PARALLEL SESSION B : FRONTIER DOWNSCALING TOOL B3: A FOCUS ON ESD SPECIFIC OPPORTUNITIES

Results from a downscaled Multi-GCM-Ensemble using the ESD-method EPISODES

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The latest generation of climate projections for the 21st century were provided by the Coupled Model Intercomparison Project Phase 5 (CMIP5). However, their spatial resolution is rather coarse but information is needed on a fine spatial scale. Due to the high demand of computer resources, RCM models are only able to downscale a small part of this projections. Empirical statistical downscaling (ESD) methods can fill this gap.

The ESD-method EPISODES is used to downscale a large ensemble of GCM scenario runs . The downscaling is based on a gridded observational data set covering the territory of Germany. The spatial resolution is 0.11 degree, as an equivalent to the European fine scale CORDEX grid, with a daily temporal resolution. Most downscaled projections cover the time period 1951 to 2100.

Here, an analysis of this unique set of high resolution climate change projections for Germany is presented.

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