

Sandown Pier Wave Gauge

Location

OS: 459964E 83835N
 WGS84: Latitude: 50°65.111'N Longitude: 01°15.316'W

Water Depth

N/A

Instrument Type

Rosemount WaveRadar Rex

Data Quality

C1(%)	Sample interval
93	20 minutes

Monthly Means

All times GMT

Month	H _s	T _p	T _z	Direction	SST	No. of days
	(m)	(s)	(s)	(°)	(°C)	
January	0.43	11.4	4.1	-	-	30
February	0.45	11.9	4.0	-	-	28
March	0.36	12.3	3.9	-	-	28
April	0.31	11.9	3.6	-	-	21
May	0.35	10.9	3.7	-	-	27
June	0.32	11.6	3.6	-	-	30
July	0.33	10.9	3.6	-	-	27
August	0.31	12.9	3.5	-	-	31
September	0.29	13.0	3.5	-	-	28
October	0.37	11.9	3.6	-	-	31
November	0.41	12.3	3.7	-	-	30
December	0.48	11.1	4.0	-	-	29

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

Highest storm events in 2007									
Date/Time	H _s	T _p	T _z	Dir.	Water level elevation (OD)	Tidal stage (hours re. HW)	Tidal range (m)	Tidal surge* (m)	Max. surge* (m)
18-Nov-2007 17:40	2.00	9.3	5.2	-	1.04	HW + 1	1.8	-0.02	0.20
06-Mar-2007 03:00	1.71	9.4	5.1	-	1.49	HW + 2	3.2	0.52	0.60
08-Feb-2007 04:20	1.55	8.5	4.3	-	1.60	HW + 2	2.6	0.26	0.56

* Tidal information is obtained from the nearest recording tide gauge (the wave radar also provides tidal data). 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.

Year	Annual H_s exceedance* (m)						Annual Maximum H_s (m)	
	0.05%	0.5%	1%	2%	5%	10%	Date	A_{max}
2006	1.66	1.36	1.26	1.13	0.87	0.66	03-Dec-2006 06:40	1.82
2007	1.85	1.26	1.07	0.93	0.72	0.58	18-Nov-2007 17:40	2.00

* i.e. 5 % of the H_s values measured in 2006 exceeded 0.87m

Distribution plots

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

- Percentage of occurrence of H_s , T_p , T_z and Direction for 2007
- Incidence of storms during 2007. Storm events are defined using the Peaks-over-Threshold method. The highest H_s of each storm event is shown.
- Annual time series of H_s (red line is storm threshold)

