LifeWatch Data Analysis Workshop:

Towards improved LifeWatch sampling campaigns

preparing analysis of the generated long term data series

22nd-23rd February 2018

Location: IODE Training room 1, VLIZ, Wandelaarkaai 7, 8400 Oostende

Organizers: Olivier Beauchard, Jonas Mortelmans, Elisabeth Debusschere

Thursday, February 22nd

09:30 - 09:35: Welcome and introduction to the workshop [Elisabeth Debusschere-VLIZ]

09:35 - 09:45: Introduction to the LifeWatch research infrastructure and observatory [Klaas Deneudt-VLIZ]

09:45 - 10:00: LifeWatch observatory: monthly observation and sampling campaigns [Jonas Mortelmans-VLIZ]

10:00 - 10:10: R shiny data explorer [Klaas Deneudt-VLIZ]

10:10 - 12:40: Long term observations: case studies (Research questions, sampling strategy and analysis)

      10:10 - 10:35: Overview of long term monitoring at Marine Biology Ugent [Carl Van Colen-UGent]

      10:35 - 11:00: Phytoplankton monitoring [Reinhoud De Blok-UGent/VLIZ]

      11:00 - 11:25: COFFEE BREAK

      11:25 - 11:50: Overview of the main results of the LifeWatch observatory [Olivier Beauchard]

      11:50 - 12:15: Omes monitoring: long term analysis in the Scheldt (Tom Maris - University of Antwerp)

      12:15 - 12:40: Belgian case: long term monitoring of the macrobenthos community [Annelies De Backer - ILVO]

12:40 - 13:30: LUNCH

      13:30 - 14:00: "Long-term and continuous measurements of suspended particulate matter dynamics in the Belgian nerashore area" [Michael Fettweis- OD Nature]

14:00 - 14:25: Power analysis of monitoring data [Nicolas Vanermen-INBO]

14: 25 – 14:50: Global pattern observed within combined OMES – LifeWatch data series (2017 data set) [Olivier Beauchard-VLIZ]

14:50- 15:15: COFFEE BREAK

15:15-15:40: Dealing with data gaps [Olivier Beauchard]

15:40 - 17:30: Break-out session: An optimal observatory network design facilitates the trade-off of feasibility and data quantity.

- Relevance of sampling stations: number and location
- Added value of monthly cruises in long term observations (frequency of sampling)
- Impact of tide and currents on data
- Solutions to fill the gaps/prevent the gaps
- Additional suggestions by the participants…

[DINNER]

Friday, February 23nd

09:30 – 10:00: presentations on the break out topics

10:00 – 10:20: Flip the redundancy of macrobenthos sampling into an opportunity [Elisabeth Debusschere]

10:20 – 11:30: Group discussion

- Importance of replicates in long term monitoring
- Do the data sets show similar trends?
- Can the various datasets correlate to each other? (Bentho-pelagic coupling)
- What can we learn from a short term analysis?
- LifeWatch data users: who, what do they want, main concerns, need for additional parameters…
- Choice of fixative
- Do we sample the same water masses?

11:30 – 11:45 COFFEE BREAK

11:45-12:30: Need for collaborations/ agreements or engagements & Wrap up of the workshop [Elisabeth Debusschere]

12:30 - 13:30: LUNCH