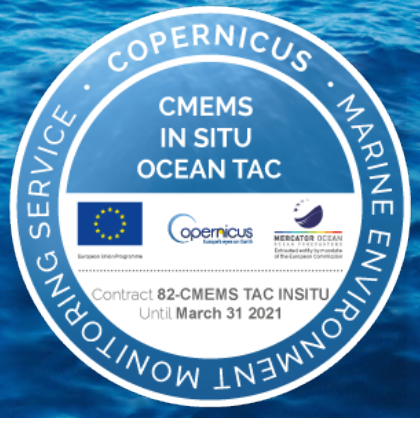


marine.copernicus.eu

CMEMS In Situ TAC

In Situ TAC Team

Copernicus ® In Situ TAC
Where we are?

3 components:

- **Space**
- **Insitu**
- **Services**

Atmosphere Monitoring
Climate Change
Marine Monitoring (CMEMS)
Land Monitoring
Security
Emergency Management

7 MFCs (models)
- **GLO MFC**
- **ARC MFC**
- **BAL MFC**
- **NWS MFC**
- **IBI MFC**
- **MED MFC**
- **BS MFC**

8 TACs (Observations)
- **In Situ TAC**
- **6 Space TACs: OCTAC, SLTAC, …**
- **1 Multi Ob. CIS**

CMEMS: Evolution in time

CMEMS: Copernicus Marine Environment Monitoring Service

GMES MyOcean

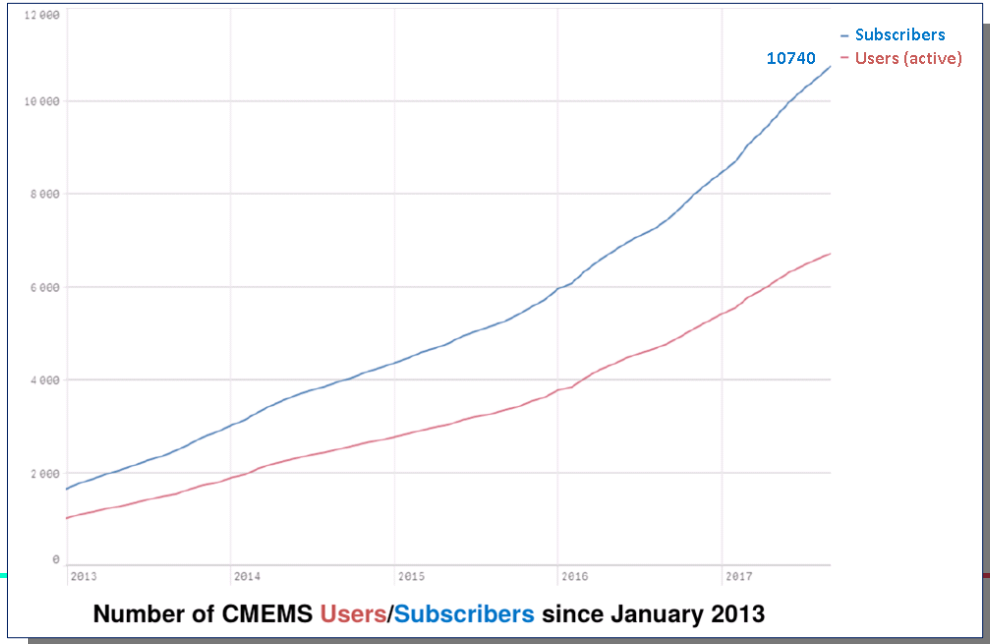
CMEMS Phase 1 (Apr. 2015 – Apr. 2018)

CMEMS Phase 2 (Jan. 2018 – Mar. 2021)

http://marine.copernicus.eu/

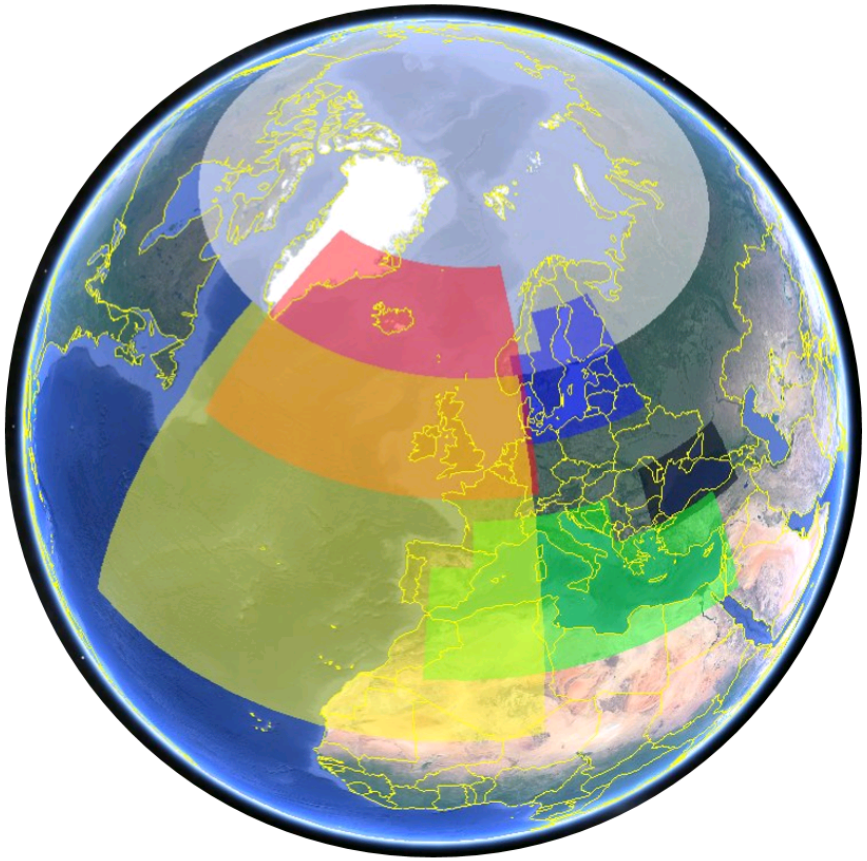
Jan. – Apr. 2018: overlapping period between the two Phases: transition.

