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Trends in indices of climatic extremes in central-western Spain

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Different indices of climate extremes have been computed from daily temperature and precipitation data registered in meteorological stations in the central-western area of Spain. The data have been obtained from the Spanish-Meteorological Office and cover the period from 1958 to 2001. Eight indicators, six of them for temperature (TX10P,TX90P,TN10P, TN90P, WSDI and CSDI) and two for the precipitation (R10mm and R20mm) extremes, have been computed. Their trends during the interval under consideration have been estimated and tested for statistical significance. In agreement with previous studies, our results indicate a generalized tendency towards warmer conditions, although there appear to exist remarkable disparities in the magnitude and significance of the trends even on this regional scale. Regarding the precipitation extremes, significant trends are detected in a minority of the stations under study.