



OPERA
OCEAN PREDICTION
ENHANCEMENT IN
REGIONS OF AFRICA

Presentation of Mercator Ocean and its activities in Africa



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Mercator Ocean International




Funded by
the European Union



2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development



**MERCATOR
OCEAN**
INTERNATIONAL

A world map showing ocean currents. The continents are in natural colors, and the oceans are overlaid with a complex pattern of swirling lines in shades of blue, green, and yellow, representing different current systems. A semi-transparent dark blue banner is positioned across the middle of the map, containing white text.

**Mercator Ocean International,
a future intergovernmental organisation dedicated to
Digital Ocean Systems and Information Services**

3 Decades of development of an impactful digital oceanography

2000-2010

2010-2020



2021
2030
United Nations Decade
of Ocean Science
for Sustainable Development

2020-2030



Policies & governance



ORGANIZATIONS
& action

Services & operational infrastructures



SYSTEMS
& data

Science & international collaborations



PEOPLE
& knowledge

Mercator Ocean International



Multinational governance

Delegated entity of the European Union



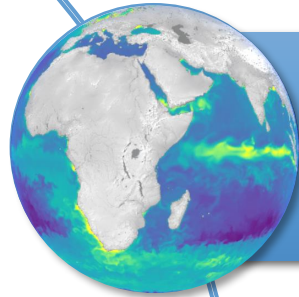
Public interest mission

Digital oceanography, operational

120 staff, Toulouse, Madrid, Barcelona

International partners network

3 CORE MISSIONS



DESCRIBES THE OCEAN ENVIRONMENT

- Providing a global public service for **ocean data, information and knowledge**



PROVIDES OCEAN SERVICES & CAPACITIES

- Supporting capacity and international cooperation through a **global ocean prediction network**, based on a **numerical ocean system** (Digital Twin of the Ocean)



SUPPORTS OCEAN PROGRAMMES & POLICIES

- Developing and operating a reference centre for ocean forecasting whose **ocean intelligence** is needed by States, EU, UN...

Mercator Ocean International



Multinational governance

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DELEGATIONS & MANDATES



Priorities ahead of the UN Ocean Conference



1

GOVERNANCE

Formalize the transition of Mercator Ocean to intergovernmental status, with the opening of the signatures to Member States



2

DIGITAL OCEAN INFRASTRUCTURE

Promote the European Digital Twin of the Ocean as a decision-making tool within the framework of the EU Ocean Pact



3

GLOBAL OCEAN PREDICTION COMMUNITY

Establish cooperation agreements with the international ocean forecasting community

Transitioning into an IGO



6 Initiating States



- decided in 2022 to transform the Mercator Ocean International into an intergovernmental organisation (IGO),
- adopted a 3-year roadmap with the 2025 **UN Ocean Conference as a key milestone**,
- **invited all European States to join** as Founding Member States to establish an IGO of representative European governance.



2022, Portugal



2025, France

MOTIVATIONS:



1. **To develop further and facilitate** the opening of Mercator Ocean governance to be representative of ocean prediction in Europe and beyond



2. **To better support the European Commission** and the **UNESCO-IOC** in the implementation of their programs, with a competent intergovernmental organisation fully devoted to ocean digital ocean systems knowledge and operations



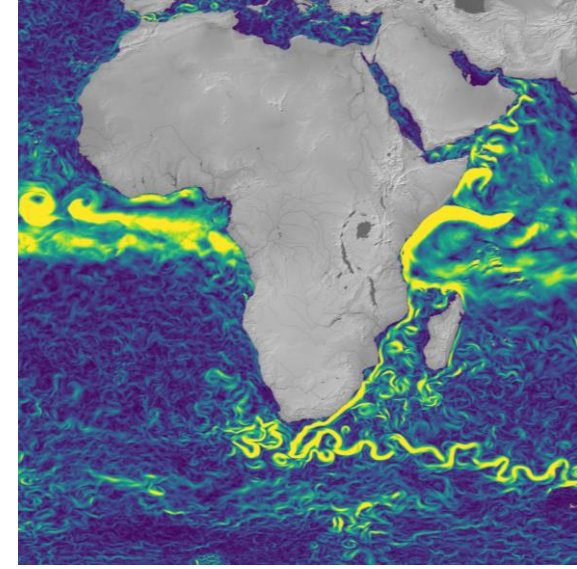
3. **To foster inter-governmental and international agreements** required for a further development of ocean prediction worldwide through national capacities, e.g. on data sharing standards and interoperability protocols.



