SeaDataCloud

Product publication

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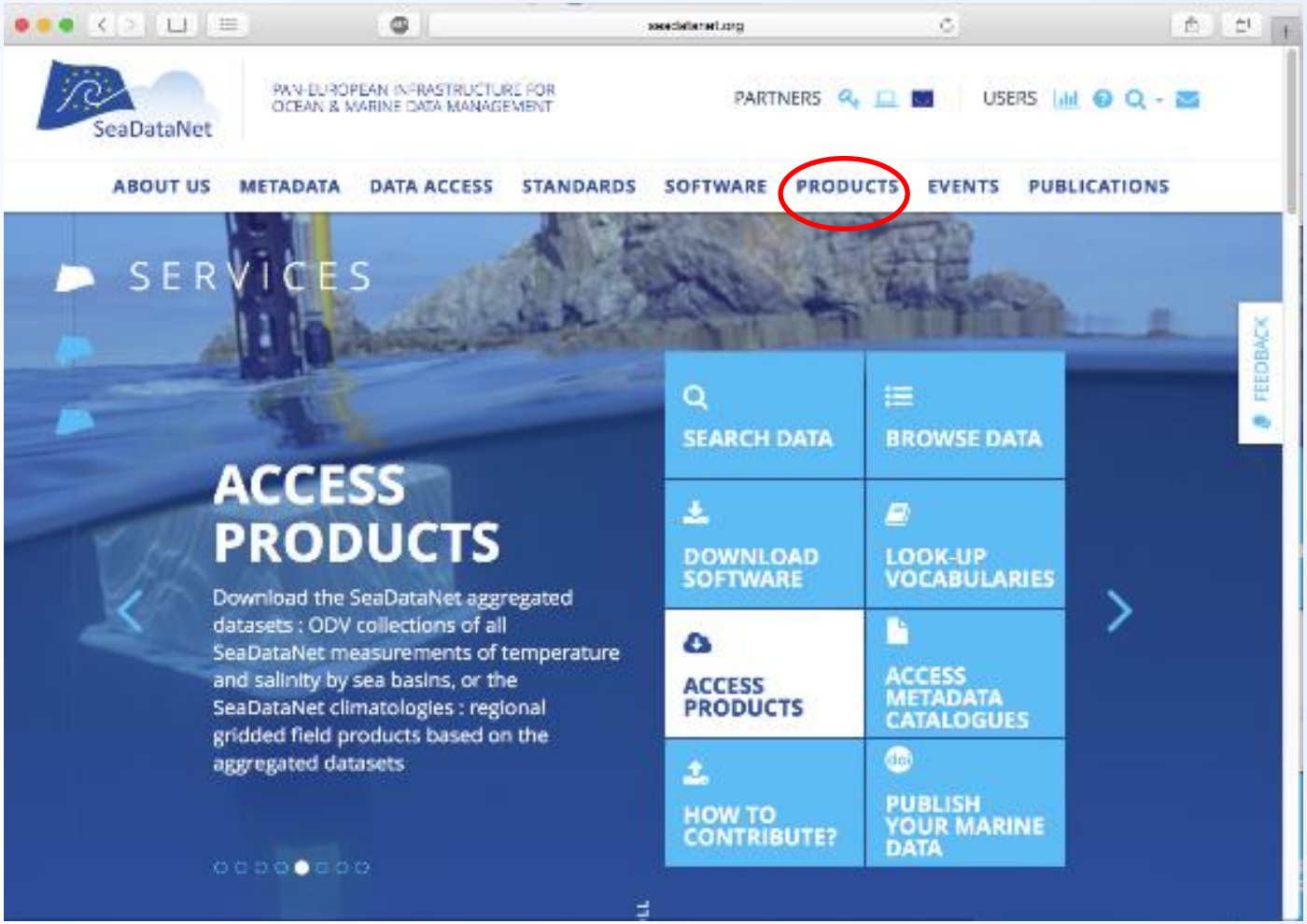
Temperature & Salinity Data Products

