

For smart planning and monitoring **MANAGING WATER RESOURCES FROM SPACE**

Monitoring water bodies from space ensures operational safety, environmental compliance, and informed decision-making. Long-term insights help to manage water resources throughout the development and maintenance phases. This includes drinking water reservoirs, water treatment or hydropower installations.

Satellite-based monitoring of water bodies at scale provides insights into water quality, water extent and levels, catchment, and hydrological regimes. We empower your monitoring routines to facilitate early warnings or sustainable planning.

CHALLENGE ACCEPTED

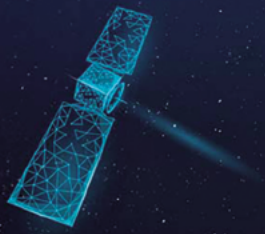
- + Assessing impacts of new constructions
- + Identifying environmental challenges
- + Gaining timely information to set management activities
- + Unveiling spatial differences and patterns
- + Informing the public in time

WHY BUILD ON EOMAP SERVICES

- ✓ **Cost savings**
Enjoy easy and cost-effective access to satellite-based measurements. These help reduce and better target costly in situ campaigns.
- ✓ **Fast data access**
Improve monitoring on water quality with data otherwise not available. Increase upstream situational awareness, and see downstream impacts.
- ✓ **Worldwide data coverage**
Access globally available data, even for the most remote areas.
- ✓ **Reliable forecasts and hindsights**
Rely on robust baseline studies and historical data up to 40 years back. AI supported technologies facilitate forecasting and gap filling.



Contact us
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OUR SOLUTIONS

Monitoring Water Quality over time

Water managers can rely on key parameters, including chlorophyll, turbidity and sediment concentrations, or water temperature. This helps identify sediment dynamics and detect emerging algal blooms or pollution hot spots at an early stage.

Water extent, level and storage

Combining different data sources leveraging optical and radar imagery to track changes in surface water bodies, reservoirs, and rivers empowers aquatic stakeholders in their decision-making. This supports a better understanding of seasonal behaviours as well as up to daily updates.

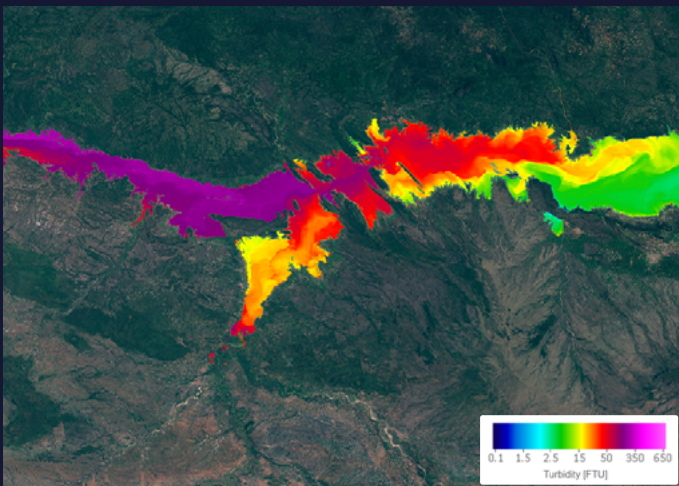
Catchment analysis

For online-accessible catchment twins, our solutions integrate both static variables, such as Digital Terrain models, and dynamic variables, including water level or quality - This enables managers to assess the entire water cycle, facilitating integrated planning and management of water resources.

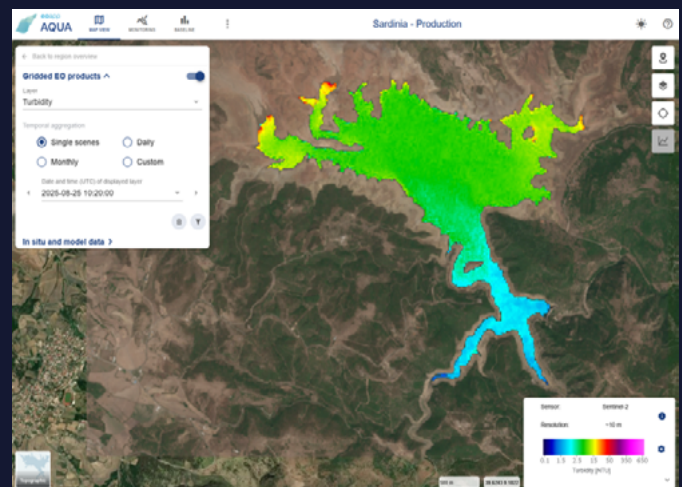
Ecological monitoring

EO solutions enable managers to spot early signs of deterioration in water ecosystems by tracking changes in biodiversity, eutrophication, and macrophytes. This allows them to focus on critical areas and prioritise actions.

USE CASES



Hydropower Monitoring Mozambique | Daily monitoring of water quality in one of the biggest reservoirs worldwide – Cahora Bassa, Mozambique



Drinking Water Reservoirs Monitoring Italy | Support of management activities in drinking water supply – Mulargia, Sardinia, Italy



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