



Validation of multiple temperature and precipitation statistics in the ERA-Interim driven MED-CORDEX experiments.

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In this work the ERA-Interim Med-CORDEX simulation are validated against all available European or regional validation data-set at different resolution.

These simulations are carried on at two resolutions, a low resolution of 50 km and the high resolution of 12 km.

The standard temperature and precipitation variables are used to compute bias, root mean square and correlation over the entire European domain and this metric is used to validate the seasonal behavior of the model ensemble.

The Taylor diagram are used to summarize the results over several European sub-regions and to analyze the differences between the ensemble members.

Probability distributions of daily precipitation are analyzed at both model resolution together with five extremes indices and they include metrics of intensity (SDII) and extremes (R95) of precipitation, dry (DSL) and wet (WSL) spell length, the hydroclimatic intensity index HY-INT.

Differences among the two resolution are evident for both the seasonal behavior and for the extreme indices validation. The resolution added value is shown when the probability distribution are analyzed in several regions of the European area and for some of the extreme indices considered.