EASYDAB (Earth System Data Branding): Enhancing the Findability and the Reuse of FAIR and Open Data

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Abstract

Even though in Earth System Sciences (ESS) the importance of good research data management has been widely discussed, the easy discoverability of quality-checked data has not yet been addressed in detail. This is the aim of the Earth System Data Branding (EASYDAB). EASYDAB is a branding to highlight FAIR and open data from Earth System Sciences that are published with DataCite DOIs. The EASYDAB guideline defines principles on how to achieve high metadata quality of ESS datasets by demanding specific metadata information. The EASYDAB logo is protected and may only be used by repositories that agree to follow the EASYDAB terms. The logo indicates that published data have an open licence, open file formats and rich metadata information. Quality controls by the responsible repository ensure that these conditions are met. For the control, the repository can choose between different approved quality guidelines such as e.g. the ATMODAT Standard, ISO 19115 or the OGC Geopackage Encoding Standard. Ideally, a quality guideline provides detailed mandatory and recommended specifications for rich metadata in the data files, the DataCite DOI and the landing page. One example of such a quality guideline is the ATMODAT standard, which has been developed specifically for atmospheric model data (AtMoDat project). In addition to the metadata specifications, it also demands controlled vocabularies, structured landing pages and specific file formats (netCDF). The ATMODAT standard includes checklists for data producers and data curators so that compliance with the requirements can easily be obtained by both sides. To facilitate an automated compliance check of the netCDF files metadata, a Python tool has also been developed and published. The automated checking of the quality principles enables a simplified control of the data by the repository. Nevertheless, repositories can also use checklists for the curation of the data. The overall aim of the curation of EASYDAB datasets shall always be the enhancement of the reuse of reviewed, high-quality data. Therefore, EASYDAB shows scientists the way to open and FAIR data while it enables repositories to indicate their efforts in publishing data with high maturity.

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Motivation

Many data publications in Earth System sciences nowadays have a **DataCite DOI**.

However, only a few can be easily found and/or reused

Frequently, data producers are either unaware of the FAIR principles or don't know how to comply with them. Only a few data repositories check the quality and the FAIRness of the (meta)data.

FASYDAB Guidelines

EASYDAB guidelines: contain requirements for certified quality guidelines.

Quality guidelines: define, how quality of metadata is controlled.

ATMODAT Standard: first accepted EASYDAB quality guideline

- easy to implement and
- provides checklists for data curators and data producers.

A dataset that complies with this standard:

- · follows the FAIR principles.
- · has high-quality metadata.

atmodat data checker: tests the compliance of the metadata with the ATMODAT Standard.

EASYDAB = Earth System Data Branding



highlights quality controlled, FAIR and open data

Advantages of data publication with EASYDAB

Data producer show that data comply with discipline-specific metadata standards.

Repositories indicate that archived data have been curated.

Data user easily identify data that are reusable, open and interoperabel because of data curation.

EASYDAB datasets will stand out from others, making them more attractive to download, use and cite.

How does EASYDAB work?

EASYDAB is a quality seal.

The use of the logo is free of charge, but it is registered and only useable by repositories with a contract.

The logo will be displayed

- · on landing pages of datasets with a DataCite DOI,
- only if (meta)data are quality controlled and are according to the EASYDAB Guideline.



Do you want to know more?

EASYDAB Homepage



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