

The National Oceans and Coastal Information Management System (OCIMS)

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The Challenge

The South African marine environment covers vast spatial scales

Need for an information system to support

- ✓ Development
- ✓ Monitoring
- ✓ Protection
- ✓ Management
- ✓ Policing



Objectives

The OCIMS project was launched in 2015 and forms part of Operation Phakisa to support the development and governance of the South African ocean economy

OCIMS provides information and decision support services for the daily management of South Africa's oceans and coasts

Earth Observation



Establish earth observation technology capacity for the South African Exclusive Economic Zone (EEZ) and the extended continental shelf

Functional System



Deliver an operational, user-friendly and cost-effective system for the benefit of stakeholders

Sustainable Infrastructure



Establish and implement the data and earth observation infrastructure

Stakeholders

OCIMS follows a co-development approach. Since inception there has been direct input from stakeholders through **Technical Advisory Groups**, ensuring the decision support services are fit for purpose

The OCIMS community is primarily comprised of government departments, private sector companies, parastatals, NGOs and academics



OCIMS stakeholder workshop, 2019. (Source: DFFE, 2019)

Tools and Services

Operational Tools

Static Tools

Data related initiatives



Coastal

View various spatial

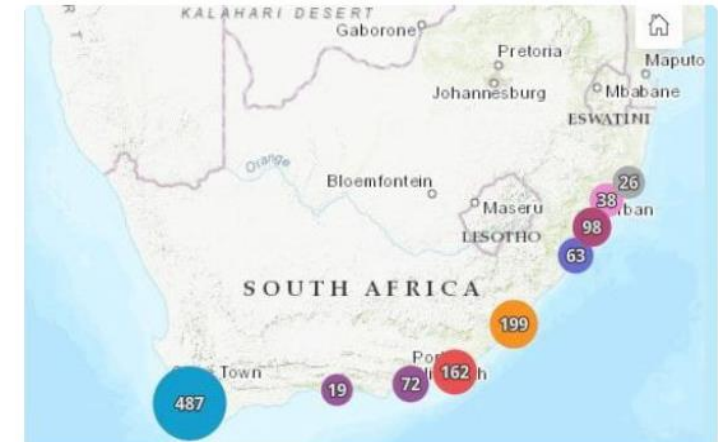
Marine Information Management System

MIMS is an archival data repository for marine and coastal data.



Avian Influenza Reporting Dashboard

The dashboard provides visualisation of the data captured via the data capture tool

