

NOOS PROJECT SUMMARY: River runoff data for operational ocean forecasting

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KEYWORDS: ocean modelling, river, fresh water, runoff

<i>River runoff data for operational ocean forecasting</i>	
Project Aims	<p>Make river runoff data – observed and predicted fresh water flux and nutrient/contaminant loads – available to NOOS partners for use in ocean hindcasting and forecasting, and assess the benefits derived.</p> <ol style="list-style-type: none"> 1. Make near-real-time observations of river fluxes available to partners. 2. Make high quality historical data sets of observed fluxes and loads available to partners for hindcast studies. 3. Assess the availability and applicability of prognostic river runoff data and make recommendations for further effort. 4. Develop best practises for applying river runoff data in coastal ocean forecasting.
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Present status (September 2010)	<p>Project tasks 1.1, 1.2 and 2 were addressed in ECOOP T2.5 (ended May 2010). NOOS partners: met.no, SMHI, RIKZ, BSH. K. Borst coord NOOS part. <u>Task 1.1, 2.1: River volume flux data inventory done (→ ECOOP T2.5)</u></p> <ul style="list-style-type: none"> • Info on NRT data from Sweden, Germany, Norway, UK • Hindcast data for UK from Cefas • Coop IBI-ROOS for French, Irish stations <p><u>Task 1.2: NRT data exchange</u></p> <ul style="list-style-type: none"> • Daily updated obs data provided for some Norwegian rivers by met.no. ftp.met.no/pub/bruceh/noos/. • Daily updated prognostic data for rivers feeding the Kattegat/Skagerrak provided by SMHI. • 10-min obs data for Dutch and German stations provided by Deltares. • Deltares has implemented data collation, presentation and dissemination via MATROOS. Online access for viewing at http://noos.cc/index.php?id=150. FTP access at ftp://noosdata.nl/ECOOP/DATA/RWS. MATROOS at Deltares accessible at matroos.deltares.nl (noos login). • Data file format standardized to SDN ODV pending a netCDF standard. Metadata standard is SDN CDI. • Data for England can be brought in through efforts of RWS and Deltares. Permission from UK Env. Agency is only obstacle! • No NRT data will be available from Belgium (but maybe via NL). <p><u>Task 3: Prognostic runoff data</u></p> <ul style="list-style-type: none"> • SMHI preparing prognostic hydrological model for Europe (E-HYPE). Data for NOOS area expected by end of 2010. Test data delivered August 2010. Development supported by MyOcean, OPERR (new EU-FP7).

Project timescale	<p>Year 2005-06:</p> <ul style="list-style-type: none"> • Establish project and finalize Project description • Assign tasks to partners • Start the inventory of river datasets and hydrological models (1.1, 2.1, 3.1) <p>Year 2007:</p> <ul style="list-style-type: none"> • First version of the river data inventory complete (1.1, 2.1) <p>Year 2008:</p> <ul style="list-style-type: none"> • Update project description • Initial implementation of exchange system for NRT (1.2 – ECOOP 2.5.2) <p>Year 2009:</p> <ul style="list-style-type: none"> • Operate data provision by ftp box for selected data sets (NO, SE) • Operational data provision for DE and NL (ECOOP <i>Deltares – RWS</i>) • Establish data assembly center at Deltares, with online viewing, ftp dissemination and analysis tool (MATROOS). • Prognostic hydrological model for northern Europe expected initiated by SMHI. <p>Year 2010:</p> <ul style="list-style-type: none"> • April-May 2010 A preliminary uncalibrated E-HYPE version • June 2010 Improvement and calibration before put in operational environment • June-Aug 2010: Preparations for daily model runs in development environment • Aug-Sep 2010: Finishing the model setup and testing and evaluation • Oct 2010: Daily model runs in a production environment. • Continue to pressure UK EA to release data. Approach Scotland for same. <p>Year 2011:</p> <ul style="list-style-type: none"> • Further calibration and validation against observations.
Link to project docs	<p>Description of Work ECOOP WP 2.5 description MyOcean WP7 description OPERR description</p>