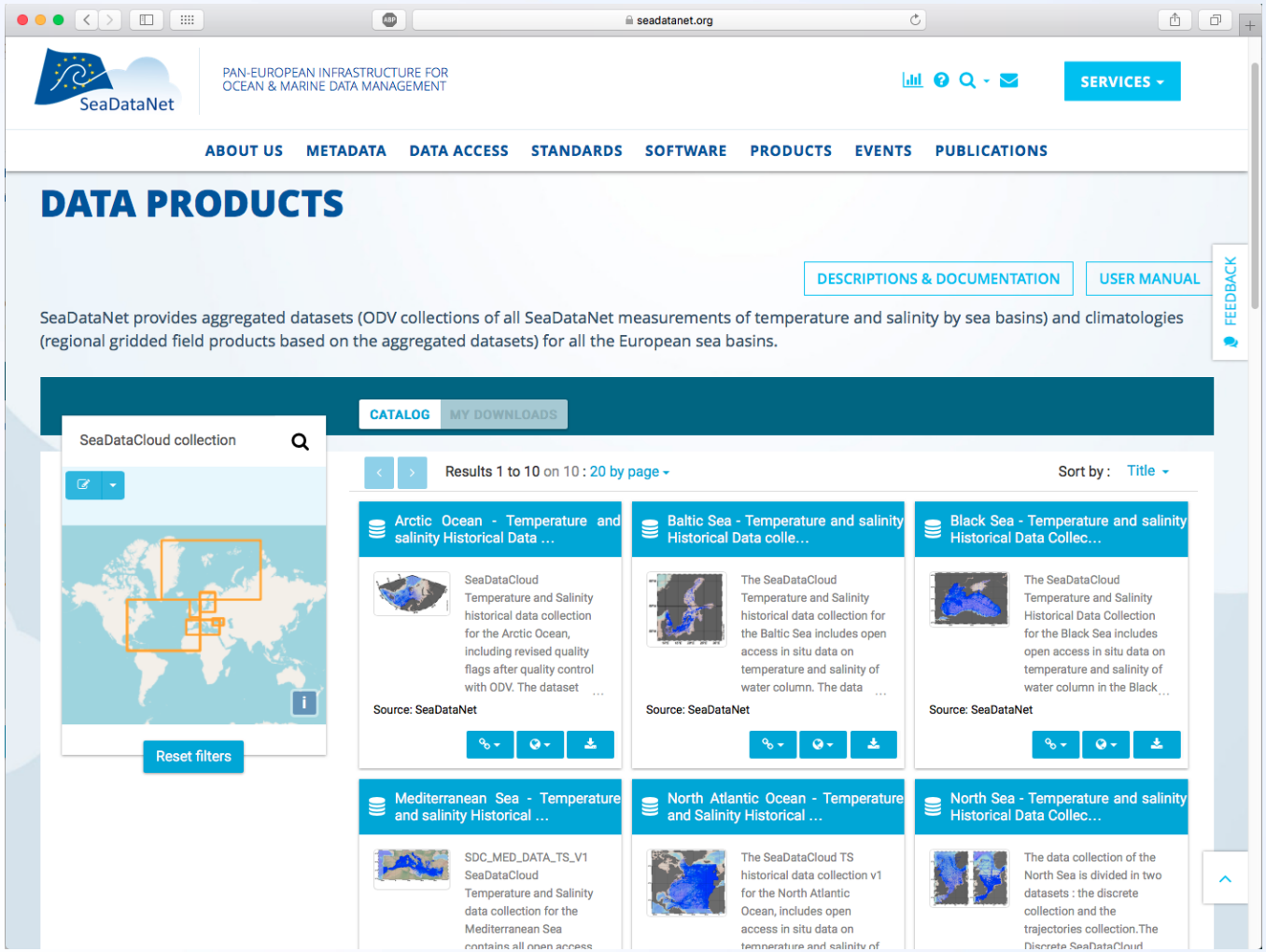
Sea region	Aggregated dataset			Climatology	
	SDN V1.1	SDN V2	SDC V1	SDN V1	SDC* V1
Arctic Ocean	X	X	X	X	
Baltic Sea	X	X	X	X	X
Black Sea	X	X	X	X	X
Global Ocean					X
Mediterranean Sea	X	X	X	X	X
North Atlantic Ocean	X	X	X	X	X
North Sea	X	X	X	X	X