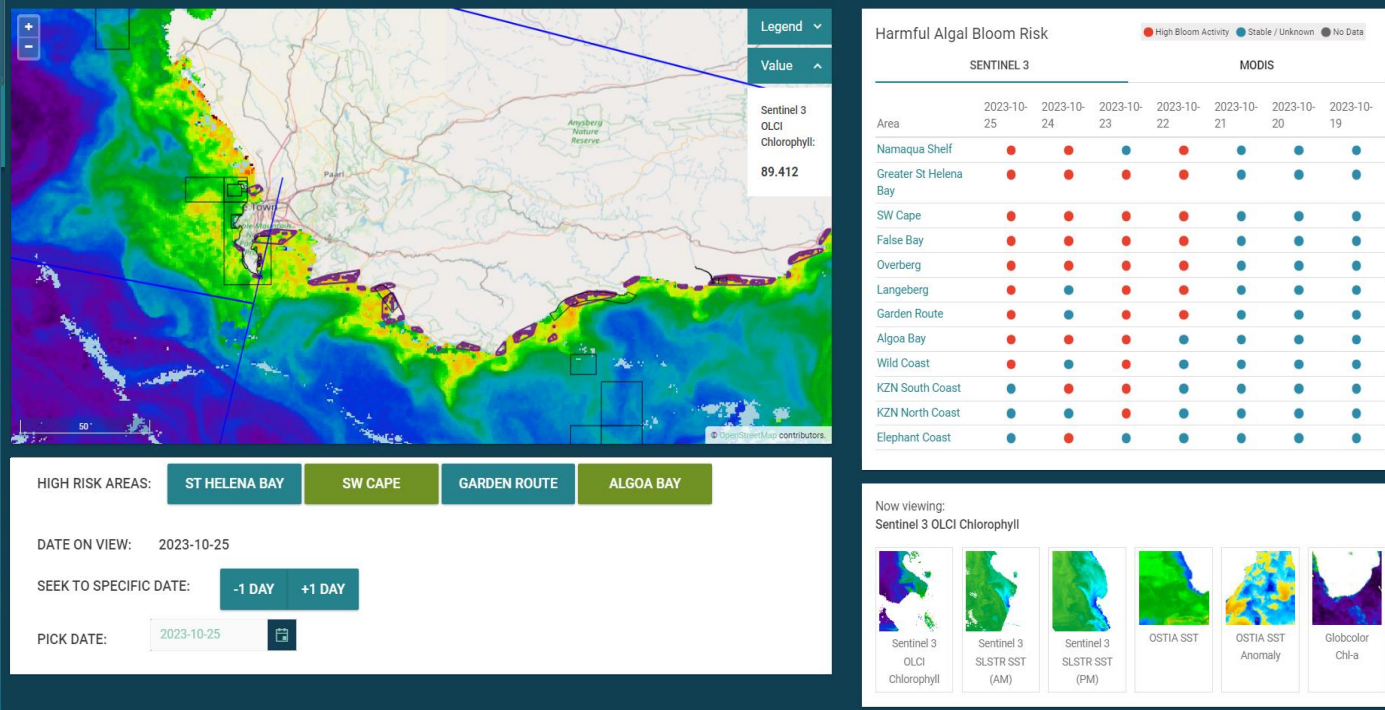


Water quality sampling dashboard

Water quality results from a point-source sampling initiative. To contribute to this initiative, please [contact us](#).



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Fisheries and Aquaculture Decision Support Service

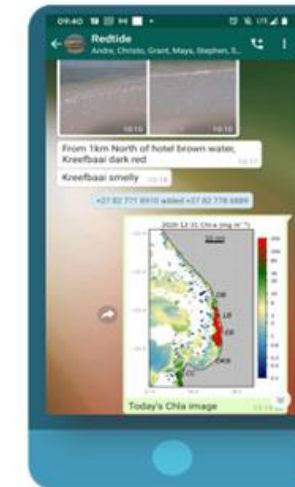
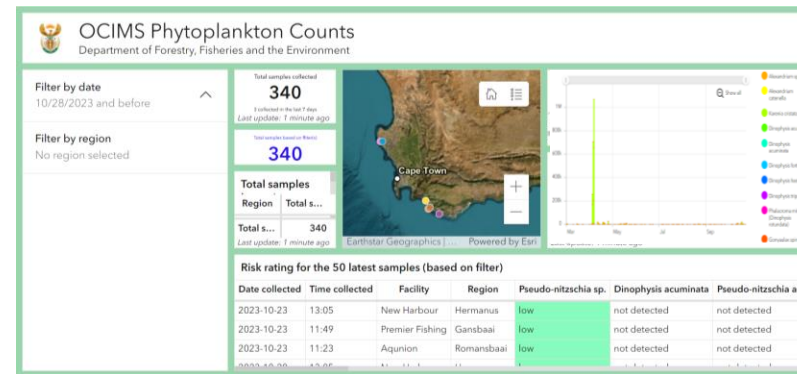
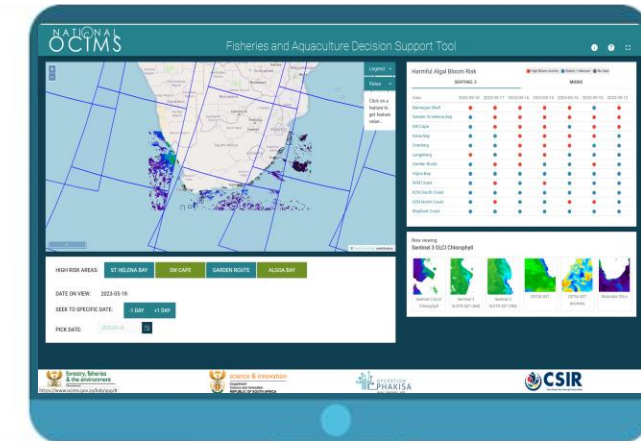
- ✓ Mapped satellite products coverage over EEZ
- ✓ Daily satellite products
- ✓ 300m-5km spatial resolution

