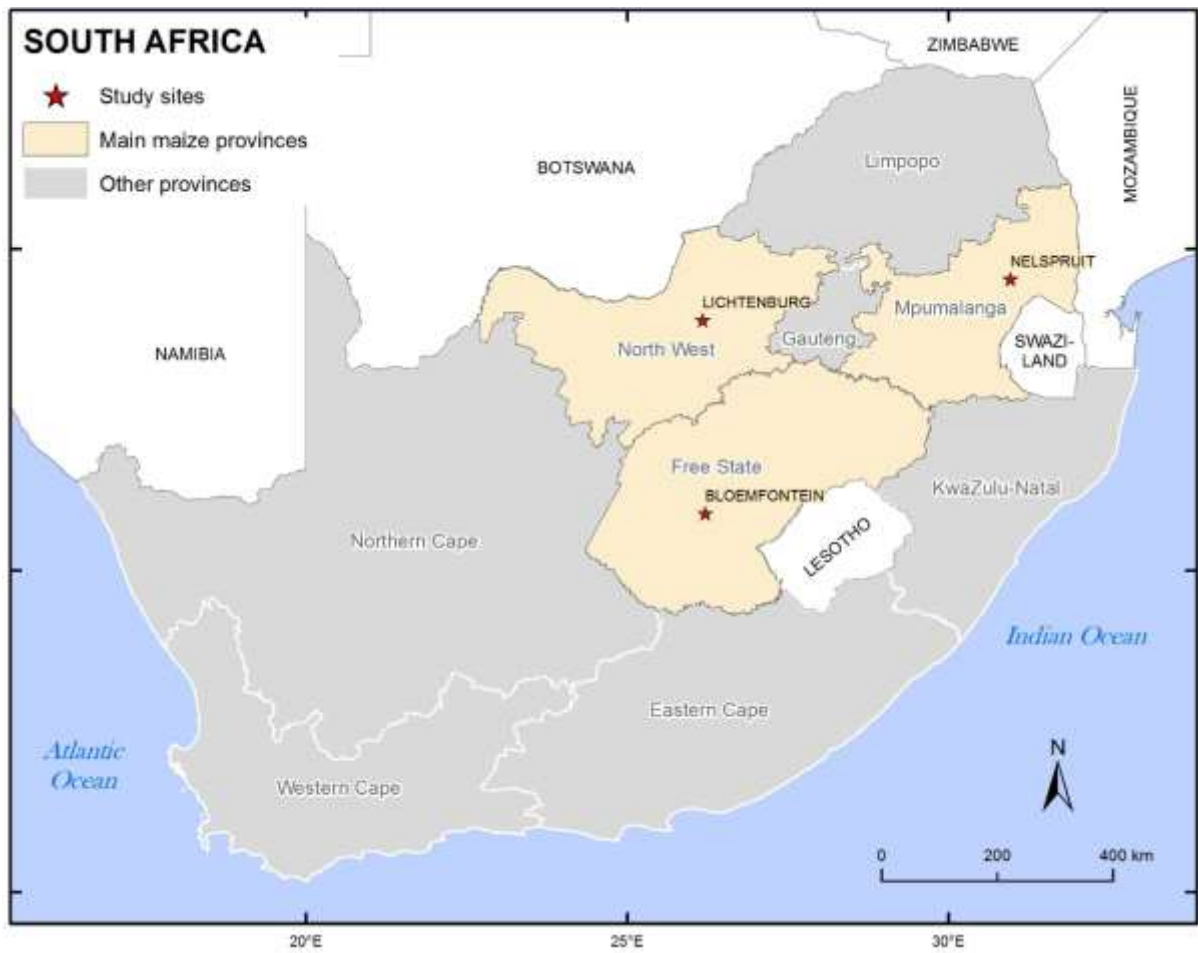
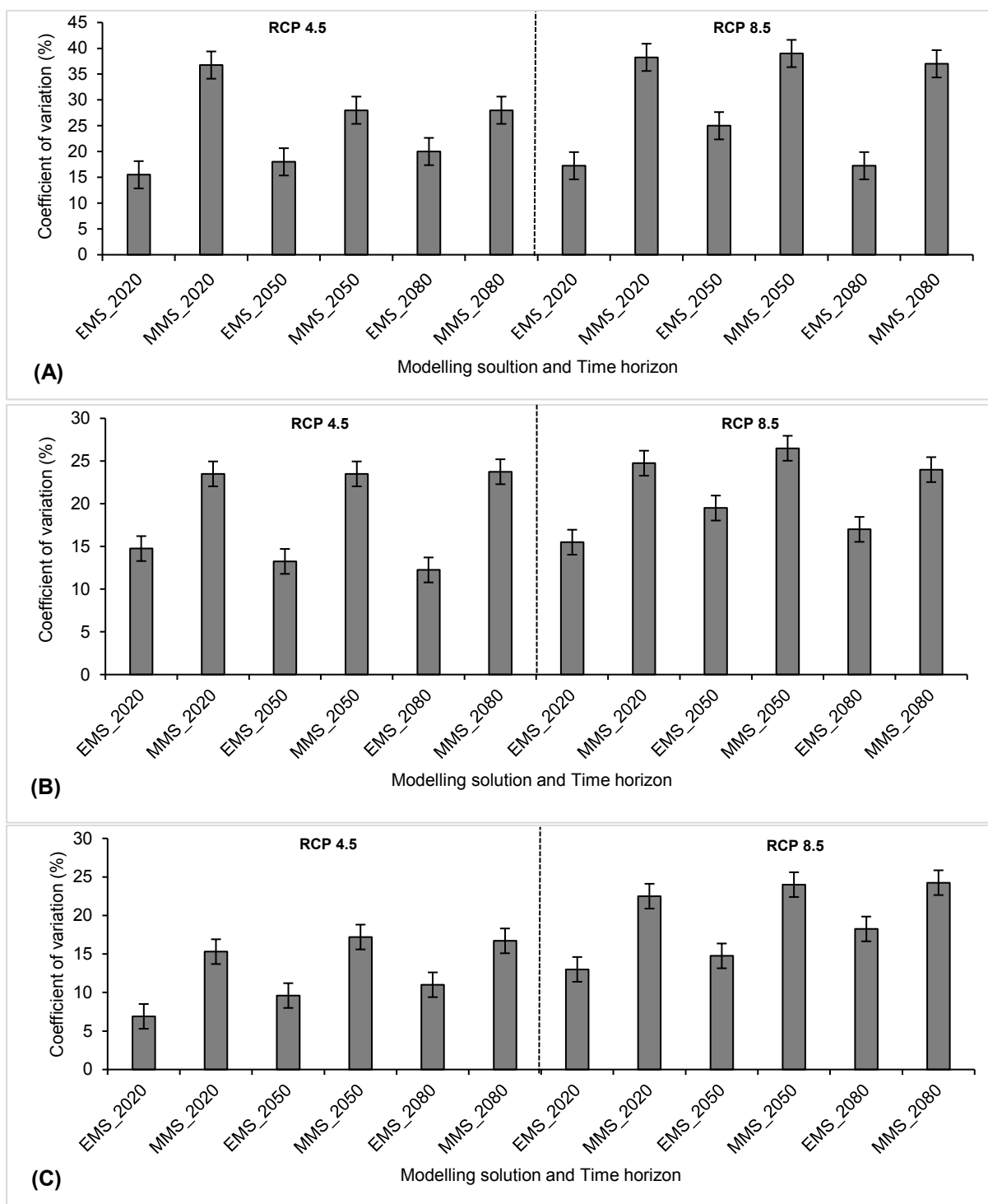


