

The background of the entire page is an aerial photograph of numerous circular aquaculture pens floating in a body of water. The pens are made of dark metal frames with netting. Some pens have internal structures, possibly for feeding or aeration. The water is a deep blue, and the sky is a lighter blue. In the bottom right corner, there is a faint, stylized network of blue lines and dots, resembling a data visualization or a map overlay.

Enhancing Aquaculture Operations

AQUAFARMING INSIGHTS FROM SPACE

Using high-quality Earth Observation data, EOMAP provides aquafarmers with tailored environmental insights for their current or future sites. With a few clicks, users can access key parameters, analyse trends, and integrate in-situ data for comprehensive monitoring and management.

Understanding and analysing the aquatic environment supports producers by enabling effective monitoring, site assessment, and infrastructure management. Access to environmental data from space reduces operational costs, optimises production, and increases profitability across the diverse aquaculture sub-sectors.

CHALLENGE ACCEPTED

- + Data gaps on the aquatic environment with high impacts on yield and product quality
- + Empirical site selection leading to lengthy processes up to 12 to 18 months
- + Open-source information in low resolution, lacking further interpretation
- + Undetected risks and time loss due to information gaps

WHY BUILD ON EOMAP SERVICES

- ✓ **Keep control**
EO data enables monitoring of key water quality parameters, revealing patterns that guide sustainable growth.
- ✓ **Enjoy rapid access**
Near real-time satellite data and user-friendly dashboards enable quick farm overviews and decisions.
- ✓ **Tailor-made analysis**
Multivariate analysis provides answers to aquaculture related questions like biomass growth, harvest times, etc.
- ✓ **Increase safety**
Receiving alerts when defined boundary conditions are exceeded.



Contact us
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OUR SOLUTIONS

eoapp AQUAFARM

This smart web application builds on satellite-based and complementary sources to aggregate, process, analyse and visualise key environmental data of farming areas. This benefits two applications:

Operational Monitoring: Enjoy an efficient view on environmental conditions, production parameters and early warnings of upcoming risks.

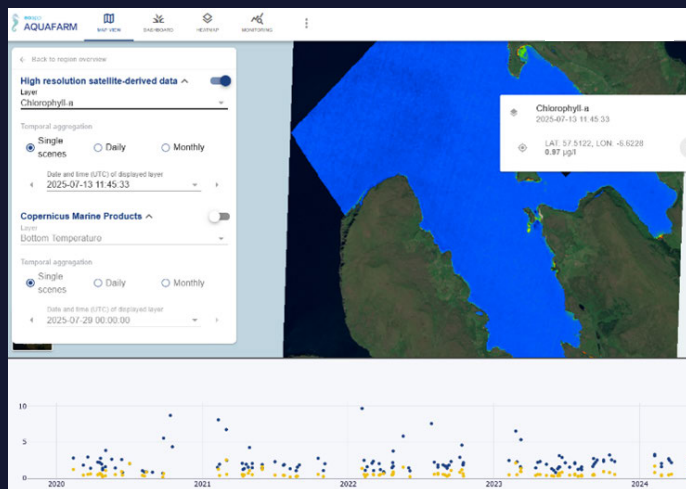
Site assessments: Current and past time series empower you to identify environmental trends. This helps you assess the suitability of a region for seaweed, shellfish or finfish farming.

Monitoring water quality

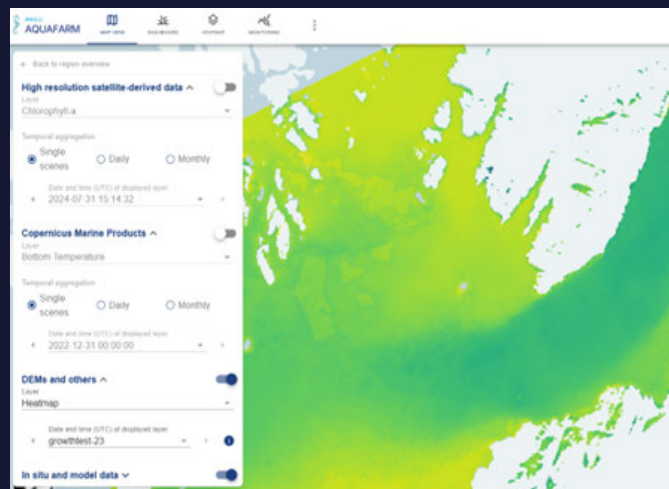
Water managers can rely on key parameters in high resolution, including chlorophyll, turbidity and sediment concentrations, or water temperature. This helps identify nutrient and sediment dynamics, detect emerging algal blooms at an early stage or identify pollution hot spots.

We complement these water quality measurements with large-scale data on the ocean environment including salinity, nitrate, oxygen, wind, waves, and currents.

USE CASES



Site assessment, Scotland | The eoapp AQUAFARM offers multi-year time series to evaluate regional suitability for diverse aquaculture by providing current and past data to support assessing site conditions and analysing trends.



Multivariate analysis, Greenland | The heatmap tool integrates environmental parameters and HAB-related risks, supporting decision-making while enabling comprehensive assessment of suitable sites for aquaculture.



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