



Making CORDEX accessible to users: case studies in the Middle East

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The current demand of long term climate projections corresponds to more applied requests from users: climate data and services are supposed to enable robust decision making in very diversified environments... Issues like uncertainty management (elaborating probabilistic projections based on full ensembles analysis) or tailoring of indicators should be central.

However, an assessment of a sample of local, regional and national climate change adaptation strategies, in Europe and in the Med (Stoverinck, Dubois and Amelung 2013) highlighted the frequent insufficient robustness of climate information used to inform policy making. Some initiatives only refer to past climate data, use only one SRES or RCP scenario, one model or a too limited set of downscaling techniques.

The CORDEX program (Coordinated regional climate downscaling experiment, coordinated by WCRP) forms the largest effort of climate downscaling so far. Its datasets, initially developed for scientific purposes have strong potential to improve regional and local adaptation policies. They can be considered as reference for the coming years, not only reflecting the improvement of our knowledge of climate, but also offering data in a much more harmonized and accessible way.

The PROCLIM initiative (www.pro-clim.org) aims at developing a European climate service, proposing territorialized climate projections, supporting local adaptation frameworks, derived from CORDEX. This encompasses several methodological challenges: understanding users' needs at the European level, specifying indices, selecting relevant geographical domains, correcting systematic biases, selecting sub-ensembles of the CORDEX datasets so as to provide a sound uncertainty analysis, representing results in an user-friendly manner.

The presentation will detail some features of PROCLIM, based on two recent experiments: the elaboration of long term climate projections, based on AFRICA-CORDEX, supporting the elaboration of the third national communication on climate change of Jordan; and the provision of high resolution hydro-climatic projections for Israel, Palestine and Jordan, which combined post-processing of CORDEX, and some dedicated runs of WRF, configured in climate mode.