Table S1. Reservoirs number of samples, basic information and geographic location.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Basin** | **Reservoir Name** | ***n*** | **Capacity  (hm³)** | **Basin  Area (km²)** | **Flow  (m³/s)** | **Location  (Lon/Lat)** |
| Acaraú (14423 km² /1737.46 hm³) | Acaraú Mirim | 10 | 36.71 | 479.59 | 0.72 | -40.2899 / -3.5088 |
| Araras | 9 | 859.53 | 3504.38 | 6.14 | -40.4506 / -4.2528 |
| Arrebita | 8 | 18.53 | 124 | 17.3 | -40.2653 / -3.8554 |
| Ayres de Sousa | 9 | 96.80 | 1100.9 | 1.50 | -40.5135 / -3.7969 |
| Bonito | 8 | 6.00 | 34.75 | - | -40.6327 / -4.3374 |
| Carão | 4 | 26.23 | 309.55 | 0.22 | -40.3528 / -4.8185 |
| Diamantino II | 12 | 18.04 | 106 | 1.49 | -40.3615 / -3.1651 |
| Edson Queiroz | 8 | 254.00 | 1779.22 | 2.44 | -40.058 / -4.2303 |
| Farias de Sousa | 9 | 12.23 | 43.97 | 0.50 | -40.5849 / -4.7739 |
| Forquilha | 7 | 50.13 | 191.86 | 0.45 | -40.2459 / -3.8049 |
| Jatobá II | 12 | 6.24 | 41.38 | 0.02 | -40.7466 / -4.5931 |
| Jenipapo | 10 | 4.94 | - | - | -40.4448 / -3.5614 |
| São Vicente | 9 | 9.84 | 72.71 | 0.10 | -40.2779 / -3.3787 |
| Sobral | 11 | 4.27 | 33.04 | - | -40.368 / -3.6554 |
| Taquara | 9 | 320.78 | - | - | -40.6331 / -3.9115 |
| Alto Jaguaribe (24636 km² /2765.18 hm³) | Arneiroz II | 9 | 178.13 | 5407 | 1.57 | -40.2386 / -6.2532 |
| Benguê | 11 | 18.00 | 1062.3 | 0.2 | -40.1527 / -6.6031 |
| Broco | 5 | 11.88 | - | - | -40.3282 / -6.0111 |
| Caldeirões | 16 | 1.13 | - | - | -39.9225 / -6.5305 |
| Canoas | 9 | 69.25 | 69.26 | 0.8 | -39.9318 / -6.9576 |
| Do Coronel | 11 | 1.66 | 24.81 | - | -39.9509 / -6.7033 |
| Facundo | 13 | 1.75 | - | - | -40.6806 / -6.3033 |
| Faé | 4 | 12.79 | 309 | 0.3 | -39.2332 / -6.1534 |
| João Luís | 13 | 6.58 | - | - | -40.1833 / -7.0855 |
| Mamoeiro | 13 | 20.49 | 1887 | 0.37 | -40.0704 / -6.7941 |
| Monte Belo | 8 | 3.96 | - | - | -40.1184 / -7.1573 |
| Muquém | 9 | 46.55 | 295.2 | 0.3 | -39.4821 / -6.6263 |
| Orós | 13 | 1,940.00 | 25696 | 20.4 | -38.9825 / -6.2565 |
| Parambu | 11 | 9.04 | 104 | 0.2 | -40.7171 / -6.1971 |
| Pau Preto | 12 | 1.90 | 59.21 | - | -40.0881 / -7.0848 |
| Poço da Pedra | 11 | 52.00 | 800 | 0.4 | -40.3596 / -6.9863 |
| Quincoé | 6 | 4.30 | - | - | -39.4574 / -6.0838 |
| Rivaldo Carvalho | 9 | 20.10 | 318.42 | - | -39,9277 / -6,2761 |
| Trici | 10 | 13.00 | 556.8 | 0.28 | -40.424 / -5.9154 |
