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Supplement of

Projected changes in crop yield mean and variability over West Africa in a world 1.5 K warmer than the pre-industrial era

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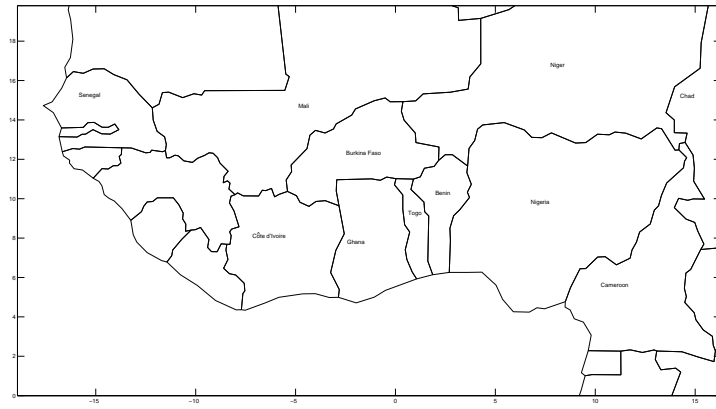


Figure S1. Annotated map of West Africa highlighting the countries discussed.

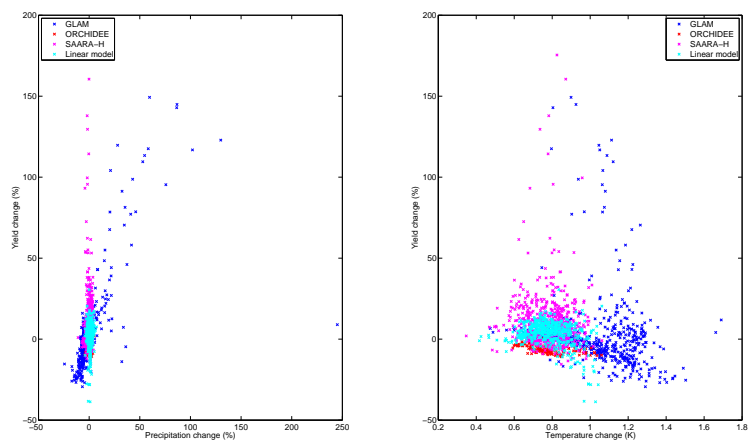


Figure S2. Percentage maize yield change against precipitation (left) and temperature (right) for four crop models. This is the full figure equivalent of Figure 5.

Table S1. Seasonal (maize) mean temperature and total precipitation for the GCMs and RCMs used in this study.

Model pairing	Temperature change (K)	Temperature IAV (K)	Precipitation change (cm)	Precipitation IAV (cm)
CanESM2 & RCA4	0.68	0.24	-0.08	2.55
CNRM-CM5A & CCLM4.8.17	1.07	0.38	0.27	3.01
CNRM-CM5A & RCA4	0.80	0.23	0.61	2.14
CM5A-MR & RCA4	0.72	0.25	1.42	2.48
CSIRO-Mk3.6.0 & RCA4	1.14	0.30	0.03	3.19
NOAA-GFDL-CM3 & RCA4	1.44	0.31	2.16	4.53
MOHC-HadGEM2-ES & CCLM4.8.17	1.55	0.58	-2.91	3.89
MOHC-HadGEM2-ES & RACMO22T	1.02	0.47	2.23	3.26
MOHC-HadGEM2-ES & RCA4	1.18	0.33	1.39	2.59
ICHEC-EC-EARTH & HIRHAM5	0.98	0.55	-1.2	4.37
ICHEC-EC-EARTH & RACMO22T	0.52	0.34	1.63	2.95
ICHEC-EC-EARTH & RCA4	0.69	0.28	-0.04	4.06
MIROC5 & RCA4	1.33	0.30	3.01	4.87
MPI-ESM-LR & CCLM4.8.17	1.03	0.45	-2.29	2.32
MPI-ESM-LR & RCA4	0.62	0.20	1.50	2.50
NorESM & RCA4	0.95	0.32	2.62	4.46

Table S2. Seasonal (maize) mean temperature and total precipitation for the GCMs used in this study. Where a GCM is used to drive multiple RCMs, the results from the RCMs have been averaged in this table.

GCM mean	Temperature change (K)	Temperature IAV (K)	Precipitation change (cm)	Precipitation IAV (cm)
CanESM2	0.68	0.24	-0.08	2.55
CNRM-CM5A	0.93	0.31	0.44	2.57
CM5A-MR	0.72	0.25	1.42	2.48
CSIRO-Mk3.6.0	1.14	0.3	0.03	3.19
NOAA-GFDL-CM3	1.44	0.31	2.16	4.53
MOHC-HadGEM2-ES	1.25	0.46	0.24	3.24
ICHEC-EC-EARTH	0.73	0.39	0.13	3.8
MIROC5	1.33	0.30	3.01	4.87
MPI-ESM-LR	0.83	0.32	-0.39	2.41
NorESM	0.95	0.32	2.62	4.46

Table S3. Seasonal (maize) mean temperature and total precipitation for the RCMs used in this study. Where a RCM is driven by multiple GCMs, the results from the GCMs have been averaged in this table.

RCM mean	Temperature change (K)	Temperature IAV (K)	Precipitation change (cm)	Precipitation IAV (cm)
SMHI	0.96	0.28	1.26	3.34
CCLM	1.22	0.47	-1.64	3.07
KNMI	0.77	0.40	1.93	3.10
HIRHAM	0.98	0.55	-1.20	4.37