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

Accessing data products

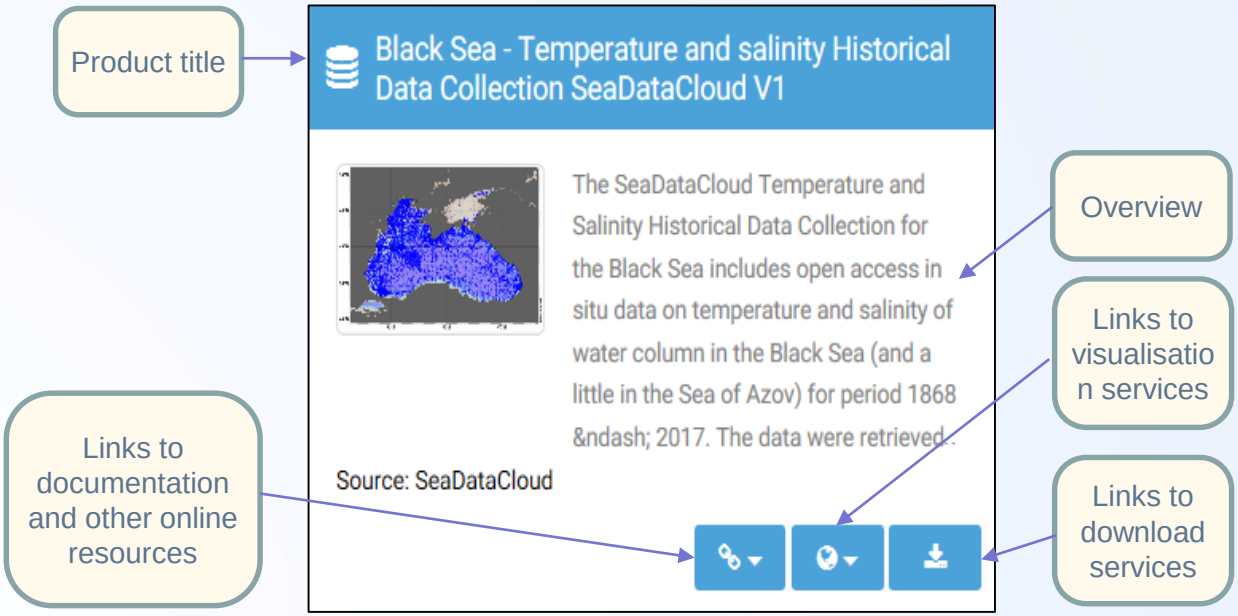


Sextant web catalogue



Product description in Sextant

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



Product description in Sextant

Baltic Sea - Temperature and salinity Historical Data collection SeaDataCloud V1

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IDENTIFICATION

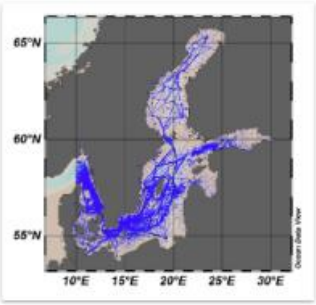
DATA IDENTIFICATION

Title	Baltic Sea - Temperature and salinity Historical Data collection SeaDataCloud V1
Overview	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/.
External shortname	SDC_BAL_DATA_TS_V1
Metadata language	English
Credit	SeaDataNet
Date (Creation)	18 Apr 2018

INSPIRE THEME AND KEYWORDS

Topic category	Oceans
GEMET - INSPIRE themes, version 1.0	Oceanographic geographical features
SeaVoX salt and fresh water body gazetteer	Bay of Bothnia Baltic Sea Gulf of Finland Gulf of Bothnia

DATA ACCESS



Product DOI

Global Ocean Climatology - Temperature and Salinity Climatology V1

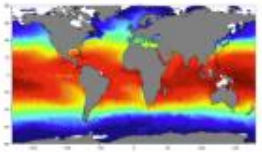
Date(s)	2019-06-18 (Creation)
Author(s):	Kanwal Shahzadi[1], Nadia Pinardi[1], Vladislav Lyubartsev[2], Simona Simoncelli[3], Marco Zavatarelli[1]
Custodian(s):	IFREMER / IDM / SISMER - Scientific Information Systems for the SEA
Originator(s):	NOAA / Wdc For Oceanography
Resource provider(s):	Alma Mater 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 DIVAnd (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/OC5/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/

