SeaDataNet Annual Meeting: Rhodes

SeaDataNet

PAN-EUROPEAN INFRASTRUCTURE
FOR OCEAN & MARINE DATA
MANAGEMENT

EMODnet Physics

Antonio Novellino, Giuseppe Manzella, Dick Schaap, Patrick Gorringe, Silvye Pouliquen, Lesley Rickards

Setting EMODnet

Green Paper *on a Future Maritime Policy for the Union:*

- **…**
- **The EU could consider setting up a European Marine Observation and Data Network which would provide a sustainable focus for improving systematic observation**
- **…**

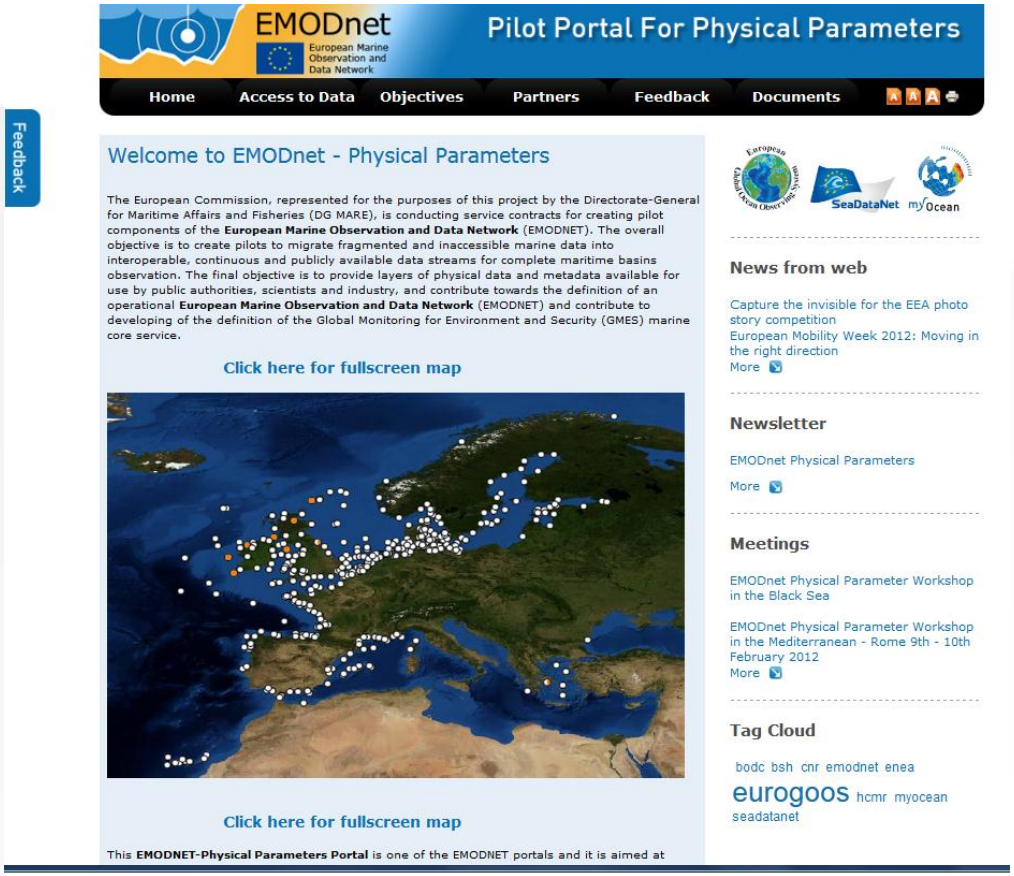
EMODnet Physics

Measurements from fixed stations that cover :

