

Deal Pier Wave Gauge

Location

OS: 638145E 152700N
 WGS84: Latitude: 51° 13' 25.652"N Longitude: 01° 24' 33.332"E

Water Depth

N/A

Instrument Type

Rosemount WaveRadar Rex

Data Quality

All times GMT

C1(%)	Sample interval
97	20 minutes

Monthly Means

Month	H _s	T _p	T _z	Direction	SST	No. of days
	(m)	(s)	(s)	(°)	(°C)	
January	0.56	8.6	4.6	-	-	31
February	0.46	8.9	4.1	-	-	27
March	0.50	8.8	4.1	-	-	31
April	0.41	8.4	3.7	-	-	30
May	0.45	7.7	3.9	-	-	27
June	0.38	7.7	3.7	-	-	30
July	0.38	7.7	3.8	-	-	31
August	0.40	8.0	3.7	-	-	31
September	0.45	8.1	4.0	-	-	30
October	0.40	8.0	3.7	-	-	31
November	0.48	8.1	4.1	-	-	30
December	0.52	8.5	4.3	-	-	27

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)
28-Sep-2007 11:00	1.77	9.8	5.8	-	3.20	HW - 1	5.7	0.26	0.37
20-Mar-2007 11:00	1.73	8.3	5.4	-	2.94	HW - 1	5.9	0.33	0.62
18-Jan-2007 12:40	1.71	10.5	7.0	-	1.51	HW + 3	4.3	-0.01	0.83

* Tidal information is obtained from the nearest recording tide gauge (the 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}
2005	1.58	1.37	1.23	1.12	0.92	0.78	16-Oct-2005 09:40	1.62
2006	1.62	1.37	1.25	1.11	0.91	0.75	26-Jan-2006 08:00	1.68
2007	1.60	1.33	1.22	1.08	0.89	0.75	28-Sep-2007 11:00	1.77

i.e. 2% of the H_s values measured in 2005 exceeded 1.12m

Distribution plots

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

- Percentage of occurrence of H_s , T_p , and T_z
- Incidence of storm waves for 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)

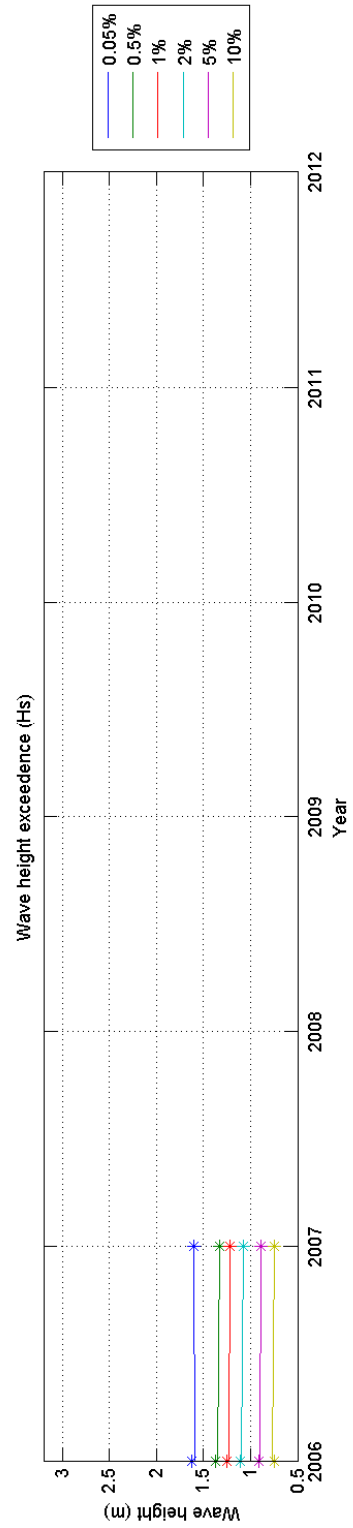
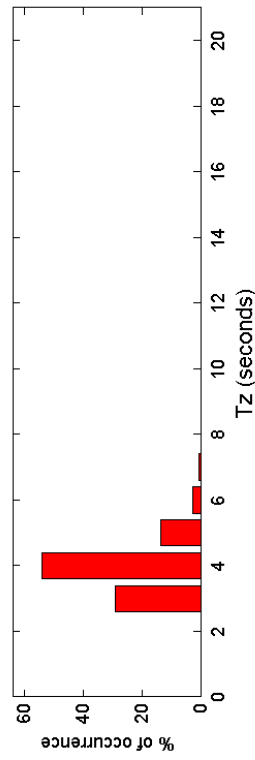
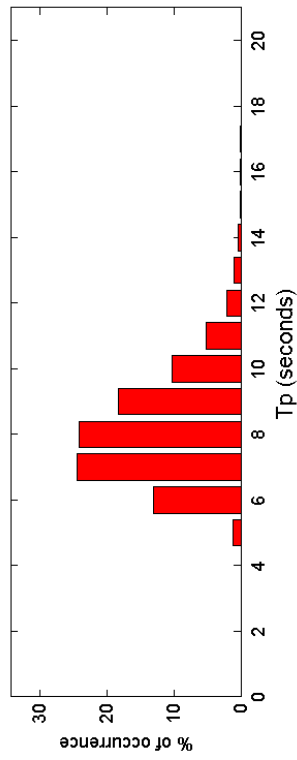
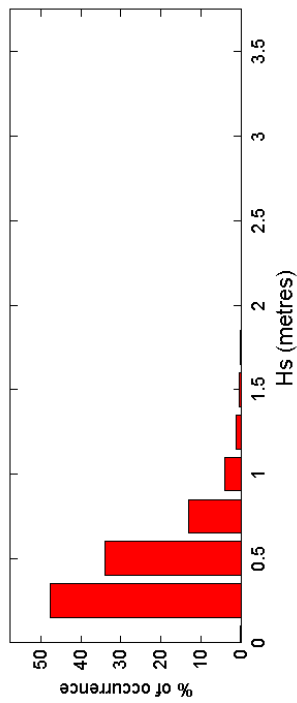
General

