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Supplement of

Climate projections of a multivariate heat stress index: the role of downscaling and bias correction

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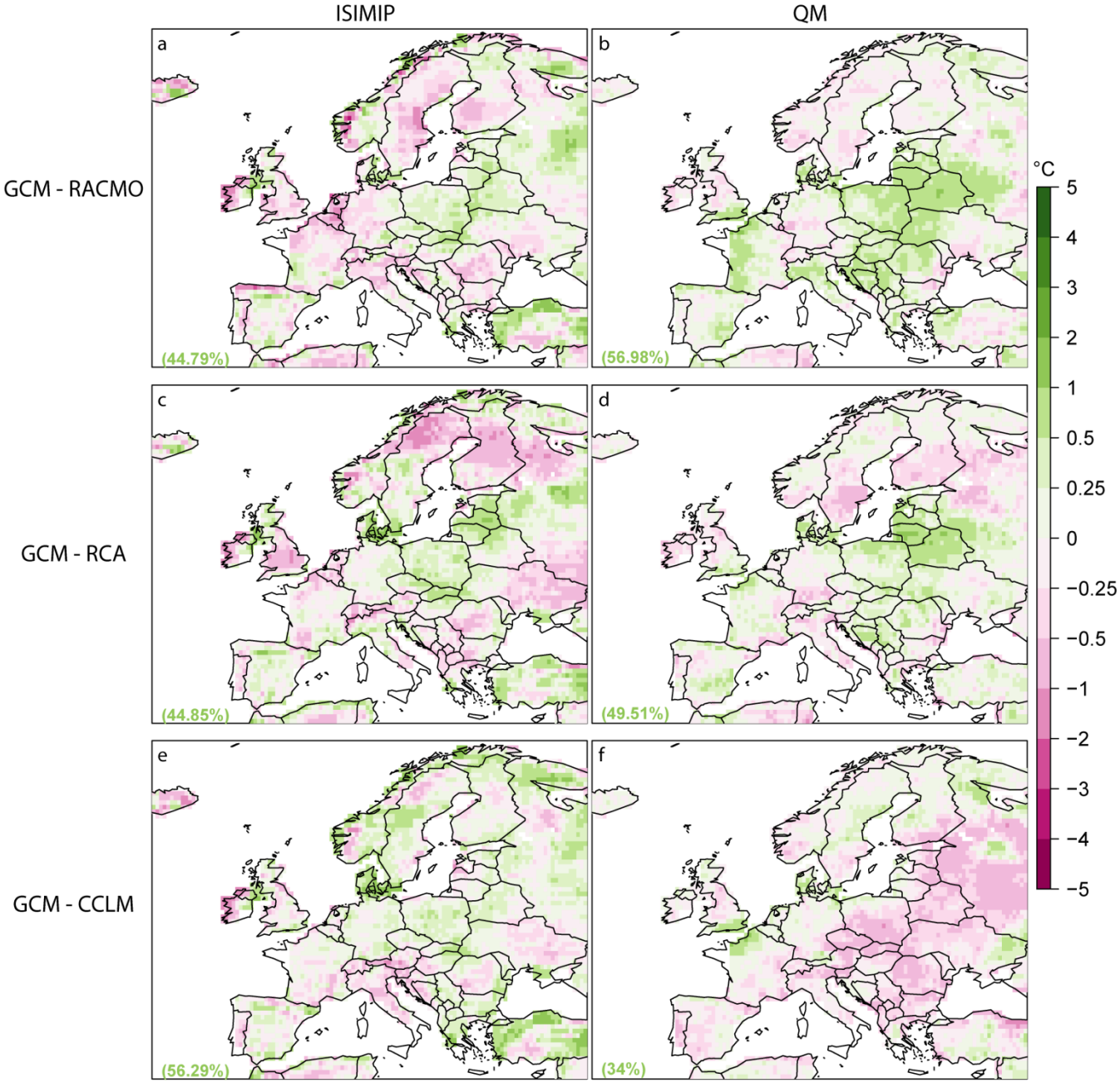

Figure S 1: Added value of high resolution after bias correction for WBGTp99. The panels show the difference between the biases (in absolute value) of the GCM minus the RCMs (EUR-011) after the two BC methods (ISIMIP –left panel- and QM –right panel). Thus, greenish colours mean added value of the RCM after BC with respect to the bias-corrected GCM. The numbers in brackets depict the percentage of grid boxes where the bias-corrected RCM improves on the bias-corrected GCM.

