.1	0.602837	834.06	1164.9	-0.6	1.78	1821.12	6.46	1816.06	6.44	-5.06	-0.28
83	283	200	117	4528	0.829078	693.3	0.603357	834.2	1180.9	0	1.76	1821.36	6.44	1815.4	6.41	-5.96	-0.33

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
83	284	201	118	4544	0.827366	693.5	0.603873	834.34	1196.96	-0.59	1.75	1820.36	6.41	1815.05	6.39	-5.31	-0.29
83	285	202	119	4560	0.825657	693.69	0.604386	834.48	1213.08	0	1.73	1820.48	6.39	1814.26	6.37	-6.22	-0.34
83	286	203	120	4576	0.823952	693.87	0.604895	834.63	1229.25	-0.59	1.72	1819.36	6.36	1813.79	6.34	-5.57	-0.31
83	287	204	121	4592	0.822251	694.06	0.605401	834.79	1245.49	0	1.7	1819.37	6.34	1812.88	6.32	-6.49	-0.36
83	288	205	122	4608	0.820554	694.23	0.605903	834.95	1261.78	-0.59	1.69	1818.14	6.31	1812.29	6.29	-5.85	-0.32
83	289	206	123	4624	0.81886	694.4	0.606401	835.11	1278.12	0	1.67	1818.04	6.29	1811.26	6.27	-6.77	-0.37
83	290	207	124	4640	0.81717	694.56	0.606897	835.28	1294.53	-0.59	1.66	1816.7	6.26	1810.55	6.24	-6.15	-0.34
83	291	208	125	4656	0.815484	694.72	0.607388	835.45	1310.99	0	1.65	1816.48	6.24	1809.41	6.22	-7.07	-0.39
83	292	209	126	4672	0.813802	694.88	0.607877	835.63	1327.5	-0.59	1.63	1815.04	6.22	1808.58	6.19	-6.46	-0.36
83	293	210	127	4688	0.812124	695.03	0.608362	835.81	1344.07	0	1.62	1814.71	6.19	1807.32	6.17	-7.39	-0.41
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
84	167	83	-1	2672	0.999964	588.3	0.498503	909.74	0.15	0	9.75	1183.56	7.09	1192.32	7.14	8.75	0.73
84	168	84	0	2688	1	590.67	0.5	907.92	0	0.77	10	1200.19	7.14	1208.1	7.19	7.91	0.65
84	169	85	1	2704	0.999965	592.99	0.501479	906.14	0.14	0	9.75	1214.48	7.19	1221.48	7.23	7	0.57
84	170	86	2	2720	0.999862	595.26	0.502941	904.41	0.57	0.77	9.52	1230.04	7.24	1236.75	7.28	6.71	0.54
84	171	87	3	2736	0.999692	597.49	0.504386	902.72	1.28	0	9.29	1243.8	7.27	1249.65	7.31	5.86	0.47
84	172	88	4	2752	0.999459	599.68	0.505814	901.07	2.27	0.76	9.07	1258.81	7.32	1264.43	7.35	5.61	0.44
84	173	89	5	2768	0.999165	601.82	0.507225	899.47	3.52	0	8.86	1272.05	7.35	1276.85	7.38	4.81	0.38
84	174	90	6	2784	0.998811	603.93	0.508621	897.9	5.04	0.76	8.65	1286.54	7.39	1291.15	7.42	4.61	0.36
84	175	91	7	2800	0.9984	605.99	0.51	896.38	6.82	0	8.45	1299.26	7.42	1303.12	7.45	3.86	0.3
84	176	92	8	2816	0.997934	608.01	0.511364	894.89	8.86	0.75	8.26	1313.25	7.46	1316.95	7.48	3.7	0.28
84	177	93	9	2832	0.997415	609.99	0.512712	893.45	11.15	0	8.08	1325.49	7.49	1328.47	7.51	2.99	0.22
84	178	94	10	2848	0.996844	611.94	0.514045	892.04	13.69	0.75	7.9	1338.98	7.52	1341.85	7.54	2.87	0.21
84	179	95	11	2864	0.996224	613.85	0.515363	890.66	16.47	0	7.73	1350.75	7.55	1352.95	7.56	2.2	0.16
84	180	96	12	2880	0.995556	615.72	0.516667	889.32	19.49	0.75	7.56	1363.77	7.58	1365.89	7.59	2.11	0.15
84	181	97	13	2896	0.994841	617.55	0.517956	888.02	22.75	0	7.4	1375.08	7.6	1376.56	7.61	1.49	0.11
84	182	98	14	2912	0.994083	619.35	0.519231	886.74	26.24	0.74	7.24	1387.64	7.62	1389.08	7.63	1.43	0.1
84	183	99	15	2928	0.993281	621.12	0.520492	885.5	29.96	0	7.09	1398.51	7.64	1399.35	7.65	0.84	0.06
84	184	100	16	2944	0.992439	622.85	0.521739	884.3	33.9	0.74	6.94	1410.63	7.67	1411.45	7.67	0.82	0.06
84	185	101	17	2960	0.991556	624.55	0.522973	883.12	38.07	0	6.8	1421.06	7.68	1421.33	7.68	0.26	0.02
84	186	102	18	2976	0.990635	626.22	0.524194	881.97	42.45	0.73	6.66	1432.76	7.7	1433.02	7.7	0.27	0.02
84	187	103	19	2992	0.989677	627.85	0.525401	880.85	47.04	0	6.53	1442.78	7.72	1442.52	7.71	-0.26	-0.02
84	188	104	20	3008	0.988683	629.45	0.526596	879.77	51.85	0.73	6.4	1454.06	7.73	1453.83	7.73	-0.23	-0.02
84	189	105	21	3024	0.987654	631.03	0.527778	878.71	56.86	0	6.27	1463.67	7.74	1462.95	7.74	-0.72	-0.05
84	190	106	22	3040	0.986593	632.57	0.528947	877.67	62.08	0.73	6.15	1474.55	7.76	1473.88	7.76	-0.67	-0.05
84	191	107	23	3056	0.985499	634.08	0.530105	876.67	67.5	0	6.03	1483.78	7.77	1482.64	7.76	-1.14	-0.08
84	192	108	24	3072	0.984375	635.57	0.53125	875.69	73.12	0.72	5.92	1494.26	7.78	1493.2	7.78	-1.07	-0.07
84	193	109	25	3088	0.983221	637.03	0.532383	874.74	78.93	0	5.8	1503.11	7.79	1501.61	7.78	-1.51	-0.1
84	194	110	26	3104	0.982038	638.46	0.533505	873.81	84.93	0.72	5.7	1513.22	7.8	1511.8	7.79	-1.41	-0.09
84	195	111	27	3120	0.980828	639.86	0.534615	872.9	91.12	0	5.59	1521.7	7.8	1519.87	7.79	-1.83	-0.12
84	196	112	28	3136	0.979592	641.24	0.535714	872.02	97.5	0.71	5.49	1531.44	7.81	1529.72	7.8	-1.72	-0.11
84	197	113	29	3152	0.97833	642.59	0.536802	871.17	104.06	0	5.39	1539.57	7.82	1537.46	7.8	-2.12	-0.14
84	198	114	30	3168	0.977043	643.91	0.537879	870.34	110.8	0.71	5.29	1548.95	7.82	1546.97	7.81	-1.99	-0.13
84	199	115	31	3184	0.975733	645.21	0.538945	869.53	117.72	0	5.2	1556.74	7.82	1554.38	7.81	-2.37	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
84	200	116	32	3200	0.9744	646.49	0.54	868.74	124.81	0.71	5.11	1565.78	7.83	1563.56	7.82	-2.22	-0.14
84	201	117	33	3216	0.973045	647.74	0.541045	867.97	132.08	0	5.02	1573.23	7.83	1570.65	7.81	-2.58	-0.16
84	202	118	34	3232	0.971669	648.96	0.542079	867.23	139.51	0.7	4.93	1581.93	7.83	1579.51	7.82	-2.42	-0.15
84	203	119	35	3248	0.970273	650.17	0.543103	866.5	147.12	0	4.85	1589.06	7.83	1586.29	7.81	-2.76	-0.17
84	204	120	36	3264	0.968858	651.35	0.544118	865.8	154.88	0.7	4.77	1597.43	7.83	1594.84	7.82	-2.6	-0.16
84	205	121	37	3280	0.967424	652.51	0.545122	865.11	162.81	0	4.69	1604.25	7.83	1601.33	7.81	-2.92	-0.18
84	206	122	38	3296	0.965972	653.65	0.546117	864.45	170.9	0.7	4.61	1612.3	7.83	1609.56	7.81	-2.74	-0.17
84	207	123	39	3312	0.964503	654.77	0.547101	863.8	179.15	0	4.53	1618.81	7.82	1615.76	7.81	-3.05	-0.19
84	208	124	40	3328	0.963018	655.86	0.548077	863.17	187.56	0.69	4.46	1626.56	7.82	1623.7	7.81	-2.86	-0.18
84	209	125	41	3344	0.961516	656.94	0.549043	862.57	196.11	0	4.39	1632.77	7.81	1629.61	7.8	-3.16	-0.19
84	210	126	42	3360	0.96	657.99	0.55	861.97	204.82	0.69	4.32	1640.22	7.81	1637.26	7.8	-2.96	-0.18
84	211	127	43	3376	0.958469	659.02	0.550948	861.4	213.68	0	4.25	1646.15	7.8	1642.89	7.79	-3.25	-0.2
84	212	128	44	3392	0.956924	660.04	0.551887	860.85	222.68	0.69	4.18	1653.3	7.8	1650.26	7.78	-3.05	-0.18
84	213	129	45	3408	0.955366	661.04	0.552817	860.31	231.83	0	4.12	1658.95	7.79	1655.62	7.77	-3.32	-0.2
84	214	130	46	3424	0.953795	662.01	0.553738	859.78	241.12	0.68	4.05	1665.82	7.78	1662.71	7.77	-3.11	-0.19
84	215	131	47	3440	0.952212	662.97	0.554651	859.28	250.55	0	3.99	1671.19	7.77	1667.81	7.76	-3.38	-0.2
84	216	132	48	3456	0.950617	663.91	0.555556	858.79	260.12	0.68	3.93	1677.79	7.77	1674.63	7.75	-3.16	-0.19
84	217	133	49	3472	0.949011	664.83	0.556452	858.31	269.83	0	3.87	1682.9	7.76	1679.48	7.74	-3.42	-0.2
84	218	134	50	3488	0.947395	665.74	0.557339	857.85	279.67	0.68	3.82	1689.23	7.75	1686.03	7.73	-3.2	-0.19
84	219	135	51	3504	0.945768	666.63	0.558219	857.41	289.65	0	3.76	1694.08	7.74	1690.63	7.72	-3.45	-0.2
84	220	136	52	3520	0.944132	667.5	0.559091	856.98	299.76	0.67	3.71	1700.15	7.73	1696.92	7.71	-3.22	-0.19
84	221	137	53	3536	0.942487	668.35	0.559955	856.56	310	0	3.65	1704.74	7.71	1701.27	7.7	-3.47	-0.2
84	222	138	54	3552	0.940833	669.19	0.560811	856.16	320.36	0.67	3.6	1710.56	7.71	1707.32	7.69	-3.24	-0.19
84	223	139	55	3568	0.93917	670.01	0.561659	855.77	330.85	0	3.55	1714.91	7.69	1711.43	7.67	-3.48	-0.2
84	224	140	56	3584	0.9375	670.82	0.5625	855.4	341.47	0.67	3.5	1720.48	7.68	1717.24	7.67	-3.25	-0.19
84	225	141	57	3600	0.935822	671.61	0.563333	855.03	352.21	0	3.45	1724.6	7.66	1721.11	7.65	-3.49	-0.2
84	226	142	58	3616	0.934137	672.39	0.564159	854.69	363.07	0.67	3.4	1729.93	7.65	1726.68	7.64	-3.25	-0.19
84	227	143	59	3632	0.932446	673.15	0.564978	854.35	374.05	0	3.36	1733.81	7.64	1730.33	7.62	-3.48	-0.2
84	228	144	60	3648	0.930748	673.89	0.565789	854.03	385.15	0.66	3.31	1738.91	7.63	1735.66	7.61	-3.25	-0.19
84	229	145	61	3664	0.929044	674.62	0.566594	853.72	396.36	0	3.27	1742.56	7.61	1739.08	7.59	-3.48	-0.2
84	230	146	62	3680	0.927335	675.34	0.567391	853.42	407.69	0.66	3.22	1747.43	7.6	1744.19	7.58	-3.24	-0.19
84	231	147	63	3696	0.92562	676.05	0.568182	853.14	419.13	0	3.18	1750.87	7.58	1747.4	7.56	-3.47	-0.2
84	232	148	64	3712	0.9239	676.74	0.568966	852.86	430.69	0.66	3.14	1755.51	7.57	1752.28	7.55	-3.23	-0.18
84	233	149	65	3728	0.922176	677.41	0.569742	852.6	442.35	0	3.1	1758.73	7.55	1755.27	7.53	-3.46	-0.2
84	234	150	66	3744	0.920447	678.08	0.570513	852.35	454.13	0.65	3.06	1763.16	7.53	1759.94	7.52	-3.22	-0.18
84	235	151	67	3760	0.918714	678.73	0.571277	852.11	466.01	0	3.02	1766.17	7.52	1762.73	7.5	-3.45	-0.2
84	236	152	68	3776	0.916978	679.36	0.572034	851.88	478	0.65	2.98	1770.39	7.5	1767.17	7.49	-3.22	-0.18
84	237	153	69	3792	0.915238	679.99	0.572785	851.66	490.09	0	2.94	1773.2	7.48	1769.76	7.47	-3.44	-0.19
84	238	154	70	3808	0.913495	680.6	0.573529	851.45	502.29	0.65	2.91	1777.21	7.47	1774	7.45	-3.21	-0.18
84	239	155	71	3824	0.911749	681.2	0.574268	851.26	514.59	0	2.87	1779.82	7.45	1776.39	7.43	-3.43	-0.19
84	240	156	72	3840	0.91	681.79	0.575	851.07	527	0.65	2.84	1783.63	7.43	1780.43	7.42	-3.2	-0.18
84	241	157	73	3856	0.908249	682.37	0.575726	850.89	539.5	0	2.8	1786.05	7.41	1782.62	7.4	-3.43	-0.19
84	242	158	74	3872	0.906495	682.93	0.576446	850.72	552.1	0.64	2.77	1789.66	7.4	1786.46	7.38	-3.2	-0.18
84	243	159	75	3888	0.90474	683.49	0.57716	850.57	564.8	0	2.74	1791.89	7.37	1788.46	7.36	-3.42	-0.19
84	244	160	76	3904	0.902983	684.03	0.577869	850.42	577.59	0.64	2.7	1795.31	7.36	1792.11	7.34	-3.2	-0.18
84	245	161	77	3920	0.901224	684.56	0.578571	850.28	590.48	0	2.67	1797.35	7.34	1793.93	7.32	-3.43	-0.19

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84	246	162	78	3936	0.899465	685.08	0.579268	850.15	603.46	0.64	2.64	1800.58	7.32	1797.38	7.31	-3.21	-0.18
84	247	163	79	3952	0.897704	685.59	0.57996	850.03	616.54	0	2.61	1802.45	7.3	1799.02	7.28	-3.44	-0.19
84	248	164	80	3968	0.895942	686.09	0.580645	849.91	629.71	0.64	2.58	1805.5	7.28	1802.28	7.27	-3.22	-0.18
84	249	165	81	3984	0.894179	686.58	0.581325	849.81	642.97	0	2.55	1807.19	7.26	1803.74	7.24	-3.45	-0.19
84	250	166	82	4000	0.892416	687.06	0.582	849.72	656.32	0.63	2.52	1810.06	7.24	1806.82	7.23	-3.24	-0.18
84	251	167	83	4016	0.890653	687.53	0.582669	849.63	669.75	0	2.49	1811.58	7.22	1808.11	7.2	-3.47	-0.19
84	252	168	84	4032	0.888889	687.99	0.583333	849.55	683.28	0.63	2.47	1814.28	7.2	1811.01	7.19	-3.27	-0.18
84	253	169	85	4048	0.887125	688.44	0.583992	849.48	696.89	0	2.44	1815.63	7.18	1812.13	7.16	-3.5	-0.19
84	254	170	86	4064	0.885362	688.88	0.584646	849.42	710.59	0.63	2.41	1818.15	7.16	1814.85	7.15	-3.3	-0.18
84	255	171	87	4080	0.883599	689.31	0.585294	849.36	724.37	0	2.39	1819.34	7.13	1815.8	7.12	-3.54	-0.19
84	256	172	88	4096	0.881836	689.74	0.585938	849.32	738.23	0.62	2.36	1821.7	7.12	1818.36	7.1	-3.34	-0.18
84	257	173	89	4112	0.880074	690.15	0.586576	849.28	752.18	0	2.34	1822.73	7.09	1819.15	7.08	-3.59	-0.2
84	258	174	90	4128	0.878313	690.55	0.587209	849.25	766.2	0.62	2.31	1824.93	7.07	1821.53	7.06	-3.4	-0.19
84	259	175	91	4144	0.876552	690.95	0.587838	849.22	780.31	0	2.29	1825.8	7.05	1822.16	7.04	-3.64	-0.2
84	260	176	92	4160	0.874793	691.34	0.588462	849.2	794.5	0.62	2.26	1827.84	7.03	1824.38	7.02	-3.46	-0.19
84	261	177	93	4176	0.873035	691.71	0.58908	849.19	808.77	0	2.24	1828.56	7.01	1824.85	6.99	-3.71	-0.2
84	262	178	94	4192	0.871278	692.08	0.589695	849.19	823.11	0.62	2.22	1830.44	6.99	1826.91	6.97	-3.53	-0.19
84	263	179	95	4208	0.869522	692.45	0.590304	849.2	837.54	0	2.19	1831.02	6.96	1827.23	6.95	-3.79	-0.21
84	264	180	96	4224	0.867769	692.8	0.590909	849.21	852.03	0.62	2.17	1832.75	6.94	1829.13	6.93	-3.61	-0.2
84	265	181	97	4240	0.866016	693.15	0.591509	849.22	866.61	0	2.15	1833.17	6.92	1829.3	6.9	-3.88	-0.21
84	266	182	98	4256	0.864266	693.48	0.592105	849.25	881.25	0.61	2.13	1834.76	6.9	1831.05	6.88	-3.71	-0.2
84	267	183	99	4272	0.862517	693.82	0.592697	849.28	895.97	0	2.11	1835.04	6.87	1831.06	6.86	-3.98	-0.22
84	268	184	100	4288	0.860771	694.14	0.593284	849.32	910.77	0.61	2.09	1836.48	6.85	1832.66	6.84	-3.82	-0.21
84	269	185	101	4304	0.859026	694.45	0.593866	849.36	925.63	0	2.07	1836.62	6.83	1832.53	6.81	-4.09	-0.22
84	270	186	102	4320	0.857284	694.76	0.594444	849.41	940.57	0.61	2.05	1837.92	6.81	1833.98	6.79	-3.94	-0.21
84	271	187	103	4336	0.855544	695.06	0.595018	849.46	955.58	0	2.03	1837.92	6.78	1833.71	6.77	-4.21	-0.23
84	272	188	104	4352	0.853806	695.36	0.595588	849.52	970.65	0.61	2.01	1839.08	6.76	1835.01	6.75	-4.07	-0.22
84	273	189	105	4368	0.852071	695.64	0.596154	849.59	985.8	0	1.99	1838.96	6.74	1834.6	6.72	-4.35	-0.24
84	274	190	106	4384	0.850338	695.92	0.596715	849.66	1001.01	0.6	1.97	1839.98	6.72	1835.76	6.7	-4.21	-0.23
84	275	191	107	4400	0.848608	696.19	0.597273	849.74	1016.29	0	1.95	1839.72	6.69	1835.22	6.67	-4.5	-0.25
84	276	192	108	4416	0.846881	696.46	0.597826	849.83	1031.64	0.6	1.93	1840.61	6.67	1836.24	6.65	-4.37	-0.24
84	277	193	109	4432	0.845156	696.72	0.598375	849.92	1047.05	0	1.92	1840.23	6.64	1835.56	6.63	-4.67	-0.25
84	278	194	110	4448	0.843435	696.97	0.598921	850.01	1062.53	0.6	1.9	1840.98	6.62	1836.44	6.61	-4.54	-0.25
84	279	195	111	4464	0.841716	697.22	0.599462	850.11	1078.07	0	1.88	1840.48	6.6	1835.63	6.58	-4.85	-0.26
84	280	196	112	4480	0.84	697.46	0.6	850.22	1093.68	0.6	1.86	1841.1	6.58	1836.37	6.56	-4.73	-0.26
84	281	197	113	4496	0.838287	697.69	0.600534	850.33	1109.35	0	1.85	1840.47	6.55	1835.44	6.53	-5.04	-0.27
84	282	198	114	4512	0.836578	697.92	0.601064	850.44	1125.08	0.6	1.83	1840.98	6.53	1836.05	6.51	-4.93	-0.27
84	283	199	115	4528	0.834871	698.14	0.60159	850.57	1140.87	0	1.81	1840.23	6.5	1834.98	6.48	-5.25	-0.29
84	284	200	116	4544	0.833168	698.36	0.602113	850.69	1156.73	0.59	1.8	1840.61	6.48	1835.46	6.46	-5.15	-0.28
84	285	201	117	4560	0.831468	698.57	0.602632	850.82	1172.64	0	1.78	1839.75	6.46	1834.28	6.44	-5.47	-0.3
84	286	202	118	4576	0.829772	698.78	0.603147	850.96	1188.62	0.59	1.77	1840.01	6.43	1834.63	6.41	-5.38	-0.29
84	287	203	119	4592	0.828079	698.97	0.603659	851.1	1204.65	0	1.75	1839.03	6.41	1833.32	6.39	-5.71	-0.31
84	288	204	120	4608	0.826389	699.17	0.604167	851.24	1220.75	0.59	1.74	1839.17	6.39	1833.55	6.37	-5.62	-0.31
84	289	205	121	4624	0.824703	699.36	0.604671	851.39	1236.9	0	1.72	1838.08	6.36	1832.12	6.34	-5.96	-0.33
84	290	206	122	4640	0.82302	699.54	0.605172	851.55	1253.11	0.59	1.71	1838.11	6.34	1832.22	6.32	-5.88	-0.32
84	291	207	123	4656	0.821341	699.71	0.60567	851.71	1269.37	0	1.69	1836.9	6.31	1830.68	6.29	-6.23	-0.34

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
84	292	208	124	4672	0.819666	699.89	0.606164	851.87	1285.69	0.59	1.68	1836.82	6.29	1830.66	6.27	-6.16	-0.34
84	293	209	125	4688	0.817994	700.05	0.606655	852.04	1302.07	0	1.67	1835.51	6.26	1829	6.24	-6.51	-0.36
84	294	210	126	4704	0.816327	700.21	0.607143	852.21	1318.5	0.58	1.65	1835.31	6.24	1828.86	6.22	-6.45	-0.35
84	295	211	127	4720	0.814662	700.37	0.607627	852.38	1334.99	0	1.64	1833.9	6.22	1827.09	6.19	-6.81	-0.37
84	296	212	128	4736	0.813002	700.52	0.608108	852.56	1351.53	0.58	1.63	1833.6	6.19	1826.83	6.17	-6.76	-0.37
84	297	213	129	4752	0.811346	700.67	0.608586	852.75	1368.12	0	1.61	1832.08	6.17	1824.95	6.14	-7.13	-0.39
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
85	169	84	-1	2704	0.999965	592.99	0.498521	927.84	0.14	0	9.75	1192.78	7.06	1201.57	7.11	8.79	0.73
85	170	85	0	2720	1	595.34	0.5	926	0	-0.77	10	1207.88	7.11	1216.4	7.16	8.52	0.7
85	171	86	1	2736	0.999966	597.66	0.501462	924.21	0.14	0	9.76	1223.75	7.16	1230.77	7.2	7.03	0.57
85	172	87	2	2752	0.999865	599.92	0.502907	922.46	0.57	-0.76	9.52	1237.81	7.2	1245.11	7.24	7.31	0.59
85	173	88	3	2768	0.999699	602.15	0.504335	920.76	1.27	0	9.3	1253.12	7.24	1259	7.28	5.87	0.47
85	174	89	4	2784	0.999472	604.33	0.505747	919.1	2.24	-0.76	9.08	1266.66	7.28	1272.86	7.32	6.2	0.49
85	175	90	5	2800	0.999184	606.47	0.507143	917.48	3.48	0	8.87	1281.44	7.32	1286.26	7.35	4.81	0.37
85	176	91	6	2816	0.998838	608.56	0.508523	915.9	4.98	-0.75	8.67	1294.47	7.35	1299.65	7.38	5.19	0.4
85	177	92	7	2832	0.998436	610.62	0.509887	914.36	6.74	0	8.47	1308.74	7.39	1312.59	7.42	3.85	0.29
85	178	93	8	2848	0.99798	612.64	0.511236	912.86	8.76	-0.75	8.28	1321.27	7.42	1325.54	7.45	4.27	0.32
85	179	94	9	2864	0.997472	614.62	0.51257	911.4	11.02	0	8.1	1335.06	7.46	1338.03	7.48	2.97	0.22
85	180	95	10	2880	0.996914	616.56	0.513889	909.97	13.54	-0.75	7.92	1347.11	7.48	1350.53	7.5	3.43	0.25
85	181	96	11	2896	0.996307	618.46	0.515193	908.58	16.29	0	7.75	1360.41	7.52	1362.58	7.53	2.17	0.16
85	182	97	12	2912	0.995653	620.33	0.516484	907.23	19.28	-0.74	7.58	1372	7.54	1374.67	7.55	2.66	0.19
85	183	98	13	2928	0.994954	622.16	0.51776	905.91	22.5	0	7.42	1384.85	7.57	1386.29	7.58	1.45	0.1
85	184	99	14	2944	0.994211	623.96	0.519022	904.62	25.96	-0.74	7.26	1395.99	7.59	1397.96	7.6	1.97	0.14
85	185	100	15	2960	0.993426	625.73	0.52027	903.36	29.64	0	7.11	1408.39	7.61	1409.18	7.62	0.79	0.06
85	186	101	16	2976	0.9926	627.46	0.521505	902.14	33.54	-0.73	6.97	1419.1	7.63	1420.45	7.64	1.35	0.1
85	187	102	17	2992	0.991736	629.16	0.522727	900.95	37.66	0	6.83	1431.06	7.65	1431.26	7.65	0.2	0.01
85	188	103	18	3008	0.990833	630.82	0.523936	899.79	42	-0.73	6.69	1441.35	7.67	1442.14	7.67	0.79	0.05
85	189	104	19	3024	0.989894	632.46	0.525132	898.65	46.55	0	6.56	1452.9	7.69	1452.56	7.69	-0.33	-0.02
85	190	105	20	3040	0.98892	634.06	0.526316	897.55	51.31	-0.73	6.43	1462.78	7.7	1463.07	7.7	0.28	0.02
85	191	106	21	3056	0.987912	635.64	0.527487	896.47	56.27	0	6.3	1473.92	7.72	1473.11	7.71	-0.81	-0.05
85	192	107	22	3072	0.986871	637.18	0.528646	895.43	61.44	-0.72	6.18	1483.41	7.73	1483.24	7.73	-0.17	-0.01
85	193	108	23	3088	0.985798	638.7	0.529793	894.41	66.8	0	6.06	1494.15	7.74	1492.92	7.74	-1.23	-0.08
85	194	109	24	3104	0.984696	640.18	0.530928	893.41	72.37	-0.72	5.95	1503.27	7.75	1502.7	7.75	-0.57	-0.04
85	195	110	25	3120	0.983563	641.64	0.532051	892.44	78.12	0	5.84	1513.63	7.76	1512.02	7.75	-1.61	-0.11
85	196	111	26	3136	0.982403	643.08	0.533163	891.5	84.07	-0.71	5.73	1522.37	7.77	1521.44	7.76	-0.93	-0.06
85	197	112	27	3152	0.981216	644.48	0.534264	890.58	90.2	0	5.62	1532.36	7.78	1530.41	7.77	-1.95	-0.13
85	198	113	28	3168	0.980002	645.86	0.535354	889.69	96.52	-0.71	5.52	1540.74	7.78	1539.5	7.78	-1.24	-0.08
85	199	114	29	3184	0.978763	647.21	0.536432	888.82	103.02	0	5.42	1550.37	7.79	1548.13	7.78	-2.24	-0.14
85	200	115	30	3200	0.9775	648.54	0.5375	887.97	109.7	-0.71	5.33	1558.41	7.79	1556.89	7.78	-1.52	-0.1
85	201	116	31	3216	0.976213	649.85	0.538557	887.15	116.55	0	5.23	1567.69	7.8	1565.19	7.79	-2.5	-0.16
85	202	117	32	3232	0.974904	651.13	0.539604	886.34	123.58	-0.7	5.14	1575.39	7.8	1573.62	7.79	-1.76	-0.11
85	203	118	33	3248	0.973574	652.38	0.54064	885.56	130.78	0	5.05	1584.33	7.8	1581.61	7.79	-2.72	-0.17
85	204	119	34	3264	0.972222	653.61	0.541667	884.8	138.15	-0.7	4.97	1591.7	7.8	1589.73	7.79	-1.97	-0.12
85	205	120	35	3280	0.970851	654.82	0.542683	884.06	145.69	0	4.88	1600.31	7.81	1597.4	7.79	-2.91	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
85	206	121	36	3296	0.96946	656.01	0.543689	883.35	153.39	-0.7	4.8	1607.36	7.8	1605.21	7.79	-2.15	-0.13
85	207	122	37	3312	0.968051	657.17	0.544686	882.65	161.25	0	4.72	1615.65	7.81	1612.57	7.79	-3.08	-0.19
85	208	123	38	3328	0.966624	658.32	0.545673	881.97	169.27	-0.69	4.64	1622.4	7.8	1620.09	7.79	-2.3	-0.14
85	209	124	39	3344	0.965179	659.44	0.546651	881.31	177.45	0	4.57	1630.37	7.8	1627.16	7.79	-3.22	-0.2
85	210	125	40	3360	0.963719	660.54	0.547619	880.67	185.78	-0.69	4.49	1636.82	7.79	1634.39	7.78	-2.43	-0.15
85	211	126	41	3376	0.962243	661.62	0.548578	880.05	194.26	0	4.42	1644.49	7.79	1641.16	7.78	-3.33	-0.2
85	212	127	42	3392	0.960751	662.68	0.549528	879.44	202.9	-0.69	4.35	1650.65	7.79	1648.11	7.77	-2.54	-0.15
85	213	128	43	3408	0.959245	663.72	0.550469	878.85	211.68	0	4.28	1658.03	7.78	1654.6	7.77	-3.43	-0.21
85	214	129	44	3424	0.957726	664.74	0.551402	878.28	220.61	-0.68	4.22	1663.9	7.78	1661.27	7.76	-2.63	-0.16
85	215	130	45	3440	0.956193	665.74	0.552326	877.73	229.68	0	4.15	1670.99	7.77	1667.49	7.76	-3.5	-0.21
85	216	131	46	3456	0.954647	666.73	0.553241	877.2	238.9	-0.68	4.09	1676.59	7.76	1673.89	7.75	-2.7	-0.16
85	217	132	47	3472	0.953089	667.69	0.554147	876.68	248.25	0	4.03	1683.41	7.76	1679.84	7.74	-3.56	-0.21
85	218	133	48	3488	0.951519	668.64	0.555046	876.17	257.75	-0.68	3.97	1688.73	7.75	1685.98	7.73	-2.75	-0.16
85	219	134	49	3504	0.949938	669.57	0.555936	875.69	267.38	0	3.91	1695.28	7.74	1691.67	7.72	-3.61	-0.21
85	220	135	50	3520	0.948347	670.48	0.556818	875.21	277.14	-0.67	3.85	1700.34	7.73	1697.55	7.72	-2.79	-0.16
85	221	136	51	3536	0.946746	671.37	0.557692	874.76	287.04	0	3.79	1706.62	7.72	1702.98	7.71	-3.64	-0.21
85	222	137	52	3552	0.945134	672.25	0.558559	874.31	297.07	-0.67	3.74	1711.44	7.71	1708.61	7.7	-2.82	-0.17
85	223	138	53	3568	0.943514	673.11	0.559417	873.88	307.23	0	3.69	1717.46	7.7	1713.79	7.69	-3.67	-0.21
85	224	139	54	3584	0.941885	673.96	0.560268	873.47	317.51	-0.67	3.63	1722.02	7.69	1719.18	7.67	-2.84	-0.17
85	225	140	55	3600	0.940247	674.78	0.561111	873.07	327.92	0	3.58	1727.8	7.68	1724.12	7.66	-3.68	-0.21
85	226	141	56	3616	0.938601	675.6	0.561947	872.69	338.46	-0.67	3.53	1732.12	7.66	1729.27	7.65	-2.86	-0.17
85	227	142	57	3632	0.936948	676.4	0.562775	872.31	349.12	0	3.48	1737.66	7.65	1733.97	7.64	-3.69	-0.21
85	228	143	58	3648	0.935288	677.18	0.563596	871.95	359.9	-0.66	3.44	1741.74	7.64	1738.88	7.63	-2.86	-0.16
85	229	144	59	3664	0.933621	677.95	0.56441	871.61	370.8	0	3.39	1747.04	7.63	1743.35	7.61	-3.69	-0.21
85	230	145	60	3680	0.931947	678.7	0.565217	871.27	381.81	-0.66	3.34	1750.9	7.61	1748.04	7.6	-2.86	-0.16
85	231	146	61	3696	0.930267	679.44	0.566017	870.95	392.94	0	3.3	1755.96	7.6	1752.28	7.59	-3.68	-0.21
85	232	147	62	3712	0.928582	680.16	0.56681	870.64	404.19	-0.66	3.25	1759.6	7.58	1756.75	7.57	-2.86	-0.16
85	233	148	63	3728	0.926891	680.88	0.567597	870.35	415.55	0	3.21	1764.44	7.57	1760.77	7.56	-3.68	-0.21
85	234	149	64	3744	0.925195	681.57	0.568376	870.06	427.02	-0.65	3.17	1767.86	7.55	1765.01	7.54	-2.85	-0.16
85	235	150	65	3760	0.923495	682.26	0.569149	869.79	438.6	0	3.13	1772.48	7.54	1768.82	7.53	-3.67	-0.21
85	236	151	66	3776	0.92179	682.93	0.569915	869.53	450.3	-0.65	3.09	1775.69	7.52	1772.85	7.51	-2.84	-0.16
85	237	152	67	3792	0.92008	683.59	0.570675	869.27	462.09	0	3.05	1780.09	7.51	1776.44	7.5	-3.65	-0.21
85	238	153	68	3808	0.918367	684.23	0.571429	869.04	474	-0.65	3.01	1783.1	7.49	1780.27	7.48	-2.83	-0.16
85	239	154	69	3824	0.916651	684.86	0.572176	868.81	486.01	0	2.97	1787.29	7.48	1783.65	7.46	-3.64	-0.2
85	240	155	70	3840	0.914931	685.48	0.572917	868.59	498.12	-0.65	2.94	1790.1	7.46	1787.27	7.45	-2.82	-0.16
85	241	156	71	3856	0.913207	686.09	0.573651	868.38	510.34	0	2.9	1794.09	7.44	1790.45	7.43	-3.64	-0.2
85	242	157	72	3872	0.911481	686.69	0.57438	868.18	522.66	-0.64	2.87	1796.69	7.42	1793.88	7.41	-2.82	-0.16
85	243	158	73	3888	0.909753	687.27	0.575103	868	535.07	0	2.83	1800.49	7.41	1796.86	7.39	-3.63	-0.2
85	244	159	74	3904	0.908022	687.85	0.57582	867.82	547.59	-0.64	2.8	1802.9	7.39	1800.09	7.38	-2.81	-0.16
85	245	160	75	3920	0.906289	688.41	0.576531	867.65	560.2	0	2.76	1806.5	7.37	1802.88	7.36	-3.63	-0.2
85	246	161	76	3936	0.904554	688.96	0.577236	867.49	572.91	-0.64	2.73	1808.73	7.35	1805.92	7.34	-2.81	-0.16
85	247	162	77	3952	0.902818	689.5	0.577935	867.34	585.72	0	2.7	1812.14	7.34	1808.52	7.32	-3.63	-0.2
85	248	163	78	3968	0.90108	690.03	0.578629	867.2	598.62	-0.64	2.67	1814.19	7.32	1811.37	7.3	-2.82	-0.16
85	249	164	79	3984	0.89934	690.55	0.579317	867.07	611.61	0	2.64	1817.41	7.3	1813.78	7.28	-3.63	-0.2
85	250	165	80	4000	0.8976	691.05	0.58	866.95	624.69	-0.63	2.61	1819.28	7.28	1816.45	7.27	-2.83	-0.16
85	251	166	81	4016	0.895859	691.55	0.580677	866.84	637.86	0	2.58	1822.32	7.26	1818.68	7.25	-3.64	-0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
85	252	167	82	4032	0.894117	692.04	0.581349	866.73	651.13	-0.63	2.55	1824.02	7.24	1821.17	7.23	-2.85	-0.16
85	253	168	83	4048	0.892375	692.52	0.582016	866.64	664.48	0	2.52	1826.89	7.22	1823.23	7.21	-3.66	-0.2
85	254	169	84	4064	0.890632	692.98	0.582677	866.55	677.92	-0.63	2.49	1828.41	7.2	1825.54	7.19	-2.87	-0.16
85	255	170	85	4080	0.888889	693.44	0.583333	866.47	691.44	0	2.47	1831.11	7.18	1827.42	7.17	-3.69	-0.2
85	256	171	86	4096	0.887146	693.89	0.583984	866.4	705.06	-0.62	2.44	1832.47	7.16	1829.57	7.15	-2.9	-0.16
85	257	172	87	4112	0.885403	694.33	0.58463	866.34	718.75	0	2.41	1834.99	7.14	1831.27	7.13	-3.72	-0.2
85	258	173	88	4128	0.883661	694.76	0.585271	866.28	732.53	-0.62	2.39	1836.19	7.12	1833.25	7.11	-2.94	-0.16
85	259	174	89	4144	0.881919	695.18	0.585907	866.24	746.39	0	2.36	1838.55	7.1	1834.79	7.08	-3.76	-0.21
85	260	175	90	4160	0.880178	695.59	0.586538	866.2	760.33	-0.62	2.34	1839.59	7.08	1836.61	7.06	-2.99	-0.16
85	261	176	91	4176	0.878437	695.99	0.587165	866.16	774.36	0	2.31	1841.8	7.06	1837.98	7.04	-3.81	-0.21
85	262	177	92	4192	0.876697	696.39	0.587786	866.14	788.46	-0.62	2.29	1842.68	7.03	1839.64	7.02	-3.05	-0.17
85	263	178	93	4208	0.874958	696.78	0.588403	866.12	802.64	0	2.26	1844.73	7.01	1840.85	7	-3.87	-0.21
85	264	179	94	4224	0.873221	697.15	0.589015	866.11	816.9	-0.62	2.24	1845.46	6.99	1842.35	6.98	-3.11	-0.17
85	265	180	95	4240	0.871485	697.52	0.589623	866.11	831.24	0	2.22	1847.35	6.97	1843.41	6.96	-3.94	-0.21
85	266	181	96	4256	0.86975	697.88	0.590226	866.11	845.65	-0.61	2.2	1847.94	6.95	1844.75	6.94	-3.19	-0.17
85	267	182	97	4272	0.868016	698.24	0.590824	866.12	860.14	0	2.17	1849.68	6.93	1845.65	6.91	-4.03	-0.22
85	268	183	98	4288	0.866284	698.58	0.591418	866.14	874.7	-0.61	2.15	1850.12	6.9	1846.84	6.89	-3.28	-0.18
85	269	184	99	4304	0.864554	698.92	0.592007	866.16	889.34	0	2.13	1851.71	6.88	1847.59	6.87	-4.12	-0.22
85	270	185	100	4320	0.862826	699.25	0.592593	866.19	904.05	-0.61	2.11	1852.01	6.86	1848.63	6.85	-3.38	-0.18
85	271	186	101	4336	0.861099	699.58	0.593173	866.23	918.83	0	2.09	1853.46	6.84	1849.24	6.82	-4.23	-0.23
85	272	187	102	4352	0.859375	699.89	0.59375	866.27	933.68	-0.61	2.07	1853.63	6.81	1850.13	6.8	-3.49	-0.19
85	273	188	103	4368	0.857653	700.2	0.594322	866.32	948.6	0	2.05	1854.93	6.79	1850.59	6.78	-4.34	-0.23
85	274	189	104	4384	0.855933	700.5	0.594891	866.37	963.59	-0.6	2.03	1854.96	6.77	1851.34	6.76	-3.62	-0.2
85	275	190	105	4400	0.854215	700.79	0.595455	866.43	978.66	0	2.01	1856.13	6.75	1851.66	6.73	-4.47	-0.24
85	276	191	106	4416	0.852499	701.08	0.596014	866.5	993.78	-0.6	1.99	1856.03	6.72	1852.27	6.71	-3.76	-0.2
85	277	192	107	4432	0.850787	701.36	0.59657	866.57	1008.98	0	1.97	1857.06	6.7	1852.45	6.69	-4.61	-0.25
85	278	193	108	4448	0.849076	701.64	0.597122	866.65	1024.24	-0.6	1.96	1856.83	6.68	1852.92	6.67	-3.91	-0.21
85	279	194	109	4464	0.847368	701.9	0.59767	866.73	1039.57	0	1.94	1857.73	6.66	1852.96	6.64	-4.77	-0.26
85	280	195	110	4480	0.845663	702.16	0.598214	866.82	1054.97	-0.6	1.92	1857.37	6.63	1853.3	6.62	-4.07	-0.22
85	281	196	111	4496	0.843961	702.42	0.598754	866.91	1070.43	0	1.9	1858.15	6.61	1853.21	6.6	-4.94	-0.27
85	282	197	112	4512	0.842261	702.66	0.599291	867.01	1085.95	-0.6	1.89	1857.66	6.59	1853.41	6.57	-4.25	-0.23
85	283	198	113	4528	0.840565	702.91	0.599823	867.12	1101.54	0	1.87	1858.31	6.57	1853.19	6.55	-5.12	-0.28
85	284	199	114	4544	0.838871	703.14	0.600352	867.23	1117.19	-0.59	1.85	1857.7	6.54	1853.26	6.53	-4.44	-0.24
85	285	200	115	4560	0.837181	703.37	0.600877	867.34	1132.9	0	1.84	1858.23	6.52	1852.91	6.5	-5.32	-0.29
85	286	201	116	4576	0.835493	703.59	0.601399	867.46	1148.67	-0.59	1.82	1857.5	6.49	1852.85	6.48	-4.65	-0.25
85	287	202	117	4592	0.833809	703.81	0.601916	867.59	1164.5	0	1.8	1857.9	6.47	1852.37	6.45	-5.53	-0.3
85	288	203	118	4608	0.832128	704.02	0.602431	867.72	1180.39	-0.59	1.79	1857.06	6.45	1852.19	6.43	-4.87	-0.26
85	289	204	119	4624	0.83045	704.23	0.602941	867.85	1196.35	0	1.77	1857.35	6.43	1851.59	6.41	-5.76	-0.31
85	290	205	120	4640	0.828775	704.43	0.603448	867.99	1212.36	-0.59	1.76	1856.39	6.4	1851.29	6.38	-5.11	-0.28
85	291	206	121	4656	0.827104	704.62	0.603952	868.14	1228.43	0	1.74	1856.56	6.38	1850.56	6.36	-6	-0.32
85	292	207	122	4672	0.825436	704.81	0.604452	868.29	1244.55	-0.59	1.73	1855.49	6.35	1850.14	6.34	-5.36	-0.29
85	293	208	123	4688	0.823772	705	0.604949	868.44	1260.74	0	1.72	1855.54	6.33	1849.29	6.31	-6.26	-0.34
85	294	209	124	4704	0.822111	705.18	0.605442	868.6	1276.98	-0.58	1.7	1854.37	6.31	1848.75	6.29	-5.62	-0.3
85	295	210	125	4720	0.820454	705.35	0.605932	868.76	1293.27	0	1.69	1854.31	6.29	1847.78	6.26	-6.53	-0.35
85	296	211	126	4736	0.8188	705.52	0.606419	868.93	1309.62	-0.58	1.67	1853.03	6.26	1847.12	6.24	-5.91	-0.32
85	297	212	127	4752	0.81715	705.68	0.606902	869.1	1326.03	0	1.66	1852.86	6.24	1846.04	6.22	-6.82	-0.37

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
85	298	213	128	4768	0.815504	705.84	0.607383	869.27	1342.49	-0.58	1.65	1851.47	6.21	1845.27	6.19	-6.2	-0.34
85	299	214	129	4784	0.813861	705.99	0.60786	869.45	1359	0	1.63	1851.19	6.19	1844.07	6.17	-7.12	-0.39
85	300	215	130	4800	0.812222	706.14	0.608333	869.63	1375.57	-0.58	1.62	1849.7	6.17	1843.19	6.14	-6.52	-0.35
85	301	216	131	4816	0.810587	706.28	0.608804	869.82	1392.18	0	1.61	1849.32	6.14	1841.87	6.12	-7.44	-0.4
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
86	171	85	-1	2736	0.999966	597.66	0.498538	946.09	0.14	0	9.76	1201.87	7.03	1210.69	7.08	8.82	0.73
86	172	86	0	2752	1	600	0.5	944.23	0	0.76	10	1218.53	7.08	1226.52	7.13	7.99	0.65
86	173	87	1	2768	0.999967	602.31	0.501445	942.43	0.14	0	9.76	1232.89	7.13	1239.96	7.17	7.07	0.57
86	174	88	2	2784	0.999868	604.57	0.502874	940.66	0.56	0.76	9.53	1248.5	7.18	1255.28	7.21	6.78	0.54
86	175	89	3	2800	0.999706	606.78	0.504286	938.95	1.25	0	9.31	1262.33	7.21	1268.25	7.25	5.92	0.47
86	176	90	4	2816	0.999483	608.96	0.505682	937.27	2.21	0.75	9.09	1277.4	7.26	1283.08	7.29	5.68	0.44
86	177	91	5	2832	0.999202	611.09	0.507062	935.64	3.44	0	8.88	1290.72	7.29	1295.59	7.32	4.87	0.38
86	178	92	6	2848	0.998864	613.18	0.508427	934.04	4.93	0.75	8.68	1305.28	7.33	1309.95	7.36	4.67	0.36
86	179	93	7	2864	0.998471	615.23	0.509777	932.49	6.67	0	8.49	1318.1	7.36	1322.01	7.39	3.91	0.3
86	180	94	8	2880	0.998025	617.25	0.511111	930.97	8.66	0.75	8.3	1332.16	7.4	1335.91	7.42	3.75	0.28
86	181	95	9	2896	0.997528	619.22	0.512431	929.49	10.9	0	8.12	1344.5	7.43	1347.53	7.44	3.03	0.23
86	182	96	10	2912	0.996981	621.16	0.513736	928.05	13.39	0.74	7.94	1358.08	7.46	1360.99	7.48	2.91	0.21
86	183	97	11	2928	0.996387	623.06	0.515027	926.65	16.11	0	7.77	1369.95	7.49	1372.19	7.5	2.24	0.16
86	184	98	12	2944	0.995747	624.93	0.516304	925.28	19.07	0.74	7.6	1383.07	7.52	1385.22	7.53	2.15	0.16
86	185	99	13	2960	0.995062	626.76	0.517568	923.94	22.26	0	7.44	1394.49	7.54	1396	7.55	1.52	0.11
86	186	100	14	2976	0.994335	628.55	0.518817	922.64	25.68	0.73	7.29	1407.15	7.57	1408.61	7.57	1.46	0.1
86	187	101	15	2992	0.993566	630.32	0.520053	921.37	29.32	0	7.14	1418.13	7.58	1419	7.59	0.86	0.06
86	188	102	16	3008	0.992757	632.05	0.521277	920.13	33.18	0.73	6.99	1430.36	7.61	1431.2	7.61	0.84	0.06
86	189	103	17	3024	0.99191	633.75	0.522487	918.92	37.26	0	6.85	1440.92	7.62	1441.2	7.63	0.28	0.02
86	190	104	18	3040	0.991025	635.41	0.523684	917.74	41.56	0.73	6.72	1452.73	7.65	1453	7.65	0.28	0.02
86	191	105	19	3056	0.990104	637.05	0.524869	916.6	46.06	0	6.58	1462.88	7.66	1462.62	7.66	-0.25	-0.02
86	192	106	20	3072	0.989149	638.65	0.526042	915.48	50.78	0.72	6.46	1474.27	7.68	1474.05	7.68	-0.23	-0.02
86	193	107	21	3088	0.988161	640.23	0.527202	914.39	55.69	0	6.33	1484.03	7.69	1483.3	7.69	-0.73	-0.05
86	194	108	22	3104	0.98714	641.77	0.528351	913.32	60.81	0.72	6.21	1495.02	7.71	1494.35	7.7	-0.68	-0.05
86	195	109	23	3120	0.986088	643.29	0.529487	912.29	66.12	0	6.09	1504.39	7.71	1503.24	7.71	-1.15	-0.08
86	196	110	24	3136	0.985006	644.78	0.530612	911.28	71.63	0.71	5.98	1515	7.73	1513.92	7.72	-1.08	-0.07
86	197	111	25	3152	0.983895	646.24	0.531726	910.3	77.33	0	5.87	1524	7.74	1522.47	7.73	-1.53	-0.1
86	198	112	26	3168	0.982757	647.68	0.532828	909.34	83.22	0.71	5.76	1534.23	7.75	1532.8	7.74	-1.43	-0.09
86	199	113	27	3184	0.981591	649.08	0.53392	908.4	89.3	0	5.66	1542.87	7.75	1541.01	7.74	-1.86	-0.12
86	200	114	28	3200	0.9804	650.47	0.535	907.5	95.56	0.71	5.55	1552.74	7.76	1550.99	7.75	-1.75	-0.11
86	201	115	29	3216	0.979184	651.82	0.53607	906.61	102	0	5.46	1561.02	7.77	1558.87	7.76	-2.15	-0.14
86	202	116	30	3232	0.977943	653.16	0.537129	905.75	108.62	0.7	5.36	1570.54	7.77	1568.52	7.76	-2.02	-0.13
86	203	117	31	3248	0.97668	654.46	0.538177	904.91	115.41	0	5.27	1578.48	7.78	1576.08	7.76	-2.4	-0.15
86	204	118	32	3264	0.975394	655.75	0.539216	904.09	122.38	0.7	5.17	1587.66	7.78	1585.4	7.77	-2.26	-0.14
86	205	119	33	3280	0.974087	657	0.540244	903.3	129.51	0	5.09	1595.27	7.78	1592.65	7.77	-2.62	-0.16
86	206	120	34	3296	0.972759	658.24	0.541262	902.52	136.82	0.7	5	1604.11	7.79	1601.65	7.77	-2.47	-0.15
86	207	121	35	3312	0.971411	659.45	0.542271	901.77	144.29	0	4.92	1611.4	7.78	1608.59	7.77	-2.81	-0.17
86	208	122	36	3328	0.970044	660.65	0.543269	901.04	151.92	0.69	4.83	1619.92	7.79	1617.28	7.78	-2.64	-0.16
86	209	123	37	3344	0.968659	661.82	0.544258	900.33	159.71	0	4.75	1626.9	7.78	1623.93	7.77	-2.97	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
86	210	124	38	3360	0.967256	662.96	0.545238	899.63	167.66	0.69	4.68	1635.11	7.79	1632.31	7.77	-2.79	-0.17
86	211	125	39	3376	0.965836	664.09	0.546209	898.96	175.77	0	4.6	1641.78	7.78	1638.67	7.77	-3.11	-0.19
86	212	126	40	3392	0.9644	665.2	0.54717	898.31	184.03	0.69	4.53	1649.68	7.78	1646.76	7.77	-2.92	-0.18
86	213	127	41	3408	0.962948	666.28	0.548122	897.67	192.45	0	4.46	1656.06	7.77	1652.84	7.76	-3.22	-0.19
86	214	128	42	3424	0.961481	667.35	0.549065	897.05	201.01	0.68	4.39	1663.66	7.77	1660.64	7.76	-3.02	-0.18
86	215	129	43	3440	0.96	668.39	0.55	896.45	209.72	0	4.32	1669.75	7.77	1666.44	7.75	-3.31	-0.2
86	216	130	44	3456	0.958505	669.42	0.550926	895.87	218.58	0.68	4.25	1677.07	7.76	1673.96	7.75	-3.11	-0.19
86	217	131	45	3472	0.956996	670.43	0.551843	895.3	227.58	0	4.19	1682.88	7.76	1679.49	7.74	-3.39	-0.2
86	218	132	46	3488	0.955475	671.42	0.552752	894.75	236.72	0.68	4.12	1689.91	7.75	1686.74	7.74	-3.17	-0.19
86	219	133	47	3504	0.953942	672.39	0.553653	894.22	246	0	4.06	1695.45	7.74	1692.01	7.73	-3.44	-0.2
86	220	134	48	3520	0.952397	673.34	0.554545	893.7	255.42	0.67	4	1702.21	7.74	1698.99	7.72	-3.22	-0.19
86	221	135	49	3536	0.95084	674.28	0.55543	893.2	264.97	0	3.94	1707.49	7.73	1704.01	7.71	-3.48	-0.2
86	222	136	50	3552	0.949274	675.19	0.556306	892.72	274.66	0.67	3.88	1713.98	7.72	1710.72	7.71	-3.26	-0.19
86	223	137	51	3568	0.947697	676.09	0.557175	892.25	284.48	0	3.83	1719	7.71	1715.49	7.69	-3.51	-0.2
86	224	138	52	3584	0.94611	676.98	0.558036	891.79	294.43	0.67	3.77	1725.24	7.7	1721.95	7.69	-3.28	-0.19
86	225	139	53	3600	0.944514	677.85	0.558889	891.35	304.51	0	3.72	1730.01	7.69	1726.48	7.67	-3.53	-0.2
86	226	140	54	3616	0.942909	678.7	0.559735	890.93	314.72	0.67	3.67	1735.99	7.68	1732.69	7.67	-3.3	-0.19
86	227	141	55	3632	0.941295	679.53	0.560573	890.52	325.05	0	3.61	1740.52	7.67	1736.98	7.65	-3.54	-0.2
86	228	142	56	3648	0.939674	680.35	0.561404	890.12	335.5	0.66	3.56	1746.25	7.66	1742.95	7.64	-3.3	-0.19
86	229	143	57	3664	0.938045	681.16	0.562227	889.73	346.08	0	3.52	1750.54	7.64	1747	7.63	-3.54	-0.2
86	230	144	58	3680	0.936408	681.95	0.563043	889.36	356.78	0.66	3.47	1756.03	7.63	1752.73	7.62	-3.3	-0.19
86	231	145	59	3696	0.934765	682.72	0.563853	889	367.6	0	3.42	1760.09	7.62	1756.56	7.6	-3.53	-0.2
86	232	146	60	3712	0.933115	683.49	0.564655	888.66	378.53	0.66	3.37	1765.35	7.61	1762.06	7.6	-3.29	-0.19
86	233	147	61	3728	0.931459	684.23	0.565451	888.33	389.58	0	3.33	1769.19	7.59	1765.67	7.58	-3.52	-0.2
86	234	148	62	3744	0.929798	684.96	0.566239	888.01	400.75	0.65	3.29	1774.22	7.58	1770.94	7.57	-3.28	-0.19
86	235	149	63	3760	0.92813	685.68	0.567021	887.7	412.03	0	3.24	1777.83	7.57	1774.33	7.55	-3.51	-0.2
86	236	150	64	3776	0.926458	686.39	0.567797	887.4	423.42	0.65	3.2	1782.64	7.55	1779.38	7.54	-3.27	-0.18
86	237	151	65	3792	0.924781	687.08	0.568565	887.12	434.92	0	3.16	1786.05	7.54	1782.56	7.52	-3.49	-0.2
86	238	152	66	3808	0.923099	687.76	0.569328	886.85	446.53	0.65	3.12	1790.64	7.52	1787.39	7.51	-3.25	-0.18
86	239	153	67	3824	0.921412	688.42	0.570084	886.58	458.24	0	3.08	1793.83	7.51	1790.36	7.49	-3.47	-0.19
86	240	154	68	3840	0.919722	689.07	0.570833	886.33	470.07	0.65	3.04	1798.21	7.49	1794.98	7.48	-3.23	-0.18
86	241	155	69	3856	0.918028	689.71	0.571577	886.09	481.99	0	3	1801.2	7.47	1797.75	7.46	-3.45	-0.19
86	242	156	70	3872	0.916331	690.34	0.572314	885.87	494.02	0.64	2.97	1805.38	7.46	1802.16	7.45	-3.22	-0.18
86	243	157	71	3888	0.91463	690.96	0.573045	885.65	506.16	0	2.93	1808.17	7.44	1804.73	7.43	-3.44	-0.19
86	244	158	72	3904	0.912927	691.56	0.57377	885.44	518.39	0.64	2.9	1812.14	7.43	1808.94	7.41	-3.2	-0.18
86	245	159	73	3920	0.91122	692.15	0.57449	885.24	530.72	0	2.86	1814.74	7.41	1811.32	7.39	-3.42	-0.19
86	246	160	74	3936	0.909512	692.73	0.575203	885.06	543.16	0.64	2.83	1818.52	7.39	1815.33	7.38	-3.19	-0.18
86	247	161	75	3952	0.9078	693.3	0.575911	884.88	555.69	0	2.79	1820.93	7.37	1817.52	7.36	-3.41	-0.19
86	248	162	76	3968	0.906087	693.86	0.576613	884.71	568.31	0.64	2.76	1824.51	7.36	1821.34	7.34	-3.18	-0.17
86	249	163	77	3984	0.904373	694.41	0.577309	884.55	581.03	0	2.73	1826.74	7.34	1823.34	7.32	-3.4	-0.19
86	250	164	78	4000	0.902656	694.95	0.578	884.4	593.85	0.63	2.7	1830.13	7.32	1826.96	7.31	-3.17	-0.17
86	251	165	79	4016	0.900938	695.47	0.578685	884.26	606.75	0	2.67	1832.18	7.3	1828.78	7.29	-3.39	-0.19
86	252	166	80	4032	0.899219	695.99	0.579365	884.13	619.75	0.63	2.64	1835.39	7.28	1832.22	7.27	-3.17	-0.17
86	253	167	81	4048	0.897499	696.49	0.58004	884.01	632.84	0	2.61	1837.26	7.26	1833.87	7.25	-3.4	-0.19
86	254	168	82	4064	0.895778	696.99	0.580709	883.9	646.02	0.63	2.58	1840.3	7.25	1837.12	7.23	-3.18	-0.17
86	255	169	83	4080	0.894056	697.47	0.581373	883.79	659.29	0	2.55	1842	7.22	1838.59	7.21	-3.4	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
86	256	170	84	4096	0.892334	697.95	0.582031	883.7	672.64	0.62	2.52	1844.86	7.21	1841.67	7.19	-3.19	-0.17
86	257	171	85	4112	0.890612	698.41	0.582685	883.61	686.08	0	2.49	1846.39	7.18	1842.97	7.17	-3.42	-0.19
86	258	172	86	4128	0.888889	698.87	0.583333	883.53	699.61	0.62	2.47	1849.08	7.17	1845.87	7.15	-3.21	-0.17
86	259	173	87	4144	0.887166	699.32	0.583977	883.46	713.22	0	2.44	1850.44	7.14	1847	7.13	-3.44	-0.19
86	260	174	88	4160	0.885444	699.75	0.584615	883.39	726.92	0.62	2.41	1852.97	7.13	1849.74	7.11	-3.23	-0.17
86	261	175	89	4176	0.883722	700.18	0.585249	883.34	740.69	0	2.39	1854.17	7.1	1850.7	7.09	-3.47	-0.19
86	262	176	90	4192	0.882	700.6	0.585878	883.29	754.55	0.62	2.36	1856.54	7.09	1853.27	7.07	-3.27	-0.18
86	263	177	91	4208	0.880279	701.01	0.586502	883.25	768.49	0	2.34	1857.58	7.06	1854.07	7.05	-3.51	-0.19
86	264	178	92	4224	0.878558	701.41	0.587121	883.22	782.51	0.62	2.31	1859.79	7.04	1856.47	7.03	-3.31	-0.18
86	265	179	93	4240	0.876839	701.81	0.587736	883.19	796.61	0	2.29	1860.68	7.02	1857.12	7.01	-3.56	-0.19
86	266	180	94	4256	0.87512	702.19	0.588346	883.17	810.78	0.61	2.27	1862.73	7	1859.36	6.99	-3.37	-0.18
86	267	181	95	4272	0.873403	702.57	0.588951	883.16	825.04	0	2.24	1863.48	6.98	1859.86	6.97	-3.62	-0.19
86	268	182	96	4288	0.871686	702.94	0.589552	883.16	839.36	0.61	2.22	1865.37	6.96	1861.94	6.95	-3.43	-0.18
86	269	183	97	4304	0.869971	703.3	0.590149	883.16	853.77	0	2.2	1865.97	6.94	1862.28	6.92	-3.69	-0.2
86	270	184	98	4320	0.868258	703.65	0.590741	883.17	868.25	0.61	2.18	1867.72	6.92	1864.21	6.9	-3.51	-0.19
86	271	185	99	4336	0.866546	704	0.591328	883.18	882.8	0	2.16	1868.17	6.89	1864.41	6.88	-3.77	-0.2
86	272	186	100	4352	0.864836	704.34	0.591912	883.21	897.42	0.61	2.14	1869.77	6.87	1866.18	6.86	-3.6	-0.19
86	273	187	101	4368	0.863127	704.67	0.592491	883.23	912.12	0	2.11	1870.09	6.85	1866.23	6.84	-3.86	-0.21
86	274	188	102	4384	0.86142	704.99	0.593066	883.27	926.89	0.6	2.09	1871.55	6.83	1867.85	6.82	-3.69	-0.2
86	275	189	103	4400	0.859716	705.31	0.593636	883.31	941.73	0	2.07	1871.73	6.81	1867.76	6.79	-3.96	-0.21
86	276	190	104	4416	0.858013	705.62	0.594203	883.36	956.64	0.6	2.05	1873.04	6.79	1869.24	6.77	-3.81	-0.2
86	277	191	105	4432	0.856312	705.92	0.594765	883.41	971.62	0	2.04	1873.09	6.76	1869.01	6.75	-4.08	-0.22
86	278	192	106	4448	0.854614	706.21	0.595324	883.47	986.66	0.6	2.02	1874.27	6.74	1870.34	6.73	-3.93	-0.21
86	279	193	107	4464	0.852918	706.5	0.595878	883.54	1001.77	0	2	1874.19	6.72	1869.98	6.7	-4.21	-0.22
86	280	194	108	4480	0.851224	706.78	0.596429	883.61	1016.96	0.6	1.98	1875.23	6.7	1871.17	6.68	-4.06	-0.22
86	281	195	109	4496	0.849533	707.05	0.596975	883.68	1032.2	0	1.96	1875.02	6.67	1870.67	6.66	-4.35	-0.23
86	282	196	110	4512	0.847845	707.32	0.597518	883.77	1047.51	0.6	1.94	1875.94	6.65	1871.72	6.64	-4.21	-0.23
86	283	197	111	4528	0.846159	707.58	0.598057	883.86	1062.89	0	1.93	1875.6	6.63	1871.09	6.61	-4.5	-0.24
86	284	198	112	4544	0.844475	707.84	0.598592	883.95	1078.33	0.59	1.91	1876.38	6.61	1872.01	6.59	-4.37	-0.23
86	285	199	113	4560	0.842795	708.09	0.599123	884.05	1093.83	0	1.89	1875.92	6.58	1871.25	6.57	-4.67	-0.25
86	286	200	114	4576	0.841117	708.33	0.59965	884.15	1109.4	0.59	1.87	1876.58	6.56	1872.03	6.55	-4.55	-0.24
86	287	201	115	4592	0.839442	708.57	0.600174	884.26	1125.03	0	1.86	1876	6.54	1871.15	6.52	-4.85	-0.26
86	288	202	116	4608	0.83777	708.8	0.600694	884.37	1140.72	0.59	1.84	1876.54	6.52	1871.8	6.5	-4.74	-0.25
86	289	203	117	4624	0.836101	709.02	0.601211	884.49	1156.47	0	1.83	1875.84	6.49	1870.79	6.47	-5.05	-0.27
86	290	204	118	4640	0.834435	709.24	0.601724	884.62	1172.28	0.59	1.81	1876.26	6.47	1871.31	6.45	-4.94	-0.26
86	291	205	119	4656	0.832772	709.45	0.602234	884.75	1188.15	0	1.8	1875.44	6.44	1870.18	6.43	-5.26	-0.28
86	292	206	120	4672	0.831113	709.66	0.60274	884.88	1204.08	0.59	1.78	1875.74	6.42	1870.58	6.41	-5.16	-0.28
86	293	207	121	4688	0.829456	709.86	0.603242	885.02	1220.07	0	1.76	1874.81	6.4	1869.33	6.38	-5.49	-0.29
86	294	208	122	4704	0.827803	710.06	0.603741	885.16	1236.11	0.58	1.75	1875	6.38	1869.6	6.36	-5.4	-0.29
86	295	209	123	4720	0.826153	710.25	0.604237	885.31	1252.22	0	1.74	1873.96	6.35	1868.23	6.33	-5.73	-0.31
86	296	210	124	4736	0.824507	710.43	0.60473	885.46	1268.38	0.58	1.72	1874.03	6.33	1868.38	6.31	-5.65	-0.3
86	297	211	125	4752	0.822864	710.61	0.605219	885.62	1284.59	0	1.71	1872.88	6.31	1866.9	6.29	-5.98	-0.32
86	298	212	126	4768	0.821224	710.79	0.605705	885.78	1300.86	0.58	1.69	1872.84	6.28	1866.93	6.26	-5.91	-0.32
86	299	213	127	4784	0.819588	710.96	0.606187	885.95	1317.19	0	1.68	1871.58	6.26	1865.33	6.24	-6.26	-0.34
86	300	214	128	4800	0.817956	711.12	0.606667	886.12	1333.57	0.58	1.67	1871.43	6.24	1865.24	6.22	-6.19	-0.33
86	301	215	129	4816	0.816327	711.28	0.607143	886.29	1350	0	1.65	1870.07	6.21	1863.53	6.19	-6.54	-0.35

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
86	302	216	130	4832	0.814701	711.44	0.607616	886.47	1366.49	0.58	1.64	1869.82	6.19	1863.33	6.17	-6.49	-0.35
86	303	217	131	4848	0.813079	711.59	0.608086	886.65	1383.03	0	1.63	1868.36	6.17	1861.51	6.14	-6.84	-0.37
86	304	218	132	4864	0.811461	711.74	0.608553	886.84	1399.62	0.57	1.61	1867.99	6.14	1861.2	6.12	-6.8	-0.37
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
87	173	86	-1	2768	0.999967	602.31	0.498555	964.47	0.14	0	9.76	1210.84	7	1219.69	7.05	8.85	0.73
87	174	87	0	2784	1	604.65	0.5	962.6	0	-0.76	10	1225.99	7.05	1234.57	7.1	8.58	0.69
87	175	88	1	2800	0.999967	606.94	0.501429	960.78	0.14	0	9.76	1241.9	7.1	1249	7.14	7.1	0.57
87	176	89	2	2816	0.999871	609.19	0.502841	959	0.55	-0.75	9.53	1256.03	7.14	1263.4	7.18	7.37	0.58
87	177	90	3	2832	0.999713	611.4	0.504237	957.27	1.24	0	9.31	1271.4	7.18	1277.34	7.22	5.94	0.46
87	178	91	4	2848	0.999495	613.57	0.505618	955.58	2.19	-0.75	9.1	1285.01	7.22	1291.27	7.25	6.25	0.48
87	179	92	5	2864	0.99922	615.69	0.506983	953.93	3.4	0	8.89	1299.86	7.26	1304.74	7.29	4.87	0.37
87	180	93	6	2880	0.998889	617.78	0.508333	952.32	4.87	-0.75	8.69	1312.97	7.29	1318.21	7.32	5.24	0.4
87	181	94	7	2896	0.998504	619.83	0.509669	950.76	6.6	0	8.5	1327.32	7.33	1331.22	7.35	3.9	0.29
87	182	95	8	2912	0.998068	621.84	0.510989	949.22	8.57	-0.74	8.31	1339.94	7.36	1344.25	7.39	4.31	0.32
87	183	96	9	2928	0.997581	623.81	0.512295	947.73	10.79	0	8.13	1353.81	7.4	1356.83	7.41	3.02	0.22
87	184	97	10	2944	0.997046	625.74	0.513587	946.28	13.24	-0.74	7.96	1365.96	7.42	1369.42	7.44	3.46	0.25
87	185	98	11	2960	0.996465	627.64	0.514865	944.85	15.94	0	7.79	1379.36	7.46	1381.57	7.47	2.21	0.16
87	186	99	12	2976	0.995838	629.5	0.516129	943.47	18.87	-0.73	7.63	1391.05	7.48	1393.74	7.49	2.69	0.19
87	187	100	13	2992	0.995167	631.33	0.51738	942.12	22.02	0	7.47	1403.99	7.51	1405.47	7.52	1.48	0.11
87	188	101	14	3008	0.994455	633.13	0.518617	940.8	25.41	-0.73	7.31	1415.25	7.53	1417.24	7.54	1.99	0.14
87	189	102	15	3024	0.993701	634.89	0.519841	939.51	29.01	0	7.17	1427.75	7.55	1428.56	7.56	0.81	0.06
87	190	103	16	3040	0.992909	636.62	0.521053	938.26	32.84	-0.73	7.02	1438.58	7.57	1439.94	7.58	1.36	0.09
87	191	104	17	3056	0.992078	638.32	0.522251	937.04	36.88	0	6.88	1450.65	7.6	1450.86	7.6	0.21	0.01
87	192	105	18	3072	0.991211	639.98	0.523438	935.84	41.13	-0.72	6.75	1461.07	7.61	1461.86	7.61	0.79	0.05
87	193	106	19	3088	0.990308	641.62	0.524611	934.68	45.59	0	6.61	1472.73	7.63	1472.4	7.63	-0.33	-0.02
87	194	107	20	3104	0.989372	643.22	0.525773	933.55	50.26	-0.72	6.49	1482.74	7.64	1483.02	7.64	0.28	0.02
87	195	108	21	3120	0.988402	644.8	0.526923	932.44	55.12	0	6.36	1494	7.66	1493.19	7.66	-0.81	-0.05
87	196	109	22	3136	0.987401	646.35	0.528061	931.36	60.19	-0.71	6.24	1503.62	7.67	1503.44	7.67	-0.18	-0.01
87	197	110	23	3152	0.986369	647.87	0.529188	930.31	65.46	0	6.12	1514.49	7.69	1513.25	7.68	-1.24	-0.08
87	198	111	24	3168	0.985308	649.36	0.530303	929.29	70.91	-0.71	6.01	1523.74	7.7	1523.15	7.69	-0.59	-0.04
87	199	112	25	3184	0.984218	650.82	0.531407	928.29	76.56	0	5.9	1534.23	7.71	1532.6	7.7	-1.63	-0.11
87	200	113	26	3200	0.9831	652.26	0.5325	927.32	82.4	-0.71	5.79	1543.11	7.72	1542.16	7.71	-0.96	-0.06
87	201	114	27	3216	0.981956	653.67	0.533582	926.37	88.42	0	5.69	1553.23	7.73	1551.27	7.72	-1.97	-0.13
87	202	115	28	3232	0.980786	655.05	0.534653	925.45	94.62	-0.7	5.59	1561.76	7.73	1560.49	7.73	-1.28	-0.08
87	203	116	29	3248	0.979592	656.41	0.535714	924.55	101	0	5.49	1571.53	7.74	1569.26	7.73	-2.27	-0.14
87	204	117	30	3264	0.978374	657.75	0.536765	923.67	107.56	-0.7	5.39	1579.71	7.74	1578.15	7.74	-1.56	-0.1
87	205	118	31	3280	0.977133	659.06	0.537805	922.82	114.29	0	5.3	1589.13	7.75	1586.6	7.74	-2.53	-0.16
87	206	119	32	3296	0.97587	660.35	0.538835	921.99	121.2	-0.7	5.21	1596.98	7.75	1595.18	7.74	-1.81	-0.11
87	207	120	33	3312	0.974585	661.61	0.539855	921.18	128.27	0	5.12	1606.07	7.76	1603.31	7.75	-2.76	-0.17
87	208	121	34	3328	0.97328	662.85	0.540865	920.39	135.51	-0.69	5.03	1613.59	7.76	1611.57	7.75	-2.02	-0.13
87	209	122	35	3344	0.971956	664.07	0.541866	919.62	142.91	0	4.95	1622.35	7.76	1619.39	7.75	-2.96	-0.18
87	210	123	36	3360	0.970612	665.26	0.542857	918.87	150.48	-0.69	4.87	1629.56	7.76	1627.35	7.75	-2.21	-0.14
87	211	124	37	3376	0.96925	666.44	0.543839	918.15	158.21	0	4.79	1638	7.76	1634.87	7.75	-3.13	-0.19
87	212	125	38	3392	0.967871	667.59	0.544811	917.44	166.09	-0.69	4.71	1644.9	7.76	1642.54	7.75	-2.36	-0.14

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
87	213	126	39	3408	0.966475	668.72	0.545775	916.75	174.13	0	4.63	1653.03	7.76	1649.76	7.75	-3.27	-0.2
87	214	127	40	3424	0.965062	669.83	0.546729	916.09	182.32	-0.68	4.56	1659.64	7.76	1657.14	7.74	-2.49	-0.15
87	215	128	41	3440	0.963634	670.92	0.547674	915.44	190.66	0	4.49	1667.46	7.76	1664.08	7.74	-3.39	-0.2
87	216	129	42	3456	0.962191	671.99	0.548611	914.81	199.16	-0.68	4.42	1673.78	7.75	1671.18	7.74	-2.6	-0.16
87	217	130	43	3472	0.960734	673.05	0.549539	914.19	207.8	0	4.35	1681.32	7.75	1677.83	7.73	-3.48	-0.21
87	218	131	44	3488	0.959263	674.08	0.550459	913.6	216.58	-0.68	4.28	1687.35	7.74	1684.66	7.73	-2.69	-0.16
87	219	132	45	3504	0.957778	675.09	0.55137	913.02	225.51	0	4.22	1694.6	7.74	1691.04	7.72	-3.56	-0.21
87	220	133	46	3520	0.956281	676.09	0.552273	912.45	234.57	-0.67	4.16	1700.37	7.73	1697.6	7.72	-2.76	-0.16
87	221	134	47	3536	0.954772	677.06	0.553167	911.91	243.78	0	4.09	1707.34	7.73	1703.72	7.71	-3.62	-0.21
87	222	135	48	3552	0.953251	678.02	0.554054	911.38	253.12	-0.67	4.03	1712.83	7.72	1710.01	7.7	-2.82	-0.16
87	223	136	49	3568	0.951718	678.96	0.554933	910.87	262.6	0	3.97	1719.54	7.71	1715.87	7.69	-3.67	-0.21
87	224	137	50	3584	0.950175	679.89	0.555804	910.37	272.22	-0.67	3.92	1724.77	7.7	1721.91	7.69	-2.86	-0.17
87	225	138	51	3600	0.948622	680.8	0.556667	909.89	281.96	0	3.86	1731.22	7.69	1727.51	7.68	-3.7	-0.21
87	226	139	52	3616	0.947059	681.69	0.557522	909.42	291.84	-0.67	3.8	1736.2	7.68	1733.31	7.67	-2.89	-0.17
87	227	140	53	3632	0.945487	682.56	0.55837	908.97	301.84	0	3.75	1742.38	7.68	1738.66	7.66	-3.72	-0.21
87	228	141	54	3648	0.943906	683.42	0.559211	908.53	311.97	-0.66	3.7	1747.12	7.66	1744.21	7.65	-2.91	-0.17
87	229	142	55	3664	0.942316	684.26	0.560044	908.1	322.22	0	3.65	1753.06	7.66	1749.32	7.64	-3.73	-0.21
87	230	143	56	3680	0.940718	685.09	0.56087	907.69	332.6	-0.66	3.6	1757.55	7.64	1754.64	7.63	-2.91	-0.17
87	231	144	57	3696	0.939113	685.9	0.561688	907.3	343.1	0	3.55	1763.25	7.63	1759.51	7.62	-3.74	-0.21
87	232	145	58	3712	0.9375	686.7	0.5625	906.92	353.72	-0.66	3.5	1767.51	7.62	1764.6	7.61	-2.92	-0.17
87	233	146	59	3728	0.93588	687.48	0.563305	906.55	364.46	0	3.45	1772.97	7.61	1769.24	7.59	-3.73	-0.21
87	234	147	60	3744	0.934254	688.25	0.564103	906.19	375.31	-0.65	3.41	1777	7.59	1774.09	7.58	-2.91	-0.16
87	235	148	61	3760	0.932621	689	0.564894	905.85	386.28	0	3.36	1782.23	7.58	1778.51	7.57	-3.72	-0.21
87	236	149	62	3776	0.930982	689.74	0.565678	905.51	397.37	-0.65	3.32	1786.05	7.57	1783.15	7.56	-2.9	-0.16
87	237	150	63	3792	0.929338	690.46	0.566456	905.2	408.57	0	3.27	1791.05	7.56	1787.34	7.54	-3.71	-0.21
87	238	151	64	3808	0.927689	691.18	0.567227	904.89	419.88	-0.65	3.23	1794.64	7.54	1791.76	7.53	-2.89	-0.16
87	239	152	65	3824	0.926034	691.87	0.567992	904.59	431.29	0	3.19	1799.43	7.53	1795.74	7.51	-3.69	-0.21
87	240	153	66	3840	0.924375	692.56	0.56875	904.31	442.82	-0.65	3.15	1802.81	7.51	1799.94	7.5	-2.87	-0.16
87	241	154	67	3856	0.922711	693.23	0.569502	904.04	454.46	0	3.11	1807.38	7.5	1803.71	7.48	-3.67	-0.2
87	242	155	68	3872	0.921044	693.89	0.570248	903.78	466.2	-0.64	3.07	1810.56	7.48	1807.71	7.47	-2.85	-0.16
87	243	156	69	3888	0.919372	694.54	0.570988	903.53	478.04	0	3.03	1814.93	7.47	1811.27	7.45	-3.66	-0.2
87	244	157	70	3904	0.917697	695.18	0.571721	903.29	489.99	-0.64	3	1817.9	7.45	1815.07	7.44	-2.84	-0.16
87	245	158	71	3920	0.916018	695.8	0.572449	903.06	502.04	0	2.96	1822.06	7.44	1818.42	7.42	-3.64	-0.2
87	246	159	72	3936	0.914337	696.41	0.573171	902.84	514.19	-0.64	2.93	1824.84	7.42	1822.02	7.41	-2.82	-0.15
87	247	160	73	3952	0.912652	697.01	0.573887	902.63	526.44	0	2.89	1828.8	7.4	1825.18	7.39	-3.62	-0.2
87	248	161	74	3968	0.910965	697.6	0.574597	902.44	538.79	-0.64	2.86	1831.39	7.38	1828.59	7.37	-2.81	-0.15
87	249	162	75	3984	0.909276	698.17	0.575301	902.25	551.24	0	2.82	1835.16	7.37	1831.55	7.36	-3.61	-0.2
87	250	163	76	4000	0.907584	698.74	0.576	902.07	563.78	-0.63	2.79	1837.56	7.35	1834.77	7.34	-2.8	-0.15
87	251	164	77	4016	0.90589	699.29	0.576693	901.9	576.42	0	2.76	1841.14	7.34	1837.54	7.32	-3.59	-0.2
87	252	165	78	4032	0.904195	699.84	0.577381	901.74	589.15	-0.63	2.73	1843.36	7.31	1840.57	7.3	-2.79	-0.15
87	253	166	79	4048	0.902498	700.37	0.578063	901.6	601.98	0	2.69	1846.75	7.3	1843.16	7.29	-3.59	-0.19
87	254	167	80	4064	0.9008	700.89	0.57874	901.45	614.89	-0.63	2.66	1848.79	7.28	1846.01	7.27	-2.79	-0.15
87	255	168	81	4080	0.8991	701.41	0.579412	901.32	627.9	0	2.63	1852	7.26	1848.42	7.25	-3.59	-0.19
87	256	169	82	4096	0.8974	701.91	0.580078	901.2	640.99	-0.62	2.6	1853.87	7.24	1851.09	7.23	-2.79	-0.15
87	257	170	83	4112	0.895699	702.4	0.580739	901.09	654.18	0	2.58	1856.91	7.23	1853.32	7.21	-3.59	-0.19
87	258	171	84	4128	0.893997	702.88	0.581395	900.98	667.45	-0.62	2.55	1858.61	7.2	1855.81	7.19	-2.8	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
87	259	172	85	4144	0.892294	703.36	0.582046	900.89	680.81	0	2.52	1861.47	7.19	1857.87	7.17	-3.6	-0.19
87	260	173	86	4160	0.890592	703.82	0.582692	900.8	694.25	-0.62	2.49	1863	7.17	1860.19	7.15	-2.81	-0.15
87	261	174	87	4176	0.888889	704.28	0.583333	900.72	707.78	0	2.47	1865.69	7.15	1862.08	7.13	-3.62	-0.19
87	262	175	88	4192	0.887186	704.72	0.583969	900.65	721.39	-0.62	2.44	1867.07	7.13	1864.23	7.12	-2.84	-0.15
87	263	176	89	4208	0.885483	705.16	0.584601	900.58	735.08	0	2.41	1869.59	7.11	1865.95	7.09	-3.64	-0.2
87	264	177	90	4224	0.883781	705.58	0.585227	900.53	748.86	-0.62	2.39	1870.81	7.09	1867.94	7.08	-2.87	-0.15
87	265	178	91	4240	0.882079	706	0.585849	900.48	762.71	0	2.36	1873.17	7.07	1869.49	7.05	-3.68	-0.2
87	266	179	92	4256	0.880378	706.41	0.586466	900.44	776.65	-0.61	2.34	1874.23	7.05	1871.32	7.04	-2.91	-0.16
87	267	180	93	4272	0.878677	706.81	0.587079	900.4	790.66	0	2.32	1876.44	7.03	1872.72	7.01	-3.72	-0.2
87	268	181	94	4288	0.876977	707.21	0.587687	900.38	804.75	-0.61	2.29	1877.34	7.01	1874.39	6.99	-2.96	-0.16
87	269	182	95	4304	0.875278	707.59	0.58829	900.36	818.92	0	2.27	1879.4	6.99	1875.62	6.97	-3.77	-0.2
87	270	183	96	4320	0.87358	707.97	0.588889	900.34	833.17	-0.61	2.25	1880.16	6.96	1877.14	6.95	-3.02	-0.16
87	271	184	97	4336	0.871884	708.34	0.589483	900.34	847.49	0	2.22	1882.06	6.94	1878.22	6.93	-3.84	-0.2
87	272	185	98	4352	0.870188	708.7	0.590074	900.34	861.89	-0.61	2.2	1882.67	6.92	1879.58	6.91	-3.09	-0.16
87	273	186	99	4368	0.868494	709.05	0.590659	900.35	876.36	0	2.18	1884.43	6.9	1880.52	6.89	-3.91	-0.21
87	274	187	100	4384	0.866802	709.4	0.591241	900.36	890.9	-0.6	2.16	1884.9	6.88	1881.73	6.87	-3.17	-0.17
87	275	188	101	4400	0.865111	709.73	0.591818	900.38	905.51	0	2.14	1886.51	6.86	1882.51	6.85	-4	-0.21
87	276	189	102	4416	0.863422	710.06	0.592391	900.41	920.2	-0.6	2.12	1886.84	6.84	1883.58	6.82	-3.26	-0.17
87	277	190	103	4432	0.861734	710.39	0.59296	900.45	934.95	0	2.1	1888.31	6.82	1884.22	6.8	-4.09	-0.22
87	278	191	104	4448	0.860049	710.7	0.593525	900.49	949.78	-0.6	2.08	1888.51	6.79	1885.14	6.78	-3.36	-0.18
87	279	192	105	4464	0.858365	711.01	0.594086	900.53	964.68	0	2.06	1889.84	6.77	1885.64	6.76	-4.2	-0.22
87	280	193	106	4480	0.856684	711.31	0.594643	900.59	979.64	-0.6	2.04	1889.9	6.75	1886.42	6.74	-3.48	-0.18
87	281	194	107	4496	0.855004	711.61	0.595196	900.64	994.67	0	2.02	1891.1	6.73	1886.78	6.71	-4.32	-0.23
87	282	195	108	4512	0.853327	711.9	0.595745	900.71	1009.77	-0.6	2	1891.03	6.71	1887.43	6.69	-3.61	-0.19
87	283	196	109	4528	0.851653	712.18	0.59629	900.78	1024.93	0	1.98	1892.09	6.69	1887.64	6.67	-4.45	-0.24
87	284	197	110	4544	0.84998	712.45	0.596831	900.86	1040.16	-0.59	1.97	1891.9	6.66	1888.15	6.65	-3.75	-0.2
87	285	198	111	4560	0.84831	712.72	0.597368	900.94	1055.46	0	1.95	1892.83	6.64	1888.24	6.63	-4.6	-0.24
87	286	199	112	4576	0.846643	712.98	0.597902	901.02	1070.82	-0.59	1.93	1892.52	6.62	1888.61	6.6	-3.9	-0.21
87	287	200	113	4592	0.844978	713.24	0.598432	901.12	1086.24	0	1.91	1893.32	6.6	1888.56	6.58	-4.76	-0.25
87	288	201	114	4608	0.843316	713.49	0.598958	901.21	1101.72	-0.59	1.9	1892.88	6.57	1888.81	6.56	-4.07	-0.22
87	289	202	115	4624	0.841657	713.73	0.599481	901.32	1117.27	0	1.88	1893.56	6.55	1888.63	6.54	-4.93	-0.26
87	290	203	116	4640	0.84	713.97	0.6	901.43	1132.88	-0.59	1.86	1893	6.53	1888.75	6.51	-4.25	-0.23
87	291	204	117	4656	0.838346	714.2	0.600515	901.54	1148.55	0	1.85	1893.56	6.51	1888.44	6.49	-5.12	-0.27
87	292	205	118	4672	0.836695	714.43	0.601027	901.66	1164.28	-0.59	1.83	1892.88	6.48	1888.44	6.47	-4.45	-0.24
87	293	206	119	4688	0.835048	714.65	0.601536	901.78	1180.07	0	1.82	1893.32	6.46	1888	6.44	-5.32	-0.28
87	294	207	120	4704	0.833403	714.86	0.602041	901.91	1195.92	-0.58	1.8	1892.53	6.44	1887.87	6.42	-4.66	-0.25
87	295	208	121	4720	0.831761	715.07	0.602542	902.04	1211.83	0	1.79	1892.85	6.42	1887.32	6.4	-5.53	-0.29
87	296	209	122	4736	0.830122	715.27	0.603041	902.18	1227.79	-0.58	1.77	1891.95	6.39	1887.07	6.38	-4.88	-0.26
87	297	210	123	4752	0.828487	715.47	0.603535	902.32	1243.81	0	1.76	1892.15	6.37	1886.39	6.35	-5.76	-0.31
87	298	211	124	4768	0.826855	715.66	0.604027	902.47	1259.89	-0.58	1.74	1891.14	6.35	1886.02	6.33	-5.12	-0.27
87	299	212	125	4784	0.825226	715.85	0.604515	902.62	1276.03	0	1.73	1891.23	6.33	1885.22	6.31	-6.01	-0.32
87	300	213	126	4800	0.8236	716.03	0.605	902.78	1292.22	-0.58	1.71	1890.11	6.3	1884.74	6.28	-5.37	-0.29
87	301	214	127	4816	0.821978	716.21	0.605482	902.94	1308.46	0	1.7	1890.09	6.28	1883.82	6.26	-6.27	-0.33
87	302	215	128	4832	0.820359	716.38	0.60596	903.1	1324.76	-0.58	1.69	1888.86	6.25	1883.22	6.24	-5.64	-0.3
87	303	216	129	4848	0.818743	716.55	0.606436	903.27	1341.12	0	1.67	1888.73	6.23	1882.19	6.21	-6.54	-0.35
87	304	217	130	4864	0.817131	716.71	0.606908	903.45	1357.53	-0.57	1.66	1887.4	6.21	1881.48	6.19	-5.93	-0.31

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
87	305	218	131	4880	0.815523	716.87	0.607377	903.63	1373.99	0	1.65	1887.17	6.19	1880.34	6.17	-6.83	-0.36
87	306	219	132	4896	0.813918	717.02	0.607843	903.81	1390.5	-0.57	1.63	1885.74	6.16	1879.51	6.14	-6.22	-0.33
87	307	220	133	4912	0.812316	717.17	0.608306	903.99	1407.06	0	1.62	1885.4	6.14	1878.26	6.12	-7.14	-0.38
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
88	175	87	-1	2800	0.999967	606.94	0.498571	983	0.14	0	9.76	1219.69	6.97	1228.57	7.02	8.88	0.72
88	176	88	0	2816	1	609.27	0.5	981.11	0	0.75	10	1236.37	7.02	1244.43	7.07	8.06	0.65
88	177	89	1	2832	0.999968	611.56	0.501412	979.28	0.14	0	9.77	1250.79	7.07	1257.94	7.11	7.14	0.57
88	178	90	2	2848	0.999874	613.8	0.502809	977.49	0.55	0.75	9.54	1266.45	7.11	1273.3	7.15	6.85	0.54
88	179	91	3	2864	0.999719	616	0.50419	975.74	1.22	0	9.32	1280.35	7.15	1286.34	7.19	5.99	0.47
88	180	92	4	2880	0.999506	618.16	0.505556	974.04	2.17	0.75	9.11	1295.49	7.2	1301.23	7.23	5.74	0.44
88	181	93	5	2896	0.999237	620.28	0.506906	972.37	3.37	0	8.9	1308.89	7.23	1313.81	7.26	4.93	0.38
88	182	94	6	2912	0.998913	622.36	0.508242	970.75	4.82	0.74	8.71	1323.52	7.27	1328.24	7.3	4.72	0.36
88	183	95	7	2928	0.998537	624.41	0.509563	969.16	6.52	0	8.52	1336.42	7.3	1340.38	7.32	3.96	0.3
88	184	96	8	2944	0.99811	626.41	0.51087	967.62	8.48	0.74	8.33	1350.56	7.34	1354.36	7.36	3.8	0.28
88	185	97	9	2960	0.997633	628.38	0.512162	966.11	10.67	0	8.15	1363	7.37	1366.07	7.38	3.08	0.23
88	186	98	10	2976	0.997109	630.31	0.513441	964.64	13.1	0.73	7.98	1376.66	7.4	1379.61	7.42	2.95	0.21
88	187	99	11	2992	0.99654	632.2	0.514706	963.2	15.77	0	7.81	1388.64	7.43	1390.91	7.44	2.27	0.16
88	188	100	12	3008	0.995926	634.07	0.515957	961.8	18.67	0.73	7.65	1401.84	7.46	1404.03	7.47	2.18	0.16
88	189	101	13	3024	0.995269	635.89	0.517196	960.44	21.79	0	7.49	1413.37	7.48	1414.92	7.49	1.54	0.11
88	190	102	14	3040	0.994571	637.69	0.518421	959.1	25.14	0.73	7.34	1426.14	7.51	1427.62	7.51	1.48	0.1
88	191	103	15	3056	0.993832	639.45	0.519634	957.8	28.71	0	7.19	1437.23	7.52	1438.12	7.53	0.88	0.06
88	192	104	16	3072	0.993056	641.17	0.520833	956.53	32.5	0.72	7.05	1449.57	7.55	1450.42	7.55	0.85	0.06
88	193	105	17	3088	0.992241	642.87	0.522021	955.29	36.5	0	6.91	1460.25	7.57	1460.53	7.57	0.29	0.02
88	194	106	18	3104	0.991391	644.54	0.523196	954.09	40.71	0.72	6.77	1472.16	7.59	1472.44	7.59	0.28	0.02
88	195	107	19	3120	0.990506	646.17	0.524359	952.91	45.12	0	6.64	1482.44	7.6	1482.19	7.6	-0.25	-0.02
88	196	108	20	3136	0.989588	647.78	0.52551	951.76	49.74	0.71	6.51	1493.95	7.62	1493.72	7.62	-0.23	-0.02
88	197	109	21	3152	0.988637	649.36	0.52665	950.64	54.57	0	6.39	1503.83	7.63	1503.1	7.63	-0.73	-0.05
88	198	110	22	3168	0.987654	650.9	0.527778	949.55	59.59	0.71	6.27	1514.95	7.65	1514.26	7.65	-0.69	-0.05
88	199	111	23	3184	0.986642	652.42	0.528894	948.48	64.8	0	6.15	1524.45	7.66	1523.29	7.65	-1.16	-0.08
88	200	112	24	3200	0.9856	653.92	0.53	947.44	70.21	0.71	6.04	1535.18	7.68	1534.09	7.67	-1.09	-0.07
88	201	113	25	3216	0.98453	655.38	0.531095	946.43	75.8	0	5.93	1544.32	7.68	1542.77	7.68	-1.55	-0.1
88	202	114	26	3232	0.983433	656.82	0.532178	945.44	81.58	0.7	5.82	1554.68	7.7	1553.23	7.69	-1.46	-0.09
88	203	115	27	3248	0.98231	658.23	0.533251	944.48	87.55	0	5.72	1563.46	7.7	1561.57	7.69	-1.88	-0.12
88	204	116	28	3264	0.981161	659.62	0.534314	943.54	93.7	0.7	5.62	1573.46	7.71	1571.69	7.7	-1.78	-0.11
88	205	117	29	3280	0.979988	660.99	0.535366	942.63	100.02	0	5.52	1581.89	7.72	1579.71	7.71	-2.18	-0.14
88	206	118	30	3296	0.978792	662.32	0.536408	941.73	106.52	0.7	5.42	1591.54	7.73	1589.49	7.72	-2.06	-0.13
88	207	119	31	3312	0.977572	663.64	0.53744	940.87	113.19	0	5.33	1599.64	7.73	1597.19	7.72	-2.44	-0.15
88	208	120	32	3328	0.976331	664.93	0.538462	940.02	120.04	0.69	5.24	1608.95	7.74	1606.65	7.72	-2.3	-0.14
88	209	121	33	3344	0.975069	666.2	0.539474	939.2	127.05	0	5.15	1616.71	7.74	1614.05	7.72	-2.67	-0.17
88	210	122	34	3360	0.973787	667.44	0.540476	938.39	134.22	0.69	5.07	1625.7	7.74	1623.18	7.73	-2.51	-0.15
88	211	123	35	3376	0.972485	668.66	0.541469	937.61	141.57	0	4.98	1633.14	7.74	1630.28	7.73	-2.86	-0.18
88	212	124	36	3392	0.971164	669.86	0.542453	936.85	149.07	0.69	4.9	1641.81	7.74	1639.11	7.73	-2.69	-0.16
88	213	125	37	3408	0.969825	671.04	0.543427	936.11	156.73	0	4.82	1648.94	7.74	1645.91	7.73	-3.03	-0.18
88	214	126	38	3424	0.968469	672.2	0.544393	935.39	164.55	0.68	4.74	1657.29	7.74	1654.44	7.73	-2.85	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
88	215	127	39	3440	0.967096	673.33	0.545349	934.69	172.52	0	4.67	1664.13	7.74	1660.96	7.73	-3.17	-0.19
88	216	128	40	3456	0.965706	674.45	0.546296	934.01	180.64	0.68	4.59	1672.17	7.74	1669.2	7.73	-2.98	-0.18
88	217	129	41	3472	0.964302	675.55	0.547235	933.35	188.92	0	4.52	1678.71	7.74	1675.43	7.72	-3.28	-0.2
88	218	130	42	3488	0.962882	676.62	0.548165	932.7	197.34	0.68	4.45	1686.47	7.74	1683.39	7.72	-3.08	-0.18
88	219	131	43	3504	0.961448	677.68	0.549087	932.08	205.91	0	4.38	1692.72	7.73	1689.35	7.71	-3.38	-0.2
88	220	132	44	3520	0.96	678.72	0.55	931.47	214.62	0.67	4.32	1700.19	7.73	1697.02	7.71	-3.17	-0.19
88	221	133	45	3536	0.958539	679.74	0.550905	930.87	223.48	0	4.25	1706.17	7.72	1702.72	7.7	-3.45	-0.2
88	222	134	46	3552	0.957065	680.74	0.551802	930.3	232.47	0.67	4.19	1713.35	7.72	1710.12	7.7	-3.23	-0.19
88	223	135	47	3568	0.955579	681.72	0.552691	929.74	241.6	0	4.13	1719.06	7.71	1715.56	7.69	-3.51	-0.2
88	224	136	48	3584	0.954082	682.68	0.553571	929.2	250.88	0.67	4.07	1725.98	7.71	1722.69	7.69	-3.28	-0.19
88	225	137	49	3600	0.952573	683.63	0.554444	928.67	260.28	0	4.01	1731.42	7.7	1727.88	7.68	-3.55	-0.21
88	226	138	50	3616	0.951053	684.56	0.55531	928.16	269.82	0.67	3.95	1738.07	7.69	1734.75	7.68	-3.32	-0.19
88	227	139	51	3632	0.949524	685.47	0.556167	927.67	279.49	0	3.89	1743.26	7.68	1739.69	7.66	-3.57	-0.21
88	228	140	52	3648	0.947984	686.37	0.557018	927.19	289.29	0.66	3.84	1749.65	7.67	1746.31	7.66	-3.34	-0.19
88	229	141	53	3664	0.946435	687.25	0.55786	926.72	299.21	0	3.78	1754.59	7.66	1751	7.65	-3.59	-0.21
88	230	142	54	3680	0.944877	688.12	0.558696	926.27	309.27	0.66	3.73	1760.73	7.66	1757.38	7.64	-3.35	-0.19
88	231	143	55	3696	0.943311	688.97	0.559524	925.84	319.44	0	3.68	1765.43	7.64	1761.84	7.63	-3.6	-0.2
88	232	144	56	3712	0.941736	689.8	0.560345	925.41	329.74	0.66	3.63	1771.33	7.64	1767.97	7.62	-3.36	-0.19
88	233	145	57	3728	0.940154	690.62	0.561159	925.01	340.17	0	3.58	1775.79	7.62	1772.2	7.61	-3.59	-0.2
88	234	146	58	3744	0.938564	691.42	0.561966	924.61	350.71	0.65	3.53	1781.44	7.61	1778.09	7.6	-3.35	-0.19
88	235	147	59	3760	0.936967	692.21	0.562766	924.23	361.37	0	3.48	1785.67	7.6	1782.09	7.58	-3.58	-0.2
88	236	148	60	3776	0.935363	692.98	0.563559	923.86	372.15	0.65	3.44	1791.1	7.59	1787.76	7.58	-3.34	-0.19
88	237	149	61	3792	0.933753	693.74	0.564346	923.51	383.04	0	3.39	1795.1	7.57	1791.54	7.56	-3.57	-0.2
88	238	150	62	3808	0.932138	694.49	0.565126	923.16	394.04	0.65	3.35	1800.3	7.56	1796.98	7.55	-3.32	-0.18
88	239	151	63	3824	0.930516	695.22	0.5659	922.83	405.16	0	3.31	1804.09	7.55	1800.54	7.53	-3.55	-0.2
88	240	152	64	3840	0.928889	695.94	0.566667	922.52	416.39	0.65	3.26	1809.06	7.54	1805.76	7.52	-3.3	-0.18
88	241	153	65	3856	0.927257	696.65	0.567427	922.21	427.73	0	3.22	1812.63	7.52	1809.11	7.51	-3.52	-0.19
88	242	154	66	3872	0.92562	697.34	0.568182	921.92	439.18	0.64	3.18	1817.39	7.51	1814.11	7.5	-3.28	-0.18
88	243	155	67	3888	0.923978	698.02	0.56893	921.63	450.73	0	3.14	1820.76	7.49	1817.26	7.48	-3.5	-0.19
88	244	156	68	3904	0.922333	698.69	0.569672	921.36	462.39	0.64	3.1	1825.3	7.48	1822.05	7.47	-3.25	-0.18
88	245	157	69	3920	0.920683	699.34	0.570408	921.1	474.16	0	3.06	1828.47	7.46	1825	7.45	-3.47	-0.19
88	246	158	70	3936	0.91903	699.98	0.571138	920.85	486.02	0.64	3.03	1832.81	7.45	1829.58	7.44	-3.23	-0.18
88	247	159	71	3952	0.917373	700.61	0.571862	920.61	497.99	0	2.99	1835.77	7.43	1832.33	7.42	-3.44	-0.19
88	248	160	72	3968	0.915713	701.23	0.572581	920.38	510.06	0.64	2.95	1839.91	7.42	1836.71	7.41	-3.2	-0.17
88	249	161	73	3984	0.91405	701.84	0.573293	920.17	522.23	0	2.92	1842.68	7.4	1839.26	7.39	-3.42	-0.19
88	250	162	74	4000	0.912384	702.43	0.574	919.96	534.5	0.63	2.88	1846.62	7.39	1843.44	7.37	-3.18	-0.17
88	251	163	75	4016	0.910716	703.02	0.574701	919.76	546.87	0	2.85	1849.2	7.37	1845.81	7.35	-3.39	-0.18
88	252	164	76	4032	0.909045	703.59	0.575397	919.57	559.33	0.63	2.82	1852.95	7.35	1849.8	7.34	-3.16	-0.17
88	253	165	77	4048	0.907372	704.15	0.576087	919.4	571.88	0	2.79	1855.35	7.33	1851.98	7.32	-3.37	-0.18
88	254	166	78	4064	0.905698	704.71	0.576772	919.23	584.53	0.63	2.75	1858.92	7.32	1855.78	7.31	-3.14	-0.17
88	255	167	79	4080	0.904022	705.25	0.577451	919.07	597.27	0	2.72	1861.13	7.3	1857.77	7.29	-3.36	-0.18
88	256	168	80	4096	0.902344	705.78	0.578125	918.92	610.11	0.62	2.69	1864.51	7.28	1861.39	7.27	-3.13	-0.17
88	257	169	81	4112	0.900665	706.3	0.578794	918.78	623.03	0	2.66	1866.55	7.26	1863.21	7.25	-3.35	-0.18
88	258	170	82	4128	0.898984	706.81	0.579457	918.65	636.04	0.62	2.63	1869.76	7.25	1866.64	7.24	-3.12	-0.17
88	259	171	83	4144	0.897303	707.31	0.580116	918.53	649.15	0	2.6	1871.63	7.23	1868.29	7.21	-3.34	-0.18
88	260	172	84	4160	0.895621	707.8	0.580769	918.41	662.34	0.62	2.57	1874.65	7.21	1871.54	7.2	-3.12	-0.17

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88	261	173	85	4176	0.893939	708.28	0.581418	918.31	675.61	0	2.55	1876.35	7.19	1873.01	7.18	-3.34	-0.18
88	262	174	86	4192	0.892256	708.75	0.582061	918.21	688.97	0.62	2.52	1879.21	7.17	1876.09	7.16	-3.12	-0.17
88	263	175	87	4208	0.890572	709.21	0.5827	918.12	702.42	0	2.49	1880.75	7.15	1877.4	7.14	-3.35	-0.18
88	264	176	88	4224	0.888889	709.66	0.583333	918.04	715.94	0.62	2.47	1883.44	7.13	1880.3	7.12	-3.13	-0.17
88	265	177	89	4240	0.887205	710.11	0.583962	917.97	729.56	0	2.44	1884.81	7.11	1881.45	7.1	-3.36	-0.18
88	266	178	90	4256	0.885522	710.54	0.584586	917.9	743.25	0.61	2.41	1887.34	7.1	1884.19	7.08	-3.15	-0.17
88	267	179	91	4272	0.883839	710.97	0.585206	917.85	757.02	0	2.39	1888.56	7.07	1885.17	7.06	-3.38	-0.18
88	268	180	92	4288	0.882156	711.38	0.585821	917.8	770.87	0.61	2.37	1890.92	7.06	1887.74	7.04	-3.18	-0.17
88	269	181	93	4304	0.880474	711.79	0.586431	917.75	784.81	0	2.34	1891.99	7.03	1888.57	7.02	-3.42	-0.18
88	270	182	94	4320	0.878793	712.19	0.587037	917.72	798.82	0.61	2.32	1894.2	7.02	1890.98	7	-3.22	-0.17
88	271	183	95	4336	0.877112	712.58	0.587638	917.69	812.9	0	2.29	1895.11	6.99	1891.66	6.98	-3.46	-0.18
88	272	184	96	4352	0.875433	712.97	0.588235	917.67	827.07	0.61	2.27	1897.17	6.97	1893.91	6.96	-3.26	-0.17
88	273	185	97	4368	0.873754	713.34	0.588828	917.66	841.3	0	2.25	1897.94	6.95	1894.43	6.94	-3.51	-0.19
88	274	186	98	4384	0.872076	713.71	0.589416	917.65	855.62	0.6	2.23	1899.85	6.93	1896.53	6.92	-3.32	-0.17
88	275	187	99	4400	0.8704	714.07	0.59	917.65	870	0	2.2	1900.47	6.91	1896.91	6.9	-3.57	-0.19
88	276	188	100	4416	0.868725	714.43	0.59058	917.66	884.46	0.6	2.18	1902.23	6.89	1898.85	6.88	-3.39	-0.18
88	277	189	101	4432	0.867052	714.77	0.591155	917.67	899	0	2.16	1902.72	6.87	1899.08	6.86	-3.64	-0.19
88	278	190	102	4448	0.86538	715.11	0.591727	917.7	913.6	0.6	2.14	1904.34	6.85	1900.87	6.84	-3.46	-0.18
88	279	191	103	4464	0.863709	715.44	0.592294	917.72	928.28	0	2.12	1904.69	6.83	1900.96	6.81	-3.72	-0.2
88	280	192	104	4480	0.862041	715.76	0.592857	917.76	943.02	0.6	2.1	1906.16	6.81	1902.61	6.8	-3.55	-0.19
88	281	193	105	4496	0.860374	716.08	0.593416	917.8	957.83	0	2.08	1906.38	6.78	1902.56	6.77	-3.82	-0.2
88	282	194	106	4512	0.858709	716.39	0.593972	917.84	972.72	0.6	2.06	1907.71	6.76	1904.06	6.75	-3.65	-0.19
88	283	195	107	4528	0.857047	716.69	0.594523	917.89	987.67	0	2.04	1907.8	6.74	1903.87	6.73	-3.92	-0.21
88	284	196	108	4544	0.855386	716.98	0.59507	917.95	1002.68	0.59	2.02	1909	6.72	1905.24	6.71	-3.77	-0.2
88	285	197	109	4560	0.853727	717.27	0.595614	918.01	1017.77	0	2.01	1908.95	6.7	1904.91	6.68	-4.04	-0.21
88	286	198	110	4576	0.852071	717.55	0.596154	918.08	1032.91	0.59	1.99	1910.03	6.68	1906.14	6.66	-3.89	-0.2
88	287	199	111	4592	0.850417	717.83	0.59669	918.16	1048.13	0	1.97	1909.85	6.65	1905.68	6.64	-4.17	-0.22
88	288	200	112	4608	0.848765	718.1	0.597222	918.24	1063.41	0.59	1.95	1910.8	6.63	1906.77	6.62	-4.03	-0.21
88	289	201	113	4624	0.847116	718.36	0.597751	918.33	1078.75	0	1.94	1910.5	6.61	1906.18	6.6	-4.32	-0.23
88	290	202	114	4640	0.84547	718.62	0.598276	918.42	1094.15	0.59	1.92	1911.32	6.59	1907.14	6.58	-4.18	-0.22
88	291	203	115	4656	0.843826	718.87	0.598797	918.51	1109.62	0	1.9	1910.9	6.57	1906.43	6.55	-4.47	-0.23
88	292	204	116	4672	0.842184	719.11	0.599315	918.62	1125.15	0.59	1.89	1911.59	6.55	1907.25	6.53	-4.35	-0.23
88	293	205	117	4688	0.840546	719.35	0.599829	918.72	1140.74	0	1.87	1911.06	6.52	1906.41	6.51	-4.65	-0.24
88	294	206	118	4704	0.83891	719.58	0.60034	918.84	1156.39	0.58	1.85	1911.63	6.5	1907.1	6.49	-4.53	-0.24
88	295	207	119	4720	0.837277	719.81	0.600847	918.95	1172.1	0	1.84	1910.98	6.48	1906.14	6.46	-4.83	-0.25
88	296	208	120	4736	0.835646	720.03	0.601351	919.08	1187.87	0.58	1.82	1911.43	6.46	1906.71	6.44	-4.72	-0.25
88	297	209	121	4752	0.834019	720.25	0.601852	919.2	1203.69	0	1.81	1910.66	6.43	1905.63	6.42	-5.03	-0.26
88	298	210	122	4768	0.832395	720.46	0.602349	919.34	1219.58	0.58	1.79	1911	6.41	1906.07	6.4	-4.93	-0.26
88	299	211	123	4784	0.830774	720.66	0.602843	919.47	1235.52	0	1.78	1910.12	6.39	1904.87	6.37	-5.24	-0.28
88	300	212	124	4800	0.829156	720.86	0.603333	919.62	1251.52	0.58	1.76	1910.34	6.37	1905.19	6.35	-5.15	-0.27
88	301	213	125	4816	0.827541	721.06	0.603821	919.76	1267.58	0	1.75	1909.35	6.34	1903.88	6.33	-5.47	-0.29
88	302	214	126	4832	0.825929	721.24	0.604305	919.91	1283.69	0.58	1.73	1909.46	6.32	1904.08	6.3	-5.38	-0.28
88	303	215	127	4848	0.82432	721.43	0.604785	920.07	1299.86	0	1.72	1908.37	6.3	1902.65	6.28	-5.72	-0.3
88	304	216	128	4864	0.822715	721.61	0.605263	920.23	1316.08	0.57	1.71	1908.37	6.28	1902.73	6.26	-5.64	-0.3
88	305	217	129	4880	0.821113	721.78	0.605738	920.39	1332.35	0	1.69	1907.17	6.25	1901.19	6.23	-5.97	-0.31
88	306	218	130	4896	0.819514	721.95	0.606209	920.56	1348.68	0.57	1.68	1907.06	6.23	1901.16	6.21	-5.9	-0.31

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
88	307	219	131	4912	0.817918	722.11	0.606678	920.73	1365.07	0	1.67	1905.76	6.21	1899.51	6.19	-6.25	-0.33
88	308	220	132	4928	0.816327	722.27	0.607143	920.91	1381.5	0.57	1.65	1905.54	6.19	1899.36	6.17	-6.18	-0.33
88	309	221	133	4944	0.814738	722.42	0.607605	921.09	1397.99	0	1.64	1904.14	6.16	1897.6	6.14	-6.54	-0.34
88	310	222	134	4960	0.813153	722.57	0.608065	921.28	1414.53	0.57	1.63	1903.82	6.14	1897.34	6.12	-6.48	-0.34
88	311	223	135	4976	0.811571	722.72	0.608521	921.47	1431.12	0	1.62	1902.31	6.12	1895.47	6.09	-6.84	-0.36
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
89	177	88	-1	2832	0.999968	611.56	0.498588	1001.66	0.14	0	9.77	1228.41	6.94	1237.32	6.99	8.91	0.72
89	178	89	0	2848	1	613.88	0.5	999.77	0	-0.75	10	1243.61	6.99	1252.25	7.04	8.64	0.69
89	179	90	1	2864	0.999969	616.16	0.501397	997.92	0.14	0	9.77	1259.56	7.04	1266.72	7.08	7.16	0.57
89	180	91	2	2880	0.999877	618.39	0.502778	996.11	0.54	-0.75	9.54	1273.76	7.08	1281.18	7.12	7.42	0.58
89	181	92	3	2896	0.999725	620.59	0.504144	994.35	1.21	0	9.33	1289.18	7.12	1295.18	7.16	6	0.46
89	182	93	4	2912	0.999517	622.74	0.505495	992.63	2.14	-0.74	9.12	1302.87	7.16	1309.17	7.19	6.3	0.48
89	183	94	5	2928	0.999253	624.85	0.506831	990.95	3.33	0	8.92	1317.78	7.2	1322.71	7.23	4.93	0.37
89	184	95	6	2944	0.998937	626.93	0.508152	989.31	4.77	-0.74	8.72	1330.97	7.23	1336.25	7.26	5.28	0.4
89	185	96	7	2960	0.998568	628.97	0.509459	987.71	6.45	0	8.53	1345.4	7.27	1349.35	7.29	3.95	0.29
89	186	97	8	2976	0.99815	630.97	0.510753	986.15	8.38	-0.73	8.35	1358.11	7.3	1362.45	7.33	4.34	0.32
89	187	98	9	2992	0.997684	632.93	0.512032	984.63	10.56	0	8.17	1372.05	7.34	1375.11	7.35	3.06	0.22
89	188	99	10	3008	0.997171	634.86	0.513298	983.14	12.96	-0.73	8	1384.3	7.36	1387.79	7.38	3.49	0.25
89	189	100	11	3024	0.996613	636.75	0.51455	981.69	15.6	0	7.83	1397.78	7.4	1400.03	7.41	2.24	0.16
89	190	101	12	3040	0.996011	638.61	0.515789	980.28	18.47	-0.73	7.67	1409.59	7.42	1412.3	7.43	2.71	0.19
89	191	102	13	3056	0.995367	640.43	0.517016	978.9	21.56	0	7.51	1422.62	7.45	1424.12	7.46	1.5	0.11
89	192	103	14	3072	0.994683	642.23	0.518229	977.55	24.88	-0.72	7.36	1433.99	7.47	1435.99	7.48	2	0.14
89	193	104	15	3088	0.99396	643.98	0.51943	976.23	28.41	0	7.21	1446.59	7.5	1447.42	7.5	0.83	0.06
89	194	105	16	3104	0.993198	645.71	0.520619	974.95	32.16	-0.72	7.07	1457.53	7.51	1458.9	7.52	1.36	0.09
89	195	106	17	3120	0.9924	647.41	0.521795	973.69	36.12	0	6.93	1469.71	7.54	1469.93	7.54	0.22	0.02
89	196	107	18	3136	0.991566	649.07	0.522959	972.47	40.29	-0.71	6.8	1480.25	7.55	1481.03	7.56	0.79	0.05
89	197	108	19	3152	0.990698	650.71	0.524112	971.28	44.67	0	6.67	1492.01	7.57	1491.69	7.57	-0.32	-0.02
89	198	109	20	3168	0.989797	652.32	0.525253	970.11	49.24	-0.71	6.54	1502.16	7.59	1502.42	7.59	0.27	0.02
89	199	110	21	3184	0.988864	653.89	0.526382	968.98	54.02	0	6.42	1513.53	7.61	1512.71	7.6	-0.81	-0.05
89	200	111	22	3200	0.9879	655.44	0.5275	967.87	58.99	-0.71	6.3	1523.29	7.62	1523.09	7.62	-0.2	-0.01
89	201	112	23	3216	0.986906	656.96	0.528607	966.79	64.16	0	6.18	1534.27	7.63	1533.02	7.63	-1.25	-0.08
89	202	113	24	3232	0.985884	658.46	0.529703	965.74	69.52	-0.7	6.07	1543.66	7.64	1543.04	7.64	-0.62	-0.04
89	203	114	25	3248	0.984833	659.93	0.530788	964.71	75.06	0	5.96	1554.27	7.66	1552.62	7.65	-1.65	-0.11
89	204	115	26	3264	0.983756	661.37	0.531863	963.71	80.79	-0.7	5.85	1563.29	7.66	1562.31	7.66	-0.99	-0.06
89	205	116	27	3280	0.982653	662.78	0.532927	962.73	86.7	0	5.75	1573.54	7.68	1571.55	7.67	-1.99	-0.13
89	206	117	28	3296	0.981525	664.17	0.533981	961.78	92.79	-0.7	5.65	1582.21	7.68	1580.9	7.67	-1.32	-0.08
89	207	118	29	3312	0.980373	665.54	0.535024	960.85	99.06	0	5.55	1592.11	7.69	1589.81	7.68	-2.3	-0.14
89	208	119	30	3328	0.979197	666.88	0.536058	959.94	105.5	-0.69	5.46	1600.44	7.69	1598.84	7.69	-1.6	-0.1
89	209	120	31	3344	0.978	668.2	0.537081	959.06	112.11	0	5.36	1609.99	7.7	1607.43	7.69	-2.57	-0.16
89	210	121	32	3360	0.97678	669.49	0.538095	958.2	118.9	-0.69	5.27	1618	7.7	1616.14	7.7	-1.86	-0.11
89	211	122	33	3376	0.97554	670.76	0.5391	957.36	125.85	0	5.18	1627.21	7.71	1624.41	7.7	-2.8	-0.17
89	212	123	34	3392	0.974279	672.01	0.540094	956.54	132.96	-0.69	5.1	1634.89	7.71	1632.82	7.7	-2.07	-0.13
89	213	124	35	3408	0.972999	673.24	0.54108	955.75	140.24	0	5.02	1643.79	7.72	1640.78	7.7	-3	-0.18
89	214	125	36	3424	0.971701	674.44	0.542056	954.97	147.68	-0.68	4.93	1651.15	7.72	1648.89	7.71	-2.26	-0.14

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
89	215	126	37	3440	0.970384	675.62	0.543023	954.22	155.28	0	4.85	1659.73	7.72	1656.56	7.7	-3.18	-0.19
89	216	127	38	3456	0.96905	676.78	0.543981	953.49	163.03	-0.68	4.78	1666.8	7.72	1664.37	7.71	-2.42	-0.15
89	217	128	39	3472	0.967699	677.93	0.544931	952.77	170.93	0	4.7	1675.07	7.72	1671.75	7.7	-3.32	-0.2
89	218	129	40	3488	0.966333	679.05	0.545872	952.08	178.99	-0.68	4.63	1681.84	7.71	1679.28	7.7	-2.56	-0.15
89	219	130	41	3504	0.964951	680.15	0.546804	951.4	187.2	0	4.56	1689.81	7.72	1686.37	7.7	-3.44	-0.2
89	220	131	42	3520	0.963554	681.23	0.547727	950.74	195.55	-0.67	4.49	1696.29	7.71	1693.62	7.7	-2.67	-0.16
89	221	132	43	3536	0.962142	682.29	0.548643	950.1	204.05	0	4.42	1703.97	7.71	1700.43	7.69	-3.54	-0.21
89	222	133	44	3552	0.960717	683.33	0.54955	949.48	212.7	-0.67	4.35	1710.17	7.7	1707.41	7.69	-2.76	-0.16
89	223	134	45	3568	0.959279	684.36	0.550448	948.87	221.48	0	4.28	1717.57	7.7	1713.95	7.69	-3.62	-0.21
89	224	135	46	3584	0.957828	685.36	0.551339	948.29	230.4	-0.67	4.22	1723.5	7.69	1720.67	7.68	-2.83	-0.16
89	225	136	47	3600	0.956365	686.35	0.552222	947.71	239.47	0	4.16	1730.63	7.69	1726.94	7.68	-3.68	-0.21
89	226	137	48	3616	0.954891	687.32	0.553097	947.16	248.66	-0.67	4.1	1736.29	7.68	1733.4	7.67	-2.89	-0.17
89	227	138	49	3632	0.953405	688.28	0.553965	946.62	258	0	4.04	1743.14	7.68	1739.42	7.66	-3.73	-0.21
89	228	139	50	3648	0.951908	689.21	0.554825	946.1	267.46	-0.66	3.98	1748.55	7.67	1745.62	7.66	-2.93	-0.17
89	229	140	51	3664	0.950401	690.13	0.555677	945.59	277.06	0	3.92	1755.14	7.66	1751.38	7.65	-3.76	-0.21
89	230	141	52	3680	0.948885	691.04	0.556522	945.1	286.78	-0.66	3.87	1760.29	7.65	1757.34	7.64	-2.95	-0.17
89	231	142	53	3696	0.947359	691.92	0.557359	944.62	296.63	0	3.82	1766.64	7.65	1762.86	7.63	-3.78	-0.21
89	232	143	54	3712	0.945823	692.79	0.55819	944.16	306.61	-0.66	3.76	1771.54	7.64	1768.57	7.62	-2.97	-0.17
89	233	144	55	3728	0.94428	693.65	0.559013	943.71	316.71	0	3.71	1777.64	7.63	1773.85	7.61	-3.79	-0.21
89	234	145	56	3744	0.942728	694.49	0.559829	943.28	326.94	-0.65	3.66	1782.3	7.62	1779.33	7.6	-2.97	-0.17
89	235	146	57	3760	0.941168	695.31	0.560638	942.86	337.28	0	3.61	1788.16	7.61	1784.37	7.59	-3.79	-0.21
89	236	147	58	3776	0.939601	696.12	0.561441	942.45	347.75	-0.65	3.56	1792.59	7.6	1789.62	7.58	-2.97	-0.17
89	237	148	59	3792	0.938026	696.92	0.562236	942.06	358.33	0	3.51	1798.21	7.59	1794.43	7.57	-3.78	-0.21
89	238	149	60	3808	0.936445	697.7	0.563025	941.68	369.03	-0.65	3.47	1802.41	7.57	1799.45	7.56	-2.96	-0.16
89	239	150	61	3824	0.934858	698.47	0.563808	941.31	379.85	0	3.42	1807.8	7.56	1804.04	7.55	-3.76	-0.21
89	240	151	62	3840	0.933264	699.22	0.564583	940.96	390.77	-0.65	3.38	1811.78	7.55	1808.84	7.54	-2.95	-0.16
89	241	152	63	3856	0.931664	699.96	0.565353	940.62	401.81	0	3.34	1816.95	7.54	1813.2	7.52	-3.74	-0.21
89	242	153	64	3872	0.930059	700.68	0.566116	940.29	412.96	-0.64	3.29	1820.72	7.52	1817.79	7.51	-2.93	-0.16
89	243	154	65	3888	0.928449	701.4	0.566872	939.97	424.22	0	3.25	1825.66	7.51	1821.94	7.5	-3.72	-0.2
89	244	155	66	3904	0.926834	702.1	0.567623	939.66	435.59	-0.64	3.21	1829.22	7.5	1826.31	7.48	-2.9	-0.16
89	245	156	67	3920	0.925214	702.78	0.568367	939.37	447.07	0	3.17	1833.95	7.49	1830.25	7.47	-3.7	-0.2
89	246	157	68	3936	0.92359	703.46	0.569106	939.09	458.65	-0.64	3.13	1837.3	7.47	1834.42	7.46	-2.88	-0.16
89	247	158	69	3952	0.921962	704.12	0.569838	938.82	470.33	0	3.09	1841.83	7.46	1838.16	7.44	-3.67	-0.2
89	248	159	70	3968	0.92033	704.77	0.570565	938.56	482.12	-0.64	3.06	1844.98	7.44	1842.12	7.43	-2.85	-0.15
89	249	160	71	3984	0.918695	705.41	0.571285	938.31	494.01	0	3.02	1849.3	7.43	1845.65	7.41	-3.64	-0.2
89	250	161	72	4000	0.917056	706.03	0.572	938.07	506	-0.63	2.98	1852.25	7.41	1849.42	7.4	-2.83	-0.15
89	251	162	73	4016	0.915414	706.65	0.572709	937.84	518.09	0	2.95	1856.37	7.4	1852.76	7.38	-3.61	-0.2
89	252	163	74	4032	0.913769	707.25	0.573413	937.62	530.28	-0.63	2.91	1859.14	7.38	1856.33	7.37	-2.8	-0.15
89	253	164	75	4048	0.912122	707.84	0.574111	937.42	542.56	0	2.88	1863.06	7.36	1859.47	7.35	-3.59	-0.19
89	254	165	76	4064	0.910472	708.42	0.574803	937.22	554.94	-0.63	2.85	1865.64	7.35	1862.86	7.33	-2.78	-0.15
89	255	166	77	4080	0.90882	708.99	0.57549	937.03	567.42	0	2.81	1869.38	7.33	1865.81	7.32	-3.57	-0.19
89	256	167	78	4096	0.907166	709.55	0.576172	936.85	579.98	-0.62	2.78	1871.77	7.31	1869.01	7.3	-2.76	-0.15
89	257	168	79	4112	0.90551	710.1	0.576848	936.68	592.64	0	2.75	1875.33	7.3	1871.78	7.28	-3.55	-0.19
89	258	169	80	4128	0.903852	710.63	0.577519	936.53	605.4	-0.62	2.72	1877.54	7.28	1874.79	7.27	-2.75	-0.15
89	259	170	81	4144	0.902193	711.16	0.578185	936.38	618.24	0	2.69	1880.91	7.26	1877.38	7.25	-3.53	-0.19
89	260	171	82	4160	0.900533	711.68	0.578846	936.24	631.17	-0.62	2.66	1882.95	7.24	1880.22	7.23	-2.74	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
89	261	172	83	4176	0.898871	712.19	0.579502	936.1	644.19	0	2.63	1886.15	7.23	1882.63	7.21	-3.52	-0.19
89	262	173	84	4192	0.897209	712.68	0.580153	935.98	657.3	-0.62	2.6	1888.02	7.21	1885.29	7.2	-2.73	-0.14
89	263	174	85	4208	0.895546	713.17	0.580798	935.87	670.49	0	2.57	1891.04	7.19	1887.52	7.18	-3.52	-0.19
89	264	175	86	4224	0.893882	713.65	0.581439	935.76	683.77	-0.62	2.55	1892.75	7.17	1890.02	7.16	-2.73	-0.14
89	265	176	87	4240	0.892218	714.12	0.582075	935.66	697.13	0	2.52	1895.6	7.15	1892.08	7.14	-3.52	-0.19
89	266	177	88	4256	0.890553	714.58	0.582707	935.57	710.58	-0.61	2.49	1897.15	7.13	1894.41	7.12	-2.74	-0.14
89	267	178	89	4272	0.888889	715.03	0.583333	935.49	724.11	0	2.47	1899.83	7.12	1896.3	7.1	-3.53	-0.19
89	268	179	90	4288	0.887224	715.47	0.583955	935.42	737.72	-0.61	2.44	1901.22	7.09	1898.46	7.08	-2.76	-0.15
89	269	180	91	4304	0.88556	715.9	0.584572	935.35	751.41	0	2.42	1903.74	7.08	1900.19	7.06	-3.55	-0.19
89	270	181	92	4320	0.883896	716.33	0.585185	935.3	765.19	-0.61	2.39	1904.97	7.06	1902.19	7.05	-2.78	-0.15
89	271	182	93	4336	0.882232	716.74	0.585793	935.25	779.04	0	2.37	1907.34	7.04	1903.76	7.02	-3.58	-0.19
89	272	183	94	4352	0.880569	717.15	0.586397	935.2	792.96	-0.61	2.34	1908.42	7.02	1905.61	7.01	-2.81	-0.15
89	273	184	95	4368	0.878906	717.55	0.586996	935.17	806.97	0	2.32	1910.63	7	1907.02	6.99	-3.61	-0.19
89	274	185	96	4384	0.877244	717.94	0.587591	935.14	821.05	-0.6	2.3	1911.56	6.98	1908.71	6.97	-2.85	-0.15
89	275	186	97	4400	0.875583	718.33	0.588182	935.12	835.21	0	2.27	1913.62	6.96	1909.96	6.95	-3.66	-0.19
89	276	187	98	4416	0.873924	718.7	0.588768	935.11	849.44	-0.6	2.25	1914.4	6.94	1911.5	6.93	-2.9	-0.15
89	277	188	99	4432	0.872265	719.07	0.58935	935.1	863.75	0	2.23	1916.32	6.92	1912.61	6.9	-3.71	-0.19
89	278	189	100	4448	0.870607	719.43	0.589928	935.1	878.12	-0.6	2.21	1916.96	6.9	1913.99	6.88	-2.96	-0.15
89	279	190	101	4464	0.868951	719.78	0.590502	935.11	892.58	0	2.19	1918.73	6.88	1914.95	6.86	-3.77	-0.2
89	280	191	102	4480	0.867296	720.12	0.591071	935.12	907.1	-0.6	2.17	1919.23	6.85	1916.19	6.84	-3.04	-0.16
89	281	192	103	4496	0.865643	720.46	0.591637	935.14	921.69	0	2.14	1920.85	6.84	1917	6.82	-3.85	-0.2
89	282	193	104	4512	0.863991	720.79	0.592199	935.16	936.36	-0.6	2.12	1921.22	6.81	1918.1	6.8	-3.12	-0.16
89	283	194	105	4528	0.862341	721.12	0.592756	935.2	951.09	0	2.1	1922.7	6.79	1918.77	6.78	-3.94	-0.21
89	284	195	106	4544	0.860692	721.43	0.59331	935.24	965.89	-0.59	2.09	1922.94	6.77	1919.72	6.76	-3.21	-0.17
89	285	196	107	4560	0.859046	721.74	0.59386	935.28	980.76	0	2.07	1924.29	6.75	1920.25	6.74	-4.03	-0.21
89	286	197	108	4576	0.857401	722.04	0.594406	935.33	995.7	-0.59	2.05	1924.39	6.73	1921.07	6.72	-3.32	-0.17
89	287	198	109	4592	0.855759	722.34	0.594948	935.39	1010.7	0	2.03	1925.6	6.71	1921.46	6.69	-4.14	-0.22
89	288	199	110	4608	0.854118	722.63	0.595486	935.45	1025.77	-0.59	2.01	1925.58	6.69	1922.14	6.67	-3.44	-0.18
89	289	200	111	4624	0.85248	722.91	0.596021	935.52	1040.9	0	1.99	1926.66	6.67	1922.4	6.65	-4.27	-0.22
89	290	201	112	4640	0.850844	723.19	0.596552	935.59	1056.1	-0.59	1.97	1926.51	6.64	1922.94	6.63	-3.57	-0.19
89	291	202	113	4656	0.849211	723.46	0.597079	935.67	1071.36	0	1.96	1927.47	6.62	1923.07	6.61	-4.4	-0.23
89	292	203	114	4672	0.847579	723.72	0.597603	935.76	1086.68	-0.59	1.94	1927.19	6.6	1923.48	6.59	-3.71	-0.19
89	293	204	115	4688	0.84595	723.98	0.598123	935.85	1102.07	0	1.92	1928.03	6.58	1923.48	6.56	-4.55	-0.24
89	294	205	116	4704	0.844324	724.23	0.598639	935.95	1117.52	-0.58	1.91	1927.63	6.56	1923.76	6.54	-3.87	-0.2
89	295	206	117	4720	0.8427	724.47	0.599153	936.05	1133.03	0	1.89	1928.34	6.54	1923.63	6.52	-4.71	-0.24
89	296	207	118	4736	0.841079	724.71	0.599662	936.15	1148.6	-0.58	1.87	1927.83	6.51	1923.79	6.5	-4.04	-0.21
89	297	208	119	4752	0.839461	724.95	0.600168	936.26	1164.23	0	1.86	1928.42	6.49	1923.53	6.48	-4.89	-0.25
89	298	209	120	4768	0.837845	725.18	0.600671	936.38	1179.92	-0.58	1.84	1927.79	6.47	1923.57	6.45	-4.22	-0.22
89	299	210	121	4784	0.836232	725.4	0.601171	936.5	1195.67	0	1.83	1928.26	6.45	1923.18	6.43	-5.08	-0.26
89	300	211	122	4800	0.834622	725.61	0.601667	936.63	1211.47	-0.58	1.81	1927.52	6.43	1923.1	6.41	-4.42	-0.23
89	301	212	123	4816	0.833015	725.83	0.602159	936.76	1227.34	0	1.8	1927.87	6.4	1922.59	6.39	-5.28	-0.27
89	302	213	124	4832	0.831411	726.03	0.602649	936.9	1243.26	-0.58	1.78	1927.02	6.38	1922.39	6.37	-4.63	-0.24
89	303	214	125	4848	0.82981	726.23	0.603135	937.04	1259.24	0	1.77	1927.26	6.36	1921.76	6.34	-5.5	-0.29
89	304	215	126	4864	0.828212	726.43	0.603618	937.18	1275.27	-0.57	1.75	1926.3	6.34	1921.44	6.32	-4.86	-0.25
89	305	216	127	4880	0.826617	726.62	0.604098	937.34	1291.36	0	1.74	1926.43	6.32	1920.7	6.3	-5.73	-0.3
89	306	217	128	4896	0.825025	726.8	0.604575	937.49	1307.5	-0.57	1.73	1925.36	6.29	1920.26	6.28	-5.1	-0.27

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
89	307	218	129	4912	0.823436	726.98	0.605049	937.65	1323.7	0	1.71	1925.38	6.27	1919.4	6.25	-5.98	-0.31
89	308	219	130	4928	0.82185	727.16	0.605519	937.81	1339.95	-0.57	1.7	1924.21	6.25	1918.85	6.23	-5.35	-0.28
89	309	220	131	4944	0.820268	727.33	0.605987	937.98	1356.26	0	1.69	1924.12	6.23	1917.88	6.21	-6.24	-0.33
89	310	221	132	4960	0.818689	727.49	0.606452	938.15	1372.62	-0.57	1.67	1922.84	6.2	1917.22	6.18	-5.62	-0.29
89	311	222	133	4976	0.817113	727.65	0.606913	938.33	1389.03	0	1.66	1922.65	6.18	1916.14	6.16	-6.51	-0.34
89	312	223	134	4992	0.815541	727.81	0.607372	938.51	1405.49	-0.57	1.65	1921.27	6.16	1915.37	6.14	-5.91	-0.31
89	313	224	135	5008	0.813972	727.96	0.607827	938.69	1422	0	1.63	1920.98	6.14	1914.17	6.12	-6.81	-0.36
89	314	225	136	5024	0.812406	728.11	0.60828	938.88	1438.56	-0.56	1.62	1919.5	6.11	1913.29	6.09	-6.21	-0.32
89	315	226	137	5040	0.810844	728.25	0.60873	939.08	1455.18	0	1.61	1919.11	6.09	1911.99	6.07	-7.11	-0.37
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
90	179	89	-1	2864	0.999969	616.16	0.498603	1020.47	0.14	0	9.77	1237.01	6.91	1245.95	6.96	8.94	0.72
90	180	90	0	2880	1	618.47	0.5	1018.56	0	0.75	10	1253.72	6.97	1261.85	7.01	8.13	0.64
90	181	91	1	2896	0.999969	620.74	0.501381	1016.69	0.13	0	9.77	1268.2	7.01	1275.41	7.05	7.21	0.57
90	182	92	2	2912	0.999879	622.96	0.502747	1014.88	0.54	0.74	9.55	1283.91	7.05	1290.83	7.09	6.91	0.54
90	183	93	3	2928	0.999731	625.15	0.504098	1013.1	1.2	0	9.33	1297.89	7.09	1303.93	7.13	6.05	0.46
90	184	94	4	2944	0.999527	627.3	0.505435	1011.36	2.12	0.74	9.13	1313.08	7.14	1318.88	7.17	5.8	0.44
90	185	95	5	2960	0.99927	629.41	0.506757	1009.67	3.29	0	8.93	1326.55	7.17	1331.53	7.2	4.98	0.37
90	186	96	6	2976	0.998959	631.48	0.508065	1008.02	4.72	0.73	8.73	1341.25	7.21	1346.03	7.24	4.77	0.35
90	187	97	7	2992	0.998599	633.51	0.509358	1006.41	6.39	0	8.55	1354.24	7.24	1358.25	7.26	4.01	0.29
90	188	98	8	3008	0.998189	635.51	0.510638	1004.83	8.3	0.73	8.36	1368.46	7.28	1372.3	7.3	3.84	0.28
90	189	99	9	3024	0.997732	637.47	0.511905	1003.29	10.44	0	8.19	1380.98	7.31	1384.1	7.32	3.12	0.23
90	190	100	10	3040	0.99723	639.39	0.513158	1001.79	12.83	0.73	8.02	1394.73	7.34	1397.72	7.36	2.99	0.21
90	191	101	11	3056	0.996683	641.28	0.514398	1000.32	15.44	0	7.85	1406.81	7.37	1409.11	7.38	2.3	0.16
90	192	102	12	3072	0.996094	643.14	0.515625	998.89	18.28	0.72	7.69	1420.1	7.4	1422.31	7.41	2.21	0.16
90	193	103	13	3088	0.995463	644.96	0.516839	997.5	21.34	0	7.54	1431.74	7.42	1433.31	7.43	1.57	0.11
90	194	104	14	3104	0.994792	646.75	0.518041	996.13	24.62	0.72	7.39	1444.6	7.45	1446.1	7.45	1.5	0.1
90	195	105	15	3120	0.994083	648.51	0.519231	994.8	28.12	0	7.24	1455.81	7.47	1456.7	7.47	0.9	0.06
90	196	106	16	3136	0.993336	650.23	0.520408	993.5	31.84	0.71	7.1	1468.24	7.49	1469.1	7.5	0.87	0.06
90	197	107	17	3152	0.992553	651.93	0.521574	992.23	35.76	0	6.96	1479.04	7.51	1479.33	7.51	0.29	0.02
90	198	108	18	3168	0.991736	653.59	0.522727	991	39.89	0.71	6.83	1491.06	7.53	1491.35	7.53	0.29	0.02
90	199	109	19	3184	0.990884	655.23	0.523869	989.79	44.22	0	6.7	1501.46	7.55	1501.21	7.54	-0.25	-0.02
90	200	110	20	3200	0.99	656.84	0.525	988.61	48.76	0.71	6.57	1513.08	7.57	1512.85	7.56	-0.23	-0.02
90	201	111	21	3216	0.989084	658.41	0.526119	987.46	53.49	0	6.45	1523.09	7.58	1522.35	7.57	-0.74	-0.05
90	202	112	22	3232	0.988138	659.96	0.527228	986.34	58.41	0.7	6.33	1534.32	7.6	1533.62	7.59	-0.7	-0.05
90	203	113	23	3248	0.987163	661.49	0.528325	985.24	63.53	0	6.21	1543.96	7.61	1542.78	7.6	-1.18	-0.08
90	204	114	24	3264	0.986159	662.98	0.529412	984.17	68.84	0.7	6.1	1554.81	7.62	1553.7	7.62	-1.11	-0.07
90	205	115	25	3280	0.985128	664.45	0.530488	983.13	74.33	0	5.99	1564.08	7.63	1562.51	7.62	-1.57	-0.1
90	206	116	26	3296	0.98407	665.9	0.531553	982.11	80.01	0.7	5.89	1574.57	7.64	1573.09	7.64	-1.48	-0.09
90	207	117	27	3312	0.982987	667.31	0.532609	981.12	85.87	0	5.78	1583.48	7.65	1581.57	7.64	-1.91	-0.12
90	208	118	28	3328	0.981879	668.71	0.533654	980.15	91.9	0.69	5.68	1593.61	7.66	1591.81	7.65	-1.81	-0.11
90	209	119	29	3344	0.980747	670.07	0.534689	979.21	98.11	0	5.58	1602.19	7.67	1599.97	7.66	-2.22	-0.14
90	210	120	30	3360	0.979592	671.42	0.535714	978.29	104.5	0.69	5.49	1611.97	7.68	1609.88	7.67	-2.09	-0.13
90	211	121	31	3376	0.978415	672.74	0.53673	977.39	111.06	0	5.4	1620.21	7.68	1617.73	7.67	-2.48	-0.15
90	212	122	32	3392	0.977216	674.04	0.537736	976.52	117.78	0.69	5.3	1629.66	7.69	1627.31	7.68	-2.34	-0.14

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90	213	123	33	3408	0.975997	675.31	0.538732	975.67	124.67	0	5.22	1637.57	7.69	1634.85	7.68	-2.71	-0.17
90	214	124	34	3424	0.974758	676.56	0.53972	974.84	131.73	0.68	5.13	1646.69	7.69	1644.13	7.68	-2.56	-0.16
90	215	125	35	3440	0.973499	677.79	0.540698	974.03	138.94	0	5.05	1654.29	7.69	1651.37	7.68	-2.91	-0.18
90	216	126	36	3456	0.972222	679	0.541667	973.24	146.32	0.68	4.97	1663.09	7.7	1660.34	7.69	-2.74	-0.17
90	217	127	37	3472	0.970927	680.19	0.542627	972.47	153.85	0	4.89	1670.38	7.7	1667.3	7.68	-3.08	-0.18
90	218	128	38	3488	0.969615	681.35	0.543578	971.72	161.54	0.68	4.81	1678.87	7.7	1675.97	7.69	-2.9	-0.17
90	219	129	39	3504	0.968287	682.5	0.544521	970.99	169.38	0	4.73	1685.86	7.7	1682.64	7.68	-3.22	-0.19
90	220	130	40	3520	0.966942	683.62	0.545455	970.28	177.37	0.67	4.66	1694.05	7.7	1691.02	7.69	-3.03	-0.18
90	221	131	41	3536	0.965582	684.73	0.54638	969.59	185.51	0	4.59	1700.75	7.7	1697.41	7.68	-3.34	-0.2
90	222	132	42	3552	0.964207	685.82	0.547297	968.92	193.8	0.67	4.52	1708.65	7.7	1705.51	7.68	-3.14	-0.18
90	223	133	43	3568	0.962818	686.88	0.548206	968.27	202.23	0	4.45	1715.07	7.69	1711.63	7.68	-3.44	-0.2
90	224	134	44	3584	0.961416	687.93	0.549107	967.63	210.8	0.67	4.38	1722.68	7.69	1719.45	7.68	-3.23	-0.19
90	225	135	45	3600	0.96	688.96	0.55	967.02	219.52	0	4.32	1728.82	7.68	1725.31	7.67	-3.51	-0.2
90	226	136	46	3616	0.958572	689.97	0.550885	966.41	228.37	0.67	4.25	1736.16	7.68	1732.86	7.67	-3.3	-0.19
90	227	137	47	3632	0.957131	690.97	0.551762	965.83	237.37	0	4.19	1742.03	7.67	1738.46	7.66	-3.57	-0.21
90	228	138	48	3648	0.955679	691.94	0.552632	965.26	246.49	0.66	4.13	1749.09	7.67	1745.75	7.66	-3.35	-0.19
90	229	139	49	3664	0.954215	692.9	0.553493	964.71	255.75	0	4.07	1754.7	7.66	1751.09	7.65	-3.61	-0.21
90	230	140	50	3680	0.952741	693.84	0.554348	964.18	265.15	0.66	4.01	1761.51	7.66	1758.13	7.64	-3.38	-0.19
90	231	141	51	3696	0.951257	694.77	0.555195	963.66	274.67	0	3.96	1766.86	7.65	1763.22	7.63	-3.64	-0.21
90	232	142	52	3712	0.949762	695.68	0.556034	963.15	284.32	0.66	3.9	1773.41	7.64	1770	7.63	-3.4	-0.19
90	233	143	53	3728	0.948258	696.57	0.556867	962.66	294.1	0	3.85	1778.51	7.63	1774.86	7.62	-3.65	-0.21
90	234	144	54	3744	0.946746	697.45	0.557692	962.19	304	0.65	3.79	1784.81	7.63	1781.4	7.61	-3.41	-0.19
90	235	145	55	3760	0.945224	698.31	0.558511	961.73	314.03	0	3.74	1789.68	7.62	1786.02	7.6	-3.65	-0.2
90	236	146	56	3776	0.943694	699.16	0.559322	961.28	324.18	0.65	3.69	1795.73	7.61	1792.31	7.59	-3.41	-0.19
90	237	147	57	3792	0.942157	699.99	0.560127	960.85	334.45	0	3.64	1800.36	7.6	1796.71	7.58	-3.65	-0.2
90	238	148	58	3808	0.940612	700.8	0.560924	960.43	344.84	0.65	3.59	1806.17	7.59	1802.76	7.57	-3.4	-0.19
90	239	149	59	3824	0.939059	701.61	0.561715	960.03	355.35	0	3.55	1810.57	7.58	1806.93	7.56	-3.63	-0.2
90	240	150	60	3840	0.9375	702.39	0.5625	959.63	365.97	0.65	3.5	1816.15	7.57	1812.76	7.55	-3.39	-0.19
90	241	151	61	3856	0.935934	703.17	0.563278	959.26	376.71	0	3.45	1820.32	7.55	1816.71	7.54	-3.61	-0.2
90	242	152	62	3872	0.934362	703.93	0.56405	958.89	387.56	0.64	3.41	1825.68	7.54	1822.31	7.53	-3.36	-0.18
90	243	153	63	3888	0.932785	704.67	0.564815	958.54	398.52	0	3.37	1829.64	7.53	1826.05	7.51	-3.59	-0.2
90	244	154	64	3904	0.931201	705.4	0.565574	958.2	409.59	0.64	3.32	1834.77	7.52	1831.43	7.51	-3.34	-0.18
90	245	155	65	3920	0.929613	706.12	0.566327	957.87	420.78	0	3.28	1838.51	7.5	1834.96	7.49	-3.56	-0.19
90	246	156	66	3936	0.928019	706.83	0.567073	957.55	432.07	0.64	3.24	1843.43	7.49	1840.12	7.48	-3.31	-0.18
90	247	157	67	3952	0.926421	707.52	0.567814	957.25	443.46	0	3.2	1846.97	7.48	1843.44	7.46	-3.52	-0.19
90	248	158	68	3968	0.924818	708.21	0.568548	956.95	454.96	0.64	3.16	1851.67	7.47	1848.4	7.45	-3.27	-0.18
90	249	159	69	3984	0.923211	708.87	0.569277	956.67	466.57	0	3.12	1855.01	7.45	1851.52	7.44	-3.49	-0.19
90	250	160	70	4000	0.9216	709.53	0.57	956.4	478.28	0.63	3.09	1859.51	7.44	1856.27	7.43	-3.24	-0.17
90	251	161	71	4016	0.919985	710.17	0.570717	956.14	490.09	0	3.05	1862.64	7.42	1859.19	7.41	-3.45	-0.19
90	252	162	72	4032	0.918367	710.81	0.571429	955.89	502	0.63	3.01	1866.94	7.41	1863.74	7.4	-3.2	-0.17
90	253	163	73	4048	0.916746	711.43	0.572134	955.66	514.01	0	2.98	1869.88	7.39	1866.46	7.38	-3.42	-0.18
90	254	164	74	4064	0.915122	712.04	0.572835	955.43	526.12	0.63	2.94	1873.99	7.38	1870.81	7.37	-3.17	-0.17
90	255	165	75	4080	0.913495	712.64	0.573529	955.21	538.32	0	2.91	1876.74	7.36	1873.35	7.35	-3.38	-0.18
90	256	166	76	4096	0.911865	713.22	0.574219	955	550.62	0.62	2.87	1880.65	7.35	1877.51	7.33	-3.14	-0.17
90	257	167	77	4112	0.910233	713.8	0.574903	954.81	563.02	0	2.84	1883.22	7.33	1879.86	7.31	-3.35	-0.18
90	258	168	78	4128	0.908599	714.37	0.575581	954.62	575.5	0.62	2.81	1886.94	7.31	1883.83	7.3	-3.11	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
90	259	169	79	4144	0.906963	714.92	0.576255	954.44	588.09	0	2.78	1889.33	7.29	1886	7.28	-3.33	-0.18
90	260	170	80	4160	0.905325	715.47	0.576923	954.27	600.76	0.62	2.75	1892.87	7.28	1889.78	7.27	-3.09	-0.16
90	261	171	81	4176	0.903686	716	0.577586	954.11	613.52	0	2.72	1895.08	7.26	1891.78	7.25	-3.3	-0.17
90	262	172	82	4192	0.902045	716.52	0.578244	953.96	626.37	0.62	2.69	1898.44	7.25	1895.38	7.23	-3.06	-0.16
90	263	173	83	4208	0.900403	717.04	0.578897	953.82	639.31	0	2.66	1900.48	7.23	1897.2	7.21	-3.28	-0.17
90	264	174	84	4224	0.89876	717.54	0.579545	953.69	652.34	0.62	2.63	1903.67	7.21	1900.62	7.2	-3.05	-0.16
90	265	175	85	4240	0.897116	718.04	0.580189	953.57	665.45	0	2.6	1905.54	7.19	1902.28	7.18	-3.27	-0.17
90	266	176	86	4256	0.895472	718.52	0.580827	953.45	678.65	0.61	2.57	1908.56	7.18	1905.52	7.16	-3.04	-0.16
90	267	177	87	4272	0.893827	719	0.581461	953.35	691.93	0	2.54	1910.27	7.15	1907.01	7.14	-3.26	-0.17
90	268	178	88	4288	0.892181	719.47	0.58209	953.25	705.3	0.61	2.52	1913.11	7.14	1910.08	7.13	-3.04	-0.16
90	269	179	89	4304	0.890535	719.93	0.582714	953.16	718.75	0	2.49	1914.66	7.12	1911.4	7.11	-3.26	-0.17
90	270	180	90	4320	0.888889	720.37	0.583333	953.08	732.28	0.61	2.47	1917.35	7.1	1914.31	7.09	-3.04	-0.16
90	271	181	91	4336	0.887243	720.81	0.583948	953	745.89	0	2.44	1918.73	7.08	1915.47	7.07	-3.27	-0.17
90	272	182	92	4352	0.885597	721.25	0.584559	952.94	759.58	0.61	2.42	1921.26	7.06	1918.21	7.05	-3.05	-0.16
90	273	183	93	4368	0.883951	721.67	0.585165	952.88	773.35	0	2.39	1922.49	7.04	1919.21	7.03	-3.28	-0.17
90	274	184	94	4384	0.882306	722.08	0.585766	952.83	787.2	0.6	2.37	1924.86	7.03	1921.79	7.01	-3.07	-0.16
90	275	185	95	4400	0.880661	722.49	0.586364	952.78	801.12	0	2.34	1925.95	7	1922.64	6.99	-3.3	-0.17
90	276	186	96	4416	0.879017	722.89	0.586957	952.75	815.12	0.6	2.32	1928.16	6.99	1925.06	6.97	-3.1	-0.16
90	277	187	97	4432	0.877374	723.28	0.587545	952.72	829.2	0	2.3	1929.1	6.96	1925.76	6.95	-3.33	-0.17
90	278	188	98	4448	0.875731	723.66	0.588129	952.7	843.35	0.6	2.28	1931.16	6.95	1928.03	6.94	-3.14	-0.16
90	279	189	99	4464	0.874089	724.04	0.58871	952.68	857.58	0	2.25	1931.96	6.92	1928.58	6.91	-3.38	-0.18
90	280	190	100	4480	0.872449	724.4	0.589286	952.68	871.88	0.6	2.23	1933.87	6.91	1930.69	6.9	-3.18	-0.16
90	281	191	101	4496	0.87081	724.76	0.589858	952.67	886.25	0	2.21	1934.53	6.88	1931.1	6.87	-3.43	-0.18
90	282	192	102	4512	0.869172	725.11	0.590426	952.68	900.69	0.6	2.19	1936.3	6.87	1933.06	6.85	-3.24	-0.17
90	283	193	103	4528	0.867535	725.46	0.590989	952.69	915.2	0	2.17	1936.81	6.84	1933.32	6.83	-3.49	-0.18
90	284	194	104	4544	0.8659	725.8	0.591549	952.71	929.78	0.59	2.15	1938.45	6.83	1935.14	6.81	-3.31	-0.17
90	285	195	105	4560	0.864266	726.13	0.592105	952.74	944.44	0	2.13	1938.83	6.8	1935.26	6.79	-3.56	-0.18
90	286	196	106	4576	0.862634	726.45	0.592657	952.77	959.16	0.59	2.11	1940.32	6.78	1936.93	6.77	-3.39	-0.17
90	287	197	107	4592	0.861004	726.77	0.593206	952.81	973.95	0	2.09	1940.57	6.76	1936.92	6.75	-3.65	-0.19
90	288	198	108	4608	0.859375	727.08	0.59375	952.85	988.8	0.59	2.07	1941.93	6.74	1938.45	6.73	-3.48	-0.18
90	289	199	109	4624	0.857748	727.38	0.594291	952.9	1003.73	0	2.05	1942.04	6.72	1938.3	6.71	-3.75	-0.19
90	290	200	110	4640	0.856124	727.67	0.594828	952.96	1018.72	0.59	2.03	1943.27	6.7	1939.69	6.69	-3.58	-0.18
90	291	201	111	4656	0.854501	727.96	0.595361	953.02	1033.77	0	2.01	1943.26	6.68	1939.41	6.66	-3.85	-0.2
90	292	202	112	4672	0.85288	728.25	0.59589	953.09	1048.89	0.59	2	1944.36	6.66	1940.66	6.65	-3.7	-0.19
90	293	203	113	4688	0.851262	728.52	0.596416	953.16	1064.07	0	1.98	1944.23	6.64	1940.25	6.62	-3.98	-0.2
90	294	204	114	4704	0.849646	728.79	0.596939	953.24	1079.32	0.58	1.96	1945.2	6.62	1941.37	6.6	-3.83	-0.2
90	295	205	115	4720	0.848032	729.06	0.597458	953.32	1094.62	0	1.95	1944.94	6.59	1940.83	6.58	-4.11	-0.21
90	296	206	116	4736	0.846421	729.32	0.597973	953.41	1109.99	0.58	1.93	1945.79	6.57	1941.82	6.56	-3.97	-0.2
90	297	207	117	4752	0.844812	729.57	0.598485	953.51	1125.43	0	1.91	1945.41	6.55	1941.15	6.54	-4.26	-0.22
90	298	208	118	4768	0.843205	729.81	0.598993	953.61	1140.92	0.58	1.9	1946.13	6.53	1942.01	6.52	-4.12	-0.21
90	299	209	119	4784	0.841601	730.06	0.599498	953.71	1156.47	0	1.88	1945.64	6.51	1941.23	6.49	-4.42	-0.23
90	300	210	120	4800	0.84	730.29	0.6	953.83	1172.08	0.58	1.86	1946.25	6.49	1941.96	6.47	-4.29	-0.22
90	301	211	121	4816	0.838401	730.52	0.600498	953.94	1187.75	0	1.85	1945.64	6.46	1941.05	6.45	-4.59	-0.24
90	302	212	122	4832	0.836805	730.74	0.600993	954.06	1203.48	0.58	1.83	1946.13	6.44	1941.66	6.43	-4.47	-0.23
90	303	213	123	4848	0.835212	730.96	0.601485	954.19	1219.26	0	1.82	1945.41	6.42	1940.63	6.4	-4.78	-0.25
90	304	214	124	4864	0.833622	731.17	0.601974	954.32	1235.11	0.57	1.8	1945.78	6.4	1941.11	6.39	-4.67	-0.24

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
90	305	215	125	4880	0.832034	731.38	0.602459	954.45	1251.01	0	1.79	1944.95	6.38	1939.97	6.36	-4.98	-0.26
90	306	216	126	4896	0.83045	731.58	0.602941	954.59	1266.96	0.57	1.77	1945.21	6.36	1940.33	6.34	-4.87	-0.25
90	307	217	127	4912	0.828868	731.78	0.60342	954.74	1282.98	0	1.76	1944.27	6.33	1939.07	6.32	-5.19	-0.27
90	308	218	128	4928	0.82729	731.97	0.603896	954.89	1299.04	0.57	1.75	1944.42	6.31	1939.32	6.3	-5.1	-0.26
90	309	219	129	4944	0.825714	732.16	0.604369	955.04	1315.16	0	1.73	1943.37	6.29	1937.95	6.27	-5.42	-0.28
90	310	220	130	4960	0.824142	732.34	0.604839	955.2	1331.34	0.57	1.72	1943.41	6.27	1938.07	6.25	-5.34	-0.28
90	311	221	131	4976	0.822572	732.51	0.605305	955.36	1347.56	0	1.7	1942.26	6.25	1936.59	6.23	-5.67	-0.29
90	312	222	132	4992	0.821006	732.69	0.605769	955.53	1363.85	0.57	1.69	1942.2	6.22	1936.61	6.21	-5.59	-0.29
90	313	223	133	5008	0.819443	732.85	0.60623	955.7	1380.18	0	1.68	1940.94	6.2	1935.01	6.18	-5.93	-0.31
90	314	224	134	5024	0.817883	733.01	0.606688	955.88	1396.56	0.56	1.67	1940.77	6.18	1934.92	6.16	-5.86	-0.3
90	315	225	135	5040	0.816327	733.17	0.607143	956.06	1413	0	1.65	1939.42	6.16	1933.22	6.14	-6.21	-0.32
90	316	226	136	5056	0.814773	733.33	0.607595	956.24	1429.49	0.56	1.64	1939.15	6.14	1933.01	6.12	-6.14	-0.32
90	317	227	137	5072	0.813223	733.47	0.608044	956.43	1446.02	0	1.63	1937.7	6.11	1931.2	6.09	-6.5	-0.34
90	318	228	138	5088	0.811677	733.62	0.608491	956.62	1462.61	0.56	1.62	1937.32	6.09	1930.89	6.07	-6.44	-0.33
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
91	181	90	-1	2896	0.999969	620.74	0.498619	1039.41	0.13	0	9.77	1245.49	6.88	1254.45	6.93	8.96	0.71
91	182	91	0	2912	1	623.04	0.5	1037.49	0	-0.74	10	1260.73	6.93	1269.42	6.97	8.69	0.68
91	183	92	1	2928	0.99997	625.3	0.501366	1035.61	0.13	0	9.77	1276.73	6.98	1283.95	7.02	7.23	0.56
91	184	93	2	2944	0.999882	627.52	0.502717	1033.78	0.53	-0.74	9.55	1290.99	7.02	1298.46	7.06	7.47	0.58
91	185	94	3	2960	0.999737	629.7	0.504054	1031.99	1.19	0	9.34	1306.47	7.06	1312.52	7.09	6.05	0.46
91	186	95	4	2976	0.999538	631.84	0.505376	1030.24	2.1	-0.73	9.14	1320.22	7.1	1326.57	7.13	6.35	0.48
91	187	96	5	2992	0.999285	633.95	0.506684	1028.53	3.26	0	8.94	1335.2	7.14	1340.18	7.17	4.98	0.37
91	188	97	6	3008	0.998981	636.01	0.507979	1026.86	4.67	-0.73	8.75	1348.47	7.17	1353.79	7.2	5.32	0.39
91	189	98	7	3024	0.998628	638.04	0.509259	1025.24	6.32	0	8.56	1362.97	7.21	1366.96	7.23	3.99	0.29
91	190	99	8	3040	0.998227	640.03	0.510526	1023.65	8.21	-0.73	8.38	1375.77	7.24	1380.14	7.26	4.37	0.32
91	191	100	9	3056	0.99778	641.99	0.51178	1022.09	10.34	0	8.2	1389.79	7.28	1392.88	7.29	3.09	0.22
91	192	101	10	3072	0.997287	643.91	0.513021	1020.58	12.69	-0.72	8.04	1402.14	7.3	1405.65	7.32	3.51	0.25
91	193	102	11	3088	0.996752	645.79	0.514249	1019.1	15.28	0	7.87	1415.7	7.34	1417.97	7.35	2.27	0.16
91	194	103	12	3104	0.996174	647.65	0.515464	1017.65	18.09	-0.72	7.71	1427.61	7.36	1430.33	7.37	2.73	0.19
91	195	104	13	3120	0.995556	649.47	0.516667	1016.24	21.12	0	7.56	1440.73	7.39	1442.25	7.4	1.52	0.11
91	196	105	14	3136	0.994898	651.25	0.517857	1014.86	24.38	-0.71	7.41	1452.2	7.41	1454.22	7.42	2.01	0.14
91	197	106	15	3152	0.994202	653.01	0.519036	1013.51	27.84	0	7.26	1464.9	7.44	1465.74	7.44	0.85	0.06
91	198	107	16	3168	0.99347	654.74	0.520202	1012.2	31.52	-0.71	7.12	1475.96	7.45	1477.33	7.46	1.37	0.09
91	199	108	17	3184	0.992702	656.43	0.521357	1010.92	35.4	0	6.99	1488.24	7.48	1488.47	7.48	0.23	0.02
91	200	109	18	3200	0.9919	658.1	0.5225	1009.66	39.49	-0.71	6.85	1498.89	7.49	1499.68	7.5	0.78	0.05
91	201	110	19	3216	0.991065	659.73	0.523632	1008.44	43.78	0	6.72	1510.77	7.52	1510.44	7.51	-0.32	-0.02
91	202	111	20	3232	0.990197	661.34	0.524752	1007.25	48.27	-0.7	6.6	1521.03	7.53	1521.29	7.53	0.25	0.02
91	203	112	21	3248	0.989298	662.92	0.525862	1006.08	52.96	0	6.48	1532.52	7.55	1531.69	7.55	-0.82	-0.05
91	204	113	22	3264	0.98837	664.47	0.526961	1004.94	57.84	-0.7	6.36	1542.4	7.56	1542.18	7.56	-0.22	-0.01
91	205	114	23	3280	0.987412	665.99	0.528049	1003.83	62.91	0	6.24	1553.5	7.58	1552.23	7.57	-1.27	-0.08
91	206	115	24	3296	0.986427	667.49	0.529126	1002.75	68.17	-0.7	6.13	1563.02	7.59	1562.38	7.58	-0.64	-0.04
91	207	116	25	3312	0.985414	668.96	0.530193	1001.69	73.62	0	6.02	1573.75	7.6	1572.09	7.59	-1.67	-0.11
91	208	117	26	3328	0.984375	670.41	0.53125	1000.66	79.24	-0.69	5.92	1582.91	7.61	1581.89	7.61	-1.02	-0.06
91	209	118	27	3344	0.983311	671.83	0.532297	999.65	85.05	0	5.81	1593.28	7.62	1591.26	7.61	-2.02	-0.13

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
91	210	119	28	3360	0.982222	673.22	0.533333	998.67	91.03	-0.69	5.71	1602.1	7.63	1600.74	7.62	-1.35	-0.08
91	211	120	29	3376	0.98111	674.59	0.53436	997.71	97.19	0	5.61	1612.12	7.64	1609.79	7.63	-2.33	-0.14
91	212	121	30	3392	0.979975	675.94	0.535377	996.78	103.52	-0.69	5.52	1620.6	7.64	1618.95	7.64	-1.65	-0.1
91	213	122	31	3408	0.978818	677.26	0.536385	995.87	110.02	0	5.43	1630.28	7.65	1627.67	7.64	-2.61	-0.16
91	214	123	32	3424	0.97764	678.56	0.537383	994.98	116.69	-0.68	5.34	1638.42	7.66	1636.52	7.65	-1.91	-0.12
91	215	124	33	3440	0.976441	679.84	0.538372	994.11	123.52	0	5.25	1647.78	7.66	1644.93	7.65	-2.85	-0.17
91	216	125	34	3456	0.975223	681.1	0.539352	993.27	130.51	-0.68	5.16	1655.6	7.66	1653.48	7.65	-2.13	-0.13
91	217	126	35	3472	0.973985	682.33	0.540323	992.45	137.67	0	5.08	1664.64	7.67	1661.58	7.66	-3.05	-0.18
91	218	127	36	3488	0.97273	683.54	0.541284	991.64	144.98	-0.68	5	1672.15	7.67	1669.83	7.66	-2.32	-0.14
91	219	128	37	3504	0.971456	684.73	0.542237	990.86	152.45	0	4.92	1680.87	7.68	1677.64	7.66	-3.23	-0.19
91	220	129	38	3520	0.970165	685.9	0.543182	990.1	160.08	-0.67	4.84	1688.09	7.67	1685.6	7.66	-2.48	-0.15
91	221	130	39	3536	0.968858	687.05	0.544118	989.36	167.85	0	4.77	1696.5	7.68	1693.12	7.66	-3.38	-0.2
91	222	131	40	3552	0.967535	688.18	0.545045	988.63	175.78	-0.67	4.69	1703.42	7.67	1700.8	7.66	-2.62	-0.15
91	223	132	41	3568	0.966197	689.29	0.545964	987.93	183.86	0	4.62	1711.54	7.68	1708.04	7.66	-3.5	-0.2
91	224	133	42	3584	0.964844	690.38	0.546875	987.25	192.08	-0.67	4.55	1718.18	7.67	1715.44	7.66	-2.74	-0.16
91	225	134	43	3600	0.963477	691.46	0.547778	986.58	200.44	0	4.48	1726.01	7.67	1722.4	7.66	-3.6	-0.21
91	226	135	44	3616	0.962096	692.51	0.548673	985.93	208.95	-0.67	4.41	1732.36	7.67	1729.53	7.65	-2.83	-0.16
91	227	136	45	3632	0.960702	693.54	0.549559	985.3	217.59	0	4.35	1739.91	7.66	1736.23	7.65	-3.68	-0.21
91	228	137	46	3648	0.959295	694.56	0.550439	984.68	226.38	-0.66	4.29	1746	7.66	1743.1	7.65	-2.9	-0.17
91	229	138	47	3664	0.957876	695.56	0.55131	984.09	235.3	0	4.22	1753.27	7.66	1749.53	7.64	-3.74	-0.21
91	230	139	48	3680	0.956446	696.54	0.552174	983.51	244.36	-0.66	4.16	1759.1	7.65	1756.14	7.64	-2.96	-0.17
91	231	140	49	3696	0.955005	697.51	0.55303	982.94	253.55	0	4.1	1766.1	7.65	1762.32	7.63	-3.79	-0.22
91	232	141	50	3712	0.953552	698.45	0.553879	982.39	262.87	-0.66	4.04	1771.67	7.64	1768.67	7.62	-2.99	-0.17
91	233	142	51	3728	0.95209	699.39	0.554721	981.86	272.32	0	3.99	1778.42	7.63	1774.6	7.62	-3.82	-0.22
91	234	143	52	3744	0.950617	700.3	0.555556	981.34	281.9	-0.65	3.93	1783.73	7.62	1780.71	7.61	-3.02	-0.17
91	235	144	53	3760	0.949135	701.2	0.556383	980.84	291.61	0	3.88	1790.23	7.62	1786.39	7.6	-3.84	-0.21
91	236	145	54	3776	0.947644	702.08	0.557203	980.36	301.44	-0.65	3.83	1795.3	7.61	1792.26	7.59	-3.03	-0.17
91	237	146	55	3792	0.946145	702.95	0.558017	979.88	311.39	0	3.77	1801.55	7.6	1797.7	7.59	-3.84	-0.21
91	238	147	56	3808	0.944637	703.8	0.558824	979.43	321.47	-0.65	3.72	1806.38	7.59	1803.34	7.58	-3.04	-0.17
91	239	148	57	3824	0.943121	704.64	0.559623	978.98	331.66	0	3.67	1812.39	7.58	1808.55	7.57	-3.84	-0.21
91	240	149	58	3840	0.941597	705.46	0.560417	978.55	341.98	-0.65	3.62	1816.99	7.57	1813.96	7.56	-3.03	-0.17
91	241	150	59	3856	0.940066	706.27	0.561203	978.14	352.41	0	3.58	1822.76	7.56	1818.93	7.55	-3.83	-0.21
91	242	151	60	3872	0.938529	707.07	0.561983	977.73	362.96	-0.64	3.53	1827.13	7.55	1824.12	7.54	-3.01	-0.17
91	243	152	61	3888	0.936985	707.85	0.562757	977.34	373.62	0	3.48	1832.68	7.54	1828.87	7.53	-3.81	-0.21
91	244	153	62	3904	0.935434	708.61	0.563525	976.97	384.39	-0.64	3.44	1836.83	7.53	1833.84	7.52	-2.99	-0.16
91	245	154	63	3920	0.933878	709.36	0.564286	976.6	395.28	0	3.4	1842.15	7.52	1838.37	7.5	-3.78	-0.21
91	246	155	64	3936	0.932315	710.1	0.565041	976.25	406.28	-0.64	3.35	1846.09	7.5	1843.12	7.49	-2.97	-0.16
91	247	156	65	3952	0.930748	710.83	0.565789	975.91	417.38	0	3.31	1851.19	7.49	1847.44	7.48	-3.75	-0.2
91	248	157	66	3968	0.929175	711.54	0.566532	975.58	428.6	-0.64	3.27	1854.91	7.48	1851.98	7.47	-2.94	-0.16
91	249	158	67	3984	0.927598	712.24	0.567269	975.27	439.91	0	3.23	1859.81	7.47	1856.09	7.45	-3.72	-0.2
91	250	159	68	4000	0.926016	712.93	0.568	974.96	451.34	-0.63	3.19	1863.32	7.45	1860.42	7.44	-2.91	-0.16
91	251	160	69	4016	0.92443	713.61	0.568725	974.67	462.87	0	3.15	1868.01	7.44	1864.32	7.43	-3.68	-0.2
91	252	161	70	4032	0.92284	714.27	0.569444	974.39	474.5	-0.63	3.11	1871.33	7.43	1868.46	7.41	-2.87	-0.15
91	253	162	71	4048	0.921245	714.92	0.570158	974.12	486.23	0	3.08	1875.81	7.41	1872.16	7.4	-3.65	-0.19
91	254	163	72	4064	0.919648	715.56	0.570866	973.86	498.06	-0.63	3.04	1878.93	7.4	1876.09	7.39	-2.84	-0.15
91	255	164	73	4080	0.918047	716.19	0.571569	973.61	509.99	0	3	1883.21	7.39	1879.6	7.37	-3.61	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
91	256	165	74	4096	0.916443	716.8	0.572266	973.38	522.02	-0.62	2.97	1886.14	7.37	1883.34	7.36	-2.8	-0.15
91	257	166	75	4112	0.914836	717.41	0.572957	973.15	534.15	0	2.94	1890.23	7.35	1886.65	7.34	-3.58	-0.19
91	258	167	76	4128	0.913226	718	0.573643	972.93	546.37	-0.62	2.9	1892.98	7.34	1890.2	7.33	-2.77	-0.15
91	259	168	77	4144	0.911614	718.59	0.574324	972.72	558.69	0	2.87	1896.87	7.32	1893.33	7.31	-3.54	-0.19
91	260	169	78	4160	0.91	719.16	0.575	972.53	571.1	-0.62	2.84	1899.44	7.31	1896.7	7.29	-2.74	-0.14
91	261	170	79	4176	0.908384	719.72	0.57567	972.34	583.6	0	2.8	1903.15	7.29	1899.63	7.28	-3.51	-0.18
91	262	171	80	4192	0.906765	720.27	0.576336	972.16	596.19	-0.62	2.77	1905.53	7.27	1902.82	7.26	-2.71	-0.14
91	263	172	81	4208	0.905145	720.82	0.576996	971.99	608.87	0	2.74	1909.06	7.26	1905.58	7.25	-3.49	-0.18
91	264	173	82	4224	0.903524	721.35	0.577652	971.83	621.64	-0.62	2.71	1911.27	7.24	1908.59	7.23	-2.69	-0.14
91	265	174	83	4240	0.901901	721.87	0.578302	971.68	634.5	0	2.68	1914.63	7.23	1911.17	7.21	-3.46	-0.18
91	266	175	84	4256	0.900277	722.38	0.578947	971.54	647.45	-0.61	2.65	1916.67	7.21	1914	7.2	-2.67	-0.14
91	267	176	85	4272	0.898652	722.88	0.579588	971.41	660.49	0	2.63	1919.85	7.19	1916.4	7.18	-3.45	-0.18
91	268	177	86	4288	0.897026	723.37	0.580224	971.28	673.6	-0.61	2.6	1921.72	7.17	1919.07	7.16	-2.66	-0.14
91	269	178	87	4304	0.895399	723.86	0.580855	971.17	686.81	0	2.57	1924.74	7.16	1921.3	7.14	-3.43	-0.18
91	270	179	88	4320	0.893772	724.33	0.581481	971.06	700.09	-0.61	2.54	1926.45	7.13	1923.8	7.13	-2.65	-0.14
91	271	180	89	4336	0.892145	724.8	0.582103	970.96	713.46	0	2.52	1929.29	7.12	1925.86	7.11	-3.43	-0.18
91	272	181	90	4352	0.890517	725.25	0.582721	970.87	726.91	-0.61	2.49	1930.84	7.1	1928.2	7.09	-2.65	-0.14
91	273	182	91	4368	0.888889	725.7	0.583333	970.79	740.44	0	2.47	1933.53	7.08	1930.1	7.07	-3.43	-0.18
91	274	183	92	4384	0.887261	726.14	0.583942	970.72	754.06	-0.6	2.44	1934.92	7.06	1932.27	7.05	-2.66	-0.14
91	275	184	93	4400	0.885633	726.57	0.584545	970.65	767.75	0	2.42	1937.45	7.05	1934.01	7.03	-3.44	-0.18
91	276	185	94	4416	0.884005	726.99	0.585145	970.59	781.51	-0.6	2.39	1938.69	7.02	1936.02	7.01	-2.67	-0.14
91	277	186	95	4432	0.882378	727.41	0.58574	970.54	795.36	0	2.37	1941.06	7.01	1937.61	6.99	-3.46	-0.18
91	278	187	96	4448	0.880752	727.81	0.586331	970.5	809.28	-0.6	2.34	1942.16	6.99	1939.46	6.98	-2.69	-0.14
91	279	188	97	4464	0.879125	728.21	0.586918	970.46	823.28	0	2.32	1944.38	6.97	1940.9	6.96	-3.48	-0.18
91	280	189	98	4480	0.8775	728.6	0.5875	970.43	837.35	-0.6	2.3	1945.33	6.95	1942.6	6.94	-2.73	-0.14
91	281	190	99	4496	0.875875	728.98	0.588078	970.41	851.49	0	2.28	1947.4	6.93	1943.88	6.92	-3.52	-0.18
91	282	191	100	4512	0.874252	729.35	0.588652	970.39	865.71	-0.6	2.26	1948.2	6.91	1945.43	6.9	-2.77	-0.14
91	283	192	101	4528	0.872629	729.72	0.589223	970.38	880	0	2.23	1950.13	6.89	1946.56	6.88	-3.56	-0.18
91	284	193	102	4544	0.871008	730.08	0.589789	970.38	894.37	-0.59	2.21	1950.79	6.87	1947.97	6.86	-2.82	-0.14
91	285	194	103	4560	0.869388	730.43	0.590351	970.39	908.8	0	2.19	1952.57	6.85	1948.95	6.84	-3.62	-0.19
91	286	195	104	4576	0.867769	730.77	0.590909	970.4	923.31	-0.59	2.17	1953.1	6.83	1950.22	6.82	-2.88	-0.15
91	287	196	105	4592	0.866151	731.11	0.591463	970.42	937.88	0	2.15	1954.74	6.81	1951.06	6.8	-3.68	-0.19
91	288	197	106	4608	0.864535	731.44	0.592014	970.44	952.52	-0.59	2.13	1955.14	6.79	1952.18	6.78	-2.96	-0.15
91	289	198	107	4624	0.862921	731.76	0.592561	970.47	967.23	0	2.11	1956.64	6.77	1952.88	6.76	-3.76	-0.19
91	290	199	108	4640	0.861308	732.08	0.593103	970.51	982.01	-0.59	2.09	1956.91	6.75	1953.87	6.74	-3.04	-0.16
91	291	200	109	4656	0.859697	732.39	0.593643	970.55	996.85	0	2.07	1958.28	6.73	1954.43	6.72	-3.85	-0.2
91	292	201	110	4672	0.858088	732.69	0.594178	970.6	1011.76	-0.59	2.06	1958.41	6.71	1955.28	6.7	-3.14	-0.16
91	293	202	111	4688	0.856481	732.99	0.59471	970.66	1026.74	0	2.04	1959.65	6.69	1955.7	6.67	-3.95	-0.2
91	294	203	112	4704	0.854875	733.28	0.595238	970.72	1041.78	-0.58	2.02	1959.66	6.67	1956.42	6.65	-3.24	-0.17
91	295	204	113	4720	0.853272	733.56	0.595763	970.78	1056.88	0	2	1960.77	6.65	1956.71	6.63	-4.06	-0.21
91	296	205	114	4736	0.851671	733.84	0.596284	970.86	1072.05	-0.58	1.98	1960.66	6.62	1957.3	6.61	-3.36	-0.17
91	297	206	115	4752	0.850072	734.11	0.596801	970.93	1087.28	0	1.97	1961.64	6.6	1957.46	6.59	-4.19	-0.21
91	298	207	116	4768	0.848475	734.38	0.597315	971.02	1102.57	-0.58	1.95	1961.41	6.58	1957.91	6.57	-3.5	-0.18
91	299	208	117	4784	0.846881	734.63	0.597826	971.11	1117.92	0	1.93	1962.27	6.56	1957.95	6.55	-4.32	-0.22
91	300	209	118	4800	0.845289	734.89	0.598333	971.2	1133.34	-0.58	1.92	1961.91	6.54	1958.27	6.53	-3.64	-0.19
91	301	210	119	4816	0.843699	735.13	0.598837	971.3	1148.81	0	1.9	1962.65	6.52	1958.18	6.51	-4.47	-0.23

