

Hornsea Directional Waverider Buoy

Location

OS: 527077E 448459N

WGS84: Latitude: 50° 55.003' N Longitude: 000° 3.999' E

Water Depth

Approx. 10m CD

Instrument Type

Datwell Directional WaveRider Buoy Mk III

Data Quality

C1(%)	Sample interval
97	30 minutes

Monthly Means

All times GMT

Hornsea June 2008 to May 2009						
Month	H _s	T _p	T _z	Direction	SST	No. of days
	(m)	(s)	(s)	(°)	(°C)	
June	0.73	6.6	4.1	98	12.7	20
July	0.68	6.0	3.9	88	14.0	31
August	0.56	6.2	3.6	90	14.8	31
September	0.70	7.2	4.0	71	14.0	30
October	0.87	9.2	4.1	72	12.2	31
November	1.26	8.8	4.6	61	9.8	30
December	0.94	7.7	4.4	77	7.4	31
January	0.97	7.6	4.2	90	6.1	31
February	0.98	9.4	4.9	41	4.8	28
March	0.67	7.6	4.0	97	6.1	31
April	0.66	6.2	4.0	85	7.8	30
May	0.64	5.5	3.4	120	9.9	31

Tables and plots of these values, together with the minimum and maximum values and the standard deviation are available on the website

Highest events in 2008/9									
Date/Time	H _s	T _p	T _z	Dir.	Water level elevation (OD)	Tidal stage (hrs re: HW)	Tidal range (m)	Tidal surge* (m)	Max. surge* (m)
02-Feb-2009 22:30	3.98	11.1	6.9	62	2.76	HW	4.39	0.14	0.34
22-Nov-2008 13:30	3.78	12.5	7.5	31	0.05	HW -4	3.44	-0.07	0.68

* Tidal information is obtained from the nearest recording tide gauge (the National Network gauge at Immingham). The surge shown is the residual at the time of the highest H_s. The maximum tidal surge is the largest positive surge during the storm event.

Distribution plots

The distribution of wave parameters is shown in the accompanying graphs of:

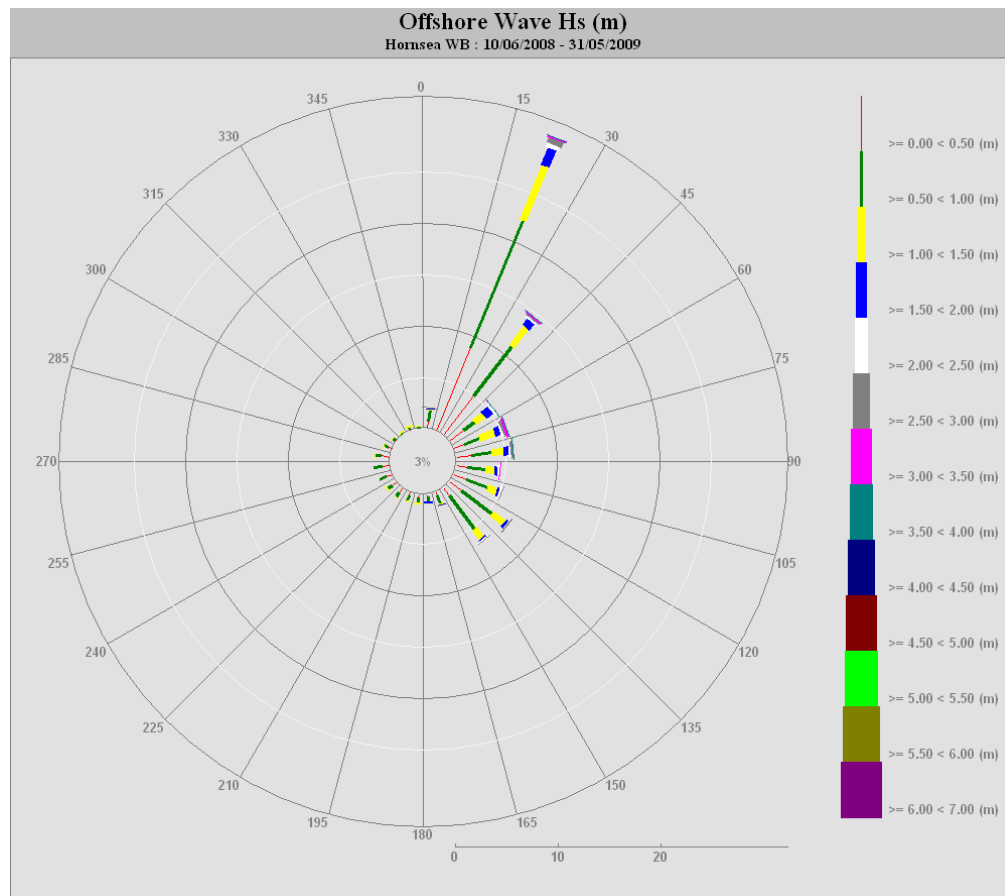
- Wave roses (Direction vs. H_s) from June 2008 to May 2009
- Percentage of occurrence of H_s , T_p , T_z and Direction from June 2008 to May 2009
- Monthly time series of significant wave height (the red line is the storm threshold)
- Incidence of storms during the reporting period and all previous years. Storms are defined using the Peaks-over-Threshold method. The highest H_s of each storm is shown.

Summary

The buoy was deployed on 5 June 2008. Storm events were concentrated between October and March. Storm wave approach was from the ENE or NEbN.

Acknowledgements

Tidal data were supplied by the British Oceanographic Data Centre as part of the function of the National Tidal and Sea Level Facility, hosted by the Proudman Oceanographic Laboratory and funded by DEFRA and the Natural Environment Research Council.



Percentage of occurrence of direction vs. H_s for June 2008 to May 2009 (this reporting period)

Hornsea Jun 2008 to May 2009