<https://www.ocims.gov.za/hab/app/>

Fisheries and Aquaculture DeST

<https://www.ocims.gov.za/hab/app/>

- Web-based **User Interface**, providing present and historical maps of **Chl-a**, Sea Surface Temperature (**SST**), **SST gradients**, **SST anomalies**, and phytoplankton **bloom analytics**
- Regional **WhatsApp groups**, providing relevant site-specific, near-real time high resolution satellite images
- **Email alerts** sent to users when there are bloom events
- Technical Advisory Group
- **Phytoplankton count data capture tool and dashboard** (controlled access)



Webtool

Regional WhatsApp groups

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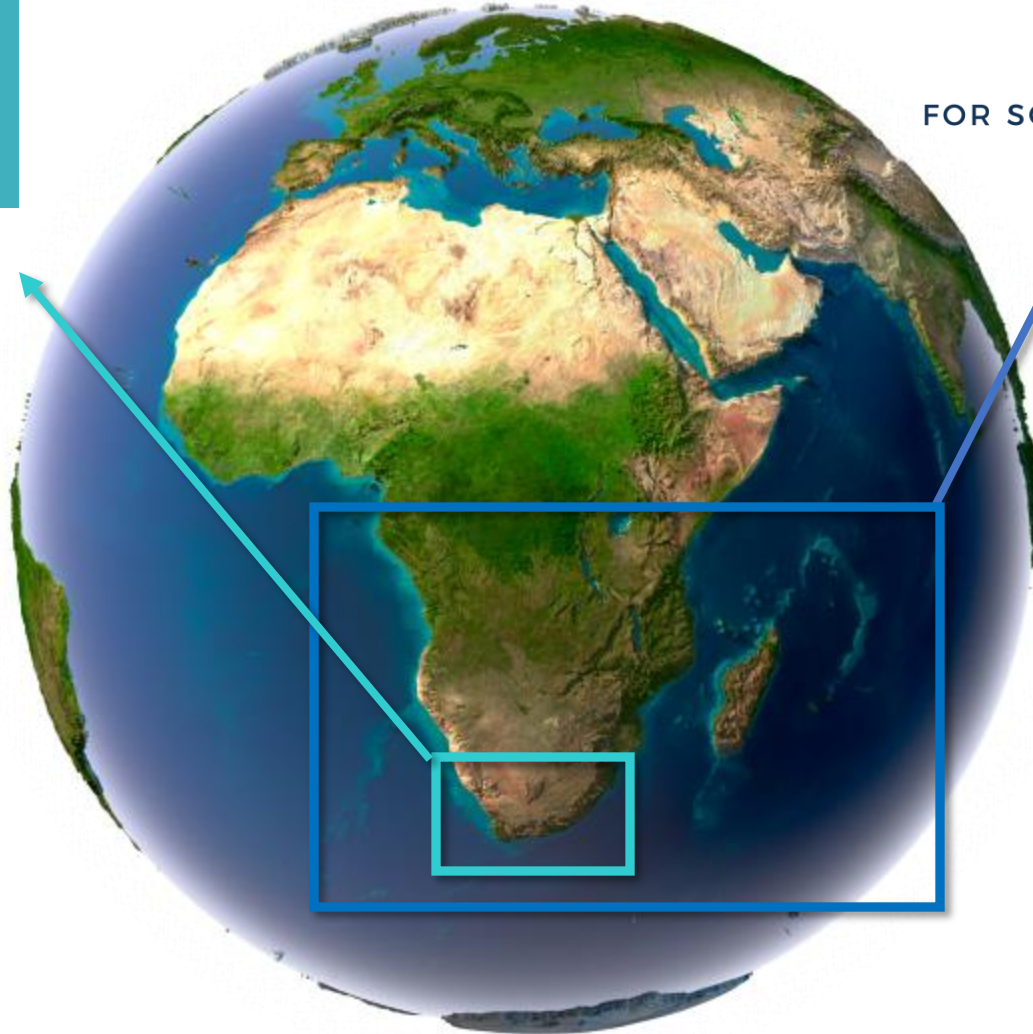
Marine Earth Observation service development and delivery in Africa