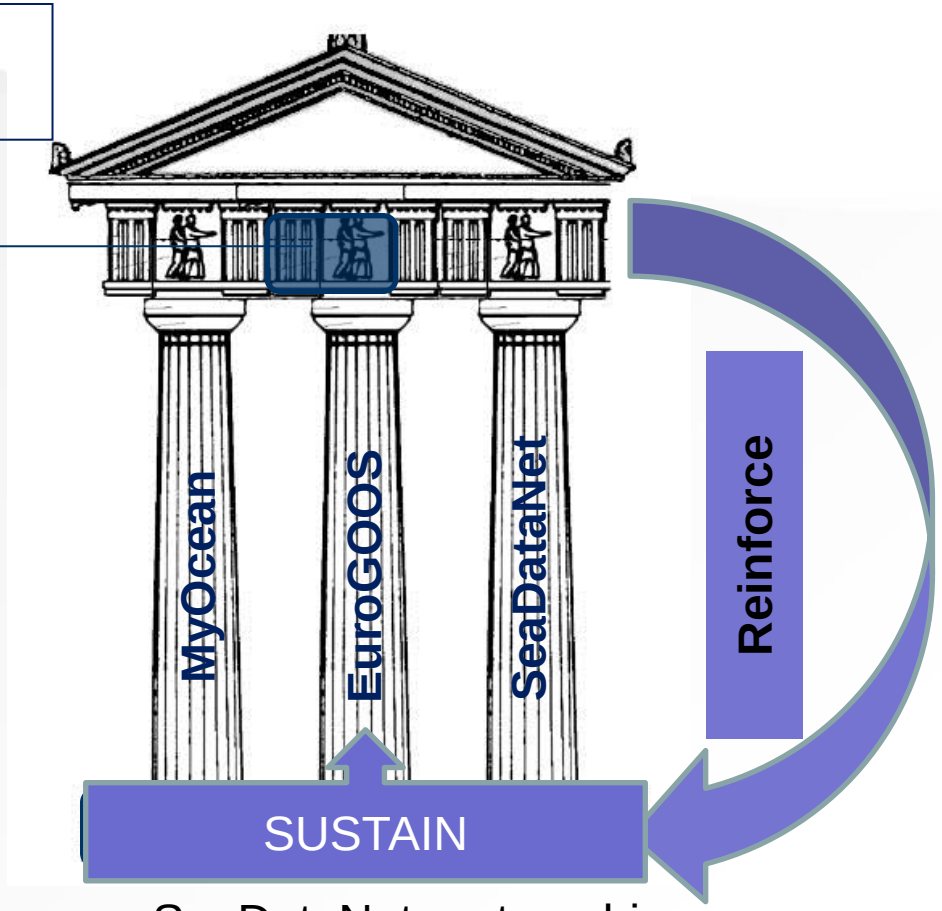
- wave height and period
- temperature of the water column
- wind speed and direction
- salinity of the water column
- horizontal velocity of the water column
- light attenuation
- sea level

Measurements from ferryboxes that cover :

