Royal Meteorological Society

Shipping Forecast Workshop



Marine Forecast Glossary

Marine forecasts contain a number of terms which are used to convey specific meanings.

Gale warnings

Gale Winds of at least Beaufort force 8 (34–40 knots) or gusts reaching 43–51 knots

Severe gale Winds of force 9 (41–47 knots) or gusts reaching 52–60 knots

Storm Winds of force 10 (48–55 knots) or gusts reaching 61–68 knots

Violent storm Winds of force 11 (56–63 knots) or gusts of 69 knots or more

Hurricane force Winds of force 12 (64 knots or more)

Note: The term used is 'hurricane force'; the term 'hurricane' on its own means a true tropical cyclone, not experienced in British waters.

Imminent Expected within six hours of time of issue

Soon Expected within six to 12 hours of time of issue

Later Expected more than 12 hours from time of issue

Visibility

Very poor Visibility less than 1,000 metres

Poor Visibility between 1,000 metres and 2 nautical miles

Moderate Visibility between 2 and 5 nautical miles

Good Visibility more than 5 nautical miles

Movement of pressure systems

Slowly Moving at less than 15 knots

Steadily Moving at 15 to 25 knots

Rather quickly Moving at 25 to 35 knots

Rapidly Moving at 35 to 45 knots

Very rapidly Moving at more than 45 knots

Pressure tendency in station reports

Rising (or falling) more slowly

Pressure rising (or falling) at a progressively slower rate through the preceding three hours

Rising (or falling) slowly Pressure change of 0.1 to 1.5 hPa in the preceding three hours

Rising (or falling) Pressure change of 1.6 to 3.5 hPa in the preceding three hours

Rising (or falling) quickly Pressure change of 3.6 to 6.0 hPa in the preceding three hours

Rising (or falling) v. rapidly

Pressure change of more than 6.0 hPa in the preceding three hours

Now rising (or falling)

Pressure has been falling (rising) or steady in the preceding three hours, but at the time of observation was definitely rising (falling)

Note: For those more familiar with the millibar, 1 hPa = 1 mb

Wind

Wind direction Indicates the direction from which the wind is blowing

Becoming cyclonic

Indicates that there will be considerable change in wind direction across the path of a depression within the forecast area

Veering The changing of the wind direction clockwise, e.g. SW to W

Backing The changing of the wind in the opposite direction to veering (anticlockwise), e.g. SE to NE

Sea state

Smooth Wave height less than 0.5 m

Slight Wave height of 0.5 to 1.25 m

Moderate Wave height of 1.25 to 2.5 m

Rough Wave height of 2.5 to 4.0 m

Very rough Wave height of 4.0 to 6.0 m

High Wave height of 6.0 to 9.0 m

Very high Wave height of 9.0 to 14.0 m

Phenomenal Wave height more than 14.0 m

Shipping forecast



The shipping forecast issued by the Met Office, on behalf of the Maritime and Coastguard Agency, on Thursday 10 March 2011 at 1130 UTC

There are warnings of gales in Viking, North Utsire, South Utsire, Forties, Cromarty, Forth, Tyne, Dogger, Fisher, German Bight, Humber, Thames, Dover, Wight, Portland, Trafalgar, Irish Sea, Shannon, Rockall, Malin, Hebrides, Bailey, Fair Isle, Faeroes, South-east Iceland.

The General synopsis at 0600

Low Fair Isle 981 expected Baltic sea 977 by 0600 tomorrow. New lows expected Viking 986 and Fair Isle 990 by same time

The area forecasts for the next 24 hours

Viking, North Utsire, South Utsire

Cyclonic, mainly westerly or northwesterly 6 to gale 8, occasionally severe gale 9 in South Utsire, decreasing 4 at times. Rough or very rough. Rain, snow or squally wintry showers. Moderate or good, occasionally very poor

Forties, Cromarty

West or northwest backing southwest, 7 to severe gale 9, occasionally storm 10. Rough or very rough. Rain or squally wintry showers. Good, occasionally poor

Forth, Tyne, Dogger, Fisher, German Bight, Humber

West or southwest 7 to severe gale 9, occasionally storm 10 at first, except in Tyne and Humber. Very rough or high, but rough in Forth and Tyne. Squally showers. Good, occasionally poor

Thames, Dover, Wight, Portland, Plymouth

Southwest 5 to 7, occasionally gale 8 except in Plymouth, decreasing 4 or 5 later. Moderate or rough. Showers. Moderate or good