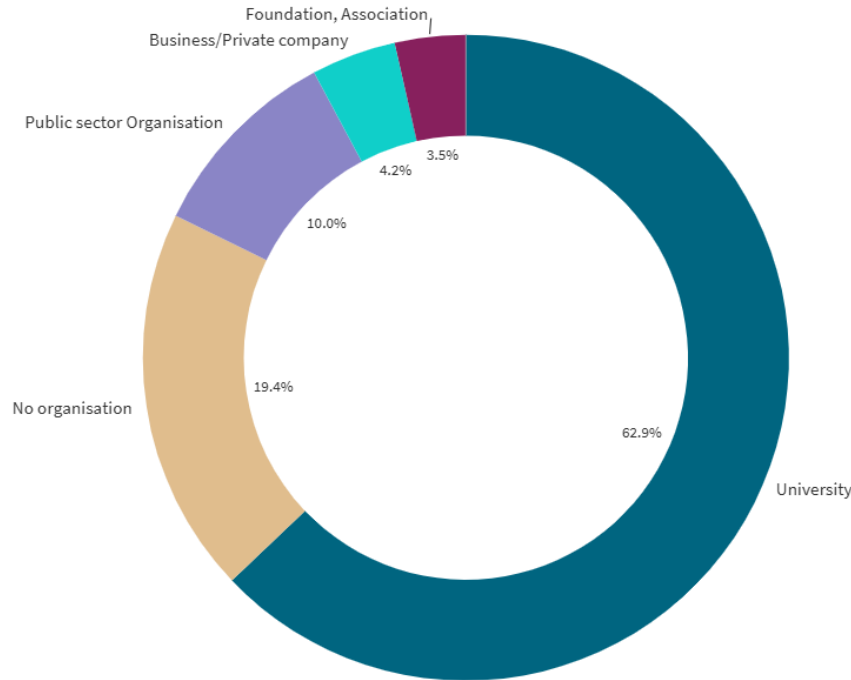


Copernicus Marine Service

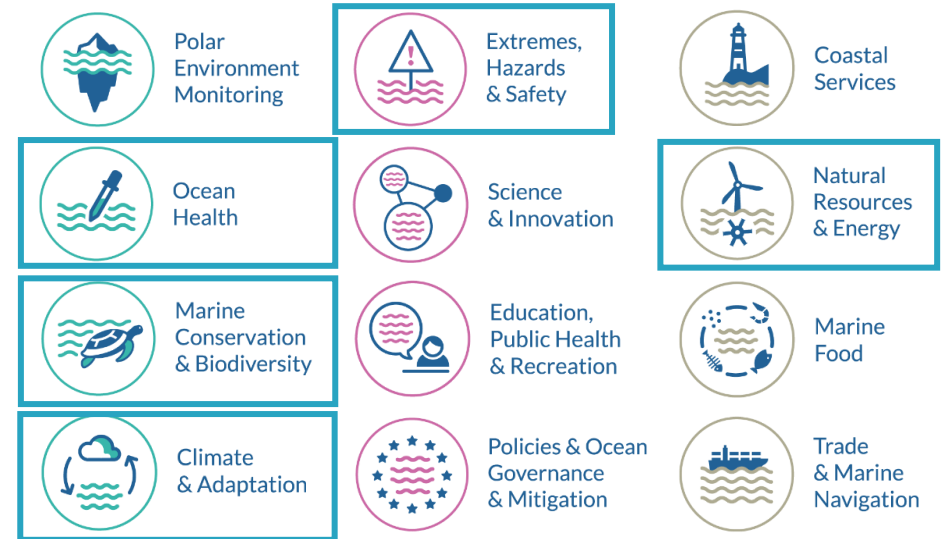
4 233 registered users in Africa
marine.copernicus.eu



