



# European EO driven hydro-spatial intelligence for climate adaptation and coastal resilience

Dr. Meghna Sengupta

[meghna@marble-imaging.de](mailto:meghna@marble-imaging.de) | [www.marble-imaging.de](http://www.marble-imaging.de)

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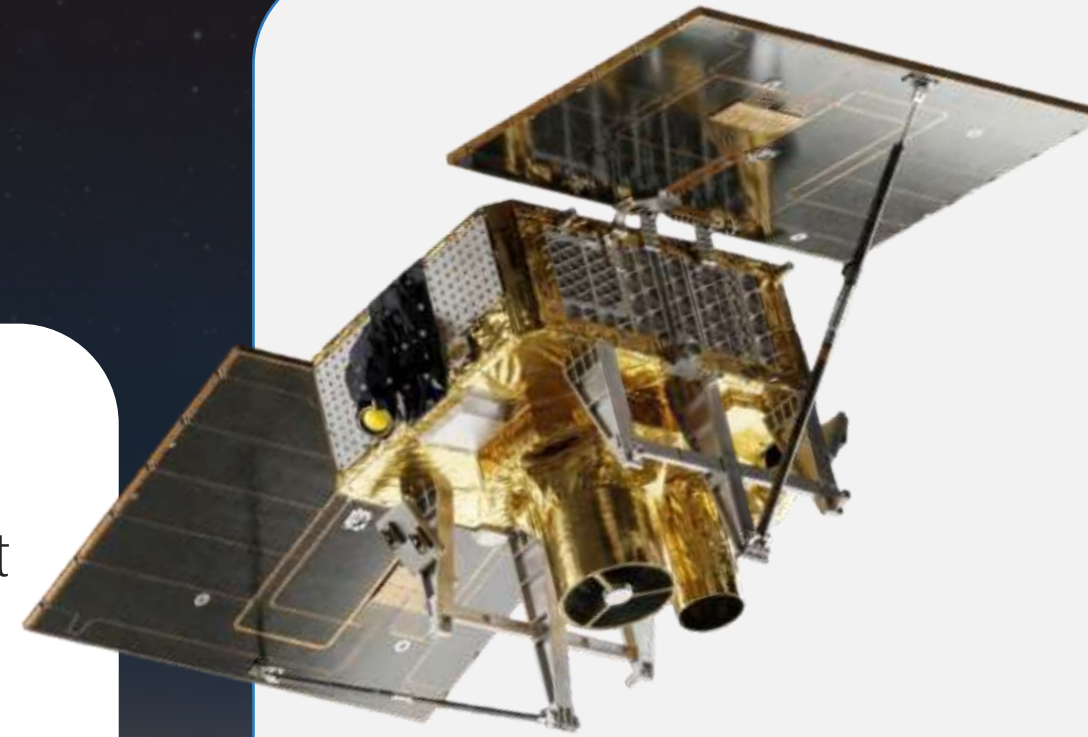
Geospatial World Forum, Amsterdam



Earth  
Observation  
reimagined.

### Key facts:

- German NewSpace company founded in August 2023
- 22+ Employees
- Focusing on Defense, Security and Maritime resilience
- Developing our own constellation of satellites to provide daily global imaging in <50cm
- Strengthening European Resilience and autonomy
- Data available for research purposes via the ESA CCM



