

virtual representation of a physical object or system DIGITAL TWIN

digitally simulates a real asset through datas and models

What is it?

dynamic structure

simultaneously affected by physical and ecological changes and learns through data

facilitates extensive digital research by conducting studies unfeasible on physical objects



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extensive research

3D INTEGRATED MODELLING SYSTEM recently applied also in the field of oceanography



predictive capacity learns through historical and current data to make strong predictions



real-time changes the analysis and results in parallel with real-time data

How do digital twins work as ocean demonstrators?

They utilize real-time data from databases and smart observation systems, employing dynamic, high-resolution, fully coupled models of sea and watershed with AI tools. These Digital Twins comprehension of regional enhance ecosystems, predict their states amid climate changes, and assess socio-economic scenarios for decision-making.



