



An intercomparison and verification of outputs of several climate models on representative Mediterranean catchments

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Within the framework of the FP7 project CLIMB (Climate Induced Changes on the Hydrology of Mediterranean Basins: Reducing Uncertainty and Quantifying Risk through an Integrated Monitoring and Modeling System), we present here the results of a systematic analysis aimed at the evaluation of the performances of several climate models in providing reliable variables for hydrological modelling in representative catchments of the Mediterranean area. Specifically, we consider the outputs of regional and global climate models available through the open access data projects IPCC, PRUDENCE and ENSEMBLES. In order to extract and to keep updated the variables of interest on specific target hydrological catchments we developed an interface based on a software that synchronises a local database with the output of several climatic models. The performances of precipitation and temperature fields on the 7 Mediterranean catchments of interest for CLIMB project activities are evaluated using the E-OBS gridded dataset. Comparisons and evaluations of performances in reproducing both the hydrological cycle and the extremes at the catchment scale are presented and discussed.