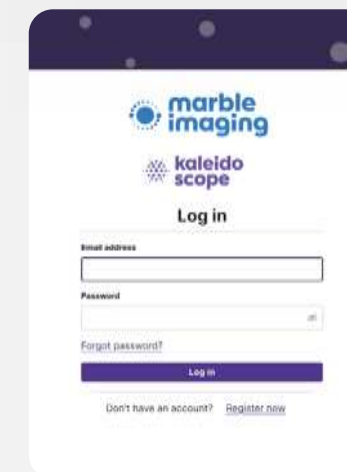
### Multispectral imaging

Visible, RedEdge, Near Infrared

Resolution VNIR (constellation): <50cm

Resolution SWIR: 6m

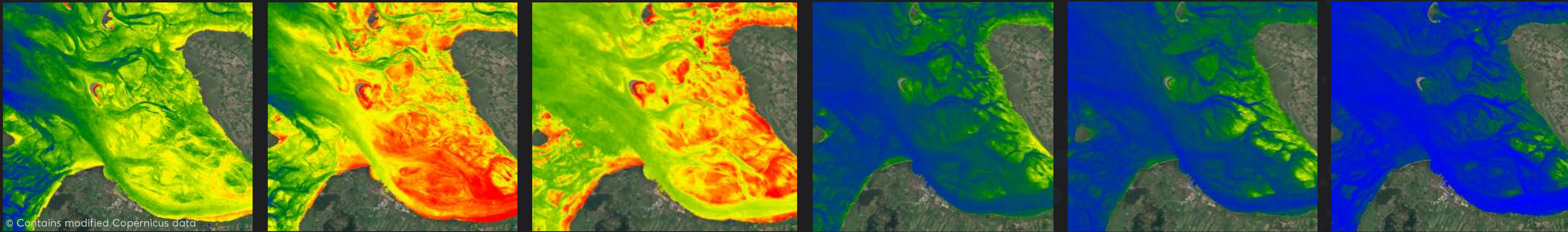
Satellite mass: >200Kg



# The Growing Challenge of Coastal Resilience

- Coastal regions are under pressure - 40% of the world's population lives within 100 km of the coast, where climate impacts are hitting hardest.
- Rising sea levels, storms, habitat degradation threaten communities, ecosystems, and critical infrastructure.
- Coastal ecosystems, our first line of defence, are degrading faster than we can monitor.
- Decision-makers often lack timely, reliable data to assess, monitor and respond effectively.

We are facing growing coastal risks - but our ability to observe, assess, and act remains limited.



## Building resilience across our coasts using VHR EO data

- EO-based robust analytics deliver continuous, repeated insights on coastal change and risk.
- Enables early warning, impact assessment, and resilience planning at scale.
- Turns complex data into actionable intelligence for decision-makers.





# Coastal Information Service

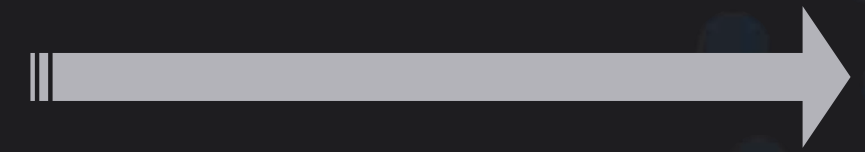
Our solutions address a range of targeted use cases

Globally, nearly 50% of mangrove ecosystems are now at risk of collapse due to human pressure and climate change. – IUCN Red List of Ecosystems