Increasing number of users (MyOcean- CMEMS)



In Situ TAC: Organization (2018)

IN SITU TAC ORGANIZATION Leader: Ifremer / France



Management & Operations
7 Regions

Global:	Ifremer / France
Arctic:	IMR / Norway
Baltic:	SMHI / Sweeden
NWS:	BSH / Germany
IBI:	Puertos del Estado / Spain
MED:	HCMR / Greece
Black Sea:	IOBAS / Bulgaria

Scientific Expertise Cross Cutting

Product Quality:	Oceanscope-PdE-IMR
Multi Year:	SOCIB-OceanScope-PdE
BGC assim.:	IMR

System Evolution

HF Radar:	AZTI-CNR-SOCIB
Carbon Data:	UIB
BGC assessment:	IMR-HCMR-SYKE
Monitoring:	SOCIB-PdE-HCMR

In Situ TAC: general description

General characteristics:

Fully operational service since April 2015

7 Components: Global + 6 regions (Arctic, Baltic, NWS, IBI, MED and BlackS

Same data format (NetCDF - OceanSites 1.2)

Same FTP structure

Same RTQC & quality indexes

NRT (near real time) and **REP** (reprocessed) products

Functions implemented:

Acquisition from international networks and regional providers

Quality control: agreed procedures following EuroGOOS DATA-MEQ WG recommendations in coherence with international agreements (SeaDataNet,

Product validation & assessment: assess the consistency of the data

In Situ TAC Products in 2018

- **T&S** NRT (daily) and REP (yearly update): Global and Regiona

  Provided since 2015

- **UV** (current) from Drifters REP (yearly update): Global

  Provided since 2016

- **Wave** NRT (daily) and REP (yearly update): Global

  Provided in NRT since 2017 and **REP 2018**

- **BGC -** O2 and Chla : NRT (daily) and REP (yearly update): Global

  Provided in NRT since 2017 and **REP 2018**

In Situ TAC: changes and plans for Phase 2

- One common Distribution Unit: DIAS (Data Information and Access Service) cloud system ® **Unique FTP access** for all the CMEMS products
- **HF Radar integration** following INCREASE Service Evolution project coordinated by AZTI

  Planned NRT for 2019 and REP 2020
- **Carbon data integration** in link with ICOS-Ocean operated by University of Bergen

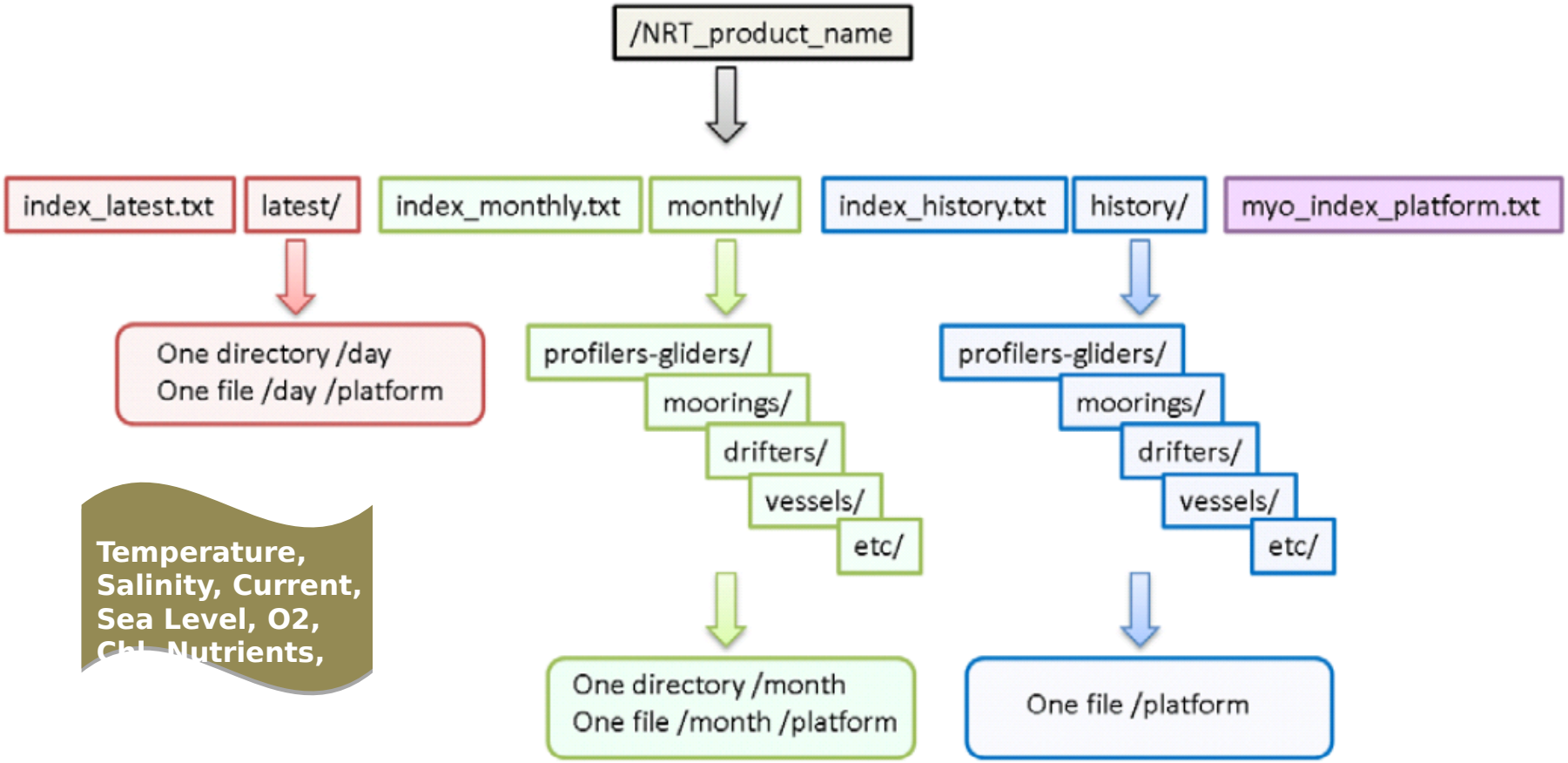
  Planned NRT & REP for 2019
- Prepare Ocean Monitoring Indicators (OMIs)

  Planned for 2018, 2019 & 2020

In Situ TAC: FTP structure (NRT)

Access with Copernicus user & passwd (free registration)