South Biscay

Easterly or northeasterly 3 or 4, occasionally 5. Moderate or rough. Mainly fair. Moderate or good

Trafalgar (Issued 0015 UTC Thu 10 Mar)

Easterly or northeasterly 5 to 7, decreasing 4 at times, occasionally gale 8 in southeast. Moderate or rough. Thundery showers. Good, occasionally poor

North FitzRoy

Southwesterly 3 or 4, increasing 5 or 6. Rough or very rough. Showers later. Good

Sole, Lundy, Fastnet, Irish Sea

West backing south 5 to 7, occasionally gale 8, except in Sole. Moderate or rough, but very rough in Sole and Fastnet. Showers. Moderate or good

Shannon

West or southwest, becoming cyclonic later 5 to 7, occasionally gale 8. Very rough or high. Showers then rain. Moderate or good, occasionally poor

Rockall, Malin

West gale 8 to storm 10, decreasing 5 or 6 later. High or very high. Squally wintry showers. Good, occasionally poor

Hebrides, Bailey

Cyclonic mainly westerly or northwesterly 7 to severe gale 9, occasionally storm 10, decreasing 5 or 6 at times. High or very high. Squally wintry showers. Good, occasionally poor

Fair Isle, Faeroes

Cyclonic, mainly north or northwest 6 to gale 8, perhaps severe gale 9 later, decreasing 4 or 5 at times. Very rough or high. Rain, snow or squally wintry showers. Good, occasionally very poor

South-east Iceland

Northerly or northeasterly 5 to 7, occasionally gale 8. Very rough or high. Snow showers. Good, occasionally very poor. Occasional light icing in north

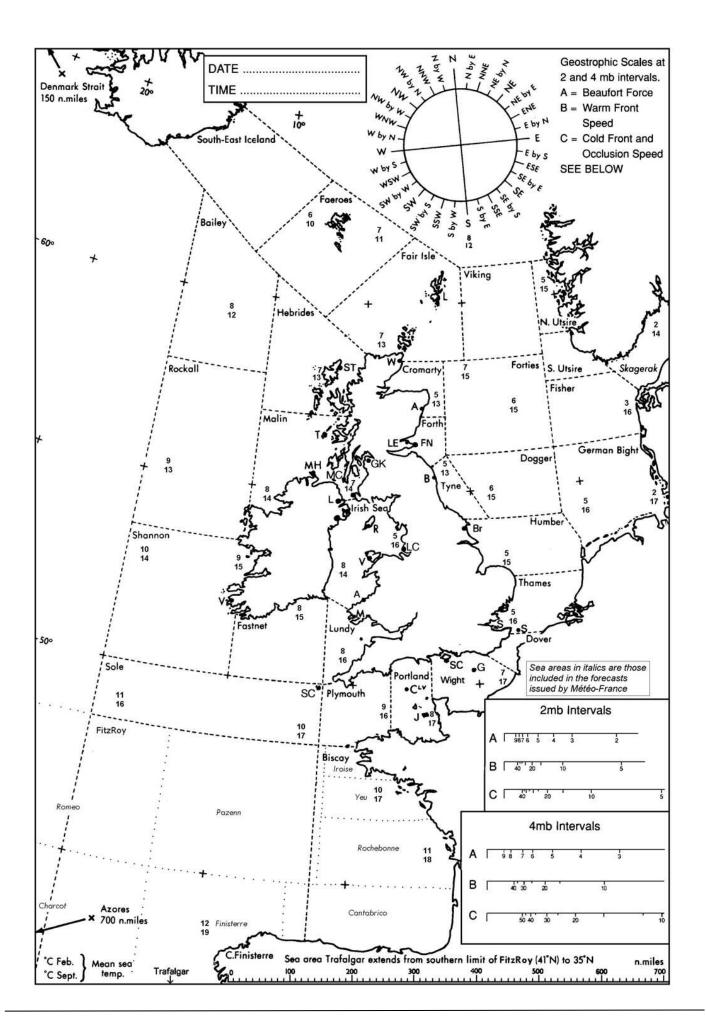
To convert knots (kts) to miles per hour (mph) use the following formula: 1 knot = 1.15 miles per hour

To convert miles per hour (mph) to knots (kts) use the following formula: 1 miles per hour = 0.868976242 knots

