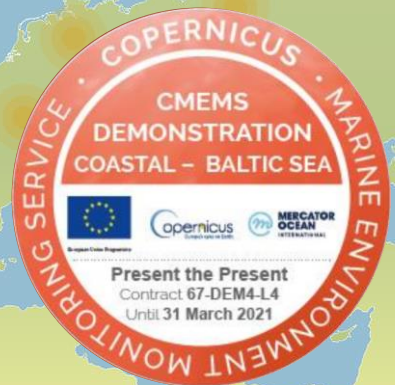


ONLINE EVENT

January 26-28 2021

Copernicus Marine Service General Assembly



Present the present

Daiga Cepīte-Frišfelde



UNIVERSITY
OF LATVIA



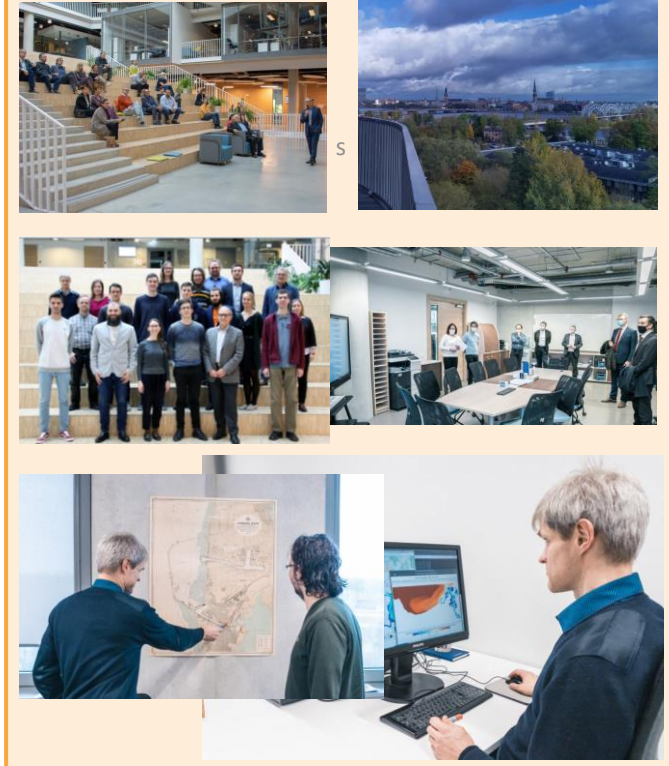
COMPANY PRESENTATION



UNIVERSITY
OF LATVIA



- Personnel: 30 people
- Location: Riga, Latvia
- Expertise:
Institute of Numerical modelling -
miniature paradize for modellers
of physical processes –
building, testing, implementing
research engineering software for
Oceanography & hydrology & hydrogeology





Markets:

*Marine Navigation,
Safety & Disaster*

Geographical areas:

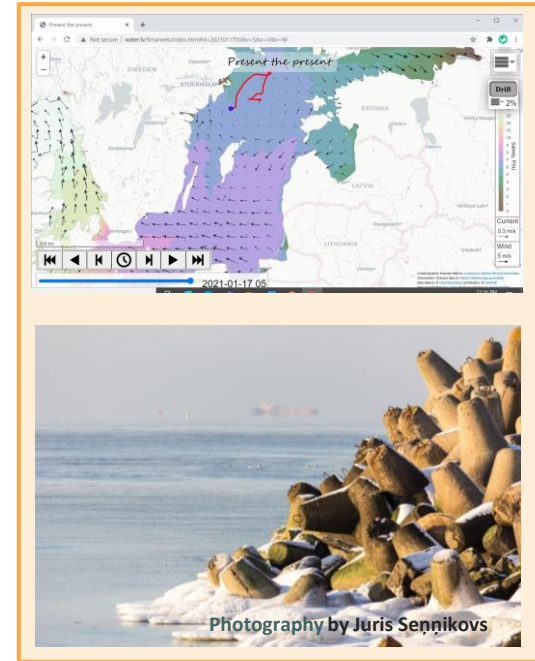
Baltic Sea

Service: Present the present offers drift visualisation on the surface of the virtual Baltic Sea surface model (forecast 2 days ahead, 1 week hindcast)

End users targeted: general public, school children, state authorities, agencies and economic operators which are either (a) responsibilities for, (b) or depending on or (c) affecting coastal and marine environment.