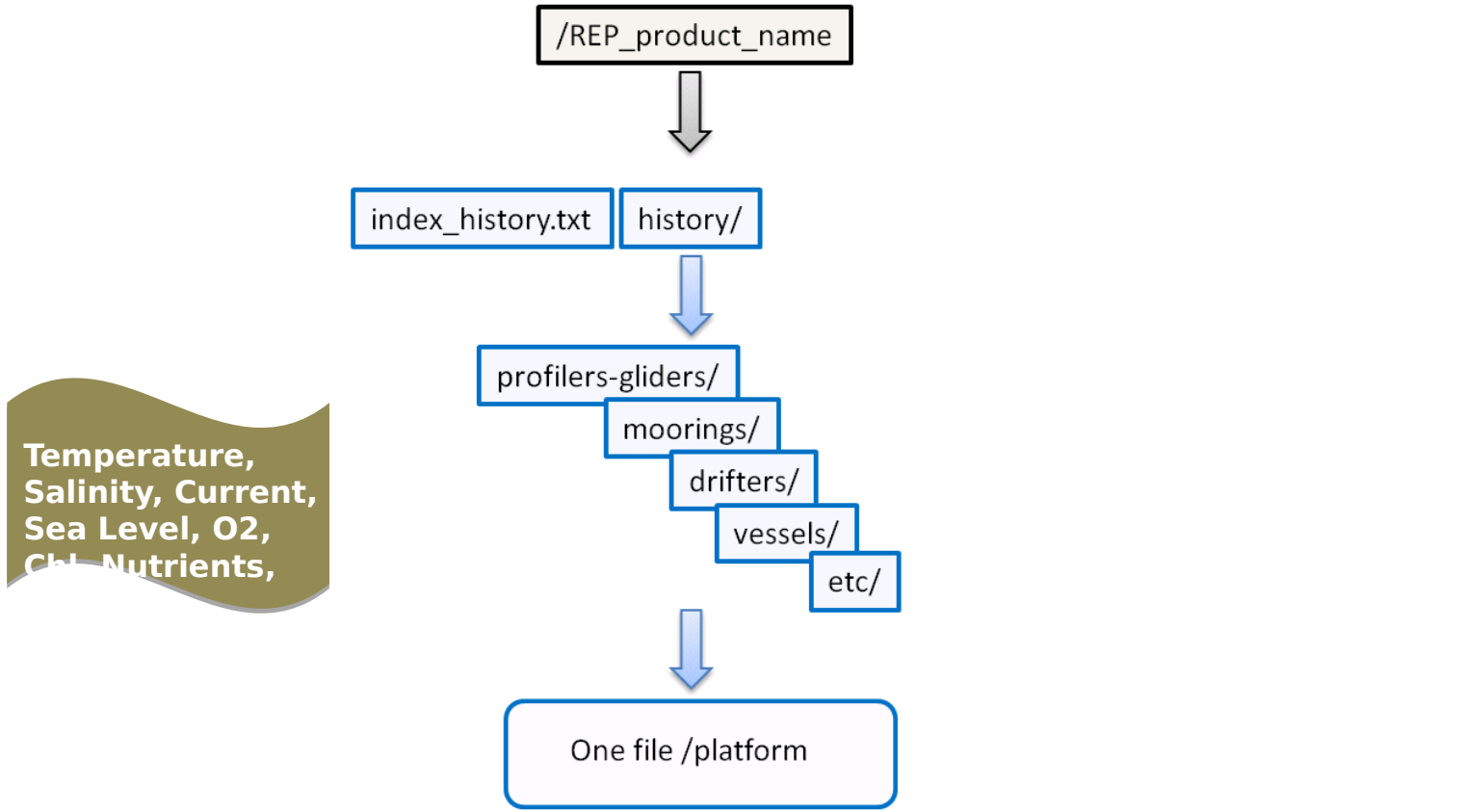
NRT product: data received in real time
history directory: aggregated NRT data



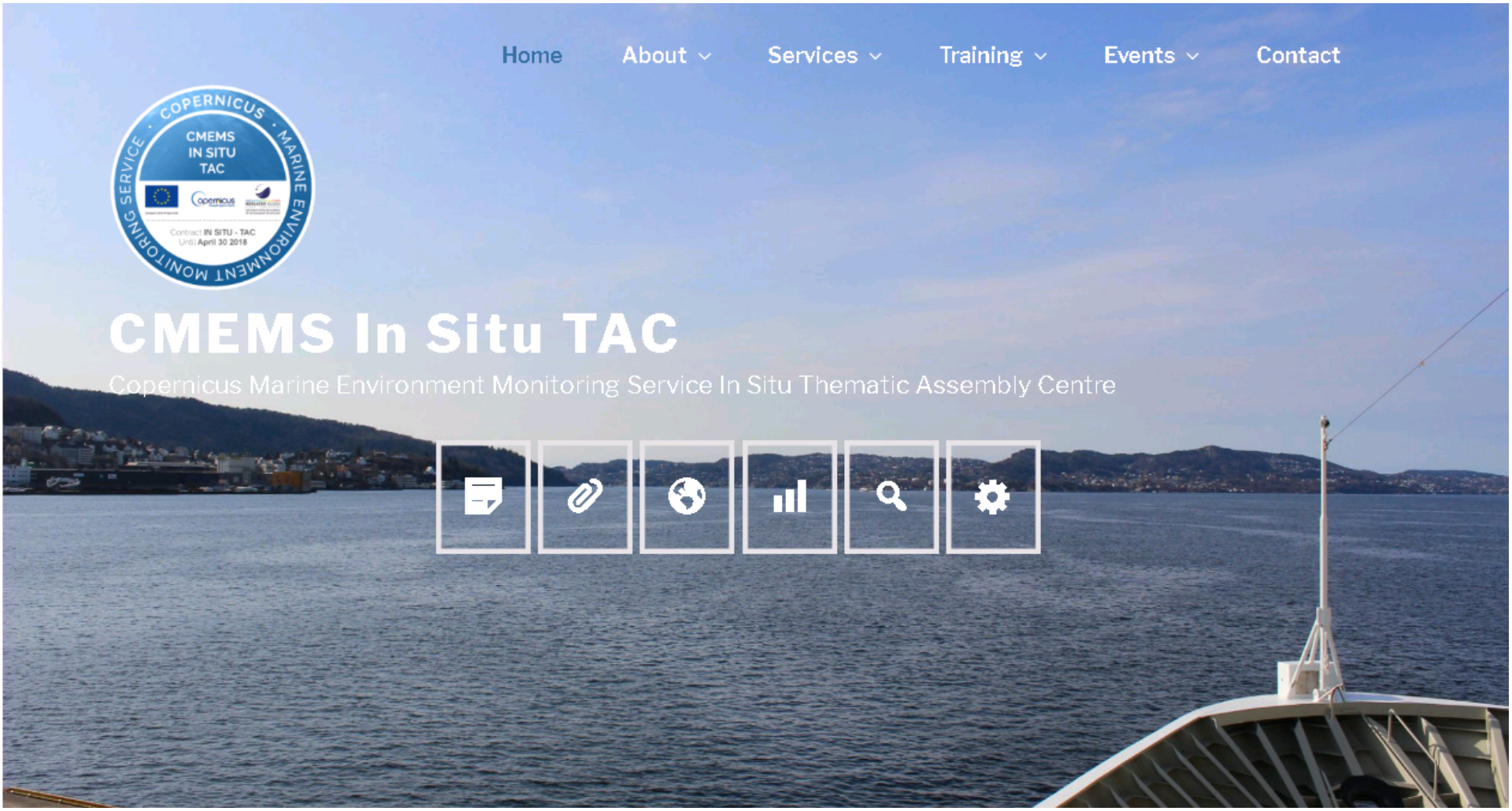
In Situ TAC: FTP structure (REP)

