

NWS-Wave

Science configuration referred to as FOAM-NWSW and AMM15
(Atlantic Margin Model 1.5km)



North-West European shelf surface wave analysis and 7-day forecast

Technical product details

Source

Numerical models

Spatial extent

Atlantic North-West European Shelf. Lat 46° to 62.74°. Lon -16° to 13°

Grid resolution

Regular grid, 1.5 km grid cells, 0.014° x 0.03°

Temporal resolution

Hourly

Elevation (depth) levels

Surface

Variables

primary_swell_wave_from_direction
primary_swell_wave_mean_period
primary_swell_wave_significant_height
secondary_swell_wave_from_direction
secondary_swell_wave_mean_period
secondary_swell_wave_significant_height
wave_from_direction
wave_from_direction_at_variance_spectral_density_maximum
wave_mean_period_from_variance_spectral_density_inverse_frequency_moment
wave_mean_period_from_variance_spectral_density_second_frequency_moment
wave_period_at_variance_spectral_density_maximum
wave_significant_height
wave_stokes_drift_x_velocity
wave_stokes_drift_y_velocity
wind_wave_from_direction
wind_wave_mean_period
wind_wave_significant_height
wave_maximum_height
wave_maximum_crest_height

More information in table below

Filenames

metoffice_wave_amm15_NWS_WAV_b\${BULLETIN_DATE}_hi\${VALIDITY_DATE}.nc where
\${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 ~0800 UTC

Delivery methods available

SFTP pull, FTP pull

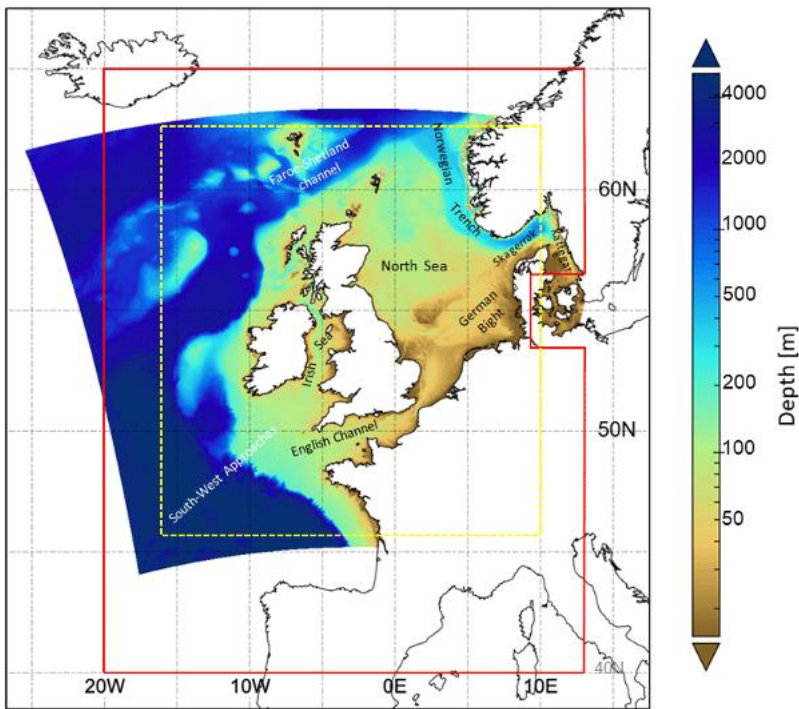
File formats for delivery

NetCDF-4

Frequency of delivery

Daily to FTP server for collection by customer

Further information



Bathymetry of the AMM15 model domain. The red line defines the low-resolution AMM7 model domain. **The yellow dotted box is the domain covered by the AMM15 products** delivered on a regular grid to UKMCAS users. (Figure from Tonani et al. 2019)

Filetype	Variables(s)	Averaging	Freq.	Level(s)	Leadtimes
WAV*hi	primary_swell_wave_from_direction	instant	hourly	surface	T-48 => T+167
WAV*hi	primary_swell_wave_mean_period	instant	hourly	surface	T-48 => T+167
WAV*hi	primary_swell_wave_significant_height	instant	hourly	surface	T-48 => T+167
WAV*hi	secondary_swell_wave_from_direction	instant	hourly	surface	T-48 => T+167
WAV*hi	secondary_swell_wave_mean_period	instant	hourly	surface	T-48 => T+167
WAV*hi	secondary_swell_wave_significant_height	instant	hourly	surface	T-48 => T+167
WAV*hi	wave_from_direction	instant	hourly	surface	T-48 => T+167
WAV*hi	wave_from_direction_at_variance_spectral_density_maximum	instant	hourly	surface	T-48 => T+167
WAV*hi	wave_mean_period_from_variance_spectral_density_inverse_frequency_moment	instant	hourly	surface	T-48 => T+167
WAV*hi	wave_mean_period_from_variance_spectral_density_second_frequency_moment	instant	hourly	surface	T-48 => T+167
WAV*hi	wave_period_at_variance_spectral_density_maximum	instant	hourly	surface	T-48 => T+167
WAV*hi	wave_significant_height	instant	hourly	surface	T-48 => T+167
WAV*hi	wave_stokes_drift_x_velocity	instant	hourly	surface	T-48 => T+167
WAV*hi	wave_stokes_drift_y_velocity	instant	hourly	surface	T-48 => T+167
WAV*hi	wind_wave_from_direction	instant	hourly	surface	T-48 => T+167
WAV*hi	wind_wave_mean_period	instant	hourly	surface	T-48 => T+167
WAV*hi	wind_wave_significant_height	instant	hourly	surface	T-48 => T+167
WAV*hi	wave_maximum_height	instant	hourly	surface	T-48 => T+167
WAV*hi	wave_maximum_crest_height	instant	hourly	surface	T-48 => T+167

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