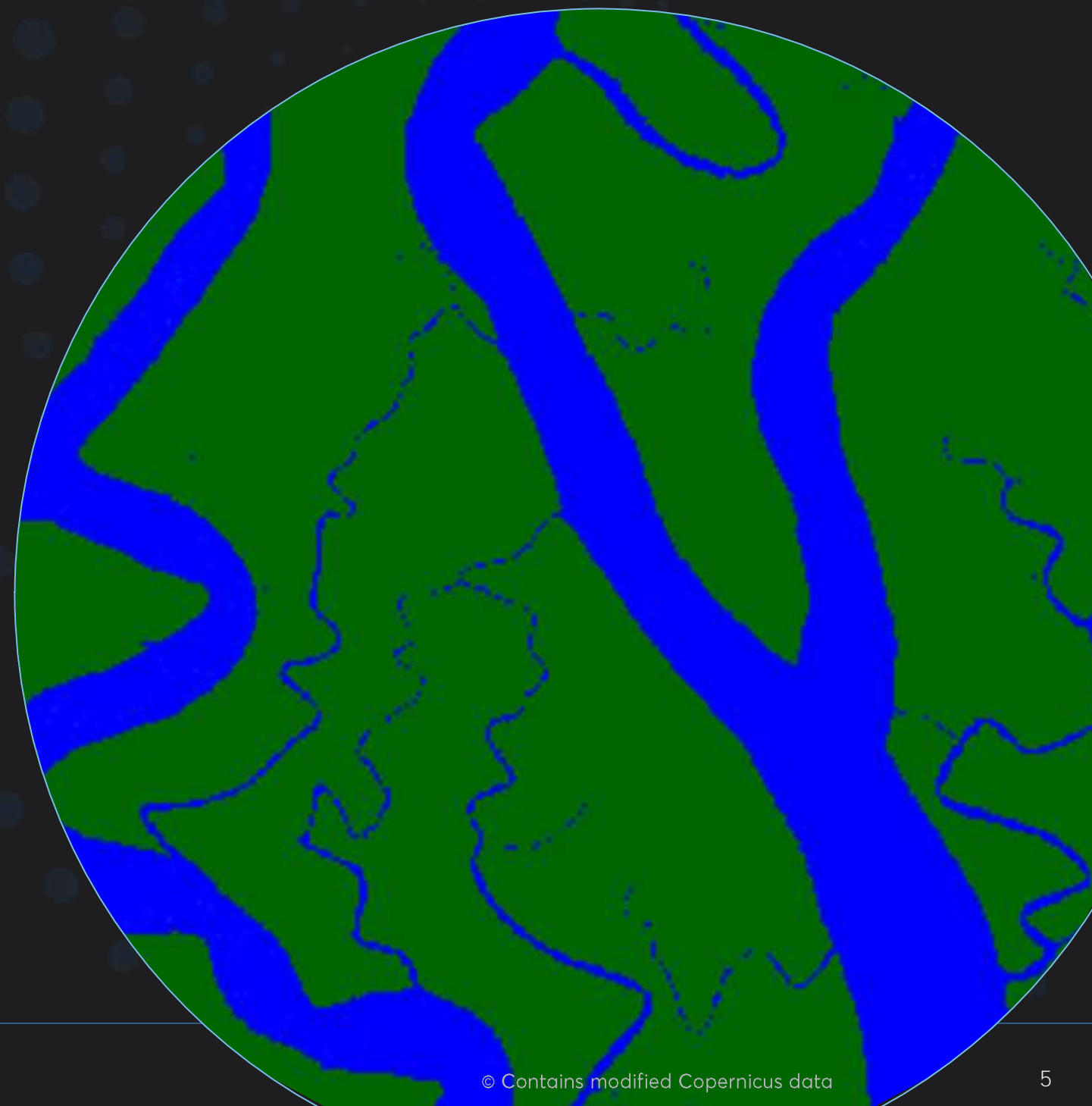


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Blue carbon ecosystems such as mangroves are highly relevant for climate adaptation and biodiversity conservation goals



- ✓ We map, monitor and track change in extent and health of mangrove forests
- ✓ Supporting faster compliance reporting, timely action



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Sundarbans, India



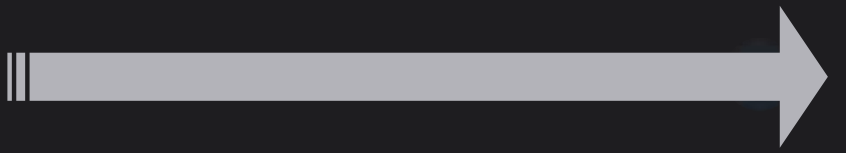
# Coastal Information Service

Our solutions address a range of targeted use cases

~50% of global aquaculture production is exposed to eutrophication-prone waters; eutrophication is linked to sudden mass fish mortality events causing significant socio-economic losses. – FAO; UNEP; UNESCO

Water quality parameters like chlorophyll-a and turbidity

Highly significant for sustainable aquaculture operations, ESG compliance, quality of life and health

