

HELMHOLTZ EARTH & ENVIRONMENT DATAHUB

Collaborative Approach for a Common Research Data Infrastructure

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Our Mission

- Link data across all compartments
- One access approach
- Enable researchers to collaborate and interact with data
- Harmonize FAIR based research data management

Our Solution

Our Infrastructure

State-of-the-art, highly usable self-services for

- Sensor and device management with SMS or O2A
- Configuration of data ingest for time series management systems of centres
- Quality control / flagging using jointly developed and used tools , e.g. SaQC (System for automated Quality Control)

Central joint data interface

- OGC SensorThings API (STA)
- Domain-specific homogenized JSON-LD schemas inspired by schema.org and developed in the HMC project STAMPLATE
- Interfaces to European research infrastructure data centres (e.g. eLTER, ACTRIS, ICOS)

Earth Data Portal as single-entry point for Helmholtz earth data

- Data product catalogue
- Tool and service directory
- Infrastructure data spotlights
- Highly customizable viewers
- Branded portals

Implementations, Outreach and Embedding

- Blueprint for integrating existing resources into the DataHub
- Visibility of domain specific data in the Hub by branded portals
- Compatibility beyond domains by automated data flows from sensors into the DataHub
- Integration of data into automated modelling chains
- Co-development of resources for DataHub and ENVRI-Hub at the European level.