- temperature of the water column
- salinity of the water column



The EMODnet PP pillars



SeaDataNet partnership
EuroGOOS ROOSs
MyOcean/GMES partnership

Single point of access to Near Real time and Archived data

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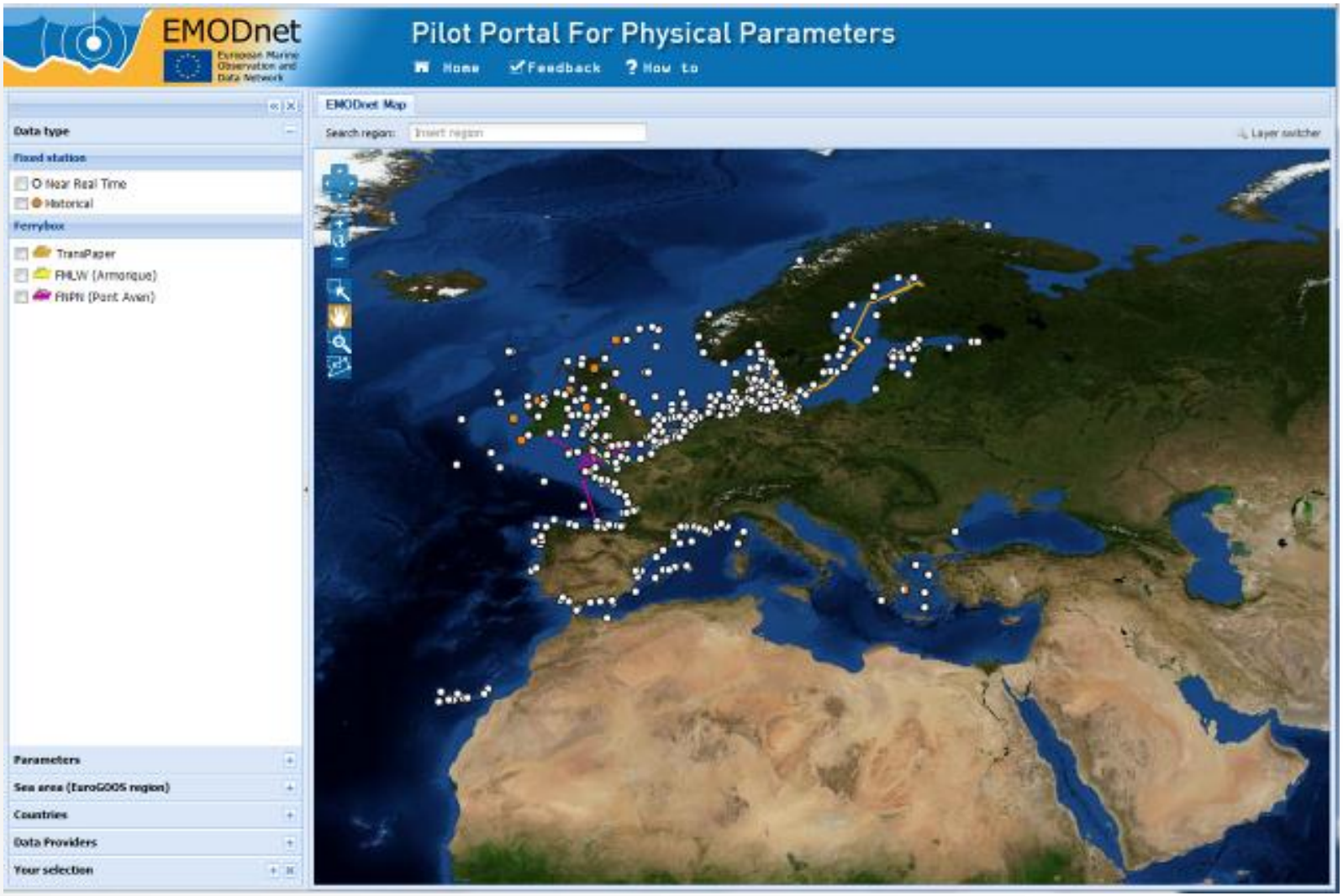
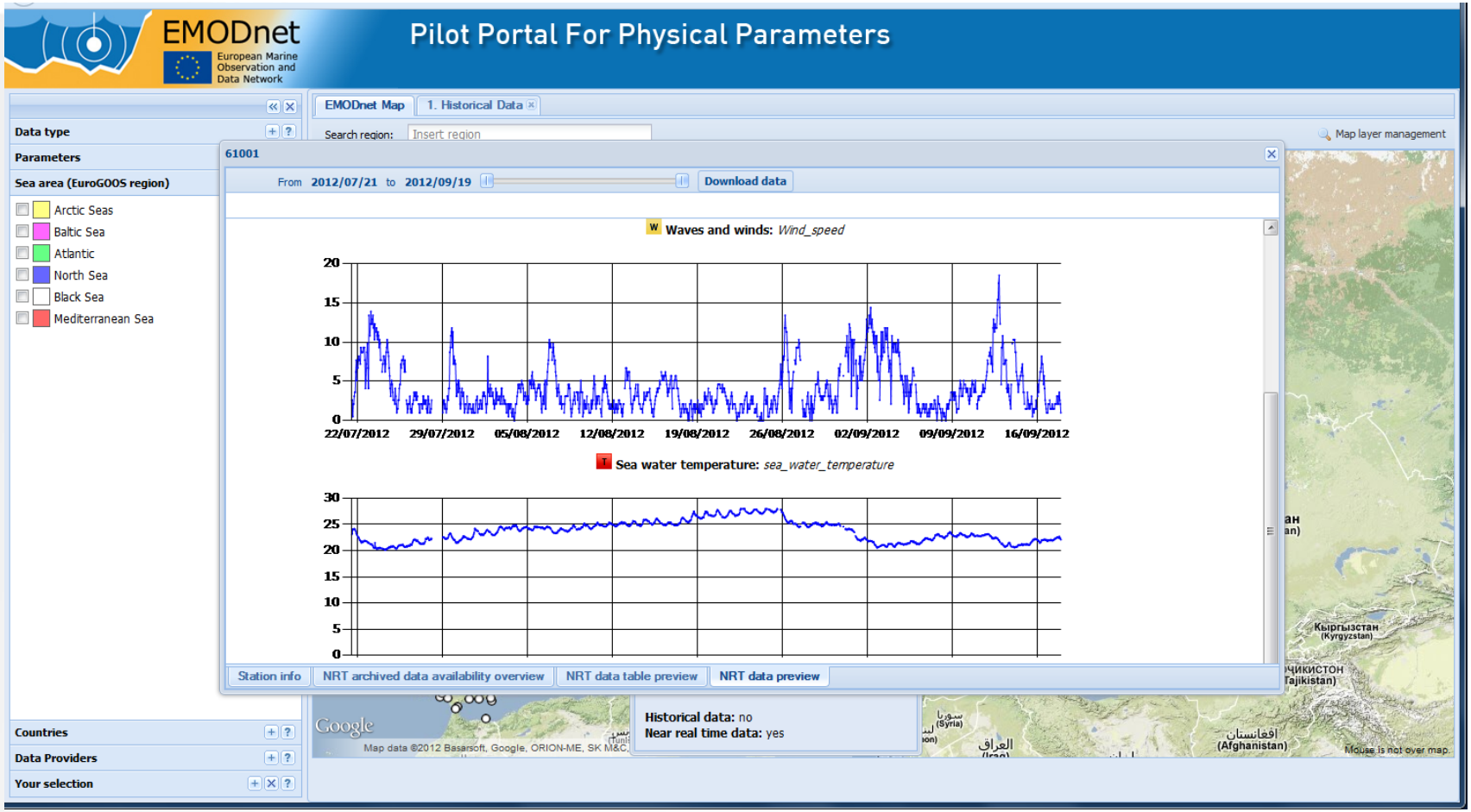
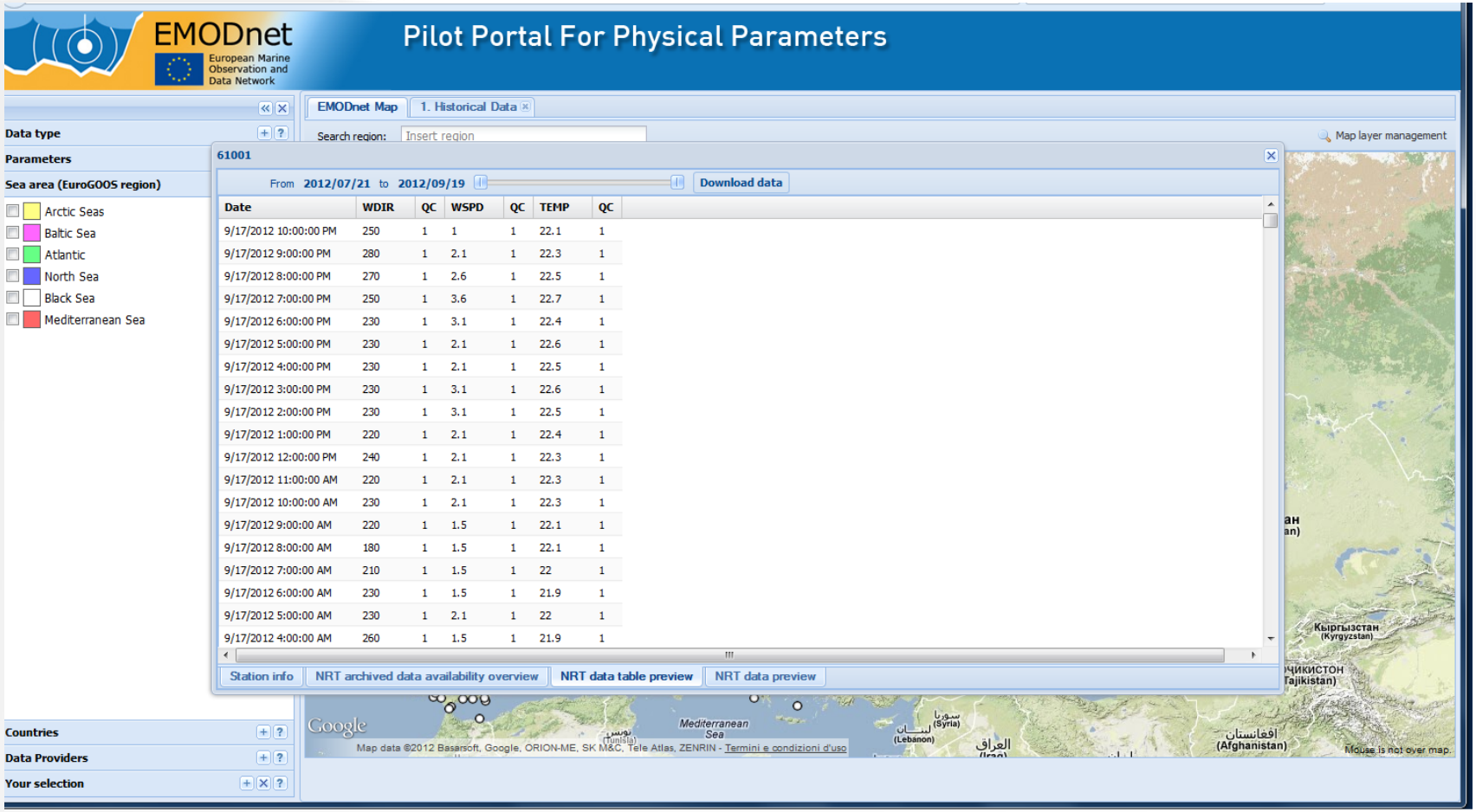
SeaDataNet




