EO Applications for Integrated Maritime and Territorial Spatial Planning in the Baltic

BALTIC EXPRO+

BalticAIMS

Newsletter 04/2023

Targeting progress in utilizing EO derived information for Baltic Sea needs and actions

Technical solutions for data access developed and applications demonstrated

BalticAIMS Partners:

Syke

Brockmann Consult GmbH

Brockmann Geomatics Sweden AB

eo science for society

esa

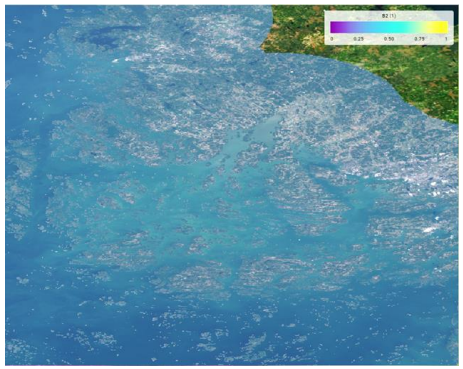
Key results of the BalticAIMS project

For selected demonstration areas in the Baltic Sea, BalticAIMS has:

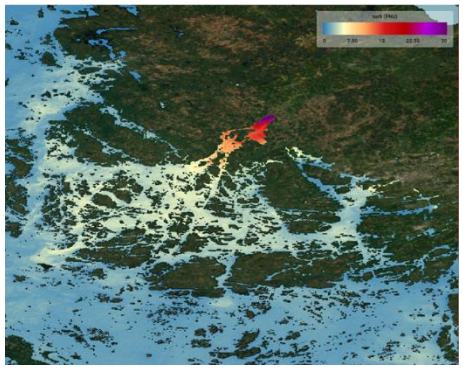
- Collected and combined different data sources into ready to use data
- Developed technical solutions for easy access to EO derived products
- Implemented several user stories, addressing real-life questions of stakeholders and showcasing the applications in user workflows
- Assessed the utility of the BalticAIMS services and products

BalticAIMS Product suite

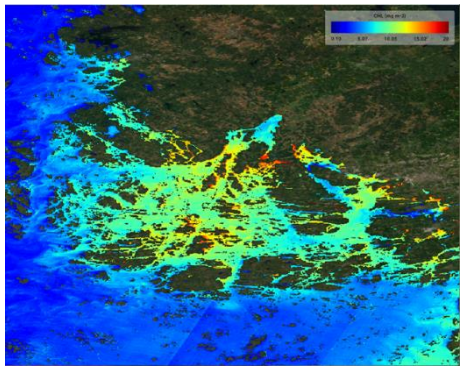
- Sentinel-2 true colour images
- Turbidity
- Chlorophyll-a and algal blooms
- Sea Surface Temperature (SST)
- Corine Land Cover
- HELCOM phosphorous and nitrogen load



