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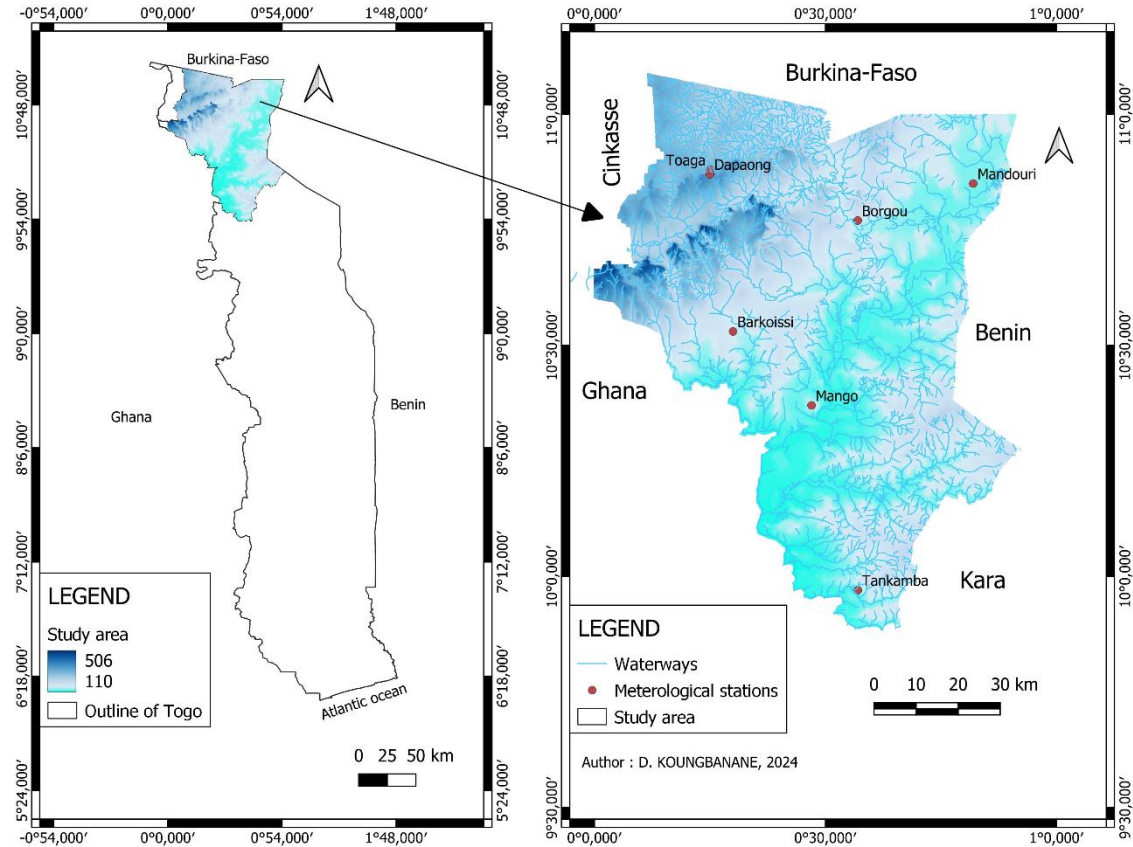


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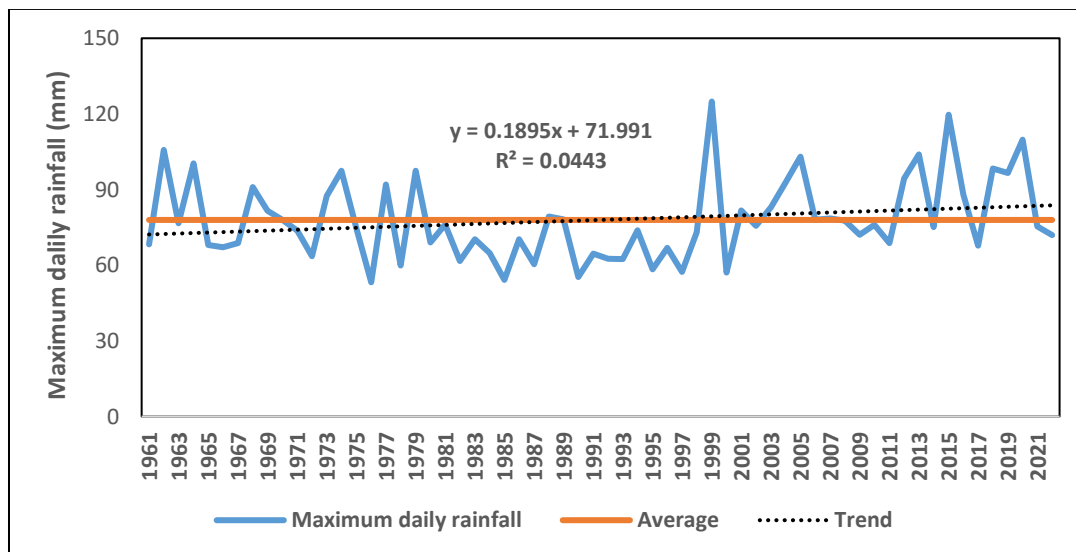