5 Knots = 6 MPH	40 Knots = 46 MPH
10 Knots = 12 MPH	45 Knots = 52 MPH
15 Knots = 17MPH	50 Knots = 58 MPH
20 Knots = 23MPH	55 Knots = 63 MPH
25 Knots = 29 MPH	60 Knots = 69 MPH
30 Knots = 35 MPH	65 Knots = 75 MPH
35 Knots = 40 MPH	70 Knots = 81 MPH

Summary Conversion Table

Weather Type	Biscay	Hebrides
Wind Speed and Direction		
Precipitation (if any)		
Visibility		
Pressure		
Temperature		



Latest observations - 1500 UTC on 10 Mar 2011: East & North coasts

	Location	TAPACO E DO CO	T	emperatu	re	Humidity	1	Wind	****		Wa	ve
	Location	Weather	Air	Dew Pt	Sea		Dir	Speed	Vis	Pressure	Period	Height
			°C	°C	°C	o/o	deg	knots	n miles	hPa	seconds	metres
	<u>K7</u>	N/A	1.8	-4.7	7.4	62	350	5	N/A	991.0	9	3.0
	<u>F3</u>	N/A	8,3	6.8	7,4	90	230	40	2	1010.0	7	2.2
L	Lerwick	<u> </u>	1.4	-3,1	N/A	72	350	14	19	990.1	N/A	N/A
	<u>Foula</u>	N/A	3.4	-3.7	N/A	60	330	9	N/A	991.2	N/A	N/A
	Sule Skerry	N/A	3.9	-3.5	N/A	58	150	5	N/A	991.7	N/A	N/A
	Kirkwall	එ	3.5	-3.6	N/A	60	300	5	10	992.1	N/A	N/A
W	Wick Airport	එ	3.3	0.4	N/A	81	260	6	12	992.5	N/A	N/A
	Lossiemouth	₽	2,2	0.6	N/A	89	240	11	3	994.2	N/A	N/A
	Dyce	*	3.7	0.5	N/A	80	260	10	19	994.1	N/A	N/A
LE	Leuchars	D	6,2	1.1	N/A	70	270	21	24	996.2	N/A	N/A
В	Boulmer	₽	5.1	1.8	N/A	79	270	25	7	999.1	N/A	N/A
	Donna Nook	ය	11,1	3.4	N/A	59	280	21	16	1003.8	N/A	N/A
	Weybourne	එ	13.3	3.9	N/A	53	250	28	21	1004.4	N/A	N/A
S	Shoeburyness	N/A	11.7	6.3	N/A	69	240	13	8	1009.5	N/A	N/A
	Manston	එ	11.8	6.2	N/A	69	230	21	11	1010.4	N/A	N/A
S	Sandettie	N/A	8.5	7.1	7.0	91	230	38	5	1011.3	6	2.0

Latest observations — 1500 UTC on 10 Mar 2011: South coast

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	Location	Weather	Temperature			Humidity	Wind				Wave	
	Location		Air	Dew Pt	Sea	numidity	Dir	Speed	Vis	Pressure	Period	Height
			°C	°C	°C	%	deg	knots	n miles	hPa	seconds	metres
	Greenwich	N/A	9.2	7.3	8.3	88	240	34	5	1014.9	7	2.0
	Solent	N/A	8.9	7.4	N/A	90	260	28	N/A	1012.6	N/A	N/A
	<u>Hurn</u>	&	10.8	7.9	N/A	82	250	20	8	1013.5	N/A	N/A
	Channel	N/A	10.1	8.1	9.2	87	240	29	5	1017.4	7	1.6
	Guernsey	4	9.8	7.3	N/A	84	240	20	9	1018.6	N/A	N/A
	Jersey Buoy	N/A	N/A	N/A	8.1	N/A	290	20	N/A	1019.8	13	1.7
	Jersey Airport	\mathcal{E}	9.6	7.0	N/A	84	250	17	14	1019.2	N/A	N/A
	Plymouth	&	10.0	8.5	N/A	90	270	17	3	1016.1	N/A	N/A
-	Culdrose	&	10.4	7.4	N/A	82	270	16	4	1017.0	N/A	N/A
	Seven Stones	N/A	10.3	8.6	9.5	89	260	22	5	1017.4	9	2.5

