



Let's talk about Coastal Challenges

📅 13 June 2025 – 10:30 am - 1:30 pm CEST

📍 Inspire Area – European Digital Ocean Pavilion

🌐 United Nations Ocean Conference 2025

Abstract

Next generation coastal environmental monitoring

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DHI is working with the Danish agency for green land use change and water environments to implement key environmental directives (e.g. WFD, MSFD, etc.).

DHI has developed a biogeochemical model complex that describes phenomena such as oxygen depletion and algae concentrations and maintains an operational system for downloading data, executing models on a daily basis, assimilating national level field observations as well as satellite data and disseminating model results as part of the agency's overall vision to modernize the data monitoring system supporting Denmark's implementation of European directives. The model complex consists of several models covering Danish water bodies downscaling the Copernicus Marine Global Ocean Analysis and Forecasting service to coastal bays and enclosed estuaries, while consistently adding the required biogeochemical modelling.

Continuous improvements of this service are pursued by exploiting the value of additional water quality data sets for building increased trust in the service via validation and increasing its accuracy via assimilation.

