

Validation of extremes within the Perfect-Predictor Experiment of the COST Action VALUE

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Extreme events are of widespread concern due to their damaging consequences on natural and anthropogenic systems. From science to applications the statistical attributes of rare and infrequent occurrence and low probability become connected with the socio-economic aspect of strong impact. Specific end-user needs regarding information about extreme events depend on the type of application, but as a joining element there is always the request for easily accessible climate change information with a clear description of their uncertainties and limitations.

Within the Perfect-Predictor Experiment of the COST Action VALUE extreme indices modelled from a wide range of downscaling methods are compared to reference indices calculated from observational data. The experiment uses reference data from a selection of 86 weather stations representative of the different climates in Europe. Results are presented for temperature and precipitation extremes and include aspects of the marginal distribution as well as spell-length related aspects.