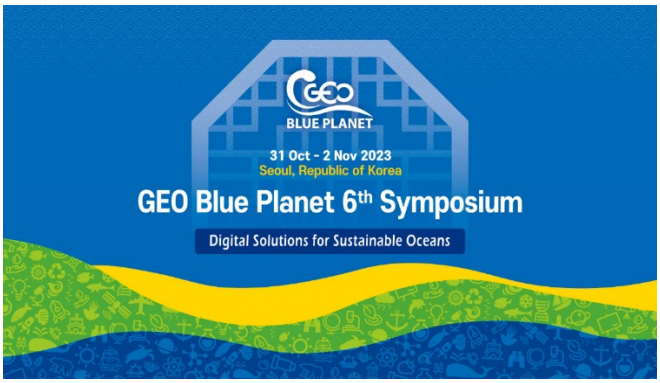
# ANNUAL REPORT ON ACTIVITIES

YEAR 2023
Edited by the GEO Blue Planet Secretariat

info@geoblueplanet.org www.geoblueplanet.org @GEOBluePlanet




# Introduction

GEO Blue Planet, a global initiative of the Group on Earth Observations (GEO), focuses on ocean and coastal monitoring through Earth Observations (EO) to aid sustainable management and decision-making. Throughout 2023, GEO Blue Planet pursued impactful projects and international collaborations that emphasized ocean conservation, digital integration, and data-driven policymaking. Here's an expanded summary of the year's accomplishments, activities, and strategic directions across awards, events, working groups, and partnerships.

## GEO Team Impact Award

During GEO Week 2023, GEO Blue Planet received the GEO Team Impact Award, a distinguished honor shared with GEO Global Agricultural Monitoring (GEOGLAM) and the GEO-PDRS, for their joint contributions to environmental data sharing and effective policy support. This award recognized GEO Blue Planet's work in creating frameworks that incorporate ocean data into environmental planning, bolstering efforts for climate adaptation and coastal sustainability.

# Key Events and Global Engagements

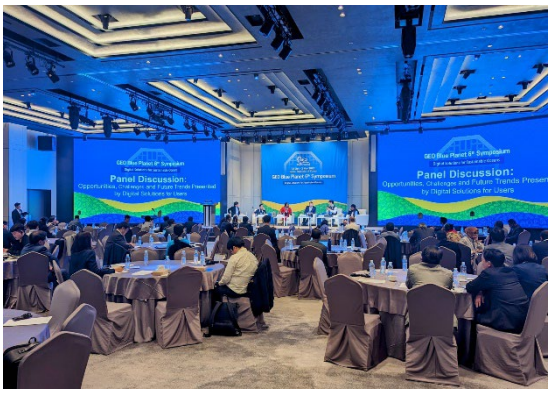
## 6th GEO Blue Planet Symposium in Seoul, South Korea:

Held under the theme “Digital Solutions for Oceans,” the symposium assembled leaders, researchers, and policymakers to discuss the implementation of digital tools for sustainable ocean management. The event was hosted by the Korea Maritime Institute (KMI) and emphasized cooperation across the Asia-Pacific region, addressing urgent oceanic challenges through Earth Observation and digital solutions. Highlights included:

- Day 1: Keynotes on regional ocean challenges and sessions on integrating digital tools for sustainable marine resource management.

- Day 2: Thematic workshops on marine litter, fisheries management, bathymetry, and coastal adaptation.

- Day 3: A forum that reviewed symposium outcomes and planned next steps for the newly established GEO Blue Planet Asian Secretariat.

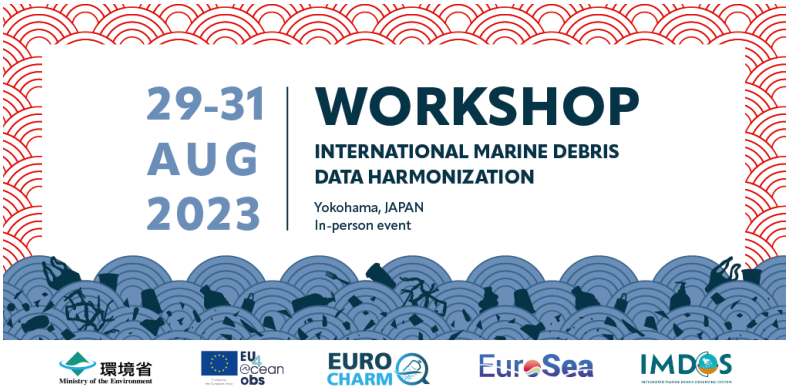



## GEO Week in Cape Town, South Africa:

GEO Blue Planet also had a strong presence at GEO Week, where it showcased its projects and engaged in knowledge exchange on ocean monitoring at an exhibition stand. Representatives presented on GEO Blue Planet’s role within the broader GEO framework, highlighting partnerships, climate resilience initiatives, and data-driven tools for ecosystem protection.