Access with MyOcean – Copernicus user & passwd

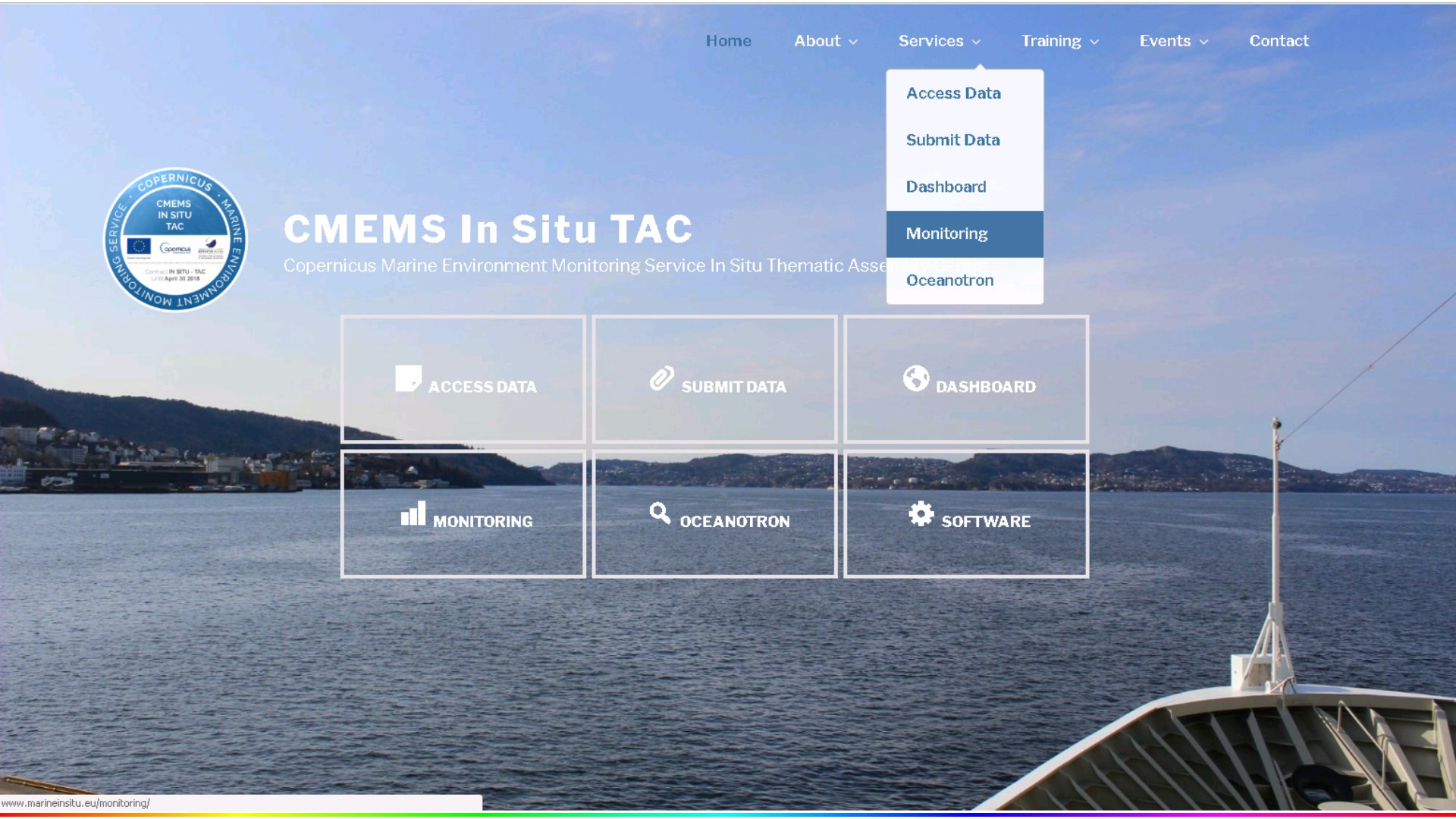
REP product: validated and assessed data
history directory: validated and assessed data from providers or NRT product



New In Situ TAC web site: http://www.marineinsitu.eu/



Monitoring
http://www.marineinsitu.eu/



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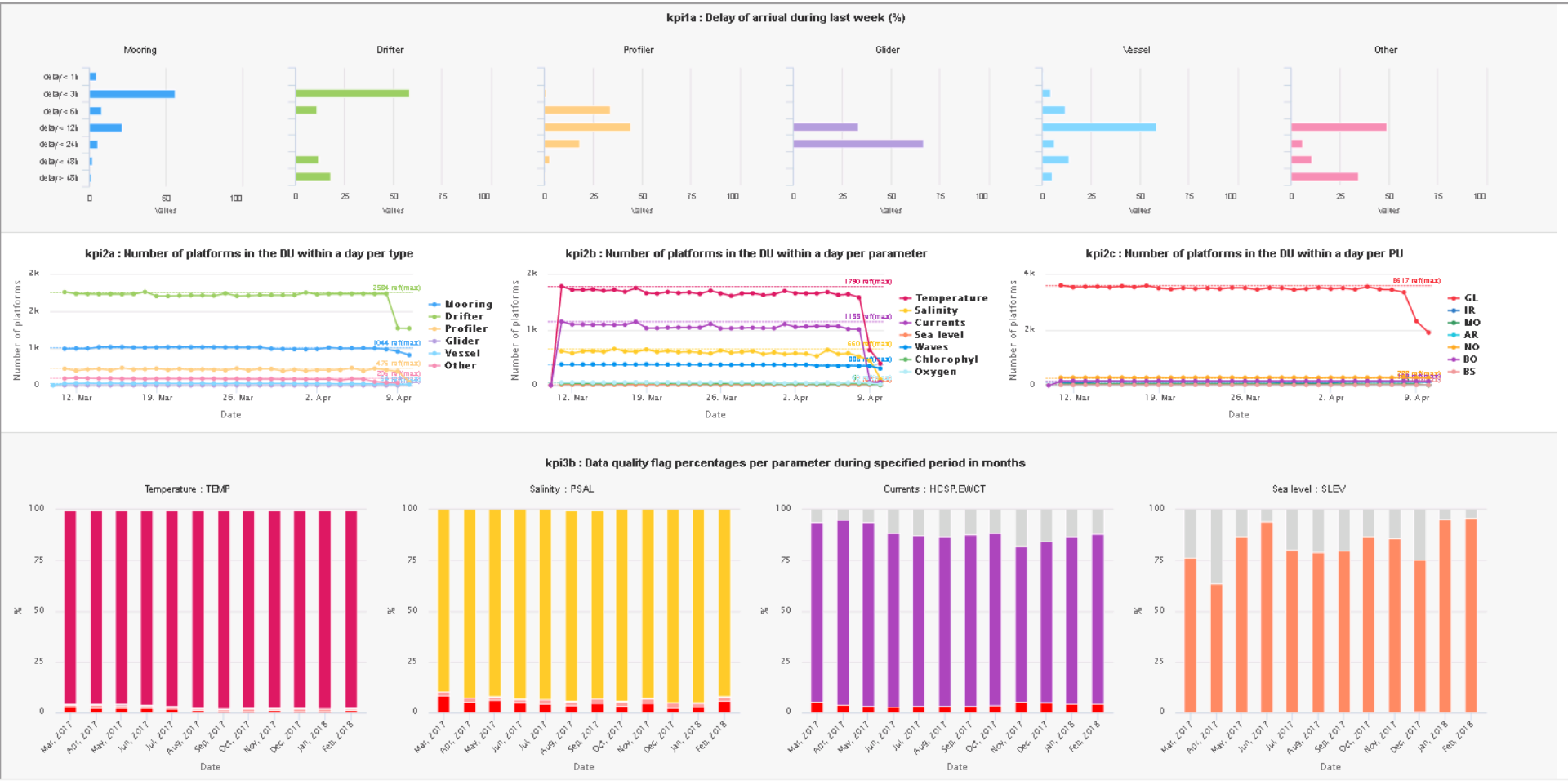
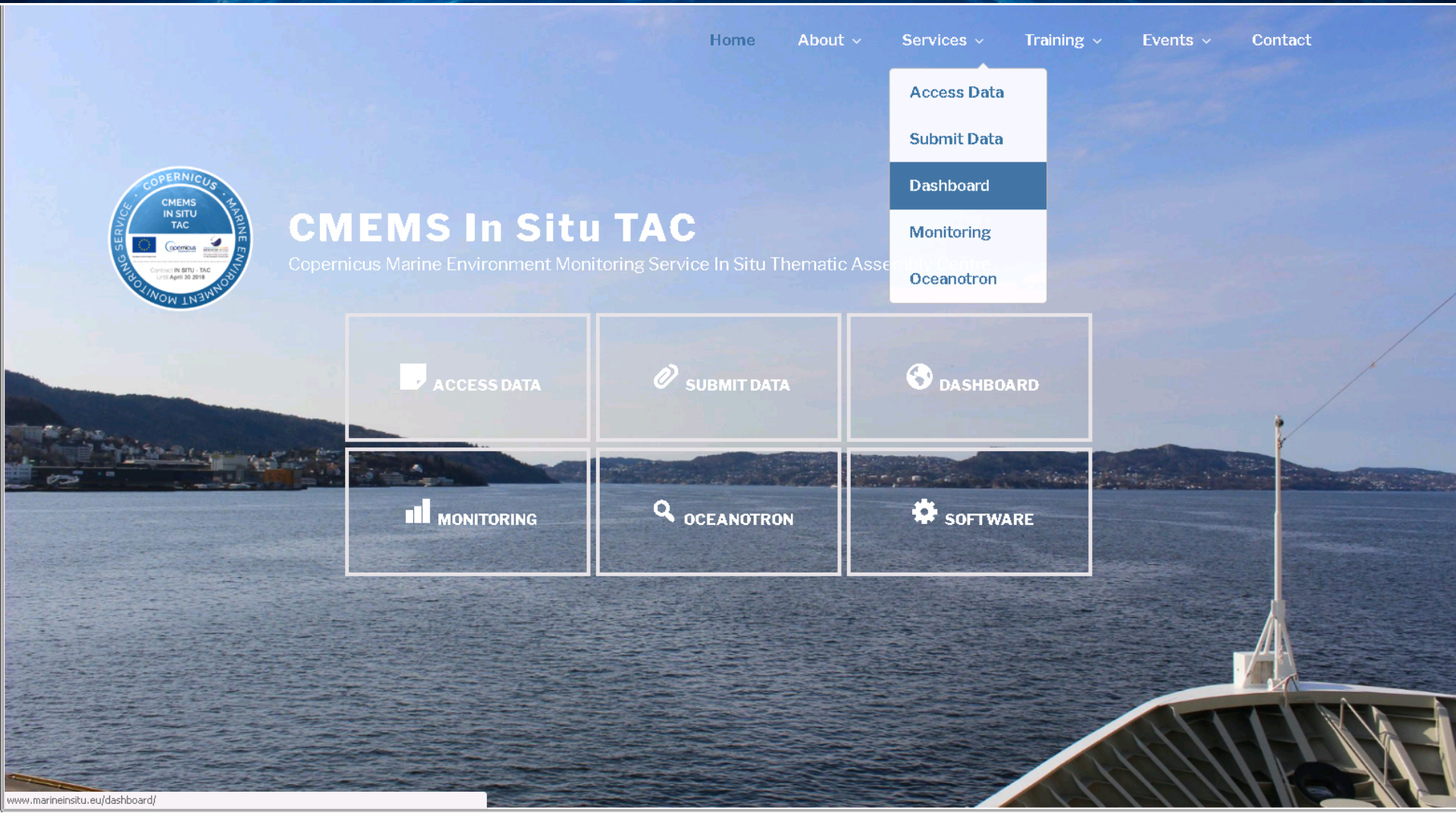