| Trussu | 9 | 268.80 | 1598 | 4.2 | -39.4469 / -6.3068 |
| Valério | 10 | 1.86 | 61.11 | - | -39.7294 / -6.9684 |
| Várzea do Boi | 15 | 51.91 | 1209 | 0.1 | -40.2517 / -5.8966 |
| Baixo Jaguaribe  (5452km² /24 hm³) | Santo Antônio de Russas | 6 | 24.00 | - | - | -38.192 / -4.8627 |
| Banabuíu (19316 km²/ 2755.32 hm³) | Banabuiú | 7 | 1,601.00 | 13500 | 12.93 | -38.9652 / -5.357 |
| Capitão Mor | 7 | 6.00 | 113.11 | - | -40.0002 / -5.6255 |
| Cedro | 6 | 126.00 | 224 | 0.5 | -39.0684 / -4.9765 |
| Cipoada | 12 | 86.09 | 356.4 | 0.8 | -38.6593 / -5.2605 |
| Curral Velho | 11 | 12.17 | 110.26 | - | -38.3244 / -5.0926 |
| Fogareiro | 8 | 118.00 | 7700 | 1.2 | -39.4917 / -5.1578 |
| Jatobá | 8 | 1.07 | 22 | - | -39.2373 / -5.6068 |
| Mons. Tabosa | 3 | 11.70 | 81 | 0.1 | -40.0126 / -4.8021 |
| Patu | 12 | 65.10 | 1027 | 0.84 | -39.4144 / -5.5824 |
| Pedras Brancas | 12 | 456.00 | 1787 | 3.2 | -38.8864 / -5.1297 |
| Pirabibu | 5 | 74.00 | 520 | 3.8 | -39.3589 / -4.9813 |
| Poço do Barro | 11 | 52.00 | 356 | 0.6 | -38.4676 / -5.3907 |
| Quixeramobim | 7 | 7.88 | 8300 | 1.7 | -39.3192 / -5.1997 |
| São José I | 7 | 7.67 | 15.5 | 0.05 | -39.6059 / -5.1966 |
| São José II | 11 | 21.00 | - | - | -39.4737 / -5.8376 |
| Serafim Dias | 7 | 40.94 | 1533 | 0.5 | -39.6532 / -5.7253 |
| Trapiá II | 8 | 18.00 | 139 | 0.4 | -39.7456 / -5.5026 |
| Umari | 10 | 30.00 | 975 | 0.39 | -39.5509 / -4.8001 |
| Vieirão | 3 | 20.70 | 403.47 | - | -39.7229 / -5.1586 |
| Coreaú (10657 km²/283.64 hm³) | Angicos | 17 | 56.05 | 287.29 | 0.73 | -40.8303 / -3.6467 |
| Diamante | 13 | 13.20 | 32.7 | 0.12 | -40.8706 / -3.5945 |
| Gangorra | 10 | 54.40 | 105 | 0.24 | -40.8789 / -3.1739 |
| Itaúna | 8 | 72.58 | 771.3 | - | -41.15 / -3.1612 |
| Martinópole | 7 | 24.83 | - | - | -40.6223 / -3.2477 |
| Premuoca | 7 | 5.20 | 21.1 | - | -40.5539 / -3.3233 |
| Trapiá III | 8 | 5.51 | - | - | -40.6859 / -3.7301 |
| Tucunduba | 12 | 39.37 | 295.77 | 1.14 | -40.4389 / -3.1966 |
| Várzea da Volta | 5 | 12.50 | 167.5 | 0.2 | -40.6033 / -3.5061 |
| Curu (8528 km²/1028.8 hm³) | Caxitoré | 8 | 202.00 | - | - | -39.3683 / -3.7603 |
| Desterro | 6 | 5.60 | 42.96 | - | -39.114 / -4.066 |
| Escuridão | 7 | 2.72 | - | - | -39.3801 / -4.5311 |
| Frios | 14 | 33.02 | 274.33 | 0.37 | -39.3019 / -3.6903 |
| General Sampaio | 7 | 322.20 |  |  | -39.4543 / -4.0836 |
| Itapajé | 14 | 4.24 | 26.6 | 0.1 | -39.5715 / -3.671 |
