



Gridded versus point data in the context of validation results from experiments of the COST action VALUE

Joanna Wibig (1), Sven Kotlarski (2), Douglas Maraun (3), Pedro Soares (4), Adam Jaczewski (5), Bartosz Czernecki (6), Jose Gutierrez (7), Rita Pongracz (8), and Judit Bartholy (8)

(1) University of Lodz, Lodz, Poland (zameteo@uni.lodz.pl), (2) Federal Office of Meteorology and Climatology MeteoSwiss, Switzerland, (3) University of Graz, Graz, Austria, (4) University of Lisbon, Lisbon, Portugal, (5) Institute of Meteorology and Water Management, Poland, (6) Adam Mickiewicz University of Poznan, Poznan, Poland, (7) Santander Meteorology Group, Santander, Spain, (8) Eotvos Lorand University, Budapest, Hungary

The aim of the paper is to compare the bias of selected ERA-Interim driven RCM projections when evaluated to gridded observation data (regridded to the same resolution as the considered RCM output) with those evaluated against station data to isolate the representativeness issue from the downscaling performance. The comparison has to be done for experiments of the COST action VALUE, so the same data period (1979-2008) and the same set consisting of 85 stations were used. As a gridded observations the EOBs data from the gridpoints closest to selected stations were used. The comparison was made for daily precipitation totals as well as daily minimum, maximum and mean temperature. A lot of indices were analysed to weigh up representativeness issues for marginal and temporal aspects. Relevant marginal aspects are described by average and extreme values distributions, whereas temporal aspects are presented by seasonality and length of extremes spells. Set of indices used in VALUE experiment 1 is calculated for each dataset (stations, EOBs, selected RCM outputs) and biases of RCM outputs against station and EOBs data are obtained and compared. Those with most significant changes are analysed in details.