

Climate change scenarios for Poland based on EuroCORDEX ensemble – general concept

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Climate change and associated climate risks indicated the need for the development of adaptation strategies. In the frame of the project “Adaption strategies to Climate Change in Poland” an attempt has been made to prepare a climate change scenario for the are of Poland.

Two development scenarios developed in the scope of IPCC AR5 were adopted RCP4.5 and RCP8.5. We have used all available results from EuroCORDEX repository, based on daily results for the domain EUR11 (resolution of 0.11deg.)

Three different datasets based on gridded meteorological data were used for downscaling – EOBS, ERA5 and dataset prepared by the Institute of Meteorology and Water Management based on the methodology developed in COST Action VALUE.

We will present a comparison of gridded datasets with reference data from stations, ensemble scenario performance for the reference period and the ensemble spread. Also, climate indices in the current and future climate over Poland will be discussed.