MarCOSIO

●●● MARINE AND COASTAL OPERATIONS FOR SOUTHERN AFRICA AND THE INDIAN OCEAN

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- ✓ Developed by the Department of Forestry, Fisheries and the Environment in partnership with the CSIR, SAEON and SAWS through Operation Phakisa
- ✓ Decision support tools for the effective governance of South Africa's oceans and coasts

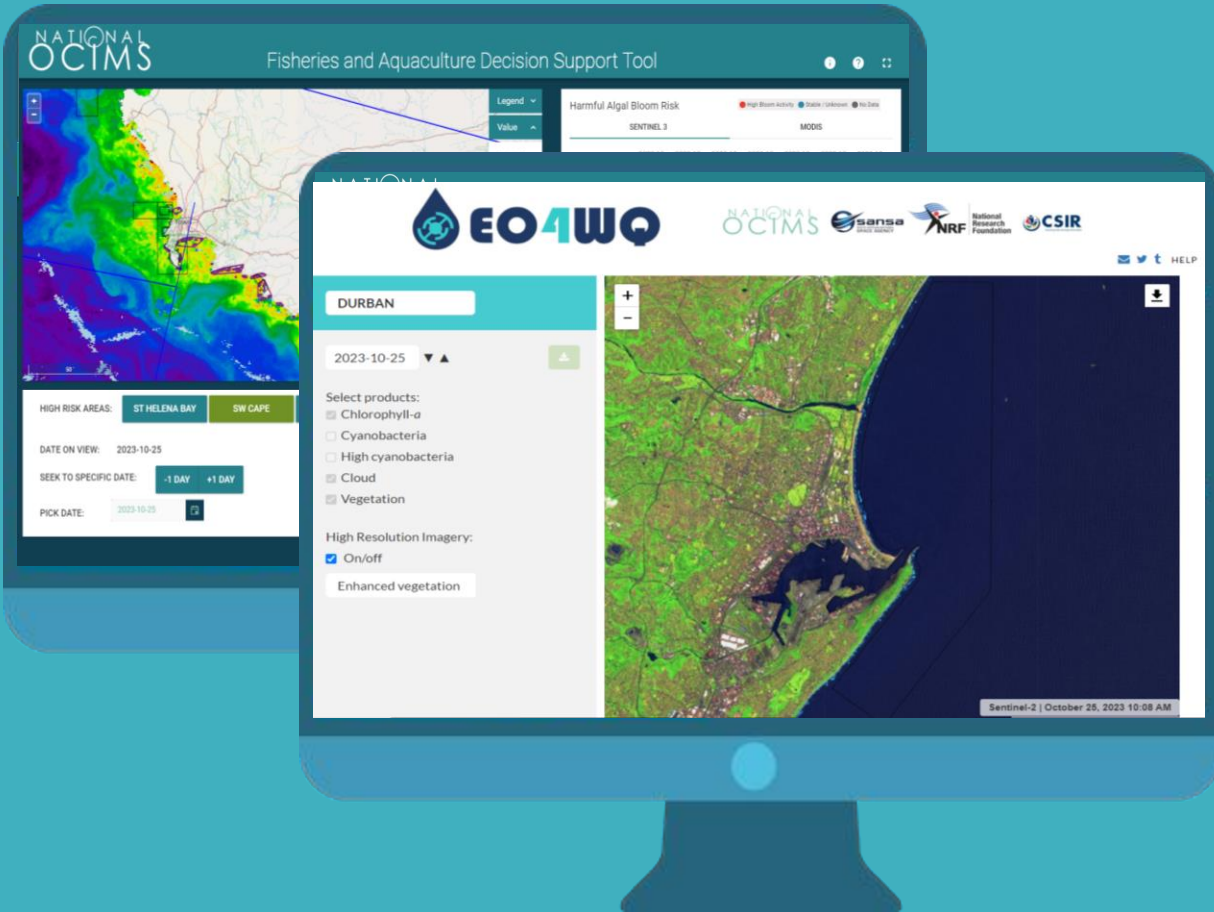
- ✓ One of two Marine Thematic area consortia GMES & Africa programme. Represents the southern African and Indian Ocean partners.
- ✓ Mechanism for regional upscaling of OCIMS