Dashboard
http://www.marineinsitu.eu/



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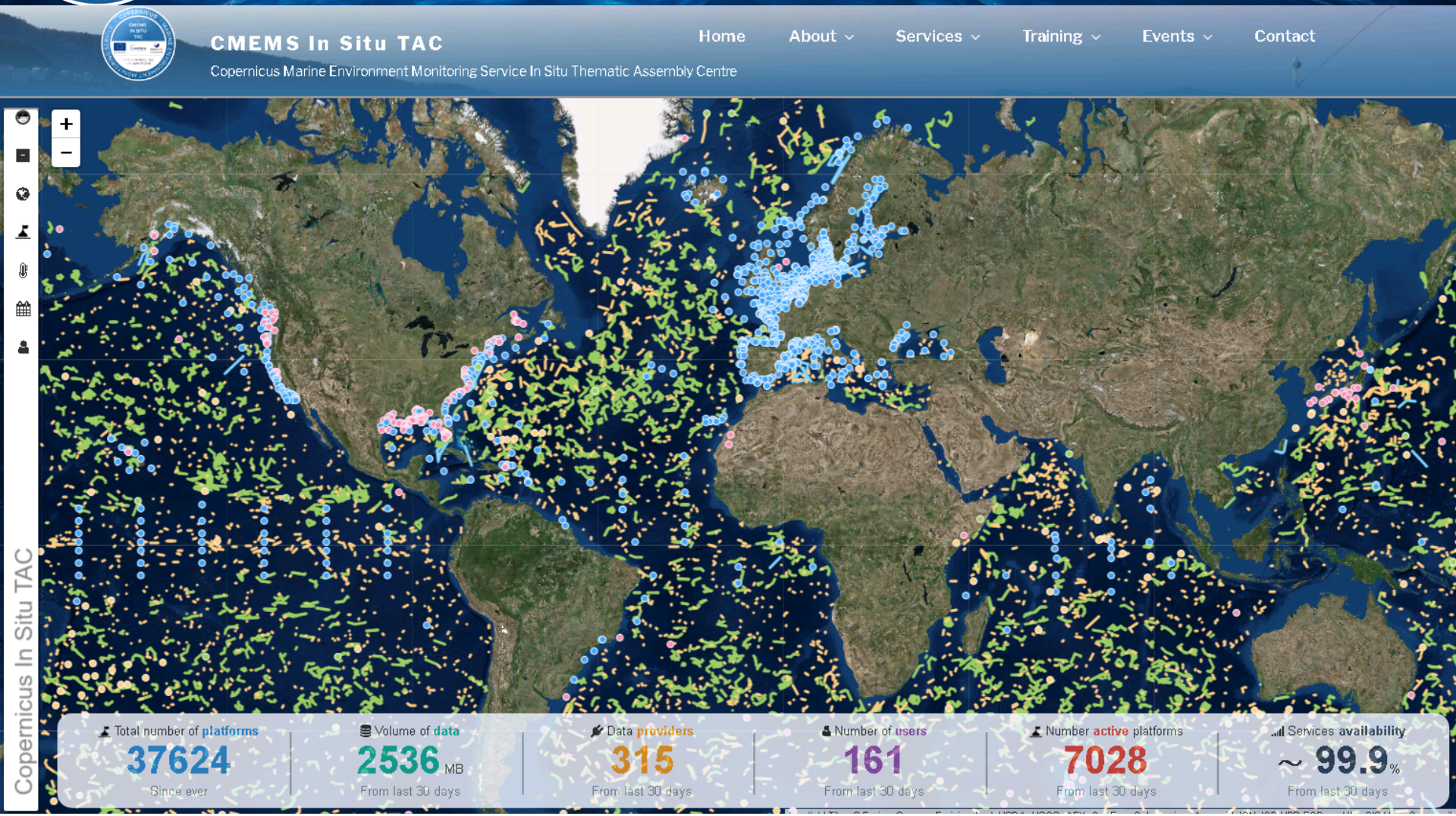

