EASYDAB (Earth System Data Branding) for FAIR and Open Data

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As in many scientific disciplines, there are a variety of activities in Earth system sciences that address the important aspects of good research data management. What has not been sufficiently investigated and dealt with so far is the easy discoverability and re-use of quality-checked data. This aspect is taken up by the EASYDAB label.

EASYDAB¹ is a currently developed branding for FAIR and open data from the Earth System Sciences. The branding can be adopted by institutions running a data repository which stores data from the Earth System Sciences. EASYDAB is always connected to a research data publication with DataCite DOIs. Data published under EASYDAB are characterized by a high maturity, extensive metadata information and compliance with a comprehensive discipline-specific standard. For these datasets, the EASYDAB logo is added to the landing page of the data repository. Thereby, repositories can indicate their efforts to publish data with high maturity.

The first standard made for EASYDAB is the ATMODAT standard², which has been developed within the AtMoDat³ project (Atmospheric Model Data). It incorporates concrete recommendations and requirements related to the maturity, publication and enhanced FAIRness of atmospheric model data. The requirements are for rich metadata with controlled vocabularies, structured landing pages, file formats (netCDF) and the structure within files. Human- and machine-readable landing pages are a core element of the ATMODAT standard and should hold and present discipline-specific metadata on simulation and variable level.

The ATMODAT standard includes checklists for the data producer and the data curator so that the compliance with the standard can easily be obtained by both sides. To facilitate automatic checking of the netCDF files headers, a checker program will also be provided and published with DOI. Moreover, a checker for the compliance with the requirements for the DOI Metadata will be developed and made openly available.

The integration of standards from other disciplines in the Earth System Sciences, such as oceanography, into EASYDAB is helpful and desirable to improve the re-use of reviewed, high-quality data.

¹www.easydab.de