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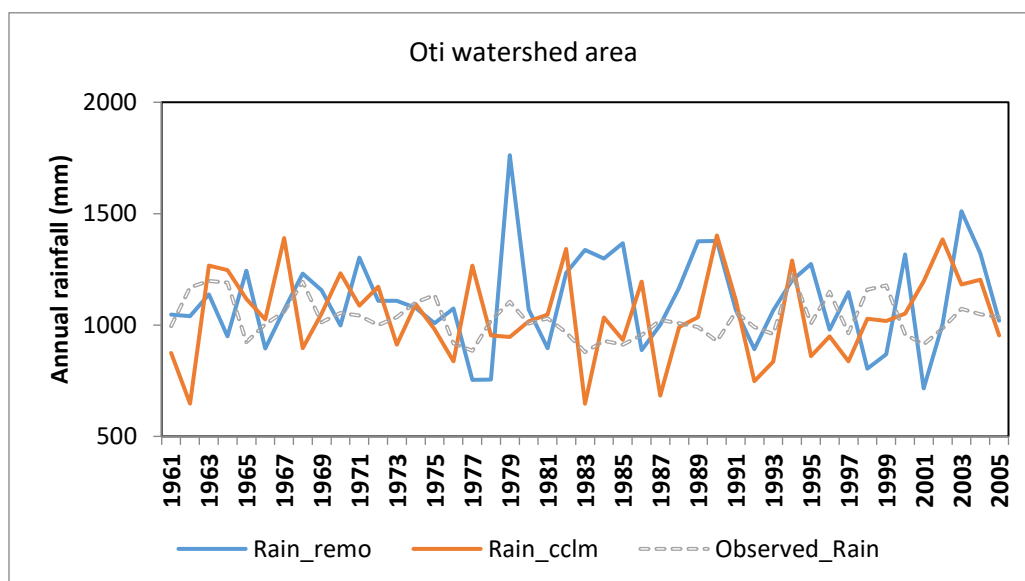


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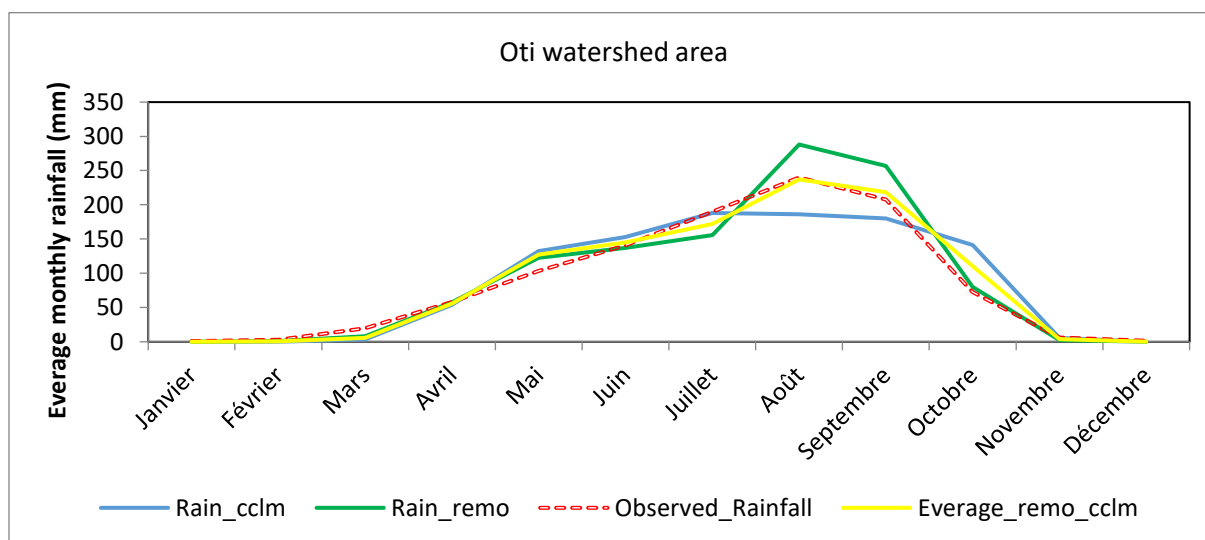