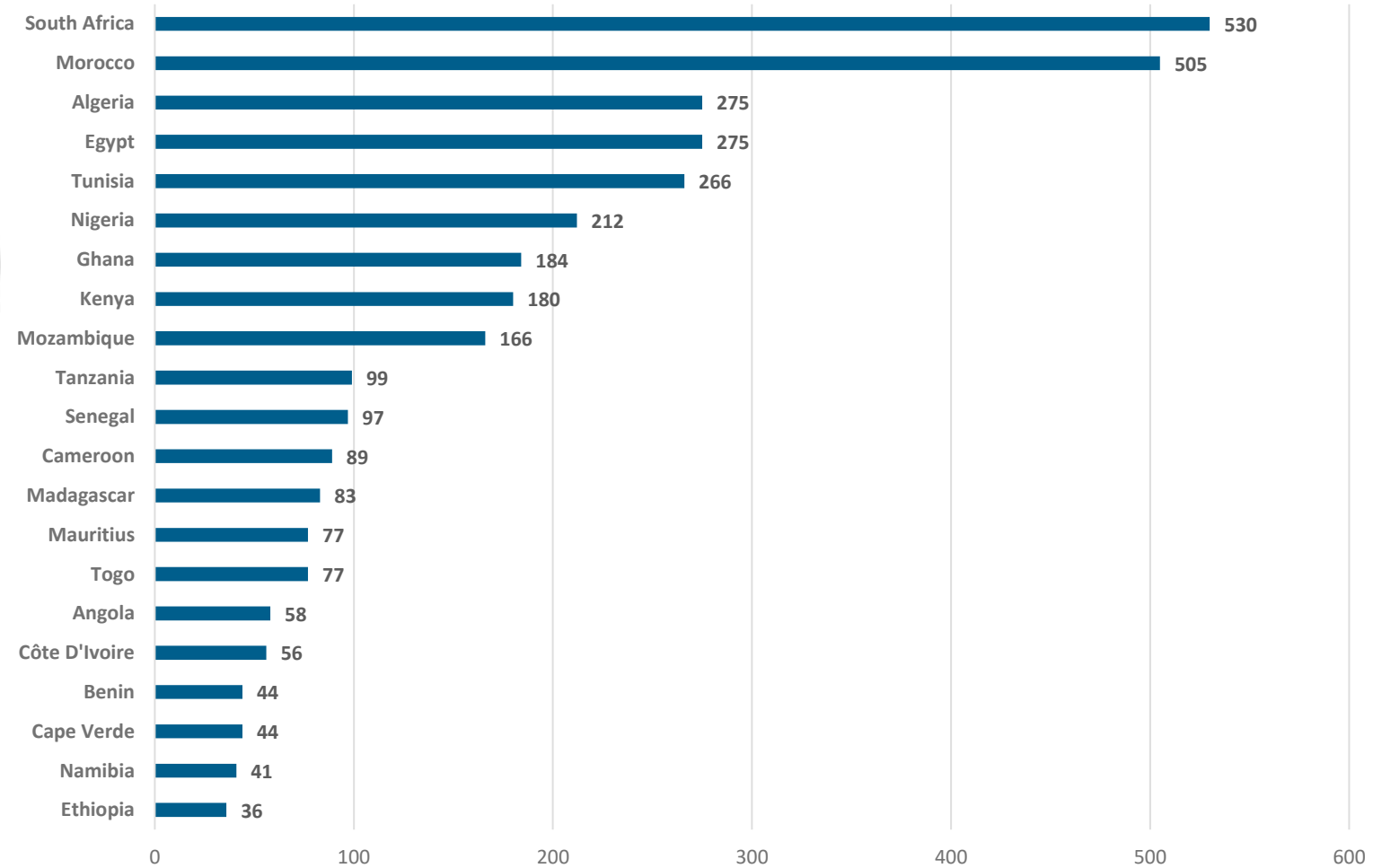
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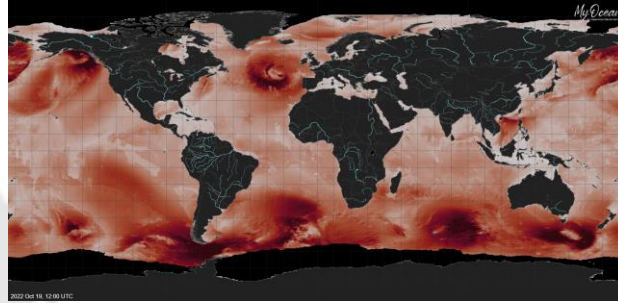
Top Blue markets: Environment, Society & Economy



Engagement with marine data community in Africa

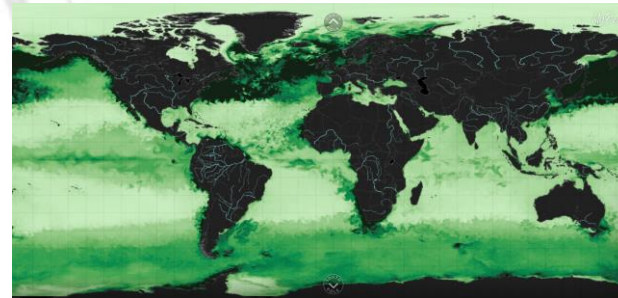


Top products by number of data users in Africa



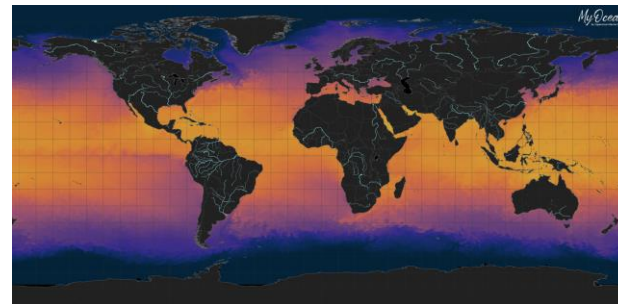
Global Ocean Physics Analysis and Forecast

Daily and monthly mean files of temperature, salinity, currents, sea level, mixed layer depth and ice parameters from the top to the bottom over the global ocean. It also includes hourly mean surface fields for sea level height, temperature and currents.



