

Supplementary Materials: A Weather-Pattern-Based Evaluation of the Performance of CMIP5 Models over Mexico

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Table S1. Spatial correlation between CMIP5 patterns and their corresponding pattern in ERA-Interim for mslp.

Model	WPs					
	1,1	1,2	1,3	2,1	2,2	2,3
MPI-ESM-LR	0.87	0.83	0.75	0.74	0.82	0.87
MRI-ESM1	0.94	0.95	0.94	0.94	0.95	0.93
ACCESS1.3	0.98	0.97	0.97	0.98	0.98	0.98
CMCC-CM	0.99	0.98	0.96	0.96	0.98	0.99

Table S2. Spatial correlation between CMIP5 patterns and their corresponding pattern in ERA-Interim for q700.

Model	WPs					
	1,1	1,2	1,3	2,1	2,2	2,3
MPI-ESM-LR	0.92	-	0.87	0.78	-	0.9
MRI-ESM1	0.92	0.71	0.95	0.94	0.61	0.91
ACCESS1.3	-	0.72	0.91	0.92	0.71	-
CMCC-CM	0.92	0.87	0.91	0.92	0.45	0.92

Table S3. Spatial correlation between CMIP5 patterns and their corresponding pattern in ERA-Interim for u700.

Model	WPs					
	1,1	1,2	1,3	2,1	2,2	2,3
MPI-ESM-LR	0.95	0.81	0.86	0.85	0.86	0.95
MRI-ESM1	-	0.88	0.82	0.84	0.89	-
ACCESS1.3	0.95	0.96	0.93	0.93	0.94	0.96
CMCC-CM	0.93	0.95	0.67	0.7	0.95	0.93

Table S4. Spatial correlation between CMIP5 patterns and their corresponding pattern in ERA-Interim for v700.

Model	WPs					
	1,1	1,2	1,3	2,1	2,2	2,3
MPI-ESM-LR	0.94	0.85	0.94	0.93	0.92	0.95
MRI-ESM1	0.97	0.85	0.92	0.92	0.9	0.98
ACCESS1.3	0.89	0.86	0.87	0.87	0.87	0.89
CMCC-CM	0.96	0.92	0.94	0.94	0.94	0.96

Figure S1. Composites of precipitation anomalies for weather types of 700 hPa specific humidity. Precipitation data is obtained from Rainfall Estimates from Rain Gauge and Satellite Observations (CHIRPS).

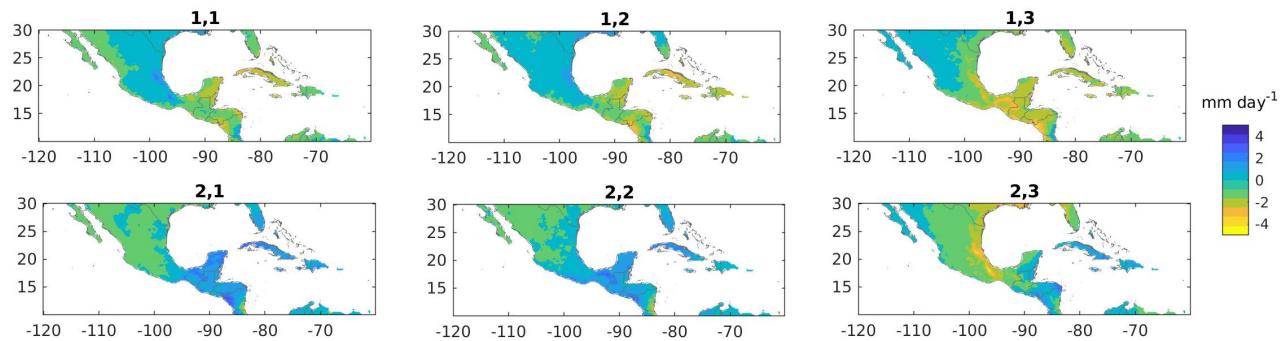


Figure S2. Percentage of area in the study region with absolute error greater than 0.4, for: mslp, q700, u700 and v700.

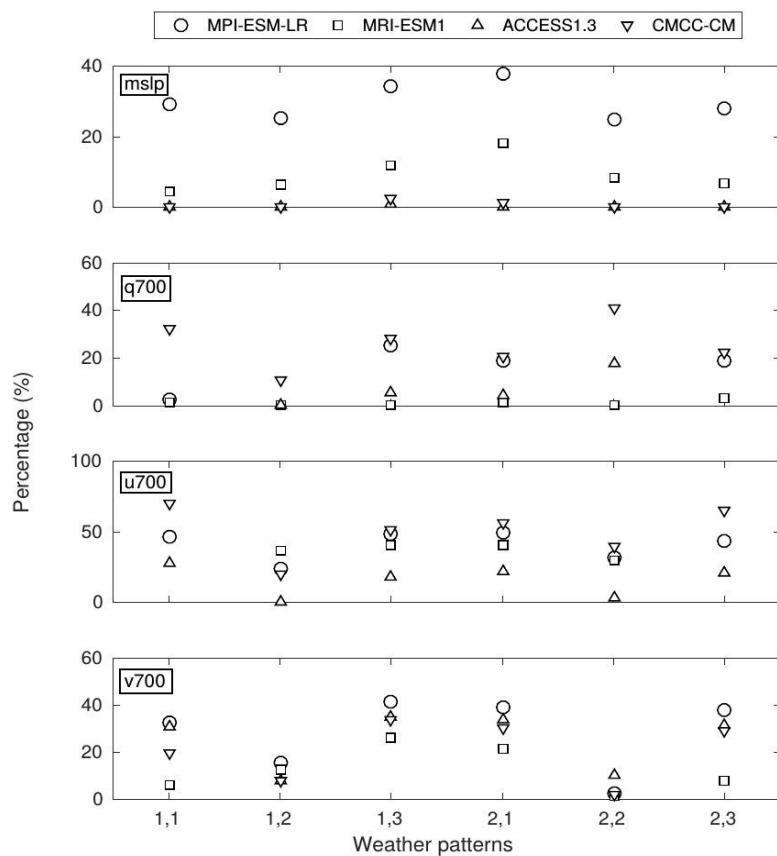


Figure S3. Percentage of area in the study region with absolute error greater than 0.7, for: mslp, q700, u700 and v700.

