NOOS Meeting on 'Exchange of transports' 8 March 2013, BSH Hamburg

Participants:

Jose Ozer (MUMM), Stephan Dick, Frank Janssen, Inga Golbeck, Inge Menzenhauer (BSH)

Agenda:

- 1. Welcome and introduction
- 2. New NOOS web pages
- 3. Evaluation and developments within MyOcean
- 4. Discussion on new file contents and formats for the exchange
- 5. Discussion on heat fluxes
- 6. Further evaluation and developments (e.g. ensemble modelling)

Summary of Results and Action List:

1.) Introduction

Unfortunately Jacob Woge Nielsen (DMI) was sick and could not attend the meeting.

DCOO (Danish Centre of Operational Oceanography) will join the NOOS activity. Data will be provided very soon. Contact: Johan Söderkvist (jos@fcoo.dk)

2.) New web pages

Stephan and Inge presented new web pages. All agreed that they should become operational soon. Data of DCOO will be included as soon as available.

- Actions: Replace old by new web pages (Inge)
 - Include DCOO results (Inge)
 - Investigate possibility to show figure of surface transports (Inge)
 - Investigate possibility to combine results of different partners in figures on demand (Inge)
- 3.) Evaluation and developments within MyOcean

Inga presented results of evaluation and validation activities within MyOcean including ensemble modelling.

Actions: - Investigate possibility of comparison with measurements in Dover Strait (Jose)

- Investigate possibility to include water levels in evaluation of ensemble results, need to remove tidal signal (Frank and Inga)

4.) Discussion on new file contents and formats for the exchange

Jose presented results of sensitivity studies for the computation of volume fluxes. There is a problem with mass conservation (2 M2 tidal cycles averaged can't be converted into monthly/annual mean). Also the 4 digits format is not accurate enough. Jose and Stephan

recommended modified output files and formats. At the northern boundary a new transect is needed.

It was decided to continue with existing data (mean over 2 M2 tidal cycles) as they are, but to introduce a new (additional) output file with:

- hourly data (hourly values must be carefully integrated and be computed according to the time-stepping procedure used to solve the vertically integrated continuity equation)
- only net water transports (in m³/s)
- new format: REAL with sufficient digits

Actions: - Define new transect (No. 0) at northwestern boundary (Stephan)

- Modify and update description 'How to calculate transports' (Stephan)
 - Look for appropriate REAL format with sufficient digits (Jose)

5.) Discussion on heat fluxes

It was discussed if it is useful to change the computation of heat fluxes (e.g. switch from °K to °C). It was decided to Continue with °K but that all should use the same (and constant) values for heat capacity and density.

- Actions: Define new values for heat capacity and density (Stephan)
 - Modify description, how to calculate transports accordingly (Stephan)
- 6.) Further evaluation and developments (e.g. ensemble modelling)

Discussed under 3.).