

NOOS annual report 20183

Member report - DMI

September 2013

Country	Denmark
Institution	Danish Meteorological Institute
Observations Status and new initiatives	<p><i>Status:</i></p> <ul style="list-style-type: none"> • Sea level, recorded at 25 national locations and collected from an additional national 48 locations, totalling 73 tide gauge sites. 35 are duplicated. • Sea level collected in real time for the North Sea – Baltic Sea region • Remote sensing data: SST, water colour/algae blooms • Responsibility for 3 hydrographic stations, taken over from DCOO <p><i>New initiatives:</i></p> <ul style="list-style-type: none"> • Tide gauge net to be slimmed slightly • Fate of hydrographic stations to be decided
Modelling Status and new initiatives	<p><i>Status:</i></p> <p>Operational: baroclinic 3-dimensional model</p> <ul style="list-style-type: none"> • V3: Storm surge HBM code 3 nested grids (3 n.m., 1 n.m, 0.5 n.m.) and a fjord module 4x daily 5 day forecast annual tidal run revised drag coefficient no ice dynamics • V4: MyOcean V.3 HBM code 4 nested grids (3 n.m., 1 n.m., 1 n.m, 0.5 n.m.) 2x daily 2½ day forecast high vertical and horizontal resolution in the Baltic, split from the North Sea domain biogeochemical model (ERGOM) with benthic processes • dispersion model (BSHdmod) for various substances and objects <p>Project:</p> <ul style="list-style-type: none"> • <i>Gulf of Finland</i> (BalticWay) finalised. Please refer to “Preventive Methods for Coastal Protection” edited by T. Soomere, E. Quak, Springer. <p>Under development:</p> <ul style="list-style-type: none"> • two-way nested fjord grid • 3D-var • re-instate ice dynamics thru revised ice module • wave-hd coupling on time step level (using WAM cy4.54)
Dissemination Status and new initiatives	<p><i>Status:</i></p> <p>Internet service (public): Real-time observations and forecasts available at ocean.dmi.dk , www.dmi.dk</p> <ul style="list-style-type: none"> • Tide • Sea level, storm surges • Sea surface temperature and temperature anomaly • Sea surface salinity • Surface current • Sea ice • Sea state and other wave parameters <p>Ftp box service (for NOOS):</p> <ul style="list-style-type: none"> • Tide gauge data • Sea level forecastModelled transport at North Sea / Baltic Sea cross-sections • Modelled transport at North Sea / Baltic Sea cross-sections

	<p>NOOS service:</p> <ul style="list-style-type: none"> • homepage (using the TYPO3 content management system) • Modelled transport for North Sea cross-sections (V.4 results)
Relevant national projects	<i>MEMC</i> : National co-operation on eco modelling (DTUaqua, NERI, DMI)
Relevant international projects	<p><i>MyOcean</i>: EU-FP7 project for the GMES-Marine Core Service. Lead WP6 – Baltic Sea modelling forecast Centre.</p> <p><i>eSurge</i>: Examine the feasibility of using satellite data (wind, ssh) in storm surge model</p> <p><i>SunFish</i>: HD-Wave model coupling in a unified setup, other modules</p>
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