Biology

EMODnet
European Marine Observation and Data Network

EMODnet Biology annual meeting

ULiège status update

Charles TROUPIN

16-17 April 2025 (Constanta, Romania)

The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) 2021/1139 of the European Parliament and of the Council of 7 July 2021 establishing the European Maritime, Fisheries and Aquaculture Fund.

Activities within WP3

What's our initial goal?

1. Allow users to directly call DIVAnd (Julia code) from a R session
2. Generate presence density maps with DIVAnd (called from R)
3. Compare results obtained with different methods

Activities within WP3

What's our initial goal?

Technical aspect

Documentation
Testing
Compatibility issues
Creation of a new library

Scientific aspect

Providing a new tool to community
Application to real datasets
Comparison with existing methods

Activities within WP3

What has been done so far?

https://github.com/gher-uliege/EMODnet-Biology-PhaseV

- ✓ Create and improve the documentation of the installation procedure (`README.md`)
- ✓ Test installation under Windows (✓ working) and Linux (✗ failing) using Conda (✗ also failing)
- ✓ Perform simple 1D and 2D interpolations with DIVAnd in R
- ✓ Perform density map from observations (turtles) with DIVAnd in R

Activities within WP3

What has been done so far?

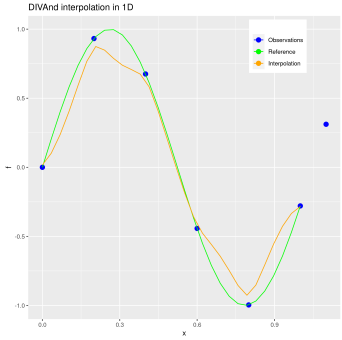
Under development (with Salvador Fernández, VLIZ):
create a R package for DIVAnd

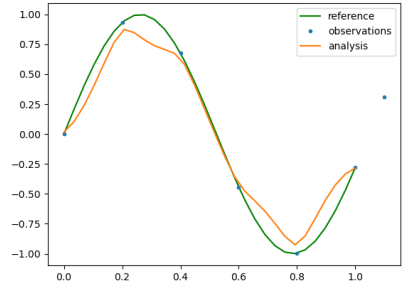
(to hide all the dirty stuff from users)

Activities within WP3

What has been done so far?

Results for the 1D test with R and with Julia





(spoiler: they are the same)

Activities within WP3

What are the next steps?

Technical aspect:

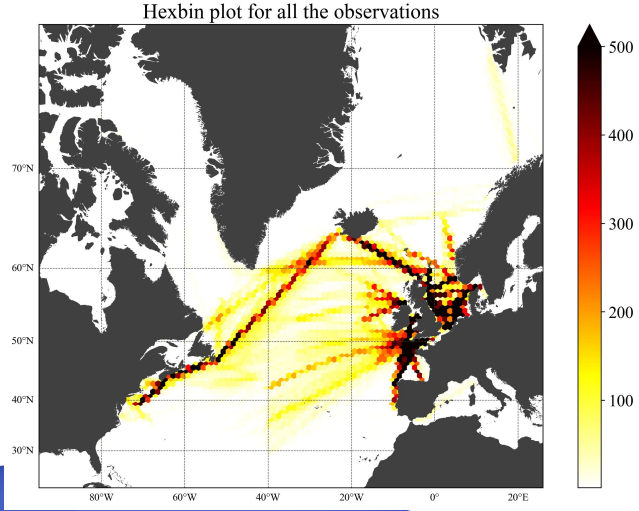
1. fix library issues (if possible)
2. finish writing R module

Scientific aspect:

3. Apply method on birds data: *European Seabirds At Sea (ESAS)* https://www.vliz.be/en/imis?module=dataset&dasid=3117
4. Compare DIVAnd with other method(s)

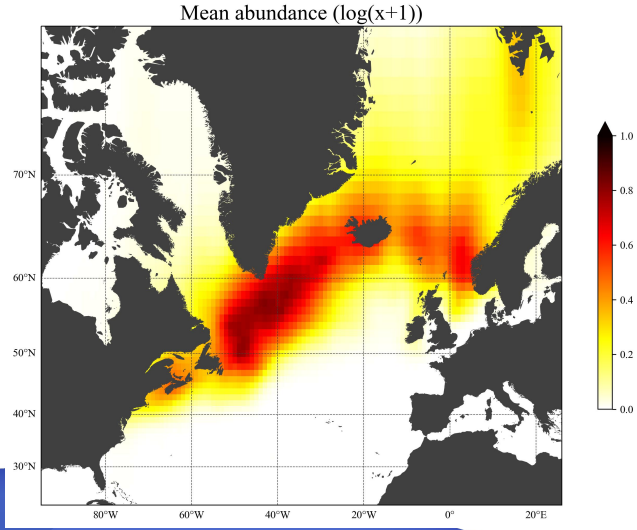
Activities within WP3

Side project: gridding of CPR data using a neural network



Activities within WP3

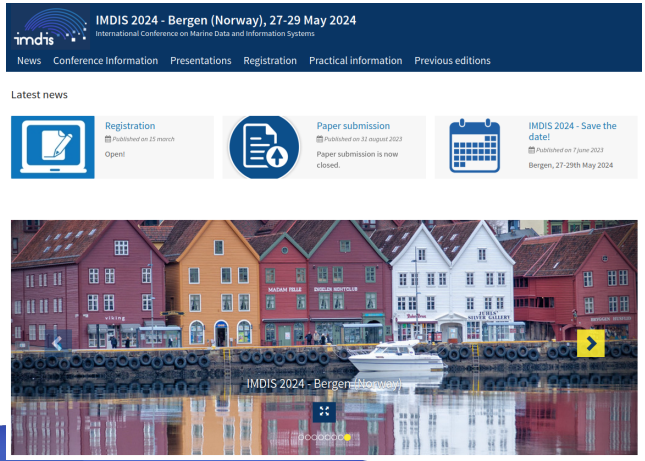
Side project: gridding of CPR data using a neural network



Activities within WP3

Side project: gridding of CPR data using a neural network

More details: IMDIS conference



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European Marine Observation and Data Network

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