

## **NWS-Wave**

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



# North-West European shelf surface wave analysis and 6-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

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 ~0900UTC

### Delivery methods available

SFTP pull, FTP pull

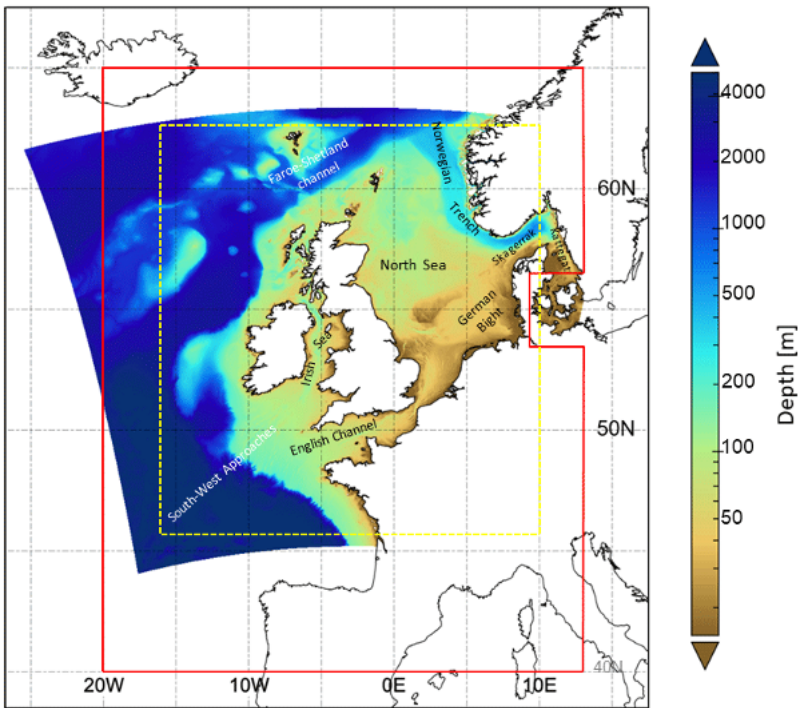
### File formats for delivery

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+143
WAV*hi	primary_swell_wave_mean_period	instant	hourly	surface	T-48 => T+143
WAV*hi	primary_swell_wave_significant_height	instant	hourly	surface	T-48 => T+143
WAV*hi	secondary_swell_wave_from_direction	instant	hourly	surface	T-48 => T+143
WAV*hi	secondary_swell_wave_mean_period	instant	hourly	surface	T-48 => T+143
WAV*hi	secondary_swell_wave_significant_height	instant	hourly	surface	T-48 => T+143
WAV*hi	wave_from_direction	instant	hourly	surface	T-48 => T+143
WAV*hi	wave_from_direction_at_variance_spectral_density_maximum	instant	hourly	surface	T-48 => T+143
WAV*hi	wave_mean_period_from_variance_spectral_density_inverse_frequency_moment	instant	hourly	surface	T-48 => T+143
WAV*hi	wave_mean_period_from_variance_spectral_density_second_frequency_moment	instant	hourly	surface	T-48 => T+143
WAV*hi	wave_period_at_variance_spectral_density_maximum	instant	hourly	surface	T-48 => T+143
WAV*hi	wave_significant_height	instant	hourly	surface	T-48 => T+143
WAV*hi	wave_stokes_drift_x_velocity	instant	hourly	surface	T-48 => T+143
WAV*hi	wave_stokes_drift_y_velocity	instant	hourly	surface	T-48 => T+143
WAV*hi	wind_wave_from_direction	instant	hourly	surface	T-48 => T+143
WAV*hi	wind_wave_mean_period	instant	hourly	surface	T-48 => T+143
WAV*hi	wind_wave_significant_height	instant	hourly	surface	T-48 => T+143

Table: AMM15WAVE netCDF products sent to UKMCAS via ftp by the Operational Marine Post-Processing Shelf-Seas Suite (MaPP-SS).