

# Photogrammetry

---

3D inventory surveys of wrecks  
and other objects

Inspections of wind farm  
structures

---

Bathymetric measurements  
and analyses

Seabed sediment surveys

---

Quay inspections

Marine ecosystem surveys

---

Coastal change monitoring

Coastline mapping

---





# Key application areas of photogrammetric surveys

## LOW-ALTITUDE PHOTOGRAMMETRIC SURVEYS OF THE COASTAL ZONE (UAV)

Precise documentation of the current state of the coast, monitoring of spatio-temporal changes, and visualisations.

Analysis of erosion and sediment accumulation processes	Long-term change forecasts for the coastal zone
3D modelling of cliffs and beaches	Coastal zone protection planning
Inventory surveys of coastal defences	Design and engineering activity planning

## PORT INFRASTRUCTURE MONITORING

Regular inspections of quays, breakwaters, and other structures, both above and below water.

Port quay and jetty measurement surveys	Underwater structural inspections and damage detection
Breakwater condition assessment	Maintenance and repair planning

## INVENTORY SURVEYS OF WRECKS AND UNDERWATER OBJECTS

Documentation and 3D modelling of shipwrecks or other underwater objects.

Photorealistic 3D modelling of shipwrecks	Support services for underwater archaeological surveys
Archaeological documentation	Recovery and conservation operation planning

## SUPPORT SERVICES FOR OFFSHORE WIND ENERGY PROJECTS

Detailed imaging of the seabed surface prior to wind turbine installation	Assessment of the impact of the structure on local sedimentation processes
Monitoring of changes in seabed morphology around the installation	Assessment of the condition of wind turbine foundations