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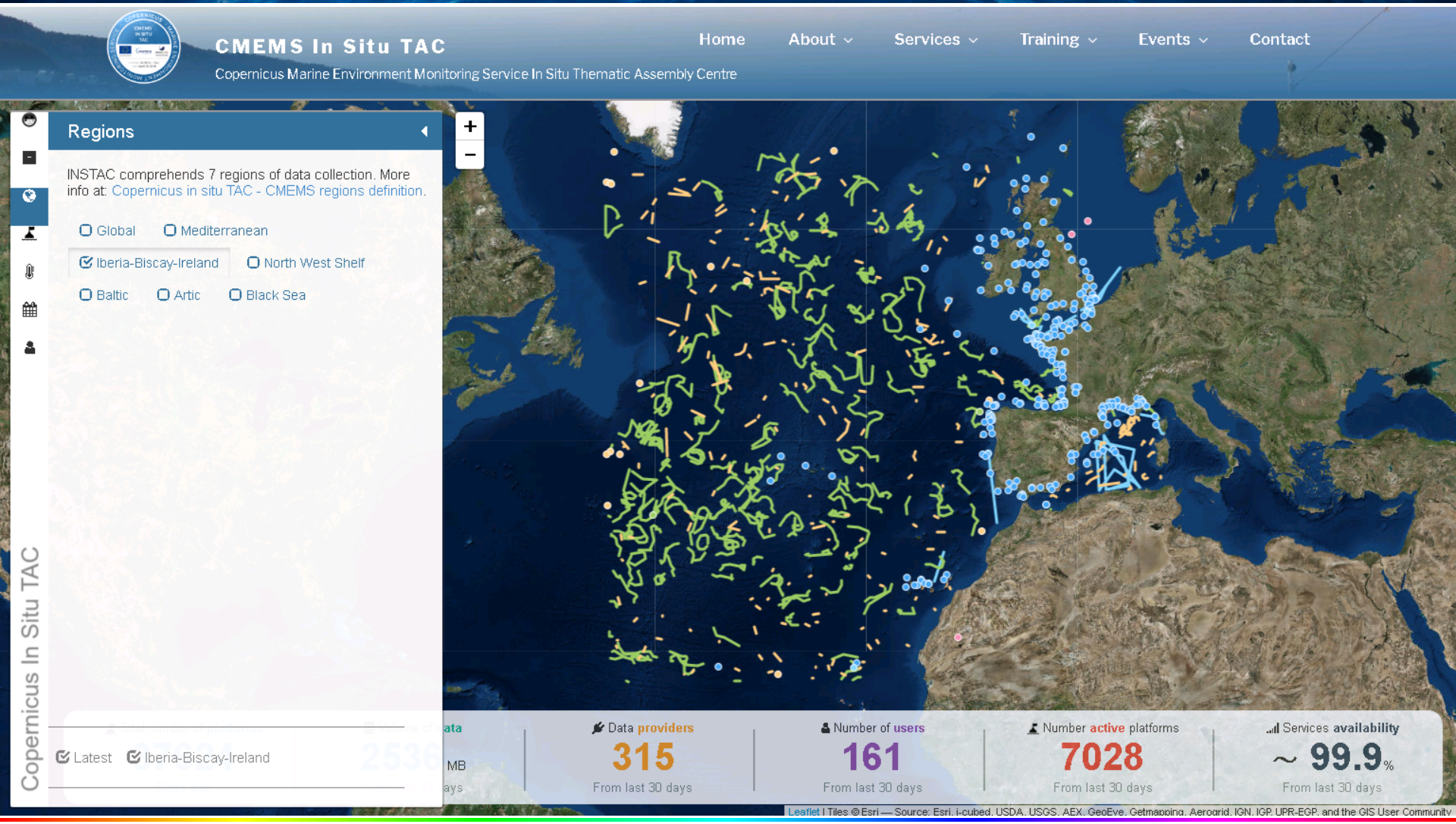