EMODnet
European Marine Observation and Data Network
Pilot Portal For Physical Parameters
EMODnet Map
1. Historical Data
Search region:
Insert region
Map layer management
Data type
Parameters
Sea area (EuroGOOS region)
Arctic Seas
Baltic Sea
Atlantic
North Sea
Black Sea
Mediterranean Sea
61001
From 2012/07/21 to 2012/09/19
Download data
Waves and winds: Wind_speed
20
15
10
5
0
22/07/2012
29/07/2012
05/08/2012
12/08/2012
19/08/2012
26/08/2012
02/09/2012
09/09/2012
16/09/2012
Sea water temperature: sea_water_temperature
30
25
20
15
10
5
0
Station info
NRT archived data availability overview
NRT data table preview
NRT data preview
Historical data: no
Near real time data: yes
Countries
Data Providers
Your selection
Google
Map data ©2012 Basarsoft, Google, ORION-ME, SK M&C,
Кыргызстан (Kyrgyzstan)
Tajikistan)
(Afghanistan)
Mouse is not over map.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Map layer management
61001
From 2012/07/21 to 2012/09/19
Download data
Date WDIR QC WSPD QC TEMP QC
9/17/2012 10:00:00 PM 250 1 1 1 22.1 1
9/17/2012 9:00:00 PM 280 1 2.1 1 22.3 1
9/17/2012 8:00:00 PM 270 1 2.6 1 22.5 1
9/17/2012 7:00:00 PM 250 1 3.6 1 22.7 1
9/17/2012 6:00:00 PM 230 1 3.1 1 22.4 1
9/17/2012 5:00:00 PM 230 1 2.1 1 22.6 1
9/17/2012 4:00:00 PM 230 1 2.1 1 22.5 1
9/17/2012 3:00:00 PM 230 1 3.1 1 22.6 1
9/17/2012 2:00:00 PM 230 1 3.1 1 22.5 1
9/17/2012 1:00:00 PM 220 1 2.1 1 22.4 1
9/17/2012 12:00:00 PM 240 1 2.1 1 22.3 1
9/17/2012 11:00:00 AM 220 1 2.1 1 22.3 1
9/17/2012 10:00:00 AM 230 1 2.1 1 22.3 1
9/17/2012 9:00:00 AM 220 1 1.5 1 22.1 1
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9/17/2012 7:00:00 AM 210 1 1.5 1 22 1
9/17/2012 6:00:00 AM 230 1 1.5 1 21.9 1
9/17/2012 5:00:00 AM 230 1 2.1 1 22 1
9/17/2012 4:00:00 AM 260 1 1.5 1 21.9 1
Station info
NRT archived data availability overview
NRT data table preview
NRT data preview
Countries
Data Providers
Your selection
Google
Mediterranean Sea
Map data ©2012 Basarsoft, Google, ORION-ME, SK M&C, Tele Atlas, ZENRIN - Termini e condizioni d'uso
Mouse is not over map.

