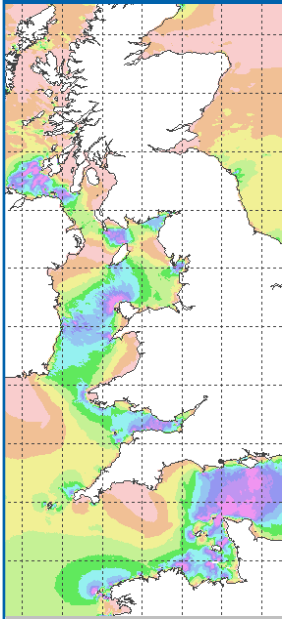


Information Sheet



General Information

The NOC High Resolution Continental Shelf Model (CS20) covers the area 12°W-13°E; 48°N-63°N within the 200m depth contour, has a resolution of 1/60° latitude by 1/40° longitude (horizontal resolution approximately 1 nautical mile (1.8km)) and has data computed at 32 different depth levels (sigma levels) through the water column.

Grid squares are referenced as (i,j). The latitude (°N) and longitude (+ve °E, -ve °W) are specified at the centre of each grid square.

Harmonic constituents (amplitude and phase) are supplied for each parameter; elevation (z), east-going current component (u) and north-going current component (v). The amplitude, H, is given in metres for elevation and metres/second for currents, and the phase, g, degrees.

Position of Parameters within CS20 Model Grid

The values for each parameter; elevation (z) (m), east-going current component (u) and north-going current component (v) are sited at the centre of each grid square.

Format of Data Files

Six lines of header information followed by a blank line.

Then data for each grid square in the order latitude, longitude, flag (3 = elevation and currents available, 2= currents only available, 1= elevation only available, 0 = no data), constituent (order specified in line 6), parameter (zH, zg, uH, ug, vH, vg), where H is amplitude, g is phase.

Land values have flag set to 0 and parameters are represented as -999.900

Sample Output

Ln 1: Model info
Ln 2: imin, imax, jmin, jmax
Ln 3: latitude
Ln 4: longitude (-ve easterly)
Ln 5: no. of harmonics
Ln 6: order of hc's
<blank>
lat, lon, flag, M₂(Z_H, Z_g, U_H, U_g,
V_H, V_g), Q₁(Z_H, Z_g, U_H, U_g, V_H, V_g),
O₁(Z_H, Z_g, U_H, U_g, V_H, V_g) ...
M₄(Z_H, Z_g, U_H, U_g, V_H, V_g)

Model: CS20 [run011] - 15 Harmonics - Depth-Averaged Currents
Region specified: 160 161 630 631
Lat: 51.024979 to 51.008312
Long: -8.037500 to -8.012500
Number of harmonics: 15
Harmonics: M2 Q1 O1 P1 S1 K1 2N2 Mu-2 N2 Nu-2 L2 T2 S2 K2 M4

51.024979	-8.037500	3	1.414	141.50	0.264	100.60	0.132	71.70	0.011...
lat	lon	flag	M ₂ Z _H	M ₂ Z _g	M ₂ U _H	M ₂ U _g	M ₂ V _H	M ₂ V _g	Q ₁ Z _H

Speeds of Harmonic Constituents (15 as supplied)

Constituent	Speed σ (°/h)	Constituent	Speed σ (°/h)
M ₂	28.98411	N ₂	28.43973
Q ₁	13.39866	v ₂	28.51258
O ₁	13.94304	L ₂	29.52848
P ₁	14.95893	T ₂	29.95893
S ₁	15.00000	S ₂	30.00000
K ₁	15.04107	K ₂	30.08214
2N ₂	27.89536	M ₄	57.96821
μ_2	27.96821		