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
91	302	211	120	4832	0.842112	735.38	0.599338	971.41	1164.34	-0.58	1.88	1962.18	6.5	1958.38	6.48	-3.8	-0.19
91	303	212	121	4848	0.840528	735.61	0.599835	971.52	1179.94	0	1.87	1962.8	6.48	1958.17	6.46	-4.64	-0.24
91	304	213	122	4864	0.838946	735.84	0.600329	971.63	1195.59	-0.57	1.85	1962.22	6.45	1958.25	6.44	-3.97	-0.2
91	305	214	123	4880	0.837366	736.07	0.60082	971.75	1211.3	0	1.84	1962.72	6.44	1957.91	6.42	-4.81	-0.25
91	306	215	124	4896	0.83579	736.29	0.601307	971.88	1227.06	-0.57	1.82	1962.03	6.41	1957.87	6.4	-4.16	-0.21
91	307	216	125	4912	0.834216	736.5	0.601792	972.01	1242.88	0	1.81	1962.42	6.39	1957.41	6.38	-5.01	-0.26
91	308	217	126	4928	0.832645	736.71	0.602273	972.14	1258.76	-0.57	1.79	1961.61	6.37	1957.26	6.35	-4.36	-0.22
91	309	218	127	4944	0.831076	736.91	0.602751	972.28	1274.7	0	1.78	1961.89	6.35	1956.68	6.33	-5.21	-0.27
91	310	219	128	4960	0.829511	737.11	0.603226	972.42	1290.69	-0.57	1.77	1960.98	6.33	1956.41	6.31	-4.57	-0.23
91	311	220	129	4976	0.827948	737.3	0.603698	972.57	1306.73	0	1.75	1961.14	6.31	1955.72	6.29	-5.43	-0.28
91	312	221	130	4992	0.826389	737.49	0.604167	972.73	1322.83	-0.57	1.74	1960.13	6.28	1955.33	6.27	-4.8	-0.25
91	313	222	131	5008	0.824832	737.67	0.604633	972.88	1338.98	0	1.72	1960.19	6.26	1954.52	6.24	-5.66	-0.29
91	314	223	132	5024	0.823279	737.85	0.605096	973.05	1355.19	-0.56	1.71	1959.06	6.24	1954.02	6.22	-5.04	-0.26
91	315	224	133	5040	0.821728	738.02	0.605556	973.21	1371.44	0	1.7	1959.02	6.22	1953.11	6.2	-5.91	-0.3
91	316	225	134	5056	0.820181	738.19	0.606013	973.38	1387.75	-0.56	1.68	1957.79	6.2	1952.5	6.18	-5.3	-0.27
91	317	226	135	5072	0.818637	738.36	0.606467	973.56	1404.11	0	1.67	1957.64	6.18	1951.47	6.16	-6.17	-0.32
91	318	227	136	5088	0.817096	738.52	0.606918	973.74	1420.53	-0.56	1.66	1956.32	6.15	1950.75	6.13	-5.57	-0.29
91	319	228	137	5104	0.815558	738.67	0.607367	973.92	1436.99	0	1.65	1956.07	6.13	1949.62	6.11	-6.45	-0.33
91	320	229	138	5120	0.814023	738.82	0.607812	974.11	1453.5	-0.56	1.63	1954.65	6.11	1948.79	6.09	-5.85	-0.3
91	321	230	139	5136	0.812492	738.97	0.608255	974.3	1470.06	0	1.62	1954.3	6.09	1947.55	6.07	-6.74	-0.35
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
92	183	91	-1	2928	0.99997	625.3	0.498634	1058.5	0.13	0	9.77	1253.84	6.85	1262.83	6.9	8.99	0.71
92	184	92	0	2944	1	627.6	0.5	1056.56	0	0.74	10	1270.58	6.91	1278.77	6.95	8.19	0.64
92	185	93	1	2960	0.999971	629.85	0.501351	1054.67	0.13	0	9.78	1285.12	6.95	1292.39	6.99	7.26	0.56
92	186	94	2	2976	0.999884	632.06	0.502688	1052.82	0.52	0.73	9.56	1300.88	6.99	1307.85	7.03	6.97	0.53
92	187	95	3	2992	0.999743	634.24	0.504011	1051.02	1.17	0	9.35	1314.92	7.03	1321.02	7.06	6.1	0.46
92	188	96	4	3008	0.999547	636.37	0.505319	1049.25	2.07	0.73	9.15	1330.18	7.08	1336.02	7.11	5.85	0.44
92	189	97	5	3024	0.9993	638.47	0.506614	1047.53	3.22	0	8.95	1343.72	7.11	1348.75	7.14	5.03	0.37
92	190	98	6	3040	0.999003	640.53	0.507895	1045.85	4.62	0.73	8.76	1358.49	7.15	1363.31	7.18	4.82	0.35
92	191	99	7	3056	0.998657	642.55	0.509162	1044.21	6.25	0	8.57	1371.56	7.18	1375.61	7.2	4.05	0.29
92	192	100	8	3072	0.998264	644.54	0.510417	1042.6	8.12	0.72	8.39	1385.85	7.22	1389.73	7.24	3.88	0.28
92	193	101	9	3088	0.997825	646.49	0.511658	1041.03	10.23	0	8.22	1398.47	7.25	1401.62	7.26	3.15	0.22
92	194	102	10	3104	0.997343	648.41	0.512887	1039.5	12.56	0.72	8.05	1412.3	7.28	1415.31	7.3	3.02	0.21
92	195	103	11	3120	0.996818	650.29	0.514103	1038.01	15.12	0	7.89	1424.47	7.3	1426.8	7.32	2.33	0.16
92	196	104	12	3136	0.996252	652.14	0.515306	1036.55	17.91	0.71	7.73	1437.85	7.34	1440.08	7.35	2.23	0.16
92	197	105	13	3152	0.995645	653.96	0.516497	1035.12	20.91	0	7.58	1449.59	7.36	1451.18	7.37	1.59	0.11
92	198	106	14	3168	0.995001	655.75	0.517677	1033.73	24.13	0.71	7.43	1462.54	7.39	1464.06	7.39	1.52	0.1
92	199	107	15	3184	0.994318	657.5	0.518844	1032.37	27.56	0	7.29	1473.86	7.41	1474.77	7.41	0.91	0.06
92	200	108	16	3200	0.9936	659.22	0.52	1031.04	31.2	0.71	7.15	1486.39	7.43	1487.26	7.44	0.87	0.06
92	201	109	17	3216	0.992847	660.92	0.521144	1029.74	35.05	0	7.01	1497.3	7.45	1497.6	7.45	0.3	0.02
92	202	110	18	3232	0.99206	662.58	0.522277	1028.47	39.1	0.7	6.88	1509.43	7.47	1509.72	7.47	0.29	0.02
92	203	111	19	3248	0.99124	664.22	0.523399	1027.23	43.35	0	6.75	1519.94	7.49	1519.69	7.49	-0.25	-0.02
92	204	112	20	3264	0.990388	665.83	0.52451	1026.02	47.8	0.7	6.62	1531.67	7.51	1531.44	7.51	-0.24	-0.02
92	205	113	21	3280	0.989506	667.41	0.52561	1024.84	52.45	0	6.5	1541.81	7.52	1541.06	7.52	-0.75	-0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
92	206	114	22	3296	0.988595	668.96	0.526699	1023.69	57.28	0.7	6.39	1553.15	7.54	1552.44	7.54	-0.71	-0.05
92	207	115	23	3312	0.987654	670.48	0.527778	1022.57	62.31	0	6.27	1562.91	7.55	1561.72	7.54	-1.2	-0.08
92	208	116	24	3328	0.986686	671.98	0.528846	1021.47	67.52	0.69	6.16	1573.89	7.57	1572.75	7.56	-1.13	-0.07
92	209	117	25	3344	0.985692	673.45	0.529904	1020.4	72.91	0	6.05	1583.29	7.58	1581.7	7.57	-1.59	-0.1
92	210	118	26	3360	0.984671	674.9	0.530952	1019.35	78.49	0.69	5.95	1593.9	7.59	1592.39	7.58	-1.51	-0.09
92	211	119	27	3376	0.983626	676.32	0.531991	1018.33	84.25	0	5.84	1602.95	7.6	1601	7.59	-1.94	-0.12
92	212	120	28	3392	0.982556	677.72	0.533019	1017.33	90.18	0.69	5.74	1613.2	7.61	1611.36	7.6	-1.84	-0.11
92	213	121	29	3408	0.981463	679.09	0.534038	1016.36	96.28	0	5.64	1621.91	7.61	1619.66	7.6	-2.25	-0.14
92	214	122	30	3424	0.980348	680.44	0.535047	1015.41	102.56	0.68	5.55	1631.83	7.63	1629.7	7.62	-2.13	-0.13
92	215	123	31	3440	0.97921	681.77	0.536047	1014.48	109	0	5.46	1640.2	7.63	1637.68	7.62	-2.52	-0.15
92	216	124	32	3456	0.978052	683.07	0.537037	1013.58	115.61	0.68	5.37	1649.78	7.64	1647.4	7.63	-2.39	-0.14
92	217	125	33	3472	0.976874	684.35	0.538018	1012.7	122.39	0	5.28	1657.84	7.64	1655.08	7.63	-2.76	-0.17
92	218	126	34	3488	0.975675	685.61	0.538991	1011.84	129.32	0.68	5.19	1667.1	7.65	1664.49	7.64	-2.61	-0.16
92	219	127	35	3504	0.974458	686.85	0.539954	1011	136.42	0	5.11	1674.84	7.65	1671.88	7.63	-2.96	-0.18
92	220	128	36	3520	0.973223	688.06	0.540909	1010.19	143.67	0.67	5.03	1683.78	7.65	1680.98	7.64	-2.8	-0.17
92	221	129	37	3536	0.97197	689.26	0.541855	1009.39	151.08	0	4.95	1691.22	7.65	1688.08	7.64	-3.14	-0.19
92	222	130	38	3552	0.9707	690.43	0.542793	1008.62	158.64	0.67	4.87	1699.85	7.66	1696.89	7.64	-2.96	-0.17
92	223	131	39	3568	0.969414	691.59	0.543722	1007.86	166.36	0	4.8	1706.99	7.65	1703.71	7.64	-3.28	-0.19
92	224	132	40	3584	0.968112	692.72	0.544643	1007.13	174.22	0.67	4.72	1715.33	7.66	1712.23	7.64	-3.09	-0.18
92	225	133	41	3600	0.966795	693.84	0.545556	1006.41	182.23	0	4.65	1722.18	7.65	1718.77	7.64	-3.4	-0.2
92	226	134	42	3616	0.965463	694.93	0.54646	1005.71	190.38	0.67	4.58	1730.22	7.66	1727.02	7.64	-3.2	-0.19
92	227	135	43	3632	0.964117	696.01	0.547357	1005.03	198.68	0	4.51	1736.79	7.65	1733.29	7.64	-3.5	-0.2
92	228	136	44	3648	0.962758	697.07	0.548246	1004.37	207.12	0.66	4.45	1744.55	7.65	1741.26	7.64	-3.29	-0.19
92	229	137	45	3664	0.961385	698.11	0.549127	1003.72	215.7	0	4.38	1750.85	7.65	1747.27	7.63	-3.58	-0.2
92	230	138	46	3680	0.96	699.13	0.55	1003.1	224.42	0.66	4.32	1758.33	7.64	1754.97	7.63	-3.36	-0.19
92	231	139	47	3696	0.958603	700.13	0.550866	1002.49	233.27	0	4.25	1764.36	7.64	1760.73	7.62	-3.63	-0.21
92	232	140	48	3712	0.957194	701.12	0.551724	1001.89	242.26	0.66	4.19	1771.57	7.64	1768.17	7.62	-3.41	-0.19
92	233	141	49	3728	0.955774	702.09	0.552575	1001.31	251.38	0	4.13	1777.35	7.63	1773.67	7.61	-3.68	-0.21
92	234	142	50	3744	0.954343	703.05	0.553419	1000.75	260.63	0.65	4.08	1784.3	7.63	1780.85	7.61	-3.44	-0.19
92	235	143	51	3760	0.952902	703.98	0.554255	1000.21	270.01	0	4.02	1789.81	7.62	1786.11	7.6	-3.7	-0.21
92	236	144	52	3776	0.951451	704.9	0.555085	999.68	279.52	0.65	3.96	1796.51	7.61	1793.05	7.6	-3.46	-0.19
92	237	145	53	3792	0.94999	705.81	0.555907	999.17	289.16	0	3.91	1801.78	7.6	1798.07	7.59	-3.71	-0.21
92	238	146	54	3808	0.948521	706.7	0.556723	998.67	298.92	0.65	3.86	1808.23	7.6	1804.75	7.58	-3.47	-0.19
92	239	147	55	3824	0.947042	707.57	0.557531	998.18	308.8	0	3.8	1813.26	7.59	1809.54	7.57	-3.71	-0.21
92	240	148	56	3840	0.945556	708.43	0.558333	997.71	318.8	0.65	3.75	1819.46	7.58	1815.99	7.57	-3.47	-0.19
92	241	149	57	3856	0.944061	709.27	0.559129	997.26	328.92	0	3.7	1824.25	7.57	1820.55	7.55	-3.7	-0.2
92	242	150	58	3872	0.942559	710.1	0.559917	996.81	339.16	0.64	3.65	1830.22	7.56	1826.76	7.55	-3.46	-0.19
92	243	151	59	3888	0.941049	710.92	0.5607	996.39	349.52	0	3.61	1834.78	7.55	1831.1	7.54	-3.69	-0.2
92	244	152	60	3904	0.939532	711.72	0.561475	995.97	359.99	0.64	3.56	1840.52	7.54	1837.08	7.53	-3.44	-0.19
92	245	153	61	3920	0.938009	712.5	0.562245	995.57	370.58	0	3.51	1844.86	7.53	1841.2	7.52	-3.66	-0.2
92	246	154	62	3936	0.93648	713.27	0.563008	995.18	381.28	0.64	3.47	1850.37	7.52	1846.96	7.51	-3.41	-0.18
92	247	155	63	3952	0.934944	714.03	0.563765	994.81	392.09	0	3.43	1854.49	7.51	1850.86	7.49	-3.63	-0.2
92	248	156	64	3968	0.933403	714.78	0.564516	994.44	403.01	0.64	3.38	1859.78	7.5	1856.41	7.49	-3.37	-0.18
92	249	157	65	3984	0.931856	715.51	0.565261	994.09	414.04	0	3.34	1863.69	7.48	1860.1	7.47	-3.59	-0.19
92	250	158	66	4000	0.930304	716.23	0.566	993.75	425.18	0.63	3.3	1868.77	7.48	1865.43	7.46	-3.34	-0.18
92	251	159	67	4016	0.928747	716.94	0.566733	993.43	436.42	0	3.26	1872.47	7.46	1868.92	7.45	-3.55	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
92	252	160	68	4032	0.927186	717.63	0.56746	993.11	447.77	0.63	3.22	1877.33	7.45	1874.03	7.44	-3.3	-0.18
92	253	161	69	4048	0.92562	718.31	0.568182	992.81	459.22	0	3.18	1880.83	7.43	1877.32	7.42	-3.51	-0.19
92	254	162	70	4064	0.92405	718.98	0.568898	992.52	470.78	0.63	3.14	1885.49	7.42	1882.24	7.41	-3.26	-0.17
92	255	163	71	4080	0.922476	719.64	0.569608	992.24	482.43	0	3.11	1888.79	7.41	1885.33	7.39	-3.47	-0.18
92	256	164	72	4096	0.920898	720.29	0.570312	991.97	494.19	0.62	3.07	1893.25	7.4	1890.04	7.38	-3.21	-0.17
92	257	165	73	4112	0.919317	720.92	0.571012	991.71	506.04	0	3.03	1896.36	7.38	1892.94	7.37	-3.42	-0.18
92	258	166	74	4128	0.917733	721.55	0.571705	991.46	517.99	0.62	3	1900.62	7.37	1897.45	7.35	-3.17	-0.17
92	259	167	75	4144	0.916146	722.16	0.572394	991.22	530.04	0	2.96	1903.54	7.35	1900.16	7.34	-3.38	-0.18
92	260	168	76	4160	0.914556	722.76	0.573077	991	542.18	0.62	2.93	1907.61	7.34	1904.48	7.32	-3.13	-0.16
92	261	169	77	4176	0.912964	723.35	0.573755	990.78	554.42	0	2.9	1910.34	7.32	1907.01	7.31	-3.34	-0.17
92	262	170	78	4192	0.911369	723.93	0.574427	990.57	566.75	0.62	2.86	1914.23	7.31	1911.14	7.29	-3.09	-0.16
92	263	171	79	4208	0.909772	724.5	0.575095	990.38	579.18	0	2.83	1916.78	7.29	1913.49	7.28	-3.3	-0.17
92	264	172	80	4224	0.908173	725.06	0.575758	990.19	591.69	0.62	2.8	1920.48	7.27	1917.43	7.26	-3.05	-0.16
92	265	173	81	4240	0.906572	725.61	0.576415	990.01	604.29	0	2.77	1922.86	7.26	1919.6	7.24	-3.26	-0.17
92	266	174	82	4256	0.904969	726.14	0.577068	989.84	616.99	0.61	2.74	1926.38	7.24	1923.36	7.23	-3.02	-0.16
92	267	175	83	4272	0.903365	726.67	0.577715	989.68	629.77	0	2.71	1928.59	7.22	1925.36	7.21	-3.23	-0.17
92	268	176	84	4288	0.90176	727.19	0.578358	989.53	642.64	0.61	2.68	1931.93	7.21	1928.94	7.2	-2.99	-0.15
92	269	177	85	4304	0.900153	727.7	0.578996	989.39	655.59	0	2.65	1933.97	7.19	1930.77	7.18	-3.2	-0.17
92	270	178	86	4320	0.898546	728.2	0.57963	989.26	668.63	0.61	2.62	1937.14	7.17	1934.18	7.16	-2.96	-0.15
92	271	179	87	4336	0.896938	728.69	0.580258	989.13	681.76	0	2.6	1939.02	7.16	1935.84	7.14	-3.18	-0.16
92	272	180	88	4352	0.895329	729.17	0.580882	989.02	694.96	0.61	2.57	1942.02	7.14	1939.08	7.13	-2.94	-0.15
92	273	181	89	4368	0.893719	729.64	0.581502	988.91	708.26	0	2.54	1943.73	7.12	1940.57	7.11	-3.16	-0.16
92	274	182	90	4384	0.892109	730.11	0.582117	988.81	721.63	0.6	2.52	1946.58	7.1	1943.64	7.09	-2.93	-0.15
92	275	183	91	4400	0.890499	730.56	0.582727	988.72	735.08	0	2.49	1948.13	7.08	1944.98	7.07	-3.15	-0.16
92	276	184	92	4416	0.888889	731.01	0.583333	988.64	748.61	0.6	2.47	1950.81	7.07	1947.89	7.06	-2.93	-0.15
92	277	185	93	4432	0.887279	731.44	0.583935	988.56	762.22	0	2.44	1952.21	7.05	1949.06	7.04	-3.15	-0.16
92	278	186	94	4448	0.885668	731.87	0.584532	988.49	775.91	0.6	2.42	1954.74	7.03	1951.81	7.02	-2.93	-0.15
92	279	187	95	4464	0.884059	732.29	0.585125	988.43	789.68	0	2.39	1955.99	7.01	1952.83	7	-3.16	-0.16
92	280	188	96	4480	0.882449	732.71	0.585714	988.38	803.52	0.6	2.37	1958.36	6.99	1955.42	6.98	-2.94	-0.15
92	281	189	97	4496	0.88084	733.11	0.586299	988.34	817.44	0	2.35	1959.46	6.97	1956.29	6.96	-3.17	-0.16
92	282	190	98	4512	0.879231	733.51	0.586879	988.3	831.43	0.6	2.32	1961.68	6.96	1958.72	6.95	-2.96	-0.15
92	283	191	99	4528	0.877624	733.9	0.587456	988.27	845.5	0	2.3	1962.64	6.94	1959.44	6.92	-3.19	-0.16
92	284	192	100	4544	0.876017	734.28	0.588028	988.25	859.64	0.59	2.28	1964.71	6.92	1961.72	6.91	-2.99	-0.15
92	285	193	101	4560	0.874411	734.65	0.588596	988.23	873.85	0	2.26	1965.53	6.9	1962.3	6.89	-3.23	-0.16
92	286	194	102	4576	0.872806	735.02	0.589161	988.22	888.14	0.59	2.24	1967.45	6.88	1964.43	6.87	-3.03	-0.15
92	287	195	103	4592	0.871202	735.37	0.589721	988.22	902.49	0	2.22	1968.13	6.86	1964.86	6.85	-3.27	-0.17
92	288	196	104	4608	0.869599	735.73	0.590278	988.22	916.92	0.59	2.19	1969.92	6.84	1966.84	6.83	-3.08	-0.16
92	289	197	105	4624	0.867997	736.07	0.59083	988.23	931.41	0	2.17	1970.46	6.82	1967.14	6.81	-3.32	-0.17
92	290	198	106	4640	0.866397	736.41	0.591379	988.25	945.98	0.59	2.15	1972.11	6.8	1968.97	6.79	-3.13	-0.16
92	291	199	107	4656	0.864798	736.74	0.591924	988.28	960.61	0	2.13	1972.52	6.78	1969.13	6.77	-3.39	-0.17
92	292	200	108	4672	0.863201	737.06	0.592466	988.31	975.31	0.59	2.12	1974.03	6.76	1970.83	6.75	-3.2	-0.16
92	293	201	109	4688	0.861606	737.38	0.593003	988.34	990.07	0	2.1	1974.31	6.74	1970.85	6.73	-3.46	-0.18
92	294	202	110	4704	0.860012	737.69	0.593537	988.38	1004.9	0.58	2.08	1975.69	6.72	1972.4	6.71	-3.29	-0.17
92	295	203	111	4720	0.85842	737.99	0.594068	988.43	1019.8	0	2.06	1975.84	6.7	1972.29	6.69	-3.55	-0.18
92	296	204	112	4736	0.85683	738.29	0.594595	988.49	1034.76	0.58	2.04	1977.09	6.68	1973.71	6.67	-3.38	-0.17
92	297	205	113	4752	0.855242	738.58	0.595118	988.55	1049.79	0	2.02	1977.11	6.66	1973.47	6.64	-3.65	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
92	298	206	114	4768	0.853655	738.86	0.595638	988.61	1064.88	0.58	2.01	1978.24	6.64	1974.75	6.63	-3.48	-0.18
92	299	207	115	4784	0.852071	739.14	0.596154	988.68	1080.03	0	1.99	1978.14	6.62	1974.38	6.6	-3.76	-0.19
92	300	208	116	4800	0.850489	739.41	0.596667	988.76	1095.24	0.58	1.97	1979.14	6.6	1975.53	6.59	-3.6	-0.18
92	301	209	117	4816	0.848909	739.67	0.597176	988.84	1110.52	0	1.95	1978.92	6.57	1975.04	6.56	-3.88	-0.2
92	302	210	118	4832	0.847331	739.93	0.597682	988.93	1125.86	0.58	1.94	1979.79	6.56	1976.06	6.54	-3.73	-0.19
92	303	211	119	4848	0.845756	740.19	0.598185	989.03	1141.25	0	1.92	1979.46	6.53	1975.44	6.52	-4.01	-0.2
92	304	212	120	4864	0.844183	740.44	0.598684	989.12	1156.71	0.57	1.91	1980.21	6.51	1976.34	6.5	-3.87	-0.2
92	305	213	121	4880	0.842612	740.68	0.59918	989.23	1172.22	0	1.89	1979.76	6.49	1975.6	6.48	-4.16	-0.21
92	306	214	122	4896	0.841044	740.91	0.599673	989.34	1187.8	0.57	1.87	1980.4	6.47	1976.37	6.46	-4.03	-0.2
92	307	215	123	4912	0.839478	741.15	0.600163	989.45	1203.43	0	1.86	1979.83	6.45	1975.51	6.43	-4.32	-0.22
92	308	216	124	4928	0.837915	741.37	0.600649	989.57	1219.12	0.57	1.84	1980.35	6.43	1976.15	6.42	-4.2	-0.21
92	309	217	125	4944	0.836355	741.59	0.601133	989.7	1234.87	0	1.83	1979.68	6.41	1975.18	6.39	-4.5	-0.23
92	310	218	126	4960	0.834797	741.81	0.601613	989.82	1250.67	0.57	1.81	1980.08	6.39	1975.7	6.37	-4.38	-0.22
92	311	219	127	4976	0.833242	742.02	0.60209	989.96	1266.53	0	1.8	1979.3	6.36	1974.61	6.35	-4.69	-0.24
92	312	220	128	4992	0.83169	742.22	0.602564	990.1	1282.44	0.57	1.79	1979.59	6.34	1975.02	6.33	-4.58	-0.23
92	313	221	129	5008	0.83014	742.42	0.603035	990.24	1298.41	0	1.77	1978.7	6.32	1973.81	6.31	-4.89	-0.25
92	314	222	130	5024	0.828593	742.61	0.603503	990.39	1314.43	0.56	1.76	1978.89	6.3	1974.1	6.29	-4.79	-0.24
92	315	223	131	5040	0.82705	742.8	0.603968	990.54	1330.51	0	1.74	1977.89	6.28	1972.78	6.26	-5.11	-0.26
92	316	224	132	5056	0.825509	742.99	0.60443	990.7	1346.64	0.56	1.73	1977.97	6.26	1972.96	6.24	-5.01	-0.25
92	317	225	133	5072	0.823971	743.17	0.60489	990.86	1362.82	0	1.72	1976.87	6.24	1971.53	6.22	-5.34	-0.27
92	318	226	134	5088	0.822436	743.34	0.605346	991.02	1379.05	0.56	1.7	1976.85	6.22	1971.59	6.2	-5.25	-0.27
92	319	227	135	5104	0.820904	743.51	0.605799	991.19	1395.34	0	1.69	1975.65	6.19	1970.06	6.18	-5.59	-0.28
92	320	228	136	5120	0.819375	743.68	0.60625	991.37	1411.67	0.56	1.68	1975.52	6.17	1970.01	6.16	-5.51	-0.28
92	321	229	137	5136	0.817849	743.84	0.606698	991.55	1428.06	0	1.67	1974.22	6.15	1968.37	6.13	-5.85	-0.3
92	322	230	138	5152	0.816327	743.99	0.607143	991.73	1444.5	0.56	1.65	1973.99	6.13	1968.21	6.11	-5.78	-0.29
92	323	231	139	5168	0.814807	744.15	0.607585	991.92	1460.99	0	1.64	1972.59	6.11	1966.47	6.09	-6.12	-0.31
92	324	232	140	5184	0.813291	744.29	0.608025	992.11	1477.52	0.56	1.63	1972.26	6.09	1966.2	6.07	-6.06	-0.31
92	325	233	141	5200	0.811778	744.44	0.608462	992.3	1494.11	0	1.62	1970.77	6.06	1964.35	6.04	-6.42	-0.33
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
93	185	92	-1	2960	0.999971	629.85	0.498649	1077.72	0.13	0	9.78	1262.07	6.82	1271.09	6.87	9.01	0.71
93	186	93	0	2976	1	632.14	0.5	1075.77	0	-0.73	10	1277.36	6.87	1286.1	6.91	8.74	0.68
93	187	94	1	2992	0.999971	634.38	0.501337	1073.87	0.13	0	9.78	1293.4	6.92	1300.68	6.96	7.28	0.56
93	188	95	2	3008	0.999887	636.59	0.50266	1072	0.52	-0.73	9.56	1307.72	6.96	1315.24	7	7.51	0.57
93	189	96	3	3024	0.999748	638.75	0.503968	1070.18	1.16	0	9.36	1323.26	7	1329.36	7.03	6.1	0.46
93	190	97	4	3040	0.999557	640.88	0.505263	1068.41	2.05	-0.73	9.15	1337.09	7.04	1343.47	7.07	6.39	0.48
93	191	98	5	3056	0.999315	642.97	0.506545	1066.67	3.19	0	8.96	1352.12	7.08	1357.15	7.11	5.02	0.37
93	192	99	6	3072	0.999023	645.03	0.507812	1064.97	4.57	-0.72	8.77	1365.48	7.11	1370.83	7.14	5.35	0.39
93	193	100	7	3088	0.998685	647.05	0.509067	1063.32	6.19	0	8.59	1380.04	7.15	1384.07	7.17	4.03	0.29
93	194	101	8	3104	0.9983	649.03	0.510309	1061.7	8.04	-0.72	8.41	1392.92	7.18	1397.33	7.2	4.4	0.32
93	195	102	9	3120	0.99787	650.98	0.511538	1060.12	10.12	0	8.24	1407.02	7.22	1410.15	7.23	3.13	0.22
93	196	103	10	3136	0.997397	652.89	0.512755	1058.57	12.44	-0.71	8.07	1419.46	7.24	1422.99	7.26	3.53	0.25
93	197	104	11	3152	0.996882	654.77	0.513959	1057.06	14.97	0	7.91	1433.11	7.27	1435.41	7.29	2.3	0.16
93	198	105	12	3168	0.996327	656.62	0.515152	1055.58	17.73	-0.71	7.75	1445.11	7.3	1447.85	7.31	2.74	0.19
93	199	106	13	3184	0.995732	658.44	0.516332	1054.14	20.7	0	7.6	1458.32	7.33	1459.87	7.34	1.54	0.11

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
93	200	107	14	3200	0.9951	660.22	0.5175	1052.73	23.89	-0.71	7.45	1469.9	7.35	1471.92	7.36	2.02	0.14
93	201	108	15	3216	0.994431	661.97	0.518657	1051.36	27.29	0	7.31	1482.69	7.38	1483.55	7.38	0.86	0.06
93	202	109	16	3232	0.993726	663.7	0.519802	1050.01	30.9	-0.7	7.17	1493.86	7.4	1495.23	7.4	1.37	0.09
93	203	110	17	3248	0.992987	665.39	0.520936	1048.7	34.71	0	7.03	1506.24	7.42	1506.47	7.42	0.24	0.02
93	204	111	18	3264	0.992215	667.05	0.522059	1047.42	38.72	-0.7	6.9	1517.01	7.44	1517.79	7.44	0.77	0.05
93	205	112	19	3280	0.99141	668.69	0.523171	1046.16	42.93	0	6.78	1528.99	7.46	1528.66	7.46	-0.33	-0.02
93	206	113	20	3296	0.990574	670.3	0.524272	1044.94	47.34	-0.7	6.65	1539.38	7.47	1539.62	7.47	0.24	0.02
93	207	114	21	3312	0.989708	671.88	0.525362	1043.75	51.94	0	6.53	1550.97	7.49	1550.13	7.49	-0.83	-0.05
93	208	115	22	3328	0.988813	673.43	0.526442	1042.58	56.74	-0.69	6.41	1560.98	7.5	1560.74	7.5	-0.24	-0.02
93	209	116	23	3344	0.987889	674.95	0.527512	1041.44	61.72	0	6.3	1572.19	7.52	1570.91	7.52	-1.29	-0.08
93	210	117	24	3360	0.986939	676.45	0.528571	1040.33	66.88	-0.69	6.19	1581.84	7.53	1581.17	7.53	-0.67	-0.04
93	211	118	25	3376	0.985962	677.93	0.529621	1039.24	72.23	0	6.08	1592.69	7.55	1591	7.54	-1.69	-0.11
93	212	119	26	3392	0.984959	679.38	0.53066	1038.18	77.75	-0.69	5.97	1601.98	7.56	1600.93	7.55	-1.05	-0.07
93	213	120	27	3408	0.983932	680.8	0.53169	1037.14	83.46	0	5.87	1612.47	7.57	1610.42	7.56	-2.05	-0.13
93	214	121	28	3424	0.982881	682.2	0.53271	1036.13	89.34	-0.68	5.77	1621.42	7.58	1620.03	7.57	-1.39	-0.09
93	215	122	29	3440	0.981806	683.58	0.533721	1035.14	95.39	0	5.68	1631.57	7.59	1629.2	7.58	-2.37	-0.15
93	216	123	30	3456	0.98071	684.93	0.534722	1034.18	101.61	-0.68	5.58	1640.18	7.59	1638.49	7.59	-1.69	-0.1
93	217	124	31	3472	0.979592	686.26	0.535714	1033.24	108	0	5.49	1649.99	7.6	1647.34	7.59	-2.65	-0.16
93	218	125	32	3488	0.978453	687.56	0.536697	1032.32	114.55	-0.68	5.4	1658.28	7.61	1656.32	7.6	-1.96	-0.12
93	219	126	33	3504	0.977294	688.85	0.537671	1031.43	121.27	0	5.31	1667.76	7.62	1664.87	7.6	-2.89	-0.17
93	220	127	34	3520	0.976116	690.11	0.538636	1030.56	128.15	-0.67	5.23	1675.73	7.62	1673.55	7.61	-2.18	-0.13
93	221	128	35	3536	0.974919	691.35	0.539593	1029.7	135.19	0	5.14	1684.9	7.62	1681.8	7.61	-3.1	-0.18
93	222	129	36	3552	0.973703	692.57	0.540541	1028.87	142.38	-0.67	5.06	1692.56	7.62	1690.18	7.61	-2.38	-0.14
93	223	130	37	3568	0.972471	693.77	0.54148	1028.06	149.73	0	4.98	1701.42	7.63	1698.14	7.61	-3.28	-0.19
93	224	131	38	3584	0.971221	694.95	0.542411	1027.28	157.23	-0.67	4.9	1708.78	7.63	1706.23	7.62	-2.55	-0.15
93	225	132	39	3600	0.969956	696.11	0.543333	1026.51	164.88	0	4.83	1717.33	7.63	1713.9	7.62	-3.43	-0.2
93	226	133	40	3616	0.968674	697.24	0.544248	1025.76	172.68	-0.67	4.76	1724.41	7.63	1721.72	7.62	-2.69	-0.16
93	227	134	41	3632	0.967378	698.36	0.545154	1025.03	180.63	0	4.68	1732.66	7.63	1729.1	7.62	-3.56	-0.21
93	228	135	42	3648	0.966066	699.46	0.546053	1024.31	188.72	-0.66	4.61	1739.45	7.63	1736.65	7.62	-2.8	-0.16
93	229	136	43	3664	0.964741	700.55	0.546943	1023.62	196.95	0	4.54	1747.42	7.63	1743.76	7.61	-3.66	-0.21
93	230	137	44	3680	0.963403	701.61	0.547826	1022.94	205.33	-0.66	4.48	1753.94	7.63	1751.04	7.61	-2.9	-0.17
93	231	138	45	3696	0.962051	702.65	0.548701	1022.29	213.84	0	4.41	1761.63	7.63	1757.89	7.61	-3.74	-0.21
93	232	139	46	3712	0.960687	703.68	0.549569	1021.65	222.49	-0.66	4.35	1767.87	7.62	1764.9	7.61	-2.97	-0.17
93	233	140	47	3728	0.95931	704.69	0.550429	1021.02	231.28	0	4.29	1775.29	7.62	1771.49	7.6	-3.81	-0.21
93	234	141	48	3744	0.957922	705.68	0.551282	1020.42	240.2	-0.65	4.23	1781.27	7.61	1778.25	7.6	-3.02	-0.17
93	235	142	49	3760	0.956523	706.66	0.552128	1019.83	249.25	0	4.17	1788.43	7.61	1784.58	7.59	-3.85	-0.22
93	236	143	50	3776	0.955113	707.62	0.552966	1019.25	258.43	-0.65	4.11	1794.15	7.6	1791.09	7.59	-3.06	-0.17
93	237	144	51	3792	0.953693	708.56	0.553797	1018.7	267.75	0	4.05	1801.05	7.6	1797.17	7.58	-3.88	-0.22
93	238	145	52	3808	0.952263	709.49	0.554622	1018.15	277.18	-0.65	3.99	1806.52	7.59	1803.44	7.58	-3.09	-0.17
93	239	146	53	3824	0.950824	710.4	0.555439	1017.63	286.75	0	3.94	1813.17	7.59	1809.27	7.57	-3.9	-0.22
93	240	147	54	3840	0.949375	711.29	0.55625	1017.12	296.43	-0.65	3.89	1818.4	7.58	1815.3	7.56	-3.1	-0.17
93	241	148	55	3856	0.947918	712.17	0.557054	1016.62	306.24	0	3.83	1824.8	7.57	1820.9	7.56	-3.9	-0.21
93	242	149	56	3872	0.946452	713.03	0.557851	1016.14	316.18	-0.64	3.78	1829.79	7.56	1826.7	7.55	-3.1	-0.17
93	243	150	57	3888	0.944978	713.88	0.558642	1015.67	326.23	0	3.73	1835.95	7.56	1832.06	7.54	-3.89	-0.21
93	244	151	58	3904	0.943496	714.72	0.559426	1015.22	336.39	-0.64	3.68	1840.72	7.54	1837.63	7.53	-3.09	-0.17
93	245	152	59	3920	0.942007	715.54	0.560204	1014.78	346.68	0	3.64	1846.64	7.54	1842.77	7.52	-3.88	-0.21

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
93	246	153	60	3936	0.940512	716.35	0.560976	1014.35	357.08	-0.64	3.59	1851.18	7.53	1848.11	7.51	-3.07	-0.17
93	247	154	61	3952	0.939009	717.14	0.561741	1013.94	367.59	0	3.54	1856.88	7.52	1853.02	7.5	-3.85	-0.21
93	248	155	62	3968	0.9375	717.92	0.5625	1013.54	378.22	-0.64	3.5	1861.19	7.5	1858.15	7.49	-3.04	-0.16
93	249	156	63	3984	0.935985	718.68	0.563253	1013.15	388.96	0	3.46	1866.67	7.5	1862.85	7.48	-3.82	-0.21
93	250	157	64	4000	0.934464	719.43	0.564	1012.78	399.8	-0.63	3.41	1870.77	7.48	1867.76	7.47	-3.01	-0.16
93	251	158	65	4016	0.932938	720.17	0.564741	1012.41	410.76	0	3.37	1876.02	7.47	1872.24	7.46	-3.79	-0.2
93	252	159	66	4032	0.931406	720.9	0.565476	1012.07	421.82	-0.63	3.33	1879.91	7.46	1876.94	7.45	-2.97	-0.16
93	253	160	67	4048	0.929869	721.61	0.566206	1011.73	432.99	0	3.29	1884.96	7.45	1881.21	7.44	-3.75	-0.2
93	254	161	68	4064	0.928328	722.31	0.566929	1011.4	444.26	-0.63	3.25	1888.65	7.44	1885.71	7.42	-2.94	-0.16
93	255	162	69	4080	0.926782	723	0.567647	1011.09	455.64	0	3.21	1893.48	7.43	1889.78	7.41	-3.7	-0.2
93	256	163	70	4096	0.925232	723.68	0.568359	1010.79	467.11	-0.62	3.17	1896.97	7.41	1894.07	7.4	-2.89	-0.15
93	257	164	71	4112	0.923678	724.34	0.569066	1010.5	478.69	0	3.13	1901.6	7.4	1897.94	7.38	-3.66	-0.19
93	258	165	72	4128	0.92212	725	0.569767	1010.22	490.37	-0.62	3.1	1904.89	7.38	1902.04	7.37	-2.85	-0.15
93	259	166	73	4144	0.920559	725.64	0.570463	1009.95	502.15	0	3.06	1909.33	7.37	1905.72	7.36	-3.61	-0.19
93	260	167	74	4160	0.918994	726.27	0.571154	1009.69	514.02	-0.62	3.03	1912.43	7.36	1909.62	7.34	-2.81	-0.15
93	261	168	75	4176	0.917426	726.89	0.571839	1009.44	525.99	0	2.99	1916.67	7.34	1913.1	7.33	-3.57	-0.19
93	262	169	76	4192	0.915856	727.49	0.572519	1009.2	538.06	-0.62	2.96	1919.58	7.33	1916.82	7.32	-2.76	-0.14
93	263	170	77	4208	0.914282	728.09	0.573194	1008.98	550.22	0	2.92	1923.64	7.31	1920.11	7.3	-3.52	-0.18
93	264	171	78	4224	0.912707	728.68	0.573864	1008.76	562.47	-0.62	2.89	1926.36	7.3	1923.64	7.29	-2.72	-0.14
93	265	172	79	4240	0.911129	729.25	0.574528	1008.55	574.82	0	2.86	1930.23	7.28	1926.75	7.27	-3.48	-0.18
93	266	173	80	4256	0.909548	729.82	0.575188	1008.35	587.26	-0.61	2.83	1932.78	7.27	1930.1	7.26	-2.68	-0.14
93	267	174	81	4272	0.907966	730.37	0.575843	1008.17	599.78	0	2.8	1936.47	7.25	1933.03	7.24	-3.44	-0.18
93	268	175	82	4288	0.906382	730.92	0.576493	1007.99	612.4	-0.61	2.77	1938.85	7.23	1936.2	7.22	-2.65	-0.14
93	269	176	83	4304	0.904797	731.46	0.577138	1007.82	625.1	0	2.74	1942.36	7.22	1938.95	7.21	-3.41	-0.18
93	270	177	84	4320	0.90321	731.98	0.577778	1007.66	637.9	-0.61	2.71	1944.56	7.2	1941.95	7.19	-2.61	-0.13
93	271	178	85	4336	0.901622	732.5	0.578413	1007.51	650.77	0	2.68	1947.9	7.19	1944.52	7.18	-3.38	-0.17
93	272	179	86	4352	0.900032	733	0.579044	1007.37	663.73	-0.61	2.65	1949.94	7.17	1947.35	7.16	-2.59	-0.13
93	273	180	87	4368	0.898442	733.5	0.57967	1007.23	676.78	0	2.62	1953.11	7.15	1949.76	7.14	-3.35	-0.17
93	274	181	88	4384	0.896851	733.99	0.580292	1007.11	689.91	-0.6	2.6	1954.98	7.13	1952.42	7.13	-2.57	-0.13
93	275	182	89	4400	0.89526	734.47	0.580909	1006.99	703.12	0	2.57	1957.98	7.12	1954.65	7.11	-3.33	-0.17
93	276	183	90	4416	0.893667	734.94	0.581522	1006.89	716.42	-0.6	2.54	1959.7	7.1	1957.15	7.09	-2.55	-0.13
93	277	184	91	4432	0.892075	735.4	0.58213	1006.79	729.79	0	2.52	1962.54	7.08	1959.22	7.07	-3.32	-0.17
93	278	185	92	4448	0.890482	735.85	0.582734	1006.69	743.24	-0.6	2.49	1964.1	7.07	1961.56	7.06	-2.54	-0.13
93	279	186	93	4464	0.888889	736.3	0.583333	1006.61	756.78	0	2.47	1966.78	7.05	1963.47	7.04	-3.31	-0.17
93	280	187	94	4480	0.887296	736.73	0.583929	1006.54	770.39	-0.6	2.44	1968.19	7.03	1965.65	7.02	-2.54	-0.13
93	281	188	95	4496	0.885703	737.16	0.58452	1006.47	784.08	0	2.42	1970.71	7.01	1967.4	7	-3.31	-0.17
93	282	189	96	4512	0.88411	737.58	0.585106	1006.41	797.84	-0.6	2.39	1971.97	6.99	1969.43	6.98	-2.54	-0.13
93	283	190	97	4528	0.882518	737.99	0.585689	1006.35	811.68	0	2.37	1974.34	6.98	1971.03	6.96	-3.32	-0.17
93	284	191	98	4544	0.880926	738.39	0.586268	1006.31	825.6	-0.59	2.35	1975.46	6.96	1972.9	6.95	-2.56	-0.13
93	285	192	99	4560	0.879335	738.79	0.586842	1006.27	839.59	0	2.32	1977.68	6.94	1974.35	6.93	-3.33	-0.17
93	286	193	100	4576	0.877745	739.17	0.587413	1006.24	853.65	-0.59	2.3	1978.65	6.92	1976.07	6.91	-2.58	-0.13
93	287	194	101	4592	0.876155	739.56	0.587979	1006.22	867.78	0	2.28	1980.73	6.9	1977.37	6.89	-3.36	-0.17
93	288	195	102	4608	0.874566	739.93	0.588542	1006.2	881.99	-0.59	2.26	1981.55	6.88	1978.94	6.87	-2.61	-0.13
93	289	196	103	4624	0.872978	740.29	0.5891	1006.19	896.27	0	2.24	1983.49	6.86	1980.09	6.85	-3.4	-0.17
93	290	197	104	4640	0.871391	740.65	0.589655	1006.19	910.61	-0.59	2.22	1984.18	6.84	1981.52	6.83	-2.66	-0.13
93	291	198	105	4656	0.869806	741	0.590206	1006.19	925.03	0	2.2	1985.97	6.82	1982.53	6.81	-3.44	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
93	292	199	106	4672	0.868221	741.35	0.590753	1006.2	939.52	-0.59	2.18	1986.53	6.8	1983.82	6.79	-2.71	-0.14
93	293	200	107	4688	0.866638	741.68	0.591297	1006.22	954.07	0	2.16	1988.19	6.79	1984.69	6.77	-3.5	-0.18
93	294	201	108	4704	0.865056	742.01	0.591837	1006.24	968.69	-0.58	2.14	1988.61	6.76	1985.84	6.75	-2.77	-0.14
93	295	202	109	4720	0.863476	742.34	0.592373	1006.27	983.38	0	2.12	1990.13	6.75	1986.57	6.73	-3.57	-0.18
93	296	203	110	4736	0.861897	742.65	0.592905	1006.3	998.14	-0.58	2.1	1990.43	6.72	1987.58	6.71	-2.85	-0.14
93	297	204	111	4752	0.86032	742.96	0.593434	1006.35	1012.96	0	2.08	1991.82	6.71	1988.17	6.69	-3.64	-0.18
93	298	205	112	4768	0.858745	743.26	0.59396	1006.39	1027.84	-0.58	2.06	1991.98	6.68	1989.05	6.67	-2.93	-0.15
93	299	206	113	4784	0.857172	743.56	0.594482	1006.45	1042.79	0	2.04	1993.25	6.67	1989.51	6.65	-3.73	-0.19
93	300	207	114	4800	0.8556	743.85	0.595	1006.51	1057.8	-0.58	2.03	1993.29	6.64	1990.26	6.63	-3.03	-0.15
93	301	208	115	4816	0.85403	744.14	0.595515	1006.57	1072.88	0	2.01	1994.43	6.63	1990.59	6.61	-3.83	-0.19
93	302	209	116	4832	0.852463	744.41	0.596026	1006.64	1088.01	-0.58	1.99	1994.35	6.6	1991.21	6.59	-3.14	-0.16
93	303	210	117	4848	0.850897	744.69	0.596535	1006.72	1103.21	0	1.98	1995.36	6.59	1991.41	6.57	-3.95	-0.2
93	304	211	118	4864	0.849333	744.95	0.597039	1006.8	1118.47	-0.57	1.96	1995.16	6.56	1991.9	6.55	-3.26	-0.16
93	305	212	119	4880	0.847772	745.21	0.597541	1006.89	1133.79	0	1.94	1996.05	6.54	1991.98	6.53	-4.07	-0.2
93	306	213	120	4896	0.846213	745.47	0.598039	1006.98	1149.17	-0.57	1.93	1995.73	6.52	1992.34	6.51	-3.39	-0.17
93	307	214	121	4912	0.844656	745.72	0.598534	1007.08	1164.61	0	1.91	1996.5	6.5	1992.29	6.49	-4.21	-0.21
93	308	215	122	4928	0.843102	745.96	0.599026	1007.18	1180.11	-0.57	1.89	1996.07	6.48	1992.54	6.47	-3.54	-0.18
93	309	216	123	4944	0.84155	746.2	0.599515	1007.29	1195.67	0	1.88	1996.73	6.46	1992.36	6.45	-4.36	-0.22
93	310	217	124	4960	0.84	746.43	0.6	1007.4	1211.28	-0.57	1.86	1996.18	6.44	1992.49	6.43	-3.7	-0.19
93	311	218	125	4976	0.838453	746.66	0.600482	1007.52	1226.95	0	1.85	1996.72	6.42	1992.19	6.41	-4.53	-0.23
93	312	219	126	4992	0.836908	746.88	0.600962	1007.64	1242.68	-0.57	1.83	1996.07	6.4	1992.2	6.39	-3.87	-0.19
93	313	220	127	5008	0.835366	747.09	0.601438	1007.77	1258.46	0	1.82	1996.49	6.38	1991.79	6.36	-4.71	-0.24
93	314	221	128	5024	0.833827	747.3	0.601911	1007.91	1274.3	-0.56	1.8	1995.73	6.36	1991.67	6.34	-4.06	-0.2
93	315	222	129	5040	0.83229	747.51	0.602381	1008.04	1290.19	0	1.79	1996.05	6.34	1991.15	6.32	-4.9	-0.25
93	316	223	130	5056	0.830756	747.71	0.602848	1008.19	1306.14	-0.56	1.78	1995.18	6.31	1990.92	6.3	-4.26	-0.21
93	317	224	131	5072	0.829225	747.91	0.603312	1008.33	1322.14	0	1.76	1995.39	6.29	1990.28	6.28	-5.11	-0.26
93	318	225	132	5088	0.827697	748.1	0.603774	1008.48	1338.19	-0.56	1.75	1994.41	6.27	1989.94	6.26	-4.47	-0.22
93	319	226	133	5104	0.826171	748.28	0.604232	1008.64	1354.3	0	1.74	1994.51	6.25	1989.19	6.24	-5.33	-0.27
93	320	227	134	5120	0.824648	748.46	0.604688	1008.8	1370.46	-0.56	1.72	1993.44	6.23	1988.74	6.21	-4.7	-0.24
93	321	228	135	5136	0.823129	748.64	0.60514	1008.97	1386.67	0	1.71	1993.43	6.21	1987.87	6.19	-5.56	-0.28
93	322	229	136	5152	0.821612	748.81	0.60559	1009.14	1402.93	-0.56	1.7	1992.26	6.19	1987.31	6.17	-4.95	-0.25
93	323	230	137	5168	0.820098	748.98	0.606037	1009.31	1419.25	0	1.68	1992.15	6.17	1986.34	6.15	-5.81	-0.29
93	324	231	138	5184	0.818587	749.14	0.606481	1009.49	1435.61	-0.56	1.67	1990.88	6.14	1985.68	6.13	-5.2	-0.26
93	325	232	139	5200	0.817079	749.3	0.606923	1009.67	1452.02	0	1.66	1990.67	6.13	1984.6	6.11	-6.07	-0.31
93	326	233	140	5216	0.815575	749.45	0.607362	1009.85	1468.49	-0.55	1.65	1989.3	6.1	1983.82	6.09	-5.48	-0.28
93	327	234	141	5232	0.814073	749.6	0.607798	1010.04	1485	0	1.63	1988.99	6.08	1982.64	6.06	-6.35	-0.32
93	328	235	142	5248	0.812574	749.75	0.608232	1010.24	1501.56	-0.55	1.62	1987.53	6.06	1981.76	6.04	-5.76	-0.29
93	329	236	143	5264	0.811079	749.89	0.608663	1010.44	1518.17	0	1.61	1987.12	6.04	1980.48	6.02	-6.64	-0.34
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
94	187	93	-1	2992	0.999971	634.38	0.498663	1097.08	0.13	0	9.78	1270.18	6.79	1279.22	6.84	9.04	0.71
94	188	94	0	3008	1	636.66	0.5	1095.12	0	0.73	10	1286.95	6.85	1295.19	6.89	8.24	0.64
94	189	95	1	3024	0.999972	638.9	0.501323	1093.2	0.13	0	9.78	1301.55	6.89	1308.87	6.93	7.32	0.56
94	190	96	2	3040	0.999889	641.1	0.502632	1091.32	0.51	0.73	9.57	1317.36	6.93	1324.38	6.97	7.02	0.53
94	191	97	3	3056	0.999753	643.26	0.503927	1089.49	1.15	0	9.36	1331.47	6.97	1337.61	7	6.15	0.46

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
94	192	98	4	3072	0.999566	645.38	0.505208	1087.7	2.03	0.72	9.16	1346.78	7.01	1352.67	7.05	5.89	0.44
94	193	99	5	3088	0.999329	647.46	0.506477	1085.95	3.16	0	8.97	1360.4	7.05	1365.47	7.07	5.07	0.37
94	194	100	6	3104	0.999043	649.51	0.507732	1084.24	4.52	0.72	8.78	1375.23	7.09	1380.09	7.11	4.86	0.35
94	195	101	7	3120	0.998711	651.53	0.508974	1082.57	6.12	0	8.6	1388.38	7.12	1392.47	7.14	4.08	0.29
94	196	102	8	3136	0.998334	653.5	0.510204	1080.93	7.96	0.71	8.42	1402.74	7.16	1406.65	7.18	3.91	0.28
94	197	103	9	3152	0.997913	655.45	0.511421	1079.33	10.02	0	8.25	1415.45	7.19	1418.63	7.2	3.18	0.22
94	198	104	10	3168	0.997449	657.36	0.512626	1077.77	12.31	0.71	8.09	1429.36	7.22	1432.4	7.23	3.04	0.21
94	199	105	11	3184	0.996945	659.24	0.513819	1076.25	14.82	0	7.93	1441.62	7.24	1443.97	7.26	2.35	0.16
94	200	106	12	3200	0.9964	661.08	0.515	1074.76	17.55	0.71	7.77	1455.09	7.28	1457.34	7.29	2.25	0.15
94	201	107	13	3216	0.995817	662.9	0.516169	1073.3	20.5	0	7.62	1466.93	7.3	1468.53	7.31	1.6	0.11
94	202	108	14	3232	0.995197	664.68	0.517327	1071.88	23.65	0.7	7.47	1479.97	7.33	1481.5	7.33	1.53	0.1
94	203	109	15	3248	0.99454	666.43	0.518473	1070.49	27.02	0	7.33	1491.39	7.35	1492.31	7.35	0.92	0.06
94	204	110	16	3264	0.993849	668.15	0.519608	1069.13	30.59	0.7	7.19	1504.02	7.37	1504.9	7.38	0.88	0.06
94	205	111	17	3280	0.993123	669.84	0.520732	1067.8	34.37	0	7.06	1515.04	7.39	1515.34	7.39	0.3	0.02
94	206	112	18	3296	0.992365	671.51	0.521845	1066.5	38.35	0.7	6.93	1527.27	7.41	1527.56	7.42	0.29	0.02
94	207	113	19	3312	0.991575	673.14	0.522947	1065.24	42.52	0	6.8	1537.9	7.43	1537.64	7.43	-0.26	-0.02
94	208	114	20	3328	0.990754	674.75	0.524038	1064	46.89	0.69	6.68	1549.73	7.45	1549.49	7.45	-0.24	-0.02
94	209	115	21	3344	0.989904	676.33	0.52512	1062.79	51.45	0	6.56	1559.99	7.46	1559.23	7.46	-0.76	-0.05
94	210	116	22	3360	0.989025	677.88	0.52619	1061.6	56.2	0.69	6.44	1571.44	7.48	1570.72	7.48	-0.72	-0.05
94	211	117	23	3376	0.988118	679.41	0.527251	1060.45	61.13	0	6.33	1581.33	7.49	1580.12	7.49	-1.21	-0.08
94	212	118	24	3392	0.987184	680.91	0.528302	1059.32	66.25	0.69	6.22	1592.42	7.51	1591.26	7.51	-1.15	-0.07
94	213	119	25	3408	0.986224	682.39	0.529343	1058.22	71.55	0	6.11	1601.95	7.52	1600.33	7.51	-1.62	-0.1
94	214	120	26	3424	0.985239	683.84	0.530374	1057.15	77.03	0.68	6	1612.67	7.54	1611.14	7.53	-1.53	-0.1
94	215	121	27	3440	0.984229	685.26	0.531395	1056.1	82.69	0	5.9	1621.86	7.54	1619.88	7.53	-1.98	-0.12
94	216	122	28	3456	0.983196	686.66	0.532407	1055.07	88.51	0.68	5.8	1632.23	7.56	1630.36	7.55	-1.87	-0.11
94	217	123	29	3472	0.98214	688.04	0.53341	1054.07	94.51	0	5.7	1641.08	7.56	1638.79	7.55	-2.29	-0.14
94	218	124	30	3488	0.981062	689.4	0.534404	1053.09	100.68	0.68	5.61	1651.12	7.57	1648.95	7.56	-2.17	-0.13
94	219	125	31	3504	0.979963	690.73	0.535388	1052.14	107.02	0	5.52	1659.63	7.58	1657.07	7.57	-2.57	-0.15
94	220	126	32	3520	0.978843	692.04	0.536364	1051.21	113.52	0.67	5.43	1669.34	7.59	1666.91	7.58	-2.43	-0.15
94	221	127	33	3536	0.977703	693.33	0.53733	1050.3	120.18	0	5.34	1677.54	7.59	1674.73	7.58	-2.81	-0.17
94	222	128	34	3552	0.976544	694.59	0.538288	1049.41	127	0.67	5.26	1686.92	7.6	1684.27	7.59	-2.66	-0.16
94	223	129	35	3568	0.975366	695.83	0.539238	1048.54	133.98	0	5.17	1694.81	7.6	1691.8	7.59	-3.02	-0.18
94	224	130	36	3584	0.974171	697.06	0.540179	1047.7	141.12	0.67	5.09	1703.88	7.61	1701.03	7.59	-2.85	-0.17
94	225	131	37	3600	0.972958	698.26	0.541111	1046.88	148.41	0	5.01	1711.47	7.61	1708.28	7.59	-3.19	-0.19
94	226	132	38	3616	0.971728	699.44	0.542035	1046.07	155.85	0.67	4.94	1720.24	7.61	1717.22	7.6	-3.01	-0.18
94	227	133	39	3632	0.970483	700.61	0.542952	1045.29	163.44	0	4.86	1727.53	7.61	1724.18	7.6	-3.34	-0.19
94	228	134	40	3648	0.969221	701.75	0.54386	1044.53	171.18	0.66	4.79	1736	7.61	1732.85	7.6	-3.15	-0.18
94	229	135	41	3664	0.967945	702.87	0.54476	1043.78	179.06	0	4.71	1743	7.61	1739.54	7.6	-3.46	-0.2
94	230	136	42	3680	0.966654	703.98	0.545652	1043.06	187.09	0.66	4.64	1751.18	7.61	1747.92	7.6	-3.26	-0.19
94	231	137	43	3696	0.965349	705.06	0.546537	1042.35	195.26	0	4.58	1757.91	7.61	1754.34	7.59	-3.56	-0.2
94	232	138	44	3712	0.964031	706.13	0.547414	1041.66	203.57	0.66	4.51	1765.81	7.61	1762.45	7.6	-3.35	-0.19
94	233	139	45	3728	0.9627	707.18	0.548283	1040.99	212.02	0	4.44	1772.26	7.61	1768.62	7.59	-3.64	-0.21
94	234	140	46	3744	0.961356	708.21	0.549145	1040.34	220.6	0.65	4.38	1779.88	7.61	1776.46	7.59	-3.42	-0.19
94	235	141	47	3760	0.96	709.23	0.55	1039.7	229.32	0	4.32	1786.07	7.6	1782.37	7.58	-3.7	-0.21
94	236	142	48	3776	0.958633	710.22	0.550847	1039.08	238.17	0.65	4.26	1793.43	7.6	1789.95	7.58	-3.47	-0.19
94	237	143	49	3792	0.957254	711.2	0.551688	1038.48	247.16	0	4.2	1799.35	7.59	1795.61	7.58	-3.74	-0.21

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
94	238	144	50	3808	0.955865	712.17	0.552521	1037.89	256.27	0.65	4.14	1806.45	7.59	1802.94	7.58	-3.51	-0.19
94	239	145	51	3824	0.954465	713.12	0.553347	1037.32	265.51	0	4.08	1812.13	7.58	1808.36	7.57	-3.77	-0.21
94	240	146	52	3840	0.953056	714.05	0.554167	1036.77	274.88	0.65	4.03	1818.97	7.58	1815.44	7.56	-3.53	-0.19
94	241	147	53	3856	0.951637	714.96	0.554979	1036.23	284.38	0	3.97	1824.4	7.57	1820.62	7.55	-3.78	-0.21
94	242	148	54	3872	0.950208	715.86	0.555785	1035.71	293.99	0.64	3.92	1830.99	7.57	1827.46	7.55	-3.53	-0.19
94	243	149	55	3888	0.948771	716.75	0.556584	1035.2	303.73	0	3.87	1836.18	7.56	1832.41	7.54	-3.77	-0.21
94	244	150	56	3904	0.947326	717.62	0.557377	1034.7	313.59	0.64	3.81	1842.54	7.55	1839.01	7.54	-3.53	-0.19
94	245	151	57	3920	0.945873	718.48	0.558163	1034.22	323.57	0	3.76	1847.49	7.54	1843.73	7.53	-3.76	-0.2
94	246	152	58	3936	0.944411	719.32	0.558943	1033.76	333.67	0.64	3.71	1853.61	7.53	1850.1	7.52	-3.51	-0.19
94	247	153	59	3952	0.942943	720.14	0.559717	1033.31	343.88	0	3.67	1858.33	7.52	1854.59	7.51	-3.74	-0.2
94	248	154	60	3968	0.941467	720.95	0.560484	1032.87	354.21	0.64	3.62	1864.22	7.52	1860.73	7.5	-3.49	-0.19
94	249	155	61	3984	0.939985	721.75	0.561245	1032.44	364.65	0	3.57	1868.72	7.5	1865.01	7.49	-3.71	-0.2
94	250	156	62	4000	0.938496	722.54	0.562	1032.03	375.21	0.63	3.53	1874.38	7.5	1870.93	7.48	-3.45	-0.18
94	251	157	63	4016	0.937001	723.31	0.562749	1031.64	385.87	0	3.48	1878.67	7.48	1875	7.47	-3.67	-0.2
94	252	158	64	4032	0.9355	724.07	0.563492	1031.25	396.64	0.63	3.44	1884.11	7.48	1880.7	7.46	-3.41	-0.18
94	253	159	65	4048	0.933994	724.81	0.564229	1030.88	407.52	0	3.4	1888.19	7.46	1884.56	7.45	-3.63	-0.19
94	254	160	66	4064	0.932482	725.55	0.564961	1030.52	418.51	0.63	3.36	1893.41	7.45	1890.04	7.44	-3.37	-0.18
94	255	161	67	4080	0.930965	726.27	0.565686	1030.17	429.6	0	3.32	1897.28	7.44	1893.7	7.43	-3.58	-0.19
94	256	162	68	4096	0.929443	726.97	0.566406	1029.83	440.8	0.62	3.28	1902.3	7.43	1898.97	7.42	-3.32	-0.18
94	257	163	69	4112	0.927917	727.67	0.567121	1029.51	452.1	0	3.24	1905.96	7.42	1902.43	7.4	-3.53	-0.19
94	258	164	70	4128	0.926387	728.35	0.567829	1029.19	463.51	0.62	3.2	1910.77	7.41	1907.5	7.39	-3.27	-0.17
94	259	165	71	4144	0.924852	729.02	0.568533	1028.89	475.01	0	3.16	1914.24	7.39	1910.76	7.38	-3.48	-0.18
94	260	166	72	4160	0.923314	729.68	0.569231	1028.6	486.61	0.62	3.13	1918.85	7.38	1915.63	7.37	-3.22	-0.17
94	261	167	73	4176	0.921772	730.33	0.569923	1028.32	498.32	0	3.09	1922.12	7.36	1918.69	7.35	-3.43	-0.18
94	262	168	74	4192	0.920226	730.97	0.570611	1028.05	510.11	0.62	3.05	1926.54	7.35	1923.37	7.34	-3.17	-0.16
94	263	169	75	4208	0.918677	731.59	0.571293	1027.8	522.01	0	3.02	1929.62	7.34	1926.25	7.32	-3.38	-0.18
94	264	170	76	4224	0.917126	732.21	0.57197	1027.55	534	0.62	2.98	1933.85	7.33	1930.73	7.31	-3.12	-0.16
94	265	171	77	4240	0.915571	732.81	0.572642	1027.31	546.08	0	2.95	1936.75	7.31	1933.42	7.3	-3.32	-0.17
94	266	172	78	4256	0.914014	733.4	0.573308	1027.08	558.26	0.61	2.92	1940.78	7.3	1937.72	7.28	-3.07	-0.16
94	267	173	79	4272	0.912455	733.99	0.57397	1026.87	570.53	0	2.89	1943.5	7.28	1940.23	7.27	-3.27	-0.17
94	268	174	80	4288	0.910893	734.56	0.574627	1026.66	582.89	0.61	2.85	1947.36	7.27	1944.34	7.25	-3.02	-0.16
94	269	175	81	4304	0.90933	735.12	0.575279	1026.46	595.34	0	2.82	1949.9	7.25	1946.67	7.24	-3.22	-0.17
94	270	176	82	4320	0.907764	735.67	0.575926	1026.28	607.88	0.61	2.79	1953.57	7.24	1950.6	7.22	-2.97	-0.15
94	271	177	83	4336	0.906197	736.21	0.576568	1026.1	620.51	0	2.76	1955.94	7.22	1952.76	7.21	-3.18	-0.16
94	272	178	84	4352	0.904628	736.75	0.577206	1025.93	633.22	0.61	2.73	1959.44	7.2	1956.51	7.19	-2.93	-0.15
94	273	179	85	4368	0.903058	737.27	0.577839	1025.77	646.02	0	2.7	1961.65	7.19	1958.51	7.17	-3.14	-0.16
94	274	180	86	4384	0.901486	737.78	0.578467	1025.62	658.91	0.6	2.68	1964.97	7.17	1962.08	7.16	-2.89	-0.15
94	275	181	87	4400	0.899914	738.29	0.579091	1025.47	671.88	0	2.65	1967.01	7.15	1963.91	7.14	-3.1	-0.16
94	276	182	88	4416	0.898341	738.78	0.57971	1025.34	684.93	0.6	2.62	1970.17	7.14	1967.31	7.13	-2.86	-0.15
94	277	183	89	4432	0.896767	739.27	0.580325	1025.22	698.06	0	2.59	1972.05	7.12	1968.98	7.11	-3.07	-0.16
94	278	184	90	4448	0.895192	739.74	0.580935	1025.1	711.28	0.6	2.57	1975.04	7.1	1972.21	7.09	-2.83	-0.14
94	279	185	91	4464	0.893616	740.21	0.581541	1024.99	724.58	0	2.54	1976.76	7.09	1973.71	7.07	-3.05	-0.15
94	280	186	92	4480	0.892041	740.67	0.582143	1024.89	737.96	0.6	2.52	1979.6	7.07	1976.78	7.06	-2.81	-0.14
94	281	187	93	4496	0.890465	741.12	0.58274	1024.8	751.41	0	2.49	1981.16	7.05	1978.13	7.04	-3.03	-0.15
94	282	188	94	4512	0.888889	741.56	0.583333	1024.72	764.94	0.6	2.47	1983.84	7.03	1981.04	7.02	-2.8	-0.14
94	283	189	95	4528	0.887313	742	0.583922	1024.64	778.56	0	2.44	1985.25	7.02	1982.23	7	-3.02	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
94	284	190	96	4544	0.885737	742.42	0.584507	1024.57	792.24	0.59	2.42	1987.77	7	1984.98	6.99	-2.79	-0.14
94	285	191	97	4560	0.884161	742.84	0.585088	1024.51	806.01	0	2.39	1989.04	6.98	1986.02	6.97	-3.01	-0.15
94	286	192	98	4576	0.882586	743.25	0.585664	1024.46	819.84	0.59	2.37	1991.41	6.96	1988.62	6.95	-2.79	-0.14
94	287	193	99	4592	0.881011	743.65	0.586237	1024.41	833.76	0	2.35	1992.53	6.94	1989.51	6.93	-3.02	-0.15
94	288	194	100	4608	0.879437	744.05	0.586806	1024.37	847.74	0.59	2.33	1994.75	6.93	1991.95	6.92	-2.8	-0.14
94	289	195	101	4624	0.877863	744.44	0.58737	1024.34	861.8	0	2.3	1995.73	6.91	1992.7	6.9	-3.03	-0.15
94	290	196	102	4640	0.87629	744.81	0.587931	1024.32	875.93	0.59	2.28	1997.81	6.89	1994.99	6.88	-2.82	-0.14
94	291	197	103	4656	0.874718	745.19	0.588488	1024.3	890.13	0	2.26	1998.65	6.87	1995.59	6.86	-3.06	-0.15
94	292	198	104	4672	0.873147	745.55	0.589041	1024.29	904.4	0.59	2.24	2000.59	6.85	1997.74	6.84	-2.85	-0.14
94	293	199	105	4688	0.871577	745.91	0.58959	1024.28	918.74	0	2.22	2001.29	6.83	1998.2	6.82	-3.09	-0.15
94	294	200	106	4704	0.870008	746.26	0.590136	1024.29	933.15	0.58	2.2	2003.09	6.81	2000.2	6.8	-2.89	-0.14
94	295	201	107	4720	0.86844	746.6	0.590678	1024.3	947.63	0	2.18	2003.66	6.79	2000.52	6.78	-3.13	-0.16
94	296	202	108	4736	0.866874	746.94	0.591216	1024.31	962.17	0.58	2.16	2005.32	6.77	2002.38	6.76	-2.94	-0.15
94	297	203	109	4752	0.865309	747.27	0.591751	1024.33	976.78	0	2.14	2005.76	6.75	2002.57	6.74	-3.19	-0.16
94	298	204	110	4768	0.863745	747.59	0.592282	1024.36	991.46	0.58	2.12	2007.29	6.74	2004.29	6.73	-3	-0.15
94	299	205	111	4784	0.862183	747.91	0.592809	1024.4	1006.2	0	2.1	2007.6	6.71	2004.34	6.7	-3.25	-0.16
94	300	206	112	4800	0.860622	748.22	0.593333	1024.44	1021.01	0.58	2.08	2009	6.7	2005.92	6.69	-3.07	-0.15
94	301	207	113	4816	0.859063	748.52	0.593854	1024.48	1035.88	0	2.07	2009.18	6.68	2005.85	6.66	-3.33	-0.17
94	302	208	114	4832	0.857506	748.82	0.594371	1024.54	1050.82	0.58	2.05	2010.45	6.66	2007.3	6.65	-3.15	-0.16
94	303	209	115	4848	0.855951	749.11	0.594884	1024.59	1065.82	0	2.03	2010.51	6.64	2007.09	6.62	-3.41	-0.17
94	304	210	116	4864	0.854398	749.39	0.595395	1024.66	1080.88	0.57	2.01	2011.65	6.62	2008.41	6.61	-3.25	-0.16
94	305	211	117	4880	0.852846	749.67	0.595902	1024.73	1096	0	2	2011.59	6.6	2008.08	6.58	-3.51	-0.17
94	306	212	118	4896	0.851297	749.95	0.596405	1024.8	1111.19	0.57	1.98	2012.62	6.58	2009.26	6.57	-3.35	-0.17
94	307	213	119	4912	0.849749	750.21	0.596906	1024.88	1126.43	0	1.96	2012.43	6.56	2008.81	6.54	-3.63	-0.18
94	308	214	120	4928	0.848204	750.47	0.597403	1024.97	1141.74	0.57	1.95	2013.34	6.54	2009.87	6.53	-3.47	-0.17
94	309	215	121	4944	0.846661	750.73	0.597896	1025.06	1157.1	0	1.93	2013.04	6.51	2009.29	6.5	-3.75	-0.19
94	310	216	122	4960	0.84512	750.98	0.598387	1025.16	1172.52	0.57	1.91	2013.82	6.5	2010.22	6.48	-3.6	-0.18
94	311	217	123	4976	0.843581	751.22	0.598875	1025.26	1188	0	1.9	2013.41	6.47	2009.53	6.46	-3.89	-0.19
94	312	218	124	4992	0.842045	751.46	0.599359	1025.37	1203.54	0.57	1.88	2014.08	6.46	2010.33	6.44	-3.75	-0.19
94	313	219	125	5008	0.840511	751.69	0.59984	1025.48	1219.14	0	1.87	2013.56	6.43	2009.52	6.42	-4.04	-0.2
94	314	220	126	5024	0.838979	751.92	0.600318	1025.6	1234.79	0.56	1.85	2014.11	6.41	2010.21	6.4	-3.9	-0.19
94	315	221	127	5040	0.83745	752.14	0.600794	1025.72	1250.5	0	1.84	2013.48	6.39	2009.28	6.38	-4.2	-0.21
94	316	222	128	5056	0.835924	752.36	0.601266	1025.85	1266.26	0.56	1.82	2013.92	6.37	2009.84	6.36	-4.07	-0.2
94	317	223	129	5072	0.8344	752.57	0.601735	1025.98	1282.08	0	1.81	2013.18	6.35	2008.8	6.34	-4.38	-0.22
94	318	224	130	5088	0.832878	752.78	0.602201	1026.12	1297.95	0.56	1.8	2013.51	6.33	2009.25	6.32	-4.26	-0.21
94	319	225	131	5104	0.83136	752.98	0.602665	1026.26	1313.88	0	1.78	2012.66	6.31	2008.1	6.29	-4.57	-0.23
94	320	226	132	5120	0.829844	753.18	0.603125	1026.41	1329.86	0.56	1.77	2012.89	6.29	2008.43	6.28	-4.46	-0.22
94	321	227	133	5136	0.82833	753.37	0.603583	1026.56	1345.89	0	1.75	2011.94	6.27	2007.17	6.25	-4.77	-0.24
94	322	228	134	5152	0.82682	753.56	0.604037	1026.71	1361.97	0.56	1.74	2012.05	6.25	2007.39	6.23	-4.67	-0.23
94	323	229	135	5168	0.825312	753.74	0.604489	1026.87	1378.11	0	1.73	2011	6.23	2006.02	6.21	-4.99	-0.25
94	324	230	136	5184	0.823807	753.92	0.604938	1027.04	1394.3	0.56	1.72	2011.02	6.21	2006.12	6.19	-4.89	-0.24
94	325	231	137	5200	0.822305	754.09	0.605385	1027.21	1410.54	0	1.7	2009.87	6.18	2004.64	6.17	-5.22	-0.26
94	326	232	138	5216	0.820806	754.26	0.605828	1027.38	1426.83	0.55	1.69	2009.78	6.16	2004.64	6.15	-5.13	-0.26
94	327	233	139	5232	0.81931	754.42	0.606269	1027.56	1443.17	0	1.68	2008.53	6.14	2003.06	6.13	-5.47	-0.27
94	328	234	140	5248	0.817817	754.58	0.606707	1027.74	1459.56	0.55	1.67	2008.34	6.12	2002.95	6.11	-5.39	-0.27
94	329	235	141	5264	0.816327	754.74	0.607143	1027.92	1476	0	1.65	2006.99	6.1	2001.26	6.08	-5.73	-0.29

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
94	330	236	142	5280	0.814839	754.89	0.607576	1028.11	1492.49	0.55	1.64	2006.7	6.08	2001.05	6.06	-5.66	-0.28
94	331	237	143	5296	0.813355	755.04	0.608006	1028.3	1509.02	0	1.63	2005.27	6.06	1999.26	6.04	-6.01	-0.3
94	332	238	144	5312	0.811874	755.18	0.608434	1028.5	1525.61	0.55	1.62	2004.88	6.04	1998.94	6.02	-5.94	-0.3
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
95	189	94	-1	3024	0.999972	638.9	0.498677	1116.58	0.13	0	9.78	1278.17	6.76	1287.23	6.81	9.06	0.7
95	190	95	0	3040	1	641.17	0.5	1114.61	0	-0.73	10	1293.5	6.81	1302.29	6.85	8.79	0.67
95	191	96	1	3056	0.999973	643.4	0.501309	1112.67	0.13	0	9.78	1309.59	6.86	1316.92	6.89	7.33	0.56
95	192	97	2	3072	0.999891	645.59	0.502604	1110.78	0.51	-0.72	9.57	1323.97	6.9	1331.53	6.94	7.55	0.57
95	193	98	3	3088	0.999758	647.74	0.503886	1108.93	1.14	0	9.37	1339.56	6.94	1345.71	6.97	6.15	0.46
95	194	99	4	3104	0.999575	649.86	0.505155	1107.13	2.01	-0.72	9.17	1353.46	6.98	1359.88	7.01	6.42	0.47
95	195	100	5	3120	0.999343	651.94	0.50641	1105.36	3.12	0	8.98	1368.55	7.02	1373.62	7.04	5.07	0.37
95	196	101	6	3136	0.999063	653.98	0.507653	1103.64	4.48	-0.71	8.79	1381.98	7.05	1387.36	7.08	5.38	0.39
95	197	102	7	3152	0.998737	655.99	0.508883	1101.95	6.06	0	8.61	1396.61	7.09	1400.68	7.11	4.07	0.29
95	198	103	8	3168	0.998368	657.96	0.510101	1100.3	7.88	-0.71	8.44	1409.58	7.12	1414.01	7.14	4.43	0.31
95	199	104	9	3184	0.997955	659.9	0.511307	1098.69	9.92	0	8.27	1423.75	7.15	1426.91	7.17	3.16	0.22
95	200	105	10	3200	0.9975	661.81	0.5125	1097.12	12.19	-0.71	8.11	1436.28	7.18	1439.83	7.2	3.55	0.25
95	201	106	11	3216	0.997005	663.69	0.513682	1095.58	14.68	0	7.95	1450.01	7.21	1452.33	7.23	2.32	0.16
95	202	107	12	3232	0.996471	665.53	0.514851	1094.07	17.38	-0.7	7.79	1462.11	7.24	1464.86	7.25	2.75	0.19
95	203	108	13	3248	0.995899	667.34	0.51601	1092.6	20.3	0	7.64	1475.4	7.27	1476.96	7.28	1.56	0.11
95	204	109	14	3264	0.99529	669.12	0.517157	1091.16	23.42	-0.7	7.5	1487.09	7.29	1489.11	7.3	2.02	0.14
95	205	110	15	3280	0.994646	670.87	0.518293	1089.76	26.76	0	7.35	1499.97	7.32	1500.83	7.32	0.87	0.06
95	206	111	16	3296	0.993967	672.59	0.519417	1088.38	30.3	-0.7	7.22	1511.25	7.34	1512.61	7.34	1.36	0.09
95	207	112	17	3312	0.993255	674.28	0.520531	1087.04	34.04	0	7.08	1523.72	7.36	1523.96	7.36	0.24	0.02
95	208	113	18	3328	0.992511	675.95	0.521635	1085.73	37.98	-0.69	6.95	1534.61	7.38	1535.37	7.38	0.76	0.05
95	209	114	19	3344	0.991736	677.58	0.522727	1084.44	42.12	0	6.83	1546.68	7.4	1546.35	7.4	-0.33	-0.02
95	210	115	20	3360	0.99093	679.19	0.52381	1083.19	46.44	-0.69	6.7	1557.19	7.42	1557.41	7.42	0.22	0.01
95	211	116	21	3376	0.990095	680.77	0.524882	1081.97	50.96	0	6.58	1568.88	7.44	1568.04	7.43	-0.84	-0.05
95	212	117	22	3392	0.989231	682.32	0.525943	1080.77	55.67	-0.69	6.47	1579.02	7.45	1578.75	7.45	-0.26	-0.02
95	213	118	23	3408	0.98834	683.85	0.526995	1079.6	60.56	0	6.35	1590.34	7.47	1589.04	7.46	-1.3	-0.08
95	214	119	24	3424	0.987422	685.35	0.528037	1078.46	65.64	-0.68	6.24	1600.11	7.48	1599.41	7.47	-0.7	-0.04
95	215	120	25	3440	0.986479	686.83	0.52907	1077.34	70.89	0	6.14	1611.07	7.49	1609.36	7.49	-1.72	-0.11
95	216	121	26	3456	0.985511	688.28	0.530093	1076.25	76.32	-0.68	6.03	1620.5	7.5	1619.41	7.5	-1.09	-0.07
95	217	122	27	3472	0.984519	689.71	0.531106	1075.19	81.93	0	5.93	1631.11	7.52	1629.03	7.51	-2.08	-0.13
95	218	123	28	3488	0.983503	691.11	0.53211	1074.15	87.71	-0.68	5.83	1640.19	7.52	1638.75	7.52	-1.44	-0.09
95	219	124	29	3504	0.982465	692.49	0.533105	1073.13	93.65	0	5.73	1650.45	7.54	1648.05	7.53	-2.4	-0.15
95	220	125	30	3520	0.981405	693.85	0.534091	1072.14	99.77	-0.67	5.64	1659.2	7.54	1657.46	7.53	-1.74	-0.11
95	221	126	31	3536	0.980324	695.18	0.535068	1071.17	106.05	0	5.55	1669.14	7.55	1666.45	7.54	-2.69	-0.16
95	222	127	32	3552	0.979222	696.5	0.536036	1070.23	112.5	-0.67	5.46	1677.56	7.56	1675.56	7.55	-2.01	-0.12
95	223	128	33	3568	0.978101	697.79	0.536996	1069.3	119.11	0	5.37	1687.17	7.57	1684.24	7.55	-2.94	-0.17
95	224	129	34	3584	0.976961	699.05	0.537946	1068.4	125.87	-0.67	5.29	1695.29	7.57	1693.05	7.56	-2.24	-0.13
95	225	130	35	3600	0.975802	700.3	0.538889	1067.52	132.8	0	5.2	1704.58	7.58	1701.43	7.56	-3.15	-0.19
95	226	131	36	3616	0.974626	701.53	0.539823	1066.67	139.87	-0.67	5.12	1712.39	7.58	1709.95	7.57	-2.44	-0.14
95	227	132	37	3632	0.973432	702.73	0.540749	1065.83	147.1	0	5.04	1721.38	7.58	1718.04	7.57	-3.34	-0.19
95	228	133	38	3648	0.972222	703.92	0.541667	1065.01	154.49	-0.66	4.97	1728.89	7.58	1726.27	7.57	-2.61	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
95	229	134	39	3664	0.970996	705.09	0.542576	1064.21	162.02	0	4.89	1737.57	7.59	1734.08	7.57	-3.49	-0.2
95	230	135	40	3680	0.969754	706.23	0.543478	1063.44	169.69	-0.66	4.82	1744.79	7.59	1742.04	7.57	-2.75	-0.16
95	231	136	41	3696	0.968498	707.36	0.544372	1062.68	177.52	0	4.75	1753.19	7.59	1749.57	7.57	-3.62	-0.21
95	232	137	42	3712	0.967227	708.47	0.545259	1061.94	185.48	-0.66	4.68	1760.13	7.59	1757.25	7.57	-2.87	-0.16
95	233	138	43	3728	0.965942	709.56	0.546137	1061.22	193.59	0	4.61	1768.24	7.59	1764.51	7.57	-3.72	-0.21
95	234	139	44	3744	0.964643	710.63	0.547009	1060.52	201.83	-0.65	4.54	1774.9	7.59	1771.93	7.57	-2.97	-0.17
95	235	140	45	3760	0.963332	711.69	0.547872	1059.84	210.22	0	4.47	1782.73	7.59	1778.93	7.57	-3.81	-0.21
95	236	141	46	3776	0.962008	712.72	0.548729	1059.17	218.74	-0.65	4.41	1789.13	7.58	1786.09	7.57	-3.04	-0.17
95	237	142	47	3792	0.960672	713.74	0.549578	1058.52	227.39	0	4.35	1796.69	7.58	1792.82	7.56	-3.87	-0.22
95	238	143	48	3808	0.959325	714.75	0.55042	1057.89	236.18	-0.65	4.29	1802.82	7.57	1799.73	7.56	-3.1	-0.17
95	239	144	49	3824	0.957966	715.73	0.551255	1057.27	245.1	0	4.23	1810.12	7.57	1806.21	7.56	-3.91	-0.22
95	240	145	50	3840	0.956597	716.7	0.552083	1056.67	254.14	-0.65	4.17	1816	7.57	1812.87	7.55	-3.13	-0.17
95	241	146	51	3856	0.955218	717.65	0.552905	1056.09	263.32	0	4.11	1823.05	7.56	1819.1	7.55	-3.94	-0.22
95	242	147	52	3872	0.953828	718.59	0.553719	1055.52	272.62	-0.64	4.06	1828.68	7.56	1825.52	7.54	-3.16	-0.17
95	243	148	53	3888	0.952429	719.51	0.554527	1054.97	282.05	0	4	1835.47	7.55	1831.51	7.54	-3.96	-0.22
95	244	149	54	3904	0.951021	720.42	0.555328	1054.44	291.6	-0.64	3.95	1840.86	7.54	1837.69	7.53	-3.16	-0.17
95	245	150	55	3920	0.949604	721.31	0.556122	1053.92	301.27	0	3.9	1847.4	7.54	1843.45	7.52	-3.96	-0.21
95	246	151	56	3936	0.948179	722.19	0.556911	1053.41	311.06	-0.64	3.84	1852.56	7.53	1849.39	7.52	-3.16	-0.17
95	247	152	57	3952	0.946746	723.05	0.557692	1052.92	320.96	0	3.79	1858.86	7.53	1854.92	7.51	-3.95	-0.21
95	248	153	58	3968	0.945304	723.89	0.558468	1052.44	330.99	-0.64	3.74	1863.79	7.52	1860.64	7.5	-3.15	-0.17
95	249	154	59	3984	0.943856	724.73	0.559237	1051.98	341.13	0	3.7	1869.86	7.51	1865.93	7.49	-3.93	-0.21
95	250	155	60	4000	0.9424	725.54	0.56	1051.53	351.39	-0.63	3.65	1874.56	7.5	1871.43	7.49	-3.12	-0.17
95	251	156	61	4016	0.940937	726.35	0.560757	1051.09	361.76	0	3.6	1880.41	7.49	1876.51	7.48	-3.9	-0.21
95	252	157	62	4032	0.939468	727.14	0.561508	1050.67	372.24	-0.63	3.56	1884.88	7.48	1881.79	7.47	-3.09	-0.16
95	253	158	63	4048	0.937993	727.92	0.562253	1050.26	382.83	0	3.51	1890.51	7.47	1886.64	7.46	-3.86	-0.2
95	254	159	64	4064	0.936512	728.68	0.562992	1049.86	393.53	-0.63	3.47	1894.77	7.46	1891.71	7.45	-3.06	-0.16
95	255	160	65	4080	0.935025	729.43	0.563725	1049.48	404.34	0	3.43	1900.18	7.45	1896.36	7.44	-3.82	-0.2
95	256	161	66	4096	0.933533	730.17	0.564453	1049.11	415.25	-0.62	3.39	1904.23	7.44	1901.22	7.43	-3.01	-0.16
95	257	162	67	4112	0.932035	730.9	0.565175	1048.75	426.27	0	3.35	1909.43	7.43	1905.65	7.41	-3.78	-0.2
95	258	163	68	4128	0.930533	731.61	0.565891	1048.4	437.4	-0.62	3.31	1913.27	7.42	1910.31	7.4	-2.97	-0.16
95	259	164	69	4144	0.929026	732.31	0.566602	1048.06	448.63	0	3.27	1918.26	7.41	1914.54	7.39	-3.73	-0.19
95	260	165	70	4160	0.927515	733	0.567308	1047.74	459.95	-0.62	3.23	1921.91	7.39	1918.99	7.38	-2.92	-0.15
95	261	166	71	4176	0.925999	733.68	0.568008	1047.43	471.38	0	3.19	1926.7	7.38	1923.03	7.37	-3.67	-0.19
95	262	167	72	4192	0.92448	734.34	0.568702	1047.13	482.91	-0.62	3.15	1930.15	7.37	1927.29	7.36	-2.87	-0.15
95	263	168	73	4208	0.922957	735	0.569392	1046.84	494.54	0	3.12	1934.74	7.36	1931.12	7.34	-3.62	-0.19
95	264	169	74	4224	0.92143	735.64	0.570076	1046.56	506.26	-0.62	3.08	1938	7.34	1935.19	7.33	-2.81	-0.15
95	265	170	75	4240	0.9199	736.27	0.570755	1046.29	518.08	0	3.05	1942.4	7.33	1938.83	7.32	-3.56	-0.18
95	266	171	76	4256	0.918367	736.9	0.571429	1046.03	530	-0.61	3.01	1945.47	7.31	1942.71	7.3	-2.76	-0.14
95	267	172	77	4272	0.916831	737.51	0.572097	1045.79	542.01	0	2.98	1949.68	7.3	1946.17	7.29	-3.51	-0.18
95	268	173	78	4288	0.915293	738.11	0.572761	1045.55	554.11	-0.61	2.95	1952.57	7.29	1949.86	7.28	-2.71	-0.14
95	269	174	79	4304	0.913752	738.69	0.57342	1045.32	566.31	0	2.91	1956.59	7.27	1953.13	7.26	-3.46	-0.18
95	270	175	80	4320	0.912209	739.27	0.574074	1045.1	578.59	-0.61	2.88	1959.3	7.26	1956.65	7.25	-2.66	-0.14
95	271	176	81	4336	0.910663	739.84	0.574723	1044.9	590.96	0	2.85	1963.15	7.24	1959.74	7.23	-3.41	-0.17
95	272	177	82	4352	0.909115	740.4	0.575368	1044.7	603.43	-0.61	2.82	1965.68	7.23	1963.08	7.22	-2.61	-0.13
95	273	178	83	4368	0.907566	740.95	0.576007	1044.51	615.98	0	2.79	1969.35	7.21	1965.99	7.2	-3.36	-0.17
95	274	179	84	4384	0.906015	741.49	0.576642	1044.33	628.62	-0.6	2.76	1971.72	7.2	1969.15	7.19	-2.56	-0.13

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
95	275	180	85	4400	0.904463	742.02	0.577273	1044.16	641.34	0	2.73	1975.21	7.18	1971.89	7.17	-3.31	-0.17
95	276	181	86	4416	0.902909	742.54	0.577899	1044	654.15	-0.6	2.7	1977.41	7.16	1974.88	7.16	-2.52	-0.13
95	277	182	87	4432	0.901354	743.05	0.57852	1043.85	667.04	0	2.67	1980.73	7.15	1977.46	7.14	-3.27	-0.17
95	278	183	88	4448	0.899798	743.55	0.579137	1043.71	680.02	-0.6	2.65	1982.77	7.13	1980.28	7.12	-2.49	-0.13
95	279	184	89	4464	0.898241	744.04	0.579749	1043.58	693.08	0	2.62	1985.92	7.12	1982.68	7.11	-3.24	-0.16
95	280	185	90	4480	0.896684	744.53	0.580357	1043.45	706.22	-0.6	2.59	1987.8	7.1	1985.34	7.09	-2.46	-0.12
95	281	186	91	4496	0.895125	745	0.580961	1043.33	719.44	0	2.57	1990.79	7.08	1987.58	7.07	-3.21	-0.16
95	282	187	92	4512	0.893567	745.47	0.58156	1043.23	732.74	-0.6	2.54	1992.51	7.07	1990.08	7.06	-2.43	-0.12
95	283	188	93	4528	0.892008	745.92	0.582155	1043.13	746.12	0	2.52	1995.35	7.05	1992.16	7.04	-3.19	-0.16
95	284	189	94	4544	0.890448	746.37	0.582746	1043.03	759.58	-0.59	2.49	1996.91	7.03	1994.5	7.02	-2.41	-0.12
95	285	190	95	4560	0.888889	746.81	0.583333	1042.95	773.11	0	2.47	1999.59	7.02	1996.42	7	-3.17	-0.16
95	286	191	96	4576	0.887329	747.25	0.583916	1042.87	786.72	-0.59	2.44	2001.01	7	1998.61	6.99	-2.4	-0.12
95	287	192	97	4592	0.88577	747.67	0.584495	1042.8	800.41	0	2.42	2003.54	6.98	2000.37	6.97	-3.16	-0.16
95	288	193	98	4608	0.884211	748.09	0.585069	1042.74	814.17	-0.59	2.4	2004.81	6.96	2002.41	6.95	-2.4	-0.12
95	289	194	99	4624	0.882652	748.5	0.58564	1042.69	828.01	0	2.37	2007.18	6.95	2004.02	6.93	-3.16	-0.16
95	290	195	100	4640	0.881094	748.9	0.586207	1042.64	841.91	-0.59	2.35	2008.31	6.93	2005.91	6.92	-2.4	-0.12
95	291	196	101	4656	0.879536	749.29	0.58677	1042.6	855.9	0	2.33	2010.54	6.91	2007.37	6.9	-3.17	-0.16
95	292	197	102	4672	0.877979	749.68	0.587329	1042.57	869.95	-0.59	2.31	2011.53	6.89	2009.11	6.88	-2.42	-0.12
95	293	198	103	4688	0.876423	750.06	0.587884	1042.54	884.07	0	2.28	2013.61	6.87	2010.43	6.86	-3.18	-0.16
95	294	199	104	4704	0.874867	750.43	0.588435	1042.53	898.27	-0.58	2.26	2014.46	6.85	2012.02	6.84	-2.44	-0.12
95	295	200	105	4720	0.873312	750.79	0.588983	1042.51	912.53	0	2.24	2016.41	6.84	2013.2	6.82	-3.21	-0.16
95	296	201	106	4736	0.871759	751.15	0.589527	1042.51	926.86	-0.58	2.22	2017.12	6.81	2014.65	6.81	-2.47	-0.12
95	297	202	107	4752	0.870206	751.5	0.590067	1042.51	941.27	0	2.2	2018.93	6.8	2015.68	6.79	-3.25	-0.16
95	298	203	108	4768	0.868655	751.84	0.590604	1042.52	955.74	-0.58	2.18	2019.51	6.78	2016.99	6.77	-2.51	-0.12
95	299	204	109	4784	0.867104	752.18	0.591137	1042.53	970.27	0	2.16	2021.18	6.76	2017.89	6.75	-3.29	-0.16
95	300	205	110	4800	0.865556	752.51	0.591667	1042.55	984.87	-0.58	2.14	2021.63	6.74	2019.06	6.73	-2.57	-0.13
95	301	206	111	4816	0.864008	752.83	0.592193	1042.58	999.54	0	2.12	2023.17	6.72	2019.82	6.71	-3.35	-0.17
95	302	207	112	4832	0.862462	753.15	0.592715	1042.62	1014.27	-0.58	2.11	2023.5	6.7	2020.86	6.69	-2.63	-0.13
95	303	208	113	4848	0.860918	753.46	0.593234	1042.66	1029.07	0	2.09	2024.91	6.68	2021.49	6.67	-3.42	-0.17
95	304	209	114	4864	0.859375	753.76	0.59375	1042.7	1043.93	-0.57	2.07	2025.1	6.66	2022.4	6.65	-2.71	-0.13
95	305	210	115	4880	0.857834	754.06	0.594262	1042.75	1058.85	0	2.05	2026.39	6.64	2022.89	6.63	-3.49	-0.17
95	306	211	116	4896	0.856295	754.35	0.594771	1042.81	1073.84	-0.57	2.03	2026.46	6.62	2023.67	6.61	-2.79	-0.14
95	307	212	117	4912	0.854757	754.63	0.595277	1042.87	1088.89	0	2.02	2027.62	6.6	2024.04	6.59	-3.59	-0.18
95	308	213	118	4928	0.853221	754.91	0.595779	1042.94	1103.99	-0.57	2	2027.58	6.58	2024.69	6.57	-2.89	-0.14
95	309	214	119	4944	0.851688	755.19	0.596278	1043.02	1119.16	0	1.98	2028.62	6.57	2024.93	6.55	-3.69	-0.18
95	310	215	120	4960	0.850156	755.45	0.596774	1043.1	1134.39	-0.57	1.97	2028.45	6.54	2025.46	6.53	-3	-0.15
95	311	216	121	4976	0.848626	755.72	0.597267	1043.18	1149.68	0	1.95	2029.37	6.53	2025.57	6.51	-3.8	-0.19
95	312	217	122	4992	0.847099	755.97	0.597756	1043.27	1165.03	-0.57	1.94	2029.09	6.5	2025.97	6.49	-3.12	-0.15
95	313	218	123	5008	0.845574	756.22	0.598243	1043.37	1180.44	0	1.92	2029.89	6.49	2025.96	6.47	-3.93	-0.19
95	314	219	124	5024	0.84405	756.47	0.598726	1043.47	1195.9	-0.56	1.9	2029.5	6.46	2026.25	6.45	-3.26	-0.16
95	315	220	125	5040	0.84253	756.71	0.599206	1043.58	1211.42	0	1.89	2030.18	6.45	2026.12	6.43	-4.07	-0.2
95	316	221	126	5056	0.841011	756.94	0.599684	1043.69	1227	-0.56	1.87	2029.68	6.42	2026.28	6.41	-3.4	-0.17
95	317	222	127	5072	0.839495	757.17	0.600158	1043.81	1242.63	0	1.86	2030.25	6.4	2026.03	6.39	-4.22	-0.21
95	318	223	128	5088	0.837981	757.39	0.600629	1043.93	1258.32	-0.56	1.84	2029.64	6.38	2026.08	6.37	-3.56	-0.18
95	319	224	129	5104	0.83647	757.61	0.601097	1044.06	1274.06	0	1.83	2030.1	6.36	2025.71	6.35	-4.39	-0.22
95	320	225	130	5120	0.834961	757.82	0.601562	1044.19	1289.86	-0.56	1.82	2029.38	6.34	2025.65	6.33	-3.74	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
95	321	226	131	5136	0.833455	758.03	0.602025	1044.32	1305.72	0	1.8	2029.73	6.32	2025.17	6.31	-4.57	-0.23
95	322	227	132	5152	0.831951	758.23	0.602484	1044.46	1321.62	-0.56	1.79	2028.91	6.3	2024.99	6.29	-3.93	-0.19
95	323	228	133	5168	0.83045	758.43	0.602941	1044.61	1337.58	0	1.77	2029.15	6.28	2024.39	6.27	-4.76	-0.24
95	324	229	134	5184	0.828951	758.63	0.603395	1044.76	1353.59	-0.56	1.76	2028.23	6.26	2024.1	6.25	-4.13	-0.2
95	325	230	135	5200	0.827456	758.81	0.603846	1044.91	1369.66	0	1.75	2028.36	6.24	2023.4	6.23	-4.97	-0.25
95	326	231	136	5216	0.825963	759	0.604294	1045.07	1385.77	-0.55	1.73	2027.34	6.22	2022.99	6.21	-4.34	-0.21
95	327	232	137	5232	0.824472	759.18	0.60474	1045.24	1401.94	0	1.72	2027.37	6.2	2022.18	6.18	-5.19	-0.26
95	328	233	138	5248	0.822985	759.35	0.605183	1045.4	1418.16	-0.55	1.71	2026.24	6.18	2021.67	6.16	-4.57	-0.23
95	329	234	139	5264	0.8215	759.52	0.605623	1045.58	1434.42	0	1.7	2026.17	6.16	2020.75	6.14	-5.42	-0.27
95	330	235	140	5280	0.820018	759.69	0.606061	1045.75	1450.74	-0.55	1.68	2024.95	6.14	2020.14	6.12	-4.81	-0.24
95	331	236	141	5296	0.818539	759.85	0.606495	1045.93	1467.11	0	1.67	2024.78	6.12	2019.11	6.1	-5.67	-0.28
95	332	237	142	5312	0.817063	760	0.606928	1046.12	1483.52	-0.55	1.66	2023.46	6.09	2018.39	6.08	-5.07	-0.25
95	333	238	143	5328	0.81559	760.16	0.607357	1046.31	1499.99	0	1.65	2023.2	6.08	2017.26	6.06	-5.93	-0.29
95	334	239	144	5344	0.81412	760.31	0.607784	1046.5	1516.5	-0.55	1.64	2021.78	6.05	2016.44	6.04	-5.34	-0.27
95	335	240	145	5360	0.812653	760.45	0.608209	1046.7	1533.06	0	1.62	2021.42	6.03	2015.21	6.02	-6.21	-0.31
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
96	191	95	-1	3056	0.999973	643.4	0.498691	1136.22	0.13	0	9.78	1286.04	6.73	1295.12	6.78	9.08	0.7
96	192	96	0	3072	1	645.66	0.5	1134.23	0	0.72	10	1302.84	6.79	1311.13	6.83	8.29	0.63
96	193	97	1	3088	0.999973	647.88	0.501295	1132.28	0.13	0	9.78	1317.5	6.83	1324.86	6.86	7.37	0.56
96	194	98	2	3104	0.999894	650.06	0.502577	1130.38	0.5	0.72	9.58	1333.35	6.87	1340.41	6.91	7.06	0.53
96	195	99	3	3120	0.999763	652.21	0.503846	1128.52	1.12	0	9.37	1347.52	6.91	1353.71	6.94	6.19	0.46
96	196	100	4	3136	0.999584	654.32	0.505102	1126.7	1.99	0.71	9.18	1362.88	6.95	1368.82	6.98	5.93	0.43
96	197	101	5	3152	0.999356	656.4	0.506345	1124.92	3.09	0	8.99	1376.58	6.99	1381.69	7.01	5.11	0.37
96	198	102	6	3168	0.999082	658.43	0.507576	1123.18	4.43	0.71	8.8	1391.47	7.03	1396.37	7.05	4.89	0.35
96	199	103	7	3184	0.998763	660.44	0.508794	1121.48	6	0	8.63	1404.71	7.06	1408.82	7.08	4.11	0.29
96	200	104	8	3200	0.9984	662.41	0.51	1119.81	7.8	0.71	8.45	1419.14	7.1	1423.08	7.12	3.94	0.28
96	201	105	9	3216	0.997995	664.35	0.511194	1118.19	9.82	0	8.29	1431.93	7.12	1435.13	7.14	3.2	0.22
96	202	106	10	3232	0.997549	666.25	0.512376	1116.6	12.07	0.7	8.12	1445.91	7.16	1448.98	7.17	3.07	0.21
96	203	107	11	3248	0.997064	668.12	0.513547	1115.04	14.53	0	7.96	1458.27	7.18	1460.64	7.2	2.37	0.16
96	204	108	12	3264	0.99654	669.96	0.514706	1113.52	17.21	0.7	7.81	1471.82	7.21	1474.09	7.23	2.27	0.15
96	205	109	13	3280	0.995979	671.77	0.515854	1112.04	20.1	0	7.66	1483.76	7.24	1485.37	7.25	1.61	0.11
96	206	110	14	3296	0.995381	673.55	0.51699	1110.58	23.2	0.7	7.52	1496.88	7.27	1498.43	7.27	1.54	0.1
96	207	111	15	3312	0.994749	675.3	0.518116	1109.16	26.5	0	7.38	1508.41	7.29	1509.34	7.29	0.92	0.06
96	208	112	16	3328	0.994083	677.02	0.519231	1107.77	30.01	0.69	7.24	1521.13	7.31	1522.01	7.32	0.88	0.06
96	209	113	17	3344	0.993384	678.71	0.520335	1106.42	33.72	0	7.11	1532.27	7.33	1532.56	7.33	0.3	0.02
96	210	114	18	3360	0.992653	680.37	0.521429	1105.09	37.62	0.69	6.98	1544.59	7.36	1544.87	7.36	0.28	0.02
96	211	115	19	3376	0.991891	682	0.522512	1103.79	41.72	0	6.85	1555.33	7.37	1555.07	7.37	-0.27	-0.02
96	212	116	20	3392	0.9911	683.61	0.523585	1102.52	46.01	0.69	6.73	1567.27	7.39	1567.01	7.39	-0.26	-0.02
96	213	117	21	3408	0.99028	685.19	0.524648	1101.29	50.49	0	6.61	1577.64	7.41	1576.87	7.4	-0.78	-0.05
96	214	118	22	3424	0.989431	686.75	0.525701	1100.07	55.15	0.68	6.49	1589.2	7.43	1588.46	7.42	-0.74	-0.05
96	215	119	23	3440	0.988556	688.27	0.526744	1098.89	60	0	6.38	1599.21	7.44	1597.98	7.43	-1.24	-0.08
96	216	120	24	3456	0.987654	689.78	0.527778	1097.73	65.03	0.68	6.27	1610.41	7.46	1609.23	7.45	-1.18	-0.07
96	217	121	25	3472	0.986727	691.26	0.528802	1096.6	70.24	0	6.16	1620.07	7.47	1618.42	7.46	-1.65	-0.1
96	218	122	26	3488	0.985776	692.71	0.529817	1095.5	75.62	0.68	6.06	1630.91	7.48	1629.34	7.47	-1.56	-0.1

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
96	219	123	27	3504	0.9848	694.14	0.530822	1094.42	81.18	0	5.96	1640.22	7.49	1638.21	7.48	-2.01	-0.12
96	220	124	28	3520	0.983802	695.54	0.531818	1093.36	86.91	0.67	5.86	1650.71	7.5	1648.8	7.49	-1.91	-0.12
96	221	125	29	3536	0.982781	696.93	0.532805	1092.33	92.81	0	5.76	1659.69	7.51	1657.36	7.5	-2.33	-0.14
96	222	126	30	3552	0.981738	698.29	0.533784	1091.33	98.88	0.67	5.67	1669.85	7.52	1667.64	7.51	-2.21	-0.13
96	223	127	31	3568	0.980675	699.62	0.534753	1090.35	105.11	0	5.58	1678.5	7.53	1675.89	7.52	-2.61	-0.16
96	224	128	32	3584	0.979592	700.94	0.535714	1089.39	111.5	0.67	5.49	1688.33	7.54	1685.86	7.53	-2.48	-0.15
96	225	129	33	3600	0.978489	702.23	0.536667	1088.45	118.05	0	5.4	1696.67	7.54	1693.81	7.53	-2.86	-0.17
96	226	130	34	3616	0.977367	703.5	0.537611	1087.53	124.76	0.67	5.32	1706.18	7.55	1703.47	7.54	-2.71	-0.16
96	227	131	35	3632	0.976227	704.75	0.538546	1086.64	131.63	0	5.23	1714.21	7.55	1711.14	7.54	-3.07	-0.18
96	228	132	36	3648	0.975069	705.98	0.539474	1085.77	138.65	0.66	5.15	1723.41	7.56	1720.51	7.55	-2.9	-0.17
96	229	133	37	3664	0.973894	707.19	0.540393	1084.92	145.83	0	5.07	1731.14	7.56	1727.89	7.55	-3.25	-0.19
96	230	134	38	3680	0.972703	708.38	0.541304	1084.09	153.15	0.66	5	1740.04	7.57	1736.96	7.55	-3.07	-0.18
96	231	135	39	3696	0.971496	709.55	0.542208	1083.28	160.62	0	4.92	1747.47	7.56	1744.07	7.55	-3.4	-0.2
96	232	136	40	3712	0.970273	710.7	0.543103	1082.49	168.24	0.66	4.85	1756.08	7.57	1752.86	7.56	-3.21	-0.18
96	233	137	41	3728	0.969036	711.83	0.543991	1081.72	176	0	4.78	1763.23	7.57	1759.7	7.55	-3.53	-0.2
96	234	138	42	3744	0.967784	712.95	0.544872	1080.96	183.9	0.65	4.71	1771.55	7.57	1768.22	7.56	-3.33	-0.19
96	235	139	43	3760	0.966519	714.04	0.545745	1080.23	191.95	0	4.64	1778.42	7.57	1774.79	7.55	-3.63	-0.2
96	236	140	44	3776	0.96524	715.12	0.54661	1079.51	200.13	0.65	4.57	1786.46	7.57	1783.04	7.56	-3.42	-0.19
96	237	141	45	3792	0.963948	716.18	0.547468	1078.82	208.45	0	4.5	1793.06	7.57	1789.35	7.55	-3.71	-0.21
96	238	142	46	3808	0.962644	717.22	0.548319	1078.14	216.91	0.65	4.44	1800.82	7.57	1797.33	7.55	-3.49	-0.19
96	239	143	47	3824	0.961328	718.24	0.549163	1077.48	225.5	0	4.38	1807.16	7.56	1803.39	7.55	-3.77	-0.21
96	240	144	48	3840	0.96	719.25	0.55	1076.83	234.22	0.65	4.32	1814.66	7.56	1811.12	7.55	-3.54	-0.2
96	241	145	49	3856	0.958661	720.24	0.55083	1076.2	243.07	0	4.26	1820.74	7.55	1816.93	7.54	-3.81	-0.21
96	242	146	50	3872	0.957312	721.22	0.551653	1075.59	252.05	0.64	4.2	1827.98	7.55	1824.41	7.54	-3.57	-0.2
96	243	147	51	3888	0.955952	722.17	0.552469	1075	261.16	0	4.14	1833.81	7.55	1829.98	7.53	-3.83	-0.21
96	244	148	52	3904	0.954582	723.12	0.553279	1074.42	270.4	0.64	4.09	1840.8	7.54	1837.21	7.53	-3.59	-0.2
96	245	149	53	3920	0.953203	724.04	0.554082	1073.85	279.75	0	4.03	1846.38	7.54	1842.54	7.52	-3.84	-0.21
96	246	150	54	3936	0.951814	724.95	0.554878	1073.31	289.23	0.64	3.98	1853.12	7.53	1849.53	7.52	-3.6	-0.19
96	247	151	55	3952	0.950417	725.85	0.555668	1072.77	298.84	0	3.92	1858.47	7.52	1854.63	7.51	-3.84	-0.21
96	248	152	56	3968	0.949011	726.73	0.556452	1072.25	308.56	0.64	3.87	1864.97	7.52	1861.38	7.51	-3.59	-0.19
96	249	153	57	3984	0.947598	727.6	0.557229	1071.75	318.4	0	3.82	1870.08	7.51	1866.26	7.5	-3.82	-0.2
96	250	154	58	4000	0.946176	728.45	0.558	1071.26	328.35	0.63	3.77	1876.34	7.51	1872.77	7.49	-3.57	-0.19
96	251	155	59	4016	0.944747	729.29	0.558765	1070.79	338.43	0	3.73	1881.23	7.49	1877.43	7.48	-3.8	-0.2
96	252	156	60	4032	0.943311	730.11	0.559524	1070.32	348.61	0.63	3.68	1887.26	7.49	1883.72	7.48	-3.54	-0.19
96	253	157	61	4048	0.941868	730.92	0.560277	1069.88	358.91	0	3.63	1891.92	7.48	1888.16	7.46	-3.76	-0.2
96	254	158	62	4064	0.940418	731.72	0.561024	1069.44	369.32	0.63	3.59	1897.73	7.47	1894.23	7.46	-3.5	-0.18
96	255	159	63	4080	0.938962	732.5	0.561765	1069.02	379.84	0	3.54	1902.18	7.46	1898.46	7.44	-3.72	-0.2
96	256	160	64	4096	0.9375	733.27	0.5625	1068.61	390.47	0.62	3.5	1907.77	7.45	1904.31	7.44	-3.46	-0.18
96	257	161	65	4112	0.936032	734.03	0.56323	1068.22	401.21	0	3.46	1912	7.44	1908.33	7.43	-3.67	-0.19
96	258	162	66	4128	0.934559	734.78	0.563953	1067.83	412.05	0.62	3.41	1917.38	7.43	1913.97	7.42	-3.41	-0.18
96	259	163	67	4144	0.933081	735.51	0.564672	1067.46	423	0	3.37	1921.41	7.42	1917.79	7.4	-3.62	-0.19
96	260	164	68	4160	0.931598	736.23	0.565385	1067.11	434.05	0.62	3.33	1926.57	7.41	1923.22	7.4	-3.35	-0.17
96	261	165	69	4176	0.93011	736.94	0.566092	1066.76	445.2	0	3.29	1930.4	7.4	1926.84	7.38	-3.56	-0.18
96	262	166	70	4192	0.928617	737.63	0.566794	1066.43	456.46	0.62	3.26	1935.36	7.39	1932.06	7.37	-3.3	-0.17
96	263	167	71	4208	0.927121	738.32	0.56749	1066.1	467.81	0	3.22	1938.99	7.37	1935.49	7.36	-3.5	-0.18
96	264	168	72	4224	0.92562	738.99	0.568182	1065.79	479.27	0.62	3.18	1943.75	7.36	1940.51	7.35	-3.24	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
96	265	169	73	4240	0.924115	739.65	0.568868	1065.49	490.82	0	3.14	1947.18	7.35	1943.74	7.33	-3.44	-0.18
96	266	170	74	4256	0.922607	740.3	0.569549	1065.2	502.47	0.61	3.11	1951.75	7.34	1948.58	7.33	-3.17	-0.16
96	267	171	75	4272	0.921096	740.94	0.570225	1064.92	514.22	0	3.07	1955	7.32	1951.62	7.31	-3.38	-0.17
96	268	172	76	4288	0.919581	741.56	0.570896	1064.65	526.06	0.61	3.04	1959.37	7.31	1956.26	7.3	-3.11	-0.16
96	269	173	77	4304	0.918064	742.18	0.571561	1064.4	537.99	0	3.01	1962.43	7.3	1959.12	7.28	-3.31	-0.17
96	270	174	78	4320	0.916543	742.79	0.572222	1064.15	550.02	0.61	2.97	1966.62	7.28	1963.57	7.27	-3.05	-0.16
96	271	175	79	4336	0.91502	743.38	0.572878	1063.91	562.14	0	2.94	1969.5	7.27	1966.25	7.26	-3.25	-0.17
96	272	176	80	4352	0.913495	743.97	0.573529	1063.69	574.35	0.61	2.91	1973.51	7.26	1970.52	7.24	-2.99	-0.15
96	273	177	81	4368	0.911967	744.54	0.574176	1063.47	586.65	0	2.88	1976.21	7.24	1973.02	7.23	-3.19	-0.16
96	274	178	82	4384	0.910437	745.11	0.574818	1063.26	599.04	0.6	2.85	1980.04	7.23	1977.11	7.22	-2.93	-0.15
96	275	179	83	4400	0.908906	745.66	0.575455	1063.07	611.52	0	2.81	1982.57	7.21	1979.44	7.2	-3.14	-0.16
96	276	180	84	4416	0.907372	746.21	0.576087	1062.88	624.08	0.6	2.79	1986.22	7.2	1983.34	7.19	-2.88	-0.15
96	277	181	85	4432	0.905837	746.74	0.576715	1062.7	636.73	0	2.76	1988.58	7.18	1985.5	7.17	-3.08	-0.16
96	278	182	86	4448	0.904301	747.27	0.577338	1062.53	649.46	0.6	2.73	1992.06	7.17	1989.24	7.16	-2.83	-0.14
96	279	183	87	4464	0.902763	747.79	0.577957	1062.37	662.28	0	2.7	1994.26	7.15	1991.23	7.14	-3.03	-0.15
96	280	184	88	4480	0.901224	748.3	0.578571	1062.22	675.18	0.6	2.67	1997.57	7.13	1994.79	7.12	-2.78	-0.14
96	281	185	89	4496	0.899685	748.79	0.579181	1062.08	688.16	0	2.64	1999.61	7.12	1996.62	7.11	-2.99	-0.15
96	282	186	90	4512	0.898144	749.29	0.579787	1061.94	701.23	0.6	2.62	2002.76	7.1	2000.02	7.09	-2.74	-0.14
96	283	187	91	4528	0.896603	749.77	0.580389	1061.82	714.37	0	2.59	2004.64	7.08	2001.69	7.07	-2.95	-0.15
96	284	188	92	4544	0.895061	750.24	0.580986	1061.7	727.6	0.59	2.57	2007.62	7.07	2004.92	7.06	-2.7	-0.13
96	285	189	93	4560	0.893518	750.7	0.581579	1061.59	740.9	0	2.54	2009.35	7.05	2006.43	7.04	-2.91	-0.15
96	286	190	94	4576	0.891975	751.16	0.582168	1061.49	754.28	0.59	2.51	2012.18	7.04	2009.5	7.03	-2.67	-0.13
96	287	191	95	4592	0.890432	751.61	0.582753	1061.4	767.74	0	2.49	2013.75	7.02	2010.86	7.01	-2.89	-0.14
96	288	192	96	4608	0.888889	752.05	0.583333	1061.31	781.28	0.59	2.47	2016.42	7	2013.77	6.99	-2.65	-0.13
96	289	193	97	4624	0.887346	752.48	0.58391	1061.23	794.89	0	2.44	2017.84	6.98	2014.98	6.97	-2.87	-0.14
96	290	194	98	4640	0.885803	752.9	0.584483	1061.16	808.57	0.59	2.42	2020.37	6.97	2017.73	6.96	-2.64	-0.13
96	291	195	99	4656	0.88426	753.32	0.585052	1061.1	822.33	0	2.4	2021.64	6.95	2018.79	6.94	-2.85	-0.14
96	292	196	100	4672	0.882717	753.72	0.585616	1061.05	836.17	0.59	2.37	2024.02	6.93	2021.39	6.92	-2.63	-0.13
96	293	197	101	4688	0.881175	754.12	0.586177	1061	850.07	0	2.35	2025.16	6.91	2022.31	6.9	-2.85	-0.14
96	294	198	102	4704	0.879633	754.52	0.586735	1060.96	864.05	0.58	2.33	2027.39	6.9	2024.76	6.89	-2.63	-0.13
96	295	199	103	4720	0.878093	754.9	0.587288	1060.93	878.1	0	2.31	2028.38	6.88	2025.53	6.87	-2.85	-0.14
96	296	200	104	4736	0.876552	755.28	0.587838	1060.9	892.22	0.58	2.29	2030.47	6.86	2027.83	6.85	-2.64	-0.13
96	297	201	105	4752	0.875013	755.65	0.588384	1060.88	906.41	0	2.27	2031.33	6.84	2028.46	6.83	-2.87	-0.14
96	298	202	106	4768	0.873474	756.01	0.588926	1060.87	920.67	0.58	2.24	2033.28	6.82	2030.62	6.81	-2.66	-0.13
96	299	203	107	4784	0.871937	756.37	0.589465	1060.86	934.99	0	2.22	2034	6.8	2031.11	6.79	-2.89	-0.14
96	300	204	108	4800	0.8704	756.72	0.59	1060.86	949.38	0.58	2.2	2035.81	6.79	2033.13	6.78	-2.69	-0.13
96	301	205	109	4816	0.868865	757.06	0.590532	1060.87	963.85	0	2.19	2036.41	6.77	2033.48	6.76	-2.92	-0.14
96	302	206	110	4832	0.86733	757.4	0.59106	1060.89	978.37	0.58	2.17	2038.09	6.75	2035.36	6.74	-2.73	-0.13
96	303	207	111	4848	0.865797	757.73	0.591584	1060.91	992.96	0	2.15	2038.55	6.73	2035.58	6.72	-2.97	-0.15
96	304	208	112	4864	0.864266	758.05	0.592105	1060.93	1007.62	0.57	2.13	2040.1	6.71	2037.32	6.7	-2.77	-0.14
96	305	209	113	4880	0.862736	758.37	0.592623	1060.97	1022.34	0	2.11	2040.43	6.69	2037.41	6.68	-3.02	-0.15
96	306	210	114	4896	0.861207	758.68	0.593137	1061	1037.13	0.57	2.09	2041.85	6.67	2039.02	6.66	-2.83	-0.14
96	307	211	115	4912	0.85968	758.98	0.593648	1061.05	1051.98	0	2.07	2042.07	6.65	2038.98	6.64	-3.09	-0.15
96	308	212	116	4928	0.858155	759.28	0.594156	1061.1	1066.89	0.57	2.06	2043.36	6.63	2040.45	6.62	-2.91	-0.14
96	309	213	117	4944	0.856631	759.57	0.59466	1061.16	1081.86	0	2.04	2043.45	6.61	2040.29	6.6	-3.16	-0.16
96	310	214	118	4960	0.855109	759.86	0.595161	1061.22	1096.9	0.57	2.02	2044.62	6.6	2041.63	6.59	-2.99	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
96	311	215	119	4976	0.853589	760.14	0.595659	1061.29	1111.99	0	2	2044.59	6.57	2041.34	6.56	-3.25	-0.16
96	312	216	120	4992	0.852071	760.41	0.596154	1061.36	1127.14	0.57	1.99	2045.64	6.56	2042.56	6.55	-3.08	-0.15
96	313	217	121	5008	0.850555	760.68	0.596645	1061.44	1142.36	0	1.97	2045.5	6.54	2042.14	6.52	-3.35	-0.16
96	314	218	122	5024	0.849041	760.94	0.597134	1061.52	1157.63	0.56	1.96	2046.42	6.52	2043.23	6.51	-3.19	-0.16
96	315	219	123	5040	0.847528	761.2	0.597619	1061.61	1172.96	0	1.94	2046.16	6.5	2042.7	6.48	-3.46	-0.17
96	316	220	124	5056	0.846018	761.45	0.598101	1061.71	1188.35	0.56	1.92	2046.98	6.48	2043.67	6.47	-3.31	-0.16
96	317	221	125	5072	0.84451	761.69	0.59858	1061.81	1203.8	0	1.91	2046.6	6.46	2043.02	6.44	-3.59	-0.18
96	318	222	126	5088	0.843005	761.93	0.599057	1061.92	1219.3	0.56	1.89	2047.3	6.44	2043.86	6.43	-3.44	-0.17
96	319	223	127	5104	0.841501	762.17	0.59953	1062.03	1234.86	0	1.88	2046.82	6.42	2043.09	6.4	-3.73	-0.18
96	320	224	128	5120	0.84	762.4	0.6	1062.14	1250.48	0.56	1.86	2047.4	6.4	2043.82	6.39	-3.59	-0.18
96	321	225	129	5136	0.838501	762.62	0.600467	1062.26	1266.15	0	1.85	2046.81	6.38	2042.94	6.36	-3.88	-0.19
96	322	226	130	5152	0.837005	762.84	0.600932	1062.39	1281.88	0.56	1.83	2047.29	6.36	2043.54	6.35	-3.74	-0.18
96	323	227	131	5168	0.835511	763.05	0.601393	1062.52	1297.66	0	1.82	2046.59	6.34	2042.55	6.32	-4.04	-0.2
96	324	228	132	5184	0.834019	763.26	0.601852	1062.66	1313.49	0.56	1.81	2046.95	6.32	2043.04	6.31	-3.91	-0.19
96	325	229	133	5200	0.83253	763.47	0.602308	1062.8	1329.38	0	1.79	2046.15	6.3	2041.94	6.28	-4.22	-0.21
96	326	230	134	5216	0.831044	763.67	0.602761	1062.94	1345.31	0.55	1.78	2046.41	6.28	2042.31	6.26	-4.1	-0.2
96	327	231	135	5232	0.82956	763.86	0.603211	1063.09	1361.31	0	1.77	2045.51	6.26	2041.1	6.24	-4.41	-0.22
96	328	232	136	5248	0.828079	764.05	0.603659	1063.24	1377.35	0.55	1.75	2045.66	6.24	2041.36	6.22	-4.3	-0.21
96	329	233	137	5264	0.8266	764.24	0.604103	1063.4	1393.44	0	1.74	2044.66	6.21	2040.05	6.2	-4.61	-0.23
96	330	234	138	5280	0.825124	764.42	0.604545	1063.57	1409.59	0.55	1.73	2044.71	6.2	2040.2	6.18	-4.51	-0.22
96	331	235	139	5296	0.823651	764.59	0.604985	1063.73	1425.78	0	1.71	2043.61	6.17	2038.77	6.16	-4.83	-0.24
96	332	236	140	5312	0.82218	764.76	0.605422	1063.9	1442.03	0.55	1.7	2043.55	6.16	2038.82	6.14	-4.73	-0.23
96	333	237	141	5328	0.820713	764.93	0.605856	1064.08	1458.32	0	1.69	2042.36	6.13	2037.29	6.12	-5.06	-0.25
96	334	238	142	5344	0.819248	765.09	0.606287	1064.26	1474.67	0.55	1.68	2042.2	6.11	2037.23	6.1	-4.97	-0.24
96	335	239	143	5360	0.817786	765.25	0.606716	1064.44	1491.06	0	1.66	2040.91	6.09	2035.6	6.08	-5.31	-0.26
96	336	240	144	5376	0.816327	765.41	0.607143	1064.63	1507.5	0.55	1.65	2040.66	6.07	2035.43	6.06	-5.23	-0.26
96	337	241	145	5392	0.81487	765.56	0.607567	1064.82	1523.99	0	1.64	2039.28	6.05	2033.7	6.03	-5.57	-0.27
96	338	242	146	5408	0.813417	765.7	0.607988	1065.02	1540.52	0.54	1.63	2038.93	6.03	2033.43	6.02	-5.5	-0.27
96	339	243	147	5424	0.811966	765.84	0.608407	1065.22	1557.11	0	1.62	2037.45	6.01	2031.6	5.99	-5.85	-0.29
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
97	193	96	-1	3088	0.999973	647.88	0.498705	1155.99	0.13	0	9.78	1293.78	6.7	1302.88	6.75	9.1	0.7
97	194	97	0	3104	1	650.13	0.5	1153.99	0	-0.72	10	1309.16	6.75	1317.99	6.79	8.82	0.67
97	195	98	1	3120	0.999974	652.35	0.501282	1152.03	0.12	0	9.79	1325.29	6.8	1332.66	6.83	7.38	0.55
97	196	99	2	3136	0.999896	654.53	0.502551	1150.11	0.5	-0.71	9.58	1339.73	6.84	1347.32	6.87	7.59	0.56
97	197	100	3	3152	0.999768	656.67	0.503807	1148.23	1.11	0	9.38	1355.37	6.88	1361.56	6.91	6.19	0.45
97	198	101	4	3168	0.999592	658.77	0.505051	1146.4	1.97	-0.71	9.19	1369.33	6.92	1375.79	6.95	6.45	0.47
97	199	102	5	3184	0.999369	660.84	0.506281	1144.61	3.06	0	9	1384.49	6.96	1389.59	6.98	5.1	0.37
97	200	103	6	3200	0.9991	662.87	0.5075	1142.85	4.39	-0.71	8.82	1397.99	6.99	1403.4	7.02	5.41	0.39
97	201	104	7	3216	0.998787	664.87	0.508706	1141.14	5.94	0	8.64	1412.69	7.03	1416.79	7.05	4.1	0.29
97	202	105	8	3232	0.998432	666.84	0.509901	1139.46	7.72	-0.7	8.47	1425.74	7.06	1430.19	7.08	4.44	0.31
97	203	106	9	3248	0.998034	668.77	0.511084	1137.82	9.73	0	8.3	1439.98	7.09	1443.16	7.11	3.18	0.22
97	204	107	10	3264	0.997597	670.67	0.512255	1136.21	11.95	-0.7	8.14	1452.6	7.12	1456.17	7.14	3.56	0.24
97	205	108	11	3280	0.997121	672.54	0.513415	1134.65	14.39	0	7.98	1466.41	7.15	1468.74	7.16	2.34	0.16
97	206	109	12	3296	0.996607	674.38	0.514563	1133.11	17.04	-0.7	7.83	1478.6	7.18	1481.36	7.19	2.76	0.19

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97	207	110	13	3312	0.996056	676.19	0.5157	1131.61	19.91	0	7.68	1491.98	7.21	1493.55	7.22	1.57	0.11
97	208	111	14	3328	0.99547	677.96	0.516827	1130.14	22.98	-0.69	7.54	1503.76	7.23	1505.79	7.24	2.02	0.13
97	209	112	15	3344	0.994849	679.71	0.517943	1128.71	26.25	0	7.4	1516.73	7.26	1517.6	7.26	0.87	0.06
97	210	113	16	3360	0.994195	681.43	0.519048	1127.3	29.72	-0.69	7.26	1528.12	7.28	1529.47	7.28	1.36	0.09
97	211	114	17	3376	0.993509	683.12	0.520142	1125.93	33.4	0	7.13	1540.68	7.3	1540.92	7.3	0.24	0.02
97	212	115	18	3392	0.992791	684.78	0.521226	1124.59	37.27	-0.69	7	1551.68	7.32	1552.43	7.32	0.75	0.05
97	213	116	19	3408	0.992043	686.41	0.5223	1123.28	41.33	0	6.88	1563.86	7.34	1563.52	7.34	-0.34	-0.02
97	214	117	20	3424	0.991266	688.02	0.523364	1122	45.58	-0.68	6.75	1574.47	7.36	1574.68	7.36	0.2	0.01
97	215	118	21	3440	0.99046	689.6	0.524419	1120.74	50.02	0	6.63	1586.27	7.38	1585.41	7.37	-0.86	-0.05
97	216	119	22	3456	0.989626	691.15	0.525463	1119.52	54.64	-0.68	6.52	1596.52	7.39	1596.23	7.39	-0.29	-0.02
97	217	120	23	3472	0.988766	692.68	0.526498	1118.32	59.45	0	6.41	1607.96	7.41	1606.63	7.4	-1.33	-0.08
97	218	121	24	3488	0.98788	694.19	0.527523	1117.15	64.44	-0.68	6.3	1617.85	7.42	1617.12	7.42	-0.73	-0.05
97	219	122	25	3504	0.986969	695.67	0.528539	1116	69.6	0	6.19	1628.92	7.44	1627.18	7.43	-1.74	-0.11
97	220	123	26	3520	0.986033	697.12	0.529545	1114.88	74.94	-0.67	6.09	1638.47	7.45	1637.34	7.44	-1.13	-0.07
97	221	124	27	3536	0.985074	698.55	0.530543	1113.79	80.45	0	5.99	1649.19	7.46	1647.08	7.45	-2.11	-0.13
97	222	125	28	3552	0.984092	699.96	0.531532	1112.72	86.13	-0.67	5.89	1658.4	7.47	1656.93	7.46	-1.48	-0.09
97	223	126	29	3568	0.983088	701.34	0.532511	1111.68	91.98	0	5.79	1668.79	7.48	1666.35	7.47	-2.44	-0.15
97	224	127	30	3584	0.982063	702.71	0.533482	1110.66	98	-0.67	5.7	1677.67	7.49	1675.88	7.48	-1.79	-0.11
97	225	128	31	3600	0.981017	704.04	0.534444	1109.66	104.18	0	5.61	1687.73	7.5	1684.99	7.49	-2.73	-0.16
97	226	129	32	3616	0.979951	705.36	0.535398	1108.68	110.52	-0.67	5.52	1696.29	7.51	1694.23	7.5	-2.06	-0.12
97	227	130	33	3632	0.978866	706.66	0.536344	1107.73	117.02	0	5.43	1706.02	7.52	1703.04	7.5	-2.99	-0.18
97	228	131	34	3648	0.977762	707.93	0.537281	1106.8	123.67	-0.66	5.35	1714.27	7.52	1711.97	7.51	-2.3	-0.13
97	229	132	35	3664	0.97664	709.19	0.53821	1105.9	130.49	0	5.26	1723.69	7.53	1720.49	7.51	-3.2	-0.19
97	230	133	36	3680	0.975501	710.42	0.53913	1105.01	137.45	-0.66	5.18	1731.64	7.53	1729.14	7.52	-2.5	-0.14
97	231	134	37	3696	0.974345	711.63	0.540043	1104.15	144.57	0	5.1	1740.76	7.54	1737.36	7.52	-3.39	-0.2
97	232	135	38	3712	0.973172	712.83	0.540948	1103.3	151.83	-0.66	5.03	1748.41	7.54	1745.73	7.52	-2.67	-0.15
97	233	136	39	3728	0.971983	714	0.541845	1102.48	159.25	0	4.95	1757.23	7.54	1753.68	7.53	-3.55	-0.2
97	234	137	40	3744	0.970779	715.15	0.542735	1101.67	166.81	-0.65	4.88	1764.59	7.54	1761.77	7.53	-2.82	-0.16
97	235	138	41	3760	0.969561	716.29	0.543617	1100.89	174.51	0	4.81	1773.12	7.55	1769.44	7.53	-3.68	-0.21
97	236	139	42	3776	0.968328	717.41	0.544492	1100.12	182.35	-0.65	4.74	1780.2	7.54	1777.26	7.53	-2.94	-0.17
97	237	140	43	3792	0.967081	718.51	0.545359	1099.38	190.33	0	4.67	1788.45	7.55	1784.66	7.53	-3.79	-0.21
97	238	141	44	3808	0.965822	719.59	0.546218	1098.65	198.46	-0.65	4.6	1795.26	7.54	1792.22	7.53	-3.04	-0.17
97	239	142	45	3824	0.964549	720.65	0.547071	1097.94	206.72	0	4.53	1803.23	7.54	1799.36	7.53	-3.87	-0.22
97	240	143	46	3840	0.963264	721.7	0.547917	1097.25	215.11	-0.65	4.47	1809.77	7.54	1806.66	7.53	-3.11	-0.17
97	241	144	47	3856	0.961967	722.73	0.548755	1096.57	223.63	0	4.41	1817.48	7.54	1813.54	7.53	-3.93	-0.22
97	242	145	48	3872	0.960658	723.74	0.549587	1095.91	232.29	-0.64	4.35	1823.76	7.54	1820.59	7.52	-3.17	-0.17
97	243	146	49	3888	0.959339	724.73	0.550412	1095.27	241.08	0	4.29	1831.2	7.54	1827.22	7.52	-3.98	-0.22
97	244	147	50	3904	0.958009	725.71	0.55123	1094.65	250	-0.64	4.23	1837.23	7.53	1834.03	7.52	-3.2	-0.17
97	245	148	51	3920	0.956668	726.68	0.552041	1094.04	259.04	0	4.17	1844.42	7.53	1840.41	7.51	-4.01	-0.22
97	246	149	52	3936	0.955318	727.62	0.552846	1093.45	268.21	-0.64	4.12	1850.2	7.52	1846.97	7.51	-3.23	-0.17
97	247	150	53	3952	0.953958	728.55	0.553644	1092.87	277.5	0	4.06	1857.14	7.52	1853.12	7.5	-4.02	-0.22
97	248	151	54	3968	0.952588	729.47	0.554435	1092.31	286.91	-0.64	4.01	1862.68	7.51	1859.44	7.5	-3.23	-0.17
97	249	152	55	3984	0.95121	730.37	0.555221	1091.77	296.45	0	3.95	1869.37	7.51	1865.35	7.49	-4.02	-0.22
97	250	153	56	4000	0.949824	731.26	0.556	1091.24	306.1	-0.63	3.9	1874.68	7.5	1871.45	7.49	-3.23	-0.17
97	251	154	57	4016	0.948429	732.13	0.556773	1090.72	315.87	0	3.85	1881.13	7.49	1877.13	7.48	-4	-0.21
97	252	155	58	4032	0.947027	732.99	0.55754	1090.22	325.76	-0.63	3.8	1886.21	7.48	1883	7.47	-3.21	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
97	253	156	59	4048	0.945617	733.83	0.5583	1089.73	335.76	0	3.76	1892.43	7.48	1888.45	7.46	-3.98	-0.21
97	254	157	60	4064	0.9442	734.66	0.559055	1089.26	345.88	-0.63	3.71	1897.28	7.47	1894.1	7.46	-3.18	-0.17
97	255	158	61	4080	0.942776	735.48	0.559804	1088.8	356.11	0	3.66	1903.28	7.46	1899.33	7.45	-3.95	-0.21
97	256	159	62	4096	0.941345	736.28	0.560547	1088.35	366.45	-0.62	3.62	1907.91	7.45	1904.76	7.44	-3.15	-0.17
97	257	160	63	4112	0.939908	737.07	0.561284	1087.92	376.9	0	3.57	1913.68	7.45	1909.78	7.43	-3.91	-0.2
97	258	161	64	4128	0.938465	737.85	0.562016	1087.5	387.45	-0.62	3.53	1918.1	7.43	1915	7.42	-3.1	-0.16
97	259	162	65	4144	0.937016	738.61	0.562741	1087.1	398.12	0	3.49	1923.66	7.43	1919.8	7.41	-3.86	-0.2
97	260	163	66	4160	0.935562	739.36	0.563462	1086.7	408.89	-0.62	3.44	1927.87	7.41	1924.81	7.4	-3.06	-0.16
97	261	164	67	4176	0.934103	740.1	0.564176	1086.32	419.77	0	3.4	1933.22	7.41	1929.41	7.39	-3.81	-0.2
97	262	165	68	4192	0.932638	740.83	0.564885	1085.95	430.75	-0.62	3.36	1937.22	7.39	1934.22	7.38	-3	-0.16
97	263	166	69	4208	0.931169	741.54	0.565589	1085.59	441.83	0	3.32	1942.36	7.39	1938.61	7.37	-3.75	-0.19
97	264	167	70	4224	0.929695	742.24	0.566288	1085.25	453.01	-0.62	3.28	1946.17	7.37	1943.22	7.36	-2.94	-0.15
97	265	168	71	4240	0.928216	742.93	0.566981	1084.91	464.3	0	3.25	1951.1	7.36	1947.42	7.35	-3.69	-0.19
97	266	169	72	4256	0.926734	743.61	0.567669	1084.59	475.68	-0.61	3.21	1954.72	7.35	1951.83	7.34	-2.88	-0.15
97	267	170	73	4272	0.925248	744.28	0.568352	1084.28	487.16	0	3.17	1959.46	7.34	1955.83	7.33	-3.63	-0.19
97	268	171	74	4288	0.923758	744.93	0.56903	1083.98	498.74	-0.61	3.14	1962.87	7.32	1960.05	7.31	-2.82	-0.14
97	269	172	75	4304	0.922265	745.58	0.569703	1083.69	510.41	0	3.1	1967.42	7.31	1963.86	7.3	-3.56	-0.18
97	270	173	76	4320	0.920768	746.21	0.57037	1083.41	522.18	-0.61	3.07	1970.65	7.3	1967.9	7.29	-2.76	-0.14
97	271	174	77	4336	0.919269	746.83	0.571033	1083.15	534.04	0	3.03	1975.01	7.29	1971.51	7.27	-3.5	-0.18
97	272	175	78	4352	0.917766	747.45	0.571691	1082.89	545.99	-0.61	3	1978.06	7.27	1975.37	7.26	-2.7	-0.14
97	273	176	79	4368	0.916261	748.05	0.572344	1082.64	558.04	0	2.97	1982.24	7.26	1978.8	7.25	-3.43	-0.17
97	274	177	80	4384	0.914753	748.64	0.572993	1082.41	570.17	-0.6	2.93	1985.11	7.24	1982.47	7.24	-2.63	-0.13
97	275	178	81	4400	0.913243	749.22	0.573636	1082.18	582.4	0	2.9	1989.1	7.23	1985.73	7.22	-3.37	-0.17
97	276	179	82	4416	0.911731	749.79	0.574275	1081.96	594.71	-0.6	2.87	1991.8	7.22	1989.22	7.21	-2.58	-0.13
97	277	180	83	4432	0.910216	750.35	0.57491	1081.76	607.12	0	2.84	1995.61	7.2	1992.3	7.19	-3.31	-0.17
97	278	181	84	4448	0.9087	750.91	0.57554	1081.56	619.6	-0.6	2.81	1998.14	7.19	1995.62	7.18	-2.52	-0.13
97	279	182	85	4464	0.907183	751.45	0.576165	1081.37	632.18	0	2.78	2001.78	7.17	1998.53	7.16	-3.25	-0.16
97	280	183	86	4480	0.905663	751.98	0.576786	1081.19	644.84	-0.6	2.75	2004.14	7.16	2001.68	7.15	-2.46	-0.12
97	281	184	87	4496	0.904143	752.51	0.577402	1081.02	657.58	0	2.72	2007.61	7.14	2004.41	7.13	-3.2	-0.16
97	282	185	88	4512	0.902621	753.02	0.578014	1080.86	670.41	-0.6	2.7	2009.81	7.13	2007.4	7.12	-2.41	-0.12
97	283	186	89	4528	0.901098	753.53	0.578622	1080.71	683.32	0	2.67	2013.12	7.11	2009.96	7.1	-3.15	-0.16
97	284	187	90	4544	0.899573	754.02	0.579225	1080.57	696.31	-0.59	2.64	2015.15	7.1	2012.78	7.09	-2.37	-0.12
97	285	188	91	4560	0.898049	754.51	0.579825	1080.43	709.38	0	2.62	2018.29	7.08	2015.19	7.07	-3.11	-0.15
97	286	189	92	4576	0.896523	754.99	0.58042	1080.31	722.53	-0.59	2.59	2020.17	7.06	2017.85	7.06	-2.33	-0.12
97	287	190	93	4592	0.894997	755.46	0.58101	1080.19	735.76	0	2.56	2023.16	7.05	2020.09	7.04	-3.07	-0.15
97	288	191	94	4608	0.89347	755.92	0.581597	1080.08	749.06	-0.59	2.54	2024.88	7.03	2022.59	7.02	-2.29	-0.11
97	289	192	95	4624	0.891943	756.38	0.58218	1079.98	762.45	0	2.51	2027.71	7.02	2024.67	7.01	-3.04	-0.15
97	290	193	96	4640	0.890416	756.82	0.582759	1079.89	775.91	-0.59	2.49	2029.29	7	2027.02	6.99	-2.27	-0.11
97	291	194	97	4656	0.888889	757.26	0.583333	1079.8	789.44	0	2.47	2031.96	6.98	2028.95	6.97	-3.01	-0.15
97	292	195	98	4672	0.887362	757.69	0.583904	1079.72	803.06	-0.59	2.44	2033.39	6.96	2031.14	6.96	-2.25	-0.11
97	293	196	99	4688	0.885834	758.11	0.584471	1079.65	816.74	0	2.42	2035.92	6.95	2032.92	6.94	-2.99	-0.15
97	294	197	100	4704	0.884307	758.53	0.585034	1079.59	830.5	-0.58	2.4	2037.2	6.93	2034.97	6.92	-2.23	-0.11
97	295	198	101	4720	0.882781	758.93	0.585593	1079.53	844.33	0	2.37	2039.58	6.91	2036.6	6.9	-2.98	-0.15
97	296	199	102	4736	0.881255	759.33	0.586149	1079.49	858.23	-0.58	2.35	2040.72	6.89	2038.49	6.89	-2.23	-0.11
97	297	200	103	4752	0.879729	759.72	0.5867	1079.44	872.21	0	2.33	2042.96	6.88	2039.98	6.87	-2.98	-0.15
97	298	201	104	4768	0.878204	760.11	0.587248	1079.41	886.25	-0.58	2.31	2043.96	6.86	2041.73	6.85	-2.23	-0.11

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
97	299	202	105	4784	0.876679	760.48	0.587793	1079.38	900.36	0	2.29	2046.06	6.84	2043.07	6.83	-2.99	-0.15
97	300	203	106	4800	0.875156	760.85	0.588333	1079.36	914.55	-0.58	2.27	2046.92	6.82	2044.68	6.82	-2.25	-0.11
97	301	204	107	4816	0.873633	761.22	0.58887	1079.35	928.8	0	2.25	2048.88	6.81	2045.88	6.8	-3	-0.15
97	302	205	108	4832	0.872111	761.57	0.589404	1079.34	943.12	-0.58	2.23	2049.62	6.79	2047.35	6.78	-2.27	-0.11
97	303	206	109	4848	0.87059	761.92	0.589934	1079.34	957.5	0	2.21	2051.44	6.77	2048.41	6.76	-3.03	-0.15
97	304	207	110	4864	0.86907	762.26	0.590461	1079.35	971.96	-0.57	2.19	2052.04	6.75	2049.74	6.74	-2.3	-0.11
97	305	208	111	4880	0.867552	762.6	0.590984	1079.36	986.47	0	2.17	2053.73	6.73	2050.66	6.72	-3.07	-0.15
97	306	209	112	4896	0.866034	762.93	0.591503	1079.38	1001.06	-0.57	2.15	2054.21	6.71	2051.86	6.71	-2.34	-0.11
97	307	210	113	4912	0.864518	763.25	0.59202	1079.41	1015.71	0	2.13	2055.76	6.7	2052.65	6.69	-3.11	-0.15
97	308	211	114	4928	0.863004	763.57	0.592532	1079.44	1030.42	-0.57	2.11	2056.12	6.68	2053.72	6.67	-2.4	-0.12
97	309	212	115	4944	0.861491	763.88	0.593042	1079.48	1045.19	0	2.09	2057.54	6.66	2054.38	6.65	-3.17	-0.15
97	310	213	116	4960	0.859979	764.18	0.593548	1079.52	1060.03	-0.57	2.08	2057.77	6.64	2055.32	6.63	-2.46	-0.12
97	311	214	117	4976	0.858469	764.48	0.594051	1079.57	1074.93	0	2.06	2059.08	6.62	2055.84	6.61	-3.24	-0.16
97	312	215	118	4992	0.856961	764.77	0.594551	1079.63	1089.89	-0.57	2.04	2059.19	6.6	2056.65	6.59	-2.53	-0.12
97	313	216	119	5008	0.855454	765.06	0.595048	1079.69	1104.91	0	2.03	2060.37	6.58	2057.05	6.57	-3.31	-0.16
97	314	217	120	5024	0.853949	765.34	0.595541	1079.76	1119.99	-0.56	2.01	2060.36	6.56	2057.74	6.55	-2.62	-0.13
97	315	218	121	5040	0.852446	765.61	0.596032	1079.83	1135.13	0	1.99	2061.42	6.54	2058.01	6.53	-3.41	-0.17
97	316	219	122	5056	0.850945	765.88	0.596519	1079.91	1150.33	-0.56	1.98	2061.29	6.52	2058.57	6.51	-2.72	-0.13
97	317	220	123	5072	0.849446	766.14	0.597003	1079.99	1165.59	0	1.96	2062.23	6.51	2058.73	6.49	-3.51	-0.17
97	318	221	124	5088	0.847949	766.4	0.597484	1080.08	1180.9	-0.56	1.94	2061.99	6.48	2059.17	6.48	-2.83	-0.14
97	319	222	125	5104	0.846454	766.65	0.597962	1080.18	1196.28	0	1.93	2062.82	6.47	2059.2	6.46	-3.62	-0.18
97	320	223	126	5120	0.844961	766.9	0.598437	1080.28	1211.71	-0.56	1.91	2062.47	6.45	2059.52	6.44	-2.95	-0.14
97	321	224	127	5136	0.84347	767.14	0.59891	1080.38	1227.19	0	1.9	2063.18	6.43	2059.43	6.42	-3.75	-0.18
97	322	225	128	5152	0.841981	767.38	0.599379	1080.49	1242.74	-0.56	1.88	2062.72	6.41	2059.63	6.4	-3.09	-0.15
97	323	226	129	5168	0.840495	767.61	0.599845	1080.61	1258.34	0	1.87	2063.32	6.39	2059.43	6.38	-3.89	-0.19
97	324	227	130	5184	0.839011	767.83	0.600309	1080.73	1273.99	-0.56	1.85	2062.75	6.37	2059.52	6.36	-3.23	-0.16
97	325	228	131	5200	0.837529	768.05	0.600769	1080.85	1289.69	0	1.84	2063.24	6.35	2059.2	6.34	-4.04	-0.2
97	326	229	132	5216	0.83605	768.27	0.601227	1080.98	1305.46	-0.55	1.83	2062.57	6.33	2059.17	6.32	-3.39	-0.16
97	327	230	133	5232	0.834572	768.48	0.601682	1081.12	1321.27	0	1.81	2062.95	6.31	2058.74	6.3	-4.21	-0.2
97	328	231	134	5248	0.833098	768.68	0.602134	1081.26	1337.14	-0.55	1.8	2062.17	6.29	2058.6	6.28	-3.57	-0.17
97	329	232	135	5264	0.831626	768.88	0.602584	1081.4	1353.06	0	1.78	2062.45	6.27	2058.06	6.26	-4.39	-0.21
97	330	233	136	5280	0.830156	769.08	0.60303	1081.55	1369.03	-0.55	1.77	2061.57	6.25	2057.81	6.24	-3.76	-0.18
97	331	234	137	5296	0.828689	769.27	0.603474	1081.7	1385.05	0	1.76	2061.74	6.23	2057.16	6.21	-4.58	-0.22
97	332	235	138	5312	0.827225	769.46	0.603916	1081.86	1401.12	-0.55	1.75	2060.76	6.21	2056.8	6.2	-3.96	-0.19
97	333	236	139	5328	0.825763	769.64	0.604354	1082.02	1417.25	0	1.73	2060.83	6.19	2056.04	6.17	-4.79	-0.23
97	334	237	140	5344	0.824303	769.82	0.60479	1082.19	1433.42	-0.55	1.72	2059.75	6.17	2055.58	6.15	-4.17	-0.2
97	335	238	141	5360	0.822847	769.99	0.605224	1082.36	1449.64	0	1.71	2059.72	6.15	2054.71	6.13	-5.01	-0.24
97	336	239	142	5376	0.821393	770.16	0.605655	1082.53	1465.92	-0.55	1.69	2058.54	6.13	2054.14	6.11	-4.4	-0.21
97	337	240	143	5392	0.819942	770.32	0.606083	1082.71	1482.24	0	1.68	2058.41	6.11	2053.17	6.09	-5.24	-0.26
97	338	241	144	5408	0.818494	770.48	0.606509	1082.9	1498.61	-0.54	1.67	2057.14	6.09	2052.5	6.07	-4.64	-0.23
97	339	242	145	5424	0.817048	770.64	0.606932	1083.08	1515.02	0	1.66	2056.92	6.07	2051.43	6.05	-5.49	-0.27
97	340	243	146	5440	0.815606	770.79	0.607353	1083.27	1531.49	-0.54	1.65	2055.56	6.05	2050.65	6.03	-4.9	-0.24
97	341	244	147	5456	0.814166	770.93	0.607771	1083.47	1548	0	1.64	2055.23	6.03	2049.48	6.01	-5.75	-0.28
97	342	245	148	5472	0.812729	771.08	0.608187	1083.67	1564.56	-0.54	1.62	2053.78	6.01	2048.61	5.99	-5.17	-0.25
97	343	246	149	5488	0.811295	771.22	0.608601	1083.87	1581.16	0	1.61	2053.36	5.99	2047.33	5.97	-6.03	-0.29

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
98	195	97	-1	3120	0.999974	652.35	0.498718	1175.9	0.12	0	9.79	1301.41	6.67	1310.53	6.72	9.12	0.7
98	196	98	0	3136	1	654.59	0.5	1173.88	0	0.71	10	1318.24	6.73	1326.57	6.77	8.34	0.63
98	197	99	1	3152	0.999974	656.8	0.501269	1171.91	0.12	0	9.79	1332.95	6.77	1340.36	6.8	7.41	0.55
98	198	100	2	3168	0.999898	658.97	0.502525	1169.98	0.49	0.71	9.58	1348.85	6.81	1355.96	6.85	7.11	0.52
98	199	101	3	3184	0.999773	661.11	0.503769	1168.09	1.1	0	9.39	1363.09	6.85	1369.32	6.88	6.23	0.45
98	200	102	4	3200	0.9996	663.21	0.505	1166.24	1.95	0.71	9.19	1378.51	6.89	1384.48	6.92	5.97	0.43
98	201	103	5	3216	0.999381	665.27	0.506219	1164.43	3.03	0	9.01	1392.27	6.93	1397.42	6.95	5.14	0.37
98	202	104	6	3232	0.999118	667.3	0.507426	1162.66	4.34	0.7	8.83	1407.22	6.97	1412.15	6.99	4.93	0.35
98	203	105	7	3248	0.998811	669.29	0.508621	1160.94	5.88	0	8.65	1420.54	7	1424.68	7.02	4.14	0.29
98	204	106	8	3264	0.998462	671.25	0.509804	1159.24	7.65	0.7	8.48	1435.04	7.03	1439	7.05	3.97	0.28
98	205	107	9	3280	0.998073	673.18	0.510976	1157.59	9.63	0	8.32	1447.91	7.06	1451.14	7.08	3.23	0.22
98	206	108	10	3296	0.997644	675.08	0.512136	1155.97	11.84	0.7	8.16	1461.97	7.1	1465.05	7.11	3.09	0.21
98	207	109	11	3312	0.997176	676.95	0.513285	1154.39	14.25	0	8	1474.42	7.12	1476.81	7.13	2.39	0.16
98	208	110	12	3328	0.996672	678.78	0.514423	1152.84	16.88	0.69	7.85	1488.04	7.15	1490.33	7.17	2.28	0.15
98	209	111	13	3344	0.996131	680.59	0.51555	1151.32	19.72	0	7.7	1500.08	7.18	1501.7	7.19	1.62	0.11
98	210	112	14	3360	0.995556	682.36	0.516667	1149.84	22.76	0.69	7.56	1513.29	7.21	1514.84	7.21	1.55	0.1
98	211	113	15	3376	0.994946	684.11	0.517773	1148.39	26	0	7.42	1524.92	7.23	1525.85	7.23	0.93	0.06
98	212	114	16	3392	0.994304	685.82	0.518868	1146.97	29.45	0.69	7.28	1537.73	7.25	1538.61	7.26	0.88	0.06
98	213	115	17	3408	0.99363	687.51	0.519953	1145.58	33.09	0	7.15	1548.97	7.27	1549.26	7.27	0.29	0.02
98	214	116	18	3424	0.992925	689.17	0.521028	1144.23	36.92	0.68	7.02	1561.39	7.3	1561.67	7.3	0.28	0.02
98	215	117	19	3440	0.99219	690.81	0.522093	1142.9	40.95	0	6.9	1572.25	7.31	1571.97	7.31	-0.28	-0.02
98	216	118	20	3456	0.991427	692.41	0.523148	1141.6	45.16	0.68	6.78	1584.28	7.33	1584.01	7.33	-0.27	-0.02
98	217	119	21	3472	0.990635	693.99	0.524194	1140.34	49.56	0	6.66	1594.77	7.35	1593.97	7.35	-0.8	-0.05
98	218	120	22	3488	0.989816	695.55	0.525229	1139.1	54.14	0.68	6.55	1606.43	7.37	1605.67	7.37	-0.76	-0.05
98	219	121	23	3504	0.98897	697.08	0.526256	1137.88	58.91	0	6.43	1616.56	7.38	1615.3	7.38	-1.26	-0.08
98	220	122	24	3520	0.988099	698.58	0.527273	1136.7	63.85	0.67	6.32	1627.87	7.4	1626.66	7.39	-1.2	-0.07
98	221	123	25	3536	0.987203	700.06	0.528281	1135.54	68.97	0	6.22	1637.65	7.41	1635.97	7.4	-1.68	-0.1
98	222	124	26	3552	0.986284	701.52	0.529279	1134.4	74.27	0.67	6.11	1648.6	7.43	1647	7.42	-1.6	-0.1
98	223	125	27	3568	0.985341	702.95	0.530269	1133.3	79.73	0	6.01	1658.04	7.44	1655.99	7.43	-2.05	-0.12
98	224	126	28	3584	0.984375	704.36	0.53125	1132.21	85.37	0.67	5.92	1668.64	7.45	1666.7	7.44	-1.95	-0.12
98	225	127	29	3600	0.983388	705.75	0.532222	1131.15	91.17	0	5.82	1677.75	7.46	1675.38	7.45	-2.37	-0.14
98	226	128	30	3616	0.982379	707.11	0.533186	1130.12	97.13	0.67	5.73	1688.03	7.47	1685.77	7.46	-2.25	-0.13
98	227	129	31	3632	0.98135	708.45	0.534141	1129.11	103.26	0	5.64	1696.81	7.47	1694.15	7.46	-2.66	-0.16
98	228	130	32	3648	0.980302	709.77	0.535088	1128.12	109.55	0.66	5.55	1706.76	7.49	1704.24	7.47	-2.52	-0.15
98	229	131	33	3664	0.979234	711.07	0.536026	1127.16	116	0	5.46	1715.23	7.49	1712.33	7.48	-2.91	-0.17
98	230	132	34	3680	0.978147	712.35	0.536957	1126.21	122.6	0.66	5.37	1724.87	7.5	1722.11	7.49	-2.76	-0.16
98	231	133	35	3696	0.977043	713.6	0.537879	1125.29	129.36	0	5.29	1733.04	7.5	1729.91	7.49	-3.13	-0.18
98	232	134	36	3712	0.975922	714.84	0.538793	1124.39	136.27	0.66	5.21	1742.36	7.51	1739.4	7.5	-2.96	-0.17
98	233	135	37	3728	0.974783	716.06	0.5397	1123.51	143.33	0	5.13	1750.23	7.51	1746.92	7.5	-3.31	-0.19
98	234	136	38	3744	0.973628	717.25	0.540598	1122.66	150.54	0.65	5.06	1759.26	7.52	1756.13	7.5	-3.13	-0.18
98	235	137	39	3760	0.972458	718.43	0.541489	1121.82	157.9	0	4.98	1766.84	7.52	1763.37	7.5	-3.46	-0.2
98	236	138	40	3776	0.971273	719.59	0.542373	1121	165.4	0.65	4.91	1775.57	7.52	1772.3	7.51	-3.27	-0.18
98	237	139	41	3792	0.970072	720.73	0.543249	1120.2	173.04	0	4.84	1782.86	7.52	1779.27	7.51	-3.59	-0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
98	238	140	42	3808	0.968858	721.85	0.544118	1119.42	180.83	0.65	4.77	1791.32	7.53	1787.92	7.51	-3.39	-0.19
98	239	141	43	3824	0.96763	722.95	0.544979	1118.66	188.75	0	4.7	1798.33	7.52	1794.64	7.51	-3.7	-0.21
98	240	142	44	3840	0.966389	724.04	0.545833	1117.92	196.81	0.65	4.63	1806.51	7.53	1803.02	7.51	-3.48	-0.19
98	241	143	45	3856	0.965135	725.11	0.54668	1117.2	205.01	0	4.56	1813.25	7.52	1809.48	7.51	-3.78	-0.21
98	242	144	46	3872	0.963869	726.16	0.547521	1116.49	213.34	0.64	4.5	1821.16	7.53	1817.6	7.51	-3.56	-0.2
98	243	145	47	3888	0.96259	727.19	0.548354	1115.81	221.8	0	4.44	1827.64	7.52	1823.81	7.51	-3.83	-0.21
98	244	146	48	3904	0.961301	728.21	0.54918	1115.13	230.4	0.64	4.38	1835.28	7.52	1831.67	7.51	-3.61	-0.2
98	245	147	49	3920	0.96	729.21	0.55	1114.48	239.12	0	4.32	1841.51	7.52	1837.63	7.5	-3.88	-0.21
98	246	148	50	3936	0.958689	730.19	0.550813	1113.84	247.97	0.64	4.26	1848.89	7.52	1845.25	7.5	-3.64	-0.2
98	247	149	51	3952	0.957367	731.16	0.551619	1113.22	256.95	0	4.2	1854.87	7.51	1850.97	7.49	-3.9	-0.21
98	248	150	52	3968	0.956035	732.11	0.552419	1112.62	266.05	0.64	4.15	1862	7.51	1858.34	7.49	-3.66	-0.2
98	249	151	53	3984	0.954694	733.05	0.553213	1112.03	275.28	0	4.09	1867.73	7.5	1863.83	7.49	-3.91	-0.21
98	250	152	54	4000	0.953344	733.97	0.554	1111.46	284.62	0.63	4.04	1874.62	7.5	1870.96	7.48	-3.66	-0.2
98	251	153	55	4016	0.951985	734.88	0.554781	1110.9	294.09	0	3.98	1880.12	7.49	1876.21	7.47	-3.9	-0.21
98	252	154	56	4032	0.950617	735.77	0.555556	1110.36	303.68	0.63	3.93	1886.76	7.49	1883.11	7.47	-3.65	-0.19
98	253	155	57	4048	0.949242	736.65	0.556324	1109.83	313.38	0	3.88	1892.02	7.48	1888.14	7.46	-3.88	-0.21
98	254	156	58	4064	0.947858	737.51	0.557087	1109.32	323.2	0.63	3.83	1898.43	7.47	1894.81	7.46	-3.63	-0.19
98	255	157	59	4080	0.946467	738.36	0.557843	1108.82	333.14	0	3.78	1903.47	7.46	1899.62	7.45	-3.85	-0.2
98	256	158	60	4096	0.945068	739.19	0.558594	1108.33	343.19	0.62	3.74	1909.65	7.46	1906.06	7.45	-3.59	-0.19
98	257	159	61	4112	0.943663	740.02	0.559339	1107.86	353.35	0	3.69	1914.47	7.45	1910.65	7.43	-3.81	-0.2
98	258	160	62	4128	0.942251	740.82	0.560078	1107.4	363.62	0.62	3.64	1920.42	7.44	1916.87	7.43	-3.55	-0.19
98	259	161	63	4144	0.940833	741.62	0.560811	1106.96	374	0	3.6	1925.03	7.43	1921.26	7.42	-3.77	-0.2
98	260	162	64	4160	0.939408	742.4	0.561538	1106.53	384.48	0.62	3.56	1930.76	7.43	1927.26	7.41	-3.5	-0.18
98	261	163	65	4176	0.937978	743.17	0.562261	1106.11	395.08	0	3.51	1935.15	7.41	1931.44	7.4	-3.71	-0.19
98	262	164	66	4192	0.936542	743.93	0.562977	1105.71	405.78	0.62	3.47	1940.68	7.41	1937.23	7.39	-3.45	-0.18
98	263	165	67	4208	0.935101	744.67	0.563688	1105.31	416.59	0	3.43	1944.86	7.39	1941.21	7.38	-3.65	-0.19
98	264	166	68	4224	0.933655	745.4	0.564394	1104.93	427.5	0.62	3.39	1950.17	7.39	1946.79	7.37	-3.38	-0.17
98	265	167	69	4240	0.932204	746.12	0.565094	1104.56	438.51	0	3.35	1954.16	7.37	1950.57	7.36	-3.59	-0.18
98	266	168	70	4256	0.930748	746.83	0.565789	1104.21	449.62	0.61	3.31	1959.27	7.37	1955.95	7.35	-3.32	-0.17
98	267	169	71	4272	0.929288	747.53	0.566479	1103.86	460.83	0	3.27	1963.05	7.35	1959.53	7.34	-3.52	-0.18
98	268	170	72	4288	0.927824	748.21	0.567164	1103.53	472.14	0.61	3.24	1967.96	7.34	1964.71	7.33	-3.25	-0.17
98	269	171	73	4304	0.926355	748.88	0.567844	1103.21	483.55	0	3.2	1971.55	7.33	1968.1	7.32	-3.45	-0.18
98	270	172	74	4320	0.924883	749.55	0.568519	1102.9	495.06	0.61	3.16	1976.27	7.32	1973.09	7.31	-3.18	-0.16
98	271	173	75	4336	0.923408	750.2	0.569188	1102.6	506.66	0	3.13	1979.67	7.31	1976.29	7.29	-3.38	-0.17
98	272	174	76	4352	0.921929	750.84	0.569853	1102.31	518.35	0.61	3.09	1984.2	7.29	1981.09	7.28	-3.11	-0.16
98	273	175	77	4368	0.920447	751.47	0.570513	1102.04	530.14	0	3.06	1987.42	7.28	1984.11	7.27	-3.31	-0.17
98	274	176	78	4384	0.918962	752.08	0.571168	1101.77	542.02	0.6	3.03	1991.76	7.27	1988.72	7.26	-3.04	-0.15
98	275	177	79	4400	0.917474	752.69	0.571818	1101.51	553.99	0	2.99	1994.79	7.25	1991.56	7.24	-3.24	-0.16
98	276	178	80	4416	0.915984	753.29	0.572464	1101.27	566.06	0.6	2.96	1998.95	7.24	1995.98	7.23	-2.97	-0.15
98	277	179	81	4432	0.914491	753.88	0.573105	1101.03	578.21	0	2.93	2001.81	7.23	1998.65	7.22	-3.16	-0.16
98	278	180	82	4448	0.912996	754.46	0.573741	1100.8	590.45	0.6	2.9	2005.79	7.22	2002.89	7.2	-2.9	-0.14
98	279	181	83	4464	0.911499	755.02	0.574373	1100.59	602.78	0	2.87	2008.48	7.2	2005.38	7.19	-3.1	-0.15
98	280	182	84	4480	0.91	755.58	0.575	1100.38	615.2	0.6	2.84	2012.28	7.19	2009.45	7.18	-2.83	-0.14
98	281	183	85	4496	0.908499	756.13	0.575623	1100.18	627.7	0	2.81	2014.8	7.17	2011.77	7.16	-3.03	-0.15
98	282	184	86	4512	0.906997	756.67	0.576241	1099.99	640.28	0.6	2.78	2018.43	7.16	2015.66	7.15	-2.77	-0.14
98	283	185	87	4528	0.905493	757.2	0.576855	1099.81	652.95	0	2.75	2020.78	7.14	2017.82	7.13	-2.97	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
98	284	186	88	4544	0.903987	757.72	0.577465	1099.64	665.7	0.59	2.72	2024.24	7.13	2021.54	7.12	-2.71	-0.13
98	285	187	89	4560	0.902481	758.23	0.57807	1099.48	678.54	0	2.69	2026.44	7.11	2023.53	7.1	-2.91	-0.14
98	286	188	90	4576	0.900973	758.74	0.578671	1099.33	691.45	0.59	2.67	2029.74	7.1	2027.08	7.09	-2.65	-0.13
98	287	189	91	4592	0.899465	759.23	0.579268	1099.19	704.45	0	2.64	2031.77	7.08	2028.92	7.07	-2.85	-0.14
98	288	190	92	4608	0.897955	759.72	0.579861	1099.05	717.53	0.59	2.61	2034.91	7.07	2032.3	7.06	-2.6	-0.13
98	289	191	93	4624	0.896445	760.19	0.58045	1098.93	730.68	0	2.59	2036.79	7.05	2033.98	7.04	-2.8	-0.14
98	290	192	94	4640	0.894935	760.66	0.581034	1098.81	743.92	0.59	2.56	2039.76	7.03	2037.21	7.02	-2.56	-0.13
98	291	193	95	4656	0.893424	761.12	0.581615	1098.7	757.23	0	2.54	2041.49	7.02	2038.73	7.01	-2.76	-0.14
98	292	194	96	4672	0.891912	761.57	0.582192	1098.6	770.61	0.59	2.51	2044.32	7	2041.8	6.99	-2.52	-0.12
98	293	195	97	4688	0.890401	762.02	0.582765	1098.5	784.07	0	2.49	2045.89	6.98	2043.17	6.97	-2.72	-0.13
98	294	196	98	4704	0.888889	762.45	0.583333	1098.42	797.61	0.58	2.47	2048.57	6.97	2046.08	6.96	-2.48	-0.12
98	295	197	99	4720	0.887377	762.88	0.583898	1098.34	811.22	0	2.44	2050	6.95	2047.3	6.94	-2.7	-0.13
98	296	198	100	4736	0.885866	763.3	0.584459	1098.27	824.91	0.58	2.42	2052.52	6.93	2050.06	6.93	-2.46	-0.12
98	297	199	101	4752	0.884354	763.72	0.585017	1098.2	838.66	0	2.4	2053.81	6.92	2051.14	6.91	-2.67	-0.13
98	298	200	102	4768	0.882843	764.12	0.58557	1098.15	852.49	0.58	2.38	2056.19	6.9	2053.75	6.89	-2.44	-0.12
98	299	201	103	4784	0.881332	764.52	0.58612	1098.1	866.39	0	2.35	2057.34	6.88	2054.68	6.87	-2.66	-0.13
98	300	202	104	4800	0.879822	764.91	0.586667	1098.06	880.36	0.58	2.33	2059.58	6.87	2057.14	6.86	-2.43	-0.12
98	301	203	105	4816	0.878313	765.29	0.587209	1098.02	894.4	0	2.31	2060.59	6.85	2057.94	6.84	-2.65	-0.13
98	302	204	106	4832	0.876804	765.67	0.587748	1098	908.51	0.58	2.29	2062.69	6.83	2060.25	6.82	-2.43	-0.12
98	303	205	107	4848	0.875295	766.04	0.588284	1097.97	922.69	0	2.27	2063.57	6.81	2060.91	6.8	-2.66	-0.13
98	304	206	108	4864	0.873788	766.4	0.588816	1097.96	936.93	0.57	2.25	2065.52	6.79	2063.08	6.79	-2.44	-0.12
98	305	207	109	4880	0.872282	766.76	0.589344	1097.95	951.25	0	2.23	2066.27	6.77	2063.6	6.77	-2.67	-0.13
98	306	208	110	4896	0.870776	767.11	0.589869	1097.95	965.62	0.57	2.21	2068.1	6.76	2065.63	6.75	-2.46	-0.12
98	307	209	111	4912	0.869272	767.45	0.590391	1097.96	980.07	0	2.19	2068.71	6.74	2066.02	6.73	-2.69	-0.13
98	308	210	112	4928	0.867769	767.78	0.590909	1097.97	994.58	0.57	2.17	2070.41	6.72	2067.92	6.71	-2.49	-0.12
98	309	211	113	4944	0.866267	768.11	0.591424	1097.99	1009.15	0	2.15	2070.9	6.7	2068.17	6.69	-2.73	-0.13
98	310	212	114	4960	0.864766	768.44	0.591935	1098.02	1023.79	0.57	2.13	2072.46	6.69	2069.93	6.68	-2.53	-0.12
98	311	213	115	4976	0.863267	768.75	0.592444	1098.05	1038.49	0	2.12	2072.83	6.67	2070.06	6.66	-2.77	-0.13
98	312	214	116	4992	0.861769	769.06	0.592949	1098.08	1053.25	0.57	2.1	2074.26	6.65	2071.69	6.64	-2.58	-0.12
98	313	215	117	5008	0.860272	769.37	0.59345	1098.13	1068.08	0	2.08	2074.51	6.63	2071.68	6.62	-2.82	-0.14
98	314	216	118	5024	0.858777	769.67	0.593949	1098.18	1082.97	0.56	2.06	2075.82	6.61	2073.18	6.6	-2.64	-0.13
98	315	217	119	5040	0.857284	769.96	0.594444	1098.23	1097.91	0	2.05	2075.94	6.59	2073.05	6.58	-2.89	-0.14
98	316	218	120	5056	0.855792	770.24	0.594937	1098.29	1112.92	0.56	2.03	2077.13	6.57	2074.42	6.56	-2.71	-0.13
98	317	219	121	5072	0.854302	770.52	0.595426	1098.36	1127.99	0	2.01	2077.14	6.55	2074.17	6.54	-2.97	-0.14
98	318	220	122	5088	0.852814	770.8	0.595912	1098.43	1143.12	0.56	2	2078.21	6.54	2075.42	6.53	-2.79	-0.13
98	319	221	123	5104	0.851328	771.07	0.596395	1098.51	1158.3	0	1.98	2078.1	6.51	2075.05	6.5	-3.05	-0.15
98	320	222	124	5120	0.849844	771.33	0.596875	1098.59	1173.55	0.56	1.96	2079.05	6.5	2076.17	6.49	-2.89	-0.14
98	321	223	125	5136	0.848361	771.59	0.597352	1098.68	1188.85	0	1.95	2078.83	6.48	2075.68	6.47	-3.15	-0.15
98	322	224	126	5152	0.846881	771.84	0.597826	1098.77	1204.21	0.56	1.93	2079.67	6.46	2076.68	6.45	-2.99	-0.14
98	323	225	127	5168	0.845403	772.09	0.598297	1098.87	1219.62	0	1.92	2079.34	6.44	2076.07	6.43	-3.27	-0.16
98	324	226	128	5184	0.843926	772.33	0.598765	1098.98	1235.09	0.56	1.9	2080.06	6.42	2076.95	6.41	-3.11	-0.15
98	325	227	129	5200	0.842452	772.57	0.599231	1099.09	1250.62	0	1.89	2079.62	6.4	2076.23	6.39	-3.39	-0.16
98	326	228	130	5216	0.84098	772.8	0.599693	1099.2	1266.2	0.55	1.87	2080.23	6.38	2076.99	6.37	-3.25	-0.16
98	327	229	131	5232	0.83951	773.02	0.600153	1099.32	1281.83	0	1.86	2079.68	6.36	2076.15	6.35	-3.53	-0.17
98	328	230	132	5248	0.838043	773.25	0.60061	1099.44	1297.52	0.55	1.84	2080.19	6.34	2076.8	6.33	-3.39	-0.16
98	329	231	133	5264	0.836578	773.46	0.601064	1099.57	1313.26	0	1.83	2079.53	6.32	2075.85	6.31	-3.68	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
98	330	232	134	5280	0.835115	773.67	0.601515	1099.71	1329.06	0.55	1.82	2079.93	6.3	2076.38	6.29	-3.55	-0.17
98	331	233	135	5296	0.833654	773.88	0.601964	1099.84	1344.9	0	1.8	2079.17	6.28	2075.33	6.27	-3.84	-0.19
98	332	234	136	5312	0.832196	774.08	0.60241	1099.99	1360.8	0.55	1.79	2079.47	6.26	2075.75	6.25	-3.72	-0.18
98	333	235	137	5328	0.830741	774.28	0.602853	1100.14	1376.76	0	1.78	2078.61	6.24	2074.59	6.23	-4.02	-0.19
98	334	236	138	5344	0.829288	774.47	0.603293	1100.29	1392.76	0.55	1.76	2078.8	6.22	2074.89	6.21	-3.9	-0.19
98	335	237	139	5360	0.827837	774.66	0.603731	1100.44	1408.81	0	1.75	2077.84	6.2	2073.63	6.19	-4.21	-0.2
98	336	238	140	5376	0.826389	774.84	0.604167	1100.61	1424.91	0.55	1.74	2077.92	6.18	2073.82	6.17	-4.1	-0.2
98	337	239	141	5392	0.824943	775.02	0.604599	1100.77	1441.07	0	1.73	2076.87	6.16	2072.45	6.15	-4.42	-0.21
98	338	240	142	5408	0.823501	775.19	0.60503	1100.94	1457.27	0.54	1.71	2076.85	6.14	2072.54	6.13	-4.31	-0.21
98	339	241	143	5424	0.82206	775.36	0.605457	1101.12	1473.52	0	1.7	2075.7	6.12	2071.07	6.11	-4.63	-0.22
98	340	242	144	5440	0.820623	775.53	0.605882	1101.29	1489.82	0.54	1.69	2075.59	6.1	2071.05	6.09	-4.54	-0.22
98	341	243	145	5456	0.819188	775.69	0.606305	1101.48	1506.16	0	1.68	2074.35	6.08	2069.48	6.07	-4.87	-0.24
98	342	244	146	5472	0.817756	775.85	0.606725	1101.66	1522.56	0.54	1.66	2074.14	6.06	2069.36	6.05	-4.78	-0.23
98	343	245	147	5488	0.816327	776	0.607143	1101.85	1539	0	1.65	2072.8	6.04	2067.69	6.03	-5.11	-0.25
98	344	246	148	5504	0.8149	776.15	0.607558	1102.05	1555.49	0.54	1.64	2072.5	6.02	2067.46	6.01	-5.03	-0.24
98	345	247	149	5520	0.813476	776.29	0.607971	1102.25	1572.02	0	1.63	2071.07	6	2065.69	5.99	-5.37	-0.26
98	346	248	150	5536	0.812055	776.43	0.608382	1102.45	1588.6	0.54	1.62	2070.67	5.98	2065.37	5.97	-5.3	-0.26
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
99	197	98	-1	3152	0.999974	656.8	0.498731	1195.95	0.12	0	9.79	1308.92	6.64	1318.05	6.69	9.13	0.69
99	198	99	0	3168	1	659.04	0.5	1193.92	0	-0.71	10	1324.33	6.69	1333.19	6.73	8.86	0.66
99	199	100	1	3184	0.999975	661.24	0.501256	1191.93	0.12	0	9.79	1340.5	6.74	1347.92	6.77	7.42	0.55
99	200	101	2	3200	0.9999	663.4	0.5025	1189.98	0.49	-0.71	9.59	1355.01	6.78	1362.63	6.81	7.62	0.56
99	201	102	3	3216	0.999777	665.53	0.503731	1188.08	1.09	0	9.39	1370.69	6.82	1376.92	6.85	6.23	0.45
99	202	103	4	3232	0.999608	667.62	0.50495	1186.22	1.93	-0.7	9.2	1384.73	6.86	1391.2	6.89	6.48	0.47
99	203	104	5	3248	0.999393	669.68	0.506158	1184.4	3	0	9.02	1399.94	6.9	1405.07	6.92	5.13	0.37
99	204	105	6	3264	0.999135	671.71	0.507353	1182.61	4.3	-0.7	8.84	1413.52	6.93	1418.94	6.96	5.43	0.38
99	205	106	7	3280	0.998834	673.7	0.508537	1180.87	5.83	0	8.66	1428.27	6.97	1432.4	6.99	4.13	0.29
99	206	107	8	3296	0.998492	675.65	0.509709	1179.16	7.57	-0.7	8.5	1441.41	7	1445.87	7.02	4.46	0.31
99	207	108	9	3312	0.99811	677.58	0.51087	1177.49	9.54	0	8.33	1455.72	7.03	1458.92	7.05	3.2	0.22
99	208	109	10	3328	0.997689	679.47	0.512019	1175.86	11.72	-0.69	8.17	1468.42	7.06	1472	7.08	3.57	0.24
99	209	110	11	3344	0.99723	681.34	0.513158	1174.26	14.12	0	8.02	1482.3	7.09	1484.66	7.1	2.35	0.16
99	210	111	12	3360	0.996735	683.17	0.514286	1172.7	16.72	-0.69	7.87	1494.59	7.12	1497.35	7.13	2.76	0.18
99	211	112	13	3376	0.996204	684.97	0.515403	1171.17	19.53	0	7.72	1508.05	7.15	1509.63	7.15	1.58	0.1
99	212	113	14	3392	0.995639	686.74	0.516509	1169.67	22.54	-0.69	7.58	1519.93	7.17	1521.95	7.18	2.02	0.13
99	213	114	15	3408	0.995041	688.49	0.517606	1168.21	25.76	0	7.44	1532.99	7.2	1533.86	7.2	0.87	0.06
99	214	115	16	3424	0.99441	690.2	0.518692	1166.77	29.17	-0.68	7.31	1544.47	7.22	1545.82	7.22	1.35	0.09
99	215	116	17	3440	0.993748	691.89	0.519767	1165.37	32.78	0	7.17	1557.13	7.24	1557.36	7.24	0.23	0.01
99	216	117	18	3456	0.993056	693.55	0.520833	1164	36.58	-0.68	7.05	1568.23	7.26	1568.97	7.26	0.74	0.05
99	217	118	19	3472	0.992334	695.18	0.521889	1162.66	40.57	0	6.92	1580.51	7.28	1580.16	7.28	-0.35	-0.02
99	218	119	20	3488	0.991583	696.79	0.522936	1161.35	44.75	-0.68	6.8	1591.24	7.3	1591.42	7.3	0.18	0.01
99	219	120	21	3504	0.990805	698.37	0.523973	1160.07	49.11	0	6.68	1603.14	7.32	1602.26	7.32	-0.88	-0.05
99	220	121	22	3520	0.99	699.93	0.525	1158.81	53.66	-0.67	6.57	1613.5	7.33	1613.19	7.33	-0.32	-0.02
99	221	122	23	3536	0.989169	701.46	0.526018	1157.58	58.38	0	6.46	1625.04	7.35	1623.69	7.35	-1.35	-0.08
99	222	123	24	3552	0.988313	702.96	0.527027	1156.38	63.28	-0.67	6.35	1635.05	7.37	1634.29	7.36	-0.77	-0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
99	223	124	25	3568	0.987432	704.44	0.528027	1155.21	68.36	0	6.24	1646.23	7.38	1644.46	7.37	-1.77	-0.11
99	224	125	26	3584	0.986527	705.9	0.529018	1154.06	73.61	-0.67	6.14	1655.9	7.39	1654.74	7.39	-1.17	-0.07
99	225	126	27	3600	0.9856	707.33	0.53	1152.94	79.03	0	6.04	1666.74	7.41	1664.59	7.4	-2.15	-0.13
99	226	127	28	3616	0.98465	708.74	0.530973	1151.84	84.62	-0.67	5.94	1676.08	7.42	1674.55	7.41	-1.52	-0.09
99	227	128	29	3632	0.983679	710.13	0.531938	1150.77	90.37	0	5.85	1686.58	7.43	1684.09	7.42	-2.48	-0.15
99	228	129	30	3648	0.982687	711.5	0.532895	1149.72	96.29	-0.66	5.75	1695.59	7.44	1693.75	7.43	-1.84	-0.11
99	229	130	31	3664	0.981675	712.84	0.533843	1148.7	102.37	0	5.66	1705.76	7.45	1702.98	7.44	-2.78	-0.16
99	230	131	32	3680	0.980643	714.16	0.534783	1147.69	108.6	-0.66	5.57	1714.45	7.45	1712.34	7.44	-2.12	-0.12
99	231	132	33	3696	0.979592	715.46	0.535714	1146.71	115	0	5.49	1724.31	7.46	1721.27	7.45	-3.04	-0.18
99	232	133	34	3712	0.978523	716.74	0.536638	1145.76	121.55	-0.66	5.4	1732.69	7.47	1730.34	7.46	-2.36	-0.14
99	233	134	35	3728	0.977436	718	0.537554	1144.82	128.26	0	5.32	1742.24	7.48	1738.98	7.46	-3.26	-0.19
99	234	135	36	3744	0.976331	719.24	0.538462	1143.91	135.11	-0.65	5.24	1750.32	7.48	1747.76	7.47	-2.56	-0.15
99	235	136	37	3760	0.975211	720.46	0.539362	1143.02	142.12	0	5.16	1759.56	7.49	1756.12	7.47	-3.45	-0.2
99	236	137	38	3776	0.974074	721.66	0.540254	1142.15	149.27	-0.65	5.09	1767.35	7.49	1764.61	7.48	-2.74	-0.16
99	237	138	39	3792	0.972921	722.84	0.541139	1141.29	156.57	0	5.01	1776.3	7.49	1772.69	7.48	-3.61	-0.2
99	238	139	40	3808	0.971753	724.01	0.542017	1140.46	164.01	-0.65	4.94	1783.81	7.49	1780.92	7.48	-2.89	-0.16
99	239	140	41	3824	0.970571	725.15	0.542887	1139.65	171.6	0	4.87	1792.46	7.5	1788.72	7.48	-3.74	-0.21
99	240	141	42	3840	0.969375	726.27	0.54375	1138.86	179.32	-0.65	4.8	1799.69	7.5	1796.68	7.49	-3.01	-0.17
99	241	142	43	3856	0.968165	727.38	0.544606	1138.09	187.19	0	4.73	1808.07	7.5	1804.22	7.49	-3.85	-0.21
99	242	143	44	3872	0.966942	728.47	0.545455	1137.33	195.19	-0.64	4.66	1815.02	7.5	1811.92	7.49	-3.11	-0.17
99	243	144	45	3888	0.965706	729.54	0.546296	1136.59	203.33	0	4.59	1823.13	7.5	1819.19	7.49	-3.94	-0.22
99	244	145	46	3904	0.964458	730.6	0.547131	1135.88	211.6	-0.64	4.53	1829.82	7.5	1826.64	7.49	-3.18	-0.17
99	245	146	47	3920	0.963199	731.64	0.547959	1135.18	220	0	4.47	1837.66	7.5	1833.66	7.48	-4	-0.22
99	246	147	48	3936	0.961927	732.66	0.54878	1134.49	228.53	-0.64	4.41	1844.09	7.5	1840.85	7.48	-3.24	-0.18
99	247	148	49	3952	0.960645	733.66	0.549595	1133.83	237.19	0	4.35	1851.67	7.5	1847.62	7.48	-4.04	-0.22
99	248	149	50	3968	0.959352	734.65	0.550403	1133.18	245.98	-0.64	4.29	1857.85	7.49	1854.57	7.48	-3.28	-0.18
99	249	150	51	3984	0.958049	735.62	0.551205	1132.54	254.89	0	4.23	1865.17	7.49	1861.1	7.47	-4.07	-0.22
99	250	151	52	4000	0.956736	736.58	0.552	1131.93	263.93	-0.63	4.17	1871.1	7.48	1867.81	7.47	-3.3	-0.18
99	251	152	53	4016	0.955413	737.52	0.552789	1131.33	273.09	0	4.12	1878.18	7.48	1874.1	7.47	-4.08	-0.22
99	252	153	54	4032	0.954082	738.45	0.553571	1130.74	282.38	-0.63	4.07	1883.87	7.48	1880.57	7.46	-3.3	-0.18
99	253	154	55	4048	0.952741	739.36	0.554348	1130.17	291.78	0	4.01	1890.7	7.47	1886.63	7.46	-4.08	-0.22
99	254	155	56	4064	0.951392	740.26	0.555118	1129.62	301.3	-0.63	3.96	1896.16	7.47	1892.87	7.45	-3.29	-0.17
99	255	156	57	4080	0.950035	741.14	0.555882	1129.08	310.93	0	3.91	1902.76	7.46	1898.7	7.45	-4.06	-0.21
99	256	157	58	4096	0.948669	742.01	0.556641	1128.55	320.69	-0.62	3.86	1907.99	7.45	1904.72	7.44	-3.27	-0.17
99	257	158	59	4112	0.947297	742.86	0.557393	1128.04	330.56	0	3.81	1914.35	7.45	1910.32	7.43	-4.04	-0.21
99	258	159	60	4128	0.945917	743.71	0.55814	1127.54	340.54	-0.62	3.77	1919.36	7.44	1916.12	7.43	-3.24	-0.17
99	259	160	61	4144	0.94453	744.53	0.55888	1127.06	350.63	0	3.72	1925.5	7.43	1921.5	7.42	-4	-0.21
99	260	161	62	4160	0.943136	745.35	0.559615	1126.59	360.83	-0.62	3.67	1930.29	7.42	1927.08	7.41	-3.2	-0.17
99	261	162	63	4176	0.941736	746.15	0.560345	1126.14	371.14	0	3.63	1936.2	7.42	1932.25	7.4	-3.95	-0.2
99	262	163	64	4192	0.94033	746.93	0.561069	1125.69	381.56	-0.62	3.58	1940.78	7.41	1937.62	7.4	-3.15	-0.16
99	263	164	65	4208	0.938918	747.71	0.561787	1125.26	392.09	0	3.54	1946.48	7.4	1942.58	7.39	-3.9	-0.2
99	264	165	66	4224	0.9375	748.47	0.5625	1124.85	402.72	-0.62	3.5	1950.85	7.39	1947.75	7.38	-3.1	-0.16
99	265	166	67	4240	0.936077	749.22	0.563208	1124.44	413.45	0	3.46	1956.34	7.38	1952.5	7.37	-3.84	-0.2
99	266	167	68	4256	0.934649	749.96	0.56391	1124.05	424.29	-0.61	3.42	1960.5	7.37	1957.46	7.36	-3.04	-0.16
99	267	168	69	4272	0.933216	750.69	0.564607	1123.67	435.23	0	3.38	1965.78	7.36	1962.01	7.35	-3.78	-0.19
99	268	169	70	4288	0.931778	751.4	0.565299	1123.31	446.28	-0.61	3.34	1969.75	7.35	1966.77	7.34	-2.97	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
99	269	170	71	4304	0.930335	752.1	0.565985	1122.95	457.42	0	3.3	1974.83	7.34	1971.12	7.33	-3.71	-0.19
99	270	171	72	4320	0.928889	752.79	0.566667	1122.61	468.66	-0.61	3.26	1978.6	7.33	1975.69	7.32	-2.91	-0.15
99	271	172	73	4336	0.927438	753.47	0.567343	1122.28	480	0	3.23	1983.48	7.32	1979.85	7.31	-3.64	-0.18
99	272	173	74	4352	0.925984	754.14	0.568015	1121.96	491.43	-0.61	3.19	1987.06	7.31	1984.23	7.29	-2.83	-0.14
99	273	174	75	4368	0.924526	754.8	0.568681	1121.65	502.96	0	3.15	1991.75	7.3	1988.19	7.28	-3.56	-0.18
99	274	175	76	4384	0.923065	755.44	0.569343	1121.35	514.58	-0.6	3.12	1995.14	7.28	1992.38	7.27	-2.76	-0.14
99	275	176	77	4400	0.9216	756.08	0.57	1121.06	526.3	0	3.09	1999.65	7.27	1996.16	7.26	-3.49	-0.17
99	276	177	78	4416	0.920132	756.7	0.570652	1120.78	538.11	-0.6	3.05	2002.86	7.26	2000.17	7.25	-2.69	-0.13
99	277	178	79	4432	0.918662	757.32	0.5713	1120.52	550.01	0	3.02	2007.18	7.25	2003.76	7.23	-3.42	-0.17
99	278	179	80	4448	0.917189	757.92	0.571942	1120.26	562	-0.6	2.99	2010.21	7.23	2007.59	7.22	-2.62	-0.13
99	279	180	81	4464	0.915713	758.51	0.572581	1120.01	574.08	0	2.95	2014.35	7.22	2011	7.21	-3.34	-0.17
99	280	181	82	4480	0.914235	759.1	0.573214	1119.78	586.25	-0.6	2.92	2017.2	7.2	2014.65	7.2	-2.55	-0.13
99	281	182	83	4496	0.912754	759.67	0.573843	1119.55	598.5	0	2.89	2021.16	7.19	2017.89	7.18	-3.27	-0.16
99	282	183	84	4512	0.911272	760.24	0.574468	1119.33	610.85	-0.6	2.86	2023.85	7.18	2021.37	7.17	-2.48	-0.12
99	283	184	85	4528	0.909788	760.79	0.575088	1119.13	623.28	0	2.83	2027.64	7.16	2024.44	7.15	-3.2	-0.16
99	284	185	86	4544	0.908302	761.34	0.575704	1118.93	635.79	-0.59	2.8	2030.15	7.15	2027.74	7.14	-2.41	-0.12
99	285	186	87	4560	0.906814	761.87	0.576316	1118.74	648.39	0	2.77	2033.77	7.14	2030.64	7.13	-3.13	-0.15
99	286	187	88	4576	0.905325	762.4	0.576923	1118.56	661.07	-0.59	2.75	2036.13	7.12	2033.78	7.11	-2.35	-0.12
99	287	188	89	4592	0.903835	762.92	0.577526	1118.39	673.83	0	2.72	2039.58	7.11	2036.51	7.1	-3.07	-0.15
99	288	189	90	4608	0.902344	763.43	0.578125	1118.23	686.67	-0.59	2.69	2041.77	7.09	2039.48	7.08	-2.29	-0.11
99	289	190	91	4624	0.900851	763.93	0.57872	1118.08	699.59	0	2.66	2045.06	7.08	2042.05	7.07	-3.01	-0.15
99	290	191	92	4640	0.899358	764.42	0.57931	1117.94	712.6	-0.59	2.64	2047.1	7.06	2044.86	7.05	-2.23	-0.11
99	291	192	93	4656	0.897864	764.9	0.579897	1117.8	725.68	0	2.61	2050.23	7.05	2047.27	7.04	-2.96	-0.14
99	292	193	94	4672	0.896369	765.38	0.580479	1117.67	738.84	-0.59	2.59	2052.11	7.03	2049.93	7.02	-2.18	-0.11
99	293	194	95	4688	0.894874	765.85	0.581058	1117.55	752.07	0	2.56	2055.09	7.01	2052.17	7	-2.91	-0.14
99	294	195	96	4704	0.893378	766.31	0.581633	1117.44	765.39	-0.58	2.54	2056.82	7	2054.68	6.99	-2.14	-0.1
99	295	196	97	4720	0.891882	766.76	0.582203	1117.34	778.78	0	2.51	2059.64	6.98	2056.77	6.97	-2.87	-0.14
99	296	197	98	4736	0.890385	767.2	0.58277	1117.25	792.24	-0.58	2.49	2061.22	6.96	2059.12	6.96	-2.1	-0.1
99	297	198	99	4752	0.888889	767.63	0.583333	1117.16	805.78	0	2.47	2063.89	6.95	2061.06	6.94	-2.84	-0.14
99	298	199	100	4768	0.887392	768.06	0.583893	1117.08	819.39	-0.58	2.44	2065.33	6.93	2063.26	6.92	-2.07	-0.1
99	299	200	101	4784	0.885896	768.48	0.584448	1117.01	833.07	0	2.42	2067.86	6.92	2065.05	6.91	-2.81	-0.14
99	300	201	102	4800	0.8844	768.89	0.585	1116.95	846.83	-0.58	2.4	2069.16	6.9	2067.11	6.89	-2.05	-0.1
99	301	202	103	4816	0.882904	769.3	0.585548	1116.89	860.65	0	2.38	2071.54	6.88	2068.75	6.87	-2.79	-0.13
99	302	203	104	4832	0.881409	769.69	0.586093	1116.84	874.55	-0.58	2.35	2072.7	6.86	2070.66	6.86	-2.04	-0.1
99	303	204	105	4848	0.879914	770.08	0.586634	1116.8	888.52	0	2.33	2074.94	6.85	2072.16	6.84	-2.78	-0.13
99	304	205	106	4864	0.878419	770.46	0.587171	1116.76	902.55	-0.57	2.31	2075.96	6.83	2073.93	6.82	-2.03	-0.1
99	305	206	107	4880	0.876926	770.84	0.587705	1116.73	916.66	0	2.29	2078.06	6.81	2075.29	6.8	-2.77	-0.13
99	306	207	108	4896	0.875433	771.21	0.588235	1116.71	930.83	-0.57	2.27	2078.95	6.79	2076.92	6.79	-2.03	-0.1
99	307	208	109	4912	0.87394	771.57	0.588762	1116.7	945.07	0	2.25	2080.91	6.78	2078.13	6.77	-2.78	-0.13
99	308	209	110	4928	0.872449	771.93	0.589286	1116.69	959.38	-0.57	2.23	2081.67	6.76	2079.63	6.75	-2.04	-0.1
99	309	210	111	4944	0.870959	772.27	0.589806	1116.69	973.75	0	2.21	2083.5	6.74	2080.71	6.73	-2.79	-0.13
99	310	211	112	4960	0.869469	772.62	0.590323	1116.69	988.18	-0.57	2.19	2084.13	6.72	2082.07	6.72	-2.06	-0.1
99	311	212	113	4976	0.867981	772.95	0.590836	1116.71	1002.68	0	2.17	2085.83	6.71	2083.01	6.7	-2.82	-0.14
99	312	213	114	4992	0.866494	773.28	0.591346	1116.72	1017.25	-0.57	2.16	2086.34	6.69	2084.24	6.68	-2.1	-0.1
99	313	214	115	5008	0.865008	773.6	0.591853	1116.75	1031.88	0	2.14	2087.91	6.67	2085.06	6.66	-2.85	-0.14
99	314	215	116	5024	0.863524	773.92	0.592357	1116.78	1046.57	-0.56	2.12	2088.29	6.65	2086.15	6.64	-2.14	-0.1

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
99	315	216	117	5040	0.862041	774.23	0.592857	1116.82	1061.32	0	2.1	2089.74	6.63	2086.84	6.62	-2.9	-0.14
99	316	217	118	5056	0.860559	774.53	0.593354	1116.86	1076.13	-0.56	2.08	2090	6.61	2087.81	6.61	-2.19	-0.1
99	317	218	119	5072	0.859079	774.83	0.593849	1116.91	1091.01	0	2.07	2091.32	6.6	2088.36	6.59	-2.95	-0.14
99	318	219	120	5088	0.857601	775.12	0.59434	1116.96	1105.95	-0.56	2.05	2091.46	6.58	2089.21	6.57	-2.25	-0.11
99	319	220	121	5104	0.856124	775.41	0.594828	1117.02	1120.94	0	2.03	2092.66	6.56	2089.64	6.55	-3.02	-0.14
99	320	221	122	5120	0.854648	775.69	0.595313	1117.09	1136	-0.56	2.02	2092.68	6.54	2090.36	6.53	-2.33	-0.11
99	321	222	123	5136	0.853175	775.97	0.595794	1117.16	1151.11	0	2	2093.77	6.52	2090.67	6.51	-3.1	-0.15
99	322	223	124	5152	0.851703	776.24	0.596273	1117.23	1166.28	-0.56	1.98	2093.68	6.5	2091.26	6.49	-2.41	-0.12
99	323	224	125	5168	0.850233	776.5	0.596749	1117.32	1181.51	0	1.97	2094.64	6.48	2091.45	6.48	-3.19	-0.15
99	324	225	126	5184	0.848765	776.76	0.597222	1117.4	1196.79	-0.56	1.95	2094.44	6.46	2091.93	6.46	-2.51	-0.12
99	325	226	127	5200	0.847299	777.01	0.597692	1117.5	1212.14	0	1.94	2095.29	6.45	2092	6.44	-3.29	-0.16
99	326	227	128	5216	0.845835	777.26	0.59816	1117.59	1227.54	-0.55	1.92	2094.98	6.43	2092.36	6.42	-2.62	-0.13
99	327	228	129	5232	0.844373	777.5	0.598624	1117.7	1242.99	0	1.91	2095.72	6.41	2092.31	6.4	-3.41	-0.16
99	328	229	130	5248	0.842913	777.74	0.599085	1117.81	1258.5	-0.55	1.89	2095.3	6.39	2092.55	6.38	-2.74	-0.13
99	329	230	131	5264	0.841456	777.97	0.599544	1117.92	1274.06	0	1.88	2095.92	6.37	2092.39	6.36	-3.54	-0.17
99	330	231	132	5280	0.84	778.2	0.6	1118.04	1289.68	-0.55	1.86	2095.4	6.35	2092.52	6.34	-2.88	-0.14
99	331	232	133	5296	0.838547	778.42	0.600453	1118.16	1305.35	0	1.85	2095.92	6.33	2092.24	6.32	-3.68	-0.18
99	332	233	134	5312	0.837095	778.64	0.600904	1118.29	1321.08	-0.55	1.84	2095.28	6.31	2092.26	6.3	-3.03	-0.14
99	333	234	135	5328	0.835646	778.85	0.601351	1118.42	1336.85	0	1.82	2095.7	6.29	2091.87	6.28	-3.83	-0.18
99	334	235	136	5344	0.8342	779.06	0.601796	1118.56	1352.68	-0.55	1.81	2094.96	6.27	2091.78	6.26	-3.19	-0.15
99	335	236	137	5360	0.832756	779.26	0.602239	1118.7	1368.56	0	1.79	2095.27	6.25	2091.28	6.24	-3.99	-0.19
99	336	237	138	5376	0.831314	779.46	0.602679	1118.85	1384.49	-0.55	1.78	2094.44	6.23	2091.08	6.22	-3.36	-0.16
99	337	238	139	5392	0.829874	779.65	0.603116	1119	1400.47	0	1.77	2094.64	6.22	2090.47	6.2	-4.17	-0.2
99	338	239	140	5408	0.828437	779.84	0.60355	1119.16	1416.51	-0.54	1.76	2093.71	6.19	2090.16	6.18	-3.55	-0.17
99	339	240	141	5424	0.827003	780.03	0.603982	1119.32	1432.59	0	1.74	2093.81	6.18	2089.45	6.16	-4.37	-0.21
99	340	241	142	5440	0.825571	780.21	0.604412	1119.48	1448.72	-0.54	1.73	2092.78	6.16	2089.03	6.14	-3.75	-0.18
99	341	242	143	5456	0.824142	780.38	0.604839	1119.65	1464.9	0	1.72	2092.79	6.14	2088.21	6.12	-4.57	-0.22
99	342	243	144	5472	0.822715	780.55	0.605263	1119.82	1481.13	-0.54	1.71	2091.66	6.12	2087.7	6.1	-3.96	-0.19
99	343	244	145	5488	0.82129	780.72	0.605685	1120	1497.41	0	1.69	2091.57	6.1	2086.77	6.08	-4.79	-0.23
99	344	245	146	5504	0.819869	780.88	0.606105	1120.18	1513.73	-0.54	1.68	2090.35	6.08	2086.15	6.06	-4.19	-0.2
99	345	246	147	5520	0.81845	781.04	0.606522	1120.37	1530.1	0	1.67	2090.16	6.06	2085.13	6.04	-5.03	-0.24
99	346	247	148	5536	0.817034	781.19	0.606936	1120.56	1546.52	-0.54	1.66	2088.84	6.04	2084.41	6.02	-4.43	-0.21
99	347	248	149	5552	0.81562	781.34	0.607349	1120.75	1562.99	0	1.65	2088.56	6.02	2083.29	6	-5.27	-0.25
99	348	249	150	5568	0.814209	781.49	0.607759	1120.95	1579.5	-0.54	1.64	2087.16	6	2082.47	5.98	-4.69	-0.23
99	349	250	151	5584	0.812801	781.63	0.608166	1121.15	1596.06	0	1.62	2086.78	5.98	2081.25	5.96	-5.54	-0.27
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
100	199	99	-1	3184	0.999975	661.24	0.498744	1216.13	0.12	0	9.79	1316.3	6.61	1325.45	6.66	9.15	0.69
100	200	100	0	3200	1	663.47	0.5	1214.08	0	0.71	10	1333.15	6.67	1341.53	6.71	8.38	0.62
100	201	101	1	3216	0.999975	665.66	0.501244	1212.08	0.12	0	9.79	1347.93	6.71	1355.37	6.74	7.45	0.55
100	202	102	2	3232	0.999902	667.82	0.502475	1210.12	0.48	0.7	9.59	1363.87	6.75	1371.01	6.79	7.14	0.52
100	203	103	3	3248	0.999782	669.94	0.503695	1208.21	1.08	0	9.4	1378.17	6.79	1384.43	6.82	6.26	0.45
100	204	104	4	3264	0.999616	672.03	0.504902	1206.33	1.91	0.7	9.21	1393.64	6.83	1399.64	6.86	6	0.43
100	205	105	5	3280	0.999405	674.08	0.506098	1204.49	2.97	0	9.03	1407.48	6.87	1412.65	6.89	5.17	0.37
100	206	106	6	3296	0.999152	676.1	0.507282	1202.7	4.26	0.7	8.85	1422.49	6.91	1427.44	6.93	4.95	0.35