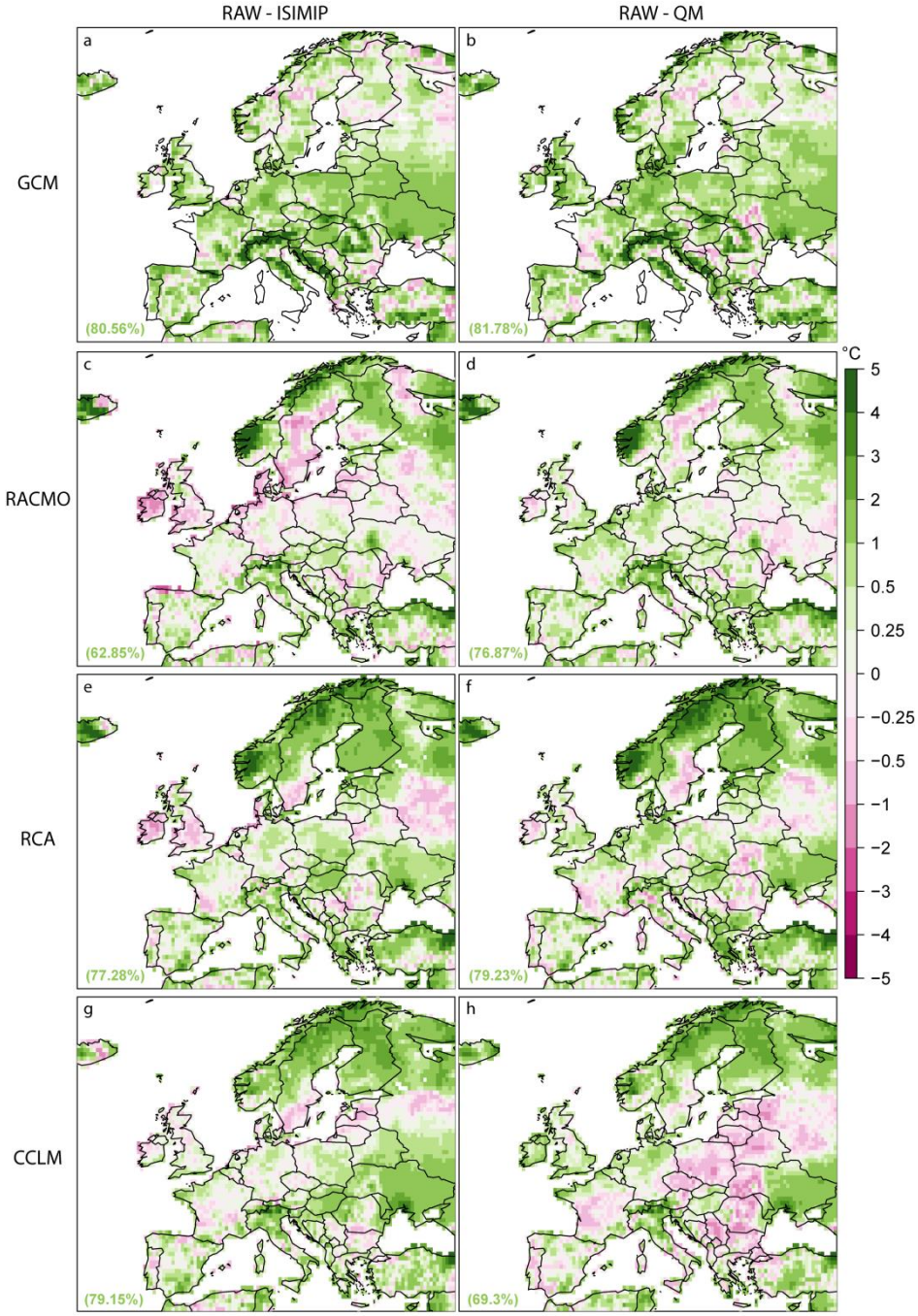

Figure S 2: Added value of bias correction for WBGTp99. The panels show the difference between the biases (in absolute value) of the raw minus the bias-corrected data (for the GCM and the RCMs-EUR-011 in rows) for the two BC methods (ISIMIP –left panel- and QM –right panel). Thus, greenish colours mean added value of the bias-corrected data with respect to the raw counterpart. The numbers in brackets depict the percentage of grid boxes where the bias-corrected data improves on the raw.