| Jerimum | 5 | 20.50 | 386 | 0.5 | -39.6907 / -3.8431 |
| Pentecoste | 9 | 360.00 | 28460 | 3.5 | -39.249 / -3.8158 |
| Salão | 10 | 6.04 | 83.34 | - | -39.3135 / -4.409 |
| São Domingos | 4 | 3.20 | 15.77 | - | -39.287 / -4.2248 |
| São Mateus | 12 | 10.33 | 265 | - | -39.319 / -4.3751 |
| Sousa | 2 | 30.84 | 219.3 | 0.3 | -39.2844 / -4.3957 |
| Tejuçuoca | 5 | 28.11 | 180 | 0.4 | -39.5228 / -3.9721 |
| Litoral (8619km²/ 214.9 hm³) | Gameleira | 13 | 52.64 | 519 | 0.65 | -39.4838 / -3.3878 |
| Gerardo Atimbone | 12 | 4.00 | - | - | -39.9841 / -3.8393 |
| Missi | 15 | 65.30 | 625.6 | 0.33 | -39.8642 / -3.4867 |
| Mundaú | 12 | 21.30 | - | - | -39.5184 / -3.6347 |
| Patos | 12 | 7.55 | 969.4 | - | -40.0349 / -3.7712 |
| Poço Verde | 13 | 12.43 | - | - | -39.6287 / -3.4473 |
| Quandú | 12 | 3.37 | - | - | -39.6315 / -3.575 |
| S. Pedro Timbaúba | 14 | 15.77 | 1000 | 0.1 | -39.9758 / -3.5819 |
| Sta Mª de Aracatiaçu | 8 | 8.20 | 890 | - | -39,9807 / -4,049 |
| Sto Ant. de Aracatiaçu | 5 | 24.34 | 627.4 | 0.15 | -40,0114 / -3,8914 |
| Médio Jaguaribe (10376 km²/7364.8 hm³) | Adauto Bezerra | 4 | 4.79 | 31.03 | - | -38.4483 / -6.0375 |
| Canafístula | 5 | 13.11 | 53 | 0.3 | -38.3229 / -5.8711 |
| Ema | 5 | 10.39 | 100 | 0.1 | -38.3564 / -5.7769 |
| Castanhão | 14 | 6,700.00 | 44.8 | 29 | -38.5122 / -5.548 |
| Figueiredo | 7 | 497.00 | - | 4.4 | -38.259 / -5.6358 |
| Jenipapeiro | 9 | 14.59 | 132 | - | -39.2532 / -5.8101 |
| Joaquim Távora | 10 | 26.77 | 120 | 0.1 | -38.8345 / -5.9515 |
| Nova Floresta | 5 | 5.19 | 160.29 | - | -38.918 / -5.9491 |
| Riacho da Serra | 13 | 23.47 | 173.4 | 0.37 | -38.33 / -5.5734 |
| Riacho do Sangue | 11 | 58.43 | 1368 | 0.61 | -38.9544 / -5.6915 |
| Santa Maria | 7 | 6.72 | 120 | - | -38.2759 / -5.9718 |
| Santo Antônio | 12 | 0.83 | 3.2 | - | -38.4126 / -5.8908 |
| Tigre | 9 | 3.51 | 31 | 0.3 | -39.1524 / -5.8945 |
| Metropolitana (15085 km²/1350.45 hm³) | Sítios Novos | 12 | 126.00 | 446 | 1.1 | -38.9715 / -3.7766 |
| Acarape do Meio | 10 | 29.60 | 210 | 0.15 | -38.8097 / -4.1938 |
| Amanary | 7 | 11.01 | 31.9 | 0.2 | -38.8786 / -4.0129 |
| Aracoiaba | 9 | 162.00 | 582.83 | 0.5 | -38.7227 / -4.3888 |
| Batente | 11 | 37.00 | 1369 | - | -38.5057 / -4.656 |
| Castro | 8 | 62.31 | - | - | -38.9409 / -4.5658 |
| Catucinzenta | 8 | 24.90 | 64.5 | 0.2 | -38.4485 / -4.0314 |
| Cauhipe | 7 | 12.00 | 94 | 0.15 | -38.8669 / -3.7476 |
