

EU Coastal Use Cases Workshop

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New services of HywasPort system
– seabed indicators in coastal zone
and seamless transition between
port and sea models



Uldis Bethers, Daiga Cepīte-Frišfelde,
Juris Seņņikovs, Andrejs Timuhins
SIA «Procesu analīzes un izpētes centrs»



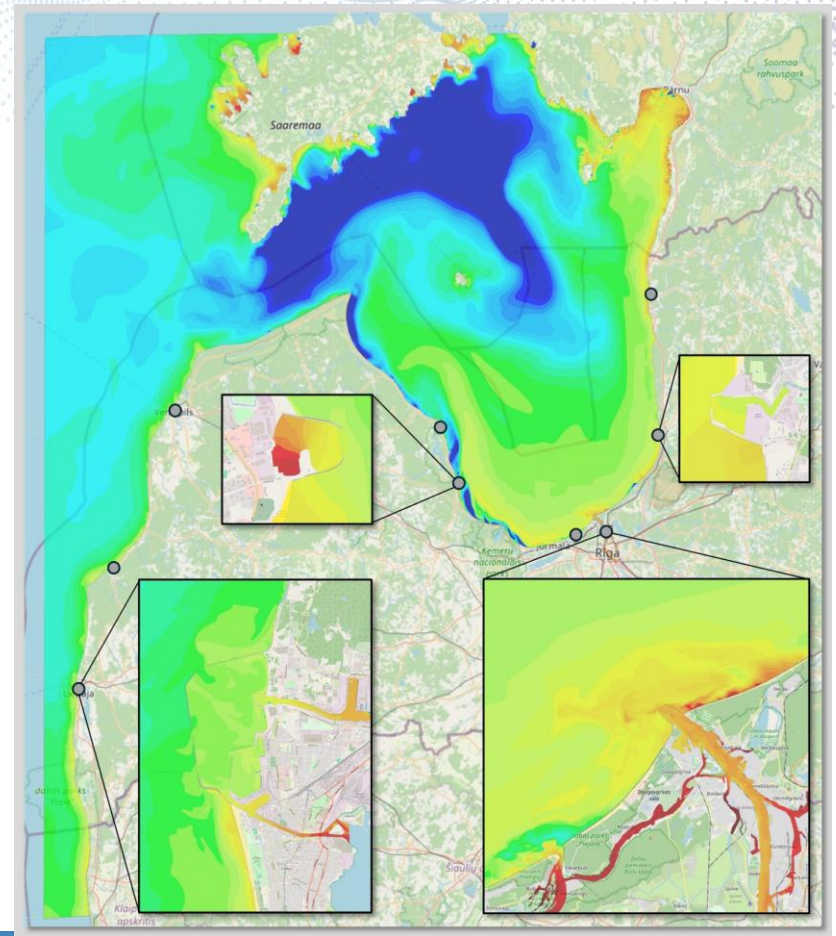
Development of TWO new services in existing HywasPort system

