



Scenarios of temperature extremes for Poland for the period 2021-2050 - comparison of two approaches

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Seven RCM simulations were taken into account. Five from ENSEMBLES project: METNOHIRHAM5 (HadCM3Q0), DMI-HIRHAM5 (ECHAM5-r3), KNMI-RACMO₂ (ECHAM5-r3), SMHIRCA (ECHAM5-r3), ICTP-REGCM3 (ECHAM5-r3), model CLM resolved in Max Planck Institute in Hamburg and WRF resolved at University of Lodz. Two model output statistic (MOS) methodologies were used: delta change method (DC) and bias correction method. Bias was assessed by comparison with observation data - daily mean, minimum and maximum temperatures from 40 measurement points in Poland.

In both cases correction were distribution based. In the bias correction the quintile-quintile method was used to obtain different corrections for different percentiles. In the DC method transfer function was related to the percentile also.

Results obtained by both methods were compared and the differences discussed.