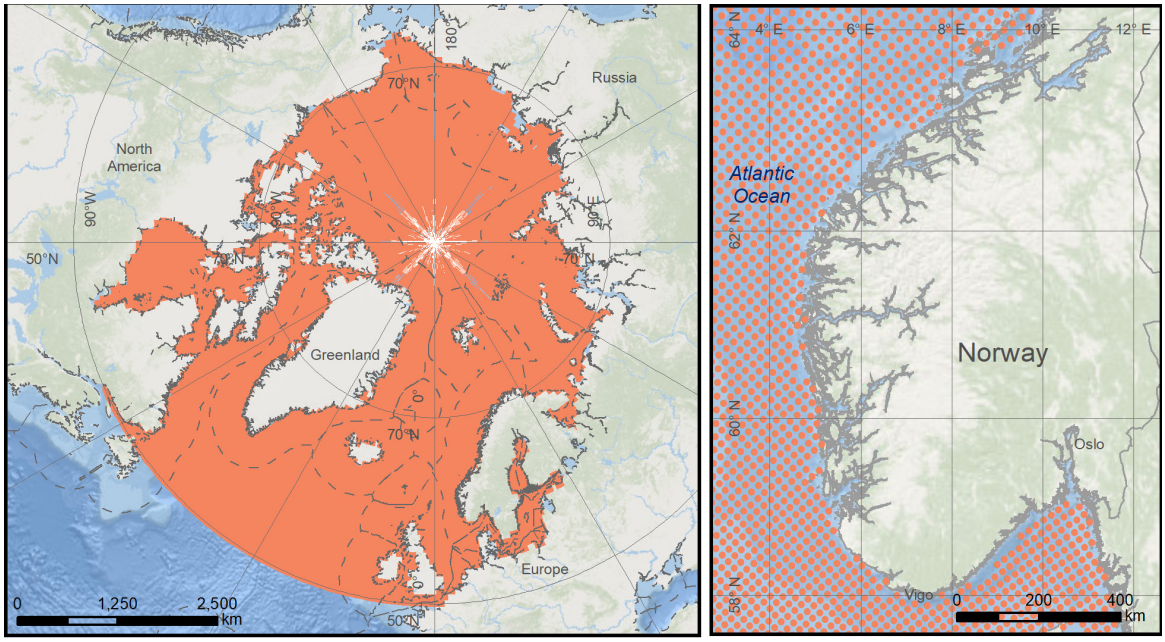
WINDS
CURRENTS
PREDICTION
OBSERVATION

GLOBAL
REGIONAL
LOCAL

EDS CATALOG

COPERNICUS ARCTIC OCEAN



The Copernicus, Arctic Ocean operational Forecast is run and delivered by Arctic – Monitoring Forecasting Centre (ARC MFC) under Copernicus Marine Environment Monitoring Service (CMEMS). ARC MFC is led by Nansen Environmental and Remote Sensing Center (NERSC, Norway) in collaboration with Norwegian Meteorological Institute (MET Norway) and the Institute of Marine Research (IMR, Norway).

TOPAZ4 data assimilation system is at the core of the Arctic Ocean forecast, which uses the latest version of the Hybrid Coordinate Ocean Model (HYCOM). TOPAZ4 also uses the Ensemble Kalman filter to assimilate remotely sensed sea level anomalies, sea surface temperature, sea ice concentration, sea ice thickness and Lagrangian sea ice velocities. The bathymetry dataset used in the system is GEBCO while the atmospheric fields for forcing the ocean model come from European Centre for Medium-Range Weather Forecasts (ECMWF).

Data Provider: http://marine.copernicus.eu/

Key details

EDS Data Product	Copernicus, Arctic Ocean
Coverage	Regional [90 to 50]°N, [-180 to 180]°E
Owner/Provider	CMEMS
Type of Data	Current Predictions
Forecast Length	240 Hours
Horizontal Grid Size	0.125°x 0.125° (12.5km x 12.5km)
Model Run Frequency	Daily
Time Step	1 Hour
Wind Forcing	ECMWF
River Flow	Yes
Tides	No

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