Region: Baltic Sea

Area: Coastal zone of LATVIA

HywasPort system: model forecasts and observations in port aquatories

Observation data: ports and 3rd parties

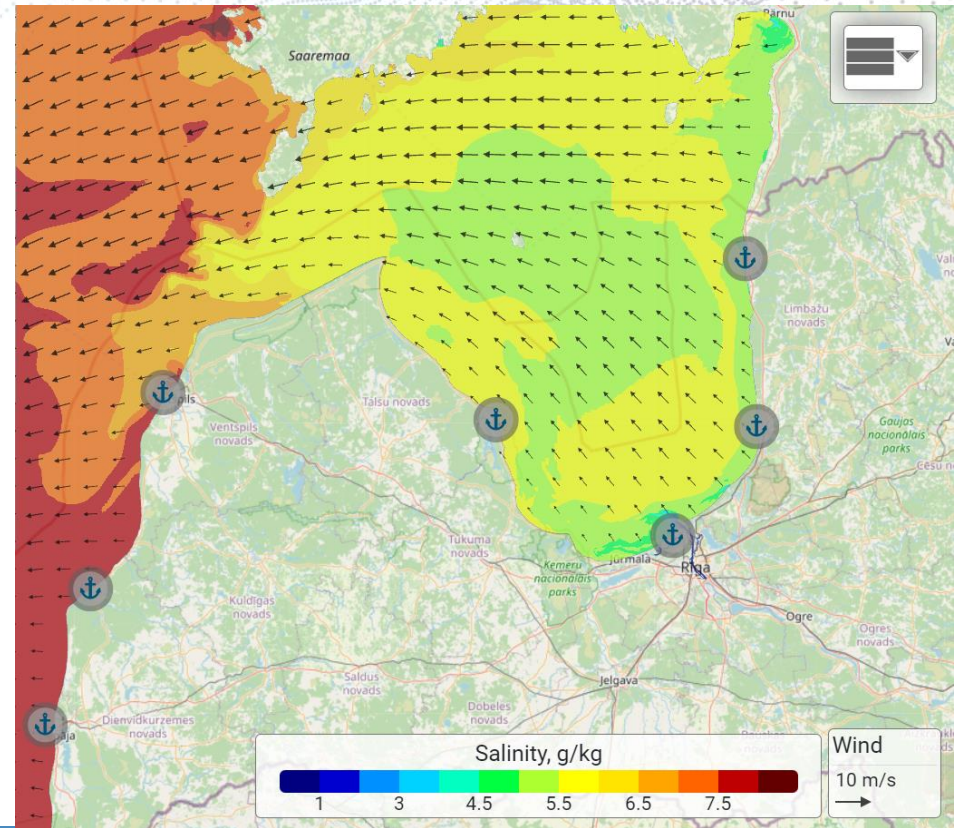


CMS: Copernicus Marine Models (Analysis and Forecasts) BALTIC-PHY and BALTIC-WAV as BC

Coastal model: HirombBOOS model in an operational setup by University of Latvia. 7 levels of nesting with the resolution of 36 m for inner ports, and 72/100 m for the port approaches.

Sediments: module of HBM and energetic model of longshor transport

Waves: in-house wave model for port approaches and aquatories



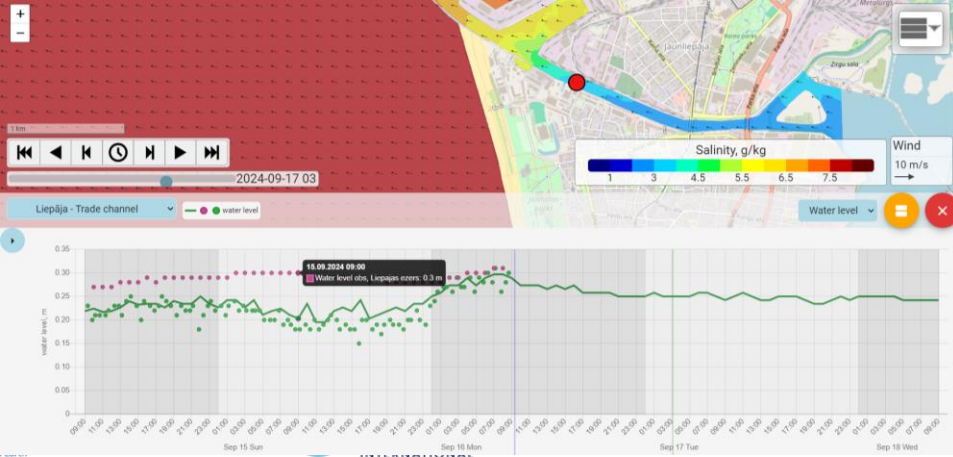
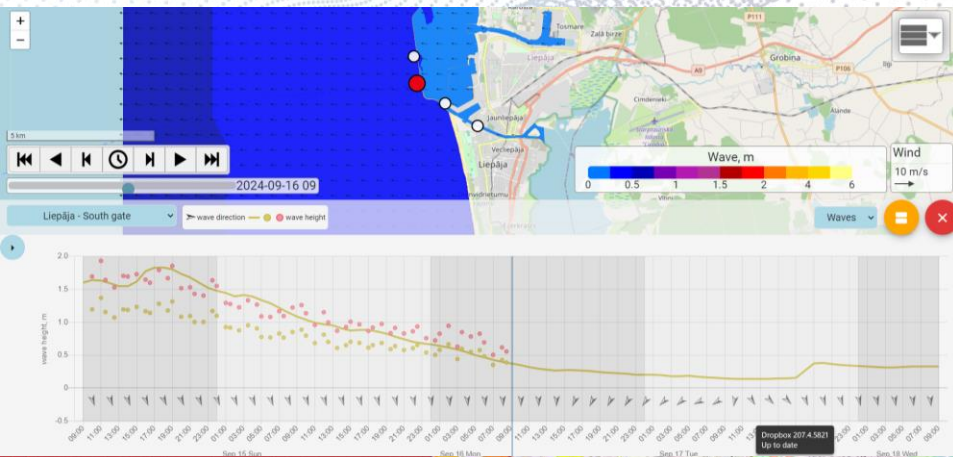
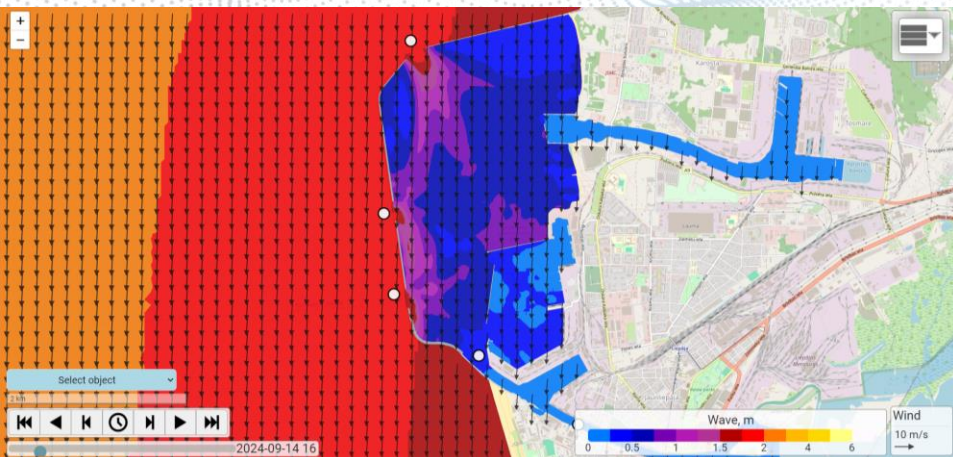
Seamless Forecasting for Latvian Seaports, Bridging the Gap Between Inner Ports and Open Seas

