marble imaging

Earth Observation reimagined.

With Marble Imaging, we will unleash the full potential of global Earth Observation data by providing powerful EO based analytics and insights.

esa | DLR | SPACE FOUNDERS | CREATIVE DESTRUCTION LAB | EUDIS Business Accelerator

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Founded in August 2023 in the German aerospace hub Bremen, we are ready to show the world the real potential of affordable and accessible EO data.

We aim to be …

… the first European provider to capture areas of interest worldwide hourly in very high-resolution using our constellation of small satellites.

… a leading provider of Earth Observation (EO) data solutions focusing on commercially applicable environmental and security use cases.

Marble Imaging is a German NewSpace company specialized in EO analytics and services. Already now we offer crucial insights analyzing both public and commercial satellite imagery. With the help of Marble's future constellation, we will be able to deliver even more tailored high quality products and plan to emerge as a new and reliable European source to satisfy the increasing demand of institutional and commercial EO users.

Our Team

Up- and downstream EO experience

The growing Marble Imaging team brings together a wealth of expertise from senior leadership positions within prominent European EO initiatives. Our collective background encompasses the full spectrum of EO science and data processing. Moreover, we possess a deep understanding of leveraging EO data as ultimate beneficiaries.

Robert Hook
CEO, Aerospace Engineer

Dr. Gopika Suresh
CSO, Earth Observation Scientist

Alexander Epp
CMO, Journalist

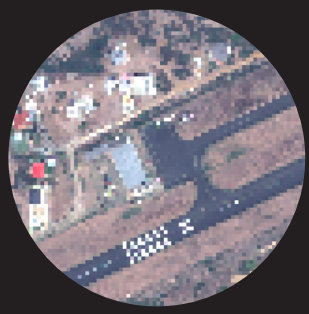
Dr. Raul Scarlat
Earth Observation Scientist

The Founders

The key

Ground resolution vs frequency vs price

Copernicus Sentinel-2
Resolution: 10 m
Frequency: 6 days
Cost: 0 €



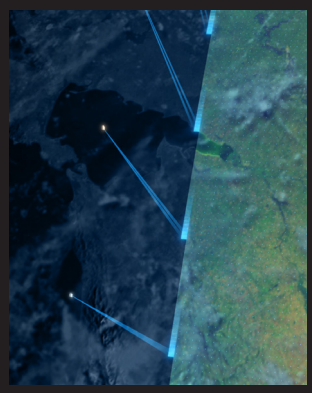
Resolution: 3 m
Frequency: Daily
Cost: 2-7 € / km²

Marble Imaging
Target resolution: 50 cm
Planned frequency: Hourly
Cost: starting 5 € / km²

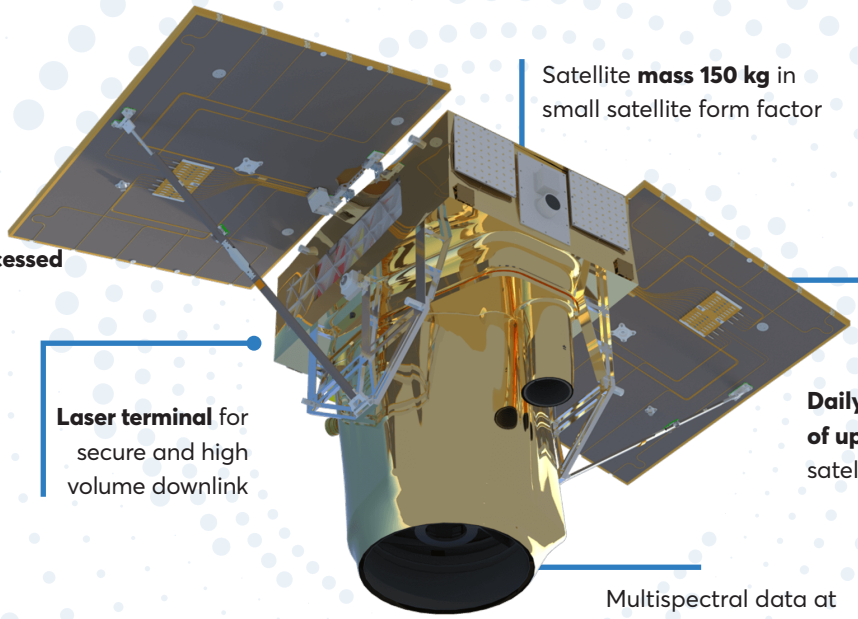
Resolution: 30 cm
Frequency: irregular
Cost: 18+ € / km²

Flexible and fair pricing models targeted to the customer's needs

"To maximize the value gained from our business insights, we are developing a high performance constellation of very high-resolution satellites with daily global coverage.