Global Ocean Biogeochemistry Analysis and Forecast

Daily and monthly mean files of biogeochemical parameters (chlorophyll, nitrate, phosphate, silicate, dissolved oxygen, dissolved iron, primary production, phytoplankton, zooplankton, PH, and surface partial pressure of carbon dioxide) over the global ocean.



Global Ocean Physics Reanalysis

This product includes daily and monthly mean files for temperature, salinity, currents, sea level, mixed layer depth and ice parameters from the top to the bottom

2025 #MarineData4Africa Training

2025 edition: 1314 attendees, 98 countries

2024 Training of Trainers webinar

Organised in the framework of the Copernicus User Uptake in Africa project

2023 Copernicus #MarineData4Africa Training

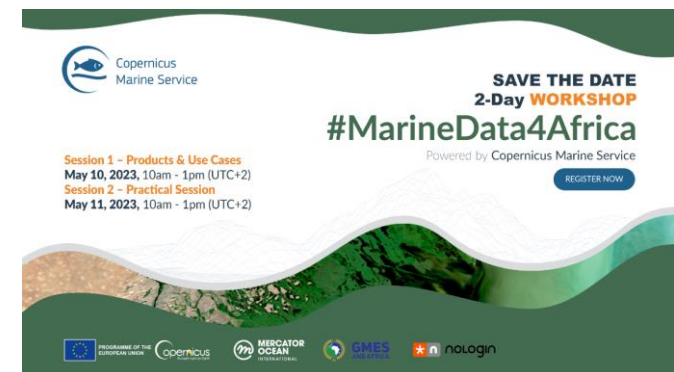
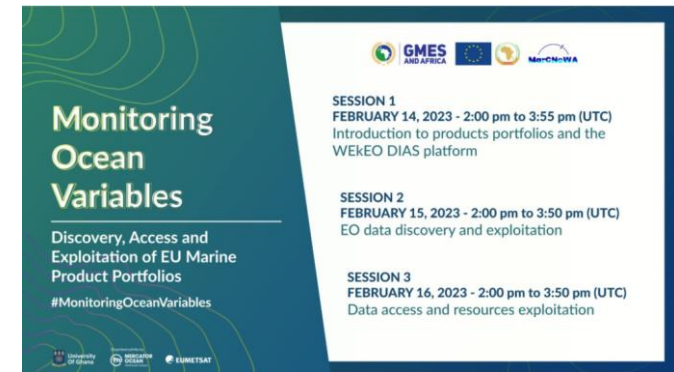
2023 edition: 744 attendees, 40 countries, with GMES & Africa

2023 #MonitoringOceanVariables training workshop in 2023

3-days workshop co-organised with EUMETSAT and University of Ghana, GMES & Africa

2022 Copernicus Marine Service training workshop at the GBP

Symposium Training workshop during the GEO Blue Planet Symposium, 100 participants, with GMES & Africa





Ocean Innovation Africa Summit '23

Participated in event targeting entrepreneurship and innovation in the blue economy sectors in Africa

World Economic Forum - UpLink Great Blue Wall Challenge

Support to Great Blue Wall initiative, alongside IUCN, WIOMSA, UNECA

OceanHubAfrica partnership (2022- 2023)

Support to acceleration programme

OceanChallenge4Africa hackathon challenge 2022

Create innovative and impact-driven ocean solutions using marine Earth-observation data (with at least one Copernicus Marine product), to contribute to the sustainable use of ocean and coastal resources in Africa. About 200 participants from 51 countries working in the 35 selected teams accompanied by a team of 20 mentors.

GEO Blue Planet



- Mercator Ocean International hosts the European Office of GEO Blue Planet – the ocean and coastal arm of the Group on Earth Observations
- Activities to improve **engagement with African marine community**
 - expand the Earth Observation community of practice, strengthen local capacity, and provide access to resources, tools and services.

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Growing collaboration in Africa



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IOC Sub Commission for Africa
and the Adjacent Island States