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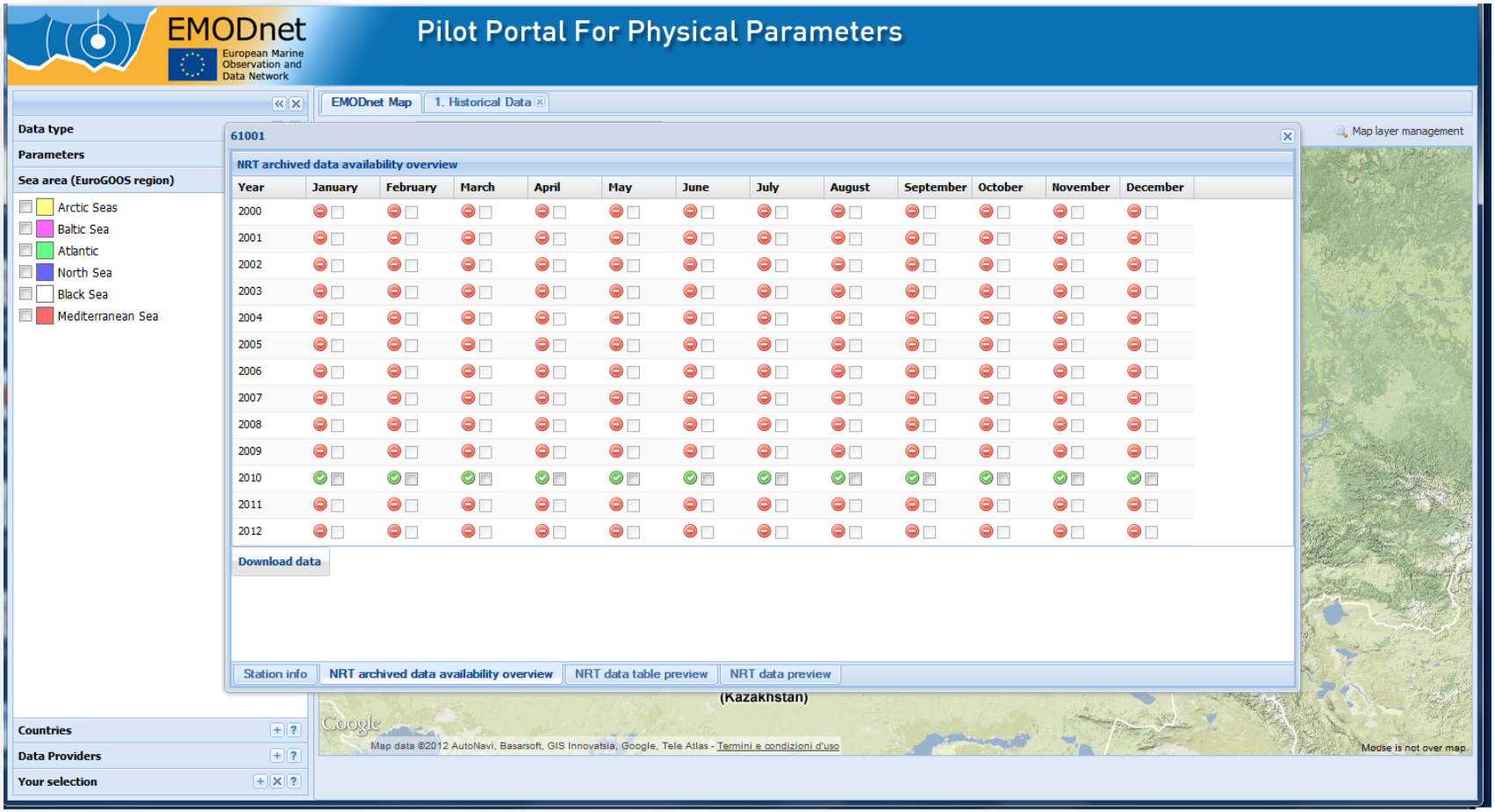

