

COPERNICUS MARINE ENVIRONMENT MONITORING SERVICE **4REGIONS**



Marine Monitoring



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Mercator Ocean International



Implemented by



Infosession Copernicus4Regions 20th January 2020



Marine
Monitoring

COPERNICUS MARINE SERVICE

<http://www.marine.copernicus.eu>

One Single Portal
OPEN & FREE DATA
Sustained
User-Driven
Manned Service Desk



Copernicus
Europe's eyes on Earth

Implemented by
MERCATOR OCEAN
INTERNATIONAL



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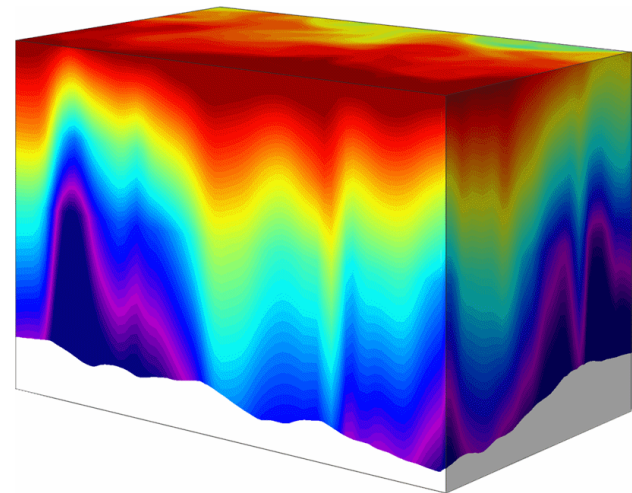
PORTFOLIO GATHERS DATA FROM 3 SOURCES



**SATELLITE
OBSERVATION**



**IN SITU
OBSERVATION**



**OCEAN MODEL
COMPUTATION**



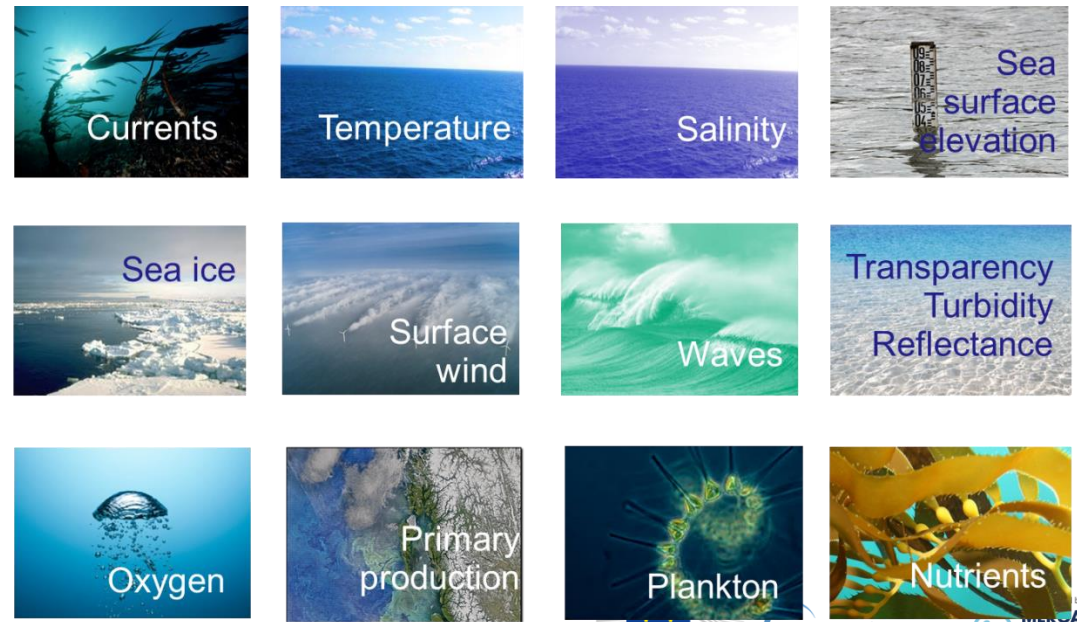


Marine Monitoring

OCEAN DATA, A PUBLIC GOOD



- 1 Global
- 2 Arctic
- 3 Baltic
- 4 NWS
- 5 IBI
- 6 Med Sea
- 7 Black Sea





Ocean Data & Information

OCEAN PRODUCTS

Ocean product catalogue, to download or visualize data across more than 10 variables, including historic, current and forecasted data.

