Annex A

Met Office Inshore Waters Forecast issued 1200 UTC 23 May 2011

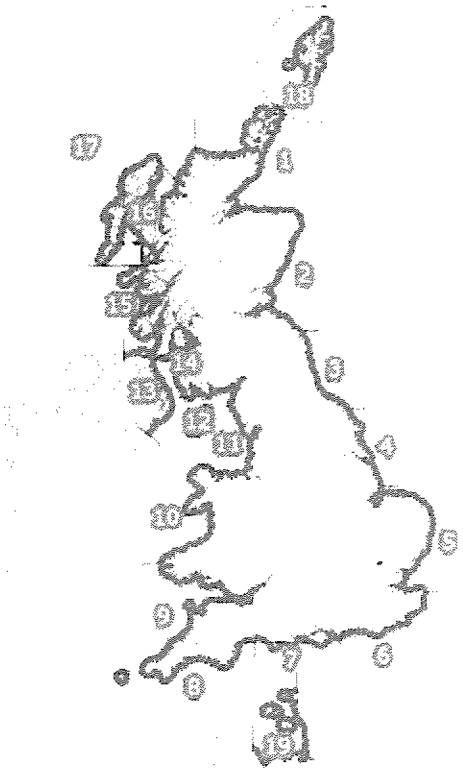
Met Office

Inshore Waters Forecast and Strong Winds

Coastal Strong Winds

Strong coastal winds are forecast for the coastal areas coloured in red on the map below.

Click on a region to see the inshore waters forecast for that area.



Updated: 0948 UTC on Mon 23 May 2011

Coastal locations:

- Cape Wrath to Rattray Head including Orkney
- Rattray Head to Berwick upon Tweed
- Berwick upon Tweed to Whitby
- Whitby to Gibraltar Point
- Gibraltar Point to North Foreland
- North Foreland to Selsey Bill
- Selsey Bill to Lyme Regis
- Lyme Regis to Lands End including the Isles of Scilly
- Lands End to St Davids Head including the Bristol

Printable views / Text only: Inshore Waters forecast

General Situation

An intense low just to the west of Scotland will move away northeastwards and fill slowly during Tuesday and Wednesday as a ridge of high pressure builds over southern areas. Another Atlantic low will move slowly eastwards into the United Kingdom during Wednesday and Thursday.

Select area

Great Orme Head to the Mull of Galloway

Great Orme Head to the Mull of Galloway

Strong winds are forecast

For coastal areas up to 12 miles offshore from 1200 UTC Mon 23 May until 1200 UTC Tue 24 May

24 hour forecast:

Wind	Southwest veering west 7 to severe gale 9, decreasing 5 or 6 later.
Sea State	Moderate or rough, occasionally very rough in north at first.
Weather	Squally showers.
Visibility	Good, occasionally moderate.

Outlook for the following 24 hours:

Wind	West backing south 4 or 5, decreasing 3 for a time, but increasing 5 to 7 later
Sea State	Moderate, occasionally rough, becoming slight.
Weather	Showers then mainly fair.
Visibility	Mainly good.

Annex B

Met Office Heysham Weather Forecast issued 1300 23 May 2011

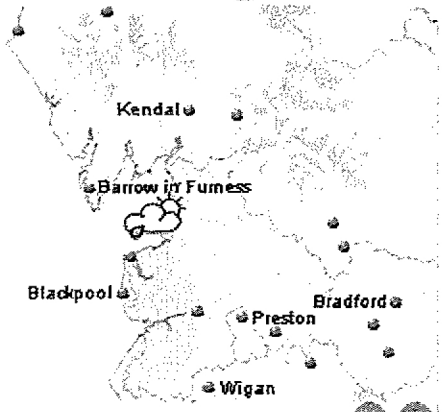
Met Office

Heysham weather forecast

Weather | Wind | Temperature | UV

Latest/recent | Forecast

1300 on Mon 23 May



Updated: 1042 on Mon 23 May 2011

Terrain Boundaries

Motorways Primary routes

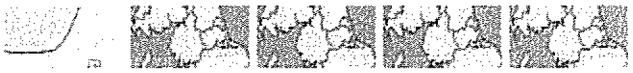
Heysham site information:

Latitude: 54.03; Longitude: -2.9

Nearest observation site: Walney Island (24.8 km)