| Cocó | 4 | 5.10 | - | - | -38.5357 / -3.8478 |
| Germinal | 7 | 2.11 | 94 | 0.37 | -38.8681 / -4.1845 |
| Itapebussu | 9 | 6.00 | 76.34 | 0.1 | -38.8955 / -4.0659 |
| Macacos | 11 | 10.32 | 67.2 | 0.1 | -38.7147 / -4.8059 |
| Malcozinhado | 11 | 38.09 | - | - | -38.3149 / -4.1018 |
| Maranguapinho | 10 | 9.35 | 111.45 | - | -38.6547 / -3.8843 |
| Pacajus | 10 | 232.00 | 4492 | 2.9 | -38.4032 / -4.2288 |
| Pacoti | 9 | 380.00 | 1100 | - | -38.5354 / -4.0766 |
| Penedo | 8 | 2.23 | 8.27 | 0.63 | -38.7445 / -3.9671 |
| Pesqueiro | 10 | 9.03 | 84.19 | 0.1 | -38.9705 / -4.4447 |
| Pompeu Sobrinho | 11 | 143.00 | 322 | 0.1 | -39.1564 / -4.851 |
| Riachão | 9 | 47.92 | - | - | -38.5345 / -4.0097 |
| Tijuquinha | 8 | 0.48 | 45.41 | - | -38.8952 / -4.3144 |
| Sertões de Crateús (10821 km²/436.04 hm³) | Barra Velha | 6 | 99.56 | 856.07 | 0.5 | -40.3205 / -5.3146 |
| Barragem do Batalhão | 5 | 1.64 | - | - | -40.658 / -5.2006 |
| Carnaubal | 5 | 73.20 | 2050 | 0.7 | -40.665 / -5.292 |
| Colina | 10 | 4.29 | 369.75 | - | -40.7131 / -5.8463 |
| Cupim | 8 | 4.60 | 231.45 | - | -40.2947 / -5.3952 |
| Flor do Campo | 8 | 105.00 | - | - | -40.6757 / -5.5819 |
| Jaburu II | 11 | 101.64 | - | - | -40.4696 / -5.4151 |
| Realejo | 15 | 31.55 | 209.5 | 0.3 | -40.8146 / -5.2684 |
| São José III | 2 | 7.96 | 94.64 | - | -40.774 / -4.8986 |
| Sucesso | 11 | 6.60 | 272.78 | - | -40.5173 / -4.9533 |
| Serra da Ibiapaba (5988km²  /140.33 hm³) | Jaburu I | 13 | 140.33 | 314 | 2.39 | -41.096 / -3.8432 |
| Salgado (12865 km²/449.922 hm³) | Atalho | 13 | 72.55 | 1830 | 0.56 | -38.9029 / -7.653 |
| Cachoeira | 8 | 34.33 | 143.19 | 0.2 | -39.0267 / -7.0006 |
| Jenipapeiro II | 12 | 41.40 | 186.4 | 0.14 | -38.75 / -6.6724 |
| Junco | 11 | 2.03 | 18.19 | - | -39.2178 / -6.8929 |
| Lima Campos | 18 | 66.38 | 340 | - | -38.9669 / -6.3967 |
| Manoel Balbino | 12 | 37.18 | 41.32 | 0.08 | -39.3268 / -7.0922 |
| Olho d'Água | 12 | 19.00 | 71.8 | 0.13 | -39.3764 / -6.7959 |
| Prazeres | 10 | 32.50 | 152.6 | 0.3 | -38.6886 / -7.117 |
| Quixabinha | 11 | 31.78 | 87.36 | 0.12 | -38.742 / -7.5068 |
| Rosário | 10 | 47.22 | 329 | 0.46 | -39.0901 / -6.895 |
| São Domingos II | 14 | 2.25 | - | - | -39.2845 / -7.0304 |
| Tatajuba | 13 | 2.72 | - | - | -39.0852 / -6.413 |
| Thomás Osterne | 10 | 28.78 | - | - | -39.4872 / -7.0995 |
| Ubaldinho | 13 | 31.80 | - | - | -39.2428 / -6.5924 |