DATA



ONLINE CATALOGUE

YOUR SEARCH

Found 151 ocean products matching your criteria.

REGIONAL DOMAIN

PARAMETERS

TEMPORAL COVERAGE

PRODUCT WITH DEPTH LEVEL

GLOBAL_ANALYSIS_FORECAST_PHY_001_024

GLOBAL OCEAN 1/4° PHYSICS ANALYSIS AND FORECAST UPDATED DAILY

MODEL: GLO

T bottomT S SSH UV MLD SIC SIT SILV

0.083 degree x 0.083 degree (50 depth levels)

From 2006-12-27 to Present

monthly-mean, daily-mean, hourly-mean

GLOBAL_ANALYSIS_FORECAST_BIO_001_014

GLOBAL OCEAN BIOGEOCHEMISTRY ANALYSIS AND WEEKLY FORECAST

MODEL: GLO

CHL PHYC O2 NO3 PO4 SI FE PP

0.5 degree x 0.5 degree (50 depth levels)

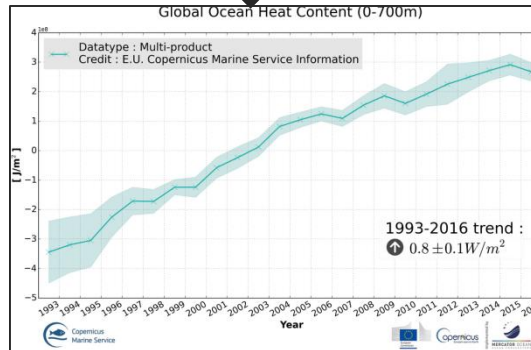
From 2012-01-01 to Present

weekly-mean

OCEAN MONITORING INDICATORS

Essential variables monitoring the health of the ocean

TRENDS



OCEAN STATE REPORT

Extensive annual analysis on the state of the ocean over nearly 20 years and severe/notable annual events