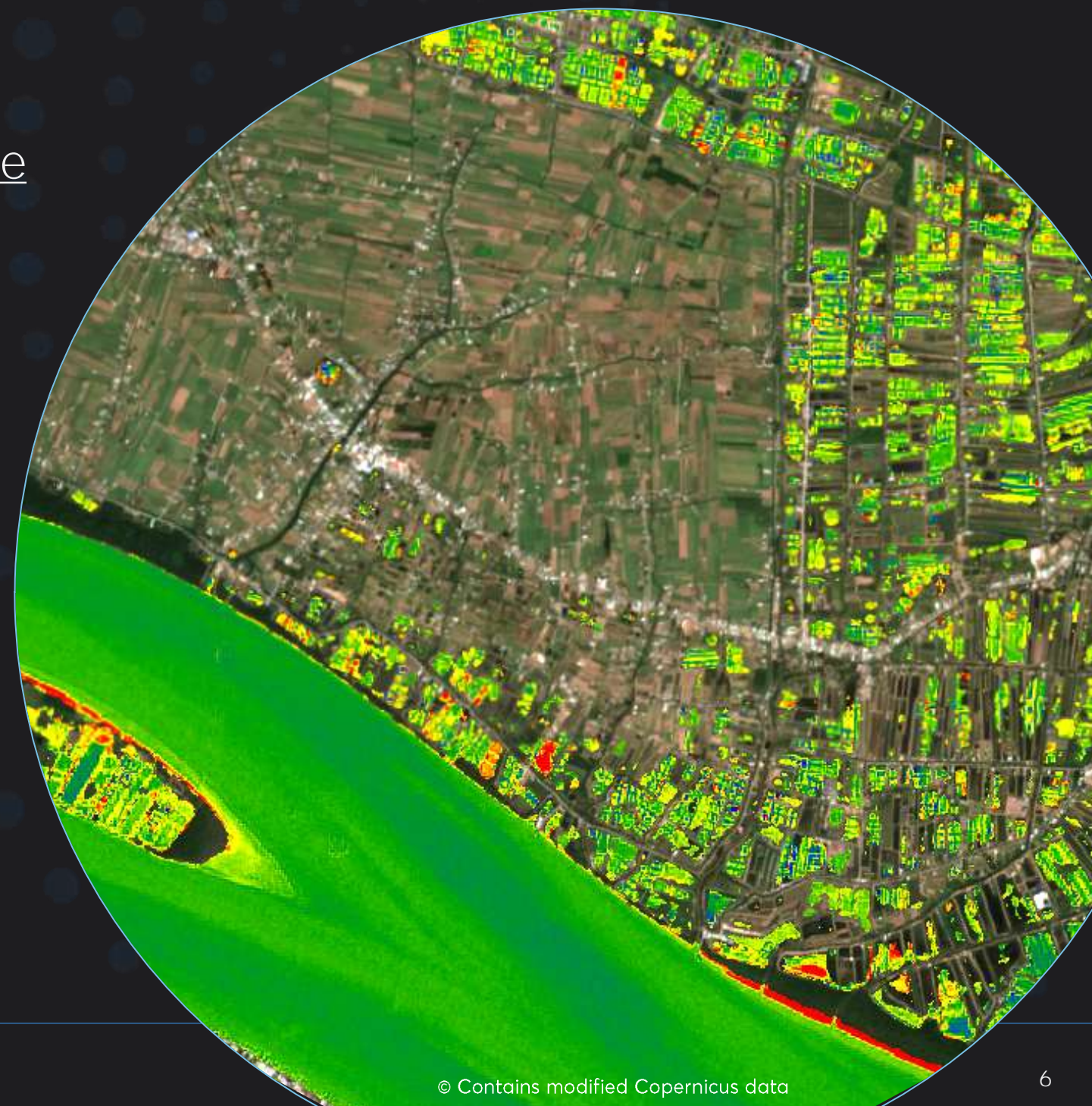


✓ We enable rapid anomaly detection and tracking

✓ Targeted to support aquaculture operators, management bodies



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Mekong Delta, Vietnam



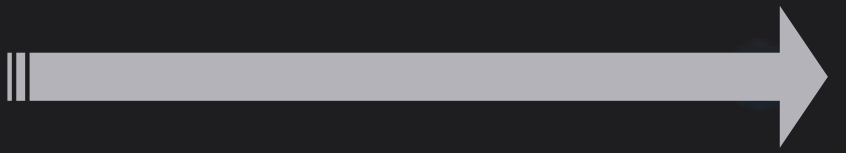
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In the Lake Victoria basin, ~40 million people rely on water and fisheries exposed to recurring cyanobacterial blooms, creating widespread human health risks. – WHO; Lake Victoria Basin Commission

