Case Study BALTIC SEA / Gulf of Riga
WP3

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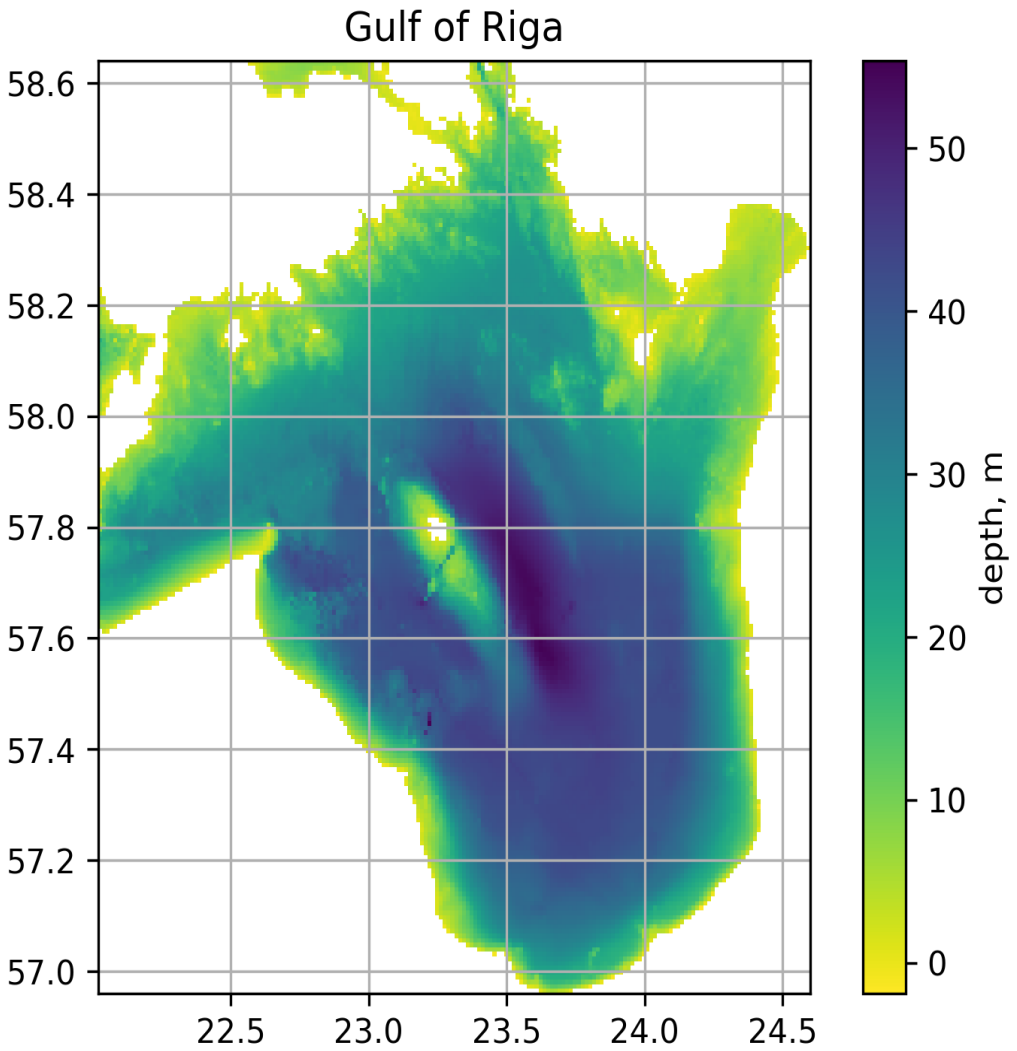
NACIONĀLAIS ATTĪSTĪBAS PLĀNS 2020
EIROPAS SAVIENĪBA
Eiropas Reģionālās attīstības fonds
IEGULDĪJUMS TAVĀ NĀKOTNĒ
Līguma Nr. 23-11.17e/20/246

Hindcast

Time period: 1993-2020 (28 yrs)
Domain: Gulf of Riga (Lon 22°-24.6°E, Lat 56.96° - 58.64°N)
Software: Hiromb-BOOS model, UL setup
Resolution: 1x1 km (187x203 nodes), 20 layers, 10 minutes
Parameters: velocity, waterlevel, T, S, ice