EXPERTISE





Marine
Monitoring

Marine.copernicus.eu

ACCESS TO DATA & INFORMATION

Free and open access
to worldwide Ocean information
marine.copernicus.eu

• SEARCH
& BROWSE



• DISCOVER
& VISUALISE



• REGISTER



• DOWNLOAD



• COMPUTE



• JOIN UP



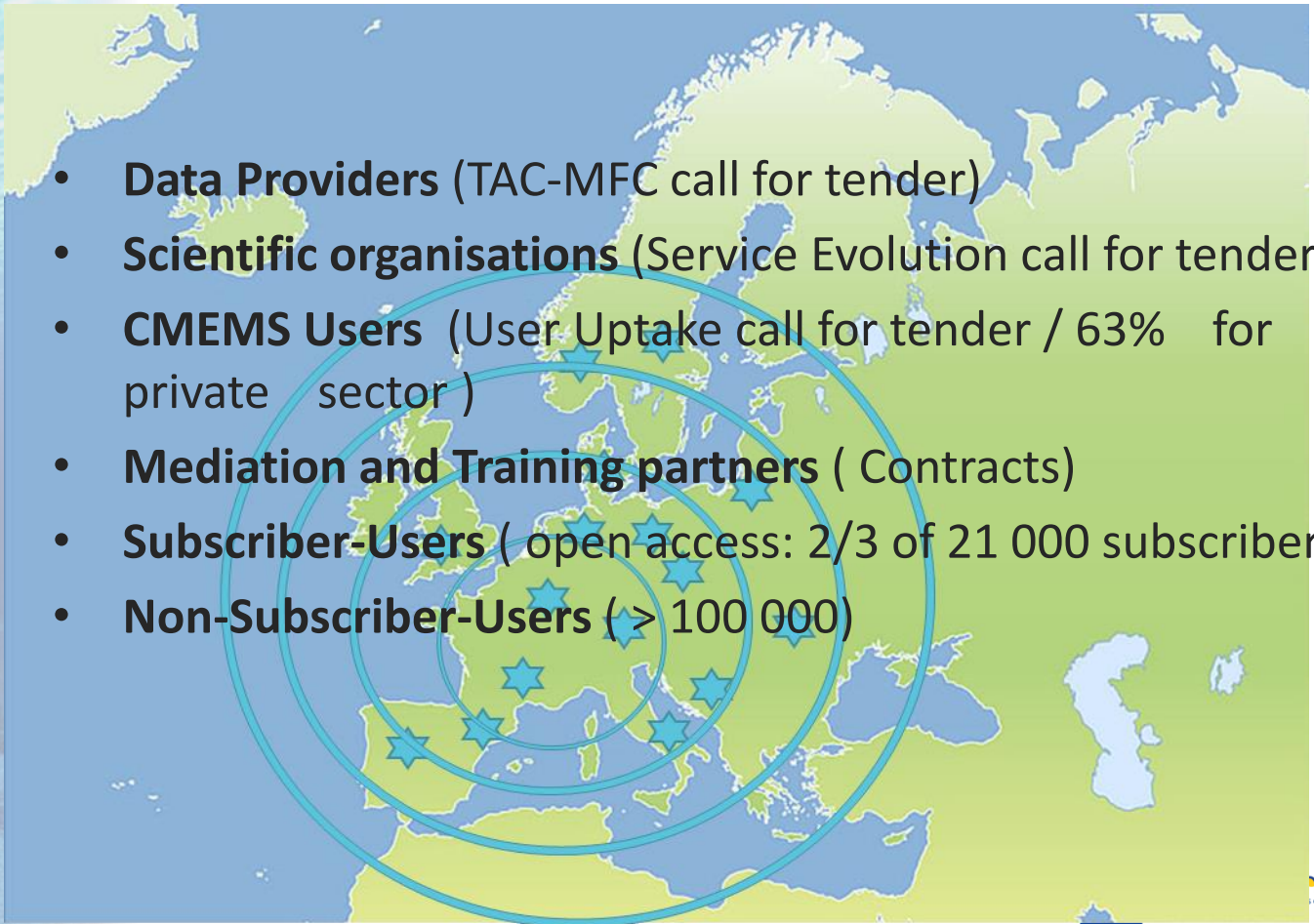
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IN EU REGIONS, WE ARE IN CONTACT WITH



- **Data Providers** (TAC-MFC call for tender)
- **Scientific organisations** (Service Evolution call for tender)
- **CMEMS Users** (User Uptake call for tender / 63% for the private sector)
- **Mediation and Training partners** (Contracts)
- **Subscriber-Users** (open access: 2/3 of 21 000 subscribers)
- **Non-Subscriber-Users** (> 100 000)



Marine
Monitoring

Serving users in various sectors



- | | | | |
|---|--------------------------------------|----|------------------------|
| 1 | SEA ICE
MONITORING | 6 | COASTAL
MONITORING |
| 2 | MARINE
CONSERVATION
& POLICIES | 7 | SOCIETY
& EDUCATION |
| 3 | SCIENCE
& CLIMATE | 8 | MARINE
FOOD |
| 4 | NATURAL
RESOURCES
& ENERGY | 9 | MARINE
NAVIGATION |
| 5 | WATER
QUALITY | 10 | SAFETY
& DISASTER |



Marine Monitoring

GET CLOSER TO USERS : SHOWCASING, PROMOTING

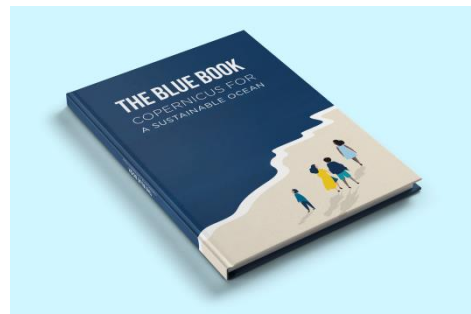
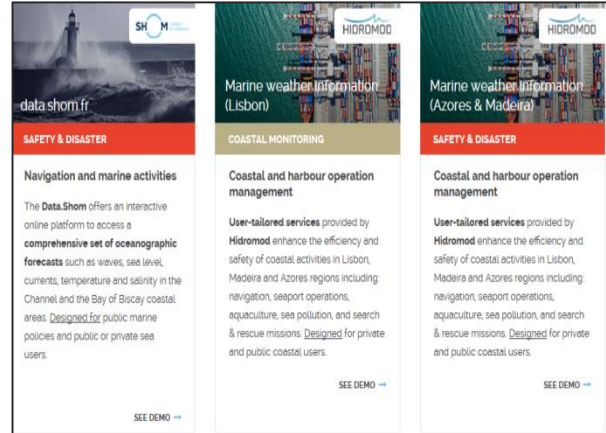
USE CASES



USE CASE BOOKS



USE CASE DEMOS



ONLINE !