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
100	207	107	7	3312	0.998856	678.09	0.508454	1200.94	5.77	0	8.68	1435.88	6.94	1440.05	6.96	4.17	0.29
100	208	108	8	3328	0.998521	680.04	0.509615	1199.22	7.5	0.69	8.51	1450.44	6.97	1454.43	6.99	3.99	0.27
100	209	109	9	3344	0.998146	681.96	0.510766	1197.53	9.45	0	8.35	1463.4	7	1466.64	7.02	3.24	0.22
100	210	110	10	3360	0.997732	683.85	0.511905	1195.89	11.61	0.69	8.19	1477.53	7.04	1480.63	7.05	3.1	0.21
100	211	111	11	3376	0.997282	685.71	0.513033	1194.27	13.98	0	8.03	1490.07	7.06	1492.47	7.07	2.4	0.16
100	212	112	12	3392	0.996796	687.54	0.514151	1192.7	16.56	0.69	7.88	1503.77	7.09	1506.06	7.1	2.29	0.15
100	213	113	13	3408	0.996275	689.34	0.515258	1191.15	19.35	0	7.74	1515.9	7.12	1517.53	7.12	1.63	0.11
100	214	114	14	3424	0.99572	691.11	0.516355	1189.64	22.33	0.68	7.6	1529.2	7.15	1530.75	7.15	1.55	0.1
100	215	115	15	3440	0.995133	692.85	0.517442	1188.16	25.52	0	7.46	1540.92	7.17	1541.85	7.17	0.92	0.06
100	216	116	16	3456	0.994513	694.57	0.518519	1186.71	28.9	0.68	7.33	1553.82	7.19	1554.7	7.2	0.88	0.06
100	217	117	17	3472	0.993863	696.25	0.519585	1185.3	32.48	0	7.2	1565.16	7.21	1565.45	7.21	0.29	0.02
100	218	118	18	3488	0.993182	697.91	0.520642	1183.91	36.25	0.68	7.07	1577.67	7.24	1577.94	7.24	0.27	0.02
100	219	119	19	3504	0.992473	699.55	0.521689	1182.56	40.2	0	6.95	1588.64	7.25	1588.35	7.25	-0.29	-0.02
100	220	120	20	3520	0.991736	701.15	0.522727	1181.23	44.34	0.67	6.83	1600.77	7.28	1600.49	7.27	-0.29	-0.02
100	221	121	21	3536	0.990971	702.73	0.523756	1179.93	48.67	0	6.71	1611.37	7.29	1610.56	7.29	-0.82	-0.05
100	222	122	22	3552	0.990179	704.29	0.524775	1178.66	53.17	0.67	6.6	1623.14	7.31	1622.36	7.31	-0.78	-0.05
100	223	123	23	3568	0.989362	705.82	0.525785	1177.42	57.86	0	6.48	1633.38	7.32	1632.1	7.32	-1.29	-0.08
100	224	124	24	3584	0.98852	707.33	0.526786	1176.21	62.72	0.67	6.38	1644.79	7.34	1643.56	7.34	-1.23	-0.07
100	225	125	25	3600	0.987654	708.81	0.527778	1175.02	67.75	0	6.27	1654.69	7.35	1652.98	7.35	-1.71	-0.1
100	226	126	26	3616	0.986765	710.27	0.528761	1173.86	72.96	0.67	6.17	1665.75	7.37	1664.12	7.36	-1.63	-0.1
100	227	127	27	3632	0.985853	711.7	0.529736	1172.72	78.33	0	6.07	1675.31	7.38	1673.23	7.37	-2.08	-0.12
100	228	128	28	3648	0.984918	713.11	0.530702	1171.61	83.88	0.66	5.97	1686.03	7.39	1684.05	7.39	-1.99	-0.12
100	229	129	29	3664	0.983963	714.5	0.531659	1170.52	89.58	0	5.88	1695.27	7.4	1692.85	7.39	-2.42	-0.14
100	230	130	30	3680	0.982987	715.87	0.532609	1169.46	95.45	0.66	5.78	1705.66	7.42	1703.36	7.41	-2.3	-0.14
100	231	131	31	3696	0.981991	717.22	0.53355	1168.42	101.48	0	5.69	1714.57	7.42	1711.86	7.41	-2.71	-0.16
100	232	132	32	3712	0.980975	718.54	0.534483	1167.4	107.67	0.66	5.6	1724.64	7.43	1722.07	7.42	-2.57	-0.15
100	233	133	33	3728	0.979941	719.84	0.535408	1166.41	114.02	0	5.52	1733.24	7.44	1730.28	7.43	-2.96	-0.17
100	234	134	34	3744	0.978888	721.13	0.536325	1165.44	120.52	0.65	5.43	1743	7.45	1740.19	7.44	-2.81	-0.16
100	235	135	35	3760	0.977818	722.39	0.537234	1164.49	127.17	0	5.35	1751.3	7.45	1748.12	7.44	-3.18	-0.18
100	236	136	36	3776	0.976731	723.63	0.538136	1163.56	133.97	0.65	5.27	1760.75	7.46	1757.73	7.45	-3.02	-0.17
100	237	137	37	3792	0.975627	724.86	0.53903	1162.66	140.92	0	5.19	1768.75	7.46	1765.38	7.45	-3.37	-0.19
100	238	138	38	3808	0.974507	726.06	0.539916	1161.77	148.02	0.65	5.11	1777.91	7.47	1774.72	7.46	-3.19	-0.18
100	239	139	39	3824	0.973372	727.24	0.540795	1160.91	155.27	0	5.04	1785.62	7.47	1782.1	7.46	-3.53	-0.2
100	240	140	40	3840	0.972222	728.41	0.541667	1160.06	162.65	0.65	4.97	1794.49	7.48	1791.15	7.46	-3.34	-0.19
100	241	141	41	3856	0.971058	729.56	0.542531	1159.24	170.18	0	4.89	1801.92	7.48	1798.26	7.46	-3.66	-0.2
100	242	142	42	3872	0.969879	730.68	0.543388	1158.43	177.85	0.64	4.82	1810.5	7.48	1807.05	7.47	-3.46	-0.19
100	243	143	43	3888	0.968687	731.79	0.544239	1157.65	185.65	0	4.76	1817.66	7.48	1813.9	7.46	-3.76	-0.21
100	244	144	44	3904	0.967482	732.89	0.545082	1156.88	193.6	0.64	4.69	1825.97	7.48	1822.41	7.47	-3.55	-0.19
100	245	145	45	3920	0.966264	733.96	0.545918	1156.13	201.67	0	4.62	1832.86	7.48	1829.01	7.47	-3.84	-0.21
100	246	146	46	3936	0.965034	735.02	0.546748	1155.4	209.88	0.64	4.56	1840.89	7.48	1837.27	7.47	-3.62	-0.2
100	247	147	47	3952	0.963792	736.07	0.547571	1154.68	218.22	0	4.5	1847.52	7.48	1843.62	7.46	-3.9	-0.21
100	248	148	48	3968	0.962539	737.09	0.548387	1153.99	226.7	0.64	4.44	1855.3	7.48	1851.62	7.47	-3.67	-0.2
100	249	149	49	3984	0.961275	738.1	0.549197	1153.31	235.29	0	4.38	1861.67	7.48	1857.73	7.46	-3.94	-0.21
100	250	150	50	4000	0.96	739.09	0.55	1152.65	244.02	0.63	4.32	1869.19	7.48	1865.48	7.46	-3.71	-0.2
100	251	151	51	4016	0.958715	740.07	0.550797	1152	252.87	0	4.26	1875.32	7.47	1871.35	7.46	-3.97	-0.21
100	252	152	52	4032	0.95742	741.03	0.551587	1151.37	261.85	0.63	4.2	1882.58	7.47	1878.86	7.46	-3.72	-0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
100	253	153	53	4048	0.956116	741.98	0.552372	1150.76	270.94	0	4.15	1888.47	7.46	1884.49	7.45	-3.97	-0.21
100	254	154	54	4064	0.954802	742.91	0.55315	1150.16	280.16	0.63	4.09	1895.49	7.46	1891.77	7.45	-3.72	-0.2
100	255	155	55	4080	0.953479	743.83	0.553922	1149.58	289.5	0	4.04	1901.14	7.46	1897.17	7.44	-3.97	-0.21
100	256	156	56	4096	0.952148	744.73	0.554688	1149.01	298.95	0.62	3.99	1907.92	7.45	1904.21	7.44	-3.71	-0.19
100	257	157	57	4112	0.950809	745.62	0.555447	1148.46	308.52	0	3.94	1913.34	7.44	1909.39	7.43	-3.94	-0.21
100	258	158	58	4128	0.949462	746.49	0.556202	1147.92	318.21	0.62	3.89	1919.89	7.44	1916.2	7.43	-3.68	-0.19
100	259	159	59	4144	0.948108	747.35	0.55695	1147.4	328.01	0	3.84	1925.08	7.43	1921.17	7.42	-3.91	-0.2
100	260	160	60	4160	0.946746	748.2	0.557692	1146.89	337.93	0.62	3.79	1931.4	7.43	1927.75	7.41	-3.65	-0.19
100	261	161	61	4176	0.945377	749.03	0.558429	1146.4	347.95	0	3.75	1936.37	7.42	1932.5	7.4	-3.87	-0.2
100	262	162	62	4192	0.944001	749.85	0.55916	1145.91	358.09	0.62	3.7	1942.47	7.41	1938.87	7.4	-3.6	-0.19
100	263	163	63	4208	0.942619	750.66	0.559886	1145.45	368.33	0	3.66	1947.22	7.4	1943.4	7.39	-3.82	-0.2
100	264	164	64	4224	0.94123	751.45	0.560606	1144.99	378.68	0.62	3.61	1953.1	7.4	1949.55	7.38	-3.55	-0.18
100	265	165	65	4240	0.939836	752.23	0.561321	1144.55	389.14	0	3.57	1957.65	7.39	1953.89	7.37	-3.76	-0.19
100	266	166	66	4256	0.938436	753	0.56203	1144.13	399.7	0.61	3.53	1963.31	7.38	1959.83	7.37	-3.49	-0.18
100	267	167	67	4272	0.937031	753.75	0.562734	1143.71	410.37	0	3.49	1967.65	7.37	1963.96	7.36	-3.69	-0.19
100	268	168	68	4288	0.93562	754.5	0.563433	1143.31	421.14	0.61	3.44	1973.11	7.36	1969.69	7.35	-3.42	-0.17
100	269	169	69	4304	0.934205	755.23	0.564126	1142.92	432.01	0	3.41	1977.25	7.35	1973.62	7.34	-3.62	-0.18
100	270	170	70	4320	0.932785	755.95	0.564815	1142.54	442.98	0.61	3.37	1982.5	7.34	1979.16	7.33	-3.35	-0.17
100	271	171	71	4336	0.93136	756.66	0.565498	1142.17	454.05	0	3.33	1986.44	7.33	1982.89	7.32	-3.55	-0.18
100	272	172	72	4352	0.929931	757.35	0.566176	1141.82	465.22	0.61	3.29	1991.5	7.32	1988.23	7.31	-3.27	-0.16
100	273	173	73	4368	0.928498	758.04	0.56685	1141.48	476.49	0	3.25	1995.24	7.31	1991.78	7.3	-3.47	-0.17
100	274	174	74	4384	0.927061	758.71	0.567518	1141.15	487.86	0.6	3.22	2000.11	7.3	1996.91	7.29	-3.19	-0.16
100	275	175	75	4400	0.92562	759.37	0.568182	1140.83	499.31	0	3.18	2003.66	7.29	2000.28	7.27	-3.39	-0.17
100	276	176	76	4416	0.924176	760.03	0.568841	1140.52	510.87	0.6	3.15	2008.34	7.28	2005.22	7.27	-3.11	-0.16
100	277	177	77	4432	0.922728	760.67	0.569495	1140.22	522.51	0	3.11	2011.71	7.26	2008.4	7.25	-3.31	-0.16
100	278	178	78	4448	0.921277	761.3	0.570144	1139.93	534.25	0.6	3.08	2016.19	7.25	2013.16	7.24	-3.03	-0.15
100	279	179	79	4464	0.919824	761.92	0.570789	1139.66	546.08	0	3.04	2019.39	7.24	2016.16	7.23	-3.22	-0.16
100	280	180	80	4480	0.918367	762.53	0.571429	1139.39	558	0.6	3.01	2023.69	7.23	2020.74	7.22	-2.95	-0.15
100	281	181	81	4496	0.916908	763.13	0.572064	1139.13	570.01	0	2.98	2026.71	7.21	2023.57	7.2	-3.14	-0.16
100	282	182	82	4512	0.915447	763.72	0.572695	1138.89	582.11	0.6	2.95	2030.83	7.2	2027.96	7.19	-2.87	-0.14
100	283	183	83	4528	0.913983	764.3	0.573322	1138.65	594.29	0	2.92	2033.67	7.19	2030.61	7.18	-3.06	-0.15
100	284	184	84	4544	0.912517	764.87	0.573944	1138.43	606.56	0.59	2.89	2037.62	7.17	2034.83	7.16	-2.79	-0.14
100	285	185	85	4560	0.91105	765.43	0.574561	1138.21	618.92	0	2.86	2040.3	7.16	2037.32	7.15	-2.98	-0.15
100	286	186	86	4576	0.90958	765.98	0.575175	1138	631.36	0.59	2.83	2044.07	7.15	2041.36	7.14	-2.71	-0.13
100	287	187	87	4592	0.908109	766.53	0.575784	1137.81	643.88	0	2.8	2046.58	7.13	2043.68	7.12	-2.91	-0.14
100	288	188	88	4608	0.906636	767.06	0.576389	1137.62	656.49	0.59	2.77	2050.19	7.12	2047.55	7.11	-2.64	-0.13
100	289	189	89	4624	0.905162	767.58	0.57699	1137.44	669.18	0	2.74	2052.54	7.1	2049.71	7.09	-2.83	-0.14
100	290	190	90	4640	0.903686	768.1	0.577586	1137.27	681.95	0.59	2.72	2055.98	7.09	2053.41	7.08	-2.57	-0.13
100	291	191	91	4656	0.902209	768.61	0.578179	1137.11	694.8	0	2.69	2058.17	7.07	2055.41	7.06	-2.77	-0.13
100	292	192	92	4672	0.900732	769.11	0.578767	1136.95	707.73	0.59	2.66	2061.46	7.06	2058.95	7.05	-2.51	-0.12
100	293	193	93	4688	0.899253	769.59	0.579352	1136.81	720.74	0	2.64	2063.49	7.04	2060.79	7.03	-2.7	-0.13
100	294	194	94	4704	0.897774	770.08	0.579932	1136.67	733.83	0.58	2.61	2066.62	7.03	2064.17	7.02	-2.44	-0.12
100	295	195	95	4720	0.896294	770.55	0.580508	1136.55	746.99	0	2.59	2068.5	7.01	2065.85	7	-2.64	-0.13
100	296	196	96	4736	0.894814	771.01	0.581081	1136.43	760.23	0.58	2.56	2071.47	7	2069.08	6.99	-2.39	-0.12
100	297	197	97	4752	0.893333	771.47	0.58165	1136.32	773.55	0	2.54	2073.2	6.98	2070.61	6.97	-2.59	-0.13
100	298	198	98	4768	0.891852	771.92	0.582215	1136.21	786.94	0.58	2.51	2076.02	6.97	2073.68	6.96	-2.34	-0.11

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
100	299	199	99	4784	0.89037	772.36	0.582776	1136.12	800.41	0	2.49	2077.6	6.95	2075.06	6.94	-2.55	-0.12
100	300	200	100	4800	0.888889	772.79	0.583333	1136.03	813.94	0.58	2.47	2080.27	6.93	2077.97	6.93	-2.3	-0.11
100	301	201	101	4816	0.887407	773.22	0.583887	1135.95	827.56	0	2.44	2081.72	6.92	2079.21	6.91	-2.51	-0.12
100	302	202	102	4832	0.885926	773.64	0.584437	1135.88	841.24	0.58	2.42	2084.24	6.9	2081.98	6.89	-2.27	-0.11
100	303	203	103	4848	0.884445	774.05	0.584983	1135.81	854.99	0	2.4	2085.54	6.88	2083.07	6.87	-2.47	-0.12
100	304	204	104	4864	0.882964	774.45	0.585526	1135.76	868.82	0.57	2.38	2087.93	6.87	2085.69	6.86	-2.24	-0.11
100	305	205	105	4880	0.881483	774.85	0.586066	1135.71	882.71	0	2.36	2089.09	6.85	2086.64	6.84	-2.45	-0.12
100	306	206	106	4896	0.880003	775.24	0.586601	1135.66	896.67	0.57	2.33	2091.33	6.83	2089.11	6.83	-2.22	-0.11
100	307	207	107	4912	0.878524	775.62	0.587134	1135.63	910.71	0	2.31	2092.36	6.82	2089.93	6.81	-2.44	-0.12
100	308	208	108	4928	0.877045	775.99	0.587662	1135.6	924.81	0.57	2.29	2094.46	6.8	2092.26	6.79	-2.21	-0.11
100	309	209	109	4944	0.875567	776.36	0.588188	1135.58	938.97	0	2.27	2095.36	6.78	2092.93	6.77	-2.43	-0.12
100	310	210	110	4960	0.874089	776.72	0.58871	1135.56	953.21	0.57	2.25	2097.33	6.77	2095.12	6.76	-2.21	-0.11
100	311	211	111	4976	0.872613	777.08	0.589228	1135.55	967.5	0	2.23	2098.1	6.75	2095.67	6.74	-2.43	-0.12
100	312	212	112	4992	0.871137	777.42	0.589744	1135.55	981.87	0.57	2.21	2099.94	6.73	2097.72	6.72	-2.22	-0.11
100	313	213	113	5008	0.869663	777.77	0.590256	1135.56	996.3	0	2.2	2100.58	6.71	2098.13	6.7	-2.44	-0.12
100	314	214	114	5024	0.868189	778.1	0.590764	1135.57	1010.79	0.56	2.18	2102.28	6.7	2100.05	6.69	-2.23	-0.11
100	315	215	115	5040	0.866717	778.43	0.59127	1135.58	1025.35	0	2.16	2102.8	6.68	2100.33	6.67	-2.47	-0.12
100	316	216	116	5056	0.865246	778.75	0.591772	1135.61	1039.96	0.56	2.14	2104.38	6.66	2102.12	6.65	-2.26	-0.11
100	317	217	117	5072	0.863776	779.07	0.592271	1135.64	1054.65	0	2.12	2104.77	6.64	2102.27	6.63	-2.5	-0.12
100	318	218	118	5088	0.862308	779.38	0.592767	1135.67	1069.39	0.56	2.1	2106.23	6.62	2103.93	6.62	-2.3	-0.11
100	319	219	119	5104	0.860841	779.68	0.59326	1135.71	1084.19	0	2.09	2106.5	6.6	2103.96	6.6	-2.54	-0.12
100	320	220	120	5120	0.859375	779.98	0.59375	1135.76	1099.05	0.56	2.07	2107.83	6.59	2105.48	6.58	-2.35	-0.11
100	321	221	121	5136	0.857911	780.27	0.594237	1135.82	1113.98	0	2.05	2107.99	6.57	2105.39	6.56	-2.59	-0.12
100	322	222	122	5152	0.856448	780.56	0.59472	1135.87	1128.96	0.56	2.04	2109.2	6.55	2106.79	6.54	-2.41	-0.11
100	323	223	123	5168	0.854988	780.84	0.595201	1135.94	1144	0	2.02	2109.24	6.53	2106.58	6.52	-2.66	-0.13
100	324	224	124	5184	0.853528	781.12	0.595679	1136.01	1159.1	0.56	2	2110.33	6.51	2107.85	6.51	-2.48	-0.12
100	325	225	125	5200	0.852071	781.39	0.596154	1136.09	1174.26	0	1.99	2110.25	6.49	2107.52	6.48	-2.74	-0.13
100	326	226	126	5216	0.850615	781.65	0.596626	1136.17	1189.48	0.55	1.97	2111.23	6.48	2108.67	6.47	-2.56	-0.12
100	327	227	127	5232	0.849162	781.91	0.597095	1136.25	1204.75	0	1.96	2111.05	6.46	2108.22	6.45	-2.82	-0.13
100	328	228	128	5248	0.84771	782.16	0.597561	1136.35	1220.07	0.55	1.94	2111.91	6.44	2109.25	6.43	-2.66	-0.13
100	329	229	129	5264	0.84626	782.41	0.598024	1136.44	1235.46	0	1.93	2111.61	6.42	2108.69	6.41	-2.92	-0.14
100	330	230	130	5280	0.844812	782.66	0.598485	1136.55	1250.89	0.55	1.91	2112.37	6.4	2109.6	6.39	-2.76	-0.13
100	331	231	131	5296	0.843366	782.89	0.598943	1136.65	1266.39	0	1.9	2111.96	6.38	2108.93	6.37	-3.04	-0.14
100	332	232	132	5312	0.841922	783.13	0.599398	1136.77	1281.93	0.55	1.88	2112.6	6.36	2109.72	6.35	-2.88	-0.14
100	333	233	133	5328	0.84048	783.36	0.59985	1136.88	1297.53	0	1.87	2112.1	6.34	2108.93	6.33	-3.16	-0.15
100	334	234	134	5344	0.83904	783.58	0.600299	1137.01	1313.19	0.55	1.85	2112.63	6.33	2109.62	6.32	-3.01	-0.14
100	335	235	135	5360	0.837603	783.8	0.600746	1137.13	1328.89	0	1.84	2112.02	6.3	2108.72	6.29	-3.3	-0.16
100	336	236	136	5376	0.836168	784.01	0.60119	1137.27	1344.65	0.55	1.83	2112.44	6.29	2109.29	6.28	-3.16	-0.15
100	337	237	137	5392	0.834735	784.22	0.601632	1137.4	1360.46	0	1.81	2111.73	6.27	2108.28	6.26	-3.45	-0.16
100	338	238	138	5408	0.833304	784.42	0.602071	1137.54	1376.32	0.54	1.8	2112.05	6.25	2108.74	6.24	-3.32	-0.16
100	339	239	139	5424	0.831876	784.62	0.602507	1137.69	1392.24	0	1.79	2111.24	6.23	2107.63	6.22	-3.61	-0.17
100	340	240	140	5440	0.83045	784.82	0.602941	1137.84	1408.2	0.54	1.77	2111.46	6.21	2107.98	6.2	-3.49	-0.17
100	341	241	141	5456	0.829026	785.01	0.603372	1138	1424.21	0	1.76	2110.55	6.19	2106.76	6.18	-3.79	-0.18
100	342	242	142	5472	0.827605	785.19	0.603801	1138.16	1440.27	0.54	1.75	2110.67	6.17	2107	6.16	-3.67	-0.17
100	343	243	143	5488	0.826186	785.37	0.604227	1138.32	1456.38	0	1.74	2109.66	6.15	2105.68	6.14	-3.98	-0.19
100	344	244	144	5504	0.82477	785.55	0.604651	1138.49	1472.54	0.54	1.72	2109.68	6.13	2105.81	6.12	-3.87	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
100	345	245	145	5520	0.823356	785.72	0.605072	1138.66	1488.75	0	1.71	2108.58	6.11	2104.4	6.1	-4.18	-0.2
100	346	246	146	5536	0.821945	785.89	0.605491	1138.84	1505.01	0.54	1.7	2108.5	6.09	2104.42	6.08	-4.08	-0.19
100	347	247	147	5552	0.820537	786.05	0.605908	1139.02	1521.31	0	1.69	2107.3	6.07	2102.91	6.06	-4.4	-0.21
100	348	248	148	5568	0.819131	786.21	0.606322	1139.2	1537.66	0.54	1.68	2107.13	6.05	2102.83	6.04	-4.3	-0.2
100	349	249	149	5584	0.817727	786.37	0.606734	1139.39	1554.06	0	1.66	2105.84	6.03	2101.21	6.02	-4.63	-0.22
100	350	250	150	5600	0.816327	786.52	0.607143	1139.59	1570.5	0.53	1.65	2105.58	6.02	2101.04	6	-4.54	-0.22
100	351	251	151	5616	0.814928	786.67	0.60755	1139.78	1586.99	0	1.64	2104.2	5.99	2099.33	5.98	-4.88	-0.23
100	352	252	152	5632	0.813533	786.81	0.607955	1139.98	1603.52	0.53	1.63	2103.84	5.98	2099.05	5.96	-4.79	-0.23
100	353	253	153	5648	0.81214	786.95	0.608357	1140.19	1620.1	0	1.62	2102.38	5.96	2097.24	5.94	-5.13	-0.24
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
101	201	100	-1	3216	0.999975	665.66	0.498756	1236.44	0.12	0	9.79	1323.56	6.58	1332.73	6.63	9.16	0.69
101	202	101	0	3232	1	667.89	0.5	1234.39	0	-0.7	10	1339.02	6.63	1347.92	6.67	8.89	0.66
101	203	102	1	3248	0.999976	670.07	0.501232	1232.37	0.12	0	9.8	1355.23	6.68	1362.69	6.71	7.45	0.55
101	204	103	2	3264	0.999904	672.22	0.502451	1230.4	0.48	-0.7	9.6	1369.8	6.71	1377.45	6.75	7.65	0.56
101	205	104	3	3280	0.999786	674.34	0.503659	1228.47	1.07	0	9.4	1385.53	6.76	1391.79	6.79	6.26	0.45
101	206	105	4	3296	0.999623	676.42	0.504854	1226.58	1.89	-0.7	9.22	1399.63	6.79	1406.13	6.83	6.5	0.46
101	207	106	5	3312	0.999417	678.47	0.506039	1224.73	2.94	0	9.04	1414.9	6.84	1420.06	6.86	5.16	0.36
101	208	107	6	3328	0.999168	680.48	0.507212	1222.92	4.22	-0.69	8.86	1428.55	6.87	1433.99	6.89	5.44	0.38
101	209	108	7	3344	0.998878	682.46	0.508373	1221.14	5.72	0	8.69	1443.37	6.91	1447.51	6.93	4.15	0.29
101	210	109	8	3360	0.998549	684.41	0.509524	1219.41	7.43	-0.69	8.52	1456.58	6.94	1461.05	6.96	4.47	0.31
101	211	110	9	3376	0.998181	686.33	0.510664	1217.71	9.36	0	8.36	1470.96	6.97	1474.18	6.99	3.22	0.22
101	212	111	10	3392	0.997775	688.22	0.511792	1216.05	11.5	-0.69	8.2	1483.75	7	1487.33	7.02	3.58	0.24
101	213	112	11	3408	0.997333	690.07	0.512911	1214.42	13.85	0	8.05	1497.7	7.03	1500.07	7.04	2.36	0.16
101	214	113	12	3424	0.996856	691.9	0.514019	1212.83	16.41	-0.68	7.9	1510.08	7.06	1512.84	7.07	2.76	0.18
101	215	114	13	3440	0.996344	693.7	0.515116	1211.27	19.17	0	7.76	1523.62	7.09	1525.2	7.09	1.58	0.1
101	216	115	14	3456	0.995799	695.47	0.516204	1209.74	22.13	-0.68	7.62	1535.6	7.11	1537.61	7.12	2.02	0.13
101	217	116	15	3472	0.995222	697.21	0.517281	1208.25	25.29	0	7.48	1548.74	7.14	1549.61	7.14	0.87	0.06
101	218	117	16	3488	0.994613	698.92	0.518349	1206.79	28.64	-0.68	7.35	1560.32	7.16	1561.66	7.16	1.34	0.09
101	219	118	17	3504	0.993974	700.6	0.519406	1205.36	32.18	0	7.22	1573.07	7.18	1573.29	7.18	0.22	0.01
101	220	119	18	3520	0.993306	702.26	0.520455	1203.96	35.92	-0.67	7.09	1584.28	7.2	1584.99	7.2	0.72	0.05
101	221	120	19	3536	0.992609	703.9	0.521493	1202.59	39.84	0	6.97	1596.65	7.22	1596.28	7.22	-0.37	-0.02
101	222	121	20	3552	0.991884	705.5	0.522523	1201.25	43.95	-0.67	6.85	1607.48	7.24	1607.64	7.24	0.16	0.01
101	223	122	21	3568	0.991132	707.08	0.523543	1199.94	48.23	0	6.73	1619.48	7.26	1618.58	7.26	-0.9	-0.06
101	224	123	22	3584	0.990354	708.64	0.524554	1198.65	52.7	-0.67	6.62	1629.96	7.28	1629.61	7.28	-0.35	-0.02
101	225	124	23	3600	0.989551	710.17	0.525556	1197.4	57.35	0	6.51	1641.6	7.3	1640.22	7.29	-1.38	-0.08
101	226	125	24	3616	0.988723	711.68	0.526549	1196.17	62.17	-0.67	6.4	1651.73	7.31	1650.92	7.3	-0.8	-0.05
101	227	126	25	3632	0.987871	713.16	0.527533	1194.96	67.16	0	6.3	1663.02	7.33	1661.21	7.32	-1.8	-0.11
101	228	127	26	3648	0.986996	714.62	0.528509	1193.79	72.32	-0.66	6.19	1672.8	7.34	1671.6	7.33	-1.21	-0.07
101	229	128	27	3664	0.986099	716.05	0.529476	1192.64	77.65	0	6.09	1683.75	7.35	1681.56	7.34	-2.19	-0.13
101	230	129	28	3680	0.98518	717.47	0.530435	1191.51	83.15	-0.66	6	1693.21	7.36	1691.64	7.35	-1.57	-0.09
101	231	130	29	3696	0.984239	718.86	0.531385	1190.41	88.81	0	5.9	1703.82	7.38	1701.3	7.36	-2.53	-0.15
101	232	131	30	3712	0.983279	720.23	0.532328	1189.33	94.63	-0.66	5.81	1712.96	7.38	1711.07	7.38	-1.89	-0.11
101	233	132	31	3728	0.982298	721.58	0.533262	1188.28	100.62	0	5.72	1723.25	7.4	1720.42	7.38	-2.83	-0.16
101	234	133	32	3744	0.981299	722.9	0.534188	1187.25	106.76	-0.65	5.63	1732.07	7.4	1729.9	7.39	-2.17	-0.13

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
101	235	134	33	3760	0.980281	724.21	0.535106	1186.24	113.05	0	5.54	1742.04	7.41	1738.95	7.4	-3.09	-0.18
101	236	135	34	3776	0.979244	725.49	0.536017	1185.26	119.5	-0.65	5.46	1750.56	7.42	1748.14	7.41	-2.42	-0.14
101	237	136	35	3792	0.978191	726.76	0.53692	1184.3	126.1	0	5.38	1760.22	7.43	1756.91	7.41	-3.31	-0.19
101	238	137	36	3808	0.97712	728.01	0.537815	1183.35	132.85	-0.65	5.3	1768.44	7.43	1765.81	7.42	-2.63	-0.15
101	239	138	37	3824	0.976033	729.23	0.538703	1182.43	139.75	0	5.22	1777.8	7.44	1774.3	7.42	-3.51	-0.2
101	240	139	38	3840	0.974931	730.44	0.539583	1181.54	146.79	-0.65	5.14	1785.73	7.44	1782.92	7.43	-2.81	-0.16
101	241	140	39	3856	0.973812	731.62	0.540456	1180.66	153.98	0	5.07	1794.8	7.45	1791.13	7.43	-3.67	-0.2
101	242	141	40	3872	0.972679	732.79	0.541322	1179.8	161.31	-0.64	4.99	1802.44	7.45	1799.49	7.44	-2.96	-0.16
101	243	142	41	3888	0.971532	733.94	0.542181	1178.96	168.79	0	4.92	1811.23	7.45	1807.43	7.44	-3.81	-0.21
101	244	143	42	3904	0.970371	735.08	0.543033	1178.14	176.4	-0.64	4.85	1818.6	7.45	1815.52	7.44	-3.08	-0.17
101	245	144	43	3920	0.969196	736.19	0.543878	1177.34	184.15	0	4.78	1827.11	7.46	1823.19	7.44	-3.92	-0.21
101	246	145	44	3936	0.968008	737.29	0.544715	1176.56	192.03	-0.64	4.72	1834.2	7.46	1831.02	7.44	-3.18	-0.17
101	247	146	45	3952	0.966808	738.37	0.545547	1175.8	200.05	0	4.65	1842.44	7.46	1838.44	7.44	-4	-0.22
101	248	147	46	3968	0.965596	739.43	0.546371	1175.05	208.2	-0.64	4.59	1849.27	7.46	1846.01	7.44	-3.26	-0.18
101	249	148	47	3984	0.964372	740.48	0.547189	1174.33	216.48	0	4.53	1857.24	7.46	1853.18	7.44	-4.07	-0.22
101	250	149	48	4000	0.963136	741.51	0.548	1173.62	224.89	-0.63	4.46	1863.82	7.46	1860.5	7.44	-3.31	-0.18
101	251	150	49	4016	0.961889	742.52	0.548805	1172.93	233.43	0	4.4	1871.53	7.46	1867.42	7.44	-4.11	-0.22
101	252	151	50	4032	0.960632	743.52	0.549603	1172.25	242.09	-0.63	4.35	1877.85	7.45	1874.5	7.44	-3.35	-0.18
101	253	152	51	4048	0.959365	744.5	0.550395	1171.59	250.88	0	4.29	1885.31	7.45	1881.18	7.44	-4.14	-0.22
101	254	153	52	4064	0.958088	745.47	0.551181	1170.95	259.79	-0.63	4.23	1891.39	7.45	1888.02	7.43	-3.37	-0.18
101	255	154	53	4080	0.956801	746.42	0.551961	1170.33	268.83	0	4.18	1898.61	7.45	1894.46	7.43	-4.15	-0.22
101	256	155	54	4096	0.955505	747.36	0.552734	1169.72	277.98	-0.62	4.12	1904.45	7.44	1901.07	7.43	-3.37	-0.18
101	257	156	55	4112	0.954201	748.28	0.553502	1169.12	287.25	0	4.07	1911.42	7.44	1907.28	7.42	-4.14	-0.22
101	258	157	56	4128	0.952887	749.19	0.554264	1168.54	296.64	-0.62	4.02	1917.02	7.43	1913.66	7.42	-3.36	-0.18
101	259	158	57	4144	0.951566	750.08	0.555019	1167.98	306.15	0	3.97	1923.76	7.43	1919.64	7.41	-4.12	-0.21
101	260	159	58	4160	0.950237	750.96	0.555769	1167.43	315.77	-0.62	3.92	1929.14	7.42	1925.8	7.41	-3.34	-0.17
101	261	160	59	4176	0.9489	751.82	0.556513	1166.89	325.51	0	3.87	1935.64	7.42	1931.55	7.4	-4.09	-0.21
101	262	161	60	4192	0.947556	752.67	0.557252	1166.37	335.36	-0.62	3.82	1940.8	7.41	1937.5	7.4	-3.3	-0.17
101	263	162	61	4208	0.946204	753.51	0.557985	1165.87	345.32	0	3.78	1947.08	7.4	1943.03	7.39	-4.05	-0.21
101	264	163	62	4224	0.944846	754.34	0.558712	1165.38	355.38	-0.62	3.73	1952.02	7.39	1948.76	7.38	-3.26	-0.17
101	265	164	63	4240	0.943482	755.15	0.559434	1164.9	365.56	0	3.68	1958.08	7.39	1954.08	7.37	-4	-0.2
101	266	165	64	4256	0.942111	755.95	0.56015	1164.43	375.84	-0.61	3.64	1962.8	7.38	1959.6	7.37	-3.21	-0.16
101	267	166	65	4272	0.940734	756.73	0.560861	1163.98	386.24	0	3.6	1968.65	7.37	1964.71	7.36	-3.94	-0.2
101	268	167	66	4288	0.939352	757.51	0.561567	1163.54	396.73	-0.61	3.55	1973.17	7.36	1970.02	7.35	-3.14	-0.16
101	269	168	67	4304	0.937964	758.27	0.562268	1163.11	407.33	0	3.51	1978.8	7.36	1974.92	7.34	-3.88	-0.2
101	270	169	68	4320	0.936571	759.02	0.562963	1162.7	418.03	-0.61	3.47	1983.11	7.34	1980.04	7.33	-3.08	-0.16
101	271	170	69	4336	0.935172	759.75	0.563653	1162.3	428.83	0	3.43	1988.54	7.34	1984.74	7.32	-3.81	-0.19
101	272	171	70	4352	0.933769	760.48	0.564338	1161.91	439.74	-0.61	3.39	1992.66	7.33	1989.65	7.31	-3.01	-0.15
101	273	172	71	4368	0.932362	761.19	0.565018	1161.53	450.74	0	3.35	1997.89	7.32	1994.16	7.3	-3.73	-0.19
101	274	173	72	4384	0.93095	761.89	0.565693	1161.17	461.84	-0.6	3.32	2001.81	7.31	1998.88	7.3	-2.93	-0.15
101	275	174	73	4400	0.929534	762.59	0.566364	1160.82	473.04	0	3.28	2006.84	7.3	2003.19	7.28	-3.65	-0.18
101	276	175	74	4416	0.928114	763.27	0.567029	1160.47	484.33	-0.6	3.24	2010.57	7.28	2007.72	7.27	-2.85	-0.14
101	277	176	75	4432	0.92669	763.93	0.56769	1160.14	495.72	0	3.21	2015.41	7.28	2011.84	7.26	-3.57	-0.18
101	278	177	76	4448	0.925263	764.59	0.568345	1159.83	507.2	-0.6	3.17	2018.95	7.26	2016.18	7.25	-2.77	-0.14
101	279	178	77	4464	0.923832	765.24	0.568996	1159.52	518.78	0	3.14	2023.6	7.25	2020.11	7.24	-3.49	-0.17
101	280	179	78	4480	0.922398	765.88	0.569643	1159.22	530.45	-0.6	3.1	2026.96	7.24	2024.27	7.23	-2.69	-0.13

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
101	281	180	79	4496	0.920961	766.5	0.570285	1158.93	542.21	0	3.07	2031.43	7.23	2028.02	7.22	-3.4	-0.17
101	282	181	80	4512	0.919521	767.12	0.570922	1158.66	554.06	-0.6	3.04	2034.61	7.21	2032.01	7.21	-2.6	-0.13
101	283	182	81	4528	0.918079	767.73	0.571555	1158.39	565.99	0	3.01	2038.89	7.2	2035.58	7.19	-3.32	-0.16
101	284	183	82	4544	0.916634	768.32	0.572183	1158.14	578.02	-0.59	2.97	2041.9	7.19	2039.38	7.18	-2.52	-0.12
101	285	184	83	4560	0.915186	768.91	0.572807	1157.89	590.13	0	2.94	2046.01	7.18	2042.78	7.17	-3.23	-0.16
101	286	185	84	4576	0.913737	769.48	0.573427	1157.65	602.33	-0.59	2.91	2048.85	7.16	2046.41	7.16	-2.44	-0.12
101	287	186	85	4592	0.912285	770.05	0.574042	1157.43	614.62	0	2.88	2052.78	7.15	2049.63	7.14	-3.15	-0.15
101	288	187	86	4608	0.910831	770.61	0.574653	1157.21	626.99	-0.59	2.85	2055.45	7.14	2053.09	7.13	-2.36	-0.12
101	289	188	87	4624	0.909376	771.16	0.57526	1157	639.44	0	2.82	2059.22	7.13	2056.14	7.11	-3.07	-0.15
101	290	189	88	4640	0.907919	771.7	0.575862	1156.81	651.98	-0.59	2.8	2061.72	7.11	2059.44	7.1	-2.29	-0.11
101	291	190	89	4656	0.906461	772.23	0.57646	1156.62	664.6	0	2.77	2065.32	7.1	2062.33	7.09	-3	-0.15
101	292	191	90	4672	0.905001	772.75	0.577055	1156.44	677.3	-0.59	2.74	2067.67	7.08	2065.46	7.07	-2.21	-0.11
101	293	192	91	4688	0.90354	773.26	0.577645	1156.27	690.08	0	2.71	2071.11	7.07	2068.18	7.06	-2.93	-0.14
101	294	193	92	4704	0.902078	773.77	0.578231	1156.11	702.93	-0.58	2.69	2073.29	7.05	2071.15	7.04	-2.14	-0.1
101	295	194	93	4720	0.900615	774.26	0.578814	1155.95	715.87	0	2.66	2076.57	7.04	2073.71	7.03	-2.86	-0.14
101	296	195	94	4736	0.899151	774.75	0.579392	1155.81	728.89	-0.58	2.63	2078.61	7.02	2076.53	7.02	-2.08	-0.1
101	297	196	95	4752	0.897686	775.23	0.579966	1155.67	741.98	0	2.61	2081.73	7.01	2078.93	7	-2.79	-0.13
101	298	197	96	4768	0.896221	775.7	0.580537	1155.55	755.15	-0.58	2.58	2083.61	6.99	2081.59	6.99	-2.02	-0.1
101	299	198	97	4784	0.894755	776.16	0.581104	1155.43	768.39	0	2.56	2086.58	6.98	2083.84	6.97	-2.74	-0.13
101	300	199	98	4800	0.893289	776.62	0.581667	1155.31	781.71	-0.58	2.54	2088.31	6.96	2086.35	6.95	-1.97	-0.09
101	301	200	99	4816	0.891822	777.07	0.582226	1155.21	795.11	0	2.51	2091.13	6.95	2088.44	6.94	-2.68	-0.13
101	302	201	100	4832	0.890356	777.51	0.582781	1155.12	808.57	-0.58	2.49	2092.72	6.93	2090.8	6.92	-1.92	-0.09
101	303	202	101	4848	0.888889	777.94	0.583333	1155.03	822.11	0	2.47	2095.39	6.92	2092.75	6.91	-2.64	-0.13
101	304	203	102	4864	0.887422	778.36	0.583882	1154.95	835.72	-0.57	2.44	2096.84	6.9	2094.96	6.89	-1.88	-0.09
101	305	204	103	4880	0.885955	778.78	0.584426	1154.88	849.4	0	2.42	2099.36	6.88	2096.76	6.87	-2.6	-0.12
101	306	205	104	4896	0.884489	779.19	0.584967	1154.81	863.16	-0.57	2.4	2100.67	6.86	2098.83	6.86	-1.85	-0.09
101	307	206	105	4912	0.883023	779.59	0.585505	1154.75	876.98	0	2.38	2103.06	6.85	2100.49	6.84	-2.57	-0.12
101	308	207	106	4928	0.881557	779.98	0.586039	1154.7	890.87	-0.57	2.36	2104.23	6.83	2102.41	6.83	-1.82	-0.09
101	309	208	107	4944	0.880091	780.37	0.58657	1154.66	904.83	0	2.34	2106.47	6.82	2103.92	6.81	-2.55	-0.12
101	310	209	108	4960	0.878626	780.75	0.587097	1154.62	918.86	-0.57	2.31	2107.51	6.8	2105.71	6.79	-1.81	-0.09
101	311	210	109	4976	0.877162	781.13	0.587621	1154.59	932.95	0	2.29	2109.62	6.78	2107.09	6.78	-2.54	-0.12
101	312	211	110	4992	0.875699	781.49	0.588141	1154.57	947.11	-0.57	2.27	2110.53	6.76	2108.73	6.76	-1.8	-0.09
101	313	212	111	5008	0.874236	781.86	0.588658	1154.55	961.34	0	2.25	2112.5	6.75	2109.97	6.74	-2.53	-0.12
101	314	213	112	5024	0.872774	782.21	0.589172	1154.54	975.63	-0.56	2.24	2113.28	6.73	2111.49	6.72	-1.8	-0.09
101	315	214	113	5040	0.871313	782.56	0.589683	1154.54	989.99	0	2.22	2115.13	6.71	2112.59	6.71	-2.54	-0.12
101	316	215	114	5056	0.869853	782.9	0.59019	1154.54	1004.41	-0.56	2.2	2115.78	6.7	2113.97	6.69	-1.81	-0.09
101	317	216	115	5072	0.868394	783.23	0.590694	1154.55	1018.9	0	2.18	2117.49	6.68	2114.94	6.67	-2.55	-0.12
101	318	217	116	5088	0.866936	783.56	0.591195	1154.57	1033.44	-0.56	2.16	2118.02	6.66	2116.19	6.65	-1.83	-0.09
101	319	218	117	5104	0.865479	783.88	0.591693	1154.59	1048.05	0	2.14	2119.61	6.64	2117.04	6.64	-2.57	-0.12
101	320	219	118	5120	0.864023	784.2	0.592187	1154.62	1062.72	-0.56	2.13	2120.02	6.63	2118.16	6.62	-1.86	-0.09
101	321	220	119	5136	0.862569	784.51	0.592679	1154.66	1077.46	0	2.11	2121.48	6.61	2118.88	6.6	-2.61	-0.12
101	322	221	120	5152	0.861116	784.82	0.593168	1154.7	1092.25	-0.56	2.09	2121.77	6.59	2119.87	6.58	-1.9	-0.09
101	323	222	121	5168	0.859665	785.11	0.593653	1154.74	1107.1	0	2.07	2123.11	6.57	2120.46	6.56	-2.65	-0.13
101	324	223	122	5184	0.858215	785.41	0.594136	1154.8	1122.01	-0.56	2.06	2123.28	6.55	2121.33	6.55	-1.95	-0.09
101	325	224	123	5200	0.856767	785.69	0.594615	1154.86	1136.98	0	2.04	2124.51	6.54	2121.8	6.53	-2.71	-0.13
101	326	225	124	5216	0.85532	785.98	0.595092	1154.92	1152.01	-0.55	2.02	2124.56	6.52	2122.55	6.51	-2.01	-0.09

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
101	327	226	125	5232	0.853875	786.25	0.595566	1154.99	1167.1	0	2.01	2125.67	6.5	2122.89	6.49	-2.77	-0.13
101	328	227	126	5248	0.852432	786.52	0.596037	1155.06	1182.24	-0.55	1.99	2125.61	6.48	2123.52	6.47	-2.09	-0.1
101	329	228	127	5264	0.85099	786.79	0.596505	1155.14	1197.44	0	1.98	2126.6	6.46	2123.75	6.46	-2.85	-0.13
101	330	229	128	5280	0.84955	787.05	0.59697	1155.23	1212.7	-0.55	1.96	2126.43	6.44	2124.26	6.44	-2.17	-0.1
101	331	230	129	5296	0.848112	787.3	0.597432	1155.32	1228.01	0	1.95	2127.31	6.43	2124.37	6.42	-2.94	-0.14
101	332	231	130	5312	0.846676	787.55	0.597892	1155.42	1243.38	-0.55	1.93	2127.03	6.41	2124.76	6.4	-2.27	-0.11
101	333	232	131	5328	0.845242	787.79	0.598348	1155.52	1258.8	0	1.92	2127.8	6.39	2124.75	6.38	-3.05	-0.14
101	334	233	132	5344	0.843809	788.03	0.598802	1155.63	1274.28	-0.55	1.9	2127.42	6.37	2125.03	6.36	-2.38	-0.11
101	335	234	133	5360	0.842379	788.27	0.599254	1155.74	1289.81	0	1.89	2128.07	6.35	2124.91	6.34	-3.16	-0.15
101	336	235	134	5376	0.840951	788.49	0.599702	1155.85	1305.39	-0.55	1.87	2127.58	6.33	2125.08	6.32	-2.5	-0.12
101	337	236	135	5392	0.839525	788.72	0.600148	1155.98	1321.03	0	1.86	2128.13	6.31	2124.85	6.31	-3.29	-0.15
101	338	237	136	5408	0.838101	788.94	0.600592	1156.1	1336.72	-0.54	1.85	2127.54	6.29	2124.9	6.29	-2.64	-0.12
101	339	238	137	5424	0.836679	789.15	0.601032	1156.23	1352.46	0	1.83	2127.99	6.28	2124.56	6.27	-3.43	-0.16
101	340	239	138	5440	0.83526	789.36	0.601471	1156.37	1368.25	-0.54	1.82	2127.29	6.26	2124.51	6.25	-2.78	-0.13
101	341	240	139	5456	0.833842	789.57	0.601906	1156.51	1384.09	0	1.81	2127.63	6.24	2124.06	6.23	-3.58	-0.17
101	342	241	140	5472	0.832427	789.77	0.602339	1156.66	1399.99	-0.54	1.79	2126.84	6.22	2123.9	6.21	-2.94	-0.14
101	343	242	141	5488	0.831014	789.96	0.60277	1156.81	1415.93	0	1.78	2127.08	6.2	2123.34	6.19	-3.74	-0.18
101	344	243	142	5504	0.829604	790.15	0.603198	1156.96	1431.92	-0.54	1.77	2126.19	6.18	2123.07	6.17	-3.12	-0.15
101	345	244	143	5520	0.828196	790.34	0.603623	1157.12	1447.97	0	1.75	2126.33	6.16	2122.41	6.15	-3.92	-0.18
101	346	245	144	5536	0.82679	790.52	0.604046	1157.28	1464.06	-0.54	1.74	2125.34	6.14	2122.04	6.13	-3.3	-0.16
101	347	246	145	5552	0.825387	790.7	0.604467	1157.45	1480.2	0	1.73	2125.38	6.13	2121.27	6.11	-4.11	-0.19
101	348	247	146	5568	0.823986	790.87	0.604885	1157.62	1496.38	-0.54	1.72	2124.3	6.1	2120.8	6.09	-3.5	-0.17
101	349	248	147	5584	0.822588	791.04	0.605301	1157.8	1512.62	0	1.7	2124.24	6.09	2119.93	6.07	-4.32	-0.2
101	350	249	148	5600	0.821192	791.21	0.605714	1157.98	1528.9	-0.53	1.69	2123.07	6.07	2119.36	6.06	-3.71	-0.18
101	351	250	149	5616	0.819799	791.37	0.606125	1158.16	1545.23	0	1.68	2122.92	6.05	2118.38	6.04	-4.54	-0.21
101	352	251	150	5632	0.818408	791.53	0.606534	1158.35	1561.6	-0.53	1.67	2121.65	6.03	2117.71	6.02	-3.94	-0.19
101	353	252	151	5648	0.81702	791.68	0.606941	1158.54	1578.02	0	1.66	2121.41	6.01	2116.64	6	-4.77	-0.23
101	354	253	152	5664	0.815634	791.83	0.607345	1158.74	1594.49	-0.53	1.65	2120.06	5.99	2115.87	5.98	-4.18	-0.2
101	355	254	153	5680	0.814251	791.98	0.607746	1158.94	1611	0	1.64	2119.72	5.97	2114.7	5.96	-5.01	-0.24
101	356	255	154	5696	0.812871	792.12	0.608146	1159.15	1627.56	-0.53	1.63	2118.28	5.95	2113.84	5.94	-4.44	-0.21
101	357	256	155	5712	0.811493	792.26	0.608543	1159.35	1644.16	0	1.61	2117.85	5.93	2112.57	5.92	-5.27	-0.25
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
102	203	101	-1	3248	0.999976	670.07	0.498768	1256.89	0.12	0	9.8	1330.71	6.56	1339.89	6.6	9.18	0.69
102	204	102	0	3264	1	672.29	0.5	1254.82	0	0.7	10	1347.59	6.61	1356.01	6.65	8.42	0.62
102	205	103	1	3280	0.999976	674.47	0.50122	1252.79	0.12	0	9.8	1362.42	6.65	1369.9	6.68	7.48	0.55
102	206	104	2	3296	0.999906	676.61	0.502427	1250.81	0.47	0.7	9.6	1378.41	6.69	1385.58	6.73	7.18	0.52
102	207	105	3	3312	0.99979	678.72	0.503623	1248.86	1.06	0	9.41	1392.77	6.73	1399.06	6.76	6.29	0.45
102	208	106	4	3328	0.99963	680.8	0.504808	1246.96	1.88	0.69	9.22	1408.29	6.77	1414.32	6.8	6.03	0.43
102	209	107	5	3344	0.999428	682.84	0.505981	1245.09	2.92	0	9.04	1422.2	6.8	1427.39	6.83	5.2	0.36
102	210	108	6	3360	0.999184	684.85	0.507143	1243.27	4.18	0.69	8.87	1437.26	6.84	1442.24	6.87	4.98	0.35
102	211	109	7	3376	0.998899	686.82	0.508294	1241.48	5.66	0	8.7	1450.73	6.88	1454.92	6.9	4.19	0.29
102	212	110	8	3392	0.998576	688.77	0.509434	1239.73	7.36	0.69	8.53	1465.36	6.91	1469.36	6.93	4.01	0.27
102	213	111	9	3408	0.998215	690.68	0.510563	1238.02	9.27	0	8.37	1478.4	6.94	1481.65	6.96	3.26	0.22
102	214	112	10	3424	0.997816	692.57	0.511682	1236.35	11.4	0.68	8.22	1492.59	6.97	1495.71	6.99	3.11	0.21

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
102	215	113	11	3440	0.997382	694.42	0.512791	1234.7	13.72	0	8.07	1505.22	7	1507.63	7.01	2.41	0.16
102	216	114	12	3456	0.996914	696.24	0.513889	1233.1	16.26	0.68	7.92	1519	7.03	1521.3	7.04	2.3	0.15
102	217	115	13	3472	0.996411	698.04	0.514977	1231.52	18.99	0	7.78	1531.22	7.06	1532.85	7.06	1.63	0.11
102	218	116	14	3488	0.995876	699.81	0.516055	1229.98	21.93	0.68	7.64	1544.6	7.09	1546.15	7.09	1.55	0.1
102	219	117	15	3504	0.995309	701.55	0.517123	1228.48	25.06	0	7.5	1556.42	7.11	1557.34	7.11	0.92	0.06
102	220	118	16	3520	0.994711	703.26	0.518182	1227	28.38	0.67	7.37	1569.41	7.13	1570.28	7.14	0.87	0.06
102	221	119	17	3536	0.994083	704.94	0.519231	1225.56	31.89	0	7.24	1580.85	7.15	1581.12	7.15	0.27	0.02
102	222	120	18	3552	0.993426	706.6	0.52027	1224.14	35.6	0.67	7.11	1593.45	7.18	1593.7	7.18	0.25	0.02
102	223	121	19	3568	0.992741	708.23	0.5213	1222.76	39.48	0	6.99	1604.52	7.2	1604.21	7.19	-0.31	-0.02
102	224	122	20	3584	0.992028	709.84	0.522321	1221.4	43.55	0.67	6.87	1616.75	7.22	1616.45	7.22	-0.3	-0.02
102	225	123	21	3600	0.991289	711.42	0.523333	1220.07	47.81	0	6.76	1627.46	7.23	1626.62	7.23	-0.84	-0.05
102	226	124	22	3616	0.990524	712.97	0.524336	1218.78	52.24	0.67	6.64	1639.32	7.25	1638.52	7.25	-0.81	-0.05
102	227	125	23	3632	0.989734	714.5	0.52533	1217.51	56.84	0	6.53	1649.68	7.27	1648.37	7.26	-1.32	-0.08
102	228	126	24	3648	0.98892	716.01	0.526316	1216.26	61.62	0.66	6.43	1661.19	7.29	1659.93	7.28	-1.26	-0.08
102	229	127	25	3664	0.988082	717.49	0.527293	1215.05	66.57	0	6.32	1671.21	7.3	1669.46	7.29	-1.74	-0.1
102	230	128	26	3680	0.987221	718.95	0.528261	1213.85	71.7	0.66	6.22	1682.37	7.31	1680.71	7.31	-1.67	-0.1
102	231	129	27	3696	0.986338	720.39	0.529221	1212.69	76.98	0	6.12	1692.06	7.32	1689.93	7.32	-2.12	-0.13
102	232	130	28	3712	0.985434	721.81	0.530172	1211.55	82.44	0.66	6.02	1702.89	7.34	1700.86	7.33	-2.03	-0.12
102	233	131	29	3728	0.984509	723.2	0.531116	1210.43	88.05	0	5.93	1712.24	7.35	1709.78	7.34	-2.46	-0.14
102	234	132	30	3744	0.983563	724.57	0.532051	1209.34	93.83	0.65	5.84	1722.75	7.36	1720.4	7.35	-2.35	-0.14
102	235	133	31	3760	0.982598	725.92	0.532979	1208.28	99.76	0	5.75	1731.79	7.37	1729.03	7.36	-2.76	-0.16
102	236	134	32	3776	0.981614	727.25	0.533898	1207.23	105.85	0.65	5.66	1741.97	7.38	1739.35	7.37	-2.63	-0.15
102	237	135	33	3792	0.980612	728.56	0.53481	1206.21	112.1	0	5.57	1750.7	7.39	1747.68	7.37	-3.02	-0.17
102	238	136	34	3808	0.979592	729.85	0.535714	1205.21	118.5	0.65	5.49	1760.58	7.4	1757.71	7.39	-2.87	-0.16
102	239	137	35	3824	0.978554	731.11	0.536611	1204.24	125.05	0	5.41	1769.01	7.4	1765.77	7.39	-3.24	-0.18
102	240	138	36	3840	0.9775	732.36	0.5375	1203.28	131.75	0.65	5.33	1778.58	7.41	1775.5	7.4	-3.08	-0.17
102	241	139	37	3856	0.976429	733.59	0.538382	1202.35	138.59	0	5.25	1786.71	7.41	1783.28	7.4	-3.43	-0.19
102	242	140	38	3872	0.975343	734.8	0.539256	1201.44	145.59	0.64	5.17	1795.99	7.42	1792.74	7.41	-3.25	-0.18
102	243	141	39	3888	0.974242	735.99	0.540123	1200.54	152.72	0	5.1	1803.84	7.42	1800.25	7.41	-3.59	-0.2
102	244	142	40	3904	0.973126	737.16	0.540984	1199.67	160	0.64	5.02	1812.83	7.43	1809.43	7.42	-3.4	-0.19
102	245	143	41	3920	0.971995	738.32	0.541837	1198.82	167.41	0	4.95	1820.4	7.43	1816.68	7.42	-3.72	-0.21
102	246	144	42	3936	0.970851	739.45	0.542683	1197.99	174.97	0.64	4.88	1829.11	7.44	1825.59	7.42	-3.52	-0.19
102	247	145	43	3952	0.969693	740.57	0.543522	1197.17	182.66	0	4.81	1836.41	7.43	1832.58	7.42	-3.83	-0.21
102	248	146	44	3968	0.968522	741.67	0.544355	1196.38	190.49	0.64	4.75	1844.84	7.44	1841.22	7.42	-3.62	-0.2
102	249	147	45	3984	0.967339	742.76	0.545181	1195.61	198.45	0	4.68	1851.87	7.44	1847.96	7.42	-3.91	-0.21
102	250	148	46	4000	0.966144	743.82	0.546	1194.85	206.54	0.63	4.62	1860.04	7.44	1856.35	7.43	-3.69	-0.2
102	251	149	47	4016	0.964937	744.87	0.546813	1194.11	214.76	0	4.55	1866.81	7.44	1862.84	7.42	-3.97	-0.21
102	252	150	48	4032	0.963719	745.91	0.547619	1193.39	223.11	0.63	4.49	1874.72	7.44	1870.97	7.42	-3.74	-0.2
102	253	151	49	4048	0.96249	746.93	0.548419	1192.68	231.59	0	4.43	1881.24	7.44	1877.22	7.42	-4.01	-0.21
102	254	152	50	4064	0.96125	747.93	0.549213	1191.99	240.19	0.63	4.37	1888.89	7.44	1885.11	7.42	-3.78	-0.2
102	255	153	51	4080	0.96	748.92	0.55	1191.32	248.92	0	4.32	1895.16	7.43	1891.12	7.42	-4.04	-0.21
102	256	154	52	4096	0.95874	749.89	0.550781	1190.67	257.77	0.62	4.26	1902.56	7.43	1898.77	7.42	-3.79	-0.2
102	257	155	53	4112	0.957471	750.84	0.551556	1190.03	266.74	0	4.21	1908.59	7.43	1904.55	7.41	-4.04	-0.21
102	258	156	54	4128	0.956193	751.78	0.552326	1189.41	275.83	0.62	4.15	1915.75	7.43	1911.96	7.41	-3.79	-0.2
102	259	157	55	4144	0.954905	752.71	0.553089	1188.8	285.04	0	4.1	1921.54	7.42	1917.51	7.4	-4.03	-0.21
102	260	158	56	4160	0.953609	753.62	0.553846	1188.21	294.37	0.62	4.05	1928.46	7.42	1924.69	7.4	-3.77	-0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
102	261	159	57	4176	0.952305	754.52	0.554598	1187.63	303.81	0	4	1934.03	7.41	1930.02	7.39	-4.01	-0.21
102	262	160	58	4192	0.950994	755.41	0.555344	1187.07	313.37	0.62	3.95	1940.71	7.41	1936.97	7.39	-3.75	-0.19
102	263	161	59	4208	0.949674	756.28	0.556084	1186.53	323.04	0	3.9	1946.05	7.4	1942.08	7.38	-3.97	-0.2
102	264	162	60	4224	0.948347	757.13	0.556818	1185.99	332.83	0.62	3.85	1952.51	7.4	1948.81	7.38	-3.71	-0.19
102	265	163	61	4240	0.947013	757.98	0.557547	1185.48	342.72	0	3.8	1957.63	7.39	1953.71	7.37	-3.93	-0.2
102	266	164	62	4256	0.945672	758.81	0.558271	1184.97	352.72	0.61	3.76	1963.87	7.38	1960.22	7.37	-3.66	-0.19
102	267	165	63	4272	0.944325	759.62	0.558989	1184.48	362.83	0	3.71	1968.78	7.37	1964.91	7.36	-3.87	-0.2
102	268	166	64	4288	0.942972	760.43	0.559701	1184.01	373.05	0.61	3.67	1974.8	7.37	1971.2	7.36	-3.6	-0.18
102	269	167	65	4304	0.941612	761.22	0.560409	1183.54	383.37	0	3.62	1979.49	7.36	1975.69	7.34	-3.81	-0.19
102	270	168	66	4320	0.940247	762	0.561111	1183.09	393.8	0.61	3.58	1985.3	7.35	1981.77	7.34	-3.53	-0.18
102	271	169	67	4336	0.938876	762.76	0.561808	1182.65	404.33	0	3.54	1989.79	7.34	1986.05	7.33	-3.73	-0.19
102	272	170	68	4352	0.9375	763.52	0.5625	1182.23	414.97	0.61	3.5	1995.39	7.34	1991.93	7.32	-3.46	-0.17
102	273	171	69	4368	0.936119	764.26	0.563187	1181.82	425.7	0	3.46	1999.68	7.32	1996.02	7.31	-3.66	-0.18
102	274	172	70	4384	0.934733	764.99	0.563869	1181.42	436.54	0.6	3.42	2005.08	7.32	2001.7	7.31	-3.38	-0.17
102	275	173	71	4400	0.933342	765.71	0.564545	1181.03	447.47	0	3.38	2009.17	7.31	2005.59	7.29	-3.57	-0.18
102	276	174	72	4416	0.931947	766.42	0.565217	1180.65	458.51	0.6	3.34	2014.37	7.3	2011.07	7.29	-3.29	-0.16
102	277	175	73	4432	0.930548	767.11	0.565884	1180.29	469.64	0	3.31	2018.26	7.29	2014.78	7.27	-3.49	-0.17
102	278	176	74	4448	0.929144	767.8	0.566547	1179.94	480.86	0.6	3.27	2023.27	7.28	2020.06	7.27	-3.21	-0.16
102	279	177	75	4464	0.927737	768.47	0.567204	1179.6	492.18	0	3.23	2026.98	7.27	2023.58	7.25	-3.4	-0.17
102	280	178	76	4480	0.926327	769.14	0.567857	1179.27	503.6	0.6	3.2	2031.79	7.26	2028.68	7.25	-3.12	-0.15
102	281	179	77	4496	0.924912	769.79	0.568505	1178.95	515.1	0	3.16	2035.32	7.24	2032.01	7.23	-3.31	-0.16
102	282	180	78	4512	0.923495	770.43	0.569149	1178.64	526.7	0.6	3.13	2039.95	7.23	2036.92	7.22	-3.03	-0.15
102	283	181	79	4528	0.922074	771.07	0.569788	1178.35	538.39	0	3.1	2043.29	7.22	2040.08	7.21	-3.22	-0.16
102	284	182	80	4544	0.920651	771.69	0.570423	1178.06	550.17	0.59	3.06	2047.74	7.21	2044.81	7.2	-2.93	-0.14
102	285	183	81	4560	0.919224	772.3	0.571053	1177.78	562.04	0	3.03	2050.91	7.2	2047.79	7.19	-3.12	-0.15
102	286	184	82	4576	0.917795	772.9	0.571678	1177.52	573.99	0.59	3	2055.18	7.19	2052.33	7.18	-2.84	-0.14
102	287	185	83	4592	0.916364	773.5	0.5723	1177.26	586.04	0	2.97	2058.17	7.17	2055.14	7.16	-3.03	-0.15
102	288	186	84	4608	0.914931	774.08	0.572917	1177.02	598.17	0.59	2.94	2062.27	7.16	2059.51	7.15	-2.75	-0.13
102	289	187	85	4624	0.913495	774.65	0.573529	1176.78	610.38	0	2.91	2065.09	7.15	2062.15	7.14	-2.94	-0.14
102	290	188	86	4640	0.912057	775.22	0.574138	1176.56	622.68	0.59	2.88	2069.01	7.13	2066.35	7.13	-2.66	-0.13
102	291	189	87	4656	0.910617	775.77	0.574742	1176.34	635.06	0	2.85	2071.68	7.12	2068.83	7.11	-2.85	-0.14
102	292	190	88	4672	0.909176	776.32	0.575342	1176.13	647.53	0.59	2.82	2075.43	7.11	2072.85	7.1	-2.58	-0.12
102	293	191	89	4688	0.907733	776.85	0.575939	1175.93	660.08	0	2.79	2077.93	7.09	2075.16	7.08	-2.77	-0.13
102	294	192	90	4704	0.906289	777.38	0.576531	1175.75	672.7	0.58	2.76	2081.52	7.08	2079.02	7.07	-2.5	-0.12
102	295	193	91	4720	0.904843	777.9	0.577119	1175.57	685.41	0	2.74	2083.86	7.06	2081.18	7.05	-2.68	-0.13
102	296	194	92	4736	0.903397	778.41	0.577703	1175.4	698.2	0.58	2.71	2087.29	7.05	2084.87	7.04	-2.42	-0.12
102	297	195	93	4752	0.901949	778.91	0.578283	1175.23	711.07	0	2.68	2089.47	7.04	2086.87	7.03	-2.61	-0.12
102	298	196	94	4768	0.9005	779.4	0.578859	1175.08	724.01	0.58	2.66	2092.74	7.02	2090.4	7.01	-2.34	-0.11
102	299	197	95	4784	0.89905	779.89	0.579431	1174.94	737.03	0	2.63	2094.77	7.01	2092.24	7	-2.53	-0.12
102	300	198	96	4800	0.8976	780.37	0.58	1174.8	750.13	0.58	2.61	2097.89	6.99	2095.62	6.99	-2.27	-0.11
102	301	199	97	4816	0.896149	780.84	0.580565	1174.67	763.3	0	2.58	2099.77	6.98	2097.31	6.97	-2.47	-0.12
102	302	200	98	4832	0.894698	781.3	0.581126	1174.55	776.55	0.58	2.56	2102.73	6.96	2100.53	6.96	-2.21	-0.11
102	303	201	99	4848	0.893246	781.75	0.581683	1174.44	789.87	0	2.54	2104.47	6.95	2102.07	6.94	-2.4	-0.11
102	304	202	100	4864	0.891794	782.2	0.582237	1174.34	803.27	0.57	2.51	2107.28	6.93	2105.14	6.92	-2.15	-0.1
102	305	203	101	4880	0.890341	782.63	0.582787	1174.24	816.74	0	2.49	2108.88	6.91	2106.53	6.91	-2.35	-0.11
102	306	204	102	4896	0.888889	783.06	0.583333	1174.15	830.28	0.57	2.47	2111.55	6.9	2109.45	6.89	-2.1	-0.1

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
102	307	205	103	4912	0.887436	783.49	0.583876	1174.07	843.89	0	2.44	2113	6.88	2110.7	6.88	-2.3	-0.11
102	308	206	104	4928	0.885984	783.9	0.584416	1174	857.57	0.57	2.42	2115.52	6.87	2113.47	6.86	-2.05	-0.1
102	309	207	105	4944	0.884532	784.31	0.584951	1173.93	871.32	0	2.4	2116.84	6.85	2114.58	6.84	-2.26	-0.11
102	310	208	106	4960	0.88308	784.71	0.585484	1173.87	885.14	0.57	2.38	2119.22	6.84	2117.21	6.83	-2.01	-0.1
102	311	209	107	4976	0.881629	785.1	0.586013	1173.82	899.03	0	2.36	2120.4	6.82	2118.18	6.81	-2.22	-0.1
102	312	210	108	4992	0.880178	785.49	0.586538	1173.78	912.99	0.57	2.34	2122.65	6.8	2120.66	6.8	-1.98	-0.09
102	313	211	109	5008	0.878727	785.87	0.587061	1173.74	927.01	0	2.32	2123.69	6.78	2121.5	6.78	-2.2	-0.1
102	314	212	110	5024	0.877277	786.25	0.58758	1173.71	941.1	0.56	2.3	2125.8	6.77	2123.84	6.76	-1.96	-0.09
102	315	213	111	5040	0.875828	786.61	0.588095	1173.69	955.26	0	2.28	2126.72	6.75	2124.54	6.74	-2.18	-0.1
102	316	214	112	5056	0.874379	786.97	0.588608	1173.67	969.48	0.56	2.26	2128.7	6.74	2126.75	6.73	-1.95	-0.09
102	317	215	113	5072	0.872931	787.33	0.589117	1173.66	983.77	0	2.24	2129.49	6.72	2127.32	6.71	-2.17	-0.1
102	318	216	114	5088	0.871485	787.67	0.589623	1173.66	998.12	0.56	2.22	2131.34	6.7	2129.39	6.7	-1.95	-0.09
102	319	217	115	5104	0.870039	788.01	0.590125	1173.66	1012.53	0	2.2	2132	6.68	2129.83	6.68	-2.17	-0.1
102	320	218	116	5120	0.868594	788.35	0.590625	1173.67	1027.01	0.56	2.18	2133.72	6.67	2131.76	6.66	-1.96	-0.09
102	321	219	117	5136	0.86715	788.68	0.591121	1173.68	1041.54	0	2.16	2134.26	6.65	2132.08	6.64	-2.18	-0.1
102	322	220	118	5152	0.865707	789	0.591615	1173.7	1056.14	0.56	2.15	2135.85	6.63	2133.88	6.63	-1.97	-0.09
102	323	221	119	5168	0.864266	789.32	0.592105	1173.73	1070.81	0	2.13	2136.27	6.61	2134.07	6.61	-2.2	-0.1
102	324	222	120	5184	0.862826	789.63	0.592593	1173.77	1085.53	0.56	2.11	2137.75	6.6	2135.75	6.59	-2	-0.09
102	325	223	121	5200	0.861387	789.93	0.593077	1173.81	1100.31	0	2.09	2138.05	6.58	2135.81	6.57	-2.24	-0.1
102	326	224	122	5216	0.85995	790.23	0.593558	1173.85	1115.15	0.55	2.08	2139.4	6.56	2137.36	6.56	-2.04	-0.1
102	327	225	123	5232	0.858514	790.52	0.594037	1173.9	1130.05	0	2.06	2139.58	6.54	2137.3	6.54	-2.28	-0.11
102	328	226	124	5248	0.857079	790.81	0.594512	1173.96	1145.01	0.55	2.04	2140.81	6.53	2138.73	6.52	-2.08	-0.1
102	329	227	125	5264	0.855646	791.09	0.594985	1174.02	1160.03	0	2.03	2140.88	6.51	2138.55	6.5	-2.33	-0.11
102	330	228	126	5280	0.854215	791.37	0.595455	1174.09	1175.1	0.55	2.01	2142	6.49	2139.86	6.48	-2.14	-0.1
102	331	229	127	5296	0.852785	791.64	0.595921	1174.17	1190.23	0	2	2141.96	6.47	2139.56	6.46	-2.39	-0.11
102	332	230	128	5312	0.851357	791.9	0.596386	1174.25	1205.42	0.55	1.98	2142.96	6.45	2140.75	6.45	-2.21	-0.1
102	333	231	129	5328	0.849931	792.16	0.596847	1174.33	1220.66	0	1.97	2142.81	6.43	2140.34	6.43	-2.47	-0.12
102	334	232	130	5344	0.848507	792.42	0.597305	1174.42	1235.96	0.55	1.95	2143.7	6.42	2141.4	6.41	-2.3	-0.11
102	335	233	131	5360	0.847084	792.67	0.597761	1174.52	1251.31	0	1.94	2143.44	6.4	2140.88	6.39	-2.56	-0.12
102	336	234	132	5376	0.845663	792.91	0.598214	1174.62	1266.72	0.55	1.92	2144.22	6.38	2141.83	6.37	-2.39	-0.11
102	337	235	133	5392	0.844244	793.15	0.598665	1174.73	1282.18	0	1.91	2143.85	6.36	2141.19	6.35	-2.66	-0.12
102	338	236	134	5408	0.842828	793.39	0.599112	1174.84	1297.69	0.54	1.89	2144.52	6.34	2142.02	6.34	-2.5	-0.12
102	339	237	135	5424	0.841413	793.62	0.599558	1174.95	1313.26	0	1.88	2144.05	6.32	2141.28	6.32	-2.77	-0.13
102	340	238	136	5440	0.84	793.84	0.6	1175.07	1328.88	0.54	1.86	2144.61	6.31	2142	6.3	-2.61	-0.12
102	341	239	137	5456	0.838589	794.06	0.60044	1175.2	1344.55	0	1.85	2144.04	6.29	2141.15	6.28	-2.89	-0.14
102	342	240	138	5472	0.837181	794.28	0.600877	1175.33	1360.27	0.54	1.84	2144.5	6.27	2141.75	6.26	-2.75	-0.13
102	343	241	139	5488	0.835774	794.49	0.601312	1175.46	1376.05	0	1.82	2143.82	6.25	2140.79	6.24	-3.03	-0.14
102	344	242	140	5504	0.83437	794.69	0.601744	1175.6	1391.87	0.54	1.81	2144.18	6.23	2141.29	6.22	-2.89	-0.13
102	345	243	141	5520	0.832968	794.89	0.602174	1175.75	1407.75	0	1.8	2143.41	6.21	2140.23	6.2	-3.18	-0.15
102	346	244	142	5536	0.831568	795.09	0.602601	1175.9	1423.67	0.54	1.78	2143.66	6.2	2140.62	6.19	-3.05	-0.14
102	347	245	143	5552	0.830171	795.28	0.603026	1176.05	1439.64	0	1.77	2142.79	6.18	2139.45	6.17	-3.34	-0.16
102	348	246	144	5568	0.828775	795.47	0.603448	1176.21	1455.67	0.54	1.76	2142.95	6.16	2139.73	6.15	-3.21	-0.15
102	349	247	145	5584	0.827382	795.66	0.603868	1176.37	1471.74	0	1.75	2141.98	6.14	2138.46	6.13	-3.52	-0.16
102	350	248	146	5600	0.825992	795.83	0.604286	1176.54	1487.86	0.53	1.73	2142.04	6.12	2138.64	6.11	-3.4	-0.16
102	351	249	147	5616	0.824604	796.01	0.604701	1176.71	1504.02	0	1.72	2140.98	6.1	2137.27	6.09	-3.71	-0.17
102	352	250	148	5632	0.823218	796.18	0.605114	1176.89	1520.24	0.53	1.71	2140.94	6.08	2137.35	6.07	-3.59	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
102	353	251	149	5648	0.821835	796.35	0.605524	1177.07	1536.5	0	1.7	2139.79	6.06	2135.88	6.05	-3.91	-0.18
102	354	252	150	5664	0.820454	796.51	0.605932	1177.25	1552.8	0.53	1.69	2139.65	6.04	2135.85	6.03	-3.8	-0.18
102	355	253	151	5680	0.819076	796.67	0.606338	1177.44	1569.16	0	1.68	2138.41	6.02	2134.29	6.01	-4.12	-0.19
102	356	254	152	5696	0.8177	796.82	0.606742	1177.63	1585.56	0.53	1.66	2138.19	6.01	2134.16	5.99	-4.03	-0.19
102	357	255	153	5712	0.816327	796.97	0.607143	1177.82	1602	0	1.65	2136.85	5.99	2132.5	5.97	-4.35	-0.2
102	358	256	154	5728	0.814956	797.12	0.607542	1178.02	1618.49	0.53	1.64	2136.54	5.97	2132.27	5.96	-4.26	-0.2
102	359	257	155	5744	0.813588	797.26	0.607939	1178.23	1635.02	0	1.63	2135.12	5.95	2130.52	5.93	-4.6	-0.22
102	360	258	156	5760	0.812222	797.4	0.608333	1178.44	1651.6	0.53	1.62	2134.71	5.93	2130.2	5.92	-4.51	-0.21
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
103	205	102	-1	3280	0.999976	674.47	0.49878	1277.48	0.12	0	9.8	1337.73	6.53	1346.92	6.57	9.19	0.68
103	206	103	0	3296	1	676.67	0.5	1275.39	0	-0.7	10	1353.24	6.57	1362.15	6.61	8.92	0.65
103	207	104	1	3312	0.999977	678.85	0.501208	1273.35	0.12	0	9.8	1369.48	6.62	1376.97	6.65	7.49	0.54
103	208	105	2	3328	0.999908	680.98	0.502404	1271.35	0.47	-0.69	9.6	1384.11	6.65	1391.78	6.69	7.67	0.55
103	209	106	3	3344	0.999794	683.09	0.503589	1269.39	1.05	0	9.41	1399.89	6.7	1406.18	6.73	6.29	0.45
103	210	107	4	3360	0.999637	685.16	0.504762	1267.47	1.86	-0.69	9.23	1414.05	6.73	1420.57	6.76	6.52	0.46
103	211	108	5	3376	0.999438	687.19	0.505924	1265.6	2.89	0	9.05	1429.37	6.77	1434.56	6.8	5.18	0.36
103	212	109	6	3392	0.999199	689.2	0.507075	1263.76	4.14	-0.69	8.88	1443.1	6.81	1448.55	6.83	5.46	0.38
103	213	110	7	3408	0.99892	691.17	0.508216	1261.96	5.61	0	8.71	1457.97	6.84	1462.14	6.86	4.17	0.28
103	214	111	8	3424	0.998602	693.11	0.509346	1260.19	7.29	-0.68	8.55	1471.26	6.88	1475.75	6.9	4.48	0.3
103	215	112	9	3440	0.998248	695.02	0.510465	1258.47	9.19	0	8.39	1485.71	6.91	1488.94	6.93	3.23	0.22
103	216	113	10	3456	0.997857	696.9	0.511574	1256.78	11.29	-0.68	8.23	1498.58	6.94	1502.17	6.95	3.58	0.24
103	217	114	11	3472	0.99743	698.75	0.512673	1255.12	13.6	0	8.08	1512.61	6.97	1514.98	6.98	2.37	0.16
103	218	115	12	3488	0.99697	700.58	0.513761	1253.5	16.11	-0.68	7.94	1525.07	7	1527.83	7.01	2.76	0.18
103	219	116	13	3504	0.996476	702.37	0.51484	1251.91	18.82	0	7.79	1538.69	7.03	1540.28	7.03	1.58	0.1
103	220	117	14	3520	0.99595	704.13	0.515909	1250.36	21.73	-0.67	7.65	1550.76	7.05	1552.77	7.06	2.01	0.13
103	221	118	15	3536	0.995393	705.87	0.516968	1248.84	24.83	0	7.52	1563.98	7.08	1564.85	7.08	0.87	0.06
103	222	119	16	3552	0.994806	707.58	0.518018	1247.35	28.12	-0.67	7.39	1575.67	7.1	1576.99	7.1	1.32	0.08
103	223	120	17	3568	0.994189	709.26	0.519058	1245.89	31.61	0	7.26	1588.5	7.12	1588.71	7.12	0.21	0.01
103	224	121	18	3584	0.993543	710.92	0.520089	1244.46	35.28	-0.67	7.14	1599.81	7.14	1600.51	7.15	0.7	0.04
103	225	122	19	3600	0.992869	712.55	0.521111	1243.06	39.13	0	7.01	1612.27	7.17	1611.89	7.16	-0.38	-0.02
103	226	123	20	3616	0.992169	714.16	0.522124	1241.69	43.17	-0.67	6.9	1623.22	7.18	1623.35	7.18	0.13	0.01
103	227	124	21	3632	0.991442	715.74	0.523128	1240.35	47.39	0	6.78	1635.31	7.2	1634.39	7.2	-0.92	-0.06
103	228	125	22	3648	0.990689	717.29	0.524123	1239.04	51.78	-0.66	6.67	1645.9	7.22	1645.52	7.22	-0.38	-0.02
103	229	126	23	3664	0.989912	718.82	0.525109	1237.75	56.35	0	6.56	1657.64	7.24	1656.23	7.23	-1.4	-0.08
103	230	127	24	3680	0.989112	720.33	0.526087	1236.49	61.09	-0.66	6.45	1667.88	7.25	1667.04	7.25	-0.84	-0.05
103	231	128	25	3696	0.988287	721.82	0.527056	1235.26	66	0	6.35	1679.27	7.27	1677.43	7.26	-1.84	-0.11
103	232	129	26	3712	0.987441	723.28	0.528017	1234.06	71.08	-0.66	6.25	1689.18	7.28	1687.92	7.28	-1.25	-0.07
103	233	130	27	3728	0.986572	724.72	0.52897	1232.88	76.33	0	6.15	1700.23	7.3	1698	7.29	-2.23	-0.13
103	234	131	28	3744	0.985682	726.13	0.529915	1231.72	81.73	-0.65	6.05	1709.81	7.31	1708.19	7.3	-1.62	-0.09
103	235	132	29	3760	0.984771	727.53	0.530851	1230.59	87.31	0	5.96	1720.53	7.32	1717.96	7.31	-2.57	-0.15
103	236	133	30	3776	0.983841	728.9	0.53178	1229.49	93.04	-0.65	5.86	1729.79	7.33	1727.84	7.32	-1.94	-0.11
103	237	134	31	3792	0.982891	730.25	0.5327	1228.41	98.92	0	5.77	1740.19	7.34	1737.32	7.33	-2.87	-0.17
103	238	135	32	3808	0.981922	731.58	0.533613	1227.35	104.97	-0.65	5.69	1749.14	7.35	1746.91	7.34	-2.23	-0.13
103	239	136	33	3824	0.980935	732.89	0.534519	1226.31	111.17	0	5.6	1759.22	7.36	1756.09	7.35	-3.14	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
103	240	137	34	3840	0.979931	734.18	0.535417	1225.3	117.52	-0.65	5.52	1767.87	7.37	1765.39	7.36	-2.48	-0.14
103	241	138	35	3856	0.978909	735.45	0.536307	1224.31	124.02	0	5.43	1777.65	7.38	1774.28	7.36	-3.37	-0.19
103	242	139	36	3872	0.97787	736.7	0.53719	1223.34	130.66	-0.64	5.35	1786	7.38	1783.31	7.37	-2.69	-0.15
103	243	140	37	3888	0.976816	737.94	0.538066	1222.4	137.46	0	5.28	1795.48	7.39	1791.92	7.37	-3.57	-0.2
103	244	141	38	3904	0.975746	739.15	0.538934	1221.47	144.4	-0.64	5.2	1803.54	7.39	1800.67	7.38	-2.88	-0.16
103	245	142	39	3920	0.974661	740.34	0.539796	1220.57	151.48	0	5.12	1812.74	7.4	1809	7.38	-3.73	-0.21
103	246	143	40	3936	0.973561	741.52	0.54065	1219.68	158.7	-0.64	5.05	1820.51	7.4	1817.49	7.39	-3.03	-0.17
103	247	144	41	3952	0.972447	742.68	0.541498	1218.82	166.06	0	4.98	1829.43	7.41	1825.56	7.39	-3.87	-0.21
103	248	145	42	3968	0.971319	743.81	0.542339	1217.97	173.56	-0.64	4.91	1836.93	7.41	1833.77	7.39	-3.15	-0.17
103	249	146	43	3984	0.970178	744.94	0.543173	1217.14	181.2	0	4.84	1845.56	7.41	1841.58	7.4	-3.98	-0.22
103	250	147	44	4000	0.969024	746.04	0.544	1216.34	188.97	-0.63	4.77	1852.8	7.41	1849.54	7.4	-3.26	-0.18
103	251	148	45	4016	0.967858	747.13	0.544821	1215.55	196.87	0	4.71	1861.16	7.41	1857.09	7.4	-4.07	-0.22
103	252	149	46	4032	0.966679	748.2	0.545635	1214.78	204.91	-0.63	4.65	1868.13	7.41	1864.8	7.4	-3.33	-0.18
103	253	150	47	4048	0.965489	749.25	0.546443	1214.02	213.07	0	4.58	1876.23	7.42	1872.1	7.4	-4.13	-0.22
103	254	151	48	4064	0.964288	750.29	0.547244	1213.29	221.36	-0.63	4.52	1882.95	7.41	1879.56	7.4	-3.39	-0.18
103	255	152	49	4080	0.963076	751.32	0.548039	1212.57	229.78	0	4.46	1890.79	7.41	1886.62	7.4	-4.18	-0.22
103	256	153	50	4096	0.961853	752.32	0.548828	1211.87	238.32	-0.62	4.4	1897.26	7.41	1893.84	7.4	-3.42	-0.18
103	257	154	51	4112	0.96062	753.31	0.549611	1211.19	246.99	0	4.35	1904.85	7.41	1900.65	7.4	-4.2	-0.22
103	258	155	52	4128	0.959377	754.29	0.550388	1210.52	255.78	-0.62	4.29	1911.08	7.41	1907.63	7.39	-3.44	-0.18
103	259	156	53	4144	0.958125	755.25	0.551158	1209.87	264.69	0	4.23	1918.42	7.41	1914.21	7.39	-4.21	-0.22
103	260	157	54	4160	0.956864	756.2	0.551923	1209.24	273.72	-0.62	4.18	1924.41	7.4	1920.96	7.39	-3.44	-0.18
103	261	158	55	4176	0.955594	757.13	0.552682	1208.62	282.87	0	4.13	1931.52	7.4	1927.31	7.38	-4.21	-0.22
103	262	159	56	4192	0.954315	758.04	0.553435	1208.01	292.13	-0.62	4.08	1937.27	7.39	1933.84	7.38	-3.43	-0.18
103	263	160	57	4208	0.953028	758.95	0.554183	1207.42	301.51	0	4.02	1944.14	7.39	1939.96	7.38	-4.18	-0.22
103	264	161	58	4224	0.951733	759.84	0.554924	1206.85	311.01	-0.62	3.97	1949.66	7.39	1946.26	7.37	-3.4	-0.17
103	265	162	59	4240	0.950431	760.71	0.55566	1206.29	320.61	0	3.93	1956.31	7.38	1952.16	7.37	-4.15	-0.21
103	266	163	60	4256	0.949121	761.57	0.556391	1205.75	330.33	-0.61	3.88	1961.61	7.37	1958.24	7.36	-3.37	-0.17
103	267	164	61	4272	0.947804	762.42	0.557116	1205.22	340.16	0	3.83	1968.03	7.37	1963.92	7.36	-4.11	-0.21
103	268	165	62	4288	0.94648	763.26	0.557836	1204.7	350.1	-0.61	3.78	1973.12	7.36	1969.8	7.35	-3.32	-0.17
103	269	166	63	4304	0.94515	764.08	0.55855	1204.2	360.15	0	3.74	1979.31	7.36	1975.26	7.34	-4.05	-0.21
103	270	167	64	4320	0.943813	764.89	0.559259	1203.71	370.3	-0.61	3.7	1984.19	7.35	1980.93	7.34	-3.26	-0.16
103	271	168	65	4336	0.942471	765.68	0.559963	1203.24	380.56	0	3.65	1990.17	7.34	1986.19	7.33	-3.99	-0.2
103	272	169	66	4352	0.941122	766.47	0.560662	1202.78	390.92	-0.61	3.61	1994.84	7.33	1991.65	7.32	-3.19	-0.16
103	273	170	67	4368	0.939768	767.24	0.561355	1202.33	401.38	0	3.57	2000.62	7.33	1996.7	7.31	-3.92	-0.2
103	274	171	68	4384	0.938409	768	0.562044	1201.89	411.95	-0.6	3.53	2005.08	7.32	2001.96	7.31	-3.12	-0.16
103	275	172	69	4400	0.937045	768.75	0.562727	1201.47	422.62	0	3.49	2010.65	7.31	2006.81	7.3	-3.84	-0.19
103	276	173	70	4416	0.935675	769.48	0.563406	1201.06	433.39	-0.6	3.45	2014.91	7.3	2011.87	7.29	-3.04	-0.15
103	277	174	71	4432	0.934301	770.21	0.564079	1200.66	444.26	0	3.41	2020.28	7.29	2016.53	7.28	-3.76	-0.19
103	278	175	72	4448	0.932923	770.92	0.564748	1200.28	455.22	-0.6	3.37	2024.35	7.28	2021.39	7.27	-2.96	-0.15
103	279	176	73	4464	0.93154	771.62	0.565412	1199.9	466.28	0	3.33	2029.53	7.27	2025.86	7.26	-3.67	-0.18
103	280	177	74	4480	0.930153	772.32	0.566071	1199.54	477.44	-0.6	3.3	2033.41	7.26	2030.54	7.25	-2.87	-0.14
103	281	178	75	4496	0.928762	773	0.566726	1199.19	488.69	0	3.26	2038.39	7.25	2034.81	7.24	-3.58	-0.18
103	282	179	76	4512	0.927368	773.67	0.567376	1198.85	500.04	-0.6	3.22	2042.08	7.24	2039.3	7.23	-2.78	-0.14
103	283	180	77	4528	0.92597	774.32	0.568021	1198.52	511.47	0	3.19	2046.87	7.23	2043.39	7.22	-3.49	-0.17
103	284	181	78	4544	0.924569	774.97	0.568662	1198.2	523	-0.59	3.16	2050.39	7.22	2047.7	7.21	-2.69	-0.13
103	285	182	79	4560	0.923164	775.61	0.569298	1197.89	534.62	0	3.12	2054.99	7.21	2051.6	7.2	-3.39	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
103	286	183	80	4576	0.921757	776.24	0.56993	1197.6	546.33	-0.59	3.09	2058.33	7.2	2055.73	7.19	-2.6	-0.13
103	287	184	81	4592	0.920346	776.86	0.570557	1197.31	558.13	0	3.06	2062.76	7.19	2059.46	7.18	-3.3	-0.16
103	288	185	82	4608	0.918933	777.46	0.571181	1197.03	570.02	-0.59	3.02	2065.91	7.17	2063.41	7.16	-2.5	-0.12
103	289	186	83	4624	0.917518	778.06	0.571799	1196.77	581.99	0	2.99	2070.17	7.16	2066.96	7.15	-3.2	-0.15
103	290	187	84	4640	0.9161	778.65	0.572414	1196.51	594.05	-0.59	2.96	2073.15	7.15	2070.75	7.14	-2.41	-0.12
103	291	188	85	4656	0.91468	779.23	0.573024	1196.27	606.2	0	2.93	2077.23	7.14	2074.12	7.13	-3.11	-0.15
103	292	189	86	4672	0.913258	779.8	0.57363	1196.03	618.43	-0.59	2.9	2080.05	7.12	2077.74	7.12	-2.32	-0.11
103	293	190	87	4688	0.911834	780.36	0.574232	1195.81	630.74	0	2.87	2083.96	7.11	2080.94	7.1	-3.02	-0.15
103	294	191	88	4704	0.910408	780.91	0.57483	1195.59	643.14	-0.58	2.84	2086.62	7.1	2084.39	7.09	-2.23	-0.11
103	295	192	89	4720	0.90898	781.46	0.575424	1195.38	655.62	0	2.82	2090.36	7.09	2087.43	7.08	-2.93	-0.14
103	296	193	90	4736	0.907551	781.99	0.576014	1195.19	668.17	-0.58	2.79	2092.86	7.07	2090.72	7.06	-2.14	-0.1
103	297	194	91	4752	0.906121	782.51	0.576599	1195	680.81	0	2.76	2096.44	7.06	2093.59	7.05	-2.84	-0.14
103	298	195	92	4768	0.904689	783.03	0.577181	1194.82	693.53	-0.58	2.73	2098.78	7.04	2096.72	7.04	-2.06	-0.1
103	299	196	93	4784	0.903256	783.54	0.577759	1194.65	706.33	0	2.71	2102.2	7.03	2099.43	7.02	-2.76	-0.13
103	300	197	94	4800	0.901822	784.04	0.578333	1194.49	719.2	-0.58	2.68	2104.38	7.01	2102.4	7.01	-1.98	-0.09
103	301	198	95	4816	0.900387	784.53	0.578904	1194.33	732.15	0	2.66	2107.64	7	2104.96	6.99	-2.68	-0.13
103	302	199	96	4832	0.898952	785.01	0.57947	1194.19	745.18	-0.58	2.63	2109.68	6.99	2107.77	6.98	-1.91	-0.09
103	303	200	97	4848	0.897515	785.49	0.580033	1194.05	758.28	0	2.61	2112.79	6.97	2110.18	6.96	-2.61	-0.12
103	304	201	98	4864	0.896079	785.95	0.580592	1193.92	771.46	-0.57	2.58	2114.67	6.96	2112.84	6.95	-1.84	-0.09
103	305	202	99	4880	0.894641	786.41	0.581148	1193.8	784.71	0	2.56	2117.63	6.94	2115.09	6.93	-2.54	-0.12
103	306	203	100	4896	0.893203	786.86	0.581699	1193.69	798.04	-0.57	2.53	2119.37	6.93	2117.6	6.92	-1.77	-0.08
103	307	204	101	4912	0.891765	787.31	0.582248	1193.58	811.43	0	2.51	2122.18	6.91	2119.7	6.9	-2.48	-0.12
103	308	205	102	4928	0.890327	787.74	0.582792	1193.49	824.9	-0.57	2.49	2123.78	6.9	2122.07	6.89	-1.72	-0.08
103	309	206	103	4944	0.888889	788.17	0.583333	1193.4	838.44	0	2.47	2126.45	6.88	2124.02	6.87	-2.43	-0.11
103	310	207	104	4960	0.887451	788.59	0.583871	1193.32	852.06	-0.57	2.44	2127.91	6.86	2126.24	6.86	-1.67	-0.08
103	311	208	105	4976	0.886012	789.01	0.584405	1193.24	865.74	0	2.42	2130.43	6.85	2128.06	6.84	-2.38	-0.11
103	312	209	106	4992	0.884574	789.42	0.584936	1193.18	879.49	-0.57	2.4	2131.76	6.83	2130.13	6.83	-1.62	-0.08
103	313	210	107	5008	0.883137	789.82	0.585463	1193.12	893.3	0	2.38	2134.14	6.82	2131.8	6.81	-2.34	-0.11
103	314	211	108	5024	0.881699	790.21	0.585987	1193.07	907.19	-0.56	2.36	2135.33	6.8	2133.74	6.8	-1.59	-0.07
103	315	212	109	5040	0.880262	790.6	0.586508	1193.02	921.14	0	2.34	2137.58	6.79	2135.27	6.78	-2.3	-0.11
103	316	213	110	5056	0.878826	790.97	0.587025	1192.98	935.16	-0.56	2.32	2138.63	6.77	2137.07	6.76	-1.56	-0.07
103	317	214	111	5072	0.87739	791.35	0.587539	1192.95	949.25	0	2.3	2140.75	6.75	2138.47	6.75	-2.28	-0.11
103	318	215	112	5088	0.875954	791.71	0.58805	1192.93	963.4	-0.56	2.28	2141.67	6.73	2140.13	6.73	-1.54	-0.07
103	319	216	113	5104	0.87452	792.07	0.588558	1192.91	977.62	0	2.26	2143.66	6.72	2141.39	6.71	-2.26	-0.11
103	320	217	114	5120	0.873086	792.43	0.589063	1192.9	991.9	-0.56	2.24	2144.46	6.7	2142.93	6.7	-1.53	-0.07
103	321	218	115	5136	0.871653	792.77	0.589564	1192.9	1006.24	0	2.22	2146.31	6.69	2144.05	6.68	-2.26	-0.11
103	322	219	116	5152	0.870221	793.11	0.590062	1192.9	1020.65	-0.56	2.2	2146.99	6.67	2145.46	6.66	-1.53	-0.07
103	323	220	117	5168	0.86879	793.45	0.590557	1192.91	1035.12	0	2.18	2148.72	6.65	2146.46	6.65	-2.26	-0.11
103	324	221	118	5184	0.86736	793.78	0.591049	1192.92	1049.65	-0.56	2.17	2149.27	6.63	2147.73	6.63	-1.54	-0.07
103	325	222	119	5200	0.865931	794.1	0.591538	1192.94	1064.24	0	2.15	2150.87	6.62	2148.6	6.61	-2.27	-0.11
103	326	223	120	5216	0.864504	794.41	0.592025	1192.97	1078.89	-0.55	2.13	2151.3	6.6	2149.75	6.59	-1.56	-0.07
103	327	224	121	5232	0.863077	794.72	0.592508	1193	1093.6	0	2.11	2152.79	6.58	2150.49	6.58	-2.3	-0.11
103	328	225	122	5248	0.861652	795.03	0.592988	1193.04	1108.37	-0.55	2.1	2153.1	6.56	2151.51	6.56	-1.59	-0.07
103	329	226	123	5264	0.860229	795.33	0.593465	1193.09	1123.2	0	2.08	2154.46	6.55	2152.13	6.54	-2.33	-0.11
103	330	227	124	5280	0.858806	795.62	0.593939	1193.14	1138.09	-0.55	2.06	2154.66	6.53	2153.03	6.52	-1.63	-0.08
103	331	228	125	5296	0.857385	795.91	0.594411	1193.19	1153.04	0	2.05	2155.91	6.51	2153.53	6.51	-2.37	-0.11

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
103	332	229	126	5312	0.855966	796.19	0.59488	1193.26	1168.04	-0.55	2.03	2155.99	6.49	2154.31	6.49	-1.68	-0.08
103	333	230	127	5328	0.854548	796.47	0.595345	1193.32	1183.1	0	2.02	2157.12	6.48	2154.69	6.47	-2.43	-0.11
103	334	231	128	5344	0.853132	796.74	0.595808	1193.4	1198.22	-0.55	2	2157.09	6.46	2155.35	6.45	-1.74	-0.08
103	335	232	129	5360	0.851718	797	0.596269	1193.48	1213.4	0	1.98	2158.11	6.44	2155.62	6.43	-2.49	-0.12
103	336	233	130	5376	0.850305	797.26	0.596726	1193.56	1228.62	-0.55	1.97	2157.97	6.42	2156.16	6.42	-1.81	-0.08
103	337	234	131	5392	0.848894	797.52	0.597181	1193.65	1243.91	0	1.95	2158.88	6.41	2156.31	6.4	-2.57	-0.12
103	338	235	132	5408	0.847484	797.77	0.597633	1193.74	1259.25	-0.54	1.94	2158.63	6.39	2156.74	6.38	-1.9	-0.09
103	339	236	133	5424	0.846077	798.02	0.598083	1193.84	1274.64	0	1.92	2159.43	6.37	2156.77	6.36	-2.66	-0.12
103	340	237	134	5440	0.844671	798.26	0.598529	1193.95	1290.08	-0.54	1.91	2159.08	6.35	2157.09	6.34	-1.99	-0.09
103	341	238	135	5456	0.843268	798.49	0.598974	1194.06	1305.58	0	1.9	2159.76	6.33	2157	6.33	-2.76	-0.13
103	342	239	136	5472	0.841866	798.72	0.599415	1194.17	1321.13	-0.54	1.88	2159.31	6.31	2157.21	6.31	-2.1	-0.1
103	343	240	137	5488	0.840466	798.95	0.599854	1194.3	1336.73	0	1.87	2159.89	6.3	2157.02	6.29	-2.87	-0.13
103	344	241	138	5504	0.839068	799.17	0.600291	1194.42	1352.39	-0.54	1.85	2159.34	6.28	2157.12	6.27	-2.22	-0.1
103	345	242	139	5520	0.837673	799.38	0.600725	1194.55	1368.09	0	1.84	2159.81	6.26	2156.81	6.25	-3	-0.14
103	346	243	140	5536	0.836279	799.6	0.601156	1194.68	1383.85	-0.54	1.83	2159.16	6.24	2156.8	6.23	-2.36	-0.11
103	347	244	141	5552	0.834888	799.8	0.601585	1194.82	1399.66	0	1.81	2159.53	6.22	2156.39	6.21	-3.14	-0.15
103	348	245	142	5568	0.833498	800.01	0.602011	1194.97	1415.51	-0.54	1.8	2158.78	6.2	2156.28	6.2	-2.5	-0.12
103	349	246	143	5584	0.832111	800.2	0.602436	1195.12	1431.42	0	1.79	2159.05	6.19	2155.76	6.18	-3.29	-0.15
103	350	247	144	5600	0.830727	800.4	0.602857	1195.27	1447.37	-0.53	1.78	2158.2	6.17	2155.54	6.16	-2.66	-0.12
103	351	248	145	5616	0.829344	800.59	0.603276	1195.43	1463.38	0	1.76	2158.38	6.15	2154.92	6.14	-3.45	-0.16
103	352	249	146	5632	0.827964	800.77	0.603693	1195.59	1479.43	-0.53	1.75	2157.43	6.13	2154.6	6.12	-2.83	-0.13
103	353	250	147	5648	0.826586	800.95	0.604108	1195.75	1495.53	0	1.74	2157.51	6.11	2153.88	6.1	-3.63	-0.17
103	354	251	148	5664	0.82521	801.13	0.60452	1195.92	1511.67	-0.53	1.73	2156.47	6.09	2153.46	6.08	-3.02	-0.14
103	355	252	149	5680	0.823837	801.3	0.60493	1196.1	1527.87	0	1.72	2156.45	6.07	2152.63	6.06	-3.82	-0.18
103	356	253	150	5696	0.822466	801.47	0.605337	1196.28	1544.11	-0.53	1.7	2155.32	6.05	2152.11	6.05	-3.22	-0.15
103	357	254	151	5712	0.821097	801.63	0.605742	1196.46	1560.39	0	1.69	2155.21	6.04	2151.19	6.03	-4.02	-0.19
103	358	255	152	5728	0.819731	801.79	0.606145	1196.65	1576.72	-0.53	1.68	2153.99	6.02	2150.56	6.01	-3.43	-0.16
103	359	256	153	5744	0.818367	801.95	0.606546	1196.84	1593.1	0	1.67	2153.78	6	2149.54	5.99	-4.24	-0.2
103	360	257	154	5760	0.817006	802.1	0.606944	1197.03	1609.52	-0.53	1.66	2152.48	5.98	2148.82	5.97	-3.65	-0.17
103	361	258	155	5776	0.815648	802.25	0.607341	1197.23	1625.99	0	1.65	2152.18	5.96	2147.71	5.95	-4.47	-0.21
103	362	259	156	5792	0.814291	802.39	0.607735	1197.44	1642.5	-0.53	1.64	2150.78	5.94	2146.89	5.93	-3.89	-0.18
103	363	260	157	5808	0.812938	802.53	0.608127	1197.64	1659.05	0	1.63	2150.39	5.92	2145.68	5.91	-4.71	-0.22
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
104	207	103	-1	3312	0.999977	678.85	0.498792	1298.2	0.12	0	9.8	1344.64	6.5	1353.85	6.54	9.21	0.68
104	208	104	0	3328	1	681.05	0.5	1296.1	0	0.69	10	1361.55	6.55	1370	6.59	8.45	0.62
104	209	105	1	3344	0.999977	683.21	0.501196	1294.04	0.12	0	9.8	1376.43	6.59	1383.94	6.62	7.51	0.54
104	210	106	2	3360	0.999909	685.34	0.502381	1292.03	0.46	0.69	9.61	1392.46	6.63	1399.67	6.67	7.2	0.51
104	211	107	3	3376	0.999798	687.44	0.503555	1290.06	1.04	0	9.42	1406.88	6.67	1413.2	6.7	6.32	0.45
104	212	108	4	3392	0.999644	689.51	0.504717	1288.12	1.84	0.69	9.24	1422.45	6.71	1428.51	6.74	6.06	0.42
104	213	109	5	3408	0.999449	691.54	0.505869	1286.23	2.86	0	9.06	1436.43	6.74	1441.65	6.77	5.22	0.36
104	214	110	6	3424	0.999214	693.54	0.507009	1284.38	4.1	0.68	8.89	1451.55	6.78	1456.55	6.81	5	0.34
104	215	111	7	3440	0.99894	695.5	0.50814	1282.57	5.56	0	8.72	1465.09	6.81	1469.3	6.83	4.2	0.29
104	216	112	8	3456	0.998628	697.44	0.509259	1280.79	7.23	0.68	8.56	1479.78	6.85	1483.8	6.87	4.02	0.27
104	217	113	9	3472	0.99828	699.35	0.510369	1279.05	9.1	0	8.4	1492.9	6.88	1496.17	6.89	3.27	0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
104	218	114	10	3488	0.997896	701.23	0.511468	1277.34	11.19	0.68	8.25	1507.17	6.91	1510.29	6.93	3.12	0.21
104	219	115	11	3504	0.997477	703.07	0.512557	1275.67	13.47	0	8.1	1519.88	6.94	1522.29	6.95	2.41	0.16
104	220	116	12	3520	0.997025	704.89	0.513636	1274.04	15.96	0.67	7.95	1533.73	6.97	1536.03	6.98	2.3	0.15
104	221	117	13	3536	0.99654	706.68	0.514706	1272.44	18.65	0	7.81	1546.04	7	1547.67	7	1.63	0.11
104	222	118	14	3552	0.996023	708.45	0.515766	1270.87	21.53	0.67	7.67	1559.5	7.02	1561.05	7.03	1.55	0.1
104	223	119	15	3568	0.995475	710.18	0.516816	1269.33	24.61	0	7.54	1571.42	7.05	1572.33	7.05	0.91	0.06
104	224	120	16	3584	0.994898	711.89	0.517857	1267.83	27.88	0.67	7.41	1584.49	7.07	1585.35	7.08	0.86	0.05
104	225	121	17	3600	0.994291	713.57	0.518889	1266.35	31.33	0	7.28	1596.03	7.09	1596.29	7.09	0.26	0.02
104	226	122	18	3616	0.993657	715.23	0.519912	1264.91	34.97	0.67	7.16	1608.72	7.12	1608.96	7.12	0.24	0.01
104	227	123	19	3632	0.992994	716.86	0.520925	1263.5	38.79	0	7.04	1619.89	7.14	1619.56	7.13	-0.33	-0.02
104	228	124	20	3648	0.992305	718.46	0.52193	1262.11	42.79	0.66	6.92	1632.21	7.16	1631.89	7.16	-0.33	-0.02
104	229	125	21	3664	0.991591	720.04	0.522926	1260.76	46.98	0	6.8	1643.03	7.17	1642.16	7.17	-0.87	-0.05
104	230	126	22	3680	0.990851	721.6	0.523913	1259.43	51.33	0.66	6.69	1654.99	7.2	1654.15	7.19	-0.84	-0.05
104	231	127	23	3696	0.990086	723.13	0.524892	1258.13	55.86	0	6.58	1665.46	7.21	1664.11	7.2	-1.35	-0.08
104	232	128	24	3712	0.989298	724.64	0.525862	1256.86	60.57	0.66	6.48	1677.07	7.23	1675.78	7.22	-1.3	-0.08
104	233	129	25	3728	0.988488	726.12	0.526824	1255.61	65.44	0	6.37	1687.2	7.24	1685.42	7.23	-1.78	-0.11
104	234	130	26	3744	0.987654	727.59	0.527778	1254.39	70.48	0.65	6.27	1698.47	7.26	1696.76	7.25	-1.71	-0.1
104	235	131	27	3760	0.986799	729.03	0.528723	1253.2	75.68	0	6.17	1708.27	7.27	1706.1	7.26	-2.17	-0.13
104	236	132	28	3776	0.985924	730.44	0.529661	1252.03	81.04	0.65	6.08	1719.21	7.28	1717.13	7.28	-2.07	-0.12
104	237	133	29	3792	0.985027	731.84	0.530591	1250.89	86.57	0	5.98	1728.68	7.29	1726.17	7.28	-2.51	-0.15
104	238	134	30	3808	0.984111	733.21	0.531513	1249.77	92.26	0.65	5.89	1739.3	7.31	1736.9	7.3	-2.4	-0.14
104	239	135	31	3824	0.983176	734.57	0.532427	1248.67	98.1	0	5.8	1748.46	7.32	1745.65	7.3	-2.81	-0.16
104	240	136	32	3840	0.982222	735.9	0.533333	1247.6	104.1	0.65	5.71	1758.76	7.33	1756.08	7.32	-2.68	-0.15
104	241	137	33	3856	0.98125	737.21	0.534232	1246.55	110.25	0	5.63	1767.61	7.33	1764.54	7.32	-3.07	-0.17
104	242	138	34	3872	0.980261	738.51	0.535124	1245.53	116.55	0.64	5.54	1777.6	7.35	1774.68	7.33	-2.93	-0.16
104	243	139	35	3888	0.979255	739.78	0.536008	1244.52	123	0	5.46	1786.16	7.35	1782.86	7.34	-3.3	-0.19
104	244	140	36	3904	0.978232	741.03	0.536885	1243.54	129.6	0.64	5.38	1795.85	7.36	1792.71	7.35	-3.14	-0.18
104	245	141	37	3920	0.977193	742.27	0.537755	1242.58	136.34	0	5.3	1804.12	7.36	1800.62	7.35	-3.49	-0.19
104	246	142	38	3936	0.976139	743.48	0.538618	1241.64	143.23	0.64	5.23	1813.51	7.37	1810.2	7.36	-3.32	-0.18
104	247	143	39	3952	0.975069	744.68	0.539474	1240.72	150.26	0	5.15	1821.49	7.37	1817.84	7.36	-3.66	-0.2
104	248	144	40	3968	0.973985	745.86	0.540323	1239.82	157.43	0.64	5.08	1830.61	7.38	1827.14	7.37	-3.47	-0.19
104	249	145	41	3984	0.972888	747.02	0.541165	1238.94	164.74	0	5.01	1838.31	7.38	1834.52	7.37	-3.79	-0.21
104	250	146	42	4000	0.971776	748.16	0.542	1238.09	172.18	0.63	4.94	1847.14	7.39	1843.55	7.37	-3.59	-0.19
104	251	147	43	4016	0.970651	749.29	0.542829	1237.25	179.76	0	4.87	1854.58	7.39	1850.68	7.37	-3.9	-0.21
104	252	148	44	4032	0.969514	750.39	0.543651	1236.43	187.48	0.63	4.8	1863.14	7.39	1859.45	7.38	-3.69	-0.2
104	253	149	45	4048	0.968364	751.49	0.544466	1235.62	195.32	0	4.74	1870.31	7.39	1866.32	7.38	-3.98	-0.21
104	254	150	46	4064	0.967202	752.56	0.545276	1234.84	203.3	0.63	4.67	1878.6	7.4	1874.84	7.38	-3.76	-0.2
104	255	151	47	4080	0.966028	753.62	0.546078	1234.08	211.4	0	4.61	1885.51	7.39	1881.47	7.38	-4.05	-0.22
104	256	152	48	4096	0.964844	754.66	0.546875	1233.33	219.64	0.62	4.55	1893.55	7.4	1889.73	7.38	-3.81	-0.2
104	257	153	49	4112	0.963648	755.69	0.547665	1232.6	228	0	4.49	1900.21	7.39	1896.12	7.38	-4.09	-0.22
104	258	154	50	4128	0.962442	756.7	0.54845	1231.88	236.48	0.62	4.43	1907.99	7.4	1904.14	7.38	-3.85	-0.2
104	259	155	51	4144	0.961226	757.69	0.549228	1231.19	245.09	0	4.37	1914.4	7.39	1910.29	7.38	-4.11	-0.22
104	260	156	52	4160	0.96	758.67	0.55	1230.51	253.82	0.62	4.32	1921.93	7.39	1918.07	7.38	-3.86	-0.2
104	261	157	53	4176	0.958765	759.64	0.550766	1229.85	262.67	0	4.26	1928.11	7.39	1923.99	7.37	-4.11	-0.21
104	262	158	54	4192	0.95752	760.59	0.551527	1229.2	271.64	0.62	4.21	1935.4	7.39	1931.54	7.37	-3.86	-0.2
104	263	159	55	4208	0.956267	761.53	0.552281	1228.57	280.73	0	4.15	1941.34	7.38	1937.24	7.37	-4.1	-0.21

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
104	264	160	56	4224	0.955005	762.45	0.55303	1227.95	289.93	0.62	4.1	1948.39	7.38	1944.55	7.37	-3.84	-0.2
104	265	161	57	4240	0.953734	763.35	0.553774	1227.35	299.25	0	4.05	1954.1	7.37	1950.03	7.36	-4.07	-0.21
104	266	162	58	4256	0.952456	764.25	0.554511	1226.77	308.68	0.61	4	1960.92	7.37	1957.11	7.36	-3.81	-0.19
104	267	163	59	4272	0.951171	765.13	0.555243	1226.2	318.22	0	3.95	1966.41	7.36	1962.37	7.35	-4.04	-0.21
104	268	164	60	4288	0.949877	765.99	0.55597	1225.64	327.88	0.61	3.91	1973	7.36	1969.24	7.35	-3.77	-0.19
104	269	165	61	4304	0.948577	766.85	0.556691	1225.1	337.64	0	3.86	1978.27	7.35	1974.28	7.34	-3.99	-0.2
104	270	166	62	4320	0.94727	767.69	0.557407	1224.57	347.52	0.61	3.81	1984.65	7.35	1980.93	7.34	-3.71	-0.19
104	271	167	63	4336	0.945957	768.52	0.558118	1224.06	357.5	0	3.77	1989.7	7.34	1985.77	7.33	-3.92	-0.2
104	272	168	64	4352	0.944637	769.33	0.558824	1223.56	367.58	0.61	3.72	1995.86	7.34	1992.21	7.32	-3.65	-0.18
104	273	169	65	4368	0.943311	770.13	0.559524	1223.07	377.78	0	3.68	2000.7	7.33	1996.84	7.31	-3.86	-0.19
104	274	170	66	4384	0.941979	770.92	0.560219	1222.6	388.07	0.6	3.64	2006.64	7.32	2003.07	7.31	-3.57	-0.18
104	275	171	67	4400	0.940641	771.7	0.560909	1222.14	398.47	0	3.59	2011.28	7.31	2007.5	7.3	-3.78	-0.19
104	276	172	68	4416	0.939298	772.46	0.561594	1221.69	408.98	0.6	3.55	2017.02	7.31	2013.53	7.3	-3.5	-0.17
104	277	173	69	4432	0.93795	773.22	0.562274	1221.26	419.58	0	3.51	2021.46	7.3	2017.76	7.28	-3.69	-0.18
104	278	174	70	4448	0.936597	773.96	0.56295	1220.84	430.28	0.6	3.47	2027	7.29	2023.59	7.28	-3.41	-0.17
104	279	175	71	4464	0.93524	774.69	0.56362	1220.43	441.08	0	3.43	2031.24	7.28	2027.63	7.27	-3.6	-0.18
104	280	176	72	4480	0.933878	775.41	0.564286	1220.03	451.98	0.6	3.4	2036.58	7.27	2033.26	7.26	-3.32	-0.16
104	281	177	73	4496	0.932511	776.12	0.564947	1219.65	462.97	0	3.36	2040.62	7.26	2037.11	7.25	-3.51	-0.17
104	282	178	74	4512	0.93114	776.81	0.565603	1219.27	474.06	0.6	3.32	2045.77	7.25	2042.54	7.24	-3.22	-0.16
104	283	179	75	4528	0.929766	777.5	0.566254	1218.91	485.25	0	3.29	2049.63	7.24	2046.21	7.23	-3.41	-0.17
104	284	180	76	4544	0.928387	778.17	0.566901	1218.56	496.53	0.59	3.25	2054.58	7.23	2051.46	7.22	-3.13	-0.15
104	285	181	77	4560	0.927005	778.84	0.567544	1218.22	507.9	0	3.22	2058.26	7.22	2054.95	7.21	-3.31	-0.16
104	286	182	78	4576	0.92562	779.49	0.568182	1217.89	519.36	0.59	3.18	2063.03	7.21	2060	7.2	-3.03	-0.15
104	287	183	79	4592	0.924231	780.14	0.568815	1217.57	530.91	0	3.15	2066.52	7.2	2063.31	7.19	-3.21	-0.16
104	288	184	80	4608	0.92284	780.77	0.569444	1217.27	542.55	0.59	3.11	2071.11	7.19	2068.19	7.18	-2.92	-0.14
104	289	185	81	4624	0.921445	781.39	0.570069	1216.97	554.28	0	3.08	2074.43	7.18	2071.32	7.17	-3.11	-0.15
104	290	186	82	4640	0.920048	782.01	0.57069	1216.69	566.1	0.59	3.05	2078.84	7.17	2076.02	7.16	-2.82	-0.14
104	291	187	83	4656	0.918648	782.61	0.571306	1216.41	578.01	0	3.02	2081.99	7.15	2078.98	7.14	-3.01	-0.14
104	292	188	84	4672	0.917245	783.21	0.571918	1216.15	590	0.59	2.99	2086.22	7.14	2083.5	7.14	-2.72	-0.13
104	293	189	85	4688	0.915841	783.79	0.572526	1215.89	602.08	0	2.96	2089.2	7.13	2086.29	7.12	-2.9	-0.14
104	294	190	86	4704	0.914434	784.37	0.573129	1215.65	614.24	0.58	2.93	2093.26	7.12	2090.64	7.11	-2.62	-0.13
104	295	191	87	4720	0.913025	784.93	0.573729	1215.41	626.48	0	2.9	2096.07	7.11	2093.27	7.1	-2.8	-0.13
104	296	192	88	4736	0.911614	785.49	0.574324	1215.19	638.81	0.58	2.87	2099.97	7.09	2097.45	7.09	-2.52	-0.12
104	297	193	89	4752	0.910202	786.04	0.574916	1214.97	651.22	0	2.84	2102.62	7.08	2099.91	7.07	-2.7	-0.13
104	298	194	90	4768	0.908788	786.58	0.575503	1214.76	663.7	0.58	2.81	2106.35	7.07	2103.92	7.06	-2.43	-0.12
104	299	195	91	4784	0.907372	787.11	0.576087	1214.56	676.27	0	2.79	2108.84	7.05	2106.23	7.04	-2.61	-0.12
104	300	196	92	4800	0.905956	787.63	0.576667	1214.38	688.92	0.58	2.76	2112.41	7.04	2110.07	7.03	-2.33	-0.11
104	301	197	93	4816	0.904537	788.14	0.577243	1214.2	701.65	0	2.73	2114.74	7.03	2112.22	7.02	-2.52	-0.12
104	302	198	94	4832	0.903118	788.65	0.577815	1214.02	714.45	0.58	2.71	2118.15	7.01	2115.91	7.01	-2.24	-0.11
104	303	199	95	4848	0.901698	789.15	0.578383	1213.86	727.34	0	2.68	2120.33	7	2117.91	6.99	-2.43	-0.11
104	304	200	96	4864	0.900277	789.64	0.578947	1213.71	740.29	0.57	2.65	2123.59	6.99	2121.43	6.98	-2.16	-0.1
104	305	201	97	4880	0.898855	790.12	0.579508	1213.56	753.33	0	2.63	2125.62	6.97	2123.28	6.96	-2.35	-0.11
104	306	202	98	4896	0.897433	790.59	0.580065	1213.43	766.43	0.57	2.61	2128.73	6.96	2126.65	6.95	-2.08	-0.1
104	307	203	99	4912	0.89601	791.05	0.580619	1213.3	779.62	0	2.58	2130.61	6.94	2128.34	6.93	-2.27	-0.11
104	308	204	100	4928	0.894586	791.51	0.581169	1213.18	792.87	0.57	2.56	2133.57	6.93	2131.56	6.92	-2	-0.09
104	309	205	101	4944	0.893162	791.96	0.581715	1213.06	806.2	0	2.53	2135.31	6.91	2133.11	6.9	-2.2	-0.1

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
104	310	206	102	4960	0.891738	792.4	0.582258	1212.96	819.6	0.57	2.51	2138.12	6.9	2136.18	6.89	-1.94	-0.09
104	311	207	103	4976	0.890313	792.84	0.582797	1212.86	833.07	0	2.49	2139.72	6.88	2137.59	6.87	-2.13	-0.1
104	312	208	104	4992	0.888889	793.27	0.583333	1212.77	846.61	0.57	2.47	2142.38	6.87	2140.51	6.86	-1.87	-0.09
104	313	209	105	5008	0.887464	793.69	0.583866	1212.69	860.22	0	2.44	2143.85	6.85	2141.78	6.84	-2.07	-0.1
104	314	210	106	5024	0.88604	794.1	0.584395	1212.62	873.9	0.56	2.42	2146.37	6.84	2144.55	6.83	-1.82	-0.08
104	315	211	107	5040	0.884616	794.51	0.584921	1212.55	887.65	0	2.4	2147.7	6.82	2145.68	6.81	-2.02	-0.09
104	316	212	108	5056	0.883192	794.9	0.585443	1212.49	901.47	0.56	2.38	2150.08	6.8	2148.31	6.8	-1.77	-0.08
104	317	213	109	5072	0.881768	795.3	0.585962	1212.44	915.35	0	2.36	2151.28	6.79	2149.3	6.78	-1.97	-0.09
104	318	214	110	5088	0.880345	795.68	0.586478	1212.39	929.3	0.56	2.34	2153.53	6.77	2151.8	6.77	-1.73	-0.08
104	319	215	111	5104	0.878922	796.06	0.586991	1212.35	943.32	0	2.32	2154.59	6.75	2152.65	6.75	-1.94	-0.09
104	320	216	112	5120	0.8775	796.43	0.5875	1212.32	957.4	0.56	2.3	2156.71	6.74	2155.01	6.73	-1.7	-0.08
104	321	217	113	5136	0.876078	796.8	0.588006	1212.3	971.54	0	2.28	2157.64	6.72	2155.73	6.72	-1.91	-0.09
104	322	218	114	5152	0.874658	797.16	0.588509	1212.28	985.76	0.56	2.26	2159.63	6.71	2157.95	6.7	-1.68	-0.08
104	323	219	115	5168	0.873238	797.51	0.589009	1212.27	1000.03	0	2.24	2160.44	6.69	2158.55	6.68	-1.89	-0.09
104	324	220	116	5184	0.871818	797.86	0.589506	1212.26	1014.37	0.56	2.22	2162.3	6.67	2160.63	6.67	-1.66	-0.08
104	325	221	117	5200	0.8704	798.2	0.59	1212.26	1028.76	0	2.2	2162.98	6.66	2161.1	6.65	-1.88	-0.09
104	326	222	118	5216	0.868983	798.53	0.590491	1212.27	1043.23	0.55	2.19	2164.72	6.64	2163.06	6.64	-1.66	-0.08
104	327	223	119	5232	0.867566	798.86	0.590979	1212.28	1057.75	0	2.17	2165.28	6.62	2163.4	6.62	-1.88	-0.09
104	328	224	120	5248	0.866151	799.18	0.591463	1212.3	1072.33	0.55	2.15	2166.89	6.61	2165.23	6.6	-1.66	-0.08
104	329	225	121	5264	0.864737	799.5	0.591945	1212.33	1086.97	0	2.13	2167.33	6.59	2165.45	6.58	-1.89	-0.09
104	330	226	122	5280	0.863324	799.81	0.592424	1212.36	1101.68	0.55	2.12	2168.82	6.57	2167.14	6.57	-1.68	-0.08
104	331	227	123	5296	0.861913	800.11	0.5929	1212.4	1116.44	0	2.1	2169.15	6.55	2167.24	6.55	-1.91	-0.09
104	332	228	124	5312	0.860502	800.41	0.593373	1212.45	1131.26	0.55	2.08	2170.52	6.54	2168.82	6.53	-1.7	-0.08
104	333	229	125	5328	0.859093	800.7	0.593844	1212.5	1146.13	0	2.07	2170.73	6.52	2168.79	6.51	-1.94	-0.09
104	334	230	126	5344	0.857686	800.99	0.594311	1212.55	1161.07	0.55	2.05	2171.99	6.5	2170.25	6.5	-1.74	-0.08
104	335	231	127	5360	0.85628	801.27	0.594776	1212.61	1176.06	0	2.03	2172.09	6.48	2170.11	6.48	-1.98	-0.09
104	336	232	128	5376	0.854875	801.55	0.595238	1212.68	1191.11	0.55	2.02	2173.22	6.47	2171.44	6.46	-1.79	-0.08
104	337	233	129	5392	0.853472	801.82	0.595697	1212.75	1206.22	0	2	2173.21	6.45	2171.18	6.44	-2.03	-0.09
104	338	234	130	5408	0.852071	802.09	0.596154	1212.83	1221.38	0.54	1.99	2174.24	6.43	2172.39	6.43	-1.84	-0.08
104	339	235	131	5424	0.850671	802.35	0.596608	1212.91	1236.59	0	1.97	2174.12	6.41	2172.03	6.41	-2.09	-0.1
104	340	236	132	5440	0.849273	802.6	0.597059	1213	1251.86	0.54	1.96	2175.03	6.4	2173.12	6.39	-1.91	-0.09
104	341	237	133	5456	0.847877	802.86	0.597507	1213.1	1267.18	0	1.94	2174.81	6.38	2172.64	6.37	-2.17	-0.1
104	342	238	134	5472	0.846483	803.1	0.597953	1213.2	1282.56	0.54	1.93	2175.61	6.36	2173.62	6.36	-1.99	-0.09
104	343	239	135	5488	0.84509	803.34	0.598397	1213.3	1297.99	0	1.91	2175.28	6.34	2173.03	6.34	-2.26	-0.1
104	344	240	136	5504	0.843699	803.58	0.598837	1213.41	1313.47	0.54	1.9	2175.98	6.33	2173.89	6.32	-2.09	-0.1
104	345	241	137	5520	0.84231	803.81	0.599275	1213.52	1329.01	0	1.89	2175.55	6.31	2173.19	6.3	-2.35	-0.11
104	346	242	138	5536	0.840924	804.04	0.599711	1213.64	1344.59	0.54	1.87	2176.14	6.29	2173.95	6.28	-2.19	-0.1
104	347	243	139	5552	0.839539	804.26	0.600144	1213.77	1360.23	0	1.86	2175.6	6.27	2173.14	6.26	-2.46	-0.11
104	348	244	140	5568	0.838156	804.48	0.600575	1213.9	1375.92	0.54	1.85	2176.09	6.25	2173.78	6.25	-2.31	-0.11
104	349	245	141	5584	0.836775	804.69	0.601003	1214.03	1391.66	0	1.83	2175.46	6.23	2172.87	6.23	-2.59	-0.12
104	350	246	142	5600	0.835396	804.9	0.601429	1214.17	1407.45	0.53	1.82	2175.84	6.22	2173.4	6.21	-2.44	-0.11
104	351	247	143	5616	0.834019	805.1	0.601852	1214.31	1423.29	0	1.81	2175.11	6.2	2172.39	6.19	-2.72	-0.13
104	352	248	144	5632	0.832645	805.3	0.602273	1214.46	1439.17	0.53	1.79	2175.4	6.18	2172.82	6.17	-2.58	-0.12
104	353	249	145	5648	0.831272	805.49	0.602691	1214.61	1455.11	0	1.78	2174.57	6.16	2171.7	6.15	-2.87	-0.13
104	354	250	146	5664	0.829902	805.68	0.603107	1214.77	1471.09	0.53	1.77	2174.76	6.14	2172.02	6.14	-2.74	-0.13
104	355	251	147	5680	0.828534	805.87	0.603521	1214.93	1487.12	0	1.76	2173.84	6.12	2170.8	6.11	-3.03	-0.14

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
104	356	252	148	5696	0.827168	806.05	0.603933	1215.09	1503.2	0.53	1.74	2173.93	6.11	2171.02	6.1	-2.9	-0.13
104	357	253	149	5712	0.825805	806.23	0.604342	1215.26	1519.33	0	1.73	2172.91	6.09	2169.71	6.08	-3.21	-0.15
104	358	254	150	5728	0.824444	806.4	0.604749	1215.44	1535.5	0.53	1.72	2172.91	6.07	2169.82	6.06	-3.09	-0.14
104	359	255	151	5744	0.823085	806.57	0.605153	1215.61	1551.72	0	1.71	2171.8	6.05	2168.41	6.04	-3.39	-0.16
104	360	256	152	5760	0.821728	806.74	0.605556	1215.8	1567.99	0.53	1.7	2171.7	6.03	2168.42	6.02	-3.28	-0.15
104	361	257	153	5776	0.820374	806.9	0.605956	1215.98	1584.3	0	1.69	2170.51	6.01	2166.91	6	-3.59	-0.17
104	362	258	154	5792	0.819023	807.06	0.606354	1216.17	1600.65	0.53	1.68	2170.32	6	2166.83	5.99	-3.49	-0.16
104	363	259	155	5808	0.817673	807.21	0.606749	1216.37	1617.06	0	1.66	2169.03	5.98	2165.22	5.96	-3.81	-0.18
104	364	260	156	5824	0.816327	807.36	0.607143	1216.57	1633.5	0.52	1.65	2168.75	5.96	2165.04	5.95	-3.71	-0.17
104	365	261	157	5840	0.814982	807.5	0.607534	1216.77	1649.99	0	1.64	2167.38	5.94	2163.34	5.93	-4.04	-0.19
104	366	262	158	5856	0.81364	807.65	0.607923	1216.97	1666.52	0.52	1.63	2167.01	5.92	2163.07	5.91	-3.94	-0.18
104	367	263	159	5872	0.812301	807.79	0.608311	1217.18	1683.1	0	1.62	2165.55	5.9	2161.28	5.89	-4.28	-0.2
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
105	209	104	-1	3344	0.999977	683.21	0.498804	1319.05	0.12	0	9.8	1351.43	6.47	1360.64	6.51	9.21	0.68
105	210	105	0	3360	1	685.41	0.5	1316.93	0	-0.69	10	1366.97	6.51	1375.91	6.55	8.94	0.65
105	211	106	1	3376	0.999978	687.56	0.501185	1314.86	0.12	0	9.8	1383.26	6.56	1390.77	6.59	7.51	0.54
105	212	107	2	3392	0.999911	689.69	0.502358	1312.84	0.46	-0.69	9.61	1397.94	6.59	1405.63	6.63	7.69	0.55
105	213	108	3	3408	0.999802	691.78	0.503521	1310.85	1.03	0	9.43	1413.76	6.64	1420.08	6.67	6.31	0.44
105	214	109	4	3424	0.999651	693.84	0.504673	1308.91	1.82	-0.68	9.24	1427.99	6.67	1434.53	6.7	6.53	0.46
105	215	110	5	3440	0.999459	695.87	0.505814	1307	2.84	0	9.07	1443.37	6.71	1448.57	6.74	5.2	0.36
105	216	111	6	3456	0.999228	697.86	0.506944	1305.14	4.06	-0.68	8.9	1457.16	6.75	1462.63	6.77	5.47	0.37
105	217	112	7	3472	0.998959	699.82	0.508065	1303.31	5.51	0	8.73	1472.09	6.78	1476.28	6.8	4.18	0.28
105	218	113	8	3488	0.998653	701.76	0.509174	1301.52	7.16	-0.68	8.57	1485.46	6.81	1489.95	6.83	4.49	0.3
105	219	114	9	3504	0.998311	703.66	0.510274	1299.76	9.02	0	8.41	1499.97	6.85	1503.21	6.86	3.24	0.22
105	220	115	10	3520	0.997934	705.54	0.511364	1298.04	11.09	-0.67	8.26	1512.93	6.88	1516.51	6.89	3.58	0.24
105	221	116	11	3536	0.997523	707.38	0.512443	1296.36	13.35	0	8.11	1527.02	6.91	1529.4	6.92	2.38	0.16
105	222	117	12	3552	0.997078	709.2	0.513514	1294.71	15.82	-0.67	7.97	1539.57	6.94	1542.33	6.95	2.75	0.18
105	223	118	13	3568	0.996602	710.98	0.514574	1293.09	18.48	0	7.83	1553.27	6.97	1554.85	6.97	1.58	0.1
105	224	119	14	3584	0.996094	712.74	0.515625	1291.51	21.34	-0.67	7.69	1565.43	6.99	1567.42	7	2	0.13
105	225	120	15	3600	0.995556	714.48	0.516667	1289.96	24.39	0	7.56	1578.73	7.02	1579.59	7.02	0.86	0.05
105	226	121	16	3616	0.994988	716.18	0.517699	1288.44	27.63	-0.67	7.43	1590.51	7.04	1591.81	7.04	1.3	0.08
105	227	122	17	3632	0.994392	717.87	0.518722	1286.95	31.05	0	7.3	1603.43	7.06	1603.63	7.06	0.2	0.01
105	228	123	18	3648	0.993767	719.52	0.519737	1285.49	34.66	-0.66	7.18	1614.84	7.08	1615.51	7.09	0.67	0.04
105	229	124	19	3664	0.993116	721.15	0.520742	1284.07	38.45	0	7.06	1627.39	7.11	1626.99	7.1	-0.4	-0.02
105	230	125	20	3680	0.992439	722.75	0.521739	1282.67	42.42	-0.66	6.94	1638.44	7.12	1638.54	7.12	0.1	0.01
105	231	126	21	3696	0.991736	724.33	0.522727	1281.3	46.57	0	6.83	1650.62	7.15	1649.68	7.14	-0.94	-0.06
105	232	127	22	3712	0.991008	725.89	0.523707	1279.96	50.89	-0.66	6.71	1661.32	7.16	1660.9	7.16	-0.42	-0.03
105	233	128	23	3728	0.990256	727.42	0.524678	1278.64	55.39	0	6.61	1673.15	7.18	1671.72	7.17	-1.43	-0.09
105	234	129	24	3744	0.989481	728.93	0.525641	1277.36	60.05	-0.65	6.5	1683.51	7.19	1682.63	7.19	-0.88	-0.05
105	235	130	25	3760	0.988683	730.42	0.526596	1276.1	64.88	0	6.4	1695	7.21	1693.13	7.2	-1.87	-0.11
105	236	131	26	3776	0.987863	731.88	0.527542	1274.86	69.88	-0.65	6.3	1705.02	7.22	1703.72	7.22	-1.3	-0.08
105	237	132	27	3792	0.987021	733.32	0.528481	1273.66	75.04	0	6.2	1716.18	7.24	1713.91	7.23	-2.27	-0.13
105	238	133	28	3808	0.986159	734.74	0.529412	1272.47	80.37	-0.65	6.1	1725.87	7.25	1724.2	7.24	-1.67	-0.1
105	239	134	29	3824	0.985277	736.14	0.530335	1271.32	85.85	0	6.01	1736.7	7.27	1734.09	7.26	-2.62	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
105	240	135	30	3840	0.984375	737.51	0.53125	1270.18	91.49	-0.65	5.92	1746.08	7.28	1744.08	7.27	-2	-0.11
105	241	136	31	3856	0.983454	738.87	0.532158	1269.07	97.29	0	5.83	1756.59	7.29	1753.67	7.28	-2.92	-0.17
105	242	137	32	3872	0.982515	740.2	0.533058	1267.99	103.24	-0.64	5.74	1765.66	7.3	1763.37	7.29	-2.29	-0.13
105	243	138	33	3888	0.981558	741.52	0.533951	1266.93	109.34	0	5.65	1775.86	7.31	1772.67	7.29	-3.19	-0.18
105	244	139	34	3904	0.980583	742.81	0.534836	1265.89	115.6	-0.64	5.57	1784.63	7.31	1782.09	7.3	-2.54	-0.14
105	245	140	35	3920	0.979592	744.09	0.535714	1264.87	122	0	5.49	1794.53	7.32	1791.1	7.31	-3.43	-0.19
105	246	141	36	3936	0.978584	745.34	0.536585	1263.87	128.55	-0.64	5.41	1803.01	7.33	1800.25	7.32	-2.76	-0.15
105	247	142	37	3952	0.977561	746.58	0.537449	1262.9	135.24	0	5.33	1812.61	7.34	1808.98	7.32	-3.63	-0.2
105	248	143	38	3968	0.976522	747.8	0.538306	1261.95	142.08	-0.64	5.25	1820.8	7.34	1817.85	7.33	-2.95	-0.16
105	249	144	39	3984	0.975468	749	0.539157	1261.01	149.06	0	5.18	1830.11	7.35	1826.31	7.33	-3.8	-0.21
105	250	145	40	4000	0.9744	750.18	0.54	1260.1	156.17	-0.63	5.11	1838.02	7.35	1834.92	7.34	-3.1	-0.17
105	251	146	41	4016	0.973318	751.34	0.540837	1259.21	163.43	0	5.04	1847.05	7.36	1843.12	7.34	-3.94	-0.21
105	252	147	42	4032	0.972222	752.49	0.541667	1258.34	170.82	-0.63	4.97	1854.69	7.36	1851.46	7.35	-3.23	-0.17
105	253	148	43	4048	0.971113	753.62	0.54249	1257.48	178.35	0	4.9	1863.45	7.37	1859.4	7.35	-4.05	-0.22
105	254	149	44	4064	0.969992	754.73	0.543307	1256.65	186	-0.63	4.83	1870.82	7.37	1867.49	7.35	-3.33	-0.18
105	255	150	45	4080	0.968858	755.83	0.544118	1255.84	193.8	0	4.77	1879.31	7.37	1875.17	7.35	-4.14	-0.22
105	256	151	46	4096	0.967712	756.9	0.544922	1255.04	201.72	-0.62	4.7	1886.42	7.37	1883.01	7.36	-3.41	-0.18
105	257	152	47	4112	0.966555	757.97	0.54572	1254.26	209.77	0	4.64	1894.64	7.37	1890.44	7.36	-4.2	-0.22
105	258	153	48	4128	0.965387	759.01	0.546512	1253.5	217.94	-0.62	4.58	1901.5	7.37	1898.03	7.36	-3.46	-0.18
105	259	154	49	4144	0.964207	760.04	0.547297	1252.76	226.24	0	4.52	1909.47	7.37	1905.22	7.36	-4.25	-0.22
105	260	155	50	4160	0.963018	761.06	0.548077	1252.03	234.67	-0.62	4.46	1916.08	7.37	1912.58	7.36	-3.5	-0.18
105	261	156	51	4176	0.961818	762.06	0.548851	1251.32	243.22	0	4.4	1923.8	7.37	1919.53	7.35	-4.27	-0.22
105	262	157	52	4192	0.960608	763.04	0.549618	1250.63	251.89	-0.62	4.34	1930.16	7.37	1926.65	7.35	-3.52	-0.18
105	263	158	53	4208	0.959389	764.01	0.55038	1249.96	260.68	0	4.29	1937.64	7.37	1933.36	7.35	-4.28	-0.22
105	264	159	54	4224	0.958161	764.97	0.551136	1249.3	269.59	-0.62	4.24	1943.77	7.36	1940.25	7.35	-3.52	-0.18
105	265	160	55	4240	0.956924	765.91	0.551887	1248.65	278.61	0	4.18	1951.01	7.36	1946.74	7.35	-4.27	-0.22
105	266	161	56	4256	0.955679	766.83	0.552632	1248.03	287.76	-0.61	4.13	1956.9	7.36	1953.4	7.34	-3.5	-0.18
105	267	162	57	4272	0.954425	767.75	0.553371	1247.41	297.01	0	4.08	1963.91	7.36	1959.66	7.34	-4.25	-0.22
105	268	163	58	4288	0.953163	768.64	0.554104	1246.82	306.38	-0.61	4.03	1969.58	7.35	1966.1	7.34	-3.47	-0.18
105	269	164	59	4304	0.951894	769.53	0.554833	1246.23	315.86	0	3.98	1976.35	7.35	1972.14	7.33	-4.21	-0.21
105	270	165	60	4320	0.950617	770.4	0.555556	1245.67	325.46	-0.61	3.93	1981.8	7.34	1978.37	7.33	-3.43	-0.17
105	271	166	61	4336	0.949333	771.26	0.556273	1245.11	335.16	0	3.89	1988.36	7.34	1984.19	7.32	-4.16	-0.21
105	272	167	62	4352	0.948043	772.1	0.556985	1244.57	344.97	-0.61	3.84	1993.59	7.33	1990.21	7.32	-3.38	-0.17
105	273	168	63	4368	0.946746	772.94	0.557692	1244.05	354.89	0	3.79	1999.92	7.33	1995.82	7.31	-4.1	-0.21
105	274	169	64	4384	0.945442	773.76	0.558394	1243.54	364.91	-0.6	3.75	2004.94	7.32	2001.63	7.31	-3.32	-0.17
105	275	170	65	4400	0.944132	774.56	0.559091	1243.04	375.04	0	3.71	2011.06	7.31	2007.03	7.3	-4.04	-0.2
105	276	171	66	4416	0.942817	775.36	0.559783	1242.56	385.27	-0.6	3.66	2015.88	7.3	2012.63	7.29	-3.24	-0.16
105	277	172	67	4432	0.941495	776.14	0.560469	1242.08	395.61	0	3.62	2021.79	7.3	2017.83	7.28	-3.96	-0.2
105	278	173	68	4448	0.940169	776.91	0.561151	1241.63	406.04	-0.6	3.58	2026.4	7.29	2023.23	7.28	-3.16	-0.16
105	279	174	69	4464	0.938837	777.67	0.561828	1241.18	416.58	0	3.54	2032.11	7.28	2028.23	7.27	-3.87	-0.19
105	280	175	70	4480	0.9375	778.42	0.5625	1240.75	427.22	-0.6	3.5	2036.52	7.27	2033.44	7.26	-3.08	-0.15
105	281	176	71	4496	0.936158	779.15	0.563167	1240.33	437.95	0	3.46	2042.03	7.27	2038.24	7.25	-3.78	-0.19
105	282	177	72	4512	0.934812	779.88	0.56383	1239.92	448.79	-0.6	3.42	2046.24	7.26	2043.26	7.25	-2.99	-0.15
105	283	178	73	4528	0.933462	780.59	0.564488	1239.52	459.71	0	3.38	2051.56	7.25	2047.87	7.24	-3.69	-0.18
105	284	179	74	4544	0.932107	781.29	0.565141	1239.14	470.74	-0.59	3.35	2055.58	7.24	2052.69	7.23	-2.89	-0.14
105	285	180	75	4560	0.930748	781.98	0.565789	1238.77	481.86	0	3.31	2060.71	7.23	2057.11	7.22	-3.59	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
105	286	181	76	4576	0.929385	782.66	0.566434	1238.41	493.07	-0.59	3.28	2064.55	7.22	2061.75	7.21	-2.79	-0.14
105	287	182	77	4592	0.928019	783.33	0.567073	1238.06	504.37	0	3.24	2069.48	7.21	2065.99	7.2	-3.49	-0.17
105	288	183	78	4608	0.926649	783.99	0.567708	1237.72	515.77	-0.59	3.21	2073.14	7.2	2070.45	7.19	-2.69	-0.13
105	289	184	79	4624	0.925276	784.64	0.568339	1237.39	527.25	0	3.17	2077.89	7.19	2074.5	7.18	-3.39	-0.16
105	290	185	80	4640	0.9239	785.28	0.568966	1237.07	538.83	-0.59	3.14	2081.37	7.18	2078.78	7.17	-2.59	-0.12
105	291	186	81	4656	0.922521	785.91	0.569588	1236.77	550.49	0	3.11	2085.94	7.17	2082.66	7.16	-3.28	-0.16
105	292	187	82	4672	0.921139	786.53	0.570205	1236.47	562.24	-0.59	3.07	2089.25	7.15	2086.76	7.15	-2.49	-0.12
105	293	188	83	4688	0.919754	787.14	0.570819	1236.19	574.08	0	3.04	2093.64	7.15	2090.46	7.13	-3.18	-0.15
105	294	189	84	4704	0.918367	787.74	0.571429	1235.91	586	-0.58	3.01	2096.78	7.13	2094.39	7.12	-2.38	-0.11
105	295	190	85	4720	0.916978	788.33	0.572034	1235.65	598.01	0	2.98	2100.99	7.12	2097.92	7.11	-3.07	-0.15
105	296	191	86	4736	0.915586	788.91	0.572635	1235.39	610.1	-0.58	2.95	2103.96	7.11	2101.68	7.1	-2.28	-0.11
105	297	192	87	4752	0.914192	789.48	0.573232	1235.15	622.28	0	2.92	2108.01	7.1	2105.04	7.09	-2.97	-0.14
105	298	193	88	4768	0.912797	790.05	0.573826	1234.91	634.53	-0.58	2.89	2110.82	7.08	2108.64	7.08	-2.18	-0.1
105	299	194	89	4784	0.911399	790.6	0.574415	1234.69	646.87	0	2.86	2114.7	7.07	2111.83	7.06	-2.87	-0.14
105	300	195	90	4800	0.91	791.15	0.575	1234.47	659.29	-0.58	2.84	2117.35	7.06	2115.27	7.05	-2.08	-0.1
105	301	196	91	4816	0.908599	791.68	0.575581	1234.26	671.8	0	2.81	2121.07	7.05	2118.3	7.04	-2.77	-0.13
105	302	197	92	4832	0.907197	792.21	0.576159	1234.07	684.38	-0.58	2.78	2123.55	7.03	2121.57	7.03	-1.98	-0.09
105	303	198	93	4848	0.905794	792.73	0.576733	1233.88	697.03	0	2.76	2127.11	7.02	2124.44	7.01	-2.67	-0.13
105	304	199	94	4864	0.904389	793.24	0.577303	1233.7	709.77	-0.57	2.73	2129.45	7	2127.56	7	-1.89	-0.09
105	305	200	95	4880	0.902983	793.75	0.577869	1233.53	722.58	0	2.7	2132.85	6.99	2130.27	6.98	-2.58	-0.12
105	306	201	96	4896	0.901576	794.24	0.578431	1233.36	735.47	-0.57	2.68	2135.03	6.98	2133.23	6.97	-1.8	-0.08
105	307	202	97	4912	0.900169	794.73	0.57899	1233.21	748.44	0	2.65	2138.28	6.97	2135.79	6.96	-2.49	-0.12
105	308	203	98	4928	0.89876	795.21	0.579545	1233.06	761.47	-0.57	2.63	2140.31	6.95	2138.6	6.94	-1.72	-0.08
105	309	204	99	4944	0.897351	795.68	0.580097	1232.93	774.59	0	2.6	2143.41	6.94	2141.01	6.93	-2.41	-0.11
105	310	205	100	4960	0.895942	796.14	0.580645	1232.8	787.77	-0.57	2.58	2145.3	6.92	2143.67	6.92	-1.64	-0.08
105	311	206	101	4976	0.894532	796.6	0.58119	1232.68	801.03	0	2.56	2148.25	6.91	2145.92	6.9	-2.33	-0.11
105	312	207	102	4992	0.893121	797.04	0.581731	1232.56	814.36	-0.57	2.53	2150	6.89	2148.44	6.89	-1.56	-0.07
105	313	208	103	5008	0.891711	797.48	0.582268	1232.46	827.76	0	2.51	2152.81	6.88	2150.55	6.87	-2.26	-0.1
105	314	209	104	5024	0.8903	797.92	0.582803	1232.36	841.24	-0.56	2.49	2154.41	6.86	2152.92	6.86	-1.5	-0.07
105	315	210	105	5040	0.888889	798.34	0.583333	1232.27	854.78	0	2.47	2157.08	6.85	2154.88	6.84	-2.19	-0.1
105	316	211	106	5056	0.887478	798.76	0.583861	1232.19	868.39	-0.56	2.44	2158.54	6.83	2157.11	6.83	-1.43	-0.07
105	317	212	107	5072	0.886067	799.17	0.584385	1232.11	882.07	0	2.42	2161.07	6.82	2158.94	6.81	-2.13	-0.1
105	318	213	108	5088	0.884656	799.58	0.584906	1232.04	895.82	-0.56	2.4	2162.4	6.8	2161.02	6.8	-1.38	-0.06
105	319	214	109	5104	0.883246	799.98	0.585423	1231.98	909.63	0	2.38	2164.79	6.79	2162.71	6.78	-2.08	-0.1
105	320	215	110	5120	0.881836	800.37	0.585938	1231.93	923.51	-0.56	2.36	2165.99	6.77	2164.66	6.76	-1.33	-0.06
105	321	216	111	5136	0.880426	800.75	0.586449	1231.88	937.46	0	2.34	2168.25	6.75	2166.21	6.75	-2.04	-0.09
105	322	217	112	5152	0.879017	801.13	0.586957	1231.85	951.47	-0.56	2.32	2169.32	6.74	2168.02	6.73	-1.3	-0.06
105	323	218	113	5168	0.877608	801.5	0.587461	1231.81	965.55	0	2.3	2171.44	6.72	2169.44	6.72	-2	-0.09
105	324	219	114	5184	0.8762	801.87	0.587963	1231.79	979.69	-0.56	2.28	2172.38	6.7	2171.12	6.7	-1.27	-0.06
105	325	220	115	5200	0.874793	802.22	0.588462	1231.77	993.89	0	2.26	2174.38	6.69	2172.4	6.68	-1.98	-0.09
105	326	221	116	5216	0.873386	802.58	0.588957	1231.76	1008.16	-0.55	2.24	2175.2	6.67	2173.95	6.67	-1.25	-0.06
105	327	222	117	5232	0.87198	802.92	0.58945	1231.75	1022.49	0	2.23	2177.06	6.66	2175.1	6.65	-1.96	-0.09
105	328	223	118	5248	0.870576	803.26	0.589939	1231.75	1036.88	-0.55	2.21	2177.76	6.64	2176.52	6.64	-1.23	-0.06
105	329	224	119	5264	0.869172	803.6	0.590426	1231.76	1051.34	0	2.19	2179.5	6.62	2177.55	6.62	-1.95	-0.09
105	330	225	120	5280	0.867769	803.92	0.590909	1231.77	1065.85	-0.55	2.17	2180.07	6.61	2178.84	6.6	-1.23	-0.06
105	331	226	121	5296	0.866367	804.25	0.59139	1231.79	1080.43	0	2.15	2181.69	6.59	2179.74	6.59	-1.95	-0.09

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
105	332	227	122	5312	0.864966	804.56	0.591867	1231.82	1095.06	-0.55	2.14	2182.15	6.57	2180.91	6.57	-1.24	-0.06
105	333	228	123	5328	0.863566	804.87	0.592342	1231.85	1109.75	0	2.12	2183.65	6.56	2181.69	6.55	-1.96	-0.09
105	334	229	124	5344	0.862168	805.18	0.592814	1231.89	1124.5	-0.55	2.1	2183.99	6.54	2182.73	6.54	-1.26	-0.06
105	335	230	125	5360	0.860771	805.48	0.593284	1231.93	1139.31	0	2.09	2185.37	6.52	2183.39	6.52	-1.98	-0.09
105	336	231	126	5376	0.859375	805.77	0.59375	1231.98	1154.18	-0.55	2.07	2185.6	6.5	2184.31	6.5	-1.28	-0.06
105	337	232	127	5392	0.857981	806.06	0.594214	1232.03	1169.1	0	2.05	2186.86	6.49	2184.85	6.48	-2.02	-0.09
105	338	233	128	5408	0.856588	806.34	0.594675	1232.09	1184.08	-0.54	2.04	2186.98	6.47	2185.66	6.47	-1.32	-0.06
105	339	234	129	5424	0.855196	806.62	0.595133	1232.16	1199.12	0	2.02	2188.13	6.45	2186.07	6.45	-2.06	-0.09
105	340	235	130	5440	0.853806	806.89	0.595588	1232.23	1214.21	-0.54	2.01	2188.13	6.44	2186.76	6.43	-1.37	-0.06
105	341	236	131	5456	0.852418	807.16	0.596041	1232.31	1229.36	0	1.99	2189.17	6.42	2187.06	6.41	-2.11	-0.1
105	342	237	132	5472	0.851031	807.42	0.596491	1232.39	1244.56	-0.54	1.98	2189.07	6.4	2187.64	6.4	-1.43	-0.07
105	343	238	133	5488	0.849646	807.67	0.596939	1232.48	1259.82	0	1.96	2189.99	6.38	2187.82	6.38	-2.18	-0.1
105	344	239	134	5504	0.848263	807.92	0.597384	1232.57	1275.13	-0.54	1.95	2189.79	6.37	2188.28	6.36	-1.5	-0.07
105	345	240	135	5520	0.846881	808.17	0.597826	1232.67	1290.49	0	1.93	2190.6	6.35	2188.35	6.34	-2.25	-0.1
105	346	241	136	5536	0.845501	808.41	0.598266	1232.77	1305.9	-0.54	1.92	2190.29	6.33	2188.71	6.33	-1.59	-0.07
105	347	242	137	5552	0.844123	808.65	0.598703	1232.88	1321.37	0	1.9	2191	6.31	2188.66	6.31	-2.34	-0.11
105	348	243	138	5568	0.842747	808.88	0.599138	1233	1336.89	-0.54	1.89	2190.59	6.29	2188.91	6.29	-1.68	-0.08
105	349	244	139	5584	0.841372	809.11	0.59957	1233.11	1352.46	0	1.88	2191.2	6.28	2188.76	6.27	-2.44	-0.11
105	350	245	140	5600	0.84	809.33	0.6	1233.24	1368.08	-0.53	1.86	2190.68	6.26	2188.89	6.25	-1.79	-0.08
105	351	246	141	5616	0.83863	809.55	0.600427	1233.37	1383.75	0	1.85	2191.18	6.24	2188.63	6.24	-2.55	-0.12
105	352	247	142	5632	0.837261	809.76	0.600852	1233.5	1399.47	-0.53	1.84	2190.57	6.22	2188.66	6.22	-1.91	-0.09
105	353	248	143	5648	0.835895	809.97	0.601275	1233.64	1415.24	0	1.82	2190.97	6.21	2188.3	6.2	-2.67	-0.12
105	354	249	144	5664	0.83453	810.18	0.601695	1233.78	1431.06	-0.53	1.81	2190.26	6.19	2188.22	6.18	-2.04	-0.09
105	355	250	145	5680	0.833168	810.38	0.602113	1233.92	1446.93	0	1.8	2190.56	6.17	2187.75	6.16	-2.81	-0.13
105	356	251	146	5696	0.831808	810.57	0.602528	1234.08	1462.85	-0.53	1.79	2189.76	6.15	2187.57	6.14	-2.18	-0.1
105	357	252	147	5712	0.83045	810.76	0.602941	1234.23	1478.82	0	1.77	2189.96	6.13	2187	6.13	-2.96	-0.14
105	358	253	148	5728	0.829094	810.95	0.603352	1234.39	1494.83	-0.53	1.76	2189.06	6.11	2186.72	6.11	-2.34	-0.11
105	359	254	149	5744	0.82774	811.13	0.60376	1234.56	1510.89	0	1.75	2189.17	6.1	2186.05	6.09	-3.12	-0.14
105	360	255	150	5760	0.826389	811.31	0.604167	1234.73	1527	-0.53	1.74	2188.18	6.08	2185.67	6.07	-2.51	-0.11
105	361	256	151	5776	0.82504	811.49	0.604571	1234.9	1543.15	0	1.73	2188.19	6.06	2184.89	6.05	-3.3	-0.15
105	362	257	152	5792	0.823693	811.66	0.604972	1235.08	1559.35	-0.53	1.71	2187.11	6.04	2184.41	6.03	-2.69	-0.12
105	363	258	153	5808	0.822348	811.82	0.605372	1235.26	1575.59	0	1.7	2187.03	6.02	2183.54	6.02	-3.49	-0.16
105	364	259	154	5824	0.821006	811.99	0.605769	1235.44	1591.88	-0.52	1.69	2185.85	6.01	2182.97	6	-2.89	-0.13
105	365	260	155	5840	0.819666	812.15	0.606164	1235.63	1608.22	0	1.68	2185.68	5.99	2182	5.98	-3.69	-0.17
105	366	261	156	5856	0.818328	812.3	0.606557	1235.83	1624.6	-0.52	1.67	2184.42	5.97	2181.32	5.96	-3.1	-0.14
105	367	262	157	5872	0.816993	812.45	0.606948	1236.02	1641.02	0	1.66	2184.16	5.95	2180.26	5.94	-3.9	-0.18
105	368	263	158	5888	0.81566	812.6	0.607337	1236.23	1657.49	-0.52	1.65	2182.81	5.93	2179.49	5.92	-3.32	-0.15
105	369	264	159	5904	0.81433	812.74	0.607724	1236.43	1674	0	1.64	2182.46	5.91	2178.33	5.9	-4.13	-0.19
105	370	265	160	5920	0.813002	812.88	0.608108	1236.64	1690.55	-0.52	1.63	2181.03	5.89	2177.47	5.89	-3.56	-0.16
105	371	266	161	5936	0.811677	813.02	0.608491	1236.85	1707.15	0	1.62	2180.59	5.88	2176.22	5.87	-4.37	-0.2
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
106	211	105	-1	3376	0.999978	687.56	0.498815	1340.03	0.12	0	9.8	1358.09	6.44	1367.32	6.48	9.23	0.67
106	212	106	0	3392	1	689.75	0.5	1337.9	0	0.69	10	1375.03	6.49	1383.51	6.53	8.48	0.61
106	213	107	1	3408	0.999978	691.9	0.501174	1335.82	0.11	0	9.8	1389.97	6.53	1397.5	6.56	7.54	0.54

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
106	214	108	2	3424	0.999913	694.02	0.502336	1333.78	0.46	0.68	9.62	1406.04	6.57	1413.27	6.6	7.23	0.51
106	215	109	3	3440	0.999805	696.11	0.503488	1331.78	1.02	0	9.43	1420.52	6.61	1426.86	6.64	6.34	0.44
106	216	110	4	3456	0.999657	698.16	0.50463	1329.82	1.81	0.68	9.25	1436.14	6.65	1442.22	6.68	6.08	0.42
106	217	111	5	3472	0.999469	700.18	0.50576	1327.9	2.81	0	9.08	1450.18	6.68	1455.42	6.71	5.23	0.36
106	218	112	6	3488	0.999242	702.17	0.506881	1326.02	4.03	0.68	8.91	1465.36	6.72	1470.37	6.74	5.01	0.34
106	219	113	7	3504	0.998978	704.13	0.507991	1324.18	5.46	0	8.74	1478.97	6.75	1483.19	6.77	4.22	0.28
106	220	114	8	3520	0.998678	706.06	0.509091	1322.38	7.09	0.67	8.58	1493.73	6.79	1497.76	6.81	4.03	0.27
106	221	115	9	3536	0.998342	707.96	0.510181	1320.61	8.94	0	8.43	1506.92	6.82	1510.2	6.83	3.28	0.22
106	222	116	10	3552	0.997971	709.83	0.511261	1318.87	10.99	0.67	8.28	1521.26	6.85	1524.38	6.87	3.13	0.21
106	223	117	11	3568	0.997567	711.67	0.512332	1317.18	13.23	0	8.13	1534.05	6.88	1536.46	6.89	2.41	0.16
106	224	118	12	3584	0.99713	713.49	0.513393	1315.51	15.68	0.67	7.99	1547.98	6.91	1550.27	6.92	2.3	0.15
106	225	119	13	3600	0.996662	715.27	0.514444	1313.88	18.32	0	7.85	1560.37	6.93	1562	6.94	1.62	0.1
106	226	120	14	3616	0.996163	717.03	0.515487	1312.28	21.15	0.67	7.71	1573.91	6.96	1575.45	6.97	1.54	0.1
106	227	121	15	3632	0.995634	718.76	0.51652	1310.72	24.18	0	7.58	1585.92	6.99	1586.82	6.99	0.9	0.06
106	228	122	16	3648	0.995075	720.47	0.517544	1309.19	27.39	0.66	7.45	1599.07	7.01	1599.92	7.02	0.85	0.05
106	229	123	17	3664	0.994489	722.15	0.518559	1307.68	30.78	0	7.32	1610.71	7.03	1610.95	7.03	0.24	0.02
106	230	124	18	3680	0.993875	723.8	0.519565	1306.21	34.36	0.66	7.2	1623.48	7.06	1623.7	7.06	0.22	0.01
106	231	125	19	3696	0.993235	725.43	0.520563	1304.77	38.12	0	7.08	1634.76	7.08	1634.4	7.08	-0.35	-0.02
106	232	126	20	3712	0.992568	727.03	0.521552	1303.36	42.06	0.66	6.96	1647.17	7.1	1646.82	7.1	-0.35	-0.02
106	233	127	21	3728	0.991877	728.61	0.522532	1301.97	46.17	0	6.85	1658.09	7.12	1657.2	7.11	-0.89	-0.05
106	234	128	22	3744	0.991161	730.17	0.523504	1300.62	50.46	0.65	6.74	1670.15	7.14	1669.28	7.13	-0.87	-0.05
106	235	129	23	3760	0.990421	731.7	0.524468	1299.29	54.92	0	6.63	1680.72	7.15	1679.34	7.15	-1.38	-0.08
106	236	130	24	3776	0.989658	733.21	0.525424	1297.99	59.54	0.65	6.52	1692.43	7.17	1691.1	7.17	-1.33	-0.08
106	237	131	25	3792	0.988873	734.7	0.526371	1296.72	64.34	0	6.42	1702.67	7.18	1700.85	7.18	-1.82	-0.11
106	238	132	26	3808	0.988066	736.16	0.527311	1295.47	69.3	0.65	6.32	1714.04	7.2	1712.3	7.19	-1.75	-0.1
106	239	133	27	3824	0.987238	737.6	0.528243	1294.25	74.42	0	6.22	1723.95	7.21	1721.74	7.2	-2.21	-0.13
106	240	134	28	3840	0.986389	739.02	0.529167	1293.05	79.7	0.65	6.13	1735	7.23	1732.88	7.22	-2.12	-0.12
106	241	135	29	3856	0.98552	740.42	0.530083	1291.88	85.14	0	6.03	1744.59	7.24	1742.03	7.23	-2.56	-0.15
106	242	136	30	3872	0.984632	741.8	0.530992	1290.73	90.74	0.64	5.94	1755.31	7.25	1752.87	7.24	-2.45	-0.14
106	243	137	31	3888	0.983725	743.16	0.531893	1289.61	96.49	0	5.85	1764.59	7.26	1761.73	7.25	-2.86	-0.16
106	244	138	32	3904	0.9828	744.49	0.532787	1288.51	102.4	0.64	5.76	1775	7.27	1772.27	7.26	-2.73	-0.15
106	245	139	33	3920	0.981858	745.81	0.533673	1287.43	108.46	0	5.68	1783.98	7.28	1780.85	7.27	-3.13	-0.18
106	246	140	34	3936	0.980898	747.11	0.534553	1286.38	114.66	0.64	5.6	1794.09	7.29	1791.1	7.28	-2.98	-0.17
106	247	141	35	3952	0.979921	748.38	0.535425	1285.35	121.02	0	5.51	1802.77	7.3	1799.41	7.29	-3.36	-0.19
106	248	142	36	3968	0.978928	749.64	0.53629	1284.34	127.52	0.64	5.44	1812.57	7.31	1809.37	7.3	-3.2	-0.18
106	249	143	37	3984	0.97792	750.88	0.537149	1283.35	134.16	0	5.36	1820.97	7.31	1817.41	7.3	-3.56	-0.2
106	250	144	38	4000	0.976896	752.1	0.538	1282.38	140.95	0.63	5.28	1830.48	7.32	1827.1	7.31	-3.38	-0.19
106	251	145	39	4016	0.975858	753.3	0.538845	1281.44	147.87	0	5.21	1838.59	7.33	1834.87	7.31	-3.73	-0.2
106	252	146	40	4032	0.974805	754.49	0.539683	1280.51	154.94	0.63	5.13	1847.82	7.33	1844.29	7.32	-3.54	-0.19
106	253	147	41	4048	0.973738	755.66	0.540514	1279.61	162.14	0	5.06	1855.66	7.33	1851.79	7.32	-3.86	-0.21
106	254	148	42	4064	0.972658	756.81	0.541339	1278.72	169.48	0.63	4.99	1864.61	7.34	1860.95	7.33	-3.66	-0.2
106	255	149	43	4080	0.971565	757.94	0.542157	1277.86	176.95	0	4.93	1872.18	7.34	1868.21	7.33	-3.97	-0.21
106	256	150	44	4096	0.970459	759.05	0.542969	1277.01	184.56	0.62	4.86	1880.86	7.35	1877.1	7.33	-3.76	-0.2
106	257	151	45	4112	0.969341	760.15	0.543774	1276.18	192.29	0	4.79	1888.17	7.35	1884.11	7.33	-4.06	-0.22
106	258	152	46	4128	0.968211	761.23	0.544574	1275.37	200.16	0.62	4.73	1896.59	7.35	1892.75	7.34	-3.83	-0.2
106	259	153	47	4144	0.96707	762.3	0.545367	1274.58	208.15	0	4.67	1903.63	7.35	1899.51	7.33	-4.12	-0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
106	260	154	48	4160	0.965917	763.35	0.546154	1273.81	216.27	0.62	4.61	1911.79	7.35	1907.91	7.34	-3.89	-0.2
106	261	155	49	4176	0.964754	764.38	0.546935	1273.05	224.52	0	4.55	1918.59	7.35	1914.43	7.33	-4.16	-0.22
106	262	156	50	4192	0.96358	765.4	0.54771	1272.31	232.89	0.62	4.49	1926.5	7.35	1922.58	7.34	-3.92	-0.2
106	263	157	51	4208	0.962396	766.41	0.548479	1271.59	241.38	0	4.43	1933.05	7.35	1928.87	7.33	-4.18	-0.22
106	264	158	52	4224	0.961203	767.4	0.549242	1270.89	249.99	0.62	4.37	1940.71	7.35	1936.78	7.34	-3.93	-0.2
106	265	159	53	4240	0.96	768.37	0.55	1270.2	258.72	0	4.32	1947.03	7.35	1942.84	7.33	-4.18	-0.22
106	266	160	54	4256	0.958788	769.33	0.550752	1269.53	267.57	0.61	4.26	1954.45	7.35	1950.52	7.33	-3.93	-0.2
106	267	161	55	4272	0.957567	770.27	0.551498	1268.87	276.54	0	4.21	1960.53	7.34	1956.36	7.33	-4.17	-0.21
106	268	162	56	4288	0.956338	771.2	0.552239	1268.23	285.62	0.61	4.16	1967.71	7.34	1963.81	7.33	-3.91	-0.2
106	269	163	57	4304	0.9551	772.12	0.552974	1267.61	294.81	0	4.11	1973.56	7.34	1969.42	7.32	-4.14	-0.21
106	270	164	58	4320	0.953855	773.02	0.553704	1267	304.12	0.61	4.06	1980.52	7.34	1976.65	7.32	-3.87	-0.2
106	271	165	59	4336	0.952601	773.91	0.554428	1266.4	313.54	0	4.01	1986.15	7.33	1982.05	7.31	-4.1	-0.21
106	272	166	60	4352	0.951341	774.79	0.555147	1265.83	323.07	0.61	3.96	1992.88	7.33	1989.05	7.31	-3.83	-0.19
106	273	167	61	4368	0.950073	775.65	0.555861	1265.26	332.71	0	3.91	1998.29	7.32	1994.24	7.3	-4.05	-0.2
106	274	168	62	4384	0.948799	776.5	0.556569	1264.71	342.46	0.6	3.87	2004.8	7.32	2001.03	7.3	-3.77	-0.19
106	275	169	63	4400	0.947517	777.34	0.557273	1264.17	352.32	0	3.82	2009.99	7.31	2006.01	7.29	-3.98	-0.2
106	276	170	64	4416	0.94623	778.16	0.557971	1263.65	362.28	0.6	3.78	2016.29	7.31	2012.59	7.29	-3.7	-0.18
106	277	171	65	4432	0.944936	778.98	0.558664	1263.14	372.34	0	3.73	2021.27	7.3	2017.37	7.28	-3.91	-0.19
106	278	172	66	4448	0.943636	779.78	0.559353	1262.65	382.51	0.6	3.69	2027.36	7.29	2023.73	7.28	-3.62	-0.18
106	279	173	67	4464	0.942331	780.56	0.560036	1262.16	392.78	0	3.65	2032.14	7.28	2028.31	7.27	-3.82	-0.19
106	280	174	68	4480	0.94102	781.34	0.560714	1261.69	403.16	0.6	3.61	2038.02	7.28	2034.48	7.27	-3.54	-0.17
106	281	175	69	4496	0.939704	782.1	0.561388	1261.24	413.63	0	3.57	2042.6	7.27	2038.86	7.26	-3.73	-0.18
106	282	176	70	4512	0.938383	782.86	0.562057	1260.79	424.2	0.6	3.53	2048.27	7.26	2044.83	7.25	-3.45	-0.17
106	283	177	71	4528	0.937058	783.6	0.562721	1260.36	434.87	0	3.49	2052.66	7.25	2049.02	7.24	-3.64	-0.18
106	284	178	72	4544	0.935727	784.33	0.56338	1259.94	445.64	0.59	3.45	2058.13	7.25	2054.79	7.24	-3.35	-0.16
106	285	179	73	4560	0.934392	785.04	0.564035	1259.54	456.5	0	3.41	2062.33	7.24	2058.79	7.22	-3.54	-0.17
106	286	180	74	4576	0.933053	785.75	0.564685	1259.14	467.46	0.59	3.37	2067.61	7.23	2064.37	7.22	-3.24	-0.16
106	287	181	75	4592	0.93171	786.45	0.565331	1258.76	478.51	0	3.34	2071.62	7.22	2068.19	7.21	-3.43	-0.17
106	288	182	76	4608	0.930363	787.13	0.565972	1258.39	489.65	0.59	3.3	2076.71	7.21	2073.57	7.2	-3.14	-0.15
106	289	183	77	4624	0.929012	787.81	0.566609	1258.03	500.89	0	3.27	2080.54	7.2	2077.21	7.19	-3.32	-0.16
106	290	184	78	4640	0.927658	788.48	0.567241	1257.68	512.22	0.59	3.23	2085.44	7.19	2082.41	7.18	-3.03	-0.15
106	291	185	79	4656	0.9263	789.13	0.567869	1257.34	523.64	0	3.2	2089.09	7.18	2085.88	7.17	-3.21	-0.15
106	292	186	80	4672	0.924939	789.78	0.568493	1257.01	535.15	0.59	3.16	2093.81	7.17	2090.89	7.16	-2.92	-0.14
106	293	187	81	4688	0.923575	790.41	0.569113	1256.7	546.74	0	3.13	2097.28	7.16	2094.18	7.15	-3.1	-0.15
106	294	188	82	4704	0.922208	791.03	0.569728	1256.39	558.43	0.58	3.1	2101.83	7.15	2099.02	7.14	-2.81	-0.13
106	295	189	83	4720	0.920839	791.65	0.570339	1256.1	570.2	0	3.07	2105.12	7.14	2102.14	7.13	-2.99	-0.14
106	296	190	84	4736	0.919467	792.26	0.570946	1255.81	582.05	0.58	3.04	2109.49	7.13	2106.8	7.12	-2.69	-0.13
106	297	191	85	4752	0.918092	792.85	0.571549	1255.54	593.99	0	3.01	2112.62	7.11	2109.75	7.1	-2.87	-0.14
106	298	192	86	4768	0.916715	793.44	0.572148	1255.27	606.02	0.58	2.98	2116.82	7.1	2114.24	7.09	-2.58	-0.12
106	299	193	87	4784	0.915337	794.02	0.572742	1255.02	618.13	0	2.95	2119.78	7.09	2117.02	7.08	-2.76	-0.13
106	300	194	88	4800	0.913956	794.59	0.573333	1254.78	630.32	0.58	2.92	2123.81	7.08	2121.34	7.07	-2.47	-0.12
106	301	195	89	4816	0.912573	795.15	0.57392	1254.54	642.59	0	2.89	2126.61	7.07	2123.96	7.06	-2.65	-0.12
106	302	196	90	4832	0.911188	795.7	0.574503	1254.31	654.94	0.58	2.86	2130.48	7.05	2128.12	7.05	-2.36	-0.11
106	303	197	91	4848	0.909802	796.24	0.575083	1254.1	667.38	0	2.83	2133.12	7.04	2130.58	7.03	-2.54	-0.12
106	304	198	92	4864	0.908414	796.77	0.575658	1253.89	679.89	0.57	2.81	2136.83	7.03	2134.57	7.02	-2.26	-0.11
106	305	199	93	4880	0.907025	797.3	0.57623	1253.69	692.48	0	2.78	2139.31	7.01	2136.88	7.01	-2.43	-0.11

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
106	306	200	94	4896	0.905635	797.82	0.576797	1253.5	705.15	0.57	2.75	2142.86	7	2140.71	7	-2.15	-0.1
106	307	201	95	4912	0.904243	798.32	0.577362	1253.32	717.89	0	2.73	2145.19	6.99	2142.86	6.98	-2.33	-0.11
106	308	202	96	4928	0.90285	798.82	0.577922	1253.15	730.71	0.57	2.7	2148.58	6.98	2146.53	6.97	-2.05	-0.1
106	309	203	97	4944	0.901457	799.32	0.578479	1252.99	743.61	0	2.68	2150.76	6.96	2148.53	6.95	-2.23	-0.1
106	310	204	98	4960	0.900062	799.8	0.579032	1252.83	756.58	0.57	2.65	2154.01	6.95	2152.05	6.94	-1.96	-0.09
106	311	205	99	4976	0.898667	800.28	0.579582	1252.69	769.62	0	2.63	2156.04	6.93	2153.9	6.93	-2.14	-0.1
106	312	206	100	4992	0.897272	800.75	0.580128	1252.55	782.74	0.57	2.6	2159.13	6.92	2157.26	6.91	-1.87	-0.09
106	313	207	101	5008	0.895875	801.21	0.580671	1252.42	795.93	0	2.58	2161.02	6.9	2158.97	6.9	-2.05	-0.1
106	314	208	102	5024	0.894478	801.66	0.58121	1252.3	809.19	0.56	2.56	2163.97	6.89	2162.18	6.89	-1.78	-0.08
106	315	209	103	5040	0.893081	802.11	0.581746	1252.19	822.52	0	2.53	2165.71	6.88	2163.74	6.87	-1.97	-0.09
106	316	210	104	5056	0.891684	802.55	0.582278	1252.08	835.93	0.56	2.51	2168.52	6.86	2166.81	6.86	-1.7	-0.08
106	317	211	105	5072	0.890286	802.98	0.582808	1251.98	849.4	0	2.49	2170.12	6.85	2168.23	6.84	-1.89	-0.09
106	318	212	106	5088	0.888889	803.4	0.583333	1251.89	862.94	0.56	2.47	2172.79	6.83	2171.16	6.83	-1.63	-0.08
106	319	213	107	5104	0.887491	803.82	0.583856	1251.81	876.56	0	2.44	2174.26	6.82	2172.44	6.81	-1.82	-0.08
106	320	214	108	5120	0.886094	804.23	0.584375	1251.73	890.23	0.56	2.42	2176.78	6.8	2175.22	6.8	-1.57	-0.07
106	321	215	109	5136	0.884696	804.64	0.584891	1251.66	903.98	0	2.4	2178.12	6.79	2176.36	6.78	-1.76	-0.08
106	322	216	110	5152	0.883299	805.03	0.585404	1251.6	917.79	0.56	2.38	2180.51	6.77	2179	6.77	-1.51	-0.07
106	323	217	111	5168	0.881902	805.42	0.585913	1251.55	931.67	0	2.36	2181.72	6.75	2180.01	6.75	-1.71	-0.08
106	324	218	112	5184	0.880506	805.81	0.58642	1251.5	945.62	0.56	2.34	2183.97	6.74	2182.52	6.74	-1.46	-0.07
106	325	219	113	5200	0.87911	806.18	0.586923	1251.46	959.62	0	2.32	2185.05	6.72	2183.39	6.72	-1.66	-0.08
106	326	220	114	5216	0.877715	806.55	0.587423	1251.43	973.7	0.55	2.3	2187.18	6.71	2185.76	6.7	-1.41	-0.06
106	327	221	115	5232	0.87632	806.92	0.58792	1251.4	987.83	0	2.28	2188.13	6.69	2186.51	6.69	-1.62	-0.07
106	328	222	116	5248	0.874926	807.28	0.588415	1251.38	1002.03	0.55	2.26	2190.12	6.68	2188.74	6.67	-1.38	-0.06
106	329	223	117	5264	0.873532	807.63	0.588906	1251.37	1016.3	0	2.25	2190.95	6.66	2189.36	6.65	-1.59	-0.07
106	330	224	118	5280	0.87214	807.97	0.589394	1251.36	1030.62	0.55	2.23	2192.82	6.64	2191.47	6.64	-1.35	-0.06
106	331	225	119	5296	0.870748	808.31	0.589879	1251.36	1045	0	2.21	2193.53	6.63	2191.96	6.62	-1.57	-0.07
106	332	226	120	5312	0.869357	808.65	0.590361	1251.37	1059.45	0.55	2.19	2195.27	6.61	2193.94	6.61	-1.34	-0.06
106	333	227	121	5328	0.867967	808.97	0.590841	1251.38	1073.96	0	2.17	2195.86	6.59	2194.31	6.59	-1.56	-0.07
106	334	228	122	5344	0.866578	809.3	0.591317	1251.4	1088.52	0.55	2.16	2197.49	6.58	2196.15	6.58	-1.33	-0.06
106	335	229	123	5360	0.86519	809.61	0.591791	1251.43	1103.15	0	2.14	2197.96	6.56	2196.4	6.56	-1.55	-0.07
106	336	230	124	5376	0.863804	809.92	0.592262	1251.46	1117.83	0.55	2.12	2199.46	6.55	2198.12	6.54	-1.34	-0.06
106	337	231	125	5392	0.862418	810.23	0.59273	1251.49	1132.57	0	2.11	2199.81	6.53	2198.25	6.52	-1.56	-0.07
106	338	232	126	5408	0.861034	810.53	0.593195	1251.54	1147.37	0.54	2.09	2201.2	6.51	2199.85	6.51	-1.35	-0.06
106	339	233	127	5424	0.859651	810.82	0.593658	1251.58	1162.23	0	2.07	2201.44	6.49	2199.86	6.49	-1.58	-0.07
106	340	234	128	5440	0.85827	811.11	0.594118	1251.64	1177.14	0.54	2.06	2202.71	6.48	2201.34	6.47	-1.37	-0.06
106	341	235	129	5456	0.85689	811.39	0.594575	1251.7	1192.11	0	2.04	2202.84	6.46	2201.24	6.46	-1.61	-0.07
106	342	236	130	5472	0.855511	811.67	0.595029	1251.76	1207.13	0.54	2.03	2204	6.44	2202.6	6.44	-1.41	-0.06
106	343	237	131	5488	0.854134	811.94	0.595481	1251.83	1222.21	0	2.01	2204.02	6.43	2202.38	6.42	-1.65	-0.07
106	344	238	132	5504	0.852758	812.21	0.59593	1251.91	1237.35	0.54	2	2205.07	6.41	2203.62	6.41	-1.45	-0.07
106	345	239	133	5520	0.851384	812.47	0.596377	1251.99	1252.53	0	1.98	2204.98	6.39	2203.29	6.39	-1.7	-0.08
106	346	240	134	5536	0.850012	812.73	0.596821	1252.08	1267.78	0.54	1.97	2205.92	6.38	2204.41	6.37	-1.51	-0.07
106	347	241	135	5552	0.848641	812.98	0.597262	1252.17	1283.07	0	1.95	2205.73	6.36	2203.97	6.35	-1.76	-0.08
106	348	242	136	5568	0.847272	813.22	0.597701	1252.27	1298.42	0.54	1.94	2206.56	6.34	2204.98	6.34	-1.58	-0.07
106	349	243	137	5584	0.845904	813.47	0.598138	1252.37	1313.82	0	1.92	2206.26	6.32	2204.43	6.32	-1.83	-0.08
106	350	244	138	5600	0.844539	813.7	0.598571	1252.48	1329.27	0.53	1.91	2206.99	6.31	2205.33	6.3	-1.66	-0.08
106	351	245	139	5616	0.843175	813.94	0.599003	1252.59	1344.77	0	1.9	2206.59	6.29	2204.67	6.28	-1.92	-0.09

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
106	352	246	140	5632	0.841813	814.17	0.599432	1252.71	1360.33	0.53	1.88	2207.21	6.27	2205.46	6.27	-1.75	-0.08
106	353	247	141	5648	0.840453	814.39	0.599858	1252.83	1375.93	0	1.87	2206.71	6.25	2204.7	6.25	-2.01	-0.09
106	354	248	142	5664	0.839095	814.61	0.600282	1252.96	1391.59	0.53	1.85	2207.23	6.24	2205.38	6.23	-1.85	-0.08
106	355	249	143	5680	0.837739	814.82	0.600704	1253.09	1407.29	0	1.84	2206.63	6.22	2204.51	6.21	-2.12	-0.1
106	356	250	144	5696	0.836384	815.03	0.601124	1253.23	1423.05	0.53	1.83	2207.05	6.2	2205.08	6.19	-1.97	-0.09
106	357	251	145	5712	0.835032	815.24	0.601541	1253.37	1438.85	0	1.82	2206.36	6.18	2204.12	6.17	-2.24	-0.1
106	358	252	146	5728	0.833682	815.44	0.601955	1253.52	1454.7	0.53	1.8	2206.68	6.16	2204.58	6.16	-2.09	-0.1
106	359	253	147	5744	0.832334	815.63	0.602368	1253.67	1470.6	0	1.79	2205.89	6.14	2203.51	6.14	-2.38	-0.11
106	360	254	148	5760	0.830988	815.83	0.602778	1253.82	1486.55	0.53	1.78	2206.11	6.13	2203.87	6.12	-2.24	-0.1
106	361	255	149	5776	0.829644	816.02	0.603186	1253.98	1502.54	0	1.77	2205.23	6.11	2202.7	6.1	-2.52	-0.11
106	362	256	150	5792	0.828302	816.2	0.603591	1254.15	1518.58	0.53	1.75	2205.35	6.09	2202.96	6.09	-2.39	-0.11
106	363	257	151	5808	0.826962	816.38	0.603994	1254.31	1534.67	0	1.74	2204.38	6.07	2201.7	6.07	-2.68	-0.12
106	364	258	152	5824	0.825625	816.56	0.604396	1254.49	1550.8	0.52	1.73	2204.41	6.06	2201.86	6.05	-2.55	-0.12
106	365	259	153	5840	0.82429	816.73	0.604795	1254.66	1566.98	0	1.72	2203.35	6.04	2200.49	6.03	-2.85	-0.13
106	366	260	154	5856	0.822957	816.89	0.605191	1254.84	1583.21	0.52	1.71	2203.28	6.02	2200.55	6.01	-2.73	-0.12
106	367	261	155	5872	0.821626	817.06	0.605586	1255.03	1599.48	0	1.7	2202.13	6	2199.09	5.99	-3.04	-0.14
106	368	262	156	5888	0.820298	817.22	0.605978	1255.22	1615.79	0.52	1.69	2201.98	5.98	2199.05	5.98	-2.93	-0.13
106	369	263	157	5904	0.818972	817.38	0.606369	1255.41	1632.15	0	1.67	2200.74	5.96	2197.5	5.96	-3.24	-0.15
106	370	264	158	5920	0.817648	817.53	0.606757	1255.61	1648.55	0.52	1.66	2200.49	5.95	2197.36	5.94	-3.13	-0.14
106	371	265	159	5936	0.816327	817.68	0.607143	1255.81	1665	0	1.65	2199.17	5.93	2195.72	5.92	-3.45	-0.16
106	372	266	160	5952	0.815008	817.82	0.607527	1256.01	1681.49	0.52	1.64	2198.84	5.91	2195.49	5.9	-3.35	-0.15
106	373	267	161	5968	0.813691	817.96	0.607909	1256.22	1698.02	0	1.63	2197.43	5.89	2193.75	5.88	-3.67	-0.17
106	374	268	162	5984	0.812377	818.1	0.608289	1256.43	1714.6	0.52	1.62	2197.01	5.87	2193.43	5.86	-3.58	-0.16
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
107	213	106	-1	3408	0.999978	691.9	0.498826	1361.14	0.11	0	9.8	1364.64	6.41	1373.88	6.45	9.23	0.67
107	214	107	0	3424	1	694.08	0.5	1359.01	0	-0.68	10	1380.23	6.45	1389.19	6.49	8.96	0.64
107	215	108	1	3440	0.999978	696.23	0.501163	1356.91	0.11	0	9.81	1396.56	6.5	1404.09	6.53	7.54	0.54
107	216	109	2	3456	0.999914	698.34	0.502315	1354.86	0.45	-0.68	9.62	1411.29	6.53	1418.99	6.57	7.7	0.54
107	217	110	3	3472	0.999809	700.42	0.503456	1352.84	1.01	0	9.44	1427.16	6.58	1433.49	6.61	6.33	0.44
107	218	111	4	3488	0.999663	702.47	0.504587	1350.87	1.79	-0.68	9.26	1441.45	6.61	1448	6.64	6.55	0.45
107	219	112	5	3504	0.999479	704.48	0.505708	1348.94	2.78	0	9.09	1456.88	6.65	1462.1	6.68	5.22	0.36
107	220	113	6	3520	0.999256	706.47	0.506818	1347.05	3.99	-0.67	8.92	1470.74	6.69	1476.21	6.71	5.48	0.37
107	221	114	7	3536	0.998997	708.43	0.507919	1345.19	5.41	0	8.75	1485.73	6.72	1489.93	6.74	4.19	0.28
107	222	115	8	3552	0.998701	710.35	0.509009	1343.37	7.03	-0.67	8.6	1499.17	6.75	1503.66	6.77	4.49	0.3
107	223	116	9	3568	0.998371	712.25	0.51009	1341.59	8.86	0	8.44	1513.75	6.79	1516.99	6.8	3.25	0.21
107	224	117	10	3584	0.998007	714.11	0.511161	1339.84	10.89	-0.67	8.29	1526.78	6.82	1530.36	6.83	3.58	0.23
107	225	118	11	3600	0.99761	715.95	0.512222	1338.13	13.12	0	8.14	1540.95	6.85	1543.32	6.86	2.38	0.15
107	226	119	12	3616	0.997181	717.76	0.513274	1336.45	15.54	-0.67	8	1553.58	6.87	1556.33	6.89	2.75	0.18
107	227	120	13	3632	0.99672	719.55	0.514317	1334.8	18.16	0	7.86	1567.35	6.9	1568.93	6.91	1.58	0.1
107	228	121	14	3648	0.99623	721.3	0.515351	1333.19	20.97	-0.66	7.73	1579.6	6.93	1581.58	6.94	1.98	0.13
107	229	122	15	3664	0.995709	723.03	0.516376	1331.61	23.97	0	7.59	1592.98	6.96	1593.83	6.96	0.85	0.05
107	230	123	16	3680	0.995161	724.74	0.517391	1330.07	27.15	-0.66	7.47	1604.85	6.98	1606.14	6.98	1.28	0.08
107	231	124	17	3696	0.994584	726.41	0.518398	1328.55	30.52	0	7.34	1617.86	7	1618.04	7	0.18	0.01
107	232	125	18	3712	0.99398	728.07	0.519397	1327.06	34.07	-0.66	7.22	1629.36	7.02	1630.01	7.03	0.65	0.04

