



Trends of temperature and precipitation daily extreme values in Galicia (Northwest of Spain) over the second half of the XXth century.

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Trends for a long-term set of daily maximum and minimum temperature and precipitation data were analyzed for Galicia (Northwest of Spain). For many years, the study of climatic variations has been the main objective of climatic research on global space-time scales. However, it is necessary to conduct studies on a local and regional scale that allow a more precise evaluation of the tendencies.

This analysis has been centred in the daily scale, using as input meteorological data collected from weather stations corresponding to the National Weather Service and to the Department of Environment of the Galician regional government. All of the records were scanned for discontinuities, outliers and obvious error, using several homogeneity test and different quality evaluation procedures.

Firstly, this study has shown the variations of daily values of minimum and maximum temperature and precipitation recorded in Galicia from the middle of twentieth century onwards.

Secondly, some extreme climate indices based on the 5th, 10th, 90th and 95th percentiles were used to describe cold and warm extremes in temperature and wet extremes in precipitation. Also, for the five longer series (at least 50 years long), located in different climatic zones (from the rainfall point of view), the change in Gumbel distribution parameters was analysed.

Last, synoptic situations associated with these extremes were analyzed as far as their temporal variability was concerned.