

NOOS PROJECT SUMMARY: River runoff data for operational ocean forecasting

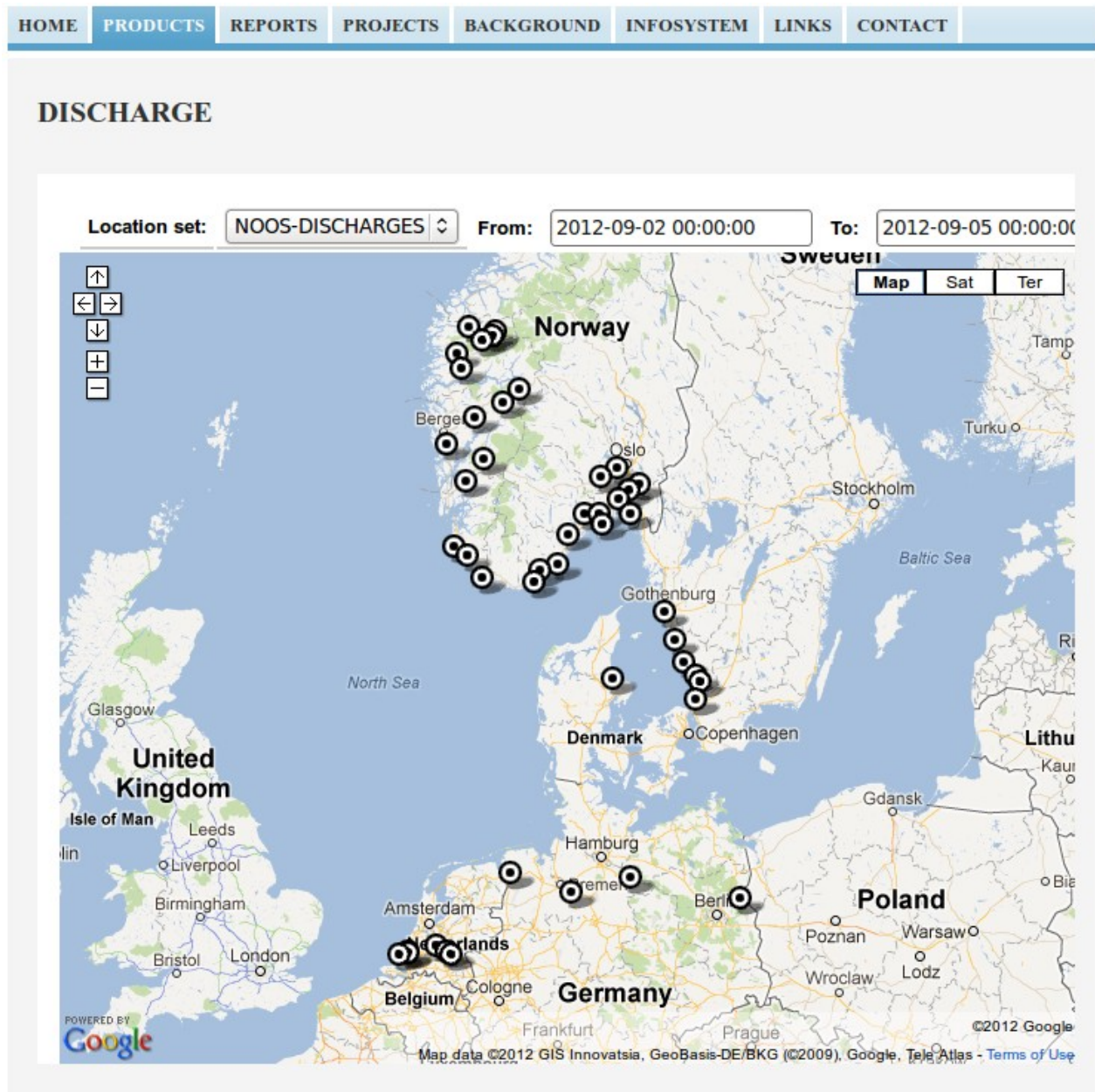
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KEYWORDS: ocean modelling, river, fresh water, runoff