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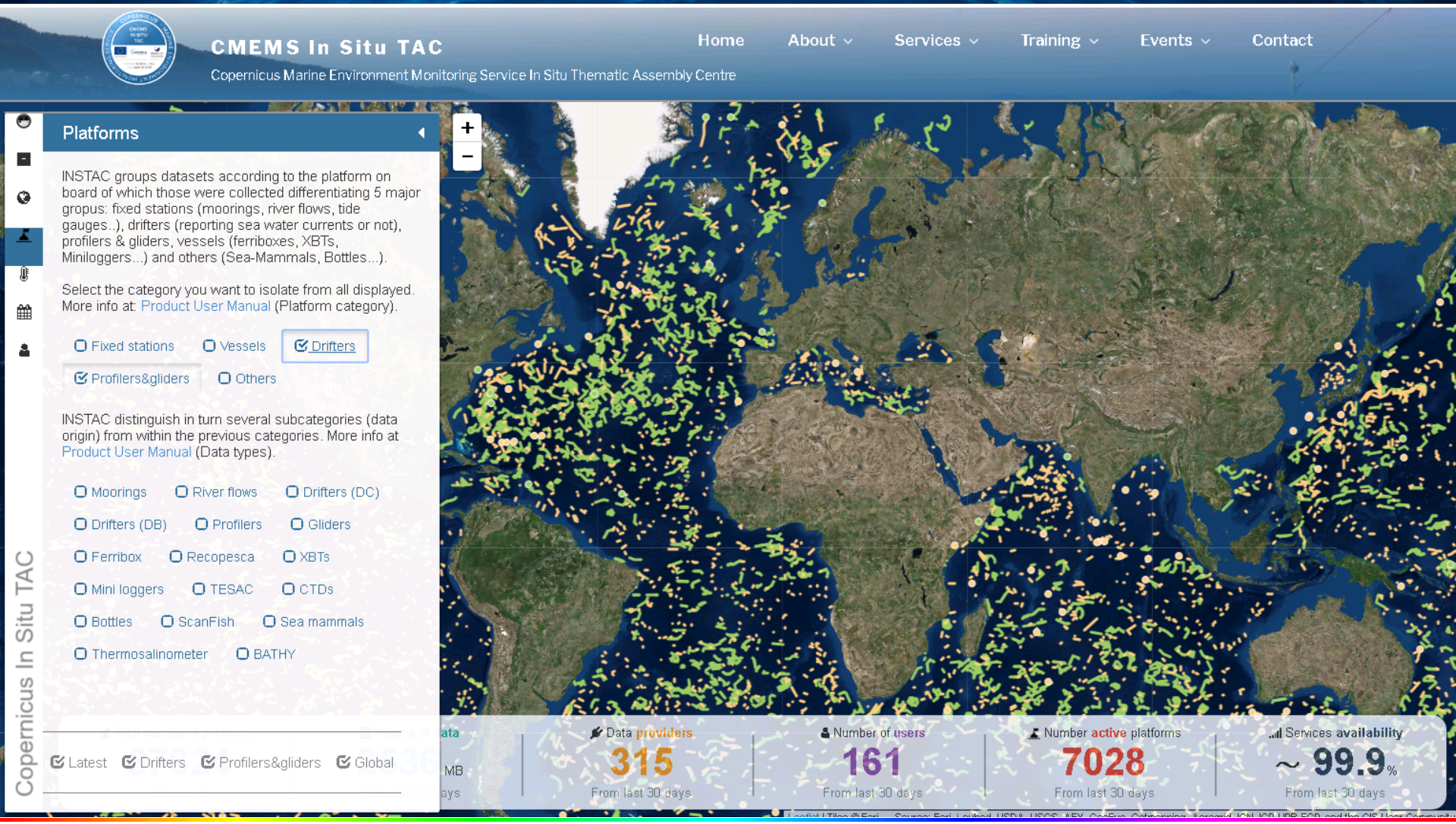
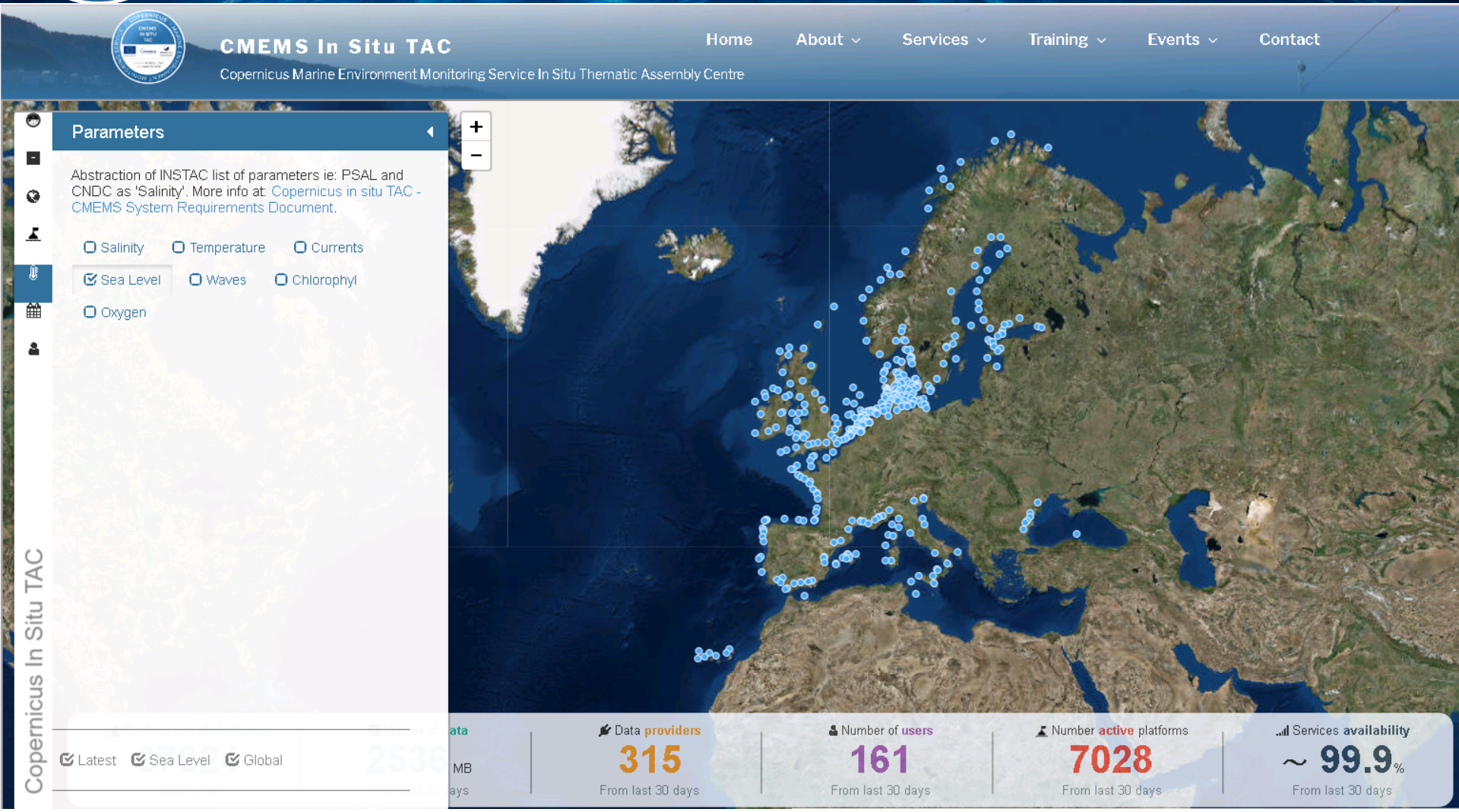


INSTAC General presentation

Dashboard
http://www.marineinsitu.eu/



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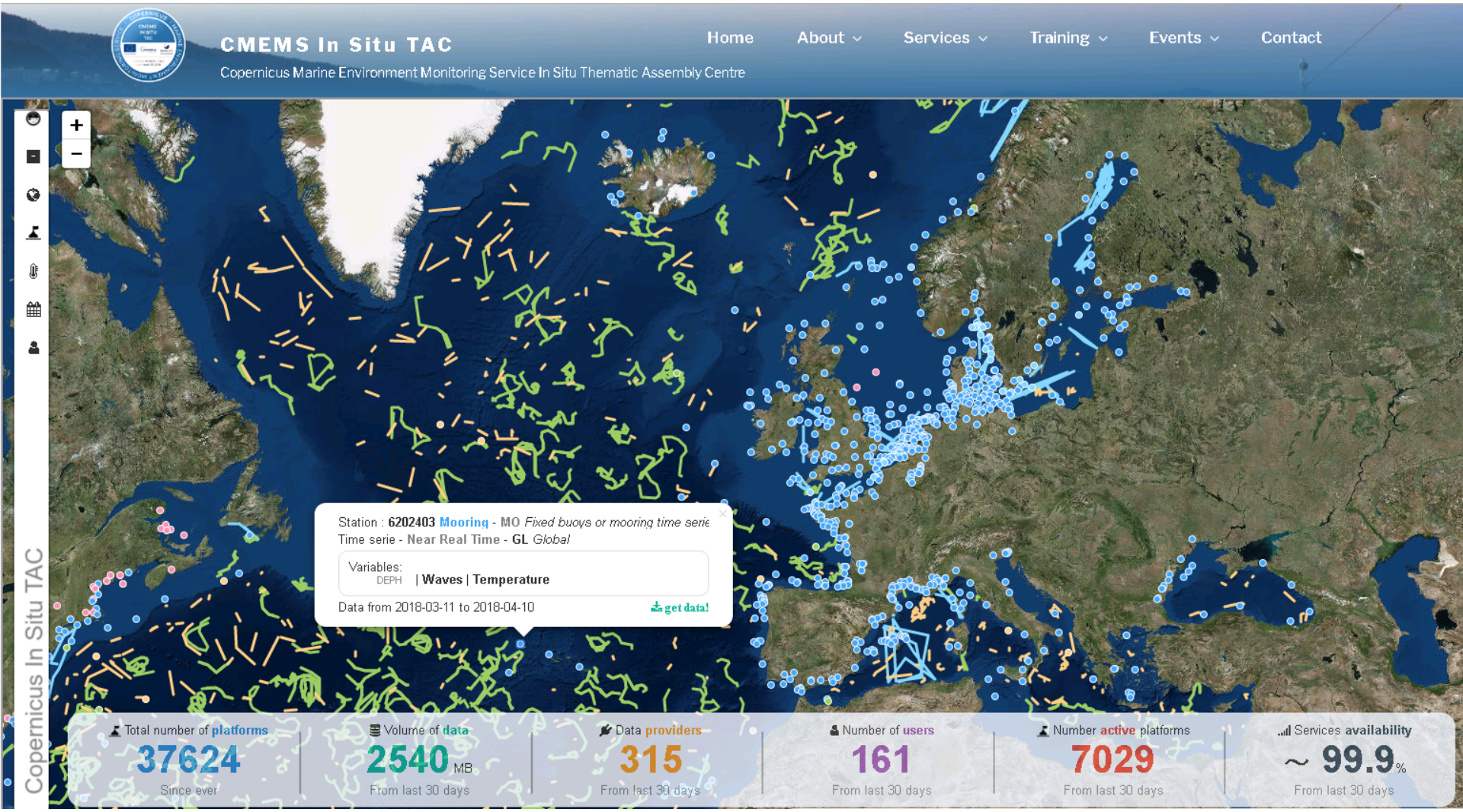