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
107	233	126	19	3728	0.99335	729.7	0.520386	1325.61	37.8	0	7.1	1642	7.05	1641.58	7.05	-0.42	-0.03
107	234	127	20	3744	0.992695	731.3	0.521368	1324.18	41.7	-0.65	6.98	1653.15	7.06	1653.22	7.07	0.07	0
107	235	128	21	3760	0.992014	732.88	0.52234	1322.78	45.78	0	6.87	1665.43	7.09	1664.46	7.08	-0.97	-0.06
107	236	129	22	3776	0.99131	734.43	0.523305	1321.41	50.03	-0.65	6.76	1676.23	7.1	1675.78	7.1	-0.45	-0.03
107	237	130	23	3792	0.990582	735.97	0.524262	1320.07	54.45	0	6.65	1688.16	7.12	1686.69	7.12	-1.47	-0.09
107	238	131	24	3808	0.989831	737.48	0.52521	1318.76	59.04	-0.65	6.55	1698.62	7.14	1697.7	7.13	-0.92	-0.05
107	239	132	25	3824	0.989058	738.96	0.526151	1317.47	63.8	0	6.44	1710.21	7.16	1708.3	7.15	-1.91	-0.11
107	240	133	26	3840	0.988264	740.43	0.527083	1316.21	68.72	-0.65	6.34	1720.34	7.17	1719	7.16	-1.35	-0.08
107	241	134	27	3856	0.987449	741.87	0.528008	1314.97	73.8	0	6.25	1731.6	7.19	1729.29	7.18	-2.31	-0.13
107	242	135	28	3872	0.986613	743.29	0.528926	1313.76	79.04	-0.64	6.15	1741.41	7.2	1739.69	7.19	-1.72	-0.1
107	243	136	29	3888	0.985758	744.69	0.529835	1312.58	84.44	0	6.06	1752.35	7.21	1749.68	7.2	-2.67	-0.15
107	244	137	30	3904	0.984883	746.07	0.530738	1311.42	90	-0.64	5.97	1761.84	7.22	1759.79	7.21	-2.06	-0.12
107	245	138	31	3920	0.98399	747.43	0.531633	1310.28	95.71	0	5.88	1772.46	7.23	1769.49	7.22	-2.98	-0.17
107	246	139	32	3936	0.983079	748.77	0.53252	1309.17	101.57	-0.64	5.79	1781.65	7.24	1779.3	7.23	-2.35	-0.13
107	247	140	33	3952	0.98215	750.09	0.533401	1308.07	107.58	0	5.71	1791.96	7.25	1788.71	7.24	-3.25	-0.18
107	248	141	34	3968	0.981204	751.38	0.534274	1307.01	113.74	-0.64	5.62	1800.85	7.26	1798.25	7.25	-2.61	-0.14
107	249	142	35	3984	0.980242	752.66	0.535141	1305.96	120.05	0	5.54	1810.87	7.27	1807.38	7.26	-3.49	-0.19
107	250	143	36	4000	0.979264	753.93	0.536	1304.94	126.5	-0.63	5.46	1819.47	7.28	1816.64	7.27	-2.83	-0.16
107	251	144	37	4016	0.97827	755.17	0.536853	1303.94	133.1	0	5.38	1829.18	7.29	1825.49	7.27	-3.69	-0.2
107	252	145	38	4032	0.977261	756.39	0.537698	1302.96	139.83	-0.63	5.31	1837.5	7.29	1834.48	7.28	-3.02	-0.16
107	253	146	39	4048	0.976238	757.6	0.538538	1302	146.71	0	5.23	1846.93	7.3	1843.07	7.28	-3.86	-0.21
107	254	147	40	4064	0.9752	758.78	0.53937	1301.06	153.72	-0.63	5.16	1854.97	7.3	1851.79	7.29	-3.17	-0.17
107	255	148	41	4080	0.974148	759.95	0.540196	1300.14	160.87	0	5.09	1864.12	7.31	1860.12	7.29	-4.01	-0.22
107	256	149	42	4096	0.973083	761.11	0.541016	1299.24	168.16	-0.62	5.02	1871.89	7.31	1868.58	7.3	-3.3	-0.18
107	257	150	43	4112	0.972006	762.24	0.541829	1298.36	175.58	0	4.95	1880.77	7.32	1876.65	7.3	-4.12	-0.22
107	258	151	44	4128	0.970915	763.36	0.542636	1297.5	183.13	-0.62	4.89	1888.27	7.32	1884.86	7.31	-3.41	-0.18
107	259	152	45	4144	0.969813	764.46	0.543436	1296.66	190.81	0	4.82	1896.88	7.32	1892.67	7.31	-4.21	-0.22
107	260	153	46	4160	0.968698	765.55	0.544231	1295.84	198.63	-0.62	4.76	1904.12	7.32	1900.64	7.31	-3.49	-0.18
107	261	154	47	4176	0.967572	766.62	0.545019	1295.04	206.56	0	4.69	1912.48	7.33	1908.2	7.31	-4.28	-0.22
107	262	155	48	4192	0.966436	767.67	0.545802	1294.25	214.63	-0.62	4.63	1919.47	7.33	1915.92	7.31	-3.54	-0.18
107	263	156	49	4208	0.965288	768.71	0.546578	1293.48	222.82	0	4.57	1927.56	7.33	1923.24	7.31	-4.32	-0.22
107	264	157	50	4224	0.96413	769.73	0.547348	1292.73	231.13	-0.62	4.51	1934.31	7.33	1930.73	7.31	-3.58	-0.19
107	265	158	51	4240	0.962962	770.74	0.548113	1292	239.56	0	4.46	1942.16	7.33	1937.81	7.31	-4.34	-0.22
107	266	159	52	4256	0.961784	771.73	0.548872	1291.28	248.12	-0.61	4.4	1948.66	7.33	1945.06	7.31	-3.59	-0.18
107	267	160	53	4272	0.960597	772.71	0.549625	1290.58	256.79	0	4.34	1956.26	7.33	1951.91	7.31	-4.35	-0.22
107	268	161	54	4288	0.959401	773.67	0.550373	1289.89	265.58	-0.61	4.29	1962.53	7.32	1958.94	7.31	-3.59	-0.18
107	269	162	55	4304	0.958196	774.62	0.551115	1289.23	274.49	0	4.24	1969.9	7.32	1965.56	7.31	-4.34	-0.22
107	270	163	56	4320	0.956982	775.56	0.551852	1288.57	283.51	-0.61	4.18	1975.93	7.32	1972.36	7.31	-3.57	-0.18
107	271	164	57	4336	0.95576	776.48	0.552583	1287.94	292.64	0	4.13	1983.07	7.32	1978.76	7.3	-4.31	-0.22
107	272	165	58	4352	0.954531	777.39	0.553309	1287.32	301.89	-0.61	4.08	1988.88	7.31	1985.34	7.3	-3.54	-0.18
107	273	166	59	4368	0.953293	778.28	0.554029	1286.71	311.25	0	4.03	1995.79	7.31	1991.52	7.29	-4.27	-0.21
107	274	167	60	4384	0.952049	779.16	0.554745	1286.12	320.72	-0.6	3.99	2001.38	7.3	1997.88	7.29	-3.5	-0.18
107	275	168	61	4400	0.950797	780.03	0.555455	1285.54	330.3	0	3.94	2008.07	7.3	2003.84	7.29	-4.22	-0.21
107	276	169	62	4416	0.949538	780.88	0.556159	1284.98	339.99	-0.6	3.89	2013.44	7.3	2010	7.28	-3.44	-0.17
107	277	170	63	4432	0.948272	781.73	0.556859	1284.43	349.78	0	3.85	2019.91	7.29	2015.75	7.28	-4.16	-0.21
107	278	171	64	4448	0.947001	782.56	0.557554	1283.9	359.68	-0.6	3.8	2025.07	7.28	2021.7	7.27	-3.37	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
107	279	172	65	4464	0.945723	783.37	0.558244	1283.38	369.68	0	3.76	2031.33	7.28	2027.24	7.27	-4.08	-0.2
107	280	173	66	4480	0.944439	784.18	0.558929	1282.87	379.79	-0.6	3.72	2036.28	7.27	2032.99	7.26	-3.3	-0.16
107	281	174	67	4496	0.943149	784.97	0.559609	1282.38	390	0	3.67	2042.33	7.27	2038.33	7.25	-4	-0.2
107	282	175	68	4512	0.941854	785.75	0.560284	1281.9	400.31	-0.6	3.63	2047.08	7.26	2043.87	7.25	-3.21	-0.16
107	283	176	69	4528	0.940554	786.52	0.560954	1281.43	410.71	0	3.59	2052.93	7.25	2049.02	7.24	-3.91	-0.19
107	284	177	70	4544	0.939248	787.28	0.56162	1280.97	421.22	-0.59	3.55	2057.48	7.24	2054.36	7.23	-3.12	-0.15
107	285	178	71	4560	0.937938	788.02	0.562281	1280.53	431.83	0	3.51	2063.13	7.24	2059.31	7.23	-3.82	-0.19
107	286	179	72	4576	0.936623	788.76	0.562937	1280.1	442.53	-0.59	3.47	2067.49	7.23	2064.47	7.22	-3.02	-0.15
107	287	180	73	4592	0.935303	789.48	0.563589	1279.68	453.33	0	3.44	2072.94	7.22	2069.23	7.21	-3.71	-0.18
107	288	181	74	4608	0.93398	790.19	0.564236	1279.28	464.22	-0.59	3.4	2077.11	7.21	2074.19	7.2	-2.92	-0.14
107	289	182	75	4624	0.932652	790.9	0.564879	1278.88	475.21	0	3.36	2082.37	7.21	2078.76	7.19	-3.61	-0.17
107	290	183	76	4640	0.93132	791.59	0.565517	1278.5	486.29	-0.59	3.33	2086.36	7.19	2083.55	7.18	-2.81	-0.13
107	291	184	77	4656	0.929984	792.27	0.566151	1278.13	497.46	0	3.29	2091.43	7.19	2087.93	7.18	-3.5	-0.17
107	292	185	78	4672	0.928645	792.94	0.566781	1277.77	508.72	-0.59	3.26	2095.23	7.18	2092.53	7.17	-2.7	-0.13
107	293	186	79	4688	0.927303	793.6	0.567406	1277.43	520.08	0	3.22	2100.12	7.17	2096.73	7.16	-3.39	-0.16
107	294	187	80	4704	0.925957	794.25	0.568027	1277.09	531.52	-0.58	3.19	2103.75	7.16	2101.16	7.15	-2.59	-0.12
107	295	188	81	4720	0.924608	794.89	0.568644	1276.76	543.05	0	3.16	2108.45	7.15	2105.18	7.14	-3.27	-0.16
107	296	189	82	4736	0.923256	795.52	0.569257	1276.45	554.67	-0.58	3.12	2111.91	7.13	2109.43	7.13	-2.48	-0.12
107	297	190	83	4752	0.921901	796.14	0.569865	1276.14	566.37	0	3.09	2116.44	7.13	2113.28	7.12	-3.16	-0.15
107	298	191	84	4768	0.920544	796.75	0.57047	1275.85	578.16	-0.58	3.06	2119.72	7.11	2117.36	7.11	-2.36	-0.11
107	299	192	85	4784	0.919184	797.36	0.57107	1275.56	590.04	0	3.03	2124.08	7.1	2121.04	7.09	-3.04	-0.14
107	300	193	86	4800	0.917822	797.95	0.571667	1275.29	601.99	-0.58	3	2127.19	7.09	2124.95	7.08	-2.25	-0.11
107	301	194	87	4816	0.916458	798.53	0.572259	1275.02	614.03	0	2.97	2131.38	7.08	2128.46	7.07	-2.92	-0.14
107	302	195	88	4832	0.915091	799.11	0.572848	1274.77	626.16	-0.58	2.94	2134.33	7.07	2132.2	7.06	-2.13	-0.1
107	303	196	89	4848	0.913723	799.67	0.573432	1274.53	638.36	0	2.91	2138.35	7.06	2135.54	7.05	-2.81	-0.13
107	304	197	90	4864	0.912353	800.23	0.574013	1274.29	650.65	-0.57	2.88	2141.14	7.04	2139.12	7.04	-2.02	-0.09
107	305	198	91	4880	0.910981	800.78	0.57459	1274.06	663.01	0	2.86	2145	7.03	2142.3	7.02	-2.7	-0.13
107	306	199	92	4896	0.909607	801.32	0.575163	1273.85	675.46	-0.57	2.83	2147.63	7.02	2145.72	7.01	-1.91	-0.09
107	307	200	93	4912	0.908232	801.85	0.575733	1273.64	687.98	0	2.8	2151.33	7.01	2148.75	7	-2.59	-0.12
107	308	201	94	4928	0.906856	802.37	0.576299	1273.44	700.58	-0.57	2.78	2153.81	6.99	2152.01	6.99	-1.8	-0.08
107	309	202	95	4944	0.905479	802.88	0.576861	1273.25	713.26	0	2.75	2157.35	6.98	2154.87	6.97	-2.48	-0.12
107	310	203	96	4960	0.9041	803.39	0.577419	1273.07	726.01	-0.57	2.72	2159.68	6.97	2157.98	6.96	-1.7	-0.08
107	311	204	97	4976	0.90272	803.89	0.577974	1272.9	738.84	0	2.7	2163.07	6.96	2160.69	6.95	-2.38	-0.11
107	312	205	98	4992	0.90134	804.38	0.578526	1272.74	751.74	-0.57	2.67	2165.25	6.94	2163.65	6.93	-1.6	-0.07
107	313	206	99	5008	0.899958	804.86	0.579073	1272.58	764.72	0	2.65	2168.49	6.93	2166.21	6.92	-2.28	-0.11
107	314	207	100	5024	0.898576	805.33	0.579618	1272.44	777.77	-0.56	2.62	2170.52	6.91	2169.01	6.91	-1.51	-0.07
107	315	208	101	5040	0.897193	805.8	0.580159	1272.3	790.89	0	2.6	2173.61	6.9	2171.42	6.89	-2.19	-0.1
107	316	209	102	5056	0.89581	806.26	0.580696	1272.17	804.09	-0.56	2.58	2175.5	6.88	2174.08	6.88	-1.42	-0.07
107	317	210	103	5072	0.894426	806.71	0.58123	1272.05	817.35	0	2.55	2178.44	6.87	2176.34	6.87	-2.1	-0.1
107	318	211	104	5088	0.893042	807.16	0.581761	1271.93	830.69	-0.56	2.53	2180.19	6.86	2178.86	6.85	-1.33	-0.06
107	319	212	105	5104	0.891658	807.6	0.582288	1271.83	844.09	0	2.51	2182.99	6.84	2180.98	6.84	-2.02	-0.09
107	320	213	106	5120	0.890273	808.03	0.582812	1271.73	857.57	-0.56	2.49	2184.61	6.83	2183.35	6.82	-1.25	-0.06
107	321	214	107	5136	0.888889	808.45	0.583333	1271.64	871.11	0	2.47	2187.27	6.81	2185.33	6.81	-1.94	-0.09
107	322	215	108	5152	0.887504	808.87	0.583851	1271.55	884.72	-0.56	2.44	2188.75	6.8	2187.56	6.79	-1.18	-0.05
107	323	216	109	5168	0.88612	809.27	0.584365	1271.48	898.4	0	2.42	2191.27	6.78	2189.4	6.78	-1.87	-0.09
107	324	217	110	5184	0.884736	809.68	0.584877	1271.41	912.15	-0.56	2.4	2192.62	6.77	2191.5	6.76	-1.12	-0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
107	325	218	111	5200	0.883351	810.07	0.585385	1271.35	925.96	0	2.38	2195.01	6.75	2193.2	6.75	-1.81	-0.08
107	326	219	112	5216	0.881968	810.46	0.58589	1271.29	939.83	-0.55	2.36	2196.22	6.74	2195.16	6.73	-1.06	-0.05
107	327	220	113	5232	0.880584	810.84	0.586391	1271.24	953.77	0	2.34	2198.48	6.72	2196.73	6.72	-1.75	-0.08
107	328	221	114	5248	0.879201	811.22	0.58689	1271.2	967.78	-0.55	2.32	2199.57	6.71	2198.56	6.7	-1.01	-0.05
107	329	222	115	5264	0.877819	811.59	0.587386	1271.17	981.85	0	2.3	2201.7	6.69	2199.99	6.69	-1.71	-0.08
107	330	223	116	5280	0.876437	811.95	0.587879	1271.14	995.98	-0.55	2.28	2202.66	6.67	2201.69	6.67	-0.97	-0.04
107	331	224	117	5296	0.875056	812.31	0.588369	1271.12	1010.17	0	2.27	2204.66	6.66	2202.99	6.66	-1.67	-0.08
107	332	225	118	5312	0.873675	812.66	0.588855	1271.11	1024.43	-0.55	2.25	2205.5	6.64	2204.56	6.64	-0.94	-0.04
107	333	226	119	5328	0.872296	813.01	0.589339	1271.1	1038.75	0	2.23	2207.37	6.63	2205.73	6.62	-1.64	-0.07
107	334	227	120	5344	0.870917	813.35	0.58982	1271.1	1053.12	-0.55	2.21	2208.09	6.61	2207.18	6.61	-0.92	-0.04
107	335	228	121	5360	0.869539	813.68	0.590299	1271.11	1067.56	0	2.19	2209.84	6.6	2208.22	6.59	-1.62	-0.07
107	336	229	122	5376	0.868162	814.01	0.590774	1271.12	1082.06	-0.55	2.18	2210.44	6.58	2209.54	6.58	-0.9	-0.04
107	337	230	123	5392	0.866786	814.33	0.591246	1271.14	1096.62	0	2.16	2212.07	6.56	2210.47	6.56	-1.61	-0.07
107	338	231	124	5408	0.865411	814.65	0.591716	1271.16	1111.24	-0.54	2.14	2212.56	6.55	2211.66	6.54	-0.9	-0.04
107	339	232	125	5424	0.864037	814.96	0.592183	1271.19	1125.91	0	2.13	2214.07	6.53	2212.46	6.53	-1.61	-0.07
107	340	233	126	5440	0.862664	815.26	0.592647	1271.23	1140.64	-0.54	2.11	2214.44	6.51	2213.54	6.51	-0.9	-0.04
107	341	234	127	5456	0.861293	815.56	0.593109	1271.27	1155.43	0	2.09	2215.84	6.5	2214.22	6.49	-1.62	-0.07
107	342	235	128	5472	0.859923	815.85	0.593567	1271.32	1170.28	-0.54	2.08	2216.09	6.48	2215.18	6.48	-0.92	-0.04
107	343	236	129	5488	0.858554	816.14	0.594023	1271.37	1185.18	0	2.06	2217.37	6.46	2215.74	6.46	-1.64	-0.07
107	344	237	130	5504	0.857186	816.42	0.594477	1271.43	1200.13	-0.54	2.04	2217.52	6.45	2216.58	6.44	-0.94	-0.04
107	345	238	131	5520	0.85582	816.7	0.594928	1271.49	1215.15	0	2.03	2218.69	6.43	2217.02	6.43	-1.67	-0.08
107	346	239	132	5536	0.854456	816.97	0.595376	1271.56	1230.21	-0.54	2.01	2218.73	6.41	2217.75	6.41	-0.98	-0.04
107	347	240	133	5552	0.853092	817.24	0.595821	1271.64	1245.34	0	2	2219.78	6.4	2218.08	6.39	-1.71	-0.08
107	348	241	134	5568	0.851731	817.5	0.596264	1271.72	1260.51	-0.54	1.98	2219.71	6.38	2218.69	6.38	-1.03	-0.05
107	349	242	135	5584	0.850371	817.76	0.596705	1271.8	1275.74	0	1.97	2220.66	6.36	2218.91	6.36	-1.76	-0.08
107	350	243	136	5600	0.849012	818.01	0.597143	1271.9	1291.02	-0.53	1.96	2220.49	6.34	2219.4	6.34	-1.08	-0.05
107	351	244	137	5616	0.847655	818.26	0.597578	1271.99	1306.35	0	1.94	2221.33	6.33	2219.51	6.32	-1.82	-0.08
107	352	245	138	5632	0.8463	818.51	0.598011	1272.09	1321.74	-0.53	1.93	2221.05	6.31	2219.9	6.31	-1.15	-0.05
107	353	246	139	5648	0.844947	818.74	0.598442	1272.2	1337.18	0	1.91	2221.79	6.29	2219.9	6.29	-1.9	-0.09
107	354	247	140	5664	0.843595	818.98	0.59887	1272.31	1352.67	-0.53	1.9	2221.41	6.28	2220.18	6.27	-1.24	-0.06
107	355	248	141	5680	0.842246	819.21	0.599296	1272.43	1368.2	0	1.89	2222.05	6.26	2220.07	6.25	-1.98	-0.09
107	356	249	142	5696	0.840898	819.43	0.599719	1272.55	1383.79	-0.53	1.87	2221.57	6.24	2220.24	6.24	-1.33	-0.06
107	357	250	143	5712	0.839552	819.65	0.60014	1272.68	1399.43	0	1.86	2222.1	6.22	2220.02	6.22	-2.08	-0.09
107	358	251	144	5728	0.838207	819.86	0.600559	1272.81	1415.12	-0.53	1.85	2221.52	6.21	2220.09	6.2	-1.43	-0.06
107	359	252	145	5744	0.836865	820.07	0.600975	1272.95	1430.86	0	1.83	2221.96	6.19	2219.77	6.18	-2.19	-0.1
107	360	253	146	5760	0.835525	820.28	0.601389	1273.09	1446.64	-0.53	1.82	2221.28	6.17	2219.73	6.17	-1.55	-0.07
107	361	254	147	5776	0.834186	820.48	0.601801	1273.23	1462.48	0	1.81	2221.62	6.15	2219.31	6.15	-2.31	-0.1
107	362	255	148	5792	0.83285	820.68	0.60221	1273.38	1478.36	-0.53	1.8	2220.85	6.13	2219.17	6.13	-1.68	-0.08
107	363	256	149	5808	0.831516	820.87	0.602617	1273.54	1494.29	0	1.78	2221.09	6.12	2218.64	6.11	-2.45	-0.11
107	364	257	150	5824	0.830184	821.06	0.603022	1273.69	1510.26	-0.52	1.77	2220.23	6.1	2218.4	6.09	-1.82	-0.08
107	365	258	151	5840	0.828853	821.25	0.603425	1273.86	1526.28	0	1.76	2220.37	6.08	2217.78	6.08	-2.59	-0.12
107	366	259	152	5856	0.827525	821.43	0.603825	1274.02	1542.35	-0.52	1.75	2219.42	6.06	2217.44	6.06	-1.98	-0.09
107	367	260	153	5872	0.8262	821.61	0.604223	1274.2	1558.47	0	1.74	2219.46	6.05	2216.71	6.04	-2.75	-0.12
107	368	261	154	5888	0.824876	821.78	0.60462	1274.37	1574.63	-0.52	1.72	2218.42	6.03	2216.28	6.02	-2.14	-0.1
107	369	262	155	5904	0.823554	821.95	0.605014	1274.55	1590.83	0	1.71	2218.38	6.01	2215.45	6	-2.93	-0.13
107	370	263	156	5920	0.822235	822.11	0.605405	1274.74	1607.08	-0.52	1.7	2217.25	5.99	2214.92	5.99	-2.32	-0.1

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
107	371	264	157	5936	0.820918	822.28	0.605795	1274.93	1623.38	0	1.69	2217.11	5.98	2214	5.97	-3.11	-0.14
107	372	265	158	5952	0.819603	822.43	0.606183	1275.12	1639.71	-0.52	1.68	2215.9	5.96	2213.38	5.95	-2.52	-0.11
107	373	266	159	5968	0.818291	822.59	0.606568	1275.31	1656.1	0	1.67	2215.67	5.94	2212.36	5.93	-3.31	-0.15
107	374	267	160	5984	0.816981	822.74	0.606952	1275.51	1672.52	-0.52	1.66	2214.37	5.92	2211.64	5.91	-2.72	-0.12
107	375	268	161	6000	0.815673	822.88	0.607333	1275.72	1688.99	0	1.65	2214.06	5.9	2210.53	5.89	-3.52	-0.16
107	376	269	162	6016	0.814367	823.03	0.607713	1275.93	1705.5	-0.52	1.64	2212.67	5.88	2209.72	5.88	-2.94	-0.13
107	377	270	163	6032	0.813064	823.17	0.60809	1276.14	1722.05	0	1.63	2212.27	5.87	2208.52	5.86	-3.75	-0.17
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
108	215	107	-1	3440	0.999978	696.23	0.498837	1382.39	0.11	0	9.81	1371.07	6.38	1380.32	6.42	9.24	0.67
108	216	108	0	3456	1	698.4	0.5	1380.24	0	0.68	10	1388.04	6.43	1396.54	6.47	8.5	0.61
108	217	109	1	3472	0.999979	700.54	0.501152	1378.13	0.11	0	9.81	1403.03	6.47	1410.58	6.5	7.56	0.54
108	218	110	2	3488	0.999916	702.65	0.502294	1376.06	0.45	0.68	9.62	1419.14	6.51	1426.39	6.54	7.25	0.51
108	219	111	3	3504	0.999812	704.72	0.503425	1374.04	1	0	9.44	1433.68	6.55	1440.04	6.58	6.36	0.44
108	220	112	4	3520	0.999669	706.76	0.504545	1372.05	1.77	0.67	9.26	1449.35	6.59	1455.44	6.62	6.09	0.42
108	221	113	5	3536	0.999488	708.77	0.505656	1370.11	2.76	0	9.09	1463.45	6.62	1468.7	6.65	5.25	0.36
108	222	114	6	3552	0.99927	710.75	0.506757	1368.2	3.96	0.67	8.93	1478.69	6.66	1483.71	6.68	5.02	0.34
108	223	115	7	3568	0.999015	712.71	0.507848	1366.33	5.36	0	8.76	1492.37	6.69	1496.6	6.71	4.22	0.28
108	224	116	8	3584	0.998724	714.63	0.508929	1364.5	6.97	0.67	8.61	1507.18	6.73	1511.22	6.75	4.04	0.27
108	225	117	9	3600	0.9984	716.52	0.51	1362.7	8.78	0	8.45	1520.46	6.76	1523.74	6.77	3.28	0.22
108	226	118	10	3616	0.998042	718.38	0.511062	1360.94	10.79	0.67	8.3	1534.86	6.79	1537.98	6.81	3.13	0.2
108	227	119	11	3632	0.997652	720.22	0.512115	1359.21	13	0	8.16	1547.73	6.82	1550.14	6.83	2.41	0.16
108	228	120	12	3648	0.99723	722.03	0.513158	1357.52	15.41	0.66	8.02	1561.73	6.85	1564.02	6.86	2.3	0.15
108	229	121	13	3664	0.996777	723.81	0.514192	1355.86	18	0	7.88	1574.21	6.87	1575.83	6.88	1.62	0.1
108	230	122	14	3680	0.996295	725.56	0.515217	1354.23	20.79	0.66	7.74	1587.82	6.9	1589.35	6.91	1.53	0.1
108	231	123	15	3696	0.995783	727.29	0.516234	1352.64	23.76	0	7.61	1599.92	6.93	1600.81	6.93	0.89	0.06
108	232	124	16	3712	0.995244	728.99	0.517241	1351.08	26.92	0.66	7.49	1613.15	6.95	1613.99	6.96	0.83	0.05
108	233	125	17	3728	0.994677	730.67	0.51824	1349.55	30.26	0	7.36	1624.88	6.97	1625.11	6.97	0.23	0.01
108	234	126	18	3744	0.994083	732.32	0.519231	1348.05	33.78	0.65	7.24	1637.75	7	1637.94	7	0.2	0.01
108	235	127	19	3760	0.993463	733.95	0.520213	1346.58	37.48	0	7.12	1649.12	7.02	1648.74	7.02	-0.38	-0.02
108	236	128	20	3776	0.992818	735.55	0.521186	1345.14	41.35	0.65	7.01	1661.62	7.04	1661.24	7.04	-0.38	-0.02
108	237	129	21	3792	0.992149	737.13	0.522152	1343.73	45.4	0	6.89	1672.64	7.06	1671.72	7.05	-0.92	-0.06
108	238	130	22	3808	0.991455	738.69	0.523109	1342.34	49.61	0.65	6.78	1684.79	7.08	1683.89	7.08	-0.9	-0.05
108	239	131	23	3824	0.990739	740.22	0.524059	1340.99	54	0	6.68	1695.47	7.09	1694.05	7.09	-1.42	-0.08
108	240	132	24	3840	0.99	741.73	0.525	1339.66	58.55	0.65	6.57	1707.28	7.11	1705.91	7.11	-1.37	-0.08
108	241	133	25	3856	0.989239	743.21	0.525934	1338.36	63.27	0	6.47	1717.62	7.13	1715.76	7.12	-1.86	-0.11
108	242	134	26	3872	0.988457	744.68	0.52686	1337.08	68.16	0.64	6.37	1729.1	7.15	1727.31	7.14	-1.79	-0.1
108	243	135	27	3888	0.987654	746.12	0.527778	1335.83	73.2	0	6.27	1739.12	7.16	1736.86	7.15	-2.26	-0.13
108	244	136	28	3904	0.986831	747.55	0.528689	1334.61	78.4	0.64	6.18	1750.27	7.17	1748.1	7.16	-2.17	-0.12
108	245	137	29	3920	0.985989	748.95	0.529592	1333.41	83.76	0	6.08	1759.97	7.18	1757.36	7.17	-2.61	-0.15
108	246	138	30	3936	0.985128	750.33	0.530488	1332.23	89.27	0.64	5.99	1770.8	7.2	1768.3	7.19	-2.5	-0.14
108	247	139	31	3952	0.984248	751.69	0.531377	1331.08	94.94	0	5.9	1780.2	7.21	1777.28	7.2	-2.92	-0.16
108	248	140	32	3968	0.983351	753.03	0.532258	1329.95	100.75	0.64	5.82	1790.72	7.22	1787.93	7.21	-2.79	-0.16
108	249	141	33	3984	0.982436	754.35	0.533133	1328.85	106.72	0	5.73	1799.81	7.23	1796.62	7.22	-3.19	-0.18
108	250	142	34	4000	0.981504	755.65	0.534	1327.77	112.83	0.63	5.65	1810.03	7.24	1806.98	7.23	-3.04	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
108	251	143	35	4016	0.980556	756.93	0.534861	1326.71	119.1	0	5.57	1818.83	7.25	1815.41	7.23	-3.42	-0.19
108	252	144	36	4032	0.979592	758.19	0.535714	1325.67	125.5	0.63	5.49	1828.75	7.26	1825.49	7.24	-3.26	-0.18
108	253	145	37	4048	0.978612	759.44	0.536561	1324.66	132.05	0	5.41	1837.27	7.26	1833.64	7.25	-3.62	-0.2
108	254	146	38	4064	0.977618	760.66	0.537402	1323.66	138.74	0.63	5.33	1846.9	7.27	1843.45	7.26	-3.45	-0.19
108	255	147	39	4080	0.976609	761.87	0.538235	1322.69	145.56	0	5.26	1855.13	7.28	1851.34	7.26	-3.79	-0.2
108	256	148	40	4096	0.975586	763.06	0.539062	1321.74	152.53	0.62	5.19	1864.48	7.28	1860.88	7.27	-3.61	-0.19
108	257	149	41	4112	0.974549	764.24	0.539883	1320.81	159.63	0	5.12	1872.45	7.29	1868.51	7.27	-3.93	-0.21
108	258	150	42	4128	0.973499	765.39	0.540698	1319.9	166.86	0.62	5.05	1881.52	7.29	1877.79	7.28	-3.73	-0.2
108	259	151	43	4144	0.972436	766.53	0.541506	1319	174.23	0	4.98	1889.22	7.29	1885.17	7.28	-4.05	-0.21
108	260	152	44	4160	0.971361	767.65	0.542308	1318.13	181.73	0.62	4.91	1898.02	7.3	1894.19	7.29	-3.83	-0.2
108	261	153	45	4176	0.970273	768.76	0.543103	1317.28	189.36	0	4.85	1905.46	7.3	1901.32	7.28	-4.13	-0.22
108	262	154	46	4192	0.969174	769.85	0.543893	1316.44	197.11	0.62	4.78	1914	7.31	1910.09	7.29	-3.91	-0.2
108	263	155	47	4208	0.968064	770.92	0.544677	1315.62	205	0	4.72	1921.18	7.3	1916.98	7.29	-4.19	-0.22
108	264	156	48	4224	0.966942	771.98	0.545455	1314.82	213.01	0.62	4.66	1929.46	7.31	1925.5	7.29	-3.96	-0.21
108	265	157	49	4240	0.96581	773.02	0.546226	1314.04	221.14	0	4.6	1936.39	7.31	1932.16	7.29	-4.23	-0.22
108	266	158	50	4256	0.964667	774.05	0.546992	1313.28	229.4	0.61	4.54	1944.43	7.31	1940.44	7.29	-3.99	-0.21
108	267	159	51	4272	0.963515	775.06	0.547753	1312.53	237.77	0	4.48	1951.12	7.31	1946.86	7.29	-4.25	-0.22
108	268	160	52	4288	0.962352	776.05	0.548507	1311.8	246.27	0.61	4.43	1958.91	7.31	1954.9	7.29	-4	-0.2
108	269	161	53	4304	0.961181	777.04	0.549257	1311.09	254.89	0	4.37	1965.36	7.31	1961.1	7.29	-4.26	-0.22
108	270	162	54	4320	0.96	778	0.55	1310.39	263.62	0.61	4.32	1972.91	7.31	1968.91	7.29	-4	-0.2
108	271	163	55	4336	0.95881	778.96	0.550738	1309.71	272.47	0	4.26	1979.12	7.3	1974.88	7.29	-4.24	-0.21
108	272	164	56	4352	0.957612	779.9	0.551471	1309.05	281.43	0.61	4.21	1986.44	7.3	1982.46	7.29	-3.98	-0.2
108	273	165	57	4368	0.956406	780.82	0.552198	1308.4	290.51	0	4.16	1992.43	7.3	1988.22	7.28	-4.21	-0.21
108	274	166	58	4384	0.955192	781.73	0.55292	1307.77	299.7	0.6	4.11	1999.51	7.3	1995.57	7.28	-3.94	-0.2
108	275	167	59	4400	0.95397	782.63	0.553636	1307.15	309	0	4.06	2005.28	7.29	2001.11	7.28	-4.17	-0.21
108	276	168	60	4416	0.952741	783.52	0.554348	1306.55	318.41	0.6	4.01	2012.14	7.29	2008.25	7.28	-3.89	-0.19
108	277	169	61	4432	0.951505	784.39	0.555054	1305.96	327.93	0	3.97	2017.69	7.28	2013.58	7.27	-4.11	-0.2
108	278	170	62	4448	0.950261	785.25	0.555755	1305.38	337.55	0.6	3.92	2024.33	7.28	2020.51	7.27	-3.83	-0.19
108	279	171	63	4464	0.949011	786.1	0.556452	1304.82	347.28	0	3.87	2029.67	7.27	2025.63	7.26	-4.04	-0.2
108	280	172	64	4480	0.947755	786.93	0.557143	1304.28	357.12	0.6	3.83	2036.1	7.27	2032.34	7.26	-3.76	-0.18
108	281	173	65	4496	0.946493	787.75	0.557829	1303.75	367.06	0	3.79	2041.23	7.26	2037.26	7.25	-3.96	-0.19
108	282	174	66	4512	0.945224	788.56	0.558511	1303.23	377.1	0.6	3.74	2047.44	7.26	2043.77	7.25	-3.67	-0.18
108	283	175	67	4528	0.94395	789.36	0.559187	1302.72	387.25	0	3.7	2052.37	7.25	2048.49	7.24	-3.87	-0.19
108	284	176	68	4544	0.94267	790.15	0.559859	1302.23	397.5	0.59	3.66	2058.38	7.25	2054.8	7.24	-3.58	-0.17
108	285	177	69	4560	0.941385	790.92	0.560526	1301.75	407.84	0	3.62	2063.1	7.24	2059.33	7.23	-3.78	-0.18
108	286	178	70	4576	0.940095	791.68	0.561189	1301.29	418.29	0.59	3.58	2068.91	7.23	2065.43	7.22	-3.48	-0.17
108	287	179	71	4592	0.9388	792.43	0.561847	1300.83	428.83	0	3.54	2073.44	7.22	2069.77	7.21	-3.67	-0.18
108	288	180	72	4608	0.9375	793.17	0.5625	1300.39	439.47	0.59	3.5	2079.05	7.22	2075.68	7.21	-3.38	-0.16
108	289	181	73	4624	0.936196	793.9	0.563149	1299.96	450.2	0	3.46	2083.39	7.21	2079.83	7.2	-3.57	-0.17
108	290	182	74	4640	0.934887	794.62	0.563793	1299.55	461.03	0.59	3.42	2088.81	7.2	2085.54	7.19	-3.27	-0.16
108	291	183	75	4656	0.933574	795.33	0.564433	1299.14	471.96	0	3.39	2092.96	7.19	2089.51	7.18	-3.45	-0.17
108	292	184	76	4672	0.932257	796.02	0.565068	1298.75	482.97	0.59	3.35	2098.19	7.19	2095.04	7.17	-3.15	-0.15
108	293	185	77	4688	0.930937	796.71	0.5657	1298.37	494.08	0	3.32	2102.16	7.17	2098.82	7.16	-3.33	-0.16
108	294	186	78	4704	0.929613	797.39	0.566327	1298	505.28	0.58	3.28	2107.2	7.17	2104.17	7.16	-3.04	-0.14
108	295	187	79	4720	0.928285	798.05	0.566949	1297.64	516.56	0	3.25	2110.99	7.16	2107.78	7.15	-3.21	-0.15
108	296	188	80	4736	0.926954	798.71	0.567568	1297.29	527.94	0.58	3.21	2115.85	7.15	2112.94	7.14	-2.92	-0.14

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
108	297	189	81	4752	0.92562	799.35	0.568182	1296.96	539.4	0	3.18	2119.46	7.14	2116.37	7.13	-3.09	-0.15
108	298	190	82	4768	0.924283	799.99	0.568792	1296.63	550.96	0.58	3.15	2124.15	7.13	2121.35	7.12	-2.79	-0.13
108	299	191	83	4784	0.922943	800.62	0.569398	1296.32	562.6	0	3.12	2127.59	7.12	2124.62	7.11	-2.97	-0.14
108	300	192	84	4800	0.9216	801.23	0.57	1296.01	574.32	0.58	3.09	2132.1	7.11	2129.43	7.1	-2.67	-0.13
108	301	193	85	4816	0.920255	801.84	0.570598	1295.72	586.13	0	3.05	2135.37	7.09	2132.52	7.08	-2.84	-0.13
108	302	194	86	4832	0.918907	802.44	0.571192	1295.44	598.02	0.58	3.02	2139.71	7.09	2137.16	7.08	-2.55	-0.12
108	303	195	87	4848	0.917557	803.03	0.571782	1295.16	610	0	2.99	2142.81	7.07	2140.09	7.06	-2.72	-0.13
108	304	196	88	4864	0.916205	803.61	0.572368	1294.9	622.05	0.57	2.96	2146.98	7.06	2144.56	7.05	-2.42	-0.11
108	305	197	89	4880	0.914851	804.18	0.572951	1294.64	634.19	0	2.94	2149.92	7.05	2147.33	7.04	-2.6	-0.12
108	306	198	90	4896	0.913495	804.74	0.573529	1294.4	646.41	0.57	2.91	2153.93	7.04	2151.63	7.03	-2.3	-0.11
108	307	199	91	4912	0.912137	805.29	0.574104	1294.16	658.71	0	2.88	2156.71	7.03	2154.24	7.02	-2.48	-0.11
108	308	200	92	4928	0.910778	805.84	0.574675	1293.94	671.09	0.57	2.85	2160.56	7.01	2158.37	7.01	-2.18	-0.1
108	309	201	93	4944	0.909417	806.37	0.575243	1293.72	683.54	0	2.82	2163.19	7	2160.83	6.99	-2.36	-0.11
108	310	202	94	4960	0.908054	806.9	0.575806	1293.52	696.08	0.57	2.8	2166.87	6.99	2164.8	6.98	-2.07	-0.1
108	311	203	95	4976	0.90669	807.42	0.576367	1293.32	708.69	0	2.77	2169.35	6.98	2167.1	6.97	-2.24	-0.1
108	312	204	96	4992	0.905325	807.93	0.576923	1293.13	721.37	0.57	2.75	2172.88	6.96	2170.92	6.96	-1.95	-0.09
108	313	205	97	5008	0.903959	808.44	0.577476	1292.95	734.13	0	2.72	2175.2	6.95	2173.07	6.94	-2.13	-0.1
108	314	206	98	5024	0.902592	808.93	0.578025	1292.77	746.97	0.56	2.7	2178.58	6.94	2176.74	6.93	-1.84	-0.08
108	315	207	99	5040	0.901224	809.42	0.578571	1292.61	759.88	0	2.67	2180.76	6.92	2178.74	6.92	-2.02	-0.09
108	316	208	100	5056	0.899856	809.9	0.579114	1292.46	772.86	0.56	2.65	2183.99	6.91	2182.25	6.91	-1.74	-0.08
108	317	209	101	5072	0.898486	810.38	0.579653	1292.31	785.92	0	2.62	2186.02	6.9	2184.1	6.89	-1.92	-0.09
108	318	210	102	5088	0.897116	810.84	0.580189	1292.17	799.05	0.56	2.6	2189.1	6.88	2187.47	6.88	-1.64	-0.07
108	319	211	103	5104	0.895746	811.3	0.580721	1292.04	812.24	0	2.58	2190.99	6.87	2189.18	6.86	-1.82	-0.08
108	320	212	104	5120	0.894375	811.75	0.58125	1291.92	825.51	0.56	2.55	2193.93	6.86	2192.39	6.85	-1.54	-0.07
108	321	213	105	5136	0.893004	812.19	0.581776	1291.8	838.85	0	2.53	2195.69	6.84	2193.96	6.83	-1.72	-0.08
108	322	214	106	5152	0.891632	812.63	0.582298	1291.7	852.26	0.56	2.51	2198.48	6.83	2197.03	6.82	-1.45	-0.07
108	323	215	107	5168	0.890261	813.06	0.582817	1291.6	865.73	0	2.49	2200.1	6.81	2198.46	6.81	-1.64	-0.07
108	324	216	108	5184	0.888889	813.48	0.583333	1291.51	879.28	0.56	2.47	2202.76	6.8	2201.39	6.79	-1.37	-0.06
108	325	217	109	5200	0.887517	813.89	0.583846	1291.42	892.89	0	2.44	2204.24	6.78	2202.68	6.78	-1.56	-0.07
108	326	218	110	5216	0.886146	814.3	0.584356	1291.35	906.57	0.55	2.42	2206.76	6.77	2205.47	6.77	-1.29	-0.06
108	327	219	111	5232	0.884774	814.7	0.584862	1291.28	920.31	0	2.4	2208.11	6.75	2206.63	6.75	-1.48	-0.07
108	328	220	112	5248	0.883403	815.1	0.585366	1291.21	934.12	0.55	2.38	2210.51	6.74	2209.28	6.74	-1.22	-0.06
108	329	221	113	5264	0.882032	815.49	0.585866	1291.16	947.99	0	2.36	2211.73	6.72	2210.31	6.72	-1.42	-0.06
108	330	222	114	5280	0.880661	815.87	0.586364	1291.11	961.93	0.55	2.34	2213.99	6.71	2212.82	6.71	-1.16	-0.05
108	331	223	115	5296	0.879291	816.24	0.586858	1291.07	975.93	0	2.32	2215.08	6.69	2213.72	6.69	-1.36	-0.06
108	332	224	116	5312	0.877921	816.61	0.587349	1291.03	990	0.55	2.31	2217.21	6.68	2216.1	6.68	-1.11	-0.05
108	333	225	117	5328	0.876552	816.98	0.587838	1291.01	1004.12	0	2.29	2218.18	6.66	2216.87	6.66	-1.31	-0.06
108	334	226	118	5344	0.875184	817.33	0.588323	1290.99	1018.31	0.55	2.27	2220.18	6.65	2219.12	6.64	-1.06	-0.05
108	335	227	119	5360	0.873816	817.68	0.588806	1290.97	1032.56	0	2.25	2221.03	6.63	2219.77	6.63	-1.27	-0.06
108	336	228	120	5376	0.872449	818.03	0.589286	1290.96	1046.88	0.55	2.23	2222.91	6.62	2221.88	6.61	-1.03	-0.05
108	337	229	121	5392	0.871083	818.37	0.589763	1290.96	1061.25	0	2.21	2223.64	6.6	2222.41	6.59	-1.23	-0.06
108	338	230	122	5408	0.869717	818.7	0.590237	1290.97	1075.68	0.54	2.2	2225.4	6.58	2224.4	6.58	-1	-0.04
108	339	231	123	5424	0.868353	819.03	0.590708	1290.98	1090.17	0	2.18	2226.01	6.57	2224.8	6.56	-1.21	-0.05
108	340	232	124	5440	0.86699	819.35	0.591176	1290.99	1104.72	0.54	2.16	2227.64	6.55	2226.66	6.55	-0.98	-0.04
108	341	233	125	5456	0.865627	819.66	0.591642	1291.02	1119.33	0	2.14	2228.14	6.53	2226.94	6.53	-1.2	-0.05
108	342	234	126	5472	0.864266	819.97	0.592105	1291.05	1133.99	0.54	2.13	2229.66	6.52	2228.69	6.52	-0.97	-0.04

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
108	343	235	127	5488	0.862906	820.28	0.592566	1291.08	1148.71	0	2.11	2230.04	6.5	2228.85	6.5	-1.19	-0.05
108	344	236	128	5504	0.861547	820.58	0.593023	1291.12	1163.49	0.54	2.1	2231.44	6.49	2230.47	6.48	-0.97	-0.04
108	345	237	129	5520	0.860189	820.87	0.593478	1291.17	1178.33	0	2.08	2231.71	6.47	2230.51	6.47	-1.2	-0.05
108	346	238	130	5536	0.858833	821.16	0.593931	1291.22	1193.22	0.54	2.06	2233	6.45	2232.02	6.45	-0.98	-0.04
108	347	239	131	5552	0.857477	821.44	0.59438	1291.28	1208.16	0	2.05	2233.16	6.44	2231.95	6.43	-1.21	-0.05
108	348	240	132	5568	0.856124	821.72	0.594828	1291.34	1223.16	0.54	2.03	2234.34	6.42	2233.33	6.42	-1.01	-0.05
108	349	241	133	5584	0.854771	821.99	0.595272	1291.41	1238.22	0	2.02	2234.39	6.4	2233.15	6.4	-1.24	-0.06
108	350	242	134	5600	0.85342	822.26	0.595714	1291.49	1253.33	0.53	2	2235.46	6.39	2234.42	6.38	-1.04	-0.05
108	351	243	135	5616	0.852071	822.52	0.596154	1291.57	1268.49	0	1.99	2235.4	6.37	2234.13	6.37	-1.28	-0.06
108	352	244	136	5632	0.850723	822.78	0.596591	1291.65	1283.71	0.53	1.97	2236.36	6.35	2235.28	6.35	-1.08	-0.05
108	353	245	137	5648	0.849377	823.04	0.597025	1291.74	1298.97	0	1.96	2236.21	6.33	2234.88	6.33	-1.33	-0.06
108	354	246	138	5664	0.848032	823.28	0.597458	1291.84	1314.29	0.53	1.95	2237.06	6.32	2235.92	6.32	-1.14	-0.05
108	355	247	139	5680	0.846689	823.53	0.597887	1291.94	1329.67	0	1.93	2236.8	6.3	2235.41	6.3	-1.39	-0.06
108	356	248	140	5696	0.845348	823.77	0.598315	1292.05	1345.09	0.53	1.92	2237.55	6.29	2236.34	6.28	-1.2	-0.05
108	357	249	141	5712	0.844008	824	0.598739	1292.16	1360.56	0	1.9	2237.19	6.27	2235.73	6.26	-1.46	-0.07
108	358	250	142	5728	0.84267	824.23	0.599162	1292.27	1376.08	0.53	1.89	2237.83	6.25	2236.55	6.25	-1.28	-0.06
108	359	251	143	5744	0.841334	824.45	0.599582	1292.39	1391.66	0	1.88	2237.37	6.23	2235.83	6.23	-1.54	-0.07
108	360	252	144	5760	0.84	824.67	0.6	1292.52	1407.28	0.53	1.86	2237.92	6.22	2236.55	6.21	-1.37	-0.06
108	361	253	145	5776	0.838668	824.89	0.600416	1292.65	1422.95	0	1.85	2237.36	6.2	2235.72	6.19	-1.63	-0.07
108	362	254	146	5792	0.837337	825.1	0.600829	1292.79	1438.67	0.53	1.84	2237.8	6.18	2236.33	6.18	-1.47	-0.07
108	363	255	147	5808	0.836008	825.31	0.60124	1292.93	1454.44	0	1.83	2237.15	6.16	2235.41	6.16	-1.74	-0.08
108	364	256	148	5824	0.834682	825.51	0.601648	1293.07	1470.26	0.52	1.81	2237.5	6.15	2235.91	6.14	-1.58	-0.07
108	365	257	149	5840	0.833357	825.71	0.602055	1293.22	1486.12	0	1.8	2236.75	6.13	2234.89	6.12	-1.86	-0.08
108	366	258	150	5856	0.832034	825.91	0.602459	1293.37	1502.03	0.52	1.79	2237	6.11	2235.29	6.11	-1.71	-0.08
108	367	259	151	5872	0.830714	826.1	0.602861	1293.53	1517.99	0	1.78	2236.16	6.09	2234.17	6.09	-1.99	-0.09
108	368	260	152	5888	0.829395	826.28	0.603261	1293.69	1533.99	0.52	1.76	2236.32	6.08	2234.47	6.07	-1.85	-0.08
108	369	261	153	5904	0.828079	826.46	0.603659	1293.86	1550.04	0	1.75	2235.38	6.06	2233.25	6.05	-2.14	-0.1
108	370	262	154	5920	0.826764	826.64	0.604054	1294.03	1566.14	0.52	1.74	2235.45	6.04	2233.45	6.04	-2	-0.09
108	371	263	155	5936	0.825452	826.82	0.604447	1294.21	1582.28	0	1.73	2234.43	6.02	2232.13	6.02	-2.29	-0.1
108	372	264	156	5952	0.824142	826.99	0.604839	1294.39	1598.47	0.52	1.72	2234.4	6.01	2232.24	6	-2.16	-0.1
108	373	265	157	5968	0.822833	827.15	0.605228	1294.57	1614.7	0	1.71	2233.29	5.99	2230.83	5.98	-2.46	-0.11
108	374	266	158	5984	0.821528	827.32	0.605615	1294.76	1630.97	0.52	1.7	2233.17	5.97	2230.83	5.96	-2.34	-0.1
108	375	267	159	6000	0.820224	827.48	0.606	1294.95	1647.29	0	1.69	2231.97	5.95	2229.33	5.94	-2.64	-0.12
108	376	268	160	6016	0.818923	827.63	0.606383	1295.14	1663.65	0.52	1.67	2231.77	5.94	2229.24	5.93	-2.53	-0.11
108	377	269	161	6032	0.817623	827.78	0.606764	1295.34	1680.05	0	1.66	2230.49	5.92	2227.65	5.91	-2.84	-0.13
108	378	270	162	6048	0.816327	827.93	0.607143	1295.55	1696.5	0.51	1.65	2230.19	5.9	2227.46	5.89	-2.73	-0.12
108	379	271	163	6064	0.815032	828.07	0.60752	1295.75	1712.99	0	1.64	2228.82	5.88	2225.78	5.87	-3.05	-0.14
108	380	272	164	6080	0.81374	828.21	0.607895	1295.97	1729.52	0.51	1.63	2228.44	5.86	2225.5	5.86	-2.95	-0.13
108	381	273	165	6096	0.81245	828.35	0.608268	1296.18	1746.09	0	1.62	2227	5.85	2223.73	5.84	-3.27	-0.15
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
109	217	108	-1	3472	0.999979	700.54	0.498848	1403.77	0.11	0	9.81	1377.39	6.35	1386.64	6.39	9.25	0.67
109	218	109	0	3488	1	702.7	0.5	1401.61	0	-0.68	10	1393.01	6.39	1401.98	6.43	8.97	0.64
109	219	110	1	3504	0.999979	704.84	0.501142	1399.48	0.11	0	9.81	1409.38	6.44	1416.94	6.47	7.56	0.53
109	220	111	2	3520	0.999917	706.94	0.502273	1397.4	0.44	-0.67	9.63	1424.17	6.47	1431.88	6.51	7.72	0.54

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
109	221	112	3	3536	0.999816	709.01	0.503394	1395.36	0.99	0	9.45	1440.08	6.52	1446.43	6.54	6.35	0.44
109	222	113	4	3552	0.999675	711.04	0.504505	1393.36	1.76	-0.67	9.27	1454.43	6.55	1460.99	6.58	6.55	0.45
109	223	114	5	3568	0.999497	713.05	0.505605	1391.4	2.73	0	9.1	1469.91	6.59	1475.14	6.61	5.23	0.35
109	224	115	6	3584	0.999283	715.03	0.506696	1389.48	3.92	-0.67	8.94	1483.84	6.62	1489.32	6.65	5.48	0.37
109	225	116	7	3600	0.999032	716.97	0.507778	1387.6	5.31	0	8.78	1498.89	6.66	1503.09	6.68	4.2	0.28
109	226	117	8	3616	0.998747	718.89	0.50885	1385.75	6.91	-0.67	8.62	1512.4	6.69	1516.89	6.71	4.49	0.3
109	227	118	9	3632	0.998428	720.78	0.509912	1383.94	8.7	0	8.47	1527.04	6.73	1530.29	6.74	3.25	0.21
109	228	119	10	3648	0.998076	722.64	0.510965	1382.17	10.7	-0.66	8.32	1540.15	6.76	1543.72	6.77	3.57	0.23
109	229	120	11	3664	0.997693	724.47	0.512009	1380.43	12.89	0	8.17	1554.39	6.79	1556.76	6.8	2.37	0.15
109	230	121	12	3680	0.997278	726.28	0.513043	1378.72	15.27	-0.66	8.03	1567.1	6.81	1569.83	6.83	2.73	0.17
109	231	122	13	3696	0.996833	728.06	0.514069	1377.05	17.85	0	7.89	1580.94	6.84	1582.51	6.85	1.57	0.1
109	232	123	14	3712	0.996359	729.81	0.515086	1375.41	20.61	-0.66	7.76	1593.28	6.87	1595.24	6.88	1.96	0.12
109	233	124	15	3728	0.995856	731.54	0.516094	1373.8	23.56	0	7.63	1606.74	6.9	1607.57	6.9	0.83	0.05
109	234	125	16	3744	0.995325	733.24	0.517094	1372.22	26.69	-0.65	7.5	1618.7	6.92	1619.96	6.92	1.26	0.08
109	235	126	17	3760	0.994767	734.91	0.518085	1370.68	30	0	7.38	1631.79	6.94	1631.95	6.94	0.16	0.01
109	236	127	18	3776	0.994183	736.56	0.519068	1369.17	33.49	-0.65	7.26	1643.39	6.96	1644.01	6.97	0.62	0.04
109	237	128	19	3792	0.993573	738.19	0.520042	1367.68	37.16	0	7.14	1656.11	6.99	1655.66	6.99	-0.45	-0.03
109	238	129	20	3808	0.992938	739.79	0.521008	1366.23	41	-0.65	7.03	1667.36	7.01	1667.39	7.01	0.03	0
109	239	130	21	3824	0.99228	741.37	0.521967	1364.8	45.02	0	6.91	1679.73	7.03	1678.72	7.02	-1	-0.06
109	240	131	22	3840	0.991597	742.92	0.522917	1363.4	49.2	-0.65	6.8	1690.63	7.04	1690.14	7.04	-0.49	-0.03
109	241	132	23	3856	0.990892	744.46	0.523859	1362.03	53.55	0	6.7	1702.65	7.06	1701.15	7.06	-1.5	-0.09
109	242	133	24	3872	0.990165	745.97	0.524793	1360.69	58.07	-0.64	6.59	1713.22	7.08	1712.25	7.08	-0.97	-0.06
109	243	134	25	3888	0.989416	747.45	0.52572	1359.37	62.76	0	6.49	1724.91	7.1	1722.95	7.09	-1.95	-0.11
109	244	135	26	3904	0.988646	748.92	0.526639	1358.08	67.6	-0.64	6.39	1735.15	7.11	1733.75	7.11	-1.4	-0.08
109	245	136	27	3920	0.987855	750.36	0.527551	1356.82	72.6	0	6.29	1746.51	7.13	1744.15	7.12	-2.36	-0.14
109	246	137	28	3936	0.987045	751.79	0.528455	1355.58	77.76	-0.64	6.2	1756.43	7.14	1754.65	7.13	-1.78	-0.1
109	247	138	29	3952	0.986215	753.19	0.529352	1354.37	83.08	0	6.11	1767.47	7.16	1764.75	7.14	-2.72	-0.15
109	248	139	30	3968	0.985367	754.57	0.530242	1353.18	88.55	-0.64	6.02	1777.08	7.17	1774.96	7.16	-2.12	-0.12
109	249	140	31	3984	0.9845	755.93	0.531124	1352.01	94.18	0	5.93	1787.8	7.18	1784.77	7.17	-3.03	-0.17
109	250	141	32	4000	0.983616	757.28	0.532	1350.87	99.95	-0.63	5.84	1797.11	7.19	1794.7	7.18	-2.41	-0.13
109	251	142	33	4016	0.982715	758.6	0.532869	1349.76	105.87	0	5.76	1807.53	7.2	1804.22	7.19	-3.31	-0.18
109	252	143	34	4032	0.981796	759.9	0.53373	1348.66	111.94	-0.63	5.67	1816.54	7.21	1813.87	7.2	-2.67	-0.15
109	253	144	35	4048	0.980862	761.18	0.534585	1347.59	118.16	0	5.59	1826.66	7.22	1823.11	7.21	-3.55	-0.19
109	254	145	36	4064	0.979912	762.45	0.535433	1346.54	124.52	-0.63	5.51	1835.38	7.23	1832.48	7.21	-2.9	-0.16
109	255	146	37	4080	0.978947	763.7	0.536275	1345.51	131.02	0	5.44	1845.21	7.24	1841.46	7.22	-3.76	-0.2
109	256	147	38	4096	0.977966	764.93	0.537109	1344.5	137.66	-0.62	5.36	1853.65	7.24	1850.56	7.23	-3.09	-0.17
109	257	148	39	4112	0.976972	766.14	0.537938	1343.52	144.43	0	5.29	1863.2	7.25	1859.27	7.23	-3.93	-0.21
109	258	149	40	4128	0.975963	767.33	0.53876	1342.55	151.35	-0.62	5.21	1871.36	7.25	1868.11	7.24	-3.25	-0.17
109	259	150	41	4144	0.974941	768.5	0.539575	1341.61	158.4	0	5.14	1880.63	7.26	1876.56	7.25	-4.07	-0.22
109	260	151	42	4160	0.973905	769.66	0.540385	1340.68	165.58	-0.62	5.07	1888.53	7.26	1885.15	7.25	-3.38	-0.18
109	261	152	43	4176	0.972857	770.8	0.541188	1339.78	172.9	0	5.01	1897.52	7.27	1893.33	7.25	-4.19	-0.22
109	262	153	44	4192	0.971797	771.93	0.541985	1338.89	180.35	-0.62	4.94	1905.15	7.27	1901.67	7.26	-3.48	-0.18
109	263	154	45	4208	0.970724	773.04	0.542776	1338.02	187.92	0	4.87	1913.89	7.28	1909.61	7.26	-4.28	-0.22
109	264	155	46	4224	0.96964	774.13	0.543561	1337.17	195.63	-0.62	4.81	1921.26	7.28	1917.7	7.26	-3.56	-0.19
109	265	156	47	4240	0.968544	775.21	0.54434	1336.34	203.46	0	4.75	1929.74	7.28	1925.39	7.27	-4.35	-0.23
109	266	157	48	4256	0.967437	776.27	0.545113	1335.53	211.41	-0.61	4.69	1936.86	7.28	1933.24	7.27	-3.62	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
109	267	158	49	4272	0.96632	777.31	0.54588	1334.74	219.49	0	4.63	1945.08	7.28	1940.69	7.27	-4.39	-0.23
109	268	159	50	4288	0.965193	778.35	0.546642	1333.96	227.69	-0.61	4.57	1951.96	7.28	1948.3	7.27	-3.66	-0.19
109	269	160	51	4304	0.964055	779.36	0.547398	1333.2	236.01	0	4.51	1959.93	7.29	1955.52	7.27	-4.42	-0.23
109	270	161	52	4320	0.962908	780.36	0.548148	1332.46	244.45	-0.61	4.45	1966.57	7.28	1962.9	7.27	-3.67	-0.19
109	271	162	53	4336	0.961752	781.35	0.548893	1331.74	253.01	0	4.4	1974.3	7.29	1969.88	7.27	-4.42	-0.22
109	272	163	54	4352	0.960586	782.32	0.549632	1331.03	261.69	-0.61	4.34	1980.7	7.28	1977.03	7.27	-3.67	-0.19
109	273	164	55	4368	0.959412	783.28	0.550366	1330.33	270.48	0	4.29	1988.2	7.28	1983.79	7.27	-4.41	-0.22
109	274	165	56	4384	0.958229	784.22	0.551095	1329.66	279.39	-0.6	4.24	1994.37	7.28	1990.72	7.27	-3.65	-0.18
109	275	166	57	4400	0.957038	785.15	0.551818	1329	288.4	0	4.19	2001.64	7.28	1997.25	7.26	-4.38	-0.22
109	276	167	58	4416	0.955839	786.07	0.552536	1328.35	297.53	-0.6	4.14	2007.58	7.27	2003.97	7.26	-3.61	-0.18
109	277	168	59	4432	0.954633	786.97	0.553249	1327.72	306.77	0	4.09	2014.62	7.27	2010.28	7.26	-4.34	-0.22
109	278	169	60	4448	0.953419	787.86	0.553957	1327.11	316.12	-0.6	4.04	2020.35	7.27	2016.78	7.25	-3.57	-0.18
109	279	170	61	4464	0.952197	788.74	0.554659	1326.51	325.58	0	3.99	2027.17	7.27	2022.88	7.25	-4.28	-0.21
109	280	171	62	4480	0.950969	789.6	0.555357	1325.92	335.15	-0.6	3.95	2032.68	7.26	2029.17	7.25	-3.51	-0.17
109	281	172	63	4496	0.949735	790.45	0.55605	1325.35	344.82	0	3.9	2039.28	7.26	2035.06	7.24	-4.22	-0.21
109	282	173	64	4512	0.948494	791.29	0.556738	1324.79	354.6	-0.6	3.86	2044.58	7.25	2041.15	7.24	-3.43	-0.17
109	283	174	65	4528	0.947246	792.12	0.55742	1324.25	364.48	0	3.81	2050.97	7.25	2046.83	7.23	-4.14	-0.2
109	284	175	66	4544	0.945993	792.93	0.558099	1323.72	374.46	-0.59	3.77	2056.07	7.24	2052.71	7.23	-3.35	-0.16
109	285	176	67	4560	0.944734	793.73	0.558772	1323.2	384.54	0	3.73	2062.25	7.24	2058.2	7.22	-4.05	-0.2
109	286	177	68	4576	0.943469	794.52	0.559441	1322.7	394.73	-0.59	3.68	2067.14	7.23	2063.88	7.22	-3.26	-0.16
109	287	178	69	4592	0.942199	795.3	0.560105	1322.21	405.01	0	3.64	2073.12	7.22	2069.17	7.21	-3.95	-0.19
109	288	179	70	4608	0.940924	796.07	0.560764	1321.73	415.39	-0.59	3.6	2077.82	7.21	2074.65	7.2	-3.16	-0.15
109	289	180	71	4624	0.939644	796.83	0.561419	1321.27	425.87	0	3.56	2083.6	7.21	2079.75	7.2	-3.85	-0.19
109	290	181	72	4640	0.938359	797.57	0.562069	1320.82	436.45	-0.59	3.52	2088.1	7.2	2085.04	7.19	-3.06	-0.15
109	291	182	73	4656	0.93707	798.31	0.562715	1320.38	447.12	0	3.49	2093.68	7.19	2089.94	7.18	-3.74	-0.18
109	292	183	74	4672	0.935776	799.03	0.563356	1319.95	457.89	-0.59	3.45	2098	7.18	2095.05	7.17	-2.95	-0.14
109	293	184	75	4688	0.934478	799.74	0.563993	1319.54	468.74	0	3.41	2103.39	7.18	2099.76	7.17	-3.63	-0.17
109	294	185	76	4704	0.933176	800.44	0.564626	1319.13	479.7	-0.58	3.38	2107.52	7.17	2104.69	7.16	-2.83	-0.13
109	295	186	77	4720	0.93187	801.13	0.565254	1318.74	490.74	0	3.34	2112.73	7.16	2109.22	7.15	-3.51	-0.17
109	296	187	78	4736	0.930561	801.82	0.565878	1318.36	501.87	-0.58	3.31	2116.68	7.15	2113.96	7.14	-2.71	-0.13
109	297	188	79	4752	0.929248	802.49	0.566498	1317.99	513.1	0	3.27	2121.7	7.14	2118.31	7.13	-3.39	-0.16
109	298	189	80	4768	0.927931	803.15	0.567114	1317.63	524.41	-0.58	3.24	2125.47	7.13	2122.88	7.12	-2.59	-0.12
109	299	190	81	4784	0.926612	803.8	0.567726	1317.29	535.81	0	3.21	2130.31	7.12	2127.05	7.11	-3.26	-0.15
109	300	191	82	4800	0.925289	804.44	0.568333	1316.95	547.3	-0.58	3.17	2133.91	7.11	2131.44	7.1	-2.47	-0.12
109	301	192	83	4816	0.923963	805.07	0.568937	1316.63	558.87	0	3.14	2138.57	7.1	2135.44	7.09	-3.14	-0.15
109	302	193	84	4832	0.922635	805.69	0.569536	1316.31	570.53	-0.58	3.11	2142	7.09	2139.66	7.08	-2.34	-0.11
109	303	194	85	4848	0.921304	806.31	0.570132	1316.01	582.27	0	3.08	2146.49	7.08	2143.48	7.07	-3.01	-0.14
109	304	195	86	4864	0.919971	806.91	0.570724	1315.72	594.1	-0.57	3.05	2149.75	7.07	2147.53	7.06	-2.22	-0.1
109	305	196	87	4880	0.918635	807.5	0.571311	1315.43	606.01	0	3.02	2154.07	7.06	2151.19	7.05	-2.88	-0.13
109	306	197	88	4896	0.917297	808.09	0.571895	1315.16	618	-0.57	2.99	2157.17	7.05	2155.08	7.04	-2.09	-0.1
109	307	198	89	4912	0.915957	808.67	0.572476	1314.89	630.07	0	2.96	2161.33	7.04	2158.57	7.03	-2.76	-0.13
109	308	199	90	4928	0.914615	809.23	0.573052	1314.64	642.23	-0.57	2.93	2164.26	7.03	2162.29	7.02	-1.97	-0.09
109	309	200	91	4944	0.913271	809.79	0.573625	1314.4	654.46	0	2.9	2168.26	7.02	2165.62	7.01	-2.63	-0.12
109	310	201	92	4960	0.911925	810.34	0.574194	1314.16	666.77	-0.57	2.88	2171.03	7	2169.19	7	-1.85	-0.09
109	311	202	93	4976	0.910578	810.88	0.574759	1313.94	679.16	0	2.85	2174.87	6.99	2172.36	6.99	-2.51	-0.12
109	312	203	94	4992	0.909229	811.42	0.575321	1313.72	691.63	-0.57	2.82	2177.49	6.98	2175.76	6.97	-1.72	-0.08

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
109	313	204	95	5008	0.907879	811.94	0.575879	1313.51	704.17	0	2.79	2181.17	6.97	2178.78	6.96	-2.39	-0.11
109	314	205	96	5024	0.906528	812.46	0.576433	1313.31	716.79	-0.56	2.77	2183.64	6.95	2182.03	6.95	-1.61	-0.07
109	315	206	97	5040	0.905175	812.97	0.576984	1313.12	729.49	0	2.74	2187.16	6.94	2184.89	6.94	-2.27	-0.1
109	316	207	98	5056	0.903822	813.47	0.577532	1312.94	742.26	-0.56	2.72	2189.48	6.93	2187.99	6.92	-1.49	-0.07
109	317	208	99	5072	0.902467	813.97	0.578076	1312.77	755.1	0	2.69	2192.86	6.92	2190.7	6.91	-2.16	-0.1
109	318	209	100	5088	0.901112	814.45	0.578616	1312.61	768.02	-0.56	2.67	2195.03	6.9	2193.65	6.9	-1.38	-0.06
109	319	210	101	5104	0.899755	814.93	0.579154	1312.45	781.01	0	2.65	2198.26	6.89	2196.21	6.88	-2.05	-0.09
109	320	211	102	5120	0.898398	815.4	0.579688	1312.31	794.07	-0.56	2.62	2200.29	6.88	2199.01	6.87	-1.28	-0.06
109	321	212	103	5136	0.897041	815.86	0.580218	1312.17	807.2	0	2.6	2203.37	6.86	2201.42	6.86	-1.95	-0.09
109	322	213	104	5152	0.895683	816.32	0.580745	1312.04	820.4	-0.56	2.58	2205.26	6.85	2204.09	6.84	-1.18	-0.05
109	323	214	105	5168	0.894325	816.77	0.581269	1311.91	833.67	0	2.55	2208.2	6.84	2206.35	6.83	-1.85	-0.08
109	324	215	106	5184	0.892966	817.21	0.58179	1311.8	847.01	-0.56	2.53	2209.95	6.82	2208.87	6.82	-1.08	-0.05
109	325	216	107	5200	0.891607	817.64	0.582308	1311.69	860.42	0	2.51	2212.75	6.81	2211	6.8	-1.75	-0.08
109	326	217	108	5216	0.890248	818.07	0.582822	1311.59	873.9	-0.55	2.49	2214.37	6.79	2213.38	6.79	-0.99	-0.04
109	327	218	109	5232	0.888889	818.49	0.583333	1311.5	887.44	0	2.47	2217.03	6.78	2215.36	6.77	-1.67	-0.08
109	328	219	110	5248	0.88753	818.91	0.583841	1311.41	901.06	-0.55	2.45	2218.52	6.76	2217.61	6.76	-0.91	-0.04
109	329	220	111	5264	0.886171	819.31	0.584347	1311.34	914.73	0	2.42	2221.04	6.75	2219.46	6.75	-1.59	-0.07
109	330	221	112	5280	0.884812	819.71	0.584848	1311.27	928.47	-0.55	2.4	2222.4	6.73	2221.56	6.73	-0.84	-0.04
109	331	222	113	5296	0.883453	820.11	0.585347	1311.2	942.28	0	2.38	2224.79	6.72	2223.28	6.72	-1.51	-0.07
109	332	223	114	5312	0.882095	820.49	0.585843	1311.15	956.15	-0.55	2.36	2226.02	6.7	2225.25	6.7	-0.77	-0.03
109	333	224	115	5328	0.880737	820.88	0.586336	1311.1	970.09	0	2.34	2228.28	6.69	2226.83	6.69	-1.45	-0.07
109	334	225	116	5344	0.879379	821.25	0.586826	1311.06	984.09	-0.55	2.33	2229.38	6.67	2228.68	6.67	-0.71	-0.03
109	335	226	117	5360	0.878022	821.62	0.587313	1311.02	998.15	0	2.31	2231.52	6.66	2230.13	6.66	-1.39	-0.06
109	336	227	118	5376	0.876665	821.98	0.587798	1310.99	1012.27	-0.55	2.29	2232.5	6.64	2231.84	6.64	-0.65	-0.03
109	337	228	119	5392	0.875309	822.34	0.588279	1310.97	1026.45	0	2.27	2234.51	6.63	2233.17	6.63	-1.34	-0.06
109	338	229	120	5408	0.873954	822.69	0.588757	1310.96	1040.7	-0.54	2.25	2235.37	6.61	2234.75	6.61	-0.61	-0.03
109	339	230	121	5424	0.872599	823.03	0.589233	1310.95	1055	0	2.23	2237.25	6.6	2235.95	6.6	-1.3	-0.06
109	340	231	122	5440	0.871246	823.37	0.589706	1310.94	1069.37	-0.54	2.22	2237.99	6.58	2237.41	6.58	-0.58	-0.03
109	341	232	123	5456	0.869893	823.7	0.590176	1310.95	1083.79	0	2.2	2239.75	6.57	2238.49	6.56	-1.27	-0.06
109	342	233	124	5472	0.868541	824.03	0.590643	1310.96	1098.28	-0.54	2.18	2240.38	6.55	2239.83	6.55	-0.55	-0.02
109	343	234	125	5488	0.86719	824.35	0.591108	1310.98	1112.82	0	2.16	2242.02	6.54	2240.78	6.53	-1.25	-0.06
109	344	235	126	5504	0.86584	824.67	0.59157	1311	1127.42	-0.54	2.15	2242.53	6.52	2242	6.52	-0.53	-0.02
109	345	236	127	5520	0.864491	824.98	0.592029	1311.03	1142.07	0	2.13	2244.06	6.5	2242.82	6.5	-1.23	-0.05
109	346	237	128	5536	0.863143	825.28	0.592486	1311.06	1156.79	-0.54	2.11	2244.45	6.49	2243.92	6.49	-0.53	-0.02
109	347	238	129	5552	0.861796	825.58	0.592939	1311.1	1171.55	0	2.1	2245.86	6.47	2244.63	6.47	-1.23	-0.05
109	348	239	130	5568	0.860451	825.87	0.593391	1311.15	1186.38	-0.54	2.08	2246.15	6.45	2245.62	6.45	-0.53	-0.02
109	349	240	131	5584	0.859106	826.16	0.59384	1311.2	1201.26	0	2.07	2247.45	6.44	2246.21	6.44	-1.24	-0.06
109	350	241	132	5600	0.857763	826.45	0.594286	1311.26	1216.2	-0.53	2.05	2247.62	6.42	2247.08	6.42	-0.54	-0.02
109	351	242	133	5616	0.856422	826.72	0.594729	1311.32	1231.18	0	2.04	2248.81	6.41	2247.56	6.4	-1.25	-0.06
109	352	243	134	5632	0.855081	827	0.59517	1311.39	1246.23	-0.53	2.02	2248.88	6.39	2248.31	6.39	-0.56	-0.03
109	353	244	135	5648	0.853743	827.27	0.595609	1311.46	1261.32	0	2.01	2249.95	6.37	2248.67	6.37	-1.28	-0.06
109	354	245	136	5664	0.852405	827.53	0.596045	1311.54	1276.47	-0.53	1.99	2249.92	6.36	2249.32	6.35	-0.6	-0.03
109	355	246	137	5680	0.851069	827.79	0.596479	1311.63	1291.68	0	1.98	2250.89	6.34	2249.57	6.34	-1.32	-0.06
109	356	247	138	5696	0.849735	828.04	0.59691	1311.71	1306.93	-0.53	1.96	2250.75	6.32	2250.1	6.32	-0.64	-0.03
109	357	248	139	5712	0.848402	828.29	0.597339	1311.81	1322.24	0	1.95	2251.61	6.31	2250.24	6.3	-1.37	-0.06
109	358	249	140	5728	0.847071	828.53	0.597765	1311.91	1337.59	-0.53	1.94	2251.37	6.29	2250.67	6.29	-0.7	-0.03

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
109	359	250	141	5744	0.845741	828.77	0.598189	1312.02	1353	0	1.92	2252.13	6.27	2250.7	6.27	-1.43	-0.06
109	360	251	142	5760	0.844414	829.01	0.598611	1312.13	1368.46	-0.53	1.91	2251.79	6.25	2251.02	6.25	-0.77	-0.03
109	361	252	143	5776	0.843087	829.24	0.59903	1312.24	1383.97	0	1.89	2252.45	6.24	2250.95	6.24	-1.5	-0.07
109	362	253	144	5792	0.841763	829.46	0.599448	1312.36	1399.53	-0.53	1.88	2252	6.22	2251.16	6.22	-0.85	-0.04
109	363	254	145	5808	0.84044	829.68	0.599862	1312.49	1415.13	0	1.87	2252.56	6.21	2250.98	6.2	-1.58	-0.07
109	364	255	146	5824	0.83912	829.9	0.600275	1312.62	1430.79	-0.52	1.86	2252.02	6.19	2251.09	6.18	-0.94	-0.04
109	365	256	147	5840	0.837801	830.11	0.600685	1312.75	1446.49	0	1.84	2252.49	6.17	2250.81	6.17	-1.68	-0.07
109	366	257	148	5856	0.836484	830.32	0.601093	1312.89	1462.25	-0.52	1.83	2251.85	6.15	2250.81	6.15	-1.04	-0.05
109	367	258	149	5872	0.835168	830.53	0.601499	1313.03	1478.04	0	1.82	2252.21	6.14	2250.43	6.13	-1.79	-0.08
109	368	259	150	5888	0.833855	830.73	0.601902	1313.18	1493.89	-0.52	1.81	2251.49	6.12	2250.33	6.12	-1.15	-0.05
109	369	260	151	5904	0.832544	830.92	0.602304	1313.33	1509.78	0	1.79	2251.75	6.1	2249.85	6.1	-1.91	-0.08
109	370	261	152	5920	0.831234	831.11	0.602703	1313.49	1525.72	-0.52	1.78	2250.93	6.08	2249.65	6.08	-1.28	-0.06
109	371	262	153	5936	0.829927	831.3	0.6031	1313.65	1541.71	0	1.77	2251.11	6.07	2249.07	6.06	-2.04	-0.09
109	372	263	154	5952	0.828622	831.48	0.603495	1313.82	1557.74	-0.52	1.76	2250.2	6.05	2248.77	6.05	-1.42	-0.06
109	373	264	155	5968	0.827319	831.66	0.603887	1313.99	1573.82	0	1.75	2250.28	6.03	2248.09	6.03	-2.18	-0.1
109	374	265	156	5984	0.826017	831.84	0.604278	1314.16	1589.94	-0.52	1.73	2249.28	6.01	2247.7	6.01	-1.57	-0.07
109	375	266	157	6000	0.824718	832.01	0.604667	1314.34	1606.11	0	1.72	2249.27	6	2246.92	5.99	-2.34	-0.1
109	376	267	158	6016	0.823421	832.18	0.605053	1314.52	1622.32	-0.52	1.71	2248.18	5.98	2246.44	5.97	-1.74	-0.08
109	377	268	159	6032	0.822126	832.34	0.605438	1314.71	1638.57	0	1.7	2248.08	5.96	2245.57	5.96	-2.51	-0.11
109	378	269	160	6048	0.820834	832.5	0.60582	1314.9	1654.87	-0.51	1.69	2246.9	5.94	2244.99	5.94	-1.92	-0.09
109	379	270	161	6064	0.819543	832.66	0.606201	1315.1	1671.21	0	1.68	2246.71	5.93	2244.02	5.92	-2.69	-0.12
109	380	271	162	6080	0.818255	832.81	0.606579	1315.3	1687.59	-0.51	1.67	2245.46	5.91	2243.35	5.9	-2.11	-0.09
109	381	272	163	6096	0.816969	832.96	0.606955	1315.5	1704.02	0	1.66	2245.18	5.89	2242.29	5.89	-2.89	-0.13
109	382	273	164	6112	0.815685	833.1	0.60733	1315.71	1720.49	-0.51	1.65	2243.84	5.87	2241.53	5.87	-2.31	-0.1
109	383	274	165	6128	0.814403	833.25	0.607702	1315.92	1737	0	1.64	2243.47	5.86	2240.38	5.85	-3.1	-0.14
109	384	275	166	6144	0.813124	833.39	0.608073	1316.13	1753.55	-0.51	1.63	2242.05	5.84	2239.52	5.83	-2.53	-0.11
109	385	276	167	6160	0.811847	833.52	0.608442	1316.35	1770.14	0	1.62	2241.6	5.82	2238.28	5.81	-3.32	-0.15
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
110	219	109	-1	3504	0.999979	704.84	0.498858	1425.28	0.11	0	9.81	1383.58	6.32	1392.84	6.36	9.26	0.66
110	220	110	0	3520	1	707	0.5	1423.1	0	0.67	10	1400.58	6.37	1409.09	6.4	8.52	0.6
110	221	111	1	3536	0.99998	709.12	0.501131	1420.97	0.11	0	9.81	1415.61	6.41	1423.19	6.44	7.58	0.53
110	222	112	2	3552	0.999919	711.22	0.502252	1418.87	0.44	0.67	9.63	1431.77	6.45	1439.03	6.48	7.26	0.5
110	223	113	3	3568	0.999819	713.28	0.503363	1416.82	0.98	0	9.45	1446.37	6.49	1452.74	6.51	6.37	0.44
110	224	114	4	3584	0.999681	715.31	0.504464	1414.81	1.74	0.67	9.28	1462.08	6.53	1468.19	6.55	6.1	0.42
110	225	115	5	3600	0.999506	717.31	0.505556	1412.83	2.71	0	9.11	1476.25	6.56	1481.51	6.58	5.26	0.35
110	226	116	6	3616	0.999295	719.29	0.506637	1410.9	3.89	0.67	8.94	1491.54	6.6	1496.57	6.62	5.03	0.34
110	227	117	7	3632	0.999049	721.23	0.507709	1409	5.27	0	8.79	1505.29	6.63	1509.52	6.65	4.23	0.28
110	228	118	8	3648	0.998769	723.14	0.508772	1407.14	6.85	0.66	8.63	1520.16	6.67	1524.2	6.69	4.04	0.26
110	229	119	9	3664	0.998455	725.03	0.509825	1405.32	8.63	0	8.48	1533.51	6.7	1536.79	6.71	3.28	0.21
110	230	120	10	3680	0.99811	726.88	0.51087	1403.53	10.61	0.66	8.33	1547.97	6.73	1551.1	6.74	3.13	0.2
110	231	121	11	3696	0.997732	728.71	0.511905	1401.77	12.78	0	8.19	1560.92	6.76	1563.33	6.77	2.41	0.15
110	232	122	12	3712	0.997325	730.52	0.512931	1400.05	15.14	0.66	8.05	1574.99	6.79	1577.28	6.8	2.29	0.15
110	233	123	13	3728	0.996887	732.29	0.513948	1398.37	17.69	0	7.91	1587.56	6.81	1589.16	6.82	1.61	0.1
110	234	124	14	3744	0.99642	734.04	0.514957	1396.71	20.43	0.65	7.78	1601.24	6.84	1602.76	6.85	1.52	0.09

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
110	235	125	15	3760	0.995926	735.77	0.515957	1395.09	23.36	0	7.65	1613.43	6.87	1614.31	6.87	0.87	0.05
110	236	126	16	3776	0.995404	737.47	0.516949	1393.5	26.46	0.65	7.52	1626.74	6.89	1627.56	6.9	0.82	0.05
110	237	127	17	3792	0.994855	739.14	0.517932	1391.94	29.75	0	7.4	1638.57	6.91	1638.77	6.91	0.2	0.01
110	238	128	18	3808	0.99428	740.79	0.518908	1390.41	33.21	0.65	7.28	1651.51	6.94	1651.69	6.94	0.18	0.01
110	239	129	19	3824	0.99368	742.42	0.519874	1388.92	36.85	0	7.16	1662.98	6.96	1662.57	6.96	-0.4	-0.02
110	240	130	20	3840	0.993056	744.02	0.520833	1387.45	40.66	0.65	7.05	1675.57	6.98	1675.16	6.98	-0.41	-0.02
110	241	131	21	3856	0.992407	745.59	0.521784	1386.01	44.65	0	6.94	1686.69	7	1685.73	6.99	-0.96	-0.06
110	242	132	22	3872	0.991736	747.15	0.522727	1384.59	48.8	0.64	6.83	1698.93	7.02	1697.99	7.02	-0.93	-0.06
110	243	133	23	3888	0.991041	748.68	0.523663	1383.21	53.12	0	6.72	1709.71	7.04	1708.26	7.03	-1.46	-0.09
110	244	134	24	3904	0.990325	750.19	0.52459	1381.85	57.6	0.64	6.62	1721.61	7.06	1720.2	7.05	-1.41	-0.08
110	245	135	25	3920	0.989588	751.68	0.52551	1380.52	62.24	0	6.51	1732.07	7.07	1730.16	7.06	-1.9	-0.11
110	246	136	26	3936	0.988829	753.15	0.526423	1379.22	67.05	0.64	6.42	1743.63	7.09	1741.8	7.08	-1.84	-0.11
110	247	137	27	3952	0.988051	754.59	0.527328	1377.94	72.02	0	6.32	1753.77	7.1	1751.46	7.09	-2.3	-0.13
110	248	138	28	3968	0.987253	756.02	0.528226	1376.69	77.14	0.64	6.22	1765.01	7.12	1762.8	7.11	-2.22	-0.13
110	249	139	29	3984	0.986436	757.42	0.529116	1375.46	82.42	0	6.13	1774.83	7.13	1772.17	7.12	-2.66	-0.15
110	250	140	30	4000	0.9856	758.8	0.53	1374.26	87.85	0.63	6.04	1785.76	7.14	1783.21	7.13	-2.55	-0.14
110	251	141	31	4016	0.984746	760.17	0.530876	1373.08	93.43	0	5.95	1795.28	7.15	1792.3	7.14	-2.98	-0.17
110	252	142	32	4032	0.983875	761.51	0.531746	1371.93	99.16	0.63	5.87	1805.9	7.17	1803.05	7.15	-2.85	-0.16
110	253	143	33	4048	0.982987	762.83	0.532609	1370.8	105.04	0	5.78	1815.11	7.17	1811.86	7.16	-3.25	-0.18
110	254	144	34	4064	0.982082	764.14	0.533465	1369.69	111.06	0.63	5.7	1825.44	7.19	1822.33	7.17	-3.11	-0.17
110	255	145	35	4080	0.981161	765.42	0.534314	1368.6	117.23	0	5.62	1834.36	7.19	1830.87	7.18	-3.49	-0.19
110	256	146	36	4096	0.980225	766.69	0.535156	1367.54	123.55	0.62	5.54	1844.39	7.2	1841.06	7.19	-3.33	-0.18
110	257	147	37	4112	0.979273	767.94	0.535992	1366.5	130	0	5.46	1853.03	7.21	1849.33	7.2	-3.69	-0.2
110	258	148	38	4128	0.978307	769.17	0.536822	1365.47	136.59	0.62	5.39	1862.77	7.22	1859.25	7.21	-3.52	-0.19
110	259	149	39	4144	0.977326	770.38	0.537645	1364.48	143.32	0	5.31	1871.13	7.22	1867.27	7.21	-3.86	-0.21
110	260	150	40	4160	0.976331	771.58	0.538462	1363.5	150.19	0.62	5.24	1880.59	7.23	1876.92	7.22	-3.68	-0.2
110	261	151	41	4176	0.975323	772.76	0.539272	1362.54	157.19	0	5.17	1888.68	7.24	1884.68	7.22	-4.01	-0.21
110	262	152	42	4192	0.974302	773.92	0.540076	1361.6	164.32	0.62	5.1	1897.87	7.24	1894.07	7.23	-3.8	-0.2
110	263	153	43	4208	0.973268	775.07	0.540875	1360.68	171.59	0	5.03	1905.7	7.25	1901.58	7.23	-4.12	-0.22
110	264	154	44	4224	0.972222	776.19	0.541667	1359.78	178.99	0.62	4.97	1914.62	7.25	1910.71	7.24	-3.91	-0.2
110	265	155	45	4240	0.971164	777.31	0.542453	1358.9	186.51	0	4.9	1922.18	7.25	1917.98	7.24	-4.21	-0.22
110	266	156	46	4256	0.970094	778.4	0.543233	1358.04	194.16	0.61	4.84	1930.85	7.26	1926.86	7.24	-3.98	-0.21
110	267	157	47	4272	0.969013	779.48	0.544007	1357.2	201.94	0	4.77	1938.16	7.26	1933.89	7.24	-4.27	-0.22
110	268	158	48	4288	0.967922	780.55	0.544776	1356.37	209.84	0.61	4.71	1946.56	7.26	1942.53	7.25	-4.04	-0.21
110	269	159	49	4304	0.966819	781.6	0.545539	1355.57	217.87	0	4.65	1953.63	7.26	1949.31	7.25	-4.31	-0.22
110	270	160	50	4320	0.965706	782.63	0.546296	1354.78	226.01	0.61	4.59	1961.78	7.27	1957.72	7.25	-4.07	-0.21
110	271	161	51	4336	0.964584	783.65	0.547048	1354.01	234.28	0	4.54	1968.6	7.26	1964.27	7.25	-4.33	-0.22
110	272	162	52	4352	0.963452	784.65	0.547794	1353.25	242.66	0.61	4.48	1976.52	7.27	1972.44	7.25	-4.08	-0.21
110	273	163	53	4368	0.96231	785.64	0.548535	1352.51	251.17	0	4.42	1983.1	7.26	1978.77	7.25	-4.33	-0.22
110	274	164	54	4384	0.961159	786.62	0.54927	1351.79	259.79	0.6	4.37	1990.78	7.27	1986.71	7.25	-4.07	-0.2
110	275	165	55	4400	0.96	787.58	0.55	1351.09	268.52	0	4.32	1997.13	7.26	1992.81	7.25	-4.31	-0.22
110	276	166	56	4416	0.958832	788.53	0.550725	1350.4	277.37	0.6	4.26	2004.57	7.26	2000.52	7.25	-4.05	-0.2
110	277	167	57	4432	0.957656	789.46	0.551444	1349.73	286.33	0	4.21	2010.7	7.26	2006.41	7.24	-4.28	-0.21
110	278	168	58	4448	0.956472	790.38	0.552158	1349.07	295.4	0.6	4.16	2017.91	7.26	2013.9	7.24	-4.01	-0.2
110	279	169	59	4464	0.955281	791.29	0.552867	1348.43	304.58	0	4.11	2023.81	7.25	2019.58	7.24	-4.23	-0.21
110	280	170	60	4480	0.954082	792.18	0.553571	1347.8	313.88	0.6	4.07	2030.81	7.25	2026.85	7.24	-3.96	-0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
110	281	171	61	4496	0.952875	793.06	0.55427	1347.19	323.27	0	4.02	2036.49	7.25	2032.32	7.23	-4.17	-0.21
110	282	172	62	4512	0.951662	793.93	0.554965	1346.59	332.78	0.6	3.97	2043.26	7.25	2039.37	7.23	-3.89	-0.19
110	283	173	63	4528	0.950443	794.79	0.555654	1346.01	342.39	0	3.93	2048.74	7.24	2044.64	7.22	-4.1	-0.2
110	284	174	64	4544	0.949216	795.63	0.556338	1345.44	352.11	0.59	3.88	2055.3	7.24	2051.48	7.22	-3.81	-0.19
110	285	175	65	4560	0.947984	796.46	0.557018	1344.88	361.93	0	3.84	2060.56	7.23	2056.55	7.22	-4.02	-0.2
110	286	176	66	4576	0.946746	797.28	0.557692	1344.34	371.85	0.59	3.79	2066.91	7.23	2063.19	7.21	-3.73	-0.18
110	287	177	67	4592	0.945501	798.09	0.558362	1343.81	381.87	0	3.75	2071.98	7.22	2068.05	7.21	-3.92	-0.19
110	288	178	68	4608	0.944252	798.89	0.559028	1343.3	392	0.59	3.71	2078.12	7.22	2074.49	7.2	-3.63	-0.17
110	289	179	69	4624	0.942996	799.67	0.559689	1342.8	402.22	0	3.67	2082.98	7.21	2079.16	7.19	-3.82	-0.18
110	290	180	70	4640	0.941736	800.44	0.560345	1342.31	412.54	0.59	3.63	2088.93	7.2	2085.4	7.19	-3.52	-0.17
110	291	181	71	4656	0.940471	801.2	0.560997	1341.84	422.96	0	3.59	2093.6	7.19	2089.88	7.18	-3.71	-0.18
110	292	182	72	4672	0.939201	801.95	0.561644	1341.37	433.47	0.59	3.55	2099.34	7.19	2095.93	7.18	-3.41	-0.16
110	293	183	73	4688	0.937926	802.69	0.562287	1340.92	444.08	0	3.51	2103.82	7.18	2100.22	7.17	-3.6	-0.17
110	294	184	74	4704	0.936647	803.42	0.562925	1340.48	454.78	0.58	3.47	2109.37	7.17	2106.08	7.16	-3.3	-0.16
110	295	185	75	4720	0.935363	804.14	0.563559	1340.06	465.58	0	3.44	2113.66	7.16	2110.19	7.15	-3.48	-0.16
110	296	186	76	4736	0.934076	804.84	0.564189	1339.65	476.47	0.58	3.4	2119.03	7.16	2115.85	7.15	-3.17	-0.15
110	297	187	77	4752	0.932785	805.54	0.564815	1339.24	487.45	0	3.37	2123.14	7.15	2119.78	7.14	-3.35	-0.16
110	298	188	78	4768	0.93149	806.23	0.565436	1338.85	498.52	0.58	3.33	2128.31	7.14	2125.27	7.13	-3.05	-0.14
110	299	189	79	4784	0.930191	806.9	0.566054	1338.47	509.68	0	3.3	2132.24	7.13	2129.02	7.12	-3.22	-0.15
110	300	190	80	4800	0.928889	807.57	0.566667	1338.11	520.92	0.58	3.26	2137.24	7.12	2134.32	7.11	-2.92	-0.14
110	301	191	81	4816	0.927584	808.23	0.567276	1337.75	532.26	0	3.23	2140.99	7.11	2137.9	7.1	-3.09	-0.14
110	302	192	82	4832	0.926275	808.87	0.567881	1337.4	543.68	0.58	3.2	2145.81	7.11	2143.03	7.1	-2.79	-0.13
110	303	193	83	4848	0.924964	809.51	0.568482	1337.07	555.19	0	3.16	2149.39	7.09	2146.44	7.08	-2.96	-0.14
110	304	194	84	4864	0.92365	810.14	0.569079	1336.74	566.79	0.57	3.13	2154.04	7.09	2151.39	7.08	-2.65	-0.12
110	305	195	85	4880	0.922333	810.75	0.569672	1336.43	578.47	0	3.1	2157.45	7.07	2154.63	7.06	-2.82	-0.13
110	306	196	86	4896	0.921013	811.36	0.570261	1336.13	590.23	0.57	3.07	2161.93	7.07	2159.41	7.06	-2.52	-0.12
110	307	197	87	4912	0.919691	811.96	0.570847	1335.83	602.07	0	3.04	2165.17	7.05	2162.49	7.04	-2.69	-0.12
110	308	198	88	4928	0.918367	812.55	0.571429	1335.55	614	0.57	3.01	2169.48	7.04	2167.09	7.04	-2.38	-0.11
110	309	199	89	4944	0.917041	813.14	0.572006	1335.28	626.01	0	2.98	2172.56	7.03	2170.01	7.02	-2.55	-0.12
110	310	200	90	4960	0.915713	813.71	0.572581	1335.01	638.1	0.57	2.95	2176.7	7.02	2174.45	7.01	-2.25	-0.1
110	311	201	91	4976	0.914383	814.27	0.573151	1334.76	650.26	0	2.93	2179.63	7.01	2177.21	7	-2.42	-0.11
110	312	202	92	4992	0.913051	814.83	0.573718	1334.52	662.51	0.57	2.9	2183.61	7	2181.49	6.99	-2.12	-0.1
110	313	203	93	5008	0.911717	815.38	0.574281	1334.28	674.84	0	2.87	2186.38	6.99	2184.09	6.98	-2.29	-0.1
110	314	204	94	5024	0.910382	815.92	0.574841	1334.06	687.24	0.56	2.84	2190.2	6.98	2188.21	6.97	-1.99	-0.09
110	315	205	95	5040	0.909045	816.45	0.575397	1333.84	699.72	0	2.82	2192.82	6.96	2190.66	6.95	-2.16	-0.1
110	316	206	96	5056	0.907707	816.97	0.575949	1333.63	712.27	0.56	2.79	2196.48	6.95	2194.62	6.95	-1.86	-0.08
110	317	207	97	5072	0.906368	817.48	0.576498	1333.43	724.9	0	2.77	2198.95	6.94	2196.92	6.93	-2.03	-0.09
110	318	208	98	5088	0.905027	817.99	0.577044	1333.24	737.6	0.56	2.74	2202.46	6.93	2200.73	6.92	-1.74	-0.08
110	319	209	99	5104	0.903686	818.49	0.577586	1333.06	750.38	0	2.72	2204.78	6.91	2202.88	6.91	-1.91	-0.09
110	320	210	100	5120	0.902344	818.98	0.578125	1332.89	763.23	0.56	2.69	2208.15	6.9	2206.53	6.9	-1.62	-0.07
110	321	211	101	5136	0.901001	819.46	0.57866	1332.73	776.16	0	2.67	2210.32	6.89	2208.53	6.88	-1.79	-0.08
110	322	212	102	5152	0.899657	819.94	0.579193	1332.57	789.15	0.56	2.64	2213.54	6.87	2212.04	6.87	-1.5	-0.07
110	323	213	103	5168	0.898312	820.41	0.579721	1332.42	802.22	0	2.62	2215.57	6.86	2213.9	6.85	-1.67	-0.08
110	324	214	104	5184	0.896967	820.87	0.580247	1332.28	815.35	0.56	2.6	2218.65	6.85	2217.26	6.84	-1.39	-0.06
110	325	215	105	5200	0.895621	821.33	0.580769	1332.15	828.56	0	2.57	2220.54	6.83	2218.98	6.83	-1.56	-0.07
110	326	216	106	5216	0.894275	821.77	0.581288	1332.03	841.83	0.55	2.55	2223.47	6.82	2222.19	6.82	-1.28	-0.06

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110	327	217	107	5232	0.892929	822.21	0.581804	1331.91	855.18	0	2.53	2225.23	6.8	2223.77	6.8	-1.46	-0.07
110	328	218	108	5248	0.891582	822.64	0.582317	1331.81	868.59	0.55	2.51	2228.02	6.79	2226.84	6.79	-1.18	-0.05
110	329	219	109	5264	0.890236	823.07	0.582827	1331.71	882.07	0	2.49	2229.64	6.78	2228.28	6.77	-1.36	-0.06
110	330	220	110	5280	0.888889	823.49	0.583333	1331.61	895.61	0.55	2.47	2232.3	6.76	2231.21	6.76	-1.09	-0.05
110	331	221	111	5296	0.887542	823.9	0.583837	1331.53	909.22	0	2.45	2233.79	6.75	2232.52	6.74	-1.27	-0.06
110	332	222	112	5312	0.886195	824.31	0.584337	1331.45	922.9	0.55	2.42	2236.32	6.74	2235.32	6.73	-1	-0.04
110	333	223	113	5328	0.884849	824.71	0.584835	1331.38	936.64	0	2.4	2237.68	6.72	2236.49	6.72	-1.19	-0.05
110	334	224	114	5344	0.883502	825.1	0.585329	1331.32	950.45	0.55	2.38	2240.07	6.71	2239.15	6.7	-0.92	-0.04
110	335	225	115	5360	0.882156	825.49	0.585821	1331.26	964.31	0	2.37	2241.3	6.69	2240.2	6.69	-1.11	-0.05
110	336	226	116	5376	0.880811	825.87	0.58631	1331.21	978.25	0.55	2.35	2243.57	6.68	2242.72	6.67	-0.85	-0.04
110	337	227	117	5392	0.879465	826.24	0.586795	1331.17	992.24	0	2.33	2244.68	6.66	2243.64	6.66	-1.04	-0.05
110	338	228	118	5408	0.878121	826.61	0.587278	1331.13	1006.3	0.54	2.31	2246.81	6.65	2246.03	6.65	-0.78	-0.03
110	339	229	119	5424	0.876776	826.97	0.587758	1331.1	1020.42	0	2.29	2247.8	6.63	2246.82	6.63	-0.98	-0.04
110	340	230	120	5440	0.875433	827.33	0.588235	1331.08	1034.6	0.54	2.27	2249.81	6.62	2249.09	6.61	-0.73	-0.03
110	341	231	121	5456	0.874089	827.68	0.58871	1331.06	1048.83	0	2.25	2250.68	6.6	2249.75	6.6	-0.92	-0.04
110	342	232	122	5472	0.872747	828.02	0.589181	1331.05	1063.13	0.54	2.24	2252.57	6.59	2251.89	6.58	-0.68	-0.03
110	343	233	123	5488	0.871406	828.36	0.58965	1331.05	1077.49	0	2.22	2253.32	6.57	2252.44	6.57	-0.88	-0.04
110	344	234	124	5504	0.870065	828.69	0.590116	1331.05	1091.91	0.54	2.2	2255.09	6.56	2254.45	6.55	-0.64	-0.03
110	345	235	125	5520	0.868725	829.02	0.59058	1331.06	1106.39	0	2.18	2255.72	6.54	2254.87	6.54	-0.84	-0.04
110	346	236	126	5536	0.867386	829.34	0.59104	1331.08	1120.92	0.54	2.17	2257.37	6.52	2256.76	6.52	-0.61	-0.03
110	347	237	127	5552	0.866048	829.65	0.591499	1331.1	1135.51	0	2.15	2257.89	6.51	2257.07	6.5	-0.82	-0.04
110	348	238	128	5568	0.864711	829.96	0.591954	1331.13	1150.16	0.54	2.13	2259.42	6.49	2258.83	6.49	-0.59	-0.03
110	349	239	129	5584	0.863376	830.27	0.592407	1331.16	1164.86	0	2.12	2259.83	6.48	2259.03	6.47	-0.8	-0.04
110	350	240	130	5600	0.862041	830.57	0.592857	1331.2	1179.62	0.53	2.1	2261.25	6.46	2260.67	6.46	-0.58	-0.03
110	351	241	131	5616	0.860707	830.86	0.593305	1331.25	1194.43	0	2.09	2261.54	6.44	2260.75	6.44	-0.79	-0.04
110	352	242	132	5632	0.859375	831.15	0.59375	1331.3	1209.3	0.53	2.07	2262.85	6.43	2262.28	6.43	-0.57	-0.03
110	353	243	133	5648	0.858044	831.43	0.594193	1331.35	1224.23	0	2.05	2263.04	6.41	2262.24	6.41	-0.8	-0.04
110	354	244	134	5664	0.856714	831.71	0.594633	1331.42	1239.21	0.53	2.04	2264.24	6.4	2263.65	6.39	-0.58	-0.03
110	355	245	135	5680	0.855386	831.99	0.59507	1331.48	1254.24	0	2.02	2264.32	6.38	2263.51	6.38	-0.81	-0.04
110	356	246	136	5696	0.854059	832.25	0.595506	1331.56	1269.32	0.53	2.01	2265.4	6.36	2264.8	6.36	-0.6	-0.03
110	357	247	137	5712	0.852733	832.52	0.595938	1331.64	1284.46	0	2	2265.38	6.35	2264.55	6.34	-0.84	-0.04
110	358	248	138	5728	0.851409	832.78	0.596369	1331.72	1299.65	0.53	1.98	2266.36	6.33	2265.73	6.33	-0.63	-0.03
110	359	249	139	5744	0.850087	833.03	0.596797	1331.81	1314.89	0	1.97	2266.24	6.31	2265.37	6.31	-0.87	-0.04
110	360	250	140	5760	0.848765	833.28	0.597222	1331.9	1330.18	0.53	1.95	2267.11	6.3	2266.44	6.3	-0.67	-0.03
110	361	251	141	5776	0.847446	833.52	0.597645	1332	1345.53	0	1.94	2266.89	6.28	2265.97	6.28	-0.92	-0.04
110	362	252	142	5792	0.846128	833.76	0.598066	1332.11	1360.92	0.53	1.93	2267.66	6.26	2266.93	6.26	-0.73	-0.03
110	363	253	143	5808	0.844812	834	0.598485	1332.22	1376.36	0	1.91	2267.33	6.25	2266.36	6.24	-0.97	-0.04
110	364	254	144	5824	0.843497	834.23	0.598901	1332.33	1391.86	0.52	1.9	2268	6.23	2267.21	6.23	-0.79	-0.03
110	365	255	145	5840	0.842184	834.46	0.599315	1332.45	1407.4	0	1.89	2267.58	6.21	2266.53	6.21	-1.04	-0.05
110	366	256	146	5856	0.840873	834.68	0.599727	1332.57	1422.99	0.52	1.87	2268.15	6.2	2267.28	6.19	-0.87	-0.04
110	367	257	147	5872	0.839564	834.9	0.600136	1332.7	1438.63	0	1.86	2267.63	6.18	2266.5	6.18	-1.12	-0.05
110	368	258	148	5888	0.838256	835.11	0.600543	1332.84	1454.32	0.52	1.85	2268.1	6.16	2267.15	6.16	-0.95	-0.04
110	369	259	149	5904	0.83695	835.32	0.600949	1332.97	1470.06	0	1.83	2267.49	6.14	2266.27	6.14	-1.22	-0.05
110	370	260	150	5920	0.835646	835.52	0.601351	1333.12	1485.84	0.52	1.82	2267.86	6.13	2266.81	6.13	-1.05	-0.05
110	371	261	151	5936	0.834344	835.72	0.601752	1333.26	1501.67	0	1.81	2267.15	6.11	2265.83	6.11	-1.32	-0.06
110	372	262	152	5952	0.833044	835.92	0.602151	1333.42	1517.54	0.52	1.8	2267.43	6.1	2266.27	6.09	-1.16	-0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
110	373	263	153	5968	0.831746	836.11	0.602547	1333.57	1533.47	0	1.79	2266.63	6.08	2265.2	6.07	-1.44	-0.06
110	374	264	154	5984	0.83045	836.3	0.602941	1333.73	1549.43	0.52	1.77	2266.82	6.06	2265.54	6.06	-1.29	-0.06
110	375	265	155	6000	0.829156	836.49	0.603333	1333.9	1565.45	0	1.76	2265.93	6.04	2264.36	6.04	-1.57	-0.07
110	376	266	156	6016	0.827863	836.67	0.603723	1334.07	1581.51	0.52	1.75	2266.03	6.03	2264.6	6.02	-1.42	-0.06
110	377	267	157	6032	0.826573	836.84	0.604111	1334.24	1597.61	0	1.74	2265.05	6.01	2263.34	6	-1.71	-0.08
110	378	268	158	6048	0.825285	837.02	0.604497	1334.42	1613.76	0.51	1.73	2265.05	5.99	2263.48	5.99	-1.57	-0.07
110	379	269	159	6064	0.823999	837.18	0.604881	1334.6	1629.95	0	1.72	2263.98	5.97	2262.12	5.97	-1.86	-0.08
110	380	270	160	6080	0.822715	837.35	0.605263	1334.79	1646.18	0.51	1.71	2263.9	5.96	2262.17	5.95	-1.73	-0.08
110	381	271	161	6096	0.821433	837.51	0.605643	1334.98	1662.46	0	1.7	2262.74	5.94	2260.72	5.93	-2.03	-0.09
110	382	272	162	6112	0.820153	837.67	0.606021	1335.17	1678.78	0.51	1.68	2262.57	5.92	2260.67	5.92	-1.9	-0.08
110	383	273	163	6128	0.818875	837.82	0.606397	1335.37	1695.15	0	1.67	2261.33	5.9	2259.13	5.9	-2.21	-0.1
110	384	274	164	6144	0.8176	837.97	0.606771	1335.57	1711.55	0.51	1.66	2261.08	5.89	2258.99	5.88	-2.09	-0.09
110	385	275	165	6160	0.816327	838.12	0.607143	1335.78	1728	0	1.65	2259.75	5.87	2257.35	5.86	-2.4	-0.11
110	386	276	166	6176	0.815055	838.26	0.607513	1335.99	1744.49	0.51	1.64	2259.41	5.85	2257.12	5.85	-2.29	-0.1
110	387	277	167	6192	0.813787	838.4	0.607881	1336.2	1761.02	0	1.63	2258.01	5.83	2255.4	5.83	-2.6	-0.12
110	388	278	168	6208	0.81252	838.54	0.608247	1336.42	1777.59	0.51	1.62	2257.58	5.82	2255.08	5.81	-2.5	-0.11
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
111	221	110	-1	3536	0.99998	709.12	0.498869	1446.92	0.11	0	9.81	1389.66	6.29	1398.92	6.33	9.26	0.66
111	222	111	0	3552	1	711.27	0.5	1444.73	0	-0.67	10	1405.32	6.33	1414.31	6.37	8.98	0.64
111	223	112	1	3568	0.99998	713.39	0.501121	1442.58	0.11	0	9.81	1421.73	6.38	1429.3	6.41	7.57	0.53
111	224	113	2	3584	0.99992	715.48	0.502232	1440.47	0.44	-0.67	9.63	1436.57	6.41	1444.29	6.45	7.72	0.53
111	225	114	3	3600	0.999822	717.54	0.503333	1438.41	0.98	0	9.46	1452.53	6.46	1458.89	6.48	6.36	0.44
111	226	115	4	3616	0.999687	719.57	0.504425	1436.38	1.73	-0.67	9.28	1466.94	6.49	1473.5	6.52	6.56	0.44
111	227	116	5	3632	0.999515	721.56	0.505507	1434.4	2.69	0	9.12	1482.47	6.53	1487.71	6.55	5.24	0.35
111	228	117	6	3648	0.999307	723.53	0.506579	1432.45	3.85	-0.66	8.95	1496.46	6.56	1501.94	6.59	5.48	0.36
111	229	118	7	3664	0.999066	725.47	0.507642	1430.54	5.22	0	8.8	1511.57	6.6	1515.77	6.62	4.2	0.28
111	230	119	8	3680	0.99879	727.38	0.508696	1428.66	6.79	-0.66	8.64	1525.15	6.63	1529.63	6.65	4.48	0.29
111	231	120	9	3696	0.998482	729.26	0.50974	1426.82	8.55	0	8.49	1539.85	6.67	1543.1	6.68	3.25	0.21
111	232	121	10	3712	0.998142	731.12	0.510776	1425.02	10.51	-0.66	8.34	1553.04	6.69	1556.6	6.71	3.56	0.23
111	233	122	11	3728	0.997771	732.94	0.511803	1423.25	12.67	0	8.2	1567.34	6.73	1569.71	6.74	2.37	0.15
111	234	123	12	3744	0.99737	734.74	0.512821	1421.52	15.01	-0.65	8.06	1580.14	6.75	1582.85	6.76	2.72	0.17
111	235	124	13	3760	0.99694	736.52	0.51383	1419.82	17.54	0	7.93	1594.05	6.78	1595.61	6.79	1.56	0.1
111	236	125	14	3776	0.996481	738.26	0.514831	1418.15	20.26	-0.65	7.79	1606.47	6.81	1608.41	6.82	1.94	0.12
111	237	126	15	3792	0.995994	739.99	0.515823	1416.51	23.16	0	7.67	1620	6.84	1620.82	6.84	0.82	0.05
111	238	127	16	3808	0.995481	741.68	0.516807	1414.91	26.24	-0.65	7.54	1632.06	6.86	1633.29	6.86	1.23	0.08
111	239	128	17	3824	0.994941	743.36	0.517782	1413.34	29.5	0	7.42	1645.22	6.88	1645.36	6.88	0.14	0.01
111	240	129	18	3840	0.994375	745.01	0.51875	1411.79	32.94	-0.65	7.3	1656.92	6.9	1657.5	6.91	0.59	0.04
111	241	130	19	3856	0.993785	746.63	0.51971	1410.28	36.55	0	7.18	1669.72	6.93	1669.25	6.93	-0.48	-0.03
111	242	131	20	3872	0.99317	748.23	0.520661	1408.8	40.33	-0.64	7.07	1681.07	6.95	1681.06	6.95	0	0
111	243	132	21	3888	0.992532	749.81	0.521605	1407.34	44.28	0	6.96	1693.52	6.97	1692.49	6.96	-1.04	-0.06
111	244	133	22	3904	0.99187	751.36	0.522541	1405.92	48.4	-0.64	6.85	1704.53	6.99	1703.99	6.98	-0.54	-0.03
111	245	134	23	3920	0.991187	752.9	0.523469	1404.52	52.68	0	6.74	1716.64	7.01	1715.1	7	-1.54	-0.09
111	246	135	24	3936	0.990482	754.41	0.52439	1403.15	57.13	-0.64	6.64	1727.31	7.02	1726.3	7.02	-1.02	-0.06
111	247	136	25	3952	0.989756	755.89	0.525304	1401.81	61.74	0	6.54	1739.09	7.04	1737.1	7.03	-2	-0.11

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
111	248	137	26	3968	0.989009	757.36	0.52621	1400.49	66.51	-0.64	6.44	1749.44	7.05	1747.99	7.05	-1.45	-0.08
111	249	138	27	3984	0.988242	758.81	0.527108	1399.2	71.44	0	6.34	1760.9	7.07	1758.49	7.06	-2.4	-0.14
111	250	139	28	4000	0.987456	760.23	0.528	1397.93	76.52	-0.63	6.25	1770.93	7.08	1769.09	7.08	-1.83	-0.1
111	251	140	29	4016	0.986651	761.64	0.528884	1396.69	81.76	0	6.16	1782.07	7.1	1779.3	7.09	-2.77	-0.16
111	252	141	30	4032	0.985828	763.02	0.529762	1395.47	87.15	-0.63	6.07	1791.79	7.11	1789.61	7.1	-2.18	-0.12
111	253	142	31	4048	0.984986	764.39	0.530632	1394.28	92.69	0	5.98	1802.62	7.12	1799.53	7.11	-3.09	-0.17
111	254	143	32	4064	0.984128	765.73	0.531496	1393.11	98.38	-0.63	5.89	1812.04	7.13	1809.56	7.12	-2.48	-0.14
111	255	144	33	4080	0.983253	767.06	0.532353	1391.97	104.22	0	5.81	1822.56	7.15	1819.2	7.13	-3.37	-0.19
111	256	145	34	4096	0.982361	768.36	0.533203	1390.85	110.2	-0.62	5.72	1831.69	7.16	1828.95	7.14	-2.74	-0.15
111	257	146	35	4112	0.981453	769.65	0.534047	1389.75	116.33	0	5.64	1841.92	7.17	1838.31	7.15	-3.61	-0.2
111	258	147	36	4128	0.98053	770.92	0.534884	1388.67	122.59	-0.62	5.57	1850.76	7.17	1847.79	7.16	-2.97	-0.16
111	259	148	37	4144	0.979592	772.17	0.535714	1387.61	129	0	5.49	1860.7	7.18	1856.88	7.17	-3.82	-0.21
111	260	149	38	4160	0.978639	773.4	0.536538	1386.58	135.55	-0.62	5.41	1869.26	7.19	1866.1	7.18	-3.16	-0.17
111	261	150	39	4176	0.977672	774.62	0.537356	1385.57	142.23	0	5.34	1878.92	7.2	1874.92	7.18	-4	-0.21
111	262	151	40	4192	0.976691	775.82	0.538168	1384.57	149.05	-0.62	5.27	1887.21	7.2	1883.88	7.19	-3.33	-0.18
111	263	152	41	4208	0.975697	777	0.538973	1383.6	156	0	5.2	1896.59	7.21	1892.45	7.2	-4.15	-0.22
111	264	153	42	4224	0.97469	778.16	0.539773	1382.65	163.08	-0.62	5.13	1904.61	7.21	1901.15	7.2	-3.46	-0.18
111	265	154	43	4240	0.97367	779.31	0.540566	1381.72	170.3	0	5.06	1913.73	7.22	1909.46	7.21	-4.26	-0.22
111	266	155	44	4256	0.972638	780.44	0.541353	1380.81	177.65	-0.61	4.99	1921.48	7.22	1917.92	7.21	-3.56	-0.19
111	267	156	45	4272	0.971594	781.56	0.542135	1379.91	185.12	0	4.93	1930.34	7.23	1925.98	7.21	-4.36	-0.23
111	268	157	46	4288	0.970539	782.66	0.54291	1379.04	192.72	-0.61	4.86	1937.84	7.23	1934.19	7.22	-3.64	-0.19
111	269	158	47	4304	0.969473	783.74	0.54368	1378.18	200.44	0	4.8	1946.43	7.24	1942.01	7.22	-4.42	-0.23
111	270	159	48	4320	0.968395	784.81	0.544444	1377.35	208.29	-0.61	4.74	1953.68	7.24	1949.98	7.22	-3.7	-0.19
111	271	160	49	4336	0.967307	785.86	0.545203	1376.53	216.26	0	4.68	1962.03	7.24	1957.56	7.22	-4.47	-0.23
111	272	161	50	4352	0.966209	786.9	0.545956	1375.73	224.36	-0.61	4.62	1969.03	7.24	1965.3	7.23	-3.74	-0.19
111	273	162	51	4368	0.965101	787.92	0.546703	1374.94	232.57	0	4.56	1977.13	7.24	1972.64	7.23	-4.49	-0.23
111	274	163	52	4384	0.963983	788.93	0.547445	1374.17	240.9	-0.6	4.51	1983.9	7.24	1980.15	7.23	-3.75	-0.19
111	275	164	53	4400	0.962856	789.92	0.548182	1373.42	249.35	0	4.45	1991.76	7.24	1987.26	7.23	-4.49	-0.23
111	276	165	54	4416	0.96172	790.9	0.548913	1372.69	257.91	-0.6	4.4	1998.29	7.24	1994.54	7.23	-3.75	-0.19
111	277	166	55	4432	0.960576	791.87	0.549639	1371.97	266.59	0	4.34	2005.91	7.24	2001.43	7.23	-4.48	-0.22
111	278	167	56	4448	0.959422	792.82	0.55036	1371.27	275.38	-0.6	4.29	2012.22	7.24	2008.49	7.22	-3.73	-0.19
111	279	168	57	4464	0.958261	793.76	0.551075	1370.59	284.28	0	4.24	2019.61	7.24	2015.16	7.22	-4.45	-0.22
111	280	169	58	4480	0.957092	794.68	0.551786	1369.92	293.3	-0.6	4.19	2025.69	7.23	2022	7.22	-3.69	-0.18
111	281	170	59	4496	0.955915	795.59	0.552491	1369.26	302.42	0	4.14	2032.86	7.23	2028.45	7.22	-4.41	-0.22
111	282	171	60	4512	0.954731	796.49	0.553191	1368.62	311.66	-0.6	4.09	2038.72	7.23	2035.08	7.22	-3.64	-0.18
111	283	172	61	4528	0.953539	797.38	0.553887	1368	321	0	4.04	2045.67	7.23	2041.32	7.21	-4.35	-0.21
111	284	173	62	4544	0.952341	798.25	0.554577	1367.39	330.45	-0.59	4	2051.32	7.22	2047.74	7.21	-3.57	-0.17
111	285	174	63	4560	0.951136	799.11	0.555263	1366.8	340	0	3.95	2058.05	7.22	2053.77	7.21	-4.27	-0.21
111	286	175	64	4576	0.949924	799.96	0.555944	1366.22	349.65	-0.59	3.91	2063.49	7.21	2059.99	7.2	-3.5	-0.17
111	287	176	65	4592	0.948706	800.8	0.55662	1365.65	359.41	0	3.86	2070	7.21	2065.81	7.2	-4.19	-0.2
111	288	177	66	4608	0.947483	801.62	0.557292	1365.1	369.28	-0.59	3.82	2075.24	7.21	2071.83	7.19	-3.41	-0.16
111	289	178	67	4624	0.946253	802.43	0.557958	1364.56	379.24	0	3.78	2081.55	7.2	2077.45	7.19	-4.1	-0.2
111	290	179	68	4640	0.945018	803.23	0.558621	1364.03	389.3	-0.59	3.74	2086.58	7.2	2083.27	7.18	-3.31	-0.16
111	291	180	69	4656	0.943777	804.02	0.559278	1363.52	399.46	0	3.69	2092.69	7.19	2088.69	7.18	-4	-0.19
111	292	181	70	4672	0.942531	804.8	0.559932	1363.02	409.72	-0.59	3.65	2097.53	7.18	2094.32	7.17	-3.21	-0.15
111	293	182	71	4688	0.941281	805.56	0.56058	1362.53	420.08	0	3.61	2103.44	7.18	2099.55	7.17	-3.89	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
111	294	183	72	4704	0.940025	806.32	0.561224	1362.06	430.53	-0.58	3.58	2108.08	7.17	2104.98	7.16	-3.1	-0.15
111	295	184	73	4720	0.938765	807.06	0.561864	1361.6	441.08	0	3.54	2113.8	7.17	2110.02	7.15	-3.77	-0.18
111	296	185	74	4736	0.9375	807.79	0.5625	1361.15	451.72	-0.58	3.5	2118.25	7.16	2115.27	7.15	-2.98	-0.14
111	297	186	75	4752	0.936231	808.52	0.563131	1360.72	462.45	0	3.46	2123.78	7.15	2120.13	7.14	-3.65	-0.17
111	298	187	76	4768	0.934958	809.23	0.563758	1360.29	473.28	-0.58	3.43	2128.05	7.14	2125.19	7.13	-2.86	-0.13
111	299	188	77	4784	0.933681	809.93	0.564381	1359.88	484.2	0	3.39	2133.39	7.14	2129.86	7.12	-3.52	-0.17
111	300	189	78	4800	0.9324	810.62	0.565	1359.48	495.2	-0.58	3.36	2137.48	7.12	2134.75	7.12	-2.73	-0.13
111	301	190	79	4816	0.931116	811.3	0.565615	1359.09	506.3	0	3.32	2142.63	7.12	2139.24	7.11	-3.39	-0.16
111	302	191	80	4832	0.929828	811.97	0.566225	1358.71	517.49	-0.58	3.29	2146.54	7.11	2143.94	7.1	-2.6	-0.12
111	303	192	81	4848	0.928536	812.64	0.566832	1358.34	528.76	0	3.25	2151.52	7.1	2148.26	7.09	-3.26	-0.15
111	304	193	82	4864	0.927242	813.29	0.567434	1357.99	540.12	-0.57	3.22	2155.25	7.09	2152.79	7.08	-2.47	-0.11
111	305	194	83	4880	0.925945	813.93	0.568033	1357.64	551.56	0	3.19	2160.05	7.08	2156.93	7.07	-3.12	-0.14
111	306	195	84	4896	0.924644	814.56	0.568627	1357.31	563.09	-0.57	3.16	2163.62	7.07	2161.29	7.06	-2.33	-0.11
111	307	196	85	4912	0.923341	815.19	0.569218	1356.98	574.71	0	3.13	2168.25	7.06	2165.26	7.05	-2.99	-0.14
111	308	197	86	4928	0.922036	815.8	0.569805	1356.67	586.41	-0.57	3.1	2171.65	7.05	2169.45	7.04	-2.19	-0.1
111	309	198	87	4944	0.920728	816.4	0.570388	1356.37	598.19	0	3.07	2176.1	7.04	2173.25	7.03	-2.85	-0.13
111	310	199	88	4960	0.919417	817	0.570968	1356.07	610.05	-0.57	3.04	2179.34	7.03	2177.28	7.02	-2.06	-0.09
111	311	200	89	4976	0.918105	817.59	0.571543	1355.79	622	0	3.01	2183.63	7.02	2180.92	7.01	-2.71	-0.12
111	312	201	90	4992	0.91679	818.17	0.572115	1355.52	634.02	-0.57	2.98	2186.71	7.01	2184.79	7	-1.92	-0.09
111	313	202	91	5008	0.915473	818.74	0.572684	1355.26	646.12	0	2.95	2190.84	7	2188.26	6.99	-2.57	-0.12
111	314	203	92	5024	0.914155	819.3	0.573248	1355	658.3	-0.56	2.92	2193.75	6.99	2191.97	6.98	-1.79	-0.08
111	315	204	93	5040	0.912834	819.85	0.57381	1354.76	670.56	0	2.89	2197.72	6.98	2195.28	6.97	-2.44	-0.11
111	316	205	94	5056	0.911513	820.39	0.574367	1354.52	682.9	-0.56	2.87	2200.49	6.96	2198.83	6.96	-1.65	-0.08
111	317	206	95	5072	0.910189	820.93	0.574921	1354.3	695.32	0	2.84	2204.3	6.95	2201.99	6.95	-2.31	-0.1
111	318	207	96	5088	0.908864	821.46	0.575472	1354.08	707.8	-0.56	2.81	2206.91	6.94	2205.39	6.94	-1.52	-0.07
111	319	208	97	5104	0.907538	821.98	0.576019	1353.87	720.37	0	2.79	2210.57	6.93	2208.39	6.92	-2.17	-0.1
111	320	209	98	5120	0.906211	822.49	0.576562	1353.67	733.01	-0.56	2.76	2213.03	6.92	2211.64	6.91	-1.39	-0.06
111	321	210	99	5136	0.904883	823	0.577103	1353.48	745.72	0	2.74	2216.54	6.91	2214.49	6.9	-2.05	-0.09
111	322	211	100	5152	0.903553	823.49	0.57764	1353.3	758.51	-0.56	2.71	2218.85	6.89	2217.59	6.89	-1.27	-0.06
111	323	212	101	5168	0.902223	823.98	0.578173	1353.13	771.36	0	2.69	2222.21	6.88	2220.29	6.87	-1.92	-0.09
111	324	213	102	5184	0.900892	824.46	0.578704	1352.97	784.29	-0.56	2.67	2224.39	6.87	2223.24	6.86	-1.15	-0.05
111	325	214	103	5200	0.89956	824.94	0.579231	1352.81	797.29	0	2.64	2227.6	6.85	2225.8	6.85	-1.8	-0.08
111	326	215	104	5216	0.898227	825.4	0.579755	1352.66	810.37	-0.55	2.62	2229.63	6.84	2228.6	6.84	-1.03	-0.05
111	327	216	105	5232	0.896894	825.86	0.580275	1352.52	823.51	0	2.6	2232.7	6.83	2231.02	6.82	-1.69	-0.08
111	328	217	106	5248	0.895561	826.32	0.580793	1352.39	836.72	-0.55	2.57	2234.6	6.81	2233.68	6.81	-0.92	-0.04
111	329	218	107	5264	0.894227	826.76	0.581307	1352.27	849.99	0	2.55	2237.53	6.8	2235.95	6.8	-1.58	-0.07
111	330	219	108	5280	0.892893	827.2	0.581818	1352.15	863.34	-0.55	2.53	2239.29	6.79	2238.47	6.78	-0.81	-0.04
111	331	220	109	5296	0.891558	827.63	0.582326	1352.04	876.75	0	2.51	2242.08	6.77	2240.61	6.77	-1.47	-0.07
111	332	221	110	5312	0.890224	828.06	0.582831	1351.94	890.23	-0.55	2.49	2243.71	6.76	2242.99	6.76	-0.71	-0.03
111	333	222	111	5328	0.888889	828.47	0.583333	1351.85	903.78	0	2.47	2246.36	6.75	2244.99	6.74	-1.38	-0.06
111	334	223	112	5344	0.887554	828.88	0.583832	1351.76	917.39	-0.55	2.45	2247.86	6.73	2247.24	6.73	-0.62	-0.03
111	335	224	113	5360	0.88622	829.29	0.584328	1351.69	931.06	0	2.43	2250.38	6.72	2249.1	6.71	-1.28	-0.06
111	336	225	114	5376	0.884885	829.69	0.584821	1351.61	944.8	-0.55	2.41	2251.75	6.7	2251.22	6.7	-0.53	-0.02
111	337	226	115	5392	0.883551	830.08	0.585312	1351.55	958.61	0	2.39	2254.15	6.69	2252.95	6.69	-1.2	-0.05
111	338	227	116	5408	0.882217	830.47	0.585799	1351.49	972.48	-0.54	2.37	2255.39	6.67	2254.93	6.67	-0.45	-0.02
111	339	228	117	5424	0.880883	830.84	0.586283	1351.44	986.4	0	2.35	2257.65	6.66	2256.53	6.66	-1.12	-0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
111	340	229	118	5440	0.87955	831.22	0.586765	1351.4	1000.4	-0.54	2.33	2258.77	6.64	2258.39	6.64	-0.38	-0.02
111	341	230	119	5456	0.878217	831.59	0.587243	1351.36	1014.45	0	2.31	2260.91	6.63	2259.86	6.63	-1.05	-0.05
111	342	231	120	5472	0.876885	831.95	0.587719	1351.33	1028.56	-0.54	2.29	2261.91	6.61	2261.59	6.61	-0.32	-0.01
111	343	232	121	5488	0.875554	832.3	0.588192	1351.31	1042.74	0	2.27	2263.92	6.6	2262.93	6.6	-0.99	-0.04
111	344	233	122	5504	0.874223	832.65	0.588663	1351.29	1056.97	-0.54	2.25	2264.8	6.58	2264.54	6.58	-0.26	-0.01
111	345	234	123	5520	0.872892	832.99	0.58913	1351.28	1071.26	0	2.24	2266.7	6.57	2265.76	6.57	-0.94	-0.04
111	346	235	124	5536	0.871563	833.33	0.589595	1351.28	1085.62	-0.54	2.22	2267.45	6.55	2267.24	6.55	-0.21	-0.01
111	347	236	125	5552	0.870234	833.66	0.590058	1351.28	1100.03	0	2.2	2269.23	6.54	2268.33	6.54	-0.9	-0.04
111	348	237	126	5568	0.868906	833.99	0.590517	1351.29	1114.5	-0.54	2.19	2269.87	6.52	2269.7	6.52	-0.18	-0.01
111	349	238	127	5584	0.867579	834.31	0.590974	1351.31	1129.02	0	2.17	2271.53	6.51	2270.67	6.51	-0.86	-0.04
111	350	239	128	5600	0.866253	834.63	0.591429	1351.33	1143.6	-0.53	2.15	2272.06	6.49	2271.92	6.49	-0.15	-0.01
111	351	240	129	5616	0.864928	834.94	0.59188	1351.35	1158.24	0	2.14	2273.6	6.48	2272.77	6.48	-0.84	-0.04
111	352	241	130	5632	0.863604	835.24	0.59233	1351.39	1172.94	-0.53	2.12	2274.02	6.46	2273.9	6.46	-0.13	-0.01
111	353	242	131	5648	0.862281	835.54	0.592776	1351.42	1187.69	0	2.1	2275.45	6.45	2274.63	6.44	-0.82	-0.04
111	354	243	132	5664	0.860959	835.83	0.59322	1351.47	1202.49	-0.53	2.09	2275.76	6.43	2275.64	6.43	-0.12	-0.01
111	355	244	133	5680	0.859639	836.12	0.593662	1351.52	1217.35	0	2.07	2277.08	6.41	2276.27	6.41	-0.81	-0.04
111	356	245	134	5696	0.85832	836.41	0.594101	1351.57	1232.26	-0.53	2.06	2277.28	6.4	2277.16	6.4	-0.12	-0.01
111	357	246	135	5712	0.857002	836.69	0.594538	1351.64	1247.23	0	2.04	2278.49	6.38	2277.67	6.38	-0.82	-0.04
111	358	247	136	5728	0.855685	836.96	0.594972	1351.7	1262.25	-0.53	2.03	2278.59	6.36	2278.46	6.36	-0.13	-0.01
111	359	248	137	5744	0.85437	837.23	0.595404	1351.78	1277.32	0	2.01	2279.69	6.35	2278.85	6.35	-0.83	-0.04
111	360	249	138	5760	0.853056	837.49	0.595833	1351.85	1292.45	-0.53	2	2279.68	6.33	2279.53	6.33	-0.15	-0.01
111	361	250	139	5776	0.851743	837.75	0.59626	1351.94	1307.63	0	1.98	2280.67	6.32	2279.81	6.32	-0.86	-0.04
111	362	251	140	5792	0.850432	838.01	0.596685	1352.02	1322.85	-0.53	1.97	2280.56	6.3	2280.38	6.3	-0.18	-0.01
111	363	252	141	5808	0.849122	838.26	0.597107	1352.12	1338.13	0	1.96	2281.45	6.28	2280.56	6.28	-0.89	-0.04
111	364	253	142	5824	0.847814	838.5	0.597527	1352.22	1353.46	-0.52	1.94	2281.24	6.27	2281.01	6.27	-0.22	-0.01
111	365	254	143	5840	0.846508	838.74	0.597945	1352.32	1368.84	0	1.93	2282.02	6.25	2281.09	6.25	-0.94	-0.04
111	366	255	144	5856	0.845203	838.98	0.598361	1352.43	1384.27	-0.52	1.92	2281.71	6.23	2281.44	6.23	-0.28	-0.01
111	367	256	145	5872	0.8439	839.21	0.598774	1352.54	1399.75	0	1.9	2282.4	6.22	2281.4	6.22	-1	-0.04
111	368	257	146	5888	0.842598	839.44	0.599185	1352.66	1415.28	-0.52	1.89	2281.99	6.2	2281.65	6.2	-0.34	-0.01
111	369	258	147	5904	0.841298	839.66	0.599593	1352.78	1430.86	0	1.88	2282.58	6.19	2281.51	6.18	-1.07	-0.05
111	370	259	148	5920	0.84	839.88	0.6	1352.91	1446.48	-0.52	1.86	2282.08	6.17	2281.66	6.17	-0.42	-0.02
111	371	260	149	5936	0.838704	840.09	0.600404	1353.04	1462.15	0	1.85	2282.56	6.15	2281.42	6.15	-1.15	-0.05
111	372	261	150	5952	0.837409	840.3	0.600806	1353.18	1477.87	-0.52	1.84	2281.97	6.13	2281.46	6.13	-0.51	-0.02
111	373	262	151	5968	0.836116	840.51	0.601206	1353.32	1493.64	0	1.83	2282.36	6.12	2281.12	6.12	-1.24	-0.05
111	374	263	152	5984	0.834825	840.71	0.601604	1353.47	1509.45	-0.52	1.81	2281.67	6.1	2281.06	6.1	-0.61	-0.03
111	375	264	153	6000	0.833536	840.91	0.602	1353.62	1525.31	0	1.8	2281.97	6.09	2280.62	6.08	-1.35	-0.06
111	376	265	154	6016	0.832249	841.1	0.602394	1353.78	1541.21	-0.52	1.79	2281.18	6.07	2280.47	6.07	-0.72	-0.03
111	377	266	155	6032	0.830963	841.29	0.602785	1353.94	1557.16	0	1.78	2281.39	6.05	2279.92	6.05	-1.46	-0.06
111	378	267	156	6048	0.82968	841.47	0.603175	1354.1	1573.16	-0.51	1.77	2280.52	6.03	2279.67	6.03	-0.84	-0.04
111	379	268	157	6064	0.828399	841.65	0.603562	1354.27	1589.2	0	1.76	2280.63	6.02	2279.04	6.01	-1.59	-0.07
111	380	269	158	6080	0.827119	841.83	0.603947	1354.44	1605.29	-0.51	1.74	2279.67	6	2278.69	6	-0.98	-0.04
111	381	270	159	6096	0.825842	842.01	0.604331	1354.62	1621.41	0	1.73	2279.69	5.98	2277.96	5.98	-1.73	-0.08
111	382	271	160	6112	0.824566	842.18	0.604712	1354.8	1637.59	-0.51	1.72	2278.65	5.97	2277.52	5.96	-1.13	-0.05
111	383	272	161	6128	0.823293	842.34	0.605091	1354.99	1653.8	0	1.71	2278.58	5.95	2276.69	5.94	-1.89	-0.08
111	384	273	162	6144	0.822021	842.5	0.605469	1355.18	1670.06	-0.51	1.7	2277.45	5.93	2276.16	5.93	-1.29	-0.06
111	385	274	163	6160	0.820752	842.66	0.605844	1355.37	1686.36	0	1.69	2277.29	5.92	2275.24	5.91	-2.05	-0.09

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
111	386	275	164	6176	0.819485	842.82	0.606218	1355.57	1702.71	-0.51	1.68	2276.08	5.9	2274.61	5.89	-1.46	-0.06
111	387	276	165	6192	0.81822	842.97	0.606589	1355.77	1719.09	0	1.67	2275.83	5.88	2273.6	5.87	-2.23	-0.1
111	388	277	166	6208	0.816957	843.12	0.606959	1355.98	1735.52	-0.51	1.66	2274.54	5.86	2272.88	5.86	-1.65	-0.07
111	389	278	167	6224	0.815696	843.26	0.607326	1356.18	1751.99	0	1.65	2274.21	5.85	2271.78	5.84	-2.43	-0.11
111	390	279	168	6240	0.814438	843.4	0.607692	1356.4	1768.5	-0.51	1.64	2272.83	5.83	2270.98	5.82	-1.85	-0.08
111	391	280	169	6256	0.813181	843.54	0.608056	1356.61	1785.05	0	1.63	2272.42	5.81	2269.79	5.81	-2.63	-0.12
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
112	223	111	-1	3568	0.99998	713.39	0.498879	1468.69	0.11	0	9.81	1395.62	6.26	1404.89	6.3	9.27	0.66
112	224	112	0	3584	1	715.54	0.5	1466.49	0	0.67	10	1412.64	6.31	1421.17	6.34	8.53	0.6
112	225	113	1	3600	0.99998	717.65	0.501111	1464.33	0.11	0	9.82	1427.73	6.35	1435.32	6.38	7.59	0.53
112	226	114	2	3616	0.999922	719.74	0.502212	1462.21	0.43	0.67	9.64	1443.93	6.39	1451.2	6.42	7.28	0.5
112	227	115	3	3632	0.999825	721.79	0.503304	1460.13	0.97	0	9.46	1458.58	6.43	1464.96	6.45	6.38	0.44
112	228	116	4	3648	0.999692	723.81	0.504386	1458.09	1.71	0.66	9.29	1474.34	6.47	1480.45	6.49	6.11	0.41
112	229	117	5	3664	0.999523	725.8	0.505459	1456.09	2.66	0	9.12	1488.57	6.5	1493.84	6.52	5.26	0.35
112	230	118	6	3680	0.999319	727.77	0.506522	1454.12	3.82	0.66	8.96	1503.91	6.54	1508.95	6.56	5.03	0.33
112	231	119	7	3696	0.999082	729.7	0.507576	1452.2	5.17	0	8.8	1517.73	6.57	1521.96	6.59	4.23	0.28
112	232	120	8	3712	0.998811	731.61	0.508621	1450.31	6.73	0.66	8.65	1532.66	6.61	1536.7	6.62	4.04	0.26
112	233	121	9	3728	0.998508	733.48	0.509657	1448.46	8.48	0	8.5	1546.08	6.64	1549.36	6.65	3.28	0.21
112	234	122	10	3744	0.998174	735.33	0.510684	1446.64	10.43	0.65	8.36	1560.61	6.67	1563.73	6.68	3.12	0.2
112	235	123	11	3760	0.997809	737.16	0.511702	1444.86	12.56	0	8.22	1573.63	6.7	1576.03	6.71	2.4	0.15
112	236	124	12	3776	0.997415	738.96	0.512712	1443.11	14.89	0.65	8.08	1587.77	6.73	1590.05	6.74	2.28	0.14
112	237	125	13	3792	0.996991	740.73	0.513713	1441.4	17.4	0	7.94	1600.42	6.75	1602.01	6.76	1.59	0.1
112	238	126	14	3808	0.99654	742.47	0.514706	1439.72	20.09	0.65	7.81	1614.18	6.78	1615.68	6.79	1.5	0.09
112	239	127	15	3824	0.996061	744.19	0.51569	1438.07	22.97	0	7.68	1626.45	6.81	1627.31	6.81	0.85	0.05
112	240	128	16	3840	0.995556	745.89	0.516667	1436.45	26.02	0.65	7.56	1639.84	6.83	1640.63	6.84	0.79	0.05
112	241	129	17	3856	0.995024	747.56	0.517635	1434.86	29.26	0	7.44	1651.76	6.85	1651.93	6.85	0.18	0.01
112	242	130	18	3872	0.994468	749.21	0.518595	1433.31	32.67	0.64	7.32	1664.78	6.88	1664.93	6.88	0.15	0.01
112	243	131	19	3888	0.993886	750.83	0.519547	1431.78	36.25	0	7.2	1676.34	6.9	1675.91	6.9	-0.43	-0.03
112	244	132	20	3904	0.993281	752.43	0.520492	1430.28	40	0.64	7.09	1689.01	6.92	1688.58	6.92	-0.44	-0.03
112	245	133	21	3920	0.992653	754.01	0.521429	1428.81	43.92	0	6.98	1700.23	6.94	1699.24	6.94	-0.99	-0.06
112	246	134	22	3936	0.992002	755.56	0.522358	1427.37	48.01	0.64	6.87	1712.56	6.96	1711.59	6.96	-0.97	-0.06
112	247	135	23	3952	0.991329	757.1	0.523279	1425.96	52.26	0	6.76	1723.45	6.98	1721.95	6.97	-1.5	-0.09
112	248	136	24	3968	0.990635	758.61	0.524194	1424.58	56.67	0.64	6.66	1735.44	7	1733.99	6.99	-1.45	-0.08
112	249	137	25	3984	0.98992	760.09	0.5251	1423.22	61.25	0	6.56	1746	7.01	1744.05	7	-1.95	-0.11
112	250	138	26	4000	0.989184	761.56	0.526	1421.89	65.98	0.63	6.46	1757.66	7.03	1755.78	7.02	-1.88	-0.11
112	251	139	27	4016	0.988429	763.01	0.526892	1420.58	70.87	0	6.36	1767.9	7.04	1765.54	7.03	-2.35	-0.13
112	252	140	28	4032	0.987654	764.43	0.527778	1419.3	75.92	0.63	6.27	1779.24	7.06	1776.98	7.05	-2.27	-0.13
112	253	141	29	4048	0.986861	765.84	0.528656	1418.05	81.12	0	6.18	1789.17	7.07	1786.46	7.06	-2.72	-0.15
112	254	142	30	4064	0.98605	767.23	0.529528	1416.82	86.47	0.63	6.09	1800.2	7.09	1797.6	7.08	-2.61	-0.15
112	255	143	31	4080	0.985221	768.59	0.530392	1415.61	91.97	0	6	1809.83	7.1	1806.8	7.09	-3.03	-0.17
112	256	144	32	4096	0.984375	769.94	0.53125	1414.43	97.62	0.62	5.92	1820.56	7.11	1817.65	7.1	-2.91	-0.16
112	257	145	33	4112	0.983512	771.26	0.532101	1413.27	103.41	0	5.83	1829.89	7.12	1826.57	7.11	-3.31	-0.18
112	258	146	34	4128	0.982633	772.57	0.532946	1412.13	109.35	0.62	5.75	1840.31	7.13	1837.14	7.12	-3.17	-0.17
112	259	147	35	4144	0.981738	773.86	0.533784	1411.02	115.43	0	5.67	1849.35	7.14	1845.8	7.13	-3.55	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
112	260	148	36	4160	0.980828	775.13	0.534615	1409.93	121.65	0.62	5.59	1859.49	7.15	1856.1	7.14	-3.4	-0.18
112	261	149	37	4176	0.979903	776.39	0.535441	1408.86	128.02	0	5.51	1868.25	7.16	1864.49	7.14	-3.76	-0.2
112	262	150	38	4192	0.978964	777.62	0.53626	1407.81	134.52	0.62	5.44	1878.1	7.17	1874.52	7.15	-3.59	-0.19
112	263	151	39	4208	0.97801	778.84	0.537072	1406.79	141.15	0	5.36	1886.58	7.17	1882.65	7.16	-3.94	-0.21
112	264	152	40	4224	0.977043	780.04	0.537879	1405.78	147.92	0.62	5.29	1896.16	7.18	1892.41	7.17	-3.75	-0.2
112	265	153	41	4240	0.976063	781.23	0.538679	1404.8	154.83	0	5.22	1904.37	7.19	1900.29	7.17	-4.08	-0.21
112	266	154	42	4256	0.975069	782.39	0.539474	1403.83	161.86	0.61	5.15	1913.68	7.19	1909.8	7.18	-3.88	-0.2
112	267	155	43	4272	0.974063	783.54	0.540262	1402.89	169.03	0	5.08	1921.62	7.2	1917.43	7.18	-4.19	-0.22
112	268	156	44	4288	0.973045	784.68	0.541045	1401.96	176.32	0.61	5.02	1930.66	7.2	1926.68	7.19	-3.98	-0.21
112	269	157	45	4304	0.972015	785.8	0.541822	1401.06	183.75	0	4.95	1938.35	7.21	1934.07	7.19	-4.28	-0.22
112	270	158	46	4320	0.970974	786.9	0.542593	1400.17	191.3	0.61	4.89	1947.13	7.21	1943.07	7.2	-4.06	-0.21
112	271	159	47	4336	0.969921	787.98	0.543358	1399.3	198.97	0	4.83	1954.57	7.21	1950.22	7.2	-4.35	-0.22
112	272	160	48	4352	0.968858	789.06	0.544118	1398.45	206.77	0.61	4.77	1963.1	7.22	1958.99	7.2	-4.11	-0.21
112	273	161	49	4368	0.967784	790.11	0.544872	1397.62	214.69	0	4.71	1970.29	7.22	1965.9	7.2	-4.39	-0.22
112	274	162	50	4384	0.9667	791.15	0.54562	1396.81	222.72	0.6	4.65	1978.57	7.22	1974.42	7.21	-4.14	-0.21
112	275	163	51	4400	0.965607	792.18	0.546364	1396.01	230.88	0	4.59	1985.52	7.22	1981.11	7.2	-4.41	-0.22
112	276	164	52	4416	0.964503	793.19	0.547101	1395.23	239.16	0.6	4.53	1993.55	7.22	1989.4	7.21	-4.15	-0.21
112	277	165	53	4432	0.963391	794.19	0.547834	1394.47	247.55	0	4.48	2000.27	7.22	1995.86	7.21	-4.41	-0.22
112	278	166	54	4448	0.962269	795.17	0.548561	1393.72	256.06	0.6	4.42	2008.07	7.22	2003.92	7.21	-4.15	-0.21
112	279	167	55	4464	0.961139	796.14	0.549283	1392.99	264.68	0	4.37	2014.55	7.22	2010.16	7.2	-4.39	-0.22
112	280	168	56	4480	0.96	797.1	0.55	1392.28	273.42	0.6	4.32	2022.12	7.22	2018	7.21	-4.12	-0.2
112	281	169	57	4496	0.958853	798.04	0.550712	1391.58	282.27	0	4.27	2028.38	7.22	2024.02	7.2	-4.35	-0.22
112	282	170	58	4512	0.957698	798.97	0.551418	1390.9	291.23	0.6	4.22	2035.72	7.22	2031.64	7.2	-4.08	-0.2
112	283	171	59	4528	0.956536	799.88	0.55212	1390.23	300.29	0	4.17	2041.76	7.21	2037.45	7.2	-4.3	-0.21
112	284	172	60	4544	0.955366	800.79	0.552817	1389.58	309.47	0.59	4.12	2048.87	7.21	2044.85	7.2	-4.02	-0.2
112	285	173	61	4560	0.954189	801.68	0.553509	1388.95	318.75	0	4.07	2054.69	7.21	2050.45	7.19	-4.24	-0.21
112	286	174	62	4576	0.953005	802.55	0.554196	1388.32	328.14	0.59	4.02	2061.59	7.21	2057.64	7.19	-3.95	-0.19
112	287	175	63	4592	0.951814	803.42	0.554878	1387.72	337.64	0	3.98	2067.2	7.2	2063.04	7.19	-4.16	-0.2
112	288	176	64	4608	0.950617	804.27	0.555556	1387.13	347.23	0.59	3.93	2073.89	7.2	2070.02	7.19	-3.87	-0.19
112	289	177	65	4624	0.949414	805.11	0.556228	1386.55	356.94	0	3.89	2079.29	7.19	2075.22	7.18	-4.08	-0.2
112	290	178	66	4640	0.948205	805.94	0.556897	1385.98	366.74	0.59	3.84	2085.77	7.19	2081.99	7.18	-3.78	-0.18
112	291	179	67	4656	0.946989	806.76	0.55756	1385.43	376.64	0	3.8	2090.97	7.19	2086.99	7.17	-3.98	-0.19
112	292	180	68	4672	0.945768	807.56	0.558219	1384.9	386.64	0.59	3.76	2097.24	7.18	2093.56	7.17	-3.68	-0.18
112	293	181	69	4688	0.944542	808.35	0.558874	1384.37	396.75	0	3.72	2102.25	7.17	2098.38	7.16	-3.87	-0.18
112	294	182	70	4704	0.943311	809.14	0.559524	1383.86	406.94	0.58	3.68	2108.32	7.17	2104.75	7.16	-3.57	-0.17
112	295	183	71	4720	0.942074	809.91	0.560169	1383.37	417.24	0	3.64	2113.13	7.16	2109.37	7.15	-3.76	-0.18
112	296	184	72	4736	0.940833	810.67	0.560811	1382.88	427.63	0.58	3.6	2119	7.16	2115.55	7.15	-3.45	-0.16
112	297	185	73	4752	0.939587	811.41	0.561448	1382.41	438.12	0	3.56	2123.62	7.15	2119.99	7.14	-3.63	-0.17
112	298	186	74	4768	0.938336	812.15	0.562081	1381.95	448.7	0.58	3.52	2129.3	7.15	2125.98	7.13	-3.33	-0.16
112	299	187	75	4784	0.937081	812.88	0.562709	1381.5	459.37	0	3.49	2133.73	7.14	2130.23	7.12	-3.5	-0.16
112	300	188	76	4800	0.935822	813.6	0.563333	1381.07	470.13	0.58	3.45	2139.23	7.13	2136.03	7.12	-3.2	-0.15
112	301	189	77	4816	0.934559	814.3	0.563953	1380.64	480.99	0	3.41	2143.48	7.12	2140.11	7.11	-3.37	-0.16
112	302	190	78	4832	0.933292	815	0.56457	1380.23	491.94	0.58	3.38	2148.79	7.12	2145.73	7.11	-3.06	-0.14
112	303	191	79	4848	0.932022	815.69	0.565182	1379.83	502.97	0	3.35	2152.86	7.11	2149.62	7.09	-3.23	-0.15
112	304	192	80	4864	0.930748	816.36	0.565789	1379.44	514.09	0.57	3.31	2157.98	7.1	2155.06	7.09	-2.92	-0.14
112	305	193	81	4880	0.929471	817.03	0.566393	1379.07	525.3	0	3.28	2161.88	7.09	2158.79	7.08	-3.09	-0.14

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112	306	194	82	4896	0.92819	817.69	0.566993	1378.7	536.6	0.57	3.24	2166.83	7.08	2164.05	7.07	-2.78	-0.13
112	307	195	83	4912	0.926906	818.33	0.56759	1378.35	547.98	0	3.21	2170.55	7.07	2167.6	7.06	-2.95	-0.14
112	308	196	84	4928	0.92562	818.97	0.568182	1378	559.45	0.57	3.18	2175.33	7.06	2172.69	7.05	-2.64	-0.12
112	309	197	85	4944	0.92433	819.6	0.56877	1377.67	571	0	3.15	2178.88	7.05	2176.08	7.04	-2.8	-0.13
112	310	198	86	4960	0.923039	820.22	0.569355	1377.35	582.64	0.57	3.12	2183.49	7.04	2180.99	7.04	-2.49	-0.11
112	311	199	87	4976	0.921744	820.83	0.569936	1377.03	594.35	0	3.09	2186.87	7.03	2184.22	7.02	-2.66	-0.12
112	312	200	88	4992	0.920447	821.43	0.570513	1376.73	606.15	0.57	3.06	2191.31	7.02	2188.96	7.02	-2.35	-0.11
112	313	201	89	5008	0.919148	822.02	0.571086	1376.44	618.03	0	3.03	2194.54	7.01	2192.02	7	-2.51	-0.11
112	314	202	90	5024	0.917847	822.61	0.571656	1376.15	629.99	0.56	3	2198.81	7	2196.61	7	-2.2	-0.1
112	315	203	91	5040	0.916543	823.18	0.572222	1375.88	642.03	0	2.97	2201.88	6.99	2199.51	6.98	-2.37	-0.11
112	316	204	92	5056	0.915238	823.75	0.572785	1375.62	654.15	0.56	2.94	2205.99	6.98	2203.93	6.97	-2.06	-0.09
112	317	205	93	5072	0.913931	824.3	0.573344	1375.37	666.35	0	2.92	2208.9	6.97	2206.68	6.96	-2.22	-0.1
112	318	206	94	5088	0.912622	824.85	0.573899	1375.12	678.62	0.56	2.89	2212.85	6.96	2210.94	6.95	-1.92	-0.09
112	319	207	95	5104	0.911312	825.4	0.574451	1374.89	690.97	0	2.86	2215.61	6.95	2213.53	6.94	-2.08	-0.09
112	320	208	96	5120	0.91	825.93	0.575	1374.66	703.39	0.56	2.84	2219.41	6.94	2217.63	6.93	-1.78	-0.08
112	321	209	97	5136	0.908687	826.46	0.575545	1374.44	715.9	0	2.81	2222.02	6.92	2220.08	6.92	-1.94	-0.09
112	322	210	98	5152	0.907372	826.97	0.576087	1374.24	728.47	0.56	2.79	2225.66	6.91	2224.03	6.91	-1.64	-0.07
112	323	211	99	5168	0.906057	827.48	0.576625	1374.04	741.12	0	2.76	2228.12	6.9	2226.32	6.89	-1.8	-0.08
112	324	212	100	5184	0.90474	827.98	0.57716	1373.85	753.84	0.56	2.74	2231.62	6.89	2230.12	6.88	-1.5	-0.07
112	325	213	101	5200	0.903422	828.48	0.577692	1373.67	766.63	0	2.71	2233.93	6.87	2232.27	6.87	-1.67	-0.07
112	326	214	102	5216	0.902104	828.97	0.578221	1373.49	779.5	0.55	2.69	2237.28	6.86	2235.91	6.86	-1.37	-0.06
112	327	215	103	5232	0.900785	829.45	0.578746	1373.33	792.43	0	2.66	2239.46	6.85	2237.92	6.84	-1.54	-0.07
112	328	216	104	5248	0.899465	829.92	0.579268	1373.17	805.44	0.55	2.64	2242.66	6.84	2241.42	6.83	-1.24	-0.06
112	329	217	105	5264	0.898144	830.38	0.579787	1373.03	818.52	0	2.62	2244.69	6.82	2243.28	6.82	-1.41	-0.06
112	330	218	106	5280	0.896823	830.84	0.580303	1372.89	831.66	0.55	2.59	2247.76	6.81	2246.64	6.81	-1.12	-0.05
112	331	219	107	5296	0.895501	831.29	0.580816	1372.75	844.87	0	2.57	2249.65	6.8	2248.36	6.79	-1.29	-0.06
112	332	220	108	5312	0.894179	831.74	0.581325	1372.63	858.15	0.55	2.55	2252.58	6.78	2251.58	6.78	-1	-0.04
112	333	221	109	5328	0.892857	832.17	0.581832	1372.51	871.5	0	2.53	2254.34	6.77	2253.17	6.77	-1.18	-0.05
112	334	222	110	5344	0.891534	832.6	0.582335	1372.4	884.92	0.55	2.51	2257.13	6.76	2256.24	6.76	-0.89	-0.04
112	335	223	111	5360	0.890212	833.03	0.582836	1372.3	898.4	0	2.49	2258.76	6.74	2257.69	6.74	-1.07	-0.05
112	336	224	112	5376	0.888889	833.44	0.583333	1372.21	911.94	0.55	2.47	2261.42	6.73	2260.63	6.73	-0.79	-0.03
112	337	225	113	5392	0.887566	833.85	0.583828	1372.12	925.56	0	2.45	2262.92	6.71	2261.95	6.71	-0.96	-0.04
112	338	226	114	5408	0.886243	834.26	0.58432	1372.04	939.23	0.54	2.43	2265.44	6.7	2264.75	6.7	-0.69	-0.03
112	339	227	115	5424	0.884921	834.65	0.584808	1371.97	952.97	0	2.41	2266.81	6.69	2265.94	6.68	-0.87	-0.04
112	340	228	116	5440	0.883599	835.04	0.585294	1371.91	966.77	0.54	2.39	2269.21	6.67	2268.61	6.67	-0.6	-0.03
112	341	229	117	5456	0.882277	835.43	0.585777	1371.85	980.64	0	2.37	2270.45	6.66	2269.67	6.66	-0.78	-0.03
112	342	230	118	5472	0.880955	835.81	0.586257	1371.8	994.56	0.54	2.35	2272.72	6.65	2272.21	6.64	-0.51	-0.02
112	343	231	119	5488	0.879633	836.18	0.586735	1371.75	1008.55	0	2.33	2273.84	6.63	2273.15	6.63	-0.7	-0.03
112	344	232	120	5504	0.878313	836.55	0.587209	1371.72	1022.6	0.54	2.31	2275.99	6.62	2275.55	6.61	-0.44	-0.02
112	345	233	121	5520	0.876992	836.91	0.587681	1371.69	1036.71	0	2.29	2276.99	6.6	2276.36	6.6	-0.63	-0.03
112	346	234	122	5536	0.875672	837.26	0.58815	1371.66	1050.88	0.54	2.27	2279.01	6.59	2278.64	6.59	-0.37	-0.02
112	347	235	123	5552	0.874353	837.61	0.588617	1371.65	1065.11	0	2.26	2279.89	6.57	2279.33	6.57	-0.56	-0.02
112	348	236	124	5568	0.873035	837.95	0.58908	1371.63	1079.4	0.54	2.24	2281.79	6.56	2281.48	6.56	-0.31	-0.01
112	349	237	125	5584	0.871717	838.29	0.589542	1371.63	1093.74	0	2.22	2282.56	6.54	2282.06	6.54	-0.5	-0.02
112	350	238	126	5600	0.8704	838.62	0.59	1371.63	1108.14	0.53	2.2	2284.34	6.53	2284.08	6.53	-0.26	-0.01
112	351	239	127	5616	0.869084	838.95	0.590456	1371.64	1122.61	0	2.19	2284.99	6.51	2284.54	6.51	-0.46	-0.02

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
112	352	240	128	5632	0.867769	839.27	0.590909	1371.65	1137.12	0.53	2.17	2286.66	6.5	2286.44	6.5	-0.21	-0.01
112	353	241	129	5648	0.866454	839.58	0.59136	1371.67	1151.7	0	2.15	2287.2	6.48	2286.78	6.48	-0.42	-0.02
112	354	242	130	5664	0.865141	839.89	0.591808	1371.7	1166.33	0.53	2.14	2288.75	6.47	2288.57	6.46	-0.18	-0.01
112	355	243	131	5680	0.863829	840.2	0.592254	1371.73	1181.01	0	2.12	2289.18	6.45	2288.79	6.45	-0.39	-0.02
112	356	244	132	5696	0.862517	840.5	0.592697	1371.77	1195.76	0.53	2.11	2290.61	6.43	2290.46	6.43	-0.16	-0.01
112	357	245	133	5712	0.861207	840.79	0.593137	1371.81	1210.55	0	2.09	2290.94	6.42	2290.57	6.42	-0.37	-0.02
112	358	246	134	5728	0.859898	841.08	0.593575	1371.86	1225.4	0.53	2.08	2292.26	6.4	2292.12	6.4	-0.14	-0.01
112	359	247	135	5744	0.85859	841.36	0.594011	1371.92	1240.3	0	2.06	2292.48	6.39	2292.12	6.38	-0.36	-0.02
112	360	248	136	5760	0.857284	841.64	0.594444	1371.98	1255.26	0.53	2.05	2293.69	6.37	2293.55	6.37	-0.14	-0.01
112	361	249	137	5776	0.855979	841.92	0.594875	1372.04	1270.27	0	2.03	2293.8	6.35	2293.44	6.35	-0.36	-0.02
112	362	250	138	5792	0.854675	842.19	0.595304	1372.12	1285.33	0.53	2.02	2294.91	6.34	2294.77	6.34	-0.14	-0.01
112	363	251	139	5808	0.853372	842.45	0.59573	1372.19	1300.44	0	2	2294.92	6.32	2294.55	6.32	-0.37	-0.02
112	364	252	140	5824	0.852071	842.71	0.596154	1372.27	1315.61	0.52	1.99	2295.92	6.31	2295.76	6.31	-0.16	-0.01
112	365	253	141	5840	0.850771	842.97	0.596575	1372.36	1330.82	0	1.97	2295.82	6.29	2295.43	6.29	-0.39	-0.02
112	366	254	142	5856	0.849473	843.22	0.596995	1372.45	1346.09	0.52	1.96	2296.72	6.28	2296.54	6.27	-0.19	-0.01
112	367	255	143	5872	0.848176	843.46	0.597411	1372.55	1361.4	0	1.95	2296.53	6.26	2296.1	6.26	-0.43	-0.02
112	368	256	144	5888	0.846881	843.7	0.597826	1372.66	1376.77	0.52	1.93	2297.33	6.24	2297.1	6.24	-0.23	-0.01
112	369	257	145	5904	0.845587	843.94	0.598238	1372.76	1392.19	0	1.92	2297.03	6.23	2296.56	6.22	-0.47	-0.02
112	370	258	146	5920	0.844295	844.17	0.598649	1372.88	1407.65	0.52	1.91	2297.73	6.21	2297.45	6.21	-0.28	-0.01
112	371	259	147	5936	0.843005	844.4	0.599057	1372.99	1423.16	0	1.89	2297.34	6.19	2296.81	6.19	-0.52	-0.02
112	372	260	148	5952	0.841716	844.62	0.599462	1373.12	1438.72	0.52	1.88	2297.94	6.18	2297.6	6.18	-0.34	-0.01
112	373	261	149	5968	0.840429	844.84	0.599866	1373.24	1454.33	0	1.87	2297.45	6.16	2296.86	6.16	-0.59	-0.03
112	374	262	150	5984	0.839143	845.06	0.600267	1373.38	1469.99	0.52	1.86	2297.95	6.14	2297.54	6.14	-0.41	-0.02
112	375	263	151	6000	0.83786	845.27	0.600667	1373.51	1485.69	0	1.84	2297.37	6.13	2296.7	6.12	-0.67	-0.03
112	376	264	152	6016	0.836578	845.47	0.601064	1373.65	1501.44	0.52	1.83	2297.78	6.11	2297.28	6.11	-0.5	-0.02
112	377	265	153	6032	0.835298	845.68	0.601459	1373.8	1517.24	0	1.82	2297.1	6.09	2296.35	6.09	-0.76	-0.03
112	378	266	154	6048	0.834019	845.87	0.601852	1373.95	1533.08	0.51	1.81	2297.42	6.08	2296.82	6.08	-0.59	-0.03
112	379	267	155	6064	0.832743	846.07	0.602243	1374.1	1548.97	0	1.79	2296.65	6.06	2295.79	6.06	-0.86	-0.04
112	380	268	156	6080	0.831468	846.26	0.602632	1374.26	1564.9	0.51	1.78	2296.87	6.04	2296.17	6.04	-0.7	-0.03
112	381	269	157	6096	0.830195	846.44	0.603018	1374.43	1580.88	0	1.77	2296.02	6.03	2295.05	6.02	-0.97	-0.04
112	382	270	158	6112	0.828925	846.63	0.603403	1374.6	1596.9	0.51	1.76	2296.15	6.01	2295.33	6.01	-0.82	-0.04
112	383	271	159	6128	0.827656	846.81	0.603786	1374.77	1612.97	0	1.75	2295.21	5.99	2294.11	5.99	-1.1	-0.05
112	384	272	160	6144	0.826389	846.98	0.604167	1374.94	1629.08	0.51	1.74	2295.24	5.98	2294.29	5.97	-0.95	-0.04
112	385	273	161	6160	0.825124	847.15	0.604545	1375.12	1645.23	0	1.73	2294.22	5.96	2292.98	5.96	-1.24	-0.05
112	386	274	162	6176	0.823861	847.32	0.604922	1375.31	1661.43	0.51	1.72	2294.17	5.94	2293.07	5.94	-1.1	-0.05
112	387	275	163	6192	0.8226	847.48	0.605297	1375.5	1677.67	0	1.71	2293.05	5.93	2291.67	5.92	-1.39	-0.06
112	388	276	164	6208	0.821341	847.64	0.60567	1375.69	1693.95	0.51	1.69	2292.91	5.91	2291.66	5.91	-1.25	-0.05
112	389	277	165	6224	0.820084	847.8	0.606041	1375.89	1710.28	0	1.68	2291.72	5.89	2290.17	5.89	-1.55	-0.07
112	390	278	166	6240	0.81883	847.95	0.60641	1376.09	1726.64	0.51	1.67	2291.49	5.88	2290.07	5.87	-1.42	-0.06
112	391	279	167	6256	0.817577	848.1	0.606777	1376.29	1743.05	0	1.66	2290.22	5.86	2288.49	5.85	-1.73	-0.08
112	392	280	168	6272	0.816327	848.25	0.607143	1376.5	1759.5	0.51	1.65	2289.91	5.84	2288.3	5.84	-1.61	-0.07
112	393	281	169	6288	0.815078	848.39	0.607506	1376.71	1775.99	0	1.64	2288.55	5.82	2286.63	5.82	-1.92	-0.08
112	394	282	170	6304	0.813832	848.53	0.607868	1376.93	1792.52	0.5	1.63	2288.16	5.81	2286.35	5.8	-1.8	-0.08
112	395	283	171	6320	0.812588	848.67	0.608228	1377.15	1809.09	0	1.62	2286.72	5.79	2284.6	5.78	-2.12	-0.09

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
113	225	112	-1	3600	0.99998	717.65	0.498889	1490.59	0.11	0	9.82	1401.46	6.23	1410.73	6.27	9.27	0.66
113	226	113	0	3616	1	719.79	0.5	1488.38	0	-0.67	10	1417.17	6.27	1426.16	6.31	8.99	0.63
113	227	114	1	3632	0.999981	721.9	0.501101	1486.2	0.11	0	9.82	1433.61	6.32	1441.19	6.35	7.59	0.53
113	228	115	2	3648	0.999923	723.98	0.502193	1484.07	0.43	-0.66	9.64	1448.5	6.35	1456.23	6.39	7.73	0.53
113	229	116	3	3664	0.999828	726.02	0.503275	1481.98	0.96	0	9.46	1464.51	6.4	1470.88	6.42	6.37	0.43
113	230	117	4	3680	0.999698	728.04	0.504348	1479.92	1.7	-0.66	9.3	1478.98	6.43	1485.53	6.46	6.56	0.44
113	231	118	5	3696	0.999531	730.03	0.505411	1477.91	2.64	0	9.13	1494.55	6.47	1499.8	6.49	5.25	0.35
113	232	119	6	3712	0.999331	731.99	0.506466	1475.93	3.79	-0.66	8.97	1508.61	6.5	1514.08	6.53	5.47	0.36
113	233	120	7	3728	0.999097	733.92	0.507511	1473.99	5.13	0	8.81	1523.77	6.54	1527.98	6.56	4.2	0.28
113	234	121	8	3744	0.998831	735.82	0.508547	1472.09	6.67	-0.65	8.66	1537.43	6.57	1541.9	6.59	4.47	0.29
113	235	122	9	3760	0.998533	737.69	0.509574	1470.23	8.41	0	8.51	1552.19	6.61	1555.43	6.62	3.24	0.21
113	236	123	10	3776	0.998205	739.54	0.510593	1468.4	10.34	-0.65	8.37	1565.44	6.63	1568.99	6.65	3.55	0.23
113	237	124	11	3792	0.997846	741.36	0.511603	1466.6	12.46	0	8.23	1579.81	6.67	1582.17	6.68	2.36	0.15
113	238	125	12	3808	0.997458	743.16	0.512605	1464.84	14.76	-0.65	8.09	1592.69	6.69	1595.39	6.7	2.7	0.17
113	239	126	13	3824	0.997041	744.93	0.513598	1463.11	17.25	0	7.96	1606.67	6.72	1608.21	6.73	1.54	0.1
113	240	127	14	3840	0.996597	746.67	0.514583	1461.41	19.92	-0.65	7.83	1619.17	6.75	1621.09	6.75	1.92	0.12
113	241	128	15	3856	0.996126	748.39	0.51556	1459.75	22.78	0	7.7	1632.78	6.78	1633.58	6.78	0.8	0.05
113	242	129	16	3872	0.995629	750.08	0.516529	1458.12	25.81	-0.64	7.58	1644.92	6.8	1646.13	6.8	1.21	0.07
113	243	130	17	3888	0.995106	751.75	0.51749	1456.52	29.02	0	7.45	1658.17	6.82	1658.28	6.82	0.12	0.01
113	244	131	18	3904	0.994558	753.4	0.518443	1454.95	32.4	-0.64	7.34	1669.95	6.84	1670.5	6.85	0.55	0.03
113	245	132	19	3920	0.993986	755.02	0.519388	1453.41	35.95	0	7.22	1682.84	6.87	1682.33	6.87	-0.51	-0.03
113	246	133	20	3936	0.99339	756.62	0.520325	1451.9	39.68	-0.64	7.11	1694.28	6.89	1694.24	6.89	-0.04	0
113	247	134	21	3952	0.992772	758.2	0.521255	1450.41	43.57	0	7	1706.82	6.91	1705.75	6.91	-1.07	-0.06
113	248	135	22	3968	0.992131	759.75	0.522177	1448.96	47.62	-0.64	6.89	1717.92	6.93	1717.34	6.92	-0.58	-0.03
113	249	136	23	3984	0.991468	761.28	0.523092	1447.53	51.84	0	6.78	1730.13	6.95	1728.54	6.94	-1.58	-0.09
113	250	137	24	4000	0.990784	762.79	0.524	1446.14	56.22	-0.63	6.68	1740.9	6.96	1739.83	6.96	-1.07	-0.06
113	251	138	25	4016	0.99008	764.28	0.5249	1444.76	60.76	0	6.58	1752.77	6.98	1750.73	6.98	-2.04	-0.12
113	252	139	26	4032	0.989355	765.75	0.525794	1443.42	65.46	-0.63	6.48	1763.22	7	1761.72	6.99	-1.5	-0.09
113	253	140	27	4048	0.988611	767.2	0.52668	1442.1	70.32	0	6.39	1774.77	7.01	1772.32	7.01	-2.45	-0.14
113	254	141	28	4064	0.987848	768.62	0.527559	1440.81	75.32	-0.63	6.29	1784.91	7.03	1783.02	7.02	-1.89	-0.11
113	255	142	29	4080	0.987067	770.03	0.528431	1439.54	80.49	0	6.2	1796.15	7.04	1793.33	7.03	-2.82	-0.16
113	256	143	30	4096	0.986267	771.42	0.529297	1438.29	85.8	-0.62	6.11	1805.98	7.05	1803.74	7.05	-2.24	-0.12
113	257	144	31	4112	0.98545	772.78	0.530156	1437.07	91.26	0	6.03	1816.91	7.07	1813.77	7.06	-3.15	-0.17
113	258	145	32	4128	0.984616	774.13	0.531008	1435.88	96.86	-0.62	5.94	1826.44	7.08	1823.9	7.07	-2.54	-0.14
113	259	146	33	4144	0.983766	775.46	0.531853	1434.7	102.62	0	5.86	1837.07	7.09	1833.64	7.08	-3.43	-0.19
113	260	147	34	4160	0.982899	776.77	0.532692	1433.56	108.51	-0.62	5.77	1846.32	7.1	1843.5	7.09	-2.81	-0.15
113	261	148	35	4176	0.982017	778.06	0.533525	1432.43	114.55	0	5.69	1856.65	7.11	1852.97	7.1	-3.68	-0.2
113	262	149	36	4192	0.98112	779.34	0.534351	1431.32	120.73	-0.62	5.62	1865.61	7.12	1862.57	7.11	-3.04	-0.16
113	263	150	37	4208	0.980208	780.59	0.535171	1430.24	127.05	0	5.54	1875.66	7.13	1871.77	7.12	-3.89	-0.21
113	264	151	38	4224	0.979281	781.83	0.535985	1429.18	133.5	-0.62	5.46	1884.34	7.14	1881.1	7.13	-3.24	-0.17
113	265	152	39	4240	0.978341	783.05	0.536792	1428.14	140.09	0	5.39	1894.11	7.15	1890.04	7.13	-4.07	-0.22
113	266	153	40	4256	0.977387	784.25	0.537594	1427.12	146.81	-0.61	5.32	1902.51	7.15	1899.11	7.14	-3.4	-0.18
113	267	154	41	4272	0.97642	785.44	0.53839	1426.13	153.67	0	5.25	1912.01	7.16	1907.79	7.15	-4.22	-0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
113	268	155	42	4288	0.97544	786.61	0.539179	1425.15	160.66	-0.61	5.18	1920.15	7.16	1916.61	7.15	-3.54	-0.18
113	269	156	43	4304	0.974448	787.76	0.539963	1424.19	167.78	0	5.11	1929.38	7.17	1925.04	7.16	-4.34	-0.23
113	270	157	44	4320	0.973443	788.9	0.540741	1423.25	175.02	-0.61	5.04	1937.26	7.18	1933.62	7.16	-3.64	-0.19
113	271	158	45	4336	0.972427	790.02	0.541513	1422.33	182.4	0	4.98	1946.23	7.18	1941.8	7.17	-4.43	-0.23
113	272	159	46	4352	0.971399	791.13	0.542279	1421.43	189.89	-0.61	4.91	1953.86	7.18	1950.13	7.17	-3.73	-0.19
113	273	160	47	4368	0.970361	792.22	0.54304	1420.55	197.52	0	4.85	1962.57	7.19	1958.07	7.17	-4.5	-0.23
113	274	161	48	4384	0.969311	793.29	0.543796	1419.69	205.26	-0.6	4.79	1969.95	7.19	1966.16	7.18	-3.78	-0.19
113	275	162	49	4400	0.968251	794.35	0.544545	1418.84	213.13	0	4.73	1978.41	7.19	1973.87	7.18	-4.54	-0.23
113	276	163	50	4416	0.967181	795.39	0.54529	1418.02	221.12	-0.6	4.67	1985.54	7.19	1981.73	7.18	-3.82	-0.19
113	277	164	51	4432	0.966101	796.42	0.546029	1417.21	229.22	0	4.61	1993.76	7.2	1989.2	7.18	-4.57	-0.23
113	278	165	52	4448	0.965012	797.44	0.546763	1416.42	237.44	-0.6	4.56	2000.66	7.2	1996.83	7.18	-3.83	-0.19
113	279	166	53	4464	0.963914	798.44	0.547491	1415.64	245.78	0	4.5	2008.64	7.2	2004.07	7.18	-4.57	-0.23
113	280	167	54	4480	0.962806	799.43	0.548214	1414.88	254.24	-0.6	4.45	2015.3	7.2	2011.48	7.18	-3.83	-0.19
113	281	168	55	4496	0.96169	800.4	0.548932	1414.14	262.81	0	4.4	2023.05	7.2	2018.49	7.18	-4.55	-0.23
113	282	169	56	4512	0.960565	801.36	0.549645	1413.41	271.49	-0.6	4.34	2029.48	7.2	2025.68	7.18	-3.8	-0.19
113	283	170	57	4528	0.959433	802.31	0.550353	1412.7	280.28	0	4.29	2037	7.2	2032.48	7.18	-4.52	-0.22
113	284	171	58	4544	0.958292	803.24	0.551056	1412.01	289.18	-0.59	4.24	2043.21	7.19	2039.45	7.18	-3.76	-0.18
113	285	172	59	4560	0.957144	804.16	0.551754	1411.33	298.19	0	4.19	2050.51	7.19	2046.03	7.18	-4.47	-0.22
113	286	173	60	4576	0.955988	805.07	0.552448	1410.67	307.31	-0.59	4.14	2056.5	7.19	2052.79	7.18	-3.71	-0.18
113	287	174	61	4592	0.954825	805.96	0.553136	1410.02	316.54	0	4.1	2063.57	7.19	2059.16	7.17	-4.41	-0.21
113	288	175	62	4608	0.953655	806.84	0.553819	1409.39	325.87	-0.59	4.05	2069.36	7.19	2065.72	7.17	-3.64	-0.18
113	289	176	63	4624	0.952479	807.71	0.554498	1408.77	335.31	0	4	2076.21	7.18	2071.88	7.17	-4.34	-0.21
113	290	177	64	4640	0.951296	808.57	0.555172	1408.17	344.85	-0.59	3.96	2081.79	7.18	2078.23	7.17	-3.56	-0.17
113	291	178	65	4656	0.950107	809.41	0.555842	1407.58	354.49	0	3.91	2088.43	7.18	2084.18	7.16	-4.25	-0.2
113	292	179	66	4672	0.948912	810.24	0.556507	1407	364.23	-0.59	3.87	2093.8	7.17	2090.33	7.16	-3.47	-0.17
113	293	180	67	4688	0.947711	811.07	0.557167	1406.44	374.08	0	3.83	2100.24	7.17	2096.09	7.15	-4.15	-0.2
113	294	181	68	4704	0.946504	811.87	0.557823	1405.89	384.02	-0.58	3.79	2105.41	7.16	2102.04	7.15	-3.37	-0.16
113	295	182	69	4720	0.945292	812.67	0.558475	1405.36	394.06	0	3.74	2111.65	7.16	2107.6	7.14	-4.04	-0.19
113	296	183	70	4736	0.944074	813.46	0.559122	1404.84	404.2	-0.58	3.7	2116.62	7.15	2113.36	7.14	-3.26	-0.15
113	297	184	71	4752	0.942852	814.23	0.559764	1404.33	414.44	0	3.66	2122.66	7.15	2118.73	7.13	-3.93	-0.19
113	298	185	72	4768	0.941624	815	0.560403	1403.83	424.77	-0.58	3.62	2127.44	7.14	2124.3	7.13	-3.14	-0.15
113	299	186	73	4784	0.940392	815.75	0.561037	1403.35	435.2	0	3.59	2133.29	7.13	2129.48	7.12	-3.81	-0.18
113	300	187	74	4800	0.939156	816.49	0.561667	1402.88	445.72	-0.58	3.55	2137.88	7.13	2134.86	7.12	-3.02	-0.14
113	301	188	75	4816	0.937915	817.23	0.562292	1402.42	456.33	0	3.51	2143.53	7.12	2139.86	7.11	-3.68	-0.17
113	302	189	76	4832	0.936669	817.95	0.562914	1401.98	467.03	-0.58	3.48	2147.94	7.11	2145.06	7.1	-2.89	-0.13
113	303	190	77	4848	0.93542	818.66	0.563531	1401.54	477.83	0	3.44	2153.41	7.11	2149.87	7.1	-3.54	-0.16
113	304	191	78	4864	0.934167	819.36	0.564145	1401.12	488.71	-0.57	3.4	2157.64	7.1	2154.89	7.09	-2.75	-0.13
113	305	192	79	4880	0.932911	820.05	0.564754	1400.71	499.68	0	3.37	2162.92	7.09	2159.52	7.08	-3.4	-0.16
113	306	193	80	4896	0.93165	820.73	0.565359	1400.31	510.74	-0.57	3.34	2166.97	7.08	2164.36	7.07	-2.61	-0.12
113	307	194	81	4912	0.930387	821.41	0.565961	1399.92	521.89	0	3.3	2172.08	7.08	2168.82	7.06	-3.26	-0.15
113	308	195	82	4928	0.92912	822.07	0.566558	1399.55	533.13	-0.57	3.27	2175.96	7.06	2173.49	7.06	-2.47	-0.11
113	309	196	83	4944	0.92785	822.72	0.567152	1399.18	544.45	0	3.24	2180.89	7.06	2177.77	7.05	-3.12	-0.14
113	310	197	84	4960	0.926576	823.36	0.567742	1398.83	555.85	-0.57	3.2	2184.59	7.05	2182.27	7.04	-2.32	-0.11
113	311	198	85	4976	0.925301	824	0.568328	1398.48	567.34	0	3.17	2189.35	7.04	2186.38	7.03	-2.97	-0.14
113	312	199	86	4992	0.924022	824.62	0.56891	1398.15	578.91	-0.57	3.14	2192.89	7.03	2190.72	7.02	-2.17	-0.1
113	313	200	87	5008	0.922741	825.24	0.569489	1397.83	590.57	0	3.11	2197.48	7.02	2194.66	7.01	-2.82	-0.13

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113	314	201	88	5024	0.921457	825.84	0.570064	1397.52	602.31	-0.56	3.08	2200.86	7.01	2198.83	7	-2.03	-0.09
113	315	202	89	5040	0.920171	826.44	0.570635	1397.21	614.12	0	3.05	2205.28	7	2202.61	6.99	-2.67	-0.12
113	316	203	90	5056	0.918883	827.03	0.571203	1396.92	626.02	-0.56	3.02	2208.49	6.99	2206.61	6.98	-1.88	-0.09
113	317	204	91	5072	0.917593	827.61	0.571767	1396.64	638	0	2.99	2212.75	6.98	2210.23	6.97	-2.52	-0.11
113	318	205	92	5088	0.916301	828.18	0.572327	1396.37	650.05	-0.56	2.97	2215.81	6.97	2214.08	6.96	-1.73	-0.08
113	319	206	93	5104	0.915007	828.74	0.572884	1396.1	662.18	0	2.94	2219.91	6.96	2217.54	6.95	-2.37	-0.11
113	320	207	94	5120	0.913711	829.3	0.573438	1395.85	674.39	-0.56	2.91	2222.81	6.95	2221.23	6.94	-1.59	-0.07
113	321	208	95	5136	0.912414	829.84	0.573988	1395.61	686.68	0	2.89	2226.76	6.94	2224.53	6.93	-2.23	-0.1
113	322	209	96	5152	0.911115	830.38	0.574534	1395.37	699.04	-0.56	2.86	2229.51	6.92	2228.07	6.92	-1.44	-0.06
113	323	210	97	5168	0.909814	830.91	0.575077	1395.15	711.48	0	2.83	2233.3	6.91	2231.21	6.91	-2.08	-0.09
113	324	211	98	5184	0.908512	831.44	0.575617	1394.93	723.99	-0.56	2.81	2235.9	6.9	2234.6	6.9	-1.3	-0.06
113	325	212	99	5200	0.907209	831.95	0.576154	1394.72	736.57	0	2.78	2239.54	6.89	2237.6	6.88	-1.94	-0.09
113	326	213	100	5216	0.905905	832.46	0.576687	1394.52	749.23	-0.55	2.76	2241.99	6.88	2240.83	6.87	-1.16	-0.05
113	327	214	101	5232	0.9046	832.96	0.577217	1394.33	761.96	0	2.73	2245.48	6.87	2243.68	6.86	-1.8	-0.08
113	328	215	102	5248	0.903294	833.45	0.577744	1394.15	774.76	-0.55	2.71	2247.79	6.85	2246.77	6.85	-1.02	-0.05
113	329	216	103	5264	0.901987	833.94	0.578267	1393.98	787.63	0	2.69	2251.14	6.84	2249.47	6.84	-1.67	-0.07
113	330	217	104	5280	0.90068	834.41	0.578788	1393.81	800.57	-0.55	2.66	2253.31	6.83	2252.42	6.83	-0.89	-0.04
113	331	218	105	5296	0.899371	834.88	0.579305	1393.66	813.58	0	2.64	2256.51	6.82	2254.98	6.81	-1.54	-0.07
113	332	219	106	5312	0.898062	835.35	0.579819	1393.51	826.67	-0.55	2.62	2258.55	6.8	2257.78	6.8	-0.76	-0.03
113	333	220	107	5328	0.896753	835.8	0.58033	1393.37	839.81	0	2.59	2261.61	6.79	2260.2	6.79	-1.41	-0.06
113	334	221	108	5344	0.895443	836.25	0.580838	1393.24	853.03	-0.55	2.57	2263.51	6.78	2262.86	6.78	-0.64	-0.03
113	335	222	109	5360	0.894132	836.69	0.581343	1393.11	866.32	0	2.55	2266.43	6.77	2265.14	6.76	-1.29	-0.06
113	336	223	110	5376	0.892822	837.13	0.581845	1392.99	879.67	-0.55	2.53	2268.19	6.75	2267.67	6.75	-0.52	-0.02
113	337	224	111	5392	0.891511	837.56	0.582344	1392.89	893.08	0	2.51	2270.98	6.74	2269.81	6.74	-1.17	-0.05
113	338	225	112	5408	0.8902	837.98	0.58284	1392.78	906.56	-0.54	2.49	2272.61	6.72	2272.2	6.72	-0.41	-0.02
113	339	226	113	5424	0.888889	838.4	0.583333	1392.69	920.11	0	2.47	2275.27	6.71	2274.21	6.71	-1.06	-0.05
113	340	227	114	5440	0.887578	838.8	0.583824	1392.6	933.72	-0.54	2.45	2276.77	6.7	2276.47	6.7	-0.31	-0.01
113	341	228	115	5456	0.886267	839.21	0.584311	1392.52	947.4	0	2.43	2279.3	6.68	2278.34	6.68	-0.96	-0.04
113	342	229	116	5472	0.884956	839.6	0.584795	1392.45	961.13	-0.54	2.41	2280.68	6.67	2280.47	6.67	-0.21	-0.01
113	343	230	117	5488	0.883645	839.99	0.585277	1392.39	974.94	0	2.39	2283.07	6.66	2282.21	6.65	-0.87	-0.04
113	344	231	118	5504	0.882335	840.38	0.585756	1392.33	988.8	-0.54	2.37	2284.33	6.64	2284.21	6.64	-0.12	-0.01
113	345	232	119	5520	0.881025	840.75	0.586232	1392.28	1002.72	0	2.35	2286.6	6.63	2285.82	6.63	-0.78	-0.03
113	346	233	120	5536	0.879715	841.13	0.586705	1392.23	1016.71	-0.54	2.33	2287.73	6.61	2287.69	6.61	-0.04	0
113	347	234	121	5552	0.878406	841.49	0.587176	1392.19	1030.75	0	2.31	2289.88	6.6	2289.18	6.6	-0.7	-0.03
113	348	235	122	5568	0.877097	841.85	0.587644	1392.16	1044.86	-0.54	2.29	2290.89	6.58	2290.93	6.58	0.04	0
113	349	236	123	5584	0.875789	842.21	0.588109	1392.14	1059.02	0	2.28	2292.91	6.57	2292.29	6.57	-0.62	-0.03
113	350	237	124	5600	0.874482	842.55	0.588571	1392.12	1073.24	-0.53	2.26	2293.81	6.55	2293.91	6.55	0.11	0
113	351	238	125	5616	0.873175	842.9	0.589031	1392.11	1087.53	0	2.24	2295.71	6.54	2295.15	6.54	-0.56	-0.02
113	352	239	126	5632	0.871869	843.23	0.589489	1392.1	1101.87	-0.53	2.22	2296.49	6.52	2296.66	6.52	0.17	0.01
113	353	240	127	5648	0.870563	843.56	0.589943	1392.1	1116.26	0	2.21	2298.28	6.51	2297.77	6.51	-0.5	-0.02
113	354	241	128	5664	0.869259	843.89	0.590395	1392.11	1130.72	-0.53	2.19	2298.94	6.49	2299.16	6.49	0.22	0.01
113	355	242	129	5680	0.867955	844.21	0.590845	1392.12	1145.23	0	2.17	2300.61	6.48	2300.16	6.48	-0.45	-0.02
113	356	243	130	5696	0.866652	844.53	0.591292	1392.14	1159.79	-0.53	2.16	2301.16	6.46	2301.42	6.46	0.26	0.01
113	357	244	131	5712	0.86535	844.84	0.591737	1392.17	1174.42	0	2.14	2302.72	6.45	2302.3	6.45	-0.42	-0.02
113	358	245	132	5728	0.864049	845.14	0.592179	1392.2	1189.09	-0.53	2.13	2303.16	6.43	2303.46	6.43	0.29	0.01
113	359	246	133	5744	0.862749	845.44	0.592618	1392.24	1203.83	0	2.11	2304.61	6.42	2304.22	6.42	-0.39	-0.02

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113	360	247	134	5760	0.861451	845.73	0.593056	1392.28	1218.61	-0.53	2.09	2304.94	6.4	2305.26	6.4	0.31	0.01
113	361	248	135	5776	0.860153	846.02	0.59349	1392.33	1233.45	0	2.08	2306.28	6.39	2305.91	6.39	-0.37	-0.02
113	362	249	136	5792	0.858857	846.31	0.593923	1392.38	1248.34	-0.53	2.06	2306.51	6.37	2306.83	6.37	0.33	0.01
113	363	250	137	5808	0.857561	846.59	0.594353	1392.44	1263.29	0	2.05	2307.73	6.36	2307.37	6.36	-0.36	-0.02
113	364	251	138	5824	0.856267	846.86	0.59478	1392.51	1278.29	-0.52	2.03	2307.86	6.34	2308.19	6.34	0.33	0.01
113	365	252	139	5840	0.854975	847.13	0.595205	1392.58	1293.34	0	2.02	2308.98	6.33	2308.61	6.32	-0.36	-0.02
113	366	253	140	5856	0.853683	847.4	0.595628	1392.65	1308.44	-0.52	2.01	2309	6.31	2309.32	6.31	0.32	0.01
113	367	254	141	5872	0.852393	847.66	0.596049	1392.74	1323.59	0	1.99	2310.01	6.29	2309.64	6.29	-0.37	-0.02
113	368	255	142	5888	0.851105	847.91	0.596467	1392.82	1338.79	-0.52	1.98	2309.93	6.28	2310.24	6.28	0.3	0.01
113	369	256	143	5904	0.849817	848.16	0.596883	1392.91	1354.05	0	1.96	2310.84	6.26	2310.45	6.26	-0.4	-0.02
113	370	257	144	5920	0.848532	848.41	0.597297	1393.01	1369.35	-0.52	1.95	2310.66	6.25	2310.94	6.25	0.28	0.01
113	371	258	145	5936	0.847248	848.65	0.597709	1393.11	1384.7	0	1.94	2311.47	6.23	2311.05	6.23	-0.43	-0.02
113	372	259	146	5952	0.845965	848.89	0.598118	1393.22	1400.1	-0.52	1.92	2311.2	6.21	2311.43	6.21	0.24	0.01
113	373	260	147	5968	0.844684	849.12	0.598525	1393.33	1415.55	0	1.91	2311.91	6.2	2311.44	6.2	-0.47	-0.02
113	374	261	148	5984	0.843404	849.35	0.59893	1393.45	1431.05	-0.52	1.9	2311.53	6.18	2311.72	6.18	0.19	0.01
113	375	262	149	6000	0.842126	849.57	0.599333	1393.57	1446.6	0	1.88	2312.15	6.17	2311.62	6.16	-0.53	-0.02
113	376	263	150	6016	0.84085	849.79	0.599734	1393.7	1462.19	-0.52	1.87	2311.68	6.15	2311.8	6.15	0.12	0.01
113	377	264	151	6032	0.839575	850.01	0.600133	1393.83	1477.83	0	1.86	2312.19	6.13	2311.6	6.13	-0.59	-0.03
113	378	265	152	6048	0.838302	850.22	0.600529	1393.96	1493.52	-0.51	1.85	2311.63	6.12	2311.68	6.12	0.05	0
113	379	266	153	6064	0.837031	850.43	0.600923	1394.1	1509.25	0	1.84	2312.05	6.1	2311.38	6.1	-0.67	-0.03
113	380	267	154	6080	0.835762	850.63	0.601316	1394.25	1525.03	-0.51	1.82	2311.4	6.08	2311.36	6.08	-0.04	0
113	381	268	155	6096	0.834494	850.83	0.601706	1394.4	1540.86	0	1.81	2311.72	6.07	2310.96	6.07	-0.76	-0.03
113	382	269	156	6112	0.833228	851.02	0.602094	1394.55	1556.73	-0.51	1.8	2310.98	6.05	2310.85	6.05	-0.13	-0.01
113	383	270	157	6128	0.831964	851.21	0.60248	1394.71	1572.65	0	1.79	2311.22	6.03	2310.35	6.03	-0.86	-0.04
113	384	271	158	6144	0.830702	851.4	0.602865	1394.87	1588.61	-0.51	1.78	2310.38	6.02	2310.14	6.02	-0.24	-0.01
113	385	272	159	6160	0.829442	851.59	0.603247	1395.04	1604.61	0	1.76	2310.53	6	2309.55	6	-0.98	-0.04
113	386	273	160	6176	0.828183	851.76	0.603627	1395.21	1620.66	-0.51	1.75	2309.61	5.98	2309.24	5.98	-0.36	-0.02
113	387	274	161	6192	0.826927	851.94	0.604005	1395.39	1636.75	0	1.74	2309.66	5.97	2308.56	5.97	-1.1	-0.05
113	388	275	162	6208	0.825672	852.11	0.604381	1395.57	1652.89	-0.51	1.73	2308.65	5.95	2308.16	5.95	-0.5	-0.02
113	389	276	163	6224	0.82442	852.28	0.604756	1395.75	1669.07	0	1.72	2308.62	5.93	2307.38	5.93	-1.24	-0.05
113	390	277	164	6240	0.823169	852.45	0.605128	1395.94	1685.29	-0.51	1.71	2307.53	5.92	2306.89	5.92	-0.64	-0.03
113	391	278	165	6256	0.82192	852.61	0.605499	1396.13	1701.55	0	1.7	2307.41	5.9	2306.01	5.9	-1.39	-0.06
113	392	279	166	6272	0.820674	852.77	0.605867	1396.33	1717.86	-0.51	1.69	2306.23	5.88	2305.43	5.88	-0.8	-0.03
113	393	280	167	6288	0.819429	852.92	0.606234	1396.53	1734.2	0	1.68	2306.03	5.87	2304.47	5.86	-1.56	-0.07
113	394	281	168	6304	0.818187	853.07	0.606599	1396.73	1750.59	-0.5	1.67	2304.77	5.85	2303.8	5.85	-0.97	-0.04
113	395	282	169	6320	0.816946	853.22	0.606962	1396.94	1767.02	0	1.66	2304.48	5.83	2302.75	5.83	-1.73	-0.08
113	396	283	170	6336	0.815708	853.36	0.607323	1397.15	1783.49	-0.5	1.65	2303.14	5.82	2301.99	5.81	-1.15	-0.05
113	397	284	171	6352	0.814471	853.5	0.607683	1397.37	1800	0	1.64	2302.77	5.8	2300.85	5.8	-1.92	-0.08
113	398	285	172	6368	0.813237	853.64	0.60804	1397.59	1816.55	-0.5	1.63	2301.35	5.78	2300	5.78	-1.35	-0.06
113	399	286	173	6384	0.812005	853.77	0.608396	1397.81	1833.14	0	1.62	2300.9	5.77	2298.77	5.76	-2.12	-0.09
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
114	227	113	-1	3632	0.999981	721.9	0.498899	1512.62	0.11	0	9.82	1407.19	6.2	1416.46	6.24	9.27	0.65
114	228	114	0	3648	1	724.03	0.5	1510.39	0	0.66	10	1424.24	6.25	1432.78	6.28	8.54	0.6
114	229	115	1	3664	0.999981	726.13	0.501092	1508.2	0.11	0	9.82	1439.37	6.29	1446.97	6.32	7.6	0.53