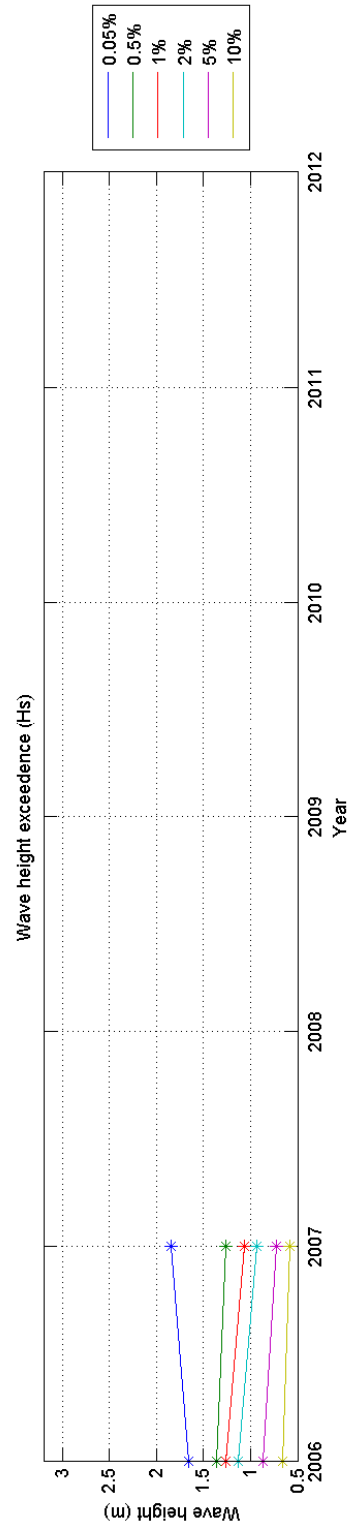
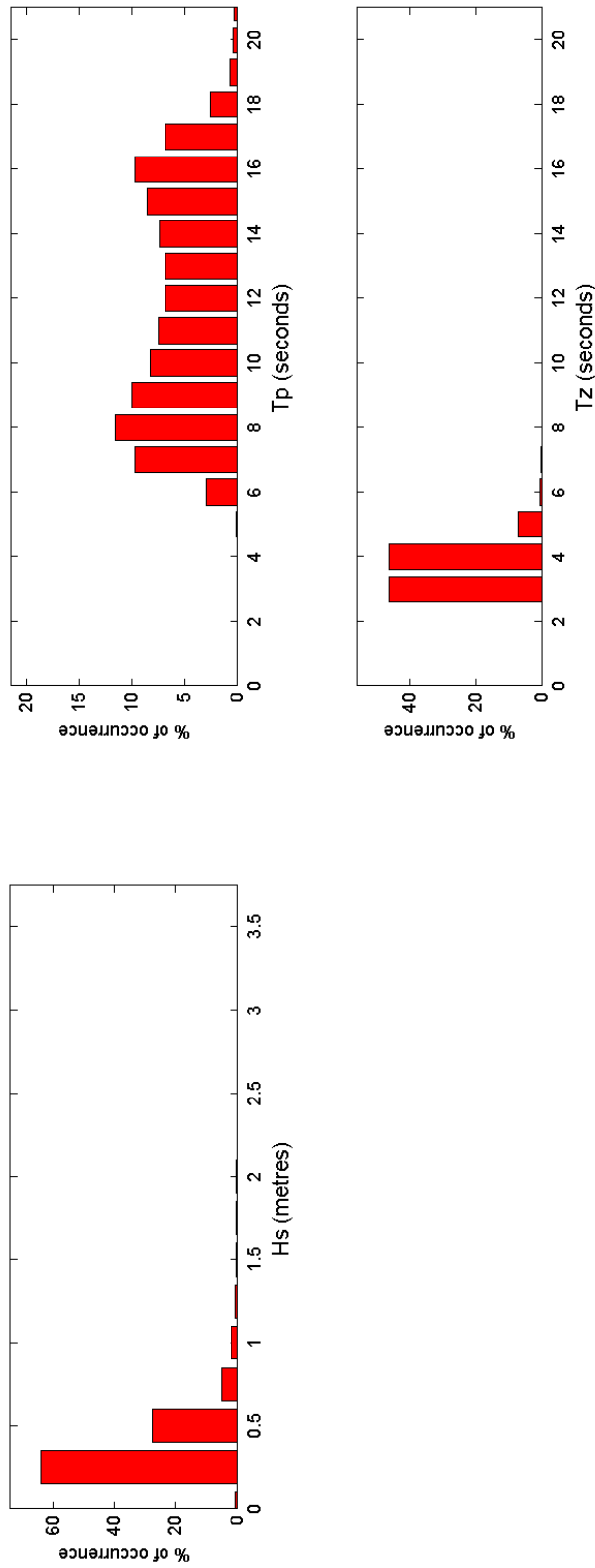
General

The wave radar was deployed on 04 May 2006.