Weather warnings overview

Severe weather warnings have been issued for North West England



Heysham five-day forecast

Date	Time	Weather	Temp	Wind Dir	Wind Speed	Wind Gust	Visibility
	1300		12 °C	SW	26 mph	45 mph	Excellent
Mon 23 May	1600		13 °C	SW	33 mph	52 mph	Excellent
	1900		12 °C	WSW	36 mph	67 mph	Excellent
	2200		11 °C	W	34 mph	64 mph	Very Good
	0100		10 °C	W	29 mph	55 mph	Very Good
	0400		10 °C	WSW	27 mph	50 mph	Excellent
	0700		10 °C	WSW	25 mph	46 mph	Excellent
Tue 24 May	1000		11 °C	W	26 mph	49 mph	Very Good
	1300		12 °C	W	26 mph	49 mph	Very Good
	1600		13 °C	WSW	20 mph	41 mph	Very Good
	1900		12 °C	W	16 mph	28 mph	Excellent
	Night		9 °C	SW	9 mph		Good
Wed 25 May	Day		18 °C	S	17 mph	33 mph	Very Good
	Night		11 °C	SSW	14 mph		Very Good
Thu 26 May	Day		12 °C	SSW	11 mph		Very Good
	Night		10 °C	NW	20 mph	31 mph	Good
Fri 27 May	Day		11 °C	NW	26 mph	40 mph	Very Good
	Night		8 °C	SW	9 mph		Very Good

Last updated: 1101 on Mon 23 May 2011

Arm yourself against hayfever

Annex C

Windfinder wind & weather forecast – Heysham updated 1017 23 May 2011

Monday 12:00

Heysham (HEYSHAM)

Time zone: UTC +1 | Sunrise: 04:57 Sunset: 21:20
Last update: 10:17 local time - initial time: 00:00 UTC

WINDFINDER.com

Local date	Monday, May 23																							
Local time	00h	01h	02h	03h	04h	05h	06h	07h	08h	09h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h
Wind direction																								
Wind speed (Knots)	13	14	15	15	15	17	19	21	23	23	25	26	25	22	23	24	25	26	26	26	24	23	23	22
Wind gusts (Knots)					27	29	32	36						35	36							35	34	33
Cloud cover																								
Relative humidity (%)	79	80	76	79	82	84	77	75	74	82	86	84	87	63	59	58	58	59	61	64	69	70	69	69
Precipitation type																								
Precipitation (mm/h)	0.0	0.0	0.0	0.0	0.4	1.0	0.3	0.4	0.2	1.4	2.2	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.4	0.4	0.3
Air pressure (hPa)	1014	1013	1013	1012	1011	1010	1010	1009	1007	1006	1005	1005	1005	1007	1008	1008	1008	1008	1009	1010	1011	1011	1013	1013
Air temperature (°C)	11	11	11	11	11	11	11	11	12	12	12	13	13	13	13	13	13	13	12	12	11	11		
Feels like (°C)	11	11	11	11	11	11	11	11	12	12	12	13	13	13	13	13	13	13	12	12	11	11		

Local date	Tuesday, May 24																							
Local time	00h	01h	02h	03h	04h	05h	06h	07h	08h	09h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h
Wind direction																								
Wind speed (Knots)	21	21	21	20	19	18	17	16	17	17	18	18	17	17	17	16	15	15	14	12	10	7	7	7
Wind gusts (Knots)	31	30	30	29	28	27		26																
Cloud cover																								
Relative humidity (%)	69	70	70	70	70	70	70	69	69	69	68	67	66	65	63	62	60	59	59	61	64	67	69	71
Precipitation type																								
Precipitation (mm/h)	0.5	0.6	0.5	0.4	0.5	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air pressure (hPa)	1014	1014	1015	1016	1016	1017	1018	1019	1019	1020	1021	1021	1022	1022	1023	1024	1024	1024	1024	1024	1025	1025	1025	1025
Air temperature (°C)											11	11	11	12	12	12	12	12	12	12	11	11	11	11
Feels like (°C)											11	11	11	12	12	12	12	12	12	12	11	11	11	11

Local date	Wednesday, May 25																							
Local time	00h	01h	02h	03h	04h	05h	06h	07h	08h	09h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h
Wind direction																								
Wind speed (Knots)	7	7	8	9	9	9	9	9	9	10	9	10	11	12	12	13	14	14	14	14	13	13	13	13
Wind gusts (Knots)																								
Cloud cover																								
Relative humidity (%)	70	74	82	84	83	80	78	76	74	68	60	55	52	51	48	49	51	51	52	55	57	60	62	65
Precipitation type																								
Precipitation (mm/h)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air pressure (hPa)	1025	1024	1024	1024	1023	1022	1022	1022	1022	1021	1021	1020	1019	1018	1017	1016	1015	1014	1013	1012	1012	1011	1011	1010
Air temperature (°C)	11	11								11	12	14	15	16	17	17	18	18	18	17	16	16	15	15
Feels like (°C)	11	11								11	12	14	15	16	17	17	18	18	18	17	16	16	15	15