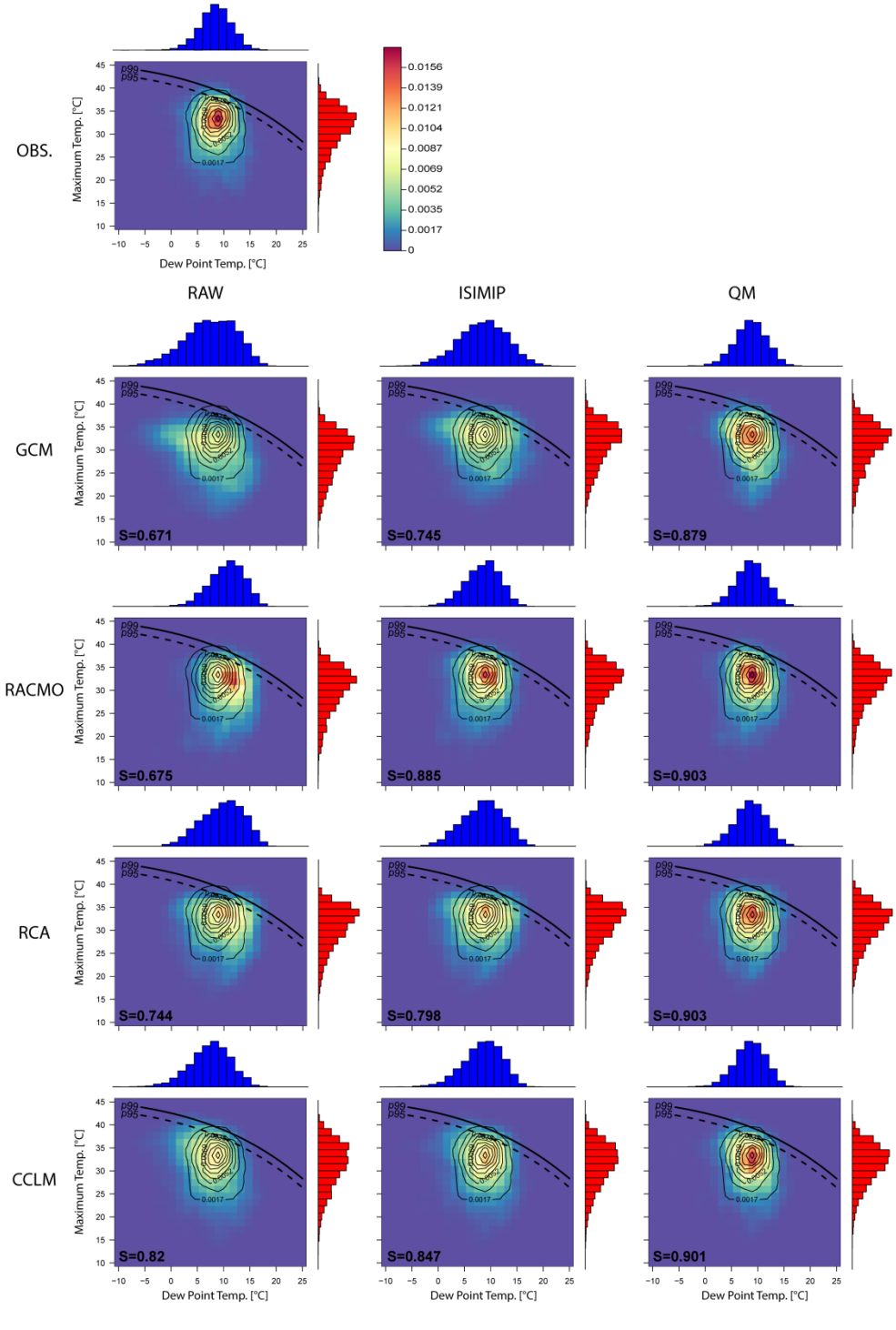

Figure S 3: As Fig.5 but for the grid box over Madrid.

