



SeaDataCloud

Overview of the product catalogue

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4th Annual Meeting, Oct 29-30, 2020
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Stages of product publishing

	Development of the product
	Producing Product Information Document (PIDoc)
	Creating metadata description in Sextant catalogue
	Obtaining DOI for the product and for PIDoc
	Activating product in Sextant - making it available to public

Temperature & Salinity Data Products

	Aggregated dataset		Climatology*	
	SDC V1	SDC V2	SDC V1	SDC V2
Arctic Ocean	Development	Development	Published	Development
Baltic Sea	Development	Development	Published	Development
Black Sea	Development	Development	Published	Development
Global Ocean	Development	Development	Published	Development
Mediterranean Sea	Development	Development	Published	Development
North Atlantic Ocean	Development	Development	Published	Development
North Sea	Development	Development	Published	Development

Development
PIDoc
Sextant
DOI
Published

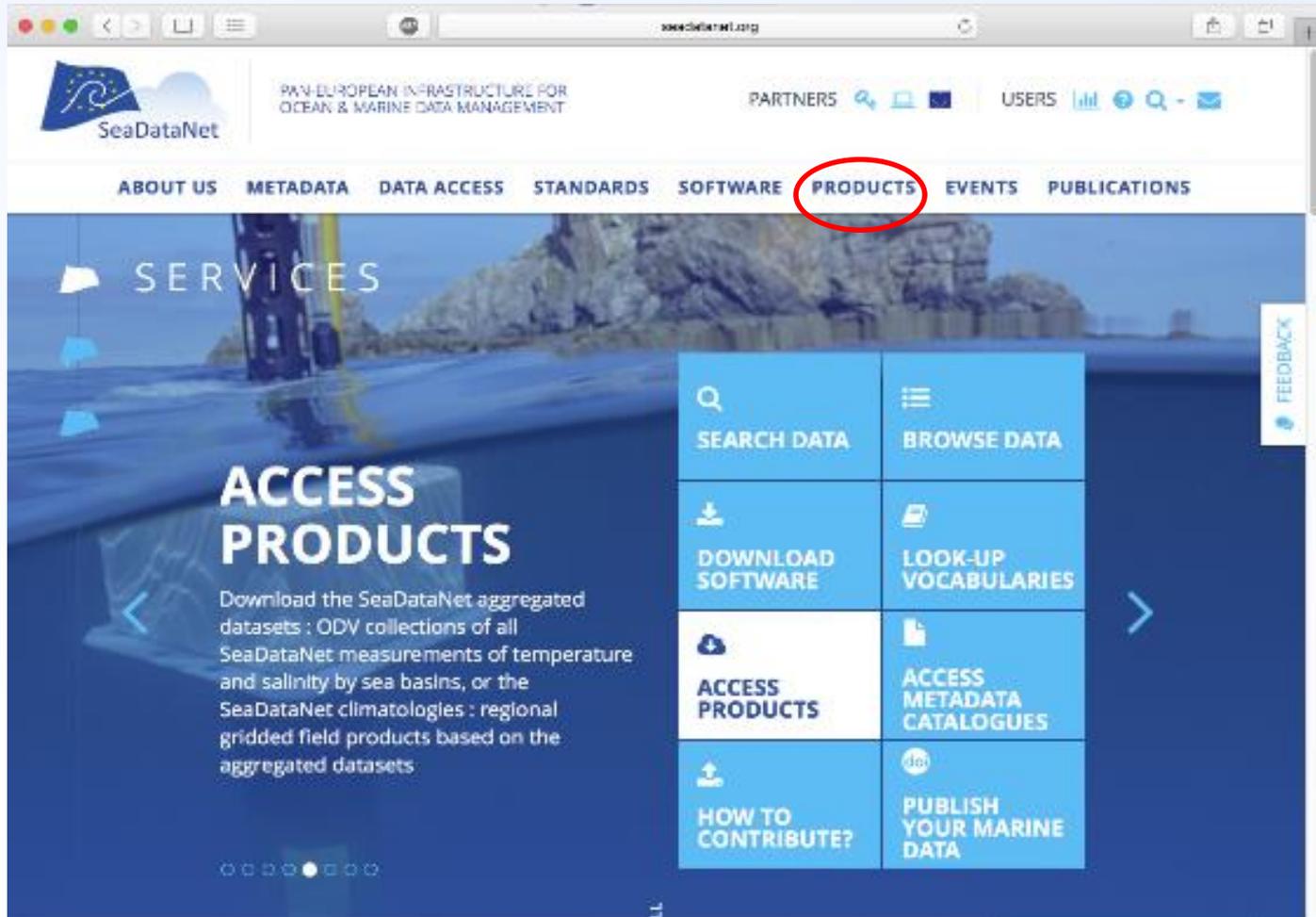
*Based on data from SeaDataNet and external data sources: WOD and CORA