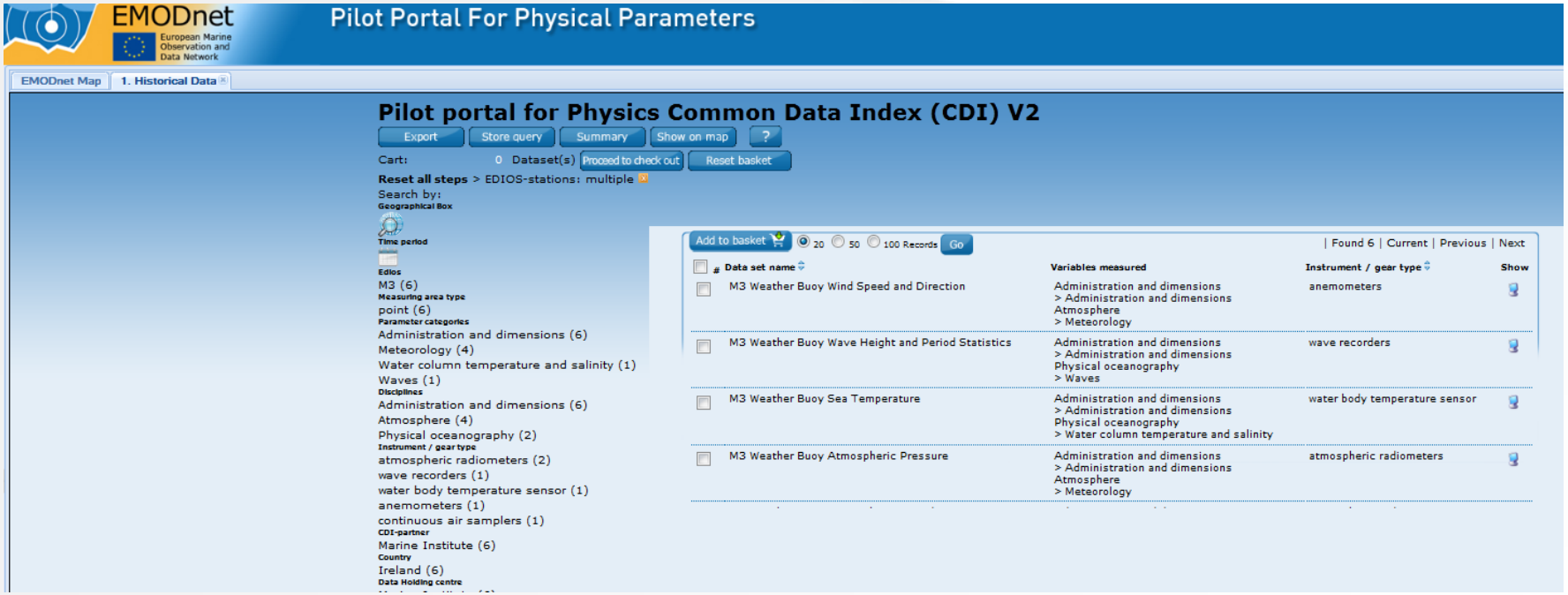

archived data discovery page: CDI list

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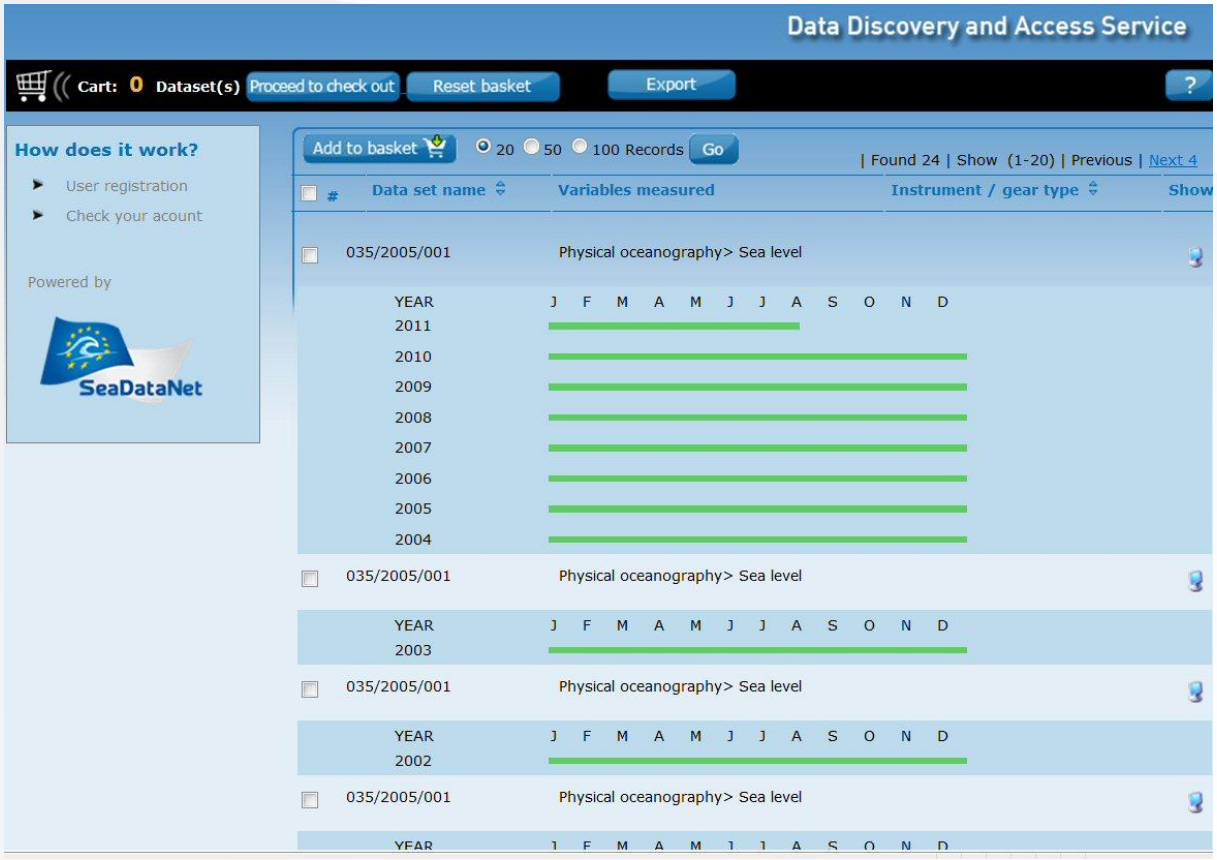
SeaDataNet