The wave radar was deployed on 25 August 2005.

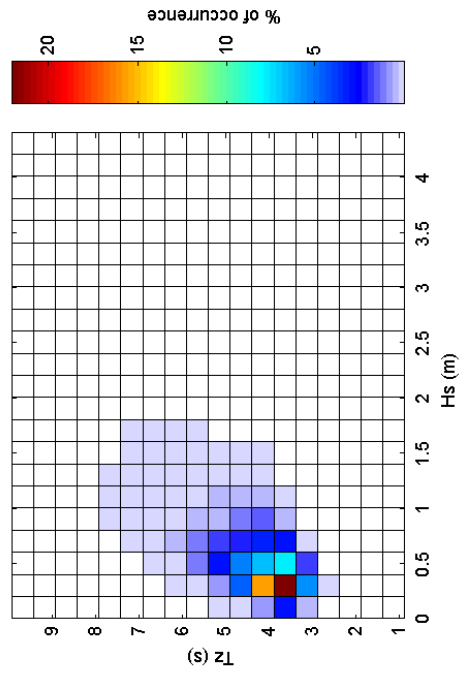
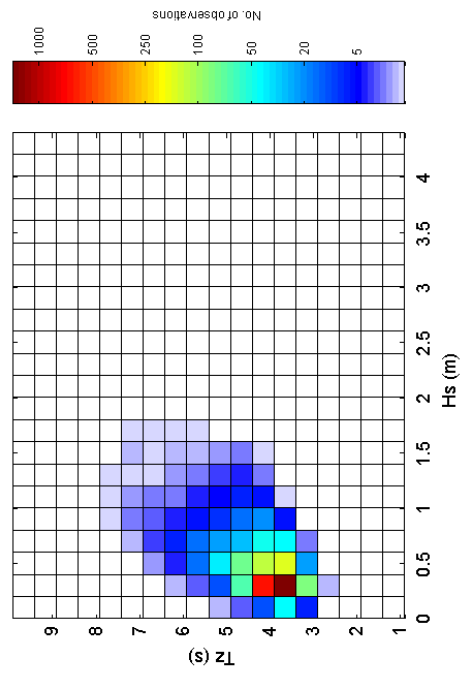
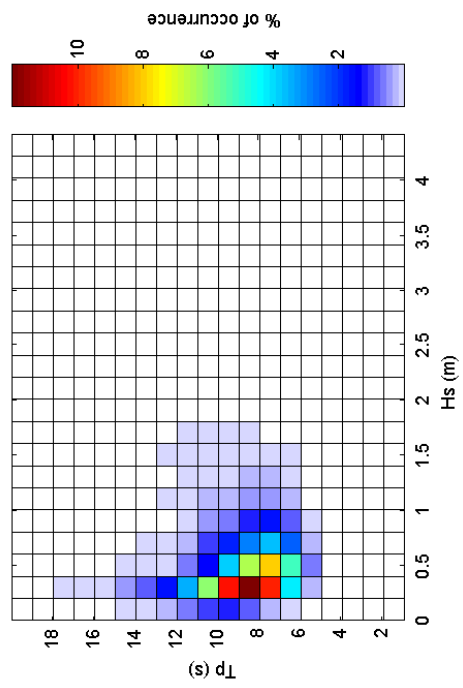
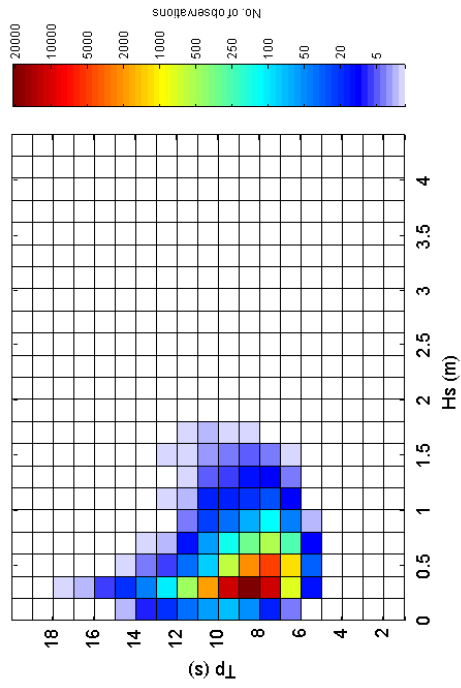
Acknowledgements