Our very high-resolution small satellites



Satellite **mass 150 kg** in small satellite form factor

- Targeted Launch of first satellite **Q4 2026**
- Data available as **preprocessed** and **analysis ready data**
- Distributed via our **geospatial portal**

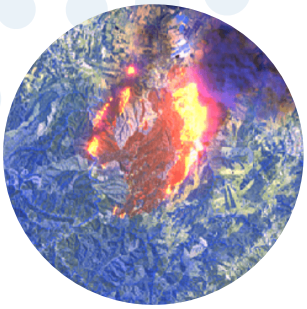
Laser terminal for secure and high volume downlink

Daily capture capability of up to 140.000 km² per satellite

Multispectral data at **sub meter GSD, harmonized with Sentinel-2**

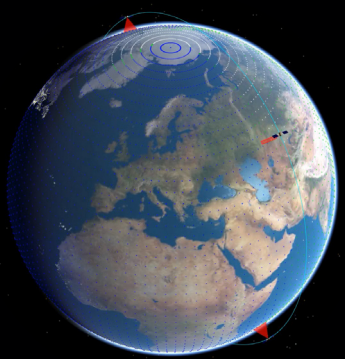
Band		Central Wavelength [nm]	Use case	Targeted product resolution first sat. [m]	Targeted product resolution constella-tion [m]
B1	Pan	625	Image sharpening	0.7	<0.5
B2	Blue	490	Land cover classification	0.7	<0.5
B3	Green	560	Land cover classification	0.7	<0.5
B4	Red	665	Land cover classification	0.7	<0.5
B5	Red Edge	705	Vegetation health and degradation	0.7	<0.5
B6	Red Edge	740	Vegetation health and degradation	0.7	<0.5
B7	Red Edge	783	Vegetation health and degradation	0.7	<0.5
B8	NIR	842	Vegetation health and degradation	0.7	<0.5
B9	Cirrus	1375	Cirrus cloud detection	6	<6
B10	SWIR2	1572	Construction /Fire / minerals mapping	6	<6
B11	SWIR 3	1661	Construction /Fire / minerals mapping	6	<6

Multispectral camera
Visible, Near Infrared product resolution target for first satellite: **70 cm** (**<50 cm** for constellation)



Multispectral camera
Short Wave Infrared product resolution target for first satelite **6 m** (**<6 m** for constellation)

Marble's **Early Adopter Program**:
Get the best pricing and secure capacity on Marble's satellite constellation



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AI supported Crisis Awareness

We want to help you safeguard your assets by adding an additional layer of remote security. Together with you, we will develop a workflow to provide you with timely and regular dossiers about your areas of interest, based on:

- Data and analytics derived from freely accessible and commercial **radar and multispectral satellite data** in high and very high-resolution as well as additional sources like **AIS for ship detection,**
- integrating information from **conflict databases and news sources,**
- adding **geolocated social media** videos and fotos for additional insights.

We currently develop **AI-supported analyses** in the fields of **change detection and object identification** with the goal to offer comprehensive and timely monitoring of security-relevant locations and hard-to-reach infrastructure – cost-effective and regular.

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Enhanced situational awareness

Our Earth Observation analytics support strategic and critical missions across:

- Defense and security
- Infrastructure monitoring
- Supply chain monitoring
- Disaster management and response

Added value: With our own future satellite constellation – the first satellite to be launched in 2026 – Marble Imaging will be able to deliver near real time monitoring capabilities of critical assets offering cutting edge security and business intelligence.

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Terrain Trafficability Assessment

We help navigate tough terrains with increased confidence, enabling safer and more efficient movement in demanding landscapes for optimal route planning and decision making.