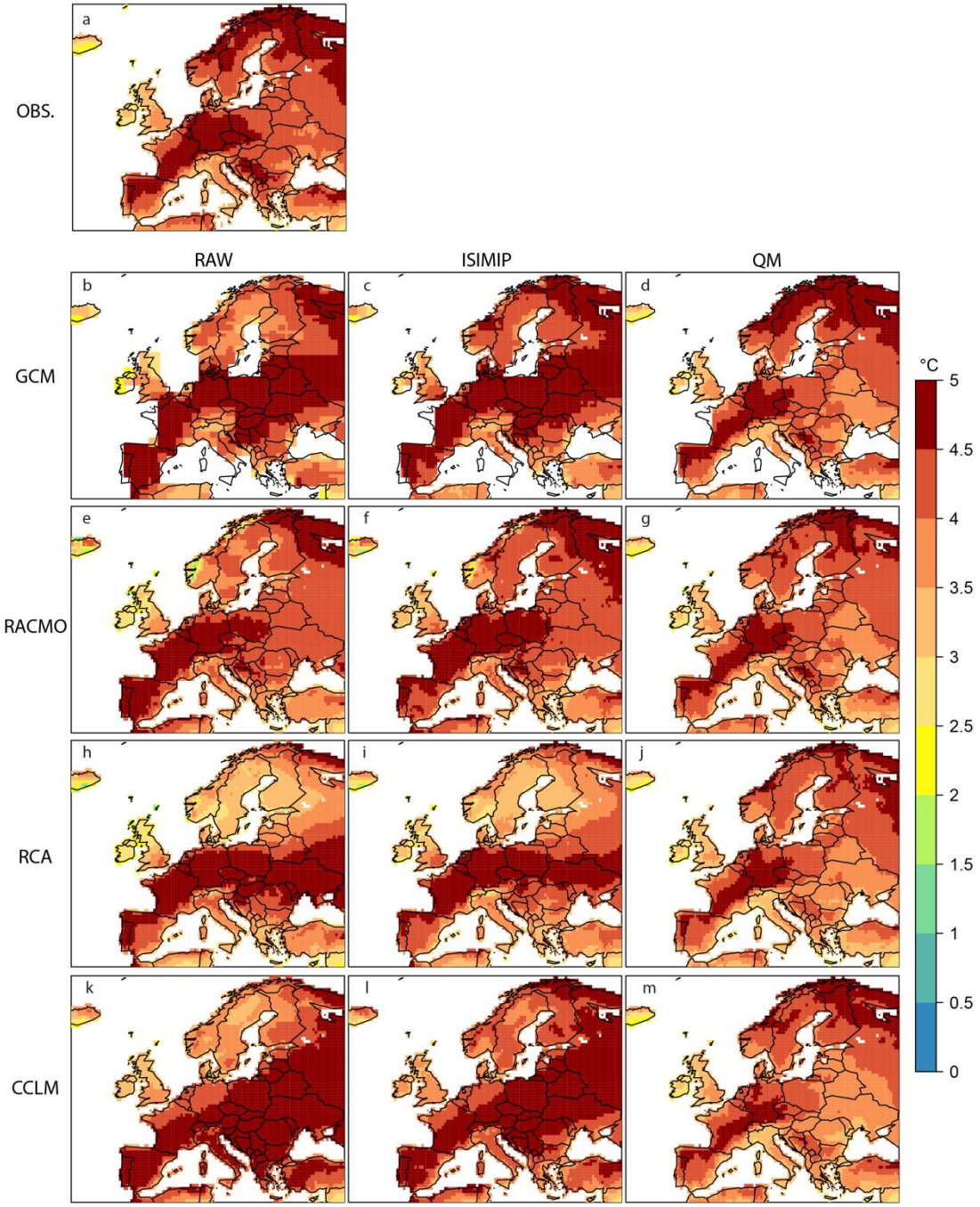

Figure S 4 Standard deviation of the distribution of daily maximum temperatures (1981-2010, JJA). Results for the observations (a), GCM (b-d) and three RCMs-EUR11 (e-m). Raw and bias-corrected data are depicted in columns.