## Supplementary files



ESM Fig. 1 Study sites and the main maize producing provinces of South Africa



ESM Fig. 2 Coefficient of variation of maize yield, obtained with both existing (EMS) and modified (MMS) modelling solutions, two radiative forcing scenarios (RCP 4.5 and RCP 8.5) at three sites: A) Bloemfontein, B) Lichtenburg and C) Nelspruit. Capped lines are +/- standard error

ESM Table 1. Comprehensive Model Intercomparison Project 3 (CMIP5) Global Circulation Models (GCMs) from which climate scenarios were obtained

<b>Name used</b>	<b>Originating group(s)</b>	<b>Country</b>	<b>Model full name</b>	<b>Primary reference</b>
ACC	Australian Community Climate and Earth System Simulator	Australia	ACCESS1-0	Dix et al. (2013)
CCSM3	Norwegian Earth System Model	Norway	CCSM4	Gent et al. (2011)
CNRM	Météo-France / Centre National de Recherches Météorologiques	France	CNRM-CM5	Salas-Méla et al. (2005)
GFDL	US Dept. of Commerce / NOAA / Geophysical Fluid Dynamics Laboratory	USA	GFDL-CM3	Delworth et al. (2006)
MPI	Max Planck Institute for Meteorology	Germany	MPI-ESM-LR	Jungclaus et al. (2006)
NOR	Community Climate System Model	Norway	NorESM1-M	Bentsen et al. (2013)