



## **Recent atmospheric changes over Spain, using Weather Types**

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The aim of this work is to study and analyze changes in meteorological phenomena and atmospheric circulation during two recent periods of time (1957-1979 and 1980-2002) over mainland Spain and the Balearic Islands. In order to do so, we have performed a joint probabilistic analysis of Weather Types (WTs) and daily observations. WTs are obtained from the ERA-40 Re-analysis data using a modified Self-Organizing Map, which uses the transition probability from one WT to another as ordering criterion. Changes in the frequency of appearance of each WT and their transition probability are analyzed, as well as changes in daily observations and alterations in the frequency of different events.