Continuous sea state in the port aquatories and the outer coastal region. The nesting of models allows for seamless transition between the inner port and marine coastal forecasts of waves, currents, sea level, sea temperature, salinity, and wind. The service is available for 8 harbours. The observations are included.



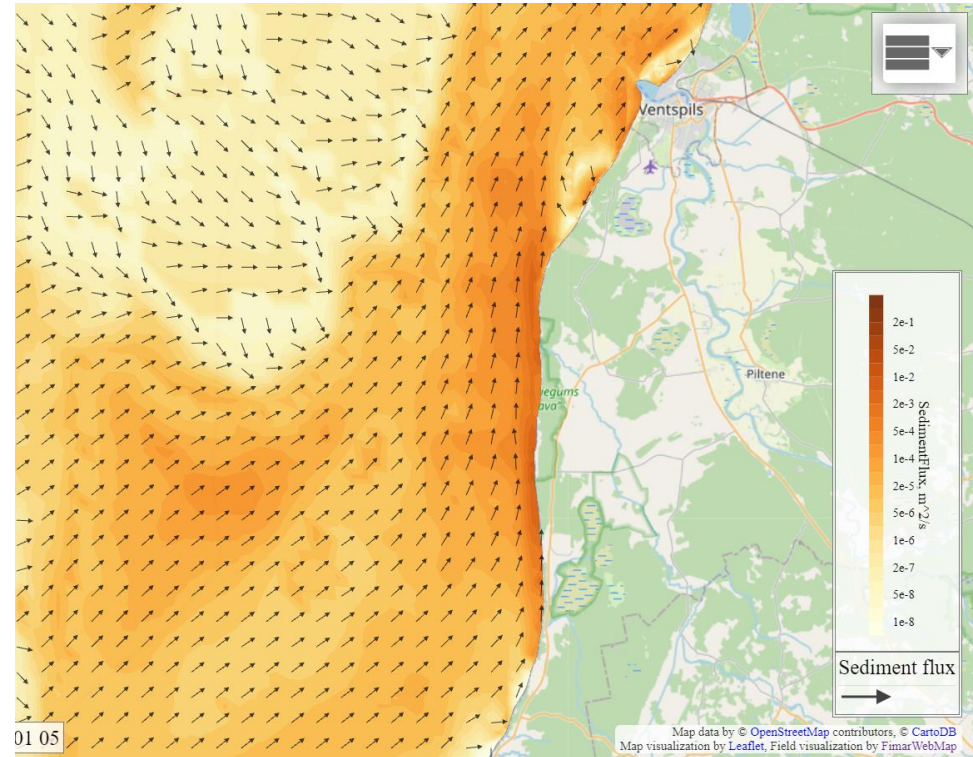


USE CASE ONE



Supporting coastal management and marine conservation in Latvia through monitoring of seabed disturbance indicators

Presenting (1) the operational map of seabed disturbance in the coastal zone, (2) the operational map of sediment transport intensity and (3) cumulative indicator characterizing the seabed disturbance above the selected threshold in the recent year versus its climatic value. Service not launched yet.



Thanks for attention !

<http://www.water.lv/HywasPort/>