Clipper Point – wind force and moments

5.1 WIND FORCES AND MOMENTS

5.1.54 WIND FORCES AND MOMENTS (ESTIMATED)

FULL LOAD

Projected front wind area	586 m²
Projected lateral wind area	2520 m²

Wind Speed		Lateral Wind Force	Head or Stern Wind Force
m/s	KrBeaufort	t	t
10.0	19.4 3 - 4	11.1	3.3
15.0	29.2 7	24.9	7.4
20.0	38.9 8	44.2	13.2

BALLAST

Projected front wind area	598 m²
Projected lateral wind area	2587 m²

Wind Speed		Lateral Wind Force	Head or Stern Wind Force
m/s	KrBeaufort	t	t
10.0	19.4 3 - 4	11.4	3.4
15.0	29.2 7	25.6	7.6
20.0	38.9 8	45.4	13.5

WARNING

Performance may differ from this record due to environmental, hull and loading conditions.

The response of the CLIPPER PANORAMA may be different from that listed if any of the following conditions, upon which the manoeuvring information is based on, are varied:

(1) Calm weather - wind 10 kn or less, calm sea;
(2) No current;
(3) Water depth twice the vessel's draught or greater;
(4) Clean hull; and
(5) Intermediate draughts or unusual trim.

Annex E

Seatruck Ferries SFN 11 – Navigation of P-class vessels: Heysham Harbour & Approaches

SEATRUCK FERRIES LTD

SEATRUCK FLEET NOTICE

SFN 11

11 March 2009

NAVIGATION OF 'P' CLASS VESSELS: HEYSHAM HARBOUR & APPROACHES

Notice to all 'P' Class Vessels

Following the Clipper Point's unfortunate incident where contact was made with the North Roundhead in gusty winds, a full Risk Assessment has been conducted. The Risk Assessment covered all aspects of the conduct of navigation in the approaches and within Heysham Harbour. Of primary concern was the effects of wind and tide on the vessel inwards of No. 8 Buoy. The Risk Assessment considered the operation in two stages:

1. Manoeuvring within the harbour
2. The approach from No. 8 Buoy to the harbour entrance

The following guidance should be consulted on every approach to Heysham.

The Master's on-scene assessment should include the following checks, as a minimum:

Tide Check the state and height of tide and how this compares with prediction. Also consider the atmospheric/weather conditions and how this affects the tide.

Wind Check the wind speed and direction:

1. Current
2. For the hour before the ETA at No. 8 Buoy
3. The forecasted wind speed and direction.

The Master should use the highest wind speed obtained from these checks to use in the tables below.

IF THE WIND SPEED EXCEEDS 29 KNOTS THE MASTER SHOULD NOT ATTEMPT TO MAKE AN APPROACH OR MANOEUVRE WITHIN THE HARBOUR.

South Quay Whether the South Quay is clear or not.

IMPORTANT

On each occasion, and in addition to the above guidance, the Master must use his own personal knowledge and experience and take into account the manoeuvring characteristics of his vessel. Any known defects to propulsion (including bow thrusters), steering, navigational equipment or anchors should also be considered.

NOTHING IN THIS GUIDANCE OVERRIDES THE MASTER'S AUTHORITY AS DESCRIBED IN THE SAFETY MANAGEMENT MANUAL.

MANOEUVRING IN HEYSHAM HARBOUR

The **Manoeuvring Risk Factor** should be considered first so that the Master has ample time to arrange for a tug, if required.

Determine the **Manoeuvring Risk Factor**:

MANOEUVRING RISK FACTOR	WIND (knots)					
	SOUTHERLY			NORTHERLY		
	< 20	20-24	25-29	< 20	20-24	25-29
South Quay Clear	LOW	LOW	MED	LOW	LOW	MED
South Quay Occupied	LOW	MED	MED	LOW	HIGH	HIGH

Use the Manoeuvring Risk Factor to consult the **Risk Control Plan** below.

APPROACH TO HEYSHAM HARBOUR (No. 8 BUOY TO ROUNDHEADS)

Estimate the **Tidal Strength** at the Woodwork (South Jetty) and determine the **Approach Risk Factor**:

TIDAL STRENGTH		TIDE		
		SPRING	MEAN	NEAP
FLOOD	HW -5	WEAK	WEAK	WEAK
	HW -4	WEAK	WEAK	WEAK
	HW -3	MOD	MOD	WEAK
	HW -2	STRONG	STRONG	MOD
	HW -1	STRONG	MOD	MOD
	HW	STRONG	MOD	MOD
	HW+15m	WEAK	WEAK	WEAK
EBB	HW +1	MOD	WEAK	WEAK
	HW +2	STRONG	MOD	MOD
	HW +3	STRONG	MOD	MOD
	HW +4	MOD	MOD	WEAK
	HW +5	WEAK	WEAK	WEAK

