EU Awards €17 million to ILIAD Project to Launch an Innovative Digital Twin of The Ocean

The ILIAD consortium, which includes 56 international partners (including HIDROMOD), will develop virtual representations of the sea that will integrate and extend existing EU earth observing, modelling digital infrastructures and computing facilities to provide highly accurate predictions of future developments.

January 2022 – the European Union (EU) has granted the ILIAD Consortium €17 million to develop and launch a Digital Twin of the Ocean (DTO) that will provide highly accurate predictions of future developments at global seas.

The ILIAD Project, which is comprised of 56 partners from 18 different countries in Europe, the Middle East and North Africa, has been awarded the funding as part of the EU the €1 billion European Green Deal.

ILIAD will develop virtual models designed to accurately reflect changes and processes accruing at the ocean. ILIAD will commercialise an interoperable, data-intensive, and cost-effective model, capitalising the explosion of new data provided by many different earth sources, modern computing infrastructure including Internet of Things, social networking, Big Data, cloud computing and more.

The ILIAD consortium, which has received funding through the EU Horizon 2020 Research and Innovation Programme, will combine high-resolution modelling with real-time sensing of ocean parameters, advanced algorithms for forecasting of spatio-temporal events and pattern recognition. The virtual representations will consist of several real-time to near-real-time digital replicas of the ocean.

ILIAD will also create a marketplace to distribute apps, plug-ins, interfaces, raw data, citizen science data, synthesised information and value-added services in combination with the ILIAD DTO.

The project partners include industrial companies, end users, academic institutions, research and technology developers and private firms.

“The development of innovative methods in open frameworks and platforms is needed to enable meaningful and informative model evaluations and comparisons for many large Earth science applications from weather to climate,” said Bente Lilja Bye, CEO of BLB and the Scientific Manager of ILIAD. “The ambitious ILIAD project aims to build on the assets resulting from two decades of investments in policies and infrastructures for the blue economy to contribute towards a sustainable ocean economy."

“Our aim is to assemble as broad and diverse as possible user community of existing and new users, who will use the project’s innovative technological solutions to address future challenges,” said Prof. Georgios Sylaios from the Democritus University of Thrace, who is the Operational Manager of ILIAD.

“By combining a large amount of diverse data in a semantically rich, and a data agnostic approach that allows simultaneous communication with real-world systems and models, we will enable researchers to develop what-if scenarios and analyse the impact of measures to prevent and adapt to climate change."

About ILIAD

ILIAD is an EU-funded project which aims to develop and launch virtual models of the ocean that will provide highly accurate predictions of future developments at global seas.

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For more information https://ocean-twin.eu/

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