

Strengthening Coastal Ecosystems **FROM SPACE TO BLUE CARBON**

Blue Carbon ecosystems – mangroves, seagrasses, and saltmarshes – can store up to five times more carbon than terrestrial forests. EOMAP’s Earth Observation (EO)-based analysis support Monitoring, Reporting & Verification (MRV) services to provide scalable, transparent, and repeatable solutions to quantify carbon stocks, detect change, and meet certification standards, essential for unlocking value in nature-based carbon markets.

Blue Carbon is where climate action meets ocean stewardship. EO-based MRV ensures the integrity of restoration and conservation credits. This helps certification bodies, investors and project developers reduce cost, risk, and uncertainty.

CHALLENGE ACCEPTED

- + Quantify carbon stock and ecosystem change with confidence
- + Meet high-integrity MRV standards for Blue Carbon credits
- + Overcome data gaps and ensure transparency for investors
- + Scale from local pilots to global monitoring systems

WHY BUILD ON EOMAP SERVICES

- ✓ **Credibility**
EOMAP’s EO-based analytics meet international standards for transparency and verification, core requirements for credible nature markets.
- ✓ **Efficiency & consistency**
Monitor large areas cost-effectively with harmonised, repeatable workflows for MRV.
- ✓ **Enhanced decision support**
Consolidate multi-source data into a user-friendly hub for confident, high-impact decisions.
- ✓ **Capacity building**
Integrate EOMAP’s web tools and training to empower local partners and project developers.





OUR SOLUTIONS

Blue Carbon MRV Services

Satellite-driven analysis to support monitoring, reporting, and verification (MRV) of ecosystems, compliant with leading carbon certification frameworks.

Habitat Extent and Change Mapping

High-resolution EO data and AI-based analytics to detect mangrove and seagrass extent, degradation, and recovery.

Carbon Stock Assessment

Fusion of optical, radar, and LiDAR data for above- and below-ground biomass estimation, providing inputs for carbon credit quantification.

Ecosystem Risk & Co-benefit Analysis

Mapping of land-use dynamics, soil organic carbon, and ecosystem co-benefits to assess permanence and additionality.

Restoration Impact Monitoring

EO-based tools to evaluate restoration success, including canopy regrowth and ecosystem health.

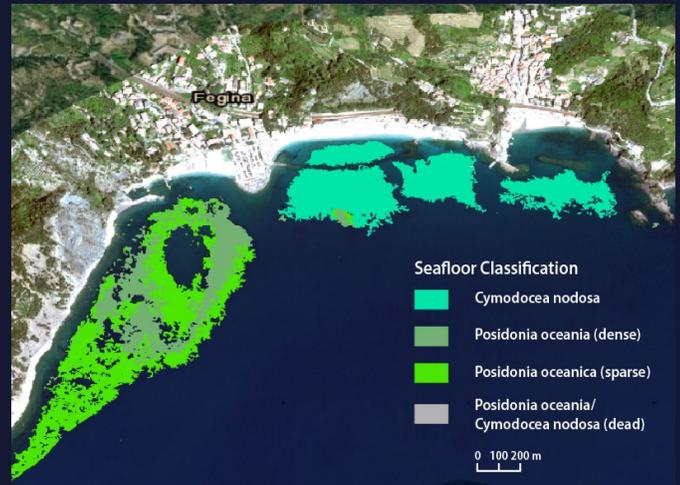
BlueMAP Decision Support Platform

Interactive cloud platform for Blue Carbon ecosystem data visualisation and reporting, integrating EO insights for carbon market workflows.

USE CASES



Mangrove Mapping, Madagascar | Tracking mangrove canopy extent and biomass changes to provide crucial information for future voluntary carbon markets and restoration potential.



Seagrass Mapping, Italy | Nationwide seagrass classification supports baseline data for carbon valuation and future restoration potentials.



Learn more
eomap.com/markets