New Data Products

Product	Status
Baltic Sea: statistical estimates	DOI
Black Sea: CIL Cold Content	DOI
Global Ocean: mixed index, AOU	Development
Mediterranean Sea: MLD, Ocean Heat Content	Development
North Atlantic Ocean: MLD	DOI
North Sea: statistical estimates	Development
Iberia-Ibiza Channel: Currents climatologies from HF radars	DOI

Development	PIDoc	Sextant	DOI	Published
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Accessing data products



The screenshot shows the SeaDataNet website interface. The top navigation bar includes the SeaDataNet logo, the text "PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT", and links for "PARTNERS" and "USERS". Below this is a secondary navigation bar with the following menu items: "ABOUT US", "METADATA", "DATA ACCESS", "STANDARDS", "SOFTWARE", "PRODUCTS" (circled in red), "EVENTS", and "PUBLICATIONS".

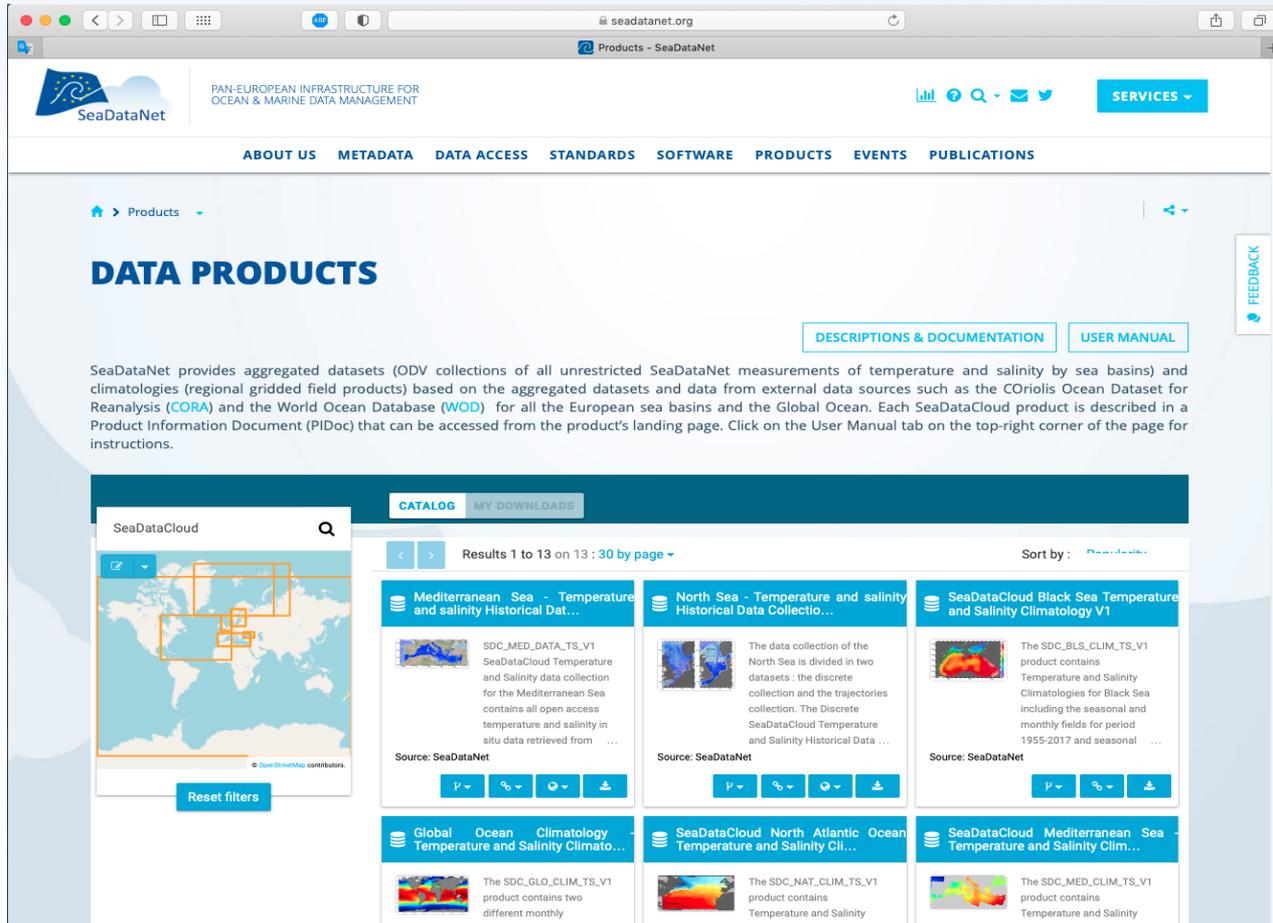
The main content area features a large blue banner with the text "SERVICES" and "ACCESS PRODUCTS". Below "ACCESS PRODUCTS" is a paragraph: "Download the SeaDataNet aggregated datasets : ODV collections of all SeaDataNet measurements of temperature and salinity by sea basins, or the SeaDataNet climatologies : regional gridded field products based on the aggregated datasets".