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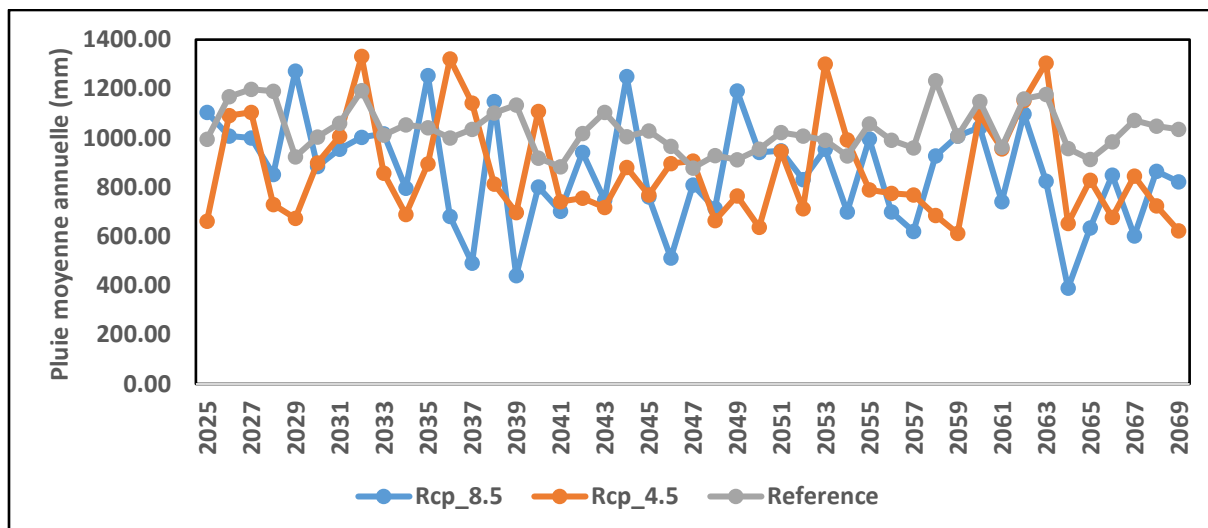