## Other Workshops and International Conferences:

- **Japan Marine Litter Workshop:** In Yokohama, GEO Blue Planet's Marine Litter Working Group partnered with Japan's Ministry of Environment to improve data harmonization for marine debris indicators.




- **High-Level Expert Meeting (Vienna):** GEO Blue Planet's executive director joined the Data Environmental Alliance (DEAL) to help form a global environmental data strategy, leveraging tech-enabled cross-sectoral approaches to address pressing environmental goals.

- **WIO Marine Regions Forum (Tanzania):** Workshops focused on data-sharing frameworks and coastal adaptation policies for developing regions, supporting sustainable resource use and local capacity building.

# Working Groups and Specialized Projects

## Marine Litter Working Group

The Marine Litter Working Group expanded the Integrated Marine Debris Observing System (IMDOS) to enable a globally coordinated data approach for monitoring marine debris, emphasizing microplastics and ocean-surface litter. In collaboration with key partners like UNEP, the team developed a strategy to standardize marine debris data and improve its accessibility for research and policymaking.

## Sargassum Working Group

Focused on sargassum blooms, this group launched the Sargassum Information Hub, a central resource for data on sargassum accumulation. The hub, which is actively evolving, serves Caribbean and West

African nations, offering real-time information, resources, and updates. Key 2023 developments included:

- Establishing regional pages and news updates.
- Planning a 2024 workshop in the Caribbean to discuss regional adaptations to sargassum influxes.
- Building new partnerships to support further resource development and stakeholder engagement.

## Fisheries Working Group

The Fisheries Working Group prioritized a white paper on Earth Observation for tuna fisheries management, which addresses the use of EO data to improve forecasting and management of fisheries. The group organized bi-weekly meetings to drive progress, set deadlines, and promote best practices for applying EO tools in managing fish stocks sustainably.

## Climate Adaptation Working Group

Tasked with supporting UNFCCC's Coastal Adaptation Plan Guidelines, the Climate Adaptation Working Group completed a comparative analysis of National Adaptation Plans, focusing on coastal components. Key workshops at the 6th GEO Blue Planet Symposium provided valuable feedback, which will inform the 2024 guidelines, enhancing coastal resilience strategies globally and enabling data-based adaptation frameworks.

## Coastal Geomorphology Working Group

This group aims to support sustainable coastal development in small island states and African nations, focusing on satellite-derived bathymetry and mapping nearshore ecosystems. In collaboration with local stakeholders, the group is building capacity in satellite data interpretation for geomorphological assessment and erosion monitoring.

## Flooding and Inundation Working Group

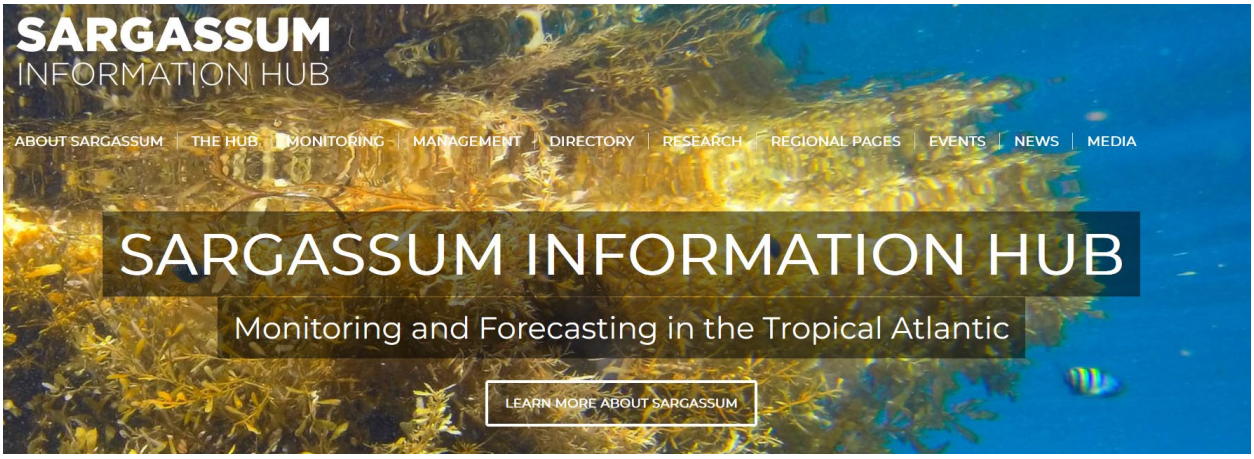
The newest addition to GEO Blue Planet's portfolio, this working group was formed to tackle the increasing global concern of coastal flooding. Linked to the WaveForce platform, it provides real-time flood forecasting, aligning with GEO Blue Planet's commitment to mitigating climate impacts on coastal populations.