To the right of the banner is a grid of eight blue buttons with white text and icons:

- SEARCH DATA (magnifying glass icon)
- BROWSE DATA (list icon)
- DOWNLOAD SOFTWARE (download icon)
- LOOK-UP VOCABULARIES (book icon)
- ACCESS PRODUCTS (cloud with download icon)
- ACCESS METADATA CATALOGUES (document icon)
- HOW TO CONTRIBUTE? (upload icon)
- PUBLISH YOUR MARINE DATA (publish icon)

A "FEEDBACK" button is visible on the right side of the banner area. At the bottom of the banner, there are navigation arrows and a series of small circles indicating the current slide position.

Sextant web catalogue



The screenshot displays the SeaDataNet website's 'DATA PRODUCTS' section. The browser address bar shows 'seadatanet.org'. The page header includes the SeaDataNet logo and the text 'PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT'. A navigation menu contains links for 'ABOUT US', 'METADATA', 'DATA ACCESS', 'STANDARDS', 'SOFTWARE', 'PRODUCTS', 'EVENTS', and 'PUBLICATIONS'. The main content area features a 'DATA PRODUCTS' heading, a 'FEEDBACK' button on the right, and two buttons for 'DESCRIPTIONS & DOCUMENTATION' and 'USER MANUAL'. A paragraph explains that SeaDataNet provides aggregated datasets (ODV collections) of all unrestricted SeaDataNet measurements of temperature and salinity by sea basins and climatologies (regional gridded field products) based on the aggregated datasets and data from external data sources such as the CORIOLIS Ocean Dataset for Reanalysis (CORA) and the World Ocean Database (WOD) for all the European sea basins and the Global Ocean. Each SeaDataCloud product is described in a Product Information Document (PIDoc) that can be accessed from the product's landing page. Click on the User Manual tab on the top-right corner of the page for instructions.

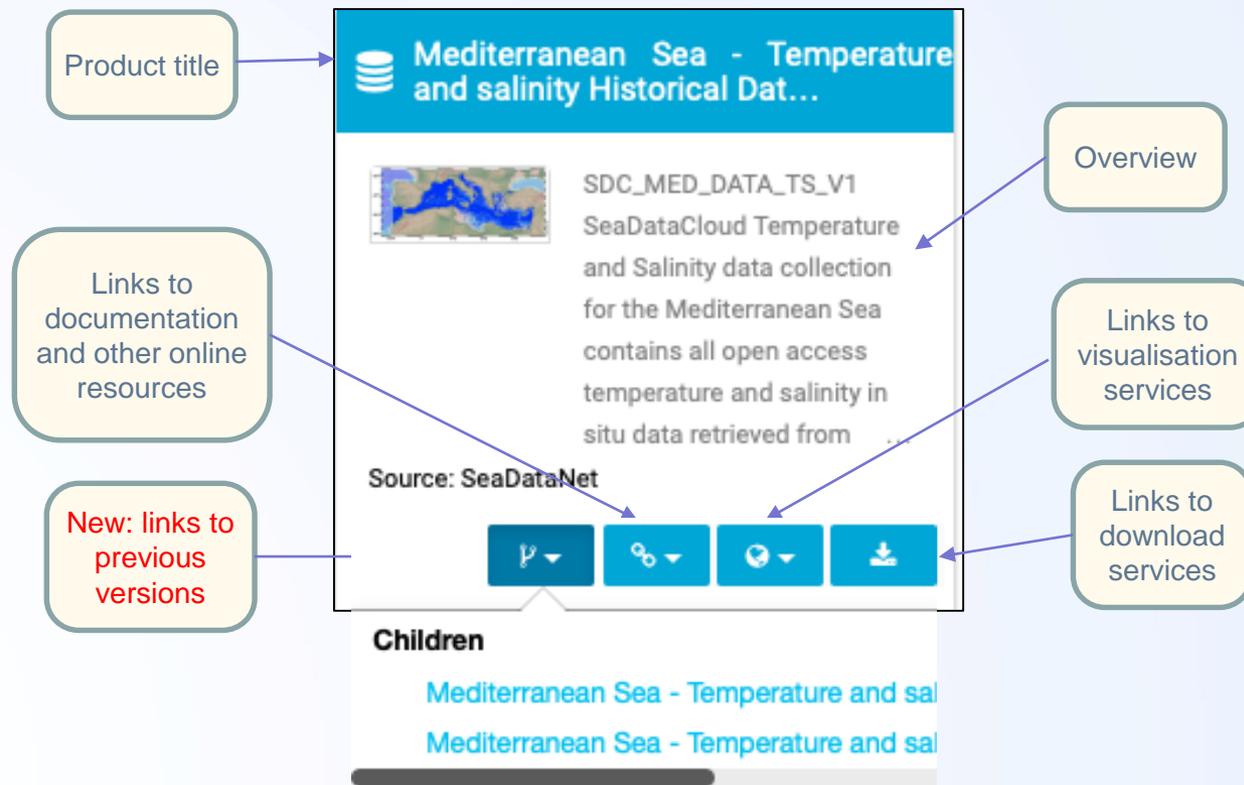
The main content area displays a grid of product cards under the heading 'DATA PRODUCTS'. The grid is filtered to show 'Results 1 to 13 on 13: 30 by page'. The products listed include:

- Mediterranean Sea - Temperature and salinity Historical Data Collection
- North Sea - Temperature and salinity Historical Data Collection
- SeaDataCloud Black Sea Temperature and Salinity Climatology V1
- Global Ocean Climatology Temperature and Salinity Climatology
- SeaDataCloud North Atlantic Ocean Temperature and Salinity Climatology
- SeaDataCloud Mediterranean Sea Temperature and Salinity Climatology

Each product card includes a small thumbnail image, a title, a brief description, and the source 'SeaDataNet'. A search bar on the left side of the grid is labeled 'SeaDataCloud' and has a 'Reset filters' button below it. The grid also includes a 'CATALOG' and 'MY DOWNLOADS' tab at the top, and a 'Sort by' dropdown menu on the right.

Product description in Sextant

In Sextant catalogue interface, each product is presented in an individual frame



Product description (metadata) in Sextant

☰ Baltic Sea - Temperature and salinity Historical Data collection SeaDataCloud V1

🔗 Export
↶ Back

IDENTIFICATION

DATA IDENTIFICATION

Title

Overview

External shortname

Metadata language

Credit

Date (Creation)

INSPIRE THEME AND KEYWORDS

Topic category

GEMET - INSPIRE themes, version 1.0

SeaVoX salt and fresh water body gazetteer

Baltic Sea - Temperature and salinity Historical Data collection SeaDataCloud V1

The SeaDataCloud Temperature and Salinity historical data collection for the Baltic Sea includes open access in situ data on temperature and salinity of water column. The data were retrieved from the SeaDataNet infrastructure at the end of 2017. Data have been quality controlled according to the SeaDataNet2 project QC procedures in conjunction with the visual expert check using the ODV software. The final number of stations in the collection is 407456, containing around 13.7 million values for both temperature and salinity. The dataset format is ODV binary collection which you can read, analyse and export from with the ODV application provided by the Alfred Wegener institute at <http://odv.awi.de/>.

For data access please register at <http://www.marine-id.org/>.

SDC_BAL_DATA_TS_V1

English

SeaDataNet

18 Apr 2018

Oceans

[Oceanographic geographical features](#)

[Bay of Bothnia](#)

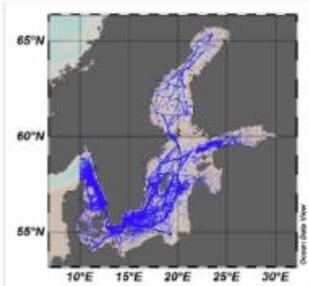
[Baltic Sea](#)

[Gulf of Finland](#)

[Gulf of Bothnia](#)

DATA ACCESS

🔗
🔄
📄



10°E 15°E 20°E 25°E 30°E

55°N 60°N 65°N

© Alfred Wegener Institute

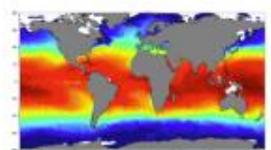
Product DOI

Global Ocean Climatology - Temperature and Salinity Climatology V1

Date(s)	2019-06-18 (Creation)
Author(s)	Karwal Shahzad ¹ , Nadia Pinardi ¹ , Vladislav Lyubartsev ² , Simona Simoncelli ³ , Marco Zavatarelli ¹
Custodian(s)	IFREMER / IDM / SISMER - Scientific Information Systems for the SEA
Originator(s)	NOAA / Wdc For Oceanography
Resource provider(s)	Alma Mater Studiorum - Universita Di Bologna
Affiliation(s)	1 : University of Bologna, Department of Physics and Astronomy (DIFA) 2 : Euro-Mediterranean Center on Climate Change CMCC 3 : Istituto Nazionale di Geofisica e Vulcanologia, Sezione di Bologna
Credit	SeaDataNet
Version	1.0
DOI	10.12770/f632d0d4-3373-43a4-a6be-d2109ebe0177
Abstract	The SDC_GLO_CLIM_TS_V1 product contains two different monthly climatologies for temperature and salinity, SDC_GLO_CLIM_TS_V1_1 and SDC_GLO_CLIM_TS_V1_2 from the World Ocean Data (WOD) database. Only the basic quality control flags from the WOD are used. The climatology, V1_1, considers temperature and salinity profiles from Conductivity Depth Temperature (CTD) profilers, Ocean station data (OSD) and Moored buoy data (MRB) along with Profiling Floats (PFL) from 1900 to 2017. The climatology, V1_2, utilizes only PFL data from 2003 to 2017. V1_1 considers depth layers from surface to 6000 m while V1_2 only from 0 to 2000 m. The gridded fields are computed using DMAnd (Data Interpolating Variational Analysis) version 2.3.1.
Keywords	Oceanographic geographical features, Temperature of the water column, Salinity of the water column, ITS-90 water temperature, Water body salinity, Pacific Ocean, Arctic Ocean, Atlantic Ocean, Indian Ocean
Lineage	The data used as input for this product have been extracted from the World Ocean Database 2013 (https://www.nodc.noaa.gov/OCS/WOD/pr_wod.html). Only basic quality control flags from the world ocean database have been used for this product. WOD has three types of quality flags i.e. 1-Individual observation value flag whose value, 2-Profile value flag that is assigned during the computation of World Ocean Atlas, 3-Originator flag. In this analysis, 1 and 2 are used with a quality flag value
Utilisation	For data access please register at http://www.marine-id.org https://sextant.ifremer.fr/eng/Data/Catalogue#/metadata/f632d0d4-3373-43a4-a6be-d2109ebe0177 Usage is subject to mandatory citation: "Reference to the resource". This resource was generated in framework of the SeaDataCloud project, EC H2020 grant #730960."
Temporal Extent	1900-01-01 - 2017-12-31
Data	ftp://ftp2.ifremer.fr/public/seadatanet-global_ocean-temperaturesalinity_climatologie/SDC_GLO_CLIM_TS_V1/