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
114	230	116	2	3680	0.999924	728.21	0.502174	1506.06	0.42	0.66	9.64	1455.61	6.33	1462.9	6.36	7.29	0.5
114	231	117	3	3696	0.999831	730.25	0.503247	1503.95	0.95	0	9.47	1470.32	6.37	1476.71	6.39	6.39	0.43
114	232	118	4	3712	0.999703	732.26	0.50431	1501.89	1.68	0.66	9.3	1486.13	6.41	1492.25	6.43	6.12	0.41
114	233	119	5	3728	0.99954	734.24	0.505365	1499.86	2.62	0	9.14	1500.42	6.44	1505.69	6.46	5.27	0.35
114	234	120	6	3744	0.999343	736.2	0.50641	1497.87	3.75	0.65	8.98	1515.81	6.48	1520.85	6.5	5.03	0.33
114	235	121	7	3760	0.999113	738.12	0.507447	1495.92	5.09	0	8.82	1529.7	6.51	1533.93	6.53	4.23	0.28
114	236	122	8	3776	0.998851	740.02	0.508475	1494	6.62	0.65	8.67	1544.69	6.55	1548.72	6.56	4.03	0.26
114	237	123	9	3792	0.998558	741.89	0.509494	1492.12	8.34	0	8.53	1558.17	6.57	1561.44	6.59	3.27	0.21
114	238	124	10	3808	0.998235	743.74	0.510504	1490.28	10.25	0.65	8.38	1572.76	6.61	1575.88	6.62	3.11	0.2
114	239	125	11	3824	0.997882	745.55	0.511506	1488.47	12.35	0	8.24	1585.87	6.64	1588.25	6.65	2.39	0.15
114	240	126	12	3840	0.9975	747.35	0.5125	1486.69	14.64	0.65	8.11	1600.07	6.67	1602.34	6.68	2.26	0.14
114	241	127	13	3856	0.99709	749.11	0.513485	1484.95	17.11	0	7.97	1612.8	6.69	1614.38	6.7	1.58	0.1
114	242	128	14	3872	0.996653	750.85	0.514463	1483.24	19.76	0.64	7.84	1626.63	6.72	1628.11	6.73	1.48	0.09
114	243	129	15	3888	0.99619	752.57	0.515432	1481.56	22.59	0	7.72	1638.99	6.74	1639.82	6.75	0.83	0.05
114	244	130	16	3904	0.9957	754.26	0.516393	1479.92	25.6	0.64	7.59	1652.45	6.77	1653.22	6.78	0.77	0.05
114	245	131	17	3920	0.995185	755.93	0.517347	1478.3	28.78	0	7.47	1664.45	6.79	1664.61	6.79	0.15	0.01
114	246	132	18	3936	0.994646	757.58	0.518293	1476.72	32.14	0.64	7.35	1677.56	6.82	1677.68	6.82	0.12	0.01
114	247	133	19	3952	0.994083	759.2	0.519231	1475.17	35.66	0	7.24	1689.21	6.84	1688.75	6.84	-0.47	-0.03
114	248	134	20	3968	0.993496	760.8	0.520161	1473.64	39.36	0.64	7.13	1701.97	6.86	1701.49	6.86	-0.47	-0.03
114	249	135	21	3984	0.992887	762.37	0.521084	1472.14	43.22	0	7.02	1713.28	6.88	1712.25	6.88	-1.03	-0.06
114	250	136	22	4000	0.992256	763.93	0.522	1470.68	47.24	0.63	6.91	1725.7	6.9	1724.69	6.9	-1.01	-0.06
114	251	137	23	4016	0.991603	765.46	0.522908	1469.24	51.43	0	6.81	1736.68	6.92	1735.14	6.91	-1.54	-0.09
114	252	138	24	4032	0.99093	766.97	0.52381	1467.82	55.78	0.63	6.7	1748.76	6.94	1747.27	6.93	-1.5	-0.09
114	253	139	25	4048	0.990236	768.46	0.524704	1466.44	60.28	0	6.6	1759.42	6.95	1757.42	6.95	-2	-0.11
114	254	140	26	4064	0.989522	769.93	0.525591	1465.08	64.95	0.63	6.51	1771.18	6.97	1769.25	6.97	-1.93	-0.11
114	255	141	27	4080	0.988789	771.37	0.526471	1463.75	69.77	0	6.41	1781.52	6.99	1779.12	6.98	-2.41	-0.14
114	256	142	28	4096	0.988037	772.8	0.527344	1462.44	74.74	0.62	6.32	1792.96	7	1790.64	6.99	-2.32	-0.13
114	257	143	29	4112	0.987267	774.21	0.52821	1461.16	79.86	0	6.23	1803	7.02	1800.23	7	-2.77	-0.15
114	258	144	30	4128	0.986479	775.6	0.52907	1459.9	85.13	0.62	6.14	1814.13	7.03	1811.46	7.02	-2.67	-0.15
114	259	145	31	4144	0.985674	776.97	0.529923	1458.67	90.55	0	6.05	1823.86	7.04	1820.77	7.03	-3.09	-0.17
114	260	146	32	4160	0.984852	778.31	0.530769	1457.46	96.12	0.62	5.96	1834.69	7.06	1831.72	7.05	-2.97	-0.16
114	261	147	33	4176	0.984014	779.64	0.531609	1456.27	101.83	0	5.88	1844.13	7.07	1840.76	7.05	-3.38	-0.18
114	262	148	34	4192	0.983159	780.96	0.532443	1455.11	107.69	0.62	5.8	1854.67	7.08	1851.43	7.07	-3.24	-0.17
114	263	149	35	4208	0.98229	782.25	0.53327	1453.97	113.68	0	5.72	1863.82	7.09	1860.2	7.07	-3.62	-0.19
114	264	150	36	4224	0.981405	783.52	0.534091	1452.85	119.82	0.62	5.64	1874.06	7.1	1870.6	7.09	-3.46	-0.19
114	265	151	37	4240	0.980506	784.78	0.534906	1451.75	126.09	0	5.56	1882.94	7.11	1879.11	7.09	-3.83	-0.2
114	266	152	38	4256	0.979592	786.02	0.535714	1450.68	132.5	0.61	5.49	1892.9	7.12	1889.24	7.1	-3.66	-0.19
114	267	153	39	4272	0.978664	787.24	0.536517	1449.63	139.04	0	5.41	1901.5	7.12	1897.49	7.11	-4.01	-0.21
114	268	154	40	4288	0.977723	788.45	0.537313	1448.59	145.72	0.61	5.34	1911.19	7.13	1907.36	7.12	-3.82	-0.2
114	269	155	41	4304	0.976769	789.64	0.538104	1447.58	152.53	0	5.27	1919.52	7.14	1915.36	7.12	-4.15	-0.22
114	270	156	42	4320	0.975802	790.81	0.538889	1446.59	159.47	0.61	5.2	1928.93	7.14	1924.98	7.13	-3.95	-0.21
114	271	157	43	4336	0.974823	791.97	0.539668	1445.62	166.54	0	5.14	1937	7.15	1932.73	7.13	-4.27	-0.22
114	272	158	44	4352	0.973832	793.11	0.540441	1444.67	173.74	0.61	5.07	1946.16	7.15	1942.1	7.14	-4.06	-0.21
114	273	159	45	4368	0.972829	794.23	0.541209	1443.74	181.07	0	5	1953.97	7.16	1949.61	7.14	-4.36	-0.22
114	274	160	46	4384	0.971815	795.34	0.541971	1442.83	188.51	0.6	4.94	1962.87	7.16	1958.73	7.15	-4.14	-0.21
114	275	161	47	4400	0.97079	796.43	0.542727	1441.93	196.09	0	4.88	1970.43	7.17	1966	7.15	-4.43	-0.23

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
114	276	162	48	4416	0.969754	797.51	0.543478	1441.06	203.78	0.6	4.82	1979.07	7.17	1974.88	7.16	-4.19	-0.21
114	277	163	49	4432	0.968708	798.57	0.544224	1440.2	211.6	0	4.76	1986.39	7.17	1981.92	7.15	-4.47	-0.23
114	278	164	50	4448	0.967652	799.62	0.544964	1439.36	219.53	0.6	4.7	1994.79	7.18	1990.57	7.16	-4.22	-0.21
114	279	165	51	4464	0.966586	800.65	0.545699	1438.54	227.58	0	4.64	2001.87	7.18	1997.38	7.16	-4.49	-0.22
114	280	166	52	4480	0.96551	801.67	0.546429	1437.73	235.76	0.6	4.58	2010.02	7.18	2005.79	7.16	-4.23	-0.21
114	281	167	53	4496	0.964425	802.68	0.547153	1436.94	244.04	0	4.53	2016.86	7.18	2012.38	7.16	-4.49	-0.22
114	282	168	54	4512	0.963332	803.67	0.547872	1436.17	252.44	0.6	4.47	2024.78	7.18	2020.56	7.17	-4.22	-0.21
114	283	169	55	4528	0.96223	804.65	0.548587	1435.42	260.96	0	4.42	2031.4	7.18	2026.93	7.16	-4.47	-0.22
114	284	170	56	4544	0.961119	805.61	0.549296	1434.68	269.58	0.59	4.37	2039.09	7.18	2034.89	7.17	-4.2	-0.21
114	285	171	57	4560	0.96	806.56	0.55	1433.96	278.32	0	4.32	2045.48	7.18	2041.05	7.16	-4.43	-0.22
114	286	172	58	4576	0.958873	807.5	0.550699	1433.25	287.17	0.59	4.27	2052.94	7.18	2048.79	7.16	-4.15	-0.2
114	287	173	59	4592	0.957739	808.42	0.551394	1432.56	296.12	0	4.22	2059.11	7.17	2054.73	7.16	-4.38	-0.21
114	288	174	60	4608	0.956597	809.33	0.552083	1431.89	305.19	0.59	4.17	2066.35	7.17	2062.26	7.16	-4.09	-0.2
114	289	175	61	4624	0.955448	810.23	0.552768	1431.23	314.36	0	4.12	2072.31	7.17	2068	7.16	-4.31	-0.21
114	290	176	62	4640	0.954293	811.11	0.553448	1430.59	323.63	0.59	4.07	2079.33	7.17	2075.31	7.16	-4.02	-0.19
114	291	177	63	4656	0.95313	811.99	0.554124	1429.96	333.01	0	4.03	2085.07	7.17	2080.84	7.15	-4.23	-0.2
114	292	178	64	4672	0.951961	812.85	0.554795	1429.34	342.49	0.59	3.98	2091.89	7.16	2087.95	7.15	-3.94	-0.19
114	293	179	65	4688	0.950786	813.7	0.555461	1428.74	352.08	0	3.94	2097.42	7.16	2093.29	7.14	-4.14	-0.2
114	294	180	66	4704	0.949604	814.53	0.556122	1428.15	361.77	0.58	3.9	2104.03	7.16	2100.19	7.14	-3.84	-0.18
114	295	181	67	4720	0.948417	815.36	0.55678	1427.58	371.55	0	3.85	2109.36	7.15	2105.33	7.14	-4.03	-0.19
114	296	182	68	4736	0.947224	816.17	0.557432	1427.02	381.44	0.58	3.81	2115.76	7.15	2112.03	7.14	-3.73	-0.18
114	297	183	69	4752	0.946026	816.98	0.558081	1426.47	391.42	0	3.77	2120.9	7.14	2116.98	7.13	-3.92	-0.19
114	298	184	70	4768	0.944822	817.77	0.558725	1425.94	401.5	0.58	3.73	2127.1	7.14	2123.48	7.13	-3.62	-0.17
114	299	185	71	4784	0.943614	818.55	0.559365	1425.42	411.68	0	3.69	2132.04	7.13	2128.24	7.12	-3.8	-0.18
114	300	186	72	4800	0.9424	819.32	0.56	1424.92	421.95	0.58	3.65	2138.05	7.13	2134.55	7.12	-3.49	-0.16
114	301	187	73	4816	0.941182	820.07	0.560631	1424.42	432.31	0	3.61	2142.8	7.12	2139.13	7.11	-3.67	-0.17
114	302	188	74	4832	0.939959	820.82	0.561258	1423.94	442.77	0.58	3.57	2148.61	7.11	2145.25	7.1	-3.36	-0.16
114	303	189	75	4848	0.938731	821.56	0.561881	1423.47	453.33	0	3.54	2153.18	7.11	2149.64	7.09	-3.54	-0.16
114	304	190	76	4864	0.9375	822.28	0.5625	1423.02	463.97	0.57	3.5	2158.8	7.1	2155.58	7.09	-3.22	-0.15
114	305	191	77	4880	0.936264	823	0.563115	1422.57	474.7	0	3.46	2163.19	7.09	2159.79	7.08	-3.39	-0.16
114	306	192	78	4896	0.935025	823.71	0.563725	1422.14	485.53	0.57	3.43	2168.63	7.09	2165.55	7.08	-3.08	-0.14
114	307	193	79	4912	0.933782	824.4	0.564332	1421.72	496.44	0	3.39	2172.83	7.08	2169.59	7.07	-3.25	-0.15
114	308	194	80	4928	0.932535	825.09	0.564935	1421.31	507.44	0.57	3.36	2178.09	7.07	2175.16	7.06	-2.93	-0.13
114	309	195	81	4944	0.931285	825.77	0.565534	1420.91	518.53	0	3.33	2182.12	7.06	2179.03	7.05	-3.1	-0.14
114	310	196	82	4960	0.930031	826.43	0.566129	1420.52	529.7	0.57	3.29	2187.21	7.06	2184.42	7.05	-2.78	-0.13
114	311	197	83	4976	0.928775	827.09	0.56672	1420.15	540.96	0	3.26	2191.06	7.05	2188.12	7.04	-2.95	-0.13
114	312	198	84	4992	0.927515	827.74	0.567308	1419.78	552.3	0.57	3.23	2195.97	7.04	2193.34	7.03	-2.63	-0.12
114	313	199	85	5008	0.926252	828.38	0.567891	1419.43	563.73	0	3.2	2199.66	7.03	2196.87	7.02	-2.79	-0.13
114	314	200	86	5024	0.924987	829	0.568471	1419.09	575.24	0.56	3.17	2204.4	7.02	2201.92	7.01	-2.47	-0.11
114	315	201	87	5040	0.923719	829.63	0.569048	1418.75	586.83	0	3.13	2207.92	7.01	2205.29	7	-2.63	-0.12
114	316	202	88	5056	0.922448	830.24	0.56962	1418.43	598.51	0.56	3.1	2212.49	7	2210.17	6.99	-2.32	-0.1
114	317	203	89	5072	0.921175	830.84	0.570189	1418.12	610.26	0	3.08	2215.86	6.99	2213.38	6.98	-2.48	-0.11
114	318	204	90	5088	0.9199	831.43	0.570755	1417.82	622.09	0.56	3.05	2220.26	6.98	2218.1	6.98	-2.16	-0.1
114	319	205	91	5104	0.918623	832.02	0.571317	1417.53	634.01	0	3.02	2223.46	6.97	2221.15	6.96	-2.32	-0.1
114	320	206	92	5120	0.917344	832.6	0.571875	1417.25	646	0.56	2.99	2227.71	6.96	2225.7	6.96	-2.01	-0.09
114	321	207	93	5136	0.916063	833.16	0.57243	1416.97	658.07	0	2.96	2230.76	6.95	2228.59	6.94	-2.16	-0.1

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
114	322	208	94	5152	0.91478	833.72	0.572981	1416.71	670.22	0.56	2.93	2234.84	6.94	2232.99	6.93	-1.85	-0.08
114	323	209	95	5168	0.913495	834.28	0.573529	1416.46	682.44	0	2.91	2237.74	6.93	2235.73	6.92	-2.01	-0.09
114	324	210	96	5184	0.912209	834.82	0.574074	1416.21	694.74	0.56	2.88	2241.67	6.92	2239.97	6.91	-1.7	-0.08
114	325	211	97	5200	0.910921	835.36	0.574615	1415.98	707.11	0	2.85	2244.41	6.91	2242.56	6.9	-1.85	-0.08
114	326	212	98	5216	0.909632	835.88	0.575153	1415.75	719.56	0.55	2.83	2248.19	6.9	2246.64	6.89	-1.54	-0.07
114	327	213	99	5232	0.908341	836.4	0.575688	1415.54	732.08	0	2.8	2250.78	6.88	2249.08	6.88	-1.7	-0.08
114	328	214	100	5248	0.907049	836.92	0.57622	1415.33	744.67	0.55	2.78	2254.41	6.87	2253.02	6.87	-1.39	-0.06
114	329	215	101	5264	0.905757	837.42	0.576748	1415.13	757.34	0	2.75	2256.86	6.86	2255.31	6.86	-1.55	-0.07
114	330	216	102	5280	0.904463	837.92	0.577273	1414.94	770.08	0.55	2.73	2260.35	6.85	2259.1	6.85	-1.25	-0.06
114	331	217	103	5296	0.903168	838.41	0.577795	1414.76	782.89	0	2.71	2262.65	6.84	2261.25	6.83	-1.41	-0.06
114	332	218	104	5312	0.901873	838.89	0.578313	1414.58	795.76	0.55	2.68	2265.99	6.83	2264.89	6.82	-1.11	-0.05
114	333	219	105	5328	0.900576	839.37	0.578829	1414.42	808.71	0	2.66	2268.16	6.81	2266.89	6.81	-1.27	-0.06
114	334	220	106	5344	0.899279	839.83	0.579341	1414.26	821.73	0.55	2.64	2271.36	6.8	2270.39	6.8	-0.97	-0.04
114	335	221	107	5360	0.897982	840.3	0.579851	1414.11	834.82	0	2.61	2273.39	6.79	2272.26	6.78	-1.13	-0.05
114	336	222	108	5376	0.896684	840.75	0.580357	1413.97	847.97	0.55	2.59	2276.45	6.78	2275.61	6.77	-0.83	-0.04
114	337	223	109	5392	0.895385	841.2	0.580861	1413.84	861.19	0	2.57	2278.34	6.76	2277.34	6.76	-1	-0.04
114	338	224	110	5408	0.894086	841.64	0.581361	1413.72	874.48	0.54	2.55	2281.26	6.75	2280.56	6.75	-0.71	-0.03
114	339	225	111	5424	0.892787	842.07	0.581858	1413.6	887.83	0	2.53	2283.03	6.73	2282.16	6.73	-0.87	-0.04
114	340	226	112	5440	0.891488	842.5	0.582353	1413.49	901.25	0.54	2.51	2285.81	6.72	2285.23	6.72	-0.58	-0.03
114	341	227	113	5456	0.890188	842.92	0.582845	1413.39	914.73	0	2.49	2287.45	6.71	2286.7	6.71	-0.75	-0.03
114	342	228	114	5472	0.888889	843.33	0.583333	1413.29	928.28	0.54	2.47	2290.1	6.7	2289.64	6.69	-0.47	-0.02
114	343	229	115	5488	0.887589	843.74	0.583819	1413.2	941.89	0	2.45	2291.61	6.68	2290.97	6.68	-0.64	-0.03
114	344	230	116	5504	0.88629	844.14	0.584302	1413.12	955.56	0.54	2.43	2294.13	6.67	2293.78	6.67	-0.36	-0.02
114	345	231	117	5520	0.884991	844.54	0.584783	1413.05	969.3	0	2.41	2295.52	6.65	2294.99	6.65	-0.53	-0.02
114	346	232	118	5536	0.883691	844.93	0.58526	1412.98	983.1	0.54	2.39	2297.91	6.64	2297.66	6.64	-0.25	-0.01
114	347	233	119	5552	0.882393	845.31	0.585735	1412.93	996.96	0	2.37	2299.17	6.63	2298.74	6.62	-0.43	-0.02
114	348	234	120	5568	0.881094	845.69	0.586207	1412.87	1010.88	0.54	2.35	2301.44	6.61	2301.29	6.61	-0.16	-0.01
114	349	235	121	5584	0.879796	846.06	0.586676	1412.83	1024.86	0	2.33	2302.58	6.6	2302.24	6.6	-0.34	-0.01
114	350	236	122	5600	0.878498	846.42	0.587143	1412.79	1038.9	0.53	2.31	2304.73	6.58	2304.66	6.58	-0.07	0
114	351	237	123	5616	0.877201	846.78	0.587607	1412.76	1053	0	2.3	2305.75	6.57	2305.5	6.57	-0.25	-0.01
114	352	238	124	5632	0.875904	847.14	0.588068	1412.73	1067.16	0.53	2.28	2307.78	6.56	2307.79	6.56	0.01	0
114	353	239	125	5648	0.874608	847.48	0.588527	1412.71	1081.38	0	2.26	2308.68	6.54	2308.5	6.54	-0.18	-0.01
114	354	240	126	5664	0.873312	847.83	0.588983	1412.7	1095.66	0.53	2.24	2310.59	6.53	2310.67	6.53	0.08	0
114	355	241	127	5680	0.872017	848.16	0.589437	1412.7	1109.99	0	2.23	2311.37	6.51	2311.27	6.51	-0.11	0
114	356	242	128	5696	0.870723	848.49	0.589888	1412.7	1124.38	0.53	2.21	2313.17	6.5	2313.31	6.5	0.15	0.01
114	357	243	129	5712	0.86943	848.82	0.590336	1412.7	1138.83	0	2.19	2313.84	6.48	2313.79	6.48	-0.05	0
114	358	244	130	5728	0.868138	849.14	0.590782	1412.71	1153.33	0.53	2.18	2315.52	6.47	2315.72	6.47	0.2	0.01
114	359	245	131	5744	0.866846	849.45	0.591226	1412.73	1167.89	0	2.16	2316.08	6.45	2316.08	6.45	0	0
114	360	246	132	5760	0.865556	849.76	0.591667	1412.76	1182.51	0.53	2.14	2317.64	6.44	2317.89	6.44	0.25	0.01
114	361	247	133	5776	0.864266	850.07	0.592105	1412.79	1197.17	0	2.13	2318.1	6.42	2318.14	6.42	0.05	0
114	362	248	134	5792	0.862977	850.37	0.592541	1412.82	1211.9	0.53	2.11	2319.55	6.41	2319.83	6.41	0.28	0.01
114	363	249	135	5808	0.86169	850.66	0.592975	1412.87	1226.67	0	2.1	2319.9	6.39	2319.97	6.39	0.08	0
114	364	250	136	5824	0.860403	850.95	0.593407	1412.91	1241.5	0.52	2.08	2321.24	6.38	2321.55	6.38	0.31	0.01
114	365	251	137	5840	0.859118	851.24	0.593836	1412.97	1256.39	0	2.07	2321.48	6.36	2321.58	6.36	0.1	0
114	366	252	138	5856	0.857834	851.52	0.594262	1413.03	1271.32	0.52	2.05	2322.71	6.35	2323.04	6.35	0.33	0.01
114	367	253	139	5872	0.856551	851.79	0.594687	1413.09	1286.31	0	2.04	2322.85	6.33	2322.96	6.33	0.11	0

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
114	368	254	140	5888	0.855269	852.06	0.595109	1413.16	1301.35	0.52	2.02	2323.98	6.32	2324.31	6.32	0.33	0.01
114	369	255	141	5904	0.853989	852.32	0.595528	1413.24	1316.43	0	2.01	2324.01	6.3	2324.13	6.3	0.12	0
114	370	256	142	5920	0.85271	852.58	0.595946	1413.32	1331.58	0.52	2	2325.04	6.28	2325.37	6.28	0.33	0.01
114	371	257	143	5936	0.851432	852.84	0.596361	1413.4	1346.77	0	1.98	2324.97	6.27	2325.08	6.27	0.11	0
114	372	258	144	5952	0.850156	853.09	0.596774	1413.49	1362.01	0.52	1.97	2325.89	6.25	2326.21	6.25	0.32	0.01
114	373	259	145	5968	0.848881	853.34	0.597185	1413.59	1377.3	0	1.95	2325.73	6.24	2325.82	6.24	0.09	0
114	374	260	146	5984	0.847608	853.58	0.597594	1413.69	1392.64	0.52	1.94	2326.55	6.22	2326.84	6.22	0.29	0.01
114	375	261	147	6000	0.846336	853.82	0.598	1413.8	1408.02	0	1.93	2326.29	6.2	2326.35	6.2	0.06	0
114	376	262	148	6016	0.845066	854.05	0.598404	1413.91	1423.46	0.52	1.91	2327.01	6.19	2327.27	6.19	0.26	0.01
114	377	263	149	6032	0.843797	854.28	0.598806	1414.02	1438.94	0	1.9	2326.65	6.17	2326.67	6.17	0.02	0
114	378	264	150	6048	0.84253	854.51	0.599206	1414.15	1454.48	0.51	1.89	2327.28	6.16	2327.49	6.16	0.21	0.01
114	379	265	151	6064	0.841264	854.73	0.599604	1414.27	1470.05	0	1.88	2326.83	6.14	2326.79	6.14	-0.03	0
114	380	266	152	6080	0.84	854.94	0.6	1414.4	1485.68	0.51	1.86	2327.35	6.12	2327.51	6.13	0.15	0.01
114	381	267	153	6096	0.838738	855.15	0.600394	1414.54	1501.35	0	1.85	2326.81	6.11	2326.71	6.11	-0.1	0
114	382	268	154	6112	0.837477	855.36	0.600785	1414.68	1517.07	0.51	1.84	2327.24	6.09	2327.33	6.09	0.08	0
114	383	269	155	6128	0.836218	855.57	0.601175	1414.82	1532.83	0	1.83	2326.61	6.07	2326.43	6.07	-0.17	-0.01
114	384	270	156	6144	0.834961	855.77	0.601562	1414.97	1548.64	0.51	1.82	2326.95	6.06	2326.95	6.06	0	0
114	385	271	157	6160	0.833706	855.96	0.601948	1415.12	1564.5	0	1.8	2326.22	6.04	2325.96	6.04	-0.26	-0.01
114	386	272	158	6176	0.832452	856.16	0.602332	1415.28	1580.4	0.51	1.79	2326.47	6.03	2326.38	6.03	-0.09	0
114	387	273	159	6192	0.8312	856.34	0.602713	1415.44	1596.34	0	1.78	2325.65	6.01	2325.3	6.01	-0.36	-0.02
114	388	274	160	6208	0.82995	856.53	0.603093	1415.61	1612.33	0.51	1.77	2325.81	5.99	2325.62	5.99	-0.2	-0.01
114	389	275	161	6224	0.828702	856.71	0.60347	1415.78	1628.36	0	1.76	2324.91	5.98	2324.44	5.98	-0.47	-0.02
114	390	276	162	6240	0.827456	856.89	0.603846	1415.95	1644.43	0.51	1.75	2324.98	5.96	2324.67	5.96	-0.31	-0.01
114	391	277	163	6256	0.826211	857.06	0.60422	1416.13	1660.55	0	1.74	2323.99	5.94	2323.4	5.94	-0.59	-0.03
114	392	278	164	6272	0.824969	857.23	0.604592	1416.32	1676.71	0.51	1.73	2323.97	5.93	2323.53	5.93	-0.44	-0.02
114	393	279	165	6288	0.823728	857.39	0.604962	1416.5	1692.91	0	1.71	2322.9	5.91	2322.18	5.91	-0.72	-0.03
114	394	280	166	6304	0.82249	857.56	0.60533	1416.7	1709.16	0.5	1.7	2322.8	5.9	2322.21	5.89	-0.58	-0.03
114	395	281	167	6320	0.821253	857.72	0.605696	1416.89	1725.44	0	1.69	2321.64	5.88	2320.77	5.88	-0.87	-0.04
114	396	282	168	6336	0.820018	857.87	0.606061	1417.09	1741.77	0.5	1.68	2321.45	5.86	2320.72	5.86	-0.74	-0.03
114	397	283	169	6352	0.818786	858.02	0.606423	1417.29	1758.14	0	1.67	2320.21	5.84	2319.18	5.84	-1.03	-0.04
114	398	284	170	6368	0.817555	858.17	0.606784	1417.5	1774.55	0.5	1.66	2319.94	5.83	2319.04	5.83	-0.9	-0.04
114	399	285	171	6384	0.816327	858.32	0.607143	1417.71	1791	0	1.65	2318.62	5.81	2317.42	5.81	-1.2	-0.05
114	400	286	172	6400	0.8151	858.46	0.6075	1417.93	1807.49	0.5	1.64	2318.27	5.8	2317.19	5.79	-1.08	-0.05
114	401	287	173	6416	0.813876	858.6	0.607855	1418.15	1824.02	0	1.63	2316.87	5.78	2315.48	5.77	-1.39	-0.06
114	402	288	174	6432	0.812653	858.73	0.608209	1418.37	1840.59	0.5	1.62	2316.43	5.76	2315.16	5.76	-1.27	-0.05
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
115	229	114	-1	3664	0.999981	726.13	0.498908	1534.78	0.11	0	9.82	1412.8	6.17	1422.07	6.21	9.27	0.65
115	230	115	0	3680	1	728.26	0.5	1532.54	0	-0.66	10	1428.54	6.21	1437.53	6.25	8.99	0.63
115	231	116	1	3696	0.999981	730.36	0.501082	1530.34	0.11	0	9.82	1445.02	6.26	1452.61	6.29	7.59	0.52
115	232	117	2	3712	0.999926	732.42	0.502155	1528.18	0.42	-0.66	9.64	1459.97	6.29	1467.69	6.33	7.73	0.53
115	233	118	3	3728	0.999834	734.46	0.503219	1526.06	0.94	0	9.47	1476.01	6.33	1482.39	6.36	6.38	0.43
115	234	119	4	3744	0.999708	736.46	0.504274	1523.98	1.67	-0.65	9.31	1490.54	6.37	1497.09	6.4	6.55	0.44
115	235	120	5	3760	0.999547	738.44	0.505319	1521.94	2.6	0	9.15	1506.17	6.41	1511.41	6.43	5.25	0.35
115	236	121	6	3776	0.999354	740.39	0.506356	1519.94	3.72	-0.65	8.99	1520.29	6.44	1525.75	6.47	5.47	0.36

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
115	237	122	7	3792	0.999128	742.32	0.507384	1517.97	5.04	0	8.83	1535.5	6.48	1539.7	6.5	4.2	0.27
115	238	123	8	3808	0.99887	744.21	0.508403	1516.04	6.56	-0.65	8.68	1549.22	6.51	1553.68	6.53	4.46	0.29
115	239	124	9	3824	0.998582	746.08	0.509414	1514.15	8.27	0	8.54	1564.04	6.54	1567.28	6.56	3.24	0.21
115	240	125	10	3840	0.998264	747.92	0.510417	1512.29	10.17	-0.65	8.39	1577.37	6.57	1580.91	6.59	3.53	0.22
115	241	126	11	3856	0.997917	749.73	0.511411	1510.47	12.25	0	8.26	1591.8	6.6	1594.15	6.61	2.35	0.15
115	242	127	12	3872	0.997541	751.52	0.512397	1508.68	14.52	-0.64	8.12	1604.76	6.63	1607.43	6.64	2.68	0.17
115	243	128	13	3888	0.997138	753.29	0.513374	1506.92	16.97	0	7.99	1618.81	6.66	1620.33	6.67	1.53	0.09
115	244	129	14	3904	0.996708	755.03	0.514344	1505.2	19.6	-0.64	7.86	1631.39	6.69	1633.29	6.69	1.89	0.12
115	245	130	15	3920	0.996252	756.74	0.515306	1503.51	22.41	0	7.73	1645.07	6.71	1645.85	6.72	0.78	0.05
115	246	131	16	3936	0.99577	758.43	0.51626	1501.85	25.39	-0.64	7.61	1657.3	6.74	1658.47	6.74	1.17	0.07
115	247	132	17	3952	0.995263	760.1	0.517206	1500.22	28.55	0	7.49	1670.62	6.76	1670.71	6.76	0.09	0.01
115	248	133	18	3968	0.994732	761.74	0.518145	1498.62	31.88	-0.64	7.37	1682.49	6.78	1683.01	6.79	0.52	0.03
115	249	134	19	3984	0.994178	763.36	0.519076	1497.05	35.38	0	7.26	1695.46	6.81	1694.92	6.81	-0.54	-0.03
115	250	135	20	4000	0.9936	764.96	0.52	1495.51	39.04	-0.63	7.15	1706.99	6.83	1706.91	6.83	-0.08	0
115	251	136	21	4016	0.993	766.54	0.520916	1494	42.87	0	7.04	1719.62	6.85	1718.51	6.85	-1.11	-0.06
115	252	137	22	4032	0.992378	768.09	0.521825	1492.52	46.87	-0.63	6.93	1730.82	6.87	1730.19	6.87	-0.63	-0.04
115	253	138	23	4048	0.991736	769.62	0.522727	1491.07	51.02	0	6.83	1743.11	6.89	1741.49	6.88	-1.62	-0.09
115	254	139	24	4064	0.991072	771.13	0.523622	1489.64	55.34	-0.63	6.72	1753.98	6.91	1752.86	6.9	-1.12	-0.06
115	255	140	25	4080	0.990388	772.62	0.52451	1488.24	59.81	0	6.62	1765.95	6.93	1763.86	6.92	-2.09	-0.12
115	256	141	26	4096	0.989685	774.09	0.525391	1486.87	64.44	-0.62	6.53	1776.5	6.94	1774.94	6.93	-1.56	-0.09
115	257	142	27	4112	0.988963	775.54	0.526265	1485.52	69.23	0	6.43	1788.14	6.96	1785.64	6.95	-2.51	-0.14
115	258	143	28	4128	0.988222	776.97	0.527132	1484.2	74.16	-0.62	6.34	1798.39	6.97	1796.43	6.96	-1.95	-0.11
115	259	144	29	4144	0.987463	778.38	0.527992	1482.91	79.25	0	6.25	1809.72	6.99	1806.84	6.98	-2.88	-0.16
115	260	145	30	4160	0.986686	779.76	0.528846	1481.64	84.48	-0.62	6.16	1819.66	7	1817.36	6.99	-2.3	-0.13
115	261	146	31	4176	0.985893	781.13	0.529693	1480.39	89.86	0	6.07	1830.69	7.01	1827.48	7	-3.21	-0.18
115	262	147	32	4192	0.985082	782.48	0.530534	1479.16	95.39	-0.62	5.99	1840.33	7.02	1837.72	7.01	-2.61	-0.14
115	263	148	33	4208	0.984256	783.82	0.531369	1477.97	101.06	0	5.9	1851.06	7.04	1847.57	7.02	-3.49	-0.19
115	264	149	34	4224	0.983414	785.13	0.532197	1476.79	106.87	-0.62	5.82	1860.42	7.05	1857.53	7.04	-2.88	-0.16
115	265	150	35	4240	0.982556	786.42	0.533019	1475.64	112.83	0	5.74	1870.86	7.06	1867.11	7.05	-3.75	-0.2
115	266	151	36	4256	0.981684	787.7	0.533835	1474.5	118.92	-0.61	5.66	1879.93	7.07	1876.81	7.06	-3.12	-0.17
115	267	152	37	4272	0.980796	788.96	0.534644	1473.4	125.15	0	5.59	1890.08	7.08	1886.12	7.06	-3.96	-0.21
115	268	153	38	4288	0.979895	790.2	0.535448	1472.31	131.51	-0.61	5.51	1898.88	7.09	1895.56	7.07	-3.31	-0.17
115	269	154	39	4304	0.97898	791.43	0.536245	1471.24	138.01	0	5.44	1908.76	7.1	1904.61	7.08	-4.14	-0.22
115	270	155	40	4320	0.978052	792.63	0.537037	1470.2	144.65	-0.61	5.37	1917.28	7.1	1913.8	7.09	-3.48	-0.18
115	271	156	41	4336	0.977111	793.83	0.537823	1469.17	151.41	0	5.3	1926.89	7.11	1922.6	7.09	-4.29	-0.22
115	272	157	42	4352	0.976157	795	0.538603	1468.17	158.31	-0.61	5.23	1935.15	7.11	1931.53	7.1	-3.62	-0.19
115	273	158	43	4368	0.975191	796.16	0.539377	1467.18	165.33	0	5.16	1944.49	7.12	1940.08	7.11	-4.41	-0.23
115	274	159	44	4384	0.974213	797.3	0.540146	1466.22	172.48	-0.6	5.09	1952.49	7.13	1948.76	7.11	-3.73	-0.19
115	275	160	45	4400	0.973223	798.43	0.540909	1465.27	179.75	0	5.03	1961.57	7.13	1957.06	7.12	-4.51	-0.23
115	276	161	46	4416	0.972222	799.54	0.541667	1464.35	187.15	-0.6	4.97	1969.32	7.14	1965.51	7.12	-3.81	-0.19
115	277	162	47	4432	0.97121	800.64	0.542419	1463.44	194.68	0	4.9	1978.15	7.14	1973.57	7.12	-4.58	-0.23
115	278	163	48	4448	0.970188	801.72	0.543165	1462.55	202.32	-0.6	4.84	1985.65	7.14	1981.79	7.13	-3.87	-0.2
115	279	164	49	4464	0.969155	802.78	0.543907	1461.68	210.08	0	4.78	1994.23	7.15	1989.61	7.13	-4.62	-0.23
115	280	165	50	4480	0.968112	803.83	0.544643	1460.83	217.97	-0.6	4.72	2001.49	7.15	1997.59	7.13	-3.9	-0.2
115	281	166	51	4496	0.96706	804.87	0.545374	1460	225.97	0	4.67	2009.83	7.15	2005.18	7.14	-4.64	-0.23
115	282	167	52	4512	0.965998	805.89	0.546099	1459.18	234.09	-0.6	4.61	2016.85	7.15	2012.94	7.14	-3.91	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
115	283	168	53	4528	0.964927	806.9	0.54682	1458.38	242.32	0	4.55	2024.95	7.16	2020.3	7.14	-4.65	-0.23
115	284	169	54	4544	0.963846	807.9	0.547535	1457.6	250.67	-0.59	4.5	2031.74	7.15	2027.84	7.14	-3.91	-0.19
115	285	170	55	4560	0.962758	808.88	0.548246	1456.83	259.13	0	4.45	2039.61	7.16	2034.98	7.14	-4.63	-0.23
115	286	171	56	4576	0.961661	809.84	0.548951	1456.08	267.7	-0.59	4.39	2046.17	7.15	2042.29	7.14	-3.88	-0.19
115	287	172	57	4592	0.960556	810.8	0.549652	1455.35	276.39	0	4.34	2053.81	7.16	2049.22	7.14	-4.59	-0.22
115	288	173	58	4608	0.959443	811.74	0.550347	1454.63	285.18	-0.59	4.29	2060.16	7.15	2056.31	7.14	-3.84	-0.19
115	289	174	59	4624	0.958322	812.67	0.551038	1453.93	294.08	0	4.24	2067.57	7.15	2063.02	7.14	-4.54	-0.22
115	290	175	60	4640	0.957194	813.58	0.551724	1453.24	303.09	-0.59	4.19	2073.7	7.15	2069.91	7.14	-3.78	-0.18
115	291	176	61	4656	0.956059	814.48	0.552405	1452.57	312.2	0	4.15	2080.89	7.15	2076.41	7.14	-4.48	-0.22
115	292	177	62	4672	0.954916	815.37	0.553082	1451.91	321.42	-0.59	4.1	2086.81	7.15	2083.09	7.13	-3.71	-0.18
115	293	178	63	4688	0.953768	816.25	0.553754	1451.27	330.75	0	4.05	2093.79	7.15	2089.39	7.13	-4.4	-0.21
115	294	179	64	4704	0.952612	817.11	0.554422	1450.64	340.17	-0.58	4.01	2099.49	7.14	2095.87	7.13	-3.63	-0.17
115	295	180	65	4720	0.951451	817.97	0.555085	1450.03	349.7	0	3.96	2106.26	7.14	2101.96	7.13	-4.31	-0.2
115	296	181	66	4736	0.950283	818.81	0.555743	1449.43	359.33	-0.58	3.92	2111.77	7.13	2108.23	7.12	-3.53	-0.17
115	297	182	67	4752	0.94911	819.64	0.556397	1448.85	369.06	0	3.88	2118.33	7.13	2114.13	7.12	-4.21	-0.2
115	298	183	68	4768	0.94793	820.46	0.557047	1448.28	378.89	-0.58	3.84	2123.64	7.13	2120.21	7.11	-3.43	-0.16
115	299	184	69	4784	0.946746	821.26	0.557692	1447.72	388.81	0	3.79	2130	7.12	2125.91	7.11	-4.09	-0.19
115	300	185	70	4800	0.945556	822.06	0.558333	1447.18	398.83	-0.58	3.75	2135.11	7.12	2131.8	7.11	-3.31	-0.16
115	301	186	71	4816	0.94436	822.84	0.55897	1446.65	408.95	0	3.71	2141.27	7.11	2137.3	7.1	-3.97	-0.19
115	302	187	72	4832	0.94316	823.62	0.559603	1446.13	419.16	-0.58	3.67	2146.19	7.11	2143	7.1	-3.19	-0.15
115	303	188	73	4848	0.941956	824.38	0.560231	1445.62	429.47	0	3.64	2152.16	7.1	2148.32	7.09	-3.84	-0.18
115	304	189	74	4864	0.940746	825.13	0.560855	1445.13	439.87	-0.57	3.6	2156.89	7.1	2153.83	7.08	-3.05	-0.14
115	305	190	75	4880	0.939532	825.87	0.561475	1444.65	450.36	0	3.56	2162.67	7.09	2158.96	7.08	-3.71	-0.17
115	306	191	76	4896	0.938314	826.6	0.562092	1444.19	460.95	-0.57	3.52	2167.22	7.08	2164.3	7.07	-2.92	-0.13
115	307	192	77	4912	0.937092	827.33	0.562704	1443.73	471.62	0	3.49	2172.81	7.08	2169.25	7.07	-3.57	-0.16
115	308	193	78	4928	0.935866	828.04	0.563312	1443.29	482.38	-0.57	3.45	2177.18	7.07	2174.4	7.06	-2.77	-0.13
115	309	194	79	4944	0.934636	828.74	0.563916	1442.86	493.24	0	3.42	2182.59	7.06	2179.17	7.05	-3.42	-0.16
115	310	195	80	4960	0.933403	829.43	0.564516	1442.44	504.17	-0.57	3.38	2186.78	7.05	2184.15	7.05	-2.62	-0.12
115	311	196	81	4976	0.932166	830.11	0.565113	1442.03	515.2	0	3.35	2192.01	7.05	2188.74	7.04	-3.27	-0.15
115	312	197	82	4992	0.930925	830.78	0.565705	1441.63	526.31	-0.57	3.32	2196.02	7.04	2193.55	7.03	-2.47	-0.11
115	313	198	83	5008	0.929682	831.44	0.566294	1441.25	537.51	0	3.28	2201.08	7.03	2197.97	7.02	-3.11	-0.14
115	314	199	84	5024	0.928435	832.1	0.566879	1440.87	548.79	-0.56	3.25	2204.93	7.02	2202.61	7.01	-2.32	-0.11
115	315	200	85	5040	0.927186	832.74	0.56746	1440.51	560.16	0	3.22	2209.81	7.02	2206.86	7.01	-2.95	-0.13
115	316	201	86	5056	0.925933	833.37	0.568038	1440.15	571.61	-0.56	3.19	2213.49	7	2211.33	7	-2.16	-0.1
115	317	202	87	5072	0.924678	834	0.568612	1439.81	583.14	0	3.16	2218.21	7	2215.41	6.99	-2.8	-0.13
115	318	203	88	5088	0.923421	834.61	0.569182	1439.48	594.75	-0.56	3.13	2221.72	6.99	2219.72	6.98	-2	-0.09
115	319	204	89	5104	0.922161	835.22	0.569749	1439.16	606.45	0	3.1	2226.27	6.98	2223.64	6.97	-2.64	-0.12
115	320	205	90	5120	0.920898	835.82	0.570312	1438.85	618.22	-0.56	3.07	2229.62	6.97	2227.78	6.96	-1.84	-0.08
115	321	206	91	5136	0.919634	836.41	0.570872	1438.55	630.07	0	3.04	2234.01	6.96	2231.54	6.95	-2.47	-0.11
115	322	207	92	5152	0.918367	836.99	0.571429	1438.25	642	-0.56	3.01	2237.21	6.95	2235.52	6.94	-1.68	-0.08
115	323	208	93	5168	0.917099	837.57	0.571981	1437.97	654.01	0	2.98	2241.44	6.94	2239.12	6.93	-2.31	-0.1
115	324	209	94	5184	0.915828	838.13	0.572531	1437.7	666.09	-0.56	2.96	2244.48	6.93	2242.95	6.92	-1.52	-0.07
115	325	210	95	5200	0.914556	838.69	0.573077	1437.44	678.25	0	2.93	2248.55	6.92	2246.4	6.91	-2.15	-0.1
115	326	211	96	5216	0.913282	839.24	0.57362	1437.18	690.49	-0.55	2.9	2251.44	6.91	2250.07	6.9	-1.37	-0.06
115	327	212	97	5232	0.912007	839.78	0.574159	1436.94	702.8	0	2.88	2255.36	6.9	2253.36	6.89	-2	-0.09
115	328	213	98	5248	0.91073	840.31	0.574695	1436.71	715.18	-0.55	2.85	2258.1	6.88	2256.89	6.88	-1.21	-0.05

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115	329	214	99	5264	0.909452	840.84	0.575228	1436.48	727.64	0	2.83	2261.86	6.87	2260.02	6.87	-1.84	-0.08
115	330	215	100	5280	0.908173	841.36	0.575758	1436.26	740.17	-0.55	2.8	2264.46	6.86	2263.4	6.86	-1.06	-0.05
115	331	216	101	5296	0.906892	841.87	0.576284	1436.06	752.78	0	2.78	2268.08	6.85	2266.39	6.85	-1.69	-0.07
115	332	217	102	5312	0.90561	842.37	0.576807	1435.86	765.45	-0.55	2.75	2270.53	6.84	2269.62	6.84	-0.91	-0.04
115	333	218	103	5328	0.904328	842.86	0.577327	1435.67	778.2	0	2.73	2274	6.83	2272.46	6.82	-1.54	-0.07
115	334	219	104	5344	0.903044	843.35	0.577844	1435.48	791.01	-0.55	2.7	2276.31	6.82	2275.55	6.81	-0.76	-0.03
115	335	220	105	5360	0.90176	843.83	0.578358	1435.31	803.9	0	2.68	2279.64	6.8	2278.25	6.8	-1.39	-0.06
115	336	221	106	5376	0.900475	844.31	0.578869	1435.15	816.85	-0.55	2.66	2281.81	6.79	2281.19	6.79	-0.62	-0.03
115	337	222	107	5392	0.899189	844.77	0.579377	1434.99	829.88	0	2.64	2285	6.78	2283.75	6.78	-1.25	-0.05
115	338	223	108	5408	0.897903	845.23	0.579882	1434.84	842.97	-0.54	2.61	2287.03	6.77	2286.55	6.76	-0.48	-0.02
115	339	224	109	5424	0.896616	845.68	0.580383	1434.7	856.12	0	2.59	2290.09	6.76	2288.97	6.75	-1.11	-0.05
115	340	225	110	5440	0.895329	846.13	0.580882	1434.57	869.35	-0.54	2.57	2291.99	6.74	2291.64	6.74	-0.34	-0.02
115	341	226	111	5456	0.894041	846.57	0.581378	1434.44	882.64	0	2.55	2294.9	6.73	2293.92	6.73	-0.98	-0.04
115	342	227	112	5472	0.892753	847	0.581871	1434.32	895.99	-0.54	2.53	2296.67	6.72	2296.46	6.71	-0.22	-0.01
115	343	228	113	5488	0.891465	847.43	0.582362	1434.21	909.41	0	2.51	2299.46	6.7	2298.6	6.7	-0.85	-0.04
115	344	229	114	5504	0.890177	847.85	0.582849	1434.11	922.9	-0.54	2.49	2301.1	6.69	2301	6.69	-0.09	0
115	345	230	115	5520	0.888889	848.26	0.583333	1434.01	936.44	0	2.47	2303.75	6.68	2303.02	6.68	-0.73	-0.03
115	346	231	116	5536	0.887601	848.67	0.583815	1433.93	950.06	-0.54	2.45	2305.26	6.66	2305.28	6.66	0.02	0
115	347	232	117	5552	0.886312	849.07	0.584294	1433.85	963.73	0	2.43	2307.79	6.65	2307.17	6.65	-0.62	-0.03
115	348	233	118	5568	0.885024	849.46	0.58477	1433.77	977.46	-0.54	2.41	2309.17	6.64	2309.31	6.64	0.13	0.01
115	349	234	119	5584	0.883737	849.85	0.585244	1433.7	991.26	0	2.39	2311.57	6.62	2311.06	6.62	-0.51	-0.02
115	350	235	120	5600	0.882449	850.23	0.585714	1433.65	1005.12	-0.53	2.37	2312.84	6.61	2313.07	6.61	0.24	0.01
115	351	236	121	5616	0.881162	850.61	0.586182	1433.59	1019.04	0	2.35	2315.11	6.6	2314.7	6.59	-0.41	-0.02
115	352	237	122	5632	0.879875	850.98	0.586648	1433.55	1033.02	-0.53	2.33	2316.26	6.58	2316.59	6.58	0.33	0.01
115	353	238	123	5648	0.878588	851.34	0.58711	1433.51	1047.06	0	2.31	2318.41	6.57	2318.09	6.57	-0.32	-0.01
115	354	239	124	5664	0.877302	851.7	0.587571	1433.48	1061.15	-0.53	2.3	2319.44	6.55	2319.86	6.55	0.42	0.02
115	355	240	125	5680	0.876017	852.05	0.588028	1433.45	1075.31	0	2.28	2321.47	6.54	2321.24	6.54	-0.23	-0.01
115	356	241	126	5696	0.874732	852.4	0.588483	1433.43	1089.52	-0.53	2.26	2322.38	6.52	2322.88	6.52	0.5	0.02
115	357	242	127	5712	0.873447	852.74	0.588936	1433.42	1103.79	0	2.24	2324.3	6.51	2324.14	6.51	-0.16	-0.01
115	358	243	128	5728	0.872164	853.08	0.589385	1433.41	1118.12	-0.53	2.23	2325.09	6.49	2325.66	6.5	0.57	0.02
115	359	244	129	5744	0.870881	853.41	0.589833	1433.41	1132.5	0	2.21	2326.89	6.48	2326.8	6.48	-0.09	0
115	360	245	130	5760	0.869599	853.73	0.590278	1433.41	1146.94	-0.53	2.19	2327.58	6.47	2328.21	6.47	0.63	0.03
115	361	246	131	5776	0.868317	854.05	0.59072	1433.43	1161.44	0	2.18	2329.26	6.45	2329.23	6.45	-0.03	0
115	362	247	132	5792	0.867037	854.37	0.59116	1433.44	1175.99	-0.53	2.16	2329.83	6.44	2330.52	6.44	0.69	0.03
115	363	248	133	5808	0.865757	854.68	0.591598	1433.47	1190.6	0	2.15	2331.4	6.42	2331.43	6.42	0.02	0
115	364	249	134	5824	0.864479	854.98	0.592033	1433.5	1205.26	-0.52	2.13	2331.87	6.41	2332.6	6.41	0.73	0.03
115	365	250	135	5840	0.863201	855.28	0.592466	1433.53	1219.97	0	2.12	2333.33	6.39	2333.39	6.39	0.06	0
115	366	251	136	5856	0.861925	855.58	0.592896	1433.57	1234.74	-0.52	2.1	2333.69	6.38	2334.46	6.38	0.77	0.03
115	367	252	137	5872	0.860649	855.87	0.593324	1433.62	1249.56	0	2.08	2335.04	6.36	2335.14	6.36	0.1	0
115	368	253	138	5888	0.859375	856.15	0.59375	1433.67	1264.43	-0.52	2.07	2335.3	6.35	2336.09	6.35	0.79	0.03
115	369	254	139	5904	0.858102	856.43	0.594173	1433.73	1279.35	0	2.06	2336.54	6.33	2336.66	6.33	0.12	0.01
115	370	255	140	5920	0.85683	856.7	0.594595	1433.8	1294.33	-0.52	2.04	2336.69	6.32	2337.5	6.32	0.81	0.03
115	371	256	141	5936	0.855559	856.97	0.595013	1433.86	1309.36	0	2.03	2337.83	6.3	2337.96	6.3	0.13	0.01
115	372	257	142	5952	0.85429	857.24	0.59543	1433.94	1324.44	-0.52	2.01	2337.88	6.28	2338.7	6.29	0.82	0.03
115	373	258	143	5968	0.853021	857.5	0.595845	1434.02	1339.56	0	2	2338.92	6.27	2339.05	6.27	0.13	0.01
115	374	259	144	5984	0.851754	857.76	0.596257	1434.1	1354.74	-0.52	1.98	2338.87	6.25	2339.68	6.26	0.81	0.03

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
115	375	260	145	6000	0.850489	858.01	0.596667	1434.19	1369.97	0	1.97	2339.8	6.24	2339.92	6.24	0.12	0.01
115	376	261	146	6016	0.849225	858.25	0.597074	1434.29	1385.25	-0.52	1.96	2339.65	6.22	2340.45	6.22	0.8	0.03
115	377	262	147	6032	0.847962	858.5	0.59748	1434.39	1400.57	0	1.94	2340.48	6.21	2340.59	6.21	0.11	0
115	378	263	148	6048	0.846701	858.74	0.597884	1434.5	1415.95	-0.51	1.93	2340.24	6.19	2341.01	6.19	0.77	0.03
115	379	264	149	6064	0.845441	858.97	0.598285	1434.61	1431.37	0	1.92	2340.97	6.18	2341.05	6.18	0.08	0
115	380	265	150	6080	0.844183	859.2	0.598684	1434.72	1446.84	-0.51	1.91	2340.63	6.16	2341.37	6.16	0.74	0.03
115	381	266	151	6096	0.842926	859.42	0.599081	1434.84	1462.36	0	1.89	2341.27	6.15	2341.3	6.15	0.04	0
115	382	267	152	6112	0.841671	859.65	0.599476	1434.97	1477.92	-0.51	1.88	2340.83	6.13	2341.52	6.13	0.69	0.03
115	383	268	153	6128	0.840417	859.86	0.599869	1435.1	1493.53	0	1.87	2341.38	6.11	2341.36	6.11	-0.02	0
115	384	269	154	6144	0.839166	860.08	0.60026	1435.23	1509.19	-0.51	1.86	2340.85	6.1	2341.48	6.1	0.63	0.03
115	385	270	155	6160	0.837915	860.29	0.600649	1435.37	1524.89	0	1.84	2341.3	6.08	2341.22	6.08	-0.08	0
115	386	271	156	6176	0.836667	860.49	0.601036	1435.51	1540.64	-0.51	1.83	2340.68	6.06	2341.24	6.07	0.56	0.02
115	387	272	157	6192	0.83542	860.69	0.601421	1435.66	1556.43	0	1.82	2341.03	6.05	2340.88	6.05	-0.16	-0.01
115	388	273	158	6208	0.834175	860.89	0.601804	1435.81	1572.27	-0.51	1.81	2340.33	6.03	2340.8	6.03	0.48	0.02
115	389	274	159	6224	0.832931	861.08	0.602185	1435.97	1588.15	0	1.8	2340.59	6.02	2340.35	6.02	-0.24	-0.01
115	390	275	160	6240	0.83169	861.27	0.602564	1436.13	1604.08	-0.51	1.79	2339.8	6	2340.18	6	0.38	0.02
115	391	276	161	6256	0.83045	861.46	0.602941	1436.3	1620.05	0	1.77	2339.97	5.98	2339.63	5.98	-0.34	-0.01
115	392	277	162	6272	0.829212	861.64	0.603316	1436.47	1636.07	-0.51	1.76	2339.09	5.97	2339.37	5.97	0.28	0.01
115	393	278	163	6288	0.827976	861.82	0.60369	1436.64	1652.12	0	1.75	2339.17	5.95	2338.72	5.95	-0.45	-0.02
115	394	279	164	6304	0.826741	861.99	0.604061	1436.82	1668.22	-0.5	1.74	2338.2	5.93	2338.37	5.93	0.16	0.01
115	395	280	165	6320	0.825509	862.16	0.60443	1437	1684.36	0	1.73	2338.2	5.92	2337.63	5.92	-0.57	-0.02
115	396	281	166	6336	0.824278	862.33	0.604798	1437.19	1700.55	-0.5	1.72	2337.15	5.9	2337.18	5.9	0.03	0
115	397	282	167	6352	0.823049	862.49	0.605164	1437.38	1716.77	0	1.71	2337.06	5.89	2336.36	5.89	-0.71	-0.03
115	398	283	168	6368	0.821823	862.65	0.605528	1437.58	1733.04	-0.5	1.7	2335.93	5.87	2335.82	5.87	-0.11	0
115	399	284	169	6384	0.820598	862.81	0.60589	1437.77	1749.35	0	1.69	2335.76	5.85	2334.9	5.85	-0.85	-0.04
115	400	285	170	6400	0.819375	862.96	0.60625	1437.98	1765.7	-0.5	1.68	2334.54	5.84	2334.28	5.84	-0.26	-0.01
115	401	286	171	6416	0.818154	863.11	0.606608	1438.18	1782.09	0	1.67	2334.28	5.82	2333.27	5.82	-1.01	-0.04
115	402	287	172	6432	0.816935	863.26	0.606965	1438.39	1798.52	-0.5	1.66	2332.99	5.8	2332.56	5.8	-0.43	-0.02
115	403	288	173	6448	0.815718	863.4	0.60732	1438.61	1814.99	0	1.65	2332.65	5.79	2331.47	5.79	-1.18	-0.05
115	404	289	174	6464	0.814503	863.54	0.607673	1438.83	1831.5	-0.5	1.64	2331.28	5.77	2330.67	5.77	-0.61	-0.03
115	405	290	175	6480	0.813291	863.68	0.608025	1439.05	1848.05	0	1.63	2330.86	5.76	2329.49	5.75	-1.37	-0.06
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
116	231	115	-1	3696	0.999981	730.36	0.498918	1557.07	0.11	0	9.82	1418.29	6.14	1427.57	6.18	9.28	0.65
116	232	116	0	3712	1	732.48	0.5	1554.81	0	0.66	10	1435.37	6.19	1443.92	6.22	8.55	0.59
116	233	117	1	3728	0.999982	734.57	0.501073	1552.6	0.1	0	9.82	1450.55	6.23	1458.16	6.26	7.61	0.52
116	234	118	2	3744	0.999927	736.63	0.502137	1550.43	0.42	0.65	9.65	1466.83	6.27	1474.12	6.3	7.29	0.49
116	235	119	3	3760	0.999837	738.66	0.503191	1548.3	0.93	0	9.48	1481.59	6.3	1487.98	6.33	6.39	0.43
116	236	120	4	3776	0.999713	740.66	0.504237	1546.2	1.65	0.65	9.31	1497.45	6.35	1503.57	6.37	6.12	0.41
116	237	121	5	3792	0.999555	742.63	0.505274	1544.15	2.57	0	9.15	1511.8	6.38	1517.06	6.4	5.27	0.35
116	238	122	6	3808	0.999364	744.58	0.506303	1542.13	3.69	0.65	9	1527.24	6.42	1532.27	6.44	5.03	0.33
116	239	123	7	3824	0.999142	746.5	0.507322	1540.15	5	0	8.84	1541.19	6.45	1545.41	6.47	4.22	0.27
116	240	124	8	3840	0.998889	748.39	0.508333	1538.21	6.51	0.65	8.69	1556.23	6.48	1560.26	6.5	4.03	0.26
116	241	125	9	3856	0.998605	750.25	0.509336	1536.3	8.2	0	8.55	1569.79	6.51	1573.05	6.53	3.26	0.21
116	242	126	10	3872	0.998292	752.09	0.510331	1534.43	10.08	0.64	8.41	1584.44	6.55	1587.55	6.56	3.1	0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
116	243	127	11	3888	0.997951	753.9	0.511317	1532.6	12.15	0	8.27	1597.62	6.57	1599.99	6.58	2.37	0.15
116	244	128	12	3904	0.997581	755.69	0.512295	1530.79	14.4	0.64	8.13	1611.89	6.61	1614.14	6.62	2.25	0.14
116	245	129	13	3920	0.997185	757.45	0.513265	1529.02	16.83	0	8	1624.7	6.63	1626.25	6.64	1.56	0.1
116	246	130	14	3936	0.996761	759.19	0.514228	1527.29	19.44	0.64	7.87	1638.6	6.66	1640.06	6.67	1.46	0.09
116	247	131	15	3952	0.996312	760.9	0.515182	1525.58	22.23	0	7.75	1651.04	6.68	1651.85	6.69	0.81	0.05
116	248	132	16	3968	0.995838	762.59	0.516129	1523.91	25.19	0.64	7.63	1664.57	6.71	1665.32	6.71	0.74	0.04
116	249	133	17	3984	0.995339	764.26	0.517068	1522.27	28.32	0	7.51	1676.66	6.73	1676.79	6.73	0.12	0.01
116	250	134	18	4000	0.994816	765.9	0.518	1520.65	31.62	0.63	7.39	1689.85	6.76	1689.93	6.76	0.09	0.01
116	251	135	19	4016	0.99427	767.52	0.518924	1519.07	35.1	0	7.28	1701.59	6.78	1701.09	6.78	-0.5	-0.03
116	252	136	20	4032	0.993701	769.11	0.519841	1517.52	38.73	0.63	7.17	1714.43	6.8	1713.92	6.8	-0.51	-0.03
116	253	137	21	4048	0.99311	770.69	0.520751	1515.99	42.54	0	7.06	1725.84	6.82	1724.77	6.82	-1.07	-0.06
116	254	138	22	4064	0.992498	772.24	0.521654	1514.5	46.5	0.63	6.95	1738.33	6.84	1737.28	6.84	-1.05	-0.06
116	255	139	23	4080	0.991865	773.77	0.522549	1513.03	50.63	0	6.85	1749.41	6.86	1747.83	6.85	-1.58	-0.09
116	256	140	24	4096	0.991211	775.28	0.523438	1511.59	54.91	0.62	6.75	1761.58	6.88	1760.04	6.88	-1.54	-0.09
116	257	141	25	4112	0.990537	776.77	0.524319	1510.18	59.35	0	6.65	1772.34	6.9	1770.3	6.89	-2.05	-0.12
116	258	142	26	4128	0.989844	778.24	0.525194	1508.79	63.94	0.62	6.55	1784.19	6.92	1782.21	6.91	-1.98	-0.11
116	259	143	27	4144	0.989133	779.69	0.526062	1507.43	68.69	0	6.45	1794.64	6.93	1792.18	6.92	-2.46	-0.14
116	260	144	28	4160	0.988402	781.12	0.526923	1506.1	73.59	0.62	6.36	1806.17	6.95	1803.8	6.94	-2.38	-0.13
116	261	145	29	4176	0.987654	782.53	0.527778	1504.79	78.64	0	6.27	1816.31	6.96	1813.48	6.95	-2.83	-0.16
116	262	146	30	4192	0.986889	783.92	0.528626	1503.5	83.84	0.62	6.18	1827.54	6.98	1824.82	6.96	-2.73	-0.15
116	263	147	31	4208	0.986106	785.29	0.529468	1502.24	89.18	0	6.1	1837.38	6.99	1834.23	6.97	-3.16	-0.17
116	264	148	32	4224	0.985308	786.64	0.530303	1501	94.67	0.62	6.01	1848.31	7	1845.28	6.99	-3.03	-0.16
116	265	149	33	4240	0.984493	787.97	0.531132	1499.79	100.3	0	5.93	1857.86	7.01	1854.42	7	-3.44	-0.19
116	266	150	34	4256	0.983662	789.29	0.531955	1498.6	106.07	0.61	5.85	1868.5	7.02	1865.19	7.01	-3.3	-0.18
116	267	151	35	4272	0.982816	790.58	0.532772	1497.43	111.99	0	5.77	1877.76	7.03	1874.07	7.02	-3.69	-0.2
116	268	152	36	4288	0.981956	791.86	0.533582	1496.29	118.04	0.61	5.69	1888.11	7.05	1884.58	7.03	-3.53	-0.19
116	269	153	37	4304	0.981081	793.12	0.534387	1495.17	124.22	0	5.61	1897.1	7.05	1893.19	7.04	-3.9	-0.21
116	270	154	38	4320	0.980192	794.37	0.535185	1494.07	130.54	0.61	5.54	1907.17	7.06	1903.43	7.05	-3.73	-0.2
116	271	155	39	4336	0.979289	795.6	0.535978	1492.99	137	0	5.46	1915.88	7.07	1911.8	7.05	-4.08	-0.21
116	272	156	40	4352	0.978374	796.81	0.536765	1491.93	143.59	0.61	5.39	1925.68	7.08	1921.78	7.07	-3.9	-0.2
116	273	157	41	4368	0.977445	798	0.537546	1490.89	150.31	0	5.32	1934.13	7.08	1929.89	7.07	-4.23	-0.22
116	274	158	42	4384	0.976504	799.18	0.538321	1489.87	157.15	0.6	5.25	1943.65	7.09	1939.62	7.08	-4.03	-0.21
116	275	159	43	4400	0.97555	800.34	0.539091	1488.88	164.13	0	5.19	1951.84	7.1	1947.49	7.08	-4.35	-0.22
116	276	160	44	4416	0.974585	801.48	0.539855	1487.9	171.23	0.6	5.12	1961.11	7.11	1956.97	7.09	-4.14	-0.21
116	277	161	45	4432	0.973608	802.61	0.540614	1486.94	178.46	0	5.05	1969.04	7.11	1964.6	7.09	-4.44	-0.23
116	278	162	46	4448	0.97262	803.73	0.541367	1486	185.81	0.6	4.99	1978.05	7.12	1973.83	7.1	-4.22	-0.21
116	279	163	47	4464	0.971622	804.83	0.542115	1485.08	193.29	0	4.93	1985.73	7.12	1981.23	7.1	-4.51	-0.23
116	280	164	48	4480	0.970612	805.91	0.542857	1484.18	200.88	0.6	4.87	1994.49	7.12	1990.22	7.11	-4.27	-0.21
116	281	165	49	4496	0.969593	806.98	0.543594	1483.3	208.59	0	4.81	2001.93	7.12	1997.39	7.11	-4.55	-0.23
116	282	166	50	4512	0.968563	808.03	0.544326	1482.43	216.43	0.6	4.75	2010.45	7.13	2006.15	7.11	-4.3	-0.21
116	283	167	51	4528	0.967524	809.07	0.545053	1481.59	224.38	0	4.69	2017.65	7.13	2013.08	7.11	-4.57	-0.23
116	284	168	52	4544	0.966475	810.1	0.545775	1480.76	232.45	0.59	4.63	2025.93	7.13	2021.61	7.12	-4.31	-0.21
116	285	169	53	4560	0.965417	811.11	0.546491	1479.95	240.63	0	4.58	2032.89	7.13	2028.33	7.12	-4.57	-0.23
116	286	170	54	4576	0.96435	812.11	0.547203	1479.15	248.92	0.59	4.52	2040.93	7.14	2036.63	7.12	-4.3	-0.21
116	287	171	55	4592	0.963275	813.09	0.547909	1478.37	257.33	0	4.47	2047.67	7.13	2043.13	7.12	-4.54	-0.22
116	288	172	56	4608	0.962191	814.06	0.548611	1477.61	265.85	0.59	4.42	2055.48	7.14	2051.21	7.12	-4.27	-0.21

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
116	289	173	57	4624	0.9611	815.02	0.549308	1476.86	274.48	0	4.37	2062	7.13	2057.5	7.12	-4.51	-0.22
116	290	174	58	4640	0.96	815.97	0.55	1476.13	283.22	0.59	4.32	2069.59	7.14	2065.36	7.12	-4.23	-0.2
116	291	175	59	4656	0.958893	816.9	0.550687	1475.42	292.07	0	4.27	2075.88	7.13	2071.43	7.12	-4.45	-0.21
116	292	176	60	4672	0.957778	817.82	0.55137	1474.72	301.02	0.59	4.22	2083.25	7.13	2079.08	7.12	-4.17	-0.2
116	293	177	61	4688	0.956656	818.72	0.552048	1474.04	310.08	0	4.17	2089.33	7.13	2084.95	7.12	-4.38	-0.21
116	294	178	62	4704	0.955528	819.62	0.552721	1473.37	319.24	0.58	4.12	2096.48	7.13	2092.39	7.12	-4.09	-0.2
116	295	179	63	4720	0.954392	820.5	0.55339	1472.72	328.51	0	4.08	2102.35	7.13	2098.06	7.11	-4.3	-0.2
116	296	180	64	4736	0.953251	821.37	0.554054	1472.08	337.88	0.58	4.03	2109.29	7.13	2105.29	7.11	-4	-0.19
116	297	181	65	4752	0.952102	822.22	0.554714	1471.45	347.35	0	3.99	2114.96	7.12	2110.76	7.11	-4.2	-0.2
116	298	182	66	4768	0.950948	823.07	0.555369	1470.84	356.93	0.58	3.94	2121.69	7.12	2117.79	7.11	-3.9	-0.18
116	299	183	67	4784	0.949788	823.9	0.55602	1470.25	366.6	0	3.9	2127.15	7.11	2123.06	7.1	-4.09	-0.19
116	300	184	68	4800	0.948622	824.73	0.556667	1469.67	376.37	0.58	3.86	2133.68	7.11	2129.89	7.1	-3.79	-0.18
116	301	185	69	4816	0.947451	825.54	0.557309	1469.1	386.24	0	3.82	2138.95	7.11	2134.97	7.09	-3.97	-0.19
116	302	186	70	4832	0.946274	826.34	0.557947	1468.54	396.2	0.58	3.78	2145.27	7.1	2141.61	7.09	-3.67	-0.17
116	303	187	71	4848	0.945093	827.12	0.558581	1468	406.26	0	3.74	2150.35	7.1	2146.5	7.08	-3.85	-0.18
116	304	188	72	4864	0.943906	827.9	0.559211	1467.47	416.42	0.57	3.7	2156.48	7.09	2152.95	7.08	-3.54	-0.16
116	305	189	73	4880	0.942714	828.67	0.559836	1466.96	426.66	0	3.66	2161.37	7.09	2157.66	7.07	-3.71	-0.17
116	306	190	74	4896	0.941518	829.43	0.560458	1466.45	437.01	0.57	3.62	2167.31	7.08	2163.91	7.07	-3.4	-0.16
116	307	191	75	4912	0.940318	830.17	0.561075	1465.96	447.44	0	3.58	2172.01	7.07	2168.44	7.06	-3.57	-0.16
116	308	192	76	4928	0.939113	830.91	0.561688	1465.49	457.96	0.57	3.55	2177.76	7.07	2174.51	7.06	-3.25	-0.15
116	309	193	77	4944	0.937904	831.63	0.562298	1465.02	468.58	0	3.51	2182.28	7.06	2178.86	7.05	-3.42	-0.16
116	310	194	78	4960	0.936691	832.35	0.562903	1464.57	479.28	0.57	3.48	2187.85	7.06	2184.74	7.05	-3.1	-0.14
116	311	195	79	4976	0.935474	833.06	0.563505	1464.12	490.07	0	3.44	2192.19	7.05	2188.92	7.04	-3.27	-0.15
116	312	196	80	4992	0.934254	833.75	0.564103	1463.69	500.95	0.57	3.41	2197.57	7.04	2194.63	7.03	-2.95	-0.13
116	313	197	81	5008	0.93303	834.44	0.564696	1463.28	511.92	0	3.37	2201.74	7.03	2198.63	7.02	-3.11	-0.14
116	314	198	82	5024	0.931803	835.11	0.565287	1462.87	522.97	0.56	3.34	2206.95	7.03	2204.16	7.02	-2.79	-0.13
116	315	199	83	5040	0.930572	835.78	0.565873	1462.47	534.11	0	3.31	2210.94	7.02	2208	7.01	-2.95	-0.13
116	316	200	84	5056	0.929338	836.44	0.566456	1462.09	545.33	0.56	3.27	2215.98	7.01	2213.35	7	-2.62	-0.12
116	317	201	85	5072	0.928102	837.09	0.567035	1461.71	556.64	0	3.24	2219.81	7	2217.02	6.99	-2.78	-0.13
116	318	202	86	5088	0.926862	837.73	0.56761	1461.35	568.03	0.56	3.21	2224.67	7	2222.21	6.99	-2.46	-0.11
116	319	203	87	5104	0.92562	838.36	0.568182	1461	579.5	0	3.18	2228.33	6.99	2225.72	6.98	-2.61	-0.12
116	320	204	88	5120	0.924375	838.98	0.56875	1460.66	591.05	0.56	3.15	2233.03	6.98	2230.74	6.97	-2.29	-0.1
116	321	205	89	5136	0.923128	839.59	0.569315	1460.33	602.68	0	3.12	2236.53	6.97	2234.08	6.96	-2.45	-0.11
116	322	206	90	5152	0.921878	840.19	0.569876	1460	614.39	0.56	3.09	2241.06	6.96	2238.94	6.95	-2.13	-0.09
116	323	207	91	5168	0.920626	840.79	0.570433	1459.69	626.18	0	3.06	2244.4	6.95	2242.12	6.94	-2.28	-0.1
116	324	208	92	5184	0.919372	841.38	0.570988	1459.39	638.05	0.56	3.03	2248.77	6.94	2246.82	6.93	-1.96	-0.09
116	325	209	93	5200	0.918116	841.95	0.571538	1459.1	650	0	3.01	2251.96	6.93	2249.85	6.92	-2.11	-0.09
116	326	210	94	5216	0.916858	842.52	0.572086	1458.82	662.02	0.55	2.98	2256.17	6.92	2254.38	6.92	-1.79	-0.08
116	327	211	95	5232	0.915598	843.09	0.57263	1458.55	674.12	0	2.95	2259.2	6.91	2257.26	6.9	-1.94	-0.09
116	328	212	96	5248	0.914337	843.64	0.573171	1458.29	686.29	0.55	2.93	2263.26	6.9	2261.64	6.9	-1.62	-0.07
116	329	213	97	5264	0.913074	844.19	0.573708	1458.03	698.54	0	2.9	2266.14	6.89	2264.37	6.88	-1.77	-0.08
116	330	214	98	5280	0.911809	844.72	0.574242	1457.79	710.86	0.55	2.87	2270.05	6.88	2268.59	6.87	-1.46	-0.06
116	331	215	99	5296	0.910543	845.25	0.574773	1457.55	723.26	0	2.85	2272.78	6.87	2271.17	6.86	-1.61	-0.07
116	332	216	100	5312	0.909276	845.78	0.575301	1457.33	735.73	0.55	2.82	2276.54	6.86	2275.24	6.85	-1.29	-0.06
116	333	217	101	5328	0.908007	846.29	0.575826	1457.11	748.27	0	2.8	2279.12	6.84	2277.68	6.84	-1.45	-0.06
116	334	218	102	5344	0.906737	846.8	0.576347	1456.9	760.88	0.55	2.77	2282.73	6.83	2281.6	6.83	-1.13	-0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
116	335	219	103	5360	0.905467	847.3	0.576866	1456.7	773.57	0	2.75	2285.18	6.82	2283.89	6.82	-1.29	-0.06
116	336	220	104	5376	0.904195	847.79	0.577381	1456.51	786.32	0.55	2.73	2288.64	6.81	2287.67	6.81	-0.98	-0.04
116	337	221	105	5392	0.902922	848.28	0.577893	1456.33	799.14	0	2.7	2290.95	6.8	2289.82	6.79	-1.13	-0.05
116	338	222	106	5408	0.901649	848.76	0.578402	1456.16	812.03	0.54	2.68	2294.27	6.79	2293.45	6.79	-0.82	-0.04
116	339	223	107	5424	0.900375	849.23	0.578909	1455.99	824.99	0	2.66	2296.44	6.77	2295.46	6.77	-0.98	-0.04
116	340	224	108	5440	0.8991	849.69	0.579412	1455.83	838.02	0.54	2.63	2299.63	6.76	2298.95	6.76	-0.67	-0.03
116	341	225	109	5456	0.897825	850.15	0.579912	1455.69	851.12	0	2.61	2301.66	6.75	2300.83	6.75	-0.83	-0.04
116	342	226	110	5472	0.896549	850.6	0.580409	1455.54	864.28	0.54	2.59	2304.71	6.74	2304.18	6.74	-0.53	-0.02
116	343	227	111	5488	0.895273	851.05	0.580904	1455.41	877.51	0	2.57	2306.61	6.72	2305.92	6.72	-0.69	-0.03
116	344	228	112	5504	0.893997	851.48	0.581395	1455.28	890.8	0.54	2.55	2309.52	6.71	2309.13	6.71	-0.39	-0.02
116	345	229	113	5520	0.89272	851.92	0.581884	1455.17	904.16	0	2.53	2311.29	6.7	2310.74	6.7	-0.55	-0.02
116	346	230	114	5536	0.891443	852.34	0.58237	1455.06	917.58	0.54	2.51	2314.07	6.69	2313.82	6.69	-0.26	-0.01
116	347	231	115	5552	0.890166	852.76	0.582853	1454.95	931.06	0	2.49	2315.71	6.67	2315.29	6.67	-0.42	-0.02
116	348	232	116	5568	0.888889	853.17	0.583333	1454.86	944.61	0.54	2.47	2318.36	6.66	2318.24	6.66	-0.13	-0.01
116	349	233	117	5584	0.887612	853.58	0.583811	1454.77	958.22	0	2.45	2319.88	6.65	2319.59	6.65	-0.29	-0.01
116	350	234	118	5600	0.886335	853.97	0.584286	1454.69	971.9	0.53	2.43	2322.4	6.64	2322.4	6.64	-0.01	0
116	351	235	119	5616	0.885058	854.37	0.584758	1454.61	985.63	0	2.41	2323.8	6.62	2323.62	6.62	-0.17	-0.01
116	352	236	120	5632	0.883781	854.75	0.585227	1454.55	999.43	0.53	2.39	2326.2	6.61	2326.31	6.61	0.11	0
116	353	237	121	5648	0.882504	855.14	0.585694	1454.49	1013.28	0	2.37	2327.47	6.59	2327.41	6.59	-0.06	0
116	354	238	122	5664	0.881228	855.51	0.586158	1454.43	1027.2	0.53	2.35	2329.74	6.58	2329.96	6.58	0.22	0.01
116	355	239	123	5680	0.879952	855.88	0.58662	1454.39	1041.17	0	2.33	2330.89	6.57	2330.94	6.57	0.04	0
116	356	240	124	5696	0.878677	856.24	0.587079	1454.35	1055.21	0.53	2.32	2333.05	6.55	2333.37	6.55	0.32	0.01
116	357	241	125	5712	0.877402	856.6	0.587535	1454.31	1069.3	0	2.3	2334.08	6.54	2334.22	6.54	0.14	0.01
116	358	242	126	5728	0.876127	856.95	0.587989	1454.29	1083.45	0.53	2.28	2336.12	6.53	2336.53	6.53	0.41	0.02
116	359	243	127	5744	0.874854	857.3	0.58844	1454.27	1097.66	0	2.26	2337.04	6.51	2337.27	6.51	0.23	0.01
116	360	244	128	5760	0.87358	857.64	0.588889	1454.25	1111.92	0.53	2.25	2338.95	6.5	2339.45	6.5	0.49	0.02
116	361	245	129	5776	0.872308	857.98	0.589335	1454.24	1126.25	0	2.23	2339.76	6.48	2340.07	6.48	0.31	0.01
116	362	246	130	5792	0.871036	858.31	0.589779	1454.24	1140.62	0.53	2.21	2341.56	6.47	2342.13	6.47	0.57	0.02
116	363	247	131	5808	0.869765	858.63	0.59022	1454.25	1155.06	0	2.2	2342.26	6.45	2342.64	6.45	0.38	0.02
116	364	248	132	5824	0.868494	858.95	0.590659	1454.26	1169.55	0.52	2.18	2343.94	6.44	2344.58	6.44	0.64	0.03
116	365	249	133	5840	0.867225	859.27	0.591096	1454.28	1184.09	0	2.16	2344.53	6.42	2344.98	6.42	0.45	0.02
116	366	250	134	5856	0.865956	859.58	0.59153	1454.3	1198.69	0.52	2.15	2346.11	6.41	2346.8	6.41	0.7	0.03
116	367	251	135	5872	0.864688	859.88	0.591962	1454.33	1213.34	0	2.13	2346.58	6.39	2347.08	6.4	0.5	0.02
116	368	252	136	5888	0.863422	860.18	0.592391	1454.36	1228.05	0.52	2.12	2348.05	6.38	2348.8	6.38	0.75	0.03
116	369	253	137	5904	0.862156	860.48	0.592818	1454.4	1242.8	0	2.1	2348.42	6.36	2348.97	6.37	0.55	0.02
116	370	254	138	5920	0.860891	860.76	0.593243	1454.45	1257.61	0.52	2.09	2349.78	6.35	2350.57	6.35	0.79	0.03
116	371	255	139	5936	0.859628	861.05	0.593666	1454.5	1272.48	0	2.07	2350.05	6.33	2350.63	6.34	0.58	0.02
116	372	256	140	5952	0.858365	861.33	0.594086	1454.56	1287.39	0.52	2.06	2351.3	6.32	2352.12	6.32	0.82	0.03
116	373	257	141	5968	0.857104	861.6	0.594504	1454.62	1302.36	0	2.04	2351.46	6.3	2352.07	6.31	0.61	0.03
116	374	258	142	5984	0.855844	861.87	0.59492	1454.69	1317.37	0.52	2.03	2352.61	6.29	2353.45	6.29	0.84	0.04
116	375	259	143	6000	0.854585	862.14	0.595333	1454.76	1332.44	0	2.02	2352.67	6.27	2353.3	6.28	0.62	0.03
116	376	260	144	6016	0.853327	862.4	0.595745	1454.84	1347.56	0.52	2	2353.72	6.26	2354.57	6.26	0.85	0.04
116	377	261	145	6032	0.852071	862.66	0.596154	1454.93	1362.72	0	1.99	2353.68	6.24	2354.31	6.24	0.63	0.03
116	378	262	146	6048	0.850816	862.91	0.596561	1455.02	1377.94	0.51	1.97	2354.63	6.23	2355.47	6.23	0.85	0.04
116	379	263	147	6064	0.849562	863.16	0.596966	1455.11	1393.2	0	1.96	2354.49	6.21	2355.12	6.21	0.62	0.03
116	380	264	148	6080	0.84831	863.4	0.597368	1455.21	1408.52	0.51	1.95	2355.34	6.2	2356.17	6.2	0.84	0.04

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116	381	265	149	6096	0.847059	863.64	0.597769	1455.31	1423.88	0	1.93	2355.11	6.18	2355.71	6.18	0.61	0.03
116	382	266	150	6112	0.84581	863.87	0.598168	1455.42	1439.29	0.51	1.92	2355.85	6.17	2356.67	6.17	0.82	0.03
116	383	267	151	6128	0.844562	864.1	0.598564	1455.54	1454.74	0	1.91	2355.53	6.15	2356.11	6.15	0.58	0.02
116	384	268	152	6144	0.843316	864.33	0.598958	1455.66	1470.24	0.51	1.9	2356.17	6.14	2356.96	6.14	0.78	0.03
116	385	269	153	6160	0.842071	864.55	0.599351	1455.78	1485.79	0	1.88	2355.76	6.12	2356.3	6.12	0.55	0.02
116	386	270	154	6176	0.840828	864.77	0.599741	1455.91	1501.39	0.51	1.87	2356.31	6.1	2357.05	6.11	0.74	0.03
116	387	271	155	6192	0.839586	864.98	0.600129	1456.04	1517.03	0	1.86	2355.8	6.09	2356.3	6.09	0.5	0.02
116	388	272	156	6208	0.838346	865.19	0.600515	1456.18	1532.72	0.51	1.85	2356.26	6.07	2356.94	6.07	0.68	0.03
116	389	273	157	6224	0.837108	865.4	0.6009	1456.33	1548.45	0	1.84	2355.66	6.06	2356.1	6.06	0.44	0.02
116	390	274	158	6240	0.835871	865.6	0.601282	1456.47	1564.23	0.51	1.82	2356.03	6.04	2356.65	6.04	0.62	0.03
116	391	275	159	6256	0.834636	865.8	0.601662	1456.62	1580.05	0	1.81	2355.34	6.02	2355.7	6.02	0.37	0.02
116	392	276	160	6272	0.833403	865.99	0.602041	1456.78	1595.92	0.51	1.8	2355.61	6.01	2356.16	6.01	0.54	0.02
116	393	277	161	6288	0.832171	866.18	0.602417	1456.94	1611.83	0	1.79	2354.84	5.99	2355.12	5.99	0.28	0.01
116	394	278	162	6304	0.830941	866.37	0.602792	1457.11	1627.78	0.5	1.78	2355.02	5.98	2355.48	5.98	0.45	0.02
116	395	279	163	6320	0.829713	866.55	0.603165	1457.28	1643.78	0	1.77	2354.16	5.96	2354.35	5.96	0.19	0.01
116	396	280	164	6336	0.828487	866.73	0.603535	1457.45	1659.82	0.5	1.76	2354.26	5.95	2354.61	5.95	0.35	0.01
116	397	281	165	6352	0.827262	866.91	0.603904	1457.63	1675.9	0	1.75	2353.31	5.93	2353.39	5.93	0.08	0
116	398	282	166	6368	0.82604	867.08	0.604271	1457.81	1692.02	0.5	1.73	2353.32	5.91	2353.56	5.91	0.24	0.01
116	399	283	167	6384	0.824819	867.25	0.604637	1457.99	1708.19	0	1.72	2352.29	5.9	2352.26	5.9	-0.04	0
116	400	284	168	6400	0.8236	867.41	0.605	1458.18	1724.4	0.5	1.71	2352.22	5.88	2352.33	5.88	0.11	0
116	401	285	169	6416	0.822383	867.57	0.605362	1458.38	1740.65	0	1.7	2351.11	5.86	2350.94	5.86	-0.17	-0.01
116	402	286	170	6432	0.821168	867.73	0.605721	1458.58	1756.94	0.5	1.69	2350.95	5.85	2350.92	5.85	-0.02	0
116	403	287	171	6448	0.819955	867.88	0.606079	1458.78	1773.27	0	1.68	2349.75	5.83	2349.44	5.83	-0.31	-0.01
116	404	288	172	6464	0.818743	868.03	0.606436	1458.99	1789.64	0.5	1.67	2349.51	5.82	2349.34	5.82	-0.17	-0.01
116	405	289	173	6480	0.817534	868.18	0.60679	1459.19	1806.05	0	1.66	2348.24	5.8	2347.77	5.8	-0.47	-0.02
116	406	290	174	6496	0.816327	868.33	0.607143	1459.41	1822.5	0.5	1.65	2347.91	5.78	2347.58	5.78	-0.34	-0.01
116	407	291	175	6512	0.815121	868.47	0.607494	1459.63	1838.99	0	1.64	2346.56	5.77	2345.93	5.76	-0.63	-0.03
116	408	292	176	6528	0.813918	868.61	0.607843	1459.85	1855.52	0.5	1.63	2346.16	5.75	2345.65	5.75	-0.51	-0.02
116	409	293	177	6544	0.812716	868.74	0.608191	1460.07	1872.09	0	1.62	2344.73	5.73	2343.91	5.73	-0.81	-0.03
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
117	233	116	-1	3728	0.999982	734.57	0.498927	1579.48	0.1	0	9.82	1423.67	6.11	1432.94	6.15	9.27	0.65
117	234	117	0	3744	1	736.68	0.5	1577.22	0	-0.65	10	1439.45	6.15	1448.44	6.19	8.99	0.62
117	235	118	1	3760	0.999982	738.76	0.501064	1574.99	0.1	0	9.82	1455.96	6.2	1463.56	6.23	7.6	0.52
117	236	119	2	3776	0.999928	740.82	0.502119	1572.81	0.41	-0.65	9.65	1470.96	6.23	1478.69	6.27	7.72	0.52
117	237	120	3	3792	0.99984	742.84	0.503165	1570.66	0.93	0	9.48	1487.05	6.27	1493.43	6.3	6.38	0.43
117	238	121	4	3808	0.999718	744.84	0.504202	1568.55	1.64	-0.65	9.32	1501.63	6.31	1508.18	6.34	6.55	0.43
117	239	122	5	3824	0.999562	746.81	0.50523	1566.49	2.55	0	9.16	1517.31	6.35	1522.55	6.37	5.24	0.34
117	240	123	6	3840	0.999375	748.75	0.50625	1564.46	3.66	-0.65	9	1531.49	6.38	1536.95	6.4	5.46	0.36
117	241	124	7	3856	0.999156	750.67	0.507261	1562.47	4.96	0	8.85	1546.76	6.42	1550.96	6.44	4.2	0.27
117	242	125	8	3872	0.998907	752.55	0.508264	1560.51	6.45	-0.64	8.7	1560.55	6.45	1564.99	6.47	4.45	0.28
117	243	126	9	3888	0.998628	754.41	0.509259	1558.59	8.13	0	8.56	1575.42	6.48	1578.65	6.5	3.23	0.2
117	244	127	10	3904	0.99832	756.25	0.510246	1556.7	10	-0.64	8.42	1588.83	6.51	1592.34	6.53	3.51	0.22
117	245	128	11	3920	0.997984	758.06	0.511224	1554.85	12.05	0	8.28	1603.32	6.54	1605.65	6.55	2.33	0.15
117	246	129	12	3936	0.99762	759.84	0.512195	1553.04	14.28	-0.64	8.15	1616.35	6.57	1619	6.58	2.65	0.16

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
117	247	130	13	3952	0.99723	761.6	0.513158	1551.25	16.7	0	8.02	1630.47	6.6	1631.97	6.61	1.51	0.09
117	248	131	14	3968	0.996813	763.34	0.514113	1549.5	19.28	-0.64	7.89	1643.13	6.63	1644.99	6.63	1.86	0.11
117	249	132	15	3984	0.996371	765.05	0.51506	1547.78	22.05	0	7.76	1656.88	6.65	1657.63	6.66	0.75	0.05
117	250	133	16	4000	0.995904	766.74	0.516	1546.1	24.99	-0.63	7.64	1669.19	6.68	1670.33	6.68	1.14	0.07
117	251	134	17	4016	0.995413	768.4	0.516932	1544.44	28.1	0	7.52	1682.59	6.7	1682.65	6.7	0.06	0
117	252	135	18	4032	0.994898	770.04	0.517857	1542.81	31.38	-0.63	7.41	1694.55	6.72	1695.03	6.73	0.48	0.03
117	253	136	19	4048	0.99436	771.66	0.518775	1541.22	34.82	0	7.29	1707.6	6.75	1707.02	6.75	-0.57	-0.03
117	254	137	20	4064	0.9938	773.26	0.519685	1539.65	38.43	-0.63	7.18	1719.22	6.77	1719.09	6.77	-0.13	-0.01
117	255	138	21	4080	0.993218	774.83	0.520588	1538.11	42.2	0	7.08	1731.93	6.79	1730.78	6.79	-1.15	-0.07
117	256	139	22	4096	0.992615	776.38	0.521484	1536.6	46.14	-0.62	6.97	1743.22	6.81	1742.55	6.81	-0.67	-0.04
117	257	140	23	4112	0.991991	777.91	0.522374	1535.12	50.23	0	6.87	1755.6	6.83	1753.93	6.82	-1.67	-0.1
117	258	141	24	4128	0.991347	779.42	0.523256	1533.67	54.49	-0.62	6.77	1766.56	6.85	1765.4	6.84	-1.17	-0.07
117	259	142	25	4144	0.990683	780.91	0.524131	1532.24	58.89	0	6.67	1778.62	6.87	1776.48	6.86	-2.14	-0.12
117	260	143	26	4160	0.99	782.38	0.525	1530.84	63.45	-0.62	6.57	1789.27	6.88	1787.66	6.88	-1.61	-0.09
117	261	144	27	4176	0.989298	783.83	0.525862	1529.47	68.17	0	6.48	1801.01	6.9	1798.45	6.89	-2.56	-0.14
117	262	145	28	4192	0.988579	785.26	0.526718	1528.12	73.03	-0.62	6.38	1811.35	6.91	1809.34	6.91	-2.01	-0.11
117	263	146	29	4208	0.987841	786.67	0.527567	1526.8	78.05	0	6.29	1822.78	6.93	1819.85	6.92	-2.93	-0.16
117	264	147	30	4224	0.987087	788.06	0.528409	1525.5	83.21	-0.62	6.2	1832.82	6.94	1830.46	6.93	-2.37	-0.13
117	265	148	31	4240	0.986315	789.43	0.529245	1524.22	88.51	0	6.12	1843.95	6.96	1840.68	6.95	-3.27	-0.18
117	266	149	32	4256	0.985528	790.78	0.530075	1522.97	93.96	-0.61	6.03	1853.7	6.97	1851.02	6.96	-2.68	-0.14
117	267	150	33	4272	0.984724	792.12	0.530899	1521.75	99.55	0	5.95	1864.53	6.98	1860.97	6.97	-3.56	-0.19
117	268	151	34	4288	0.983905	793.44	0.531716	1520.54	105.28	-0.61	5.87	1874	6.99	1871.04	6.98	-2.95	-0.16
117	269	152	35	4304	0.983071	794.73	0.532528	1519.36	111.16	0	5.79	1884.54	7.01	1880.72	6.99	-3.81	-0.2
117	270	153	36	4320	0.982222	796.01	0.533333	1518.2	117.16	-0.61	5.71	1893.72	7.01	1890.53	7	-3.19	-0.17
117	271	154	37	4336	0.981359	797.28	0.534133	1517.07	123.31	0	5.64	1903.98	7.03	1899.95	7.01	-4.03	-0.21
117	272	155	38	4352	0.980482	798.52	0.534926	1515.95	129.59	-0.61	5.56	1912.89	7.03	1909.5	7.02	-3.39	-0.18
117	273	156	39	4368	0.979592	799.75	0.535714	1514.86	136	0	5.49	1922.87	7.04	1918.66	7.03	-4.22	-0.22
117	274	157	40	4384	0.978688	800.96	0.536496	1513.79	142.54	-0.6	5.42	1931.51	7.05	1927.95	7.04	-3.56	-0.18
117	275	158	41	4400	0.977772	802.16	0.537273	1512.74	149.22	0	5.35	1941.23	7.06	1936.86	7.04	-4.37	-0.23
117	276	159	42	4416	0.976843	803.34	0.538043	1511.71	156.02	-0.6	5.28	1949.61	7.06	1945.91	7.05	-3.7	-0.19
117	277	160	43	4432	0.975902	804.5	0.538809	1510.7	162.95	0	5.21	1959.06	7.07	1954.57	7.06	-4.49	-0.23
117	278	161	44	4448	0.97495	805.65	0.539568	1509.71	170	-0.6	5.14	1967.18	7.08	1963.37	7.06	-3.81	-0.19
117	279	162	45	4464	0.973985	806.78	0.540323	1508.74	177.19	0	5.08	1976.37	7.08	1971.79	7.07	-4.59	-0.23
117	280	163	46	4480	0.97301	807.9	0.541071	1507.79	184.49	-0.6	5.02	1984.24	7.09	1980.35	7.07	-3.89	-0.2
117	281	164	47	4496	0.972024	809	0.541815	1506.85	191.91	0	4.95	1993.18	7.09	1988.53	7.08	-4.66	-0.23
117	282	165	48	4512	0.971028	810.09	0.542553	1505.94	199.46	-0.6	4.89	2000.81	7.1	1996.86	7.08	-3.95	-0.2
117	283	166	49	4528	0.970021	811.16	0.543286	1505.05	207.13	0	4.83	2009.5	7.1	2004.8	7.08	-4.7	-0.23
117	284	167	50	4544	0.969004	812.22	0.544014	1504.17	214.91	-0.59	4.77	2016.88	7.1	2012.9	7.09	-3.99	-0.2
117	285	168	51	4560	0.967978	813.26	0.544737	1503.31	222.81	0	4.72	2025.34	7.11	2020.61	7.09	-4.72	-0.23
117	286	169	52	4576	0.966942	814.29	0.545455	1502.47	230.83	-0.59	4.66	2032.48	7.11	2028.49	7.09	-4	-0.2
117	287	170	53	4592	0.965897	815.31	0.546167	1501.64	238.96	0	4.6	2040.7	7.11	2035.98	7.09	-4.72	-0.23
117	288	171	54	4608	0.964844	816.31	0.546875	1500.83	247.2	-0.59	4.55	2047.62	7.11	2043.63	7.1	-3.99	-0.2
117	289	172	55	4624	0.963782	817.3	0.547578	1500.04	255.56	0	4.5	2055.6	7.11	2050.9	7.1	-4.71	-0.23
117	290	173	56	4640	0.962711	818.27	0.548276	1499.27	264.02	-0.59	4.44	2062.29	7.11	2058.33	7.1	-3.96	-0.19
117	291	174	57	4656	0.961632	819.23	0.548969	1498.51	272.6	0	4.39	2070.05	7.11	2065.38	7.1	-4.67	-0.23
117	292	175	58	4672	0.960546	820.18	0.549658	1497.77	281.29	-0.59	4.34	2076.52	7.11	2072.6	7.1	-3.92	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
117	293	176	59	4688	0.959452	821.11	0.550341	1497.04	290.08	0	4.29	2084.06	7.11	2079.44	7.1	-4.62	-0.22
117	294	177	60	4704	0.958351	822.04	0.55102	1496.33	298.98	-0.58	4.24	2090.31	7.11	2086.45	7.1	-3.86	-0.19
117	295	178	61	4720	0.957242	822.95	0.551695	1495.64	307.98	0	4.2	2097.63	7.11	2093.08	7.1	-4.55	-0.22
117	296	179	62	4736	0.956127	823.84	0.552365	1494.96	317.09	-0.58	4.15	2103.67	7.11	2099.89	7.09	-3.79	-0.18
117	297	180	63	4752	0.955005	824.73	0.55303	1494.29	326.31	0	4.1	2110.77	7.11	2106.31	7.09	-4.47	-0.21
117	298	181	64	4768	0.953876	825.6	0.553691	1493.64	335.62	-0.58	4.06	2116.61	7.1	2112.91	7.09	-3.7	-0.18
117	299	182	65	4784	0.952741	826.46	0.554348	1493.01	345.04	0	4.01	2123.5	7.1	2119.13	7.09	-4.37	-0.21
117	300	183	66	4800	0.9516	827.31	0.555	1492.38	354.55	-0.58	3.97	2129.14	7.1	2125.54	7.09	-3.6	-0.17
117	301	184	67	4816	0.950453	828.15	0.555648	1491.78	364.17	0	3.93	2135.83	7.1	2131.56	7.08	-4.26	-0.2
117	302	185	68	4832	0.9493	828.98	0.556291	1491.18	373.88	-0.58	3.88	2141.26	7.09	2137.78	7.08	-3.49	-0.16
117	303	186	69	4848	0.948142	829.79	0.556931	1490.6	383.69	0	3.84	2147.75	7.09	2143.6	7.07	-4.15	-0.19
117	304	187	70	4864	0.946979	830.6	0.557566	1490.04	393.6	-0.57	3.8	2152.99	7.08	2149.62	7.07	-3.36	-0.16
117	305	188	71	4880	0.94581	831.39	0.558197	1489.49	403.61	0	3.76	2159.28	7.08	2155.26	7.07	-4.02	-0.19
117	306	189	72	4896	0.944637	832.17	0.558824	1488.95	413.7	-0.57	3.72	2164.33	7.07	2161.09	7.06	-3.23	-0.15
117	307	190	73	4912	0.943458	832.95	0.559446	1488.42	423.89	0	3.68	2170.43	7.07	2166.54	7.06	-3.88	-0.18
117	308	191	74	4928	0.942275	833.71	0.560065	1487.91	434.18	-0.57	3.65	2175.29	7.06	2172.19	7.05	-3.1	-0.14
117	309	192	75	4944	0.941088	834.46	0.56068	1487.4	444.55	0	3.61	2181.19	7.06	2177.45	7.05	-3.74	-0.17
117	310	193	76	4960	0.939896	835.2	0.56129	1486.92	455.02	-0.57	3.57	2185.87	7.05	2182.92	7.04	-2.95	-0.14
117	311	194	77	4976	0.9387	835.93	0.561897	1486.44	465.57	0	3.54	2191.59	7.05	2188	7.04	-3.59	-0.16
117	312	195	78	4992	0.9375	836.65	0.5625	1485.97	476.22	-0.57	3.5	2196.09	7.04	2193.29	7.03	-2.8	-0.13
117	313	196	79	5008	0.936296	837.36	0.563099	1485.52	486.95	0	3.46	2201.63	7.03	2198.2	7.02	-3.44	-0.16
117	314	197	80	5024	0.935089	838.06	0.563694	1485.08	497.77	-0.56	3.43	2205.95	7.03	2203.31	7.02	-2.64	-0.12
117	315	198	81	5040	0.933878	838.75	0.564286	1484.65	508.68	0	3.4	2211.31	7.02	2208.04	7.01	-3.28	-0.15
117	316	199	82	5056	0.932663	839.43	0.564873	1484.24	519.67	-0.56	3.36	2215.46	7.01	2212.98	7	-2.48	-0.11
117	317	200	83	5072	0.931445	840.1	0.565457	1483.83	530.75	0	3.33	2220.65	7.01	2217.54	7	-3.11	-0.14
117	318	201	84	5088	0.930224	840.76	0.566038	1483.43	541.91	-0.56	3.3	2224.63	7	2222.31	6.99	-2.32	-0.1
117	319	202	85	5104	0.929	841.42	0.566614	1483.05	553.16	0	3.27	2229.64	6.99	2226.69	6.98	-2.95	-0.13
117	320	203	86	5120	0.927773	842.06	0.567187	1482.68	564.49	-0.56	3.23	2233.45	6.98	2231.3	6.97	-2.15	-0.1
117	321	204	87	5136	0.926544	842.7	0.567757	1482.31	575.9	0	3.2	2238.3	6.97	2235.52	6.96	-2.78	-0.12
117	322	205	88	5152	0.925312	843.32	0.568323	1481.96	587.39	-0.56	3.17	2241.94	6.96	2239.96	6.96	-1.98	-0.09
117	323	206	89	5168	0.924077	843.94	0.568885	1481.62	598.96	0	3.14	2246.62	6.96	2244.02	6.95	-2.6	-0.12
117	324	207	90	5184	0.92284	844.55	0.569444	1481.29	610.61	-0.56	3.11	2250.11	6.94	2248.3	6.94	-1.81	-0.08
117	325	208	91	5200	0.9216	845.15	0.57	1480.97	622.34	0	3.09	2254.63	6.94	2252.19	6.93	-2.43	-0.11
117	326	209	92	5216	0.920358	845.74	0.570552	1480.66	634.15	-0.55	3.06	2257.96	6.93	2256.32	6.92	-1.64	-0.07
117	327	210	93	5232	0.919115	846.32	0.571101	1480.36	646.03	0	3.03	2262.31	6.92	2260.05	6.91	-2.26	-0.1
117	328	211	94	5248	0.917869	846.9	0.571646	1480.07	657.99	-0.55	3	2265.49	6.91	2264.02	6.9	-1.47	-0.06
117	329	212	95	5264	0.916621	847.47	0.572188	1479.79	670.03	0	2.97	2269.69	6.9	2267.6	6.89	-2.09	-0.09
117	330	213	96	5280	0.915372	848.02	0.572727	1479.52	682.14	-0.55	2.95	2272.71	6.89	2271.41	6.88	-1.3	-0.06
117	331	214	97	5296	0.914121	848.58	0.573263	1479.25	694.33	0	2.92	2276.76	6.88	2274.84	6.87	-1.92	-0.08
117	332	215	98	5312	0.912868	849.12	0.573795	1479	706.59	-0.55	2.89	2279.63	6.87	2278.5	6.86	-1.13	-0.05
117	333	216	99	5328	0.911614	849.65	0.574324	1478.76	718.93	0	2.87	2283.53	6.86	2281.78	6.85	-1.75	-0.08
117	334	217	100	5344	0.910359	850.18	0.57485	1478.52	731.34	-0.55	2.84	2286.26	6.85	2285.29	6.84	-0.96	-0.04
117	335	218	101	5360	0.909102	850.7	0.575373	1478.3	743.82	0	2.82	2290	6.84	2288.42	6.83	-1.58	-0.07
117	336	219	102	5376	0.907844	851.22	0.575893	1478.08	756.37	-0.55	2.79	2292.59	6.82	2291.79	6.82	-0.8	-0.03
117	337	220	103	5392	0.906585	851.72	0.576409	1477.87	768.99	0	2.77	2296.19	6.81	2294.77	6.81	-1.42	-0.06
117	338	221	104	5408	0.905325	852.22	0.576923	1477.67	781.68	-0.54	2.75	2298.63	6.8	2298	6.8	-0.64	-0.03

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
117	339	222	105	5424	0.904065	852.71	0.577434	1477.48	794.44	0	2.72	2302.09	6.79	2300.83	6.79	-1.26	-0.05
117	340	223	106	5440	0.902803	853.19	0.577941	1477.3	807.27	-0.54	2.7	2304.39	6.78	2303.92	6.78	-0.48	-0.02
117	341	224	107	5456	0.90154	853.67	0.578446	1477.13	820.17	0	2.68	2307.71	6.77	2306.61	6.76	-1.1	-0.05
117	342	225	108	5472	0.900277	854.14	0.578947	1476.96	833.14	-0.54	2.65	2309.88	6.75	2309.56	6.75	-0.32	-0.01
117	343	226	109	5488	0.899013	854.6	0.579446	1476.8	846.17	0	2.63	2313.06	6.74	2312.12	6.74	-0.94	-0.04
117	344	227	110	5504	0.897749	855.06	0.579942	1476.65	859.27	-0.54	2.61	2315.09	6.73	2314.92	6.73	-0.17	-0.01
117	345	228	111	5520	0.896484	855.51	0.580435	1476.51	872.43	0	2.59	2318.14	6.72	2317.34	6.72	-0.8	-0.03
117	346	229	112	5536	0.895219	855.95	0.580925	1476.38	885.66	-0.54	2.57	2320.04	6.71	2320.01	6.71	-0.03	0
117	347	230	113	5552	0.893953	856.39	0.581412	1476.25	898.96	0	2.55	2322.95	6.69	2322.3	6.69	-0.65	-0.03
117	348	231	114	5568	0.892687	856.82	0.581897	1476.13	912.32	-0.54	2.53	2324.72	6.68	2324.84	6.68	0.11	0
117	349	232	115	5584	0.891421	857.24	0.582378	1476.02	925.74	0	2.51	2327.51	6.67	2326.99	6.67	-0.51	-0.02
117	350	233	116	5600	0.890155	857.66	0.582857	1475.92	939.23	-0.53	2.49	2329.15	6.65	2329.4	6.66	0.25	0.01
117	351	234	117	5616	0.888889	858.07	0.583333	1475.82	952.78	0	2.47	2331.8	6.64	2331.42	6.64	-0.38	-0.02
117	352	235	118	5632	0.887623	858.47	0.583807	1475.73	966.39	-0.53	2.45	2333.32	6.63	2333.7	6.63	0.37	0.02
117	353	236	119	5648	0.886357	858.87	0.584278	1475.65	980.06	0	2.43	2335.85	6.62	2335.59	6.62	-0.26	-0.01
117	354	237	120	5664	0.88509	859.26	0.584746	1475.57	993.79	-0.53	2.41	2337.25	6.6	2337.74	6.6	0.5	0.02
117	355	238	121	5680	0.883825	859.65	0.585211	1475.51	1007.59	0	2.39	2339.65	6.59	2339.51	6.59	-0.14	-0.01
117	356	239	122	5696	0.882559	860.03	0.585674	1475.45	1021.44	-0.53	2.37	2340.93	6.58	2341.54	6.58	0.61	0.03
117	357	240	123	5712	0.881294	860.4	0.586134	1475.39	1035.36	0	2.35	2343.2	6.56	2343.18	6.56	-0.02	0
117	358	241	124	5728	0.880029	860.77	0.586592	1475.34	1049.33	-0.53	2.33	2344.36	6.55	2345.08	6.55	0.72	0.03
117	359	242	125	5744	0.878764	861.13	0.587047	1475.3	1063.36	0	2.32	2346.52	6.54	2346.6	6.54	0.08	0
117	360	243	126	5760	0.8775	861.49	0.5875	1475.27	1077.45	-0.53	2.3	2347.56	6.52	2348.38	6.52	0.82	0.03
117	361	244	127	5776	0.876236	861.84	0.58795	1475.24	1091.6	0	2.28	2349.6	6.51	2349.78	6.51	0.18	0.01
117	362	245	128	5792	0.874973	862.19	0.588398	1475.22	1105.8	-0.53	2.26	2350.53	6.49	2351.44	6.5	0.91	0.04
117	363	246	129	5808	0.873711	862.53	0.588843	1475.21	1120.06	0	2.25	2352.45	6.48	2352.72	6.48	0.27	0.01
117	364	247	130	5824	0.872449	862.86	0.589286	1475.2	1134.38	-0.52	2.23	2353.27	6.47	2354.26	6.47	0.99	0.04
117	365	248	131	5840	0.871188	863.19	0.589726	1475.2	1148.75	0	2.21	2355.08	6.45	2355.42	6.45	0.35	0.01
117	366	249	132	5856	0.869927	863.52	0.590164	1475.2	1163.17	-0.52	2.2	2355.78	6.44	2356.85	6.44	1.07	0.05
117	367	250	133	5872	0.868668	863.84	0.590599	1475.21	1177.66	0	2.18	2357.48	6.42	2357.9	6.42	0.42	0.02
117	368	251	134	5888	0.867409	864.15	0.591033	1475.23	1192.19	-0.52	2.17	2358.07	6.41	2359.21	6.41	1.14	0.05
117	369	252	135	5904	0.866151	864.46	0.591463	1475.25	1206.78	0	2.15	2359.66	6.39	2360.14	6.4	0.48	0.02
117	370	253	136	5920	0.864894	864.77	0.591892	1475.28	1221.43	-0.52	2.14	2360.15	6.38	2361.34	6.38	1.2	0.05
117	371	254	137	5936	0.863638	865.07	0.592318	1475.31	1236.12	0	2.12	2361.62	6.37	2362.16	6.37	0.54	0.02
117	372	255	138	5952	0.862383	865.36	0.592742	1475.35	1250.87	-0.52	2.11	2362	6.35	2363.25	6.35	1.24	0.05
117	373	256	139	5968	0.861129	865.65	0.593164	1475.4	1265.67	0	2.09	2363.37	6.34	2363.96	6.34	0.58	0.02
117	374	257	140	5984	0.859876	865.93	0.593583	1475.45	1280.52	-0.52	2.08	2363.65	6.32	2364.93	6.32	1.28	0.05
117	375	258	141	6000	0.858624	866.21	0.594	1475.5	1295.43	0	2.06	2364.91	6.31	2365.53	6.31	0.62	0.03
117	376	259	142	6016	0.857373	866.49	0.594415	1475.57	1310.38	-0.52	2.05	2365.09	6.29	2366.4	6.29	1.31	0.06
117	377	260	143	6032	0.856124	866.76	0.594828	1475.63	1325.39	0	2.03	2366.25	6.28	2366.89	6.28	0.65	0.03
117	378	261	144	6048	0.854875	867.03	0.595238	1475.71	1340.44	-0.51	2.02	2366.33	6.26	2367.66	6.26	1.33	0.06
117	379	262	145	6064	0.853628	867.29	0.595646	1475.79	1355.55	0	2.01	2367.38	6.25	2368.04	6.25	0.66	0.03
117	380	263	146	6080	0.852382	867.54	0.596053	1475.87	1370.7	-0.51	1.99	2367.36	6.23	2368.7	6.23	1.34	0.06
117	381	264	147	6096	0.851138	867.8	0.596457	1475.96	1385.91	0	1.98	2368.32	6.22	2368.98	6.22	0.67	0.03
117	382	265	148	6112	0.849894	868.05	0.596859	1476.05	1401.16	-0.51	1.96	2368.2	6.2	2369.54	6.2	1.34	0.06
117	383	266	149	6128	0.848653	868.29	0.597258	1476.15	1416.46	0	1.95	2369.05	6.19	2369.71	6.19	0.66	0.03
117	384	267	150	6144	0.847412	868.53	0.597656	1476.25	1431.81	-0.51	1.94	2368.84	6.17	2370.17	6.17	1.33	0.06

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
117	385	268	151	6160	0.846173	868.76	0.598052	1476.36	1447.2	0	1.93	2369.6	6.15	2370.24	6.16	0.65	0.03
117	386	269	152	6176	0.844935	868.99	0.598446	1476.48	1462.65	-0.51	1.91	2369.29	6.14	2370.6	6.14	1.31	0.06
117	387	270	153	6192	0.843699	869.22	0.598837	1476.59	1478.14	0	1.9	2369.95	6.12	2370.57	6.13	0.62	0.03
117	388	271	154	6208	0.842465	869.44	0.599227	1476.72	1493.67	-0.51	1.89	2369.55	6.11	2370.82	6.11	1.28	0.05
117	389	272	155	6224	0.841232	869.66	0.599614	1476.85	1509.25	0	1.88	2370.12	6.09	2370.7	6.09	0.58	0.02
117	390	273	156	6240	0.84	869.88	0.6	1476.98	1524.88	-0.51	1.86	2369.62	6.08	2370.85	6.08	1.23	0.05
117	391	274	157	6256	0.83877	870.09	0.600384	1477.12	1540.55	0	1.85	2370.1	6.06	2370.63	6.06	0.53	0.02
117	392	275	158	6272	0.837542	870.29	0.600765	1477.26	1556.27	-0.51	1.84	2369.51	6.04	2370.69	6.05	1.18	0.05
117	393	276	159	6288	0.836315	870.5	0.601145	1477.4	1572.03	0	1.83	2369.9	6.03	2370.37	6.03	0.47	0.02
117	394	277	160	6304	0.83509	870.69	0.601523	1477.56	1587.84	-0.5	1.82	2369.22	6.01	2370.33	6.02	1.11	0.05
117	395	278	161	6320	0.833866	870.89	0.601899	1477.71	1603.69	0	1.81	2369.52	6	2369.92	6	0.4	0.02
117	396	279	162	6336	0.832645	871.08	0.602273	1477.87	1619.58	-0.5	1.79	2368.76	5.98	2369.79	5.98	1.03	0.04
117	397	280	163	6352	0.831425	871.27	0.602645	1478.04	1635.52	0	1.78	2368.96	5.97	2369.28	5.97	0.32	0.01
117	398	281	164	6368	0.830206	871.45	0.603015	1478.2	1651.5	-0.5	1.77	2368.12	5.95	2369.06	5.95	0.94	0.04
117	399	282	165	6384	0.82899	871.63	0.603383	1478.38	1667.52	0	1.76	2368.23	5.94	2368.46	5.94	0.23	0.01
117	400	283	166	6400	0.827775	871.81	0.60375	1478.55	1683.59	-0.5	1.75	2367.3	5.92	2368.14	5.92	0.84	0.04
117	401	284	167	6416	0.826562	871.98	0.604115	1478.74	1699.69	0	1.74	2367.33	5.9	2367.45	5.9	0.12	0.01
117	402	285	168	6432	0.825351	872.15	0.604478	1478.92	1715.84	-0.5	1.73	2366.32	5.89	2367.05	5.89	0.73	0.03
117	403	286	169	6448	0.824142	872.32	0.604839	1479.11	1732.03	0	1.72	2366.26	5.87	2366.26	5.87	0	0
117	404	287	170	6464	0.822934	872.48	0.605198	1479.3	1748.26	-0.5	1.71	2365.17	5.85	2365.77	5.86	0.6	0.03
117	405	288	171	6480	0.821728	872.64	0.605556	1479.5	1764.53	0	1.7	2365.03	5.84	2364.9	5.84	-0.13	-0.01
117	406	289	172	6496	0.820525	872.79	0.605911	1479.7	1780.84	-0.5	1.69	2363.85	5.82	2364.32	5.82	0.47	0.02
117	407	290	173	6512	0.819323	872.94	0.606265	1479.91	1797.2	0	1.68	2363.63	5.81	2363.36	5.81	-0.27	-0.01
117	408	291	174	6528	0.818123	873.09	0.606618	1480.12	1813.59	-0.5	1.67	2362.38	5.79	2362.69	5.79	0.32	0.01
117	409	292	175	6544	0.816925	873.24	0.606968	1480.33	1830.02	0	1.66	2362.07	5.78	2361.65	5.77	-0.43	-0.02
117	410	293	176	6560	0.815729	873.38	0.607317	1480.55	1846.49	-0.49	1.65	2360.74	5.76	2360.89	5.76	0.15	0.01
117	411	294	177	6576	0.814535	873.52	0.607664	1480.77	1863	0	1.64	2360.35	5.74	2359.76	5.74	-0.59	-0.03
117	412	295	178	6592	0.813342	873.66	0.60801	1480.99	1879.55	-0.49	1.63	2358.94	5.73	2358.92	5.73	-0.02	0
117	413	296	179	6608	0.812152	873.79	0.608354	1481.22	1896.14	0	1.62	2358.48	5.71	2357.71	5.71	-0.77	-0.03
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
118	235	117	-1	3760	0.999982	738.76	0.498936	1602.03	0.1	0	9.82	1428.93	6.08	1438.2	6.12	9.28	0.64
118	236	118	0	3776	1	740.87	0.5	1599.75	0	0.65	10	1446.03	6.13	1454.59	6.16	8.56	0.59
118	237	119	1	3792	0.999982	742.95	0.501055	1597.51	0.1	0	9.82	1461.26	6.17	1468.87	6.2	7.61	0.52
118	238	120	2	3808	0.999929	745	0.502101	1595.31	0.41	0.65	9.65	1477.58	6.21	1484.87	6.24	7.29	0.49
118	239	121	3	3824	0.999842	747.02	0.503138	1593.15	0.92	0	9.49	1492.4	6.24	1498.79	6.27	6.39	0.43
118	240	122	4	3840	0.999722	749.01	0.504167	1591.03	1.63	0.65	9.32	1508.3	6.28	1514.41	6.31	6.12	0.4
118	241	123	5	3856	0.99957	750.98	0.505187	1588.95	2.53	0	9.17	1522.71	6.32	1527.97	6.34	5.26	0.34
118	242	124	6	3872	0.999385	752.91	0.506198	1586.91	3.63	0.64	9.01	1538.2	6.36	1543.23	6.38	5.03	0.33
118	243	125	7	3888	0.99917	754.82	0.507202	1584.9	4.92	0	8.86	1552.21	6.39	1556.43	6.41	4.22	0.27
118	244	126	8	3904	0.998925	756.71	0.508197	1582.94	6.4	0.64	8.71	1567.31	6.42	1571.33	6.44	4.02	0.26
118	245	127	9	3920	0.998651	758.56	0.509184	1581	8.07	0	8.57	1580.94	6.45	1584.19	6.47	3.25	0.21
118	246	128	10	3936	0.998348	760.4	0.510163	1579.1	9.92	0.64	8.43	1595.65	6.49	1598.74	6.5	3.09	0.19
118	247	129	11	3952	0.998017	762.2	0.511134	1577.24	11.95	0	8.29	1608.9	6.51	1611.25	6.52	2.36	0.15
118	248	130	12	3968	0.997659	763.99	0.512097	1575.41	14.17	0.64	8.16	1623.23	6.55	1625.46	6.55	2.23	0.14

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
118	249	131	13	3984	0.997274	765.74	0.513052	1573.61	16.56	0	8.03	1636.12	6.57	1637.65	6.58	1.53	0.09
118	250	132	14	4000	0.996864	767.48	0.514	1571.85	19.13	0.63	7.9	1650.08	6.6	1651.52	6.61	1.44	0.09
118	251	133	15	4016	0.996429	769.18	0.51494	1570.11	21.87	0	7.78	1662.61	6.62	1663.39	6.63	0.78	0.05
118	252	134	16	4032	0.995969	770.87	0.515873	1568.41	24.79	0.63	7.66	1676.22	6.65	1676.93	6.65	0.71	0.04
118	253	135	17	4048	0.995485	772.53	0.516798	1566.74	27.88	0	7.54	1688.39	6.67	1688.48	6.67	0.09	0.01
118	254	136	18	4064	0.994978	774.17	0.517717	1565.1	31.13	0.63	7.43	1701.65	6.7	1701.7	6.7	0.05	0
118	255	137	19	4080	0.994448	775.79	0.518627	1563.49	34.55	0	7.31	1713.48	6.72	1712.94	6.72	-0.54	-0.03
118	256	138	20	4096	0.993896	777.39	0.519531	1561.91	38.13	0.62	7.2	1726.4	6.74	1725.85	6.74	-0.55	-0.03
118	257	139	21	4112	0.993323	778.96	0.520428	1560.36	41.88	0	7.1	1737.9	6.76	1736.78	6.76	-1.11	-0.06
118	258	140	22	4128	0.992729	780.51	0.521318	1558.84	45.78	0.62	6.99	1750.48	6.78	1749.38	6.78	-1.1	-0.06
118	259	141	23	4144	0.992114	782.04	0.522201	1557.34	49.85	0	6.89	1761.65	6.8	1760.02	6.8	-1.63	-0.09
118	260	142	24	4160	0.991479	783.55	0.523077	1555.88	54.07	0.62	6.79	1773.91	6.82	1772.32	6.82	-1.59	-0.09
118	261	143	25	4176	0.990825	785.04	0.523946	1554.44	58.44	0	6.69	1784.77	6.84	1782.67	6.83	-2.1	-0.12
118	262	144	26	4192	0.990152	786.51	0.524809	1553.02	62.97	0.62	6.59	1796.7	6.86	1794.67	6.85	-2.04	-0.11
118	263	145	27	4208	0.989461	787.96	0.525665	1551.63	67.65	0	6.5	1807.25	6.87	1804.73	6.86	-2.52	-0.14
118	264	146	28	4224	0.988751	789.39	0.526515	1550.27	72.48	0.62	6.41	1818.88	6.89	1816.44	6.88	-2.43	-0.13
118	265	147	29	4240	0.988024	790.8	0.527358	1548.93	77.46	0	6.32	1829.12	6.9	1826.23	6.89	-2.89	-0.16
118	266	148	30	4256	0.98728	792.19	0.528195	1547.62	82.58	0.61	6.23	1840.44	6.92	1837.66	6.91	-2.79	-0.15
118	267	149	31	4272	0.98652	793.56	0.529026	1546.33	87.85	0	6.14	1850.39	6.93	1847.17	6.92	-3.22	-0.17
118	268	150	32	4288	0.985743	794.92	0.529851	1545.07	93.26	0.61	6.06	1861.42	6.95	1858.32	6.93	-3.1	-0.17
118	269	151	33	4304	0.98495	796.25	0.530669	1543.83	98.82	0	5.97	1871.07	6.96	1867.56	6.94	-3.51	-0.19
118	270	152	34	4320	0.984143	797.57	0.531481	1542.61	104.51	0.61	5.89	1881.81	6.97	1878.44	6.96	-3.37	-0.18
118	271	153	35	4336	0.98332	798.87	0.532288	1541.42	110.34	0	5.81	1891.18	6.98	1887.42	6.96	-3.76	-0.2
118	272	154	36	4352	0.982483	800.15	0.533088	1540.25	116.31	0.61	5.74	1901.63	6.99	1898.03	6.98	-3.61	-0.19
118	273	155	37	4368	0.981631	801.42	0.533883	1539.1	122.41	0	5.66	1910.73	7	1906.76	6.98	-3.98	-0.21
118	274	156	38	4384	0.980766	802.66	0.534672	1537.97	128.65	0.6	5.59	1920.91	7.01	1917.1	7	-3.81	-0.2
118	275	157	39	4400	0.979888	803.9	0.535455	1536.87	135.01	0	5.51	1929.74	7.02	1925.58	7	-4.16	-0.22
118	276	158	40	4416	0.978996	805.11	0.536232	1535.78	141.51	0.6	5.44	1939.64	7.03	1935.66	7.01	-3.97	-0.21
118	277	159	41	4432	0.978092	806.31	0.537004	1534.72	148.14	0	5.37	1948.2	7.03	1943.89	7.02	-4.31	-0.22
118	278	160	42	4448	0.977175	807.49	0.53777	1533.67	154.9	0.6	5.3	1957.84	7.04	1953.73	7.03	-4.11	-0.21
118	279	161	43	4464	0.976246	808.66	0.53853	1532.65	161.79	0	5.23	1966.14	7.05	1961.71	7.03	-4.43	-0.23
118	280	162	44	4480	0.975306	809.81	0.539286	1531.65	168.8	0.6	5.17	1975.52	7.06	1971.3	7.04	-4.22	-0.21
118	281	163	45	4496	0.974354	810.94	0.540036	1530.67	175.93	0	5.1	1983.57	7.06	1979.05	7.04	-4.52	-0.23
118	282	164	46	4512	0.973392	812.06	0.54078	1529.7	183.18	0.6	5.04	1992.69	7.07	1988.39	7.05	-4.3	-0.22
118	283	165	47	4528	0.972418	813.17	0.541519	1528.76	190.56	0	4.98	2000.49	7.07	1995.91	7.05	-4.59	-0.23
118	284	166	48	4544	0.971434	814.26	0.542254	1527.83	198.06	0.59	4.92	2009.37	7.08	2005.01	7.06	-4.35	-0.22
118	285	167	49	4560	0.97044	815.33	0.542982	1526.92	205.68	0	4.86	2016.93	7.08	2012.3	7.06	-4.63	-0.23
118	286	168	50	4576	0.969436	816.39	0.543706	1526.03	213.41	0.59	4.8	2025.56	7.08	2021.17	7.07	-4.38	-0.22
118	287	169	51	4592	0.968423	817.44	0.544425	1525.16	221.26	0	4.74	2032.88	7.08	2028.23	7.07	-4.65	-0.23
118	288	170	52	4608	0.9674	818.47	0.545139	1524.3	229.23	0.59	4.68	2041.27	7.09	2036.88	7.07	-4.39	-0.22
118	289	171	53	4624	0.966368	819.49	0.545848	1523.47	237.31	0	4.63	2048.36	7.09	2043.72	7.07	-4.65	-0.23
118	290	172	54	4640	0.965327	820.49	0.546552	1522.65	245.5	0.59	4.57	2056.52	7.09	2052.14	7.08	-4.38	-0.21
118	291	173	55	4656	0.964278	821.48	0.547251	1521.84	253.81	0	4.52	2063.39	7.09	2058.76	7.07	-4.62	-0.22
118	292	174	56	4672	0.96322	822.46	0.547945	1521.06	262.22	0.59	4.47	2071.31	7.09	2066.96	7.08	-4.35	-0.21
118	293	175	57	4688	0.962154	823.43	0.548635	1520.29	270.75	0	4.42	2077.96	7.09	2073.37	7.08	-4.58	-0.22
118	294	176	58	4704	0.961081	824.38	0.54932	1519.53	279.38	0.58	4.37	2085.66	7.09	2081.36	7.08	-4.3	-0.21

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
118	295	177	59	4720	0.96	825.32	0.55	1518.8	288.12	0	4.32	2092.08	7.09	2087.56	7.08	-4.53	-0.22
118	296	178	60	4736	0.958912	826.24	0.550676	1518.07	296.97	0.58	4.27	2099.57	7.09	2095.33	7.08	-4.24	-0.2
118	297	179	61	4752	0.957816	827.16	0.551347	1517.37	305.92	0	4.22	2105.78	7.09	2101.33	7.08	-4.45	-0.21
118	298	180	62	4768	0.956714	828.06	0.552013	1516.67	314.97	0.58	4.17	2113.05	7.09	2108.89	7.08	-4.16	-0.2
118	299	181	63	4784	0.955605	828.95	0.552676	1516	324.13	0	4.13	2119.05	7.09	2114.68	7.07	-4.37	-0.21
118	300	182	64	4800	0.954489	829.83	0.553333	1515.34	333.39	0.58	4.08	2126.11	7.09	2122.04	7.07	-4.07	-0.19
118	301	183	65	4816	0.953367	830.69	0.553987	1514.69	342.75	0	4.04	2131.91	7.08	2127.64	7.07	-4.27	-0.2
118	302	184	66	4832	0.952239	831.54	0.554636	1514.05	352.21	0.58	3.99	2138.76	7.08	2134.79	7.07	-3.96	-0.19
118	303	185	67	4848	0.951105	832.39	0.555281	1513.44	361.77	0	3.95	2144.35	7.08	2140.2	7.06	-4.15	-0.19
118	304	186	68	4864	0.949965	833.22	0.555921	1512.83	371.43	0.57	3.91	2151	7.08	2147.16	7.06	-3.84	-0.18
118	305	187	69	4880	0.94882	834.04	0.556557	1512.24	381.19	0	3.87	2156.4	7.07	2152.37	7.06	-4.03	-0.19
118	306	188	70	4896	0.94767	834.85	0.55719	1511.66	391.04	0.57	3.83	2162.85	7.07	2159.13	7.06	-3.72	-0.17
118	307	189	71	4912	0.946514	835.64	0.557818	1511.1	400.98	0	3.79	2168.06	7.06	2164.16	7.05	-3.9	-0.18
118	308	190	72	4928	0.945353	836.43	0.558442	1510.55	411.02	0.57	3.75	2174.31	7.06	2170.73	7.05	-3.58	-0.16
118	309	191	73	4944	0.944188	837.21	0.559061	1510.01	421.16	0	3.71	2179.33	7.05	2175.58	7.04	-3.76	-0.17
118	310	192	74	4960	0.943018	837.97	0.559677	1509.49	431.38	0.57	3.67	2185.39	7.05	2181.96	7.04	-3.44	-0.16
118	311	193	75	4976	0.941843	838.73	0.560289	1508.97	441.7	0	3.63	2190.23	7.04	2186.62	7.03	-3.61	-0.16
118	312	194	76	4992	0.940664	839.47	0.560897	1508.47	452.11	0.57	3.59	2196.1	7.04	2192.82	7.03	-3.29	-0.15
118	313	195	77	5008	0.939481	840.21	0.561502	1507.99	462.61	0	3.56	2200.76	7.03	2197.31	7.02	-3.45	-0.16
118	314	196	78	5024	0.938294	840.93	0.562102	1507.51	473.2	0.56	3.52	2206.45	7.03	2203.32	7.02	-3.13	-0.14
118	315	197	79	5040	0.937103	841.65	0.562698	1507.05	483.87	0	3.49	2210.92	7.02	2207.63	7.01	-3.29	-0.15
118	316	198	80	5056	0.935908	842.35	0.563291	1506.6	494.63	0.56	3.45	2216.43	7.01	2213.47	7	-2.96	-0.13
118	317	199	81	5072	0.934709	843.05	0.56388	1506.16	505.48	0	3.42	2220.73	7.01	2217.61	7	-3.12	-0.14
118	318	200	82	5088	0.933507	843.73	0.564465	1505.73	516.41	0.56	3.39	2226.07	7	2223.27	6.99	-2.8	-0.13
118	319	201	83	5104	0.932302	844.41	0.565047	1505.31	527.43	0	3.35	2230.2	6.99	2227.24	6.98	-2.95	-0.13
118	320	202	84	5120	0.931094	845.07	0.565625	1504.91	538.54	0.56	3.32	2235.36	6.99	2232.73	6.98	-2.62	-0.12
118	321	203	85	5136	0.929882	845.73	0.566199	1504.52	549.72	0	3.29	2239.32	6.98	2236.54	6.97	-2.78	-0.12
118	322	204	86	5152	0.928668	846.38	0.56677	1504.13	560.99	0.56	3.26	2244.31	6.97	2241.86	6.96	-2.45	-0.11
118	323	205	87	5168	0.927451	847.02	0.567337	1503.76	572.34	0	3.23	2248.1	6.96	2245.5	6.95	-2.6	-0.12
118	324	206	88	5184	0.926231	847.65	0.567901	1503.4	583.77	0.56	3.2	2252.93	6.95	2250.66	6.95	-2.27	-0.1
118	325	207	89	5200	0.925008	848.27	0.568462	1503.05	595.28	0	3.17	2256.56	6.94	2254.14	6.94	-2.42	-0.11
118	326	208	90	5216	0.923783	848.89	0.569018	1502.71	606.88	0.55	3.14	2261.22	6.94	2259.13	6.93	-2.09	-0.09
118	327	209	91	5232	0.922556	849.49	0.569572	1502.38	618.54	0	3.11	2264.69	6.93	2262.45	6.92	-2.24	-0.1
118	328	210	92	5248	0.921327	850.09	0.570122	1502.06	630.29	0.55	3.08	2269.19	6.92	2267.28	6.91	-1.91	-0.08
118	329	211	93	5264	0.920095	850.68	0.570669	1501.75	642.12	0	3.05	2272.51	6.91	2270.45	6.9	-2.06	-0.09
118	330	212	94	5280	0.918861	851.26	0.571212	1501.45	654.02	0.55	3.02	2276.85	6.9	2275.12	6.89	-1.73	-0.08
118	331	213	95	5296	0.917626	851.83	0.571752	1501.16	666	0	3	2280.02	6.89	2278.13	6.88	-1.88	-0.08
118	332	214	96	5312	0.916388	852.39	0.572289	1500.87	678.05	0.55	2.97	2284.2	6.88	2282.65	6.88	-1.55	-0.07
118	333	215	97	5328	0.915149	852.95	0.572823	1500.6	690.17	0	2.94	2287.21	6.87	2285.51	6.86	-1.7	-0.07
118	334	216	98	5344	0.913909	853.5	0.573353	1500.34	702.38	0.55	2.92	2291.25	6.86	2289.87	6.86	-1.38	-0.06
118	335	217	99	5360	0.912667	854.04	0.573881	1500.09	714.65	0	2.89	2294.11	6.85	2292.59	6.84	-1.52	-0.07
118	336	218	100	5376	0.911423	854.57	0.574405	1499.84	727	0.55	2.87	2298	6.84	2296.8	6.84	-1.2	-0.05
118	337	219	101	5392	0.910178	855.1	0.574926	1499.61	739.42	0	2.84	2300.72	6.83	2299.37	6.82	-1.35	-0.06
118	338	220	102	5408	0.908932	855.61	0.575444	1499.38	751.9	0.54	2.82	2304.46	6.82	2303.43	6.81	-1.03	-0.04
118	339	221	103	5424	0.907684	856.12	0.575959	1499.17	764.47	0	2.79	2307.03	6.81	2305.86	6.8	-1.17	-0.05
118	340	222	104	5440	0.906436	856.63	0.576471	1498.96	777.1	0.54	2.77	2310.63	6.8	2309.77	6.79	-0.85	-0.04

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118	341	223	105	5456	0.905187	857.12	0.576979	1498.76	789.8	0	2.74	2313.07	6.78	2312.06	6.78	-1	-0.04
118	342	224	106	5472	0.903936	857.61	0.577485	1498.57	802.56	0.54	2.72	2316.52	6.77	2315.83	6.77	-0.69	-0.03
118	343	225	107	5488	0.902685	858.09	0.577988	1498.39	815.4	0	2.7	2318.82	6.76	2317.98	6.76	-0.83	-0.04
118	344	226	108	5504	0.901433	858.57	0.578488	1498.21	828.31	0.54	2.68	2322.13	6.75	2321.61	6.75	-0.52	-0.02
118	345	227	109	5520	0.900181	859.03	0.578986	1498.05	841.28	0	2.65	2324.29	6.74	2323.62	6.74	-0.67	-0.03
118	346	228	110	5536	0.898927	859.5	0.57948	1497.89	854.32	0.54	2.63	2327.47	6.73	2327.11	6.73	-0.36	-0.02
118	347	229	111	5552	0.897674	859.95	0.579971	1497.74	867.42	0	2.61	2329.5	6.71	2328.99	6.71	-0.51	-0.02
118	348	230	112	5568	0.89642	860.4	0.58046	1497.6	880.59	0.54	2.59	2332.54	6.7	2332.34	6.7	-0.2	-0.01
118	349	231	113	5584	0.895165	860.84	0.580946	1497.46	893.82	0	2.57	2334.44	6.69	2334.09	6.69	-0.36	-0.02
118	350	232	114	5600	0.89391	861.27	0.581429	1497.33	907.12	0.53	2.55	2337.35	6.68	2337.3	6.68	-0.05	0
118	351	233	115	5616	0.892655	861.7	0.581909	1497.22	920.48	0	2.53	2339.13	6.66	2338.92	6.66	-0.21	-0.01
118	352	234	116	5632	0.8914	862.12	0.582386	1497.1	933.91	0.53	2.51	2341.9	6.65	2342	6.65	0.09	0
118	353	235	117	5648	0.890144	862.54	0.582861	1497	947.39	0	2.49	2343.55	6.64	2343.49	6.64	-0.06	0
118	354	236	118	5664	0.888889	862.95	0.583333	1496.9	960.94	0.53	2.47	2346.2	6.63	2346.43	6.63	0.23	0.01
118	355	237	119	5680	0.887633	863.35	0.583803	1496.81	974.56	0	2.45	2347.73	6.61	2347.8	6.61	0.07	0
118	356	238	120	5696	0.886378	863.75	0.58427	1496.73	988.23	0.53	2.43	2350.25	6.6	2350.62	6.6	0.37	0.02
118	357	239	121	5712	0.885123	864.14	0.584734	1496.66	1001.96	0	2.41	2351.65	6.59	2351.86	6.59	0.2	0.01
118	358	240	122	5728	0.883868	864.53	0.585196	1496.59	1015.75	0.53	2.39	2354.05	6.58	2354.55	6.58	0.49	0.02
118	359	241	123	5744	0.882613	864.9	0.585655	1496.53	1029.6	0	2.37	2355.34	6.56	2355.66	6.56	0.33	0.01
118	360	242	124	5760	0.881358	865.28	0.586111	1496.47	1043.52	0.53	2.35	2357.62	6.55	2358.23	6.55	0.61	0.03
118	361	243	125	5776	0.880104	865.65	0.586565	1496.42	1057.48	0	2.34	2358.78	6.53	2359.23	6.54	0.44	0.02
118	362	244	126	5792	0.87885	866.01	0.587017	1496.38	1071.51	0.53	2.32	2360.94	6.52	2361.67	6.52	0.73	0.03
118	363	245	127	5808	0.877596	866.37	0.587466	1496.35	1085.6	0	2.3	2361.99	6.51	2362.54	6.51	0.55	0.02
118	364	246	128	5824	0.876343	866.72	0.587912	1496.32	1099.74	0.52	2.28	2364.03	6.49	2364.86	6.5	0.83	0.04
118	365	247	129	5840	0.875091	867.06	0.588356	1496.3	1113.94	0	2.27	2364.97	6.48	2365.62	6.48	0.66	0.03
118	366	248	130	5856	0.873839	867.4	0.588798	1496.28	1128.19	0.52	2.25	2366.89	6.47	2367.82	6.47	0.93	0.04
118	367	249	131	5872	0.872588	867.74	0.589237	1496.27	1142.5	0	2.23	2367.72	6.45	2368.47	6.45	0.75	0.03
118	368	250	132	5888	0.871337	868.07	0.589674	1496.27	1156.87	0.52	2.22	2369.53	6.44	2370.55	6.44	1.02	0.04
118	369	251	133	5904	0.870088	868.39	0.590108	1496.27	1171.29	0	2.2	2370.24	6.42	2371.08	6.43	0.83	0.04
118	370	252	134	5920	0.868839	868.71	0.590541	1496.28	1185.76	0.52	2.18	2371.94	6.41	2373.04	6.41	1.1	0.05
118	371	253	135	5936	0.86759	869.03	0.59097	1496.3	1200.29	0	2.17	2372.55	6.4	2373.46	6.4	0.91	0.04
118	372	254	136	5952	0.866343	869.33	0.591398	1496.32	1214.88	0.52	2.15	2374.14	6.38	2375.31	6.39	1.17	0.05
118	373	255	137	5968	0.865096	869.64	0.591823	1496.35	1229.51	0	2.14	2374.64	6.37	2375.62	6.37	0.98	0.04
118	374	256	138	5984	0.863851	869.94	0.592246	1496.38	1244.2	0.52	2.12	2376.12	6.35	2377.35	6.36	1.23	0.05
118	375	257	139	6000	0.862606	870.23	0.592667	1496.42	1258.94	0	2.11	2376.52	6.34	2377.55	6.34	1.04	0.04
118	376	258	140	6016	0.861363	870.52	0.593085	1496.47	1273.73	0.52	2.09	2377.89	6.32	2379.17	6.33	1.28	0.05
118	377	259	141	6032	0.86012	870.81	0.593501	1496.52	1288.57	0	2.08	2378.18	6.31	2379.27	6.31	1.09	0.05
118	378	260	142	6048	0.858879	871.09	0.593915	1496.57	1303.47	0.51	2.06	2379.45	6.29	2380.78	6.3	1.33	0.06
118	379	261	143	6064	0.857638	871.36	0.594327	1496.63	1318.41	0	2.05	2379.64	6.28	2380.77	6.28	1.12	0.05
118	380	262	144	6080	0.856399	871.63	0.594737	1496.7	1333.41	0.51	2.04	2380.81	6.27	2382.17	6.27	1.36	0.06
118	381	263	145	6096	0.855161	871.9	0.595144	1496.77	1348.45	0	2.02	2380.9	6.25	2382.05	6.25	1.15	0.05
118	382	264	146	6112	0.853924	872.16	0.59555	1496.85	1363.55	0.51	2.01	2381.96	6.24	2383.35	6.24	1.38	0.06
118	383	265	147	6128	0.852688	872.42	0.595953	1496.93	1378.69	0	1.99	2381.96	6.22	2383.13	6.22	1.17	0.05
118	384	266	148	6144	0.851454	872.67	0.596354	1497.02	1393.88	0.51	1.98	2382.92	6.21	2384.32	6.21	1.4	0.06
118	385	267	149	6160	0.850221	872.92	0.596753	1497.11	1409.12	0	1.97	2382.82	6.19	2384	6.19	1.18	0.05
118	386	268	150	6176	0.848989	873.16	0.59715	1497.21	1424.41	0.51	1.96	2383.68	6.18	2385.08	6.18	1.4	0.06

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
118	387	269	151	6192	0.847759	873.4	0.597545	1497.31	1439.74	0	1.94	2383.48	6.16	2384.66	6.16	1.18	0.05
118	388	270	152	6208	0.84653	873.64	0.597938	1497.42	1455.13	0.51	1.93	2384.25	6.14	2385.65	6.15	1.4	0.06
118	389	271	153	6224	0.845302	873.87	0.598329	1497.53	1470.56	0	1.92	2383.96	6.13	2385.13	6.13	1.17	0.05
118	390	272	154	6240	0.844076	874.1	0.598718	1497.65	1486.03	0.51	1.9	2384.63	6.11	2386.01	6.12	1.38	0.06
118	391	273	155	6256	0.842852	874.32	0.599105	1497.77	1501.55	0	1.89	2384.24	6.1	2385.39	6.1	1.15	0.05
118	392	274	156	6272	0.841628	874.54	0.59949	1497.9	1517.12	0.51	1.88	2384.82	6.08	2386.17	6.09	1.35	0.06
118	393	275	157	6288	0.840407	874.75	0.599873	1498.03	1532.73	0	1.87	2384.35	6.07	2385.46	6.07	1.11	0.05
118	394	276	158	6304	0.839187	874.97	0.600254	1498.17	1548.39	0.5	1.86	2384.83	6.05	2386.14	6.06	1.31	0.05
118	395	277	159	6320	0.837968	875.17	0.600633	1498.31	1564.09	0	1.84	2384.27	6.04	2385.34	6.04	1.07	0.04
118	396	278	160	6336	0.836751	875.38	0.60101	1498.46	1579.84	0.5	1.83	2384.66	6.02	2385.92	6.03	1.26	0.05
118	397	279	161	6352	0.835536	875.58	0.601385	1498.61	1595.63	0	1.82	2384.01	6.01	2385.02	6.01	1.01	0.04
118	398	280	162	6368	0.834322	875.77	0.601759	1498.76	1611.46	0.5	1.81	2384.31	5.99	2385.51	5.99	1.2	0.05
118	399	281	163	6384	0.83311	875.96	0.60213	1498.92	1627.34	0	1.8	2383.57	5.97	2384.52	5.98	0.95	0.04
118	400	282	164	6400	0.8319	876.15	0.6025	1499.08	1643.26	0.5	1.79	2383.79	5.96	2384.91	5.96	1.12	0.05
118	401	283	165	6416	0.830691	876.34	0.602868	1499.25	1659.22	0	1.78	2382.96	5.94	2383.83	5.94	0.87	0.04
118	402	284	166	6432	0.829484	876.52	0.603234	1499.42	1675.23	0.5	1.77	2383.09	5.93	2384.13	5.93	1.04	0.04
118	403	285	167	6448	0.828279	876.69	0.603598	1499.6	1691.28	0	1.75	2382.18	5.91	2382.96	5.91	0.78	0.03
118	404	286	168	6464	0.827076	876.87	0.60396	1499.78	1707.37	0.5	1.74	2382.22	5.9	2383.16	5.9	0.94	0.04
118	405	287	169	6480	0.825874	877.04	0.604321	1499.97	1723.5	0	1.73	2381.23	5.88	2381.9	5.88	0.67	0.03
118	406	288	170	6496	0.824674	877.21	0.60468	1500.15	1739.67	0.5	1.72	2381.19	5.86	2382.02	5.87	0.83	0.03
118	407	289	171	6512	0.823476	877.37	0.605037	1500.35	1755.88	0	1.71	2380.11	5.85	2380.67	5.85	0.56	0.02
118	408	290	172	6528	0.82228	877.53	0.605392	1500.54	1772.14	0.5	1.7	2379.99	5.83	2380.7	5.84	0.71	0.03
118	409	291	173	6544	0.821085	877.69	0.605746	1500.74	1788.43	0	1.69	2378.83	5.82	2379.26	5.82	0.43	0.02
118	410	292	174	6560	0.819893	877.84	0.606098	1500.95	1804.76	0.49	1.68	2378.63	5.8	2379.2	5.8	0.58	0.02
118	411	293	175	6576	0.818702	877.99	0.606448	1501.16	1821.14	0	1.67	2377.39	5.78	2377.68	5.79	0.29	0.01
118	412	294	176	6592	0.817513	878.14	0.606796	1501.37	1837.55	0.49	1.66	2377.1	5.77	2377.53	5.77	0.43	0.02
118	413	295	177	6608	0.816327	878.28	0.607143	1501.59	1854	0	1.65	2375.79	5.75	2375.93	5.75	0.14	0.01
118	414	296	178	6624	0.815142	878.42	0.607488	1501.81	1870.49	0.49	1.64	2375.42	5.74	2375.7	5.74	0.28	0.01
118	415	297	179	6640	0.813958	878.56	0.607831	1502.03	1887.02	0	1.63	2374.03	5.72	2374.01	5.72	-0.02	0
118	416	298	180	6656	0.812777	878.69	0.608173	1502.26	1903.59	0.49	1.62	2373.58	5.71	2373.69	5.71	0.11	0
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
119	237	118	-1	3792	0.999982	742.95	0.498945	1624.7	0.1	0	9.82	1434.07	6.05	1443.34	6.09	9.27	0.64
119	238	119	0	3808	1	745.05	0.5	1622.41	0	-0.65	10	1449.89	6.09	1458.88	6.13	8.99	0.62
119	239	120	1	3824	0.999982	747.12	0.501046	1620.16	0.1	0	9.83	1466.44	6.14	1474.04	6.17	7.6	0.52
119	240	121	2	3840	0.999931	749.17	0.502083	1617.94	0.41	-0.65	9.66	1481.49	6.17	1489.21	6.21	7.72	0.52
119	241	122	3	3856	0.999845	751.18	0.503112	1615.77	0.91	0	9.49	1497.62	6.21	1504	6.24	6.38	0.42
119	242	123	4	3872	0.999727	753.17	0.504132	1613.64	1.61	-0.64	9.33	1512.26	6.25	1518.8	6.28	6.54	0.43
119	243	124	5	3888	0.999577	755.13	0.505144	1611.55	2.51	0	9.17	1527.98	6.29	1533.22	6.31	5.24	0.34
119	244	125	6	3904	0.999395	757.06	0.506148	1609.49	3.6	-0.64	9.02	1542.22	6.32	1547.67	6.34	5.44	0.35
119	245	126	7	3920	0.999184	758.97	0.507143	1607.47	4.88	0	8.87	1557.55	6.36	1561.73	6.37	4.19	0.27
119	246	127	8	3936	0.998942	760.85	0.50813	1605.49	6.35	-0.64	8.72	1571.4	6.39	1575.83	6.41	4.43	0.28
119	247	128	9	3952	0.998672	762.7	0.509109	1603.54	8	0	8.58	1586.33	6.42	1589.54	6.44	3.21	0.2
119	248	129	10	3968	0.998374	764.53	0.510081	1601.63	9.84	-0.64	8.44	1599.81	6.45	1603.3	6.46	3.49	0.22
119	249	130	11	3984	0.998048	766.34	0.511044	1599.75	11.86	0	8.31	1614.36	6.48	1616.67	6.49	2.31	0.14

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
119	250	131	12	4000	0.997696	768.12	0.512	1597.91	14.06	-0.63	8.17	1627.46	6.51	1630.09	6.52	2.63	0.16
119	251	132	13	4016	0.997318	769.87	0.512948	1596.1	16.43	0	8.05	1641.65	6.54	1643.13	6.55	1.48	0.09
119	252	133	14	4032	0.996914	771.6	0.513889	1594.32	18.98	-0.63	7.92	1654.39	6.57	1656.22	6.57	1.83	0.11
119	253	134	15	4048	0.996485	773.31	0.514822	1592.57	21.7	0	7.8	1668.21	6.59	1668.93	6.6	0.72	0.04
119	254	135	16	4064	0.996032	774.99	0.515748	1590.86	24.6	-0.63	7.68	1680.6	6.62	1681.71	6.62	1.1	0.07
119	255	136	17	4080	0.995556	776.65	0.516667	1589.17	27.66	0	7.56	1694.07	6.64	1694.1	6.64	0.03	0
119	256	137	18	4096	0.995056	778.29	0.517578	1587.52	30.89	-0.62	7.44	1706.12	6.66	1706.55	6.67	0.44	0.03
119	257	138	19	4112	0.994534	779.91	0.518482	1585.9	34.28	0	7.33	1719.24	6.69	1718.63	6.69	-0.61	-0.04
119	258	139	20	4128	0.993991	781.5	0.51938	1584.3	37.84	-0.62	7.22	1730.95	6.71	1730.78	6.71	-0.17	-0.01
119	259	140	21	4144	0.993426	783.08	0.52027	1582.74	41.56	0	7.11	1743.74	6.73	1742.55	6.73	-1.19	-0.07
119	260	141	22	4160	0.99284	784.63	0.521154	1581.2	45.43	-0.62	7.01	1755.13	6.75	1754.4	6.75	-0.72	-0.04
119	261	142	23	4176	0.992234	786.16	0.522031	1579.69	49.47	0	6.91	1767.59	6.77	1765.87	6.77	-1.72	-0.1
119	262	143	24	4192	0.991609	787.67	0.522901	1578.21	53.66	-0.62	6.81	1778.65	6.79	1777.43	6.78	-1.22	-0.07
119	263	144	25	4208	0.990964	789.16	0.523764	1576.76	58	0	6.71	1790.79	6.81	1788.6	6.8	-2.19	-0.12
119	264	145	26	4224	0.990301	790.63	0.524621	1575.33	62.5	-0.62	6.61	1801.54	6.82	1799.87	6.82	-1.67	-0.09
119	265	146	27	4240	0.989619	792.08	0.525472	1573.93	67.14	0	6.52	1813.37	6.84	1810.75	6.83	-2.61	-0.14
119	266	147	28	4256	0.98892	793.51	0.526316	1572.55	71.94	-0.61	6.43	1823.82	6.86	1821.74	6.85	-2.08	-0.11
119	267	148	29	4272	0.988203	794.92	0.527154	1571.2	76.88	0	6.34	1835.34	6.87	1832.34	6.86	-2.99	-0.16
119	268	149	30	4288	0.987469	796.31	0.527985	1569.88	81.97	-0.61	6.25	1845.48	6.89	1843.05	6.88	-2.44	-0.13
119	269	150	31	4304	0.986719	797.68	0.52881	1568.58	87.2	0	6.16	1856.7	6.9	1853.37	6.89	-3.33	-0.18
119	270	151	32	4320	0.985953	799.04	0.52963	1567.3	92.57	-0.61	6.08	1866.56	6.91	1863.81	6.9	-2.75	-0.15
119	271	152	33	4336	0.985172	800.37	0.530443	1566.04	98.09	0	6	1877.49	6.93	1873.86	6.91	-3.63	-0.19
119	272	153	34	4352	0.984375	801.69	0.53125	1564.81	103.74	-0.61	5.92	1887.06	6.94	1884.03	6.93	-3.03	-0.16
119	273	154	35	4368	0.983563	802.99	0.532051	1563.61	109.53	0	5.84	1897.7	6.95	1893.82	6.94	-3.88	-0.21
119	274	155	36	4384	0.982737	804.28	0.532847	1562.42	115.46	-0.6	5.76	1906.99	6.96	1903.73	6.95	-3.27	-0.17
119	275	156	37	4400	0.981898	805.54	0.533636	1561.26	121.52	0	5.68	1917.36	6.97	1913.25	6.96	-4.1	-0.21
119	276	157	38	4416	0.981044	806.79	0.53442	1560.12	127.72	-0.6	5.61	1926.38	6.98	1922.9	6.97	-3.47	-0.18
119	277	158	39	4432	0.980177	808.03	0.535199	1559	134.04	0	5.54	1936.47	6.99	1932.17	6.98	-4.29	-0.22
119	278	159	40	4448	0.979297	809.24	0.535971	1557.9	140.5	-0.6	5.46	1945.22	7	1941.57	6.98	-3.64	-0.19
119	279	160	41	4464	0.978405	810.44	0.536738	1556.83	147.09	0	5.39	1955.04	7.01	1950.59	6.99	-4.45	-0.23
119	280	161	42	4480	0.9775	811.63	0.5375	1555.77	153.8	-0.6	5.33	1963.53	7.01	1959.75	7	-3.78	-0.19
119	281	162	43	4496	0.976583	812.8	0.538256	1554.73	160.64	0	5.26	1973.09	7.02	1968.52	7.01	-4.57	-0.23
119	282	163	44	4512	0.975655	813.95	0.539007	1553.72	167.6	-0.6	5.19	1981.33	7.03	1977.43	7.01	-3.9	-0.2
119	283	164	45	4528	0.974716	815.09	0.539753	1552.72	174.69	0	5.13	1990.63	7.03	1985.96	7.02	-4.67	-0.23
119	284	165	46	4544	0.973765	816.21	0.540493	1551.74	181.9	-0.59	5.06	1998.62	7.04	1994.64	7.02	-3.98	-0.2
119	285	166	47	4560	0.972804	817.32	0.541228	1550.79	189.23	0	5	2007.67	7.04	2002.93	7.03	-4.74	-0.24
119	286	167	48	4576	0.971832	818.41	0.541958	1549.85	196.68	-0.59	4.94	2015.41	7.05	2011.38	7.03	-4.04	-0.2
119	287	168	49	4592	0.970851	819.49	0.542683	1548.93	204.25	0	4.88	2024.22	7.05	2019.44	7.04	-4.78	-0.24
119	288	169	50	4608	0.969859	820.55	0.543403	1548.02	211.94	-0.59	4.82	2031.73	7.05	2027.65	7.04	-4.07	-0.2
119	289	170	51	4624	0.968858	821.6	0.544118	1547.14	219.74	0	4.77	2040.29	7.06	2035.49	7.04	-4.8	-0.24
119	290	171	52	4640	0.967848	822.64	0.544828	1546.27	227.65	-0.59	4.71	2047.56	7.06	2043.48	7.05	-4.08	-0.2
119	291	172	53	4656	0.966828	823.66	0.545533	1545.42	235.68	0	4.65	2055.89	7.06	2051.09	7.05	-4.8	-0.23
119	292	173	54	4672	0.9658	824.67	0.546233	1544.59	243.83	-0.59	4.6	2062.93	7.06	2058.86	7.05	-4.07	-0.2
119	293	174	55	4688	0.964764	825.66	0.546928	1543.77	252.08	0	4.55	2071.03	7.07	2066.25	7.05	-4.78	-0.23
119	294	175	56	4704	0.963719	826.64	0.547619	1542.98	260.44	-0.58	4.49	2077.85	7.07	2073.8	7.05	-4.05	-0.2
119	295	176	57	4720	0.962666	827.61	0.548305	1542.19	268.92	0	4.44	2085.72	7.07	2080.98	7.05	-4.75	-0.23

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
119	296	177	58	4736	0.961605	828.56	0.548986	1541.43	277.5	-0.58	4.39	2092.32	7.07	2088.32	7.06	-4	-0.19
119	297	178	59	4752	0.960537	829.51	0.549663	1540.68	286.19	0	4.34	2099.97	7.07	2095.28	7.05	-4.69	-0.22
119	298	179	60	4768	0.959461	830.44	0.550336	1539.94	294.98	-0.58	4.29	2106.35	7.07	2102.42	7.06	-3.94	-0.19
119	299	180	61	4784	0.958379	831.35	0.551003	1539.22	303.88	0	4.24	2113.79	7.07	2109.17	7.05	-4.62	-0.22
119	300	181	62	4800	0.957289	832.26	0.551667	1538.52	312.88	-0.58	4.2	2119.96	7.07	2116.1	7.05	-3.86	-0.18
119	301	182	63	4816	0.956193	833.15	0.552326	1537.83	321.98	0	4.15	2127.18	7.07	2122.65	7.05	-4.53	-0.21
119	302	183	64	4832	0.95509	834.03	0.55298	1537.16	331.19	-0.58	4.11	2133.15	7.06	2129.38	7.05	-3.77	-0.18
119	303	184	65	4848	0.953981	834.9	0.55363	1536.5	340.5	0	4.06	2140.16	7.06	2135.73	7.05	-4.43	-0.21
119	304	185	66	4864	0.952865	835.76	0.554276	1535.85	349.9	-0.57	4.02	2145.92	7.06	2142.26	7.05	-3.66	-0.17
119	305	186	67	4880	0.951744	836.61	0.554918	1535.22	359.41	0	3.97	2152.73	7.06	2148.41	7.04	-4.32	-0.2
119	306	187	68	4896	0.950617	837.44	0.555556	1534.61	369.01	-0.57	3.93	2158.3	7.05	2154.75	7.04	-3.55	-0.16
119	307	188	69	4912	0.949485	838.27	0.556189	1534.01	378.71	0	3.89	2164.91	7.05	2160.71	7.04	-4.2	-0.19
119	308	189	70	4928	0.948347	839.08	0.556818	1533.42	388.51	-0.57	3.85	2170.28	7.05	2166.85	7.04	-3.42	-0.16
119	309	190	71	4944	0.947204	839.88	0.557443	1532.84	398.4	0	3.81	2176.69	7.04	2172.62	7.03	-4.07	-0.19
119	310	191	72	4960	0.946056	840.67	0.558065	1532.28	408.38	-0.57	3.77	2181.87	7.04	2178.58	7.03	-3.29	-0.15
119	311	192	73	4976	0.944903	841.45	0.558682	1531.73	418.46	0	3.73	2188.09	7.04	2184.16	7.02	-3.93	-0.18
119	312	193	74	4992	0.943746	842.22	0.559295	1531.2	428.63	-0.57	3.69	2193.08	7.03	2189.94	7.02	-3.14	-0.14
119	313	194	75	5008	0.942584	842.98	0.559904	1530.67	438.89	0	3.66	2199.11	7.03	2195.34	7.01	-3.78	-0.17
119	314	195	76	5024	0.941418	843.73	0.56051	1530.16	449.24	-0.56	3.62	2203.92	7.02	2200.93	7.01	-2.99	-0.14
119	315	196	77	5040	0.940247	844.47	0.561111	1529.67	459.68	0	3.58	2209.77	7.02	2206.15	7	-3.62	-0.16
119	316	197	78	5056	0.939072	845.2	0.561709	1529.18	470.21	-0.56	3.55	2214.4	7.01	2211.57	7	-2.83	-0.13
119	317	198	79	5072	0.937894	845.92	0.562303	1528.71	480.83	0	3.51	2220.06	7	2216.6	6.99	-3.46	-0.16
119	318	199	80	5088	0.936711	846.63	0.562893	1528.24	491.53	-0.56	3.48	2224.51	7	2221.85	6.99	-2.67	-0.12
119	319	200	81	5104	0.935525	847.33	0.56348	1527.79	502.32	0	3.44	2230	6.99	2226.71	6.98	-3.29	-0.15
119	320	201	82	5120	0.934336	848.02	0.564063	1527.36	513.2	-0.56	3.41	2234.28	6.98	2231.78	6.97	-2.5	-0.11
119	321	202	83	5136	0.933143	848.7	0.564642	1526.93	524.16	0	3.38	2239.59	6.98	2236.47	6.97	-3.12	-0.14
119	322	203	84	5152	0.931947	849.37	0.565217	1526.51	535.2	-0.56	3.34	2243.7	6.97	2241.38	6.96	-2.32	-0.1
119	323	204	85	5168	0.930748	850.03	0.565789	1526.11	546.33	0	3.31	2248.84	6.96	2245.9	6.95	-2.94	-0.13
119	324	205	86	5184	0.929546	850.69	0.566358	1525.72	557.54	-0.56	3.28	2252.78	6.95	2250.64	6.95	-2.15	-0.1
119	325	206	87	5200	0.928341	851.33	0.566923	1525.33	568.83	0	3.25	2257.75	6.95	2254.99	6.94	-2.76	-0.12
119	326	207	88	5216	0.927133	851.97	0.567485	1524.96	580.2	-0.55	3.22	2261.53	6.94	2259.57	6.93	-1.97	-0.09
119	327	208	89	5232	0.925923	852.59	0.568043	1524.6	591.65	0	3.19	2266.34	6.93	2263.76	6.92	-2.58	-0.11
119	328	209	90	5248	0.92471	853.21	0.568598	1524.25	603.19	-0.55	3.16	2269.96	6.92	2268.17	6.92	-1.78	-0.08
119	329	210	91	5264	0.923495	853.82	0.569149	1523.91	614.8	0	3.13	2274.6	6.91	2272.2	6.91	-2.4	-0.11
119	330	211	92	5280	0.922277	854.42	0.569697	1523.58	626.48	-0.55	3.1	2278.06	6.9	2276.46	6.9	-1.6	-0.07
119	331	212	93	5296	0.921058	855.02	0.570242	1523.26	638.25	0	3.07	2282.55	6.9	2280.33	6.89	-2.21	-0.1
119	332	213	94	5312	0.919836	855.6	0.570783	1522.95	650.09	-0.55	3.04	2285.85	6.89	2284.43	6.88	-1.42	-0.06
119	333	214	95	5328	0.918612	856.18	0.571321	1522.65	662.01	0	3.02	2290.18	6.88	2288.15	6.87	-2.03	-0.09
119	334	215	96	5344	0.917387	856.75	0.571856	1522.36	674	-0.55	2.99	2293.34	6.87	2292.1	6.86	-1.24	-0.05
119	335	216	97	5360	0.91616	857.31	0.572388	1522.08	686.07	0	2.96	2297.51	6.86	2295.66	6.85	-1.84	-0.08
119	336	217	98	5376	0.914931	857.86	0.572917	1521.81	698.21	-0.55	2.94	2300.51	6.85	2299.46	6.84	-1.05	-0.05
119	337	218	99	5392	0.9137	858.4	0.573442	1521.55	710.42	0	2.91	2304.54	6.84	2302.88	6.83	-1.66	-0.07
119	338	219	100	5408	0.912468	858.94	0.573964	1521.3	722.71	-0.54	2.89	2307.4	6.83	2306.52	6.82	-0.87	-0.04
119	339	220	101	5424	0.911235	859.47	0.574484	1521.05	735.07	0	2.86	2311.27	6.82	2309.79	6.81	-1.48	-0.06
119	340	221	102	5440	0.91	859.99	0.575	1520.82	747.5	-0.54	2.84	2313.99	6.81	2313.29	6.8	-0.7	-0.03
119	341	222	103	5456	0.908764	860.51	0.575513	1520.59	759.99	0	2.81	2317.72	6.8	2316.41	6.79	-1.3	-0.06

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
119	342	223	104	5472	0.907527	861.02	0.576023	1520.38	772.56	-0.54	2.79	2320.29	6.78	2319.77	6.78	-0.52	-0.02
119	343	224	105	5488	0.906289	861.52	0.576531	1520.17	785.2	0	2.76	2323.88	6.78	2322.75	6.77	-1.13	-0.05
119	344	225	106	5504	0.90505	862.01	0.577035	1519.97	797.91	-0.54	2.74	2326.31	6.76	2325.96	6.76	-0.35	-0.01
119	345	226	107	5520	0.90381	862.5	0.577536	1519.78	810.69	0	2.72	2329.76	6.75	2328.8	6.75	-0.95	-0.04
119	346	227	108	5536	0.902569	862.98	0.578035	1519.59	823.53	-0.54	2.7	2332.05	6.74	2331.88	6.74	-0.18	-0.01
119	347	228	109	5552	0.901328	863.45	0.57853	1519.42	836.44	0	2.67	2335.36	6.73	2334.58	6.73	-0.79	-0.03
119	348	229	110	5568	0.900086	863.92	0.579023	1519.25	849.42	-0.54	2.65	2337.53	6.72	2337.52	6.72	-0.01	0
119	349	230	111	5584	0.898843	864.38	0.579513	1519.09	862.46	0	2.63	2340.7	6.71	2340.08	6.71	-0.62	-0.03
119	350	231	112	5600	0.8976	864.83	0.58	1518.94	875.57	-0.53	2.61	2342.73	6.69	2342.88	6.69	0.15	0.01
119	351	232	113	5616	0.896356	865.27	0.580484	1518.8	888.74	0	2.59	2345.77	6.68	2345.31	6.68	-0.46	-0.02
119	352	233	114	5632	0.895112	865.71	0.580966	1518.67	901.98	-0.53	2.57	2347.67	6.67	2347.98	6.67	0.31	0.01
119	353	234	115	5648	0.893868	866.15	0.581445	1518.54	915.28	0	2.55	2350.58	6.66	2350.27	6.66	-0.3	-0.01
119	354	235	116	5664	0.892623	866.57	0.581921	1518.42	928.65	-0.53	2.53	2352.35	6.65	2352.81	6.65	0.46	0.02
119	355	236	117	5680	0.891379	866.99	0.582394	1518.31	942.07	0	2.51	2355.13	6.63	2354.98	6.63	-0.15	-0.01
119	356	237	118	5696	0.890134	867.41	0.582865	1518.2	955.56	-0.53	2.49	2356.78	6.62	2357.39	6.62	0.61	0.03
119	357	238	119	5712	0.888889	867.82	0.583333	1518.11	969.11	0	2.47	2359.43	6.61	2359.42	6.61	-0.01	0
119	358	239	120	5728	0.887644	868.22	0.583799	1518.01	982.72	-0.53	2.45	2360.96	6.59	2361.71	6.6	0.75	0.03
119	359	240	121	5744	0.886399	868.62	0.584262	1517.93	996.39	0	2.43	2363.49	6.58	2363.61	6.58	0.13	0.01
119	360	241	122	5760	0.885154	869.01	0.584722	1517.86	1010.13	-0.53	2.41	2364.9	6.57	2365.77	6.57	0.88	0.04
119	361	242	123	5776	0.88391	869.39	0.58518	1517.79	1023.92	0	2.39	2367.3	6.56	2367.56	6.56	0.26	0.01
119	362	243	124	5792	0.882665	869.77	0.585635	1517.73	1037.77	-0.53	2.37	2368.59	6.54	2369.59	6.55	1.01	0.04
119	363	244	125	5808	0.881421	870.14	0.586088	1517.67	1051.67	0	2.35	2370.87	6.53	2371.25	6.53	0.38	0.02
119	364	245	126	5824	0.880178	870.51	0.586538	1517.62	1065.64	-0.52	2.34	2372.04	6.52	2373.17	6.52	1.13	0.05
119	365	246	127	5840	0.878934	870.87	0.586986	1517.58	1079.67	0	2.32	2374.2	6.5	2374.7	6.51	0.5	0.02
119	366	247	128	5856	0.877691	871.23	0.587432	1517.54	1093.75	-0.52	2.3	2375.26	6.49	2376.5	6.49	1.24	0.05
119	367	248	129	5872	0.876449	871.58	0.587875	1517.52	1107.88	0	2.28	2377.31	6.48	2377.92	6.48	0.61	0.03
119	368	249	130	5888	0.875207	871.92	0.588315	1517.49	1122.08	-0.52	2.27	2378.25	6.46	2379.6	6.47	1.34	0.06
119	369	250	131	5904	0.873965	872.26	0.588753	1517.48	1136.33	0	2.25	2380.18	6.45	2380.9	6.45	0.71	0.03
119	370	251	132	5920	0.872725	872.6	0.589189	1517.47	1150.63	-0.52	2.23	2381.02	6.44	2382.46	6.44	1.44	0.06
119	371	252	133	5936	0.871485	872.93	0.589623	1517.46	1164.99	0	2.22	2382.84	6.42	2383.64	6.42	0.81	0.03
119	372	253	134	5952	0.870245	873.25	0.590054	1517.47	1179.41	-0.52	2.2	2383.56	6.41	2385.09	6.41	1.53	0.06
119	373	254	135	5968	0.869006	873.57	0.590483	1517.48	1193.88	0	2.19	2385.27	6.39	2386.16	6.4	0.89	0.04
119	374	255	136	5984	0.867769	873.88	0.590909	1517.49	1208.4	-0.52	2.17	2385.88	6.38	2387.49	6.38	1.61	0.07
119	375	256	137	6000	0.866532	874.19	0.591333	1517.51	1222.97	0	2.16	2387.48	6.37	2388.45	6.37	0.97	0.04
119	376	257	138	6016	0.865295	874.5	0.591755	1517.54	1237.6	-0.52	2.14	2387.99	6.35	2389.67	6.36	1.68	0.07
119	377	258	139	6032	0.86406	874.8	0.592175	1517.57	1252.28	0	2.13	2389.48	6.34	2390.52	6.34	1.03	0.04
119	378	259	140	6048	0.862826	875.09	0.592593	1517.61	1267.01	-0.51	2.11	2389.89	6.32	2391.63	6.33	1.74	0.07
119	379	260	141	6064	0.861592	875.38	0.593008	1517.65	1281.79	0	2.1	2391.27	6.31	2392.36	6.31	1.09	0.05
119	380	261	142	6080	0.86036	875.66	0.593421	1517.7	1296.63	-0.51	2.08	2391.58	6.29	2393.37	6.3	1.79	0.07
119	381	262	143	6096	0.859129	875.94	0.593832	1517.76	1311.51	0	2.07	2392.85	6.28	2394	6.28	1.14	0.05
119	382	263	144	6112	0.857899	876.22	0.594241	1517.82	1326.45	-0.51	2.05	2393.06	6.26	2394.9	6.27	1.84	0.08
119	383	264	145	6128	0.85667	876.49	0.594648	1517.88	1341.43	0	2.04	2394.23	6.25	2395.42	6.25	1.18	0.05
119	384	265	146	6144	0.855442	876.76	0.595052	1517.95	1356.46	-0.51	2.03	2394.34	6.24	2396.21	6.24	1.87	0.08
119	385	266	147	6160	0.854215	877.02	0.595455	1518.03	1371.55	0	2.01	2395.41	6.22	2396.63	6.23	1.21	0.05
119	386	267	148	6176	0.852989	877.28	0.595855	1518.11	1386.68	-0.51	2	2395.42	6.21	2397.32	6.21	1.89	0.08
119	387	268	149	6192	0.851765	877.53	0.596253	1518.2	1401.86	0	1.98	2396.4	6.19	2397.63	6.2	1.23	0.05

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119	388	269	150	6208	0.850542	877.78	0.596649	1518.29	1417.09	-0.51	1.97	2396.31	6.18	2398.21	6.18	1.91	0.08
119	389	270	151	6224	0.84932	878.02	0.597044	1518.39	1432.36	0	1.96	2397.18	6.16	2398.42	6.17	1.24	0.05
119	390	271	152	6240	0.8481	878.26	0.597436	1518.49	1447.68	-0.51	1.95	2397	6.15	2398.91	6.15	1.91	0.08
119	391	272	153	6256	0.846881	878.5	0.597826	1518.6	1463.05	0	1.93	2397.78	6.13	2399.02	6.14	1.24	0.05
119	392	273	154	6272	0.845663	878.73	0.598214	1518.71	1478.47	-0.51	1.92	2397.5	6.12	2399.41	6.12	1.9	0.08
119	393	274	155	6288	0.844447	878.96	0.598601	1518.83	1493.93	0	1.91	2398.19	6.1	2399.42	6.11	1.23	0.05
119	394	275	156	6304	0.843232	879.18	0.598985	1518.95	1509.44	-0.5	1.9	2397.82	6.09	2399.71	6.09	1.89	0.08
119	395	276	157	6320	0.842019	879.4	0.599367	1519.08	1524.99	0	1.88	2398.41	6.07	2399.62	6.07	1.21	0.05
119	396	277	158	6336	0.840807	879.62	0.599747	1519.21	1540.59	-0.5	1.87	2397.95	6.06	2399.81	6.06	1.86	0.08
119	397	278	159	6352	0.839597	879.83	0.600126	1519.34	1556.23	0	1.86	2398.45	6.04	2399.62	6.04	1.17	0.05
119	398	279	160	6368	0.838388	880.04	0.600503	1519.48	1571.92	-0.5	1.85	2397.9	6.02	2399.72	6.03	1.82	0.08
119	399	280	161	6384	0.837181	880.24	0.600877	1519.63	1587.65	0	1.84	2398.31	6.01	2399.44	6.01	1.13	0.05
119	400	281	162	6400	0.835975	880.44	0.60125	1519.78	1603.43	-0.5	1.83	2397.68	5.99	2399.44	6	1.77	0.07
119	401	282	163	6416	0.834771	880.64	0.601621	1519.93	1619.24	0	1.81	2398	5.98	2399.07	5.98	1.07	0.04
119	402	283	164	6432	0.833568	880.83	0.60199	1520.09	1635.11	-0.5	1.8	2397.27	5.96	2398.98	5.97	1.7	0.07
119	403	284	165	6448	0.832368	881.02	0.602357	1520.25	1651.01	0	1.79	2397.5	5.95	2398.51	5.95	1	0.04
119	404	285	166	6464	0.831169	881.21	0.602723	1520.42	1666.96	-0.5	1.78	2396.7	5.93	2398.33	5.94	1.63	0.07
119	405	286	167	6480	0.829971	881.39	0.603086	1520.59	1682.95	0	1.77	2396.84	5.92	2397.77	5.92	0.93	0.04
119	406	287	168	6496	0.828775	881.57	0.603448	1520.77	1698.98	-0.5	1.76	2395.95	5.9	2397.49	5.91	1.54	0.06
119	407	288	169	6512	0.827581	881.74	0.603808	1520.95	1715.05	0	1.75	2396.01	5.89	2396.84	5.89	0.84	0.03
119	408	289	170	6528	0.826389	881.91	0.604167	1521.13	1731.16	-0.5	1.74	2395.03	5.87	2396.48	5.87	1.45	0.06
119	409	290	171	6544	0.825198	882.08	0.604523	1521.32	1747.32	0	1.73	2395.01	5.86	2395.74	5.86	0.73	0.03
119	410	291	172	6560	0.82401	882.25	0.604878	1521.51	1763.51	-0.49	1.72	2393.95	5.84	2395.29	5.84	1.34	0.06
119	411	292	173	6576	0.822823	882.41	0.605231	1521.71	1779.75	0	1.71	2393.84	5.82	2394.46	5.83	0.62	0.03
119	412	293	174	6592	0.821637	882.56	0.605583	1521.91	1796.02	-0.49	1.7	2392.71	5.81	2393.93	5.81	1.22	0.05
119	413	294	175	6608	0.820454	882.72	0.605932	1522.11	1812.34	0	1.69	2392.52	5.79	2393.01	5.79	0.49	0.02
119	414	295	176	6624	0.819272	882.87	0.60628	1522.32	1828.69	-0.49	1.68	2391.3	5.78	2392.39	5.78	1.08	0.05
119	415	296	177	6640	0.818093	883.02	0.606627	1522.53	1845.09	0	1.67	2391.03	5.76	2391.39	5.76	0.36	0.01
119	416	297	178	6656	0.816915	883.16	0.606971	1522.75	1861.52	-0.49	1.66	2389.74	5.74	2390.68	5.75	0.94	0.04
119	417	298	179	6672	0.815739	883.3	0.607314	1522.96	1877.99	0	1.65	2389.39	5.73	2389.6	5.73	0.21	0.01
119	418	299	180	6688	0.814565	883.44	0.607656	1523.19	1894.5	-0.49	1.64	2388.02	5.71	2388.8	5.71	0.78	0.03
119	419	300	181	6704	0.813392	883.58	0.607995	1523.41	1911.05	0	1.63	2387.59	5.7	2387.63	5.7	0.04	0
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
120	239	119	-1	3824	0.999982	747.12	0.498954	1647.5	0.1	0	9.83	1439.1	6.02	1448.37	6.06	9.27	0.64
120	240	120	0	3840	1	749.22	0.5	1645.19	0	0.65	10	1456.23	6.07	1464.79	6.1	8.56	0.58
120	241	121	1	3856	0.999983	751.29	0.501037	1642.93	0.1	0	9.83	1471.51	6.11	1479.12	6.14	7.61	0.51
120	242	122	2	3872	0.999932	753.32	0.502066	1640.71	0.4	0.64	9.66	1487.87	6.15	1495.16	6.18	7.29	0.49
120	243	123	3	3888	0.999848	755.34	0.503086	1638.52	0.9	0	9.49	1502.73	6.18	1509.12	6.21	6.39	0.42
120	244	124	4	3904	0.999731	757.32	0.504098	1636.38	1.6	0.64	9.33	1518.68	6.22	1524.79	6.25	6.11	0.4
120	245	125	5	3920	0.999584	759.27	0.505102	1634.27	2.49	0	9.18	1533.15	6.26	1538.4	6.28	5.25	0.34
120	246	126	6	3936	0.999405	761.2	0.506098	1632.2	3.57	0.64	9.03	1548.69	6.3	1553.71	6.32	5.02	0.32
120	247	127	7	3952	0.999197	763.1	0.507085	1630.17	4.84	0	8.88	1562.77	6.33	1566.97	6.34	4.2	0.27
120	248	128	8	3968	0.998959	764.98	0.508065	1628.17	6.3	0.64	8.73	1577.92	6.36	1581.92	6.38	4	0.25
120	249	129	9	3984	0.998694	766.83	0.509036	1626.21	7.94	0	8.59	1591.61	6.39	1594.84	6.4	3.23	0.2

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
120	250	130	10	4000	0.9984	768.66	0.51	1624.28	9.76	0.63	8.45	1606.38	6.43	1609.45	6.44	3.07	0.19
120	251	131	11	4016	0.998079	770.46	0.510956	1622.39	11.76	0	8.32	1619.7	6.45	1622.04	6.46	2.34	0.14
120	252	132	12	4032	0.997732	772.24	0.511905	1620.54	13.94	0.63	8.19	1634.1	6.48	1636.31	6.49	2.21	0.13
120	253	133	13	4048	0.99736	773.99	0.512846	1618.71	16.3	0	8.06	1647.06	6.51	1648.57	6.52	1.51	0.09
120	254	134	14	4064	0.996962	775.72	0.51378	1616.92	18.83	0.63	7.93	1661.09	6.54	1662.51	6.55	1.41	0.08
120	255	135	15	4080	0.99654	777.42	0.514706	1615.16	21.53	0	7.81	1673.7	6.56	1674.45	6.57	0.75	0.04
120	256	136	16	4096	0.996094	779.1	0.515625	1613.43	24.4	0.62	7.69	1687.38	6.59	1688.06	6.59	0.68	0.04
120	257	137	17	4112	0.995624	780.76	0.516537	1611.73	27.44	0	7.57	1699.63	6.61	1699.69	6.61	0.06	0
120	258	138	18	4128	0.995133	782.4	0.517442	1610.07	30.65	0.62	7.46	1712.97	6.64	1712.98	6.64	0.02	0
120	259	139	19	4144	0.994618	784.02	0.51834	1608.43	34.02	0	7.35	1724.89	6.66	1724.31	6.66	-0.58	-0.03
120	260	140	20	4160	0.994083	785.61	0.519231	1606.82	37.55	0.62	7.24	1737.88	6.68	1737.29	6.68	-0.59	-0.03
120	261	141	21	4176	0.993526	787.18	0.520115	1605.24	41.24	0	7.13	1749.47	6.7	1748.31	6.7	-1.16	-0.07
120	262	142	22	4192	0.992949	788.73	0.520992	1603.69	45.09	0.62	7.03	1762.13	6.73	1760.99	6.72	-1.14	-0.06
120	263	143	23	4208	0.992352	790.26	0.521863	1602.17	49.09	0	6.93	1773.4	6.74	1771.72	6.74	-1.68	-0.09
120	264	144	24	4224	0.991736	791.77	0.522727	1600.68	53.25	0.62	6.83	1785.74	6.76	1784.1	6.76	-1.64	-0.09
120	265	145	25	4240	0.9911	793.26	0.523585	1599.21	57.56	0	6.73	1796.69	6.78	1794.54	6.77	-2.15	-0.12
120	266	146	26	4256	0.990446	794.73	0.524436	1597.77	62.03	0.61	6.63	1808.72	6.8	1806.63	6.79	-2.09	-0.12
120	267	147	27	4272	0.989774	796.18	0.525281	1596.35	66.64	0	6.54	1819.36	6.81	1816.79	6.8	-2.57	-0.14
120	268	148	28	4288	0.989084	797.61	0.526119	1594.96	71.4	0.61	6.45	1831.08	6.83	1828.59	6.82	-2.49	-0.14
120	269	149	29	4304	0.988378	799.02	0.526952	1593.6	76.31	0	6.36	1841.43	6.85	1838.47	6.83	-2.95	-0.16
120	270	150	30	4320	0.987654	800.42	0.527778	1592.26	81.36	0.61	6.27	1852.84	6.86	1849.99	6.85	-2.85	-0.15
120	271	151	31	4336	0.986915	801.79	0.528598	1590.94	86.56	0	6.19	1862.89	6.87	1859.6	6.86	-3.29	-0.18
120	272	152	32	4352	0.986159	803.15	0.529412	1589.65	91.9	0.61	6.1	1874.01	6.89	1870.85	6.88	-3.17	-0.17
120	273	153	33	4368	0.985388	804.48	0.53022	1588.39	97.37	0	6.02	1883.78	6.9	1880.2	6.89	-3.58	-0.19
120	274	154	34	4384	0.984602	805.8	0.531022	1587.14	102.99	0.6	5.94	1894.61	6.91	1891.17	6.9	-3.44	-0.18
120	275	155	35	4400	0.983802	807.11	0.531818	1585.92	108.74	0	5.86	1904.09	6.92	1900.26	6.91	-3.84	-0.2
120	276	156	36	4416	0.982987	808.39	0.532609	1584.72	114.63	0.6	5.78	1914.64	6.94	1910.96	6.92	-3.68	-0.19
120	277	157	37	4432	0.982158	809.66	0.533394	1583.55	120.65	0	5.71	1923.85	6.95	1919.8	6.93	-4.05	-0.21
120	278	158	38	4448	0.981316	810.91	0.534173	1582.39	126.8	0.6	5.63	1934.12	6.96	1930.24	6.94	-3.88	-0.2
120	279	159	39	4464	0.98046	812.15	0.534946	1581.26	133.09	0	5.56	1943.06	6.96	1938.83	6.95	-4.24	-0.22
120	280	160	40	4480	0.979592	813.37	0.535714	1580.15	139.5	0.6	5.49	1953.07	6.98	1949.02	6.96	-4.05	-0.21
120	281	161	41	4496	0.978711	814.57	0.536477	1579.06	146.04	0	5.42	1961.75	6.98	1957.36	6.97	-4.39	-0.22
120	282	162	42	4512	0.977818	815.75	0.537234	1577.99	152.71	0.6	5.35	1971.49	6.99	1967.3	6.98	-4.19	-0.21
120	283	163	43	4528	0.976913	816.92	0.537986	1576.94	159.51	0	5.28	1979.91	7	1975.4	6.98	-4.51	-0.23
120	284	164	44	4544	0.975997	818.08	0.538732	1575.91	166.43	0.59	5.22	1989.39	7	1985.09	6.99	-4.3	-0.22
120	285	165	45	4560	0.975069	819.22	0.539474	1574.9	173.47	0	5.15	1997.56	7.01	1992.95	6.99	-4.61	-0.23
120	286	166	46	4576	0.974131	820.34	0.54021	1573.91	180.63	0.59	5.09	2006.79	7.02	2002.41	7	-4.38	-0.22
120	287	167	47	4592	0.973182	821.45	0.540941	1572.94	187.92	0	5.03	2014.71	7.02	2010.04	7	-4.67	-0.23
120	288	168	48	4608	0.972222	822.55	0.541667	1571.99	195.32	0.59	4.97	2023.69	7.03	2019.26	7.01	-4.43	-0.22
120	289	169	49	4624	0.971253	823.63	0.542388	1571.06	202.84	0	4.91	2031.38	7.03	2026.66	7.01	-4.71	-0.23
120	290	170	50	4640	0.970273	824.7	0.543103	1570.14	210.48	0.59	4.85	2040.12	7.03	2035.65	7.02	-4.47	-0.22
120	291	171	51	4656	0.969285	825.75	0.543814	1569.25	218.23	0	4.79	2047.56	7.04	2042.83	7.02	-4.73	-0.23
120	292	172	52	4672	0.968287	826.79	0.544521	1568.37	226.1	0.59	4.73	2056.06	7.04	2051.59	7.03	-4.47	-0.22
120	293	173	53	4688	0.96728	827.81	0.545222	1567.51	234.08	0	4.68	2063.28	7.04	2058.55	7.03	-4.73	-0.23
120	294	174	54	4704	0.966264	828.82	0.545918	1566.66	242.17	0.58	4.62	2071.55	7.05	2067.09	7.03	-4.46	-0.22
120	295	175	55	4720	0.96524	829.82	0.54661	1565.83	250.38	0	4.57	2078.54	7.05	2073.83	7.03	-4.71	-0.23

