



Observed and projected precipitation over the Southeast of Spain.

J.A. García-Valero (1), J.P. Montávez (2), S. Jerez (2), P.A. Jiménez(3) and J.F. González-Rouco (4).

(1) Instituto Nacional de Meteorología (San Javier, Murcia), (2) Universidad de Murcia, (3) CIEMAT, (4) Universidad Complutense de Madrid

Daily precipitation variability in the Murcia Region (South East Spain) was studied using observations in more than 40 locations to derive subregions with homogeneous temporal variability. The regionalization was performed by means of cluster analysis, obtaining seven different regions.

A classification of the spatial precipitation pattern was further performed using a non hierarchical cluster procedure. For each pattern we obtained a related group of weather types, and analyzed the temporal evolution for the period 1958-2006.

The changes in occurrence of the obtained weather types for a climate change scenario and the related changes in precipitation have been studied within climate change experiments performed with ECHO-G model for the B2 SRES scenario. The projected changes in precipitation are compared with those simulated by the MM5 regional climate model driven by the ECHO-g model simulations.