Coming soon – archived data discovery page: Draft of the CDI temporal overview

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EMODnet Physics new proposal

SeaDataNet & MyOcean & EuroGOOS ROOSs

- The EuroGOOS **Regional Ocean Observing Systems (ROOSs) are the core of the EuroGOOS association and acts as** the operational arm of EuroGOOS and of projects such as MyOcean. The ROOSs are responsible for the collection of data to fulfil the aims of the regional service needs. Each regional component (Baltic, Arctic, North Sea, Iberian-Biscay, Mediterranean (MONGOOS), Black Sea (BS GOOS) will be involved in EMODnet Physics, through the ROOS chairs

Implementations

- Better access to additional data not yet in the current system
- Access to additional Ferrybox data
- Better streamlining and an optimisation of the data flow
- Opportunities to obtain additional parameters from existing data sites
- Filling in gaps in time series
- Assisting the work on the completeness of stations – leading to a list of uniform station names that reduces duplication between ROOSs.
- Greater uptime of services and synchronisation of data sources between ROOSs and data centres.

Parameters

- (1) wave height and period
- (2) temperature of the water column
- (3) wind speed and direction
- (4) salinity of the water column
- (5) horizontal velocity of water column
- (6) water clarity (light attenuation)
- (7) changes in sea-level
- (8) ice cover

Data layers

Each of the above should be presented as

(1) set of measurements (time series)

(2) continuous data layers in monthly or seasonal averages, differentiating where appropriate values at the sea surface from the (near) sea-bed

- (a) along the coastline. (major focus on coast)
- (b) In the sea-basin (for those parameters that are not covered by GMES)

Geographical coverage

(1) complete coverage of the Baltic, Black, Mediterranean and North Seas,

(2) coverage of jurisdictional waters, including continental shelf) of Member States and Norway for the North East Atlantic (Celtic Seas, Iberian Coast and Bay of Biscay, Macaronesia, Norwegian Sea).

(3) coverage of Icelandic Sea and Barents Sea, if possible.

New specific actions

- Incorporate data from supplementary physical monitoring systems such as EuroArgo (Argo floats) and gliders (the latter through links with the Gliders for Research Ocean Observation and Management (GROOM) project), and possibly other emerging measurement systems (e.g. HF radar)
- Upgrade the portal, further developing the existing user interfaces and adding machine-to-machine interfacing functionality

Collaboration within EMODnet lots

- Lot 3 Physical Habitats
- Lot 4 Chemistry
- Lot 7 Human Activities
- Lot 1 (Bathymetry), 2 (Geology), 5 (Biology) could collaborate with Lot 6 in order to
- Call for Tenders No MARE/2012/11 **Growth and innovation in ocean economy- Gaps and priorities in sea basin observation and data**

EMODnet WPs

- WP 1 Project management
- WP 2 Data Collection, Metadata Compilation and QA/QC
- WP 3 Metadata aggregation, Data access and Data products
- WP 4 Portal technical development and operation
- WP 5 Analysis, evaluation and feedback

EMODnet Phases

- Phase 1 Construction Months 0-12 Complete set of data products for at least three sea-basins First interim report
- Phase 2 Consolidation Months 13-24 All data products completed and available Second interim report
- Phase 3 Convergence Months 25-36 Fine-tuning to ensure convergence with other EMODnet portals Analysis of user feedback Final report

EMODnet Physics:

www.emodnet-physics.eu