



The simulated summer western Mediterranean variability in the CIRCE ensemble

Maria OrtizBevia, Francisco J. Alvarez-Garcia, Pilar Lorente, Jesus H. Carretero, and Antonio RuizdeElvira
Universidad de Alcala, Fisica, Edificio Ciencias, Fisica del Clima, Alcala de Henares, Spain (mjose.ortiz@uah.es)

The simulated western Mediterranean variability in summer in the two of the CIRCE ensemble of simulations, its relationships with large modes of climatic variability and its feedbacks are the subject of this study. The simulations were performed with the models CNRS-IPSL and INGV-CMCC. The simulations cover the second part of the 20 Century and the first part of the 21 Century. During the 20 Century part of the simulations, the distribution and concentration of the atmospheric greenhouse gases and aerosols (anthropogenic sulfate only) will be specified from the observations, as was done for the AR4-IPCC integrations. During the 21 Century simulation the GHG and anthropogenic aerosol will be specified according to the A1B IPCC-SRES. The variable analyzed are anomalies of sea surface temperature, sea level pressure, 500 hPa geopotential height, air temperature and precipitation.