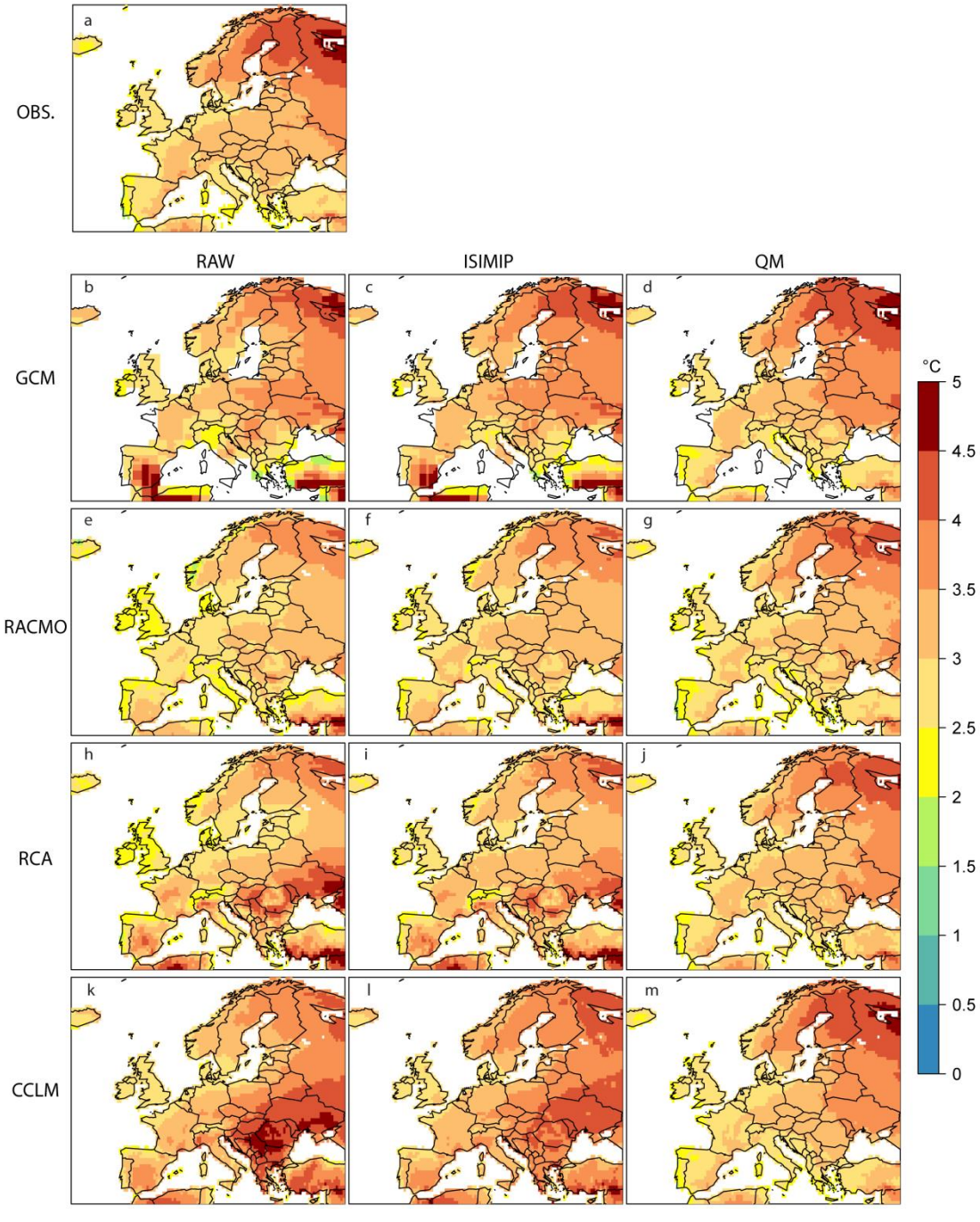

Figure S 5 As Fig.S4, but for daily mean dew point temperature.