Download link

Access to data and metadata



Is cited by

Shahzadi Karwal, Pinardi Nadia, Lyubartsev Vladislav, Zavatarelli Marco, Simoncelli Simona (2019). SeaDataCloud Temperature and Salinity Climatology for the Global Ocean (version 1). Product Information Document (PIDoc).

Link to PIDoc

How to cite

Karwal Shahzadi, Nadia Pinardi, Vladislav Lyubartsev, Simona Simoncelli, Marco Zavatarelli (2019). Global Ocean Climatology - Temperature and Salinity Climatology V1. <https://doi.org/10.12770/f632d0d4-3373-43a4-a6be-d2109ebe0177>

Product Information Document (PIDoc)

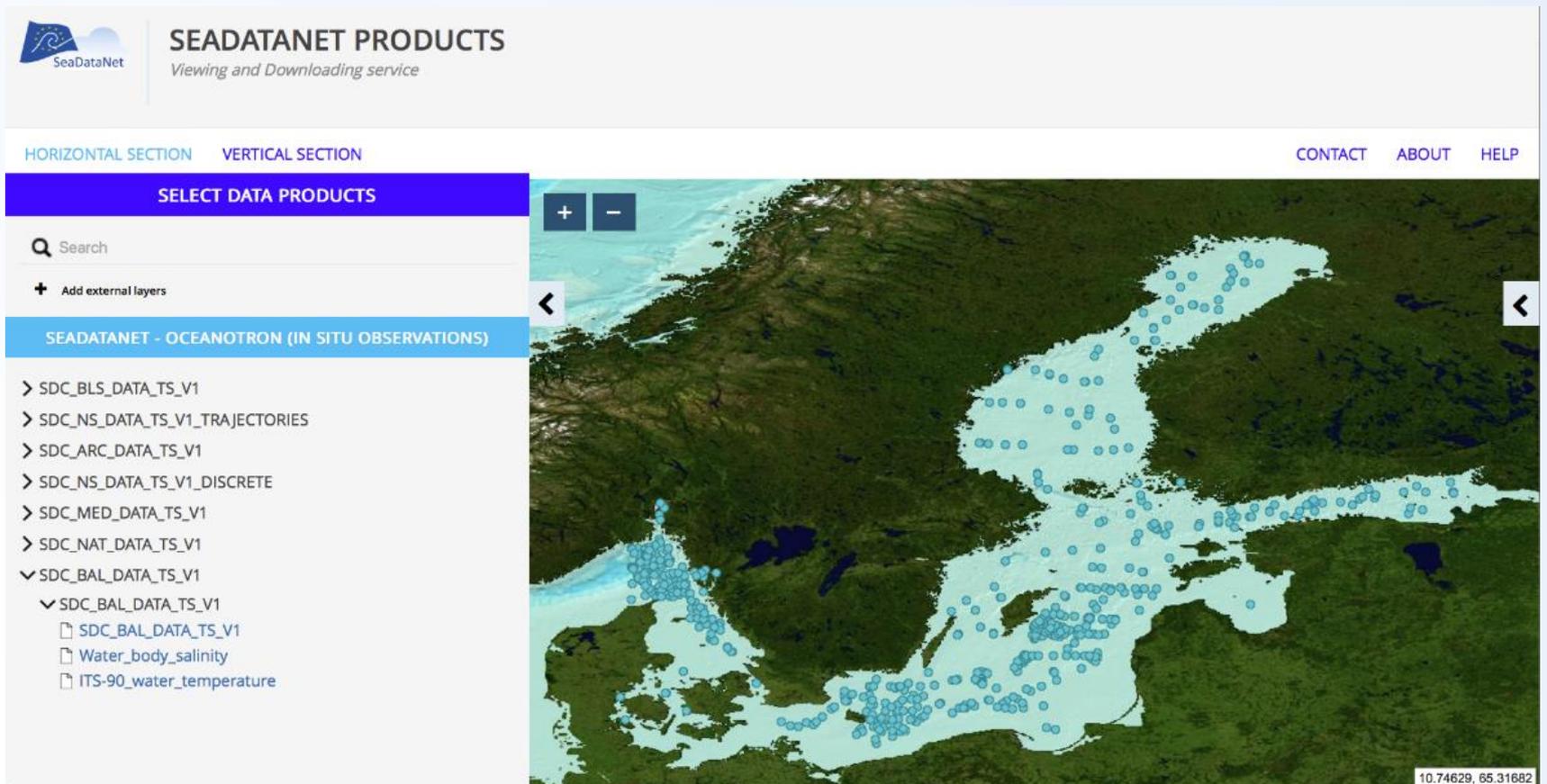
- Aggregated datasets
 - General description of data collection
 - QC procedures
 - Quality assessment results
 - Technical specifications
 - Statistics per data originator/custodian
- Climatology
 - Source datasets
 - Methodology
 - Results
 - Consistency analysis
 - Technical specifications

