NOOS PROJECT SUMMARY

October 9nd 2014

KEYWORDS Water level, data exchange

NOOS Water level data exchange			
Project Aims	To exchange observed and forecasted water level in the NW Shelf Sea in near real-time between NOOS partners, in order to improve each partner's national storm surge and water level prediction service.		
Lead agency Lead scientist	Centre for Ocean and Ice, DMI Jacob Woge Nielsen jw@dmi.dk		
Participants	DMI	Vibeke Huess Jacob W. Nielsen	vh@dmi.dk jw@dmi.dk
	BSH, with German Waterways and Shipping Directorates	Stephan Dick Kai Soetje	Stephan.dick@bsh.de Kai.Soetje@bsh.de
	Deltares	Martin Verlaan	M.Verlaan@deltares.nl
	RWS	Marc Philippart	marc.philippart@rws.nl
	MUMM	Sebastien LeGrand José Ozer	s.legrand@mumm.ac.be j.ozer@mumm.ac.be
	MDK	Guido Dumon	guido.dumon@mov.vlaanderen.be
	Met.O	John Siddorn Rachel Furner	john.siddorn@metoffice.gov.uk rachel.furner@metoffice.gov.uk
	POL	Roger Proctor Kevin Horsburgh	rp@pol.ac.uk kevinh@noc.ac.uk
	MI	Guy Westbrook	guy.westbrook@marine.ie
	Met.no	Bruce Hackett	Bruce.Hackett@met.no
	SMHI	Lars Axell Thomas Hammarklint	lars.axell@smhi.se thomas.hammarklint@smhi.se
	FCOO	Niels Holt Johan Mattson Johan Söderkvist	nho@fcoo.dk jma@fcoo.dk jos@fcoo.dk
Present status (Oct. 2014)	**Water level observation exchange** Real-time tide gauge data is exchanged between 8 NOOS partners: DMI, BSH, RWS, MDK, POL, MI, Met.no and SMHI. The data exchange includes 53 coastal and 1 off-shore stations. It is managed thru ftp boxes at each partner. DMI collects and presents at the NOOS web page http://noos.cc/index.php?id=29 in near real-time. The page displays a synoptic chart, and time series in graphical and digital format going one week back. **Water level forecast exchange** Each NOOS partner who runs an operational sea level forecast service, and who so may wish, uploads a water level forecast tar ball on a regular basis for other NOOS partners to retrieve thru ftp and use as auxliary information in their national storm surge warning service. The forecasts include surge, sea level, tide, or a combination of these, for a fixed station		

	table. The data is not to be passed on to third party. **Superstructure and quality studies** Deltares has developed an information system Matroos / Ensurf that provides real-time multi-model forecasts. The system adds value to the forecast ensemble by dynamically assigning weights using a Bayesian moving average method. This is interfaced with Google maps, and may be accessed thru the NOOS web page http://matroos.deltares.nl/google_maps/noosmap.php? Prior to putting this system to use, M. Verlaan (then RIKZ) carried out a model inter-comparison study based on the exchanged forecast data. The results were presented at the EGU Conference in 2004. On an annual basis, DMI calculates a storm surge error for each model, examining the 3 highest events at each station. The most recent analysis is found at http://ocean.dmi.dk/validations/surges/2013/compare_noos.uk.php
Project timescale *Eg ongoing / to complete in 2014*	2014 • include observations from France • include forecasts from Marine Institute of Ireland (?) • further develop storm surge forecast validation / inter-comparison page. • examine the feasibility of exchanging model fields • extend Matroos to include parameters other than sea level • complete Matroos station table
Planned Developments	none
Link to project documents (password protected URL ??)	