NEMO-Nordic : A NEMO based ocean modelling configuration for Baltic & North Seas

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Based on the NEMO ocean engine, three regional setups for the North Sea and Baltic Sea domain have been developed : the NEMO-Nordic configuration is declined in an operational setup, a stand-alone version used for climate and process studies, and a NEMO-Nordic-RCA4 atmosphere/ocean coupled configuration used for downscalling climate scenarios. We give a brief overview of the options chosen within the NEMO engine to design the configurations. Based on the results provided by each of the three configurations, we also provide an assessment of the strengths and weaknesses of NEMO-Nordic. Finally, a validation of the configurations is provided based on an extensive comparison between in-situ measurements and model results for temperature, salinity, sea-ice extent, sea level and mean circulation.