Product visualisation

- Goals
 - provide user with a quick hint on what is the product about,
 - provide user with the possibility for a deeper view of the product and even for its online analysis.
- Tools
 - **Oceanotron** – the tool to visualise observations data from the aggregated datasets.
 - **OceanBrowser** – the web-service that allows to visualise gridded 4-D fields on-line
 - **ERDDAP** - the web-service that allows to subsample and preview data products on-line

Data Collection in Oceanotron:

Distribution of salinity observations in Baltic sea at 50m in 2000



The screenshot displays the SEADATANET PRODUCTS web interface. The header includes the SeaDataNet logo and the text "SEADATANET PRODUCTS Viewing and Downloading service". Navigation links for "CONTACT", "ABOUT", and "HELP" are visible in the top right. The main content area is divided into "HORIZONTAL SECTION" and "VERTICAL SECTION" tabs. A blue "SELECT DATA PRODUCTS" button is prominent. Below it is a search bar and an "Add external layers" option. The "SEADATANET - OCEANOTRON (IN SITU OBSERVATIONS)" section is expanded, showing a list of data products. The "SDC_BAL_DATA_TS_V1" product is selected, revealing sub-products: "SDC_BAL_DATA_TS_V1", "Water_body_salinity", and "ITS-90_water_temperature". The right side of the interface features a map of the Baltic Sea region with numerous blue circular markers representing salinity observations at 50m depth in 2000. The map includes zoom in (+) and zoom out (-) controls, and left and right arrow navigation buttons. A small box in the bottom right corner of the map area contains the coordinates "10.74629, 65.31682".

