

ATLANTIC - EUROPEAN NORTH WEST
SHELF - OCEAN BIOGEOCHEMISTRY
ANALYSIS AND FORECAST

PRODUCT IDENTIFIER

NORTHWESTSHELF_ANALYSIS_FORECAST_BIO_004_002_b

GEOGRAPHICAL COVERAGE



VARIABLES

mass_concentration_of_chlorophyll_a_in_sea_water (CHL)
mole_concentration_of_phytoplankton_expressed_as_carbon_in_sea_water (PHYC)
mole_concentration_of_dissolved_molecular_oxygen_in_sea_water (O2)
mole_concentration_of_nitrate_in_sea_water (NO3)
mole_concentration_of_phosphate_in_sea_water (PO4)
net_primary_production_of_biomass_expressed_as_carbon_per_unit_volume_in_sea_water (PP)
volume_beam_attenuation_coefficient_of_radiative_flux_in_sea_water ()

OBSERVATION/MODELS

numerical-model

PRODUCT TYPE

near-real-time
forecast

PROCESSING LEVEL

L4

DATA ASSIMILATION

None

SPATIAL RESOLUTION

0.11degree x 0.07degree

VERTICAL COVERAGE (m)

from -5000 to 0 (24 levels)

COORDINATE REFERENCE
SYSTEM

WGS 84 / Plate Carree (EPSG 32662)

FEATURE TYPE

Grid

TEMPORAL COVERAGE

from 2014-01-01 to Present

TEMPORAL RESOLUTION

daily-mean

UPDATE FREQUENCY

daily
(daily at 12:00 UTC)

PRODUCTION UNIT

NWS-METOFFICE-EXETER-UK



ORIGINAL FILE FORMAT

NetCDF-4

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Short description:

The Forecasting Ocean Assimilation Model 7km Atlantic Margin model (FOAM AMM7) is a coupled hydrodynamic-ecosystem model, nested in a series of one-way nests to the Met Office global ocean model. The hydrodynamics are supplied by the Nucleus for European Modelling of the Ocean (NEMO) with the 3DVar NEMOVAR system used for the assimilation of sea surface temperature data. This is coupled to the European Regional Seas Ecosystem Model (ERSEM), developed at Plymouth Marine Laboratory (PML). ERSEM based models have been used operationally to forecast biogeochemistry in the region for a number of years (Siddorn et al., 2006).

Associated products:

The hydrodynamics supplied to coupling with ERSEM in the Forecasting Ocean Assimilation Model 7km Atlantic Margin model (FOAM AMM7) can be found on the following product information sheet [\[1\]](#)

REFERENCES

none