How to cite

Kanwal 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

Access to data and metadata

Link to the data services and to the full metadataset



Is cited by

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

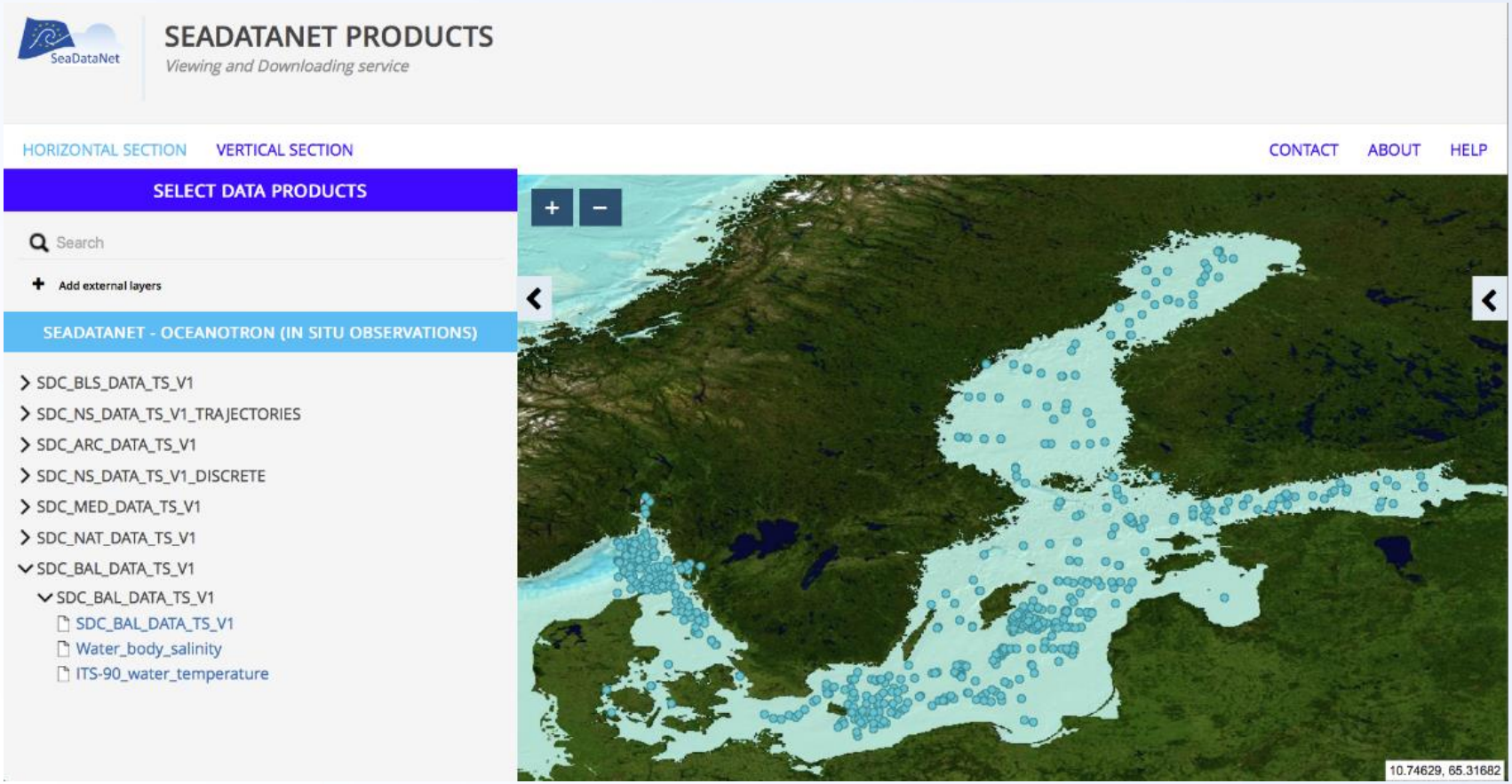
Product Information Document (PIDoc)

