

The **DIGITAL TWIN OCEAN**

An interactive replica of the ocean
for better decision-making

What is it?

A digital space providing access to vast amounts of data, models, artificial intelligence and other tools, which will allow the replication of the properties and behaviours of marine systems, including ocean currents and waves, marine life and human activities, and their interactions, in and near the sea.

Real Ocean

Digital Twin Ocean

Satellite data

Marine data

Advanced models

Artificial intelligence

Better understand the ocean

Simulate alternative scenarios

Make the best informed decisions

Better decision-making

- By connecting data and models through tailor-made applications, scientists, marine experts, policymakers, entrepreneurs and user-driven applications can test different specific scenarios.

This allows us to:

Better understand the ocean

Predict its response to changes

Simulate alternative scenarios

Make the best informed decisions

Testing scenarios

We can test what happens if...

... the frequency of extreme events increases under climate change?

How would people living on the Mediterranean coast be affected?

... we decide to strictly protect 30% of the European marine waters?

How would European fisheries be impacted?

... we decided to combine wind energy and aquaculture?

How would a specific offshore marine area be affected?

... the average sea temperature increases?

What would happen to seagrass meadows?

Who benefits?

Marine and coastal policies

Test the effectiveness of planned infrastructures

Researchers

Assess the impact of human activities and climate change

Blue economy stakeholders

Ensure sustainability by reducing environmental pressures

All of us

Contribute to science and empower citizens

Our goal: a vibrant ocean ecosystem

This knowledge will help us design the most effective ways to restore marine and coastal habitats, support a sustainable blue economy and adapt to a changing climate.

Mitigating and adapting to climate change

Supporting a sustainable blue economy

Restoring marine and coastal habitats

Boosting biodiversity

Research and Innovation

#MissionOcean
#EUMissions

EU MISSIONS
RESTORE OUR OCEAN & WATERS BY 2030

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ISBN 978-92-76-49483-6 |
DOI 10.2777/343496 | KI-06-22-164-EN-N
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