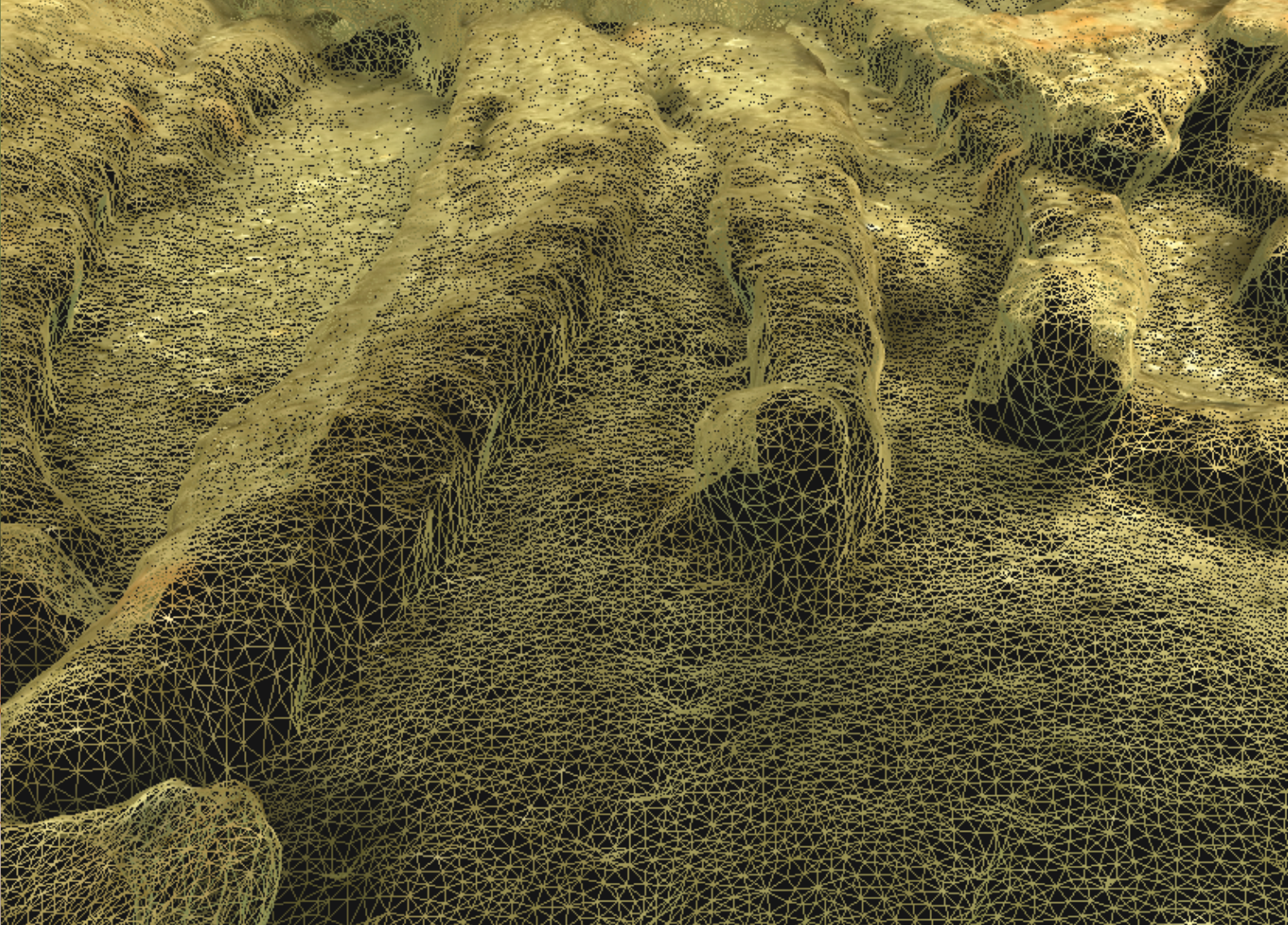
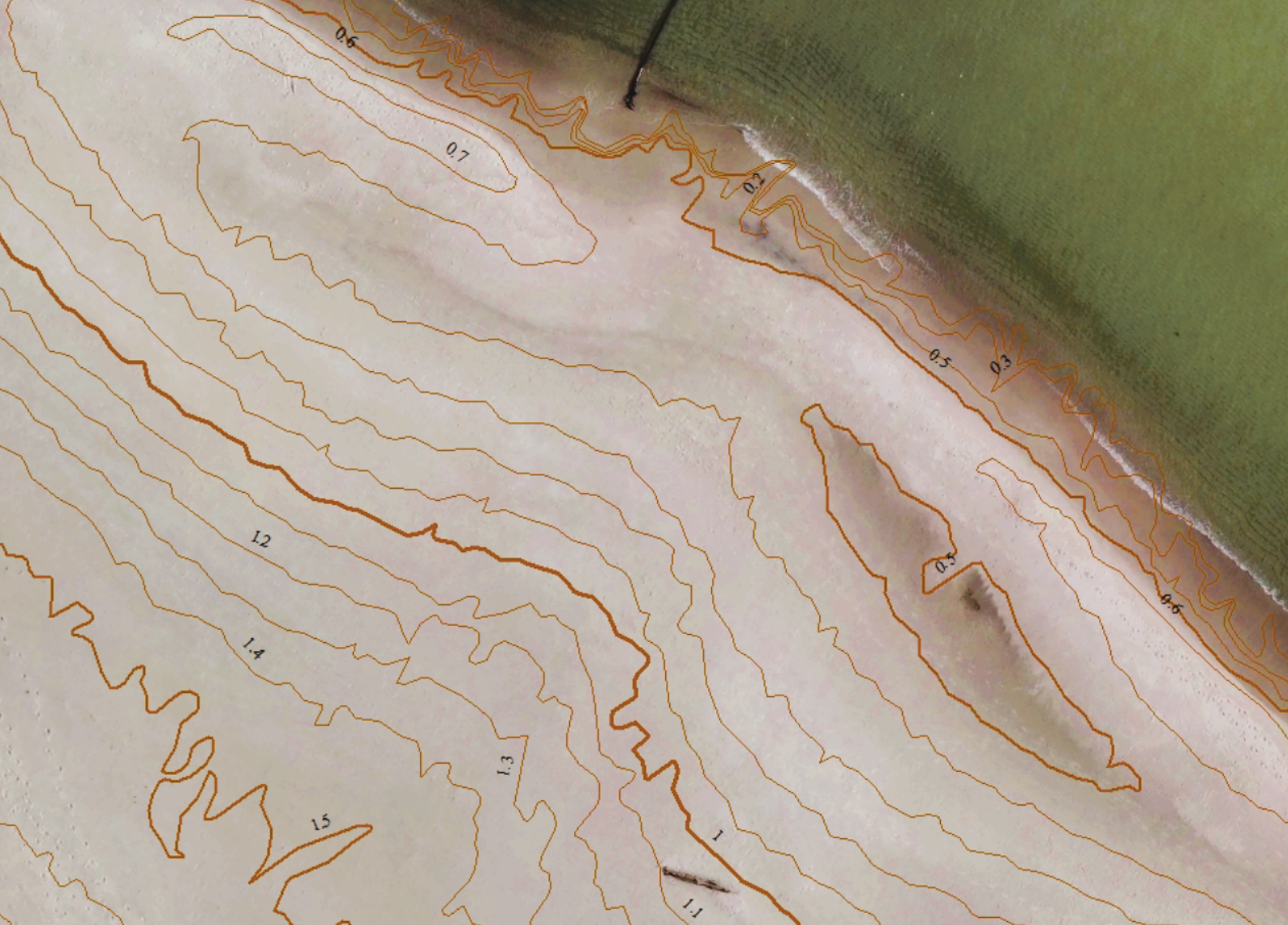
Marine photogrammetry is a state-of-the-art development of the classic photogrammetric methodology, adapted to the unique and challenging conditions of the marine environment. It employs the latest technologies and advanced algorithms to ensure precise mapping and documentation of subsea and nearshore environments.