Condition of use and accessibility: freely available without registration

www.water.lv/fimarweb





Drift trajectory in time is modelled on the surface of the virtual Baltic Sea model

any initial position

any moment from 1 week in the past up to 2 days ahead

1-hour temporal resolution

3 wind factors from the menu or user specified wind factor

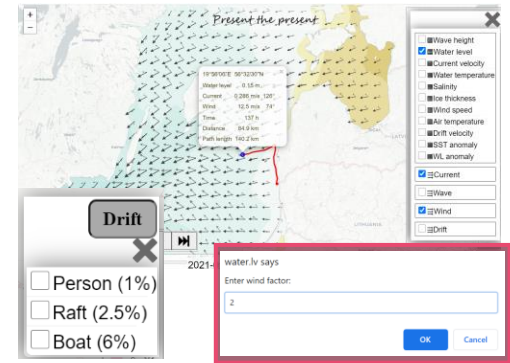
Wave effects (Stokes drift) included

Seminar for users

Stakeholder visits

Educational training for youth using creative vector designs

Entanglement with humanities & arts during communication to society





CMEMS products in use:

- BALTIC SEA PHYSICS ANALYSIS AND FORECAST - physical state of the Baltic sea near real time (003_006);
- BALTIC SEA WAVE ANALYSIS AND FORECAST - modelled near real time wave data (003_010).

How the CMEMS products are integrated in the service?

- Operational mode.
 - Information for every hour.
- Forecast is renewed every 6 hours.
Forecast for the next 48 hours is available in WEB.

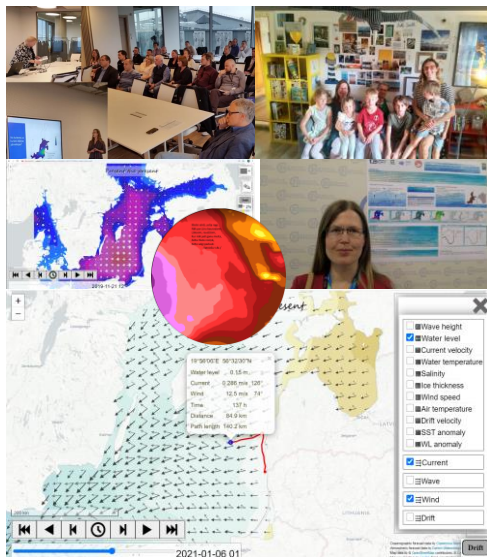
3 main blocks: 2 coming from CMEMS (oceanography and waves); 1 coming from Danish Meteorological Institute (wind, air temperature).

- Downscaling using model on HBM base run by University of Latvia is involved in technical realisation of the drift trajectory calculation in the service.



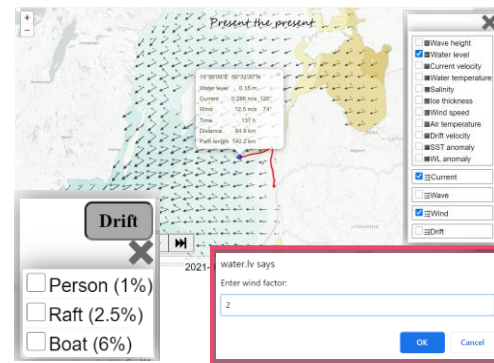
For my company

Visibility of our operational service
Experience&meeting inspiring people



For my end-users

Operational forecast in user friendly interface
Free drift modelling tool at
www.water.lv/fimarweb





NEED FOR IMPROVEMENT IN CMEMS

Observation data layers providing temperature etc. data on ferry lines in the Baltic Sea would be useful.

CMEMS as a platform for joining ocean related problems & solvers?

CMEMS as a ocean **inspired** community adding arts and humanities?



University of Latvia (UL) has developed Present the present service – free operational oceanographic and drift forecast for the Baltic Sea freely available <http://www.water.lv/fimarweb>

UL uses CMEMS to increase the visibility of its developments in operational oceanography (OO) and advance the mathematical modelling traditions in OO.

Downscaling for forecasts in shoreline channels, estuaries, lakes & other applied projects considered in future.

General public get tired easily in case data is communicated without adding emotions and inspiration. Creative data communication remains open issue.