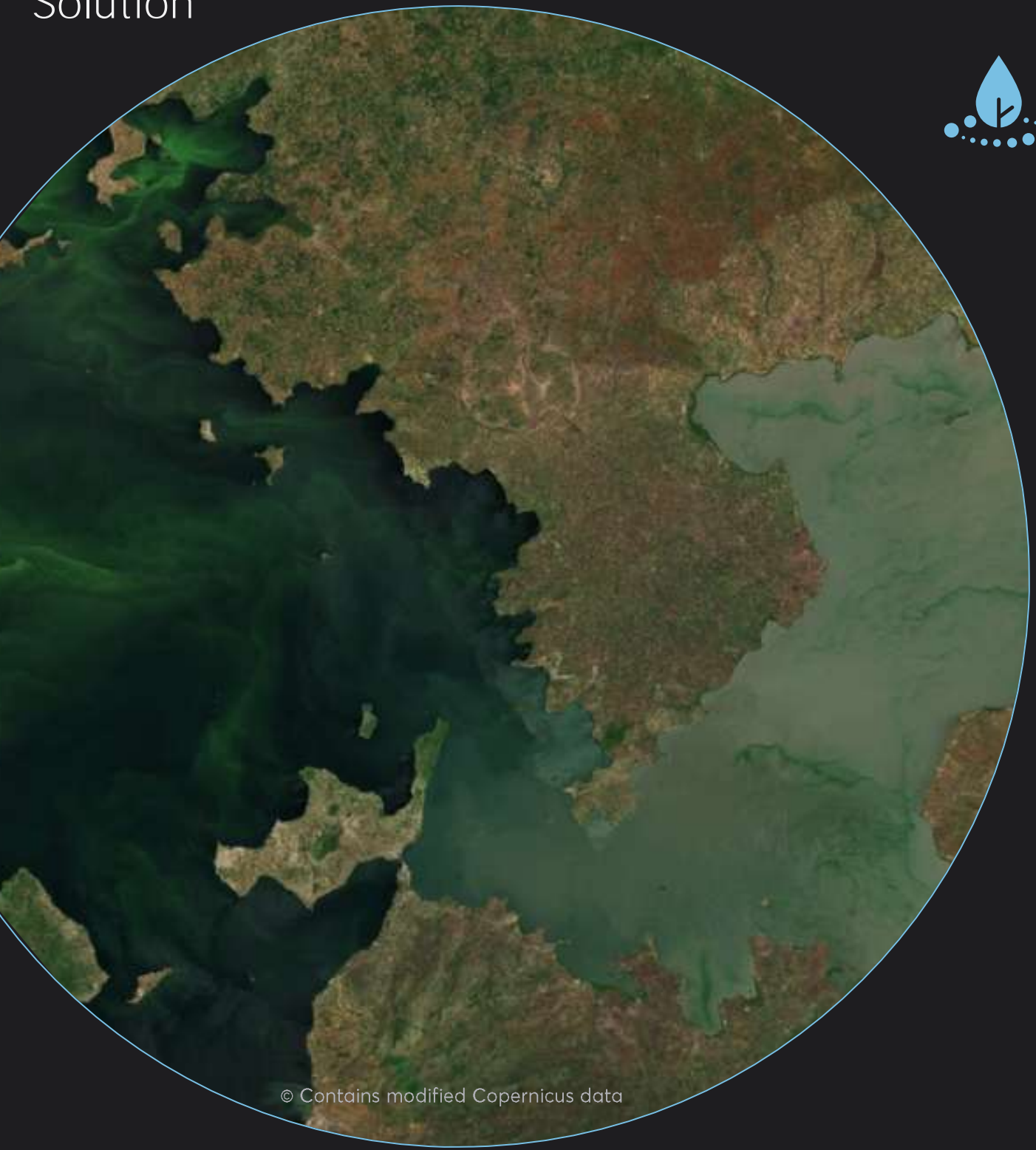
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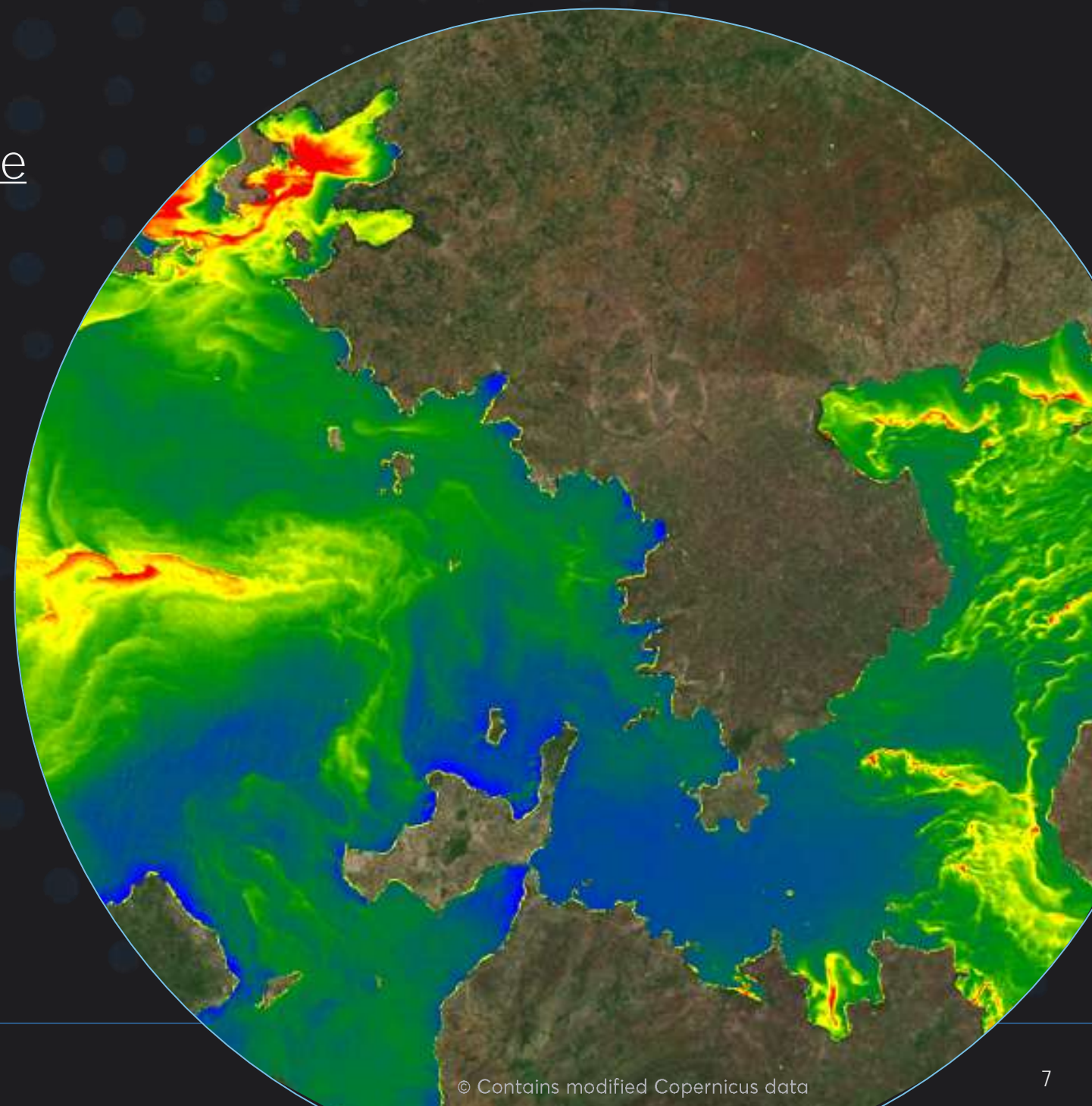


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Winam Gulf, Lake Victoria, Kenya