Combined with sonar and LIDAR technologies, photogrammetry enables producing comprehensive 3D models that combine high geometric accuracy with detailed visual information. This method is used in offshore engineering, underwater archaeology, and environmental protection.

Thanks to remotely operated underwater vehicles (ROVs) and underwater cameras, it is possible to create photorealistic 3D models not only of wrecks, but also of the seabed and the underwater parts of hydrotechnical structures. Thanks to unmanned aerial vehicles (UAVs), the coastal zone can be monitored, and Digital Terrain Models (DTM), Digital Surface Models (DSM), as well as thematic orthophotomaps of the coast can be created.

**At MEWO, we combine modern imaging technologies with expert knowledge in the fields of photogrammetry, photography, and ROV operation.**





**SUPPORT SERVICES FOR SEABED SEDIMENT SURVEYS**

Analysis of the structure, composition and changes in seabed sediments.

Sediment structure mapping	Sediment transport monitoring
Composition analysis and supervised classification	3D seabed modelling

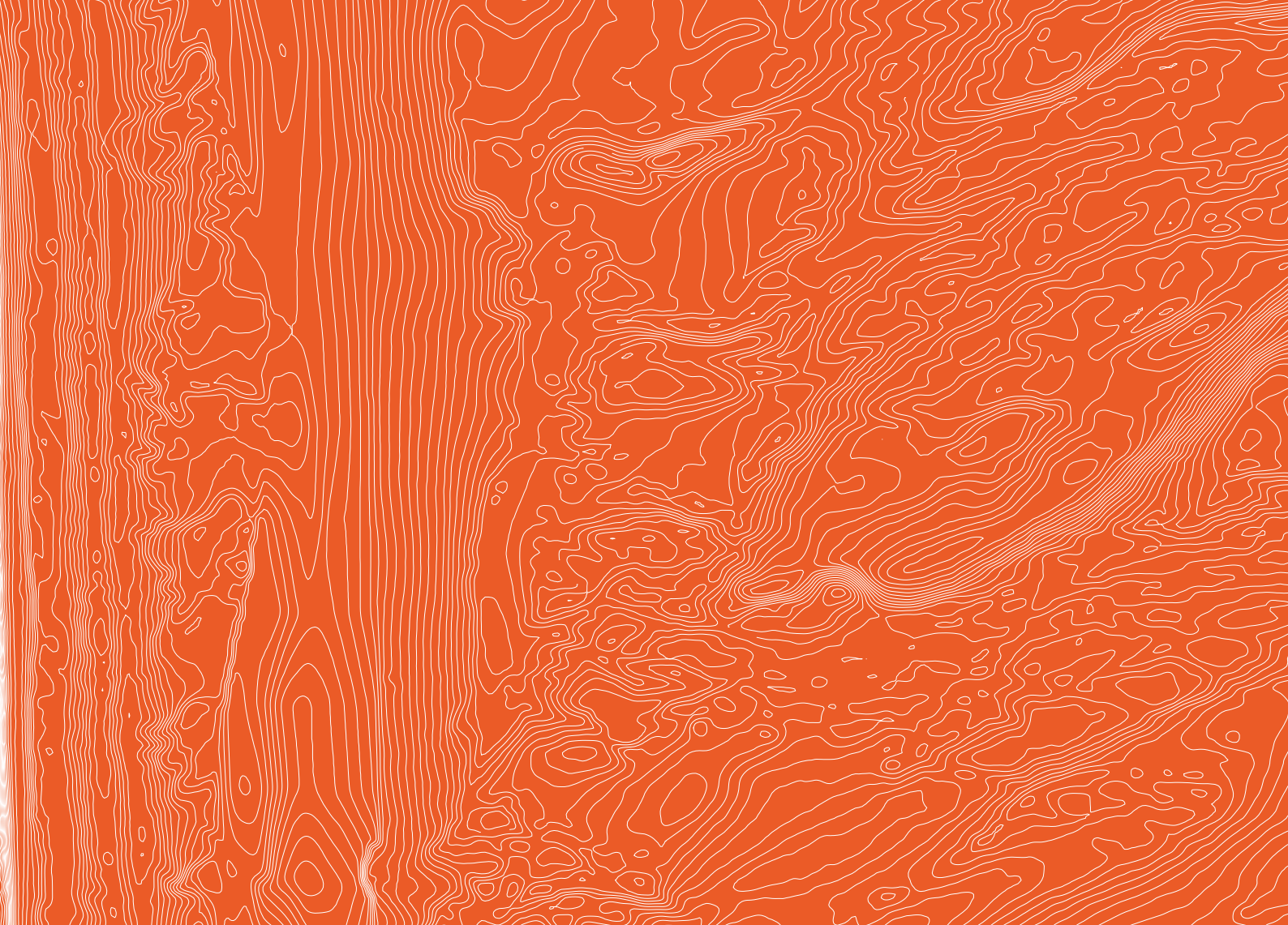
**MARINE ECOSYSTEM SURVEYS**

Benthic community monitoring	Biodiversity assessment of underwater ecosystems
Underwater meadow extent surveys	Environmental change documentation

MEWO offers comprehensive implementation of photogrammetric projects. We acquire, process, and analyse imaging data.

UAV and ROV-based surveys
Processing of large image sets
Creation of digital coast and seabed models
Creation of photorealistic 3D models
Preparation of orthophotomaps of the coastal zone and seabed
Preparation of thematic maps
Temporal analyses of morphological changes in the coastal zone and seabed
Damage detection in hydrotechnical structures
3D and 4D spatio-temporal visualisations





**address** MEWO S.A.  
ul. Starogardzka 17A  
83-010 Straszyn  
Poland

**phone** (+48) 502 058 294  
**e-mail** biuro@mewo.eu

mewo.eu

#### **Our Safety Management System**

MEWO S.A. continually strives to ensure the highest level of safety in projects implemented both at sea and on land. We are guided by international standards in terms of workflow planning, risk assessment and selection of personal protective equipment.

#### **Integrated Management System**

MEWO S.A. pledges to provide services at the highest quality level and to meet the highest standards of occupational health and safety, with full commitment to environmental protection. In order to fulfil this declaration, an Integrated Management System has been implemented in accordance with the requirements of ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018, certified by the DNV certification body. The system is continuously monitored, improved, developed and managed.

Focused on sustainable development, natural environment and corporate social responsibility, MEWO S.A. operates in accordance with the guidelines of ISO 26000. In line with the sustainable development strategy adopted, we strive to integrate business activities and values, thanks to which the needs of all stakeholders, clients, employees, communities and the environment are reflected in the Company's policies and activities. We make every effort to ensure that all business operations are conducted in an ethical and sustainable manner.

#### **Policies established at MEWO S.A.:**

- Quality Policy
- Environmental Protection Policy
- Occupational Health and Safety Policy
- Alcohol and Drug Policy
- Compliance Policy
- MEWO S.A. Code of Ethics
- Human Rights Policy
- ESG Strategy
- Sustainable Development Policy