SEADATANET PRODUCTS
Viewing and Downloading service

HORIZONTAL SECTION VERTICAL SECTION

CONTACT ABOUT HELP

SELECT DATA PRODUCTS

Search

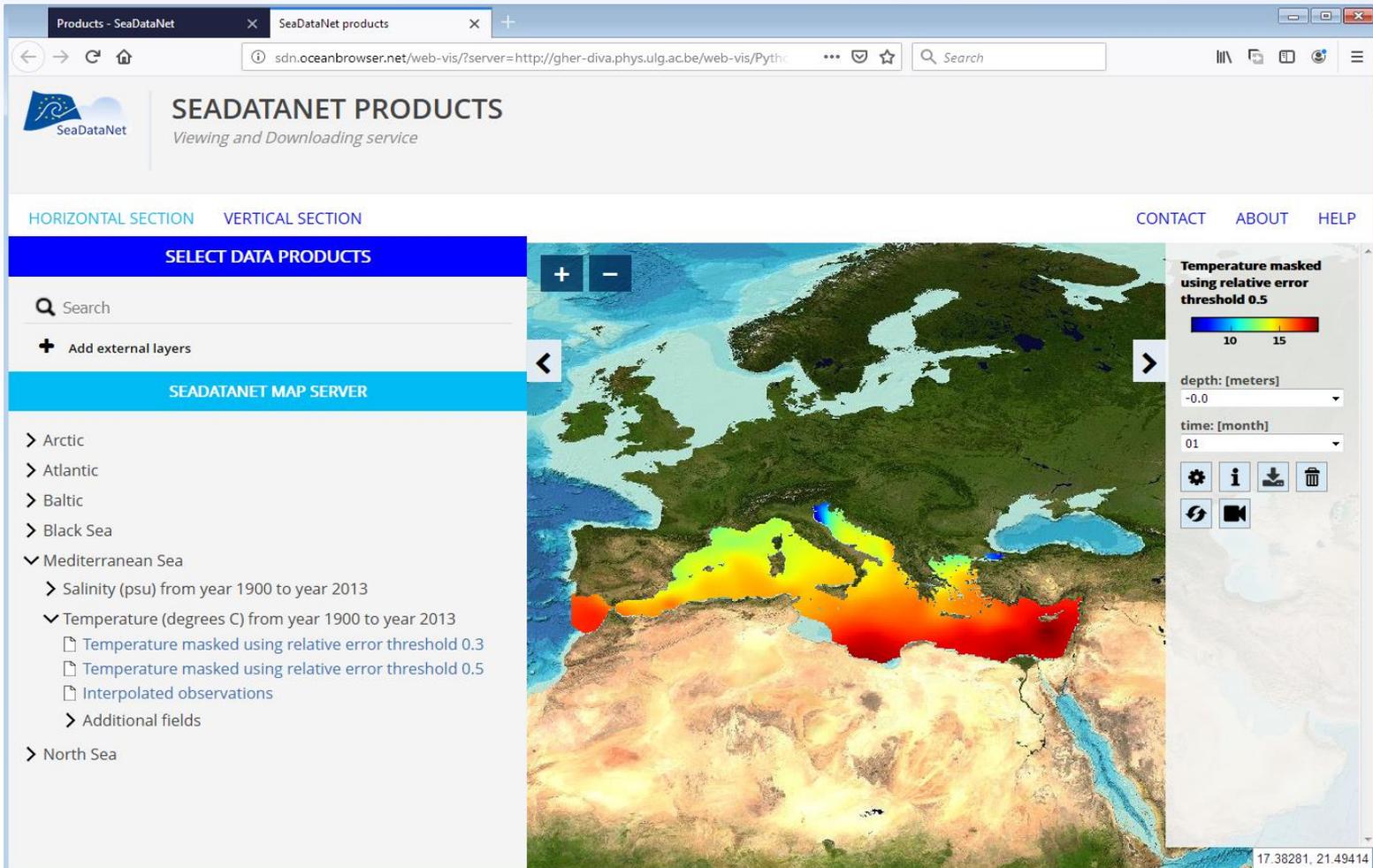
+ Add external layers

SEADATANET - OCEANOTRON (IN SITU OBSERVATIONS)

- > SDC_BLS_DATA_TS_V1
- > SDC_NS_DATA_TS_V1_TRAJECTORIES
- > SDC_ARC_DATA_TS_V1
- > SDC_NS_DATA_TS_V1_DISCRETE
- > SDC_MED_DATA_TS_V1
- > SDC_NAT_DATA_TS_V1
- ✓ SDC_BAL_DATA_TS_V1
 - ✓ SDC_BAL_DATA_TS_V1
 - SDC_BAL_DATA_TS_V1
 - Water_body_salinity
 - ITS-90_water_temperature

10.74629, 65.31682

Temperature field in OceanBrowser



The screenshot displays the OceanBrowser web interface. The browser window title is "Products - SeaDataNet" and the address bar shows "sdn.oceanbrowser.net/web-vis/?server=http://gher-diva.phys.ulg.ac.be/web-vis/Pyth...". The page header includes the SeaDataNet logo and the text "SEADATANET PRODUCTS Viewing and Downloading service".

The interface is divided into several sections:

- HORIZONTAL SECTION** and **VERTICAL SECTION** tabs are visible at the top.
- SELECT DATA PRODUCTS** section includes a search bar and an "Add external layers" button.
- SEADATANET MAP SERVER** section contains a tree view of data products:
 - Arctic
 - Atlantic
 - Baltic
 - Black Sea
 - Mediterranean Sea
 - Salinity (psu) from year 1900 to year 2013
 - Temperature (degrees C) from year 1900 to year 2013
 - Temperature masked using relative error threshold 0.3
 - Temperature masked using relative error threshold 0.5
 - Interpolated observations
 - Additional fields
 - North Sea

The main map area shows a satellite-style map of the Mediterranean region with a temperature overlay. The overlay uses a color scale from blue (10°C) to red (15°C). A legend on the right indicates "Temperature masked using relative error threshold 0.5". The legend also shows a depth of -0.0 meters and a time of 01 month. Below the legend are icons for settings, information, download, and delete. The bottom right corner of the map displays the coordinates "17.38281, 21.49414".

Climatology via ERDDAP


ERDDAP
 Easier access to scientific data

ERDDAP > griddap > Make A Graph

Dataset Title: **SDC_GlobalOcean_Climatology_TS_V1_1** [✉](#) [RSS](#)
 Institution: SeaDataNet (Dataset ID: SDC_GLO_CLIM_TS_V1_1)
 Information: [Summary](#) | [License](#) | [FGDC](#) | [ISO 19115](#) | [Metadata](#) | [Background](#) | [Data Access Form](#)

Graph Type:
X Axis:
Y Axis:
Color:

Dimensions **Start** **Stop**

time (UTC) specify just 1 value →

depth (m) specify just 1 value →

latitude (degrees_north)

longitude (degrees_east)

Graph Settings

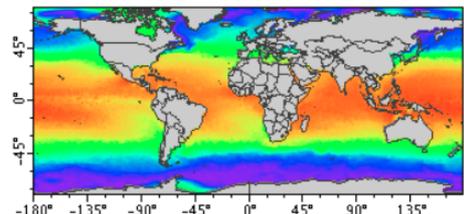
Color Bar: Continuity: Scale:
 Minimum: Maximum: N Sections:
 Draw land mask:
 Y Axis Minimum: Maximum:

Redraw the Graph (Please be patient. It may take a while to get the data.)