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GET CLOSER TO USERS : CHAMPION USERS

Copernicus Marine Service GENERAL ASSEMBLY		
CHAMPION USER ADVISORY GROUP	INDEPENDENT EXPERTS	
 Lasse RABENSTEIN  SEA ICE MONITORING	 Ghada EL SERAFI  MARINE CONSERVATION & POLICIES	 Felipe FERNANDEZ  NATURAL RESOURCES & ENERGY
 Sébastien LEGRAND  SAFETY & DISASTER	 Matthias DELPEY  WATER QUALITY	 Jonas MORTENSEN  COASTAL MONITORING
 Christophe MESSAGER  SCIENCE & CLIMATE	 Ewoud HUISKAMP  MARINE NAVIGATION	 Andrea TARAMELLI  MARINE FOOD

To advise on the Copernicus Marine Service fit-for-purpose with regards to applications developed in our target following markets.

~15 users & experts from private and public sector





GET CLOSER TO USERS: REGIONAL & THEMATIC TRAININGS

Marine

SAVE THE DATE | May 14-15 2019 In Lisbon, Portugal



COPERNICUS MARINE SERVICE TRAINING WORKSHOP

for Iberia-Biscay-Ireland Region

#CMEMSTraining

SAVE THE DATE | December 12-13 2019 Galway, Ireland



COPERNICUS MARINE SERVICE TRAINING WORKSHOP

for NORTH-WEST SHELF Seas

#CMEMS4NWS

SAVE THE DATE | December 9-10 2019 Bologna, Italy



COPERNICUS MARINE SERVICE TRAINING WORKSHOP

for MEDITERRANEAN SEA

SAVE THE DATE | June 6-7 2019

Copernicus Marine for Outermost and Maritime Regions

In Azores, Faial Island, Horta city

#CMEMS4OR

June 26-27 2019 In Constanța, Romania



COPERNICUS MARINE SERVICE TRAINING WORKSHOP

for BLACK SEA REGION

#CMEMSTraining

SAVE THE DATE | October 2, 2019

Copernicus Marine for MSFD

In Brussels, Belgium

What have Member States done to protect their marine environment under EU rules to protect seas and oceans



Copernicus Marine Service for the Aquaculture Sector



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TRAINING FACTS and FIGURES



2019

- 6 regional training workshops
- 330 participants trained
- 10 local partners
- 46 CMEMS experts involved
- 45 practical sessions developed

ATTENDEE SATISFACTION KPI



4,2/5



FEEDBACK

"The content was very relevant and helpful for me" from a Baltic Sea attendee

"More days expected" from a IBI Region attendee

"Great job, the session was very fruitful" from a Mediterranean Sea attendee



Planned in 2020

- Collaboration with Univ. Malta, International Winter Course, January
- Canaries Islands, Spain, March
- Varna, Bulgaria, April
- Gdansk, Poland, May
- Split, Croatia, June
- Oslo, Norway, October
- Hamburg, Germany, November



Recent events



- WOC World ocean council Sustainable Ocean Summit, Nov 20-22, Paris, France
- Baltic WeSeaChallenge, Turku, Finland, Dec1-4 2019
- EU Space Week, Dec 3-5, Helsinki, Finland
- Joint CMEMS/C3S side event at COP25 in Madrid, Spain, Dec 7, 13:30-15:00



Upcoming events



- International Winter course in Malta in cooperation with the Ministry of Foreign Affairs, Jan 8-13, Malta
- COPERNICUS4REGIONS debate and infosession at European Parliament, Jan 20, Brussels
- Arctic Frontiers, Jan 26-30, Tromso, Norway (CMEMS side event)
- CopernicusMarine4MarineNavigation, May 12, Greece, organized jointly by CMEMS/MIT Enterprise Forum
- CopernicusMarine4Aquaculture workshop, April 29-30, Norway, organized jointly by CMEMS/DG MARE EMODNET/EATIP
- EGU, May 3-8, Vienna, Austria (CMEMS booth)
- European Maritime Days 14-15 May, Cork, Ireland (EMODNET/CMEMS/EATIP side event submitted)



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THANK YOU

