Met Office

Global-Ocean
Science configuration referred to as FOAM-GO and CPL-NWP

Global ocean analysis and 7-day forecast, coupled to global atmosphere model

Technical product details

Source	
Numerical models	
Spatial extent	
Global ocean	
Lat 89.75°N to 83°S. Lon 0° to 360°	
Grid resolution	
Regular grid, 0.25° x 0.25° grid cells	
Temporal resolution	
Daily, hourly	
Elevation (depth) levels	

43 levels:
0, 5, 10, 15, 20, 25, 30, 40, 50, 60, 75, 100, 125, 150, 175, 200, 225, 250, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1750, 2000, 2250, 2500, 2750, 3000, 3250, 3500, 4000, 4500, 5000, 5500m

Variables

bottomT = sea_water_potential_temperature_at_sea_floor

mlotst = ocean_mixed_layer_thickness_defined_by_sigma_theta

so = sea_water_salinity

thetao = sea_water_potential_temperature

uo = eastward_seawater_velocity

vo = northward_seawater_velocity

zos = sea_surface_height_above_geoid

siconc = sea_ice_area_fraction

sithick = sea_ice_thickness

usi = eastward_sea_ice_velocity

vsi = northward_sea_ice_velocity

More information in table below

Filenames

metoffice_coupled_orca025_GL4_${VARIABLE}_b${BULLETIN_DATE}_${FREQ}${VALIDITY_DATE}.nc

where

${VARIABLE} is one of BED, CUR, ICE, MLD, SAL, SSH, TEM;

${FREQ} is one of dm (daily mean), hi (hourly instant), qh (quarter hourly);

${BULLETIN_DATE} is the date the forecast was produced;

${VALIDITY_DATE} is the date the field is valid.

More information in table below

Typical data delivery time

Daily ~0730UTC
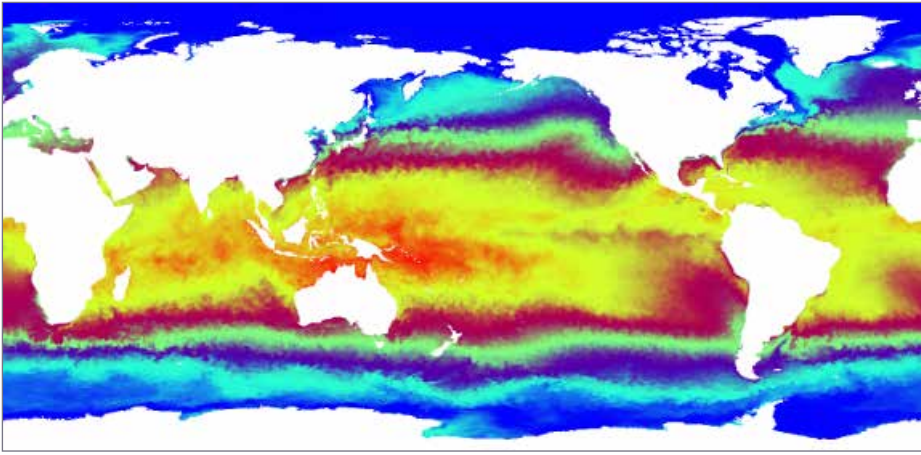
Delivery methods available

SFTP pull, FTP pull

File formats for delivery

NetCDF-4

Frequency of delivery

Daily to FTP server for collection by customer

Further information

Filetype	Variables(s)	Description	Averaging	Freq.	Level(s)	Leadtimes
TEM*dm	thetao	**potential** temperature	daily-mean	daily	43	T-36 -> T+156
SAL*dm	so	salinity	daily-mean	daily	43	T-36 -> T+156
CUR*dm	uo, vo	u- and v-currents	daily-mean	daily	43	T-36 -> T+156
ICE*dm	siconc, sithick, usi, vsi,	SIC, SIT, SI u-current, SI v-current	daily-mean	daily	1	T-36 -> T+156
MLD*dm	mlotst	mixed layer depth	daily-mean	daily	1	T-36 -> T+156
BED*dm	bottomT	**potential** temperature	daily-mean	daily	bottom	T-36 -> T+156
SSH*dm	zos	SSH	daily-mean	daily	surface	T-36 -> T+156
TEM*hi	thetao	**potential** temperature	instant	hourly	surface	T-47 -> T+168
CUR*hi	uo, vo	u- and v-currents	instant	hourly	surface	T-47 -> T+168
SSH*hi	zos	SSH	instant	hourly	surface	T-47 -> T+168

Table1: Global_Ocean netCDF products sent to UKMCAS via ftp by the Operational Marine Post-Processing Global Suite (MaPP-GL).