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## **North Sea climate from 1948 - 2006**

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The climate of the greater North Sea is investigated for the period from 1948 till 2006. For a better understanding of physical processes in the North Sea a model run is done for the period 1948 till 2006. The calculations are done with the 3-dimensional barocline shelf sea model HAMSOM with a spatial resolution of 20' x 12' and 19 levels. The layer thickness varies between 5m in the first 50m and 400m at the North Atlantic boundary. The model run is done with a time step of 5 min and hourly output of temperature, salinity, u- and v-components (3-dim) and water level (2-dim). The meteorological forcing data are from the NCEP/NCAR Reanalysis 1 data set which included air temperature, humidity, cloud cover, precipitation, sea level pressure and wind components. The boundary conditions for the open seas are from a climatological data set (Levitus, 1982) and also eight partial tides are included. Climatological river discharges are considered as well. The objective of this study is to investigate, if there is a systematical climate change in the North Sea. First results of the model run will be shown and discussed.