New web site: http://www.marineinsitu.eu/

In Situ TAC web site is not finished yet:

Missing providers acknowledgement!

- **Managed by EDMO (**SDN European Directory of Marine Organizations**) code**
- **Waiting for some regions to implement it.**
- **It should appear the name of provider, logo & URL.**

Ⓟ **Very soon!!**

CMEMS requirements - in situ observations

- Critical sustainability gaps , sampling gaps and major gaps for biogeochemical observation (e.g. carbon, oxygen, nutrients, Chl-a)

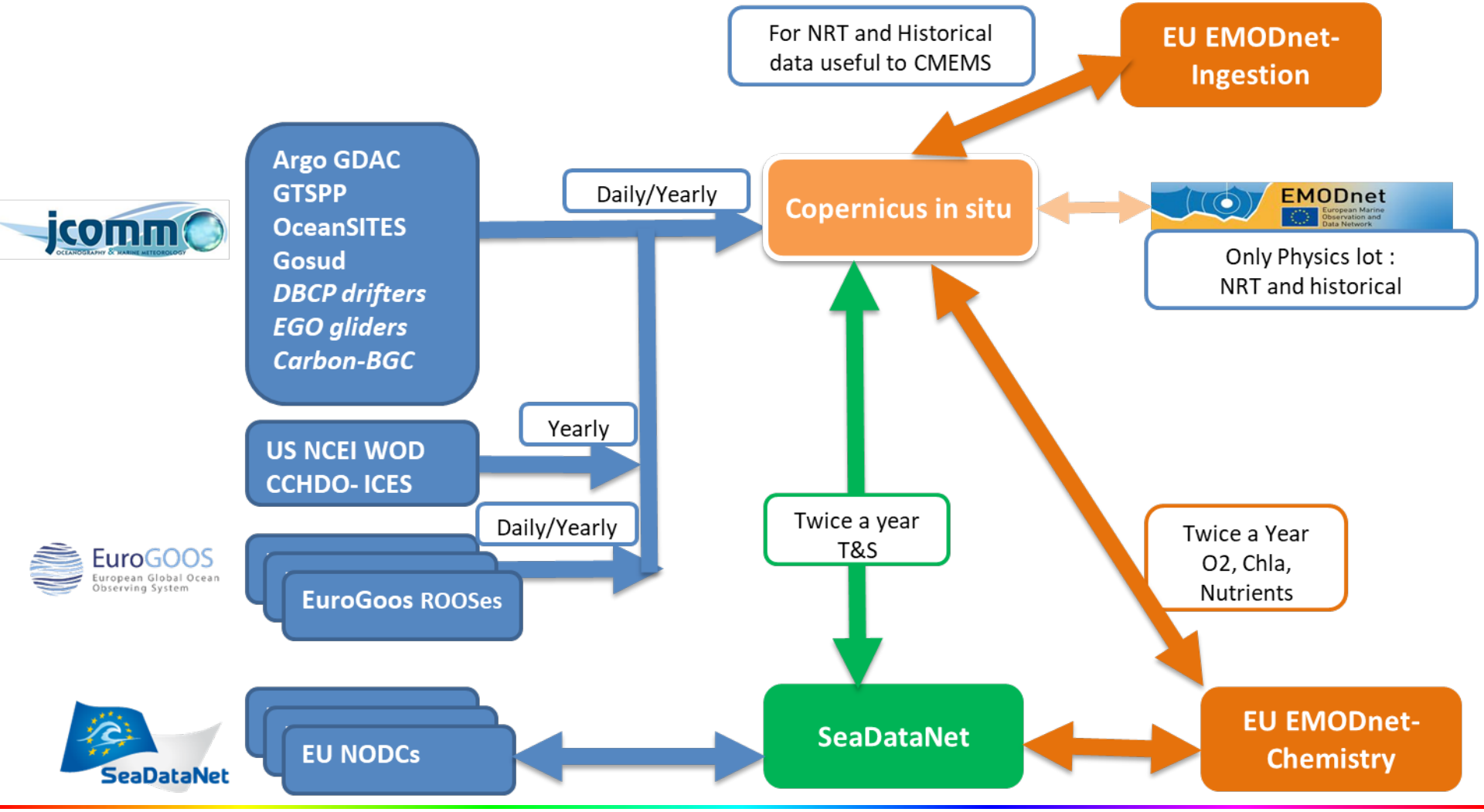
- Sustaining the **Argo global array** , consolidating its regional components and **implementing its major extensions (Biogeochemical Argo and Deep Argo)** are strong priorities for CMEMS

- **Improving ROOSes** and key observing systems such as **Ferryboxes, gliders, tide gauges and HF Radars** are also strong priorities for regional CMEMS products

- Mercator-Océn is working with the European Environment Agency in te **framework of a Future European Ocean Observing System (EOOS)** to address these gaps and consolidate/improve global and regional in situ observing systems

- A more **detailed analysis of CMEMS requirements is now being prepared in collaboration with EuroGOOS . Input to EOOS and OceanObs19**

CMEMS IN Su TAC integrated in the European and International in Situ data management landscape



Why Share data with CMEMS INSTAC

- **Adding value to the data**: making data available via CMEMS INSTAC allows datasets to be combined to create data products and improve CMEMS products in your area of interest . Underlying data sources are always carried with the data.

- **Satisfying funding requirements**: Increasingly funding bodies and governments require that data obtained using public funds be made freely available. Submitting data and making it available via CMEMS INSTAC ensures data is publicly shared for re-use in particular with EMODnet and SeaDataNet.

- **Enhancing Data Quality** : Making a data set available to CMEMS INSTAC allows you to benefit to additional assessment especially during the elaboration of historical products where coherency with neighboring observations is performed and feedback on anomalies detected provided back to providers .

THANKS FOR YOUR ATTENTION!