

Interactive comment on “High resolution atmospheric reconstruction for Europe 1948–2012: coastDat2” by B. Geyer

Anonymous Referee #1

Received and published: 15 January 2014

General comments:

The author introduces the dataset coastDat2, which is an upgrade of coastDat1. The dataset is the result of the application of one of the recent versions of the Regional Climate Model (RCM) COSMO-CLM (CCLM), forced by NCEP1 reanalysis. The version of the model is appropriate for the tackled task. For the entire region of Europe, including the Baltic and North Sea and parts of the Atlantic, 103 three variables have been stored hourly. All variables, which are available from the World Data Centre for Climate (WDCC), Hamburg, are indicated in Table 3. One exception exists, namely the variable TOT_SNOW. But I assume that it has not been stored on the server because it can be calculated as the sum of SNOW_CON and SNOW_GSP. Furthermore, all those three-dimensional data are available from WDCC, which are needed for further down-

C278

scaling in order to perform more regional studies with even higher spatial resolution. All data are stored in NetCDF format, which is state of the art. The temporal extension until 2012 and the higher spatial resolution of 0.22° (≈ 25 km) are pointed out as the advantages of the coastDat2 dataset. From the point of view of the major users of such dataset (50% commercial, and 25% authorities, as indicated in the paper) these advantages might be sufficient. However, from a scientific point of view it would be interesting to discuss whether the higher spatial resolution improved the quality of the data (see also Specific Comments).

In summary, I recommend the publication of the paper after the processing of the specific comments and the corrections of typing errors.

For specific comments see the supplement.

Please also note the supplement to this comment:

<http://www.earth-syst-sci-data-discuss.net/6/C278/2014/essdd-6-C278-2014-supplement.pdf>

Interactive comment on Earth Syst. Sci. Data Discuss., 6, 779, 2013.