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
120	296	176	56	4736	0.964207	830.81	0.547297	1565.02	258.69	0.58	4.52	2086.58	7.05	2082.15	7.03	-4.43	-0.21
120	297	177	57	4752	0.963167	831.78	0.54798	1564.23	267.11	0	4.47	2093.35	7.05	2088.68	7.03	-4.66	-0.22
120	298	178	58	4768	0.962119	832.74	0.548658	1563.45	275.64	0.58	4.42	2101.17	7.05	2096.79	7.04	-4.38	-0.21
120	299	179	59	4784	0.961063	833.68	0.549331	1562.69	284.28	0	4.37	2107.72	7.05	2103.11	7.03	-4.6	-0.22
120	300	180	60	4800	0.96	834.62	0.55	1561.94	293.02	0.58	4.32	2115.32	7.05	2111	7.04	-4.31	-0.2
120	301	181	61	4816	0.95893	835.54	0.550664	1561.21	301.87	0	4.27	2121.66	7.05	2117.13	7.03	-4.53	-0.21
120	302	182	62	4832	0.957853	836.45	0.551325	1560.49	310.82	0.58	4.22	2129.04	7.05	2124.81	7.04	-4.23	-0.2
120	303	183	63	4848	0.956769	837.34	0.55198	1559.79	319.87	0	4.18	2135.17	7.05	2130.73	7.03	-4.44	-0.21
120	304	184	64	4864	0.955679	838.23	0.552632	1559.11	329.02	0.57	4.13	2142.35	7.05	2138.21	7.03	-4.14	-0.19
120	305	185	65	4880	0.954582	839.1	0.553279	1558.44	338.27	0	4.09	2148.27	7.04	2143.94	7.03	-4.33	-0.2
120	306	186	66	4896	0.953479	839.96	0.553922	1557.78	347.62	0.57	4.04	2155.24	7.04	2151.22	7.03	-4.03	-0.19
120	307	187	67	4912	0.952371	840.81	0.55456	1557.14	357.08	0	4	2160.97	7.04	2156.75	7.03	-4.22	-0.2
120	308	188	68	4928	0.951257	841.65	0.555195	1556.51	366.62	0.57	3.96	2167.74	7.04	2163.83	7.03	-3.91	-0.18
120	309	189	69	4944	0.950137	842.48	0.555825	1555.9	376.27	0	3.91	2173.26	7.03	2169.18	7.02	-4.09	-0.19
120	310	190	70	4960	0.949011	843.3	0.556452	1555.3	386.01	0.57	3.87	2179.83	7.03	2176.06	7.02	-3.77	-0.17
120	311	191	71	4976	0.947881	844.1	0.557074	1554.71	395.84	0	3.83	2185.17	7.03	2181.22	7.01	-3.95	-0.18
120	312	192	72	4992	0.946746	844.9	0.557692	1554.14	405.77	0.57	3.79	2191.55	7.02	2187.92	7.01	-3.63	-0.17
120	313	193	73	5008	0.945605	845.68	0.558307	1553.58	415.79	0	3.75	2196.7	7.02	2192.89	7.01	-3.8	-0.17
120	314	194	74	5024	0.94446	846.46	0.558917	1553.03	425.91	0.56	3.72	2202.88	7.02	2199.4	7	-3.48	-0.16
120	315	195	75	5040	0.943311	847.22	0.559524	1552.5	436.11	0	3.68	2207.85	7.01	2204.2	7	-3.65	-0.17
120	316	196	76	5056	0.942157	847.97	0.560127	1551.98	446.41	0.56	3.64	2213.84	7.01	2210.52	7	-3.32	-0.15
120	317	197	77	5072	0.940999	848.72	0.560726	1551.47	456.79	0	3.61	2218.63	7	2215.14	6.99	-3.48	-0.16
120	318	198	78	5088	0.939836	849.45	0.561321	1550.98	467.26	0.56	3.57	2224.44	7	2221.29	6.99	-3.16	-0.14
120	319	199	79	5104	0.93867	850.18	0.561912	1550.49	477.82	0	3.53	2229.05	6.99	2225.73	6.98	-3.32	-0.15
120	320	200	80	5120	0.9375	850.89	0.5625	1550.02	488.47	0.56	3.5	2234.68	6.98	2231.7	6.97	-2.99	-0.13
120	321	201	81	5136	0.936326	851.59	0.563084	1549.56	499.2	0	3.47	2239.11	6.98	2235.97	6.97	-3.14	-0.14
120	322	202	82	5152	0.935149	852.29	0.563665	1549.11	510.02	0.56	3.43	2244.57	6.97	2241.76	6.96	-2.81	-0.13
120	323	203	83	5168	0.933969	852.97	0.564241	1548.67	520.92	0	3.4	2248.83	6.96	2245.87	6.95	-2.96	-0.13
120	324	204	84	5184	0.932785	853.65	0.564815	1548.25	531.91	0.56	3.37	2254.12	6.96	2251.49	6.95	-2.63	-0.12
120	325	205	85	5200	0.931598	854.32	0.565385	1547.83	542.98	0	3.33	2258.21	6.95	2255.43	6.94	-2.78	-0.12
120	326	206	86	5216	0.930408	854.97	0.565951	1547.43	554.13	0.55	3.3	2263.32	6.94	2260.88	6.94	-2.44	-0.11
120	327	207	87	5232	0.929215	855.62	0.566514	1547.04	565.36	0	3.27	2267.25	6.93	2264.66	6.93	-2.59	-0.11
120	328	208	88	5248	0.928019	856.26	0.567073	1546.66	576.68	0.55	3.24	2272.2	6.93	2269.94	6.92	-2.26	-0.1
120	329	209	89	5264	0.926821	856.9	0.567629	1546.29	588.07	0	3.21	2275.96	6.92	2273.56	6.91	-2.4	-0.11
120	330	210	90	5280	0.92562	857.52	0.568182	1545.93	599.54	0.55	3.18	2280.75	6.91	2278.68	6.91	-2.07	-0.09
120	331	211	91	5296	0.924417	858.13	0.568731	1545.58	611.09	0	3.15	2284.35	6.9	2282.14	6.89	-2.21	-0.1
120	332	212	92	5312	0.923211	858.74	0.569277	1545.24	622.72	0.55	3.12	2288.97	6.89	2287.1	6.89	-1.88	-0.08
120	333	213	93	5328	0.922003	859.34	0.56982	1544.91	634.43	0	3.09	2292.42	6.88	2290.41	6.88	-2.02	-0.09
120	334	214	94	5344	0.920793	859.93	0.570359	1544.59	646.21	0.55	3.07	2296.89	6.88	2295.21	6.87	-1.68	-0.07
120	335	215	95	5360	0.919581	860.51	0.570896	1544.28	658.07	0	3.04	2300.19	6.87	2298.36	6.86	-1.83	-0.08
120	336	216	96	5376	0.918367	861.08	0.571429	1543.98	670	0.55	3.01	2304.5	6.86	2303	6.85	-1.49	-0.06
120	337	217	97	5392	0.917152	861.65	0.571958	1543.69	682.01	0	2.99	2307.64	6.85	2306.01	6.84	-1.63	-0.07
120	338	218	98	5408	0.915934	862.2	0.572485	1543.41	694.09	0.54	2.96	2311.8	6.84	2310.5	6.84	-1.3	-0.06
120	339	219	99	5424	0.914715	862.75	0.573009	1543.14	706.24	0	2.93	2314.8	6.83	2313.36	6.82	-1.44	-0.06
120	340	220	100	5440	0.913495	863.3	0.573529	1542.88	718.47	0.54	2.91	2318.81	6.82	2317.7	6.82	-1.11	-0.05
120	341	221	101	5456	0.912273	863.83	0.574047	1542.62	730.77	0	2.88	2321.66	6.81	2320.41	6.8	-1.25	-0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
120	342	222	102	5472	0.91105	864.36	0.574561	1542.38	743.14	0.54	2.86	2325.52	6.8	2324.6	6.8	-0.92	-0.04
120	343	223	103	5488	0.909825	864.88	0.575073	1542.14	755.58	0	2.83	2328.23	6.79	2327.17	6.78	-1.06	-0.05
120	344	224	104	5504	0.908599	865.39	0.575581	1541.92	768.09	0.54	2.81	2331.95	6.78	2331.21	6.78	-0.74	-0.03
120	345	225	105	5520	0.907372	865.9	0.576087	1541.7	780.67	0	2.79	2334.52	6.77	2333.64	6.76	-0.88	-0.04
120	346	226	106	5536	0.906145	866.4	0.57659	1541.49	793.31	0.54	2.76	2338.1	6.76	2337.54	6.76	-0.56	-0.02
120	347	227	107	5552	0.904916	866.89	0.577089	1541.29	806.03	0	2.74	2340.53	6.75	2339.83	6.74	-0.7	-0.03
120	348	228	108	5568	0.903686	867.37	0.577586	1541.1	818.81	0.54	2.72	2343.97	6.74	2343.59	6.73	-0.37	-0.02
120	349	229	109	5584	0.902456	867.85	0.57808	1540.92	831.66	0	2.69	2346.26	6.72	2345.74	6.72	-0.52	-0.02
120	350	230	110	5600	0.901224	868.32	0.578571	1540.74	844.58	0.53	2.67	2349.56	6.71	2349.36	6.71	-0.2	-0.01
120	351	231	111	5616	0.899993	868.78	0.57906	1540.58	857.56	0	2.65	2351.72	6.7	2351.38	6.7	-0.34	-0.01
120	352	232	112	5632	0.89876	869.24	0.579545	1540.42	870.61	0.53	2.63	2354.89	6.69	2354.86	6.69	-0.03	0
120	353	233	113	5648	0.897527	869.69	0.580028	1540.27	883.72	0	2.61	2356.92	6.68	2356.75	6.68	-0.17	-0.01
120	354	234	114	5664	0.896294	870.14	0.580508	1540.12	896.9	0.53	2.59	2359.96	6.67	2360.1	6.67	0.14	0.01
120	355	235	115	5680	0.895061	870.58	0.580986	1539.99	910.14	0	2.57	2361.86	6.65	2361.85	6.65	-0.01	0
120	356	236	116	5696	0.893827	871.01	0.581461	1539.86	923.44	0.53	2.54	2364.76	6.64	2365.07	6.64	0.3	0.01
120	357	237	117	5712	0.892592	871.43	0.581933	1539.74	936.81	0	2.52	2366.54	6.63	2366.69	6.63	0.15	0.01
120	358	238	118	5728	0.891358	871.85	0.582402	1539.63	950.24	0.53	2.5	2369.31	6.62	2369.78	6.62	0.46	0.02
120	359	239	119	5744	0.890123	872.26	0.582869	1539.52	963.73	0	2.49	2370.97	6.6	2371.28	6.61	0.31	0.01
120	360	240	120	5760	0.888889	872.67	0.583333	1539.43	977.28	0.53	2.47	2373.62	6.59	2374.23	6.6	0.61	0.03
120	361	241	121	5776	0.887654	873.07	0.583795	1539.34	990.89	0	2.45	2375.15	6.58	2375.61	6.58	0.46	0.02
120	362	242	122	5792	0.88642	873.47	0.584254	1539.25	1004.56	0.53	2.43	2377.67	6.57	2378.43	6.57	0.76	0.03
120	363	243	123	5808	0.885185	873.86	0.584711	1539.18	1018.29	0	2.41	2379.09	6.55	2379.69	6.56	0.6	0.03
120	364	244	124	5824	0.883951	874.24	0.585165	1539.11	1032.08	0.52	2.39	2381.49	6.54	2382.39	6.55	0.9	0.04
120	365	245	125	5840	0.882717	874.62	0.585616	1539.04	1045.93	0	2.37	2382.78	6.53	2383.52	6.53	0.74	0.03
120	366	246	126	5856	0.881483	874.99	0.586066	1538.99	1059.83	0.52	2.36	2385.07	6.52	2386.09	6.52	1.03	0.04
120	367	247	127	5872	0.88025	875.36	0.586512	1538.94	1073.8	0	2.34	2386.24	6.5	2387.11	6.5	0.87	0.04
120	368	248	128	5888	0.879017	875.72	0.586957	1538.9	1087.82	0.52	2.32	2388.41	6.49	2389.56	6.49	1.15	0.05
120	369	249	129	5904	0.877784	876.07	0.587398	1538.86	1101.9	0	2.3	2389.47	6.48	2390.46	6.48	0.99	0.04
120	370	250	130	5920	0.876552	876.42	0.587838	1538.83	1116.03	0.52	2.29	2391.52	6.46	2392.79	6.47	1.27	0.05
120	371	251	131	5936	0.875321	876.77	0.588275	1538.81	1130.22	0	2.27	2392.47	6.45	2393.58	6.45	1.1	0.05
120	372	252	132	5952	0.874089	877.11	0.58871	1538.79	1144.46	0.52	2.25	2394.41	6.44	2395.79	6.44	1.38	0.06
120	373	253	133	5968	0.872859	877.44	0.589142	1538.78	1158.76	0	2.24	2395.25	6.42	2396.46	6.42	1.21	0.05
120	374	254	134	5984	0.871629	877.77	0.589572	1538.78	1173.12	0.52	2.22	2397.07	6.41	2398.55	6.41	1.48	0.06
120	375	255	135	6000	0.8704	878.09	0.59	1538.78	1187.52	0	2.2	2397.81	6.39	2399.11	6.4	1.31	0.05
120	376	256	136	6016	0.869172	878.41	0.590426	1538.79	1201.99	0.52	2.19	2399.52	6.38	2401.09	6.39	1.58	0.07
120	377	257	137	6032	0.867944	878.73	0.590849	1538.8	1216.5	0	2.17	2400.14	6.37	2401.54	6.37	1.4	0.06
120	378	258	138	6048	0.866717	879.04	0.59127	1538.82	1231.07	0.51	2.16	2401.75	6.35	2403.41	6.36	1.66	0.07
120	379	259	139	6064	0.865491	879.34	0.591689	1538.85	1245.69	0	2.14	2402.27	6.34	2403.74	6.34	1.48	0.06
120	380	260	140	6080	0.864266	879.64	0.592105	1538.88	1260.36	0.51	2.13	2403.76	6.33	2405.5	6.33	1.74	0.07
120	381	261	141	6096	0.863042	879.93	0.59252	1538.92	1275.08	0	2.11	2404.18	6.31	2405.73	6.31	1.55	0.06
120	382	262	142	6112	0.861818	880.22	0.592932	1538.96	1289.86	0.51	2.1	2405.57	6.3	2407.37	6.3	1.8	0.07
120	383	263	143	6128	0.860596	880.51	0.593342	1539.01	1304.68	0	2.08	2405.89	6.28	2407.5	6.29	1.61	0.07
120	384	264	144	6144	0.859375	880.79	0.59375	1539.06	1319.55	0.51	2.07	2407.17	6.27	2409.03	6.27	1.86	0.08
120	385	265	145	6160	0.858155	881.06	0.594156	1539.12	1334.48	0	2.06	2407.39	6.25	2409.05	6.26	1.66	0.07
120	386	266	146	6176	0.856936	881.34	0.59456	1539.19	1349.45	0.51	2.04	2408.57	6.24	2410.48	6.24	1.91	0.08
120	387	267	147	6192	0.855718	881.6	0.594961	1539.26	1364.48	0	2.03	2408.69	6.22	2410.4	6.23	1.71	0.07

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
120	388	268	148	6208	0.854501	881.87	0.595361	1539.33	1379.55	0.51	2.01	2409.78	6.21	2411.72	6.22	1.94	0.08
120	389	269	149	6224	0.853285	882.12	0.595758	1539.41	1394.67	0	2	2409.8	6.19	2411.54	6.2	1.74	0.07
120	390	270	150	6240	0.852071	882.38	0.596154	1539.5	1409.84	0.51	1.99	2410.78	6.18	2412.75	6.19	1.97	0.08
120	391	271	151	6256	0.850858	882.63	0.596547	1539.59	1425.05	0	1.98	2410.7	6.17	2412.47	6.17	1.76	0.07
120	392	272	152	6272	0.849646	882.87	0.596939	1539.69	1440.32	0.51	1.96	2411.59	6.15	2413.58	6.16	1.99	0.08
120	393	273	153	6288	0.848435	883.11	0.597328	1539.79	1455.63	0	1.95	2411.42	6.14	2413.2	6.14	1.78	0.07
120	394	274	154	6304	0.847226	883.35	0.597716	1539.9	1470.98	0.5	1.94	2412.21	6.12	2414.21	6.13	2	0.08
120	395	275	155	6320	0.846018	883.58	0.598101	1540.01	1486.39	0	1.92	2411.95	6.11	2413.73	6.11	1.78	0.07
120	396	276	156	6336	0.844812	883.81	0.598485	1540.12	1501.83	0.5	1.91	2412.65	6.09	2414.64	6.1	1.99	0.08
120	397	277	157	6352	0.843607	884.03	0.598866	1540.24	1517.33	0	1.9	2412.29	6.08	2414.06	6.08	1.77	0.07
120	398	278	158	6368	0.842403	884.25	0.599246	1540.37	1532.87	0.5	1.89	2412.9	6.06	2414.88	6.07	1.98	0.08
120	399	279	159	6384	0.841201	884.47	0.599624	1540.5	1548.45	0	1.88	2412.45	6.05	2414.21	6.05	1.75	0.07
120	400	280	160	6400	0.84	884.68	0.6	1540.64	1564.08	0.5	1.86	2412.97	6.03	2414.92	6.04	1.96	0.08
120	401	281	161	6416	0.838801	884.89	0.600374	1540.78	1579.75	0	1.85	2412.43	6.02	2414.16	6.02	1.72	0.07
120	402	282	162	6432	0.837603	885.1	0.600746	1540.92	1595.47	0.5	1.84	2412.85	6	2414.77	6.01	1.92	0.08
120	403	283	163	6448	0.836407	885.3	0.601117	1541.07	1611.23	0	1.83	2412.23	5.99	2413.92	5.99	1.68	0.07
120	404	284	164	6464	0.835212	885.5	0.601485	1541.22	1627.03	0.5	1.82	2412.57	5.97	2414.44	5.98	1.87	0.08
120	405	285	165	6480	0.834019	885.69	0.601852	1541.38	1642.88	0	1.81	2411.86	5.96	2413.49	5.96	1.63	0.07
120	406	286	166	6496	0.832828	885.88	0.602217	1541.54	1658.77	0.5	1.8	2412.11	5.94	2413.92	5.95	1.82	0.08
120	407	287	167	6512	0.831638	886.07	0.60258	1541.71	1674.7	0	1.78	2411.31	5.92	2412.88	5.93	1.57	0.06
120	408	288	168	6528	0.83045	886.25	0.602941	1541.88	1690.67	0.5	1.77	2411.47	5.91	2413.22	5.91	1.75	0.07
120	409	289	169	6544	0.829263	886.43	0.603301	1542.05	1706.68	0	1.76	2410.6	5.89	2412.09	5.9	1.49	0.06
120	410	290	170	6560	0.828079	886.6	0.603659	1542.23	1722.74	0.49	1.75	2410.67	5.88	2412.34	5.88	1.67	0.07
120	411	291	171	6576	0.826895	886.78	0.604015	1542.42	1738.84	0	1.74	2409.72	5.86	2411.12	5.87	1.41	0.06
120	412	292	172	6592	0.825714	886.94	0.604369	1542.6	1754.97	0.49	1.73	2409.71	5.85	2411.28	5.85	1.57	0.07
120	413	293	173	6608	0.824534	887.11	0.604722	1542.79	1771.15	0	1.72	2408.67	5.83	2409.98	5.84	1.31	0.05
120	414	294	174	6624	0.823356	887.27	0.605072	1542.99	1787.37	0.49	1.71	2408.57	5.82	2410.04	5.82	1.47	0.06
120	415	295	175	6640	0.82218	887.43	0.605422	1543.19	1803.63	0	1.7	2407.46	5.8	2408.66	5.8	1.2	0.05
120	416	296	176	6656	0.821006	887.59	0.605769	1543.39	1819.92	0.49	1.69	2407.28	5.79	2408.64	5.79	1.35	0.06
120	417	297	177	6672	0.819833	887.74	0.606115	1543.6	1836.26	0	1.68	2406.09	5.77	2407.16	5.77	1.08	0.04
120	418	298	178	6688	0.818663	887.89	0.606459	1543.81	1852.63	0.49	1.67	2405.83	5.76	2407.06	5.76	1.22	0.05
120	419	299	179	6704	0.817494	888.03	0.606802	1544.02	1869.05	0	1.66	2404.56	5.74	2405.5	5.74	0.94	0.04
120	420	300	180	6720	0.816327	888.17	0.607143	1544.24	1885.5	0.49	1.65	2404.22	5.72	2405.31	5.73	1.08	0.05
120	421	301	181	6736	0.815161	888.31	0.607482	1544.47	1901.99	0	1.64	2402.87	5.71	2403.67	5.71	0.8	0.03
120	422	302	182	6752	0.813998	888.45	0.60782	1544.69	1918.52	0.49	1.63	2402.46	5.69	2403.39	5.7	0.93	0.04
120	423	303	183	6768	0.812836	888.58	0.608156	1544.92	1935.08	0	1.63	2401.04	5.68	2401.67	5.68	0.64	0.03
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
121	241	120	-1	3856	0.999983	751.29	0.498963	1670.43	0.1	0	9.83	1444.01	5.99	1453.28	6.03	9.26	0.64
121	242	121	0	3872	1	753.38	0.5	1668.11	0	-0.64	10	1459.87	6.03	1468.85	6.07	8.98	0.61
121	243	122	1	3888	0.999983	755.44	0.501029	1665.83	0.1	0	9.83	1476.46	6.08	1484.06	6.11	7.6	0.51
121	244	123	2	3904	0.999933	757.47	0.502049	1663.59	0.4	-0.64	9.66	1491.56	6.11	1499.27	6.14	7.71	0.51
121	245	124	3	3920	0.99985	759.48	0.503061	1661.4	0.9	0	9.5	1507.73	6.15	1514.1	6.18	6.37	0.42
121	246	125	4	3936	0.999736	761.45	0.504065	1659.24	1.59	-0.64	9.34	1522.42	6.19	1528.95	6.22	6.52	0.43
121	247	126	5	3952	0.99959	763.41	0.505061	1657.12	2.47	0	9.18	1538.19	6.23	1543.42	6.25	5.23	0.34

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
121	248	127	6	3968	0.999415	765.33	0.506048	1655.04	3.54	-0.64	9.03	1552.49	6.26	1557.92	6.28	5.43	0.35
121	249	128	7	3984	0.99921	767.23	0.507028	1652.99	4.8	0	8.89	1567.87	6.3	1572.04	6.31	4.17	0.27
121	250	129	8	4000	0.998976	769.1	0.508	1650.98	6.25	-0.63	8.74	1581.78	6.33	1586.19	6.34	4.41	0.28
121	251	130	9	4016	0.998714	770.95	0.508964	1649.01	7.87	0	8.6	1596.77	6.36	1599.97	6.37	3.19	0.2
121	252	131	10	4032	0.998425	772.77	0.509921	1647.07	9.68	-0.63	8.46	1610.31	6.39	1613.78	6.4	3.47	0.21
121	253	132	11	4048	0.99811	774.57	0.51087	1645.16	11.67	0	8.33	1624.93	6.42	1627.22	6.43	2.29	0.14
121	254	133	12	4064	0.997768	776.34	0.511811	1643.29	13.84	-0.63	8.2	1638.1	6.45	1640.7	6.46	2.6	0.16
121	255	134	13	4080	0.997401	778.09	0.512745	1641.45	16.17	0	8.07	1652.35	6.48	1653.81	6.49	1.46	0.09
121	256	135	14	4096	0.997009	779.82	0.513672	1639.65	18.68	-0.62	7.95	1665.17	6.5	1666.97	6.51	1.8	0.11
121	257	136	15	4112	0.996593	781.52	0.514591	1637.87	21.37	0	7.83	1679.06	6.53	1679.75	6.54	0.69	0.04
121	258	137	16	4128	0.996154	783.2	0.515504	1636.13	24.22	-0.62	7.71	1691.53	6.56	1692.6	6.56	1.07	0.06
121	259	138	17	4144	0.995692	784.86	0.516409	1634.42	27.23	0	7.59	1705.07	6.58	1705.07	6.58	-0.01	0
121	260	139	18	4160	0.995207	786.5	0.517308	1632.74	30.41	-0.62	7.48	1717.2	6.6	1717.6	6.61	0.39	0.02
121	261	140	19	4176	0.994701	788.11	0.518199	1631.09	33.76	0	7.37	1730.41	6.63	1729.76	6.63	-0.65	-0.04
121	262	141	20	4192	0.994173	789.7	0.519084	1629.47	37.26	-0.62	7.26	1742.2	6.65	1741.99	6.65	-0.22	-0.01
121	263	142	21	4208	0.993624	791.28	0.519962	1627.88	40.93	0	7.15	1755.07	6.67	1753.84	6.67	-1.23	-0.07
121	264	143	22	4224	0.993056	792.83	0.520833	1626.31	44.75	-0.62	7.05	1766.55	6.69	1765.77	6.69	-0.78	-0.04
121	265	144	23	4240	0.992467	794.36	0.521698	1624.78	48.72	0	6.95	1779.09	6.71	1777.33	6.71	-1.76	-0.1
121	266	145	24	4256	0.991859	795.87	0.522556	1623.27	52.85	-0.61	6.85	1790.25	6.73	1788.97	6.73	-1.28	-0.07
121	267	146	25	4272	0.991233	797.35	0.523408	1621.79	57.14	0	6.75	1802.47	6.75	1800.23	6.74	-2.24	-0.12
121	268	147	26	4288	0.990588	798.82	0.524254	1620.33	61.57	-0.61	6.65	1813.32	6.77	1811.58	6.76	-1.73	-0.1
121	269	148	27	4304	0.989926	800.27	0.525093	1618.9	66.15	0	6.56	1825.23	6.79	1822.56	6.78	-2.67	-0.15
121	270	149	28	4320	0.989246	801.71	0.525926	1617.5	70.88	-0.61	6.47	1835.78	6.8	1833.64	6.79	-2.14	-0.12
121	271	150	29	4336	0.988549	803.12	0.526753	1616.12	75.75	0	6.38	1847.39	6.82	1844.33	6.81	-3.06	-0.17
121	272	151	30	4352	0.987835	804.51	0.527574	1614.77	80.77	-0.61	6.29	1857.64	6.83	1855.13	6.82	-2.5	-0.13
121	273	152	31	4368	0.987106	805.89	0.528388	1613.44	85.93	0	6.21	1868.95	6.85	1865.56	6.83	-3.4	-0.18
121	274	153	32	4384	0.98636	807.24	0.529197	1612.14	91.23	-0.6	6.12	1878.91	6.86	1876.09	6.85	-2.82	-0.15
121	275	154	33	4400	0.9856	808.58	0.53	1610.86	96.67	0	6.04	1889.94	6.87	1886.24	6.86	-3.7	-0.2
121	276	155	34	4416	0.984825	809.9	0.530797	1609.6	102.24	-0.6	5.96	1899.61	6.88	1896.51	6.87	-3.1	-0.16
121	277	156	35	4432	0.984035	811.21	0.531588	1608.37	107.96	0	5.88	1910.35	6.9	1906.4	6.88	-3.96	-0.21
121	278	157	36	4448	0.983231	812.49	0.532374	1607.15	113.8	-0.6	5.8	1919.75	6.91	1916.4	6.89	-3.35	-0.17
121	279	158	37	4464	0.982413	813.76	0.533154	1605.97	119.79	0	5.73	1930.21	6.92	1926.03	6.9	-4.18	-0.22
121	280	159	38	4480	0.981582	815.02	0.533929	1604.8	125.9	-0.6	5.66	1939.34	6.93	1935.79	6.91	-3.55	-0.18
121	281	160	39	4496	0.980737	816.25	0.534698	1603.65	132.14	0	5.58	1949.53	6.94	1945.17	6.92	-4.37	-0.22
121	282	161	40	4512	0.97988	817.47	0.535461	1602.53	138.51	-0.6	5.51	1958.4	6.94	1954.67	6.93	-3.73	-0.19
121	283	162	41	4528	0.979011	818.68	0.536219	1601.43	145.01	0	5.44	1968.32	6.96	1963.8	6.94	-4.52	-0.23
121	284	163	42	4544	0.978129	819.87	0.536972	1600.34	151.64	-0.59	5.37	1976.93	6.96	1973.06	6.95	-3.87	-0.2
121	285	164	43	4560	0.977236	821.04	0.537719	1599.28	158.39	0	5.31	1986.59	6.97	1981.94	6.95	-4.65	-0.23
121	286	165	44	4576	0.976331	822.2	0.538462	1598.24	165.27	-0.59	5.24	1994.95	6.98	1990.96	6.96	-3.98	-0.2
121	287	166	45	4592	0.975416	823.34	0.539199	1597.22	172.26	0	5.18	2004.35	6.98	1999.61	6.97	-4.75	-0.24
121	288	167	46	4608	0.974489	824.47	0.539931	1596.21	179.38	-0.59	5.11	2012.46	6.99	2008.39	6.97	-4.07	-0.2
121	289	168	47	4624	0.973552	825.58	0.540657	1595.23	186.62	0	5.05	2021.62	7	2016.8	6.98	-4.82	-0.24
121	290	169	48	4640	0.972604	826.68	0.541379	1594.27	193.98	-0.59	4.99	2029.48	7	2025.36	6.98	-4.13	-0.2
121	291	170	49	4656	0.971647	827.76	0.542096	1593.32	201.45	0	4.93	2038.4	7	2033.53	6.99	-4.86	-0.24
121	292	171	50	4672	0.970679	828.83	0.542808	1592.39	209.04	-0.59	4.87	2046.02	7.01	2041.86	6.99	-4.16	-0.2
121	293	172	51	4688	0.969703	829.89	0.543515	1591.48	216.75	0	4.81	2054.7	7.01	2049.81	7	-4.89	-0.24

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
121	294	173	52	4704	0.968717	830.93	0.544218	1590.59	224.57	-0.58	4.76	2062.09	7.01	2057.92	7	-4.17	-0.2
121	295	174	53	4720	0.967722	831.96	0.544915	1589.72	232.5	0	4.7	2070.53	7.02	2065.64	7	-4.89	-0.24
121	296	175	54	4736	0.966718	832.97	0.545608	1588.86	240.54	-0.58	4.65	2077.69	7.02	2073.53	7.01	-4.16	-0.2
121	297	176	55	4752	0.965706	833.97	0.546296	1588.02	248.7	0	4.59	2085.91	7.02	2081.04	7.01	-4.86	-0.23
121	298	177	56	4768	0.964686	834.96	0.54698	1587.2	256.96	-0.58	4.54	2092.85	7.02	2088.71	7.01	-4.13	-0.2
121	299	178	57	4784	0.963658	835.93	0.547659	1586.39	265.33	0	4.49	2100.83	7.03	2096.01	7.01	-4.82	-0.23
121	300	179	58	4800	0.962622	836.9	0.548333	1585.6	273.81	-0.58	4.44	2107.55	7.03	2103.47	7.01	-4.08	-0.19
121	301	180	59	4816	0.961579	837.85	0.549003	1584.83	282.4	0	4.39	2115.32	7.03	2110.55	7.01	-4.77	-0.23
121	302	181	60	4832	0.960528	838.78	0.549669	1584.07	291.09	-0.58	4.34	2121.83	7.03	2117.81	7.01	-4.02	-0.19
121	303	182	61	4848	0.95947	839.71	0.55033	1583.33	299.88	0	4.29	2129.38	7.03	2124.69	7.01	-4.69	-0.22
121	304	183	62	4864	0.958405	840.62	0.550987	1582.6	308.78	-0.57	4.25	2135.68	7.03	2131.74	7.01	-3.94	-0.18
121	305	184	63	4880	0.957334	841.52	0.551639	1581.89	317.78	0	4.2	2143.02	7.03	2138.41	7.01	-4.6	-0.22
121	306	185	64	4896	0.956256	842.41	0.552288	1581.19	326.88	-0.57	4.15	2149.11	7.02	2145.26	7.01	-3.84	-0.18
121	307	186	65	4912	0.955172	843.29	0.552932	1580.51	336.08	0	4.11	2156.24	7.02	2151.74	7.01	-4.5	-0.21
121	308	187	66	4928	0.954082	844.15	0.553571	1579.84	345.37	-0.57	4.07	2162.13	7.02	2158.39	7.01	-3.73	-0.17
121	309	188	67	4944	0.952985	845.01	0.554207	1579.19	354.77	0	4.02	2169.06	7.02	2164.67	7.01	-4.39	-0.2
121	310	189	68	4960	0.951883	845.85	0.554839	1578.55	364.27	-0.57	3.98	2174.75	7.02	2171.13	7	-3.61	-0.17
121	311	190	69	4976	0.950776	846.68	0.555466	1577.92	373.86	0	3.94	2181.48	7.01	2177.22	7	-4.26	-0.2
121	312	191	70	4992	0.949663	847.5	0.55609	1577.31	383.54	-0.57	3.9	2186.97	7.01	2183.49	7	-3.48	-0.16
121	313	192	71	5008	0.948545	848.31	0.556709	1576.71	393.32	0	3.86	2193.51	7.01	2189.39	6.99	-4.12	-0.19
121	314	193	72	5024	0.947422	849.11	0.557325	1576.13	403.2	-0.56	3.82	2198.81	7	2195.47	6.99	-3.34	-0.15
121	315	194	73	5040	0.946294	849.9	0.557937	1575.56	413.16	0	3.78	2205.16	7	2201.18	6.99	-3.97	-0.18
121	316	195	74	5056	0.945161	850.68	0.558544	1575	423.22	-0.56	3.74	2210.28	6.99	2207.09	6.98	-3.19	-0.14
121	317	196	75	5072	0.944024	851.45	0.559148	1574.46	433.37	0	3.7	2216.43	6.99	2212.61	6.98	-3.82	-0.17
121	318	197	76	5088	0.942882	852.2	0.559748	1573.93	443.61	-0.56	3.66	2221.37	6.99	2218.34	6.98	-3.03	-0.14
121	319	198	77	5104	0.941736	852.95	0.560345	1573.41	453.93	0	3.63	2227.34	6.98	2223.68	6.97	-3.65	-0.16
121	320	199	78	5120	0.940586	853.69	0.560937	1572.9	464.35	-0.56	3.59	2232.09	6.98	2229.23	6.97	-2.86	-0.13
121	321	200	79	5136	0.939432	854.42	0.561526	1572.4	474.85	0	3.56	2237.88	6.97	2234.4	6.96	-3.48	-0.16
121	322	201	80	5152	0.938274	855.14	0.562112	1571.92	485.44	-0.56	3.52	2242.46	6.96	2239.77	6.96	-2.69	-0.12
121	323	202	81	5168	0.937112	855.84	0.562693	1571.45	496.12	0	3.49	2248.07	6.96	2244.77	6.95	-3.31	-0.15
121	324	203	82	5184	0.935947	856.54	0.563272	1570.99	506.88	-0.56	3.45	2252.48	6.95	2249.97	6.94	-2.51	-0.11
121	325	204	83	5200	0.934779	857.23	0.563846	1570.54	517.73	0	3.42	2257.92	6.95	2254.79	6.94	-3.12	-0.14
121	326	205	84	5216	0.933607	857.91	0.564417	1570.11	528.66	-0.55	3.39	2262.16	6.94	2259.82	6.93	-2.33	-0.1
121	327	206	85	5232	0.932432	858.59	0.564985	1569.68	539.67	0	3.36	2267.42	6.93	2264.48	6.93	-2.94	-0.13
121	328	207	86	5248	0.931254	859.25	0.565549	1569.27	550.76	-0.55	3.32	2271.49	6.93	2269.35	6.92	-2.14	-0.09
121	329	208	87	5264	0.930073	859.9	0.566109	1568.87	561.94	0	3.29	2276.59	6.92	2273.84	6.91	-2.75	-0.12
121	330	209	88	5280	0.928889	860.55	0.566667	1568.48	573.19	-0.55	3.26	2280.5	6.91	2278.54	6.9	-1.96	-0.09
121	331	210	89	5296	0.927702	861.18	0.567221	1568.1	584.53	0	3.23	2285.43	6.9	2282.87	6.9	-2.56	-0.11
121	332	211	90	5312	0.926513	861.81	0.567771	1567.73	595.94	-0.55	3.2	2289.18	6.9	2287.41	6.89	-1.76	-0.08
121	333	212	91	5328	0.925322	862.43	0.568318	1567.37	607.43	0	3.17	2293.94	6.89	2291.58	6.88	-2.36	-0.1
121	334	213	92	5344	0.924128	863.04	0.568862	1567.02	619	-0.55	3.14	2297.53	6.88	2295.97	6.87	-1.57	-0.07
121	335	214	93	5360	0.922932	863.64	0.569403	1566.68	630.65	0	3.12	2302.14	6.87	2299.97	6.87	-2.17	-0.09
121	336	215	94	5376	0.921733	864.24	0.56994	1566.35	642.37	-0.55	3.09	2305.58	6.86	2304.21	6.86	-1.38	-0.06
121	337	216	95	5392	0.920533	864.82	0.570475	1566.03	654.17	0	3.06	2310.03	6.85	2308.06	6.85	-1.97	-0.09
121	338	217	96	5408	0.919331	865.4	0.571006	1565.72	666.05	-0.54	3.03	2313.32	6.84	2312.14	6.84	-1.18	-0.05
121	339	218	97	5424	0.918126	865.97	0.571534	1565.42	678	0	3.01	2317.62	6.84	2315.84	6.83	-1.78	-0.08

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121	340	219	98	5440	0.91692	866.53	0.572059	1565.13	690.02	-0.54	2.98	2320.75	6.83	2319.77	6.82	-0.99	-0.04
121	341	220	99	5456	0.915713	867.09	0.572581	1564.85	702.11	0	2.95	2324.9	6.82	2323.32	6.81	-1.58	-0.07
121	342	221	100	5472	0.914504	867.64	0.573099	1564.58	714.28	-0.54	2.93	2327.89	6.81	2327.1	6.8	-0.79	-0.03
121	343	222	101	5488	0.913293	868.18	0.573615	1564.32	726.52	0	2.9	2331.89	6.8	2330.5	6.79	-1.39	-0.06
121	344	223	102	5504	0.912081	868.71	0.574128	1564.07	738.83	-0.54	2.88	2334.73	6.79	2334.13	6.79	-0.6	-0.03
121	345	224	103	5520	0.910867	869.23	0.574638	1563.82	751.21	0	2.85	2338.59	6.78	2337.39	6.78	-1.2	-0.05
121	346	225	104	5536	0.909653	869.75	0.575145	1563.59	763.66	-0.54	2.83	2341.29	6.77	2340.88	6.77	-0.41	-0.02
121	347	226	105	5552	0.908437	870.26	0.575648	1563.36	776.18	0	2.81	2345	6.76	2344	6.76	-1.01	-0.04
121	348	227	106	5568	0.90722	870.76	0.576149	1563.15	788.77	-0.54	2.78	2347.57	6.75	2347.35	6.75	-0.22	-0.01
121	349	228	107	5584	0.906002	871.26	0.576648	1562.94	801.42	0	2.76	2351.14	6.74	2350.32	6.73	-0.82	-0.03
121	350	229	108	5600	0.904784	871.75	0.577143	1562.74	814.15	-0.53	2.74	2353.57	6.72	2353.53	6.72	-0.04	0
121	351	230	109	5616	0.903564	872.23	0.577635	1562.55	826.94	0	2.71	2357	6.72	2356.36	6.71	-0.63	-0.03
121	352	231	110	5632	0.902344	872.71	0.578125	1562.36	839.79	-0.53	2.69	2359.29	6.7	2359.44	6.7	0.14	0.01
121	353	232	111	5648	0.901123	873.18	0.578612	1562.19	852.72	0	2.67	2362.59	6.69	2362.13	6.69	-0.45	-0.02
121	354	233	112	5664	0.899901	873.64	0.579096	1562.02	865.71	-0.53	2.65	2364.75	6.68	2365.07	6.68	0.32	0.01
121	355	234	113	5680	0.898679	874.09	0.579577	1561.86	878.76	0	2.63	2367.91	6.67	2367.63	6.67	-0.28	-0.01
121	356	235	114	5696	0.897456	874.54	0.580056	1561.71	891.88	-0.53	2.61	2369.95	6.66	2370.44	6.66	0.5	0.02
121	357	236	115	5712	0.896233	874.99	0.580532	1561.57	905.06	0	2.58	2372.97	6.65	2372.87	6.65	-0.1	0
121	358	237	116	5728	0.89501	875.42	0.581006	1561.43	918.3	-0.53	2.56	2374.88	6.63	2375.55	6.64	0.66	0.03
121	359	238	117	5744	0.893786	875.85	0.581476	1561.3	931.61	0	2.54	2377.78	6.62	2377.84	6.62	0.06	0
121	360	239	118	5760	0.892562	876.28	0.581944	1561.18	944.97	-0.53	2.52	2379.56	6.61	2380.39	6.61	0.83	0.03
121	361	240	119	5776	0.891338	876.7	0.58241	1561.07	958.4	0	2.5	2382.34	6.6	2382.56	6.6	0.22	0.01
121	362	241	120	5792	0.890113	877.11	0.582873	1560.97	971.89	-0.53	2.49	2383.99	6.59	2384.98	6.59	0.99	0.04
121	363	242	121	5808	0.888889	877.51	0.583333	1560.87	985.44	0	2.47	2386.64	6.57	2387.02	6.58	0.38	0.02
121	364	243	122	5824	0.887665	877.91	0.583791	1560.78	999.06	-0.52	2.45	2388.18	6.56	2389.32	6.56	1.14	0.05
121	365	244	123	5840	0.88644	878.31	0.584247	1560.69	1012.73	0	2.43	2390.7	6.55	2391.23	6.55	0.53	0.02
121	366	245	124	5856	0.885216	878.7	0.584699	1560.61	1026.46	-0.52	2.41	2392.12	6.54	2393.41	6.54	1.28	0.05
121	367	246	125	5872	0.883992	879.08	0.58515	1560.54	1040.24	0	2.39	2394.53	6.52	2395.2	6.53	0.67	0.03
121	368	247	126	5888	0.882768	879.45	0.585598	1560.48	1054.09	-0.52	2.37	2395.83	6.51	2397.25	6.51	1.42	0.06
121	369	248	127	5904	0.881545	879.83	0.586043	1560.42	1067.99	0	2.36	2398.11	6.5	2398.92	6.5	0.81	0.03
121	370	249	128	5920	0.880321	880.19	0.586486	1560.38	1081.95	-0.52	2.34	2399.3	6.48	2400.85	6.49	1.55	0.06
121	371	250	129	5936	0.879099	880.55	0.586927	1560.33	1095.97	0	2.32	2401.47	6.47	2402.41	6.48	0.94	0.04
121	372	251	130	5952	0.877876	880.91	0.587366	1560.3	1110.05	-0.52	2.3	2402.54	6.46	2404.22	6.46	1.68	0.07
121	373	252	131	5968	0.876654	881.26	0.587802	1560.27	1124.18	0	2.29	2404.59	6.45	2405.65	6.45	1.06	0.04
121	374	253	132	5984	0.875433	881.6	0.588235	1560.24	1138.36	-0.52	2.27	2405.55	6.43	2407.35	6.44	1.8	0.07
121	375	254	133	6000	0.874212	881.94	0.588667	1560.22	1152.6	0	2.25	2407.49	6.42	2408.67	6.42	1.18	0.05
121	376	255	134	6016	0.872991	882.27	0.589096	1560.21	1166.89	-0.52	2.24	2408.34	6.41	2410.25	6.41	1.91	0.08
121	377	256	135	6032	0.871771	882.6	0.589523	1560.21	1181.24	0	2.22	2410.17	6.39	2411.45	6.4	1.28	0.05
121	378	257	136	6048	0.870552	882.93	0.589947	1560.21	1195.64	-0.51	2.21	2410.91	6.38	2412.92	6.38	2.01	0.08
121	379	258	137	6064	0.869334	883.24	0.590369	1560.22	1210.1	0	2.19	2412.63	6.37	2414.01	6.37	1.38	0.06
121	380	259	138	6080	0.868116	883.56	0.590789	1560.23	1224.61	-0.51	2.18	2413.27	6.35	2415.37	6.36	2.1	0.09
121	381	260	139	6096	0.8669	883.87	0.591207	1560.25	1239.17	0	2.16	2414.88	6.34	2416.35	6.34	1.47	0.06
121	382	261	140	6112	0.865684	884.17	0.591623	1560.27	1253.78	-0.51	2.15	2415.41	6.32	2417.6	6.33	2.18	0.09
121	383	262	141	6128	0.864468	884.47	0.592037	1560.31	1268.44	0	2.13	2416.91	6.31	2418.47	6.31	1.55	0.06
121	384	263	142	6144	0.863254	884.76	0.592448	1560.34	1283.15	-0.51	2.12	2417.34	6.3	2419.6	6.3	2.26	0.09
121	385	264	143	6160	0.862041	885.05	0.592857	1560.38	1297.92	0	2.1	2418.74	6.28	2420.37	6.29	1.62	0.07

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
121	386	265	144	6176	0.860828	885.34	0.593264	1560.43	1312.74	-0.51	2.09	2419.07	6.27	2421.4	6.27	2.33	0.1
121	387	266	145	6192	0.859617	885.62	0.593669	1560.49	1327.6	0	2.07	2420.37	6.25	2422.05	6.26	1.69	0.07
121	388	267	146	6208	0.858407	885.9	0.594072	1560.54	1342.52	-0.51	2.06	2420.6	6.24	2422.98	6.24	2.38	0.1
121	389	268	147	6224	0.857198	886.17	0.594473	1560.61	1357.48	0	2.05	2421.79	6.23	2423.53	6.23	1.74	0.07
121	390	269	148	6240	0.855989	886.43	0.594872	1560.68	1372.49	-0.51	2.03	2421.92	6.21	2424.35	6.22	2.43	0.1
121	391	270	149	6256	0.854782	886.7	0.595269	1560.75	1387.55	0	2.02	2423.01	6.2	2424.8	6.2	1.78	0.07
121	392	271	150	6272	0.853577	886.96	0.595663	1560.83	1402.66	-0.51	2	2423.05	6.18	2425.52	6.19	2.47	0.1
121	393	272	151	6288	0.852372	887.21	0.596056	1560.92	1417.82	0	1.99	2424.04	6.17	2425.86	6.17	1.82	0.07
121	394	273	152	6304	0.851169	887.46	0.596447	1561.01	1433.02	-0.5	1.98	2423.98	6.15	2426.48	6.16	2.5	0.1
121	395	274	153	6320	0.849966	887.7	0.596835	1561.11	1448.27	0	1.97	2424.88	6.14	2426.72	6.14	1.84	0.08
121	396	275	154	6336	0.848765	887.95	0.597222	1561.21	1463.57	-0.5	1.95	2424.73	6.12	2427.24	6.13	2.51	0.1
121	397	276	155	6352	0.847566	888.18	0.597607	1561.31	1478.92	0	1.94	2425.53	6.11	2427.38	6.11	1.85	0.08
121	398	277	156	6368	0.846368	888.42	0.59799	1561.42	1494.31	-0.5	1.93	2425.28	6.09	2427.8	6.1	2.52	0.1
121	399	278	157	6384	0.845171	888.64	0.598371	1561.54	1509.74	0	1.92	2425.99	6.08	2427.85	6.08	1.86	0.08
121	400	279	158	6400	0.843975	888.87	0.59875	1561.66	1525.22	-0.5	1.9	2425.65	6.06	2428.17	6.07	2.52	0.1
121	401	280	159	6416	0.842781	889.09	0.599127	1561.78	1540.75	0	1.89	2426.27	6.05	2428.12	6.06	1.85	0.08
121	402	281	160	6432	0.841588	889.31	0.599502	1561.91	1556.32	-0.5	1.88	2425.84	6.03	2428.35	6.04	2.5	0.1
121	403	282	161	6448	0.840397	889.52	0.599876	1562.05	1571.93	0	1.87	2426.37	6.02	2428.2	6.03	1.83	0.08
121	404	283	162	6464	0.839207	889.73	0.600248	1562.19	1587.59	-0.5	1.86	2425.85	6	2428.33	6.01	2.48	0.1
121	405	284	163	6480	0.838019	889.94	0.600617	1562.33	1603.29	0	1.84	2426.29	5.99	2428.09	6	1.8	0.07
121	406	285	164	6496	0.836832	890.14	0.600985	1562.48	1619.04	-0.5	1.83	2425.68	5.97	2428.13	5.98	2.44	0.1
121	407	286	165	6512	0.835646	890.34	0.601351	1562.63	1634.82	0	1.82	2426.03	5.96	2427.79	5.97	1.76	0.07
121	408	287	166	6528	0.834463	890.53	0.601716	1562.79	1650.66	-0.5	1.81	2425.34	5.94	2427.74	5.95	2.4	0.1
121	409	288	167	6544	0.833281	890.72	0.602078	1562.95	1666.53	0	1.8	2425.6	5.93	2427.31	5.93	1.71	0.07
121	410	289	168	6560	0.8321	890.91	0.602439	1563.11	1682.44	-0.49	1.79	2424.83	5.91	2427.17	5.92	2.34	0.1
121	411	290	169	6576	0.830921	891.09	0.602798	1563.28	1698.4	0	1.78	2425	5.9	2426.65	5.9	1.65	0.07
121	412	291	170	6592	0.829744	891.27	0.603155	1563.46	1714.4	-0.49	1.77	2424.15	5.88	2426.42	5.89	2.27	0.09
121	413	292	171	6608	0.828568	891.45	0.603511	1563.64	1730.44	0	1.76	2424.24	5.87	2425.81	5.87	1.57	0.06
121	414	293	172	6624	0.827394	891.62	0.603865	1563.82	1746.52	-0.49	1.75	2423.3	5.85	2425.49	5.86	2.19	0.09
121	415	294	173	6640	0.826222	891.79	0.604217	1564	1762.64	0	1.74	2423.3	5.84	2424.79	5.84	1.49	0.06
121	416	295	174	6656	0.825051	891.96	0.604567	1564.2	1778.8	-0.49	1.73	2422.29	5.82	2424.38	5.83	2.1	0.09
121	417	296	175	6672	0.823882	892.12	0.604916	1564.39	1795	0	1.72	2422.21	5.81	2423.6	5.81	1.39	0.06
121	418	297	176	6688	0.822715	892.28	0.605263	1564.59	1811.24	-0.49	1.71	2421.11	5.79	2423.1	5.8	1.99	0.08
121	419	298	177	6704	0.821549	892.44	0.605609	1564.79	1827.51	0	1.7	2420.95	5.78	2422.23	5.78	1.28	0.05
121	420	299	178	6720	0.820385	892.59	0.605952	1565	1843.83	-0.49	1.69	2419.78	5.76	2421.65	5.77	1.88	0.08
121	421	300	179	6736	0.819224	892.74	0.606295	1565.21	1860.19	0	1.68	2419.54	5.75	2420.7	5.75	1.16	0.05
121	422	301	180	6752	0.818063	892.89	0.606635	1565.42	1876.59	-0.49	1.67	2418.29	5.73	2420.03	5.73	1.75	0.07
121	423	302	181	6768	0.816905	893.03	0.606974	1565.64	1893.02	0	1.66	2417.97	5.72	2419	5.72	1.03	0.04
121	424	303	182	6784	0.815748	893.17	0.607311	1565.86	1909.49	-0.49	1.65	2416.64	5.7	2418.25	5.7	1.61	0.07
121	425	304	183	6800	0.814594	893.31	0.607647	1566.09	1926	0	1.64	2416.24	5.69	2417.13	5.69	0.88	0.04
121	426	305	184	6816	0.813441	893.44	0.607981	1566.32	1942.55	-0.48	1.63	2414.84	5.67	2416.3	5.67	1.46	0.06
121	427	306	185	6832	0.81229	893.58	0.608314	1566.55	1959.13	0	1.62	2414.37	5.65	2415.09	5.66	0.73	0.03
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
122	243	121	-1	3888	0.999983	755.44	0.498971	1693.48	0.1	0	9.83	1448.81	5.96	1458.08	6	9.26	0.64

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
122	244	122	0	3904	1	757.52	0.5	1691.15	0	0.64	10	1465.97	6.01	1474.53	6.04	8.55	0.58
122	245	123	1	3920	0.999983	759.58	0.50102	1688.86	0.1	0	9.83	1481.3	6.05	1488.9	6.08	7.6	0.51
122	246	124	2	3936	0.999934	761.6	0.502033	1686.61	0.4	0.64	9.66	1497.69	6.09	1504.98	6.12	7.28	0.48
122	247	125	3	3952	0.999852	763.61	0.503036	1684.4	0.89	0	9.5	1512.61	6.12	1518.99	6.15	6.38	0.42
122	248	126	4	3968	0.99974	765.58	0.504032	1682.23	1.57	0.64	9.35	1528.6	6.16	1534.7	6.19	6.1	0.4
122	249	127	5	3984	0.999597	767.53	0.50502	1680.09	2.45	0	9.19	1543.12	6.2	1548.37	6.22	5.24	0.34
122	250	128	6	4000	0.999424	769.45	0.506	1678	3.51	0.63	9.04	1558.72	6.23	1563.72	6.25	5	0.32
122	251	129	7	4016	0.999222	771.34	0.506972	1675.94	4.76	0	8.89	1572.85	6.27	1577.04	6.28	4.19	0.27
122	252	130	8	4032	0.998992	773.21	0.507937	1673.92	6.2	0.63	8.75	1588.06	6.3	1592.05	6.32	3.99	0.25
122	253	131	9	4048	0.998735	775.05	0.508893	1671.93	7.81	0	8.61	1601.82	6.33	1605.03	6.34	3.21	0.2
122	254	132	10	4064	0.99845	776.87	0.509843	1669.98	9.61	0.63	8.48	1616.65	6.36	1619.69	6.38	3.05	0.19
122	255	133	11	4080	0.998139	778.67	0.510784	1668.06	11.58	0	8.34	1630.04	6.39	1632.35	6.4	2.31	0.14
122	256	134	12	4096	0.997803	780.44	0.511719	1666.17	13.73	0.62	8.21	1644.5	6.42	1646.68	6.43	2.18	0.13
122	257	135	13	4112	0.997441	782.19	0.512646	1664.32	16.05	0	8.09	1657.53	6.45	1659.01	6.46	1.48	0.09
122	258	136	14	4128	0.997055	783.91	0.513566	1662.5	18.54	0.62	7.96	1671.63	6.48	1673.01	6.48	1.38	0.08
122	259	137	15	4144	0.996646	785.61	0.514479	1660.72	21.2	0	7.84	1684.31	6.5	1685.03	6.51	0.72	0.04
122	260	138	16	4160	0.996213	787.29	0.515385	1658.96	24.03	0.62	7.72	1698.06	6.53	1698.71	6.53	0.65	0.04
122	261	139	17	4176	0.995758	788.95	0.516284	1657.24	27.02	0	7.61	1710.4	6.55	1710.42	6.55	0.02	0
122	262	140	18	4192	0.99528	790.58	0.517176	1655.54	30.18	0.62	7.49	1723.8	6.58	1723.78	6.58	-0.02	0
122	263	141	19	4208	0.994781	792.2	0.518061	1653.88	33.5	0	7.38	1735.81	6.6	1735.19	6.6	-0.62	-0.04
122	264	142	20	4224	0.994261	793.79	0.518939	1652.24	36.98	0.62	7.27	1748.88	6.62	1748.24	6.62	-0.63	-0.04
122	265	143	21	4240	0.99372	795.36	0.519811	1650.64	40.62	0	7.17	1760.56	6.64	1759.35	6.64	-1.2	-0.07
122	266	144	22	4256	0.99316	796.91	0.520677	1649.06	44.41	0.61	7.07	1773.3	6.67	1772.11	6.66	-1.19	-0.07
122	267	145	23	4272	0.99258	798.44	0.521536	1647.51	48.36	0	6.96	1784.66	6.68	1782.93	6.68	-1.73	-0.1
122	268	146	24	4288	0.99198	799.95	0.522388	1645.99	52.46	0.61	6.87	1797.08	6.71	1795.39	6.7	-1.7	-0.09
122	269	147	25	4304	0.991363	801.44	0.523234	1644.49	56.71	0	6.77	1808.13	6.72	1805.92	6.71	-2.21	-0.12
122	270	148	26	4320	0.990727	802.91	0.524074	1643.02	61.11	0.61	6.67	1820.24	6.74	1818.09	6.73	-2.15	-0.12
122	271	149	27	4336	0.990074	804.36	0.524908	1641.58	65.66	0	6.58	1830.98	6.76	1828.34	6.75	-2.63	-0.14
122	272	150	28	4352	0.989403	805.79	0.525735	1640.16	70.36	0.61	6.49	1842.79	6.77	1840.23	6.77	-2.55	-0.14
122	273	151	29	4368	0.988716	807.2	0.526557	1638.77	75.2	0	6.4	1853.23	6.79	1850.21	6.78	-3.02	-0.16
122	274	152	30	4384	0.988012	808.6	0.527372	1637.41	80.18	0.6	6.31	1864.73	6.81	1861.82	6.79	-2.92	-0.16
122	275	153	31	4400	0.987293	809.97	0.528182	1636.07	85.31	0	6.23	1874.89	6.82	1871.53	6.81	-3.35	-0.18
122	276	154	32	4416	0.986557	811.33	0.528986	1634.75	90.57	0.6	6.14	1886.1	6.83	1882.87	6.82	-3.23	-0.17
122	277	155	33	4432	0.985807	812.67	0.529783	1633.45	95.97	0	6.06	1895.97	6.84	1892.32	6.83	-3.65	-0.19
122	278	156	34	4448	0.985042	813.99	0.530576	1632.18	101.51	0.6	5.98	1906.9	6.86	1903.38	6.85	-3.51	-0.18
122	279	157	35	4464	0.984263	815.3	0.531362	1630.94	107.19	0	5.9	1916.48	6.87	1912.58	6.86	-3.91	-0.2
122	280	158	36	4480	0.983469	816.58	0.532143	1629.71	113	0.6	5.83	1927.13	6.88	1923.38	6.87	-3.75	-0.2
122	281	159	37	4496	0.982662	817.86	0.532918	1628.51	118.94	0	5.75	1936.45	6.89	1932.32	6.88	-4.13	-0.21
122	282	160	38	4512	0.981842	819.11	0.533688	1627.33	125.01	0.6	5.68	1946.82	6.9	1942.86	6.89	-3.96	-0.2
122	283	161	39	4528	0.981009	820.35	0.534452	1626.17	131.21	0	5.61	1955.87	6.91	1951.56	6.9	-4.32	-0.22
122	284	162	40	4544	0.980163	821.57	0.535211	1625.03	137.54	0.59	5.53	1965.98	6.92	1961.85	6.91	-4.13	-0.21
122	285	163	41	4560	0.979304	822.78	0.535965	1623.92	144	0	5.47	1974.77	6.93	1970.3	6.91	-4.47	-0.23
122	286	164	42	4576	0.978434	823.97	0.536713	1622.82	150.58	0.59	5.4	1984.61	6.94	1980.34	6.92	-4.27	-0.22
122	287	165	43	4592	0.977552	825.14	0.537456	1621.75	157.29	0	5.33	1993.15	6.94	1988.55	6.93	-4.59	-0.23
122	288	166	44	4608	0.976659	826.3	0.538194	1620.69	164.12	0.59	5.26	2002.73	6.95	1998.35	6.94	-4.38	-0.22
122	289	167	45	4624	0.975755	827.45	0.538927	1619.66	171.08	0	5.2	2011.02	6.96	2006.33	6.94	-4.69	-0.23

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
122	290	168	46	4640	0.974839	828.58	0.539655	1618.64	178.15	0.59	5.14	2020.35	6.97	2015.89	6.95	-4.46	-0.22
122	291	169	47	4656	0.973914	829.69	0.540378	1617.65	185.34	0	5.07	2028.39	6.97	2023.64	6.95	-4.76	-0.24
122	292	170	48	4672	0.972978	830.79	0.541096	1616.67	192.65	0.59	5.01	2037.48	6.98	2032.96	6.96	-4.52	-0.22
122	293	171	49	4688	0.972032	831.88	0.541809	1615.71	200.08	0	4.95	2045.28	6.98	2040.48	6.96	-4.8	-0.24
122	294	172	50	4704	0.971077	832.95	0.542517	1614.77	207.62	0.58	4.9	2054.13	6.99	2049.58	6.97	-4.55	-0.22
122	295	173	51	4720	0.970112	834.01	0.54322	1613.85	215.28	0	4.84	2061.7	6.99	2056.88	6.97	-4.82	-0.23
122	296	174	52	4736	0.969138	835.06	0.543919	1612.94	223.05	0.58	4.78	2070.31	6.99	2065.75	6.98	-4.56	-0.22
122	297	175	53	4752	0.968155	836.09	0.544613	1612.06	230.94	0	4.73	2077.64	7	2072.83	6.98	-4.81	-0.23
122	298	176	54	4768	0.967164	837.1	0.545302	1611.19	238.93	0.58	4.67	2086.03	7	2081.48	6.98	-4.55	-0.22
122	299	177	55	4784	0.966164	838.11	0.545987	1610.34	247.04	0	4.62	2093.14	7	2088.35	6.98	-4.79	-0.23
122	300	178	56	4800	0.965156	839.1	0.546667	1609.5	255.25	0.58	4.57	2101.29	7	2096.78	6.99	-4.51	-0.22
122	301	179	57	4816	0.964139	840.08	0.547342	1608.68	263.57	0	4.51	2108.18	7	2103.44	6.99	-4.75	-0.23
122	302	180	58	4832	0.963116	841.04	0.548013	1607.88	272	0.58	4.46	2116.11	7.01	2111.65	6.99	-4.46	-0.21
122	303	181	59	4848	0.962084	842	0.54868	1607.09	280.54	0	4.41	2122.79	7.01	2118.1	6.99	-4.68	-0.22
122	304	182	60	4864	0.961046	842.94	0.549342	1606.32	289.18	0.57	4.37	2130.5	7.01	2126.11	6.99	-4.39	-0.21
122	305	183	61	4880	0.96	843.86	0.55	1605.57	297.92	0	4.32	2136.96	7.01	2132.36	6.99	-4.61	-0.22
122	306	184	62	4896	0.958947	844.78	0.550654	1604.83	306.77	0.57	4.27	2144.47	7.01	2140.16	6.99	-4.31	-0.2
122	307	185	63	4912	0.957888	845.69	0.551303	1604.11	315.71	0	4.22	2150.72	7.01	2146.21	6.99	-4.51	-0.21
122	308	186	64	4928	0.956822	846.58	0.551948	1603.4	324.76	0.57	4.18	2158.01	7.01	2153.81	6.99	-4.21	-0.2
122	309	187	65	4944	0.95575	847.46	0.552589	1602.7	333.91	0	4.13	2164.06	7	2159.66	6.99	-4.4	-0.2
122	310	188	66	4960	0.954672	848.33	0.553226	1602.02	343.15	0.57	4.09	2171.15	7	2167.06	6.99	-4.09	-0.19
122	311	189	67	4976	0.953588	849.19	0.553859	1601.36	352.5	0	4.05	2177	7	2172.72	6.99	-4.28	-0.2
122	312	190	68	4992	0.952498	850.03	0.554487	1600.71	361.94	0.57	4	2183.89	7	2179.92	6.99	-3.97	-0.18
122	313	191	69	5008	0.951403	850.87	0.555112	1600.07	371.48	0	3.96	2189.54	7	2185.39	6.98	-4.15	-0.19
122	314	192	70	5024	0.950302	851.69	0.555732	1599.45	381.11	0.56	3.92	2196.23	6.99	2192.4	6.98	-3.83	-0.17
122	315	193	71	5040	0.949196	852.51	0.556349	1598.84	390.83	0	3.88	2201.7	6.99	2197.69	6.98	-4.01	-0.18
122	316	194	72	5056	0.948085	853.31	0.556962	1598.25	400.65	0.56	3.84	2208.19	6.99	2204.51	6.98	-3.68	-0.17
122	317	195	73	5072	0.946969	854.1	0.557571	1597.67	410.56	0	3.8	2213.47	6.98	2209.62	6.97	-3.85	-0.17
122	318	196	74	5088	0.945849	854.89	0.558176	1597.1	420.57	0.56	3.76	2219.77	6.98	2216.25	6.97	-3.53	-0.16
122	319	197	75	5104	0.944723	855.66	0.558777	1596.54	430.66	0	3.73	2224.87	6.97	2221.17	6.96	-3.69	-0.17
122	320	198	76	5120	0.943594	856.42	0.559375	1596	440.84	0.56	3.69	2230.98	6.97	2227.62	6.96	-3.36	-0.15
122	321	199	77	5136	0.94246	857.17	0.559969	1595.47	451.12	0	3.65	2235.9	6.97	2232.37	6.95	-3.52	-0.16
122	322	200	78	5152	0.941322	857.91	0.560559	1594.95	461.48	0.56	3.62	2241.83	6.96	2238.64	6.95	-3.19	-0.14
122	323	201	79	5168	0.94018	858.65	0.561146	1594.45	471.92	0	3.58	2246.56	6.96	2243.22	6.94	-3.34	-0.15
122	324	202	80	5184	0.939034	859.37	0.561728	1593.95	482.46	0.56	3.55	2252.32	6.95	2249.31	6.94	-3.01	-0.13
122	325	203	81	5200	0.937884	860.08	0.562308	1593.47	493.08	0	3.51	2256.88	6.94	2253.72	6.93	-3.16	-0.14
122	326	204	82	5216	0.936731	860.79	0.562883	1593	503.78	0.55	3.48	2262.46	6.94	2259.64	6.93	-2.83	-0.13
122	327	205	83	5232	0.935574	861.48	0.563456	1592.54	514.57	0	3.44	2266.85	6.93	2263.88	6.92	-2.97	-0.13
122	328	206	84	5248	0.934414	862.16	0.564024	1592.1	525.44	0.55	3.41	2272.26	6.93	2269.62	6.92	-2.64	-0.12
122	329	207	85	5264	0.933251	862.84	0.56459	1591.66	536.4	0	3.38	2276.48	6.92	2273.7	6.91	-2.78	-0.12
122	330	208	86	5280	0.932084	863.51	0.565152	1591.24	547.43	0.55	3.35	2281.72	6.91	2279.27	6.91	-2.44	-0.11
122	331	209	87	5296	0.930915	864.17	0.56571	1590.83	558.55	0	3.32	2285.77	6.91	2283.19	6.9	-2.58	-0.11
122	332	210	88	5312	0.929743	864.82	0.566265	1590.43	569.75	0.55	3.28	2290.84	6.9	2288.6	6.89	-2.24	-0.1
122	333	211	89	5328	0.928568	865.46	0.566817	1590.04	581.03	0	3.25	2294.74	6.89	2292.35	6.88	-2.39	-0.1
122	334	212	90	5344	0.927391	866.09	0.567365	1589.66	592.38	0.55	3.22	2299.64	6.89	2297.6	6.88	-2.05	-0.09
122	335	213	91	5360	0.926211	866.71	0.56791	1589.29	603.82	0	3.2	2303.38	6.88	2301.2	6.87	-2.18	-0.09

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122	336	214	92	5376	0.925028	867.33	0.568452	1588.93	615.33	0.55	3.17	2308.13	6.87	2306.28	6.86	-1.84	-0.08
122	337	215	93	5392	0.923844	867.93	0.568991	1588.58	626.92	0	3.14	2311.71	6.86	2309.72	6.85	-1.98	-0.09
122	338	216	94	5408	0.922657	868.53	0.569527	1588.24	638.58	0.54	3.11	2316.3	6.85	2314.65	6.85	-1.64	-0.07
122	339	217	95	5424	0.921468	869.12	0.570059	1587.91	650.33	0	3.08	2319.72	6.84	2317.94	6.84	-1.78	-0.08
122	340	218	96	5440	0.920277	869.71	0.570588	1587.59	662.14	0.54	3.05	2324.16	6.84	2322.72	6.83	-1.44	-0.06
122	341	219	97	5456	0.919084	870.28	0.571114	1587.29	674.03	0	3.03	2327.43	6.83	2325.86	6.82	-1.57	-0.07
122	342	220	98	5472	0.917889	870.85	0.571637	1586.99	685.99	0.54	3	2331.71	6.82	2330.48	6.81	-1.23	-0.05
122	343	221	99	5488	0.916693	871.41	0.572157	1586.7	698.03	0	2.98	2334.84	6.81	2333.47	6.8	-1.37	-0.06
122	344	222	100	5504	0.915495	871.96	0.572674	1586.42	710.14	0.54	2.95	2338.97	6.8	2337.94	6.8	-1.03	-0.04
122	345	223	101	5520	0.914295	872.5	0.573188	1586.15	722.32	0	2.92	2341.96	6.79	2340.79	6.78	-1.17	-0.05
122	346	224	102	5536	0.913094	873.04	0.573699	1585.88	734.57	0.54	2.9	2345.94	6.78	2345.11	6.78	-0.83	-0.04
122	347	225	103	5552	0.911892	873.57	0.574207	1585.63	746.89	0	2.87	2348.78	6.77	2347.82	6.77	-0.96	-0.04
122	348	226	104	5568	0.910688	874.09	0.574713	1585.39	759.28	0.54	2.85	2352.62	6.76	2351.99	6.76	-0.63	-0.03
122	349	227	105	5584	0.909484	874.61	0.575215	1585.15	771.74	0	2.83	2355.32	6.75	2354.56	6.75	-0.76	-0.03
122	350	228	106	5600	0.908278	875.12	0.575714	1584.93	784.27	0.53	2.8	2359.02	6.74	2358.59	6.74	-0.43	-0.02
122	351	229	107	5616	0.907071	875.62	0.576211	1584.71	796.87	0	2.78	2361.58	6.73	2361.01	6.73	-0.57	-0.02
122	352	230	108	5632	0.905863	876.11	0.576705	1584.5	809.53	0.53	2.76	2365.14	6.72	2364.9	6.72	-0.24	-0.01
122	353	231	109	5648	0.904654	876.6	0.577195	1584.3	822.27	0	2.73	2367.57	6.71	2367.19	6.71	-0.37	-0.02
122	354	232	110	5664	0.903444	877.08	0.577684	1584.11	835.06	0.53	2.71	2370.99	6.7	2370.94	6.7	-0.05	0
122	355	233	111	5680	0.902234	877.55	0.578169	1583.93	847.93	0	2.69	2373.28	6.69	2373.1	6.68	-0.18	-0.01
122	356	234	112	5696	0.901023	878.02	0.578652	1583.75	860.86	0.53	2.67	2376.57	6.68	2376.71	6.68	0.14	0.01
122	357	235	113	5712	0.899811	878.48	0.579132	1583.58	873.85	0	2.65	2378.73	6.66	2378.74	6.66	0	0
122	358	236	114	5728	0.898599	878.93	0.579609	1583.42	886.91	0.53	2.63	2381.89	6.65	2382.21	6.65	0.33	0.01
122	359	237	115	5744	0.897386	879.38	0.580084	1583.27	900.03	0	2.6	2383.92	6.64	2384.11	6.64	0.19	0.01
122	360	238	116	5760	0.896173	879.82	0.580556	1583.13	913.21	0.53	2.58	2386.95	6.63	2387.45	6.63	0.51	0.02
122	361	239	117	5776	0.894959	880.26	0.581025	1582.99	926.46	0	2.56	2388.85	6.62	2389.22	6.62	0.36	0.02
122	362	240	118	5792	0.893746	880.69	0.581492	1582.86	939.77	0.53	2.54	2391.75	6.61	2392.43	6.61	0.68	0.03
122	363	241	119	5808	0.892532	881.11	0.581956	1582.74	953.14	0	2.52	2393.53	6.59	2394.07	6.6	0.54	0.02
122	364	242	120	5824	0.891317	881.53	0.582418	1582.63	966.57	0.52	2.5	2396.3	6.58	2397.15	6.59	0.85	0.04
122	365	243	121	5840	0.890103	881.94	0.582877	1582.52	980.06	0	2.48	2397.96	6.57	2398.67	6.57	0.7	0.03
122	366	244	122	5856	0.888889	882.34	0.583333	1582.43	993.61	0.52	2.47	2400.61	6.56	2401.62	6.56	1.01	0.04
122	367	245	123	5872	0.887675	882.74	0.583787	1582.33	1007.22	0	2.45	2402.15	6.55	2403.02	6.55	0.86	0.04
122	368	246	124	5888	0.88646	883.13	0.584239	1582.25	1020.89	0.52	2.43	2404.68	6.53	2405.85	6.54	1.17	0.05
122	369	247	125	5904	0.885246	883.52	0.584688	1582.17	1034.62	0	2.41	2406.1	6.52	2407.12	6.52	1.02	0.04
122	370	248	126	5920	0.884032	883.9	0.585135	1582.1	1048.41	0.52	2.39	2408.5	6.51	2409.82	6.51	1.32	0.05
122	371	249	127	5936	0.882818	884.28	0.58558	1582.04	1062.25	0	2.37	2409.81	6.5	2410.98	6.5	1.17	0.05
122	372	250	128	5952	0.881605	884.65	0.586022	1581.98	1076.15	0.52	2.36	2412.09	6.48	2413.56	6.49	1.47	0.06
122	373	251	129	5968	0.880392	885.01	0.586461	1581.93	1090.11	0	2.34	2413.28	6.47	2414.59	6.47	1.31	0.05
122	374	252	130	5984	0.879179	885.37	0.586898	1581.89	1104.13	0.52	2.32	2415.45	6.46	2417.06	6.46	1.6	0.07
122	375	253	131	6000	0.877966	885.73	0.587333	1581.85	1118.2	0	2.31	2416.53	6.44	2417.98	6.45	1.44	0.06
122	376	254	132	6016	0.876754	886.08	0.587766	1581.82	1132.32	0.52	2.29	2418.59	6.43	2420.32	6.44	1.73	0.07
122	377	255	133	6032	0.875543	886.42	0.588196	1581.79	1146.5	0	2.27	2419.56	6.42	2421.13	6.42	1.57	0.06
122	378	256	134	6048	0.874332	886.76	0.588624	1581.78	1160.74	0.51	2.26	2421.5	6.41	2423.35	6.41	1.86	0.08
122	379	257	135	6064	0.873121	887.09	0.58905	1581.76	1175.02	0	2.24	2422.36	6.39	2424.05	6.4	1.69	0.07
122	380	258	136	6080	0.871911	887.42	0.589474	1581.76	1189.37	0.51	2.22	2424.19	6.38	2426.16	6.38	1.97	0.08
122	381	259	137	6096	0.870702	887.74	0.589895	1581.76	1203.76	0	2.21	2424.94	6.36	2426.74	6.37	1.8	0.07

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122	382	260	138	6112	0.869494	888.06	0.590314	1581.77	1218.21	0.51	2.19	2426.67	6.35	2428.74	6.36	2.08	0.09
122	383	261	139	6128	0.868286	888.38	0.590731	1581.78	1232.71	0	2.18	2427.31	6.34	2429.21	6.34	1.9	0.08
122	384	262	140	6144	0.867079	888.69	0.591146	1581.8	1247.26	0.51	2.16	2428.93	6.33	2431.1	6.33	2.17	0.09
122	385	263	141	6160	0.865873	888.99	0.591558	1581.82	1261.87	0	2.15	2429.47	6.31	2431.47	6.32	2	0.08
122	386	264	142	6176	0.864668	889.29	0.591969	1581.85	1276.52	0.51	2.13	2430.98	6.3	2433.24	6.3	2.26	0.09
122	387	265	143	6192	0.863463	889.58	0.592377	1581.89	1291.23	0	2.12	2431.42	6.28	2433.5	6.29	2.08	0.09
122	388	266	144	6208	0.86226	889.87	0.592784	1581.93	1305.99	0.51	2.1	2432.83	6.27	2435.17	6.28	2.34	0.1
122	389	267	145	6224	0.861057	890.16	0.593188	1581.98	1320.79	0	2.09	2433.16	6.25	2435.32	6.26	2.16	0.09
122	390	268	146	6240	0.859855	890.44	0.59359	1582.03	1335.65	0.51	2.08	2434.47	6.24	2436.88	6.25	2.41	0.1
122	391	269	147	6256	0.858655	890.71	0.59399	1582.09	1350.55	0	2.06	2434.71	6.23	2436.93	6.23	2.22	0.09
122	392	270	148	6272	0.857455	890.99	0.594388	1582.15	1365.51	0.51	2.05	2435.91	6.21	2438.38	6.22	2.47	0.1
122	393	271	149	6288	0.856257	891.25	0.594784	1582.22	1380.51	0	2.03	2436.05	6.2	2438.33	6.2	2.28	0.09
122	394	272	150	6304	0.855059	891.52	0.595178	1582.29	1395.56	0.5	2.02	2437.16	6.19	2439.68	6.19	2.53	0.1
122	395	273	151	6320	0.853863	891.77	0.59557	1582.37	1410.66	0	2.01	2437.2	6.17	2439.53	6.18	2.33	0.1
122	396	274	152	6336	0.852668	892.03	0.59596	1582.46	1425.8	0.5	1.99	2438.21	6.16	2440.78	6.16	2.57	0.11
122	397	275	153	6352	0.851474	892.28	0.596348	1582.55	1441	0	1.98	2438.16	6.14	2440.53	6.15	2.37	0.1
122	398	276	154	6368	0.850282	892.52	0.596734	1582.64	1456.24	0.5	1.97	2439.07	6.13	2441.67	6.13	2.6	0.11
122	399	277	155	6384	0.84909	892.77	0.597118	1582.74	1471.52	0	1.96	2438.93	6.11	2441.32	6.12	2.39	0.1
122	400	278	156	6400	0.8479	893	0.5975	1582.85	1486.85	0.5	1.94	2439.74	6.1	2442.36	6.11	2.62	0.11
122	401	279	157	6416	0.846711	893.24	0.59788	1582.96	1502.23	0	1.93	2439.51	6.08	2441.92	6.09	2.41	0.1
122	402	280	158	6432	0.845524	893.47	0.598259	1583.07	1517.65	0.5	1.92	2440.23	6.07	2442.86	6.08	2.63	0.11
122	403	281	159	6448	0.844337	893.69	0.598635	1583.19	1533.12	0	1.91	2439.9	6.05	2442.32	6.06	2.42	0.1
122	404	282	160	6464	0.843153	893.91	0.59901	1583.31	1548.63	0.5	1.89	2440.53	6.04	2443.17	6.05	2.64	0.11
122	405	283	161	6480	0.841969	894.13	0.599383	1583.44	1564.19	0	1.88	2440.12	6.02	2442.53	6.03	2.41	0.1
122	406	284	162	6496	0.840787	894.35	0.599754	1583.58	1579.79	0.5	1.87	2440.66	6.01	2443.28	6.02	2.63	0.11
122	407	285	163	6512	0.839607	894.56	0.600123	1583.71	1595.43	0	1.86	2440.16	6	2442.56	6	2.4	0.1
122	408	286	164	6528	0.838428	894.76	0.60049	1583.86	1611.12	0.5	1.85	2440.6	5.98	2443.21	5.99	2.61	0.11
122	409	287	165	6544	0.83725	894.96	0.600856	1584	1626.85	0	1.84	2440.02	5.97	2442.39	5.97	2.37	0.1
122	410	288	166	6560	0.836074	895.16	0.60122	1584.16	1642.62	0.49	1.83	2440.38	5.95	2442.95	5.96	2.57	0.11
122	411	289	167	6576	0.834899	895.36	0.601582	1584.31	1658.44	0	1.81	2439.71	5.94	2442.04	5.94	2.34	0.1
122	412	290	168	6592	0.833726	895.55	0.601942	1584.47	1674.3	0.49	1.8	2439.98	5.92	2442.51	5.93	2.53	0.1
122	413	291	169	6608	0.832555	895.74	0.6023	1584.64	1690.19	0	1.79	2439.22	5.91	2441.51	5.91	2.29	0.09
122	414	292	170	6624	0.831385	895.92	0.602657	1584.81	1706.13	0.49	1.78	2439.41	5.89	2441.89	5.9	2.48	0.1
122	415	293	171	6640	0.830216	896.1	0.603012	1584.98	1722.12	0	1.77	2438.57	5.88	2440.8	5.88	2.23	0.09
122	416	294	172	6656	0.82905	896.28	0.603365	1585.16	1738.14	0.49	1.76	2438.67	5.86	2441.09	5.87	2.41	0.1
122	417	295	173	6672	0.827884	896.46	0.603717	1585.34	1754.2	0	1.75	2437.75	5.85	2439.92	5.85	2.16	0.09
122	418	296	174	6688	0.826721	896.63	0.604067	1585.53	1770.3	0.49	1.74	2437.77	5.83	2440.11	5.84	2.34	0.1
122	419	297	175	6704	0.825559	896.79	0.604415	1585.72	1786.45	0	1.73	2436.77	5.82	2438.85	5.82	2.08	0.09
122	420	298	176	6720	0.824399	896.96	0.604762	1585.91	1802.63	0.49	1.72	2436.71	5.8	2438.96	5.81	2.25	0.09
122	421	299	177	6736	0.823241	897.12	0.605107	1586.11	1818.85	0	1.71	2435.63	5.79	2437.62	5.79	1.99	0.08
122	422	300	178	6752	0.822084	897.28	0.60545	1586.31	1835.11	0.49	1.7	2435.49	5.77	2437.64	5.78	2.15	0.09
122	423	301	179	6768	0.820929	897.43	0.605792	1586.52	1851.42	0	1.69	2434.33	5.75	2436.21	5.76	1.88	0.08
122	424	302	180	6784	0.819776	897.58	0.606132	1586.72	1867.75	0.49	1.68	2434.11	5.74	2436.15	5.75	2.04	0.08
122	425	303	181	6800	0.818624	897.73	0.606471	1586.94	1884.13	0	1.67	2432.87	5.72	2434.64	5.73	1.77	0.07
122	426	304	182	6816	0.817474	897.87	0.606808	1587.16	1900.55	0.48	1.66	2432.57	5.71	2434.49	5.71	1.92	0.08
122	427	305	183	6832	0.816327	898.02	0.607143	1587.38	1917	0	1.65	2431.26	5.69	2432.9	5.7	1.64	0.07

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
122	428	306	184	6848	0.81518	898.15	0.607477	1587.6	1933.49	0.48	1.64	2430.88	5.68	2432.66	5.68	1.78	0.07
122	429	307	185	6864	0.814036	898.29	0.607809	1587.83	1950.02	0	1.63	2429.5	5.66	2430.99	5.67	1.5	0.06
122	430	308	186	6880	0.812893	898.42	0.60814	1588.06	1966.58	0.48	1.63	2429.04	5.65	2430.67	5.65	1.63	0.07
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
123	245	122	-1	3920	0.999983	759.58	0.49898	1716.66	0.1	0	9.83	1453.5	5.93	1462.75	5.97	9.25	0.63
123	246	123	0	3936	1	761.66	0.5	1714.31	0	-0.64	10	1469.39	5.97	1478.36	6.01	8.97	0.61
123	247	124	1	3952	0.999984	763.71	0.501012	1712.01	0.1	0	9.83	1486.02	6.02	1493.61	6.05	7.59	0.51
123	248	125	2	3968	0.999935	765.73	0.502016	1709.75	0.39	-0.64	9.67	1501.16	6.05	1508.86	6.08	7.69	0.51
123	249	126	3	3984	0.999855	767.72	0.503012	1707.53	0.88	0	9.51	1517.38	6.09	1523.74	6.12	6.36	0.42
123	250	127	4	4000	0.999744	769.69	0.504	1705.34	1.56	-0.63	9.35	1532.12	6.13	1538.63	6.15	6.51	0.42
123	251	128	5	4016	0.999603	771.63	0.50498	1703.2	2.43	0	9.2	1547.94	6.17	1553.15	6.19	5.22	0.34
123	252	129	6	4032	0.999433	773.55	0.505952	1701.09	3.49	-0.63	9.05	1562.29	6.2	1567.7	6.22	5.41	0.34
123	253	130	7	4048	0.999234	775.44	0.506917	1699.01	4.73	0	8.9	1577.72	6.24	1581.88	6.25	4.16	0.26
123	254	131	8	4064	0.999008	777.31	0.507874	1696.98	6.15	-0.63	8.76	1591.7	6.27	1596.08	6.28	4.39	0.27
123	255	132	9	4080	0.998754	779.15	0.508824	1694.98	7.75	0	8.62	1606.74	6.3	1609.92	6.31	3.17	0.2
123	256	133	10	4096	0.998474	780.97	0.509766	1693.01	9.53	-0.62	8.49	1620.35	6.33	1623.79	6.34	3.44	0.21
123	257	134	11	4112	0.998168	782.76	0.5107	1691.08	11.49	0	8.35	1635.03	6.36	1637.29	6.37	2.27	0.14
123	258	135	12	4128	0.997837	784.53	0.511628	1689.18	13.62	-0.62	8.23	1648.27	6.39	1650.84	6.4	2.57	0.16
123	259	136	13	4144	0.997481	786.27	0.512548	1687.32	15.92	0	8.1	1662.59	6.42	1664.01	6.42	1.43	0.09
123	260	137	14	4160	0.997101	787.99	0.513462	1685.49	18.4	-0.62	7.98	1675.48	6.44	1677.24	6.45	1.76	0.11
123	261	138	15	4176	0.996697	789.69	0.514368	1683.68	21.04	0	7.86	1689.44	6.47	1690.1	6.48	0.66	0.04
123	262	139	16	4192	0.996271	791.37	0.515267	1681.92	23.85	-0.62	7.74	1701.99	6.5	1703.01	6.5	1.02	0.06
123	263	140	17	4208	0.995822	793.03	0.51616	1680.18	26.82	0	7.62	1715.6	6.52	1715.55	6.52	-0.05	0
123	264	141	18	4224	0.995351	794.66	0.517045	1678.47	29.95	-0.62	7.51	1727.81	6.54	1728.16	6.55	0.35	0.02
123	265	142	19	4240	0.994859	796.27	0.517925	1676.79	33.25	0	7.4	1741.09	6.57	1740.39	6.57	-0.69	-0.04
123	266	143	20	4256	0.994347	797.86	0.518797	1675.14	36.7	-0.61	7.29	1752.97	6.59	1752.7	6.59	-0.27	-0.02
123	267	144	21	4272	0.993814	799.43	0.519663	1673.52	40.31	0	7.19	1765.92	6.61	1764.64	6.61	-1.28	-0.07
123	268	145	22	4288	0.993261	800.98	0.520522	1671.93	44.08	-0.61	7.08	1777.48	6.63	1776.65	6.63	-0.83	-0.05
123	269	146	23	4304	0.992689	802.51	0.521375	1670.37	48	0	6.98	1790.1	6.65	1788.29	6.65	-1.82	-0.1
123	270	147	24	4320	0.992099	804.02	0.522222	1668.83	52.07	-0.61	6.88	1801.35	6.67	1800.01	6.67	-1.34	-0.07
123	271	148	25	4336	0.99149	805.51	0.523063	1667.33	56.3	0	6.79	1813.66	6.69	1811.36	6.68	-2.3	-0.13
123	272	149	26	4352	0.990863	806.98	0.523897	1665.84	60.67	-0.61	6.69	1824.6	6.71	1822.8	6.7	-1.8	-0.1
123	273	150	27	4368	0.990219	808.43	0.524725	1664.39	65.18	0	6.6	1836.6	6.73	1833.87	6.72	-2.73	-0.15
123	274	151	28	4384	0.989557	809.86	0.525547	1662.96	69.85	-0.6	6.51	1847.24	6.74	1845.03	6.73	-2.21	-0.12
123	275	152	29	4400	0.988879	811.27	0.526364	1661.55	74.65	0	6.42	1858.94	6.76	1855.82	6.75	-3.12	-0.17
123	276	153	30	4416	0.988185	812.67	0.527174	1660.17	79.6	-0.6	6.33	1869.29	6.77	1866.72	6.76	-2.58	-0.14
123	277	154	31	4432	0.987475	814.04	0.527978	1658.82	84.69	0	6.25	1880.7	6.79	1877.23	6.78	-3.46	-0.18
123	278	155	32	4448	0.98675	815.4	0.528777	1657.49	89.92	-0.6	6.17	1890.76	6.8	1887.86	6.79	-2.9	-0.15
123	279	156	33	4464	0.98601	816.74	0.52957	1656.18	95.29	0	6.08	1901.88	6.82	1898.11	6.8	-3.77	-0.2
123	280	157	34	4480	0.985255	818.07	0.530357	1654.9	100.79	-0.6	6	1911.66	6.83	1908.47	6.82	-3.18	-0.17
123	281	158	35	4496	0.984486	819.37	0.531139	1653.64	106.43	0	5.93	1922.49	6.84	1918.46	6.83	-4.03	-0.21
123	282	159	36	4512	0.983703	820.66	0.531915	1652.4	112.2	-0.6	5.85	1932	6.85	1928.57	6.84	-3.43	-0.18
123	283	160	37	4528	0.982907	821.94	0.532686	1651.18	118.1	0	5.77	1942.56	6.86	1938.3	6.85	-4.26	-0.22
123	284	161	38	4544	0.982097	823.19	0.533451	1649.99	124.13	-0.59	5.7	1951.79	6.87	1948.16	6.86	-3.64	-0.19

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
123	285	162	39	4560	0.981274	824.43	0.534211	1648.82	130.29	0	5.63	1962.08	6.88	1957.64	6.87	-4.45	-0.23
123	286	163	40	4576	0.980439	825.66	0.534965	1647.67	136.58	-0.59	5.56	1971.06	6.89	1967.25	6.88	-3.81	-0.19
123	287	164	41	4592	0.979592	826.87	0.535714	1646.54	143	0	5.49	1981.08	6.9	1976.48	6.89	-4.61	-0.23
123	288	165	42	4608	0.978733	828.06	0.536458	1645.43	149.54	-0.59	5.42	1989.8	6.91	1985.85	6.9	-3.96	-0.2
123	289	166	43	4624	0.977862	829.24	0.537197	1644.34	156.21	0	5.35	1999.57	6.92	1994.84	6.9	-4.73	-0.24
123	290	167	44	4640	0.97698	830.4	0.537931	1643.27	162.99	-0.59	5.29	2008.03	6.92	2003.96	6.91	-4.07	-0.2
123	291	168	45	4656	0.976087	831.54	0.53866	1642.23	169.9	0	5.22	2017.55	6.93	2012.72	6.92	-4.83	-0.24
123	292	169	46	4672	0.975183	832.68	0.539384	1641.2	176.93	-0.59	5.16	2025.77	6.94	2021.61	6.92	-4.16	-0.21
123	293	170	47	4688	0.974269	833.79	0.540102	1640.19	184.08	0	5.1	2035.03	6.95	2030.13	6.93	-4.9	-0.24
123	294	171	48	4704	0.973344	834.9	0.540816	1639.2	191.35	-0.58	5.04	2043.01	6.95	2038.8	6.93	-4.21	-0.21
123	295	172	49	4720	0.97241	835.99	0.541525	1638.23	198.73	0	4.98	2052.03	6.96	2047.09	6.94	-4.95	-0.24
123	296	173	50	4736	0.971466	837.06	0.54223	1637.28	206.23	-0.58	4.92	2059.77	6.96	2055.53	6.94	-4.25	-0.21
123	297	174	51	4752	0.970513	838.12	0.542929	1636.34	213.84	0	4.86	2068.56	6.96	2063.59	6.95	-4.97	-0.24
123	298	175	52	4768	0.969551	839.17	0.543624	1635.42	221.56	-0.58	4.81	2076.07	6.97	2071.81	6.95	-4.26	-0.21
123	299	176	53	4784	0.96858	840.2	0.544314	1634.52	229.4	0	4.75	2084.62	6.97	2079.65	6.96	-4.97	-0.24
123	300	177	54	4800	0.9676	841.22	0.545	1633.64	237.35	-0.58	4.7	2091.9	6.97	2087.66	6.96	-4.25	-0.2
123	301	178	55	4816	0.966612	842.23	0.545681	1632.78	245.4	0	4.64	2100.23	6.98	2095.28	6.96	-4.95	-0.24
123	302	179	56	4832	0.965616	843.23	0.546358	1631.93	253.57	-0.58	4.59	2107.29	6.98	2103.07	6.96	-4.22	-0.2
123	303	180	57	4848	0.964611	844.21	0.54703	1631.1	261.84	0	4.54	2115.39	6.98	2110.48	6.97	-4.91	-0.23
123	304	181	58	4864	0.963599	845.18	0.547697	1630.29	270.22	-0.57	4.49	2122.23	6.98	2118.06	6.97	-4.17	-0.2
123	305	182	59	4880	0.96258	846.13	0.548361	1629.49	278.7	0	4.44	2130.11	6.98	2125.27	6.97	-4.85	-0.23
123	306	183	60	4896	0.961553	847.08	0.54902	1628.71	287.29	-0.57	4.39	2136.74	6.98	2132.64	6.97	-4.1	-0.19
123	307	184	61	4912	0.960519	848.01	0.549674	1627.94	295.99	0	4.34	2144.41	6.99	2139.64	6.97	-4.77	-0.22
123	308	185	62	4928	0.959479	848.93	0.550325	1627.19	304.78	-0.57	4.29	2150.83	6.98	2146.81	6.97	-4.02	-0.19
123	309	186	63	4944	0.958432	849.84	0.550971	1626.45	313.68	0	4.25	2158.28	6.98	2153.61	6.97	-4.68	-0.22
123	310	187	64	4960	0.957378	850.73	0.551613	1625.73	322.67	-0.57	4.2	2164.5	6.98	2160.58	6.97	-3.92	-0.18
123	311	188	65	4976	0.956318	851.62	0.552251	1625.03	331.77	0	4.16	2171.74	6.98	2167.17	6.97	-4.57	-0.21
123	312	189	66	4992	0.955251	852.49	0.552885	1624.34	340.96	-0.57	4.11	2177.76	6.98	2173.95	6.97	-3.81	-0.18
123	313	190	67	5008	0.954179	853.35	0.553514	1623.66	350.25	0	4.07	2184.8	6.98	2180.35	6.97	-4.45	-0.2
123	314	191	68	5024	0.953102	854.2	0.55414	1623	359.64	-0.56	4.03	2190.62	6.98	2186.94	6.96	-3.68	-0.17
123	315	192	69	5040	0.952018	855.04	0.554762	1622.35	369.12	0	3.99	2197.47	6.98	2193.15	6.96	-4.32	-0.2
123	316	193	70	5056	0.950929	855.87	0.55538	1621.72	378.7	-0.56	3.94	2203.09	6.97	2199.55	6.96	-3.54	-0.16
123	317	194	71	5072	0.949835	856.69	0.555994	1621.1	388.38	0	3.9	2209.74	6.97	2205.57	6.96	-4.17	-0.19
123	318	195	72	5088	0.948736	857.5	0.556604	1620.49	398.14	-0.56	3.86	2215.17	6.97	2211.78	6.96	-3.4	-0.15
123	319	196	73	5104	0.947632	858.29	0.55721	1619.9	408	0	3.82	2221.63	6.96	2217.61	6.95	-4.02	-0.18
123	320	197	74	5120	0.946523	859.08	0.557813	1619.32	417.95	-0.56	3.79	2226.88	6.96	2223.64	6.95	-3.24	-0.15
123	321	198	75	5136	0.94541	859.86	0.558411	1618.75	427.98	0	3.75	2233.15	6.96	2229.3	6.94	-3.86	-0.17
123	322	199	76	5152	0.944292	860.62	0.559006	1618.2	438.11	-0.56	3.71	2238.22	6.95	2235.14	6.94	-3.07	-0.14
123	323	200	77	5168	0.94317	861.38	0.559598	1617.66	448.33	0	3.67	2244.31	6.95	2240.62	6.94	-3.69	-0.16
123	324	201	78	5184	0.942044	862.12	0.560185	1617.13	458.64	-0.56	3.64	2249.19	6.94	2246.29	6.93	-2.9	-0.13
123	325	202	79	5200	0.940914	862.86	0.560769	1616.61	469.03	0	3.6	2255.1	6.94	2251.59	6.93	-3.51	-0.16
123	326	203	80	5216	0.939779	863.59	0.56135	1616.11	479.51	-0.55	3.57	2259.81	6.93	2257.09	6.92	-2.72	-0.12
123	327	204	81	5232	0.938642	864.3	0.561927	1615.62	490.07	0	3.53	2265.54	6.93	2262.21	6.92	-3.33	-0.15
123	328	205	82	5248	0.9375	865.01	0.5625	1615.14	500.72	-0.55	3.5	2270.08	6.92	2267.54	6.91	-2.53	-0.11
123	329	206	83	5264	0.936355	865.71	0.56307	1614.67	511.45	0	3.47	2275.63	6.92	2272.5	6.91	-3.14	-0.14
123	330	207	84	5280	0.935207	866.4	0.563636	1614.22	522.27	-0.55	3.43	2280	6.91	2277.66	6.9	-2.34	-0.1

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
123	331	208	85	5296	0.934055	867.08	0.564199	1613.77	533.17	0	3.4	2285.38	6.9	2282.44	6.9	-2.94	-0.13
123	332	209	86	5312	0.9329	867.75	0.564759	1613.34	544.15	-0.55	3.37	2289.59	6.9	2287.44	6.89	-2.15	-0.09
123	333	210	87	5328	0.931743	868.41	0.565315	1612.91	555.21	0	3.34	2294.8	6.89	2292.06	6.88	-2.74	-0.12
123	334	211	88	5344	0.930582	869.07	0.565868	1612.5	566.35	-0.55	3.31	2298.84	6.88	2296.89	6.88	-1.95	-0.08
123	335	212	89	5360	0.929419	869.71	0.566418	1612.1	577.57	0	3.28	2303.89	6.88	2301.35	6.87	-2.54	-0.11
123	336	213	90	5376	0.928253	870.35	0.566964	1611.71	588.87	-0.55	3.25	2307.77	6.87	2306.02	6.86	-1.75	-0.08
123	337	214	91	5392	0.927084	870.98	0.567507	1611.33	600.24	0	3.22	2312.66	6.86	2310.32	6.86	-2.34	-0.1
123	338	215	92	5408	0.925913	871.6	0.568047	1610.96	611.7	-0.54	3.19	2316.38	6.85	2314.84	6.85	-1.54	-0.07
123	339	216	93	5424	0.92474	872.21	0.568584	1610.61	623.23	0	3.16	2321.11	6.85	2318.98	6.84	-2.13	-0.09
123	340	217	94	5440	0.923564	872.81	0.569118	1610.26	634.84	-0.54	3.13	2324.68	6.84	2323.34	6.83	-1.34	-0.06
123	341	218	95	5456	0.922386	873.41	0.569648	1609.92	646.52	0	3.1	2329.25	6.83	2327.33	6.83	-1.92	-0.08
123	342	219	96	5472	0.921207	874	0.570175	1609.59	658.28	-0.54	3.08	2332.67	6.82	2331.54	6.82	-1.13	-0.05
123	343	220	97	5488	0.920025	874.58	0.5707	1609.27	670.11	0	3.05	2337.09	6.81	2335.37	6.81	-1.72	-0.07
123	344	221	98	5504	0.918841	875.15	0.571221	1608.97	682.02	-0.54	3.02	2340.35	6.8	2339.43	6.8	-0.92	-0.04
123	345	222	99	5520	0.917656	875.71	0.571739	1608.67	694	0	3	2344.62	6.8	2343.11	6.79	-1.51	-0.06
123	346	223	100	5536	0.916469	876.27	0.572254	1608.38	706.05	-0.54	2.97	2347.74	6.79	2347.02	6.78	-0.72	-0.03
123	347	224	101	5552	0.91528	876.82	0.572767	1608.1	718.17	0	2.94	2351.86	6.78	2350.56	6.77	-1.3	-0.06
123	348	225	102	5568	0.91409	877.36	0.573276	1607.83	730.36	-0.54	2.92	2354.84	6.77	2354.33	6.77	-0.51	-0.02
123	349	226	103	5584	0.912899	877.89	0.573782	1607.57	742.62	0	2.9	2358.81	6.76	2357.72	6.76	-1.1	-0.05
123	350	227	104	5600	0.911706	878.42	0.574286	1607.31	754.96	-0.53	2.87	2361.65	6.75	2361.34	6.75	-0.31	-0.01
123	351	228	105	5616	0.910512	878.94	0.574786	1607.07	767.36	0	2.85	2365.48	6.74	2364.59	6.74	-0.89	-0.04
123	352	229	106	5632	0.909317	879.45	0.575284	1606.84	779.83	-0.53	2.82	2368.17	6.73	2368.07	6.73	-0.11	0
123	353	230	107	5648	0.908121	879.96	0.575779	1606.61	792.37	0	2.8	2371.86	6.72	2371.17	6.72	-0.69	-0.03
123	354	231	108	5664	0.906923	880.46	0.576271	1606.39	804.97	-0.53	2.78	2374.42	6.71	2374.52	6.71	0.09	0
123	355	232	109	5680	0.905725	880.95	0.576761	1606.18	817.65	0	2.75	2377.98	6.7	2377.48	6.7	-0.49	-0.02
123	356	233	110	5696	0.904526	881.43	0.577247	1605.98	830.39	-0.53	2.73	2380.4	6.69	2380.69	6.69	0.29	0.01
123	357	234	111	5712	0.903326	881.91	0.577731	1605.79	843.19	0	2.71	2383.82	6.68	2383.52	6.68	-0.29	-0.01
123	358	235	112	5728	0.902125	882.38	0.578212	1605.61	856.06	-0.53	2.69	2386.11	6.67	2386.59	6.67	0.48	0.02
123	359	236	113	5744	0.900924	882.85	0.578691	1605.43	868.99	0	2.67	2389.39	6.66	2389.29	6.66	-0.1	0
123	360	237	114	5760	0.899722	883.31	0.579167	1605.26	881.99	-0.53	2.64	2391.55	6.64	2392.23	6.65	0.67	0.03
123	361	238	115	5776	0.89852	883.76	0.57964	1605.1	895.06	0	2.62	2394.7	6.63	2394.79	6.63	0.09	0
123	362	239	116	5792	0.897317	884.21	0.58011	1604.95	908.18	-0.53	2.6	2396.74	6.62	2397.6	6.62	0.86	0.04
123	363	240	117	5808	0.896114	884.65	0.580579	1604.81	921.37	0	2.58	2399.76	6.61	2400.03	6.61	0.27	0.01
123	364	241	118	5824	0.89491	885.08	0.581044	1604.67	934.62	-0.52	2.56	2401.67	6.6	2402.71	6.6	1.04	0.04
123	365	242	119	5840	0.893706	885.51	0.581507	1604.54	947.93	0	2.54	2404.56	6.59	2405.01	6.59	0.45	0.02
123	366	243	120	5856	0.892502	885.93	0.581967	1604.42	961.3	-0.52	2.52	2406.35	6.57	2407.57	6.58	1.22	0.05
123	367	244	121	5872	0.891298	886.34	0.582425	1604.31	974.73	0	2.5	2409.12	6.56	2409.74	6.57	0.62	0.03
123	368	245	122	5888	0.890093	886.75	0.58288	1604.2	988.23	-0.52	2.48	2410.78	6.55	2412.17	6.55	1.39	0.06
123	369	246	123	5904	0.888889	887.16	0.583333	1604.1	1001.78	0	2.47	2413.43	6.54	2414.22	6.54	0.79	0.03
123	370	247	124	5920	0.887684	887.55	0.583784	1604.01	1015.39	-0.52	2.45	2414.97	6.53	2416.52	6.53	1.55	0.06
123	371	248	125	5936	0.88648	887.95	0.584232	1603.93	1029.06	0	2.43	2417.5	6.52	2418.45	6.52	0.95	0.04
123	372	249	126	5952	0.885276	888.33	0.584677	1603.85	1042.79	-0.52	2.41	2418.93	6.5	2420.63	6.51	1.71	0.07
123	373	250	127	5968	0.884072	888.71	0.585121	1603.78	1056.57	0	2.39	2421.33	6.49	2422.44	6.49	1.11	0.05
123	374	251	128	5984	0.882868	889.09	0.585561	1603.71	1070.41	-0.52	2.38	2422.64	6.48	2424.5	6.48	1.86	0.08
123	375	252	129	6000	0.881664	889.46	0.586	1603.65	1084.31	0	2.36	2424.93	6.47	2426.19	6.47	1.26	0.05
123	376	253	130	6016	0.880461	889.82	0.586436	1603.6	1098.27	-0.52	2.34	2426.13	6.45	2428.14	6.46	2	0.08

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
123	377	254	131	6032	0.879258	890.18	0.58687	1603.56	1112.28	0	2.32	2428.3	6.44	2429.71	6.44	1.4	0.06
123	378	255	132	6048	0.878055	890.54	0.587302	1603.52	1126.35	-0.51	2.31	2429.39	6.43	2431.53	6.43	2.14	0.09
123	379	256	133	6064	0.876853	890.88	0.587731	1603.49	1140.47	0	2.29	2431.45	6.42	2432.99	6.42	1.54	0.06
123	380	257	134	6080	0.875651	891.23	0.588158	1603.46	1154.64	-0.51	2.27	2432.43	6.4	2434.7	6.41	2.27	0.09
123	381	258	135	6096	0.87445	891.57	0.588583	1603.45	1168.87	0	2.26	2434.37	6.39	2436.04	6.39	1.66	0.07
123	382	259	136	6112	0.873249	891.9	0.589005	1603.43	1183.16	-0.51	2.24	2435.24	6.37	2437.64	6.38	2.39	0.1
123	383	260	137	6128	0.872049	892.23	0.589426	1603.43	1197.49	0	2.23	2437.08	6.36	2438.86	6.37	1.78	0.07
123	384	261	138	6144	0.87085	892.55	0.589844	1603.43	1211.88	-0.51	2.21	2437.84	6.35	2440.35	6.36	2.51	0.1
123	385	262	139	6160	0.869651	892.87	0.59026	1603.43	1226.32	0	2.2	2439.57	6.34	2441.46	6.34	1.89	0.08
123	386	263	140	6176	0.868453	893.18	0.590674	1603.44	1240.82	-0.51	2.18	2440.23	6.32	2442.84	6.33	2.61	0.11
123	387	264	141	6192	0.867256	893.49	0.591085	1603.46	1255.36	0	2.16	2441.85	6.31	2443.85	6.31	2	0.08
123	388	265	142	6208	0.866059	893.79	0.591495	1603.49	1269.96	-0.51	2.15	2442.4	6.29	2445.12	6.3	2.71	0.11
123	389	266	143	6224	0.864863	894.09	0.591902	1603.51	1284.61	0	2.14	2443.92	6.28	2446.01	6.29	2.09	0.09
123	390	267	144	6240	0.863669	894.39	0.592308	1603.55	1299.31	-0.51	2.12	2444.37	6.27	2447.17	6.27	2.8	0.11
123	391	268	145	6256	0.862475	894.68	0.592711	1603.59	1314.05	0	2.11	2445.79	6.26	2447.96	6.26	2.18	0.09
123	392	269	146	6272	0.861282	894.96	0.593112	1603.64	1328.85	-0.51	2.09	2446.14	6.24	2449.02	6.25	2.88	0.12
123	393	270	147	6288	0.86009	895.24	0.593511	1603.69	1343.7	0	2.08	2447.45	6.23	2449.7	6.23	2.25	0.09
123	394	271	148	6304	0.858899	895.52	0.593909	1603.75	1358.59	-0.5	2.06	2447.7	6.21	2450.65	6.22	2.95	0.12
123	395	272	149	6320	0.857709	895.79	0.594304	1603.81	1373.54	0	2.05	2448.91	6.2	2451.23	6.21	2.32	0.09
123	396	273	150	6336	0.85652	896.06	0.594697	1603.88	1388.53	-0.5	2.04	2449.07	6.18	2452.08	6.19	3.01	0.12
123	397	274	151	6352	0.855332	896.32	0.595088	1603.95	1403.57	0	2.02	2450.18	6.17	2452.56	6.18	2.38	0.1
123	398	275	152	6368	0.854145	896.58	0.595477	1604.03	1418.66	-0.5	2.01	2450.24	6.16	2453.31	6.16	3.07	0.12
123	399	276	153	6384	0.852959	896.83	0.595865	1604.11	1433.79	0	2	2451.26	6.14	2453.68	6.15	2.43	0.1
123	400	277	154	6400	0.851775	897.08	0.59625	1604.2	1448.97	-0.5	1.98	2451.23	6.13	2454.33	6.14	3.11	0.13
123	401	278	155	6416	0.850592	897.33	0.596633	1604.3	1464.2	0	1.97	2452.14	6.12	2454.61	6.12	2.46	0.1
123	402	279	156	6432	0.84941	897.57	0.597015	1604.4	1479.47	-0.5	1.96	2452.02	6.1	2455.16	6.11	3.14	0.13
123	403	280	157	6448	0.848229	897.81	0.597395	1604.5	1494.79	0	1.95	2452.84	6.09	2455.34	6.09	2.49	0.1
123	404	281	158	6464	0.847049	898.04	0.597772	1604.61	1510.16	-0.5	1.93	2452.63	6.07	2455.79	6.08	3.16	0.13
123	405	282	159	6480	0.845871	898.27	0.598148	1604.72	1525.57	0	1.92	2453.36	6.06	2455.87	6.06	2.51	0.1
123	406	283	160	6496	0.844694	898.5	0.598522	1604.84	1541.02	-0.5	1.91	2453.05	6.04	2456.22	6.05	3.17	0.13
123	407	284	161	6512	0.843519	898.72	0.598894	1604.96	1556.52	0	1.9	2453.69	6.03	2456.21	6.03	2.52	0.1
123	408	285	162	6528	0.842344	898.94	0.599265	1605.09	1572.06	-0.5	1.89	2453.29	6.01	2456.47	6.02	3.17	0.13
123	409	286	163	6544	0.841171	899.16	0.599633	1605.22	1587.65	0	1.88	2453.84	6	2456.36	6.01	2.51	0.1
123	410	287	164	6560	0.84	899.37	0.6	1605.36	1603.28	-0.49	1.86	2453.36	5.98	2456.53	5.99	3.17	0.13
123	411	288	165	6576	0.83883	899.57	0.600365	1605.5	1618.95	0	1.85	2453.82	5.97	2456.32	5.98	2.5	0.1
123	412	289	166	6592	0.837661	899.78	0.600728	1605.65	1634.67	-0.49	1.84	2453.25	5.95	2456.4	5.96	3.15	0.13
123	413	290	167	6608	0.836494	899.98	0.60109	1605.8	1650.43	0	1.83	2453.62	5.94	2456.1	5.95	2.48	0.1
123	414	291	168	6624	0.835329	900.17	0.601449	1605.96	1666.23	-0.49	1.82	2452.97	5.93	2456.08	5.93	3.11	0.13
123	415	292	169	6640	0.834165	900.37	0.601807	1606.12	1682.07	0	1.81	2453.26	5.91	2455.7	5.92	2.44	0.1
123	416	293	170	6656	0.833002	900.55	0.602163	1606.28	1697.95	-0.49	1.8	2452.52	5.9	2455.59	5.9	3.07	0.13
123	417	294	171	6672	0.831841	900.74	0.602518	1606.45	1713.88	0	1.79	2452.72	5.88	2455.11	5.89	2.39	0.1
123	418	295	172	6688	0.830682	900.92	0.602871	1606.62	1729.84	-0.49	1.78	2451.9	5.87	2454.92	5.87	3.02	0.12
123	419	296	173	6704	0.829524	901.1	0.603222	1606.8	1745.85	0	1.77	2452.02	5.85	2454.35	5.86	2.34	0.1
123	420	297	174	6720	0.828367	901.28	0.603571	1606.98	1761.89	-0.49	1.76	2451.12	5.84	2454.07	5.84	2.95	0.12
123	421	298	175	6736	0.827213	901.45	0.603919	1607.16	1777.98	0	1.74	2451.15	5.82	2453.42	5.83	2.27	0.09
123	422	299	176	6752	0.82606	901.62	0.604265	1607.35	1794.11	-0.49	1.73	2450.17	5.81	2453.05	5.81	2.88	0.12

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
123	423	300	177	6768	0.824908	901.78	0.60461	1607.55	1810.27	0	1.72	2450.12	5.79	2452.31	5.8	2.19	0.09
123	424	301	178	6784	0.823758	901.94	0.604953	1607.74	1826.48	-0.49	1.71	2449.06	5.78	2451.85	5.78	2.79	0.11
123	425	302	179	6800	0.82261	902.1	0.605294	1607.95	1842.72	0	1.71	2448.93	5.76	2451.03	5.77	2.09	0.09
123	426	303	180	6816	0.821464	902.26	0.605634	1608.15	1859.01	-0.48	1.7	2447.8	5.75	2450.49	5.75	2.69	0.11
123	427	304	181	6832	0.820319	902.41	0.605972	1608.36	1875.33	0	1.69	2447.59	5.73	2449.58	5.74	1.99	0.08
123	428	305	182	6848	0.819176	902.56	0.606308	1608.57	1891.69	-0.48	1.68	2446.38	5.72	2448.96	5.72	2.58	0.11
123	429	306	183	6864	0.818035	902.7	0.606643	1608.79	1908.08	0	1.67	2446.09	5.7	2447.96	5.71	1.87	0.08
123	430	307	184	6880	0.816896	902.85	0.606977	1609.01	1924.52	-0.48	1.66	2444.8	5.69	2447.26	5.69	2.46	0.1
123	431	308	185	6896	0.815758	902.99	0.607309	1609.23	1940.99	0	1.65	2444.44	5.67	2446.18	5.68	1.75	0.07
123	432	309	186	6912	0.814622	903.12	0.607639	1609.46	1957.5	-0.48	1.64	2443.07	5.66	2445.4	5.66	2.32	0.1
123	433	310	187	6928	0.813488	903.26	0.607968	1609.69	1974.05	0	1.63	2442.63	5.64	2444.24	5.64	1.61	0.07
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
124	247	123	-1	3952	0.999984	763.71	0.498988	1739.96	0.1	0	9.83	1458.07	5.9	1467.32	5.94	9.25	0.63
124	248	124	0	3968	1	765.78	0.5	1737.61	0	0.64	10	1475.25	5.95	1483.8	5.98	8.55	0.58
124	249	125	1	3984	0.999984	767.82	0.501004	1735.29	0.1	0	9.83	1490.62	5.99	1498.22	6.02	7.6	0.51
124	250	126	2	4000	0.999936	769.84	0.502	1733.02	0.39	0.63	9.67	1507.06	6.03	1514.33	6.06	7.27	0.48
124	251	127	3	4016	0.999857	771.83	0.502988	1730.78	0.87	0	9.51	1522.03	6.06	1528.39	6.09	6.37	0.42
124	252	128	4	4032	0.999748	773.8	0.503968	1728.58	1.55	0.63	9.36	1538.06	6.1	1544.15	6.13	6.09	0.39
124	253	129	5	4048	0.999609	775.73	0.504941	1726.42	2.41	0	9.2	1552.64	6.14	1557.86	6.16	5.23	0.34
124	254	130	6	4064	0.999442	777.65	0.505906	1724.3	3.46	0.63	9.06	1568.28	6.17	1573.27	6.19	4.99	0.32
124	255	131	7	4080	0.999246	779.53	0.506863	1722.22	4.69	0	8.91	1582.47	6.21	1586.64	6.22	4.17	0.26
124	256	132	8	4096	0.999023	781.4	0.507812	1720.17	6.1	0.62	8.77	1597.73	6.24	1601.7	6.26	3.97	0.25
124	257	133	9	4112	0.998774	783.23	0.508755	1718.15	7.69	0	8.63	1611.55	6.27	1614.75	6.28	3.19	0.2
124	258	134	10	4128	0.998498	785.05	0.50969	1716.17	9.46	0.62	8.5	1626.44	6.3	1629.47	6.32	3.02	0.19
124	259	135	11	4144	0.998196	786.84	0.510618	1714.23	11.4	0	8.37	1639.9	6.33	1642.19	6.34	2.29	0.14
124	260	136	12	4160	0.99787	788.6	0.511538	1712.32	13.52	0.62	8.24	1654.42	6.36	1656.57	6.37	2.15	0.13
124	261	137	13	4176	0.997519	790.34	0.512452	1710.44	15.8	0	8.11	1667.52	6.39	1668.98	6.39	1.45	0.09
124	262	138	14	4192	0.997145	792.06	0.513359	1708.59	18.26	0.62	7.99	1681.69	6.42	1683.04	6.42	1.35	0.08
124	263	139	15	4208	0.996747	793.76	0.514259	1706.78	20.88	0	7.87	1694.45	6.44	1695.13	6.45	0.68	0.04
124	264	140	16	4224	0.996327	795.44	0.515152	1705	23.67	0.62	7.75	1708.27	6.47	1708.88	6.47	0.61	0.04
124	265	141	17	4240	0.995885	797.09	0.516038	1703.25	26.62	0	7.64	1720.68	6.49	1720.66	6.49	-0.02	0
124	266	142	18	4256	0.995421	798.72	0.516917	1701.52	29.73	0.61	7.53	1734.16	6.52	1734.1	6.52	-0.06	0
124	267	143	19	4272	0.994936	800.33	0.51779	1699.83	33	0	7.42	1746.25	6.54	1745.58	6.54	-0.67	-0.04
124	268	144	20	4288	0.994431	801.92	0.518657	1698.17	36.43	0.61	7.31	1759.4	6.56	1758.71	6.56	-0.68	-0.04
124	269	145	21	4304	0.993906	803.49	0.519517	1696.54	40.02	0	7.2	1771.16	6.58	1769.91	6.58	-1.25	-0.07
124	270	146	22	4320	0.993361	805.04	0.52037	1694.93	43.76	0.61	7.1	1783.98	6.61	1782.74	6.6	-1.24	-0.07
124	271	147	23	4336	0.992797	806.57	0.521218	1693.36	47.65	0	7	1795.43	6.63	1793.64	6.62	-1.78	-0.1
124	272	148	24	4352	0.992215	808.08	0.522059	1691.81	51.69	0.61	6.9	1807.93	6.65	1806.18	6.64	-1.75	-0.1
124	273	149	25	4368	0.991614	809.57	0.522894	1690.28	55.88	0	6.81	1819.07	6.66	1816.81	6.65	-2.26	-0.12
124	274	150	26	4384	0.990996	811.04	0.523723	1688.79	60.22	0.6	6.71	1831.27	6.68	1829.06	6.68	-2.21	-0.12
124	275	151	27	4400	0.99036	812.49	0.524545	1687.32	64.71	0	6.62	1842.1	6.7	1839.41	6.69	-2.7	-0.15
124	276	152	28	4416	0.989708	813.92	0.525362	1685.88	69.34	0.6	6.53	1853.99	6.72	1851.38	6.71	-2.62	-0.14
124	277	153	29	4432	0.989039	815.33	0.526173	1684.46	74.12	0	6.44	1864.53	6.73	1861.45	6.72	-3.08	-0.17
124	278	154	30	4448	0.988355	816.73	0.526978	1683.07	79.03	0.6	6.36	1876.13	6.75	1873.15	6.74	-2.98	-0.16

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
124	279	155	31	4464	0.987654	818.11	0.527778	1681.7	84.09	0	6.27	1886.38	6.76	1882.96	6.75	-3.42	-0.18
124	280	156	32	4480	0.986939	819.47	0.528571	1680.35	89.28	0.6	6.19	1897.69	6.78	1894.38	6.77	-3.31	-0.17
124	281	157	33	4496	0.986208	820.81	0.529359	1679.03	94.61	0	6.11	1907.66	6.79	1903.93	6.78	-3.72	-0.2
124	282	158	34	4512	0.985464	822.13	0.530142	1677.74	100.08	0.6	6.03	1918.68	6.8	1915.09	6.79	-3.59	-0.19
124	283	159	35	4528	0.984705	823.44	0.530919	1676.46	105.68	0	5.95	1928.37	6.81	1924.39	6.8	-3.99	-0.21
124	284	160	36	4544	0.983932	824.73	0.53169	1675.21	111.41	0.59	5.87	1939.11	6.83	1935.28	6.81	-3.83	-0.2
124	285	161	37	4560	0.983146	826.01	0.532456	1673.98	117.27	0	5.8	1948.54	6.84	1944.33	6.82	-4.21	-0.22
124	286	162	38	4576	0.982346	827.26	0.533217	1672.78	123.27	0.59	5.72	1959.01	6.85	1954.97	6.84	-4.04	-0.21
124	287	163	39	4592	0.981534	828.51	0.533972	1671.59	129.39	0	5.65	1968.17	6.86	1963.77	6.84	-4.4	-0.22
124	288	164	40	4608	0.98071	829.73	0.534722	1670.43	135.64	0.59	5.58	1978.37	6.87	1974.16	6.85	-4.21	-0.21
124	289	165	41	4624	0.979873	830.94	0.535467	1669.29	142.01	0	5.51	1987.27	6.88	1982.72	6.86	-4.55	-0.23
124	290	166	42	4640	0.979025	832.14	0.536207	1668.16	148.51	0.59	5.44	1997.22	6.89	1992.86	6.87	-4.35	-0.22
124	291	167	43	4656	0.978165	833.32	0.536942	1667.06	155.14	0	5.38	2005.86	6.89	2001.18	6.88	-4.68	-0.23
124	292	168	44	4672	0.977294	834.48	0.537671	1665.98	161.88	0.59	5.31	2015.55	6.9	2011.09	6.89	-4.47	-0.22
124	293	169	45	4688	0.976412	835.63	0.538396	1664.92	168.75	0	5.25	2023.95	6.91	2019.17	6.89	-4.78	-0.24
124	294	170	46	4704	0.975519	836.76	0.539116	1663.88	175.73	0.58	5.18	2033.39	6.92	2028.84	6.9	-4.55	-0.22
124	295	171	47	4720	0.974616	837.88	0.539831	1662.86	182.84	0	5.12	2041.54	6.92	2036.7	6.9	-4.84	-0.24
124	296	172	48	4736	0.973703	838.99	0.540541	1661.86	190.06	0.58	5.06	2050.74	6.93	2046.13	6.91	-4.61	-0.23
124	297	173	49	4752	0.972781	840.08	0.541246	1660.87	197.4	0	5	2058.65	6.93	2053.77	6.92	-4.89	-0.24
124	298	174	50	4768	0.971848	841.16	0.541946	1659.91	204.85	0.58	4.94	2067.61	6.94	2062.97	6.92	-4.64	-0.22
124	299	175	51	4784	0.970906	842.22	0.542642	1658.96	212.41	0	4.89	2075.29	6.94	2070.39	6.92	-4.9	-0.24
124	300	176	52	4800	0.969956	843.27	0.543333	1658.03	220.09	0.58	4.83	2084.01	6.95	2079.37	6.93	-4.64	-0.22
124	301	177	53	4816	0.968996	844.31	0.54402	1657.12	227.88	0	4.77	2091.46	6.95	2086.56	6.93	-4.9	-0.23
124	302	178	54	4832	0.968028	845.33	0.544702	1656.23	235.78	0.58	4.72	2099.96	6.95	2095.33	6.94	-4.63	-0.22
124	303	179	55	4848	0.967051	846.34	0.54538	1655.35	243.79	0	4.67	2107.18	6.95	2102.31	6.94	-4.87	-0.23
124	304	180	56	4864	0.966066	847.34	0.546053	1654.49	251.91	0.57	4.61	2115.45	6.96	2110.85	6.94	-4.6	-0.22
124	305	181	57	4880	0.965074	848.32	0.546721	1653.65	260.13	0	4.56	2122.46	6.96	2117.63	6.94	-4.83	-0.23
124	306	182	58	4896	0.964074	849.3	0.547386	1652.82	268.46	0.57	4.51	2130.51	6.96	2125.96	6.95	-4.54	-0.21
124	307	183	59	4912	0.963066	850.26	0.548046	1652.01	276.89	0	4.46	2137.3	6.96	2132.53	6.95	-4.76	-0.22
124	308	184	60	4928	0.962051	851.2	0.548701	1651.22	285.43	0.57	4.41	2145.13	6.96	2140.66	6.95	-4.47	-0.21
124	309	185	61	4944	0.961029	852.14	0.549353	1650.44	294.08	0	4.36	2151.71	6.96	2147.03	6.95	-4.68	-0.22
124	310	186	62	4960	0.96	853.06	0.55	1649.68	302.82	0.57	4.32	2159.33	6.97	2154.94	6.95	-4.38	-0.2
124	311	187	63	4976	0.958964	853.97	0.550643	1648.93	311.67	0	4.27	2165.7	6.96	2161.12	6.95	-4.59	-0.21
124	312	188	64	4992	0.957922	854.87	0.551282	1648.2	320.61	0.57	4.23	2173.11	6.97	2168.83	6.95	-4.28	-0.2
124	313	189	65	5008	0.956874	855.76	0.551917	1647.48	329.65	0	4.18	2179.28	6.96	2174.81	6.95	-4.48	-0.21
124	314	190	66	5024	0.95582	856.64	0.552548	1646.78	338.8	0.56	4.14	2186.49	6.96	2182.32	6.95	-4.16	-0.19
124	315	191	67	5040	0.954759	857.5	0.553175	1646.09	348.04	0	4.09	2192.46	6.96	2188.11	6.95	-4.35	-0.2
124	316	192	68	5056	0.953693	858.36	0.553797	1645.42	357.37	0.56	4.05	2199.47	6.96	2195.43	6.95	-4.03	-0.18
124	317	193	69	5072	0.952622	859.2	0.554416	1644.76	366.8	0	4.01	2205.25	6.96	2201.03	6.94	-4.21	-0.19
124	318	194	70	5088	0.951545	860.03	0.555031	1644.11	376.33	0.56	3.97	2212.05	6.96	2208.16	6.94	-3.89	-0.18
124	319	195	71	5104	0.950462	860.86	0.555643	1643.48	385.95	0	3.93	2217.64	6.95	2213.58	6.94	-4.07	-0.18
124	320	196	72	5120	0.949375	861.67	0.55625	1642.87	395.66	0.56	3.89	2224.25	6.95	2220.52	6.94	-3.74	-0.17
124	321	197	73	5136	0.948283	862.47	0.556854	1642.26	405.46	0	3.85	2229.65	6.95	2225.75	6.93	-3.91	-0.18
124	322	198	74	5152	0.947186	863.26	0.557453	1641.67	415.36	0.56	3.81	2236.08	6.94	2232.5	6.93	-3.58	-0.16
124	323	199	75	5168	0.946084	864.04	0.55805	1641.09	425.34	0	3.77	2241.3	6.94	2237.56	6.93	-3.74	-0.17
124	324	200	76	5184	0.944978	864.81	0.558642	1640.53	435.42	0.56	3.73	2247.53	6.94	2244.13	6.93	-3.4	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
124	325	201	77	5200	0.943867	865.57	0.559231	1639.98	445.58	0	3.7	2252.57	6.93	2249.01	6.92	-3.56	-0.16
124	326	202	78	5216	0.942753	866.32	0.559816	1639.44	455.83	0.55	3.66	2258.63	6.93	2255.4	6.92	-3.22	-0.14
124	327	203	79	5232	0.941634	867.06	0.560398	1638.91	466.17	0	3.63	2263.49	6.92	2260.11	6.91	-3.38	-0.15
124	328	204	80	5248	0.940512	867.79	0.560976	1638.4	476.59	0.55	3.59	2269.36	6.92	2266.32	6.91	-3.04	-0.13
124	329	205	81	5264	0.939385	868.51	0.56155	1637.89	487.1	0	3.56	2274.05	6.91	2270.86	6.9	-3.19	-0.14
124	330	206	82	5280	0.938255	869.22	0.562121	1637.4	497.69	0.55	3.52	2279.75	6.91	2276.9	6.9	-2.85	-0.12
124	331	207	83	5296	0.937122	869.93	0.562689	1636.93	508.37	0	3.49	2284.26	6.9	2281.27	6.89	-2.99	-0.13
124	332	208	84	5312	0.935985	870.62	0.563253	1636.46	519.13	0.55	3.46	2289.79	6.9	2287.15	6.89	-2.65	-0.12
124	333	209	85	5328	0.934845	871.31	0.563814	1636	529.97	0	3.42	2294.14	6.89	2291.35	6.88	-2.79	-0.12
124	334	210	86	5344	0.933701	871.98	0.564371	1635.56	540.9	0.55	3.39	2299.5	6.88	2297.05	6.88	-2.44	-0.11
124	335	211	87	5360	0.932555	872.65	0.564925	1635.13	551.9	0	3.36	2303.68	6.88	2301.1	6.87	-2.58	-0.11
124	336	212	88	5376	0.931406	873.31	0.565476	1634.71	562.99	0.55	3.33	2308.87	6.87	2306.64	6.86	-2.24	-0.1
124	337	213	89	5392	0.930254	873.96	0.566024	1634.3	574.15	0	3.3	2312.9	6.86	2310.52	6.86	-2.37	-0.1
124	338	214	90	5408	0.929099	874.6	0.566568	1633.9	585.39	0.54	3.27	2317.93	6.86	2315.9	6.85	-2.03	-0.09
124	339	215	91	5424	0.927942	875.23	0.567109	1633.51	596.71	0	3.24	2321.79	6.85	2319.62	6.84	-2.16	-0.09
124	340	216	92	5440	0.926782	875.85	0.567647	1633.13	608.11	0.54	3.21	2326.66	6.84	2324.84	6.84	-1.82	-0.08
124	341	217	93	5456	0.92562	876.47	0.568182	1632.76	619.59	0	3.18	2330.36	6.83	2328.41	6.83	-1.95	-0.08
124	342	218	94	5472	0.924455	877.08	0.568713	1632.4	631.14	0.54	3.15	2335.07	6.83	2333.47	6.82	-1.6	-0.07
124	343	219	95	5488	0.923289	877.68	0.569242	1632.06	642.76	0	3.12	2338.63	6.82	2336.89	6.81	-1.73	-0.07
124	344	220	96	5504	0.92212	878.27	0.569767	1631.72	654.46	0.54	3.1	2343.18	6.81	2341.8	6.81	-1.39	-0.06
124	345	221	97	5520	0.920949	878.85	0.57029	1631.39	666.24	0	3.07	2346.59	6.8	2345.07	6.8	-1.52	-0.06
124	346	222	98	5536	0.919777	879.43	0.570809	1631.07	678.09	0.54	3.04	2350.99	6.79	2349.82	6.79	-1.17	-0.05
124	347	223	99	5552	0.918602	880	0.571326	1630.76	690.01	0	3.02	2354.25	6.78	2352.94	6.78	-1.3	-0.06
124	348	224	100	5568	0.917426	880.56	0.571839	1630.47	702	0.54	2.99	2358.5	6.78	2357.54	6.77	-0.96	-0.04
124	349	225	101	5584	0.916249	881.11	0.57235	1630.18	714.06	0	2.97	2361.61	6.77	2360.52	6.76	-1.09	-0.05
124	350	226	102	5600	0.915069	881.66	0.572857	1629.9	726.2	0.53	2.94	2365.72	6.76	2364.98	6.76	-0.74	-0.03
124	351	227	103	5616	0.913889	882.2	0.573362	1629.63	738.4	0	2.92	2368.69	6.75	2367.81	6.75	-0.87	-0.04
124	352	228	104	5632	0.912707	882.73	0.573864	1629.37	750.68	0.53	2.89	2372.65	6.74	2372.12	6.74	-0.53	-0.02
124	353	229	105	5648	0.911523	883.25	0.574363	1629.11	763.02	0	2.87	2375.48	6.73	2374.82	6.73	-0.66	-0.03
124	354	230	106	5664	0.910339	883.77	0.574859	1628.87	775.44	0.53	2.84	2379.3	6.72	2378.98	6.72	-0.32	-0.01
124	355	231	107	5680	0.909153	884.28	0.575352	1628.64	787.92	0	2.82	2381.99	6.71	2381.54	6.71	-0.45	-0.02
124	356	232	108	5696	0.907966	884.79	0.575843	1628.41	800.46	0.53	2.8	2385.67	6.7	2385.56	6.7	-0.11	0
124	357	233	109	5712	0.906778	885.28	0.576331	1628.19	813.08	0	2.77	2388.22	6.69	2387.98	6.69	-0.24	-0.01
124	358	234	110	5728	0.90559	885.77	0.576816	1627.98	825.76	0.53	2.75	2391.76	6.68	2391.86	6.68	0.1	0
124	359	235	111	5744	0.9044	886.25	0.577298	1627.78	838.51	0	2.73	2394.19	6.67	2394.15	6.67	-0.03	0
124	360	236	112	5760	0.90321	886.73	0.577778	1627.59	851.32	0.53	2.71	2397.59	6.66	2397.9	6.66	0.3	0.01
124	361	237	113	5776	0.902019	887.2	0.578255	1627.41	864.19	0	2.69	2399.88	6.65	2400.06	6.65	0.17	0.01
124	362	238	114	5792	0.900827	887.66	0.578729	1627.23	877.13	0.53	2.66	2403.16	6.64	2403.66	6.64	0.5	0.02
124	363	239	115	5808	0.899635	888.12	0.579201	1627.06	890.14	0	2.64	2405.32	6.63	2405.69	6.63	0.37	0.02
124	364	240	116	5824	0.898442	888.57	0.57967	1626.9	903.2	0.52	2.62	2408.47	6.62	2409.17	6.62	0.7	0.03
124	365	241	117	5840	0.897249	889.02	0.580137	1626.75	916.33	0	2.6	2410.5	6.6	2411.07	6.61	0.56	0.02
124	366	242	118	5856	0.896055	889.46	0.580601	1626.61	929.52	0.52	2.58	2413.52	6.59	2414.41	6.6	0.89	0.04
124	367	243	119	5872	0.894861	889.89	0.581063	1626.47	942.78	0	2.56	2415.43	6.58	2416.18	6.58	0.75	0.03
124	368	244	120	5888	0.893667	890.31	0.581522	1626.34	956.09	0.52	2.54	2418.32	6.57	2419.4	6.57	1.08	0.04
124	369	245	121	5904	0.892473	890.73	0.581978	1626.22	969.46	0	2.52	2420.11	6.56	2421.05	6.56	0.94	0.04
124	370	246	122	5920	0.891278	891.15	0.582432	1626.1	982.9	0.52	2.5	2422.87	6.55	2424.13	6.55	1.26	0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
124	371	247	123	5936	0.890084	891.56	0.582884	1626	996.39	0	2.48	2424.54	6.54	2425.66	6.54	1.12	0.05
124	372	248	124	5952	0.888889	891.96	0.583333	1625.9	1009.94	0.52	2.47	2427.18	6.52	2428.62	6.53	1.43	0.06
124	373	249	125	5968	0.887694	892.35	0.58378	1625.8	1023.56	0	2.45	2428.73	6.51	2430.02	6.51	1.29	0.05
124	374	250	126	5984	0.886499	892.75	0.584225	1625.72	1037.22	0.52	2.43	2431.26	6.5	2432.86	6.5	1.6	0.07
124	375	251	127	6000	0.885305	893.13	0.584667	1625.64	1050.95	0	2.41	2432.69	6.49	2434.15	6.49	1.46	0.06
124	376	252	128	6016	0.88411	893.51	0.585106	1625.57	1064.74	0.52	2.39	2435.09	6.48	2436.86	6.48	1.77	0.07
124	377	253	129	6032	0.882916	893.89	0.585544	1625.5	1078.58	0	2.38	2436.41	6.46	2438.03	6.47	1.62	0.07
124	378	254	130	6048	0.881722	894.26	0.585979	1625.44	1092.47	0.51	2.36	2438.7	6.45	2440.62	6.46	1.92	0.08
124	379	255	131	6064	0.880529	894.62	0.586412	1625.39	1106.43	0	2.34	2439.9	6.44	2441.68	6.44	1.77	0.07
124	380	256	132	6080	0.879335	894.98	0.586842	1625.35	1120.43	0.51	2.32	2442.08	6.43	2444.15	6.43	2.07	0.08
124	381	257	133	6096	0.878142	895.33	0.58727	1625.31	1134.5	0	2.31	2443.17	6.41	2445.09	6.42	1.92	0.08
124	382	258	134	6112	0.87695	895.68	0.587696	1625.28	1148.61	0.51	2.29	2445.23	6.4	2447.45	6.41	2.22	0.09
124	383	259	135	6128	0.875758	896.02	0.58812	1625.25	1162.79	0	2.28	2446.22	6.39	2448.28	6.39	2.06	0.08
124	384	260	136	6144	0.874566	896.36	0.588542	1625.23	1177.01	0.51	2.26	2448.17	6.38	2450.52	6.38	2.35	0.1
124	385	261	137	6160	0.873375	896.69	0.588961	1625.22	1191.29	0	2.24	2449.04	6.36	2451.24	6.37	2.19	0.09
124	386	262	138	6176	0.872184	897.02	0.589378	1625.21	1205.62	0.51	2.23	2450.89	6.35	2453.36	6.36	2.48	0.1
124	387	263	139	6192	0.870995	897.34	0.589793	1625.21	1220	0	2.21	2451.66	6.34	2453.97	6.34	2.31	0.09
124	388	264	140	6208	0.869806	897.66	0.590206	1625.22	1234.44	0.51	2.2	2453.39	6.32	2455.99	6.33	2.6	0.11
124	389	265	141	6224	0.868617	897.97	0.590617	1625.23	1248.93	0	2.18	2454.06	6.31	2456.49	6.31	2.43	0.1
124	390	266	142	6240	0.867429	898.28	0.591026	1625.24	1263.46	0.51	2.17	2455.68	6.3	2458.39	6.3	2.71	0.11
124	391	267	143	6256	0.866242	898.58	0.591432	1625.27	1278.05	0	2.15	2456.25	6.28	2458.78	6.29	2.54	0.1
124	392	268	144	6272	0.865056	898.88	0.591837	1625.3	1292.69	0.51	2.14	2457.77	6.27	2460.58	6.28	2.81	0.11
124	393	269	145	6288	0.863871	899.18	0.592239	1625.33	1307.38	0	2.12	2458.23	6.26	2460.87	6.26	2.64	0.11
124	394	270	146	6304	0.862686	899.47	0.59264	1625.37	1322.12	0.5	2.11	2459.65	6.24	2462.56	6.25	2.9	0.12
124	395	271	147	6320	0.861503	899.75	0.593038	1625.42	1336.91	0	2.09	2460.01	6.23	2462.74	6.23	2.73	0.11
124	396	272	148	6336	0.86032	900.03	0.593434	1625.47	1351.75	0.5	2.08	2461.33	6.22	2464.32	6.22	2.99	0.12
124	397	273	149	6352	0.859139	900.31	0.593829	1625.52	1366.64	0	2.07	2461.6	6.2	2464.4	6.21	2.81	0.11
124	398	274	150	6368	0.857958	900.58	0.594221	1625.59	1381.57	0.5	2.05	2462.82	6.19	2465.88	6.2	3.06	0.12
124	399	275	151	6384	0.856779	900.85	0.594612	1625.65	1396.55	0	2.04	2462.99	6.17	2465.86	6.18	2.88	0.12
124	400	276	152	6400	0.8556	901.11	0.595	1625.73	1411.58	0.5	2.03	2464.11	6.16	2467.24	6.17	3.13	0.13
124	401	277	153	6416	0.854423	901.37	0.595387	1625.8	1426.66	0	2.01	2464.18	6.15	2467.12	6.15	2.94	0.12
124	402	278	154	6432	0.853246	901.63	0.595771	1625.89	1441.78	0.5	2	2465.2	6.13	2468.39	6.14	3.19	0.13
124	403	279	155	6448	0.852071	901.88	0.596154	1625.97	1456.95	0	1.99	2465.18	6.12	2468.17	6.12	2.99	0.12
124	404	280	156	6464	0.850897	902.12	0.596535	1626.07	1472.17	0.5	1.98	2466.11	6.1	2469.35	6.11	3.23	0.13
124	405	281	157	6480	0.849724	902.37	0.596914	1626.17	1487.43	0	1.96	2466	6.09	2469.03	6.1	3.03	0.12
124	406	282	158	6496	0.848553	902.61	0.597291	1626.27	1502.74	0.5	1.95	2466.83	6.08	2470.1	6.08	3.27	0.13
124	407	283	159	6512	0.847382	902.84	0.597666	1626.38	1518.09	0	1.94	2466.63	6.06	2469.7	6.07	3.07	0.12
124	408	284	160	6528	0.846213	903.07	0.598039	1626.49	1533.49	0.5	1.93	2467.37	6.05	2470.67	6.06	3.3	0.13
124	409	285	161	6544	0.845045	903.3	0.598411	1626.61	1548.93	0	1.91	2467.08	6.03	2470.17	6.04	3.09	0.12
124	410	286	162	6560	0.843879	903.52	0.59878	1626.73	1564.41	0.49	1.9	2467.73	6.02	2471.04	6.03	3.31	0.13
124	411	287	163	6576	0.842713	903.74	0.599148	1626.86	1579.94	0	1.89	2467.35	6	2470.45	6.01	3.1	0.13
124	412	288	164	6592	0.84155	903.95	0.599515	1626.99	1595.52	0.49	1.88	2467.91	5.99	2471.23	6	3.32	0.13
124	413	289	165	6608	0.840387	904.17	0.599879	1627.13	1611.13	0	1.87	2467.44	5.97	2470.54	5.98	3.1	0.13
124	414	290	166	6624	0.839226	904.37	0.600242	1627.27	1626.79	0.49	1.86	2467.92	5.96	2471.23	5.97	3.31	0.13
124	415	291	167	6640	0.838066	904.58	0.600602	1627.41	1642.49	0	1.84	2467.36	5.95	2470.45	5.95	3.09	0.13
124	416	292	168	6656	0.836908	904.78	0.600962	1627.56	1658.24	0.49	1.83	2467.75	5.93	2471.05	5.94	3.3	0.13

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
124	417	293	169	6672	0.835752	904.97	0.601319	1627.72	1674.02	0	1.82	2467.11	5.92	2470.18	5.92	3.07	0.12
124	418	294	170	6688	0.834596	905.17	0.601675	1627.88	1689.85	0.49	1.81	2467.41	5.9	2470.68	5.91	3.27	0.13
124	419	295	171	6704	0.833443	905.36	0.602029	1628.04	1705.72	0	1.8	2466.69	5.89	2469.72	5.89	3.04	0.12
124	420	296	172	6720	0.83229	905.54	0.602381	1628.21	1721.62	0.49	1.79	2466.9	5.87	2470.14	5.88	3.23	0.13
124	421	297	173	6736	0.83114	905.73	0.602732	1628.38	1737.57	0	1.78	2466.1	5.86	2469.09	5.86	3	0.12
124	422	298	174	6752	0.82999	905.91	0.603081	1628.56	1753.56	0.49	1.77	2466.23	5.84	2469.41	5.85	3.19	0.13
124	423	299	175	6768	0.828843	906.08	0.603428	1628.74	1769.6	0	1.76	2465.34	5.83	2468.29	5.84	2.94	0.12
124	424	300	176	6784	0.827697	906.25	0.603774	1628.92	1785.67	0.49	1.75	2465.39	5.81	2468.52	5.82	3.13	0.13
124	425	301	177	6800	0.826552	906.42	0.604118	1629.11	1801.78	0	1.74	2464.43	5.8	2467.31	5.81	2.88	0.12
124	426	302	178	6816	0.825409	906.59	0.60446	1629.3	1817.92	0.48	1.73	2464.4	5.78	2467.45	5.79	3.05	0.12
124	427	303	179	6832	0.824268	906.75	0.604801	1629.5	1834.11	0	1.72	2463.35	5.77	2466.15	5.78	2.8	0.11
124	428	304	180	6848	0.823129	906.91	0.60514	1629.7	1850.34	0.48	1.71	2463.24	5.76	2466.21	5.76	2.97	0.12
124	429	305	181	6864	0.821991	907.07	0.605478	1629.9	1866.6	0	1.7	2462.12	5.74	2464.83	5.75	2.71	0.11
124	430	306	182	6880	0.820855	907.22	0.605814	1630.11	1882.91	0.48	1.69	2461.93	5.73	2464.81	5.73	2.88	0.12
124	431	307	183	6896	0.81972	907.37	0.606148	1630.32	1899.25	0	1.68	2460.73	5.71	2463.35	5.72	2.61	0.11
124	432	308	184	6912	0.818587	907.52	0.606481	1630.54	1915.63	0.48	1.67	2460.46	5.7	2463.23	5.7	2.77	0.11
124	433	309	185	6928	0.817456	907.66	0.606813	1630.76	1932.05	0	1.66	2459.19	5.68	2461.69	5.69	2.5	0.1
124	434	310	186	6944	0.816327	907.8	0.607143	1630.98	1948.5	0.48	1.65	2458.85	5.67	2461.5	5.67	2.65	0.11
124	435	311	187	6960	0.815199	907.94	0.607471	1631.21	1964.99	0	1.64	2457.5	5.65	2459.88	5.65	2.38	0.1
124	436	312	188	6976	0.814073	908.08	0.607798	1631.44	1981.52	0.48	1.63	2457.08	5.64	2459.6	5.64	2.52	0.1
124	437	313	189	6992	0.812949	908.21	0.608124	1631.68	1998.08	0	1.63	2455.66	5.62	2457.9	5.62	2.24	0.09
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
125	249	124	-1	3984	0.999984	767.82	0.498996	1763.39	0.1	0	9.83	1462.52	5.87	1471.76	5.91	9.24	0.63
125	250	125	0	4000	1	769.89	0.5	1761.02	0	-0.63	10	1478.45	5.91	1487.41	5.95	8.96	0.6
125	251	126	1	4016	0.999984	771.93	0.500996	1758.7	0.1	0	9.83	1495.11	5.96	1502.69	5.99	7.58	0.5
125	252	127	2	4032	0.999937	773.94	0.501984	1756.41	0.39	-0.63	9.67	1510.31	5.99	1517.98	6.02	7.68	0.51
125	253	128	3	4048	0.999859	775.93	0.502964	1754.16	0.87	0	9.51	1526.56	6.03	1532.91	6.06	6.35	0.41
125	254	129	4	4064	0.999752	777.89	0.503937	1751.95	1.54	-0.63	9.36	1541.36	6.07	1547.85	6.09	6.49	0.42
125	255	130	5	4080	0.999616	779.82	0.504902	1749.78	2.39	0	9.21	1557.22	6.11	1562.42	6.13	5.2	0.33
125	256	131	6	4096	0.999451	781.73	0.505859	1747.64	3.43	-0.62	9.06	1571.63	6.14	1577.02	6.16	5.38	0.34
125	257	132	7	4112	0.999258	783.61	0.506809	1745.54	4.65	0	8.92	1587.11	6.18	1591.25	6.19	4.14	0.26
125	258	133	8	4128	0.999039	785.47	0.507752	1743.48	6.05	-0.62	8.78	1601.15	6.21	1605.51	6.22	4.36	0.27
125	259	134	9	4144	0.998793	787.31	0.508687	1741.45	7.63	0	8.64	1616.25	6.24	1619.4	6.25	3.15	0.19
125	260	135	10	4160	0.998521	789.12	0.509615	1739.46	9.39	-0.62	8.51	1629.92	6.27	1633.33	6.28	3.41	0.21
125	261	136	11	4176	0.998224	790.9	0.510536	1737.5	11.31	0	8.38	1644.66	6.3	1646.9	6.31	2.24	0.14
125	262	137	12	4192	0.997902	792.67	0.51145	1735.58	13.41	-0.62	8.25	1657.97	6.33	1660.51	6.34	2.53	0.15
125	263	138	13	4208	0.997557	794.41	0.512357	1733.69	15.68	0	8.13	1672.35	6.36	1673.75	6.36	1.4	0.08
125	264	139	14	4224	0.997188	796.13	0.513258	1731.83	18.12	-0.62	8	1685.31	6.38	1687.04	6.39	1.72	0.1
125	265	140	15	4240	0.996796	797.82	0.514151	1730	20.72	0	7.88	1699.34	6.41	1699.96	6.41	0.62	0.04
125	266	141	16	4256	0.996382	799.49	0.515038	1728.2	23.49	-0.61	7.77	1711.96	6.44	1712.95	6.44	0.98	0.06
125	267	142	17	4272	0.995946	801.15	0.515918	1726.44	26.42	0	7.65	1725.65	6.46	1725.56	6.46	-0.09	-0.01
125	268	143	18	4288	0.995489	802.78	0.516791	1724.71	29.51	-0.61	7.54	1737.94	6.48	1738.24	6.49	0.3	0.02
125	269	144	19	4304	0.995011	804.39	0.517658	1723	32.76	0	7.43	1751.29	6.51	1750.55	6.51	-0.74	-0.04
125	270	145	20	4320	0.994513	805.97	0.518519	1721.32	36.16	-0.61	7.33	1763.26	6.53	1762.94	6.53	-0.32	-0.02

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
125	271	146	21	4336	0.993995	807.54	0.519373	1719.68	39.72	0	7.22	1776.28	6.55	1774.95	6.55	-1.33	-0.07
125	272	147	22	4352	0.993458	809.09	0.520221	1718.06	43.44	-0.61	7.12	1787.93	6.57	1787.04	6.57	-0.89	-0.05
125	273	148	23	4368	0.992902	810.62	0.521062	1716.47	47.3	0	7.02	1800.63	6.6	1798.76	6.59	-1.87	-0.1
125	274	149	24	4384	0.992328	812.13	0.521898	1714.91	51.32	-0.6	6.92	1811.97	6.61	1810.57	6.61	-1.4	-0.08
125	275	150	25	4400	0.991736	813.62	0.522727	1713.37	55.48	0	6.83	1824.36	6.63	1822	6.63	-2.36	-0.13
125	276	151	26	4416	0.991126	815.09	0.523551	1711.86	59.79	-0.6	6.73	1835.39	6.65	1833.53	6.64	-1.86	-0.1
125	277	152	27	4432	0.990499	816.54	0.524368	1710.38	64.25	0	6.64	1847.48	6.67	1844.69	6.66	-2.79	-0.15
125	278	153	28	4448	0.989856	817.97	0.52518	1708.92	68.84	-0.6	6.55	1858.21	6.68	1855.94	6.68	-2.28	-0.12
125	279	154	29	4464	0.989196	819.38	0.525986	1707.49	73.59	0	6.46	1870	6.7	1866.82	6.69	-3.18	-0.17
125	280	155	30	4480	0.98852	820.78	0.526786	1706.08	78.47	-0.6	6.38	1880.45	6.72	1877.8	6.71	-2.65	-0.14
125	281	156	31	4496	0.987829	822.16	0.52758	1704.7	83.49	0	6.29	1891.94	6.73	1888.41	6.72	-3.53	-0.19
125	282	157	32	4512	0.987123	823.52	0.528369	1703.35	88.65	-0.6	6.21	1902.1	6.75	1899.13	6.73	-2.97	-0.16
125	283	158	33	4528	0.986403	824.86	0.529152	1702.01	93.94	0	6.13	1913.31	6.76	1909.47	6.75	-3.84	-0.2
125	284	159	34	4544	0.985668	826.19	0.52993	1700.7	99.37	-0.59	6.05	1923.19	6.77	1919.93	6.76	-3.26	-0.17
125	285	160	35	4560	0.984918	827.49	0.530702	1699.41	104.94	0	5.97	1934.12	6.79	1930.02	6.77	-4.1	-0.21
125	286	161	36	4576	0.984156	828.79	0.531469	1698.15	110.63	-0.59	5.89	1943.73	6.8	1940.22	6.78	-3.51	-0.18
125	287	162	37	4592	0.98338	830.06	0.53223	1696.91	116.46	0	5.82	1954.39	6.81	1950.06	6.79	-4.33	-0.22
125	288	163	38	4608	0.982591	831.32	0.532986	1695.69	122.41	-0.59	5.75	1963.73	6.82	1960.01	6.81	-3.72	-0.19
125	289	164	39	4624	0.981789	832.57	0.533737	1694.49	128.5	0	5.67	1974.12	6.83	1969.59	6.82	-4.53	-0.23
125	290	165	40	4640	0.980975	833.79	0.534483	1693.31	134.71	-0.59	5.6	1983.2	6.84	1979.3	6.83	-3.9	-0.2
125	291	166	41	4656	0.980149	835.01	0.535223	1692.16	141.04	0	5.53	1993.33	6.85	1988.64	6.83	-4.69	-0.24
125	292	167	42	4672	0.979311	836.2	0.535959	1691.03	147.5	-0.59	5.47	2002.15	6.86	1998.11	6.84	-4.04	-0.2
125	293	168	43	4688	0.978462	837.38	0.536689	1689.91	154.08	0	5.4	2012.02	6.87	2007.21	6.85	-4.82	-0.24
125	294	169	44	4704	0.977602	838.55	0.537415	1688.82	160.78	-0.58	5.33	2020.6	6.87	2016.44	6.86	-4.16	-0.21
125	295	170	45	4720	0.976731	839.7	0.538136	1687.75	167.61	0	5.27	2030.22	6.88	2025.3	6.87	-4.92	-0.24
125	296	171	46	4736	0.975849	840.84	0.538851	1686.69	174.55	-0.58	5.21	2038.55	6.89	2034.3	6.87	-4.25	-0.21
125	297	172	47	4752	0.974957	841.96	0.539562	1685.66	181.61	0	5.14	2047.92	6.9	2042.93	6.88	-4.99	-0.24
125	298	173	48	4768	0.974055	843.07	0.540268	1684.64	188.79	-0.58	5.08	2056.01	6.9	2051.7	6.88	-4.3	-0.21
125	299	174	49	4784	0.973143	844.16	0.54097	1683.65	196.08	0	5.02	2065.14	6.91	2060.1	6.89	-5.03	-0.24
125	300	175	50	4800	0.972222	845.24	0.541667	1682.67	203.49	-0.58	4.97	2072.99	6.91	2068.65	6.9	-4.34	-0.21
125	301	176	51	4816	0.971292	846.31	0.542359	1681.71	211.01	0	4.91	2081.89	6.92	2076.83	6.9	-5.06	-0.24
125	302	177	52	4832	0.970352	847.36	0.543046	1680.77	218.64	-0.58	4.85	2089.51	6.92	2085.16	6.9	-4.35	-0.21
125	303	178	53	4848	0.969404	848.4	0.543729	1679.84	226.38	0	4.8	2098.17	6.92	2093.12	6.91	-5.05	-0.24
125	304	179	54	4864	0.968447	849.43	0.544408	1678.94	234.23	-0.57	4.74	2105.57	6.93	2101.23	6.91	-4.34	-0.21
125	305	180	55	4880	0.967482	850.44	0.545082	1678.05	242.2	0	4.69	2114	6.93	2108.97	6.91	-5.03	-0.24
125	306	181	56	4896	0.966509	851.44	0.545752	1677.18	250.26	-0.57	4.64	2121.18	6.93	2116.88	6.92	-4.31	-0.2
125	307	182	57	4912	0.965527	852.43	0.546417	1676.32	258.44	0	4.58	2129.39	6.94	2124.41	6.92	-4.99	-0.23
125	308	183	58	4928	0.964539	853.41	0.547078	1675.48	266.72	-0.57	4.53	2136.36	6.94	2132.1	6.92	-4.25	-0.2
125	309	184	59	4944	0.963542	854.37	0.547735	1674.66	275.11	0	4.48	2144.35	6.94	2139.42	6.92	-4.93	-0.23
125	310	185	60	4960	0.962539	855.32	0.548387	1673.85	283.6	-0.57	4.44	2151.1	6.94	2146.91	6.93	-4.18	-0.19
125	311	186	61	4976	0.961529	856.26	0.549035	1673.06	292.19	0	4.39	2158.88	6.94	2154.03	6.93	-4.85	-0.23
125	312	187	62	4992	0.960511	857.18	0.549679	1672.29	300.89	-0.57	4.34	2165.42	6.94	2161.32	6.93	-4.1	-0.19
125	313	188	63	5008	0.959487	858.1	0.550319	1671.53	309.68	0	4.29	2172.98	6.94	2168.23	6.93	-4.75	-0.22
125	314	189	64	5024	0.958457	859	0.550955	1670.79	318.57	-0.56	4.25	2179.32	6.94	2175.32	6.93	-4	-0.18
125	315	190	65	5040	0.95742	859.89	0.551587	1670.06	327.57	0	4.2	2186.68	6.94	2182.04	6.93	-4.64	-0.21
125	316	191	66	5056	0.956377	860.77	0.552215	1669.35	336.66	-0.56	4.16	2192.82	6.94	2188.94	6.93	-3.88	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
125	317	192	67	5072	0.955328	861.64	0.552839	1668.65	345.85	0	4.12	2199.98	6.94	2195.46	6.93	-4.52	-0.21
125	318	193	68	5088	0.954274	862.5	0.553459	1667.96	355.13	-0.56	4.07	2205.92	6.94	2202.17	6.93	-3.75	-0.17
125	319	194	69	5104	0.953214	863.35	0.554075	1667.29	364.51	0	4.03	2212.88	6.94	2208.5	6.92	-4.38	-0.2
125	320	195	70	5120	0.952148	864.18	0.554688	1666.64	373.98	-0.56	3.99	2218.63	6.93	2215.02	6.92	-3.61	-0.16
125	321	196	71	5136	0.951078	865.01	0.555296	1665.99	383.55	0	3.95	2225.4	6.93	2221.16	6.92	-4.23	-0.19
125	322	197	72	5152	0.950002	865.83	0.555901	1665.36	393.21	-0.56	3.91	2230.95	6.93	2227.5	6.92	-3.46	-0.16
125	323	198	73	5168	0.948921	866.63	0.556502	1664.75	402.96	0	3.87	2237.53	6.93	2233.46	6.91	-4.07	-0.18
125	324	199	74	5184	0.947836	867.42	0.557099	1664.15	412.8	-0.56	3.83	2242.9	6.92	2239.61	6.91	-3.29	-0.15
125	325	200	75	5200	0.946746	868.21	0.557692	1663.56	422.73	0	3.79	2249.29	6.92	2245.39	6.91	-3.9	-0.17
125	326	201	76	5216	0.945651	868.98	0.558282	1662.98	432.75	-0.55	3.76	2254.48	6.92	2251.36	6.91	-3.12	-0.14
125	327	202	77	5232	0.944552	869.75	0.558869	1662.42	442.86	0	3.72	2260.69	6.91	2256.96	6.9	-3.73	-0.17
125	328	203	78	5248	0.943449	870.5	0.559451	1661.87	453.06	-0.55	3.68	2265.7	6.91	2262.76	6.9	-2.94	-0.13
125	329	204	79	5264	0.942342	871.25	0.56003	1661.33	463.34	0	3.65	2271.72	6.9	2268.18	6.89	-3.54	-0.16
125	330	205	80	5280	0.94123	871.98	0.560606	1660.81	473.71	-0.55	3.61	2276.56	6.9	2273.81	6.89	-2.75	-0.12
125	331	206	81	5296	0.940116	872.71	0.561178	1660.3	484.17	0	3.58	2282.41	6.9	2279.06	6.89	-3.35	-0.15
125	332	207	82	5312	0.938997	873.42	0.561747	1659.8	494.7	-0.55	3.54	2287.07	6.89	2284.51	6.88	-2.56	-0.11
125	333	208	83	5328	0.937875	874.13	0.562312	1659.31	505.33	0	3.51	2292.75	6.89	2289.59	6.88	-3.15	-0.14
125	334	209	84	5344	0.936749	874.83	0.562874	1658.83	516.03	-0.55	3.48	2297.24	6.88	2294.88	6.87	-2.36	-0.1
125	335	210	85	5360	0.93562	875.52	0.563433	1658.37	526.82	0	3.44	2302.74	6.87	2299.79	6.87	-2.95	-0.13
125	336	211	86	5376	0.934488	876.2	0.563988	1657.91	537.69	-0.55	3.41	2307.07	6.87	2304.92	6.86	-2.16	-0.09
125	337	212	87	5392	0.933353	876.87	0.56454	1657.47	548.64	0	3.38	2312.41	6.86	2309.67	6.85	-2.74	-0.12
125	338	213	88	5408	0.932215	877.53	0.565089	1657.04	559.66	-0.54	3.35	2316.57	6.85	2314.63	6.85	-1.95	-0.08
125	339	214	89	5424	0.931074	878.18	0.565634	1656.62	570.77	0	3.32	2321.75	6.85	2319.21	6.84	-2.53	-0.11
125	340	215	90	5440	0.929931	878.83	0.566176	1656.21	581.96	-0.54	3.29	2325.75	6.84	2324.02	6.84	-1.73	-0.07
125	341	216	91	5456	0.928785	879.47	0.566716	1655.81	593.22	0	3.26	2330.76	6.84	2328.44	6.83	-2.32	-0.1
125	342	217	92	5472	0.927636	880.1	0.567251	1655.42	604.57	-0.54	3.23	2334.61	6.83	2333.09	6.82	-1.52	-0.07
125	343	218	93	5488	0.926485	880.72	0.567784	1655.04	615.98	0	3.2	2339.46	6.82	2337.36	6.81	-2.1	-0.09
125	344	219	94	5504	0.925331	881.33	0.568314	1654.67	627.48	-0.54	3.17	2343.15	6.81	2341.85	6.81	-1.3	-0.06
125	345	220	95	5520	0.924176	881.93	0.568841	1654.32	639.05	0	3.15	2347.85	6.81	2345.97	6.8	-1.88	-0.08
125	346	221	96	5536	0.923018	882.53	0.569364	1653.97	650.69	-0.54	3.12	2351.39	6.8	2350.3	6.79	-1.09	-0.05
125	347	222	97	5552	0.921858	883.12	0.569885	1653.63	662.41	0	3.09	2355.93	6.79	2354.27	6.78	-1.66	-0.07
125	348	223	98	5568	0.920696	883.7	0.570402	1653.31	674.2	-0.54	3.06	2359.32	6.78	2358.46	6.78	-0.87	-0.04
125	349	224	99	5584	0.919533	884.27	0.570917	1652.99	686.06	0	3.04	2363.71	6.77	2362.27	6.77	-1.44	-0.06
125	350	225	100	5600	0.918367	884.84	0.571429	1652.68	698	-0.53	3.01	2366.96	6.76	2366.31	6.76	-0.65	-0.03
125	351	226	101	5616	0.9172	885.4	0.571937	1652.38	710.01	0	2.99	2371.2	6.76	2369.98	6.75	-1.22	-0.05
125	352	227	102	5632	0.916032	885.95	0.572443	1652.09	722.08	-0.53	2.96	2374.3	6.75	2373.87	6.74	-0.43	-0.02
125	353	228	103	5648	0.914862	886.49	0.572946	1651.81	734.23	0	2.94	2378.4	6.74	2377.4	6.73	-1	-0.04
125	354	229	104	5664	0.91369	887.03	0.573446	1651.54	746.45	-0.53	2.91	2381.36	6.73	2381.15	6.73	-0.21	-0.01
125	355	230	105	5680	0.912517	887.55	0.573944	1651.28	758.74	0	2.89	2385.31	6.72	2384.53	6.72	-0.79	-0.03
125	356	231	106	5696	0.911343	888.08	0.574438	1651.03	771.09	-0.53	2.86	2388.13	6.71	2388.14	6.71	0	0
125	357	232	107	5712	0.910168	888.59	0.57493	1650.79	783.51	0	2.84	2391.95	6.7	2391.38	6.7	-0.57	-0.02
125	358	233	108	5728	0.908992	889.1	0.575419	1650.55	796	-0.53	2.82	2394.63	6.69	2394.85	6.69	0.22	0.01
125	359	234	109	5744	0.907814	889.6	0.575905	1650.33	808.56	0	2.79	2398.3	6.68	2397.95	6.68	-0.35	-0.01
125	360	235	110	5760	0.906636	890.09	0.576389	1650.11	821.18	-0.53	2.77	2400.85	6.67	2401.29	6.67	0.43	0.02
125	361	236	111	5776	0.905457	890.58	0.57687	1649.9	833.87	0	2.75	2404.39	6.66	2404.25	6.66	-0.14	-0.01
125	362	237	112	5792	0.904276	891.06	0.577348	1649.7	846.63	-0.53	2.73	2406.81	6.65	2407.45	6.65	0.64	0.03

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125	363	238	113	5808	0.903096	891.54	0.577824	1649.51	859.45	0	2.71	2410.21	6.64	2410.28	6.64	0.06	0
125	364	239	114	5824	0.901914	892.01	0.578297	1649.32	872.33	-0.52	2.68	2412.5	6.63	2413.35	6.63	0.84	0.03
125	365	240	115	5840	0.900732	892.47	0.578767	1649.15	885.27	0	2.66	2415.77	6.62	2416.04	6.62	0.27	0.01
125	366	241	116	5856	0.899549	892.92	0.579235	1648.98	898.28	-0.52	2.64	2417.94	6.61	2418.98	6.61	1.05	0.04
125	367	242	117	5872	0.898366	893.37	0.5797	1648.82	911.35	0	2.62	2421.08	6.6	2421.55	6.6	0.47	0.02
125	368	243	118	5888	0.897182	893.81	0.580163	1648.67	924.49	-0.52	2.6	2423.11	6.58	2424.36	6.59	1.24	0.05
125	369	244	119	5904	0.895998	894.25	0.580623	1648.52	937.68	0	2.58	2426.13	6.57	2426.79	6.58	0.67	0.03
125	370	245	120	5920	0.894814	894.68	0.581081	1648.38	950.94	-0.52	2.56	2428.04	6.56	2429.47	6.57	1.44	0.06
125	371	246	121	5936	0.893629	895.11	0.581536	1648.25	964.25	0	2.54	2430.93	6.55	2431.78	6.55	0.86	0.04
125	372	247	122	5952	0.892444	895.53	0.581989	1648.13	977.63	-0.52	2.52	2432.72	6.54	2434.34	6.54	1.62	0.07
125	373	248	123	5968	0.891259	895.94	0.58244	1648.02	991.06	0	2.5	2435.48	6.53	2436.53	6.53	1.04	0.04
125	374	249	124	5984	0.890074	896.35	0.582888	1647.91	1004.56	-0.52	2.48	2437.15	6.52	2438.96	6.52	1.81	0.07
125	375	250	125	6000	0.888889	896.75	0.583333	1647.81	1018.11	0	2.47	2439.8	6.51	2441.02	6.51	1.22	0.05
125	376	251	126	6016	0.887704	897.14	0.583777	1647.72	1031.72	-0.52	2.45	2441.35	6.49	2443.33	6.5	1.98	0.08
125	377	252	127	6032	0.886519	897.53	0.584218	1647.63	1045.39	0	2.43	2443.88	6.48	2445.27	6.49	1.4	0.06
125	378	253	128	6048	0.885334	897.92	0.584656	1647.55	1059.12	-0.51	2.41	2445.31	6.47	2447.47	6.47	2.15	0.09
125	379	254	129	6064	0.884149	898.3	0.585092	1647.48	1072.9	0	2.39	2447.72	6.46	2449.29	6.46	1.57	0.06
125	380	255	130	6080	0.882964	898.67	0.585526	1647.41	1086.74	-0.51	2.38	2449.04	6.44	2451.36	6.45	2.32	0.09
125	381	256	131	6096	0.88178	899.04	0.585958	1647.35	1100.63	0	2.36	2451.33	6.43	2453.06	6.44	1.73	0.07
125	382	257	132	6112	0.880595	899.4	0.586387	1647.3	1114.58	-0.51	2.34	2452.55	6.42	2455.02	6.43	2.47	0.1
125	383	258	133	6128	0.879412	899.76	0.586815	1647.26	1128.59	0	2.33	2454.72	6.41	2456.61	6.41	1.88	0.08
125	384	259	134	6144	0.878228	900.11	0.58724	1647.22	1142.65	-0.51	2.31	2455.82	6.4	2458.45	6.4	2.62	0.11
125	385	260	135	6160	0.877045	900.46	0.587662	1647.18	1156.76	0	2.29	2457.89	6.38	2459.92	6.39	2.03	0.08
125	386	261	136	6176	0.875862	900.8	0.588083	1647.16	1170.93	-0.51	2.28	2458.88	6.37	2461.65	6.38	2.77	0.11
125	387	262	137	6192	0.87468	901.14	0.588501	1647.14	1185.15	0	2.26	2460.84	6.36	2463.01	6.36	2.17	0.09
125	388	263	138	6208	0.873499	901.47	0.588918	1647.12	1199.42	-0.51	2.25	2461.72	6.34	2464.62	6.35	2.9	0.12
125	389	264	139	6224	0.872318	901.8	0.589332	1647.12	1213.75	0	2.23	2463.57	6.33	2465.87	6.34	2.3	0.09
125	390	265	140	6240	0.871137	902.12	0.589744	1647.11	1228.12	-0.51	2.21	2464.35	6.32	2467.38	6.33	3.03	0.12
125	391	266	141	6256	0.869958	902.44	0.590153	1647.12	1242.55	0	2.2	2466.09	6.31	2468.51	6.31	2.43	0.1
125	392	267	142	6272	0.868779	902.75	0.590561	1647.13	1257.04	-0.51	2.18	2466.76	6.29	2469.91	6.3	3.15	0.13
125	393	268	143	6288	0.8676	903.06	0.590967	1647.15	1271.57	0	2.17	2468.4	6.28	2470.94	6.29	2.54	0.1
125	394	269	144	6304	0.866423	903.36	0.591371	1647.17	1286.15	-0.5	2.15	2468.97	6.27	2472.23	6.27	3.26	0.13
125	395	270	145	6320	0.865246	903.66	0.591772	1647.2	1300.78	0	2.14	2470.5	6.25	2473.15	6.26	2.65	0.11
125	396	271	146	6336	0.86407	903.96	0.592172	1647.23	1315.46	-0.5	2.13	2470.98	6.24	2474.34	6.25	3.36	0.14
125	397	272	147	6352	0.862895	904.25	0.592569	1647.27	1330.19	0	2.11	2472.4	6.23	2475.15	6.23	2.75	0.11
125	398	273	148	6368	0.861721	904.53	0.592965	1647.31	1344.97	-0.5	2.1	2472.78	6.21	2476.24	6.22	3.46	0.14
125	399	274	149	6384	0.860547	904.81	0.593358	1647.36	1359.8	0	2.08	2474.11	6.2	2476.95	6.21	2.84	0.11
125	400	275	150	6400	0.859375	905.09	0.59375	1647.42	1374.68	-0.5	2.07	2474.38	6.19	2477.93	6.19	3.54	0.14
125	401	276	151	6416	0.858204	905.36	0.59414	1647.48	1389.6	0	2.06	2475.61	6.17	2478.53	6.18	2.92	0.12
125	402	277	152	6432	0.857033	905.63	0.594527	1647.55	1404.58	-0.5	2.04	2475.79	6.16	2479.41	6.17	3.62	0.15
125	403	278	153	6448	0.855864	905.89	0.594913	1647.62	1419.6	0	2.03	2476.92	6.15	2479.92	6.15	2.99	0.12
125	404	279	154	6464	0.854696	906.15	0.595297	1647.7	1434.66	-0.5	2.02	2477.01	6.13	2480.69	6.14	3.68	0.15
125	405	280	155	6480	0.853528	906.41	0.595679	1647.78	1449.78	0	2	2478.04	6.12	2481.1	6.13	3.06	0.12
125	406	281	156	6496	0.852362	906.66	0.596059	1647.87	1464.93	-0.5	1.99	2478.04	6.1	2481.78	6.11	3.74	0.15
125	407	282	157	6512	0.851197	906.9	0.596437	1647.96	1480.14	0	1.98	2478.98	6.09	2482.09	6.1	3.11	0.13
125	408	283	158	6528	0.850034	907.15	0.596814	1648.06	1495.39	-0.5	1.97	2478.88	6.08	2482.67	6.08	3.79	0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
125	409	284	159	6544	0.848871	907.39	0.597188	1648.16	1510.68	0	1.95	2479.72	6.06	2482.88	6.07	3.15	0.13
125	410	285	160	6560	0.84771	907.62	0.597561	1648.27	1526.02	-0.49	1.94	2479.54	6.05	2483.36	6.06	3.82	0.15
125	411	286	161	6576	0.84655	907.85	0.597932	1648.38	1541.41	0	1.93	2480.29	6.03	2483.47	6.04	3.18	0.13
125	412	287	162	6592	0.845391	908.08	0.598301	1648.49	1556.84	-0.49	1.92	2480.01	6.02	2483.86	6.03	3.85	0.16
125	413	288	163	6608	0.844233	908.3	0.598668	1648.62	1572.31	0	1.91	2480.68	6.01	2483.88	6.01	3.21	0.13
125	414	289	164	6624	0.843077	908.52	0.599034	1648.74	1587.83	-0.49	1.89	2480.31	5.99	2484.18	6	3.87	0.16
125	415	290	165	6640	0.841922	908.74	0.599398	1648.87	1603.39	0	1.88	2480.88	5.98	2484.1	5.99	3.22	0.13
125	416	291	166	6656	0.840768	908.95	0.59976	1649.01	1618.99	-0.49	1.87	2480.43	5.96	2484.31	5.97	3.87	0.16
125	417	292	167	6672	0.839616	909.16	0.60012	1649.15	1634.63	0	1.86	2480.92	5.95	2484.14	5.96	3.22	0.13
125	418	293	168	6688	0.838465	909.36	0.600478	1649.3	1650.32	-0.49	1.85	2480.38	5.93	2484.25	5.94	3.87	0.16
125	419	294	169	6704	0.837316	909.56	0.600835	1649.45	1666.05	0	1.84	2480.78	5.92	2483.99	5.93	3.21	0.13
125	420	295	170	6720	0.836168	909.76	0.60119	1649.6	1681.82	-0.49	1.83	2480.16	5.91	2484.01	5.91	3.85	0.16
125	421	296	171	6736	0.835021	909.96	0.601544	1649.76	1697.63	0	1.82	2480.47	5.89	2483.66	5.9	3.19	0.13
125	422	297	172	6752	0.833876	910.15	0.601896	1649.92	1713.48	-0.49	1.81	2479.77	5.88	2483.59	5.89	3.83	0.15
125	423	298	173	6768	0.832733	910.33	0.602246	1650.09	1729.38	0	1.79	2480	5.86	2483.16	5.87	3.16	0.13
125	424	299	174	6784	0.83159	910.52	0.602594	1650.26	1745.31	-0.49	1.78	2479.21	5.85	2483	5.86	3.79	0.15
125	425	300	175	6800	0.83045	910.7	0.602941	1650.43	1761.29	0	1.77	2479.36	5.83	2482.48	5.84	3.12	0.13
125	426	301	176	6816	0.829311	910.87	0.603286	1650.61	1777.3	-0.48	1.76	2478.49	5.82	2482.23	5.83	3.74	0.15
125	427	302	177	6832	0.828173	911.05	0.60363	1650.8	1793.36	0	1.75	2478.55	5.8	2481.62	5.81	3.07	0.12
125	428	303	178	6848	0.827037	911.22	0.603972	1650.98	1809.45	-0.48	1.74	2477.61	5.79	2481.29	5.8	3.68	0.15
125	429	304	179	6864	0.825903	911.39	0.604312	1651.18	1825.58	0	1.73	2477.59	5.78	2480.59	5.78	3	0.12
125	430	305	180	6880	0.82477	911.55	0.604651	1651.37	1841.75	-0.48	1.72	2476.57	5.76	2480.18	5.77	3.61	0.15
125	431	306	181	6896	0.823639	911.71	0.604988	1651.57	1857.96	0	1.71	2476.47	5.75	2479.4	5.75	2.93	0.12
125	432	307	182	6912	0.822509	911.87	0.605324	1651.78	1874.21	-0.48	1.7	2475.37	5.73	2478.9	5.74	3.53	0.14
125	433	308	183	6928	0.821382	912.02	0.605658	1651.98	1890.5	0	1.69	2475.19	5.72	2478.03	5.72	2.84	0.11
125	434	309	184	6944	0.820255	912.17	0.605991	1652.19	1906.82	-0.48	1.69	2474.02	5.7	2477.45	5.71	3.44	0.14
125	435	310	185	6960	0.819131	912.32	0.606322	1652.41	1923.18	0	1.68	2473.76	5.69	2476.5	5.69	2.74	0.11
125	436	311	186	6976	0.818008	912.47	0.606651	1652.63	1939.58	-0.48	1.67	2472.51	5.67	2475.84	5.68	3.33	0.13
125	437	312	187	6992	0.816887	912.61	0.606979	1652.85	1956.02	0	1.66	2472.18	5.66	2474.81	5.66	2.63	0.11
125	438	313	188	7008	0.815767	912.75	0.607306	1653.08	1972.49	-0.48	1.65	2470.85	5.64	2474.07	5.65	3.21	0.13
125	439	314	189	7024	0.814649	912.88	0.607631	1653.31	1989	0	1.64	2470.45	5.63	2472.96	5.63	2.51	0.1
125	440	315	190	7040	0.813533	913.02	0.607955	1653.54	2005.55	-0.48	1.63	2469.05	5.61	2472.14	5.62	3.09	0.12
125	441	316	191	7056	0.812419	913.15	0.608277	1653.78	2022.13	0	1.62	2468.57	5.6	2470.95	5.6	2.38	0.1
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
126	251	125	-1	4016	0.999984	771.93	0.499004	1786.95	0.1	0	9.83	1466.86	5.84	1476.1	5.88	9.24	0.63
126	252	126	0	4032	1	773.99	0.5	1784.57	0	0.63	10	1484.07	5.89	1492.61	5.92	8.54	0.57
126	253	127	1	4048	0.999984	776.02	0.500988	1782.23	0.1	0	9.84	1499.49	5.93	1507.07	5.96	7.58	0.5
126	254	128	2	4064	0.999938	778.03	0.501969	1779.93	0.38	0.63	9.67	1515.96	5.97	1523.22	6	7.26	0.48
126	255	129	3	4080	0.999862	780.01	0.502941	1777.66	0.86	0	9.52	1530.98	6	1537.34	6.03	6.36	0.41
126	256	130	4	4096	0.999756	781.97	0.503906	1775.44	1.53	0.62	9.36	1547.06	6.04	1553.13	6.07	6.07	0.39
126	257	131	5	4112	0.999621	783.9	0.504864	1773.26	2.37	0	9.22	1561.69	6.08	1566.9	6.1	5.21	0.33
126	258	132	6	4128	0.999459	785.8	0.505814	1771.11	3.41	0.62	9.07	1577.38	6.11	1582.35	6.13	4.97	0.31
126	259	133	7	4144	0.99927	787.68	0.506757	1769	4.62	0	8.93	1591.63	6.15	1595.78	6.16	4.15	0.26
126	260	134	8	4160	0.999053	789.54	0.507692	1766.92	6.01	0.62	8.79	1606.94	6.18	1610.89	6.2	3.95	0.24

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
126	261	135	9	4176	0.998811	791.37	0.508621	1764.88	7.57	0	8.65	1620.83	6.21	1624	6.22	3.17	0.2
126	262	136	10	4192	0.998543	793.18	0.509542	1762.88	9.32	0.62	8.52	1635.77	6.24	1638.77	6.25	3	0.18
126	263	137	11	4208	0.998251	794.96	0.510456	1760.9	11.23	0	8.39	1649.3	6.27	1651.55	6.28	2.26	0.14
126	264	138	12	4224	0.997934	796.72	0.511364	1758.97	13.31	0.62	8.26	1663.88	6.3	1666	6.31	2.12	0.13
126	265	139	13	4240	0.997593	798.46	0.512264	1757.06	15.57	0	8.14	1677.05	6.33	1678.47	6.33	1.42	0.08
126	266	140	14	4256	0.99723	800.17	0.513158	1755.19	17.98	0.61	8.02	1691.28	6.36	1692.6	6.36	1.31	0.08
126	267	141	15	4272	0.996844	801.87	0.514045	1753.35	20.57	0	7.9	1704.11	6.38	1704.76	6.38	0.65	0.04
126	268	142	16	4288	0.996436	803.54	0.514925	1751.54	23.32	0.61	7.78	1718	6.41	1718.57	6.41	0.57	0.03
126	269	143	17	4304	0.996006	805.19	0.515799	1749.76	26.22	0	7.67	1730.49	6.43	1730.43	6.43	-0.06	0
126	270	144	18	4320	0.995556	806.82	0.516667	1748.01	29.29	0.61	7.56	1744.04	6.46	1743.94	6.46	-0.11	-0.01
126	271	145	19	4336	0.995084	808.43	0.517528	1746.29	32.52	0	7.45	1756.21	6.48	1755.5	6.48	-0.71	-0.04
126	272	146	20	4352	0.994593	810.02	0.518382	1744.6	35.9	0.61	7.34	1769.43	6.51	1768.7	6.5	-0.73	-0.04
126	273	147	21	4368	0.994083	811.58	0.519231	1742.94	39.43	0	7.24	1781.28	6.52	1779.98	6.52	-1.3	-0.07
126	274	148	22	4384	0.993553	813.13	0.520073	1741.31	43.12	0.6	7.14	1794.18	6.55	1792.88	6.54	-1.29	-0.07
126	275	149	23	4400	0.993005	814.66	0.520909	1739.71	46.96	0	7.04	1805.71	6.57	1803.87	6.56	-1.84	-0.1
126	276	150	24	4416	0.992439	816.17	0.521739	1738.13	50.95	0.6	6.94	1818.3	6.59	1816.49	6.58	-1.81	-0.1
126	277	151	25	4432	0.991854	817.65	0.522563	1736.58	55.08	0	6.85	1829.53	6.6	1827.2	6.6	-2.32	-0.13
126	278	152	26	4448	0.991253	819.12	0.523381	1735.06	59.36	0.6	6.75	1841.81	6.63	1839.54	6.62	-2.27	-0.12
126	279	153	27	4464	0.990635	820.57	0.524194	1733.56	63.79	0	6.66	1852.73	6.64	1849.97	6.63	-2.76	-0.15
126	280	154	28	4480	0.99	822.01	0.525	1732.09	68.36	0.6	6.57	1864.71	6.66	1862.03	6.65	-2.68	-0.14
126	281	155	29	4496	0.989349	823.42	0.525801	1730.65	73.06	0	6.48	1875.35	6.67	1872.2	6.66	-3.15	-0.17
126	282	156	30	4512	0.988683	824.82	0.526596	1729.23	77.91	0.6	6.4	1887.03	6.69	1883.98	6.68	-3.05	-0.16
126	283	157	31	4528	0.988001	826.2	0.527385	1727.83	82.9	0	6.31	1897.38	6.7	1893.88	6.69	-3.49	-0.18
126	284	158	32	4544	0.987304	827.56	0.528169	1726.46	88.03	0.59	6.23	1908.77	6.72	1905.4	6.71	-3.38	-0.18
126	285	159	33	4560	0.986593	828.9	0.528947	1725.12	93.29	0	6.15	1918.84	6.73	1915.04	6.72	-3.8	-0.2
126	286	160	34	4576	0.985867	830.23	0.52972	1723.79	98.68	0.59	6.07	1929.96	6.75	1926.29	6.74	-3.66	-0.19
126	287	161	35	4592	0.985128	831.54	0.530488	1722.49	104.21	0	5.99	1939.75	6.76	1935.69	6.74	-4.06	-0.21
126	288	162	36	4608	0.984375	832.83	0.53125	1721.22	109.87	0.59	5.92	1950.59	6.77	1946.68	6.76	-3.91	-0.2
126	289	163	37	4624	0.983609	834.11	0.532007	1719.96	115.66	0	5.84	1960.12	6.78	1955.83	6.77	-4.29	-0.22
126	290	164	38	4640	0.98283	835.37	0.532759	1718.73	121.57	0.59	5.77	1970.68	6.8	1966.56	6.78	-4.12	-0.21
126	291	165	39	4656	0.982038	836.61	0.533505	1717.52	127.62	0	5.7	1979.95	6.8	1975.47	6.79	-4.48	-0.23
126	292	166	40	4672	0.981235	837.84	0.534247	1716.33	133.79	0.59	5.63	1990.25	6.82	1985.96	6.8	-4.3	-0.22
126	293	167	41	4688	0.980419	839.06	0.534983	1715.16	140.08	0	5.56	1999.26	6.82	1994.62	6.81	-4.64	-0.23
126	294	168	42	4704	0.979592	840.26	0.535714	1714.01	146.5	0.58	5.49	2009.3	6.83	2004.86	6.82	-4.44	-0.22
126	295	169	43	4720	0.978753	841.44	0.536441	1712.89	153.04	0	5.42	2018.05	6.84	2013.29	6.82	-4.77	-0.24
126	296	170	44	4736	0.977904	842.61	0.537162	1711.78	159.7	0.58	5.36	2027.85	6.85	2023.3	6.84	-4.55	-0.22
126	297	171	45	4752	0.977043	843.76	0.537879	1710.69	166.48	0	5.29	2036.35	6.86	2031.49	6.84	-4.86	-0.24
126	298	172	46	4768	0.976172	844.9	0.538591	1709.63	173.38	0.58	5.23	2045.9	6.87	2041.26	6.85	-4.64	-0.23
126	299	173	47	4784	0.975291	846.03	0.539298	1708.58	180.4	0	5.17	2054.16	6.87	2049.23	6.85	-4.93	-0.24
126	300	174	48	4800	0.9744	847.14	0.54	1707.55	187.53	0.58	5.11	2063.46	6.88	2058.77	6.86	-4.69	-0.23
126	301	175	49	4816	0.973499	848.23	0.540698	1706.54	194.78	0	5.05	2071.49	6.88	2066.52	6.87	-4.97	-0.24
126	302	176	50	4832	0.972589	849.32	0.541391	1705.55	202.14	0.58	4.99	2080.55	6.89	2075.83	6.87	-4.72	-0.23
126	303	177	51	4848	0.971669	850.38	0.542079	1704.58	209.62	0	4.93	2088.35	6.89	2083.36	6.88	-4.99	-0.24
126	304	178	52	4864	0.970741	851.44	0.542763	1703.63	217.2	0.57	4.88	2097.18	6.9	2092.44	6.88	-4.73	-0.23
126	305	179	53	4880	0.969804	852.48	0.543443	1702.69	224.9	0	4.82	2104.74	6.9	2099.76	6.88	-4.99	-0.24
126	306	180	54	4896	0.968858	853.51	0.544118	1701.77	232.71	0.57	4.77	2113.34	6.91	2108.63	6.89	-4.72	-0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
126	307	181	55	4912	0.967904	854.53	0.544788	1700.87	240.62	0	4.71	2120.69	6.91	2115.73	6.89	-4.96	-0.23
126	308	182	56	4928	0.966942	855.53	0.545455	1699.99	248.64	0.57	4.66	2129.07	6.91	2124.38	6.9	-4.68	-0.22
126	309	183	57	4944	0.965972	856.52	0.546117	1699.12	256.77	0	4.61	2136.19	6.91	2131.28	6.9	-4.91	-0.23
126	310	184	58	4960	0.964995	857.5	0.546774	1698.27	265.01	0.57	4.56	2144.35	6.92	2139.72	6.9	-4.63	-0.22
126	311	185	59	4976	0.96401	858.47	0.547428	1697.44	273.34	0	4.51	2151.26	6.92	2146.41	6.9	-4.85	-0.23
126	312	186	60	4992	0.963018	859.42	0.548077	1696.62	281.79	0.57	4.46	2159.2	6.92	2154.65	6.91	-4.55	-0.21
126	313	187	61	5008	0.962019	860.36	0.548722	1695.82	290.33	0	4.41	2165.9	6.92	2161.14	6.9	-4.76	-0.22
126	314	188	62	5024	0.961013	861.29	0.549363	1695.03	298.97	0.56	4.36	2173.63	6.92	2169.17	6.91	-4.46	-0.21
126	315	189	63	5040	0.96	862.21	0.55	1694.26	307.72	0	4.32	2180.13	6.92	2175.46	6.91	-4.67	-0.21
126	316	190	64	5056	0.958981	863.12	0.550633	1693.5	316.56	0.56	4.27	2187.65	6.92	2183.29	6.91	-4.36	-0.2
126	317	191	65	5072	0.957956	864.01	0.551262	1692.76	325.51	0	4.23	2193.94	6.92	2189.39	6.91	-4.55	-0.21
126	318	192	66	5088	0.956924	864.9	0.551887	1692.04	334.55	0.56	4.18	2201.26	6.92	2197.02	6.91	-4.24	-0.19
126	319	193	67	5104	0.955887	865.77	0.552508	1691.33	343.69	0	4.14	2207.36	6.92	2202.93	6.91	-4.42	-0.2
126	320	194	68	5120	0.954844	866.63	0.553125	1690.63	352.92	0.56	4.1	2214.47	6.92	2210.37	6.91	-4.1	-0.19
126	321	195	69	5136	0.953795	867.48	0.553738	1689.95	362.25	0	4.05	2220.37	6.92	2216.1	6.9	-4.28	-0.19
126	322	196	70	5152	0.952741	868.32	0.554348	1689.28	371.67	0.56	4.01	2227.3	6.92	2223.34	6.9	-3.95	-0.18
126	323	197	71	5168	0.951682	869.15	0.554954	1688.63	381.18	0	3.97	2233.01	6.91	2228.88	6.9	-4.13	-0.19
126	324	198	72	5184	0.950617	869.97	0.555556	1687.99	390.79	0.56	3.93	2239.74	6.91	2235.94	6.9	-3.8	-0.17
126	325	199	73	5200	0.949548	870.78	0.556154	1687.37	400.49	0	3.89	2245.26	6.91	2241.3	6.9	-3.96	-0.18
126	326	200	74	5216	0.948474	871.58	0.556748	1686.75	410.28	0.55	3.85	2251.8	6.91	2248.17	6.9	-3.63	-0.16
126	327	201	75	5232	0.947395	872.36	0.557339	1686.15	420.16	0	3.82	2257.14	6.9	2253.35	6.89	-3.79	-0.17
126	328	202	76	5248	0.946312	873.14	0.557927	1685.57	430.12	0.55	3.78	2263.5	6.9	2260.05	6.89	-3.45	-0.15
126	329	203	77	5264	0.945224	873.91	0.558511	1684.99	440.18	0	3.74	2268.66	6.9	2265.05	6.88	-3.6	-0.16
126	330	204	78	5280	0.944132	874.67	0.559091	1684.43	450.32	0.55	3.71	2274.83	6.89	2271.57	6.88	-3.26	-0.14
126	331	205	79	5296	0.943036	875.42	0.559668	1683.88	460.55	0	3.67	2279.82	6.89	2276.4	6.88	-3.41	-0.15
126	332	206	80	5312	0.941936	876.16	0.560241	1683.35	470.87	0.55	3.63	2285.81	6.88	2282.74	6.88	-3.07	-0.13
126	333	207	81	5328	0.940833	876.89	0.560811	1682.83	481.27	0	3.6	2290.62	6.88	2287.4	6.87	-3.22	-0.14
126	334	208	82	5344	0.939725	877.61	0.561377	1682.31	491.75	0.55	3.57	2296.44	6.88	2293.57	6.87	-2.87	-0.13
126	335	209	83	5360	0.938614	878.32	0.56194	1681.82	502.32	0	3.53	2301.08	6.87	2298.07	6.86	-3.01	-0.13
126	336	210	84	5376	0.9375	879.02	0.5625	1681.33	512.97	0.55	3.5	2306.73	6.87	2304.06	6.86	-2.66	-0.12
126	337	211	85	5392	0.936382	879.71	0.563056	1680.85	523.7	0	3.47	2311.2	6.86	2308.4	6.85	-2.8	-0.12
126	338	212	86	5408	0.935261	880.4	0.563609	1680.39	534.51	0.54	3.43	2316.68	6.85	2314.23	6.85	-2.45	-0.11
126	339	213	87	5424	0.934137	881.07	0.564159	1679.94	545.41	0	3.4	2320.99	6.85	2318.4	6.84	-2.59	-0.11
126	340	214	88	5440	0.93301	881.74	0.564706	1679.49	556.38	0.54	3.37	2326.3	6.84	2324.06	6.84	-2.24	-0.1
126	341	215	89	5456	0.931881	882.4	0.565249	1679.06	567.44	0	3.34	2330.44	6.83	2328.08	6.83	-2.37	-0.1
126	342	216	90	5472	0.930748	883.05	0.565789	1678.64	578.57	0.54	3.31	2335.59	6.83	2333.58	6.82	-2.02	-0.09
126	343	217	91	5488	0.929613	883.69	0.566327	1678.24	589.78	0	3.28	2339.58	6.82	2337.43	6.81	-2.15	-0.09
126	344	218	92	5504	0.928475	884.32	0.56686	1677.84	601.06	0.54	3.25	2344.57	6.82	2342.78	6.81	-1.79	-0.08
126	345	219	93	5520	0.927335	884.95	0.567391	1677.45	612.42	0	3.22	2348.4	6.81	2346.48	6.8	-1.92	-0.08
126	346	220	94	5536	0.926192	885.56	0.567919	1677.07	623.86	0.54	3.19	2353.23	6.8	2351.66	6.8	-1.57	-0.07
126	347	221	95	5552	0.925047	886.17	0.568444	1676.71	635.38	0	3.17	2356.91	6.79	2355.22	6.79	-1.7	-0.07
126	348	222	96	5568	0.9239	886.77	0.568966	1676.35	646.96	0.54	3.14	2361.59	6.79	2360.25	6.78	-1.34	-0.06
126	349	223	97	5584	0.922751	887.37	0.569484	1676	658.62	0	3.11	2365.12	6.78	2363.65	6.77	-1.47	-0.06
126	350	224	98	5600	0.9216	887.95	0.57	1675.67	670.36	0.53	3.09	2369.64	6.77	2368.53	6.77	-1.12	-0.05
126	351	225	99	5616	0.920447	888.53	0.570513	1675.34	682.17	0	3.06	2373.02	6.76	2371.78	6.76	-1.24	-0.05
126	352	226	100	5632	0.919292	889.1	0.571023	1675.02	694.05	0.53	3.03	2377.4	6.75	2376.51	6.75	-0.89	-0.04