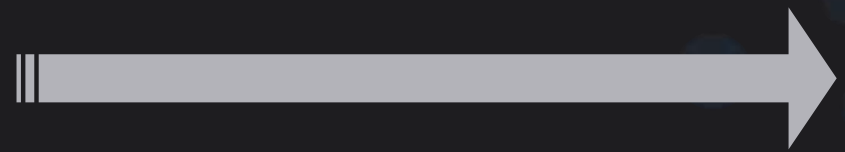
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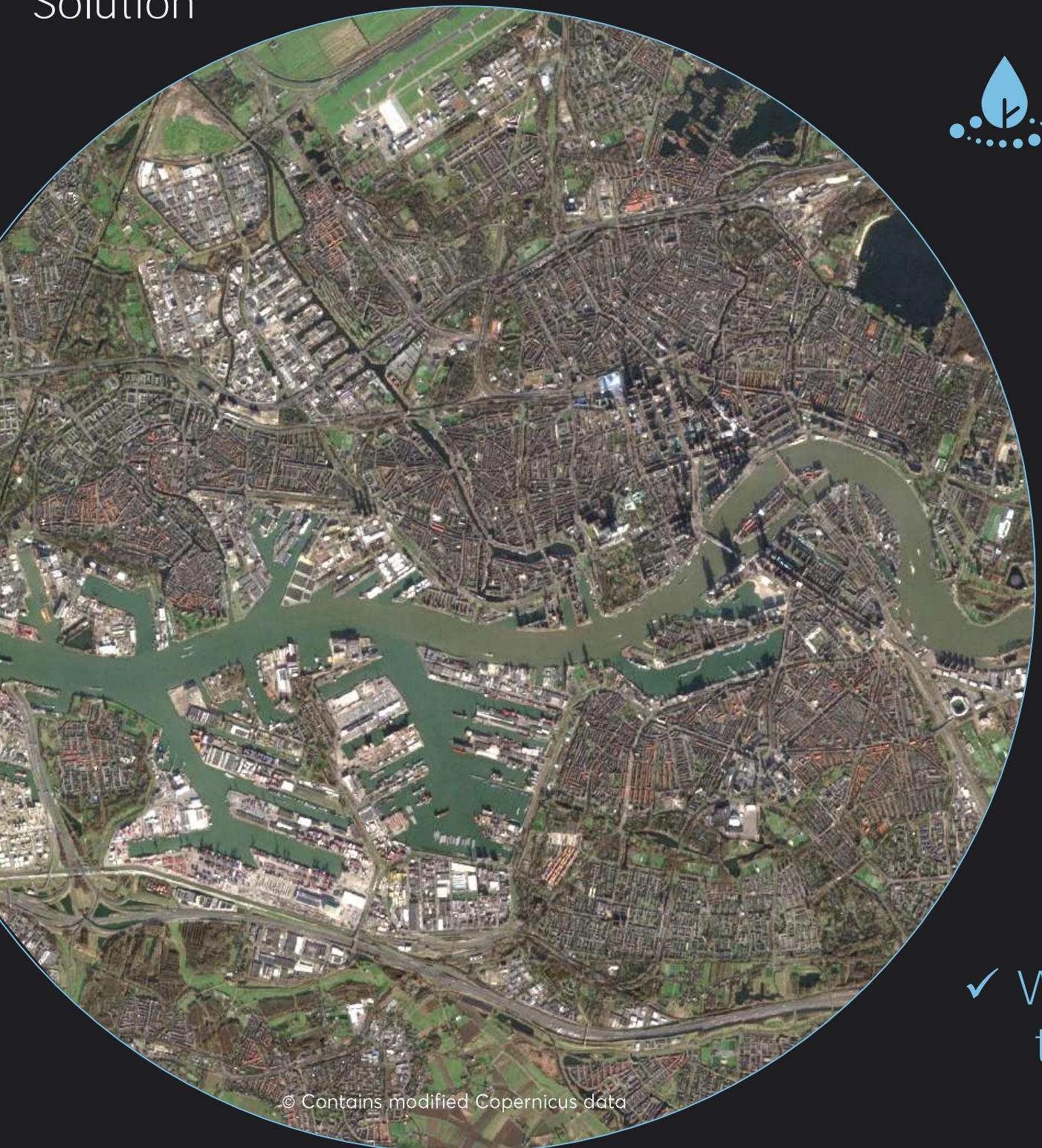
-60-80% of wetland-dependent habitats in Europe are in unfavourable conservation status requiring ongoing monitoring and reporting under Natura 2000. – EU Habitats Directive; European Environment Agency

