

NOOS PROJECT SUMMARY: **Exchange of Transports**

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KEYWORDS: data exchange, water transports, salt transports, heat transports

<i>Project title:</i> <b>Exchange of computed water, salt, and heat transports across selected transects</b>	
Project Aims	<p>Transports across predefined transects constitute a measure of the hydrodynamic situation. The knowledge of computed transports is important to assess the dispersion of pollutants or the development of ecological parameters.</p> <p>The exchange of computed transports will serve several purposes:</p> <ol style="list-style-type: none"> <li>1. Data from different models can be used for a better characterization of the current hydrodynamic situation</li> <li>2. Data from different models can be used for a model intercomparison</li> <li>3. Transport data can be used as boundary conditions for models</li> <li>4. Predicted model data can be compared with transports derived from measurements (if available)</li> </ol>
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Participants	<ul style="list-style-type: none"> <li>• BSH, Stephan Dick, Frank Janssen</li> <li>• MUMM, Jose Ozer</li> <li>• DMI, Vibeke Huess, Peter Nielsen</li> <li>• Met.Office, John Siddorn, Rachel Furner</li> </ul> <p>interested NOOS members: IMR, met.no SMHI ...</p>
Present status: <i>Ongoing</i>	<p>Daily forecasts of computed water, salt, and heat transports across selected transects in the North Sea and transition area to the Baltic are computed by circulation models of BSH, MUMM and DMI and provided on ftp servers. Tidal mean transports are calculated for 29 transects (vertical integrated flow and transport in different water layers). Results are presented in the NOOS website <a href="http://www.noos.cc">http://www.noos.cc</a> which include charts and data of net, positive and negative water transports, vertical profiles as well as the plotting of time series.</p>
Project timescale	<ul style="list-style-type: none"> <li>• Aug.-Nov. 2003: Definition of project</li> <li>• Jan.-Mar. 2004: Definition of transects and technical details</li> <li>• Mar. 2004: Technical guide for computation of transports</li> <li>• Apr. 2004: BSH data on ftp server</li> <li>• Mar. 2005: Prototype of web page on Model Transports</li> <li>• Aug. 2005: Presentation on NOOS web pages</li> <li>• Mar. 2006: MUMM data on ftp server and NOOS web pages</li> <li>• Nov. 2007: BOOS transports included (on: <a href="http://www.boos.org">www.boos.org</a>)</li> <li>• Jan. 2009: DMI data on ftp server and NOOS web pages</li> <li>• 2010: Validation activities of MUMM, BSH, Met.Office and DMI in MyOcean project (ongoing)</li> </ul>

Planned Developments and Activities (2010 - ...)	<ul style="list-style-type: none"> <li>• Participation of Met. Office in data exchange</li> <li>• Presentation of Met. Office data on web pages</li> <li>• Study on model intercomparison (BSH, MUMM, Met.Office) by Jose Ozer (MUMM)</li> <li>• Validation of Met.Office MCS data for NOOS transects in the frame of MyOcean (Class 3 metrics)</li> <li>• Presentation of salt and heat transports</li> <li>• Further evaluation of results (statistics, model intercomparison)</li> <li>• ...</li> </ul>
Link to project documents (password protected URL ??)	<a href="http://www.noos.cc/">http://www.noos.cc/</a> ⇒ Products => Model Transport (Computation of diagrams for time series is password protected, please contact: <a href="mailto:stephan.dick@bsh.de">stephan.dick@bsh.de</a> )