<i>River runoff data for operational ocean forecasting</i>	
Project Aims	<p>Make river runoff data – observed and modelled/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 (October 2019)	<p>Project tasks have been addressed in several EU projects: ECOOP T2.5, MyOcean1 miniproject, MyOcean2 IS-TAC, OPERR. Participation by several NOOS members.</p> <p><u>Task 1.1 – NRT observations inventory</u></p> <ul style="list-style-type: none"> • River volume flux data inventory done (→ ECOOP T2.5) • Coop IBI-ROOS for French, Irish stations • Archive 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"> • Data access established for major stations in France, Germany, Netherlands, Norway, Sweden. UK (incl. Scotland) is major gap. Belgium, Denmark and Ireland are minor gaps. • Deltares has implemented data collation, presentation and dissemination. Online access for viewing at http://noos.eurogoos.eu/observations/river-discharge-obs/. See Figure 1. FTP access at ftp://noosdata.nl/ECOOP/DATA/RWS. MATROOS at Deltares accessible at matroos.deltares.nl (noos login). Data for D, NL, N + S (quasi-obs). • Data file format standardized to SDN ODV pending a netCDF standard. Metadata standard is SDN CDI. • BSH runs NOOS/MyOcean data portal that has data from F, D, NL + N, S (quasi-obs) • <i>Waning interest in NRT flow observations. Main use is probably online validation of E-HYPE rather than direct input to models.</i> <p><u>Task 2.1 Archive observations archive</u></p> <ul style="list-style-type: none"> • Done. As for NRT data. <p><u>Task 2.2 Archive data exchange</u></p> <ul style="list-style-type: none"> • <i>Little interest for observations → low priority</i> • <i>Cefas has compiled a good archive of obs for OSPAR – good enough?</i> <p><u>Task 3.1: Hindcast runoff data</u></p>

	<ul style="list-style-type: none"> E-HYPE Hindcast data (daily and monthly means 1981-2010) produced using HYPE v3 is available at hypeweb.smhi.se. See Figure 2. A download manual is provided at http://noos.eurogoos.eu/members-products/on-river-discharge/. An updated product, 1989-2018, remains pass-word protected. <p><u>Task 3.2: Prognostic runoff data</u></p> <ul style="list-style-type: none"> In 2016, SMHI started an ftp feed of operational E-HYPE data to paying customers, for use in operational forecasting. Daily updated 10-day forecasts. The pricing policy has steepened, and begins to be a hindrance. <p><u>Task 4: Best practises</u></p> <ul style="list-style-type: none"> Questionnaire underway
Workplan	<p>Year 2018/19:</p> <ul style="list-style-type: none"> Clarify SHMI pricing policy regarding E-HYPE3 NRT products. <i>NOT SOLVED – no reply.</i> Make E-HYPE3 products based on 30-year series (run-off) and 11-year series (nutrients) available to partners with SMHIs consent. <i>SOLVED for run-off by providing download instructions.</i> Not solved for nutrients. Poll NOOS members on how they currently apply river runoff in their modeling. Create a forum for exchanging best practises. Fix broken links to UK NRT observations (MetO) and French observations. <i>SOLVED .</i> <p>Year 2019/20:</p> <ul style="list-style-type: none"> Clarify SHMI pricing policy regarding E-HYPE3 NRT products. Add solution for nutrients. Complete survey of best practices and publish.
Link to project docs	<p>Description of Work ECOOP WP 2.5 description MyOcean WP3 MyRiver miniproject report OPERR description (http://www.smhi.se/en/Research/Research-departments/Oceanography/operr-operational-pan-european-river-runoff-1.16820)</p>

Figures



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Figure 1: NOOS river discharge data viewing and access service at <http://noos.cc/index.php?id=150>.