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126	353	227	101	5648	0.918136	889.66	0.57153	1674.72	706	0	3.01	2380.63	6.74	2379.62	6.74	-1.01	-0.04
126	354	228	102	5664	0.916978	890.22	0.572034	1674.42	718.02	0.53	2.98	2384.86	6.74	2384.2	6.74	-0.66	-0.03
126	355	229	103	5680	0.915818	890.77	0.572535	1674.13	730.11	0	2.96	2387.95	6.73	2387.17	6.72	-0.78	-0.03
126	356	230	104	5696	0.914657	891.31	0.573034	1673.85	742.27	0.53	2.93	2392.04	6.72	2391.6	6.72	-0.43	-0.02
126	357	231	105	5712	0.913495	891.84	0.573529	1673.58	754.5	0	2.91	2394.99	6.71	2394.43	6.71	-0.56	-0.02
126	358	232	106	5728	0.912331	892.37	0.574022	1673.32	766.8	0.53	2.88	2398.93	6.7	2398.72	6.7	-0.21	-0.01
126	359	233	107	5744	0.911166	892.89	0.574513	1673.07	779.16	0	2.86	2401.75	6.69	2401.42	6.69	-0.33	-0.01
126	360	234	108	5760	0.91	893.4	0.575	1672.82	791.6	0.53	2.84	2405.55	6.68	2405.56	6.68	0.01	0
126	361	235	109	5776	0.908833	893.9	0.575485	1672.59	804.09	0	2.81	2408.23	6.67	2408.12	6.67	-0.11	0
126	362	236	110	5792	0.907665	894.4	0.575967	1672.36	816.66	0.53	2.79	2411.89	6.66	2412.13	6.66	0.24	0.01
126	363	237	111	5808	0.906495	894.89	0.576446	1672.14	829.29	0	2.77	2414.44	6.65	2414.55	6.65	0.11	0
126	364	238	112	5824	0.905325	895.38	0.576923	1671.93	841.99	0.52	2.75	2417.97	6.64	2418.42	6.64	0.46	0.02
126	365	239	113	5840	0.904155	895.86	0.577397	1671.73	854.75	0	2.72	2420.38	6.63	2420.71	6.63	0.33	0.01
126	366	240	114	5856	0.902983	896.33	0.577869	1671.54	867.57	0.52	2.7	2423.78	6.62	2424.45	6.62	0.67	0.03
126	367	241	115	5872	0.901811	896.8	0.578338	1671.36	880.46	0	2.68	2426.06	6.61	2426.61	6.61	0.55	0.02
126	368	242	116	5888	0.900638	897.26	0.578804	1671.18	893.41	0.52	2.66	2429.33	6.6	2430.21	6.6	0.88	0.04
126	369	243	117	5904	0.899465	897.71	0.579268	1671.01	906.43	0	2.64	2431.49	6.59	2432.25	6.59	0.76	0.03
126	370	244	118	5920	0.898291	898.16	0.57973	1670.85	919.5	0.52	2.62	2434.63	6.58	2435.72	6.58	1.09	0.04
126	371	245	119	5936	0.897116	898.6	0.580189	1670.7	932.64	0	2.6	2436.66	6.57	2437.62	6.57	0.96	0.04
126	372	246	120	5952	0.895942	899.04	0.580645	1670.55	945.84	0.52	2.58	2439.67	6.56	2440.97	6.56	1.29	0.05
126	373	247	121	5968	0.894767	899.46	0.581099	1670.42	959.1	0	2.56	2441.58	6.55	2442.75	6.55	1.16	0.05
126	374	248	122	5984	0.893591	899.89	0.581551	1670.29	972.41	0.52	2.54	2444.47	6.54	2445.96	6.54	1.49	0.06
126	375	249	123	6000	0.892416	900.31	0.582	1670.16	985.79	0	2.52	2446.26	6.52	2447.62	6.53	1.36	0.06
126	376	250	124	6016	0.89124	900.72	0.582447	1670.05	999.23	0.52	2.5	2449.02	6.51	2450.71	6.52	1.69	0.07
126	377	251	125	6032	0.890065	901.12	0.582891	1669.94	1012.72	0	2.48	2450.7	6.5	2452.25	6.5	1.55	0.06
126	378	252	126	6048	0.888889	901.52	0.583333	1669.84	1026.28	0.51	2.47	2453.34	6.49	2455.21	6.5	1.87	0.08
126	379	253	127	6064	0.887713	901.92	0.583773	1669.74	1039.89	0	2.45	2454.9	6.48	2456.63	6.48	1.74	0.07
126	380	254	128	6080	0.886537	902.31	0.584211	1669.66	1053.56	0.51	2.43	2457.42	6.47	2459.48	6.47	2.06	0.08
126	381	255	129	6096	0.885362	902.69	0.584646	1669.58	1067.28	0	2.41	2458.86	6.45	2460.78	6.46	1.92	0.08
126	382	256	130	6112	0.884186	903.07	0.585079	1669.51	1081.06	0.51	2.39	2461.27	6.44	2463.5	6.45	2.23	0.09
126	383	257	131	6128	0.883011	903.44	0.585509	1669.44	1094.9	0	2.38	2462.6	6.43	2464.69	6.44	2.09	0.08
126	384	258	132	6144	0.881836	903.81	0.585938	1669.38	1108.79	0.51	2.36	2464.89	6.42	2467.29	6.43	2.4	0.1
126	385	259	133	6160	0.880661	904.17	0.586364	1669.33	1122.74	0	2.34	2466.11	6.41	2468.36	6.41	2.26	0.09
126	386	260	134	6176	0.879487	904.53	0.586788	1669.28	1136.74	0.51	2.33	2468.28	6.39	2470.85	6.4	2.56	0.1
126	387	261	135	6192	0.878313	904.88	0.587209	1669.24	1150.8	0	2.31	2469.39	6.38	2471.81	6.39	2.42	0.1
126	388	262	136	6208	0.877139	905.23	0.587629	1669.21	1164.91	0.51	2.29	2471.46	6.37	2474.18	6.38	2.72	0.11
126	389	263	137	6224	0.875966	905.57	0.588046	1669.18	1179.07	0	2.28	2472.46	6.36	2475.03	6.36	2.57	0.1
126	390	264	138	6240	0.874793	905.91	0.588462	1669.16	1193.29	0.51	2.26	2474.42	6.34	2477.28	6.35	2.87	0.12
126	391	265	139	6256	0.873621	906.24	0.588875	1669.14	1207.55	0	2.25	2475.31	6.33	2478.02	6.34	2.71	0.11
126	392	266	140	6272	0.872449	906.57	0.589286	1669.14	1221.88	0.51	2.23	2477.16	6.32	2480.17	6.33	3.01	0.12
126	393	267	141	6288	0.871278	906.89	0.589695	1669.13	1236.25	0	2.22	2477.95	6.31	2480.8	6.31	2.85	0.11
126	394	268	142	6304	0.870107	907.2	0.590102	1669.14	1250.67	0.5	2.2	2479.69	6.29	2482.83	6.3	3.14	0.13
126	395	269	143	6320	0.868938	907.52	0.590506	1669.15	1265.14	0	2.19	2480.38	6.28	2483.36	6.29	2.98	0.12
126	396	270	144	6336	0.867769	907.83	0.590909	1669.16	1279.67	0.5	2.17	2482.02	6.27	2485.28	6.28	3.26	0.13
126	397	271	145	6352	0.8666	908.13	0.59131	1669.18	1294.24	0	2.16	2482.6	6.25	2485.7	6.26	3.1	0.12
126	398	272	146	6368	0.865433	908.43	0.591709	1669.21	1308.87	0.5	2.14	2484.14	6.24	2487.52	6.25	3.38	0.14

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126	399	273	147	6384	0.864266	908.72	0.592105	1669.24	1323.54	0	2.13	2484.62	6.23	2487.83	6.24	3.21	0.13
126	400	274	148	6400	0.8631	909.01	0.5925	1669.28	1338.27	0.5	2.11	2486.05	6.22	2489.54	6.22	3.49	0.14
126	401	275	149	6416	0.861935	909.3	0.592893	1669.33	1353.04	0	2.1	2486.44	6.2	2489.76	6.21	3.32	0.13
126	402	276	150	6432	0.860771	909.58	0.593284	1669.38	1367.86	0.5	2.09	2487.77	6.19	2491.36	6.2	3.59	0.14
126	403	277	151	6448	0.859608	909.85	0.593672	1669.43	1382.73	0	2.07	2488.06	6.17	2491.47	6.18	3.41	0.14
126	404	278	152	6464	0.858445	910.13	0.594059	1669.49	1397.64	0.5	2.06	2489.3	6.16	2492.97	6.17	3.68	0.15
126	405	279	153	6480	0.857284	910.39	0.594444	1669.56	1412.6	0	2.05	2489.49	6.15	2492.99	6.16	3.5	0.14
126	406	280	154	6496	0.856124	910.66	0.594828	1669.63	1427.61	0.5	2.03	2490.63	6.13	2494.39	6.14	3.76	0.15
126	407	281	155	6512	0.854964	910.92	0.595209	1669.71	1442.67	0	2.02	2490.73	6.12	2494.3	6.13	3.57	0.14
126	408	282	156	6528	0.853806	911.17	0.595588	1669.79	1457.77	0.5	2.01	2491.77	6.11	2495.6	6.12	3.83	0.15
126	409	283	157	6544	0.852649	911.43	0.595966	1669.87	1472.92	0	1.99	2491.78	6.09	2495.42	6.1	3.64	0.15
126	410	284	158	6560	0.851493	911.67	0.596341	1669.96	1488.11	0.49	1.98	2492.73	6.08	2496.61	6.09	3.89	0.16
126	411	285	159	6576	0.850338	911.92	0.596715	1670.06	1503.35	0	1.97	2492.64	6.06	2496.34	6.07	3.7	0.15
126	412	286	160	6592	0.849185	912.16	0.597087	1670.16	1518.64	0.49	1.96	2493.5	6.05	2497.44	6.06	3.94	0.16
126	413	287	161	6608	0.848032	912.39	0.597458	1670.27	1533.96	0	1.95	2493.32	6.04	2497.06	6.05	3.74	0.15
126	414	288	162	6624	0.846881	912.62	0.597826	1670.38	1549.34	0.49	1.93	2494.09	6.02	2498.07	6.03	3.98	0.16
126	415	289	163	6640	0.845731	912.85	0.598193	1670.5	1564.75	0	1.92	2493.82	6.01	2497.6	6.02	3.78	0.15
126	416	290	164	6656	0.844582	913.07	0.598558	1670.62	1580.21	0.49	1.91	2494.5	6	2498.51	6.01	4.01	0.16
126	417	291	165	6672	0.843435	913.29	0.598921	1670.74	1595.71	0	1.9	2494.14	5.98	2497.95	5.99	3.81	0.15
126	418	292	166	6688	0.842288	913.51	0.599282	1670.88	1611.26	0.49	1.89	2494.73	5.97	2498.76	5.98	4.03	0.16
126	419	293	167	6704	0.841144	913.72	0.599642	1671.01	1626.85	0	1.87	2494.29	5.95	2498.11	5.96	3.82	0.15
126	420	294	168	6720	0.84	913.93	0.6	1671.15	1642.48	0.49	1.86	2494.79	5.94	2498.83	5.95	4.04	0.16
126	421	295	169	6736	0.838858	914.14	0.600356	1671.29	1658.15	0	1.85	2494.27	5.92	2498.1	5.93	3.83	0.15
126	422	296	170	6752	0.837717	914.34	0.600711	1671.44	1673.87	0.49	1.84	2494.68	5.91	2498.72	5.92	4.04	0.16
126	423	297	171	6768	0.836578	914.54	0.601064	1671.6	1689.62	0	1.83	2494.07	5.9	2497.9	5.91	3.82	0.15
126	424	298	172	6784	0.83544	914.73	0.601415	1671.75	1705.42	0.49	1.82	2494.4	5.88	2498.43	5.89	4.03	0.16
126	425	299	173	6800	0.834303	914.92	0.601765	1671.92	1721.26	0	1.81	2493.71	5.87	2497.52	5.88	3.81	0.15
126	426	300	174	6816	0.833168	915.11	0.602113	1672.08	1737.14	0.48	1.8	2493.95	5.85	2497.96	5.86	4.01	0.16
126	427	301	175	6832	0.832034	915.3	0.602459	1672.25	1753.06	0	1.79	2493.18	5.84	2496.96	5.85	3.78	0.15
126	428	302	176	6848	0.830902	915.48	0.602804	1672.43	1769.02	0.48	1.78	2493.34	5.83	2497.32	5.83	3.98	0.16
126	429	303	177	6864	0.829772	915.65	0.603147	1672.61	1785.01	0	1.77	2492.49	5.81	2496.24	5.82	3.74	0.15
126	430	304	178	6880	0.828643	915.83	0.603488	1672.79	1801.05	0.48	1.76	2492.57	5.8	2496.51	5.81	3.94	0.16
126	431	305	179	6896	0.827515	916	0.603828	1672.98	1817.13	0	1.75	2491.64	5.78	2495.34	5.79	3.69	0.15
126	432	306	180	6912	0.826389	916.17	0.604167	1673.17	1833.25	0.48	1.74	2491.64	5.77	2495.52	5.78	3.88	0.16
126	433	307	181	6928	0.825264	916.33	0.604503	1673.36	1849.4	0	1.73	2490.63	5.75	2494.27	5.76	3.64	0.15
126	434	308	182	6944	0.824142	916.49	0.604839	1673.56	1865.59	0.48	1.72	2490.55	5.74	2494.36	5.75	3.82	0.15
126	435	309	183	6960	0.82302	916.65	0.605172	1673.76	1881.83	0	1.71	2489.47	5.72	2493.03	5.73	3.56	0.14
126	436	310	184	6976	0.821901	916.81	0.605505	1673.97	1898.1	0.48	1.7	2489.3	5.71	2493.04	5.72	3.74	0.15
126	437	311	185	6992	0.820782	916.96	0.605835	1674.18	1914.4	0	1.69	2488.15	5.69	2491.63	5.7	3.48	0.14
126	438	312	186	7008	0.819666	917.11	0.606164	1674.4	1930.75	0.48	1.68	2487.91	5.68	2491.56	5.69	3.65	0.15
126	439	313	187	7024	0.818551	917.26	0.606492	1674.61	1947.13	0	1.67	2486.67	5.66	2490.06	5.67	3.39	0.14
126	440	314	188	7040	0.817438	917.4	0.606818	1674.84	1963.55	0.48	1.66	2486.36	5.65	2489.91	5.66	3.55	0.14
126	441	315	189	7056	0.816327	917.54	0.607143	1675.06	1980	0	1.65	2485.05	5.64	2488.33	5.64	3.28	0.13
126	442	316	190	7072	0.815217	917.68	0.607466	1675.29	1996.49	0.48	1.64	2484.66	5.62	2488.1	5.63	3.44	0.14
126	443	317	191	7088	0.814109	917.81	0.607788	1675.53	2013.02	0	1.64	2483.28	5.61	2486.44	5.61	3.16	0.13
126	444	318	192	7104	0.813002	917.94	0.608108	1675.76	2029.58	0.47	1.63	2482.82	5.59	2486.13	5.6	3.31	0.13

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
127	253	126	-1	4048	0.999984	776.02	0.499012	1810.63	0.1	0	9.84	1471.09	5.81	1480.31	5.85	9.23	0.62
127	254	127	0	4064	1	778.08	0.5	1808.23	0	-0.63	10	1487.06	5.85	1496	5.89	8.94	0.6
127	255	128	1	4080	0.999985	780.11	0.50098	1805.88	0.1	0	9.84	1503.75	5.9	1511.32	5.93	7.57	0.5
127	256	129	2	4096	0.999939	782.11	0.501953	1803.57	0.38	-0.62	9.68	1518.99	5.93	1526.65	5.96	7.66	0.5
127	257	130	3	4112	0.999864	784.09	0.502918	1801.29	0.85	0	9.52	1535.29	5.97	1541.62	6	6.33	0.41
127	258	131	4	4128	0.99976	786.04	0.503876	1799.06	1.51	-0.62	9.37	1550.14	6.01	1556.6	6.03	6.47	0.42
127	259	132	5	4144	0.999627	787.96	0.504826	1796.86	2.36	0	9.22	1566.04	6.05	1571.23	6.07	5.18	0.33
127	260	133	6	4160	0.999467	789.86	0.505769	1794.7	3.38	-0.62	9.08	1580.51	6.08	1585.87	6.1	5.36	0.34
127	261	134	7	4176	0.999281	791.74	0.506705	1792.57	4.58	0	8.93	1596.04	6.12	1600.15	6.13	4.12	0.26
127	262	135	8	4192	0.999068	793.59	0.507634	1790.49	5.96	-0.62	8.8	1610.14	6.15	1614.47	6.16	4.33	0.27
127	263	136	9	4208	0.998829	795.42	0.508555	1788.43	7.52	0	8.66	1625.29	6.18	1628.42	6.19	3.13	0.19
127	264	137	10	4224	0.998565	797.22	0.50947	1786.41	9.25	-0.62	8.53	1639.03	6.21	1642.41	6.22	3.38	0.21
127	265	138	11	4240	0.998277	799.01	0.510377	1784.43	11.14	0	8.4	1653.82	6.24	1656.03	6.25	2.21	0.13
127	266	139	12	4256	0.997965	800.76	0.511278	1782.48	13.21	-0.61	8.27	1667.2	6.27	1669.7	6.28	2.5	0.15
127	267	140	13	4272	0.997629	802.5	0.512172	1780.56	15.45	0	8.15	1681.64	6.3	1683.01	6.3	1.36	0.08
127	268	141	14	4288	0.997271	804.21	0.51306	1778.67	17.85	-0.61	8.03	1694.68	6.32	1696.36	6.33	1.68	0.1
127	269	142	15	4304	0.996891	805.91	0.513941	1776.82	20.42	0	7.91	1708.77	6.35	1709.36	6.35	0.59	0.03
127	270	143	16	4320	0.996488	807.58	0.514815	1775	23.14	-0.61	7.8	1721.47	6.38	1722.41	6.38	0.94	0.05
127	271	144	17	4336	0.996065	809.22	0.515683	1773.21	26.03	0	7.68	1735.22	6.4	1735.09	6.4	-0.13	-0.01
127	272	145	18	4352	0.995621	810.85	0.516544	1771.44	29.08	-0.61	7.57	1747.59	6.42	1747.85	6.43	0.25	0.01
127	273	146	19	4368	0.995156	812.46	0.517399	1769.71	32.28	0	7.47	1761.02	6.45	1760.23	6.45	-0.78	-0.04
127	274	147	20	4384	0.994672	814.05	0.518248	1768.01	35.64	-0.6	7.36	1773.06	6.47	1772.69	6.47	-0.38	-0.02
127	275	148	21	4400	0.994169	815.61	0.519091	1766.34	39.15	0	7.26	1786.16	6.5	1784.78	6.49	-1.38	-0.08
127	276	149	22	4416	0.993646	817.16	0.519928	1764.69	42.81	-0.6	7.15	1797.9	6.51	1796.95	6.51	-0.95	-0.05
127	277	150	23	4432	0.993106	818.69	0.520758	1763.07	46.62	0	7.06	1810.68	6.54	1808.75	6.53	-1.92	-0.11
127	278	151	24	4448	0.992547	820.19	0.521583	1761.48	50.58	-0.6	6.96	1822.1	6.55	1820.64	6.55	-1.46	-0.08
127	279	152	25	4464	0.991971	821.68	0.522401	1759.92	54.69	0	6.86	1834.57	6.58	1832.16	6.57	-2.42	-0.13
127	280	153	26	4480	0.991378	823.15	0.523214	1758.39	58.94	-0.6	6.77	1845.7	6.59	1843.77	6.58	-1.93	-0.1
127	281	154	27	4496	0.990768	824.6	0.524021	1756.88	63.33	0	6.68	1857.87	6.61	1855.01	6.6	-2.86	-0.15
127	282	155	28	4512	0.990141	826.03	0.524823	1755.39	67.87	-0.6	6.59	1868.7	6.63	1866.35	6.62	-2.35	-0.13
127	283	156	29	4528	0.989499	827.45	0.525618	1753.93	72.55	0	6.5	1880.57	6.65	1877.32	6.63	-3.25	-0.17
127	284	157	30	4544	0.988841	828.85	0.526408	1752.5	77.37	-0.59	6.42	1891.11	6.66	1888.39	6.65	-2.72	-0.14
127	285	158	31	4560	0.988169	830.23	0.527193	1751.09	82.32	0	6.33	1902.69	6.68	1899.09	6.66	-3.6	-0.19
127	286	159	32	4576	0.987481	831.59	0.527972	1749.71	87.41	-0.59	6.25	1912.95	6.69	1909.9	6.68	-3.05	-0.16
127	287	160	33	4592	0.986779	832.93	0.528746	1748.35	92.64	0	6.17	1924.25	6.7	1920.34	6.69	-3.91	-0.2
127	288	161	34	4608	0.986063	834.26	0.529514	1747.01	98	-0.59	6.09	1934.23	6.72	1930.89	6.7	-3.34	-0.17
127	289	162	35	4624	0.985333	835.57	0.530277	1745.7	103.49	0	6.01	1945.25	6.73	1941.07	6.72	-4.18	-0.22
127	290	163	36	4640	0.98459	836.87	0.531034	1744.41	109.11	-0.59	5.94	1954.96	6.74	1951.37	6.73	-3.59	-0.18
127	291	164	37	4656	0.983833	838.14	0.531787	1743.14	114.86	0	5.86	1965.71	6.76	1961.3	6.74	-4.41	-0.22
127	292	165	38	4672	0.983064	839.41	0.532534	1741.89	120.74	-0.59	5.79	1975.16	6.76	1971.35	6.75	-3.81	-0.19
127	293	166	39	4688	0.982283	840.65	0.533276	1740.67	126.75	0	5.72	1985.65	6.78	1981.04	6.76	-4.61	-0.23
127	294	167	40	4704	0.981489	841.88	0.534014	1739.47	132.88	-0.58	5.65	1994.83	6.79	1990.85	6.77	-3.99	-0.2
127	295	168	41	4720	0.980684	843.1	0.534746	1738.29	139.14	0	5.58	2005.06	6.8	2000.29	6.78	-4.77	-0.24

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
127	296	169	42	4736	0.979867	844.3	0.535473	1737.13	145.51	-0.58	5.51	2013.99	6.8	2009.86	6.79	-4.13	-0.21
127	297	170	43	4752	0.979038	845.48	0.536195	1735.99	152.01	0	5.44	2023.96	6.81	2019.06	6.8	-4.9	-0.24
127	298	171	44	4768	0.978199	846.66	0.536913	1734.87	158.63	-0.58	5.38	2032.64	6.82	2028.39	6.81	-4.25	-0.21
127	299	172	45	4784	0.977349	847.81	0.537625	1733.77	165.37	0	5.31	2042.36	6.83	2037.36	6.81	-5	-0.25
127	300	173	46	4800	0.976489	848.95	0.538333	1732.69	172.23	-0.58	5.25	2050.8	6.84	2046.46	6.82	-4.34	-0.21
127	301	174	47	4816	0.975618	850.08	0.539037	1731.63	179.2	0	5.19	2060.27	6.84	2055.2	6.83	-5.08	-0.25
127	302	175	48	4832	0.974738	851.19	0.539735	1730.59	186.29	-0.58	5.13	2068.48	6.85	2064.08	6.83	-4.4	-0.21
127	303	176	49	4848	0.973848	852.29	0.540429	1729.57	193.5	0	5.07	2077.71	6.86	2072.59	6.84	-5.12	-0.25
127	304	177	50	4864	0.972948	853.38	0.541118	1728.57	200.82	-0.57	5.01	2085.68	6.86	2081.25	6.85	-4.43	-0.21
127	305	178	51	4880	0.97204	854.45	0.541803	1727.58	208.25	0	4.95	2094.68	6.87	2089.53	6.85	-5.14	-0.25
127	306	179	52	4896	0.971122	855.51	0.542484	1726.62	215.79	-0.57	4.9	2102.42	6.87	2097.97	6.86	-4.44	-0.21
127	307	180	53	4912	0.970196	856.55	0.54316	1725.67	223.44	0	4.84	2111.18	6.88	2106.04	6.86	-5.14	-0.24
127	308	181	54	4928	0.969261	857.58	0.543831	1724.74	231.2	-0.57	4.79	2118.7	6.88	2114.27	6.86	-4.43	-0.21
127	309	182	55	4944	0.968318	858.6	0.544498	1723.82	239.07	0	4.74	2127.24	6.88	2122.12	6.87	-5.12	-0.24
127	310	183	56	4960	0.967367	859.61	0.545161	1722.93	247.05	-0.57	4.68	2134.53	6.89	2130.14	6.87	-4.4	-0.21
127	311	184	57	4976	0.966409	860.6	0.54582	1722.05	255.13	0	4.63	2142.85	6.89	2137.78	6.87	-5.07	-0.24
127	312	185	58	4992	0.965442	861.58	0.546474	1721.19	263.31	-0.57	4.58	2149.93	6.89	2145.59	6.88	-4.34	-0.2
127	313	186	59	5008	0.964468	862.55	0.547125	1720.34	271.6	0	4.53	2158.03	6.89	2153.03	6.88	-5.01	-0.23
127	314	187	60	5024	0.963487	863.51	0.547771	1719.51	280	-0.56	4.48	2164.9	6.89	2160.63	6.88	-4.27	-0.2
127	315	188	61	5040	0.962499	864.46	0.548413	1718.7	288.49	0	4.43	2172.79	6.9	2167.86	6.88	-4.93	-0.23
127	316	189	62	5056	0.961505	865.39	0.549051	1717.9	297.09	-0.56	4.39	2179.45	6.9	2175.27	6.88	-4.18	-0.19
127	317	190	63	5072	0.960503	866.31	0.549685	1717.12	305.78	0	4.34	2187.13	6.9	2182.3	6.88	-4.83	-0.22
127	318	191	64	5088	0.959495	867.22	0.550314	1716.35	314.58	-0.56	4.29	2193.58	6.9	2189.51	6.89	-4.08	-0.19
127	319	192	65	5104	0.958481	868.12	0.55094	1715.6	323.47	0	4.25	2201.06	6.9	2196.35	6.89	-4.71	-0.21
127	320	193	66	5120	0.957461	869.01	0.551562	1714.86	332.46	-0.56	4.21	2207.32	6.9	2203.36	6.89	-3.96	-0.18
127	321	194	67	5136	0.956435	869.88	0.552181	1714.14	341.55	0	4.16	2214.59	6.9	2210	6.88	-4.59	-0.21
127	322	195	68	5152	0.955403	870.75	0.552795	1713.43	350.73	-0.56	4.12	2220.65	6.9	2216.83	6.88	-3.82	-0.17
127	323	196	69	5168	0.954366	871.6	0.553406	1712.74	360.01	0	4.08	2227.73	6.9	2223.28	6.88	-4.45	-0.2
127	324	197	70	5184	0.953323	872.45	0.554012	1712.06	369.38	-0.56	4.04	2233.59	6.89	2229.92	6.88	-3.68	-0.16
127	325	198	71	5200	0.952275	873.28	0.554615	1711.39	378.84	0	4	2240.48	6.89	2236.18	6.88	-4.29	-0.19
127	326	199	72	5216	0.951221	874.1	0.555215	1710.74	388.4	-0.55	3.95	2246.16	6.89	2242.64	6.88	-3.52	-0.16
127	327	200	73	5232	0.950163	874.91	0.55581	1710.11	398.05	0	3.92	2252.85	6.89	2248.72	6.88	-4.13	-0.18
127	328	201	74	5248	0.9491	875.72	0.556402	1709.48	407.78	-0.55	3.88	2258.34	6.89	2254.99	6.87	-3.35	-0.15
127	329	202	75	5264	0.948033	876.51	0.556991	1708.87	417.61	0	3.84	2264.85	6.88	2260.9	6.87	-3.95	-0.17
127	330	203	76	5280	0.946961	877.29	0.557576	1708.28	427.52	-0.55	3.8	2270.16	6.88	2266.99	6.87	-3.17	-0.14
127	331	204	77	5296	0.945884	878.06	0.558157	1707.69	437.53	0	3.76	2276.48	6.88	2272.71	6.87	-3.77	-0.17
127	332	205	78	5312	0.944803	878.82	0.558735	1707.12	447.62	-0.55	3.73	2281.62	6.87	2278.63	6.86	-2.98	-0.13
127	333	206	79	5328	0.943718	879.58	0.559309	1706.56	457.79	0	3.69	2287.76	6.87	2284.18	6.86	-3.58	-0.16
127	334	207	80	5344	0.94263	880.32	0.55988	1706.02	468.06	-0.55	3.66	2292.72	6.86	2289.93	6.86	-2.79	-0.12
127	335	208	81	5360	0.941537	881.05	0.560448	1705.48	478.4	0	3.62	2298.69	6.86	2295.31	6.85	-3.38	-0.15
127	336	209	82	5376	0.940441	881.78	0.561012	1704.96	488.83	-0.55	3.59	2303.47	6.86	2300.88	6.85	-2.59	-0.11
127	337	210	83	5392	0.939341	882.49	0.561573	1704.45	499.35	0	3.55	2309.26	6.85	2306.09	6.84	-3.17	-0.14
127	338	211	84	5408	0.938237	883.2	0.56213	1703.95	509.94	-0.54	3.52	2313.88	6.85	2311.5	6.84	-2.38	-0.1
127	339	212	85	5424	0.937131	883.9	0.562684	1703.47	520.62	0	3.49	2319.5	6.84	2316.54	6.83	-2.96	-0.13
127	340	213	86	5440	0.936021	884.59	0.563235	1702.99	531.38	-0.54	3.46	2323.96	6.84	2321.79	6.83	-2.17	-0.09
127	341	214	87	5456	0.934908	885.27	0.563783	1702.53	542.22	0	3.42	2329.41	6.83	2326.67	6.82	-2.75	-0.12

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
127	342	215	88	5472	0.933792	885.94	0.564327	1702.08	553.14	-0.54	3.39	2333.7	6.82	2331.75	6.82	-1.95	-0.08
127	343	216	89	5488	0.932673	886.6	0.564869	1701.64	564.14	0	3.36	2338.99	6.82	2336.47	6.81	-2.52	-0.11
127	344	217	90	5504	0.931551	887.25	0.565407	1701.21	575.21	-0.54	3.33	2343.12	6.81	2341.39	6.81	-1.73	-0.07
127	345	218	91	5520	0.930426	887.9	0.565942	1700.79	586.37	0	3.3	2348.25	6.81	2345.95	6.8	-2.3	-0.1
127	346	219	92	5536	0.929299	888.54	0.566474	1700.38	597.6	-0.54	3.27	2352.22	6.8	2350.72	6.79	-1.5	-0.06
127	347	220	93	5552	0.92817	889.16	0.567003	1699.98	608.9	0	3.24	2357.19	6.79	2355.12	6.79	-2.07	-0.09
127	348	221	94	5568	0.927038	889.79	0.567529	1699.6	620.29	-0.54	3.22	2361.01	6.78	2359.74	6.78	-1.28	-0.05
127	349	222	95	5584	0.925904	890.4	0.568052	1699.22	631.74	0	3.19	2365.82	6.78	2363.98	6.77	-1.84	-0.08
127	350	223	96	5600	0.924767	891	0.568571	1698.85	643.28	-0.53	3.16	2369.49	6.77	2368.44	6.77	-1.05	-0.04
127	351	224	97	5616	0.923629	891.6	0.569088	1698.5	654.88	0	3.13	2374.15	6.76	2372.54	6.76	-1.61	-0.07
127	352	225	98	5632	0.922488	892.19	0.569602	1698.15	666.56	-0.53	3.11	2377.67	6.75	2376.85	6.75	-0.82	-0.03
127	353	226	99	5648	0.921346	892.77	0.570113	1697.82	678.31	0	3.08	2382.18	6.75	2380.8	6.74	-1.38	-0.06
127	354	227	100	5664	0.920202	893.35	0.570621	1697.49	690.14	-0.53	3.05	2385.55	6.74	2384.96	6.74	-0.58	-0.02
127	355	228	101	5680	0.919056	893.91	0.571127	1697.17	702.03	0	3.03	2389.91	6.73	2388.76	6.73	-1.15	-0.05
127	356	229	102	5696	0.917908	894.47	0.571629	1696.87	713.99	-0.53	3	2393.14	6.72	2392.78	6.72	-0.35	-0.01
127	357	230	103	5712	0.916759	895.03	0.572129	1696.57	726.03	0	2.98	2397.35	6.72	2396.44	6.71	-0.92	-0.04
127	358	231	104	5728	0.915608	895.57	0.572626	1696.28	738.13	-0.53	2.95	2400.44	6.71	2400.32	6.7	-0.12	-0.01
127	359	232	105	5744	0.914456	896.11	0.57312	1696	750.31	0	2.93	2404.51	6.7	2403.83	6.7	-0.69	-0.03
127	360	233	106	5760	0.913302	896.64	0.573611	1695.73	762.55	-0.53	2.9	2407.46	6.69	2407.57	6.69	0.11	0
127	361	234	107	5776	0.912148	897.16	0.5741	1695.47	774.86	0	2.88	2411.39	6.68	2410.93	6.68	-0.46	-0.02
127	362	235	108	5792	0.910992	897.68	0.574586	1695.22	787.23	-0.53	2.86	2414.2	6.67	2414.53	6.67	0.34	0.01
127	363	236	109	5808	0.909835	898.19	0.575069	1694.97	799.68	0	2.83	2417.99	6.66	2417.77	6.66	-0.23	-0.01
127	364	237	110	5824	0.908676	898.69	0.575549	1694.74	812.19	-0.52	2.81	2420.67	6.65	2421.23	6.65	0.56	0.02
127	365	238	111	5840	0.907517	899.19	0.576027	1694.51	824.76	0	2.79	2424.32	6.64	2424.32	6.64	0	0
127	366	239	112	5856	0.906357	899.68	0.576503	1694.3	837.4	-0.52	2.77	2426.87	6.63	2427.65	6.63	0.79	0.03
127	367	240	113	5872	0.905196	900.16	0.576975	1694.09	850.1	0	2.74	2430.39	6.62	2430.61	6.62	0.22	0.01
127	368	241	114	5888	0.904035	900.64	0.577446	1693.88	862.87	-0.52	2.72	2432.8	6.61	2433.81	6.61	1.01	0.04
127	369	242	115	5904	0.902872	901.11	0.577913	1693.69	875.7	0	2.7	2436.19	6.6	2436.64	6.6	0.44	0.02
127	370	243	116	5920	0.901709	901.58	0.578378	1693.51	888.6	-0.52	2.68	2438.48	6.59	2439.7	6.59	1.22	0.05
127	371	244	117	5936	0.900546	902.04	0.578841	1693.33	901.55	0	2.66	2441.74	6.58	2442.4	6.58	0.66	0.03
127	372	245	118	5952	0.899381	902.49	0.579301	1693.16	914.57	-0.52	2.64	2443.9	6.57	2445.34	6.57	1.44	0.06
127	373	246	119	5968	0.898217	902.93	0.579759	1693	927.65	0	2.62	2447.03	6.56	2447.9	6.56	0.87	0.04
127	374	247	120	5984	0.897052	903.37	0.580214	1692.85	940.79	-0.52	2.6	2449.07	6.55	2450.71	6.55	1.65	0.07
127	375	248	121	6000	0.895886	903.81	0.580667	1692.7	953.99	0	2.58	2452.08	6.54	2453.16	6.54	1.08	0.04
127	376	249	122	6016	0.89472	904.23	0.581117	1692.56	967.26	-0.52	2.56	2453.99	6.53	2455.84	6.53	1.85	0.08
127	377	250	123	6032	0.893554	904.66	0.581565	1692.43	980.58	0	2.54	2456.87	6.52	2458.16	6.52	1.28	0.05
127	378	251	124	6048	0.892388	905.07	0.582011	1692.31	993.96	-0.51	2.52	2458.67	6.5	2460.72	6.51	2.05	0.08
127	379	252	125	6064	0.891222	905.48	0.582454	1692.19	1007.39	0	2.5	2461.43	6.49	2462.91	6.5	1.48	0.06
127	380	253	126	6080	0.890055	905.89	0.582895	1692.09	1020.89	-0.51	2.48	2463.11	6.48	2465.35	6.49	2.25	0.09
127	381	254	127	6096	0.888889	906.29	0.583333	1691.98	1034.44	0	2.47	2465.75	6.47	2467.42	6.48	1.67	0.07
127	382	255	128	6112	0.887722	906.68	0.58377	1691.89	1048.06	-0.51	2.45	2467.31	6.46	2469.74	6.47	2.44	0.1
127	383	256	129	6128	0.886556	907.07	0.584204	1691.8	1061.72	0	2.43	2469.83	6.45	2471.7	6.45	1.86	0.08
127	384	257	130	6144	0.88539	907.45	0.584635	1691.72	1075.45	-0.51	2.41	2471.28	6.44	2473.9	6.44	2.62	0.11
127	385	258	131	6160	0.884223	907.83	0.585065	1691.65	1089.23	0	2.4	2473.69	6.43	2475.73	6.43	2.04	0.08
127	386	259	132	6176	0.883057	908.2	0.585492	1691.58	1103.06	-0.51	2.38	2475.02	6.41	2477.82	6.42	2.8	0.11
127	387	260	133	6192	0.881891	908.57	0.585917	1691.52	1116.95	0	2.36	2477.32	6.4	2479.54	6.41	2.22	0.09

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
127	388	261	134	6208	0.880726	908.93	0.58634	1691.47	1130.9	-0.51	2.34	2478.54	6.39	2481.51	6.4	2.97	0.12
127	389	262	135	6224	0.879561	909.29	0.586761	1691.42	1144.9	0	2.33	2480.72	6.38	2483.11	6.38	2.38	0.1
127	390	263	136	6240	0.878396	909.64	0.587179	1691.38	1158.95	-0.51	2.31	2481.84	6.36	2484.97	6.37	3.13	0.13
127	391	264	137	6256	0.877231	909.98	0.587596	1691.35	1173.05	0	2.3	2483.91	6.35	2486.45	6.36	2.55	0.1
127	392	265	138	6272	0.876067	910.33	0.58801	1691.32	1187.21	-0.51	2.28	2484.92	6.34	2488.2	6.35	3.28	0.13
127	393	266	139	6288	0.874904	910.66	0.588422	1691.3	1201.42	0	2.26	2486.88	6.33	2489.58	6.33	2.7	0.11
127	394	267	140	6304	0.873741	910.99	0.588832	1691.28	1215.69	-0.5	2.25	2487.78	6.31	2491.21	6.32	3.43	0.14
127	395	268	141	6320	0.872578	911.32	0.589241	1691.27	1230	0	2.23	2489.64	6.3	2492.48	6.31	2.84	0.11
127	396	269	142	6336	0.871416	911.64	0.589646	1691.27	1244.37	-0.5	2.22	2490.43	6.29	2494.01	6.3	3.57	0.14
127	397	270	143	6352	0.870255	911.96	0.59005	1691.27	1258.79	0	2.2	2492.18	6.28	2495.17	6.29	2.98	0.12
127	398	271	144	6368	0.869094	912.27	0.590452	1691.28	1273.26	-0.5	2.19	2492.88	6.26	2496.58	6.27	3.71	0.15
127	399	272	145	6384	0.867934	912.58	0.590852	1691.3	1287.77	0	2.17	2494.52	6.25	2497.64	6.26	3.11	0.12
127	400	273	146	6400	0.866775	912.88	0.59125	1691.32	1302.34	-0.5	2.16	2495.12	6.24	2498.95	6.25	3.83	0.15
127	401	274	147	6416	0.865617	913.18	0.591646	1691.34	1316.96	0	2.14	2496.66	6.23	2499.89	6.23	3.23	0.13
127	402	275	148	6432	0.864459	913.48	0.59204	1691.38	1331.62	-0.5	2.13	2497.16	6.21	2501.1	6.22	3.95	0.16
127	403	276	149	6448	0.863302	913.76	0.592432	1691.41	1346.34	0	2.12	2498.6	6.2	2501.94	6.21	3.35	0.13
127	404	277	150	6464	0.862146	914.05	0.592822	1691.46	1361.1	-0.5	2.1	2498.99	6.19	2503.05	6.2	4.06	0.16
127	405	278	151	6480	0.860991	914.33	0.59321	1691.51	1375.91	0	2.09	2500.34	6.17	2503.79	6.18	3.45	0.14
127	406	279	152	6496	0.859836	914.61	0.593596	1691.56	1390.77	-0.5	2.08	2500.64	6.16	2504.79	6.17	4.15	0.17
127	407	280	153	6512	0.858683	914.88	0.59398	1691.62	1405.68	0	2.06	2501.88	6.15	2505.43	6.16	3.55	0.14
127	408	281	154	6528	0.857531	915.15	0.594363	1691.69	1420.63	-0.5	2.05	2502.09	6.13	2506.33	6.14	4.24	0.17
127	409	282	155	6544	0.856379	915.41	0.594743	1691.76	1435.63	0	2.04	2503.24	6.12	2506.87	6.13	3.63	0.14
127	410	283	156	6560	0.855229	915.67	0.595122	1691.83	1450.68	-0.49	2.02	2503.35	6.11	2507.67	6.12	4.33	0.17
127	411	284	157	6576	0.85408	915.93	0.595499	1691.91	1465.77	0	2.01	2504.4	6.09	2508.11	6.1	3.71	0.15
127	412	285	158	6592	0.852931	916.18	0.595874	1692	1480.91	-0.49	2	2504.42	6.08	2508.82	6.09	4.4	0.18
127	413	286	159	6608	0.851784	916.43	0.596247	1692.09	1496.09	0	1.99	2505.38	6.07	2509.16	6.08	3.78	0.15
127	414	287	160	6624	0.850638	916.67	0.596618	1692.18	1511.32	-0.49	1.97	2505.31	6.05	2509.77	6.06	4.46	0.18
127	415	288	161	6640	0.849493	916.91	0.596988	1692.29	1526.59	0	1.96	2506.18	6.04	2510.01	6.05	3.83	0.15
127	416	289	162	6656	0.84835	917.15	0.597356	1692.39	1541.9	-0.49	1.95	2506.01	6.02	2510.52	6.03	4.51	0.18
127	417	290	163	6672	0.847207	917.38	0.597722	1692.5	1557.26	0	1.94	2506.79	6.01	2510.67	6.02	3.88	0.15
127	418	291	164	6688	0.846066	917.61	0.598086	1692.62	1572.67	-0.49	1.92	2506.54	6	2511.09	6.01	4.55	0.18
127	419	292	165	6704	0.844926	917.83	0.598449	1692.74	1588.12	0	1.91	2507.23	5.98	2511.15	5.99	3.92	0.16
127	420	293	166	6720	0.843787	918.05	0.59881	1692.86	1603.61	-0.49	1.9	2506.89	5.97	2511.47	5.98	4.58	0.18
127	421	294	167	6736	0.842649	918.27	0.599169	1692.99	1619.14	0	1.89	2507.49	5.96	2511.44	5.97	3.95	0.16
127	422	295	168	6752	0.841513	918.48	0.599526	1693.13	1634.71	-0.49	1.88	2507.07	5.94	2511.67	5.95	4.6	0.18
127	423	296	169	6768	0.840378	918.69	0.599882	1693.27	1650.33	0	1.87	2507.58	5.93	2511.54	5.94	3.96	0.16
127	424	297	170	6784	0.839244	918.9	0.600236	1693.41	1665.99	-0.49	1.86	2507.07	5.91	2511.69	5.92	4.62	0.18
127	425	298	171	6800	0.838112	919.1	0.600588	1693.56	1681.69	0	1.85	2507.5	5.9	2511.47	5.91	3.97	0.16
127	426	299	172	6816	0.836981	919.3	0.600939	1693.71	1697.43	-0.48	1.83	2506.91	5.88	2511.52	5.9	4.62	0.18
127	427	300	173	6832	0.835852	919.5	0.601288	1693.87	1713.22	0	1.82	2507.25	5.87	2511.21	5.88	3.97	0.16
127	428	301	174	6848	0.834724	919.69	0.601636	1694.03	1729.04	-0.48	1.81	2506.57	5.86	2511.18	5.87	4.61	0.18
127	429	302	175	6864	0.833597	919.88	0.601981	1694.19	1744.9	0	1.8	2506.83	5.84	2510.78	5.85	3.95	0.16
127	430	303	176	6880	0.832472	920.06	0.602326	1694.36	1760.81	-0.48	1.79	2506.08	5.83	2510.66	5.84	4.59	0.18
127	431	304	177	6896	0.831348	920.24	0.602668	1694.54	1776.75	0	1.78	2506.25	5.81	2510.18	5.82	3.93	0.16
127	432	305	178	6912	0.830225	920.42	0.603009	1694.72	1792.73	-0.48	1.77	2505.42	5.8	2509.97	5.81	4.55	0.18
127	433	306	179	6928	0.829105	920.6	0.603349	1694.9	1808.76	0	1.76	2505.51	5.79	2509.4	5.8	3.89	0.16

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
127	434	307	180	6944	0.827985	920.77	0.603687	1695.08	1824.82	-0.48	1.75	2504.6	5.77	2509.11	5.78	4.51	0.18
127	435	308	181	6960	0.826867	920.94	0.604023	1695.27	1840.92	0	1.74	2504.61	5.76	2508.45	5.77	3.84	0.15
127	436	309	182	6976	0.825751	921.1	0.604358	1695.47	1857.06	-0.48	1.73	2503.62	5.74	2508.08	5.75	4.46	0.18
127	437	310	183	6992	0.824636	921.27	0.604691	1695.67	1873.23	0	1.72	2503.56	5.73	2507.34	5.74	3.78	0.15
127	438	311	184	7008	0.823523	921.43	0.605023	1695.87	1889.45	-0.48	1.71	2502.49	5.71	2506.88	5.72	4.39	0.18
127	439	312	185	7024	0.822412	921.58	0.605353	1696.08	1905.7	0	1.7	2502.35	5.7	2506.06	5.71	3.72	0.15
127	440	313	186	7040	0.821302	921.74	0.605682	1696.29	1921.99	-0.48	1.69	2501.21	5.68	2505.52	5.69	4.32	0.17
127	441	314	187	7056	0.820193	921.89	0.606009	1696.5	1938.32	0	1.68	2500.98	5.67	2504.62	5.68	3.63	0.15
127	442	315	188	7072	0.819086	922.03	0.606335	1696.72	1954.68	-0.48	1.68	2499.77	5.66	2504	5.67	4.23	0.17
127	443	316	189	7088	0.817981	922.18	0.606659	1696.94	1971.08	0	1.67	2499.47	5.64	2503.01	5.65	3.54	0.14
127	444	317	190	7104	0.816878	922.32	0.606982	1697.16	1987.52	-0.47	1.66	2498.18	5.63	2502.31	5.64	4.13	0.16
127	445	318	191	7120	0.815776	922.46	0.607303	1697.39	2003.99	0	1.65	2497.81	5.61	2501.24	5.62	3.44	0.14
127	446	319	192	7136	0.814676	922.59	0.607623	1697.63	2020.5	-0.47	1.64	2496.45	5.6	2500.47	5.61	4.02	0.16
127	447	320	193	7152	0.813577	922.72	0.607942	1697.86	2037.04	0	1.63	2496	5.58	2499.32	5.59	3.32	0.13
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
128	255	127	-1	4080	0.999985	780.11	0.49902	1834.43	0.1	0	9.84	1475.2	5.79	1484.42	5.82	9.22	0.62
128	256	128	0	4096	1	782.16	0.5	1832.03	0	0.62	10	1492.44	5.83	1500.97	5.86	8.53	0.57
128	257	129	1	4112	0.999985	784.18	0.500973	1829.66	0.09	0	9.84	1507.9	5.87	1515.47	5.9	7.57	0.5
128	258	130	2	4128	0.99994	786.18	0.501938	1827.33	0.38	0.62	9.68	1524.41	5.91	1531.66	5.94	7.25	0.47
128	259	131	3	4144	0.999866	788.15	0.502896	1825.05	0.85	0	9.53	1539.48	5.94	1545.82	5.97	6.34	0.41
128	260	132	4	4160	0.999763	790.1	0.503846	1822.8	1.5	0.62	9.37	1555.59	5.98	1561.65	6.01	6.06	0.39
128	261	133	5	4176	0.999633	792.02	0.504789	1820.59	2.34	0	9.23	1570.28	6.02	1575.47	6.04	5.19	0.33
128	262	134	6	4192	0.999476	793.92	0.505725	1818.42	3.35	0.62	9.08	1586.02	6.05	1590.96	6.07	4.95	0.31
128	263	135	7	4208	0.999292	795.79	0.506654	1816.28	4.55	0	8.94	1600.33	6.08	1604.46	6.1	4.13	0.26
128	264	136	8	4224	0.999082	797.64	0.507576	1814.18	5.92	0.62	8.8	1615.69	6.12	1619.61	6.13	3.92	0.24
128	265	137	9	4240	0.998847	799.46	0.508491	1812.11	7.46	0	8.67	1629.64	6.15	1632.78	6.16	3.14	0.19
128	266	138	10	4256	0.998587	801.26	0.509398	1810.08	9.18	0.61	8.54	1644.64	6.18	1647.6	6.19	2.97	0.18
128	267	139	11	4272	0.998303	803.04	0.5103	1808.08	11.06	0	8.41	1658.23	6.21	1660.45	6.22	2.23	0.13
128	268	140	12	4288	0.997995	804.8	0.511194	1806.12	13.12	0.61	8.29	1672.87	6.24	1674.96	6.25	2.09	0.12
128	269	141	13	4304	0.997664	806.53	0.512082	1804.18	15.33	0	8.16	1686.11	6.27	1687.5	6.27	1.38	0.08
128	270	142	14	4320	0.997311	808.24	0.512963	1802.28	17.72	0.61	8.04	1700.4	6.3	1701.68	6.3	1.28	0.08
128	271	143	15	4336	0.996936	809.93	0.513838	1800.42	20.27	0	7.93	1713.31	6.32	1713.92	6.32	0.61	0.04
128	272	144	16	4352	0.99654	811.6	0.514706	1798.58	22.97	0.61	7.81	1727.26	6.35	1727.79	6.35	0.53	0.03
128	273	145	17	4368	0.996122	813.25	0.515568	1796.78	25.84	0	7.7	1739.83	6.37	1739.73	6.37	-0.11	-0.01
128	274	146	18	4384	0.995684	814.87	0.516423	1795	28.87	0.6	7.59	1753.45	6.4	1753.3	6.4	-0.15	-0.01
128	275	147	19	4400	0.995226	816.48	0.517273	1793.26	32.04	0	7.48	1765.7	6.42	1764.94	6.42	-0.76	-0.04
128	276	148	20	4416	0.994749	818.07	0.518116	1791.54	35.38	0.6	7.38	1778.99	6.45	1778.21	6.44	-0.78	-0.04
128	277	149	21	4432	0.994252	819.63	0.518953	1789.85	38.86	0	7.27	1790.92	6.47	1789.57	6.46	-1.36	-0.08
128	278	150	22	4448	0.993737	821.18	0.519784	1788.19	42.5	0.6	7.17	1803.9	6.49	1802.55	6.48	-1.35	-0.07
128	279	151	23	4464	0.993204	822.7	0.520609	1786.56	46.29	0	7.07	1815.52	6.51	1813.62	6.5	-1.9	-0.1
128	280	152	24	4480	0.992653	824.21	0.521429	1784.96	50.22	0.6	6.98	1828.18	6.53	1826.32	6.52	-1.87	-0.1
128	281	153	25	4496	0.992085	825.7	0.522242	1783.39	54.3	0	6.88	1839.5	6.55	1837.11	6.54	-2.39	-0.13
128	282	154	26	4512	0.991499	827.17	0.52305	1781.84	58.52	0.6	6.79	1851.86	6.57	1849.53	6.56	-2.33	-0.13
128	283	155	27	4528	0.990898	828.62	0.523852	1780.31	62.89	0	6.7	1862.88	6.58	1860.05	6.57	-2.83	-0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
128	284	156	28	4544	0.99028	830.05	0.524648	1778.82	67.4	0.59	6.61	1874.94	6.6	1872.19	6.59	-2.75	-0.15
128	285	157	29	4560	0.989646	831.47	0.525439	1777.34	72.04	0	6.52	1885.67	6.62	1882.45	6.61	-3.22	-0.17
128	286	158	30	4576	0.988997	832.86	0.526224	1775.9	76.83	0.59	6.44	1897.44	6.63	1894.32	6.62	-3.12	-0.16
128	287	159	31	4592	0.988333	834.24	0.527003	1774.48	81.75	0	6.35	1907.88	6.65	1904.31	6.64	-3.57	-0.19
128	288	160	32	4608	0.987654	835.61	0.527778	1773.08	86.81	0.59	6.27	1919.37	6.66	1915.91	6.65	-3.45	-0.18
128	289	161	33	4624	0.986961	836.95	0.528547	1771.71	92	0	6.19	1929.53	6.68	1925.66	6.66	-3.87	-0.2
128	290	162	34	4640	0.986254	838.28	0.52931	1770.36	97.33	0.59	6.11	1940.74	6.69	1937	6.68	-3.74	-0.19
128	291	163	35	4656	0.985534	839.59	0.530069	1769.03	102.78	0	6.03	1950.63	6.7	1946.49	6.69	-4.14	-0.21
128	292	164	36	4672	0.9848	840.89	0.530822	1767.73	108.37	0.59	5.96	1961.56	6.72	1957.57	6.7	-3.99	-0.2
128	293	165	37	4688	0.984053	842.17	0.53157	1766.45	114.08	0	5.88	1971.19	6.73	1966.82	6.71	-4.37	-0.22
128	294	166	38	4704	0.983294	843.43	0.532313	1765.19	119.92	0.58	5.81	1981.85	6.74	1977.65	6.73	-4.2	-0.21
128	295	167	39	4720	0.982522	844.68	0.533051	1763.95	125.89	0	5.74	1991.22	6.75	1986.65	6.73	-4.56	-0.23
128	296	168	40	4736	0.981738	845.91	0.533784	1762.73	131.99	0.58	5.67	2001.62	6.76	1997.24	6.75	-4.38	-0.22
128	297	169	41	4752	0.980943	847.13	0.534512	1761.54	138.2	0	5.6	2010.73	6.77	2006	6.75	-4.72	-0.24
128	298	170	42	4768	0.980136	848.33	0.535235	1760.37	144.54	0.58	5.53	2020.87	6.78	2016.35	6.77	-4.52	-0.22
128	299	171	43	4784	0.979318	849.52	0.535953	1759.22	151	0	5.47	2029.73	6.79	2024.88	6.77	-4.85	-0.24
128	300	172	44	4800	0.978489	850.69	0.536667	1758.08	157.58	0.58	5.4	2039.62	6.8	2034.98	6.78	-4.64	-0.23
128	301	173	45	4816	0.977649	851.85	0.537375	1756.97	164.28	0	5.34	2048.24	6.8	2043.29	6.79	-4.95	-0.24
128	302	174	46	4832	0.976799	852.99	0.538079	1755.88	171.09	0.58	5.27	2057.88	6.81	2053.16	6.8	-4.72	-0.23
128	303	175	47	4848	0.975939	854.12	0.538779	1754.81	178.03	0	5.21	2066.26	6.82	2061.24	6.8	-5.02	-0.24
128	304	176	48	4864	0.975069	855.24	0.539474	1753.75	185.07	0.57	5.15	2075.66	6.83	2070.88	6.81	-4.78	-0.23
128	305	177	49	4880	0.97419	856.34	0.540164	1752.72	192.23	0	5.09	2083.8	6.83	2078.74	6.82	-5.06	-0.24
128	306	178	50	4896	0.973301	857.43	0.54085	1751.71	199.51	0.57	5.03	2092.97	6.84	2088.15	6.82	-4.81	-0.23
128	307	179	51	4912	0.972403	858.5	0.541531	1750.71	206.9	0	4.98	2100.87	6.84	2095.79	6.83	-5.08	-0.24
128	308	180	52	4928	0.971496	859.56	0.542208	1749.73	214.39	0.57	4.92	2109.81	6.85	2104.99	6.83	-4.82	-0.23
128	309	181	53	4944	0.970581	860.61	0.54288	1748.77	222	0	4.87	2117.49	6.85	2112.41	6.84	-5.08	-0.24
128	310	182	54	4960	0.969657	861.64	0.543548	1747.83	229.71	0.57	4.81	2126.2	6.86	2121.39	6.84	-4.81	-0.23
128	311	183	55	4976	0.968724	862.67	0.544212	1746.9	237.54	0	4.76	2133.65	6.86	2128.61	6.84	-5.05	-0.24
128	312	184	56	4992	0.967784	863.67	0.544872	1745.99	245.47	0.57	4.71	2142.14	6.87	2137.37	6.85	-4.77	-0.22
128	313	185	57	5008	0.966836	864.67	0.545527	1745.1	253.5	0	4.65	2149.38	6.87	2144.38	6.85	-5	-0.23
128	314	186	58	5024	0.965881	865.66	0.546178	1744.23	261.64	0.56	4.6	2157.64	6.87	2152.93	6.86	-4.71	-0.22
128	315	187	59	5040	0.964918	866.63	0.546825	1743.37	269.88	0	4.55	2164.67	6.87	2159.74	6.86	-4.93	-0.23
128	316	188	60	5056	0.963948	867.59	0.547468	1742.53	278.23	0.56	4.5	2172.72	6.88	2168.09	6.86	-4.64	-0.21
128	317	189	61	5072	0.962971	868.54	0.548107	1741.7	286.68	0	4.46	2179.54	6.88	2174.69	6.86	-4.85	-0.22
128	318	190	62	5088	0.961987	869.47	0.548742	1740.89	295.23	0.56	4.41	2187.38	6.88	2182.84	6.86	-4.54	-0.21
128	319	191	63	5104	0.960997	870.4	0.549373	1740.1	303.87	0	4.36	2193.99	6.88	2189.25	6.86	-4.75	-0.22
128	320	192	64	5120	0.96	871.31	0.55	1739.32	312.62	0.56	4.32	2201.63	6.88	2197.19	6.87	-4.43	-0.2
128	321	193	65	5136	0.958997	872.21	0.550623	1738.56	321.46	0	4.27	2208.04	6.88	2203.41	6.86	-4.63	-0.21
128	322	194	66	5152	0.957988	873.1	0.551242	1737.81	330.41	0.56	4.23	2215.47	6.88	2211.16	6.87	-4.31	-0.19
128	323	195	67	5168	0.956973	873.98	0.551858	1737.07	339.44	0	4.18	2221.69	6.88	2217.19	6.86	-4.49	-0.2
128	324	196	68	5184	0.955952	874.85	0.552469	1736.35	348.58	0.56	4.14	2228.92	6.88	2224.74	6.87	-4.17	-0.19
128	325	197	69	5200	0.954925	875.71	0.553077	1735.65	357.8	0	4.1	2234.94	6.88	2230.59	6.86	-4.35	-0.19
128	326	198	70	5216	0.953894	876.56	0.553681	1734.96	367.12	0.55	4.06	2241.97	6.88	2237.95	6.86	-4.02	-0.18
128	327	199	71	5232	0.952857	877.39	0.554281	1734.28	376.53	0	4.02	2247.8	6.87	2243.61	6.86	-4.19	-0.19
128	328	200	72	5248	0.951814	878.22	0.554878	1733.62	386.04	0.55	3.98	2254.65	6.87	2250.79	6.86	-3.86	-0.17
128	329	201	73	5264	0.950767	879.04	0.555471	1732.97	395.63	0	3.94	2260.29	6.87	2256.27	6.86	-4.02	-0.18

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128	330	202	74	5280	0.949715	879.84	0.556061	1732.34	405.32	0.55	3.9	2266.95	6.87	2263.27	6.86	-3.68	-0.16
128	331	203	75	5296	0.948659	880.64	0.556647	1731.72	415.09	0	3.86	2272.41	6.87	2268.57	6.85	-3.84	-0.17
128	332	204	76	5312	0.947598	881.42	0.557229	1731.11	424.96	0.55	3.82	2278.88	6.86	2275.38	6.85	-3.5	-0.15
128	333	205	77	5328	0.946532	882.2	0.557808	1730.52	434.91	0	3.79	2284.16	6.86	2280.51	6.85	-3.65	-0.16
128	334	206	78	5344	0.945462	882.97	0.558383	1729.93	444.95	0.55	3.75	2290.45	6.86	2287.15	6.85	-3.31	-0.14
128	335	207	79	5360	0.944389	883.72	0.558955	1729.36	455.07	0	3.71	2295.56	6.85	2292.11	6.84	-3.45	-0.15
128	336	208	80	5376	0.943311	884.47	0.559524	1728.81	465.28	0.55	3.68	2301.67	6.85	2298.57	6.84	-3.11	-0.14
128	337	209	81	5392	0.942229	885.21	0.560089	1728.26	475.57	0	3.64	2306.6	6.84	2303.36	6.83	-3.25	-0.14
128	338	210	82	5408	0.941144	885.94	0.560651	1727.73	485.95	0.54	3.61	2312.54	6.84	2309.64	6.83	-2.9	-0.13
128	339	211	83	5424	0.940054	886.65	0.561209	1727.21	496.41	0	3.58	2317.3	6.84	2314.27	6.83	-3.04	-0.13
128	340	212	84	5440	0.938962	887.37	0.561765	1726.7	506.95	0.54	3.54	2323.07	6.83	2320.38	6.82	-2.68	-0.12
128	341	213	85	5456	0.937866	888.07	0.562317	1726.21	517.58	0	3.51	2327.66	6.83	2324.84	6.82	-2.82	-0.12
128	342	214	86	5472	0.936767	888.76	0.562865	1725.72	528.28	0.54	3.48	2333.26	6.82	2330.79	6.82	-2.46	-0.11
128	343	215	87	5488	0.935665	889.44	0.563411	1725.25	539.07	0	3.45	2337.69	6.82	2335.09	6.81	-2.59	-0.11
128	344	216	88	5504	0.934559	890.12	0.563953	1724.79	549.93	0.54	3.41	2343.12	6.81	2340.88	6.8	-2.24	-0.1
128	345	217	89	5520	0.933451	890.78	0.564493	1724.34	560.88	0	3.38	2347.39	6.8	2345.02	6.8	-2.37	-0.1
128	346	218	90	5536	0.93234	891.44	0.565029	1723.9	571.9	0.54	3.35	2352.66	6.8	2350.65	6.79	-2.01	-0.09
128	347	219	91	5552	0.931226	892.09	0.565562	1723.47	583	0	3.32	2356.77	6.79	2354.63	6.79	-2.13	-0.09
128	348	220	92	5568	0.93011	892.73	0.566092	1723.05	594.17	0.54	3.29	2361.87	6.79	2360.1	6.78	-1.78	-0.08
128	349	221	93	5584	0.928991	893.37	0.566619	1722.64	605.43	0	3.27	2365.83	6.78	2363.93	6.77	-1.9	-0.08
128	350	222	94	5600	0.927869	893.99	0.567143	1722.25	616.75	0.53	3.24	2370.78	6.77	2369.24	6.77	-1.54	-0.07
128	351	223	95	5616	0.926746	894.61	0.567664	1721.86	628.16	0	3.21	2374.58	6.77	2372.92	6.76	-1.66	-0.07
128	352	224	96	5632	0.92562	895.22	0.568182	1721.48	639.63	0.53	3.18	2379.38	6.76	2378.07	6.76	-1.3	-0.05
128	353	225	97	5648	0.924492	895.82	0.568697	1721.12	651.18	0	3.15	2383.03	6.75	2381.61	6.75	-1.42	-0.06
128	354	226	98	5664	0.923362	896.41	0.569209	1720.76	662.81	0.53	3.13	2387.67	6.74	2386.61	6.74	-1.07	-0.04
128	355	227	99	5680	0.92223	897	0.569718	1720.42	674.5	0	3.1	2391.18	6.74	2389.99	6.73	-1.18	-0.05
128	356	228	100	5696	0.921096	897.58	0.570225	1720.08	686.27	0.53	3.07	2395.67	6.73	2394.85	6.73	-0.83	-0.03
128	357	229	101	5712	0.91996	898.15	0.570728	1719.76	698.11	0	3.05	2399.03	6.72	2398.09	6.72	-0.94	-0.04
128	358	230	102	5728	0.918823	898.72	0.571229	1719.44	710.02	0.53	3.02	2403.38	6.71	2402.79	6.71	-0.59	-0.02
128	359	231	103	5744	0.917684	899.27	0.571727	1719.13	722	0	3	2406.6	6.7	2405.89	6.7	-0.7	-0.03
128	360	232	104	5760	0.916543	899.82	0.572222	1718.84	734.04	0.53	2.97	2410.8	6.7	2410.45	6.7	-0.35	-0.01
128	361	233	105	5776	0.915401	900.36	0.572715	1718.55	746.16	0	2.95	2413.87	6.69	2413.41	6.69	-0.46	-0.02
128	362	234	106	5792	0.914258	900.9	0.573204	1718.27	758.35	0.53	2.92	2417.93	6.68	2417.83	6.68	-0.11	0
128	363	235	107	5808	0.913113	901.43	0.573691	1718	770.6	0	2.9	2420.87	6.67	2420.65	6.67	-0.22	-0.01
128	364	236	108	5824	0.911967	901.95	0.574176	1717.74	782.92	0.52	2.88	2424.79	6.66	2424.92	6.66	0.13	0.01
128	365	237	109	5840	0.91082	902.46	0.574658	1717.49	795.31	0	2.85	2427.6	6.65	2427.61	6.65	0.01	0
128	366	238	110	5856	0.909672	902.97	0.575137	1717.24	807.76	0.52	2.83	2431.38	6.64	2431.75	6.64	0.37	0.02
128	367	239	111	5872	0.908523	903.47	0.575613	1717.01	820.28	0	2.81	2434.05	6.63	2434.3	6.63	0.25	0.01
128	368	240	112	5888	0.907372	903.97	0.576087	1716.78	832.86	0.52	2.79	2437.7	6.62	2438.3	6.63	0.6	0.02
128	369	241	113	5904	0.906221	904.45	0.576558	1716.56	845.51	0	2.76	2440.24	6.61	2440.72	6.61	0.48	0.02
128	370	242	114	5920	0.905069	904.94	0.577027	1716.35	858.22	0.52	2.74	2443.75	6.6	2444.58	6.61	0.83	0.03
128	371	243	115	5936	0.903917	905.41	0.577493	1716.15	871	0	2.72	2446.16	6.59	2446.87	6.6	0.71	0.03
128	372	244	116	5952	0.902763	905.88	0.577957	1715.96	883.83	0.52	2.7	2449.54	6.58	2450.6	6.59	1.06	0.04
128	373	245	117	5968	0.901609	906.34	0.578418	1715.77	896.73	0	2.68	2451.83	6.57	2452.77	6.58	0.94	0.04
128	374	246	118	5984	0.900455	906.8	0.578877	1715.6	909.69	0.52	2.66	2455.08	6.56	2456.36	6.57	1.28	0.05
128	375	247	119	6000	0.8993	907.25	0.579333	1715.43	922.72	0	2.64	2457.24	6.55	2458.4	6.56	1.16	0.05

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
128	376	248	120	6016	0.898144	907.69	0.579787	1715.27	935.8	0.52	2.62	2460.37	6.54	2461.87	6.55	1.5	0.06
128	377	249	121	6032	0.896988	908.13	0.580239	1715.11	948.95	0	2.6	2462.4	6.53	2463.78	6.54	1.38	0.06
128	378	250	122	6048	0.895832	908.56	0.580688	1714.97	962.15	0.51	2.58	2465.41	6.52	2467.13	6.53	1.72	0.07
128	379	251	123	6064	0.894675	908.99	0.581135	1714.83	975.42	0	2.56	2467.32	6.51	2468.92	6.51	1.59	0.06
128	380	252	124	6080	0.893518	909.41	0.581579	1714.7	988.74	0.51	2.54	2470.2	6.5	2472.13	6.51	1.93	0.08
128	381	253	125	6096	0.892361	909.83	0.582021	1714.57	1002.12	0	2.52	2472	6.49	2473.8	6.49	1.8	0.07
128	382	254	126	6112	0.891204	910.24	0.582461	1714.46	1015.56	0.51	2.5	2474.76	6.48	2476.89	6.48	2.13	0.09
128	383	255	127	6128	0.890046	910.64	0.582898	1714.35	1029.06	0	2.48	2476.44	6.47	2478.44	6.47	2.01	0.08
128	384	256	128	6144	0.888889	911.04	0.583333	1714.25	1042.61	0.51	2.47	2479.08	6.46	2481.41	6.46	2.34	0.09
128	385	257	129	6160	0.887731	911.43	0.583766	1714.15	1056.22	0	2.45	2480.64	6.44	2482.85	6.45	2.2	0.09
128	386	258	130	6176	0.886574	911.82	0.584197	1714.06	1069.89	0.51	2.43	2483.17	6.43	2485.7	6.44	2.53	0.1
128	387	259	131	6192	0.885417	912.2	0.584625	1713.98	1083.61	0	2.41	2484.62	6.42	2487.01	6.43	2.4	0.1
128	388	260	132	6208	0.88426	912.58	0.585052	1713.91	1097.39	0.51	2.4	2487.03	6.41	2489.74	6.42	2.72	0.11
128	389	261	133	6224	0.883103	912.95	0.585476	1713.84	1111.22	0	2.38	2488.36	6.4	2490.95	6.4	2.58	0.1
128	390	262	134	6240	0.881946	913.31	0.585897	1713.78	1125.11	0.51	2.36	2490.66	6.39	2493.56	6.39	2.9	0.12
128	391	263	135	6256	0.88079	913.68	0.586317	1713.73	1139.06	0	2.35	2491.89	6.37	2494.65	6.38	2.76	0.11
128	392	264	136	6272	0.879633	914.03	0.586735	1713.68	1153.05	0.51	2.33	2494.07	6.36	2497.15	6.37	3.08	0.12
128	393	265	137	6288	0.878478	914.38	0.58715	1713.64	1167.1	0	2.31	2495.19	6.35	2498.13	6.36	2.93	0.12
128	394	266	138	6304	0.877322	914.73	0.587563	1713.6	1181.2	0.5	2.3	2497.27	6.34	2500.51	6.35	3.24	0.13
128	395	267	139	6320	0.876167	915.07	0.587975	1713.58	1195.36	0	2.28	2498.28	6.32	2501.38	6.33	3.1	0.12
128	396	268	140	6336	0.875013	915.4	0.588384	1713.55	1209.56	0.5	2.27	2500.25	6.31	2503.65	6.32	3.41	0.14
128	397	269	141	6352	0.873859	915.74	0.588791	1713.54	1223.82	0	2.25	2501.15	6.3	2504.41	6.31	3.26	0.13
128	398	270	142	6368	0.872705	916.06	0.589196	1713.53	1238.13	0.5	2.23	2503.01	6.29	2506.57	6.3	3.56	0.14
128	399	271	143	6384	0.871552	916.38	0.589599	1713.52	1252.49	0	2.22	2503.82	6.28	2507.23	6.28	3.41	0.14
128	400	272	144	6400	0.8704	916.7	0.59	1713.53	1266.9	0.5	2.2	2505.57	6.26	2509.28	6.27	3.7	0.15
128	401	273	145	6416	0.869248	917.01	0.590399	1713.53	1281.37	0	2.19	2506.28	6.25	2509.83	6.26	3.55	0.14
128	402	274	146	6432	0.868097	917.32	0.590796	1713.55	1295.88	0.5	2.18	2507.93	6.24	2511.77	6.25	3.84	0.15
128	403	275	147	6448	0.866947	917.62	0.591191	1713.57	1310.44	0	2.16	2508.53	6.22	2512.22	6.23	3.69	0.15
128	404	276	148	6464	0.865797	917.92	0.591584	1713.59	1325.05	0.5	2.15	2510.08	6.21	2514.05	6.22	3.97	0.16
128	405	277	149	6480	0.864649	918.22	0.591975	1713.63	1339.71	0	2.13	2510.58	6.2	2514.4	6.21	3.81	0.15
128	406	278	150	6496	0.863501	918.51	0.592365	1713.66	1354.41	0.5	2.12	2512.03	6.19	2516.13	6.2	4.09	0.16
128	407	279	151	6512	0.862354	918.79	0.592752	1713.71	1369.17	0	2.11	2512.44	6.17	2516.37	6.18	3.93	0.16
128	408	280	152	6528	0.861207	919.07	0.593137	1713.75	1383.97	0.5	2.09	2513.79	6.16	2518	6.17	4.21	0.17
128	409	281	153	6544	0.860062	919.35	0.593521	1713.81	1398.82	0	2.08	2514.1	6.15	2518.14	6.16	4.04	0.16
128	410	282	154	6560	0.858917	919.62	0.593902	1713.87	1413.72	0.49	2.06	2515.35	6.14	2519.66	6.15	4.31	0.17
128	411	283	155	6576	0.857774	919.89	0.594282	1713.93	1428.66	0	2.05	2515.57	6.12	2519.71	6.13	4.14	0.16
128	412	284	156	6592	0.856631	920.15	0.59466	1714	1443.65	0.49	2.04	2516.73	6.11	2521.13	6.12	4.4	0.17
128	413	285	157	6608	0.85549	920.41	0.595036	1714.07	1458.69	0	2.03	2516.85	6.09	2521.08	6.1	4.23	0.17
128	414	286	158	6624	0.854349	920.67	0.595411	1714.15	1473.77	0.49	2.01	2517.91	6.08	2522.4	6.09	4.49	0.18
128	415	287	159	6640	0.853209	920.92	0.595783	1714.24	1488.9	0	2	2517.94	6.07	2522.25	6.08	4.31	0.17
128	416	288	160	6656	0.852071	921.17	0.596154	1714.33	1504.07	0.49	1.99	2518.91	6.06	2523.48	6.07	4.57	0.18
128	417	289	161	6672	0.850934	921.41	0.596523	1714.42	1519.28	0	1.98	2518.85	6.04	2523.23	6.05	4.38	0.17
128	418	290	162	6688	0.849797	921.65	0.59689	1714.52	1534.54	0.49	1.96	2519.73	6.03	2524.36	6.04	4.63	0.18
128	419	291	163	6704	0.848662	921.89	0.597255	1714.63	1549.85	0	1.95	2519.58	6.01	2524.02	6.02	4.44	0.18
128	420	292	164	6720	0.847528	922.12	0.597619	1714.74	1565.2	0.49	1.94	2520.37	6	2525.06	6.01	4.69	0.19
128	421	293	165	6736	0.846396	922.35	0.597981	1714.85	1580.59	0	1.93	2520.13	5.99	2524.63	6	4.49	0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
128	422	294	166	6752	0.845264	922.58	0.598341	1714.97	1596.02	0.49	1.92	2520.83	5.97	2525.56	5.98	4.73	0.19
128	423	295	167	6768	0.844134	922.8	0.5987	1715.1	1611.5	0	1.9	2520.51	5.96	2525.04	5.97	4.54	0.18
128	424	296	168	6784	0.843005	923.02	0.599057	1715.23	1627.02	0.49	1.89	2521.11	5.95	2525.89	5.96	4.77	0.19
128	425	297	169	6800	0.841877	923.23	0.599412	1715.36	1642.58	0	1.88	2520.71	5.93	2525.28	5.94	4.57	0.18
128	426	298	170	6816	0.84075	923.44	0.599765	1715.5	1658.19	0.48	1.87	2521.23	5.92	2526.03	5.93	4.8	0.19
128	427	299	171	6832	0.839625	923.65	0.600117	1715.64	1673.83	0	1.86	2520.74	5.9	2525.33	5.91	4.59	0.18
128	428	300	172	6848	0.838501	923.85	0.600467	1715.79	1689.52	0.48	1.85	2521.17	5.89	2525.99	5.9	4.81	0.19
128	429	301	173	6864	0.837379	924.05	0.600816	1715.94	1705.25	0	1.84	2520.6	5.88	2525.2	5.89	4.6	0.18
128	430	302	174	6880	0.836257	924.25	0.601163	1716.1	1721.02	0.48	1.83	2520.95	5.86	2525.77	5.87	4.82	0.19
128	431	303	175	6896	0.835138	924.44	0.601508	1716.26	1736.83	0	1.82	2520.3	5.85	2524.9	5.86	4.6	0.18
128	432	304	176	6912	0.834019	924.63	0.601852	1716.42	1752.67	0.48	1.81	2520.56	5.83	2525.38	5.85	4.81	0.19
128	433	305	177	6928	0.832902	924.81	0.602194	1716.59	1768.56	0	1.8	2519.83	5.82	2524.42	5.83	4.59	0.18
128	434	306	178	6944	0.831787	925	0.602535	1716.76	1784.49	0.48	1.79	2520.01	5.81	2524.81	5.82	4.8	0.19
128	435	307	179	6960	0.830672	925.18	0.602874	1716.94	1800.46	0	1.78	2519.2	5.79	2523.77	5.8	4.57	0.18
128	436	308	180	6976	0.82956	925.35	0.603211	1717.12	1816.47	0.48	1.77	2519.3	5.78	2524.07	5.79	4.77	0.19
128	437	309	181	6992	0.828449	925.53	0.603547	1717.31	1832.51	0	1.76	2518.41	5.76	2522.95	5.77	4.54	0.18
128	438	310	182	7008	0.827339	925.69	0.603881	1717.5	1848.6	0.48	1.75	2518.43	5.75	2523.17	5.76	4.73	0.19
128	439	311	183	7024	0.826231	925.86	0.604214	1717.69	1864.72	0	1.74	2517.46	5.73	2521.96	5.74	4.49	0.18
128	440	312	184	7040	0.825124	926.03	0.604545	1717.89	1880.88	0.48	1.73	2517.41	5.72	2522.09	5.73	4.68	0.19
128	441	313	185	7056	0.824019	926.19	0.604875	1718.09	1897.08	0	1.72	2516.36	5.71	2520.8	5.72	4.44	0.18
128	442	314	186	7072	0.822915	926.34	0.605204	1718.3	1913.31	0.48	1.71	2516.23	5.69	2520.85	5.7	4.62	0.18
128	443	315	187	7088	0.821813	926.5	0.60553	1718.51	1929.59	0	1.7	2515.11	5.68	2519.48	5.69	4.37	0.17
128	444	316	188	7104	0.820713	926.65	0.605856	1718.72	1945.9	0.47	1.69	2514.9	5.66	2519.45	5.67	4.55	0.18
128	445	317	189	7120	0.819614	926.8	0.60618	1718.94	1962.24	0	1.68	2513.7	5.65	2518	5.66	4.3	0.17
128	446	318	190	7136	0.818516	926.94	0.606502	1719.16	1978.63	0.47	1.67	2513.42	5.64	2517.89	5.65	4.47	0.18
128	447	319	191	7152	0.817421	927.08	0.606823	1719.38	1995.04	0	1.66	2512.15	5.62	2516.36	5.63	4.21	0.17
128	448	320	192	7168	0.816327	927.22	0.607143	1719.61	2011.5	0.47	1.65	2511.79	5.61	2516.16	5.62	4.37	0.17
128	449	321	193	7184	0.815234	927.36	0.607461	1719.84	2027.99	0	1.64	2510.45	5.59	2514.56	5.6	4.11	0.16
128	450	322	194	7200	0.814143	927.49	0.607778	1720.08	2044.52	0.47	1.64	2510.02	5.58	2514.28	5.59	4.27	0.17
128	451	323	195	7216	0.813054	927.62	0.608093	1720.32	2061.08	0	1.63	2508.61	5.56	2512.6	5.57	4	0.16
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
129	257	128	-1	4112	0.999985	784.18	0.499027	1858.36	0.09	0	9.84	1479.2	5.76	1488.41	5.79	9.21	0.62
129	258	129	0	4128	1	786.23	0.5	1855.94	0	-0.62	10	1495.21	5.8	1504.13	5.83	8.92	0.59
129	259	130	1	4144	0.999985	788.25	0.500965	1853.56	0.09	0	9.84	1511.93	5.84	1519.49	5.87	7.55	0.5
129	260	131	2	4160	0.999941	790.24	0.501923	1851.23	0.38	-0.62	9.68	1527.22	5.87	1534.86	5.9	7.64	0.5
129	261	132	3	4176	0.999868	792.21	0.502874	1848.93	0.84	0	9.53	1543.55	5.91	1549.87	5.94	6.32	0.41
129	262	133	4	4192	0.999767	794.15	0.503817	1846.67	1.49	-0.62	9.38	1558.46	5.95	1564.9	5.97	6.44	0.41
129	263	134	5	4208	0.999639	796.07	0.504753	1844.44	2.32	0	9.23	1574.41	5.99	1579.57	6.01	5.16	0.33
129	264	135	6	4224	0.999483	797.96	0.505682	1842.26	3.33	-0.62	9.09	1588.93	6.02	1594.26	6.04	5.33	0.33
129	265	136	7	4240	0.999302	799.83	0.506604	1840.11	4.51	0	8.95	1604.5	6.05	1608.6	6.07	4.09	0.25
129	266	137	8	4256	0.999095	801.67	0.507519	1837.99	5.87	-0.61	8.81	1618.67	6.09	1622.96	6.1	4.3	0.26
129	267	138	9	4272	0.998864	803.49	0.508427	1835.91	7.4	0	8.68	1633.87	6.12	1636.97	6.13	3.1	0.19
129	268	139	10	4288	0.998608	805.29	0.509328	1833.87	9.11	-0.61	8.55	1647.67	6.15	1651.01	6.16	3.34	0.2
129	269	140	11	4304	0.998328	807.07	0.510223	1831.86	10.98	0	8.42	1662.52	6.18	1664.7	6.19	2.18	0.13

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
129	270	141	12	4320	0.998025	808.82	0.511111	1829.88	13.02	-0.61	8.3	1675.97	6.21	1678.43	6.22	2.46	0.15
129	271	142	13	4336	0.997699	810.55	0.511993	1827.93	15.22	0	8.18	1690.47	6.24	1691.8	6.24	1.33	0.08
129	272	143	14	4352	0.997351	812.26	0.512868	1826.02	17.59	-0.61	8.06	1703.58	6.26	1705.22	6.27	1.64	0.1
129	273	144	15	4368	0.996981	813.95	0.513736	1824.14	20.12	0	7.94	1717.73	6.29	1718.28	6.29	0.54	0.03
129	274	145	16	4384	0.99659	815.62	0.514599	1822.29	22.81	-0.6	7.83	1730.51	6.32	1731.4	6.32	0.89	0.05
129	275	146	17	4400	0.996179	817.26	0.515455	1820.47	25.65	0	7.71	1744.33	6.34	1744.15	6.34	-0.17	-0.01
129	276	147	18	4416	0.995747	818.89	0.516304	1818.68	28.66	-0.6	7.6	1756.78	6.37	1756.97	6.37	0.2	0.01
129	277	148	19	4432	0.995295	820.49	0.517148	1816.93	31.81	0	7.5	1770.27	6.39	1769.43	6.39	-0.83	-0.05
129	278	149	20	4448	0.994824	822.07	0.517986	1815.2	35.12	-0.6	7.39	1782.4	6.41	1781.96	6.41	-0.43	-0.02
129	279	150	21	4464	0.994335	823.64	0.518817	1813.5	38.59	0	7.29	1795.57	6.44	1794.13	6.43	-1.44	-0.08
129	280	151	22	4480	0.993827	825.18	0.519643	1811.82	42.2	-0.6	7.19	1807.38	6.45	1806.38	6.45	-1.01	-0.06
129	281	152	23	4496	0.9933	826.71	0.520463	1810.18	45.96	0	7.09	1820.24	6.48	1818.26	6.47	-1.98	-0.11
129	282	153	24	4512	0.992757	828.22	0.521277	1808.56	49.87	-0.6	6.99	1831.75	6.5	1830.23	6.49	-1.53	-0.08
129	283	154	25	4528	0.992196	829.7	0.522085	1806.97	53.92	0	6.9	1844.3	6.52	1841.83	6.51	-2.48	-0.13
129	284	155	26	4544	0.991619	831.17	0.522887	1805.41	58.11	-0.59	6.81	1855.52	6.53	1853.52	6.53	-2	-0.11
129	285	156	27	4560	0.991025	832.63	0.523684	1803.88	62.45	0	6.72	1867.77	6.55	1864.85	6.54	-2.92	-0.16
129	286	157	28	4576	0.990415	834.06	0.524476	1802.37	66.93	-0.59	6.63	1878.69	6.57	1876.27	6.56	-2.42	-0.13
129	287	158	29	4592	0.98979	835.47	0.525261	1800.88	71.54	0	6.54	1890.65	6.59	1887.32	6.58	-3.32	-0.18
129	288	159	30	4608	0.989149	836.87	0.526042	1799.42	76.3	-0.59	6.46	1901.28	6.6	1898.48	6.59	-2.8	-0.15
129	289	160	31	4624	0.988494	838.25	0.526817	1797.99	81.19	0	6.37	1912.95	6.62	1909.27	6.61	-3.68	-0.19
129	290	161	32	4640	0.987824	839.61	0.527586	1796.58	86.21	-0.59	6.29	1923.3	6.63	1920.17	6.62	-3.13	-0.16
129	291	162	33	4656	0.98714	840.96	0.528351	1795.19	91.37	0	6.21	1934.69	6.65	1930.7	6.63	-3.99	-0.21
129	292	163	34	4672	0.986442	842.29	0.52911	1793.83	96.66	-0.59	6.13	1944.77	6.66	1941.35	6.65	-3.42	-0.18
129	293	164	35	4688	0.985731	843.6	0.529863	1792.49	102.08	0	6.05	1955.88	6.68	1951.62	6.66	-4.26	-0.22
129	294	165	36	4704	0.985006	844.9	0.530612	1791.17	107.63	-0.58	5.98	1965.69	6.69	1962.02	6.67	-3.68	-0.19
129	295	166	37	4720	0.984269	846.18	0.531356	1789.88	113.31	0	5.91	1976.54	6.7	1972.04	6.68	-4.49	-0.23
129	296	167	38	4736	0.983519	847.45	0.532095	1788.6	119.12	-0.58	5.83	1986.08	6.71	1982.19	6.7	-3.89	-0.2
129	297	168	39	4752	0.982757	848.7	0.532828	1787.35	125.05	0	5.76	1996.66	6.72	1991.97	6.71	-4.69	-0.24
129	298	169	40	4768	0.981983	849.93	0.533557	1786.13	131.1	-0.58	5.69	2005.95	6.73	2001.88	6.72	-4.08	-0.2
129	299	170	41	4784	0.981197	851.15	0.534281	1784.92	137.28	0	5.62	2016.27	6.74	2011.42	6.73	-4.86	-0.24
129	300	171	42	4800	0.9804	852.35	0.535	1783.73	143.58	-0.58	5.55	2025.31	6.75	2021.09	6.74	-4.22	-0.21
129	301	172	43	4816	0.979592	853.54	0.535714	1782.57	150	0	5.49	2035.38	6.76	2030.39	6.75	-4.99	-0.25
129	302	173	44	4832	0.978773	854.72	0.536424	1781.42	156.54	-0.58	5.42	2044.17	6.77	2039.83	6.75	-4.34	-0.21
129	303	174	45	4848	0.977943	855.88	0.537129	1780.3	163.2	0	5.36	2053.99	6.78	2048.9	6.76	-5.09	-0.25
129	304	175	46	4864	0.977104	857.02	0.537829	1779.19	169.97	-0.57	5.3	2062.54	6.78	2058.11	6.77	-4.43	-0.22
129	305	176	47	4880	0.976254	858.15	0.538525	1778.11	176.86	0	5.24	2072.11	6.79	2066.95	6.78	-5.16	-0.25
129	306	177	48	4896	0.975394	859.27	0.539216	1777.04	183.87	-0.57	5.17	2080.42	6.8	2075.93	6.78	-4.49	-0.22
129	307	178	49	4912	0.974525	860.37	0.539902	1776	190.99	0	5.12	2089.76	6.81	2084.55	6.79	-5.21	-0.25
129	308	179	50	4928	0.973646	861.46	0.540584	1774.97	198.22	-0.57	5.06	2097.84	6.81	2093.31	6.8	-4.53	-0.22
129	309	180	51	4944	0.972759	862.54	0.541262	1773.96	205.56	0	5	2106.94	6.82	2101.71	6.8	-5.23	-0.25
129	310	181	52	4960	0.971863	863.6	0.541935	1772.97	213.01	-0.57	4.94	2114.79	6.82	2110.25	6.81	-4.54	-0.21
129	311	182	53	4976	0.970958	864.65	0.542605	1772	220.58	0	4.89	2123.66	6.83	2118.43	6.81	-5.23	-0.25
129	312	183	54	4992	0.970044	865.69	0.543269	1771.04	228.25	-0.57	4.83	2131.29	6.83	2126.77	6.82	-4.52	-0.21
129	313	184	55	5008	0.969123	866.72	0.54393	1770.1	236.02	0	4.78	2139.94	6.84	2134.73	6.82	-5.2	-0.24
129	314	185	56	5024	0.968193	867.73	0.544586	1769.18	243.91	-0.56	4.73	2147.34	6.84	2142.86	6.82	-4.49	-0.21
129	315	186	57	5040	0.967256	868.73	0.545238	1768.28	251.9	0	4.68	2155.77	6.84	2150.61	6.83	-5.16	-0.24

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
129	316	187	58	5056	0.966311	869.71	0.545886	1767.39	259.99	-0.56	4.63	2162.96	6.84	2158.53	6.83	-4.43	-0.21
129	317	188	59	5072	0.965359	870.69	0.54653	1766.52	268.19	0	4.58	2171.18	6.85	2166.08	6.83	-5.09	-0.24
129	318	189	60	5088	0.9644	871.65	0.54717	1765.67	276.49	-0.56	4.53	2178.16	6.85	2173.8	6.84	-4.36	-0.2
129	319	190	61	5104	0.963434	872.6	0.547806	1764.83	284.89	0	4.48	2186.16	6.85	2181.15	6.84	-5.01	-0.23
129	320	191	62	5120	0.962461	873.54	0.548438	1764.01	293.39	-0.56	4.43	2192.93	6.85	2188.67	6.84	-4.27	-0.19
129	321	192	63	5136	0.961481	874.47	0.549065	1763.2	301.99	0	4.39	2200.72	6.86	2195.82	6.84	-4.91	-0.22
129	322	193	64	5152	0.960495	875.39	0.549689	1762.41	310.68	-0.56	4.34	2207.3	6.85	2203.14	6.84	-4.16	-0.19
129	323	194	65	5168	0.959503	876.29	0.55031	1761.64	319.48	0	4.29	2214.88	6.86	2210.09	6.84	-4.79	-0.22
129	324	195	66	5184	0.958505	877.19	0.550926	1760.88	328.37	-0.56	4.25	2221.26	6.86	2217.22	6.84	-4.03	-0.18
129	325	196	67	5200	0.957501	878.07	0.551538	1760.13	337.36	0	4.21	2228.64	6.86	2223.98	6.84	-4.66	-0.21
129	326	197	68	5216	0.956491	878.94	0.552147	1759.4	346.44	-0.55	4.16	2234.82	6.86	2230.92	6.84	-3.9	-0.17
129	327	198	69	5232	0.955475	879.8	0.552752	1758.69	355.62	0	4.12	2242.01	6.86	2237.5	6.84	-4.51	-0.2
129	328	199	70	5248	0.954454	880.66	0.553354	1757.99	364.89	-0.55	4.08	2248	6.85	2244.25	6.84	-3.75	-0.17
129	329	200	71	5264	0.953428	881.5	0.553951	1757.3	374.25	0	4.04	2254.99	6.85	2250.64	6.84	-4.36	-0.19
129	330	201	72	5280	0.952397	882.33	0.554545	1756.63	383.71	-0.55	4	2260.79	6.85	2257.21	6.84	-3.58	-0.16
129	331	202	73	5296	0.95136	883.15	0.555136	1755.97	393.25	0	3.96	2267.6	6.85	2263.41	6.84	-4.19	-0.18
129	332	203	74	5312	0.950319	883.95	0.555723	1755.32	402.89	-0.55	3.92	2273.21	6.85	2269.8	6.84	-3.41	-0.15
129	333	204	75	5328	0.949274	884.75	0.556306	1754.69	412.61	0	3.88	2279.83	6.85	2275.83	6.83	-4.01	-0.18
129	334	205	76	5344	0.948223	885.54	0.556886	1754.07	422.42	-0.55	3.85	2285.26	6.84	2282.04	6.83	-3.22	-0.14
129	335	206	77	5360	0.947169	886.32	0.557463	1753.46	432.32	0	3.81	2291.7	6.84	2287.89	6.83	-3.82	-0.17
129	336	207	78	5376	0.94611	887.09	0.558036	1752.87	442.3	-0.55	3.77	2296.96	6.84	2293.92	6.83	-3.03	-0.13
129	337	208	79	5392	0.945047	887.85	0.558605	1752.29	452.38	0	3.74	2303.21	6.83	2299.6	6.82	-3.62	-0.16
129	338	209	80	5408	0.94398	888.61	0.559172	1751.72	462.53	-0.54	3.7	2308.29	6.83	2305.46	6.82	-2.83	-0.12
129	339	210	81	5424	0.942909	889.35	0.559735	1751.17	472.77	0	3.67	2314.38	6.83	2310.97	6.82	-3.41	-0.15
129	340	211	82	5440	0.941834	890.08	0.560294	1750.63	483.1	-0.54	3.63	2319.28	6.82	2316.66	6.81	-2.62	-0.11
129	341	212	83	5456	0.940756	890.8	0.56085	1750.1	493.51	0	3.6	2325.19	6.82	2322	6.81	-3.2	-0.14
129	342	213	84	5472	0.939674	891.52	0.561404	1749.58	504	-0.54	3.56	2329.93	6.81	2327.53	6.81	-2.4	-0.1
129	343	214	85	5488	0.938589	892.22	0.561953	1749.07	514.57	0	3.53	2335.67	6.81	2332.69	6.8	-2.98	-0.13
129	344	215	86	5504	0.9375	892.92	0.5625	1748.58	525.22	-0.54	3.5	2340.25	6.8	2338.06	6.8	-2.18	-0.09
129	345	216	87	5520	0.936408	893.61	0.563043	1748.09	535.95	0	3.47	2345.82	6.8	2343.07	6.79	-2.75	-0.12
129	346	217	88	5536	0.935314	894.29	0.563584	1747.62	546.76	-0.54	3.44	2350.23	6.79	2348.27	6.79	-1.96	-0.08
129	347	218	89	5552	0.934216	894.96	0.564121	1747.16	557.65	0	3.41	2355.64	6.79	2353.11	6.78	-2.52	-0.11
129	348	219	90	5568	0.933115	895.62	0.564655	1746.71	568.62	-0.54	3.37	2359.89	6.78	2358.16	6.78	-1.72	-0.07
129	349	220	91	5584	0.932012	896.27	0.565186	1746.27	579.67	0	3.34	2365.14	6.78	2362.85	6.77	-2.29	-0.1
129	350	221	92	5600	0.930906	896.92	0.565714	1745.84	590.79	-0.53	3.32	2369.23	6.77	2367.74	6.76	-1.49	-0.06
129	351	222	93	5616	0.929798	897.56	0.566239	1745.43	601.99	0	3.29	2374.32	6.76	2372.27	6.76	-2.05	-0.09
129	352	223	94	5632	0.928687	898.19	0.566761	1745.02	613.26	-0.53	3.26	2378.26	6.76	2377.01	6.75	-1.25	-0.05
129	353	224	95	5648	0.927573	898.81	0.56728	1744.63	624.61	0	3.23	2383.19	6.75	2381.38	6.75	-1.81	-0.08
129	354	225	96	5664	0.926458	899.42	0.567797	1744.24	636.03	-0.53	3.2	2386.98	6.74	2385.97	6.74	-1.01	-0.04
129	355	226	97	5680	0.92534	900.03	0.56831	1743.87	647.52	0	3.17	2391.76	6.74	2390.19	6.73	-1.57	-0.07
129	356	227	98	5696	0.92422	900.62	0.56882	1743.5	659.09	-0.53	3.15	2395.4	6.73	2394.63	6.73	-0.77	-0.03
129	357	228	99	5712	0.923099	901.22	0.569328	1743.15	670.73	0	3.12	2400.03	6.72	2398.7	6.72	-1.33	-0.06
129	358	229	100	5728	0.921975	901.8	0.569832	1742.8	682.45	-0.53	3.09	2403.52	6.71	2402.99	6.71	-0.53	-0.02
129	359	230	101	5744	0.920849	902.37	0.570334	1742.47	694.23	0	3.07	2408	6.71	2406.92	6.7	-1.08	-0.04
129	360	231	102	5760	0.919722	902.94	0.570833	1742.14	706.08	-0.53	3.04	2411.35	6.7	2411.07	6.7	-0.28	-0.01
129	361	232	103	5776	0.918593	903.5	0.57133	1741.82	718.01	0	3.02	2415.68	6.69	2414.85	6.69	-0.84	-0.03

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
129	362	233	104	5792	0.917463	904.06	0.571823	1741.52	730	-0.53	2.99	2418.89	6.68	2418.85	6.68	-0.04	0
129	363	234	105	5808	0.916331	904.6	0.572314	1741.22	742.06	0	2.97	2423.08	6.68	2422.49	6.67	-0.59	-0.02
129	364	235	106	5824	0.915197	905.14	0.572802	1740.93	754.19	-0.52	2.94	2426.15	6.67	2426.36	6.67	0.2	0.01
129	365	236	107	5840	0.914063	905.68	0.573288	1740.65	766.39	0	2.92	2430.2	6.66	2429.85	6.66	-0.35	-0.01
129	366	237	108	5856	0.912927	906.2	0.57377	1740.38	778.65	-0.52	2.9	2433.13	6.65	2433.58	6.65	0.45	0.02
129	367	238	109	5872	0.911789	906.72	0.574251	1740.12	790.98	0	2.87	2437.05	6.64	2436.94	6.64	-0.11	0
129	368	239	110	5888	0.910651	907.23	0.574728	1739.87	803.38	-0.52	2.85	2439.84	6.63	2440.53	6.63	0.69	0.03
129	369	240	111	5904	0.909512	907.74	0.575203	1739.63	815.84	0	2.83	2443.62	6.62	2443.75	6.62	0.13	0.01
129	370	241	112	5920	0.908371	908.24	0.575676	1739.39	828.37	-0.52	2.8	2446.28	6.61	2447.21	6.61	0.92	0.04
129	371	242	113	5936	0.90723	908.73	0.576146	1739.17	840.96	0	2.78	2449.92	6.6	2450.3	6.6	0.37	0.02
129	372	243	114	5952	0.906087	909.22	0.576613	1738.95	853.62	-0.52	2.76	2452.46	6.59	2453.62	6.6	1.16	0.05
129	373	244	115	5968	0.904944	909.7	0.577078	1738.74	866.34	0	2.74	2455.97	6.58	2456.58	6.59	0.61	0.02
129	374	245	116	5984	0.903801	910.17	0.57754	1738.54	879.12	-0.52	2.72	2458.38	6.57	2459.77	6.58	1.39	0.06
129	375	246	117	6000	0.902656	910.64	0.578	1738.34	891.96	0	2.7	2461.75	6.56	2462.6	6.57	0.84	0.03
129	376	247	118	6016	0.901511	911.1	0.578457	1738.16	904.87	-0.52	2.68	2464.04	6.55	2465.66	6.56	1.62	0.07
129	377	248	119	6032	0.900365	911.55	0.578912	1737.98	917.84	0	2.66	2467.29	6.54	2468.36	6.55	1.07	0.04
129	378	249	120	6048	0.899219	912	0.579365	1737.81	930.86	-0.51	2.64	2469.45	6.53	2471.29	6.54	1.85	0.07
129	379	250	121	6064	0.898072	912.44	0.579815	1737.65	943.95	0	2.62	2472.57	6.52	2473.86	6.53	1.29	0.05
129	380	251	122	6080	0.896925	912.88	0.580263	1737.5	957.1	-0.51	2.6	2474.61	6.51	2476.68	6.52	2.07	0.08
129	381	252	123	6096	0.895778	913.31	0.580709	1737.35	970.31	0	2.58	2477.61	6.5	2479.12	6.51	1.51	0.06
129	382	253	124	6112	0.89463	913.74	0.581152	1737.21	983.58	-0.51	2.56	2479.52	6.49	2481.81	6.5	2.29	0.09
129	383	254	125	6128	0.893482	914.16	0.581593	1737.08	996.9	0	2.54	2482.4	6.48	2484.13	6.49	1.73	0.07
129	384	255	126	6144	0.892334	914.57	0.582031	1736.96	1010.28	-0.51	2.52	2484.2	6.47	2486.7	6.48	2.5	0.1
129	385	256	127	6160	0.891186	914.98	0.582468	1736.84	1023.72	0	2.5	2486.96	6.46	2488.9	6.46	1.94	0.08
129	386	257	128	6176	0.890037	915.38	0.582902	1736.73	1037.22	-0.51	2.48	2488.64	6.45	2491.35	6.45	2.71	0.11
129	387	258	129	6192	0.888889	915.78	0.583333	1736.63	1050.78	0	2.47	2491.28	6.44	2493.43	6.44	2.15	0.09
129	388	259	130	6208	0.88774	916.17	0.583763	1736.53	1064.39	-0.51	2.45	2492.85	6.42	2495.76	6.43	2.91	0.12
129	389	260	131	6224	0.886592	916.56	0.58419	1736.44	1078.06	0	2.43	2495.38	6.41	2497.72	6.42	2.35	0.09
129	390	261	132	6240	0.885444	916.94	0.584615	1736.36	1091.78	-0.51	2.41	2496.83	6.4	2499.94	6.41	3.1	0.12
129	391	262	133	6256	0.884296	917.31	0.585038	1736.29	1105.56	0	2.4	2499.24	6.39	2501.78	6.4	2.54	0.1
129	392	263	134	6272	0.883148	917.68	0.585459	1736.22	1119.39	-0.51	2.38	2500.59	6.38	2503.88	6.39	3.29	0.13
129	393	264	135	6288	0.882	918.05	0.585878	1736.16	1133.27	0	2.36	2502.88	6.37	2505.61	6.38	2.73	0.11
129	394	265	136	6304	0.880852	918.41	0.586294	1736.1	1147.21	-0.5	2.35	2504.12	6.36	2507.6	6.36	3.48	0.14
129	395	266	137	6320	0.879705	918.76	0.586709	1736.05	1161.21	0	2.33	2506.31	6.35	2509.21	6.35	2.91	0.12
129	396	267	138	6336	0.878558	919.11	0.587121	1736.01	1175.25	-0.5	2.31	2507.43	6.33	2511.09	6.34	3.65	0.15
129	397	268	139	6352	0.877412	919.46	0.587531	1735.98	1189.35	0	2.3	2509.51	6.32	2512.59	6.33	3.08	0.12
129	398	269	140	6368	0.876266	919.8	0.58794	1735.95	1203.5	-0.5	2.28	2510.53	6.31	2514.36	6.32	3.82	0.15
129	399	270	141	6384	0.87512	920.13	0.588346	1735.93	1217.7	0	2.27	2512.5	6.3	2515.75	6.31	3.25	0.13
129	400	271	142	6400	0.873975	920.47	0.58875	1735.91	1231.96	-0.5	2.25	2513.42	6.28	2517.4	6.29	3.98	0.16
129	401	272	143	6416	0.87283	920.79	0.589152	1735.9	1246.26	0	2.24	2515.28	6.27	2518.69	6.28	3.41	0.14
129	402	273	144	6432	0.871686	921.11	0.589552	1735.89	1260.62	-0.5	2.22	2516.1	6.26	2520.24	6.27	4.14	0.16
129	403	274	145	6448	0.870543	921.43	0.58995	1735.9	1275.02	0	2.21	2517.86	6.25	2521.42	6.26	3.56	0.14
129	404	275	146	6464	0.8694	921.74	0.590347	1735.9	1289.48	-0.5	2.19	2518.57	6.23	2522.86	6.24	4.29	0.17
129	405	276	147	6480	0.868258	922.05	0.590741	1735.92	1303.98	0	2.18	2520.23	6.22	2523.93	6.23	3.7	0.15
129	406	277	148	6496	0.867116	922.35	0.591133	1735.94	1318.54	-0.5	2.16	2520.84	6.21	2525.27	6.22	4.42	0.18
129	407	278	149	6512	0.865976	922.65	0.591523	1735.96	1333.14	0	2.15	2522.4	6.2	2526.24	6.21	3.84	0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
129	408	279	150	6528	0.864836	922.94	0.591912	1735.99	1347.79	-0.5	2.14	2522.91	6.18	2527.47	6.19	4.55	0.18
129	409	280	151	6544	0.863696	923.23	0.592298	1736.03	1362.49	0	2.12	2524.37	6.17	2528.33	6.18	3.96	0.16
129	410	281	152	6560	0.862558	923.52	0.592683	1736.07	1377.24	-0.49	2.11	2524.79	6.16	2529.46	6.17	4.68	0.18
129	411	282	153	6576	0.86142	923.8	0.593066	1736.12	1392.03	0	2.09	2526.15	6.15	2530.23	6.16	4.08	0.16
129	412	283	154	6592	0.860284	924.08	0.593447	1736.17	1406.87	-0.49	2.08	2526.47	6.13	2531.26	6.14	4.79	0.19
129	413	284	155	6608	0.859148	924.35	0.593826	1736.23	1421.76	0	2.07	2527.73	6.12	2531.92	6.13	4.19	0.17
129	414	285	156	6624	0.858013	924.62	0.594203	1736.29	1436.7	-0.49	2.05	2527.96	6.11	2532.85	6.12	4.89	0.19
129	415	286	157	6640	0.856879	924.88	0.594578	1736.36	1451.68	0	2.04	2529.12	6.09	2533.42	6.1	4.29	0.17
129	416	287	158	6656	0.855746	925.14	0.594952	1736.43	1466.7	-0.49	2.03	2529.26	6.08	2534.25	6.09	4.99	0.2
129	417	288	159	6672	0.854614	925.4	0.595324	1736.51	1481.77	0	2.02	2530.33	6.07	2534.72	6.08	4.38	0.17
129	418	289	160	6688	0.853483	925.65	0.595694	1736.6	1496.89	-0.49	2	2530.38	6.05	2535.45	6.07	5.07	0.2
129	419	290	161	6704	0.852353	925.9	0.596062	1736.69	1512.05	0	1.99	2531.36	6.04	2535.82	6.05	4.47	0.18
129	420	291	162	6720	0.851224	926.14	0.596429	1736.78	1527.25	-0.49	1.98	2531.31	6.03	2536.46	6.04	5.15	0.2
129	421	292	163	6736	0.850097	926.38	0.596793	1736.88	1542.5	0	1.97	2532.2	6.01	2536.74	6.03	4.54	0.18
129	422	293	164	6752	0.84897	926.62	0.597156	1736.98	1557.8	-0.49	1.95	2532.06	6	2537.28	6.01	5.22	0.21
129	423	294	165	6768	0.847845	926.85	0.597518	1737.09	1573.13	0	1.94	2532.86	5.99	2537.46	6	4.6	0.18
129	424	295	166	6784	0.84672	927.08	0.597877	1737.21	1588.51	-0.49	1.93	2532.64	5.97	2537.91	5.99	5.27	0.21
129	425	296	167	6800	0.845597	927.31	0.598235	1737.33	1603.94	0	1.92	2533.35	5.96	2538	5.97	4.65	0.18
129	426	297	168	6816	0.844475	927.53	0.598592	1737.45	1619.4	-0.48	1.91	2533.04	5.95	2538.36	5.96	5.32	0.21
129	427	298	169	6832	0.843355	927.75	0.598946	1737.58	1634.91	0	1.9	2533.66	5.93	2538.36	5.94	4.7	0.19
129	428	299	170	6848	0.842235	927.96	0.599299	1737.71	1650.46	-0.48	1.89	2533.27	5.92	2538.63	5.93	5.36	0.21
129	429	300	171	6864	0.841117	928.17	0.59965	1737.85	1666.05	0	1.87	2533.8	5.91	2538.53	5.92	4.73	0.19
129	430	301	172	6880	0.84	928.38	0.6	1737.99	1681.68	-0.48	1.86	2533.33	5.89	2538.71	5.9	5.38	0.21
129	431	302	173	6896	0.838884	928.59	0.600348	1738.14	1697.35	0	1.85	2533.78	5.88	2538.53	5.89	4.75	0.19
129	432	303	174	6912	0.83777	928.79	0.600694	1738.29	1713.07	-0.48	1.84	2533.22	5.86	2538.62	5.88	5.4	0.21
129	433	304	175	6928	0.836657	928.98	0.601039	1738.44	1728.82	0	1.83	2533.58	5.85	2538.35	5.86	4.76	0.19
129	434	305	176	6944	0.835545	929.18	0.601382	1738.6	1744.62	-0.48	1.82	2532.95	5.84	2538.35	5.85	5.41	0.21
129	435	306	177	6960	0.834435	929.37	0.601724	1738.77	1760.45	0	1.81	2533.23	5.82	2537.99	5.83	4.77	0.19
129	436	307	178	6976	0.833326	929.55	0.602064	1738.93	1776.32	-0.48	1.8	2532.51	5.81	2537.91	5.82	5.4	0.21
129	437	308	179	6992	0.832219	929.74	0.602403	1739.11	1792.24	0	1.79	2532.71	5.8	2537.46	5.81	4.76	0.19
129	438	309	180	7008	0.831113	929.92	0.60274	1739.28	1808.19	-0.48	1.78	2531.91	5.78	2537.3	5.79	5.39	0.21
129	439	310	181	7024	0.830008	930.09	0.603075	1739.46	1824.18	0	1.77	2532.03	5.77	2536.77	5.78	4.74	0.19
129	440	311	182	7040	0.828905	930.27	0.603409	1739.65	1840.21	-0.48	1.76	2531.15	5.75	2536.51	5.76	5.36	0.21
129	441	312	183	7056	0.827803	930.44	0.603741	1739.84	1856.28	0	1.75	2531.19	5.74	2535.9	5.75	4.71	0.19
129	442	313	184	7072	0.826703	930.61	0.604072	1740.03	1872.39	-0.48	1.74	2530.24	5.72	2535.56	5.74	5.32	0.21
129	443	314	185	7088	0.825604	930.77	0.604402	1740.23	1888.53	0	1.73	2530.2	5.71	2534.86	5.72	4.66	0.18
129	444	315	186	7104	0.824507	930.93	0.60473	1740.43	1904.71	-0.47	1.72	2529.17	5.7	2534.45	5.71	5.28	0.21
129	445	316	187	7120	0.823411	931.09	0.605056	1740.63	1920.93	0	1.71	2529.05	5.68	2533.67	5.69	4.61	0.18
129	446	317	188	7136	0.822317	931.25	0.605381	1740.84	1937.19	-0.47	1.7	2527.95	5.67	2533.17	5.68	5.22	0.21
129	447	318	189	7152	0.821224	931.4	0.605705	1741.06	1953.48	0	1.69	2527.76	5.65	2532.3	5.67	4.55	0.18
129	448	319	190	7168	0.820133	931.55	0.606027	1741.27	1969.81	-0.47	1.68	2526.58	5.64	2531.73	5.65	5.15	0.2
129	449	320	191	7184	0.819044	931.69	0.606347	1741.49	1986.18	0	1.68	2526.31	5.63	2530.78	5.64	4.47	0.18
129	450	321	192	7200	0.817956	931.84	0.606667	1741.72	2002.58	-0.47	1.67	2525.06	5.61	2530.13	5.62	5.06	0.2
129	451	322	193	7216	0.816869	931.98	0.606984	1741.94	2019.02	0	1.66	2524.72	5.6	2529.1	5.61	4.39	0.17
129	452	323	194	7232	0.815784	932.11	0.607301	1742.18	2035.49	-0.47	1.65	2523.4	5.58	2528.37	5.59	4.97	0.2
129	453	324	195	7248	0.814701	932.25	0.607616	1742.41	2052	0	1.64	2522.98	5.57	2527.27	5.58	4.29	0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
129	454	325	196	7264	0.81362	932.38	0.60793	1742.65	2068.54	-0.47	1.63	2521.59	5.55	2526.45	5.56	4.87	0.19
129	455	326	197	7280	0.81254	932.51	0.608242	1742.89	2085.12	0	1.62	2521.1	5.54	2525.28	5.55	4.18	0.17
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
130	259	129	-1	4144	0.999985	788.25	0.499035	1882.41	0.09	0	9.84	1483.09	5.73	1492.29	5.76	9.2	0.62
130	260	130	0	4160	1	790.29	0.5	1879.98	0	0.62	10	1500.35	5.77	1508.86	5.8	8.51	0.56
130	261	131	1	4176	0.999985	792.3	0.500958	1877.59	0.09	0	9.84	1515.86	5.81	1523.41	5.84	7.55	0.5
130	262	132	2	4192	0.999942	794.29	0.501908	1875.24	0.37	0.62	9.68	1532.4	5.85	1539.63	5.88	7.23	0.47
130	263	133	3	4208	0.99987	796.25	0.502852	1872.93	0.84	0	9.53	1547.52	5.88	1553.84	5.91	6.32	0.41
130	264	134	4	4224	0.99977	798.19	0.503788	1870.66	1.48	0.62	9.38	1563.68	5.92	1569.71	5.95	6.04	0.38
130	265	135	5	4240	0.999644	800.1	0.504717	1868.42	2.3	0	9.24	1578.42	5.96	1583.58	5.98	5.17	0.33
130	266	136	6	4256	0.999491	801.99	0.505639	1866.22	3.3	0.61	9.1	1594.2	5.99	1599.12	6.01	4.92	0.31
130	267	137	7	4272	0.999313	803.85	0.506554	1864.06	4.48	0	8.96	1608.57	6.02	1612.67	6.04	4.1	0.25
130	268	138	8	4288	0.999109	805.7	0.507463	1861.93	5.83	0.61	8.82	1623.98	6.06	1627.87	6.07	3.89	0.24
130	269	139	9	4304	0.998881	807.51	0.508364	1859.84	7.35	0	8.69	1637.99	6.09	1641.1	6.1	3.11	0.19
130	270	140	10	4320	0.998628	809.31	0.509259	1857.78	9.04	0.61	8.56	1653.04	6.12	1655.98	6.13	2.94	0.18
130	271	141	11	4336	0.998352	811.08	0.510148	1855.75	10.9	0	8.43	1666.7	6.15	1668.89	6.16	2.19	0.13
130	272	142	12	4352	0.998054	812.83	0.511029	1853.76	12.92	0.61	8.31	1681.39	6.18	1683.45	6.19	2.05	0.12
130	273	143	13	4368	0.997732	814.56	0.511905	1851.81	15.11	0	8.19	1694.71	6.21	1696.05	6.21	1.34	0.08
130	274	144	14	4384	0.997389	816.27	0.512774	1849.88	17.46	0.6	8.07	1709.06	6.24	1710.3	6.24	1.24	0.07
130	275	145	15	4400	0.997025	817.96	0.513636	1847.99	19.97	0	7.95	1722.04	6.26	1722.6	6.26	0.56	0.03
130	276	146	16	4416	0.996639	819.62	0.514493	1846.12	22.64	0.6	7.84	1736.05	6.29	1736.54	6.29	0.49	0.03
130	277	147	17	4432	0.996233	821.26	0.515343	1844.29	25.47	0	7.73	1748.7	6.31	1748.55	6.31	-0.15	-0.01
130	278	148	18	4448	0.995808	822.89	0.516187	1842.49	28.45	0.6	7.62	1762.39	6.34	1762.19	6.34	-0.2	-0.01
130	279	149	19	4464	0.995362	824.49	0.517025	1840.72	31.59	0	7.51	1774.72	6.36	1773.9	6.36	-0.81	-0.05
130	280	150	20	4480	0.994898	826.07	0.517857	1838.98	34.88	0.6	7.41	1788.08	6.39	1787.25	6.38	-0.83	-0.05
130	281	151	21	4496	0.994415	827.64	0.518683	1837.26	38.31	0	7.31	1800.09	6.41	1798.68	6.4	-1.41	-0.08
130	282	152	22	4512	0.993914	829.18	0.519504	1835.58	41.9	0.6	7.21	1813.14	6.43	1811.73	6.42	-1.41	-0.08
130	283	153	23	4528	0.993395	830.71	0.520318	1833.92	45.63	0	7.11	1824.85	6.45	1822.89	6.44	-1.96	-0.11
130	284	154	24	4544	0.992859	832.21	0.521127	1832.29	49.52	0.59	7.01	1837.59	6.47	1835.66	6.46	-1.93	-0.1
130	285	155	25	4560	0.992305	833.7	0.52193	1830.69	53.54	0	6.92	1848.99	6.49	1846.54	6.48	-2.45	-0.13
130	286	156	26	4576	0.991736	835.17	0.522727	1829.11	57.71	0.59	6.83	1861.43	6.51	1859.03	6.5	-2.4	-0.13
130	287	157	27	4592	0.99115	836.62	0.523519	1827.56	62.01	0	6.74	1872.54	6.52	1869.64	6.51	-2.89	-0.15
130	288	158	28	4608	0.990548	838.05	0.524306	1826.04	66.46	0.59	6.65	1884.68	6.54	1881.86	6.53	-2.82	-0.15
130	289	159	29	4624	0.989931	839.47	0.525087	1824.54	71.05	0	6.56	1895.5	6.56	1892.21	6.55	-3.29	-0.17
130	290	160	30	4640	0.989298	840.87	0.525862	1823.07	75.77	0.59	6.48	1907.35	6.58	1904.16	6.57	-3.19	-0.17
130	291	161	31	4656	0.988652	842.25	0.526632	1821.62	80.63	0	6.39	1917.89	6.59	1914.25	6.58	-3.64	-0.19
130	292	162	32	4672	0.98799	843.61	0.527397	1820.2	85.62	0.59	6.31	1929.46	6.61	1925.94	6.6	-3.53	-0.18
130	293	163	33	4688	0.987315	844.96	0.528157	1818.8	90.75	0	6.23	1939.73	6.62	1935.77	6.61	-3.95	-0.2
130	294	164	34	4704	0.986626	846.29	0.528912	1817.42	96.01	0.58	6.15	1951.02	6.64	1947.2	6.62	-3.82	-0.2
130	295	165	35	4720	0.985924	847.6	0.529661	1816.07	101.39	0	6.08	1961.01	6.65	1956.79	6.63	-4.22	-0.22
130	296	166	36	4736	0.985208	848.9	0.530405	1814.74	106.91	0.58	6	1972.03	6.66	1967.96	6.65	-4.07	-0.21
130	297	167	37	4752	0.98448	850.18	0.531145	1813.43	112.55	0	5.93	1981.76	6.67	1977.31	6.66	-4.45	-0.23
130	298	168	38	4768	0.983739	851.45	0.531879	1812.15	118.32	0.58	5.85	1992.52	6.69	1988.23	6.67	-4.29	-0.22
130	299	169	39	4784	0.982987	852.7	0.532609	1810.88	124.21	0	5.78	2001.98	6.7	1997.33	6.68	-4.65	-0.23

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
130	300	170	40	4800	0.982222	853.94	0.533333	1809.64	130.23	0.58	5.71	2012.48	6.71	2008.01	6.69	-4.47	-0.22
130	301	171	41	4816	0.981446	855.16	0.534053	1808.42	136.37	0	5.64	2021.69	6.72	2016.88	6.7	-4.81	-0.24
130	302	172	42	4832	0.980659	856.36	0.534768	1807.22	142.63	0.58	5.58	2031.93	6.73	2027.32	6.71	-4.61	-0.23
130	303	173	43	4848	0.97986	857.55	0.535479	1806.05	149.01	0	5.51	2040.9	6.74	2035.96	6.72	-4.94	-0.24
130	304	174	44	4864	0.979051	858.73	0.536184	1804.89	155.51	0.57	5.44	2050.89	6.75	2046.16	6.73	-4.73	-0.23
130	305	175	45	4880	0.978232	859.89	0.536885	1803.75	162.13	0	5.38	2059.61	6.75	2054.57	6.74	-5.04	-0.25
130	306	176	46	4896	0.977402	861.04	0.537582	1802.63	168.86	0.57	5.32	2069.35	6.76	2064.54	6.75	-4.81	-0.23
130	307	177	47	4912	0.976562	862.17	0.538274	1801.54	175.71	0	5.26	2077.83	6.77	2072.72	6.75	-5.11	-0.25
130	308	178	48	4928	0.975713	863.29	0.538961	1800.46	182.68	0.57	5.2	2087.34	6.78	2082.47	6.76	-4.87	-0.23
130	309	179	49	4944	0.974854	864.4	0.539644	1799.4	189.75	0	5.14	2095.59	6.78	2090.43	6.77	-5.16	-0.25
130	310	180	50	4960	0.973985	865.49	0.540323	1798.36	196.94	0.57	5.08	2104.85	6.79	2099.95	6.77	-4.9	-0.23
130	311	181	51	4976	0.973108	866.57	0.540997	1797.34	204.24	0	5.02	2112.87	6.79	2107.7	6.78	-5.17	-0.25
130	312	182	52	4992	0.972222	867.63	0.541667	1796.33	211.65	0.57	4.97	2121.91	6.8	2117	6.79	-4.91	-0.23
130	313	183	53	5008	0.971328	868.69	0.542332	1795.35	219.17	0	4.91	2129.7	6.8	2124.53	6.79	-5.17	-0.24
130	314	184	54	5024	0.970425	869.73	0.542994	1794.38	226.8	0.56	4.86	2138.51	6.81	2133.62	6.79	-4.9	-0.23
130	315	185	55	5040	0.969514	870.76	0.543651	1793.43	234.53	0	4.8	2146.09	6.81	2140.95	6.8	-5.14	-0.24
130	316	186	56	5056	0.968595	871.77	0.544304	1792.5	242.37	0.56	4.75	2154.67	6.82	2149.82	6.8	-4.86	-0.23
130	317	187	57	5072	0.967668	872.77	0.544953	1791.58	250.31	0	4.7	2162.03	6.82	2156.94	6.8	-5.09	-0.24
130	318	188	58	5088	0.966734	873.76	0.545597	1790.68	258.36	0.56	4.65	2170.4	6.83	2165.6	6.81	-4.8	-0.22
130	319	189	59	5104	0.965792	874.74	0.546238	1789.8	266.51	0	4.6	2177.54	6.83	2172.52	6.81	-5.02	-0.23
130	320	190	60	5120	0.964844	875.71	0.546875	1788.94	274.76	0.56	4.55	2185.7	6.83	2180.98	6.82	-4.72	-0.22
130	321	191	61	5136	0.963888	876.66	0.547508	1788.09	283.12	0	4.5	2192.64	6.83	2187.7	6.82	-4.93	-0.23
130	322	192	62	5152	0.962926	877.6	0.548137	1787.25	291.57	0.56	4.45	2200.58	6.83	2195.96	6.82	-4.63	-0.21
130	323	193	63	5168	0.961957	878.53	0.548762	1786.44	300.12	0	4.41	2207.31	6.83	2202.49	6.82	-4.83	-0.22
130	324	194	64	5184	0.960982	879.45	0.549383	1785.64	308.77	0.56	4.36	2215.06	6.84	2210.54	6.82	-4.51	-0.2
130	325	195	65	5200	0.96	880.36	0.55	1784.85	317.52	0	4.32	2221.59	6.84	2216.88	6.82	-4.71	-0.21
130	326	196	66	5216	0.959012	881.26	0.550613	1784.08	326.36	0.55	4.27	2229.12	6.84	2224.74	6.82	-4.39	-0.2
130	327	197	67	5232	0.958019	882.15	0.551223	1783.32	335.3	0	4.23	2235.46	6.84	2230.89	6.82	-4.57	-0.2
130	328	198	68	5248	0.95702	883.02	0.551829	1782.58	344.34	0.55	4.19	2242.8	6.84	2238.56	6.82	-4.24	-0.19
130	329	199	69	5264	0.956015	883.89	0.552432	1781.85	353.46	0	4.14	2248.94	6.84	2244.52	6.82	-4.42	-0.2
130	330	200	70	5280	0.955005	884.74	0.55303	1781.14	362.69	0.55	4.1	2256.09	6.84	2252	6.82	-4.09	-0.18
130	331	201	71	5296	0.953989	885.59	0.553625	1780.44	372	0	4.06	2262.04	6.83	2257.78	6.82	-4.26	-0.19
130	332	202	72	5312	0.952969	886.42	0.554217	1779.76	381.4	0.55	4.02	2268.99	6.83	2265.07	6.82	-3.92	-0.17
130	333	203	73	5328	0.951943	887.24	0.554805	1779.09	390.9	0	3.98	2274.76	6.83	2270.68	6.82	-4.08	-0.18
130	334	204	74	5344	0.950913	888.06	0.555389	1778.43	400.48	0.55	3.94	2281.53	6.83	2277.79	6.82	-3.74	-0.16
130	335	205	75	5360	0.949877	888.86	0.55597	1777.79	410.15	0	3.91	2287.11	6.83	2283.21	6.82	-3.9	-0.17
130	336	206	76	5376	0.948838	889.65	0.556548	1777.16	419.91	0.55	3.87	2293.69	6.83	2290.14	6.82	-3.55	-0.16
130	337	207	77	5392	0.947794	890.43	0.557122	1776.54	429.76	0	3.83	2299.09	6.82	2295.39	6.81	-3.7	-0.16
130	338	208	78	5408	0.946746	891.21	0.557692	1775.94	439.7	0.54	3.79	2305.5	6.82	2302.15	6.81	-3.35	-0.15
130	339	209	79	5424	0.945693	891.97	0.55826	1775.35	449.72	0	3.76	2310.72	6.82	2307.23	6.81	-3.5	-0.15
130	340	210	80	5440	0.944637	892.73	0.558824	1774.77	459.82	0.54	3.72	2316.95	6.81	2313.81	6.81	-3.14	-0.14
130	341	211	81	5456	0.943576	893.47	0.559384	1774.2	470.01	0	3.69	2322	6.81	2318.72	6.8	-3.28	-0.14
130	342	212	82	5472	0.942512	894.21	0.559942	1773.65	480.28	0.54	3.65	2328.05	6.81	2325.13	6.8	-2.93	-0.13
130	343	213	83	5488	0.941444	894.94	0.560496	1773.11	490.64	0	3.62	2332.94	6.8	2329.87	6.79	-3.06	-0.13
130	344	214	84	5504	0.940373	895.66	0.561047	1772.58	501.07	0.54	3.59	2338.82	6.8	2336.11	6.79	-2.71	-0.12
130	345	215	85	5520	0.939298	896.36	0.561594	1772.06	511.59	0	3.55	2343.53	6.79	2340.7	6.78	-2.84	-0.12

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
130	346	216	86	5536	0.93822	897.07	0.562139	1771.56	522.19	0.54	3.52	2349.25	6.79	2346.77	6.78	-2.48	-0.11
130	347	217	87	5552	0.937139	897.76	0.56268	1771.06	532.87	0	3.49	2353.8	6.78	2351.19	6.78	-2.61	-0.11
130	348	218	88	5568	0.936055	898.44	0.563218	1770.58	543.63	0.54	3.46	2359.34	6.78	2357.1	6.77	-2.24	-0.1
130	349	219	89	5584	0.934968	899.12	0.563754	1770.11	554.47	0	3.43	2363.74	6.77	2361.37	6.77	-2.37	-0.1
130	350	220	90	5600	0.933878	899.78	0.564286	1769.65	565.38	0.53	3.4	2369.12	6.77	2367.11	6.76	-2.01	-0.08
130	351	221	91	5616	0.932785	900.44	0.564815	1769.2	576.37	0	3.37	2373.35	6.76	2371.23	6.76	-2.13	-0.09
130	352	222	92	5632	0.931689	901.09	0.565341	1768.76	587.44	0.53	3.34	2378.58	6.76	2376.81	6.75	-1.76	-0.07
130	353	223	93	5648	0.930591	901.73	0.565864	1768.34	598.58	0	3.31	2382.65	6.75	2380.77	6.74	-1.88	-0.08
130	354	224	94	5664	0.92949	902.36	0.566384	1767.92	609.8	0.53	3.28	2387.72	6.74	2386.2	6.74	-1.52	-0.06
130	355	225	95	5680	0.928387	902.99	0.566901	1767.52	621.1	0	3.25	2391.65	6.74	2390.01	6.73	-1.64	-0.07
130	356	226	96	5696	0.927282	903.61	0.567416	1767.12	632.47	0.53	3.22	2396.56	6.73	2395.29	6.73	-1.27	-0.05
130	357	227	97	5712	0.926174	904.22	0.567927	1766.74	643.91	0	3.19	2400.33	6.72	2398.95	6.72	-1.39	-0.06
130	358	228	98	5728	0.925065	904.82	0.568436	1766.36	655.42	0.53	3.17	2405.09	6.72	2404.07	6.72	-1.02	-0.04
130	359	229	99	5744	0.923953	905.42	0.568942	1766	667.01	0	3.14	2408.72	6.71	2407.59	6.71	-1.13	-0.05
130	360	230	100	5760	0.92284	906	0.569444	1765.64	678.67	0.53	3.11	2413.33	6.7	2412.56	6.7	-0.77	-0.03
130	361	231	101	5776	0.921724	906.58	0.569945	1765.3	690.39	0	3.09	2416.81	6.69	2415.93	6.69	-0.88	-0.04
130	362	232	102	5792	0.920607	907.16	0.570442	1764.96	702.19	0.53	3.06	2421.28	6.69	2420.76	6.69	-0.52	-0.02
130	363	233	103	5808	0.919488	907.72	0.570937	1764.64	714.06	0	3.04	2424.62	6.68	2423.99	6.68	-0.63	-0.03
130	364	234	104	5824	0.918367	908.28	0.571429	1764.32	726	0.52	3.01	2428.93	6.67	2428.67	6.67	-0.26	-0.01
130	365	235	105	5840	0.917245	908.83	0.571918	1764.02	738.01	0	2.99	2432.13	6.66	2431.76	6.66	-0.38	-0.02
130	366	236	106	5856	0.916122	909.37	0.572404	1763.72	750.08	0.52	2.96	2436.31	6.66	2436.3	6.66	-0.01	0
130	367	237	107	5872	0.914997	909.91	0.572888	1763.43	762.22	0	2.94	2439.37	6.65	2439.25	6.65	-0.12	-0.01
130	368	238	108	5888	0.913871	910.44	0.57337	1763.15	774.43	0.52	2.92	2443.41	6.64	2443.65	6.64	0.24	0.01
130	369	239	109	5904	0.912743	910.96	0.573848	1762.88	786.71	0	2.89	2446.34	6.63	2446.46	6.63	0.13	0.01
130	370	240	110	5920	0.911614	911.48	0.574324	1762.62	799.05	0.52	2.87	2450.24	6.62	2450.72	6.62	0.49	0.02
130	371	241	111	5936	0.910485	911.99	0.574798	1762.37	811.46	0	2.85	2453.03	6.61	2453.41	6.61	0.38	0.02
130	372	242	112	5952	0.909354	912.49	0.575269	1762.13	823.93	0.52	2.82	2456.79	6.6	2457.53	6.61	0.74	0.03
130	373	243	113	5968	0.908222	912.99	0.575737	1761.89	836.47	0	2.8	2459.45	6.59	2460.08	6.6	0.63	0.03
130	374	244	114	5984	0.907089	913.48	0.576203	1761.67	849.07	0.52	2.78	2463.08	6.59	2464.07	6.59	0.98	0.04
130	375	245	115	6000	0.905956	913.96	0.576667	1761.45	861.73	0	2.76	2465.62	6.57	2466.49	6.58	0.87	0.04
130	376	246	116	6016	0.904821	914.44	0.577128	1761.24	874.46	0.52	2.74	2469.12	6.57	2470.34	6.57	1.22	0.05
130	377	247	117	6032	0.903686	914.91	0.577586	1761.04	887.24	0	2.72	2471.52	6.56	2472.63	6.56	1.11	0.04
130	378	248	118	6048	0.90255	915.38	0.578042	1760.84	900.09	0.51	2.7	2474.89	6.55	2476.36	6.55	1.46	0.06
130	379	249	119	6064	0.901414	915.84	0.578496	1760.66	913.01	0	2.67	2477.17	6.54	2478.53	6.54	1.35	0.05
130	380	250	120	6080	0.900277	916.29	0.578947	1760.48	925.98	0.51	2.65	2480.42	6.53	2482.12	6.53	1.7	0.07
130	381	251	121	6096	0.89914	916.74	0.579396	1760.31	939.01	0	2.63	2482.58	6.52	2484.16	6.52	1.59	0.06
130	382	252	122	6112	0.898002	917.18	0.579843	1760.15	952.1	0.51	2.61	2485.7	6.51	2487.63	6.51	1.93	0.08
130	383	253	123	6128	0.896863	917.62	0.580287	1759.99	965.26	0	2.6	2487.73	6.5	2489.55	6.5	1.82	0.07
130	384	254	124	6144	0.895725	918.04	0.580729	1759.85	978.47	0.51	2.58	2490.73	6.49	2492.89	6.49	2.16	0.09
130	385	255	125	6160	0.894586	918.47	0.581169	1759.71	991.74	0	2.56	2492.65	6.47	2494.69	6.48	2.04	0.08
130	386	256	126	6176	0.893447	918.89	0.581606	1759.58	1005.06	0.51	2.54	2495.52	6.47	2497.91	6.47	2.38	0.1
130	387	257	127	6192	0.892307	919.3	0.582041	1759.45	1018.45	0	2.52	2497.32	6.45	2499.59	6.46	2.27	0.09
130	388	258	128	6208	0.891168	919.71	0.582474	1759.33	1031.89	0.51	2.5	2500.08	6.44	2502.68	6.45	2.6	0.1
130	389	259	129	6224	0.890028	920.11	0.582905	1759.22	1045.39	0	2.48	2501.76	6.43	2504.24	6.44	2.48	0.1
130	390	260	130	6240	0.888889	920.5	0.583333	1759.12	1058.94	0.51	2.47	2504.4	6.42	2507.22	6.43	2.82	0.11
130	391	261	131	6256	0.887749	920.89	0.58376	1759.03	1072.56	0	2.45	2505.97	6.41	2508.67	6.42	2.69	0.11

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
130	392	262	132	6272	0.88661	921.28	0.584184	1758.94	1086.22	0.51	2.43	2508.5	6.4	2511.52	6.41	3.02	0.12
130	393	263	133	6288	0.88547	921.66	0.584606	1758.85	1099.94	0	2.41	2509.96	6.39	2512.85	6.39	2.9	0.12
130	394	264	134	6304	0.884331	922.03	0.585025	1758.78	1113.72	0.5	2.4	2512.37	6.38	2515.59	6.38	3.23	0.13
130	395	265	135	6320	0.883192	922.4	0.585443	1758.71	1127.55	0	2.38	2513.72	6.36	2516.81	6.37	3.1	0.12
130	396	266	136	6336	0.882053	922.77	0.585859	1758.65	1141.43	0.5	2.36	2516.01	6.35	2519.43	6.36	3.42	0.14
130	397	267	137	6352	0.880914	923.13	0.586272	1758.59	1155.37	0	2.35	2517.25	6.34	2520.54	6.35	3.29	0.13
130	398	268	138	6368	0.879776	923.48	0.586683	1758.54	1169.36	0.5	2.33	2519.44	6.33	2523.05	6.34	3.61	0.14
130	399	269	139	6384	0.878638	923.83	0.587093	1758.5	1183.4	0	2.32	2520.58	6.32	2524.05	6.33	3.47	0.14
130	400	270	140	6400	0.8775	924.18	0.5875	1758.47	1197.5	0.5	2.3	2522.66	6.31	2526.45	6.32	3.79	0.15
130	401	271	141	6416	0.876363	924.52	0.587905	1758.44	1211.65	0	2.28	2523.68	6.29	2527.34	6.3	3.65	0.14
130	402	272	142	6432	0.875226	924.85	0.588308	1758.41	1225.84	0.5	2.27	2525.66	6.28	2529.62	6.29	3.96	0.16
130	403	273	143	6448	0.874089	925.18	0.58871	1758.4	1240.09	0	2.25	2526.58	6.27	2530.41	6.28	3.82	0.15
130	404	274	144	6464	0.872954	925.51	0.589109	1758.38	1254.39	0.5	2.24	2528.45	6.26	2532.58	6.27	4.13	0.16
130	405	275	145	6480	0.871818	925.83	0.589506	1758.38	1268.74	0	2.22	2529.27	6.25	2533.26	6.25	3.99	0.16
130	406	276	146	6496	0.870684	926.15	0.589901	1758.38	1283.14	0.5	2.21	2531.04	6.23	2535.33	6.24	4.29	0.17
130	407	277	147	6512	0.869549	926.46	0.590295	1758.39	1297.59	0	2.19	2531.76	6.22	2535.9	6.23	4.14	0.16
130	408	278	148	6528	0.868416	926.77	0.590686	1758.4	1312.09	0.5	2.18	2533.42	6.21	2537.86	6.22	4.44	0.18
130	409	279	149	6544	0.867283	927.07	0.591076	1758.42	1326.64	0	2.17	2534.04	6.2	2538.33	6.21	4.29	0.17
130	410	280	150	6560	0.866151	927.37	0.591463	1758.44	1341.23	0.49	2.15	2535.6	6.18	2540.19	6.2	4.59	0.18
130	411	281	151	6576	0.86502	927.66	0.591849	1758.47	1355.88	0	2.14	2536.13	6.17	2540.56	6.18	4.43	0.17
130	412	282	152	6592	0.863889	927.95	0.592233	1758.51	1370.57	0.49	2.12	2537.59	6.16	2542.31	6.17	4.72	0.19
130	413	283	153	6608	0.862759	928.24	0.592615	1758.55	1385.31	0	2.11	2538.02	6.15	2542.58	6.16	4.56	0.18
130	414	284	154	6624	0.86163	928.52	0.592995	1758.6	1400.09	0.49	2.1	2539.38	6.13	2544.23	6.15	4.85	0.19
130	415	285	155	6640	0.860502	928.79	0.593373	1758.65	1414.93	0	2.08	2539.72	6.12	2544.4	6.13	4.69	0.18
130	416	286	156	6656	0.859375	929.07	0.59375	1758.7	1429.8	0.49	2.07	2540.98	6.11	2545.95	6.12	4.97	0.2
130	417	287	157	6672	0.858249	929.33	0.594125	1758.77	1444.73	0	2.06	2541.22	6.09	2546.02	6.11	4.8	0.19
130	418	288	158	6688	0.857123	929.6	0.594498	1758.84	1459.7	0.49	2.04	2542.4	6.08	2547.47	6.09	5.07	0.2
130	419	289	159	6704	0.855999	929.86	0.594869	1758.91	1474.72	0	2.03	2542.55	6.07	2547.45	6.08	4.9	0.19
130	420	290	160	6720	0.854875	930.12	0.595238	1758.99	1489.78	0.49	2.02	2543.63	6.06	2548.8	6.07	5.17	0.2
130	421	291	161	6736	0.853753	930.37	0.595606	1759.07	1504.88	0	2.01	2543.68	6.04	2548.68	6.05	5	0.2
130	422	292	162	6752	0.852631	930.62	0.595972	1759.16	1520.03	0.49	1.99	2544.67	6.03	2549.93	6.04	5.26	0.21
130	423	293	163	6768	0.851511	930.86	0.596336	1759.25	1535.23	0	1.98	2544.64	6.02	2549.72	6.03	5.09	0.2
130	424	294	164	6784	0.850392	931.1	0.596698	1759.35	1550.47	0.49	1.97	2545.53	6	2550.88	6.02	5.35	0.21
130	425	295	165	6800	0.849273	931.34	0.597059	1759.46	1565.75	0	1.96	2545.41	5.99	2550.58	6	5.16	0.2
130	426	296	166	6816	0.848156	931.57	0.597418	1759.56	1581.07	0.48	1.95	2546.22	5.98	2551.64	5.99	5.42	0.21
130	427	297	167	6832	0.84704	931.8	0.597775	1759.68	1596.44	0	1.93	2546.01	5.96	2551.24	5.97	5.23	0.2
130	428	298	168	6848	0.845925	932.03	0.598131	1759.79	1611.85	0.48	1.92	2546.73	5.95	2552.21	5.96	5.48	0.21
130	429	299	169	6864	0.844812	932.25	0.598485	1759.92	1627.3	0	1.91	2546.44	5.94	2551.73	5.95	5.29	0.21
130	430	300	170	6880	0.843699	932.47	0.598837	1760.05	1642.8	0.48	1.9	2547.07	5.92	2552.6	5.94	5.53	0.22
130	431	301	171	6896	0.842588	932.69	0.599188	1760.18	1658.33	0	1.89	2546.69	5.91	2552.03	5.92	5.33	0.21
130	432	302	172	6912	0.841478	932.9	0.599537	1760.31	1673.91	0.48	1.88	2547.24	5.9	2552.81	5.91	5.57	0.22
130	433	303	173	6928	0.840369	933.1	0.599885	1760.45	1689.53	0	1.87	2546.78	5.88	2552.15	5.89	5.37	0.21
130	434	304	174	6944	0.839262	933.31	0.60023	1760.6	1705.19	0.48	1.86	2547.24	5.87	2552.84	5.88	5.6	0.22
130	435	305	175	6960	0.838156	933.51	0.600575	1760.75	1720.89	0	1.85	2546.69	5.85	2552.09	5.87	5.4	0.21
130	436	306	176	6976	0.837051	933.71	0.600917	1760.91	1736.63	0.48	1.84	2547.07	5.84	2552.69	5.85	5.63	0.22
130	437	307	177	6992	0.835947	933.9	0.601259	1761.06	1752.41	0	1.82	2546.45	5.83	2551.86	5.84	5.41	0.21

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
130	438	308	178	7008	0.834845	934.09	0.601598	1761.23	1768.23	0.48	1.81	2546.74	5.81	2552.37	5.83	5.64	0.22
130	439	309	179	7024	0.833744	934.28	0.601936	1761.4	1784.09	0	1.8	2546.04	5.8	2551.46	5.81	5.42	0.21
130	440	310	180	7040	0.832645	934.47	0.602273	1761.57	1799.99	0.48	1.79	2546.25	5.79	2551.88	5.8	5.64	0.22
130	441	311	181	7056	0.831547	934.65	0.602608	1761.74	1815.93	0	1.78	2545.47	5.77	2550.88	5.78	5.42	0.21
130	442	312	182	7072	0.83045	934.82	0.602941	1761.92	1831.9	0.48	1.77	2545.6	5.76	2551.22	5.77	5.63	0.22
130	443	313	183	7088	0.829355	935	0.603273	1762.11	1847.92	0	1.76	2544.74	5.74	2550.14	5.76	5.4	0.21
130	444	314	184	7104	0.828261	935.17	0.603604	1762.3	1863.97	0.47	1.75	2544.79	5.73	2550.39	5.74	5.6	0.22
130	445	315	185	7120	0.827168	935.34	0.603933	1762.49	1880.06	0	1.74	2543.85	5.72	2549.23	5.73	5.37	0.21
130	446	316	186	7136	0.826077	935.5	0.60426	1762.68	1896.19	0.47	1.74	2543.83	5.7	2549.4	5.72	5.57	0.22
130	447	317	187	7152	0.824988	935.67	0.604586	1762.88	1912.36	0	1.73	2542.82	5.69	2548.15	5.7	5.34	0.21
130	448	318	188	7168	0.8239	935.83	0.604911	1763.09	1928.56	0.47	1.72	2542.71	5.68	2548.24	5.69	5.53	0.22
130	449	319	189	7184	0.822813	935.98	0.605234	1763.3	1944.8	0	1.71	2541.63	5.66	2546.92	5.67	5.29	0.21
130	450	320	190	7200	0.821728	936.13	0.605556	1763.51	1961.08	0.47	1.7	2541.45	5.65	2546.92	5.66	5.47	0.21
130	451	321	191	7216	0.820645	936.28	0.605876	1763.72	1977.39	0	1.69	2540.29	5.63	2545.52	5.64	5.23	0.21
130	452	322	192	7232	0.819563	936.43	0.606195	1763.94	1993.74	0.47	1.68	2540.03	5.62	2545.44	5.63	5.41	0.21
130	453	323	193	7248	0.818483	936.58	0.606512	1764.17	2010.12	0	1.67	2538.8	5.6	2543.96	5.62	5.16	0.2
130	454	324	194	7264	0.817404	936.72	0.606828	1764.39	2026.54	0.47	1.66	2538.47	5.59	2543.81	5.6	5.33	0.21
130	455	325	195	7280	0.816327	936.86	0.607143	1764.63	2043	0	1.65	2537.17	5.58	2542.25	5.59	5.08	0.2
130	456	326	196	7296	0.815251	936.99	0.607456	1764.86	2059.49	0.47	1.64	2536.77	5.56	2542.01	5.57	5.24	0.21
130	457	327	197	7312	0.814177	937.13	0.607768	1765.1	2076.02	0	1.64	2535.4	5.55	2540.38	5.56	4.98	0.2
130	458	328	198	7328	0.813104	937.26	0.608079	1765.34	2092.58	0.47	1.63	2534.92	5.53	2540.07	5.55	5.14	0.2
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
131	261	130	-1	4176	0.999985	792.3	0.499042	1906.59	0.09	0	9.84	1486.86	5.7	1496.04	5.73	9.19	0.61
131	262	131	0	4192	1	794.33	0.5	1904.15	0	-0.62	10	1502.9	5.74	1511.8	5.77	8.9	0.59
131	263	132	1	4208	0.999986	796.34	0.500951	1901.74	0.09	0	9.84	1519.66	5.78	1527.2	5.81	7.54	0.49
131	264	133	2	4224	0.999943	798.32	0.501894	1899.38	0.37	-0.62	9.69	1535	5.81	1542.61	5.84	7.61	0.49
131	265	134	3	4240	0.999872	800.28	0.50283	1897.06	0.83	0	9.54	1551.37	5.85	1557.66	5.88	6.29	0.4
131	266	135	4	4256	0.999774	802.22	0.503759	1894.77	1.47	-0.61	9.39	1566.32	5.89	1572.74	5.91	6.41	0.41
131	267	136	5	4272	0.999649	804.13	0.504682	1892.52	2.29	0	9.24	1582.31	5.93	1587.45	5.95	5.14	0.32
131	268	137	6	4288	0.999499	806.01	0.505597	1890.31	3.28	-0.61	9.1	1596.89	5.96	1602.19	5.98	5.3	0.33
131	269	138	7	4304	0.999323	807.87	0.506506	1888.13	4.45	0	8.96	1612.51	5.99	1616.58	6.01	4.06	0.25
131	270	139	8	4320	0.999122	809.71	0.507407	1885.99	5.79	-0.61	8.83	1626.73	6.02	1631	6.04	4.26	0.26
131	271	140	9	4336	0.998897	811.53	0.508303	1883.89	7.3	0	8.7	1641.99	6.06	1645.06	6.07	3.07	0.19
131	272	141	10	4352	0.998648	813.32	0.509191	1881.82	8.97	-0.61	8.57	1655.86	6.09	1659.16	6.1	3.3	0.2
131	273	142	11	4368	0.998376	815.09	0.510073	1879.78	10.82	0	8.44	1670.76	6.12	1672.9	6.13	2.14	0.13
131	274	143	12	4384	0.998082	816.84	0.510949	1877.77	12.83	-0.6	8.32	1684.28	6.15	1686.69	6.16	2.41	0.14
131	275	144	13	4400	0.997765	818.56	0.511818	1875.8	15	0	8.2	1698.83	6.18	1700.12	6.18	1.29	0.08
131	276	145	14	4416	0.997427	820.27	0.512681	1873.86	17.34	-0.6	8.08	1712.01	6.2	1713.6	6.21	1.59	0.09
131	277	146	15	4432	0.997068	821.95	0.513538	1871.96	19.83	0	7.97	1726.23	6.23	1726.73	6.23	0.5	0.03
131	278	147	16	4448	0.996688	823.61	0.514388	1870.08	22.48	-0.6	7.85	1739.08	6.26	1739.91	6.26	0.84	0.05
131	279	148	17	4464	0.996287	825.26	0.515233	1868.24	25.29	0	7.74	1752.96	6.28	1752.74	6.28	-0.22	-0.01
131	280	149	18	4480	0.995867	826.88	0.516071	1866.42	28.25	-0.6	7.63	1765.49	6.31	1765.63	6.31	0.14	0.01
131	281	150	19	4496	0.995428	828.48	0.516904	1864.64	31.36	0	7.53	1779.05	6.33	1778.16	6.33	-0.88	-0.05
131	282	151	20	4512	0.99497	830.06	0.51773	1862.88	34.63	-0.6	7.42	1791.26	6.35	1790.77	6.35	-0.49	-0.03

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
131	283	152	21	4528	0.994494	831.63	0.518551	1861.15	38.04	0	7.32	1804.5	6.38	1803.01	6.37	-1.49	-0.08
131	284	153	22	4544	0.993999	833.17	0.519366	1859.46	41.61	-0.59	7.22	1816.4	6.4	1815.33	6.39	-1.07	-0.06
131	285	154	23	4560	0.993487	834.69	0.520175	1857.78	45.32	0	7.13	1829.33	6.42	1827.29	6.41	-2.04	-0.11
131	286	155	24	4576	0.992958	836.2	0.520979	1856.14	49.17	-0.59	7.03	1840.93	6.44	1839.33	6.43	-1.59	-0.09
131	287	156	25	4592	0.992412	837.69	0.521777	1854.53	53.17	0	6.94	1853.56	6.46	1851.01	6.45	-2.54	-0.14
131	288	157	26	4608	0.99185	839.16	0.522569	1852.94	57.31	-0.59	6.84	1864.85	6.48	1862.79	6.47	-2.07	-0.11
131	289	158	27	4624	0.991272	840.61	0.523356	1851.37	61.59	0	6.75	1877.19	6.5	1874.2	6.49	-2.99	-0.16
131	290	159	28	4640	0.990678	842.04	0.524138	1849.84	66.01	-0.59	6.67	1888.2	6.51	1885.7	6.5	-2.49	-0.13
131	291	160	29	4656	0.990069	843.46	0.524914	1848.33	70.56	0	6.58	1900.24	6.53	1896.84	6.52	-3.39	-0.18
131	292	161	30	4672	0.989445	844.85	0.525685	1846.84	75.26	-0.59	6.5	1910.96	6.54	1908.09	6.53	-2.87	-0.15
131	293	162	31	4688	0.988806	846.24	0.526451	1845.38	80.08	0	6.41	1922.72	6.56	1918.97	6.55	-3.75	-0.2
131	294	163	32	4704	0.988153	847.6	0.527211	1843.94	85.04	-0.58	6.33	1933.16	6.58	1929.95	6.56	-3.21	-0.17
131	295	164	33	4720	0.987486	848.95	0.527966	1842.53	90.14	0	6.25	1944.64	6.59	1940.57	6.58	-4.06	-0.21
131	296	165	34	4736	0.986806	850.28	0.528716	1841.14	95.36	-0.58	6.17	1954.81	6.6	1951.31	6.59	-3.51	-0.18
131	297	166	35	4752	0.986113	851.59	0.529461	1839.77	100.71	0	6.1	1966.02	6.62	1961.68	6.6	-4.34	-0.22
131	298	167	36	4768	0.985406	852.89	0.530201	1838.43	106.19	-0.58	6.02	1975.92	6.63	1972.16	6.62	-3.76	-0.19
131	299	168	37	4784	0.984687	854.18	0.530936	1837.11	111.8	0	5.95	1986.86	6.65	1982.28	6.63	-4.58	-0.23
131	300	169	38	4800	0.983956	855.44	0.531667	1835.81	117.53	-0.58	5.87	1996.51	6.66	1992.52	6.64	-3.98	-0.2
131	301	170	39	4816	0.983212	856.7	0.532392	1834.54	123.39	0	5.8	2007.18	6.67	2002.4	6.65	-4.78	-0.24
131	302	171	40	4832	0.982457	857.93	0.533113	1833.28	129.37	-0.58	5.73	2016.57	6.68	2012.4	6.66	-4.17	-0.21
131	303	172	41	4848	0.98169	859.15	0.533828	1832.05	135.47	0	5.66	2026.99	6.69	2022.04	6.67	-4.94	-0.24
131	304	173	42	4864	0.980912	860.36	0.534539	1830.84	141.7	-0.57	5.6	2036.13	6.7	2031.81	6.68	-4.32	-0.21
131	305	174	43	4880	0.980124	861.55	0.535246	1829.65	148.04	0	5.53	2046.29	6.71	2041.21	6.69	-5.08	-0.25
131	306	175	44	4896	0.979324	862.73	0.535948	1828.48	154.5	-0.57	5.47	2055.18	6.72	2050.75	6.7	-4.44	-0.22
131	307	176	45	4912	0.978514	863.9	0.536645	1827.33	161.08	0	5.4	2065.1	6.73	2059.92	6.71	-5.18	-0.25
131	308	177	46	4928	0.977694	865.04	0.537338	1826.2	167.77	-0.57	5.34	2073.75	6.73	2069.23	6.72	-4.52	-0.22
131	309	178	47	4944	0.976865	866.18	0.538026	1825.09	174.58	0	5.28	2083.43	6.74	2078.17	6.73	-5.25	-0.25
131	310	179	48	4960	0.976025	867.3	0.53871	1824	181.5	-0.57	5.22	2091.85	6.75	2087.26	6.73	-4.59	-0.22
131	311	180	49	4976	0.975176	868.41	0.539389	1822.93	188.54	0	5.16	2101.28	6.76	2095.98	6.74	-5.3	-0.25
131	312	181	50	4992	0.974318	869.51	0.540064	1821.87	195.68	-0.57	5.1	2109.47	6.76	2104.85	6.75	-4.62	-0.22
131	313	182	51	5008	0.973451	870.59	0.540735	1820.84	202.94	0	5.04	2118.68	6.77	2113.35	6.75	-5.32	-0.25
131	314	183	52	5024	0.972575	871.65	0.541401	1819.82	210.31	-0.56	4.99	2126.64	6.77	2122	6.76	-4.63	-0.22
131	315	184	53	5040	0.971691	872.71	0.542063	1818.83	217.78	0	4.93	2135.61	6.78	2130.29	6.76	-5.32	-0.25
131	316	185	54	5056	0.970798	873.75	0.542722	1817.85	225.37	-0.56	4.88	2143.35	6.78	2138.73	6.77	-4.62	-0.22
131	317	186	55	5072	0.969897	874.78	0.543375	1816.89	233.06	0	4.83	2152.1	6.79	2146.81	6.77	-5.29	-0.25
131	318	187	56	5088	0.968989	875.8	0.544025	1815.94	240.85	-0.56	4.77	2159.62	6.79	2155.04	6.78	-4.58	-0.21
131	319	188	57	5104	0.968072	876.81	0.544671	1815.01	248.75	0	4.72	2168.15	6.8	2162.91	6.78	-5.25	-0.24
131	320	189	58	5120	0.967148	877.8	0.545312	1814.1	256.75	-0.56	4.67	2175.46	6.8	2170.94	6.78	-4.52	-0.21
131	321	190	59	5136	0.966217	878.78	0.54595	1813.21	264.86	0	4.62	2183.78	6.8	2178.6	6.79	-5.18	-0.24
131	322	191	60	5152	0.965279	879.75	0.546584	1812.33	273.06	-0.56	4.57	2190.87	6.8	2186.43	6.79	-4.45	-0.2
131	323	192	61	5168	0.964334	880.71	0.547214	1811.47	281.37	0	4.52	2198.98	6.81	2193.89	6.79	-5.09	-0.23
131	324	193	62	5184	0.963382	881.65	0.54784	1810.62	289.78	-0.56	4.48	2205.87	6.81	2201.52	6.79	-4.35	-0.2
131	325	194	63	5200	0.962424	882.59	0.548462	1809.8	298.28	0	4.43	2213.77	6.81	2208.78	6.8	-4.99	-0.23
131	326	195	64	5216	0.961459	883.51	0.54908	1808.98	306.88	-0.55	4.38	2220.46	6.81	2216.21	6.8	-4.24	-0.19
131	327	196	65	5232	0.960488	884.42	0.549694	1808.18	315.58	0	4.34	2228.15	6.81	2223.28	6.8	-4.87	-0.22
131	328	197	66	5248	0.959511	885.32	0.550305	1807.4	324.38	-0.55	4.3	2234.64	6.81	2230.53	6.8	-4.12	-0.18

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
131	329	198	67	5264	0.958528	886.21	0.550912	1806.63	333.27	0	4.25	2242.14	6.82	2237.4	6.8	-4.73	-0.21
131	330	199	68	5280	0.957539	887.09	0.551515	1805.88	342.26	-0.55	4.21	2248.43	6.81	2244.46	6.8	-3.97	-0.18
131	331	200	69	5296	0.956545	887.96	0.552115	1805.14	351.34	0	4.17	2255.73	6.81	2251.15	6.8	-4.58	-0.2
131	332	201	70	5312	0.955545	888.82	0.552711	1804.42	360.51	-0.55	4.12	2261.84	6.81	2258.02	6.8	-3.82	-0.17
131	333	202	71	5328	0.95454	889.66	0.553303	1803.71	369.77	0	4.08	2268.94	6.81	2264.52	6.8	-4.42	-0.2
131	334	203	72	5344	0.95353	890.5	0.553892	1803.01	379.12	-0.55	4.04	2274.86	6.81	2271.21	6.8	-3.65	-0.16
131	335	204	73	5360	0.952515	891.33	0.554478	1802.33	388.57	0	4	2281.78	6.81	2277.53	6.8	-4.25	-0.19
131	336	205	74	5376	0.951495	892.14	0.55506	1801.66	398.1	-0.55	3.97	2287.51	6.81	2284.04	6.8	-3.47	-0.15
131	337	206	75	5392	0.950471	892.95	0.555638	1801.01	407.73	0	3.93	2294.24	6.81	2290.18	6.8	-4.06	-0.18
131	338	207	76	5408	0.949442	893.75	0.556213	1800.37	417.44	-0.54	3.89	2299.8	6.8	2296.51	6.79	-3.28	-0.14
131	339	208	77	5424	0.948408	894.53	0.556785	1799.74	427.23	0	3.85	2306.35	6.8	2302.48	6.79	-3.86	-0.17
131	340	209	78	5440	0.94737	895.31	0.557353	1799.13	437.12	-0.54	3.82	2311.72	6.8	2308.64	6.79	-3.08	-0.13
131	341	210	79	5456	0.946328	896.08	0.557918	1798.52	447.09	0	3.78	2318.09	6.8	2314.43	6.79	-3.66	-0.16
131	342	211	80	5472	0.945282	896.84	0.55848	1797.93	457.14	-0.54	3.74	2323.29	6.79	2320.42	6.78	-2.87	-0.12
131	343	212	81	5488	0.944232	897.59	0.559038	1797.36	467.28	0	3.71	2329.49	6.79	2326.04	6.78	-3.45	-0.15
131	344	213	82	5504	0.943179	898.33	0.559593	1796.79	477.5	-0.54	3.67	2334.52	6.79	2331.86	6.78	-2.66	-0.11
131	345	214	83	5520	0.942121	899.06	0.560145	1796.24	487.8	0	3.64	2340.54	6.78	2337.31	6.77	-3.22	-0.14
131	346	215	84	5536	0.941061	899.78	0.560694	1795.7	498.19	-0.54	3.61	2345.4	6.78	2342.97	6.77	-2.43	-0.1
131	347	216	85	5552	0.939996	900.49	0.561239	1795.18	508.65	0	3.57	2351.25	6.78	2348.25	6.77	-3	-0.13
131	348	217	86	5568	0.938929	901.2	0.561782	1794.66	519.2	-0.54	3.54	2355.95	6.77	2353.74	6.76	-2.2	-0.09
131	349	218	87	5584	0.937858	901.89	0.562321	1794.16	529.83	0	3.51	2361.63	6.77	2358.87	6.76	-2.76	-0.12
131	350	219	88	5600	0.936784	902.58	0.562857	1793.66	540.53	-0.53	3.48	2366.17	6.76	2364.2	6.75	-1.97	-0.08
131	351	220	89	5616	0.935707	903.26	0.56339	1793.18	551.32	0	3.45	2371.69	6.76	2369.16	6.75	-2.52	-0.11
131	352	221	90	5632	0.934627	903.93	0.56392	1792.71	562.18	-0.53	3.42	2376.06	6.75	2374.34	6.75	-1.73	-0.07
131	353	222	91	5648	0.933544	904.59	0.564448	1792.26	573.12	0	3.39	2381.42	6.75	2379.14	6.74	-2.28	-0.1
131	354	223	92	5664	0.932459	905.25	0.564972	1791.81	584.13	-0.53	3.36	2385.64	6.74	2384.16	6.73	-1.48	-0.06
131	355	224	93	5680	0.931371	905.89	0.565493	1791.37	595.22	0	3.33	2390.84	6.73	2388.81	6.73	-2.03	-0.09
131	356	225	94	5696	0.93028	906.53	0.566011	1790.95	606.39	-0.53	3.3	2394.91	6.73	2393.67	6.72	-1.23	-0.05
131	357	226	95	5712	0.929187	907.16	0.566527	1790.53	617.63	0	3.27	2399.95	6.72	2398.17	6.72	-1.78	-0.07
131	358	227	96	5728	0.928092	907.78	0.567039	1790.13	628.94	-0.53	3.24	2403.86	6.71	2402.88	6.71	-0.98	-0.04
131	359	228	97	5744	0.926995	908.4	0.567549	1789.73	640.33	0	3.21	2408.76	6.71	2407.23	6.71	-1.53	-0.06
131	360	229	98	5760	0.925895	909	0.568056	1789.35	651.79	-0.53	3.19	2412.52	6.7	2411.79	6.7	-0.73	-0.03
131	361	230	99	5776	0.924793	909.6	0.56856	1788.97	663.32	0	3.16	2417.26	6.7	2415.99	6.69	-1.28	-0.05
131	362	231	100	5792	0.92369	910.19	0.569061	1788.61	674.93	-0.53	3.13	2420.88	6.69	2420.4	6.69	-0.48	-0.02
131	363	232	101	5808	0.922584	910.78	0.569559	1788.26	686.6	0	3.11	2425.47	6.68	2424.45	6.68	-1.02	-0.04
131	364	233	102	5824	0.921477	911.35	0.570055	1787.91	698.35	-0.52	3.08	2428.95	6.67	2428.73	6.67	-0.22	-0.01
131	365	234	103	5840	0.920368	911.92	0.570548	1787.58	710.16	0	3.06	2433.4	6.67	2432.63	6.66	-0.76	-0.03
131	366	235	104	5856	0.919257	912.49	0.571038	1787.25	722.04	-0.52	3.03	2436.73	6.66	2436.76	6.66	0.04	0
131	367	236	105	5872	0.918145	913.04	0.571526	1786.94	734	0	3.01	2441.03	6.65	2440.53	6.65	-0.51	-0.02
131	368	237	106	5888	0.917031	913.59	0.572011	1786.63	746.02	-0.52	2.98	2444.22	6.64	2444.52	6.64	0.29	0.01
131	369	238	107	5904	0.915916	914.13	0.572493	1786.34	758.1	0	2.96	2448.39	6.64	2448.14	6.63	-0.25	-0.01
131	370	239	108	5920	0.914799	914.66	0.572973	1786.05	770.26	-0.52	2.93	2451.44	6.63	2451.99	6.63	0.55	0.02
131	371	240	109	5936	0.913681	915.19	0.57345	1785.77	782.48	0	2.91	2455.47	6.62	2455.48	6.62	0.01	0
131	372	241	110	5952	0.912562	915.71	0.573925	1785.5	794.77	-0.52	2.89	2458.39	6.61	2459.19	6.61	0.8	0.03
131	373	242	111	5968	0.911442	916.23	0.574397	1785.24	807.12	0	2.87	2462.28	6.6	2462.54	6.6	0.26	0.01
131	374	243	112	5984	0.910321	916.74	0.574866	1784.99	819.54	-0.52	2.84	2465.07	6.59	2466.12	6.59	1.06	0.04

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
131	375	244	113	6000	0.909198	917.24	0.575333	1784.74	832.02	0	2.82	2468.83	6.58	2469.34	6.58	0.51	0.02
131	376	245	114	6016	0.908075	917.73	0.575798	1784.51	844.56	-0.52	2.8	2471.48	6.57	2472.79	6.58	1.31	0.05
131	377	246	115	6032	0.906951	918.22	0.57626	1784.28	857.17	0	2.78	2475.11	6.57	2475.87	6.57	0.77	0.03
131	378	247	116	6048	0.905826	918.7	0.57672	1784.06	869.84	-0.51	2.76	2477.64	6.55	2479.19	6.56	1.55	0.06
131	379	248	117	6064	0.9047	919.18	0.577177	1783.85	882.57	0	2.73	2481.13	6.55	2482.14	6.55	1.01	0.04
131	380	249	118	6080	0.903573	919.65	0.577632	1783.65	895.37	-0.51	2.71	2483.53	6.54	2485.33	6.54	1.8	0.07
131	381	250	119	6096	0.902446	920.11	0.578084	1783.46	908.23	0	2.69	2486.9	6.53	2488.16	6.53	1.26	0.05
131	382	251	120	6112	0.901318	920.57	0.578534	1783.27	921.14	-0.51	2.67	2489.18	6.52	2491.22	6.52	2.04	0.08
131	383	252	121	6128	0.90019	921.02	0.578982	1783.09	934.12	0	2.65	2492.42	6.51	2493.92	6.51	1.5	0.06
131	384	253	122	6144	0.899061	921.46	0.579427	1782.92	947.16	-0.51	2.63	2494.58	6.5	2496.86	6.5	2.28	0.09
131	385	254	123	6160	0.897932	921.9	0.57987	1782.76	960.25	0	2.61	2497.69	6.49	2499.43	6.49	1.74	0.07
131	386	255	124	6176	0.896803	922.34	0.580311	1782.61	973.41	-0.51	2.59	2499.73	6.48	2502.24	6.48	2.51	0.1
131	387	256	125	6192	0.895673	922.77	0.580749	1782.46	986.62	0	2.58	2502.73	6.47	2504.69	6.47	1.97	0.08
131	388	257	126	6208	0.894542	923.19	0.581186	1782.32	999.9	-0.51	2.56	2504.64	6.46	2507.39	6.46	2.74	0.11
131	389	258	127	6224	0.893412	923.61	0.58162	1782.19	1013.23	0	2.54	2507.52	6.45	2509.72	6.45	2.2	0.09
131	390	259	128	6240	0.892281	924.02	0.582051	1782.06	1026.61	-0.51	2.52	2509.32	6.43	2512.29	6.44	2.97	0.12
131	391	260	129	6256	0.891151	924.42	0.582481	1781.95	1040.06	0	2.5	2512.08	6.42	2514.5	6.43	2.42	0.1
131	392	261	130	6272	0.89002	924.82	0.582908	1781.84	1053.56	-0.51	2.48	2513.76	6.41	2516.95	6.42	3.19	0.13
131	393	262	131	6288	0.888889	925.22	0.583333	1781.73	1067.11	0	2.47	2516.4	6.4	2519.04	6.41	2.64	0.1
131	394	263	132	6304	0.887758	925.61	0.583756	1781.64	1080.72	-0.5	2.45	2517.98	6.39	2521.38	6.4	3.4	0.13
131	395	264	133	6320	0.886627	925.99	0.584177	1781.55	1094.39	0	2.43	2520.5	6.38	2523.36	6.39	2.85	0.11
131	396	265	134	6336	0.885496	926.37	0.584596	1781.46	1108.11	-0.5	2.41	2521.97	6.37	2525.58	6.38	3.61	0.14
131	397	266	135	6352	0.884366	926.75	0.585013	1781.39	1121.88	0	2.4	2524.38	6.36	2527.44	6.37	3.06	0.12
131	398	267	136	6368	0.883235	927.11	0.585427	1781.32	1135.71	-0.5	2.38	2525.73	6.35	2529.55	6.36	3.81	0.15
131	399	268	137	6384	0.882105	927.48	0.58584	1781.26	1149.59	0	2.36	2528.04	6.34	2531.29	6.34	3.26	0.13
131	400	269	138	6400	0.880975	927.84	0.58625	1781.2	1163.53	-0.5	2.35	2529.28	6.32	2533.29	6.33	4.01	0.16
131	401	270	139	6416	0.879845	928.19	0.586658	1781.15	1177.52	0	2.33	2531.47	6.31	2534.93	6.32	3.45	0.14
131	402	271	140	6432	0.878716	928.54	0.587065	1781.11	1191.56	-0.5	2.32	2532.61	6.3	2536.81	6.31	4.2	0.17
131	403	272	141	6448	0.877587	928.88	0.587469	1781.07	1205.65	0	2.3	2534.7	6.29	2538.34	6.3	3.64	0.14
131	404	273	142	6464	0.876458	929.22	0.587871	1781.04	1219.79	-0.5	2.28	2535.73	6.28	2540.11	6.29	4.38	0.17
131	405	274	143	6480	0.87533	929.56	0.588272	1781.02	1233.98	0	2.27	2537.71	6.27	2541.53	6.28	3.82	0.15
131	406	275	144	6496	0.874202	929.89	0.58867	1781	1248.23	-0.5	2.25	2538.64	6.25	2543.2	6.26	4.56	0.18
131	407	276	145	6512	0.873075	930.21	0.589066	1780.99	1262.52	0	2.24	2540.52	6.24	2544.51	6.25	3.99	0.16
131	408	277	146	6528	0.871948	930.53	0.589461	1780.98	1276.87	-0.5	2.22	2541.35	6.23	2546.07	6.24	4.73	0.19
131	409	278	147	6544	0.870822	930.85	0.589853	1780.98	1291.26	0	2.21	2543.12	6.22	2547.27	6.23	4.16	0.16
131	410	279	148	6560	0.869697	931.16	0.590244	1780.99	1305.71	-0.49	2.2	2543.85	6.2	2548.73	6.22	4.89	0.19
131	411	280	149	6576	0.868572	931.47	0.590633	1781	1320.2	0	2.18	2545.52	6.19	2549.83	6.2	4.31	0.17
131	412	281	150	6592	0.867447	931.77	0.591019	1781.02	1334.74	-0.49	2.17	2546.15	6.18	2551.19	6.19	5.04	0.2
131	413	282	151	6608	0.866324	932.07	0.591404	1781.04	1349.33	0	2.15	2547.72	6.17	2552.18	6.18	4.46	0.17
131	414	283	152	6624	0.865201	932.36	0.591787	1781.07	1363.96	-0.49	2.14	2548.25	6.16	2553.43	6.17	5.18	0.2
131	415	284	153	6640	0.864079	932.65	0.592169	1781.1	1378.65	0	2.13	2549.72	6.14	2554.32	6.15	4.6	0.18
131	416	285	154	6656	0.862958	932.94	0.592548	1781.14	1393.38	-0.49	2.11	2550.16	6.13	2555.48	6.14	5.32	0.21
131	417	286	155	6672	0.861837	933.22	0.592926	1781.19	1408.16	0	2.1	2551.53	6.12	2556.27	6.13	4.74	0.19
131	418	287	156	6688	0.860717	933.5	0.593301	1781.24	1422.98	-0.49	2.09	2551.88	6.1	2557.32	6.12	5.45	0.21
131	419	288	157	6704	0.859599	933.77	0.593675	1781.3	1437.85	0	2.07	2553.15	6.09	2558.01	6.11	4.86	0.19
131	420	289	158	6720	0.858481	934.04	0.594048	1781.36	1452.77	-0.49	2.06	2553.41	6.08	2558.97	6.09	5.56	0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
131	421	290	159	6736	0.857364	934.3	0.594418	1781.43	1467.73	0	2.05	2554.59	6.07	2559.56	6.08	4.97	0.19
131	422	291	160	6752	0.856248	934.56	0.594787	1781.5	1482.73	-0.49	2.03	2554.75	6.05	2560.42	6.07	5.67	0.22
131	423	292	161	6768	0.855132	934.82	0.595154	1781.58	1497.79	0	2.02	2555.84	6.04	2560.92	6.05	5.08	0.2
131	424	293	162	6784	0.854018	935.07	0.595519	1781.66	1512.88	-0.49	2.01	2555.91	6.03	2561.68	6.04	5.77	0.23
131	425	294	163	6800	0.852905	935.32	0.595882	1781.75	1528.02	0	2	2556.9	6.02	2562.08	6.03	5.18	0.2
131	426	295	164	6816	0.851793	935.57	0.596244	1781.84	1543.2	-0.48	1.99	2556.89	6	2562.75	6.02	5.87	0.23
131	427	296	165	6832	0.850682	935.81	0.596604	1781.94	1558.43	0	1.97	2557.79	5.99	2563.06	6	5.27	0.21
131	428	297	166	6848	0.849572	936.05	0.596963	1782.04	1573.7	-0.48	1.96	2557.69	5.98	2563.63	5.99	5.95	0.23
131	429	298	167	6864	0.848463	936.28	0.597319	1782.15	1589.02	0	1.95	2558.5	5.96	2563.85	5.98	5.34	0.21
131	430	299	168	6880	0.847355	936.51	0.597674	1782.26	1604.37	-0.48	1.94	2558.31	5.95	2564.33	5.96	6.02	0.23
131	431	300	169	6896	0.846249	936.74	0.598028	1782.38	1619.77	0	1.93	2559.04	5.94	2564.45	5.95	5.41	0.21
131	432	301	170	6912	0.845143	936.96	0.59838	1782.5	1635.21	-0.48	1.92	2558.76	5.92	2564.84	5.94	6.08	0.24
131	433	302	171	6928	0.844039	937.18	0.59873	1782.63	1650.69	0	1.9	2559.4	5.91	2564.87	5.92	5.47	0.21
131	434	303	172	6944	0.842936	937.4	0.599078	1782.76	1666.22	-0.48	1.89	2559.04	5.9	2565.18	5.91	6.13	0.24
131	435	304	173	6960	0.841834	937.61	0.599425	1782.89	1681.78	0	1.88	2559.6	5.88	2565.12	5.9	5.52	0.22
131	436	305	174	6976	0.840733	937.82	0.599771	1783.04	1697.39	-0.48	1.87	2559.15	5.87	2565.33	5.88	6.18	0.24
131	437	306	175	6992	0.839634	938.02	0.600114	1783.18	1713.03	0	1.86	2559.63	5.86	2565.18	5.87	5.56	0.22
131	438	307	176	7008	0.838535	938.22	0.600457	1783.33	1728.72	-0.48	1.85	2559.1	5.84	2565.31	5.86	6.21	0.24
131	439	308	177	7024	0.837439	938.42	0.600797	1783.48	1744.45	0	1.84	2559.49	5.83	2565.07	5.84	5.58	0.22
131	440	309	178	7040	0.836343	938.62	0.601136	1783.64	1760.21	-0.48	1.83	2558.88	5.82	2565.11	5.83	6.23	0.24
131	441	310	179	7056	0.835249	938.81	0.601474	1783.8	1776.02	0	1.82	2559.19	5.8	2564.79	5.82	5.6	0.22
131	442	311	180	7072	0.834156	939	0.60181	1783.97	1791.86	-0.48	1.81	2558.5	5.79	2564.74	5.8	6.24	0.24
131	443	312	181	7088	0.833064	939.18	0.602144	1784.14	1807.75	0	1.8	2558.73	5.78	2564.34	5.79	5.61	0.22
131	444	313	182	7104	0.831974	939.36	0.602477	1784.32	1823.67	-0.47	1.79	2557.96	5.76	2564.21	5.78	6.24	0.24
131	445	314	183	7120	0.830885	939.54	0.602809	1784.5	1839.63	0	1.78	2558.11	5.75	2563.71	5.76	5.61	0.22
131	446	315	184	7136	0.829798	939.72	0.603139	1784.68	1855.63	-0.47	1.77	2557.26	5.73	2563.5	5.75	6.23	0.24
131	447	316	185	7152	0.828711	939.89	0.603468	1784.87	1871.67	0	1.76	2557.33	5.72	2562.92	5.73	5.59	0.22
131	448	317	186	7168	0.827627	940.06	0.603795	1785.06	1887.75	-0.47	1.75	2556.41	5.71	2562.63	5.72	6.21	0.24
131	449	318	187	7184	0.826544	940.22	0.60412	1785.26	1903.86	0	1.74	2556.4	5.69	2561.97	5.71	5.57	0.22
131	450	319	188	7200	0.825462	940.39	0.604444	1785.45	1920.01	-0.47	1.73	2555.41	5.68	2561.59	5.69	6.18	0.24
131	451	320	189	7216	0.824381	940.55	0.604767	1785.66	1936.2	0	1.72	2555.32	5.67	2560.85	5.68	5.53	0.22
131	452	321	190	7232	0.823303	940.71	0.605088	1785.87	1952.42	-0.47	1.71	2554.25	5.65	2560.39	5.66	6.14	0.24
131	453	322	191	7248	0.822225	940.86	0.605408	1786.08	1968.68	0	1.7	2554.09	5.64	2559.57	5.65	5.48	0.21
131	454	323	192	7264	0.821149	941.01	0.605727	1786.29	1984.97	-0.47	1.69	2552.95	5.62	2559.03	5.64	6.09	0.24
131	455	324	193	7280	0.820075	941.16	0.606044	1786.51	2001.31	0	1.68	2552.71	5.61	2558.13	5.62	5.43	0.21
131	456	325	194	7296	0.819002	941.3	0.60636	1786.73	2017.68	-0.47	1.67	2551.49	5.6	2557.52	5.61	6.02	0.24
131	457	326	195	7312	0.817931	941.45	0.606674	1786.96	2034.08	0	1.67	2551.18	5.58	2556.54	5.59	5.36	0.21
131	458	327	196	7328	0.816861	941.59	0.606987	1787.19	2050.52	-0.47	1.66	2549.9	5.57	2555.84	5.58	5.95	0.23
131	459	328	197	7344	0.815793	941.72	0.607298	1787.42	2066.99	0	1.65	2549.51	5.55	2554.79	5.57	5.28	0.21
131	460	329	198	7360	0.814726	941.86	0.607609	1787.66	2083.5	-0.47	1.64	2548.16	5.54	2554.02	5.55	5.86	0.23
131	461	330	199	7376	0.813661	941.99	0.607918	1787.9	2100.04	0	1.63	2547.7	5.53	2552.88	5.54	5.19	0.2
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
132	263	131	-1	4208	0.999986	796.34	0.499049	1930.89	0.09	0	9.84	1490.52	5.67	1499.7	5.7	9.18	0.61
132	264	132	0	4224	1	798.37	0.5	1928.43	0	0.62	10	1507.81	5.71	1516.3	5.74	8.49	0.56

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
132	265	133	1	4240	0.999986	800.37	0.500943	1926.02	0.09	0	9.84	1523.36	5.75	1530.89	5.78	7.53	0.49
132	266	134	2	4256	0.999943	802.35	0.50188	1923.64	0.37	0.61	9.69	1539.94	5.79	1547.15	5.82	7.21	0.47
132	267	135	3	4272	0.999874	804.31	0.502809	1921.31	0.82	0	9.54	1555.1	5.82	1561.4	5.85	6.3	0.4
132	268	136	4	4288	0.999777	806.23	0.503731	1919.01	1.46	0.61	9.39	1571.3	5.86	1577.31	5.89	6.01	0.38
132	269	137	5	4304	0.999655	808.14	0.504647	1916.75	2.27	0	9.25	1586.09	5.9	1591.24	5.92	5.14	0.32
132	270	138	6	4320	0.999506	810.02	0.505556	1914.52	3.25	0.61	9.11	1601.92	5.93	1606.82	5.95	4.9	0.3
132	271	139	7	4336	0.999333	811.88	0.506458	1912.33	4.41	0	8.97	1616.35	5.96	1620.42	5.98	4.07	0.25
132	272	140	8	4352	0.999135	813.71	0.507353	1910.18	5.74	0.61	8.84	1631.81	6	1635.67	6.01	3.86	0.24
132	273	141	9	4368	0.998913	815.53	0.508242	1908.06	7.24	0	8.71	1645.88	6.03	1648.95	6.04	3.08	0.19
132	274	142	10	4384	0.998668	817.32	0.509124	1905.98	8.91	0.6	8.58	1660.98	6.06	1663.88	6.07	2.9	0.17
132	275	143	11	4400	0.9984	819.08	0.51	1903.93	10.74	0	8.45	1674.7	6.09	1676.86	6.1	2.16	0.13
132	276	144	12	4416	0.99811	820.83	0.51087	1901.91	12.74	0.6	8.33	1689.46	6.12	1691.47	6.13	2.01	0.12
132	277	145	13	4432	0.997797	822.55	0.511733	1899.92	14.89	0	8.21	1702.84	6.15	1704.14	6.15	1.3	0.08
132	278	146	14	4448	0.997464	824.26	0.51259	1897.97	17.21	0.6	8.09	1717.25	6.18	1718.45	6.18	1.19	0.07
132	279	147	15	4464	0.997109	825.94	0.513441	1896.05	19.69	0	7.98	1730.3	6.2	1730.82	6.2	0.52	0.03
132	280	148	16	4480	0.996735	827.6	0.514286	1894.16	22.32	0.6	7.87	1744.38	6.23	1744.82	6.23	0.44	0.03
132	281	149	17	4496	0.99634	829.24	0.515125	1892.3	25.11	0	7.76	1757.1	6.25	1756.9	6.25	-0.2	-0.01
132	282	150	18	4512	0.995926	830.86	0.515957	1890.48	28.05	0.6	7.65	1770.86	6.28	1770.6	6.28	-0.25	-0.01
132	283	151	19	4528	0.995493	832.46	0.516784	1888.68	31.14	0	7.54	1783.26	6.3	1782.4	6.3	-0.86	-0.05
132	284	152	20	4544	0.995041	834.04	0.517606	1886.91	34.39	0.59	7.44	1796.7	6.33	1795.81	6.32	-0.89	-0.05
132	285	153	21	4560	0.994571	835.6	0.518421	1885.17	37.78	0	7.34	1808.79	6.35	1807.32	6.34	-1.47	-0.08
132	286	154	22	4576	0.994083	837.15	0.519231	1883.46	41.32	0.59	7.24	1821.91	6.37	1820.44	6.37	-1.47	-0.08
132	287	155	23	4592	0.993578	838.67	0.520035	1881.77	45	0	7.14	1833.7	6.39	1831.68	6.38	-2.02	-0.11
132	288	156	24	4608	0.993056	840.18	0.520833	1880.12	48.83	0.59	7.05	1846.51	6.41	1844.52	6.4	-1.99	-0.11
132	289	157	25	4624	0.992517	841.66	0.521626	1878.49	52.8	0	6.95	1858	6.43	1855.49	6.42	-2.51	-0.14
132	290	158	26	4640	0.991962	843.13	0.522414	1876.89	56.91	0.59	6.86	1870.52	6.45	1868.05	6.44	-2.46	-0.13
132	291	159	27	4656	0.991391	844.58	0.523196	1875.31	61.17	0	6.77	1881.71	6.47	1878.75	6.46	-2.96	-0.16
132	292	160	28	4672	0.990805	846.02	0.523973	1873.76	65.56	0.59	6.68	1893.94	6.49	1891.05	6.48	-2.89	-0.15
132	293	161	29	4688	0.990204	847.43	0.524744	1872.24	70.08	0	6.6	1904.85	6.5	1901.49	6.49	-3.36	-0.18
132	294	162	30	4704	0.989588	848.83	0.52551	1870.74	74.74	0.58	6.51	1916.79	6.52	1913.52	6.51	-3.27	-0.17
132	295	163	31	4720	0.988957	850.21	0.526271	1869.26	79.54	0	6.43	1927.42	6.53	1923.7	6.52	-3.72	-0.19
132	296	164	32	4736	0.988313	851.58	0.527027	1867.81	84.47	0.58	6.35	1939.07	6.55	1935.47	6.54	-3.6	-0.19
132	297	165	33	4752	0.987654	852.93	0.527778	1866.39	89.53	0	6.27	1949.43	6.56	1945.4	6.55	-4.03	-0.21
132	298	166	34	4768	0.986983	854.26	0.528523	1864.98	94.72	0.58	6.19	1960.81	6.58	1956.91	6.57	-3.9	-0.2
132	299	167	35	4784	0.986298	855.57	0.529264	1863.6	100.04	0	6.12	1970.9	6.59	1966.59	6.58	-4.3	-0.22
132	300	168	36	4800	0.9856	856.87	0.53	1862.25	105.49	0.58	6.04	1982.01	6.61	1977.86	6.59	-4.15	-0.21
132	301	169	37	4816	0.98489	858.16	0.530731	1860.92	111.06	0	5.97	1991.83	6.62	1987.29	6.6	-4.54	-0.23
132	302	170	38	4832	0.984167	859.43	0.531457	1859.61	116.76	0.58	5.9	2002.68	6.63	1998.31	6.62	-4.37	-0.22
132	303	171	39	4848	0.983433	860.68	0.532178	1858.32	122.58	0	5.82	2012.25	6.64	2007.51	6.63	-4.74	-0.24
132	304	172	40	4864	0.982687	861.92	0.532895	1857.05	128.52	0.57	5.75	2022.84	6.65	2018.28	6.64	-4.55	-0.23
132	305	173	41	4880	0.98193	863.14	0.533607	1855.8	134.59	0	5.69	2032.15	6.66	2027.25	6.65	-4.9	-0.24
132	306	174	42	4896	0.981161	864.35	0.534314	1854.58	140.77	0.57	5.62	2042.49	6.67	2037.78	6.66	-4.7	-0.23
132	307	175	43	4912	0.980382	865.54	0.535016	1853.38	147.08	0	5.55	2051.55	6.68	2046.52	6.67	-5.03	-0.25
132	308	176	44	4928	0.979592	866.72	0.535714	1852.19	153.5	0.57	5.49	2061.64	6.69	2056.82	6.68	-4.82	-0.23
132	309	177	45	4944	0.978792	867.89	0.536408	1851.03	160.04	0	5.42	2070.46	6.7	2065.33	6.68	-5.13	-0.25
132	310	178	46	4960	0.977981	869.04	0.537097	1849.89	166.69	0.57	5.36	2080.31	6.71	2075.4	6.69	-4.91	-0.24

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
132	311	179	47	4976	0.977161	870.18	0.537781	1848.77	173.46	0	5.3	2088.89	6.72	2083.69	6.7	-5.2	-0.25
132	312	180	48	4992	0.976331	871.3	0.538462	1847.66	180.34	0.57	5.24	2098.5	6.73	2093.53	6.71	-4.97	-0.24
132	313	181	49	5008	0.975492	872.41	0.539137	1846.58	187.34	0	5.18	2106.85	6.73	2101.6	6.71	-5.25	-0.25
132	314	182	50	5024	0.974644	873.51	0.539809	1845.51	194.44	0.56	5.12	2116.22	6.74	2111.22	6.72	-5	-0.24
132	315	183	51	5040	0.973787	874.59	0.540476	1844.47	201.66	0	5.07	2124.35	6.74	2119.08	6.73	-5.27	-0.25
132	316	184	52	5056	0.972921	875.66	0.541139	1843.44	208.98	0.56	5.01	2133.49	6.75	2128.48	6.74	-5	-0.24
132	317	185	53	5072	0.972047	876.72	0.541798	1842.43	216.41	0	4.95	2141.39	6.76	2136.13	6.74	-5.26	-0.25
132	318	186	54	5088	0.971164	877.77	0.542453	1841.44	223.95	0.56	4.9	2150.3	6.76	2145.32	6.75	-4.99	-0.23
132	319	187	55	5104	0.970273	878.8	0.543103	1840.46	231.6	0	4.85	2157.99	6.76	2152.75	6.75	-5.23	-0.24
132	320	188	56	5120	0.969375	879.82	0.54375	1839.51	239.35	0.56	4.8	2166.68	6.77	2161.73	6.76	-4.95	-0.23
132	321	189	57	5136	0.968469	880.83	0.544393	1838.57	247.2	0	4.74	2174.15	6.77	2168.97	6.76	-5.18	-0.24
132	322	190	58	5152	0.967555	881.82	0.545031	1837.64	255.16	0.56	4.69	2182.62	6.78	2177.73	6.76	-4.89	-0.22
132	323	191	59	5168	0.966634	882.81	0.545666	1836.74	263.22	0	4.64	2189.88	6.78	2184.77	6.76	-5.11	-0.23
132	324	192	60	5184	0.965706	883.78	0.546296	1835.85	271.38	0.56	4.59	2198.14	6.78	2193.33	6.77	-4.81	-0.22
132	325	193	61	5200	0.964772	884.74	0.546923	1834.98	279.64	0	4.55	2205.19	6.79	2200.17	6.77	-5.02	-0.23
132	326	194	62	5216	0.96383	885.69	0.547546	1834.12	288	0.55	4.5	2213.24	6.79	2208.53	6.77	-4.71	-0.21
132	327	195	63	5232	0.962882	886.62	0.548165	1833.28	296.46	0	4.45	2220.09	6.79	2215.18	6.77	-4.91	-0.22
132	328	196	64	5248	0.961927	887.55	0.54878	1832.45	305.02	0.55	4.41	2227.94	6.79	2223.34	6.78	-4.6	-0.21
132	329	197	65	5264	0.960967	888.47	0.549392	1831.64	313.67	0	4.36	2234.58	6.79	2229.79	6.78	-4.79	-0.21
132	330	198	66	5280	0.96	889.37	0.55	1830.85	322.42	0.55	4.32	2242.23	6.79	2237.77	6.78	-4.46	-0.2
132	331	199	67	5296	0.959027	890.26	0.550604	1830.07	331.26	0	4.27	2248.68	6.79	2244.03	6.78	-4.65	-0.21
132	332	200	68	5312	0.958049	891.14	0.551205	1829.3	340.2	0.55	4.23	2256.13	6.8	2251.81	6.78	-4.32	-0.19
132	333	201	69	5328	0.957065	892.02	0.551802	1828.55	349.23	0	4.19	2262.39	6.79	2257.89	6.78	-4.49	-0.2
132	334	202	70	5344	0.956076	892.88	0.552395	1827.82	358.35	0.55	4.15	2269.64	6.8	2265.48	6.78	-4.16	-0.18
132	335	203	71	5360	0.955081	893.73	0.552985	1827.1	367.57	0	4.11	2275.71	6.79	2271.38	6.78	-4.33	-0.19
132	336	204	72	5376	0.954082	894.57	0.553571	1826.39	376.88	0.55	4.07	2282.78	6.79	2278.79	6.78	-3.99	-0.17
132	337	205	73	5392	0.953077	895.4	0.554154	1825.7	386.27	0	4.03	2288.66	6.79	2284.51	6.78	-4.15	-0.18
132	338	206	74	5408	0.952068	896.22	0.554734	1825.02	395.75	0.54	3.99	2295.54	6.79	2291.74	6.78	-3.8	-0.17
132	339	207	75	5424	0.951053	897.03	0.55531	1824.36	405.33	0	3.95	2301.24	6.79	2297.28	6.78	-3.95	-0.17
132	340	208	76	5440	0.950035	897.83	0.555882	1823.7	414.99	0.54	3.91	2307.93	6.79	2304.33	6.78	-3.61	-0.16
132	341	209	77	5456	0.949011	898.62	0.556452	1823.06	424.73	0	3.87	2313.45	6.78	2309.7	6.77	-3.75	-0.16
132	342	210	78	5472	0.947984	899.4	0.557018	1822.44	434.57	0.54	3.84	2319.97	6.78	2316.57	6.77	-3.4	-0.15
132	343	211	79	5488	0.946952	900.17	0.55758	1821.83	444.49	0	3.8	2325.31	6.78	2321.77	6.77	-3.54	-0.15
132	344	212	80	5504	0.945917	900.94	0.55814	1821.23	454.49	0.54	3.77	2331.65	6.78	2328.47	6.77	-3.19	-0.14
132	345	213	81	5520	0.944877	901.69	0.558696	1820.64	464.58	0	3.73	2336.83	6.77	2333.5	6.76	-3.32	-0.14
132	346	214	82	5536	0.943834	902.43	0.559249	1820.07	474.75	0.54	3.7	2342.99	6.77	2340.03	6.76	-2.96	-0.13
132	347	215	83	5552	0.942787	903.17	0.559798	1819.5	485	0	3.66	2347.99	6.77	2344.9	6.76	-3.1	-0.13
132	348	216	84	5568	0.941736	903.89	0.560345	1818.95	495.33	0.54	3.63	2353.99	6.76	2351.25	6.76	-2.73	-0.12
132	349	217	85	5584	0.940682	904.61	0.560888	1818.42	505.75	0	3.6	2358.82	6.76	2355.96	6.75	-2.86	-0.12
132	350	218	86	5600	0.939624	905.32	0.561429	1817.89	516.24	0.53	3.56	2364.65	6.76	2362.15	6.75	-2.5	-0.11
132	351	219	87	5616	0.938564	906.02	0.561966	1817.38	526.82	0	3.53	2369.32	6.75	2366.7	6.74	-2.62	-0.11
132	352	220	88	5632	0.9375	906.71	0.5625	1816.87	537.47	0.53	3.5	2374.98	6.75	2372.73	6.74	-2.25	-0.1
132	353	221	89	5648	0.936433	907.39	0.563031	1816.38	548.2	0	3.47	2379.49	6.74	2377.12	6.73	-2.38	-0.1
132	354	222	90	5664	0.935363	908.07	0.563559	1815.9	559.01	0.53	3.44	2384.99	6.74	2382.98	6.73	-2.01	-0.08
132	355	223	91	5680	0.934291	908.73	0.564085	1815.43	569.9	0	3.41	2389.34	6.73	2387.22	6.72	-2.13	-0.09
132	356	224	92	5696	0.933216	909.39	0.564607	1814.98	580.86	0.53	3.38	2394.68	6.73	2392.93	6.72	-1.76	-0.07

