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CLWRF hindcast simulation over the CORDEX West Asia domain

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Usually the term West Asia describes the westernmost part of Asia encompassing the Middle East and the eastern Mediterranean. Weather patterns that control West Asia's climate include large scale atmospheric circulation modes such as the Indo-Pakistan heat low and the associated monsoon circulation, or smaller scale phenomena like the Red Sea trough, the etesian winds over the Aegean and cyclones formed in the Mediterranean Sea.
Global climate model (GCM) projections suggest that this part of the world will be affected by temperature increases and changes in precipitation during the 21st century. Climate change in the region might have negative impacts such as heat stress intensification, and extended drought periods. This could be especially significant for the relatively high density of urban population, including several megacities.
Climate simulations of high spatial resolution are necessary to fully understand the regional and local climate effects and perform impact assessments. This type of regional information can be extracted by applying the dynamical downscaling technique on the output of GCMs using limited area models. To gain the maximum benefit of the regional climate change studies, a common framework of coordination between the different research groups is essential. The World Climate Research Program (WRCP) provides this guidance with the Coordinated Regional Climate Downscaling Experiment (CORDEX).
Our contribution in this effort is to, initially, run a hindcast simulation of the recent past climate, driving the Weather, Research and Forecast (WRF) model with the ERA-Interim reanalysis data. We are using the CLWRF set of modifications to the version 3.3.1 of WRF according to the specifications of the CORDEX initiative. The length of the simulation is 20 years (1990-2009) including one year of spin-up time (1989) and the horizontal resolution is 0.44° ($\approx$50km). In the present study we will present the comparison between the results of this hindcast run and the version TS3.1 of the CRU gridded observational dataset.