

CATALOGUE OF LONG-TERM ECOSYSTEM RESEARCH AND MONITORING SITES

DEIMS-SDR is one of the most comprehensive publicly available catalogues of long-term ecosystem research and monitoring sites in the world. It was created to reduce fragmentation and to increase the findability, interoperability, and accessibility of in-situ sites and data. Today, DEIMS-SDR contains detailed site information of about 700 eLTER sites in Europe as well as sites outside of Europe, and offers access to long-term time series of environmental data.



DEIMS-SDR offers a FAIR representation

The Dynamic Ecological Information Management System – Site and Dataset Registry (**DEIMS-SDR**), as part of the eLTER IT infrastructure, is a catalogue of long-term ecosystem research and monitoring sites. Structured and well-organised metadata provides details of each site's location, activities, sensors, observations, and used devices, etc, making it easier to find and cross reference information across sites worldwide. Each site is assigned a persistent and unique identifier (DEIMS.ID), making it possible to reference sites and data across infrastructures and networks. The DEIMS.ID even enables a "FAIR" representation of each site in research publications, reports, and presentations, and makes data and information available and re-usable to a broader audience.

DEIMS-SDR is open to the public

DEIMS-SDR data is shared under the CC BY-NC 4.0 International licence (CC BY-NC 4.0 International, 2021), enabling free use of the information while at the same time ensuring appropriate credit for the system and its data providers. In-

formation about sites and observational data available on DEIMS-SDR is provided by site and platform coordinators and managers of research networks. Periodic requests to both coordinators and managers help to ensure the data is kept accurate and up to date. These manual inputs can be complemented by automatically calculated data such as the biogeographical region (provided by **EEA**) of each site, and statistics on e.g. temperature, and precipitation (**E-OBS** provided by Copernicus Climate Change Service (C3S)).

DEIMS-SDR enables user friendly data discovery

Information in DEIMS-SDR can be discovered through a keyword-based and faceted search interface and also by a site map. Automatic extraction of all information that is available about a site on DEIMS-SDR is also possible using an available REST-API. These data are exposed in a common data format (JSON) that allows seamless parsing and further working with those data without any restriction. Furthermore, other services such as WFS or CSW and a dedicated DEIMS python package are also used to share data. Efforts in supporting additional formats, such as the Data Catalog Vocabulary (DCAT), are currently being undertaken.



DEIMS-SDR addresses different users

DEIMS-SDR brings together available information on sites and data and makes it available to higher education and research communities, for instance for carrying out large scale scientific analysis and modelling (Mollenhauer et al., 2018; Wohner et al., 2021; Zilioli et al., 2019) or as the source of input data for processing large-scale datasets (Rennie et al., 2021). It has been used in a number of European Union (EU) funded projects, such as eLTER PLUS, e-shape, ENVRI-PLUS and ENVRI-FAIR.

Other users of DEIMS-SDR are site and platform coordinators that use it to increase the discoverability and visibility of their site and to share their data to the wider public, attracting funding and site investments. Earth Observation agencies can use DEIMS-SDR to discover sites and in-situ data for calibration and validation of satellite products. And finally, DEIMS-SDR also gives decision makers access to detailed information and data for making sound decisions to mitigate human impacts on ecosystems.

