



## **Comparison of wind field simulations with wind turbine energy yield data**

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Within the Project Landcare 2020, funded by the German Federal Ministry of Education and Research (BMBF), simulations for past and future climate scenarios will be performed to build a Decision Support System mainly for agricultural applications. These simulations are realized with the CLM model, the climate version of LM (Lokal Modell) of the German Weather Service (DWD). The simulation domain covers the area of Germany including parts of the North and Baltic. For the time period of 1995-2005 NCEP/NCAR reanalysis data are used as forcing data. Consortial Runs for the climate scenarios A1B and B1 force the model calculations for the time period from 2015-2025.

The wind fields from the control simulations are compared to the energy production of wind turbines and the correlation will be used to estimate the wind farm behaviour under climate scenario conditions.

Differences and problems when using wind turbine output data instead of wind speed measurements will be discussed.