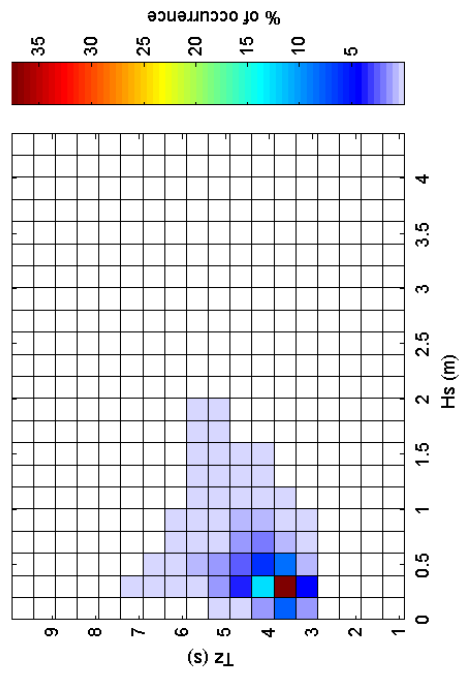
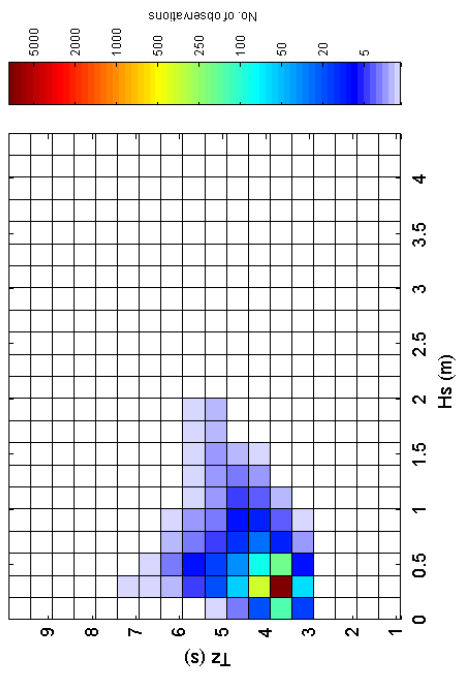
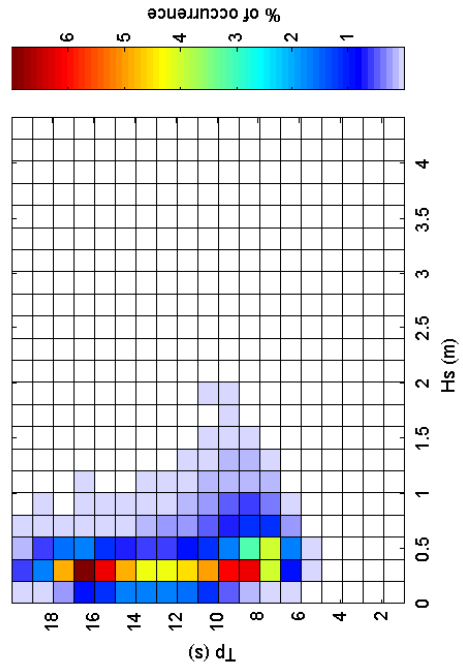
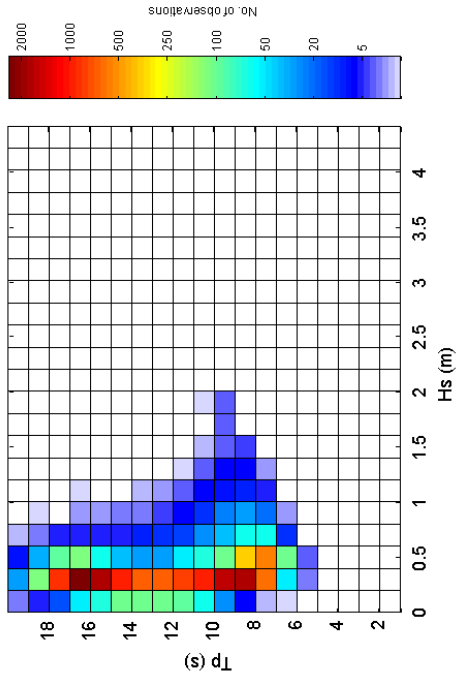
Acknowledgements

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Sandown Pier 2007



Sandown Pier 2007 - Joint distribution



Sandown Pier 2006 to 2007 - Joint distribution (% of occurrence)

