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Type: Demonstration/Tutorial (30 mins)

DigiTwin 3D -a data-driven 3D interactive view on wind farms in the North Sea

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Effective use of data driven intelligence for complex planning and decision making requires innovations that enable stakeholders to better understand the type of information that the data systems provide. In many cases stakeholders have limited expertise on a specific technical subject, but still need to understand and interpret the data driven intelligence to be able to act on limitations, consequences and alternatives.

Three-dimensional data visualization in a virtual or augmented web environment can be such an innovation that helps to interpret data by emerging the user in a virtual world where the data is visualized realistically. An example of such an environment is a planned offshore wind farm, where the user is able to move and look around freely to examine energy yields, effects on fisheries, shipping industries and ecology.

At MARIS we have developed a demo digital twin of a wind farm in the North Sea with the goal to determine to what extend 3D visualization can provide insight to data and assist marine spatial planning in the North Sea. The demo allows for the user to freely move around in the Prinses Amalia wind farm that is made to scale. The wind farm contains multiple assets that the user can investigate for more information and includes real time information of the water and air temperature and wind speed and direction.

Other key topic

Key Topic

Digital Twins

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