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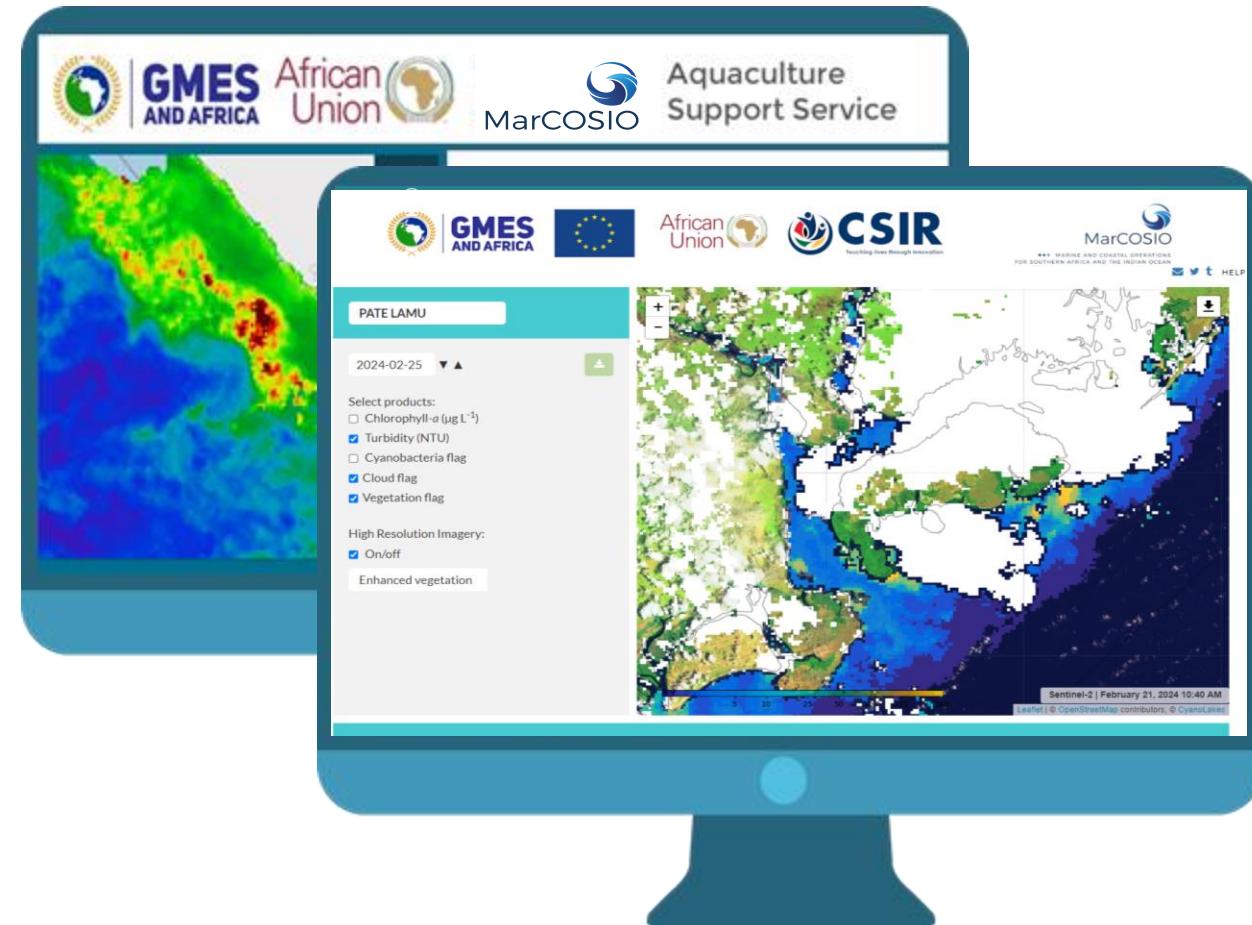
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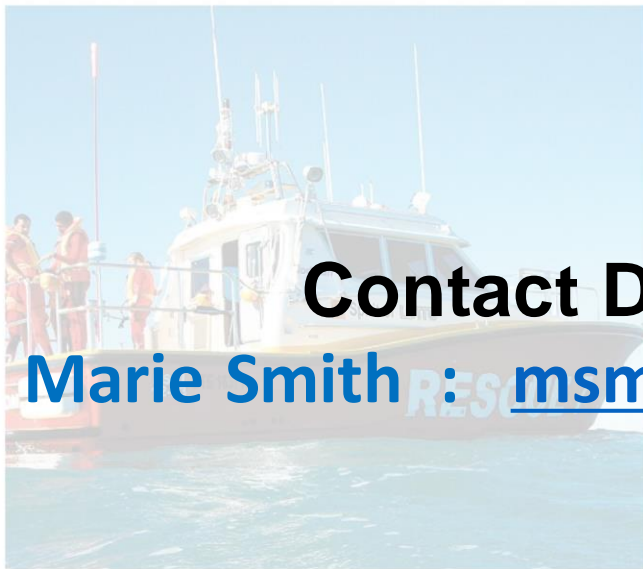
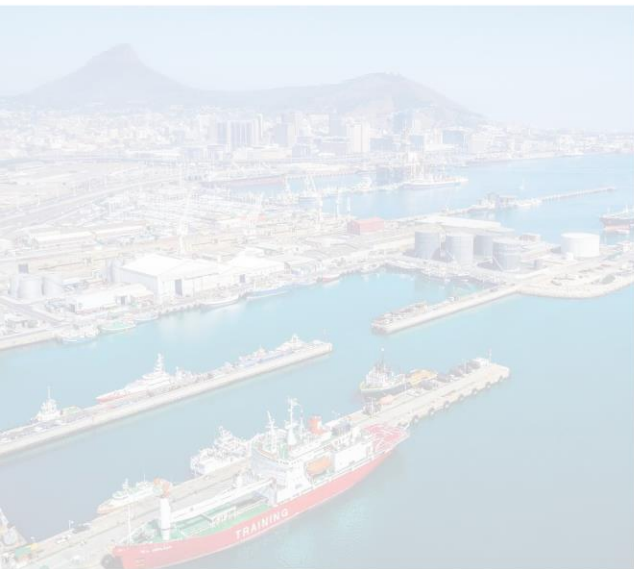
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THANK YOU
Asante sana!



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