Refined landcover - biotope mapping

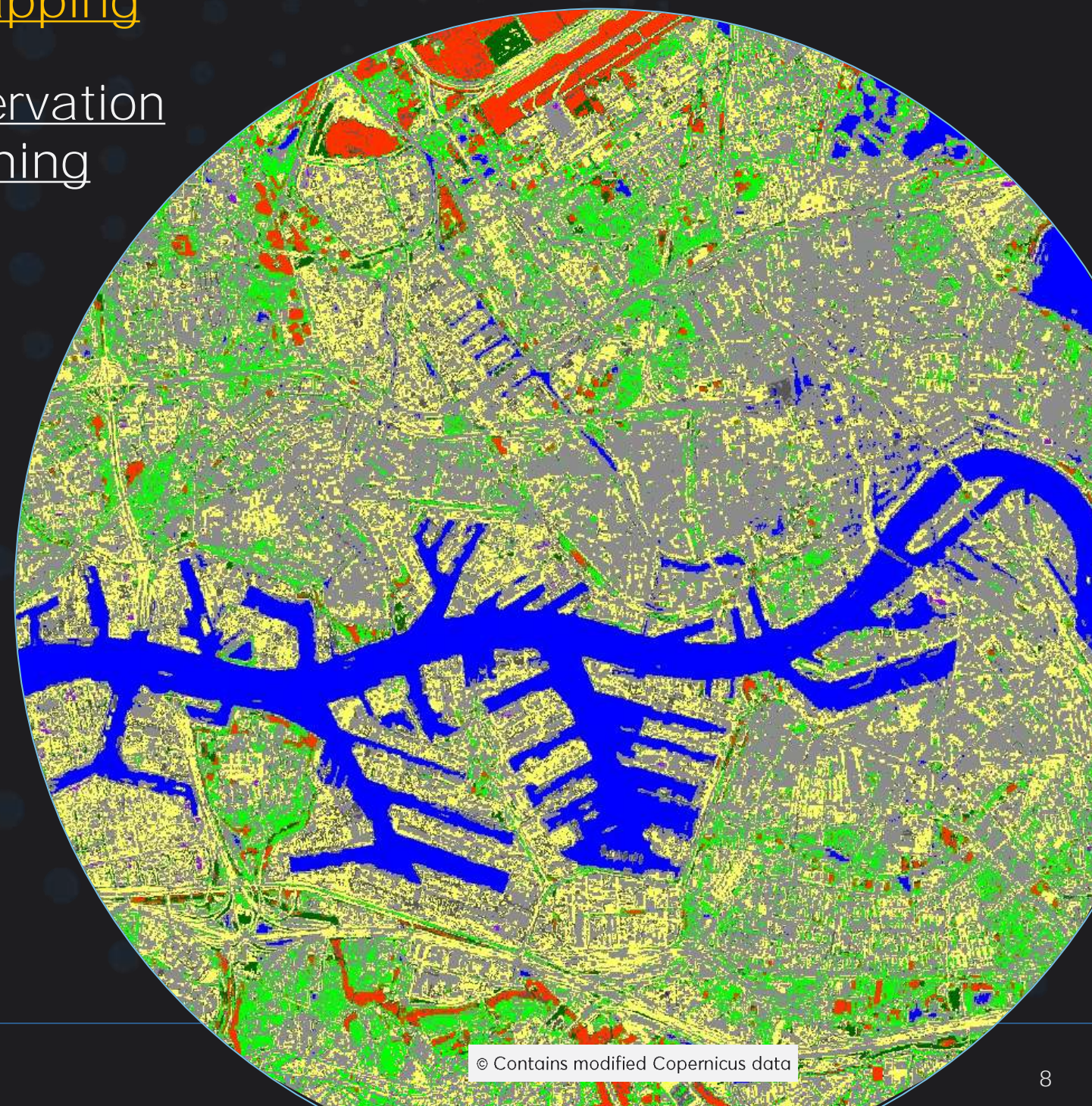
Significant for biodiversity conservation efforts; sustainable urban planning and regulatory compliance