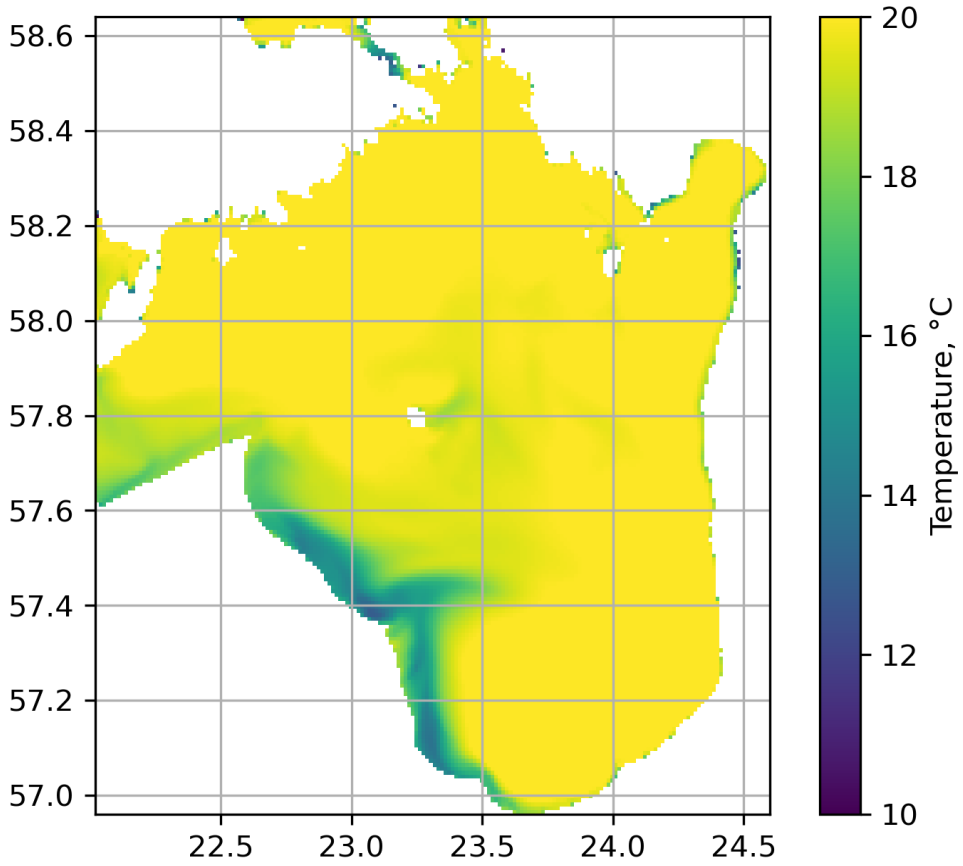
Bathymetry: Emodnet (2018)
Boundary conditions: CMEMS climatic (SMHI NEMO)
River runoff: E-HYPE (SMHI) reanalysis
Atmosphere forcing: ERA5 hourly reanalysis
Tides: astronomic calculations