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

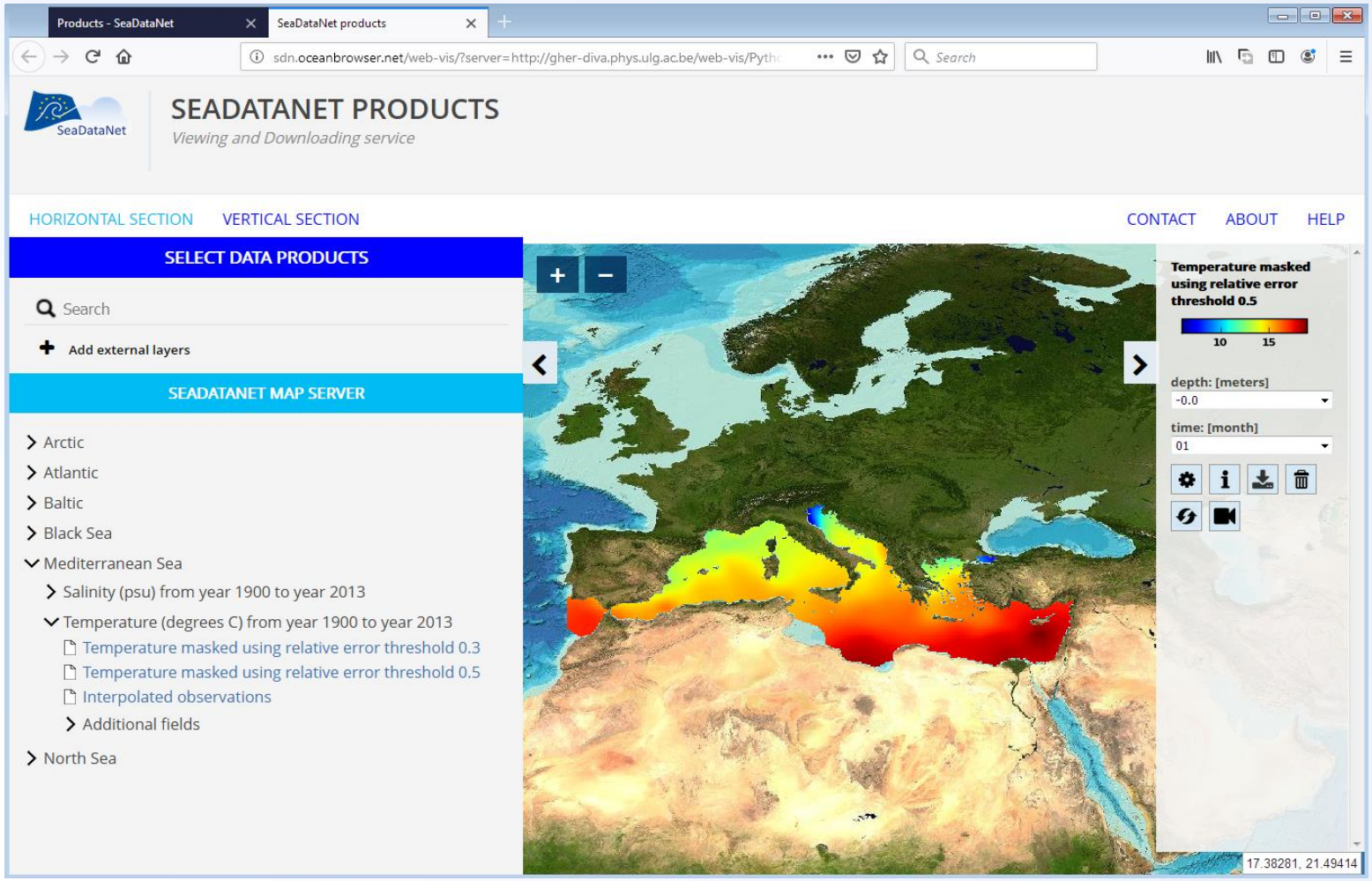
Product visualisation

- 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

Oceanotron: distribution of salinity observations in Baltic sea at 50m in 2000



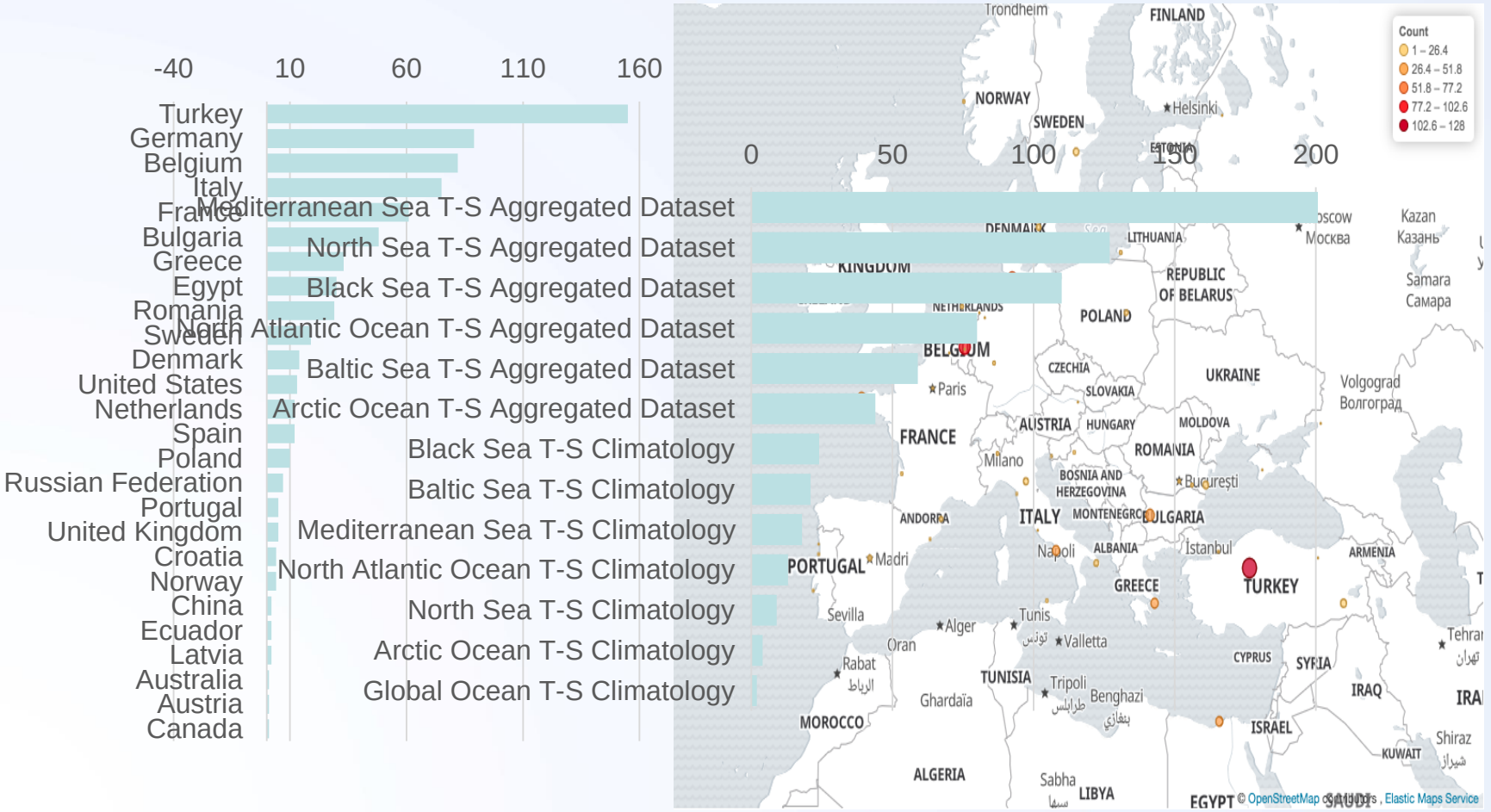
Temperature field in OceanBrowser



Key performance indicators (KPI)

- Products downloads count: 717 (since Apr 2018)
- Number of products DOI: 29
- Numbers of presentations at national/international events/meetings/conferences: 4
- Number of publications on products: 4
- Number of products meetings: 3
- Number of dedicated workshops/conferences (sessions) organised: 1
- Number of dedicated trainings organised: 1 (+1 session at the 1st SDC Training Workshop).
- Number of attendees to trainings: 22 (101).

Product downloads statistics



http://www.emodnet-physics.eu/atlantos/dashboard/Section26.aspx?shape=atlantos

Thank you