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
132	357	225	93	5712	0.932138	910.04	0.565126	1814.53	591.9	0	3.35	2398.88	6.72	2397.01	6.71	-1.87	-0.08
132	358	226	94	5728	0.931057	910.68	0.565642	1814.1	603.01	0.53	3.32	2404.06	6.72	2402.56	6.71	-1.5	-0.06
132	359	227	95	5744	0.929974	911.32	0.566156	1813.67	614.2	0	3.29	2408.11	6.71	2406.49	6.7	-1.61	-0.07
132	360	228	96	5760	0.928889	911.94	0.566667	1813.26	625.46	0.53	3.26	2413.13	6.7	2411.89	6.7	-1.24	-0.05
132	361	229	97	5776	0.927801	912.56	0.567175	1812.85	636.79	0	3.24	2417.03	6.7	2415.68	6.69	-1.35	-0.06
132	362	230	98	5792	0.926712	913.17	0.56768	1812.46	648.2	0.53	3.21	2421.9	6.69	2420.92	6.69	-0.98	-0.04
132	363	231	99	5808	0.92562	913.77	0.568182	1812.08	659.68	0	3.18	2425.65	6.68	2424.56	6.68	-1.09	-0.04
132	364	232	100	5824	0.924526	914.37	0.568681	1811.7	671.23	0.52	3.15	2430.38	6.68	2429.66	6.67	-0.72	-0.03
132	365	233	101	5840	0.92343	914.96	0.569178	1811.34	682.85	0	3.13	2433.98	6.67	2433.16	6.67	-0.83	-0.03
132	366	234	102	5856	0.922333	915.54	0.569672	1810.99	694.54	0.52	3.1	2438.56	6.66	2438.11	6.66	-0.45	-0.02
132	367	235	103	5872	0.921233	916.11	0.570163	1810.64	706.3	0	3.08	2442.02	6.65	2441.46	6.65	-0.56	-0.02
132	368	236	104	5888	0.920132	916.68	0.570652	1810.31	718.13	0.52	3.05	2446.46	6.65	2446.27	6.65	-0.19	-0.01
132	369	237	105	5904	0.91903	917.24	0.571138	1809.98	730.03	0	3.03	2449.78	6.64	2449.48	6.64	-0.29	-0.01
132	370	238	106	5920	0.917925	917.79	0.571622	1809.67	741.99	0.52	3	2454.07	6.63	2454.14	6.63	0.08	0
132	371	239	107	5936	0.91682	918.34	0.572102	1809.36	754.03	0	2.98	2457.25	6.62	2457.22	6.62	-0.03	0
132	372	240	108	5952	0.915713	918.87	0.572581	1809.07	766.13	0.52	2.95	2461.4	6.62	2461.74	6.62	0.34	0.01
132	373	241	109	5968	0.914604	919.41	0.573056	1808.78	778.3	0	2.93	2464.45	6.61	2464.69	6.61	0.24	0.01
132	374	242	110	5984	0.913495	919.93	0.573529	1808.5	790.53	0.52	2.91	2468.47	6.6	2469.07	6.6	0.6	0.02
132	375	243	111	6000	0.912384	920.45	0.574	1808.23	802.83	0	2.88	2471.38	6.59	2471.88	6.59	0.5	0.02
132	376	244	112	6016	0.911272	920.96	0.574468	1807.97	815.19	0.52	2.86	2475.26	6.58	2476.12	6.59	0.87	0.03
132	377	245	113	6032	0.910159	921.47	0.574934	1807.72	827.61	0	2.84	2478.04	6.57	2478.8	6.58	0.76	0.03
132	378	246	114	6048	0.909045	921.97	0.575397	1807.47	840.1	0.51	2.82	2481.79	6.57	2482.91	6.57	1.13	0.05
132	379	247	115	6064	0.90793	922.46	0.575858	1807.24	852.66	0	2.8	2484.44	6.56	2485.46	6.56	1.02	0.04
132	380	248	116	6080	0.906814	922.95	0.576316	1807.01	865.27	0.51	2.77	2488.06	6.55	2489.44	6.55	1.38	0.06
132	381	249	117	6096	0.905698	923.43	0.576772	1806.79	877.95	0	2.75	2490.58	6.54	2491.86	6.54	1.28	0.05
132	382	250	118	6112	0.90458	923.9	0.577225	1806.58	890.69	0.51	2.73	2494.07	6.53	2495.71	6.53	1.64	0.07
132	383	251	119	6128	0.903462	924.37	0.577676	1806.38	903.5	0	2.71	2496.47	6.52	2498	6.52	1.53	0.06
132	384	252	120	6144	0.902344	924.83	0.578125	1806.19	916.36	0.51	2.69	2499.83	6.51	2501.72	6.51	1.89	0.08
132	385	253	121	6160	0.901224	925.28	0.578571	1806	929.28	0	2.67	2502.1	6.5	2503.89	6.5	1.78	0.07
132	386	254	122	6176	0.900105	925.73	0.579016	1805.82	942.26	0.51	2.65	2505.34	6.49	2507.48	6.5	2.14	0.09
132	387	255	123	6192	0.898984	926.18	0.579457	1805.65	955.3	0	2.63	2507.5	6.48	2509.53	6.48	2.03	0.08
132	388	256	124	6208	0.897864	926.62	0.579897	1805.49	968.4	0.51	2.61	2510.61	6.47	2512.99	6.48	2.38	0.09
132	389	257	125	6224	0.896743	927.05	0.580334	1805.34	981.56	0	2.59	2512.64	6.46	2514.92	6.47	2.27	0.09
132	390	258	126	6240	0.895621	927.48	0.580769	1805.19	994.78	0.51	2.57	2515.63	6.45	2518.26	6.46	2.63	0.1
132	391	259	127	6256	0.8945	927.9	0.581202	1805.05	1008.06	0	2.56	2517.55	6.44	2520.07	6.45	2.51	0.1
132	392	260	128	6272	0.893378	928.31	0.581633	1804.92	1021.39	0.51	2.54	2520.43	6.43	2523.29	6.44	2.86	0.11
132	393	261	129	6288	0.892256	928.72	0.582061	1804.79	1034.78	0	2.52	2522.23	6.42	2524.98	6.42	2.75	0.11
132	394	262	130	6304	0.891133	929.13	0.582487	1804.67	1048.22	0.5	2.5	2524.98	6.41	2528.08	6.42	3.09	0.12
132	395	263	131	6320	0.890011	929.53	0.582911	1804.56	1061.72	0	2.48	2526.67	6.4	2529.65	6.4	2.98	0.12
132	396	264	132	6336	0.888889	929.92	0.583333	1804.46	1075.28	0.5	2.47	2529.31	6.39	2532.63	6.4	3.32	0.13
132	397	265	133	6352	0.887767	930.31	0.583753	1804.36	1088.89	0	2.45	2530.89	6.38	2534.09	6.38	3.2	0.13
132	398	266	134	6368	0.886644	930.69	0.584171	1804.27	1102.55	0.5	2.43	2533.41	6.37	2536.95	6.37	3.54	0.14
132	399	267	135	6384	0.885522	931.07	0.584586	1804.19	1116.27	0	2.41	2534.88	6.35	2538.3	6.36	3.42	0.13
132	400	268	136	6400	0.8844	931.44	0.585	1804.11	1130.05	0.5	2.4	2537.29	6.34	2541.05	6.35	3.75	0.15
132	401	269	137	6416	0.883278	931.81	0.585411	1804.04	1143.87	0	2.38	2538.65	6.33	2542.28	6.34	3.63	0.14
132	402	270	138	6432	0.882156	932.18	0.585821	1803.98	1157.75	0.5	2.37	2540.95	6.32	2544.91	6.33	3.96	0.16

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
132	403	271	139	6448	0.881035	932.53	0.586228	1803.92	1171.69	0	2.35	2542.21	6.31	2546.04	6.32	3.84	0.15
132	404	272	140	6464	0.879914	932.89	0.586634	1803.87	1185.67	0.5	2.33	2544.4	6.3	2548.56	6.31	4.16	0.16
132	405	273	141	6480	0.878793	933.24	0.587037	1803.83	1199.71	0	2.32	2545.54	6.29	2549.58	6.3	4.03	0.16
132	406	274	142	6496	0.877672	933.58	0.587438	1803.79	1213.8	0.5	2.3	2547.63	6.27	2551.99	6.29	4.36	0.17
132	407	275	143	6512	0.876552	933.92	0.587838	1803.76	1227.93	0	2.29	2548.67	6.26	2552.9	6.27	4.23	0.17
132	408	276	144	6528	0.875433	934.25	0.588235	1803.74	1242.12	0.5	2.27	2550.65	6.25	2555.2	6.26	4.54	0.18
132	409	277	145	6544	0.874313	934.58	0.588631	1803.72	1256.36	0	2.26	2551.59	6.24	2556	6.25	4.41	0.17
132	410	278	146	6560	0.873195	934.91	0.589024	1803.7	1270.65	0.49	2.24	2553.47	6.23	2558.19	6.24	4.73	0.18
132	411	279	147	6576	0.872076	935.23	0.589416	1803.7	1284.99	0	2.23	2554.31	6.21	2558.9	6.23	4.59	0.18
132	412	280	148	6592	0.870959	935.54	0.589806	1803.7	1299.38	0.49	2.21	2556.08	6.2	2560.98	6.22	4.9	0.19
132	413	281	149	6608	0.869842	935.86	0.590194	1803.7	1313.82	0	2.2	2556.82	6.19	2561.58	6.2	4.76	0.19
132	414	282	150	6624	0.868725	936.16	0.59058	1803.71	1328.31	0.49	2.18	2558.49	6.18	2563.56	6.19	5.06	0.2
132	415	283	151	6640	0.867609	936.46	0.590964	1803.73	1342.84	0	2.17	2559.13	6.17	2564.05	6.18	4.92	0.19
132	416	284	152	6656	0.866494	936.76	0.591346	1803.75	1357.42	0.49	2.16	2560.71	6.16	2565.93	6.17	5.22	0.2
132	417	285	153	6672	0.86538	937.06	0.591727	1803.78	1372.05	0	2.14	2561.25	6.14	2566.33	6.15	5.07	0.2
132	418	286	154	6688	0.864266	937.35	0.592105	1803.82	1386.73	0.49	2.13	2562.73	6.13	2568.1	6.14	5.37	0.21
132	419	287	155	6704	0.863153	937.63	0.592482	1803.86	1401.45	0	2.11	2563.18	6.12	2568.4	6.13	5.22	0.2
132	420	288	156	6720	0.862041	937.91	0.592857	1803.9	1416.22	0.49	2.1	2564.56	6.11	2570.07	6.12	5.51	0.21
132	421	289	157	6736	0.860929	938.19	0.59323	1803.95	1431.04	0	2.09	2564.91	6.09	2570.27	6.11	5.36	0.21
132	422	290	158	6752	0.859819	938.46	0.593602	1804.01	1445.9	0.49	2.08	2566.2	6.08	2571.84	6.09	5.64	0.22
132	423	291	159	6768	0.858709	938.73	0.593972	1804.07	1460.8	0	2.06	2566.46	6.07	2571.94	6.08	5.48	0.21
132	424	292	160	6784	0.857601	939	0.59434	1804.13	1475.76	0.49	2.05	2567.65	6.06	2573.41	6.07	5.77	0.22
132	425	293	161	6800	0.856493	939.26	0.594706	1804.21	1490.75	0	2.04	2567.82	6.04	2573.42	6.06	5.6	0.22
132	426	294	162	6816	0.855386	939.51	0.59507	1804.28	1505.79	0.48	2.02	2568.92	6.03	2574.8	6.04	5.88	0.23
132	427	295	163	6832	0.85428	939.77	0.595433	1804.37	1520.88	0	2.01	2569	6.02	2574.71	6.03	5.71	0.22
132	428	296	164	6848	0.853175	940.02	0.595794	1804.45	1536.01	0.48	2	2570	6	2575.99	6.02	5.99	0.23
132	429	297	165	6864	0.852071	940.26	0.596154	1804.54	1551.18	0	1.99	2570	5.99	2575.81	6	5.81	0.23
132	430	298	166	6880	0.850968	940.5	0.596512	1804.64	1566.4	0.48	1.98	2570.91	5.98	2577	5.99	6.08	0.24
132	431	299	167	6896	0.849866	940.74	0.596868	1804.74	1581.66	0	1.96	2570.82	5.96	2576.73	5.98	5.91	0.23
132	432	300	168	6912	0.848765	940.98	0.597222	1804.85	1596.96	0.48	1.95	2571.65	5.95	2577.81	5.97	6.17	0.24
132	433	301	169	6928	0.847666	941.21	0.597575	1804.96	1612.31	0	1.94	2571.47	5.94	2577.46	5.95	5.99	0.23
132	434	302	170	6944	0.846567	941.43	0.597926	1805.08	1627.69	0.48	1.93	2572.21	5.93	2578.45	5.94	6.25	0.24
132	435	303	171	6960	0.84547	941.66	0.598276	1805.2	1643.12	0	1.92	2571.94	5.91	2578	5.93	6.06	0.24
132	436	304	172	6976	0.844373	941.88	0.598624	1805.33	1658.59	0.48	1.91	2572.59	5.9	2578.91	5.91	6.31	0.24
132	437	305	173	6992	0.843278	942.09	0.59897	1805.46	1674.1	0	1.9	2572.25	5.89	2578.37	5.9	6.12	0.24
132	438	306	174	7008	0.842184	942.31	0.599315	1805.59	1689.65	0.48	1.89	2572.81	5.87	2579.18	5.89	6.37	0.25
132	439	307	175	7024	0.841092	942.51	0.599658	1805.73	1705.25	0	1.87	2572.38	5.86	2578.56	5.87	6.18	0.24
132	440	308	176	7040	0.84	942.72	0.6	1805.88	1720.88	0.48	1.86	2572.87	5.85	2579.28	5.86	6.42	0.25
132	441	309	177	7056	0.83891	942.92	0.60034	1806.02	1736.55	0	1.85	2572.35	5.83	2578.57	5.85	6.22	0.24
132	442	310	178	7072	0.837821	943.12	0.600679	1806.18	1752.27	0.48	1.84	2572.75	5.82	2579.21	5.84	6.45	0.25
132	443	311	179	7088	0.836733	943.32	0.601016	1806.33	1768.02	0	1.83	2572.16	5.81	2578.41	5.82	6.25	0.24
132	444	312	180	7104	0.835646	943.51	0.601351	1806.5	1783.81	0.47	1.82	2572.48	5.79	2578.96	5.81	6.48	0.25
132	445	313	181	7120	0.834561	943.7	0.601685	1806.66	1799.64	0	1.81	2571.81	5.78	2578.08	5.79	6.27	0.24
132	446	314	182	7136	0.833477	943.88	0.602018	1806.83	1815.51	0.47	1.8	2572.05	5.77	2578.54	5.78	6.5	0.25
132	447	315	183	7152	0.832395	944.07	0.602349	1807.01	1831.42	0	1.79	2571.3	5.75	2577.58	5.77	6.29	0.24
132	448	316	184	7168	0.831314	944.25	0.602679	1807.19	1847.37	0.47	1.78	2571.45	5.74	2577.96	5.75	6.5	0.25

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
132	449	317	185	7184	0.830234	944.42	0.603007	1807.37	1863.35	0	1.77	2570.63	5.73	2576.92	5.74	6.29	0.24
132	450	318	186	7200	0.829156	944.6	0.603333	1807.56	1879.37	0.47	1.76	2570.71	5.71	2577.21	5.73	6.5	0.25
132	451	319	187	7216	0.828079	944.77	0.603659	1807.75	1895.43	0	1.75	2569.81	5.7	2576.08	5.71	6.28	0.24
132	452	320	188	7232	0.827003	944.93	0.603982	1807.94	1911.53	0.47	1.74	2569.81	5.69	2576.29	5.7	6.48	0.25
132	453	321	189	7248	0.825929	945.1	0.604305	1808.14	1927.67	0	1.73	2568.83	5.67	2575.09	5.68	6.26	0.24
132	454	322	190	7264	0.824856	945.26	0.604626	1808.34	1943.84	0.47	1.72	2568.76	5.66	2575.21	5.67	6.46	0.25
132	455	323	191	7280	0.823785	945.42	0.604945	1808.55	1960.04	0	1.72	2567.7	5.64	2573.93	5.66	6.23	0.24
132	456	324	192	7296	0.822715	945.57	0.605263	1808.76	1976.29	0.47	1.71	2567.55	5.63	2573.98	5.64	6.42	0.25
132	457	325	193	7312	0.821646	945.72	0.60558	1808.98	1992.57	0	1.7	2566.43	5.62	2572.61	5.63	6.18	0.24
132	458	326	194	7328	0.820579	945.87	0.605895	1809.19	2008.88	0.47	1.69	2566.21	5.6	2572.58	5.62	6.37	0.25
132	459	327	195	7344	0.819514	946.02	0.606209	1809.42	2025.23	0	1.68	2565.01	5.59	2571.14	5.6	6.13	0.24
132	460	328	196	7360	0.81845	946.16	0.606522	1809.64	2041.62	0.47	1.67	2564.71	5.58	2571.03	5.59	6.31	0.25
132	461	329	197	7376	0.817387	946.3	0.606833	1809.87	2058.04	0	1.66	2563.44	5.56	2569.51	5.57	6.07	0.24
132	462	330	198	7392	0.816327	946.44	0.607143	1810.1	2074.5	0.47	1.65	2563.07	5.55	2569.32	5.56	6.24	0.24
132	463	331	199	7408	0.815267	946.58	0.607451	1810.34	2090.99	0	1.64	2561.74	5.53	2567.73	5.55	5.99	0.23
132	464	332	200	7424	0.814209	946.71	0.607759	1810.58	2107.52	0.46	1.64	2561.29	5.52	2567.46	5.53	6.16	0.24
132	465	333	201	7440	0.813153	946.84	0.608065	1810.82	2124.08	0	1.63	2559.89	5.51	2565.79	5.52	5.9	0.23
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
133	265	132	-1	4240	0.999986	800.37	0.499057	1955.31	0.09	0	9.84	1494.06	5.64	1503.23	5.67	9.16	0.61
133	266	133	0	4256	1	802.4	0.5	1952.84	0	-0.61	10	1510.14	5.68	1519.02	5.71	8.87	0.58
133	267	134	1	4272	0.999986	804.4	0.500936	1950.42	0.09	0	9.84	1526.94	5.72	1534.45	5.75	7.51	0.49
133	268	135	2	4288	0.999944	806.37	0.501866	1948.03	0.36	-0.61	9.69	1542.32	5.75	1549.9	5.78	7.58	0.49
133	269	136	3	4304	0.999876	808.32	0.502788	1945.68	0.82	0	9.54	1558.73	5.79	1565	5.82	6.27	0.4
133	270	137	4	4320	0.999781	810.24	0.503704	1943.37	1.45	-0.61	9.4	1573.73	5.83	1580.11	5.85	6.38	0.4
133	271	138	5	4336	0.99966	812.14	0.504613	1941.09	2.25	0	9.25	1589.76	5.87	1594.88	5.89	5.11	0.32
133	272	139	6	4352	0.999513	814.02	0.505515	1938.86	3.23	-0.61	9.12	1604.4	5.9	1609.67	5.92	5.27	0.33
133	273	140	7	4368	0.999343	815.88	0.50641	1936.65	4.38	0	8.98	1620.07	5.93	1624.1	5.95	4.03	0.25
133	274	141	8	4384	0.999148	817.71	0.507299	1934.49	5.7	-0.6	8.85	1634.34	5.96	1638.57	5.98	4.23	0.26
133	275	142	9	4400	0.998929	819.52	0.508182	1932.36	7.19	0	8.72	1649.65	6	1652.69	6.01	3.03	0.18
133	276	143	10	4416	0.998687	821.3	0.509058	1930.26	8.84	-0.6	8.59	1663.58	6.03	1666.84	6.04	3.26	0.2
133	277	144	11	4432	0.998423	823.07	0.509928	1928.2	10.66	0	8.46	1678.54	6.06	1680.64	6.07	2.11	0.13
133	278	145	12	4448	0.998137	824.81	0.510791	1926.17	12.64	-0.6	8.34	1692.12	6.09	1694.49	6.1	2.37	0.14
133	279	146	13	4464	0.997829	826.53	0.511649	1924.17	14.79	0	8.22	1706.73	6.12	1707.98	6.12	1.25	0.07
133	280	147	14	4480	0.9975	828.23	0.5125	1922.2	17.09	-0.6	8.11	1719.98	6.14	1721.53	6.15	1.54	0.09
133	281	148	15	4496	0.99715	829.91	0.513345	1920.27	19.55	0	7.99	1734.26	6.17	1734.72	6.17	0.46	0.03
133	282	149	16	4512	0.996781	831.57	0.514184	1918.37	22.16	-0.6	7.88	1747.18	6.2	1747.97	6.2	0.79	0.04
133	283	150	17	4528	0.996392	833.21	0.515018	1916.5	24.93	0	7.77	1761.13	6.22	1760.86	6.22	-0.27	-0.02
133	284	151	18	4544	0.995983	834.83	0.515845	1914.66	27.85	-0.59	7.66	1773.73	6.25	1773.82	6.25	0.09	0
133	285	152	19	4560	0.995556	836.43	0.516667	1912.84	30.92	0	7.56	1787.36	6.27	1786.42	6.27	-0.94	-0.05
133	286	153	20	4576	0.99511	838.01	0.517483	1911.06	34.15	-0.59	7.45	1799.64	6.29	1799.09	6.29	-0.55	-0.03
133	287	154	21	4592	0.994646	839.57	0.518293	1909.31	37.52	0	7.35	1812.96	6.32	1811.41	6.31	-1.55	-0.09
133	288	155	22	4608	0.994165	841.11	0.519097	1907.58	41.03	-0.59	7.26	1824.94	6.34	1823.8	6.33	-1.13	-0.06
133	289	156	23	4624	0.993666	842.64	0.519896	1905.89	44.69	0	7.16	1837.94	6.36	1835.84	6.35	-2.1	-0.11
133	290	157	24	4640	0.993151	844.14	0.52069	1904.22	48.49	-0.59	7.06	1849.62	6.38	1847.96	6.37	-1.66	-0.09

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
133	291	158	25	4656	0.992619	845.63	0.521478	1902.57	52.44	0	6.97	1862.33	6.4	1859.72	6.39	-2.61	-0.14
133	292	159	26	4672	0.992072	847.1	0.52226	1900.96	56.52	-0.59	6.88	1873.71	6.42	1871.57	6.41	-2.14	-0.11
133	293	160	27	4688	0.991508	848.55	0.523038	1899.37	60.75	0	6.79	1886.12	6.44	1883.06	6.43	-3.06	-0.16
133	294	161	28	4704	0.99093	849.98	0.52381	1897.81	65.11	-0.58	6.7	1897.22	6.45	1894.65	6.44	-2.57	-0.14
133	295	162	29	4720	0.990336	851.4	0.524576	1896.27	69.61	0	6.62	1909.34	6.47	1905.88	6.46	-3.46	-0.18
133	296	163	30	4736	0.989728	852.8	0.525338	1894.76	74.24	-0.58	6.53	1920.16	6.49	1917.2	6.48	-2.95	-0.15
133	297	164	31	4752	0.989105	854.18	0.526094	1893.27	79.01	0	6.45	1932	6.51	1928.17	6.49	-3.83	-0.2
133	298	165	32	4768	0.988469	855.54	0.526846	1891.81	83.91	-0.58	6.37	1942.54	6.52	1939.24	6.51	-3.29	-0.17
133	299	166	33	4784	0.987819	856.89	0.527592	1890.37	88.93	0	6.29	1954.1	6.54	1949.95	6.52	-4.14	-0.21
133	300	167	34	4800	0.987156	858.23	0.528333	1888.95	94.09	-0.58	6.21	1964.37	6.55	1960.77	6.54	-3.59	-0.18
133	301	168	35	4816	0.986479	859.54	0.52907	1887.56	99.38	0	6.14	1975.66	6.56	1971.23	6.55	-4.42	-0.22
133	302	169	36	4832	0.98579	860.84	0.529801	1886.19	104.79	-0.58	6.06	1985.66	6.58	1981.81	6.56	-3.85	-0.19
133	303	170	37	4848	0.985089	862.13	0.530528	1884.84	110.33	0	5.99	1996.68	6.59	1992.02	6.57	-4.66	-0.23
133	304	171	38	4864	0.984375	863.4	0.53125	1883.52	115.99	-0.57	5.92	2006.43	6.6	2002.36	6.59	-4.07	-0.2
133	305	172	39	4880	0.98365	864.65	0.531967	1882.22	121.78	0	5.84	2017.19	6.61	2012.33	6.6	-4.86	-0.24
133	306	173	40	4896	0.982913	865.89	0.53268	1880.94	127.69	-0.57	5.78	2026.68	6.62	2022.43	6.61	-4.26	-0.21
133	307	174	41	4912	0.982164	867.12	0.533388	1879.68	133.71	0	5.71	2037.19	6.64	2032.16	6.62	-5.03	-0.25
133	308	175	42	4928	0.981405	868.33	0.534091	1878.45	139.86	-0.57	5.64	2046.43	6.64	2042.02	6.63	-4.41	-0.22
133	309	176	43	4944	0.980635	869.52	0.53479	1877.23	146.13	0	5.57	2056.69	6.66	2051.53	6.64	-5.17	-0.25
133	310	177	44	4960	0.979854	870.7	0.535484	1876.03	152.51	-0.57	5.51	2065.69	6.66	2061.16	6.65	-4.53	-0.22
133	311	178	45	4976	0.979063	871.87	0.536174	1874.86	159.01	0	5.45	2075.7	6.67	2070.43	6.66	-5.27	-0.25
133	312	179	46	4992	0.978263	873.03	0.536859	1873.7	165.63	-0.57	5.38	2084.46	6.68	2079.84	6.67	-4.62	-0.22
133	313	180	47	5008	0.977452	874.17	0.53754	1872.57	172.36	0	5.32	2094.23	6.69	2088.89	6.67	-5.35	-0.26
133	314	181	48	5024	0.976632	875.29	0.538217	1871.45	179.2	-0.56	5.26	2102.76	6.7	2098.07	6.68	-4.68	-0.22
133	315	182	49	5040	0.975802	876.4	0.538889	1870.36	186.15	0	5.2	2112.29	6.71	2106.9	6.69	-5.39	-0.26
133	316	183	50	5056	0.974964	877.5	0.539557	1869.28	193.22	-0.56	5.15	2120.59	6.71	2115.87	6.7	-4.72	-0.22
133	317	184	51	5072	0.974117	878.59	0.540221	1868.22	200.39	0	5.09	2129.89	6.72	2124.48	6.7	-5.41	-0.25
133	318	185	52	5088	0.973261	879.66	0.540881	1867.18	207.67	-0.56	5.03	2137.96	6.72	2133.23	6.71	-4.73	-0.22
133	319	186	53	5104	0.972396	880.72	0.541536	1866.16	215.06	0	4.98	2147.04	6.73	2141.63	6.71	-5.41	-0.25
133	320	187	54	5120	0.971523	881.77	0.542188	1865.15	222.56	-0.56	4.92	2154.88	6.73	2150.17	6.72	-4.71	-0.22
133	321	188	55	5136	0.970643	882.8	0.542835	1864.17	230.16	0	4.87	2163.74	6.74	2158.35	6.72	-5.38	-0.25
133	322	189	56	5152	0.969754	883.83	0.543478	1863.2	237.87	-0.56	4.82	2171.37	6.74	2166.69	6.73	-4.68	-0.22
133	323	190	57	5168	0.968858	884.84	0.544118	1862.25	245.68	0	4.77	2180	6.75	2174.67	6.73	-5.34	-0.25
133	324	191	58	5184	0.967955	885.84	0.544753	1861.31	253.59	-0.56	4.71	2187.42	6.75	2182.8	6.74	-4.62	-0.21
133	325	192	59	5200	0.967044	886.82	0.545385	1860.39	261.61	0	4.67	2195.84	6.76	2190.58	6.74	-5.27	-0.24
133	326	193	60	5216	0.966126	887.8	0.546012	1859.49	269.72	-0.55	4.62	2203.05	6.76	2198.51	6.74	-4.54	-0.21
133	327	194	61	5232	0.965201	888.76	0.546636	1858.61	277.94	0	4.57	2211.26	6.76	2206.09	6.75	-5.18	-0.23
133	328	195	62	5248	0.96427	889.71	0.547256	1857.74	286.25	-0.55	4.52	2218.27	6.76	2213.82	6.75	-4.44	-0.2
133	329	196	63	5264	0.963332	890.65	0.547872	1856.89	294.67	0	4.47	2226.27	6.77	2221.2	6.75	-5.07	-0.23
133	330	197	64	5280	0.962388	891.58	0.548485	1856.05	303.18	-0.55	4.43	2233.07	6.77	2228.74	6.75	-4.33	-0.19
133	331	198	65	5296	0.961437	892.5	0.549094	1855.23	311.78	0	4.38	2240.88	6.77	2235.93	6.76	-4.95	-0.22
133	332	199	66	5312	0.96048	893.41	0.549699	1854.42	320.48	-0.55	4.34	2247.48	6.77	2243.28	6.76	-4.2	-0.19
133	333	200	67	5328	0.959518	894.3	0.5503	1853.63	329.28	0	4.3	2255.08	6.77	2250.27	6.76	-4.81	-0.21
133	334	201	68	5344	0.95855	895.19	0.550898	1852.85	338.17	-0.55	4.25	2261.49	6.77	2257.44	6.76	-4.05	-0.18
133	335	202	69	5360	0.957576	896.06	0.551493	1852.09	347.15	0	4.21	2268.9	6.77	2264.25	6.76	-4.66	-0.21
133	336	203	70	5376	0.956597	896.93	0.552083	1851.35	356.23	-0.55	4.17	2275.12	6.77	2271.23	6.76	-3.89	-0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
133	337	204	71	5392	0.955613	897.78	0.552671	1850.61	365.39	0	4.13	2282.34	6.77	2277.85	6.76	-4.49	-0.2
133	338	205	72	5408	0.954623	898.62	0.553254	1849.9	374.65	-0.54	4.09	2288.37	6.77	2284.65	6.76	-3.72	-0.16
133	339	206	73	5424	0.953629	899.46	0.553835	1849.19	384	0	4.05	2295.4	6.77	2291.09	6.76	-4.31	-0.19
133	340	207	74	5440	0.95263	900.28	0.554412	1848.5	393.43	-0.54	4.01	2301.25	6.77	2297.71	6.76	-3.54	-0.15
133	341	208	75	5456	0.951626	901.1	0.554985	1847.83	402.96	0	3.97	2308.09	6.77	2303.97	6.76	-4.12	-0.18
133	342	209	76	5472	0.950617	901.9	0.555556	1847.16	412.57	-0.54	3.93	2313.76	6.77	2310.42	6.76	-3.34	-0.14
133	343	210	77	5488	0.949604	902.69	0.556122	1846.51	422.27	0	3.9	2320.42	6.77	2316.51	6.75	-3.92	-0.17
133	344	211	78	5504	0.948587	903.48	0.556686	1845.88	432.05	-0.54	3.86	2325.91	6.76	2322.78	6.75	-3.13	-0.13
133	345	212	79	5520	0.947566	904.25	0.557246	1845.25	441.92	0	3.82	2332.4	6.76	2328.69	6.75	-3.7	-0.16
133	346	213	80	5536	0.94654	905.02	0.557803	1844.64	451.87	-0.54	3.79	2337.72	6.76	2334.8	6.75	-2.92	-0.13
133	347	214	81	5552	0.945511	905.78	0.558357	1844.05	461.91	0	3.75	2344.02	6.76	2340.54	6.75	-3.48	-0.15
133	348	215	82	5568	0.944477	906.52	0.558908	1843.46	472.02	-0.54	3.72	2349.17	6.75	2346.47	6.74	-2.7	-0.11
133	349	216	83	5584	0.943441	907.26	0.559456	1842.89	482.23	0	3.68	2355.3	6.75	2352.05	6.74	-3.26	-0.14
133	350	217	84	5600	0.9424	907.99	0.56	1842.33	492.51	-0.53	3.65	2360.28	6.74	2357.82	6.74	-2.46	-0.1
133	351	218	85	5616	0.941356	908.71	0.560541	1841.78	502.87	0	3.62	2366.25	6.74	2363.23	6.73	-3.02	-0.13
133	352	219	86	5632	0.940309	909.43	0.56108	1841.24	513.32	-0.53	3.58	2371.06	6.74	2368.84	6.73	-2.23	-0.09
133	353	220	87	5648	0.939258	910.13	0.561615	1840.72	523.84	0	3.55	2376.86	6.73	2374.08	6.73	-2.78	-0.12
133	354	221	88	5664	0.938204	910.82	0.562147	1840.21	534.44	-0.53	3.52	2381.52	6.73	2379.53	6.72	-1.98	-0.08
133	355	222	89	5680	0.937147	911.51	0.562676	1839.71	545.12	0	3.49	2387.15	6.72	2384.62	6.72	-2.53	-0.11
133	356	223	90	5696	0.936088	912.19	0.563202	1839.22	555.88	-0.53	3.46	2391.64	6.72	2389.91	6.71	-1.73	-0.07
133	357	224	91	5712	0.935025	912.86	0.563725	1838.74	566.71	0	3.43	2397.12	6.71	2394.84	6.71	-2.28	-0.1
133	358	225	92	5728	0.93396	913.52	0.564246	1838.27	577.62	-0.53	3.4	2401.46	6.71	2399.98	6.7	-1.48	-0.06
133	359	226	93	5744	0.932892	914.17	0.564763	1837.81	588.61	0	3.37	2406.77	6.7	2404.75	6.7	-2.02	-0.08
133	360	227	94	5760	0.931821	914.82	0.565278	1837.37	599.67	-0.53	3.34	2410.95	6.7	2409.73	6.69	-1.22	-0.05
133	361	228	95	5776	0.930748	915.46	0.565789	1836.93	610.8	0	3.31	2416.11	6.69	2414.35	6.69	-1.76	-0.07
133	362	229	96	5792	0.929672	916.09	0.566298	1836.51	622.01	-0.53	3.28	2420.15	6.69	2419.19	6.68	-0.96	-0.04
133	363	230	97	5808	0.928595	916.71	0.566804	1836.1	633.29	0	3.26	2425.15	6.68	2423.66	6.68	-1.5	-0.06
133	364	231	98	5824	0.927515	917.33	0.567308	1835.69	644.65	-0.52	3.23	2429.04	6.67	2428.34	6.67	-0.7	-0.03
133	365	232	99	5840	0.926433	917.93	0.567808	1835.3	656.07	0	3.2	2433.89	6.67	2432.66	6.66	-1.23	-0.05
133	366	233	100	5856	0.925349	918.53	0.568306	1834.92	667.57	-0.52	3.17	2437.63	6.66	2437.2	6.66	-0.43	-0.02
133	367	234	101	5872	0.924263	919.12	0.568801	1834.55	679.14	0	3.15	2442.34	6.65	2441.38	6.65	-0.96	-0.04
133	368	235	102	5888	0.923175	919.71	0.569293	1834.18	690.78	-0.52	3.12	2445.93	6.65	2445.77	6.65	-0.16	-0.01
133	369	236	103	5904	0.922085	920.29	0.569783	1833.83	702.48	0	3.1	2450.5	6.64	2449.8	6.64	-0.69	-0.03
133	370	237	104	5920	0.920993	920.86	0.57027	1833.49	714.26	-0.52	3.07	2453.95	6.63	2454.05	6.63	0.11	0
133	371	238	105	5936	0.9199	921.42	0.570755	1833.15	726.1	0	3.05	2458.37	6.63	2457.94	6.63	-0.42	-0.02
133	372	239	106	5952	0.918806	921.98	0.571237	1832.83	738.02	-0.52	3.02	2461.68	6.62	2462.05	6.62	0.38	0.02
133	373	240	107	5968	0.917709	922.53	0.571716	1832.51	750	0	3	2465.96	6.61	2465.8	6.61	-0.16	-0.01
133	374	241	108	5984	0.916612	923.07	0.572193	1832.21	762.04	-0.52	2.97	2469.13	6.6	2469.78	6.6	0.64	0.03
133	375	242	109	6000	0.915513	923.61	0.572667	1831.91	774.16	0	2.95	2473.28	6.6	2473.39	6.6	0.11	0
133	376	243	110	6016	0.914413	924.14	0.573138	1831.63	786.33	-0.52	2.93	2476.32	6.59	2477.23	6.59	0.91	0.04
133	377	244	111	6032	0.913311	924.66	0.573607	1831.35	798.58	0	2.9	2480.32	6.58	2480.7	6.58	0.38	0.02
133	378	245	112	6048	0.912209	925.17	0.574074	1831.08	810.89	-0.51	2.88	2483.23	6.57	2484.41	6.57	1.18	0.05
133	379	246	113	6064	0.911105	925.68	0.574538	1830.82	823.26	0	2.86	2487.1	6.56	2487.75	6.56	0.65	0.03
133	380	247	114	6080	0.91	926.19	0.575	1830.56	835.69	-0.51	2.84	2489.88	6.55	2491.32	6.56	1.44	0.06
133	381	248	115	6096	0.908894	926.68	0.575459	1830.32	848.19	0	2.81	2493.62	6.54	2494.53	6.55	0.91	0.04
133	382	249	116	6112	0.907788	927.17	0.575916	1830.09	860.76	-0.51	2.79	2496.26	6.53	2497.97	6.54	1.71	0.07

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
133	383	250	117	6128	0.90668	927.66	0.576371	1829.86	873.38	0	2.77	2499.87	6.53	2501.05	6.53	1.18	0.05
133	384	251	118	6144	0.905572	928.14	0.576823	1829.64	886.07	-0.51	2.75	2502.4	6.52	2504.36	6.52	1.97	0.08
133	385	252	119	6160	0.904463	928.61	0.577273	1829.43	898.81	0	2.73	2505.88	6.51	2507.31	6.51	1.44	0.06
133	386	253	120	6176	0.903353	929.08	0.57772	1829.23	911.62	-0.51	2.71	2508.28	6.5	2510.5	6.5	2.23	0.09
133	387	254	121	6192	0.902243	929.54	0.578165	1829.03	924.49	0	2.69	2511.63	6.49	2513.33	6.49	1.7	0.07
133	388	255	122	6208	0.901132	929.99	0.578608	1828.85	937.42	-0.51	2.67	2513.91	6.48	2516.39	6.49	2.48	0.1
133	389	256	123	6224	0.90002	930.44	0.579049	1828.67	950.41	0	2.65	2517.14	6.47	2519.09	6.48	1.95	0.08
133	390	257	124	6240	0.898909	930.88	0.579487	1828.5	963.45	-0.51	2.63	2519.29	6.46	2522.03	6.47	2.73	0.11
133	391	258	125	6256	0.897796	931.32	0.579923	1828.34	976.56	0	2.61	2522.4	6.45	2524.6	6.46	2.2	0.09
133	392	259	126	6272	0.896684	931.75	0.580357	1828.18	989.72	-0.51	2.59	2524.44	6.44	2527.42	6.45	2.98	0.12
133	393	260	127	6288	0.895571	932.17	0.580789	1828.03	1002.94	0	2.57	2527.43	6.43	2529.87	6.44	2.44	0.1
133	394	261	128	6304	0.894457	932.59	0.581218	1827.89	1016.22	-0.5	2.56	2529.35	6.42	2532.57	6.43	3.22	0.13
133	395	262	129	6320	0.893344	933.01	0.581646	1827.76	1029.55	0	2.54	2532.22	6.41	2534.9	6.42	2.69	0.11
133	396	263	130	6336	0.89223	933.42	0.582071	1827.63	1042.94	-0.5	2.52	2534.03	6.4	2537.48	6.41	3.46	0.14
133	397	264	131	6352	0.891117	933.82	0.582494	1827.51	1056.39	0	2.5	2536.78	6.39	2539.7	6.4	2.92	0.12
133	398	265	132	6368	0.890003	934.22	0.582915	1827.4	1069.89	-0.5	2.48	2538.47	6.38	2542.16	6.39	3.69	0.15
133	399	266	133	6384	0.888889	934.61	0.583333	1827.3	1083.44	0	2.47	2541.11	6.37	2544.26	6.38	3.15	0.12
133	400	267	134	6400	0.887775	935	0.58375	1827.2	1097.06	-0.5	2.45	2542.69	6.36	2546.61	6.37	3.92	0.15
133	401	268	135	6416	0.886661	935.38	0.584165	1827.11	1110.72	0	2.43	2545.22	6.35	2548.6	6.36	3.38	0.13
133	402	269	136	6432	0.885547	935.76	0.584577	1827.03	1124.44	-0.5	2.41	2546.69	6.34	2550.83	6.35	4.14	0.16
133	403	270	137	6448	0.884434	936.13	0.584988	1826.95	1138.21	0	2.4	2549.1	6.33	2552.7	6.33	3.6	0.14
133	404	271	138	6464	0.88332	936.5	0.585396	1826.88	1152.04	-0.5	2.38	2550.47	6.31	2554.82	6.32	4.36	0.17
133	405	272	139	6480	0.882207	936.86	0.585802	1826.82	1165.92	0	2.37	2552.77	6.3	2556.58	6.31	3.81	0.15
133	406	273	140	6496	0.881094	937.22	0.586207	1826.76	1179.85	-0.5	2.35	2554.03	6.29	2558.59	6.3	4.56	0.18
133	407	274	141	6512	0.879981	937.57	0.586609	1826.71	1193.83	0	2.33	2556.23	6.28	2560.24	6.29	4.02	0.16
133	408	275	142	6528	0.878869	937.92	0.58701	1826.66	1207.86	-0.5	2.32	2557.38	6.27	2562.15	6.28	4.77	0.19
133	409	276	143	6544	0.877757	938.26	0.587408	1826.63	1221.95	0	2.3	2559.47	6.26	2563.69	6.27	4.22	0.16
133	410	277	144	6560	0.876645	938.6	0.587805	1826.59	1236.08	-0.49	2.29	2560.52	6.25	2565.48	6.26	4.96	0.19
133	411	278	145	6576	0.875534	938.94	0.5882	1826.57	1250.27	0	2.27	2562.5	6.23	2566.91	6.25	4.41	0.17
133	412	279	146	6592	0.874423	939.26	0.588592	1826.55	1264.5	-0.49	2.26	2563.45	6.22	2568.6	6.23	5.15	0.2
133	413	280	147	6608	0.873312	939.59	0.588983	1826.54	1278.79	0	2.24	2565.33	6.21	2569.93	6.22	4.6	0.18
133	414	281	148	6624	0.872202	939.91	0.589372	1826.53	1293.12	-0.49	2.23	2566.18	6.2	2571.51	6.21	5.33	0.21
133	415	282	149	6640	0.871093	940.22	0.589759	1826.53	1307.5	0	2.21	2567.96	6.19	2572.73	6.2	4.78	0.19
133	416	283	150	6656	0.869984	940.54	0.590144	1826.53	1321.93	-0.49	2.2	2568.71	6.17	2574.21	6.19	5.51	0.21
133	417	284	151	6672	0.868876	940.84	0.590528	1826.54	1336.41	0	2.19	2570.38	6.16	2575.33	6.18	4.95	0.19
133	418	285	152	6688	0.867769	941.14	0.590909	1826.56	1350.94	-0.49	2.17	2571.04	6.15	2576.71	6.16	5.67	0.22
133	419	286	153	6704	0.866662	941.44	0.591289	1826.58	1365.52	0	2.16	2572.62	6.14	2577.72	6.15	5.11	0.2
133	420	287	154	6720	0.865556	941.74	0.591667	1826.61	1380.14	-0.49	2.14	2573.17	6.13	2579	6.14	5.83	0.23
133	421	288	155	6736	0.86445	942.03	0.592043	1826.64	1394.81	0	2.13	2574.65	6.12	2579.92	6.13	5.26	0.2
133	422	289	156	6752	0.863345	942.31	0.592417	1826.68	1409.52	-0.49	2.12	2575.11	6.1	2581.09	6.12	5.98	0.23
133	423	290	157	6768	0.862241	942.59	0.59279	1826.73	1424.29	0	2.1	2576.5	6.09	2581.91	6.1	5.41	0.21
133	424	291	158	6784	0.861138	942.87	0.59316	1826.78	1439.09	-0.49	2.09	2576.87	6.08	2582.99	6.09	6.12	0.24
133	425	292	159	6800	0.860036	943.14	0.593529	1826.83	1453.95	0	2.08	2578.16	6.07	2583.71	6.08	5.55	0.21
133	426	293	160	6816	0.858935	943.41	0.593897	1826.89	1468.84	-0.48	2.06	2578.43	6.05	2584.69	6.07	6.26	0.24
133	427	294	161	6832	0.857834	943.68	0.594262	1826.96	1483.79	0	2.05	2579.63	6.04	2585.31	6.05	5.68	0.22
133	428	295	162	6848	0.856734	943.94	0.594626	1827.03	1498.78	-0.48	2.04	2579.82	6.03	2586.2	6.04	6.38	0.25

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133	429	296	163	6864	0.855635	944.2	0.594988	1827.1	1513.81	0	2.03	2580.92	6.02	2586.72	6.03	5.8	0.22
133	430	297	164	6880	0.854538	944.45	0.595349	1827.19	1528.88	-0.48	2.02	2581.02	6	2587.51	6.02	6.5	0.25
133	431	298	165	6896	0.853441	944.7	0.595708	1827.27	1544	0	2	2582.03	5.99	2587.94	6	5.91	0.23
133	432	299	166	6912	0.852345	944.94	0.596065	1827.36	1559.16	-0.48	1.99	2582.04	5.98	2588.64	5.99	6.6	0.26
133	433	300	167	6928	0.85125	945.19	0.59642	1827.46	1574.37	0	1.98	2582.96	5.97	2588.98	5.98	6.01	0.23
133	434	301	168	6944	0.850156	945.42	0.596774	1827.56	1589.62	-0.48	1.97	2582.88	5.95	2589.58	5.97	6.7	0.26
133	435	302	169	6960	0.849063	945.66	0.597126	1827.67	1604.91	0	1.96	2583.72	5.94	2589.83	5.95	6.11	0.24
133	436	303	170	6976	0.847972	945.89	0.597477	1827.78	1620.24	-0.48	1.94	2583.55	5.93	2590.34	5.94	6.79	0.26
133	437	304	171	6992	0.846881	946.12	0.597826	1827.89	1635.62	0	1.93	2584.3	5.91	2590.49	5.93	6.19	0.24
133	438	305	172	7008	0.845791	946.34	0.598174	1828.01	1651.03	-0.48	1.92	2584.05	5.9	2590.92	5.92	6.86	0.26
133	439	306	173	7024	0.844703	946.56	0.598519	1828.14	1666.49	0	1.91	2584.72	5.89	2590.98	5.9	6.26	0.24
133	440	307	174	7040	0.843616	946.78	0.598864	1828.27	1681.99	-0.48	1.9	2584.38	5.87	2591.32	5.89	6.93	0.27
133	441	308	175	7056	0.84253	946.99	0.599206	1828.4	1697.53	0	1.89	2584.96	5.86	2591.29	5.88	6.33	0.24
133	442	309	176	7072	0.841445	947.2	0.599548	1828.54	1713.11	-0.48	1.88	2584.55	5.85	2591.54	5.86	6.99	0.27
133	443	310	177	7088	0.840361	947.41	0.599887	1828.69	1728.73	0	1.87	2585.04	5.84	2591.43	5.85	6.38	0.25
133	444	311	178	7104	0.839278	947.61	0.600225	1828.83	1744.39	-0.47	1.86	2584.55	5.82	2591.59	5.84	7.04	0.27
133	445	312	179	7120	0.838197	947.81	0.600562	1828.99	1760.09	0	1.85	2584.96	5.81	2591.39	5.82	6.43	0.25
133	446	313	180	7136	0.837117	948.01	0.600897	1829.14	1775.83	-0.47	1.84	2584.38	5.79	2591.46	5.81	7.08	0.27
133	447	314	181	7152	0.836038	948.2	0.60123	1829.3	1791.61	0	1.83	2584.71	5.78	2591.18	5.8	6.46	0.25
133	448	315	182	7168	0.834961	948.39	0.601562	1829.47	1807.43	-0.47	1.82	2584.06	5.77	2591.17	5.78	7.11	0.27
133	449	316	183	7184	0.833885	948.58	0.601893	1829.64	1823.28	0	1.81	2584.31	5.76	2590.79	5.77	6.48	0.25
133	450	317	184	7200	0.83281	948.76	0.602222	1829.81	1839.17	-0.47	1.8	2583.58	5.74	2590.7	5.76	7.12	0.27
133	451	318	185	7216	0.831736	948.94	0.60255	1829.99	1855.11	0	1.79	2583.75	5.73	2590.25	5.74	6.5	0.25
133	452	319	186	7232	0.830664	949.12	0.602876	1830.17	1871.08	-0.47	1.78	2582.94	5.71	2590.07	5.73	7.13	0.28
133	453	320	187	7248	0.829593	949.29	0.603201	1830.36	1887.08	0	1.77	2583.03	5.7	2589.53	5.72	6.5	0.25
133	454	321	188	7264	0.828524	949.46	0.603524	1830.55	1903.13	-0.47	1.76	2582.15	5.69	2589.27	5.7	7.13	0.28
133	455	322	189	7280	0.827456	949.63	0.603846	1830.74	1919.21	0	1.75	2582.16	5.68	2588.66	5.69	6.49	0.25
133	456	323	190	7296	0.826389	949.79	0.604167	1830.94	1935.33	-0.47	1.74	2581.2	5.66	2588.32	5.68	7.11	0.27
133	457	324	191	7312	0.825324	949.96	0.604486	1831.14	1951.49	0	1.73	2581.14	5.65	2587.62	5.66	6.47	0.25
133	458	325	192	7328	0.82426	950.11	0.604803	1831.35	1967.68	-0.47	1.72	2580.11	5.63	2587.2	5.65	7.09	0.27
133	459	326	193	7344	0.823197	950.27	0.60512	1831.56	1983.9	0	1.71	2579.98	5.62	2586.42	5.63	6.44	0.25
133	460	327	194	7360	0.822136	950.42	0.605435	1831.77	2000.17	-0.47	1.7	2578.87	5.61	2585.92	5.62	7.05	0.27
133	461	328	195	7376	0.821077	950.57	0.605748	1831.99	2016.47	0	1.69	2578.66	5.59	2585.06	5.61	6.4	0.25
133	462	329	196	7392	0.820018	950.72	0.606061	1832.21	2032.8	-0.47	1.68	2577.48	5.58	2584.49	5.59	7	0.27
133	463	330	197	7408	0.818962	950.87	0.606371	1832.44	2049.17	0	1.67	2577.2	5.57	2583.55	5.58	6.35	0.25
133	464	331	198	7424	0.817907	951.01	0.606681	1832.67	2065.58	-0.46	1.67	2575.95	5.55	2582.9	5.57	6.95	0.27
133	465	332	199	7440	0.816853	951.15	0.606989	1832.9	2082.02	0	1.66	2575.59	5.54	2581.88	5.55	6.29	0.24
133	466	333	200	7456	0.815801	951.28	0.607296	1833.13	2098.49	-0.46	1.65	2574.28	5.52	2581.15	5.54	6.88	0.27
133	467	334	201	7472	0.81475	951.42	0.607602	1833.37	2115	0	1.64	2573.85	5.51	2580.07	5.52	6.22	0.24
133	468	335	202	7488	0.813701	951.55	0.607906	1833.62	2131.54	-0.46	1.63	2572.46	5.5	2579.26	5.51	6.8	0.26
133	469	336	203	7504	0.812653	951.68	0.608209	1833.86	2148.12	0	1.62	2571.97	5.48	2578.1	5.5	6.13	0.24
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
134	267	133	-1	4272	0.999986	804.4	0.499064	1979.86	0.09	0	9.84	1497.5	5.61	1506.65	5.64	9.15	0.61
134	268	134	0	4288	1	806.41	0.5	1977.38	0	0.61	10	1514.82	5.65	1523.29	5.68	8.47	0.56

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
134	269	135	1	4304	0.999986	808.41	0.500929	1974.94	0.09	0	9.85	1530.41	5.69	1537.92	5.72	7.51	0.49
134	270	136	2	4320	0.999945	810.38	0.501852	1972.54	0.36	0.61	9.69	1547.03	5.73	1554.21	5.76	7.18	0.46
134	271	137	3	4336	0.999877	812.32	0.502768	1970.18	0.81	0	9.55	1562.24	5.76	1568.51	5.79	6.27	0.4
134	272	138	4	4352	0.999784	814.24	0.503676	1967.85	1.44	0.61	9.4	1578.48	5.8	1584.46	5.83	5.98	0.38
134	273	139	5	4368	0.999665	816.14	0.504579	1965.56	2.24	0	9.26	1593.32	5.84	1598.44	5.86	5.11	0.32
134	274	140	6	4384	0.99952	818.01	0.505474	1963.31	3.21	0.6	9.12	1609.19	5.87	1614.06	5.89	4.87	0.3
134	275	141	7	4400	0.999352	819.86	0.506364	1961.1	4.35	0	8.99	1623.67	5.9	1627.71	5.92	4.04	0.25
134	276	142	8	4416	0.99916	821.69	0.507246	1958.92	5.66	0.6	8.85	1639.18	5.94	1643.01	5.95	3.83	0.23
134	277	143	9	4432	0.998944	823.5	0.508123	1956.78	7.14	0	8.72	1653.31	5.97	1656.35	5.98	3.04	0.18
134	278	144	10	4448	0.998706	825.28	0.508993	1954.67	8.78	0.6	8.6	1668.47	6	1671.33	6.01	2.87	0.17
134	279	145	11	4464	0.998446	827.04	0.509857	1952.59	10.59	0	8.47	1682.25	6.03	1684.37	6.04	2.12	0.13
134	280	146	12	4480	0.998163	828.79	0.510714	1950.55	12.55	0.6	8.35	1697.06	6.06	1699.04	6.07	1.97	0.12
134	281	147	13	4496	0.99786	830.5	0.511566	1948.54	14.68	0	8.23	1710.51	6.09	1711.77	6.09	1.26	0.07
134	282	148	14	4512	0.997535	832.2	0.512411	1946.56	16.97	0.6	8.12	1724.98	6.12	1726.13	6.12	1.15	0.07
134	283	149	15	4528	0.997191	833.88	0.513251	1944.61	19.41	0	8	1738.1	6.14	1738.57	6.14	0.47	0.03
134	284	150	16	4544	0.996826	835.54	0.514085	1942.7	22.01	0.59	7.89	1752.24	6.17	1752.63	6.17	0.39	0.02
134	285	151	17	4560	0.996442	837.18	0.514912	1940.81	24.76	0	7.78	1765.04	6.19	1764.78	6.19	-0.25	-0.01
134	286	152	18	4576	0.996039	838.79	0.515734	1938.96	27.66	0.59	7.68	1778.86	6.22	1778.55	6.22	-0.31	-0.02
134	287	153	19	4592	0.995617	840.39	0.516551	1937.13	30.71	0	7.57	1791.34	6.24	1790.42	6.24	-0.92	-0.05
134	288	154	20	4608	0.995177	841.97	0.517361	1935.34	33.91	0.59	7.47	1804.84	6.27	1803.9	6.26	-0.95	-0.05
134	289	155	21	4624	0.99472	843.53	0.518166	1933.57	37.26	0	7.37	1817.01	6.29	1815.48	6.28	-1.53	-0.08
134	290	156	22	4640	0.994245	845.07	0.518966	1931.83	40.75	0.59	7.27	1830.21	6.31	1828.68	6.31	-1.53	-0.08
134	291	157	23	4656	0.993753	846.59	0.519759	1930.12	44.38	0	7.18	1842.07	6.33	1839.99	6.32	-2.08	-0.11
134	292	158	24	4672	0.993245	848.1	0.520548	1928.44	48.16	0.59	7.08	1854.96	6.35	1852.91	6.35	-2.06	-0.11
134	293	159	25	4688	0.99272	849.58	0.521331	1926.78	52.08	0	6.99	1866.54	6.37	1863.95	6.36	-2.58	-0.14
134	294	160	26	4704	0.992179	851.05	0.522109	1925.16	56.14	0.58	6.9	1879.13	6.39	1876.6	6.38	-2.53	-0.13
134	295	161	27	4720	0.991623	852.5	0.522881	1923.55	60.34	0	6.81	1890.41	6.41	1887.38	6.4	-3.03	-0.16
134	296	162	28	4736	0.991052	853.94	0.523649	1921.98	64.67	0.58	6.72	1902.72	6.43	1899.75	6.42	-2.96	-0.16
134	297	163	29	4752	0.990466	855.35	0.524411	1920.43	69.14	0	6.64	1913.71	6.44	1910.28	6.43	-3.44	-0.18
134	298	164	30	4768	0.989865	856.75	0.525168	1918.9	73.74	0.58	6.55	1925.73	6.46	1922.39	6.45	-3.34	-0.17
134	299	165	31	4784	0.989251	858.13	0.52592	1917.4	78.48	0	6.47	1936.45	6.48	1932.66	6.46	-3.8	-0.2
134	300	166	32	4800	0.988622	859.5	0.526667	1915.92	83.35	0.58	6.39	1948.19	6.49	1944.51	6.48	-3.68	-0.19
134	301	167	33	4816	0.98798	860.85	0.527409	1914.47	88.35	0	6.31	1958.64	6.51	1954.53	6.49	-4.11	-0.21
134	302	168	34	4832	0.987325	862.18	0.528146	1913.04	93.47	0.58	6.23	1970.11	6.52	1966.13	6.51	-3.98	-0.2
134	303	169	35	4848	0.986657	863.5	0.528878	1911.64	98.72	0	6.16	1980.29	6.54	1975.9	6.52	-4.39	-0.22
134	304	170	36	4864	0.985976	864.8	0.529605	1910.26	104.1	0.57	6.08	1991.49	6.55	1987.25	6.54	-4.24	-0.21
134	305	171	37	4880	0.985284	866.09	0.530328	1908.9	109.61	0	6.01	2001.41	6.56	1996.79	6.55	-4.63	-0.23
134	306	172	38	4896	0.984579	867.36	0.531046	1907.56	115.24	0.57	5.94	2012.35	6.58	2007.89	6.56	-4.46	-0.22
134	307	173	39	4912	0.983862	868.62	0.531759	1906.25	120.99	0	5.87	2022.01	6.59	2017.19	6.57	-4.83	-0.24
134	308	174	40	4928	0.983134	869.86	0.532468	1904.95	126.86	0.57	5.8	2032.69	6.6	2028.05	6.58	-4.64	-0.23
134	309	175	41	4944	0.982394	871.08	0.533172	1903.68	132.85	0	5.73	2042.11	6.61	2037.12	6.59	-4.99	-0.25
134	310	176	42	4960	0.981644	872.3	0.533871	1902.43	138.96	0.57	5.66	2052.54	6.62	2047.74	6.61	-4.79	-0.23
134	311	177	43	4976	0.980883	873.49	0.534566	1901.2	145.19	0	5.6	2061.71	6.63	2056.58	6.61	-5.12	-0.25
134	312	178	44	4992	0.980112	874.68	0.535256	1900	151.54	0.57	5.53	2071.89	6.64	2066.97	6.62	-4.91	-0.24
134	313	179	45	5008	0.97933	875.84	0.535942	1898.81	158	0	5.47	2080.81	6.65	2075.59	6.63	-5.23	-0.25
134	314	180	46	5024	0.978539	877	0.536624	1897.64	164.58	0.56	5.4	2090.75	6.66	2085.75	6.64	-5	-0.24

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
134	315	181	47	5040	0.977737	878.14	0.537302	1896.49	171.27	0	5.34	2099.44	6.66	2094.14	6.65	-5.3	-0.25
134	316	182	48	5056	0.976927	879.27	0.537975	1895.37	178.07	0.56	5.28	2109.14	6.67	2104.09	6.66	-5.06	-0.24
134	317	183	49	5072	0.976107	880.38	0.538644	1894.26	184.98	0	5.22	2117.6	6.68	2112.26	6.66	-5.34	-0.25
134	318	184	50	5088	0.975278	881.48	0.539308	1893.17	192	0.56	5.17	2127.07	6.69	2121.98	6.67	-5.09	-0.24
134	319	185	51	5104	0.97444	882.57	0.539969	1892.09	199.14	0	5.11	2135.3	6.69	2129.94	6.68	-5.36	-0.25
134	320	186	52	5120	0.973594	883.65	0.540625	1891.04	206.38	0.56	5.05	2144.54	6.7	2139.45	6.69	-5.1	-0.24
134	321	187	53	5136	0.972739	884.71	0.541277	1890.01	213.73	0	5	2152.55	6.71	2147.2	6.69	-5.35	-0.25
134	322	188	54	5152	0.971876	885.76	0.541925	1888.99	221.18	0.56	4.94	2161.57	6.71	2156.49	6.7	-5.08	-0.24
134	323	189	55	5168	0.971005	886.8	0.54257	1887.99	228.74	0	4.89	2169.36	6.72	2164.04	6.7	-5.32	-0.25
134	324	190	56	5184	0.970127	887.82	0.54321	1887.01	236.4	0.56	4.84	2178.16	6.72	2173.11	6.71	-5.04	-0.23
134	325	191	57	5200	0.96924	888.84	0.543846	1886.05	244.17	0	4.79	2185.73	6.73	2180.46	6.71	-5.27	-0.24
134	326	192	58	5216	0.968347	889.84	0.544479	1885.1	252.04	0.55	4.74	2194.31	6.73	2189.33	6.72	-4.98	-0.23
134	327	193	59	5232	0.967446	890.83	0.545107	1884.17	260.01	0	4.69	2201.68	6.73	2196.48	6.72	-5.2	-0.24
134	328	194	60	5248	0.966538	891.8	0.545732	1883.26	268.08	0.55	4.64	2210.04	6.74	2205.15	6.72	-4.9	-0.22
134	329	195	61	5264	0.965623	892.77	0.546353	1882.36	276.25	0	4.59	2217.2	6.74	2212.1	6.72	-5.11	-0.23
134	330	196	62	5280	0.964702	893.73	0.54697	1881.48	284.52	0.55	4.54	2225.36	6.74	2220.57	6.73	-4.8	-0.22
134	331	197	63	5296	0.963774	894.67	0.547583	1880.62	292.89	0	4.5	2232.32	6.74	2227.32	6.73	-5	-0.22
134	332	198	64	5312	0.962839	895.6	0.548193	1879.77	301.35	0.55	4.45	2240.28	6.75	2235.6	6.73	-4.68	-0.21
134	333	199	65	5328	0.961899	896.52	0.548799	1878.94	309.91	0	4.41	2247.03	6.75	2242.16	6.73	-4.87	-0.22
134	334	200	66	5344	0.960952	897.43	0.549401	1878.12	318.57	0.55	4.36	2254.79	6.75	2250.24	6.74	-4.55	-0.2
134	335	201	67	5360	0.96	898.33	0.55	1877.32	327.32	0	4.32	2261.35	6.75	2256.62	6.74	-4.73	-0.21
134	336	202	68	5376	0.959042	899.22	0.550595	1876.53	336.16	0.55	4.27	2268.91	6.75	2264.51	6.74	-4.4	-0.19
134	337	203	69	5392	0.958078	900.1	0.551187	1875.76	345.1	0	4.23	2275.28	6.75	2270.71	6.74	-4.57	-0.2
134	338	204	70	5408	0.957109	900.96	0.551775	1875	354.13	0.54	4.19	2282.65	6.75	2278.41	6.74	-4.23	-0.19
134	339	205	71	5424	0.956135	901.82	0.55236	1874.25	363.25	0	4.15	2288.83	6.75	2284.43	6.74	-4.4	-0.19
134	340	206	72	5440	0.955156	902.67	0.552941	1873.52	372.45	0.54	4.11	2296	6.75	2291.95	6.74	-4.05	-0.18
134	341	207	73	5456	0.954171	903.51	0.553519	1872.81	381.75	0	4.07	2302	6.75	2297.79	6.74	-4.21	-0.18
134	342	208	74	5472	0.953182	904.33	0.554094	1872.11	391.14	0.54	4.03	2308.99	6.75	2305.13	6.74	-3.86	-0.17
134	343	209	75	5488	0.952188	905.15	0.554665	1871.42	400.61	0	3.99	2314.81	6.75	2310.79	6.74	-4.02	-0.17
134	344	210	76	5504	0.95119	905.96	0.555233	1870.75	410.18	0.54	3.95	2321.61	6.75	2317.95	6.74	-3.66	-0.16
134	345	211	77	5520	0.950187	906.76	0.555797	1870.09	419.82	0	3.92	2327.25	6.75	2323.44	6.73	-3.81	-0.16
134	346	212	78	5536	0.94918	907.54	0.556358	1869.44	429.56	0.54	3.88	2333.87	6.75	2330.42	6.74	-3.45	-0.15
134	347	213	79	5552	0.948168	908.32	0.556916	1868.81	439.38	0	3.84	2339.34	6.74	2335.75	6.73	-3.59	-0.15
134	348	214	80	5568	0.947153	909.09	0.557471	1868.19	449.28	0.54	3.81	2345.79	6.74	2342.55	6.73	-3.23	-0.14
134	349	215	81	5584	0.946133	909.85	0.558023	1867.58	459.27	0	3.77	2351.08	6.74	2347.71	6.73	-3.37	-0.14
134	350	216	82	5600	0.94511	910.6	0.558571	1866.98	469.34	0.53	3.74	2357.35	6.74	2354.35	6.73	-3	-0.13
134	351	217	83	5616	0.944083	911.35	0.559117	1866.4	479.49	0	3.7	2362.47	6.73	2359.34	6.72	-3.13	-0.13
134	352	218	84	5632	0.943053	912.08	0.559659	1865.83	489.72	0.53	3.67	2368.58	6.73	2365.81	6.72	-2.76	-0.12
134	353	219	85	5648	0.942019	912.8	0.560198	1865.27	500.03	0	3.64	2373.53	6.72	2370.64	6.72	-2.89	-0.12
134	354	220	86	5664	0.940981	913.52	0.560734	1864.72	510.42	0.53	3.6	2379.47	6.72	2376.95	6.71	-2.52	-0.11
134	355	221	87	5680	0.93994	914.23	0.561268	1864.19	520.9	0	3.57	2384.26	6.72	2381.62	6.71	-2.64	-0.11
134	356	222	88	5696	0.938897	914.93	0.561798	1863.67	531.45	0.53	3.54	2390.03	6.71	2387.76	6.71	-2.27	-0.1
134	357	223	89	5712	0.93785	915.62	0.562325	1863.15	542.08	0	3.51	2394.66	6.71	2392.28	6.7	-2.39	-0.1
134	358	224	90	5728	0.9368	916.3	0.562849	1862.65	552.78	0.53	3.48	2400.27	6.7	2398.26	6.7	-2.01	-0.08
134	359	225	91	5744	0.935747	916.97	0.56337	1862.17	563.56	0	3.45	2404.75	6.7	2402.62	6.69	-2.13	-0.09
134	360	226	92	5760	0.934691	917.64	0.563889	1861.69	574.42	0.53	3.42	2410.2	6.69	2408.44	6.69	-1.75	-0.07

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
134	361	227	93	5776	0.933633	918.3	0.564404	1861.22	585.36	0	3.39	2414.51	6.69	2412.65	6.68	-1.86	-0.08
134	362	228	94	5792	0.932572	918.95	0.564917	1860.77	596.36	0.53	3.36	2419.81	6.68	2418.32	6.68	-1.49	-0.06
134	363	229	95	5808	0.931509	919.59	0.565427	1860.32	607.45	0	3.33	2423.97	6.68	2422.38	6.67	-1.6	-0.07
134	364	230	96	5824	0.930443	920.22	0.565934	1859.89	618.6	0.52	3.3	2429.11	6.67	2427.89	6.67	-1.22	-0.05
134	365	231	97	5840	0.929375	920.85	0.566438	1859.47	629.83	0	3.28	2433.13	6.67	2431.8	6.66	-1.32	-0.05
134	366	232	98	5856	0.928305	921.47	0.56694	1859.05	641.13	0.52	3.25	2438.12	6.66	2437.17	6.66	-0.95	-0.04
134	367	233	99	5872	0.927232	922.08	0.567439	1858.65	652.51	0	3.22	2441.98	6.65	2440.93	6.65	-1.05	-0.04
134	368	234	100	5888	0.926158	922.68	0.567935	1858.26	663.95	0.52	3.19	2446.82	6.65	2446.15	6.65	-0.67	-0.03
134	369	235	101	5904	0.925081	923.28	0.568428	1857.88	675.47	0	3.17	2450.55	6.64	2449.77	6.64	-0.78	-0.03
134	370	236	102	5920	0.924003	923.87	0.568919	1857.5	687.05	0.52	3.14	2455.24	6.64	2454.84	6.63	-0.4	-0.02
134	371	237	103	5936	0.922923	924.45	0.569407	1857.14	698.71	0	3.12	2458.82	6.63	2458.32	6.63	-0.5	-0.02
134	372	238	104	5952	0.921841	925.02	0.569892	1856.79	710.43	0.52	3.09	2463.37	6.62	2463.25	6.62	-0.12	0
134	373	239	105	5968	0.920757	925.59	0.570375	1856.45	722.22	0	3.07	2466.81	6.61	2466.59	6.61	-0.22	-0.01
134	374	240	106	5984	0.919672	926.15	0.570856	1856.11	734.08	0.52	3.04	2471.21	6.61	2471.37	6.61	0.16	0.01
134	375	241	107	6000	0.918585	926.71	0.571333	1855.79	746.01	0	3.02	2474.51	6.6	2474.57	6.6	0.06	0
134	376	242	108	6016	0.917497	927.25	0.571809	1855.47	758	0.52	2.99	2478.78	6.59	2479.22	6.59	0.43	0.02
134	377	243	109	6032	0.916407	927.79	0.572281	1855.17	770.06	0	2.97	2481.95	6.58	2482.28	6.58	0.34	0.01
134	378	244	110	6048	0.915316	928.33	0.572751	1854.87	782.18	0.51	2.95	2486.08	6.58	2486.79	6.58	0.71	0.03
134	379	245	111	6064	0.914224	928.85	0.573219	1854.59	794.37	0	2.92	2489.11	6.57	2489.72	6.57	0.61	0.02
134	380	246	112	6080	0.91313	929.37	0.573684	1854.31	806.63	0.51	2.9	2493.1	6.56	2494.09	6.56	0.99	0.04
134	381	247	113	6096	0.912036	929.89	0.574147	1854.04	818.95	0	2.88	2496	6.55	2496.89	6.55	0.89	0.04
134	382	248	114	6112	0.91094	930.39	0.574607	1853.78	831.33	0.51	2.86	2499.86	6.54	2501.13	6.55	1.26	0.05
134	383	249	115	6128	0.909843	930.9	0.575065	1853.53	843.78	0	2.83	2502.64	6.53	2503.8	6.54	1.16	0.05
134	384	250	116	6144	0.908746	931.39	0.575521	1853.28	856.29	0.51	2.81	2506.37	6.53	2507.9	6.53	1.53	0.06
134	385	251	117	6160	0.907647	931.88	0.575974	1853.05	868.86	0	2.79	2509.01	6.52	2510.45	6.52	1.44	0.06
134	386	252	118	6176	0.906548	932.36	0.576425	1852.82	881.49	0.51	2.77	2512.61	6.51	2514.42	6.51	1.8	0.07
134	387	253	119	6192	0.905448	932.84	0.576873	1852.6	894.18	0	2.75	2515.13	6.5	2516.84	6.5	1.71	0.07
134	388	254	120	6208	0.904347	933.31	0.57732	1852.39	906.93	0.51	2.73	2518.6	6.49	2520.68	6.5	2.07	0.08
134	389	255	121	6224	0.903245	933.77	0.577763	1852.19	919.75	0	2.71	2521	6.48	2522.97	6.49	1.97	0.08
134	390	256	122	6240	0.902143	934.23	0.578205	1851.99	932.62	0.51	2.69	2524.35	6.47	2526.68	6.48	2.34	0.09
134	391	257	123	6256	0.901041	934.68	0.578645	1851.81	945.56	0	2.67	2526.62	6.46	2528.86	6.47	2.24	0.09
134	392	258	124	6272	0.899938	935.13	0.579082	1851.63	958.55	0.51	2.65	2529.85	6.45	2532.45	6.46	2.6	0.1
134	393	259	125	6288	0.898834	935.57	0.579517	1851.46	971.6	0	2.63	2532	6.44	2534.5	6.45	2.5	0.1
134	394	260	126	6304	0.89773	936.01	0.579949	1851.3	984.71	0.5	2.61	2535.11	6.43	2537.96	6.44	2.86	0.11
134	395	261	127	6320	0.896626	936.43	0.58038	1851.14	997.87	0	2.59	2537.14	6.42	2539.9	6.43	2.75	0.11
134	396	262	128	6336	0.895521	936.86	0.580808	1850.99	1011.1	0.5	2.57	2540.13	6.41	2543.24	6.42	3.11	0.12
134	397	263	129	6352	0.894416	937.28	0.581234	1850.85	1024.38	0	2.55	2542.05	6.4	2545.05	6.41	3	0.12
134	398	264	130	6368	0.893311	937.69	0.581658	1850.72	1037.71	0.5	2.54	2544.92	6.39	2548.28	6.4	3.36	0.13
134	399	265	131	6384	0.892205	938.1	0.58208	1850.59	1051.1	0	2.52	2546.72	6.38	2549.98	6.39	3.25	0.13
134	400	266	132	6400	0.8911	938.5	0.5825	1850.47	1064.55	0.5	2.5	2549.48	6.37	2553.08	6.38	3.6	0.14
134	401	267	133	6416	0.889994	938.9	0.582918	1850.36	1078.05	0	2.48	2551.17	6.36	2554.66	6.37	3.49	0.14
134	402	268	134	6432	0.888889	939.29	0.583333	1850.25	1091.61	0.5	2.47	2553.81	6.35	2557.65	6.36	3.84	0.15
134	403	269	135	6448	0.887783	939.68	0.583747	1850.16	1105.22	0	2.45	2555.39	6.34	2559.12	6.35	3.73	0.15
134	404	270	136	6464	0.886678	940.06	0.584158	1850.07	1118.89	0.5	2.43	2557.92	6.33	2561.99	6.34	4.07	0.16
134	405	271	137	6480	0.885572	940.44	0.584568	1849.98	1132.61	0	2.42	2559.39	6.32	2563.35	6.33	3.96	0.15
134	406	272	138	6496	0.884467	940.81	0.584975	1849.9	1146.38	0.5	2.4	2561.81	6.31	2566.11	6.32	4.3	0.17

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
134	407	273	139	6512	0.883362	941.17	0.585381	1849.83	1160.2	0	2.38	2563.18	6.3	2567.36	6.31	4.18	0.16
134	408	274	140	6528	0.882257	941.54	0.585784	1849.77	1174.08	0.5	2.37	2565.48	6.29	2570	6.3	4.52	0.18
134	409	275	141	6544	0.881152	941.89	0.586186	1849.71	1188	0	2.35	2566.74	6.28	2571.15	6.29	4.4	0.17
134	410	276	142	6560	0.880048	942.24	0.586585	1849.66	1201.98	0.49	2.33	2568.94	6.27	2573.68	6.28	4.74	0.18
134	411	277	143	6576	0.878943	942.59	0.586983	1849.61	1216.01	0	2.32	2570.1	6.25	2574.71	6.26	4.62	0.18
134	412	278	144	6592	0.87784	942.93	0.587379	1849.58	1230.09	0.49	2.3	2572.19	6.24	2577.14	6.26	4.94	0.19
134	413	279	145	6608	0.876736	943.27	0.587772	1849.54	1244.23	0	2.29	2573.25	6.23	2578.07	6.24	4.82	0.19
134	414	280	146	6624	0.875633	943.61	0.588164	1849.52	1258.41	0.49	2.27	2575.23	6.22	2580.38	6.23	5.15	0.2
134	415	281	147	6640	0.87453	943.93	0.588554	1849.5	1272.64	0	2.26	2576.19	6.21	2581.21	6.22	5.02	0.19
134	416	282	148	6656	0.873428	944.26	0.588942	1849.48	1286.92	0.49	2.24	2578.07	6.2	2583.41	6.21	5.34	0.21
134	417	283	149	6672	0.872327	944.58	0.589329	1849.48	1301.25	0	2.23	2578.93	6.18	2584.14	6.2	5.21	0.2
134	418	284	150	6688	0.871225	944.89	0.589713	1849.47	1315.62	0.49	2.22	2580.71	6.17	2586.24	6.19	5.53	0.21
134	419	285	151	6704	0.870125	945.21	0.590095	1849.48	1330.05	0	2.2	2581.47	6.16	2586.86	6.17	5.39	0.21
134	420	286	152	6720	0.869025	945.51	0.590476	1849.49	1344.52	0.49	2.19	2583.15	6.15	2588.86	6.16	5.71	0.22
134	421	287	153	6736	0.867926	945.81	0.590855	1849.5	1359.05	0	2.17	2583.81	6.14	2589.38	6.15	5.57	0.22
134	422	288	154	6752	0.866827	946.11	0.591232	1849.52	1373.61	0.49	2.16	2585.4	6.13	2591.27	6.14	5.88	0.23
134	423	289	155	6768	0.865729	946.41	0.591608	1849.55	1388.23	0	2.15	2585.96	6.11	2591.7	6.13	5.74	0.22
134	424	290	156	6784	0.864632	946.69	0.591981	1849.58	1402.89	0.49	2.13	2587.45	6.1	2593.49	6.12	6.04	0.23
134	425	291	157	6800	0.863535	946.98	0.592353	1849.62	1417.6	0	2.12	2587.92	6.09	2593.81	6.1	5.9	0.23
134	426	292	158	6816	0.862439	947.26	0.592723	1849.67	1432.35	0.48	2.11	2589.31	6.08	2595.51	6.09	6.2	0.24
134	427	293	159	6832	0.861344	947.54	0.593091	1849.71	1447.15	0	2.09	2589.69	6.06	2595.73	6.08	6.05	0.23
134	428	294	160	6848	0.86025	947.81	0.593458	1849.77	1462	0.48	2.08	2590.99	6.05	2597.33	6.07	6.34	0.24
134	429	295	161	6864	0.859156	948.08	0.593823	1849.83	1476.89	0	2.07	2591.27	6.04	2597.46	6.05	6.19	0.24
134	430	296	162	6880	0.858064	948.35	0.594186	1849.89	1491.82	0.48	2.05	2592.48	6.03	2598.96	6.04	6.48	0.25
134	431	297	163	6896	0.856972	948.61	0.594548	1849.96	1506.8	0	2.04	2592.67	6.02	2599	6.03	6.32	0.24
134	432	298	164	6912	0.855881	948.87	0.594907	1850.04	1521.82	0.48	2.03	2593.79	6	2600.39	6.02	6.61	0.25
134	433	299	165	6928	0.854791	949.12	0.595266	1850.12	1536.89	0	2.02	2593.89	5.99	2600.34	6.01	6.45	0.25
134	434	300	166	6944	0.853703	949.37	0.595622	1850.21	1552	0.48	2.01	2594.92	5.98	2601.64	5.99	6.73	0.26
134	435	301	167	6960	0.852615	949.61	0.595977	1850.3	1567.15	0	1.99	2594.93	5.97	2601.5	5.98	6.57	0.25
134	436	302	168	6976	0.851528	949.86	0.59633	1850.39	1582.34	0.48	1.98	2595.87	5.95	2602.71	5.97	6.84	0.26
134	437	303	169	6992	0.850442	950.1	0.596682	1850.49	1597.58	0	1.97	2595.8	5.94	2602.47	5.96	6.67	0.26
134	438	304	170	7008	0.849357	950.33	0.597032	1850.6	1612.86	0.48	1.96	2596.65	5.93	2603.59	5.94	6.94	0.27
134	439	305	171	7024	0.848273	950.56	0.59738	1850.71	1628.18	0	1.95	2596.49	5.91	2603.26	5.93	6.77	0.26
134	440	306	172	7040	0.84719	950.79	0.597727	1850.82	1643.55	0.48	1.94	2597.25	5.9	2604.29	5.92	7.03	0.27
134	441	307	173	7056	0.846108	951.01	0.598073	1850.94	1658.95	0	1.93	2597.02	5.89	2603.87	5.9	6.86	0.26
134	442	308	174	7072	0.845028	951.23	0.598416	1851.07	1674.4	0.48	1.91	2597.69	5.88	2604.81	5.89	7.12	0.27
134	443	309	175	7088	0.843948	951.45	0.598758	1851.2	1689.88	0	1.9	2597.37	5.86	2604.31	5.88	6.94	0.27
134	444	310	176	7104	0.84287	951.67	0.599099	1851.33	1705.41	0.47	1.89	2597.96	5.85	2605.15	5.87	7.19	0.28
134	445	311	177	7120	0.841793	951.88	0.599438	1851.47	1720.98	0	1.88	2597.56	5.84	2604.56	5.85	7	0.27
134	446	312	178	7136	0.840717	952.08	0.599776	1851.61	1736.59	0.47	1.87	2598.06	5.83	2605.32	5.84	7.25	0.28
134	447	313	179	7152	0.839642	952.29	0.600112	1851.76	1752.23	0	1.86	2597.58	5.81	2604.65	5.83	7.06	0.27
134	448	314	180	7168	0.838568	952.49	0.600446	1851.91	1767.92	0.47	1.85	2598.01	5.8	2605.31	5.82	7.31	0.28
134	449	315	181	7184	0.837496	952.68	0.60078	1852.07	1783.65	0	1.84	2597.45	5.78	2604.56	5.8	7.11	0.27
134	450	316	182	7200	0.836425	952.88	0.601111	1852.23	1799.41	0.47	1.83	2597.79	5.77	2605.14	5.79	7.35	0.28
134	451	317	183	7216	0.835355	953.07	0.601441	1852.39	1815.21	0	1.82	2597.15	5.76	2604.3	5.77	7.15	0.27
134	452	318	184	7232	0.834286	953.25	0.60177	1852.56	1831.06	0.47	1.81	2597.41	5.75	2604.79	5.76	7.38	0.28

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134	453	319	185	7248	0.833219	953.44	0.602097	1852.73	1846.93	0	1.8	2596.69	5.73	2603.87	5.75	7.18	0.28
134	454	320	186	7264	0.832153	953.62	0.602423	1852.91	1862.85	0.47	1.79	2596.88	5.72	2604.28	5.74	7.41	0.28
134	455	321	187	7280	0.831088	953.8	0.602747	1853.09	1878.81	0	1.78	2596.08	5.71	2603.28	5.72	7.2	0.28
134	456	322	188	7296	0.830025	953.97	0.60307	1853.28	1894.8	0.47	1.77	2596.19	5.69	2603.61	5.71	7.42	0.28
134	457	323	189	7312	0.828963	954.14	0.603392	1853.47	1910.83	0	1.76	2595.32	5.68	2602.52	5.69	7.2	0.28
134	458	324	190	7328	0.827902	954.31	0.603712	1853.66	1926.9	0.47	1.75	2595.35	5.67	2602.77	5.68	7.42	0.29
134	459	325	191	7344	0.826842	954.48	0.604031	1853.86	1943	0	1.74	2594.41	5.65	2601.61	5.67	7.2	0.28
134	460	326	192	7360	0.825784	954.64	0.604348	1854.06	1959.14	0.47	1.73	2594.36	5.64	2601.77	5.66	7.41	0.28
134	461	327	193	7376	0.824728	954.8	0.604664	1854.26	1975.32	0	1.72	2593.34	5.63	2600.53	5.64	7.19	0.28
134	462	328	194	7392	0.823673	954.96	0.604978	1854.47	1991.53	0.47	1.71	2593.22	5.61	2600.61	5.63	7.39	0.28
134	463	329	195	7408	0.822619	955.11	0.605292	1854.69	2007.78	0	1.71	2592.13	5.6	2599.29	5.61	7.16	0.28
134	464	330	196	7424	0.821567	955.26	0.605603	1854.9	2024.06	0.46	1.7	2591.93	5.59	2599.29	5.6	7.36	0.28
134	465	331	197	7440	0.820516	955.41	0.605914	1855.12	2040.38	0	1.69	2590.77	5.57	2597.9	5.59	7.13	0.27
134	466	332	198	7456	0.819466	955.56	0.606223	1855.35	2056.73	0.46	1.68	2590.5	5.56	2597.82	5.57	7.32	0.28
134	467	333	199	7472	0.818418	955.7	0.606531	1855.58	2073.12	0	1.67	2589.27	5.54	2596.35	5.56	7.08	0.27
134	468	334	200	7488	0.817372	955.84	0.606838	1855.81	2089.54	0.46	1.66	2588.93	5.53	2596.2	5.55	7.27	0.28
134	469	335	201	7504	0.816327	955.98	0.607143	1856.04	2106	0	1.65	2587.63	5.52	2594.65	5.53	7.02	0.27
134	470	336	202	7520	0.815283	956.11	0.607447	1856.28	2122.49	0.46	1.64	2587.22	5.5	2594.42	5.52	7.2	0.28
134	471	337	203	7536	0.814241	956.24	0.607749	1856.53	2139.02	0	1.64	2585.85	5.49	2592.8	5.5	6.95	0.27
134	472	338	204	7552	0.8132	956.37	0.608051	1856.77	2155.58	0.46	1.63	2585.37	5.48	2592.49	5.49	7.13	0.27
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
135	269	134	-1	4304	0.999986	808.41	0.499071	2004.52	0.09	0	9.85	1500.82	5.58	1509.96	5.61	9.13	0.6
135	270	135	0	4320	1	810.42	0.5	2002.03	0	-0.61	10	1516.94	5.62	1525.78	5.65	8.84	0.58
135	271	136	1	4336	0.999986	812.41	0.500923	1999.58	0.09	0	9.85	1533.76	5.66	1541.25	5.69	7.49	0.49
135	272	137	2	4352	0.999946	814.37	0.501838	1997.17	0.36	-0.61	9.7	1549.19	5.7	1556.74	5.72	7.55	0.49
135	273	138	3	4368	0.999879	816.31	0.502747	1994.79	0.8	0	9.55	1565.64	5.73	1571.88	5.76	6.24	0.4
135	274	139	4	4384	0.999787	818.23	0.50365	1992.46	1.43	-0.6	9.41	1580.69	5.77	1587.04	5.79	6.35	0.4
135	275	140	5	4400	0.999669	820.12	0.504545	1990.16	2.22	0	9.26	1596.76	5.81	1601.85	5.82	5.08	0.32
135	276	141	6	4416	0.999527	821.99	0.505435	1987.89	3.18	-0.6	9.13	1611.45	5.84	1616.68	5.86	5.23	0.32
135	277	142	7	4432	0.999361	823.84	0.506318	1985.67	4.32	0	8.99	1627.17	5.87	1631.17	5.89	4	0.25
135	278	143	8	4448	0.999172	825.67	0.507194	1983.48	5.62	-0.6	8.86	1641.5	5.9	1645.69	5.92	4.19	0.25
135	279	144	9	4464	0.998959	827.47	0.508065	1981.32	7.09	0	8.73	1656.86	5.94	1659.85	5.95	3	0.18
135	280	145	10	4480	0.998724	829.25	0.508929	1979.2	8.72	-0.6	8.61	1670.84	5.97	1674.06	5.98	3.22	0.19
135	281	146	11	4496	0.998468	831.01	0.509786	1977.11	10.51	0	8.48	1685.85	6	1687.92	6.01	2.07	0.12
135	282	147	12	4512	0.998189	832.75	0.510638	1975.05	12.47	-0.6	8.36	1699.5	6.03	1701.83	6.03	2.32	0.14
135	283	148	13	4528	0.99789	834.47	0.511484	1973.03	14.58	0	8.25	1714.17	6.06	1715.38	6.06	1.2	0.07
135	284	149	14	4544	0.99757	836.16	0.512324	1971.04	16.85	-0.59	8.13	1727.49	6.08	1728.98	6.09	1.49	0.09
135	285	150	15	4560	0.99723	837.84	0.513158	1969.08	19.27	0	8.02	1741.83	6.11	1742.24	6.11	0.41	0.02
135	286	151	16	4576	0.99687	839.49	0.513986	1967.15	21.85	-0.59	7.91	1754.82	6.14	1755.55	6.14	0.73	0.04
135	287	152	17	4592	0.996491	841.13	0.514808	1965.25	24.58	0	7.8	1768.83	6.16	1768.51	6.16	-0.32	-0.02
135	288	153	18	4608	0.996094	842.75	0.515625	1963.38	27.47	-0.59	7.69	1781.51	6.19	1781.54	6.19	0.03	0
135	289	154	19	4624	0.995678	844.34	0.516436	1961.54	30.5	0	7.59	1795.2	6.21	1794.21	6.21	-0.99	-0.06
135	290	155	20	4640	0.995244	845.92	0.517241	1959.74	33.68	-0.59	7.49	1807.56	6.23	1806.95	6.23	-0.61	-0.03
135	291	156	21	4656	0.994792	847.48	0.518041	1957.96	37	0	7.39	1820.95	6.26	1819.34	6.25	-1.61	-0.09

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
135	292	157	22	4672	0.994324	849.02	0.518836	1956.2	40.47	-0.59	7.29	1833.01	6.28	1831.81	6.27	-1.2	-0.07
135	293	158	23	4688	0.993838	850.54	0.519625	1954.48	44.08	0	7.19	1846.09	6.3	1843.92	6.29	-2.17	-0.12
135	294	159	24	4704	0.993336	852.05	0.520408	1952.79	47.84	-0.58	7.1	1857.85	6.32	1856.11	6.31	-1.73	-0.09
135	295	160	25	4720	0.992818	853.53	0.521186	1951.12	51.73	0	7.01	1870.63	6.34	1867.95	6.33	-2.67	-0.14
135	296	161	26	4736	0.992285	855	0.521959	1949.48	55.76	-0.58	6.91	1882.1	6.36	1879.88	6.35	-2.21	-0.12
135	297	162	27	4752	0.991736	856.45	0.522727	1947.86	59.93	0	6.83	1894.58	6.38	1891.45	6.37	-3.13	-0.17
135	298	163	28	4768	0.991172	857.88	0.52349	1946.27	64.24	-0.58	6.74	1905.77	6.4	1903.12	6.39	-2.65	-0.14
135	299	164	29	4784	0.990593	859.3	0.524247	1944.71	68.68	0	6.65	1917.97	6.41	1914.43	6.4	-3.54	-0.18
135	300	165	30	4800	0.99	860.7	0.525	1943.17	73.25	-0.58	6.57	1928.87	6.43	1925.84	6.42	-3.03	-0.16
135	301	166	31	4816	0.989393	862.08	0.525748	1941.65	77.96	0	6.49	1940.79	6.45	1936.89	6.43	-3.9	-0.2
135	302	167	32	4832	0.988772	863.45	0.52649	1940.16	82.8	-0.58	6.41	1951.42	6.46	1948.04	6.45	-3.38	-0.17
135	303	168	33	4848	0.988138	864.8	0.527228	1938.7	87.76	0	6.33	1963.07	6.48	1958.84	6.46	-4.22	-0.22
135	304	169	34	4864	0.987491	866.13	0.527961	1937.26	92.86	-0.57	6.25	1973.43	6.49	1969.75	6.48	-3.68	-0.19
135	305	170	35	4880	0.986831	867.45	0.528689	1935.84	98.08	0	6.18	1984.81	6.51	1980.3	6.49	-4.5	-0.23
135	306	171	36	4896	0.986159	868.75	0.529412	1934.45	103.43	-0.57	6.1	1994.9	6.52	1990.96	6.51	-3.94	-0.2
135	307	172	37	4912	0.985475	870.04	0.53013	1933.07	108.9	0	6.03	2006.02	6.53	2001.27	6.52	-4.75	-0.24
135	308	173	38	4928	0.984778	871.31	0.530844	1931.72	114.49	-0.57	5.96	2015.86	6.54	2011.69	6.53	-4.16	-0.21
135	309	174	39	4944	0.98407	872.57	0.531553	1930.4	120.21	0	5.89	2026.71	6.56	2021.76	6.54	-4.95	-0.24
135	310	175	40	4960	0.983351	873.81	0.532258	1929.09	126.04	-0.57	5.82	2036.3	6.57	2031.95	6.55	-4.35	-0.21
135	311	176	41	4976	0.98262	875.04	0.532958	1927.81	132	0	5.75	2046.9	6.58	2041.78	6.57	-5.12	-0.25
135	312	177	42	4992	0.981879	876.25	0.533654	1926.55	138.08	-0.57	5.68	2056.24	6.59	2051.74	6.58	-4.51	-0.22
135	313	178	43	5008	0.981127	877.45	0.534345	1925.3	144.27	0	5.62	2066.59	6.6	2061.33	6.59	-5.26	-0.26
135	314	179	44	5024	0.980364	878.64	0.535032	1924.08	150.58	-0.56	5.55	2075.69	6.61	2071.06	6.6	-4.63	-0.22
135	315	180	45	5040	0.979592	879.81	0.535714	1922.88	157	0	5.49	2085.8	6.62	2080.43	6.6	-5.36	-0.26
135	316	181	46	5056	0.978809	880.96	0.536392	1921.7	163.54	-0.56	5.43	2094.66	6.63	2089.94	6.61	-4.72	-0.23
135	317	182	47	5072	0.978017	882.11	0.537066	1920.54	170.19	0	5.36	2104.53	6.64	2099.09	6.62	-5.44	-0.26
135	318	183	48	5088	0.977216	883.24	0.537736	1919.4	176.95	-0.56	5.3	2113.15	6.65	2108.37	6.63	-4.78	-0.23
135	319	184	49	5104	0.976405	884.35	0.538401	1918.28	183.82	0	5.25	2122.79	6.65	2117.3	6.64	-5.49	-0.26
135	320	185	50	5120	0.975586	885.46	0.539062	1917.18	190.81	-0.56	5.19	2131.19	6.66	2126.37	6.64	-4.82	-0.23
135	321	186	51	5136	0.974758	886.55	0.53972	1916.09	197.9	0	5.13	2140.59	6.67	2135.08	6.65	-5.51	-0.26
135	322	187	52	5152	0.973921	887.62	0.540373	1915.03	205.1	-0.56	5.07	2148.76	6.67	2143.94	6.66	-4.83	-0.23
135	323	188	53	5168	0.973076	888.69	0.541022	1913.98	212.41	0	5.02	2157.94	6.68	2152.44	6.66	-5.5	-0.26
135	324	189	54	5184	0.972222	889.74	0.541667	1912.95	219.82	-0.56	4.97	2165.9	6.68	2161.09	6.67	-4.81	-0.22
135	325	190	55	5200	0.971361	890.78	0.542308	1911.94	227.34	0	4.91	2174.85	6.69	2169.37	6.67	-5.48	-0.25
135	326	191	56	5216	0.970492	891.81	0.542945	1910.95	234.96	-0.55	4.86	2182.59	6.7	2177.82	6.68	-4.77	-0.22
135	327	192	57	5232	0.969615	892.83	0.543578	1909.97	242.68	0	4.81	2191.33	6.7	2185.9	6.68	-5.43	-0.25
135	328	193	58	5248	0.968731	893.83	0.544207	1909.02	250.51	-0.55	4.76	2198.85	6.7	2194.14	6.69	-4.71	-0.21
135	329	194	59	5264	0.96784	894.82	0.544833	1908.07	258.44	0	4.71	2207.38	6.71	2202.02	6.69	-5.36	-0.24
135	330	195	60	5280	0.966942	895.8	0.545455	1907.15	266.46	-0.55	4.66	2214.7	6.71	2210.06	6.7	-4.63	-0.21
135	331	196	61	5296	0.966037	896.77	0.546073	1906.24	274.59	0	4.61	2223.01	6.72	2217.75	6.7	-5.27	-0.24
135	332	197	62	5312	0.965126	897.73	0.546687	1905.35	282.81	-0.55	4.56	2230.13	6.72	2225.59	6.7	-4.53	-0.2
135	333	198	63	5328	0.964207	898.67	0.547297	1904.47	291.14	0	4.52	2238.24	6.72	2233.08	6.71	-5.16	-0.23
135	334	199	64	5344	0.963283	899.61	0.547904	1903.61	299.56	-0.55	4.47	2245.15	6.72	2240.73	6.71	-4.42	-0.2
135	335	200	65	5360	0.962352	900.53	0.548507	1902.77	308.07	0	4.43	2253.06	6.73	2248.03	6.71	-5.03	-0.22
135	336	201	66	5376	0.961416	901.44	0.549107	1901.94	316.68	-0.55	4.38	2259.77	6.73	2255.49	6.71	-4.28	-0.19
135	337	202	67	5392	0.960473	902.35	0.549703	1901.12	325.38	0	4.34	2267.48	6.73	2262.6	6.71	-4.89	-0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
135	338	203	68	5408	0.959525	903.24	0.550296	1900.33	334.18	-0.54	4.3	2274.01	6.73	2269.87	6.72	-4.13	-0.18
135	339	204	69	5424	0.958572	904.12	0.550885	1899.54	343.07	0	4.25	2281.52	6.73	2276.79	6.72	-4.73	-0.21
135	340	205	70	5440	0.957612	904.99	0.551471	1898.77	352.05	-0.54	4.21	2287.86	6.73	2283.89	6.72	-3.97	-0.17
135	341	206	71	5456	0.956648	905.85	0.552053	1898.02	361.12	0	4.17	2295.18	6.73	2290.62	6.72	-4.56	-0.2
135	342	207	72	5472	0.955679	906.7	0.552632	1897.28	370.28	-0.54	4.13	2301.33	6.73	2297.54	6.72	-3.79	-0.17
135	343	208	73	5488	0.954704	907.54	0.553207	1896.55	379.53	0	4.09	2308.46	6.73	2304.09	6.72	-4.38	-0.19
135	344	209	74	5504	0.953725	908.37	0.553779	1895.84	388.87	-0.54	4.05	2314.43	6.73	2310.83	6.72	-3.6	-0.16
135	345	210	75	5520	0.952741	909.19	0.554348	1895.14	398.3	0	4.01	2321.38	6.73	2317.2	6.72	-4.18	-0.18
135	346	211	76	5536	0.951752	910	0.554913	1894.46	407.81	-0.54	3.98	2327.17	6.73	2323.76	6.72	-3.4	-0.15
135	347	212	77	5552	0.950759	910.8	0.555476	1893.78	417.41	0	3.94	2333.94	6.73	2329.96	6.71	-3.97	-0.17
135	348	213	78	5568	0.949762	911.6	0.556034	1893.13	427.1	-0.54	3.9	2339.54	6.72	2336.35	6.71	-3.19	-0.14
135	349	214	79	5584	0.948761	912.38	0.55659	1892.48	436.87	0	3.86	2346.14	6.72	2342.38	6.71	-3.75	-0.16
135	350	215	80	5600	0.947755	913.15	0.557143	1891.85	446.72	-0.53	3.83	2351.57	6.72	2348.6	6.71	-2.97	-0.13
135	351	216	81	5616	0.946746	913.92	0.557692	1891.23	456.66	0	3.79	2357.99	6.72	2354.46	6.71	-3.53	-0.15
135	352	217	82	5632	0.945732	914.67	0.558239	1890.63	466.68	-0.53	3.76	2363.25	6.71	2360.52	6.71	-2.74	-0.12
135	353	218	83	5648	0.944715	915.42	0.558782	1890.03	476.78	0	3.72	2369.5	6.71	2366.21	6.7	-3.29	-0.14
135	354	219	84	5664	0.943694	916.15	0.559322	1889.45	486.96	-0.53	3.69	2374.6	6.71	2372.1	6.7	-2.5	-0.11
135	355	220	85	5680	0.94267	916.88	0.559859	1888.88	497.22	0	3.66	2380.67	6.71	2377.62	6.7	-3.05	-0.13
135	356	221	86	5696	0.941642	917.6	0.560393	1888.32	507.56	-0.53	3.63	2385.6	6.7	2383.35	6.69	-2.25	-0.09
135	357	222	87	5712	0.940612	918.31	0.560924	1887.78	517.99	0	3.59	2391.51	6.7	2388.72	6.69	-2.8	-0.12
135	358	223	88	5728	0.939577	919.02	0.561453	1887.25	528.49	-0.53	3.56	2396.28	6.69	2394.28	6.69	-2	-0.08
135	359	224	89	5744	0.93854	919.71	0.561978	1886.72	539.06	0	3.53	2402.03	6.69	2399.49	6.68	-2.54	-0.11
135	360	225	90	5760	0.9375	920.4	0.5625	1886.22	549.72	-0.53	3.5	2406.64	6.69	2404.9	6.68	-1.74	-0.07
135	361	226	91	5776	0.936457	921.07	0.563019	1885.72	560.45	0	3.47	2412.23	6.68	2409.95	6.68	-2.28	-0.09
135	362	227	92	5792	0.935411	921.74	0.563536	1885.23	571.26	-0.53	3.44	2416.68	6.68	2415.2	6.67	-1.48	-0.06
135	363	228	93	5808	0.934362	922.4	0.56405	1884.75	582.14	0	3.41	2422.11	6.67	2420.1	6.67	-2.01	-0.08
135	364	229	94	5824	0.933311	923.06	0.56456	1884.29	593.1	-0.52	3.38	2426.41	6.67	2425.2	6.66	-1.21	-0.05
135	365	230	95	5840	0.932257	923.7	0.565068	1883.83	604.13	0	3.35	2431.69	6.66	2429.94	6.66	-1.74	-0.07
135	366	231	96	5856	0.931201	924.34	0.565574	1883.39	615.23	-0.52	3.32	2435.84	6.66	2434.89	6.65	-0.94	-0.04
135	367	232	97	5872	0.930143	924.97	0.566076	1882.96	626.41	0	3.3	2440.96	6.65	2439.49	6.65	-1.47	-0.06
135	368	233	98	5888	0.929082	925.59	0.566576	1882.54	637.66	-0.52	3.27	2444.96	6.64	2444.29	6.64	-0.67	-0.03
135	369	234	99	5904	0.928019	926.21	0.567073	1882.12	648.98	0	3.24	2449.93	6.64	2448.73	6.64	-1.19	-0.05
135	370	235	100	5920	0.926954	926.82	0.567568	1881.72	660.37	-0.52	3.21	2453.78	6.63	2453.39	6.63	-0.39	-0.02
135	371	236	101	5936	0.925887	927.42	0.568059	1881.33	671.84	0	3.19	2458.6	6.63	2457.69	6.62	-0.91	-0.04
135	372	237	102	5952	0.924818	928.01	0.568548	1880.95	683.37	-0.52	3.16	2462.32	6.62	2462.21	6.62	-0.11	0
135	373	238	103	5968	0.923747	928.6	0.569035	1880.58	694.97	0	3.14	2466.99	6.61	2466.36	6.61	-0.63	-0.03
135	374	239	104	5984	0.922674	929.18	0.569519	1880.22	706.64	-0.52	3.11	2470.56	6.61	2470.73	6.61	0.17	0.01
135	375	240	105	6000	0.9216	929.75	0.57	1879.86	718.38	0	3.09	2475.1	6.6	2474.74	6.6	-0.35	-0.01
135	376	241	106	6016	0.920524	930.31	0.570479	1879.52	730.19	-0.52	3.06	2478.53	6.59	2478.98	6.59	0.45	0.02
135	377	242	107	6032	0.919446	930.87	0.570955	1879.19	742.06	0	3.04	2482.92	6.59	2482.85	6.59	-0.07	0
135	378	243	108	6048	0.918367	931.42	0.571429	1878.86	754	-0.51	3.01	2486.21	6.58	2486.95	6.58	0.73	0.03
135	379	244	109	6064	0.917287	931.97	0.5719	1878.55	766.01	0	2.99	2490.47	6.57	2490.68	6.57	0.21	0.01
135	380	245	110	6080	0.916205	932.5	0.572368	1878.24	778.08	-0.51	2.96	2493.63	6.56	2494.64	6.56	1.01	0.04
135	381	246	111	6096	0.915122	933.03	0.572835	1877.95	790.22	0	2.94	2497.74	6.56	2498.24	6.56	0.5	0.02
135	382	247	112	6112	0.914037	933.56	0.573298	1877.66	802.42	-0.51	2.92	2500.77	6.55	2502.06	6.55	1.29	0.05
135	383	248	113	6128	0.912952	934.08	0.57376	1877.38	814.68	0	2.9	2504.75	6.54	2505.53	6.54	0.78	0.03

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
135	384	249	114	6144	0.911865	934.59	0.574219	1877.11	827.01	-0.51	2.87	2507.65	6.53	2509.22	6.53	1.57	0.06
135	385	250	115	6160	0.910778	935.09	0.574675	1876.85	839.4	0	2.85	2511.5	6.52	2512.56	6.53	1.06	0.04
135	386	251	116	6176	0.909689	935.59	0.57513	1876.6	851.86	-0.51	2.83	2514.27	6.51	2516.12	6.52	1.85	0.07
135	387	252	117	6192	0.908599	936.08	0.575581	1876.36	864.38	0	2.81	2517.99	6.51	2519.32	6.51	1.33	0.05
135	388	253	118	6208	0.907509	936.57	0.576031	1876.12	876.96	-0.51	2.79	2520.63	6.5	2522.76	6.5	2.13	0.08
135	389	254	119	6224	0.906417	937.05	0.576478	1875.9	889.6	0	2.77	2524.23	6.49	2525.83	6.49	1.61	0.06
135	390	255	120	6240	0.905325	937.53	0.576923	1875.68	902.3	-0.51	2.75	2526.74	6.48	2529.14	6.48	2.4	0.09
135	391	256	121	6256	0.904233	937.99	0.577366	1875.47	915.06	0	2.73	2530.21	6.47	2532.09	6.48	1.88	0.07
135	392	257	122	6272	0.903139	938.46	0.577806	1875.26	927.88	-0.51	2.71	2532.6	6.46	2535.28	6.47	2.67	0.11
135	393	258	123	6288	0.902045	938.91	0.578244	1875.07	940.76	0	2.69	2535.95	6.45	2538.1	6.46	2.15	0.08
135	394	259	124	6304	0.900951	939.36	0.57868	1874.88	953.7	-0.5	2.67	2538.22	6.44	2541.16	6.45	2.94	0.12
135	395	260	125	6320	0.899856	939.81	0.579114	1874.7	966.69	0	2.65	2541.44	6.43	2543.86	6.44	2.42	0.1
135	396	261	126	6336	0.89876	940.25	0.579545	1874.53	979.75	-0.5	2.63	2543.6	6.42	2546.8	6.43	3.2	0.13
135	397	262	127	6352	0.897664	940.68	0.579975	1874.37	992.86	0	2.61	2546.7	6.41	2549.38	6.42	2.68	0.11
135	398	263	128	6368	0.896568	941.11	0.580402	1874.21	1006.03	-0.5	2.59	2548.74	6.4	2552.2	6.41	3.46	0.14
135	399	264	129	6384	0.895472	941.53	0.580827	1874.06	1019.25	0	2.57	2551.72	6.4	2554.66	6.4	2.94	0.12
135	400	265	130	6400	0.894375	941.95	0.58125	1873.92	1032.54	-0.5	2.55	2553.64	6.38	2557.36	6.39	3.72	0.15
135	401	266	131	6416	0.893278	942.36	0.581671	1873.79	1045.88	0	2.54	2556.51	6.38	2559.7	6.38	3.19	0.12
135	402	267	132	6432	0.892181	942.77	0.58209	1873.66	1059.27	-0.5	2.52	2558.32	6.36	2562.29	6.37	3.97	0.15
135	403	268	133	6448	0.891084	943.17	0.582506	1873.54	1072.72	0	2.5	2561.07	6.36	2564.51	6.36	3.44	0.13
135	404	269	134	6464	0.889986	943.57	0.582921	1873.43	1086.22	-0.5	2.48	2562.77	6.34	2566.98	6.35	4.21	0.16
135	405	270	135	6480	0.888889	943.96	0.583333	1873.33	1099.78	0	2.47	2565.41	6.33	2569.09	6.34	3.69	0.14
135	406	271	136	6496	0.887792	944.34	0.583744	1873.23	1113.39	-0.5	2.45	2566.99	6.32	2571.45	6.33	4.45	0.17
135	407	272	137	6512	0.886694	944.72	0.584152	1873.14	1127.05	0	2.43	2569.52	6.31	2573.44	6.32	3.92	0.15
135	408	273	138	6528	0.885597	945.1	0.584559	1873.05	1140.77	-0.5	2.42	2571	6.3	2575.69	6.31	4.69	0.18
135	409	274	139	6544	0.8845	945.47	0.584963	1872.97	1154.54	0	2.4	2573.42	6.29	2577.57	6.3	4.16	0.16
135	410	275	140	6560	0.883403	945.84	0.585366	1872.9	1168.36	-0.49	2.38	2574.79	6.28	2579.71	6.29	4.92	0.19
135	411	276	141	6576	0.882306	946.2	0.585766	1872.84	1182.24	0	2.37	2577.1	6.27	2581.48	6.28	4.38	0.17
135	412	277	142	6592	0.881209	946.55	0.586165	1872.78	1196.16	-0.49	2.35	2578.36	6.26	2583.5	6.27	5.14	0.2
135	413	278	143	6608	0.880113	946.91	0.586562	1872.73	1210.14	0	2.34	2580.57	6.25	2585.17	6.26	4.6	0.18
135	414	279	144	6624	0.879017	947.25	0.586957	1872.68	1224.17	-0.49	2.32	2581.73	6.24	2587.08	6.25	5.36	0.21
135	415	280	145	6640	0.877921	947.59	0.587349	1872.64	1238.24	0	2.31	2583.83	6.23	2588.64	6.24	4.82	0.19
135	416	281	146	6656	0.876826	947.93	0.58774	1872.61	1252.37	-0.49	2.29	2584.89	6.21	2590.45	6.23	5.56	0.21
135	417	282	147	6672	0.875731	948.27	0.588129	1872.58	1266.55	0	2.28	2586.88	6.2	2591.9	6.22	5.02	0.19
135	418	283	148	6688	0.874637	948.59	0.588517	1872.56	1280.78	-0.49	2.26	2587.84	6.19	2593.61	6.2	5.77	0.22
135	419	284	149	6704	0.873543	948.92	0.588902	1872.55	1295.05	0	2.25	2589.73	6.18	2594.95	6.19	5.22	0.2
135	420	285	150	6720	0.872449	949.24	0.589286	1872.54	1309.38	-0.49	2.23	2590.59	6.17	2596.56	6.18	5.96	0.23
135	421	286	151	6736	0.871356	949.55	0.589667	1872.53	1323.75	0	2.22	2592.38	6.16	2597.8	6.17	5.42	0.21
135	422	287	152	6752	0.870263	949.86	0.590047	1872.54	1338.17	-0.49	2.2	2593.15	6.14	2599.3	6.16	6.15	0.24
135	423	288	153	6768	0.869172	950.17	0.590426	1872.55	1352.64	0	2.19	2594.84	6.13	2600.44	6.15	5.6	0.22
135	424	289	154	6784	0.86808	950.47	0.590802	1872.56	1367.15	-0.49	2.18	2595.51	6.12	2601.84	6.14	6.33	0.24
135	425	290	155	6800	0.86699	950.77	0.591176	1872.58	1381.71	0	2.16	2597.1	6.11	2602.88	6.12	5.78	0.22
135	426	291	156	6816	0.8659	951.06	0.591549	1872.61	1396.32	-0.48	2.15	2597.67	6.1	2604.18	6.11	6.5	0.25
135	427	292	157	6832	0.86481	951.35	0.59192	1872.64	1410.97	0	2.13	2599.17	6.09	2605.11	6.1	5.95	0.23
135	428	293	158	6848	0.863722	951.64	0.59229	1872.68	1425.68	-0.48	2.12	2599.65	6.07	2606.31	6.09	6.67	0.26
135	429	294	159	6864	0.862634	951.92	0.592657	1872.72	1440.42	0	2.11	2601.05	6.06	2607.16	6.08	6.11	0.23

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
135	430	295	160	6880	0.861547	952.2	0.593023	1872.77	1455.21	-0.48	2.1	2601.44	6.05	2608.26	6.07	6.82	0.26
135	431	296	161	6896	0.86046	952.47	0.593387	1872.82	1470.05	0	2.08	2602.74	6.04	2609	6.05	6.26	0.24
135	432	297	162	6912	0.859375	952.74	0.59375	1872.88	1484.93	-0.48	2.07	2603.04	6.03	2610.01	6.04	6.97	0.27
135	433	298	163	6928	0.85829	953	0.594111	1872.95	1499.85	0	2.06	2604.25	6.01	2610.66	6.03	6.41	0.25
135	434	299	164	6944	0.857207	953.27	0.59447	1873.02	1514.82	-0.48	2.05	2604.46	6	2611.57	6.02	7.11	0.27
135	435	300	165	6960	0.856124	953.52	0.594828	1873.09	1529.84	0	2.03	2605.58	5.99	2612.12	6	6.54	0.25
135	436	301	166	6976	0.855042	953.78	0.595183	1873.17	1544.89	-0.48	2.02	2605.7	5.98	2612.94	5.99	7.24	0.28
135	437	302	167	6992	0.853961	954.03	0.595538	1873.25	1559.99	0	2.01	2606.73	5.97	2613.4	5.98	6.67	0.26
135	438	303	168	7008	0.85288	954.27	0.59589	1873.34	1575.14	-0.48	2	2606.77	5.95	2614.13	5.97	7.36	0.28
135	439	304	169	7024	0.851801	954.52	0.596241	1873.44	1590.32	0	1.99	2607.71	5.94	2614.5	5.96	6.78	0.26
135	440	305	170	7040	0.850723	954.75	0.596591	1873.54	1605.55	-0.48	1.97	2607.66	5.93	2615.13	5.94	7.47	0.29
135	441	306	171	7056	0.849646	954.99	0.596939	1873.64	1620.82	0	1.96	2608.51	5.91	2615.41	5.93	6.89	0.26
135	442	307	172	7072	0.84857	955.22	0.597285	1873.75	1636.13	-0.48	1.95	2608.37	5.9	2615.95	5.92	7.58	0.29
135	443	308	173	7088	0.847495	955.45	0.59763	1873.87	1651.48	0	1.94	2609.14	5.89	2616.14	5.91	6.99	0.27
135	444	309	174	7104	0.846421	955.67	0.597973	1873.99	1666.87	-0.47	1.93	2608.92	5.88	2616.59	5.89	7.67	0.29
135	445	310	175	7120	0.845348	955.9	0.598315	1874.11	1682.31	0	1.92	2609.61	5.86	2616.69	5.88	7.08	0.27
135	446	311	176	7136	0.844276	956.11	0.598655	1874.24	1697.78	-0.47	1.91	2609.3	5.85	2617.05	5.87	7.75	0.3
135	447	312	177	7152	0.843205	956.33	0.598993	1874.37	1713.3	0	1.9	2609.9	5.84	2617.06	5.85	7.16	0.27
135	448	313	178	7168	0.842136	956.54	0.59933	1874.51	1728.85	-0.47	1.88	2609.51	5.82	2617.34	5.84	7.83	0.3
135	449	314	179	7184	0.841067	956.75	0.599666	1874.65	1744.45	0	1.87	2610.03	5.81	2617.26	5.83	7.23	0.28
135	450	315	180	7200	0.84	956.95	0.6	1874.8	1760.08	-0.47	1.86	2609.57	5.8	2617.46	5.82	7.89	0.3
135	451	316	181	7216	0.838934	957.15	0.600333	1874.95	1775.75	0	1.85	2610	5.79	2617.29	5.8	7.29	0.28
135	452	317	182	7232	0.837869	957.35	0.600664	1875.1	1791.47	-0.47	1.84	2609.46	5.77	2617.4	5.79	7.95	0.3
135	453	318	183	7248	0.836805	957.54	0.600993	1875.26	1807.22	0	1.83	2609.81	5.76	2617.15	5.78	7.34	0.28
135	454	319	184	7264	0.835743	957.73	0.601322	1875.43	1823.01	-0.47	1.82	2609.19	5.75	2617.18	5.76	7.99	0.31
135	455	320	185	7280	0.834682	957.92	0.601648	1875.59	1838.83	0	1.81	2609.46	5.74	2616.84	5.75	7.38	0.28
135	456	321	186	7296	0.833622	958.11	0.601974	1875.77	1854.7	-0.47	1.8	2608.76	5.72	2616.79	5.74	8.02	0.31
135	457	322	187	7312	0.832563	958.29	0.602298	1875.94	1870.6	0	1.79	2608.96	5.71	2616.37	5.73	7.41	0.28
135	458	323	188	7328	0.831506	958.47	0.60262	1876.12	1886.54	-0.47	1.78	2608.18	5.69	2616.23	5.71	8.05	0.31
135	459	324	189	7344	0.83045	958.64	0.602941	1876.31	1902.52	0	1.77	2608.3	5.68	2615.73	5.7	7.43	0.28
135	460	325	190	7360	0.829395	958.82	0.603261	1876.5	1918.54	-0.47	1.76	2607.45	5.67	2615.51	5.69	8.06	0.31
135	461	326	191	7376	0.828342	958.99	0.603579	1876.69	1934.59	0	1.75	2607.49	5.66	2614.93	5.67	7.44	0.28
135	462	327	192	7392	0.82729	959.15	0.603896	1876.89	1950.68	-0.47	1.75	2606.56	5.64	2614.63	5.66	8.06	0.31
135	463	328	193	7408	0.826239	959.32	0.604212	1877.09	1966.8	0	1.74	2606.53	5.63	2613.97	5.65	7.44	0.28
135	464	329	194	7424	0.82519	959.48	0.604526	1877.29	1982.96	-0.46	1.73	2605.53	5.62	2613.59	5.63	8.06	0.31
135	465	330	195	7440	0.824142	959.63	0.604839	1877.5	1999.16	0	1.72	2605.42	5.6	2612.85	5.62	7.43	0.28
135	466	331	196	7456	0.823095	959.79	0.60515	1877.71	2015.39	-0.46	1.71	2604.35	5.59	2612.39	5.61	8.04	0.31
135	467	332	197	7472	0.82205	959.94	0.60546	1877.93	2031.66	0	1.7	2604.17	5.58	2611.57	5.59	7.4	0.28
135	468	333	198	7488	0.821006	960.09	0.605769	1878.15	2047.96	-0.46	1.69	2603.03	5.56	2611.04	5.58	8.01	0.31
135	469	334	199	7504	0.819964	960.24	0.606077	1878.37	2064.3	0	1.68	2602.77	5.55	2610.14	5.57	7.37	0.28
135	470	335	200	7520	0.818923	960.38	0.606383	1878.6	2080.67	-0.46	1.67	2601.56	5.54	2609.53	5.55	7.97	0.31
135	471	336	201	7536	0.817883	960.52	0.606688	1878.83	2097.08	0	1.67	2601.24	5.52	2608.56	5.54	7.33	0.28
135	472	337	202	7552	0.816845	960.66	0.606992	1879.07	2113.52	-0.46	1.66	2599.95	5.51	2607.87	5.53	7.92	0.3
135	473	338	203	7568	0.815808	960.79	0.607294	1879.31	2129.99	0	1.65	2599.56	5.5	2606.83	5.51	7.27	0.28
135	474	339	204	7584	0.814773	960.93	0.607595	1879.55	2146.5	-0.46	1.64	2598.21	5.48	2606.06	5.5	7.86	0.3
135	475	340	205	7600	0.81374	961.06	0.607895	1879.79	2163.04	0	1.63	2597.74	5.47	2604.94	5.48	7.2	0.28

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
136	271	135	-1	4336	0.999986	812.41	0.499077	2029.31	0.09	0	9.85	1504.03	5.55	1513.16	5.58	9.12	0.6
136	272	136	0	4352	1	814.42	0.5	2026.81	0	0.61	10	1521.38	5.59	1529.82	5.62	8.44	0.55
136	273	137	1	4368	0.999987	816.4	0.500916	2024.35	0.09	0	9.85	1537.01	5.63	1544.49	5.66	7.48	0.48
136	274	138	2	4384	0.999947	818.36	0.501825	2021.92	0.36	0.6	9.7	1553.66	5.67	1560.82	5.7	7.16	0.46
136	275	139	3	4400	0.999881	820.3	0.502727	2019.53	0.8	0	9.55	1568.92	5.71	1575.16	5.73	6.24	0.4
136	276	140	4	4416	0.99979	822.21	0.503623	2017.19	1.42	0.6	9.41	1585.2	5.74	1591.15	5.77	5.95	0.37
136	277	141	5	4432	0.999674	824.1	0.504513	2014.87	2.2	0	9.27	1600.09	5.78	1605.18	5.79	5.08	0.32
136	278	142	6	4448	0.999534	825.97	0.505396	2012.6	3.16	0.6	9.13	1616.01	5.81	1620.84	5.83	4.83	0.3
136	279	143	7	4464	0.999371	827.81	0.506272	2010.36	4.29	0	9	1630.54	5.84	1634.55	5.86	4.01	0.25
136	280	144	8	4480	0.999184	829.63	0.507143	2008.15	5.58	0.6	8.87	1646.1	5.88	1649.89	5.89	3.79	0.23
136	281	145	9	4496	0.998974	831.43	0.508007	2005.98	7.04	0	8.74	1660.29	5.91	1663.29	5.92	3	0.18
136	282	146	10	4512	0.998743	833.21	0.508865	2003.85	8.66	0.6	8.62	1675.5	5.94	1678.32	5.95	2.83	0.17
136	283	147	11	4528	0.998489	834.97	0.509717	2001.74	10.44	0	8.49	1689.34	5.97	1691.42	5.98	2.07	0.12
136	284	148	12	4544	0.998215	836.7	0.510563	1999.68	12.38	0.59	8.37	1704.21	6	1706.14	6.01	1.93	0.11
136	285	149	13	4560	0.997919	838.42	0.511404	1997.64	14.48	0	8.26	1717.72	6.03	1718.94	6.03	1.21	0.07
136	286	150	14	4576	0.997604	840.11	0.512238	1995.64	16.73	0.59	8.14	1732.25	6.06	1733.36	6.06	1.1	0.06
136	287	151	15	4592	0.997268	841.79	0.513066	1993.66	19.14	0	8.03	1745.44	6.08	1745.86	6.08	0.42	0.02
136	288	152	16	4608	0.996914	843.44	0.513889	1991.72	21.7	0.59	7.92	1759.64	6.11	1759.98	6.11	0.34	0.02
136	289	153	17	4624	0.99654	845.07	0.514706	1989.81	24.42	0	7.81	1772.51	6.13	1772.2	6.13	-0.31	-0.02
136	290	154	18	4640	0.996147	846.69	0.515517	1987.93	27.28	0.59	7.71	1786.4	6.16	1786.03	6.16	-0.36	-0.02
136	291	155	19	4656	0.995737	848.28	0.516323	1986.08	30.29	0	7.6	1798.95	6.18	1797.97	6.18	-0.98	-0.05
136	292	156	20	4672	0.995309	849.86	0.517123	1984.26	33.45	0.59	7.5	1812.52	6.21	1811.52	6.2	-1	-0.06
136	293	157	21	4688	0.994863	851.42	0.517918	1982.46	36.75	0	7.4	1824.77	6.23	1823.18	6.22	-1.59	-0.09
136	294	158	22	4704	0.9944	852.96	0.518707	1980.7	40.2	0.58	7.3	1838.03	6.25	1836.44	6.25	-1.59	-0.09
136	295	159	23	4720	0.993921	854.48	0.519492	1978.96	43.78	0	7.21	1849.98	6.27	1847.83	6.26	-2.15	-0.12
136	296	160	24	4736	0.993426	855.98	0.52027	1977.25	47.51	0.58	7.11	1862.94	6.29	1860.82	6.29	-2.12	-0.11
136	297	161	25	4752	0.992915	857.47	0.521044	1975.57	51.38	0	7.02	1874.6	6.31	1871.95	6.3	-2.65	-0.14
136	298	162	26	4768	0.992388	858.94	0.521812	1973.92	55.39	0.58	6.93	1887.27	6.33	1884.66	6.32	-2.6	-0.14
136	299	163	27	4784	0.991846	860.39	0.522575	1972.29	59.53	0	6.84	1898.63	6.35	1895.53	6.34	-3.11	-0.16
136	300	164	28	4800	0.991289	861.82	0.523333	1970.69	63.81	0.58	6.76	1911.02	6.37	1907.98	6.36	-3.04	-0.16
136	301	165	29	4816	0.990718	863.24	0.524086	1969.11	68.23	0	6.67	1922.1	6.39	1918.59	6.37	-3.51	-0.18
136	302	166	30	4832	0.990132	864.63	0.524834	1967.56	72.77	0.58	6.59	1934.2	6.4	1930.78	6.39	-3.42	-0.18
136	303	167	31	4848	0.989533	866.02	0.525578	1966.03	77.45	0	6.51	1945.01	6.42	1941.13	6.41	-3.88	-0.2
136	304	168	32	4864	0.98892	867.38	0.526316	1964.53	82.25	0.57	6.43	1956.83	6.44	1953.07	6.42	-3.76	-0.19
136	305	169	33	4880	0.988293	868.74	0.527049	1963.05	87.19	0	6.35	1967.37	6.45	1963.18	6.44	-4.2	-0.21
136	306	170	34	4896	0.987654	870.07	0.527778	1961.6	92.25	0.57	6.27	1978.92	6.47	1974.86	6.45	-4.06	-0.21
136	307	171	35	4912	0.987003	871.39	0.528502	1960.17	97.44	0	6.2	1989.2	6.48	1984.72	6.46	-4.47	-0.23
136	308	172	36	4928	0.986338	872.69	0.529221	1958.76	102.76	0.57	6.12	2000.48	6.5	1996.16	6.48	-4.32	-0.22
136	309	173	37	4944	0.985662	873.98	0.529935	1957.37	108.19	0	6.05	2010.5	6.51	2005.79	6.49	-4.71	-0.23
136	310	174	38	4960	0.984974	875.25	0.530645	1956.01	113.75	0.57	5.98	2021.52	6.52	2016.98	6.51	-4.55	-0.23
136	311	175	39	4976	0.984274	876.51	0.53135	1954.67	119.44	0	5.91	2031.29	6.53	2026.37	6.52	-4.92	-0.24
136	312	176	40	4992	0.983563	877.76	0.532051	1953.35	125.24	0.57	5.84	2042.05	6.55	2037.32	6.53	-4.73	-0.23
136	313	177	41	5008	0.982842	878.98	0.532748	1952.06	131.16	0	5.77	2051.57	6.55	2046.48	6.54	-5.08	-0.25

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
136	314	178	42	5024	0.982109	880.2	0.533439	1950.78	137.2	0.56	5.7	2062.09	6.57	2057.2	6.55	-4.89	-0.24
136	315	179	43	5040	0.981366	881.4	0.534127	1949.53	143.35	0	5.64	2071.35	6.58	2066.14	6.56	-5.22	-0.25
136	316	180	44	5056	0.980612	882.59	0.53481	1948.29	149.63	0.56	5.57	2081.63	6.59	2076.62	6.57	-5.01	-0.24
136	317	181	45	5072	0.979849	883.76	0.535489	1947.08	156.01	0	5.51	2090.66	6.6	2085.34	6.58	-5.32	-0.26
136	318	182	46	5088	0.979075	884.92	0.536164	1945.89	162.51	0.56	5.45	2100.69	6.61	2095.6	6.59	-5.09	-0.24
136	319	183	47	5104	0.978292	886.06	0.536834	1944.72	169.12	0	5.39	2109.48	6.61	2104.09	6.6	-5.39	-0.26
136	320	184	48	5120	0.9775	887.19	0.5375	1943.56	175.85	0.56	5.33	2119.28	6.62	2114.13	6.61	-5.15	-0.24
136	321	185	49	5136	0.976699	888.31	0.538162	1942.43	182.68	0	5.27	2127.84	6.63	2122.4	6.61	-5.44	-0.26
136	322	186	50	5152	0.975888	889.42	0.53882	1941.31	189.63	0.56	5.21	2137.41	6.64	2132.22	6.62	-5.19	-0.24
136	323	187	51	5168	0.975069	890.51	0.539474	1940.22	196.68	0	5.15	2145.75	6.64	2140.29	6.63	-5.46	-0.25
136	324	188	52	5184	0.974242	891.59	0.540123	1939.14	203.84	0.56	5.1	2155.08	6.65	2149.89	6.64	-5.19	-0.24
136	325	189	53	5200	0.973406	892.66	0.540769	1938.08	211.1	0	5.04	2163.2	6.66	2157.75	6.64	-5.45	-0.25
136	326	190	54	5216	0.972562	893.71	0.541411	1937.04	218.48	0.55	4.99	2172.31	6.66	2167.14	6.65	-5.18	-0.24
136	327	191	55	5232	0.97171	894.75	0.542049	1936.02	225.95	0	4.93	2180.21	6.67	2174.79	6.65	-5.42	-0.25
136	328	192	56	5248	0.970851	895.78	0.542683	1935.01	233.53	0.55	4.88	2189.11	6.67	2183.97	6.66	-5.13	-0.24
136	329	193	57	5264	0.969984	896.8	0.543313	1934.02	241.21	0	4.83	2196.79	6.68	2191.43	6.66	-5.37	-0.24
136	330	194	58	5280	0.969109	897.81	0.543939	1933.05	248.99	0.55	4.78	2205.47	6.68	2200.4	6.67	-5.07	-0.23
136	331	195	59	5296	0.968228	898.8	0.544562	1932.1	256.88	0	4.73	2212.95	6.69	2207.66	6.67	-5.29	-0.24
136	332	196	60	5312	0.967339	899.79	0.545181	1931.16	264.86	0.55	4.68	2221.42	6.69	2216.43	6.68	-4.99	-0.23
136	333	197	61	5328	0.966444	900.76	0.545796	1930.24	272.95	0	4.63	2228.69	6.69	2223.49	6.68	-5.2	-0.23
136	334	198	62	5344	0.965542	901.72	0.546407	1929.34	281.13	0.55	4.59	2236.95	6.7	2232.06	6.68	-4.89	-0.22
136	335	199	63	5360	0.964634	902.67	0.547015	1928.45	289.4	0	4.54	2244.02	6.7	2238.93	6.68	-5.09	-0.23
136	336	200	64	5376	0.963719	903.6	0.547619	1927.58	297.78	0.55	4.49	2252.08	6.7	2247.31	6.69	-4.77	-0.21
136	337	201	65	5392	0.962798	904.53	0.54822	1926.72	306.25	0	4.45	2258.95	6.7	2253.99	6.69	-4.96	-0.22
136	338	202	66	5408	0.961871	905.45	0.548817	1925.88	314.81	0.54	4.4	2266.81	6.71	2262.18	6.69	-4.63	-0.2
136	339	203	67	5424	0.960938	906.35	0.54941	1925.06	323.47	0	4.36	2273.48	6.71	2268.67	6.69	-4.81	-0.21
136	340	204	68	5440	0.96	907.25	0.55	1924.25	332.22	0.54	4.32	2281.15	6.71	2276.67	6.7	-4.47	-0.2
136	341	205	69	5456	0.959056	908.13	0.550587	1923.45	341.06	0	4.27	2287.63	6.71	2282.98	6.69	-4.65	-0.2
136	342	206	70	5472	0.958107	909.01	0.55117	1922.67	350	0.54	4.23	2295.1	6.71	2290.79	6.7	-4.31	-0.19
136	343	207	71	5488	0.957152	909.87	0.551749	1921.9	359.02	0	4.19	2301.4	6.71	2296.93	6.7	-4.47	-0.19
136	344	208	72	5504	0.956193	910.72	0.552326	1921.15	368.14	0.54	4.15	2308.68	6.71	2304.55	6.7	-4.12	-0.18
136	345	209	73	5520	0.955228	911.57	0.552899	1920.42	377.34	0	4.11	2314.79	6.71	2310.51	6.7	-4.28	-0.19
136	346	210	74	5536	0.954258	912.4	0.553468	1919.69	386.63	0.54	4.07	2321.89	6.71	2317.96	6.7	-3.93	-0.17
136	347	211	75	5552	0.953284	913.22	0.554035	1918.98	396.01	0	4.03	2327.82	6.71	2323.74	6.7	-4.08	-0.18
136	348	212	76	5568	0.952305	914.04	0.554598	1918.29	405.48	0.54	4	2334.73	6.71	2331.01	6.7	-3.72	-0.16
136	349	213	77	5584	0.951322	914.84	0.555158	1917.61	415.03	0	3.96	2340.48	6.71	2336.62	6.7	-3.87	-0.17
136	350	214	78	5600	0.950335	915.64	0.555714	1916.94	424.66	0.53	3.92	2347.22	6.71	2343.71	6.7	-3.51	-0.15
136	351	215	79	5616	0.949343	916.42	0.556268	1916.28	434.38	0	3.89	2352.8	6.7	2349.15	6.69	-3.64	-0.16
136	352	216	80	5632	0.948347	917.2	0.556818	1915.64	444.19	0.53	3.85	2359.35	6.7	2356.07	6.69	-3.28	-0.14
136	353	217	81	5648	0.947347	917.97	0.557365	1915.01	454.08	0	3.81	2364.76	6.7	2361.35	6.69	-3.41	-0.14
136	354	218	82	5664	0.946344	918.73	0.55791	1914.39	464.05	0.53	3.78	2371.15	6.7	2368.1	6.69	-3.04	-0.13
136	355	219	83	5680	0.945336	919.48	0.558451	1913.79	474.1	0	3.75	2376.38	6.69	2373.21	6.69	-3.17	-0.13
136	356	220	84	5696	0.944325	920.22	0.558989	1913.2	484.23	0.53	3.71	2382.6	6.69	2379.8	6.68	-2.8	-0.12
136	357	221	85	5712	0.943311	920.95	0.559524	1912.62	494.44	0	3.68	2387.67	6.69	2384.75	6.68	-2.92	-0.12
136	358	222	86	5728	0.942293	921.67	0.560056	1912.05	504.74	0.53	3.65	2393.72	6.69	2391.17	6.68	-2.55	-0.11
136	359	223	87	5744	0.941271	922.39	0.560585	1911.49	515.11	0	3.61	2398.62	6.68	2395.96	6.67	-2.66	-0.11

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136	360	224	88	5760	0.940247	923.09	0.561111	1910.95	525.56	0.53	3.58	2404.51	6.68	2402.22	6.67	-2.29	-0.1
136	361	225	89	5776	0.939219	923.79	0.561634	1910.42	536.09	0	3.55	2409.25	6.67	2406.85	6.67	-2.4	-0.1
136	362	226	90	5792	0.938189	924.48	0.562155	1909.9	546.69	0.53	3.52	2414.98	6.67	2412.95	6.67	-2.02	-0.08
136	363	227	91	5808	0.937155	925.16	0.562672	1909.39	557.37	0	3.49	2419.57	6.67	2417.43	6.66	-2.13	-0.09
136	364	228	92	5824	0.936119	925.84	0.563187	1908.89	568.13	0.52	3.46	2425.13	6.66	2423.37	6.66	-1.75	-0.07
136	365	229	93	5840	0.93508	926.5	0.563699	1908.41	578.96	0	3.43	2429.56	6.66	2427.7	6.65	-1.86	-0.08
136	366	230	94	5856	0.934038	927.16	0.564208	1907.93	589.86	0.52	3.4	2434.97	6.65	2433.49	6.65	-1.48	-0.06
136	367	231	95	5872	0.932994	927.81	0.564714	1907.47	600.84	0	3.37	2439.25	6.65	2437.67	6.64	-1.58	-0.06
136	368	232	96	5888	0.931947	928.45	0.565217	1907.02	611.9	0.52	3.34	2444.5	6.64	2443.3	6.64	-1.2	-0.05
136	369	233	97	5904	0.930898	929.08	0.565718	1906.57	623.02	0	3.32	2448.64	6.64	2447.33	6.63	-1.3	-0.05
136	370	234	98	5920	0.929847	929.71	0.566216	1906.14	634.22	0.52	3.29	2453.73	6.63	2452.82	6.63	-0.92	-0.04
136	371	235	99	5936	0.928793	930.33	0.566712	1905.72	645.49	0	3.26	2457.72	6.62	2456.7	6.62	-1.02	-0.04
136	372	236	100	5952	0.927737	930.94	0.567204	1905.31	656.83	0.52	3.23	2462.67	6.62	2462.04	6.62	-0.63	-0.03
136	373	237	101	5968	0.92668	931.55	0.567694	1904.91	668.24	0	3.21	2466.51	6.61	2465.78	6.61	-0.73	-0.03
136	374	238	102	5984	0.92562	932.14	0.568182	1904.52	679.72	0.52	3.18	2471.32	6.61	2470.97	6.61	-0.35	-0.01
136	375	239	103	6000	0.924558	932.73	0.568667	1904.14	691.27	0	3.15	2475.01	6.6	2474.57	6.6	-0.44	-0.02
136	376	240	104	6016	0.923495	933.31	0.569149	1903.76	702.89	0.52	3.13	2479.67	6.59	2479.62	6.59	-0.06	0
136	377	241	105	6032	0.92243	933.89	0.569629	1903.4	714.58	0	3.1	2483.23	6.59	2483.08	6.59	-0.15	-0.01
136	378	242	106	6048	0.921363	934.46	0.570106	1903.05	726.33	0.51	3.08	2487.75	6.58	2487.98	6.58	0.23	0.01
136	379	243	107	6064	0.920294	935.02	0.57058	1902.71	738.15	0	3.06	2491.17	6.57	2491.31	6.57	0.14	0.01
136	380	244	108	6080	0.919224	935.58	0.571053	1902.38	750.04	0.51	3.03	2495.55	6.57	2496.07	6.57	0.52	0.02
136	381	245	109	6096	0.918153	936.12	0.571522	1902.05	762	0	3.01	2498.83	6.56	2499.26	6.56	0.43	0.02
136	382	246	110	6112	0.91708	936.67	0.57199	1901.74	774.02	0.51	2.98	2503.07	6.55	2503.89	6.55	0.81	0.03
136	383	247	111	6128	0.916006	937.2	0.572454	1901.43	786.1	0	2.96	2506.23	6.54	2506.95	6.55	0.72	0.03
136	384	248	112	6144	0.914931	937.73	0.572917	1901.14	798.25	0.51	2.94	2510.33	6.54	2511.43	6.54	1.1	0.04
136	385	249	113	6160	0.913854	938.25	0.573377	1900.85	810.46	0	2.91	2513.35	6.53	2514.36	6.53	1.01	0.04
136	386	250	114	6176	0.912776	938.77	0.573834	1900.57	822.74	0.51	2.89	2517.32	6.52	2518.71	6.53	1.39	0.06
136	387	251	115	6192	0.911697	939.28	0.574289	1900.3	835.08	0	2.87	2520.21	6.51	2521.51	6.52	1.3	0.05
136	388	252	116	6208	0.910617	939.78	0.574742	1900.04	847.48	0.51	2.85	2524.05	6.51	2525.73	6.51	1.68	0.07
136	389	253	117	6224	0.909537	940.28	0.575193	1899.79	859.94	0	2.83	2526.82	6.5	2528.4	6.5	1.59	0.06
136	390	254	118	6240	0.908455	940.77	0.575641	1899.55	872.47	0.51	2.81	2530.53	6.49	2532.49	6.49	1.96	0.08
136	391	255	119	6256	0.907372	941.25	0.576087	1899.31	885.06	0	2.79	2533.17	6.48	2535.04	6.48	1.87	0.07
136	392	256	120	6272	0.906289	941.73	0.576531	1899.09	897.7	0.51	2.76	2536.75	6.47	2539	6.48	2.25	0.09
136	393	257	121	6288	0.905205	942.2	0.576972	1898.87	910.41	0	2.74	2539.26	6.46	2541.42	6.47	2.15	0.08
136	394	258	122	6304	0.90412	942.67	0.577411	1898.66	923.18	0.5	2.72	2542.73	6.45	2545.25	6.46	2.53	0.1
136	395	259	123	6320	0.903035	943.13	0.577848	1898.45	936.01	0	2.7	2545.12	6.44	2547.55	6.45	2.43	0.1
136	396	260	124	6336	0.901949	943.58	0.578283	1898.26	948.89	0.5	2.68	2548.45	6.44	2551.26	6.44	2.8	0.11
136	397	261	125	6352	0.900862	944.03	0.578715	1898.07	961.83	0	2.66	2550.73	6.43	2553.44	6.43	2.71	0.11
136	398	262	126	6368	0.899775	944.48	0.579146	1897.89	974.84	0.5	2.65	2553.94	6.42	2557.02	6.42	3.08	0.12
136	399	263	127	6384	0.898688	944.91	0.579574	1897.72	987.9	0	2.63	2556.1	6.41	2559.08	6.41	2.98	0.12
136	400	264	128	6400	0.8976	945.35	0.58	1897.56	1001.01	0.5	2.61	2559.19	6.4	2562.54	6.41	3.35	0.13
136	401	265	129	6416	0.896512	945.77	0.580424	1897.4	1014.18	0	2.59	2561.23	6.39	2564.48	6.4	3.25	0.13
136	402	266	130	6432	0.895423	946.2	0.580846	1897.25	1027.41	0.5	2.57	2564.21	6.38	2567.82	6.39	3.61	0.14
136	403	267	131	6448	0.894335	946.61	0.581266	1897.11	1040.7	0	2.55	2566.13	6.37	2569.65	6.38	3.51	0.14
136	404	268	132	6464	0.893246	947.02	0.581683	1896.98	1054.04	0.5	2.54	2569	6.36	2572.87	6.37	3.88	0.15
136	405	269	133	6480	0.892157	947.43	0.582099	1896.85	1067.43	0	2.52	2570.81	6.35	2574.58	6.36	3.77	0.15

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
136	406	270	134	6496	0.891067	947.83	0.582512	1896.73	1080.88	0.5	2.5	2573.56	6.34	2577.69	6.35	4.13	0.16
136	407	271	135	6512	0.889978	948.22	0.582924	1896.62	1094.39	0	2.48	2575.26	6.33	2579.29	6.34	4.03	0.16
136	408	272	136	6528	0.888889	948.61	0.583333	1896.51	1107.94	0.5	2.47	2577.89	6.32	2582.28	6.33	4.38	0.17
136	409	273	137	6544	0.8878	949	0.583741	1896.41	1121.56	0	2.45	2579.48	6.31	2583.76	6.32	4.28	0.17
136	410	274	138	6560	0.88671	949.38	0.584146	1896.32	1135.22	0.49	2.43	2582.01	6.3	2586.64	6.31	4.63	0.18
136	411	275	139	6576	0.885621	949.75	0.58455	1896.23	1148.94	0	2.42	2583.49	6.29	2588.02	6.3	4.52	0.17
136	412	276	140	6592	0.884532	950.12	0.584951	1896.15	1162.71	0.49	2.4	2585.91	6.28	2590.78	6.29	4.87	0.19
136	413	277	141	6608	0.883443	950.49	0.585351	1896.08	1176.53	0	2.38	2587.29	6.26	2592.05	6.28	4.76	0.18
136	414	278	142	6624	0.882354	950.85	0.585749	1896.02	1190.4	0.49	2.37	2589.6	6.26	2594.7	6.27	5.1	0.2
136	415	279	143	6640	0.881266	951.2	0.586145	1895.96	1204.32	0	2.35	2590.87	6.24	2595.86	6.26	4.99	0.19
136	416	280	144	6656	0.880178	951.56	0.586538	1895.91	1218.3	0.49	2.34	2593.07	6.23	2598.4	6.25	5.33	0.21
136	417	281	145	6672	0.87909	951.9	0.58693	1895.86	1232.32	0	2.32	2594.24	6.22	2599.46	6.23	5.22	0.2
136	418	282	146	6688	0.878002	952.24	0.587321	1895.82	1246.39	0.49	2.31	2596.34	6.21	2601.89	6.22	5.55	0.21
136	419	283	147	6704	0.876915	952.58	0.587709	1895.79	1260.52	0	2.29	2597.41	6.2	2602.84	6.21	5.44	0.21
136	420	284	148	6720	0.875828	952.91	0.588095	1895.76	1274.69	0.49	2.28	2599.4	6.19	2605.17	6.2	5.77	0.22
136	421	285	149	6736	0.874741	953.24	0.58848	1895.74	1288.91	0	2.26	2600.37	6.18	2606.02	6.19	5.65	0.22
136	422	286	150	6752	0.873655	953.56	0.588863	1895.72	1303.18	0.49	2.25	2602.26	6.17	2608.24	6.18	5.98	0.23
136	423	287	151	6768	0.87257	953.88	0.589243	1895.71	1317.5	0	2.23	2603.13	6.15	2608.99	6.17	5.85	0.22
136	424	288	152	6784	0.871485	954.2	0.589623	1895.71	1331.87	0.49	2.22	2604.93	6.14	2611.1	6.16	6.18	0.24
136	425	289	153	6800	0.8704	954.51	0.59	1895.71	1346.28	0	2.2	2605.7	6.13	2611.75	6.15	6.05	0.23
136	426	290	154	6816	0.869316	954.81	0.590376	1895.72	1360.75	0.48	2.19	2607.39	6.12	2613.76	6.14	6.37	0.24
136	427	291	155	6832	0.868233	955.12	0.590749	1895.73	1375.26	0	2.18	2608.07	6.11	2614.31	6.12	6.24	0.24
136	428	292	156	6848	0.86715	955.41	0.591121	1895.75	1389.81	0.48	2.16	2609.67	6.1	2616.22	6.11	6.56	0.25
136	429	293	157	6864	0.866068	955.71	0.591492	1895.78	1404.41	0	2.15	2610.25	6.08	2616.67	6.1	6.42	0.25
136	430	294	158	6880	0.864986	956	0.59186	1895.81	1419.06	0.48	2.14	2611.75	6.07	2618.48	6.09	6.73	0.26
136	431	295	159	6896	0.863906	956.28	0.592227	1895.85	1433.75	0	2.12	2612.24	6.06	2618.84	6.08	6.6	0.25
136	432	296	160	6912	0.862826	956.56	0.592593	1895.89	1448.49	0.48	2.11	2613.65	6.05	2620.55	6.07	6.9	0.26
136	433	297	161	6928	0.861747	956.84	0.592956	1895.94	1463.27	0	2.1	2614.04	6.04	2620.81	6.05	6.76	0.26
136	434	298	162	6944	0.860668	957.11	0.593318	1895.99	1478.1	0.48	2.09	2615.36	6.03	2622.42	6.04	7.06	0.27
136	435	299	163	6960	0.85959	957.38	0.593678	1896.05	1492.97	0	2.07	2615.67	6.01	2622.58	6.03	6.92	0.26
136	436	300	164	6976	0.858514	957.65	0.594037	1896.11	1507.89	0.48	2.06	2616.89	6	2624.1	6.02	7.22	0.27
136	437	301	165	6992	0.857438	957.91	0.594394	1896.18	1522.85	0	2.05	2617.1	5.99	2624.17	6	7.07	0.27
136	438	302	166	7008	0.856362	958.17	0.594749	1896.25	1537.86	0.48	2.04	2618.23	5.98	2625.59	5.99	7.36	0.28
136	439	303	167	7024	0.855288	958.42	0.595103	1896.33	1552.9	0	2.02	2618.37	5.96	2625.57	5.98	7.21	0.27
136	440	304	168	7040	0.854215	958.67	0.595455	1896.42	1567.99	0.48	2.01	2619.41	5.95	2626.9	5.97	7.5	0.29
136	441	305	169	7056	0.853142	958.92	0.595805	1896.51	1583.12	0	2	2619.45	5.94	2626.79	5.96	7.34	0.28
136	442	306	170	7072	0.852071	959.16	0.596154	1896.6	1598.3	0.48	1.99	2620.4	5.93	2628.02	5.95	7.62	0.29
136	443	307	171	7088	0.851001	959.4	0.596501	1896.7	1613.52	0	1.98	2620.36	5.92	2627.82	5.93	7.46	0.28
136	444	308	172	7104	0.849931	959.64	0.596847	1896.8	1628.77	0.47	1.97	2621.22	5.9	2628.96	5.92	7.74	0.29
136	445	309	173	7120	0.848863	959.87	0.597191	1896.91	1644.07	0	1.95	2621.1	5.89	2628.67	5.91	7.57	0.29
136	446	310	174	7136	0.847795	960.1	0.597534	1897.03	1659.41	0.47	1.94	2621.88	5.88	2629.72	5.9	7.85	0.3
136	447	311	175	7152	0.846729	960.32	0.597875	1897.14	1674.8	0	1.93	2621.67	5.87	2629.34	5.88	7.68	0.29
136	448	312	176	7168	0.845663	960.55	0.598214	1897.27	1690.22	0.47	1.92	2622.36	5.85	2630.31	5.87	7.94	0.3
136	449	313	177	7184	0.844599	960.76	0.598552	1897.39	1705.68	0	1.91	2622.07	5.84	2629.84	5.86	7.77	0.3
136	450	314	178	7200	0.843536	960.98	0.598889	1897.53	1721.18	0.47	1.9	2622.68	5.83	2630.71	5.85	8.03	0.31
136	451	315	179	7216	0.842474	961.19	0.599224	1897.66	1736.73	0	1.89	2622.31	5.81	2630.16	5.83	7.86	0.3

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
136	452	316	180	7232	0.841413	961.4	0.599558	1897.8	1752.31	0.47	1.88	2622.84	5.8	2630.95	5.82	8.11	0.31
136	453	317	181	7248	0.840353	961.6	0.59989	1897.95	1767.93	0	1.87	2622.38	5.79	2630.31	5.81	7.93	0.3
136	454	318	182	7264	0.839294	961.8	0.60022	1898.1	1783.59	0.47	1.86	2622.83	5.78	2631.01	5.8	8.18	0.31
136	455	319	183	7280	0.838237	962	0.600549	1898.25	1799.29	0	1.85	2622.3	5.76	2630.29	5.78	7.99	0.3
136	456	320	184	7296	0.837181	962.2	0.600877	1898.41	1815.03	0.47	1.84	2622.67	5.75	2630.91	5.77	8.24	0.31
136	457	321	185	7312	0.836126	962.39	0.601204	1898.58	1830.8	0	1.83	2622.06	5.74	2630.11	5.76	8.05	0.31
136	458	322	186	7328	0.835072	962.58	0.601528	1898.74	1846.62	0.47	1.82	2622.34	5.73	2630.63	5.74	8.29	0.32
136	459	323	187	7344	0.834019	962.76	0.601852	1898.92	1862.47	0	1.81	2621.66	5.71	2629.75	5.73	8.09	0.31
136	460	324	188	7360	0.832968	962.95	0.602174	1899.09	1878.36	0.47	1.8	2621.87	5.7	2630.2	5.72	8.33	0.32
136	461	325	189	7376	0.831918	963.13	0.602495	1899.27	1894.29	0	1.79	2621.1	5.69	2629.23	5.7	8.13	0.31
136	462	326	190	7392	0.830869	963.3	0.602814	1899.46	1910.25	0.47	1.78	2621.24	5.67	2629.59	5.69	8.36	0.32
136	463	327	191	7408	0.829821	963.47	0.603132	1899.64	1926.25	0	1.77	2620.4	5.66	2628.55	5.68	8.15	0.31
136	464	328	192	7424	0.828775	963.65	0.603448	1899.84	1942.29	0.46	1.76	2620.45	5.65	2628.83	5.67	8.38	0.32
136	465	329	193	7440	0.82773	963.81	0.603763	1900.03	1958.36	0	1.75	2619.54	5.63	2627.71	5.65	8.17	0.31
136	466	330	194	7456	0.826687	963.98	0.604077	1900.23	1974.47	0.46	1.74	2619.52	5.62	2627.91	5.64	8.38	0.32
136	467	331	195	7472	0.825645	964.14	0.60439	1900.44	1990.62	0	1.73	2618.54	5.61	2626.71	5.62	8.17	0.31
136	468	332	196	7488	0.824604	964.3	0.604701	1900.64	2006.8	0.46	1.72	2618.45	5.59	2626.83	5.61	8.38	0.32
136	469	333	197	7504	0.823564	964.45	0.605011	1900.86	2023.01	0	1.71	2617.39	5.58	2625.55	5.6	8.16	0.31
136	470	334	198	7520	0.822526	964.61	0.605319	1901.07	2039.26	0.46	1.7	2617.22	5.57	2625.59	5.59	8.37	0.32
136	471	335	199	7536	0.821489	964.76	0.605626	1901.29	2055.55	0	1.7	2616.1	5.55	2624.24	5.57	8.14	0.31
136	472	336	200	7552	0.820454	964.9	0.605932	1901.51	2071.87	0.46	1.69	2615.86	5.54	2624.2	5.56	8.34	0.32
136	473	337	201	7568	0.81942	965.05	0.606237	1901.74	2088.23	0	1.68	2614.66	5.53	2622.78	5.54	8.11	0.31
136	474	338	202	7584	0.818387	965.19	0.60654	1901.97	2104.62	0.46	1.67	2614.35	5.52	2622.66	5.53	8.31	0.32
136	475	339	203	7600	0.817356	965.33	0.606842	1902.21	2121.04	0	1.66	2613.08	5.5	2621.16	5.52	8.07	0.31
136	476	340	204	7616	0.816327	965.47	0.607143	1902.44	2137.5	0.46	1.65	2612.7	5.49	2620.97	5.51	8.26	0.32
136	477	341	205	7632	0.815298	965.6	0.607442	1902.68	2153.99	0	1.64	2611.37	5.47	2619.39	5.49	8.02	0.31
136	478	342	206	7648	0.814271	965.73	0.607741	1902.93	2170.52	0.46	1.64	2610.92	5.46	2619.12	5.48	8.21	0.31
136	479	343	207	7664	0.813246	965.86	0.608038	1903.18	2187.07	0	1.63	2609.52	5.45	2617.48	5.46	7.96	0.3
Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
137	273	136	-1	4368	0.999987	816.4	0.499084	2054.23	0.09	0	9.85	1507.13	5.52	1516.23	5.55	9.1	0.6
137	274	137	0	4384	1	818.41	0.5	2051.71	0	-0.6	10	1523.28	5.56	1532.09	5.59	8.81	0.58
137	275	138	1	4400	0.999987	820.39	0.500909	2049.23	0.09	0	9.85	1540.14	5.6	1547.6	5.63	7.46	0.48
137	276	139	2	4416	0.999947	822.34	0.501812	2046.8	0.35	-0.6	9.7	1555.61	5.64	1563.13	5.66	7.52	0.48
137	277	140	3	4432	0.999883	824.27	0.502708	2044.4	0.79	0	9.56	1572.09	5.68	1578.31	5.7	6.21	0.39
137	278	141	4	4448	0.999793	826.18	0.503597	2042.03	1.4	-0.6	9.41	1587.19	5.71	1593.51	5.73	6.31	0.4
137	279	142	5	4464	0.999679	828.07	0.50448	2039.71	2.19	0	9.27	1603.31	5.75	1608.36	5.76	5.05	0.31
137	280	143	6	4480	0.999541	829.93	0.505357	2037.42	3.14	-0.6	9.14	1618.05	5.78	1623.24	5.8	5.19	0.32
137	281	144	7	4496	0.999379	831.77	0.506228	2035.17	4.26	0	9.01	1633.81	5.81	1637.78	5.83	3.97	0.24
137	282	145	8	4512	0.999195	833.59	0.507092	2032.95	5.54	-0.6	8.88	1648.2	5.84	1652.35	5.86	4.15	0.25
137	283	146	9	4528	0.998989	835.38	0.507951	2030.77	6.99	0	8.75	1663.61	5.88	1666.57	5.89	2.96	0.18
137	284	147	10	4544	0.99876	837.16	0.508803	2028.62	8.6	-0.59	8.63	1677.65	5.91	1680.83	5.92	3.17	0.19
137	285	148	11	4560	0.99851	838.91	0.509649	2026.51	10.37	0	8.5	1692.72	5.94	1694.74	5.95	2.02	0.12
137	286	149	12	4576	0.99824	840.65	0.51049	2024.42	12.29	-0.59	8.38	1706.43	5.97	1708.7	5.97	2.27	0.13
137	287	150	13	4592	0.997948	842.36	0.511324	2022.37	14.38	0	8.27	1721.16	6	1722.31	6	1.16	0.07

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
137	288	151	14	4608	0.997637	844.05	0.512153	2020.36	16.62	-0.59	8.15	1734.54	6.02	1735.98	6.03	1.44	0.08
137	289	152	15	4624	0.997306	845.72	0.512976	2018.37	19.01	0	8.04	1748.94	6.05	1749.3	6.05	0.36	0.02
137	290	153	16	4640	0.996956	847.38	0.513793	2016.42	21.55	-0.59	7.93	1762	6.08	1762.67	6.08	0.67	0.04
137	291	154	17	4656	0.996587	849.01	0.514605	2014.49	24.25	0	7.82	1776.07	6.1	1775.7	6.1	-0.38	-0.02
137	292	155	18	4672	0.9962	850.62	0.515411	2012.6	27.09	-0.59	7.72	1788.82	6.13	1788.79	6.13	-0.03	0
137	293	156	19	4688	0.995795	852.22	0.516212	2010.74	30.08	0	7.62	1802.58	6.15	1801.53	6.15	-1.05	-0.06
137	294	157	20	4704	0.995372	853.79	0.517007	2008.9	33.22	-0.58	7.51	1815.02	6.17	1814.34	6.17	-0.68	-0.04
137	295	158	21	4720	0.994932	855.35	0.517797	2007.1	36.5	0	7.42	1828.47	6.2	1826.8	6.19	-1.67	-0.09
137	296	159	22	4736	0.994476	856.89	0.518581	2005.32	39.93	-0.58	7.32	1840.61	6.22	1839.34	6.21	-1.27	-0.07
137	297	160	23	4752	0.994003	858.41	0.51936	2003.57	43.49	0	7.22	1853.76	6.24	1851.52	6.23	-2.23	-0.12
137	298	161	24	4768	0.993514	859.91	0.520134	2001.85	47.2	-0.58	7.13	1865.6	6.26	1863.79	6.25	-1.8	-0.1
137	299	162	25	4784	0.993009	861.4	0.520903	2000.15	51.04	0	7.04	1878.45	6.28	1875.71	6.27	-2.74	-0.15
137	300	163	26	4800	0.992489	862.86	0.521667	1998.48	55.02	-0.58	6.95	1890	6.3	1887.71	6.29	-2.29	-0.12
137	301	164	27	4816	0.991954	864.31	0.522425	1996.84	59.14	0	6.86	1902.57	6.32	1899.36	6.31	-3.2	-0.17
137	302	165	28	4832	0.991404	865.75	0.523179	1995.23	63.39	-0.58	6.77	1913.84	6.34	1911.11	6.33	-2.73	-0.14
137	303	166	29	4848	0.99084	867.16	0.523927	1993.64	67.78	0	6.69	1926.11	6.36	1922.5	6.34	-3.61	-0.19
137	304	167	30	4864	0.990261	868.56	0.524671	1992.07	72.29	-0.57	6.61	1937.11	6.37	1933.99	6.36	-3.12	-0.16
137	305	168	31	4880	0.989669	869.94	0.52541	1990.53	76.94	0	6.53	1949.11	6.39	1945.12	6.38	-3.98	-0.2
137	306	169	32	4896	0.989064	871.31	0.526144	1989.02	81.72	-0.57	6.45	1959.83	6.4	1956.36	6.39	-3.46	-0.18
137	307	170	33	4912	0.988446	872.66	0.526873	1987.53	86.62	0	6.37	1971.55	6.42	1967.25	6.41	-4.31	-0.22
137	308	171	34	4928	0.987814	874	0.527597	1986.06	91.66	-0.57	6.29	1982.01	6.44	1978.24	6.42	-3.77	-0.19
137	309	172	35	4944	0.98717	875.32	0.528317	1984.61	96.81	0	6.21	1993.47	6.45	1988.88	6.44	-4.59	-0.23
137	310	173	36	4960	0.986514	876.62	0.529032	1983.19	102.1	-0.57	6.14	2003.66	6.46	1999.63	6.45	-4.03	-0.2
137	311	174	37	4976	0.985846	877.91	0.529743	1981.8	107.5	0	6.07	2014.86	6.48	2010.03	6.46	-4.83	-0.24
137	312	175	38	4992	0.985166	879.19	0.530449	1980.42	113.03	-0.57	6	2024.79	6.49	2020.54	6.48	-4.26	-0.21
137	313	176	39	5008	0.984475	880.45	0.53115	1979.07	118.68	0	5.93	2035.74	6.5	2030.7	6.49	-5.04	-0.25
137	314	177	40	5024	0.983772	881.69	0.531847	1977.74	124.44	-0.56	5.86	2045.42	6.51	2040.97	6.5	-4.45	-0.22
137	315	178	41	5040	0.983059	882.92	0.53254	1976.43	130.33	0	5.79	2056.11	6.53	2050.9	6.51	-5.21	-0.25
137	316	179	42	5056	0.982335	884.14	0.533228	1975.14	136.33	-0.56	5.72	2065.55	6.54	2060.95	6.52	-4.6	-0.22
137	317	180	43	5072	0.9816	885.34	0.533912	1973.87	142.45	0	5.66	2075.99	6.55	2070.64	6.53	-5.35	-0.26
137	318	181	44	5088	0.980855	886.53	0.534591	1972.63	148.69	-0.56	5.59	2085.19	6.56	2080.47	6.54	-4.73	-0.23
137	319	182	45	5104	0.9801	887.7	0.535266	1971.4	155.04	0	5.53	2095.39	6.57	2089.93	6.55	-5.46	-0.26
137	320	183	46	5120	0.979336	888.86	0.535937	1970.2	161.5	-0.56	5.47	2104.35	6.58	2099.53	6.56	-4.82	-0.23
137	321	184	47	5136	0.978562	890.01	0.536604	1969.01	168.07	0	5.41	2114.31	6.59	2108.78	6.57	-5.53	-0.26
137	322	185	48	5152	0.977779	891.14	0.537267	1967.85	174.76	-0.56	5.35	2123.04	6.59	2118.16	6.58	-4.88	-0.23
137	323	186	49	5168	0.976986	892.26	0.537926	1966.7	181.56	0	5.29	2132.77	6.6	2127.19	6.59	-5.58	-0.26
137	324	187	50	5184	0.976185	893.37	0.53858	1965.57	188.46	-0.56	5.23	2141.27	6.61	2136.36	6.59	-4.92	-0.23
137	325	188	51	5200	0.975375	894.46	0.539231	1964.46	195.47	0	5.17	2150.77	6.62	2145.17	6.6	-5.6	-0.26
137	326	189	52	5216	0.974557	895.54	0.539877	1963.37	202.59	-0.55	5.12	2159.05	6.62	2154.13	6.61	-4.92	-0.23
137	327	190	53	5232	0.97373	896.61	0.54052	1962.3	209.82	0	5.06	2168.33	6.63	2162.73	6.61	-5.6	-0.26
137	328	191	54	5248	0.972896	897.67	0.541159	1961.25	217.15	-0.55	5.01	2176.39	6.64	2171.48	6.62	-4.91	-0.23
137	329	192	55	5264	0.972053	898.72	0.541793	1960.21	224.58	0	4.96	2185.44	6.64	2179.87	6.63	-5.57	-0.26
137	330	193	56	5280	0.971203	899.75	0.542424	1959.2	232.12	-0.55	4.9	2193.29	6.65	2188.42	6.63	-4.87	-0.22
137	331	194	57	5296	0.970345	900.77	0.543051	1958.2	239.76	0	4.85	2202.13	6.65	2196.61	6.64	-5.52	-0.25
137	332	195	58	5312	0.96948	901.78	0.543675	1957.21	247.5	-0.55	4.8	2209.76	6.66	2204.95	6.64	-4.81	-0.22
137	333	196	59	5328	0.968608	902.77	0.544294	1956.25	255.34	0	4.75	2218.39	6.66	2212.94	6.65	-5.45	-0.25

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137	334	197	60	5344	0.967729	903.76	0.54491	1955.3	263.28	-0.55	4.7	2225.81	6.66	2221.09	6.65	-4.73	-0.21
137	335	198	61	5360	0.966843	904.73	0.545522	1954.37	271.32	0	4.65	2234.23	6.67	2228.88	6.65	-5.36	-0.24
137	336	199	62	5376	0.965951	905.7	0.546131	1953.45	279.46	-0.55	4.61	2241.45	6.67	2236.83	6.66	-4.63	-0.21
137	337	200	63	5392	0.965052	906.65	0.546736	1952.55	287.69	0	4.56	2249.67	6.68	2244.42	6.66	-5.24	-0.23
137	338	201	64	5408	0.964147	907.59	0.547337	1951.67	296.02	-0.54	4.51	2256.69	6.68	2252.18	6.66	-4.51	-0.2
137	339	202	65	5424	0.963236	908.52	0.547935	1950.8	304.45	0	4.47	2264.7	6.68	2259.59	6.67	-5.12	-0.23
137	340	203	66	5440	0.962318	909.44	0.548529	1949.95	312.97	-0.54	4.43	2271.53	6.68	2267.16	6.67	-4.37	-0.19
137	341	204	67	5456	0.961395	910.35	0.54912	1949.11	321.58	0	4.38	2279.35	6.68	2274.38	6.67	-4.97	-0.22
137	342	205	68	5472	0.960466	911.24	0.549708	1948.29	330.28	-0.54	4.34	2285.98	6.68	2281.76	6.67	-4.22	-0.18
137	343	206	69	5488	0.959532	912.13	0.550292	1947.48	339.08	0	4.3	2293.6	6.69	2288.79	6.67	-4.81	-0.21
137	344	207	70	5504	0.958592	913.01	0.550872	1946.69	347.97	-0.54	4.25	2300.05	6.69	2296	6.67	-4.05	-0.18
137	345	208	71	5520	0.957648	913.88	0.551449	1945.92	356.95	0	4.21	2307.48	6.69	2302.84	6.67	-4.63	-0.2
137	346	209	72	5536	0.956698	914.73	0.552023	1945.15	366.01	-0.54	4.17	2313.74	6.69	2309.87	6.68	-3.87	-0.17
137	347	210	73	5552	0.955743	915.58	0.552594	1944.4	375.17	0	4.13	2320.98	6.69	2316.54	6.68	-4.44	-0.19
137	348	211	74	5568	0.954783	916.42	0.553161	1943.67	384.42	-0.54	4.09	2327.06	6.69	2323.38	6.68	-3.67	-0.16
137	349	212	75	5584	0.953818	917.24	0.553725	1942.95	393.75	0	4.06	2334.12	6.69	2329.87	6.68	-4.24	-0.18
137	350	213	76	5600	0.952849	918.06	0.554286	1942.24	403.16	-0.53	4.02	2340.02	6.69	2336.55	6.68	-3.47	-0.15
137	351	214	77	5616	0.951875	918.87	0.554843	1941.55	412.67	0	3.98	2346.89	6.69	2342.86	6.67	-4.03	-0.17
137	352	215	78	5632	0.950897	919.67	0.555398	1940.87	422.26	-0.53	3.94	2352.62	6.68	2349.37	6.67	-3.25	-0.14
137	353	216	79	5648	0.949915	920.46	0.555949	1940.2	431.93	0	3.91	2359.32	6.68	2355.51	6.67	-3.81	-0.16
137	354	217	80	5664	0.948929	921.24	0.556497	1939.55	441.69	-0.53	3.87	2364.87	6.68	2361.84	6.67	-3.02	-0.13
137	355	218	81	5680	0.947939	922.01	0.557042	1938.91	451.53	0	3.84	2371.39	6.68	2367.82	6.67	-3.57	-0.15
137	356	219	82	5696	0.946945	922.77	0.557584	1938.28	461.45	-0.53	3.8	2376.77	6.68	2373.99	6.67	-2.78	-0.12
137	357	220	83	5712	0.945947	923.52	0.558123	1937.67	471.45	0	3.77	2383.13	6.68	2379.8	6.67	-3.33	-0.14
137	358	221	84	5728	0.944946	924.27	0.558659	1937.07	481.53	-0.53	3.73	2388.34	6.67	2385.8	6.66	-2.54	-0.11
137	359	222	85	5744	0.943941	925	0.559192	1936.48	491.7	0	3.7	2394.52	6.67	2391.44	6.66	-3.08	-0.13
137	360	223	86	5760	0.942932	925.73	0.559722	1935.9	501.94	-0.53	3.67	2399.57	6.67	2397.29	6.66	-2.29	-0.1
137	361	224	87	5776	0.94192	926.45	0.560249	1935.33	512.26	0	3.63	2405.59	6.66	2402.77	6.66	-2.82	-0.12
137	362	225	88	5792	0.940905	927.16	0.560773	1934.78	522.66	-0.53	3.6	2410.48	6.66	2408.45	6.65	-2.02	-0.08
137	363	226	89	5808	0.939887	927.86	0.561295	1934.24	533.14	0	3.57	2416.33	6.66	2413.78	6.65	-2.56	-0.11
137	364	227	90	5824	0.938866	928.55	0.561813	1933.71	543.69	-0.52	3.54	2421.06	6.65	2419.3	6.65	-1.76	-0.07
137	365	228	91	5840	0.937842	929.24	0.562329	1933.19	554.33	0	3.51	2426.76	6.65	2424.47	6.64	-2.29	-0.09
137	366	229	92	5856	0.936815	929.91	0.562842	1932.68	565.03	-0.52	3.48	2431.33	6.64	2429.84	6.64	-1.49	-0.06
137	367	230	93	5872	0.935785	930.58	0.563351	1932.18	575.81	0	3.45	2436.87	6.64	2434.86	6.63	-2.01	-0.08
137	368	231	94	5888	0.934753	931.24	0.563859	1931.7	586.67	-0.52	3.42	2441.29	6.63	2440.08	6.63	-1.21	-0.05
137	369	232	95	5904	0.933718	931.9	0.564363	1931.23	597.6	0	3.39	2446.67	6.63	2444.94	6.63	-1.73	-0.07
137	370	233	96	5920	0.932681	932.54	0.564865	1930.76	608.6	-0.52	3.36	2450.94	6.62	2450.01	6.62	-0.93	-0.04
137	371	234	97	5936	0.931641	933.18	0.565364	1930.31	619.67	0	3.33	2456.17	6.62	2454.72	6.62	-1.45	-0.06
137	372	235	98	5952	0.930599	933.81	0.56586	1929.87	630.82	-0.52	3.31	2460.29	6.61	2459.64	6.61	-0.64	-0.03
137	373	236	99	5968	0.929555	934.44	0.566354	1929.44	642.04	0	3.28	2465.37	6.61	2464.21	6.61	-1.16	-0.05
137	374	237	100	5984	0.928508	935.05	0.566845	1929.02	653.33	-0.52	3.25	2469.34	6.6	2468.99	6.6	-0.35	-0.01
137	375	238	101	6000	0.92746	935.66	0.567333	1928.61	664.69	0	3.23	2474.27	6.6	2473.4	6.6	-0.87	-0.04
137	376	239	102	6016	0.926409	936.26	0.567819	1928.21	676.12	-0.52	3.2	2478.1	6.59	2478.04	6.59	-0.06	0
137	377	240	103	6032	0.925357	936.85	0.568302	1927.82	687.62	0	3.17	2482.89	6.59	2482.31	6.58	-0.58	-0.02
137	378	241	104	6048	0.924302	937.44	0.568783	1927.44	699.18	-0.51	3.15	2486.58	6.58	2486.8	6.58	0.23	0.01
137	379	242	105	6064	0.923246	938.02	0.569261	1927.07	710.82	0	3.12	2491.22	6.57	2490.94	6.57	-0.28	-0.01

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137	380	243	106	6080	0.922188	938.59	0.569737	1926.7	722.52	-0.51	3.1	2494.77	6.57	2495.29	6.57	0.52	0.02
137	381	244	107	6096	0.921129	939.16	0.57021	1926.35	734.29	0	3.07	2499.27	6.56	2499.28	6.56	0.01	0
137	382	245	108	6112	0.920068	939.72	0.570681	1926.01	746.13	-0.51	3.05	2502.68	6.55	2503.5	6.55	0.82	0.03
137	383	246	109	6128	0.919006	940.27	0.571149	1925.68	758.03	0	3.03	2507.05	6.55	2507.36	6.55	0.31	0.01
137	384	247	110	6144	0.917942	940.82	0.571615	1925.36	769.99	-0.51	3	2510.33	6.54	2511.44	6.54	1.11	0.04
137	385	248	111	6160	0.916876	941.35	0.572078	1925.04	782.03	0	2.98	2514.56	6.53	2515.16	6.53	0.6	0.02
137	386	249	112	6176	0.91581	941.89	0.572539	1924.74	794.12	-0.51	2.96	2517.7	6.52	2519.1	6.53	1.4	0.06
137	387	250	113	6192	0.914742	942.41	0.572997	1924.44	806.28	0	2.93	2521.79	6.52	2522.69	6.52	0.9	0.04
137	388	251	114	6208	0.913673	942.93	0.573454	1924.16	818.51	-0.51	2.91	2524.81	6.51	2526.5	6.51	1.7	0.07
137	389	252	115	6224	0.912603	943.45	0.573907	1923.88	830.8	0	2.89	2528.77	6.5	2529.96	6.5	1.19	0.05
137	390	253	116	6240	0.911532	943.95	0.574359	1923.61	843.15	-0.51	2.87	2531.65	6.49	2533.64	6.5	1.99	0.08
137	391	254	117	6256	0.91046	944.45	0.574808	1923.35	855.56	0	2.85	2535.49	6.48	2536.97	6.49	1.48	0.06
137	392	255	118	6272	0.909387	944.95	0.575255	1923.1	868.03	-0.51	2.82	2538.25	6.48	2540.53	6.48	2.28	0.09
137	393	256	119	6288	0.908313	945.44	0.5757	1922.85	880.56	0	2.8	2541.95	6.47	2543.72	6.47	1.77	0.07
137	394	257	120	6304	0.907238	945.92	0.576142	1922.62	893.16	-0.5	2.78	2544.58	6.46	2547.15	6.46	2.57	0.1
137	395	258	121	6320	0.906162	946.4	0.576582	1922.39	905.81	0	2.76	2548.16	6.45	2550.22	6.46	2.06	0.08
137	396	259	122	6336	0.905086	946.87	0.57702	1922.17	918.53	-0.5	2.74	2550.68	6.44	2553.53	6.45	2.85	0.11
137	397	260	123	6352	0.904009	947.33	0.577456	1921.96	931.3	0	2.72	2554.13	6.43	2556.48	6.44	2.35	0.09
137	398	261	124	6368	0.902932	947.79	0.577889	1921.76	944.13	-0.5	2.7	2556.52	6.42	2559.66	6.43	3.14	0.12
137	399	262	125	6384	0.901854	948.24	0.578321	1921.56	957.03	0	2.68	2559.85	6.42	2562.48	6.42	2.63	0.1
137	400	263	126	6400	0.900775	948.69	0.57875	1921.37	969.97	-0.5	2.66	2562.12	6.41	2565.54	6.41	3.42	0.13
137	401	264	127	6416	0.899696	949.13	0.579177	1921.19	982.98	0	2.64	2565.34	6.4	2568.24	6.4	2.91	0.11
137	402	265	128	6432	0.898616	949.57	0.579602	1921.02	996.04	-0.5	2.63	2567.49	6.39	2571.18	6.4	3.69	0.14
137	403	266	129	6448	0.897536	950	0.580025	1920.86	1009.16	0	2.61	2570.58	6.38	2573.77	6.39	3.18	0.12
137	404	267	130	6464	0.896456	950.43	0.580446	1920.7	1022.34	-0.5	2.59	2572.62	6.37	2576.59	6.38	3.97	0.15
137	405	268	131	6480	0.895376	950.85	0.580864	1920.55	1035.57	0	2.57	2575.6	6.36	2579.05	6.37	3.45	0.13
137	406	269	132	6496	0.894295	951.26	0.581281	1920.41	1048.86	-0.5	2.55	2577.53	6.35	2581.76	6.36	4.23	0.16
137	407	270	133	6512	0.893214	951.67	0.581695	1920.28	1062.2	0	2.53	2580.39	6.34	2584.11	6.35	3.72	0.14
137	408	271	134	6528	0.892133	952.08	0.582108	1920.15	1075.6	-0.5	2.52	2582.2	6.33	2586.7	6.34	4.5	0.17
137	409	272	135	6544	0.891052	952.47	0.582518	1920.03	1089.05	0	2.5	2584.95	6.32	2588.93	6.33	3.98	0.15
137	410	273	136	6560	0.88997	952.87	0.582927	1919.91	1102.55	-0.49	2.48	2586.65	6.31	2591.41	6.32	4.76	0.18
137	411	274	137	6576	0.888889	953.26	0.583333	1919.81	1116.11	0	2.47	2589.29	6.3	2593.53	6.31	4.24	0.16
137	412	275	138	6592	0.887808	953.64	0.583738	1919.71	1129.72	-0.49	2.45	2590.88	6.29	2595.89	6.3	5.01	0.19
137	413	276	139	6608	0.886726	954.02	0.58414	1919.62	1143.39	0	2.43	2593.41	6.28	2597.9	6.29	4.49	0.17
137	414	277	140	6624	0.885645	954.4	0.584541	1919.53	1157.1	-0.49	2.42	2594.9	6.27	2600.16	6.28	5.26	0.2
137	415	278	141	6640	0.884564	954.76	0.58494	1919.45	1170.87	0	2.4	2597.32	6.26	2602.05	6.27	4.74	0.18
137	416	279	142	6656	0.883483	955.13	0.585337	1919.38	1184.69	-0.49	2.38	2598.7	6.25	2604.2	6.26	5.5	0.21
137	417	280	143	6672	0.882402	955.49	0.585731	1919.31	1198.56	0	2.37	2601.01	6.24	2605.99	6.25	4.98	0.19
137	418	281	144	6688	0.881321	955.84	0.586124	1919.25	1212.48	-0.49	2.35	2602.29	6.23	2608.02	6.24	5.74	0.22
137	419	282	145	6704	0.880241	956.19	0.586516	1919.2	1226.45	0	2.34	2604.49	6.22	2609.7	6.23	5.21	0.2
137	420	283	146	6720	0.879161	956.54	0.586905	1919.15	1240.47	-0.49	2.32	2605.67	6.2	2611.63	6.22	5.96	0.23
137	421	284	147	6736	0.878081	956.88	0.587292	1919.11	1254.54	0	2.31	2607.77	6.19	2613.21	6.21	5.44	0.21
137	422	285	148	6752	0.877002	957.22	0.587678	1919.08	1268.66	-0.49	2.29	2608.85	6.18	2615.03	6.2	6.19	0.24
137	423	286	149	6768	0.875923	957.55	0.588061	1919.05	1282.83	0	2.28	2610.84	6.17	2616.5	6.19	5.66	0.22
137	424	287	150	6784	0.874844	957.88	0.588443	1919.03	1297.05	-0.49	2.26	2611.82	6.16	2618.22	6.18	6.4	0.24
137	425	288	151	6800	0.873766	958.2	0.588824	1919.01	1311.32	0	2.25	2613.72	6.15	2619.59	6.16	5.87	0.22

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
137	426	289	152	6816	0.872688	958.52	0.589202	1919	1325.63	-0.48	2.23	2614.6	6.14	2621.21	6.15	6.61	0.25
137	427	290	153	6832	0.871611	958.83	0.589578	1919	1339.99	0	2.22	2616.39	6.13	2622.47	6.14	6.08	0.23
137	428	291	154	6848	0.870535	959.14	0.589953	1919	1354.4	-0.48	2.21	2617.18	6.11	2623.99	6.13	6.81	0.26
137	429	292	155	6864	0.869458	959.45	0.590326	1919.01	1368.86	0	2.19	2618.88	6.1	2625.15	6.12	6.28	0.24
137	430	293	156	6880	0.868383	959.75	0.590698	1919.02	1383.36	-0.48	2.18	2619.56	6.09	2626.57	6.11	7.01	0.27
137	431	294	157	6896	0.867308	960.05	0.591067	1919.04	1397.91	0	2.17	2621.17	6.08	2627.63	6.1	6.47	0.25
137	432	295	158	6912	0.866234	960.34	0.591435	1919.07	1412.51	-0.48	2.15	2621.76	6.07	2628.95	6.09	7.2	0.27
137	433	296	159	6928	0.86516	960.63	0.591801	1919.1	1427.15	0	2.14	2623.27	6.06	2629.92	6.07	6.65	0.25
137	434	297	160	6944	0.864087	960.92	0.592166	1919.13	1441.83	-0.48	2.13	2623.77	6.05	2631.14	6.06	7.37	0.28
137	435	298	161	6960	0.863015	961.2	0.592529	1919.17	1456.56	0	2.11	2625.18	6.03	2632.01	6.05	6.83	0.26
137	436	299	162	6976	0.861943	961.48	0.59289	1919.22	1471.34	-0.48	2.1	2625.59	6.02	2633.13	6.04	7.54	0.29
137	437	300	163	6992	0.860873	961.75	0.593249	1919.27	1486.16	0	2.09	2626.91	6.01	2633.9	6.03	6.99	0.27
137	438	301	164	7008	0.859803	962.02	0.593607	1919.33	1501.02	-0.48	2.08	2627.23	6	2634.94	6.02	7.71	0.29
137	439	302	165	7024	0.858734	962.28	0.593964	1919.39	1515.93	0	2.06	2628.46	5.99	2635.61	6	7.15	0.27
137	440	303	166	7040	0.857665	962.55	0.594318	1919.46	1530.88	-0.48	2.05	2628.69	5.97	2636.55	5.99	7.86	0.3
137	441	304	167	7056	0.856598	962.8	0.594671	1919.53	1545.88	0	2.04	2629.83	5.96	2637.13	5.98	7.3	0.28
137	442	305	168	7072	0.855531	963.06	0.595023	1919.61	1560.91	-0.48	2.03	2629.97	5.95	2637.97	5.97	8.01	0.3
137	443	306	169	7088	0.854466	963.31	0.595372	1919.69	1575.99	0	2.01	2631.02	5.94	2638.46	5.96	7.44	0.28
137	444	307	170	7104	0.853401	963.56	0.595721	1919.78	1591.12	-0.47	2	2631.07	5.93	2639.22	5.94	8.14	0.31
137	445	308	171	7120	0.852337	963.8	0.596067	1919.88	1606.28	0	1.99	2632.04	5.91	2639.61	5.93	7.58	0.29
137	446	309	172	7136	0.851274	964.04	0.596413	1919.97	1621.49	-0.47	1.98	2632.01	5.9	2640.28	5.92	8.27	0.31
137	447	310	173	7152	0.850212	964.27	0.596756	1920.08	1636.73	0	1.97	2632.88	5.89	2640.58	5.91	7.7	0.29
137	448	311	174	7168	0.849151	964.51	0.597098	1920.19	1652.02	-0.47	1.96	2632.77	5.88	2641.16	5.9	8.39	0.32
137	449	312	175	7184	0.848091	964.74	0.597439	1920.3	1667.35	0	1.95	2633.56	5.87	2641.37	5.88	7.82	0.3
137	450	313	176	7200	0.847032	964.96	0.597778	1920.42	1682.72	-0.47	1.93	2633.36	5.85	2641.86	5.87	8.5	0.32
137	451	314	177	7216	0.845974	965.18	0.598115	1920.54	1698.13	0	1.92	2634.07	5.84	2641.99	5.86	7.92	0.3
137	452	315	178	7232	0.844917	965.4	0.598451	1920.66	1713.59	-0.47	1.91	2633.79	5.83	2642.39	5.85	8.6	0.33
137	453	316	179	7248	0.843862	965.62	0.598786	1920.8	1729.08	0	1.9	2634.41	5.82	2642.43	5.83	8.02	0.3
137	454	317	180	7264	0.842807	965.83	0.599119	1920.93	1744.61	-0.47	1.89	2634.05	5.8	2642.74	5.82	8.69	0.33
137	455	318	181	7280	0.841753	966.04	0.599451	1921.07	1760.18	0	1.88	2634.59	5.79	2642.7	5.81	8.1	0.31
137	456	319	182	7296	0.840701	966.24	0.599781	1921.22	1775.79	-0.47	1.87	2634.16	5.78	2642.92	5.8	8.77	0.33
137	457	320	183	7312	0.83965	966.45	0.600109	1921.37	1791.43	0	1.86	2634.62	5.77	2642.79	5.78	8.18	0.31
137	458	321	184	7328	0.8386	966.64	0.600437	1921.52	1807.12	-0.47	1.85	2634.1	5.75	2642.94	5.77	8.84	0.33
137	459	322	185	7344	0.837551	966.84	0.600763	1921.68	1822.84	0	1.84	2634.48	5.74	2642.72	5.76	8.25	0.31
137	460	323	186	7360	0.836503	967.03	0.601087	1921.84	1838.61	-0.47	1.83	2633.88	5.73	2642.78	5.75	8.9	0.34
137	461	324	187	7376	0.835456	967.22	0.60141	1922.01	1854.41	0	1.82	2634.18	5.71	2642.49	5.73	8.3	0.31
137	462	325	188	7392	0.834411	967.41	0.601732	1922.18	1870.25	-0.47	1.81	2633.51	5.7	2642.46	5.72	8.95	0.34
137	463	326	189	7408	0.833367	967.59	0.602052	1922.35	1886.12	0	1.8	2633.73	5.69	2642.08	5.71	8.35	0.32
137	464	327	190	7424	0.832324	967.77	0.602371	1922.53	1902.03	-0.46	1.79	2632.99	5.67	2641.98	5.69	8.99	0.34
137	465	328	191	7440	0.831282	967.95	0.602688	1922.72	1917.98	0	1.78	2633.13	5.66	2641.52	5.68	8.38	0.32
137	466	329	192	7456	0.830242	968.12	0.603004	1922.9	1933.97	-0.46	1.77	2632.31	5.65	2641.33	5.67	9.02	0.34
137	467	330	193	7472	0.829203	968.29	0.603319	1923.09	1949.99	0	1.76	2632.38	5.64	2640.79	5.65	8.41	0.32
137	468	331	194	7488	0.828165	968.46	0.603632	1923.29	1966.05	-0.46	1.75	2631.49	5.62	2640.53	5.64	9.04	0.34
137	469	332	195	7504	0.827128	968.63	0.603945	1923.49	1982.15	0	1.74	2631.48	5.61	2639.91	5.63	8.43	0.32
137	470	333	196	7520	0.826093	968.79	0.604255	1923.69	1998.28	-0.46	1.74	2630.52	5.6	2639.57	5.62	9.05	0.34
137	471	334	197	7536	0.825059	968.95	0.604565	1923.9	2014.44	0	1.73	2630.44	5.58	2638.87	5.6	8.43	0.32

Z	A	N	A-2Z	Estimated T1 MeV	Beta	Estimated T2 MeV	x value	Estimated T3 MeV	Estimated T4 MeV	Estimated T5 MeV	Estimated T6 MeV	Estimated BE (MeV)	Estimated BE/A (MeV)	Reference BE (MeV)	Reference BE/A (MeV)	Difference in BE (MeV)	%Error in BE (MeV)
137	472	335	198	7552	0.824027	969.11	0.604873	1924.11	2030.64	-0.46	1.72	2629.4	5.57	2638.45	5.59	9.05	0.34
137	473	336	199	7568	0.822996	969.26	0.60518	1924.33	2046.88	0	1.71	2629.24	5.56	2637.67	5.58	8.43	0.32
137	474	337	200	7584	0.821966	969.41	0.605485	1924.55	2063.15	-0.46	1.7	2628.14	5.54	2637.17	5.56	9.04	0.34
137	475	338	201	7600	0.820937	969.56	0.605789	1924.77	2079.45	0	1.69	2627.91	5.53	2636.32	5.55	8.41	0.32
137	476	339	202	7616	0.81991	969.7	0.606092	1924.99	2095.79	-0.46	1.68	2626.73	5.52	2635.75	5.54	9.01	0.34
137	477	340	203	7632	0.818885	969.85	0.606394	1925.22	2112.17	0	1.67	2626.44	5.51	2634.82	5.52	8.38	0.32
137	478	341	204	7648	0.81786	969.99	0.606695	1925.46	2128.58	-0.46	1.67	2625.19	5.49	2634.17	5.51	8.98	0.34
137	479	342	205	7664	0.816837	970.13	0.606994	1925.69	2145.02	0	1.66	2624.82	5.48	2633.17	5.5	8.34	0.32
137	480	343	206	7680	0.815816	970.26	0.607292	1925.94	2161.49	-0.46	1.65	2623.51	5.47	2632.44	5.48	8.94	0.34
137	481	344	207	7696	0.814796	970.39	0.607588	1926.18	2178	0	1.64	2623.07	5.45	2631.37	5.47	8.3	0.32
137	482	345	208	7712	0.813777	970.52	0.607884	1926.43	2194.54	-0.46	1.63	2621.69	5.44	2630.57	5.46	8.88	0.34
137	483	346	209	7728	0.81276	970.65	0.608178	1926.68	2211.12	0	1.62	2621.18	5.43	2629.42	5.44	8.24	0.31
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