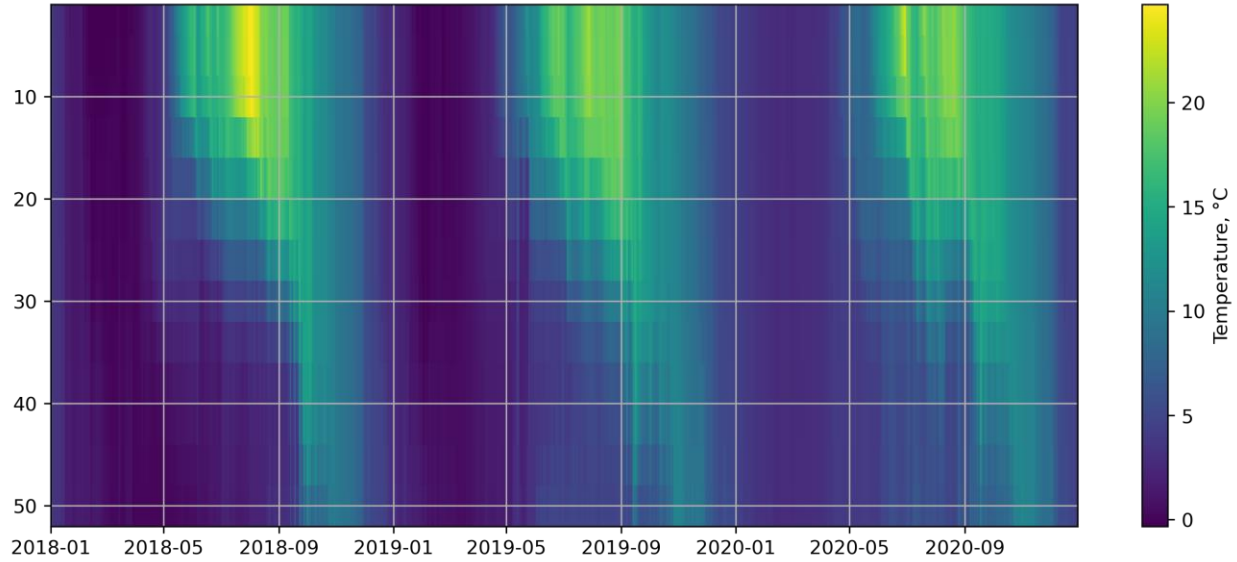
Output: daily in all nodes, hourly in surface nodes
Performance: 1 year/day
Production: Jul/Aug 2021

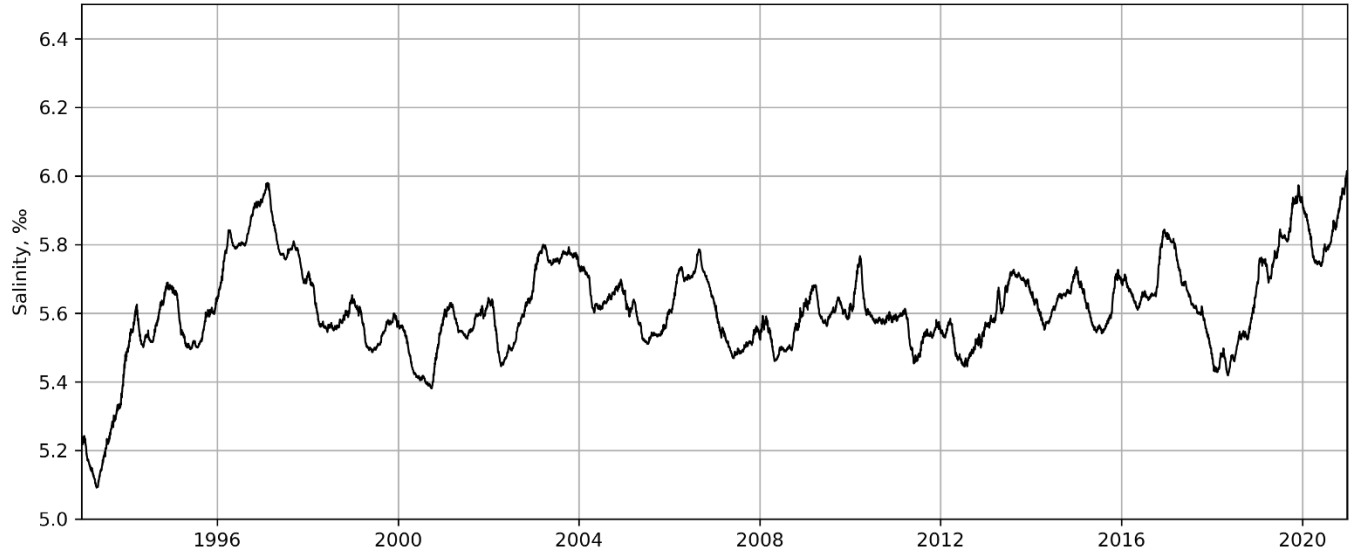


Highlights of hindcast

Upwelling patterns (20-Aug-20), seasonal thermocline, average salinity time-graph







Thank you!

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