



## **Validating an Ensemble based Forecasting System of the North and Baltic Seas**

Svetlana Losa (1), Sergey Danilov (1), Lars Nerger (1), Jens Schröter (1), Silvia Maßmann (2), and Frank Janssen (2)

(1) Alfred Wegener Institute for Polar and Marine Research, Climate System, Bremerhaven, Germany (Svetlana.Losa@awi.de), (2) German Federal Maritime and Hydrographic Agency

Quality of the forecast provided by the German Maritime and Hydrographic Agency (BSH) for the North and Baltic Seas had been previously improved by assimilating satellite sea surface temperature (SST). We investigate possible further improvements using in situ observational temperature and salinity data: Marnet time series and CTD and Scan Fish measurements. To assimilate the data, the SEIK filter is implemented. The Principle of Maximum Entropy is used as an additional criterion of plausibility of the assumptions made on error statistics and of the system performance on its own.