APPROACH RISK FACTOR		WIND (knots)					
		SOUTHERLY			NORTHERLY		
TIDAL STRENGTH		< 10	10-19	20-29	< 10	10-19	20-29
FLOOD	WEAK	LOW	LOW	MED	LOW	LOW	MED
	MOD	LOW	MED	MED	LOW	LOW	MED
	STRONG	MED	MED	HIGH	MED	MED	MED
EBB	WEAK	LOW	LOW	MED	LOW	LOW	MED
	MOD	LOW	LOW	MED	LOW	MED	MED
	STRONG	MED	MED	MED	MED	MED	HIGH

The Master should then consult the **Risk Control Plan**:

RISK CONTROL PLAN		APPROACH	MANOEUVRING
RISK FACTOR	LOW	PROCEED WITH CAUTION. Considered to be the lowest risk for damage through contact or grounding. Care should be exercised throughout the approach and manoeuvre.	
	MED	PROCEED WITH EXTRA CAUTION. There is a heightened risk of damage through contact or grounding. Extra care should be exercised throughout the approach.	MANOEUVRE WITH EXTRA CAUTION. There is a heightened risk of damage through contact or grounding. Extra care should be exercised throughout the manoeuvre. HAVE A TUG ON STANDBY, IF AVAILABLE.
	HIGH	DO NOT ENTER. The potential for damage through contact or grounding is considered to be prohibitively high. The vessel should not proceed inward of No. 8 Buoy.	

Annex F

Seatruck Ferries – Passage Plan

PASSAGE PLAN
VESSEL: CLIPPER POINT

Form DP 08 | Rev 02/09 | Page 1 of 1

From: WARRENPOINT To: HEYSHAM Date: 23.05.11 Voyage No: W230SPT

Pre-Sailing Checks

	Time	Initials
Pre-Departure Checklist Completed	1957	[redacted]
Cargo correctly stowed and secured	1954	
Stability in compliance with Loadline Regs	1957	
Stern Ramps Secure	1957	
Weather Forecast and Nav Warnings	1930	

Draughts: Fwd 5.55 m Aft 5.65 m

Tides	Time	Height
WARRENPOINT	1652	4.2
	2257	1.4
HEYSHAM	0448	8.17
	1135	2.45

0436 0439 0534 1.0

Navigational Passage Plan and Voyage Monitoring

R = Reporting Point

Wpt	WP Description	Time	Co (T)	Dist	DTG
	BREAKWATER	2006	130	3.5	121.5
	No 25 BUOY	2019	120	1.7	118.0
	No 23 BUOY (R)	2022	---	---	---
	No 21 BUOY	2029	136	0.4	116.3
	No 19 BUOY	2030	154	0.4	115.9
	No 15 BUOY	2031	132	0.6	115.5
	No 13 BUOY	2033	110	1.8	114.9
	No 5 BUOY	2039	130	0.9	113.1
	No 1 BUOY	2043	130	1.1	112.2
	HELLYHUNTER BUOY (R)	2048	093	99.8	111.1
	LUNE DEEP BUOY (R)	0400	066	3.7	11.3
	DANGER PATCH BUOY	0420	057	3.2	7.6
	No 2 BUOY (R)	0438	042.5	2.4	4.4
	No 6 BUOY (R)	0456	042	2.0	2.0
	WOODWORK	0507			0

	Date	Time
Commence Cargo	23	1715
Complete Cargo		1954 2.65
RSBE		1754
Let Go		2000
Breakwater		2006
FAOP		2048
1 Hour Notice	24	0300
EOP		0400
Roundheads		~~0505~~ [redacted]
Complete Swing		0525
First Line Ashore		0530
Ramps Down		0532
All Fast		0536
FWE		0536
Commence Cargo		0542

Tidal Gauge Readings (mtrs)

Lune Deep buoy	
No 6 buoy	
Woodwork	

Voyage Statistics

Let Go – FAOP.	0.8
FAOP – EOP	7.2
EOP – All Fast	1.6
Time on Berth	15.4
Cargo Time	3.65
Distance	101
Average Speed	14.03
Wind Direction	WSW
Wind Force	7
Sea State	RGH
Net Tidal Effect	SPRG

Cargo Statistics

Crew	22
Passengers	11
Self Drives	11
Trailers	93
Mobiles	0
Total	104

Voyage Fuel Figures

Start IFO	311.4
Start MDO	67.4
End IFO	
End MDO	
Shipped IFO	
Shipped MDO	
Used IFO	
Used MDO	

Stability Figures

GMc	2.75
KG	10.49
IMO Wx	OK

Hazardous Units

No. Units	2
Classes	8

Remarks: CHARTS USED: BA 2800, 1411, 1826, 2010, 1552. PUBLICATIONS USED: NP 37, 70, 74, 201, 256.
ECDIS CHART SYSTEM IN USE ON THIS VESSEL.

Master: [redacted]