- **Rapid accessibility assessment** of areas impacted by disasters and crises using Earth Observation data, effectively improving the deployment of rescue equipment and emergency vehicles, supporting supply logistics and evacuation route planning
- **Multi-dimensional assessment of terrain properties** – such as soil type, moisture levels, land use/land cover, topography, vegetation density, and physical obstacles – to enhance performance of existing trafficability modeling frameworks
- **Estimation of load bearing capacity** ensuring suitable ground conditions for vehicle movement and operations, reducing risks of soil damage and compaction
- **Assessment of changing terrain conditions** to support planning of tactical and security operations in challenging landscapes such as off-road, undeveloped, wild and rural environments

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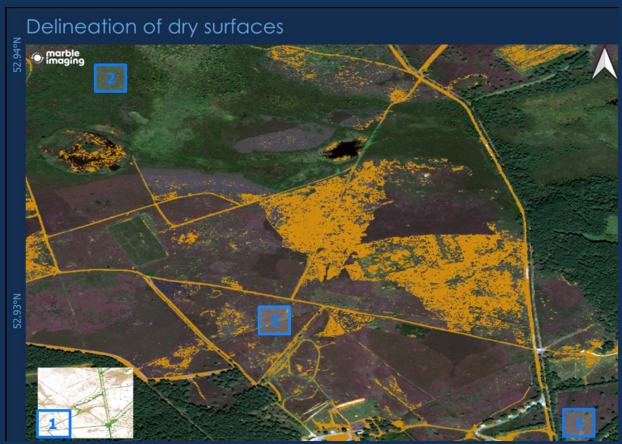
Enhanced situational awareness

Our Earth Observation analytics support strategic and critical missions across:

- Disaster Management and Response
- Defense and Security
- Forestry and Logging Operations
- Precision Agriculture Operations and Food Industry



Added value: Understanding trafficability reduces the risk of vehicles becoming immobilized in difficult environments, preventing delays and ensuring operational safety.

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Coastal Monitoring

Within our environmental monitoring suite, Precious Marble, we develop an imaging information system to **detect, quantify, and address coastal vulnerabilities:** The Precious Coast Information System **(PCIS)**.

This solution will support stakeholders and decision makers by:

- combining EO images & data with advanced algorithms to **identify hotspots** and factors contributing to vulnerabilty,
- **leveraging artificial intelligence and machine learning** for a multi-sensor approach (SST, SSH, wind etc.) to understand risks & long term coastal dynamics,
- integrating socio-economic data allowing for actionable insights.

PCIS will offer **a comprehensive view of coastal vulnerability & contributing risks** to help identify factors and places that are at risk to disturbances from coastal hazards and provide **insights for mitigation and adaptation.**

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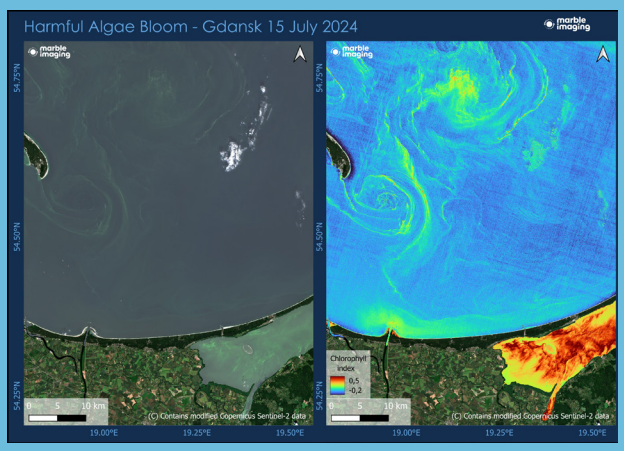
precious marble

Our environmental analytics flagship

- We analyse vulnerability,
- identify & monitor drivers contributing to vulnerability,
- integrate EO & socioeconomic data for risk and sensitivity analysis,
- highlight regions at high vulnerability,
- provide timely information regarding changing vulnerability status.



Added value: Our environmental analytics will be powered by our own very high-resolution satellite constellation offering actionable insights at revolutionairy speed.

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