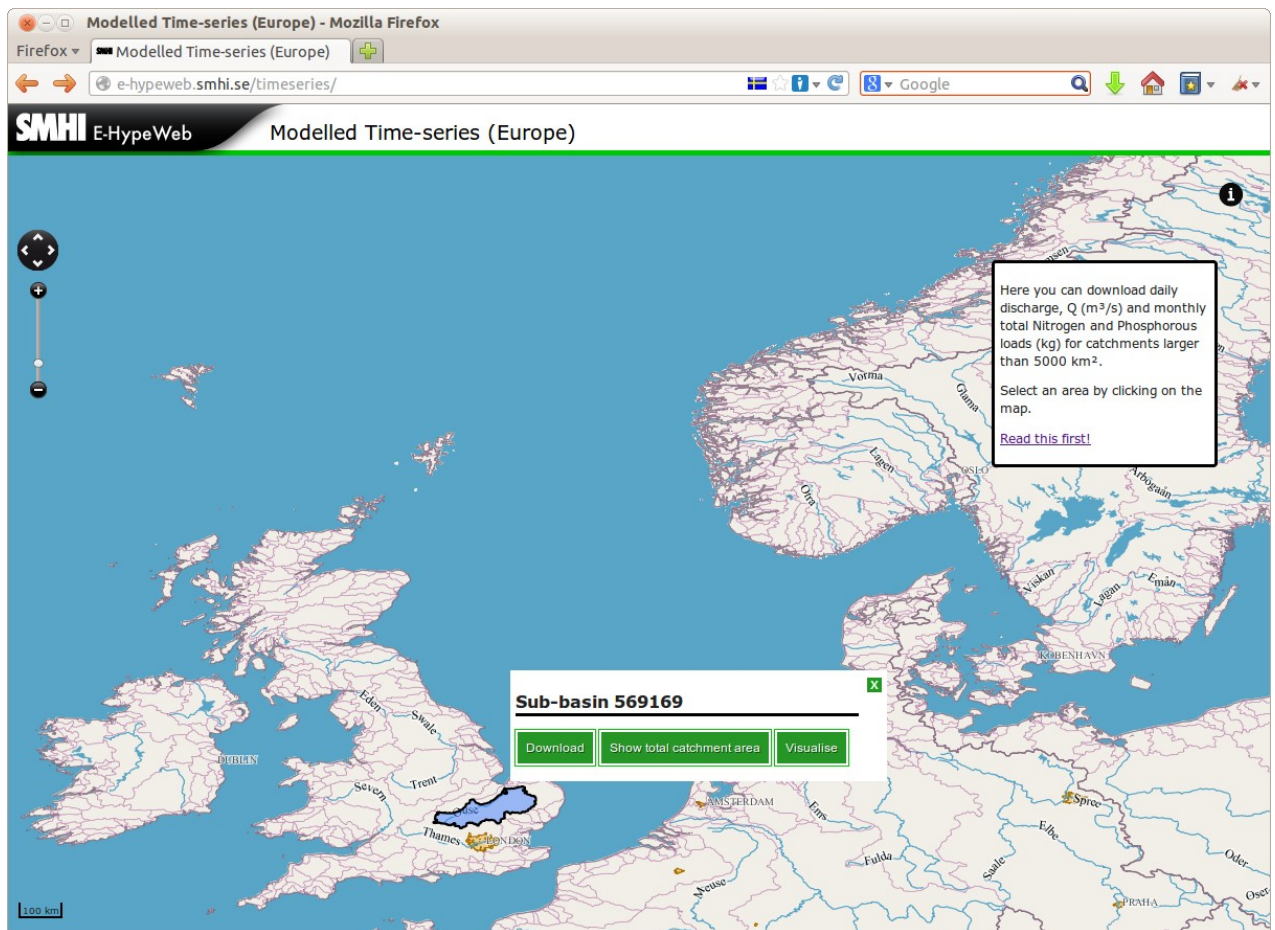


Figure 2: Screenshot of *e-hypeweb.smhi.se*. New look and feel!