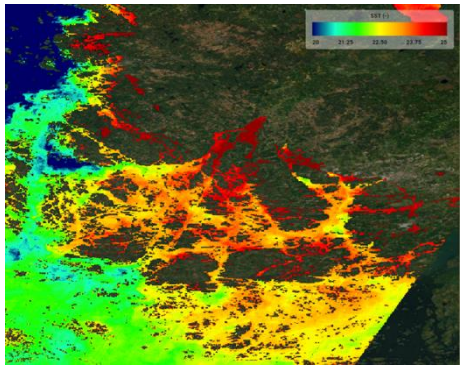
EO Sentinel-2 True colour



EO Turbidity - Sentinel-2



EO Chlorophyll - Sentinel-2

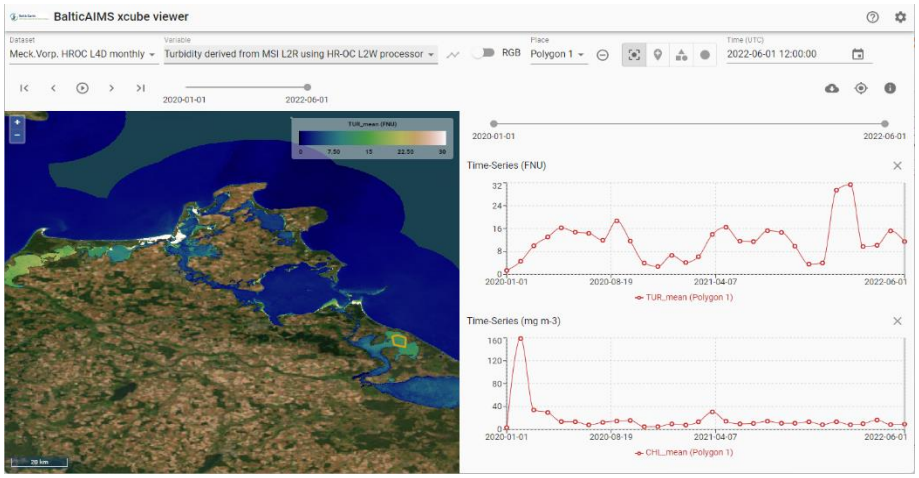


EO SST - Landsat-LC8

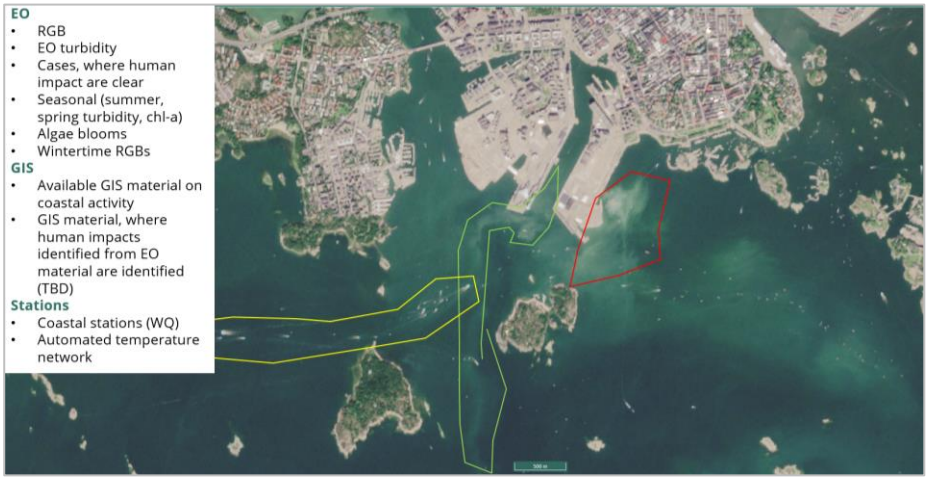
BalticAIMS service contains modified EU Copernicus and USGS/NASA Landsat program data (processing by SYKE), and Copernicus Marine Service (CMEMS) Information

BalticAIMS technical solutions

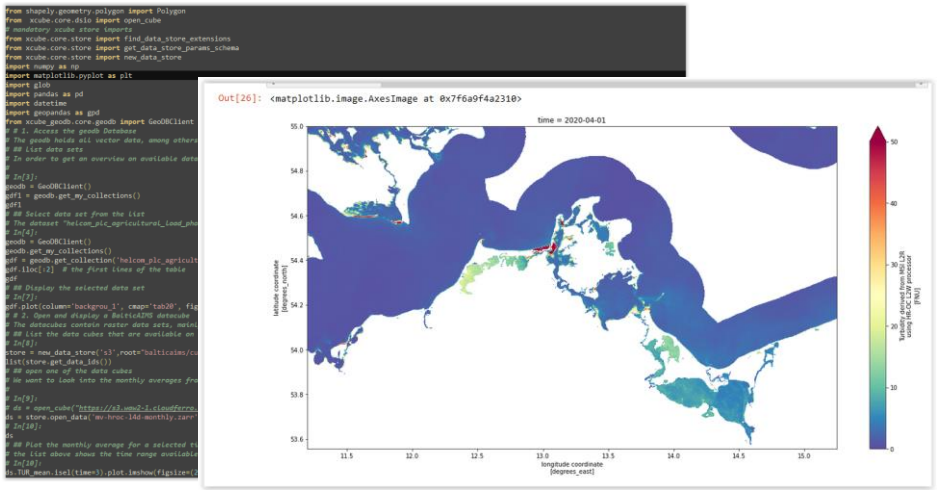
BalticAIMS browser-based Viewer



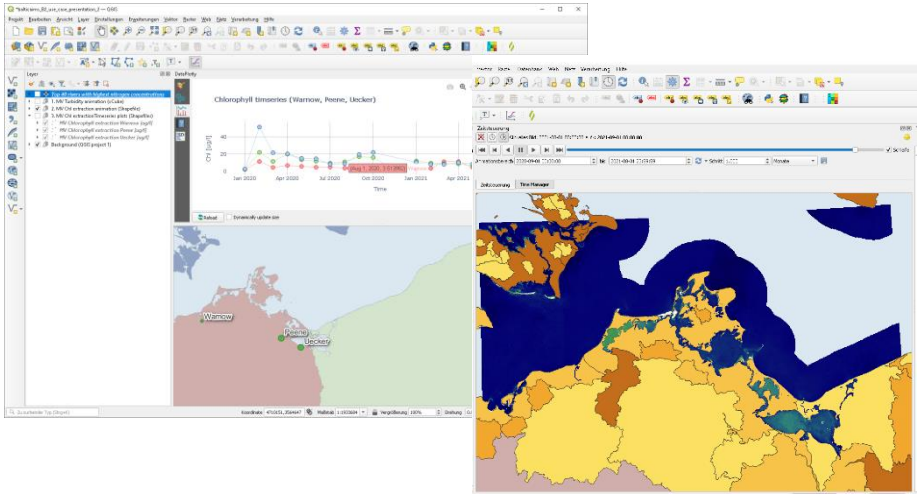
Tarkka+ - Browser-based Graphical Interface



Xcube Jupyter Notebooks



BalticAIMS Web Feature Service integration for GIS use



BalticAIMS service based on User and Stakeholder requirements

- Timeseries of Chl, TSM, SST with high spatial resolution
- Simple interfaces for easy access to data
- Possibility to integrate products in User Systems

Road towards an EO based Baltic monitoring support service

For more information, visit:

https://www.syke.fi/projects/BalticAIMS

Or contact: Sampsa Koponen - *BalticAIMS Project Coordinator*

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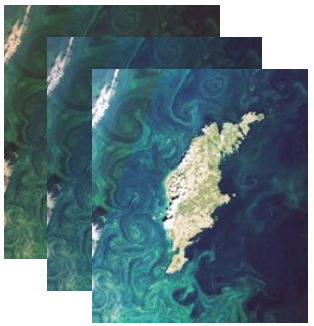
Feedback from Users and Stakeholders

"BalticAIMS Service offers easy access to the EO based products for users at different skill levels and without the need for advanced GIS software"

"Dedicated access to satellite images and EO based raster products relevant for spatial planning and monitoring of coastal land and waters of the Baltic Sea is a substantial improvement"



Future developments

Service expansion:

- *New application examples*
- *New products*
- *Full Baltic coverage*

Technical developments:

- *Improved GIS functionality and Ready to use Jupyter Notebooks*
- *Access to analysis ready data*