Latest observations — 1500 UTC on 10 Mar 2011: West coast

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	Tel automateurs.	Weather	Temperature			Humidity	Wind		VII.	Paris and a second	Wave	
	Location	weather	Air	Dew Pt	Sea	numuity	Dir	Speed	Vis	Pressure hPa	Period seconds	Height metres
			°C	°C	°C	%	deg	knots	n miles			
	Stornoway	~	3.8	2.1	N/A	89	160	8	13	991.5	N/A	N/A
	Skye: Lusa	&	3.6	2.0	N/A	89	300	20	11	995.7	N/A	N/A
	<u>Tiree</u>	D	6.7	-0.6	N/A	60	290	32	9	997.9	N/A	N/A
	<u>Machrihanish</u>	N/A	6.2	2.6	N/A	78	280	30	7	1001.6	N/A	N/A
]	Ronaldsway	එ	7.9	0.0	N/A	57	280	20	14	1005.8	N/A	N/A
	Crosby	&	7.4	5.1	N/A	85	280	20	5	1007.0	N/A	N/A
	Valley		9.5	4.5	N/A	71	260	18	8	1008.4	N/A	N/A
	<u>Aberporth</u>	N/A	9.3	5.6	7.9	78	260	18	N/A	1010.6	5	2.2
1	Turbot Bank	N/A	9.1	6.3	8.2	83	250	20	N/A	1013.2	6	2.8
<u></u>	Malin Head	&	4.6	0.9	N/A	77	270	31	8	1003.4	N/A	N/A
_	Aldergrove	&	4.9	0.8	N/A	75	260	17	19	1005.3	N/A	N/A
	<u>M5</u>	N/A	9.1	5.6	8.3	79	270	13	N/A	1013.6	6	2.3
	Roches Point	N/A	10.6	2.3	N/A	56	290	21	14	1013.1	N/A	N/A
	<u>M3</u>	N/A	9.7	6.6	10.6	81	280	21	N/A	1016.4	9	5.8
	Valentia		9.0	4.0	N/A	71	280	16	16	1015.6	N/A	N/A
•	<u>Belmullet</u>	එ	8.1	1.5	N/A	63	270	17	19	1009.3	N/A	N/A
	<u>M4</u>	N/A	6.7	1.0	9.6	67	270	29	N/A	1003.4	N/A	N/A
	<u>K4</u>	N/A	N/A	N/A	10.4	N/A	280	26	N/A	1005.2	8	6.3
	<u>K5</u>	N/A	3.5	-1.8	9.5	68	280	18	N/A	993.6	8	5.1

Latest observations — 1500 UTC on 10 Mar 2011: Offshore

Location	Weather	Temperature			Humidity	Wind		Vis	D	Wave	
Location		Air	Dew Pt	Sea	numidity	Dir	Speed	VIS	Pressure	Period	Height
		°C	°C	°C	%	deg	knots	n miles	hPa	seconds	metres
Gascogne	N/A	11.3	5.0	11.9	65	30	3	N/A	1024.4	11	3.4
<u>K2</u>	N/A	9.9	5.1	11.1	72	N/A	N/A	N/A	1018.4	9	5.2
<u>K1</u>	N/A	11.5	9.2	11.8	86	280	19	N/A	1021.8	N/A	N/A
<u>M6</u>	N/A	7.6	2.5	10.4	70	270	N/A	N/A	1015.0	9	5.2
PAP	N/A	11.2	7.7	11.8	79	300	16	N/A	1022.6	9	4.2

The weather chart below summarise the UK weather story for 1200 UTC on Thursday 10th March 2011 (i.e. three hours before the weather observation provided above). The chart description attached states:

Description of Thursday 10th March 2011, 1200 UTC surface analysis:

Low pressure sits to the north and northwest of the United Kingdom with occluded fronts over northern Scotland. A cold front lies from the Wash to the Bristol Channel, moving south-eastwards. An showery north westerly airflow covers most of the British Isles.

- The thin black line show lines of equal mean sea level pressure, known as isobars.
- The tighter the isobars are the winder it is and the lines point in the direction the wind is blowing....
- In the northern hemisphere, air moves counter-clockwise around low pressure weather systems (marked with a 'L') and clockwise around area of high pressure (marked with a 'H').
- The numbers indicate mean sea level pressure values in millibars
- Weather fronts are bands of cloud and rain (possibly snow/sleet in winter).



= Cold Fronts



= Warm Fronts



= Occluded Fronts

