



A comparison of regional climate variables between REMO, CRU, ECMWF, NCEP and ECHAM5 in European area

Y. Chen, M. Heimann and G. Churkina

Max-Planck Institute for Biogeochemistry, Jena, Germany (ychen@bgc-jena.mpg.de)

The data comparison between available data sets, namely REMO, CRU, ECMWF, NCEP as well as ECHAM5 were carried out. It is shown that the temperature has the best consistence among all the variables. The consistencies between ECHAM5, CRU and REMO are rather well for precipitation, which show obvious differences with ECMWF and NCEP. ECHAM5 shows stronger cloudiness and weaker radiation, which are opposite to REMO and ECMWF data sets. Data consistence for variables such as Tmax-Tmin; radiation; cloudiness; and VPD etc. are much worse than for temperature and precipitation variables. Finally a new data set, with its monthly and daily data and 0.25 degree grids available, was made through data combination from REMO, CRU and ECHAM5. This new data set could supply a good data possibility as climate forcing in ecosystem modelling.