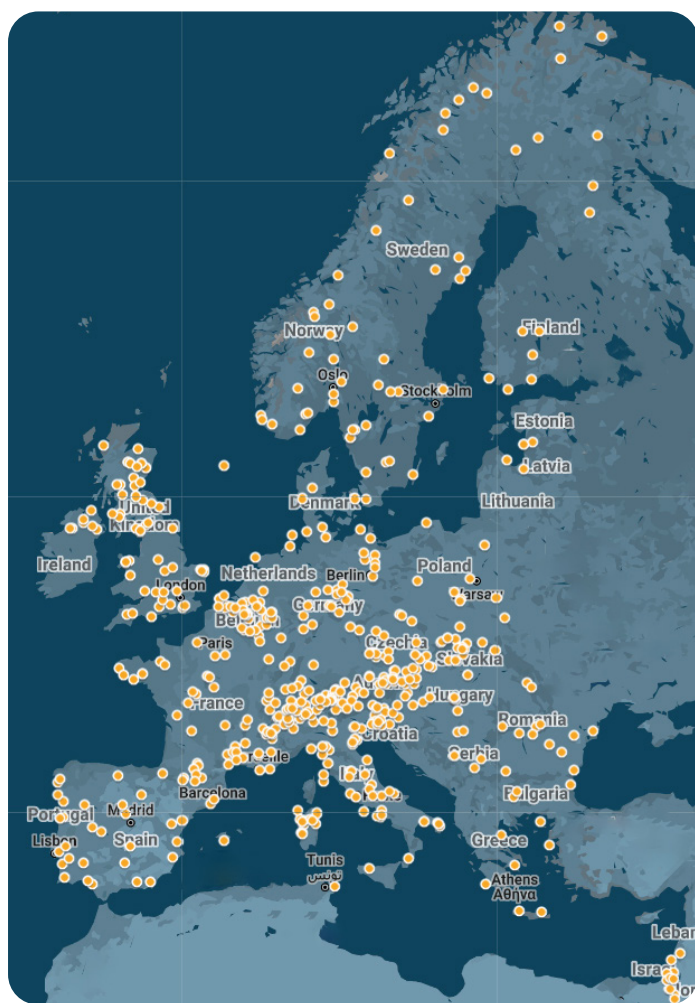


Fig 1: Map of eLTER sites described in DEIMS-SDR (generated with Google maps)

DEIMS.ID: <https://deims.org/8eda49e9-1f4e-4f3e-b58e-e0bb25dc32a6>

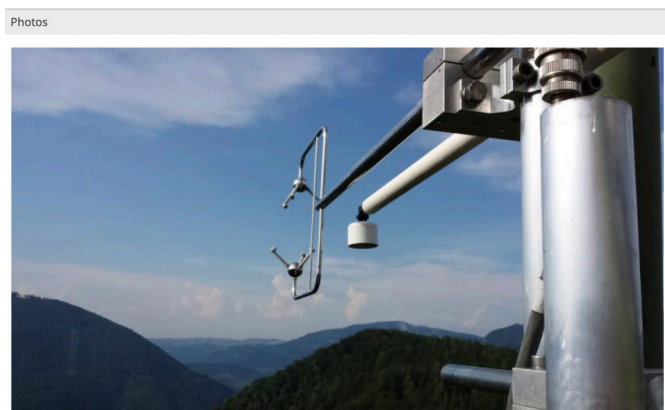
Basic Information

Site Name: LTER Zöbelboden
Short name: Zöbelboden
Country: Austria
Web Address: [Zöbelboden \(german long version\)](#)
[Zöbelboden Video on Youtube](#)
[ResearchGate project page with all publications, news, etc](#)
Parent Site Name: [LTER Platform Eisenwurzen \(EW\) - Austria](#)
Site Manager: [Gisela Proell](#)
[Thomas Dirnböck](#)
Operating Organisation: [Environment Agency Austria \(EAA\)](#)
Funding Agency: [Environment Agency Austria \(EAA\)](#)
Site Description: The Zöbelboden was established in 1992 as the only Integrated Monitoring station in Austria under the UN Convention on long-range transboundary air pollution (CLRTAP). In 2006 it became part of LTER Austria. The Zöbelboden covers a small forested catchment (90 ha) of a karstic mountain range (500 to 950 m above sea level) in the Kalkalpen National Park. Monitoring and research is focussing on climate change effects on forest ecosystems, the forest carbon and nitrogen cycle, biodiversity, and air pollution effects on forested catchments. The Zöbelboden represents one of the best known karst catchments in Europe with long-term data series of the major components of its ecosystems. The site is part of many national and international ...
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Last modified: 2022-12-07 11:12:26

General Characteristics and Status

Site Status: Operational
Year Established: 1992
Observed properties

ecosystem parameter	soil parameter	atmospheric parameter	biological parameter
chemical parameter	water parameter	landscape parameter	physical parameter
environmental parameter			



Eddy covariance measurements

Fig 2: Example of a site representation in DEIMS-SDR

Visit DEIMS-SDR to access information on research sites and in-situ data. If you are a site manager, register your site to become part of the growing catalogue and reach new audiences for your site and data.

References

- <https://deims.org>
- <https://elter-ri.eu/deims-sdr>
- DEIMS-SDR: share and discover long-term ecosystem sites and data**