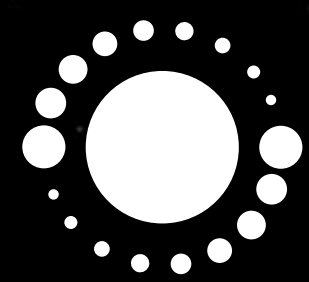
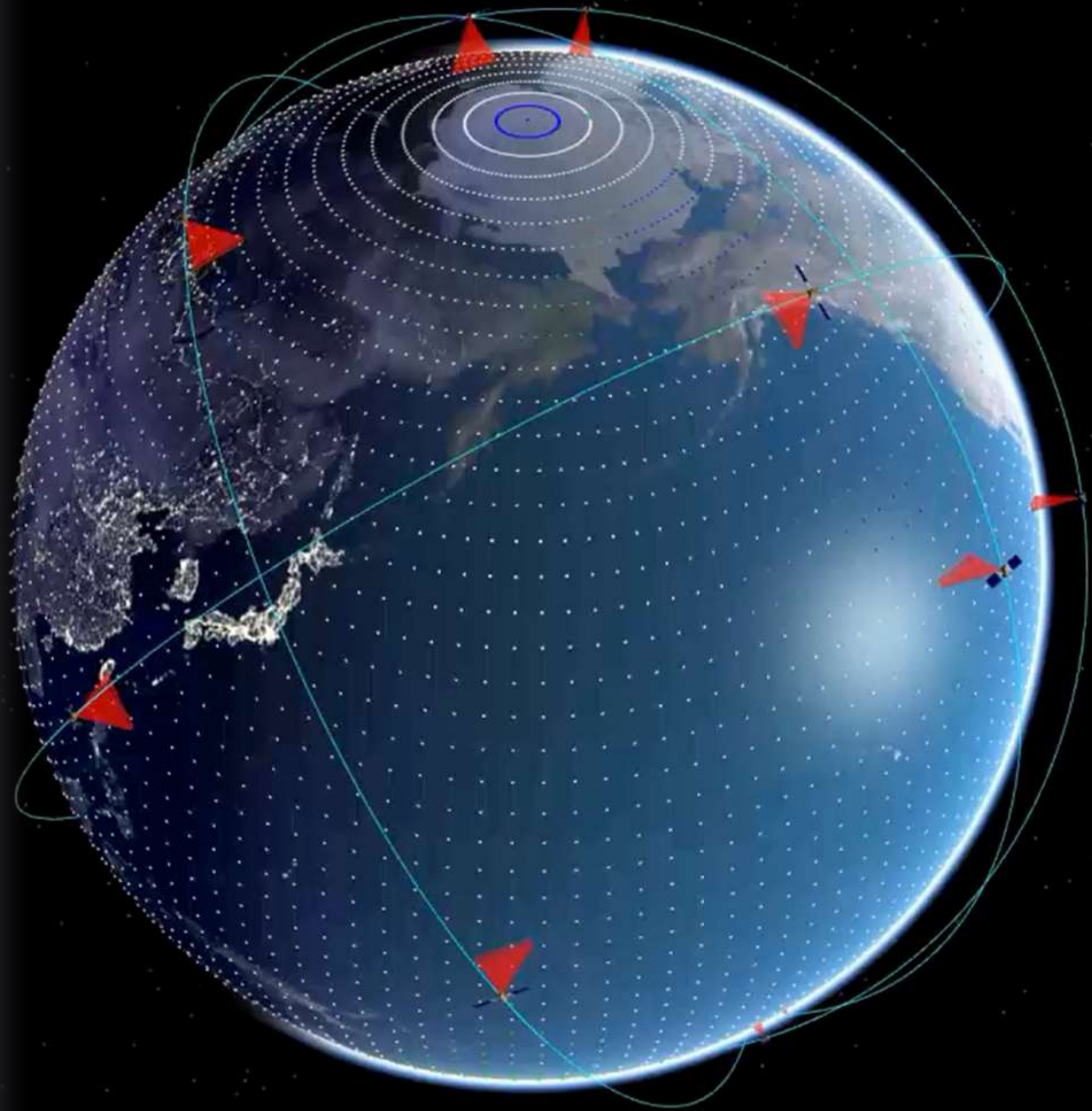
- ✓ We map refined biotope classes to enable consistent monitoring  
Aligned with Natura 2000
- ✓ Targeted to support conservation goals, sustainable development



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# marble imaging

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## Working together with Marble

- Collaboration via
- 01 Custom projects
  - 02 Funding opportunities
  - 03 Tender programs

1 Satellite Q1 2027

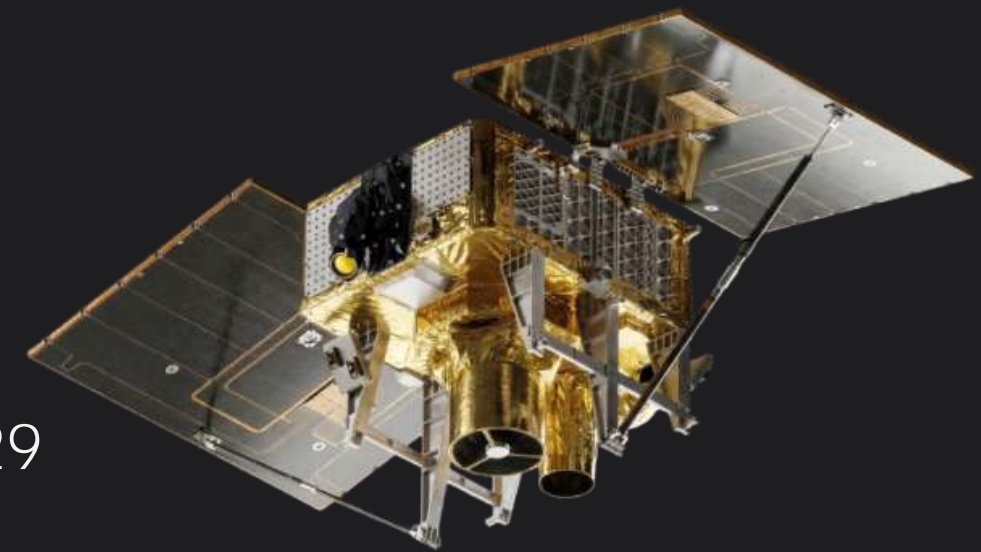
Revisit rates of upto 3 days

5 Satellites until end 2028

Daily global revisits

Upto 30 Satellites by end 2029

Hourly revisits



**Thank you!**

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