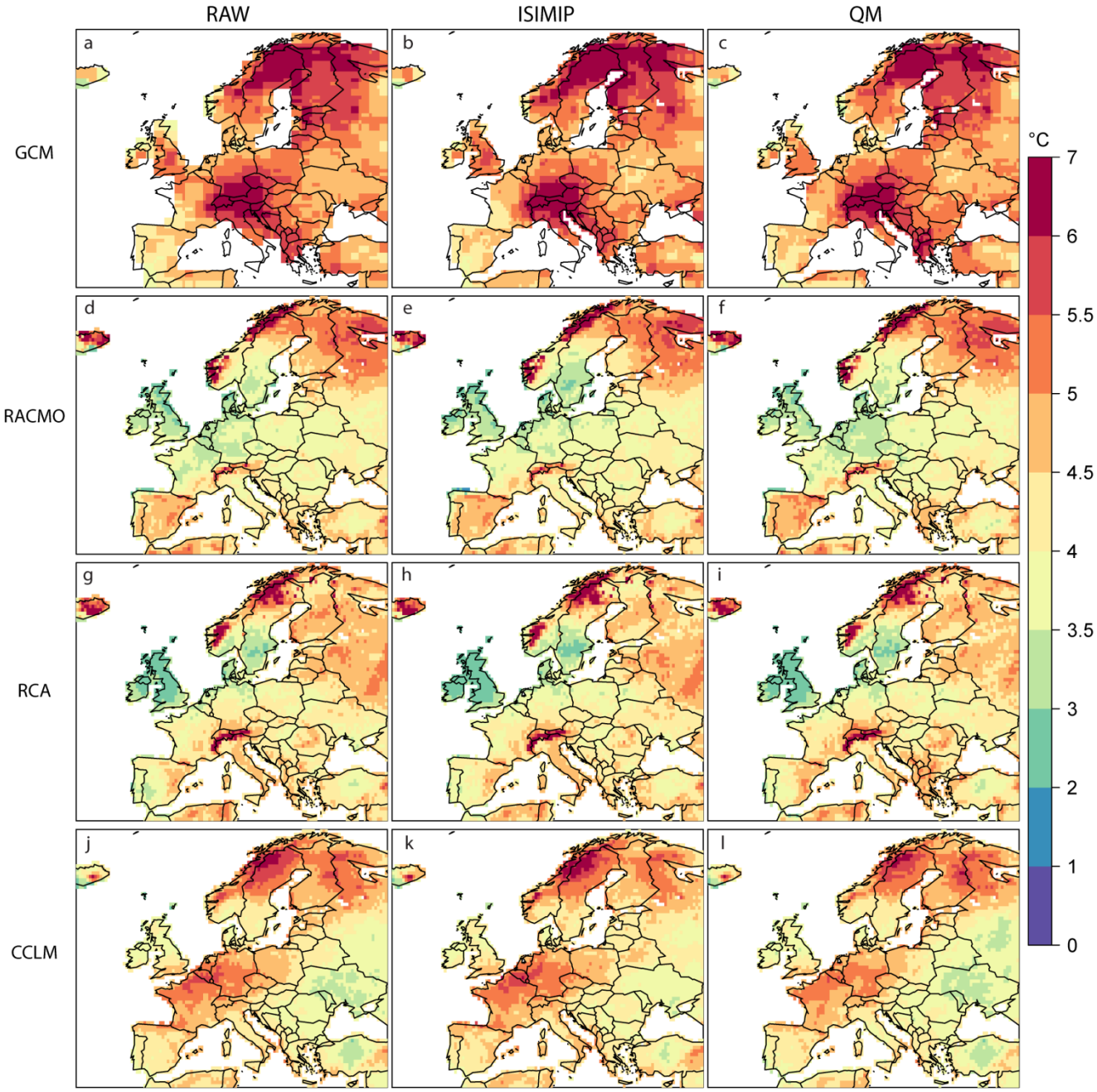

Figure S 6: As Fig.7 but for the climate change signal of the WBGTp99.