Baltic-C Meta-data-set:

Model forcing: Scenario RCM data to the LPJ-GUESS model

1.) General description of the data set:

Daily data, including 2-m temperature, soil temperature, precipitation and downward shortwave radiation. These are taken from coupled atmosphere—ocean general circulation models (AOGCM) dynamically downscaled by the regional climate model (RCM) RCA3. The AOGCMs are ECHAM5/OPYC3, HadCM3 and CCSM3 with the greenhouse gas emission scenarios A1B, A2 and B1. The data are derived as input to the vegetation model LPJ-GUESS.

2.) Created:

December, 2009.

3.) Last update:

December, 2009.

4.) Keywords:

Climate scenarios, Baltic Sea catchment, LPJ-GUESS, RCA3.

5.) Area:

Baltic Sea catchment area.

6.) Spatial extension:

A rectangular box including the Baltic Sea catchment area.

7.) Spatial resolution:

0.44° grid (50 x 50 km).

8.) Time window:

1961-2100.

9.) Temporal resolution:

Daily.

10.) Data and arrays:

GRIB files of 2-meter temperature, soil temperature, precipitation and downward shortwave radiation.

11.) Reference to other data sets:

Dynamically downscaled climate simulation with ECHAM5/OPYC3 (A1B, A2, B1), HadCM3 (A1B) and CCSM3 (A1B) using RCA3. Data derived from scenario simulations from the ENSEMBLES project (http://www.ensembles-eu.org/) and Rossby centre at SMHI (http://www.smhi.se/en/Research/Research-departments/climate-research-rossby-centre).

12.) Data quality (degree of validation):

Model simulations.

13.) Where to find the data?

Due to data volume, data available from contact persons.

14.) Contact persons:

Dr. Björn Carlsson Uppsala University, Department of Earth Sciences Villavägen 16 SE-752 36 Uppsala, Sweden

Email: Bjorn.Carlsson@met.uu.se

Dr. Anna Rutgersson Uppsala University, Department of Earth Sciences Villavägen 16 SE-752 36 Uppsala, Sweden

Email: <u>Anna.Rutgersson@met.uu.se</u>