Optional:
 Then set the File Type: ([File Type information](#))
 and [Download the Data or an Image](#)
 or view the URL: http://www.ifremer.fr/erddap/griddap/SDC_GLO_CLIM_TS_V1_1.htmlTable?Temper
 ([Documentation](#) / [Bypass this form](#))

Click on the map to specify a new center point.

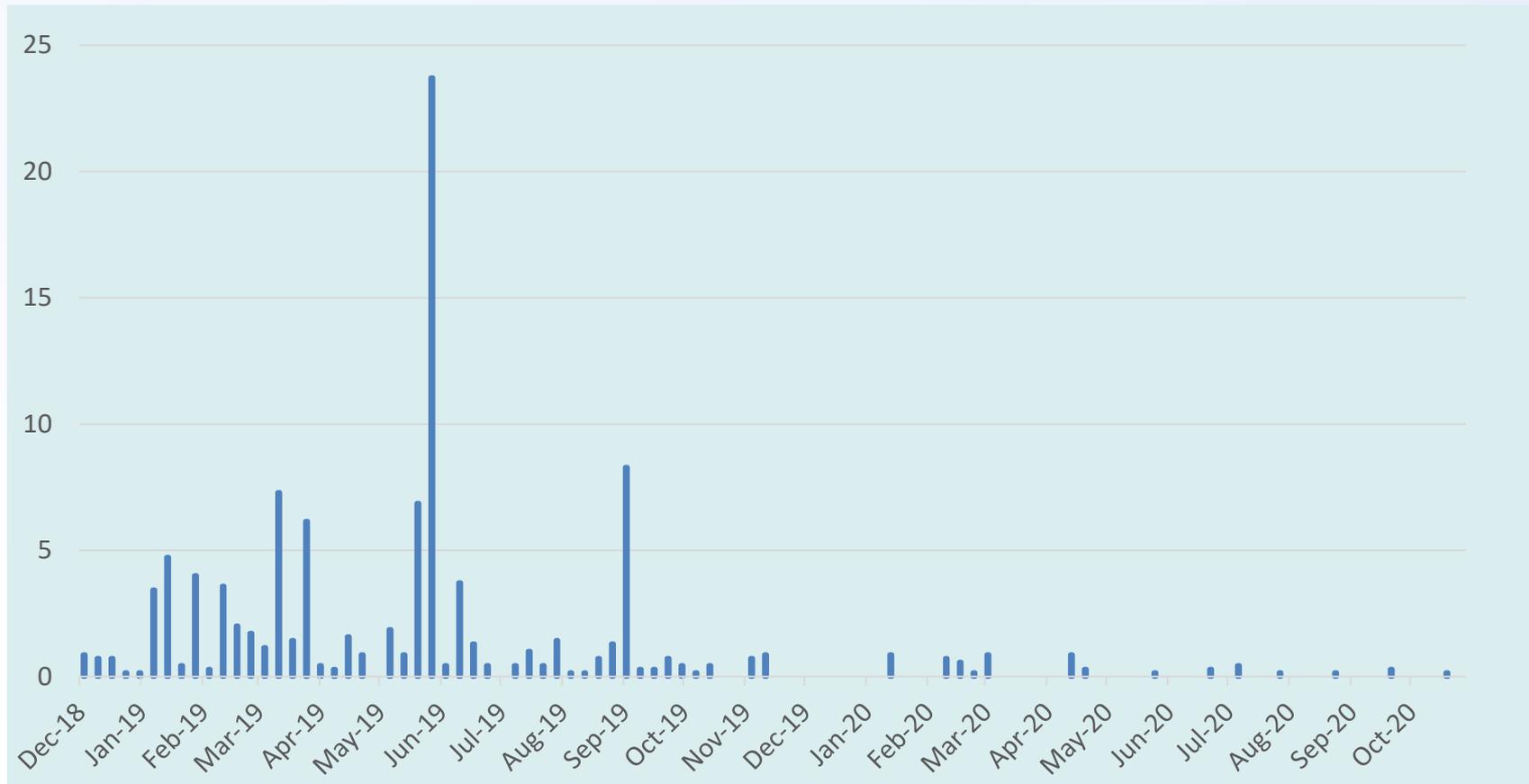
Zoom:



-10 -5 0 5 10 15 20 25 30 35 40

sea water temperature (Degree C)
 SDC_GlobalOcean_Climatology_TS_V1_1
 (1958-12-16T00:00:00Z, Depth=0.0 m)
 Data courtesy of SeaDataNet

Product downloads statistics



4th Annual Meeting, Oct 29-30, 2020

Thank you