# Advancements in Digital and Data-Driven Solutions

GEO Blue Planet has heavily invested in digital infrastructure to support its mission of integrating data into coastal and marine policies:

**- WaveForce Platform Development:** Providing up-to-date information on coastal flooding risks, the WaveForce platform leverages EO to provide predictive insights, critical for vulnerable coastal communities.

**- Sargassum Information Hub:** This platform has seen a remarkable increase in user traffic, illustrating growing demand for data resources tailored to managing sargassum blooms, a major concern in regions like the Caribbean.




**- Data Standardization Efforts in IMDOS:** Standardized data on marine litter is key to global monitoring and mitigation strategies, and the Marine Litter Working Group's IMDOS is advancing this with harmonized datasets that facilitate effective analysis and action against plastic pollution.

# Expanding Regional Partnerships and Collaborations

In 2023, GEO Blue Planet increased its reach and impact through regional offices, symposia, and partnerships. Key developments include:

- **GEO Blue Planet Asian Secretariat:** Officially launched in South Korea, the Asian office strengthens GEO Blue Planet's ability to address the unique oceanic challenges faced by Asian-Pacific nations.

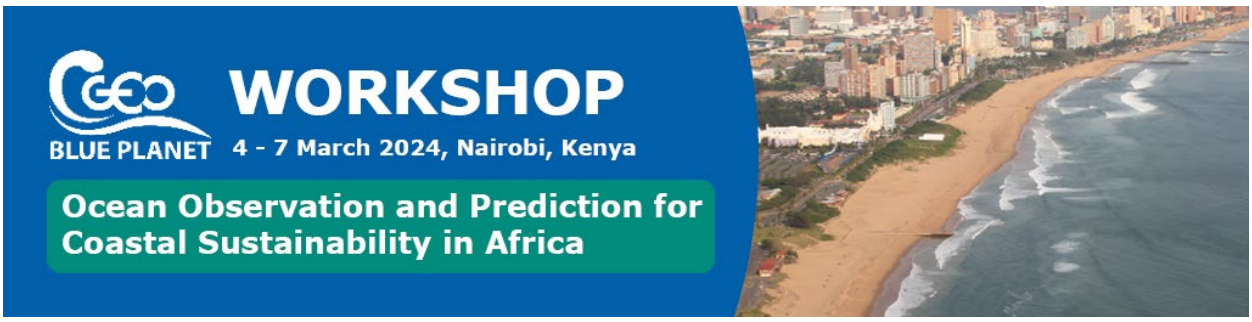
- **Collaborations with Africa:** Through workshops in Tanzania and Kenya, GEO Blue Planet has built capacity for ocean monitoring and sustainable coastal management in African coastal nations, focusing on data-sharing frameworks, training, and infrastructure support.

- **Strategic International Partnerships:** Collaboration with organizations like UNEP, IOC-UNESCO, and Blue Shell Inc. has enabled GEO Blue Planet to expand its digital solutions and ensure data accessibility in developing regions.

# Future Directions and Upcoming Initiatives

## Upcoming Events in 2024:

- **Ocean Observation Workshop in Kenya:** Set for March, this workshop will focus on sustainable ocean practices and conservation initiatives tailored to African coastal communities.




- **OceanPredict Symposium in Paris:** In November 2024, the symposium will discuss the development of operational oceanography as a societal resource, supporting GEO Blue Planet's goals for impactful, real-time data applications in ocean monitoring.

# Conclusion

The 2023 updates reflect GEO Blue Planet's commitment to enhancing ocean and coastal sustainability, particularly through digital innovation, regional engagement, and interdisciplinary collaboration. Its

work on marine litter, sargassum, fisheries, climate adaptation, and flooding emphasizes the program's role as a bridge between data, policy, and actionable insights. Looking ahead, GEO Blue Planet's partnerships and projects aim to strengthen global capabilities in ocean monitoring and adaptive coastal management, driving meaningful progress toward sustainable ocean conservation.