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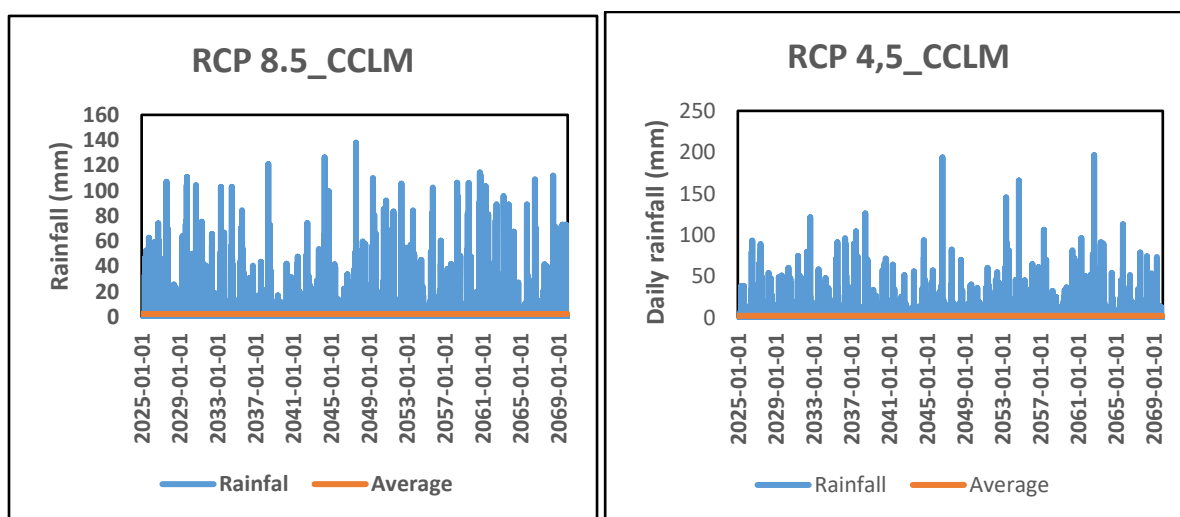
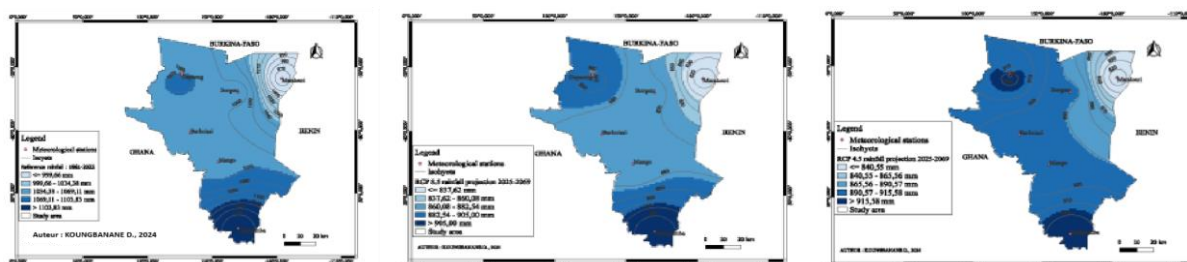


Figure 7 : Average annual rainfall fields observed and simulated by the CCLM model



Tables

Table 1 : Characteristics of rainfall indices calculated using RclimDex

Indices	Indicator name	Definitions	Unit
Rx1day	Max 1-day precipitation amount	Monthly maximum 1-day rainfall	Mm
Rx5day	Max 5-day precipitation amount	Monthly maximum consecutive 5-day rainfall	Mm
SDII	Simple daily intensity index	Annual total precipitation divided by the number of wet days (defined as PRCP $\geq$ 1.0mm) in the year	Mm/day
Rx10	Number of days with very heavy precipitation	Annual number of days with PRCP $\geq$ 20mm	Day
Rx20	Number of days with very heavy precipitation	Annual number of days with PRCP $\geq$ 20mm	Day
CWD	Consecutive wet days	Maximum number of consecutive days with RR $\geq$ 1mm	Day
R95P	Very wet days	Annual total PRCP when RR>95th percentile	Mm
R99P	Extremely wet days	Total annual PRCP when RR>99th percentile	Mm
PRCPTOT	Annual Total Precipitation in Wet Days	Yearly total PRCP in wet days (RR $\geq$ 1mm)	Mm

Table 2 : Characteristics of the 1961-2022 climate index trend

Pluies observées		
Indices	Slope	P-value
PRCPTOT	0.93	0.40
SDII	-0.01	0.27
Rx10 mm	-0.04	0.37

Rx20 mm	-0.01	0.70
R95P	-0.17	0.83
R99P	0.33	0.49
Rx1day	0.16	0.20
Rx5day	0.02	0.90
CWD	0.03	0.34

Table 3 : Trend characteristics of nine climate indices

Simulated rainfall indices				
RCP 8.5			RCP4.5	
Indices	Slope	P-value	Slope	P-value
Rx1day	0.36	0.29	0.33	0.46
Rx5day	-0.001	0.99	0.59	0.34
SDII	0.002	0.91	-0.004	0.79
Rx10 mm	-0.14	0.01	-0.09	0.11
Rx20 mm	-0.06	0.09	-0.03	0.23
CWD	-0.11	0.05	-0.10	0.17
R95P	-1.30	0.54	-0.88	0.62
R99P	1.82	0.16	0.48	0.73
PRCPTOT	-4.77	0.05	-2.59	0.28