+100
Data providers

2 Millions approx
data sets

SeaDataCloud

32 Countries

SeaDataCloud PARTNERS

IFREMER France (Coordinator)
MARIS Netherlands (Technical Coordinator)

NERC-BODC United Kingdom
BSH Germany
SMHI Sweden
IEO Spain
HCMR Greece
OGS Italy
RIHMI-WDC Russian Federation
ENEA Italy
INGV Italy
METU-IMS Turkey
AWI Germany
ULG Belgium
IMR Norway
AU-DMU Denmark
ICES Denmark
EU-JRC Belgium
MI Ireland
IHPT Portugal
NIOZ Netherlands
RBINS Belgium
VLIZ Belgium
MRI Iceland
FMI Finland
IMGW Poland
MSI Estonia
LHEI Latvia
SIO-RAS Russian Federation

IO-BAS Bulgaria
NIMRD Romania
TSU-DNA Georgia
IOF Croatia
NIB Slovenia
UOM Malta
IOLR Israel
CNR Italy
IO PAN Poland
CSIC Spain
Deltares Netherlands
SYKE Finland
UkrSCES Ukraine
ETT Italy
EUROGOOS Belgium
DKRZ Germany
CINECA Italy
CSC Finland
STFC United Kingdom
GRNET Greece
UiB Norway
GEOMAR Germany
52°North Germany
SHOM France
ORION Cyprus
CNRS France
UNIBO Italy

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Learn more about our services by visiting our website:

www.seadatanet.org

A European multidisciplinary marine and oceanographic data infrastructure

SeaDataCloud
enhancing the SeaDataNet infrastructure

OBJECTIVES

SeaDataCloud aims to better the pre-existing SeaDataNet infrastructure, a European semi-distributed multidisciplinary marine and oceanographic data infrastructure that provides integrated data sets of standardised quality, as well as an overview of marine organisations, research and monitoring activities related to the European waters.

The infrastructure connects a set of nodes that are geographically distributed, with the central portal. SeaDataNet is a common framework of international standards designed in collaboration with data users to enable the easy sharing of ocean data in an effective and interoperable way. To make the data re-use possible, potentially on a global scale, SeaDataCloud collaborates with the most important international data management systems in the world.

ON GOING ACTIVITY

The infrastructure is in expansion with new kinds of data whose formats will be developed in compliance to ISO, OGC and W3C standards. Thanks to the innovation in new technology, the infrastructure will offer new advanced services for users and data providers by adopting cloud and High Performance Computing (HPC).

CLOUD SERVICES

SeaDataCloud will develop a wide range of services in the cloud, from the data ingestion services for publishing observation data streams to the ODV (Ocean Data View) online services, the DIVA (Data
Interpolating Variational Analysis) software online, advanced visualisation tools for data streams from operational sensors and platforms, advanced sub-setting service for capturing only the data we want and many others.

The infrastructure is flexible and scalable to ingest new instruments and new terms in the controlled vocabularies. Furthermore, to facilitate the harmonisation of data from many different sources, online data format transformation services will be developed.

VIRTUAL RESEARCH ENVIRONMENT

To facilitate collaborative and individual research by users, a Virtual Research Environment will be available so that users can use a collection of services and tools and have a personalised access by using the MySeaDataCloud access service. The latter will provide a better service integration, on the basis of individual needs, maintaining the search profile of the users and will provide alerts of new available data.

SERVICES FOR PORTAL USERS

SeaDataNet users have free access to discovery service, marine data and related services (see scheme on the right). The discovery service is available without logging in, whereas the downloading service needs to go through the login process. The users are also required to agree with the terms of the SeaDataNet license.

SeaDataNet will develop advanced services to enhance the experience and give users access to online processing, analysis and visualisation tools.

SERVICES FOR DATA PROVIDERS

The portal offers tools and support to data providers to increase the data and metadata SeaDataNet core services.

A RESOURCE FOR LONG TERM DATA ARCHIVING

If you wish to contribute with your data for future research it should be delivered to a reliable platform for long term preservation. This means that data and metadata have to be prepared according to current standards.

SeaDataCloud is equipped to provide a cloud storage environment with a high degree of redundancy and geographically distributed backup. The infrastructure and its main services have been active since 2006 and will continue on an operational basis, being the engine for many other EU marine data management portals as well.

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controlled vocabularies

analysis and visualisation tools

oceanographic data

standards

data sharing

METADATA SERVICES
CSR = Cruise Summary Reports
EDMED = European Directory of Marine Environmental Data
EDMERP = European Directory of Marine Environmental Research Projects
EDIOS = European Directory of Initial Ocean-observing Systems
EDMO = European Directory of Marine Organisations

PRODUCTS
AGGREGATED DATA SETS
CLIMATOLOGIES

DATA SERVICES
Common Data Index (CDI)
Data Discovery &
Access service

Coming soon......

CLOUD SERVICES
VIRTUAL RESERACH ENVIRONMENT
MySeaDataCloud ACCESS SERVICE