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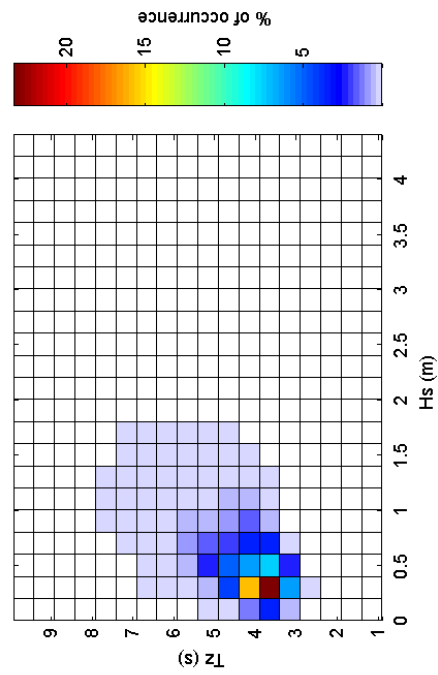
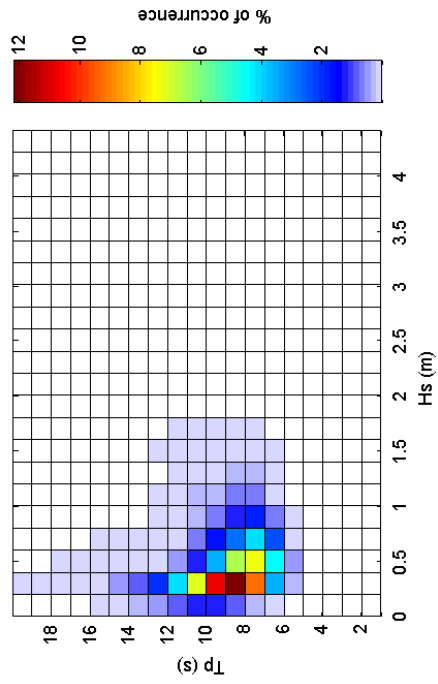
Deal Pier 2007



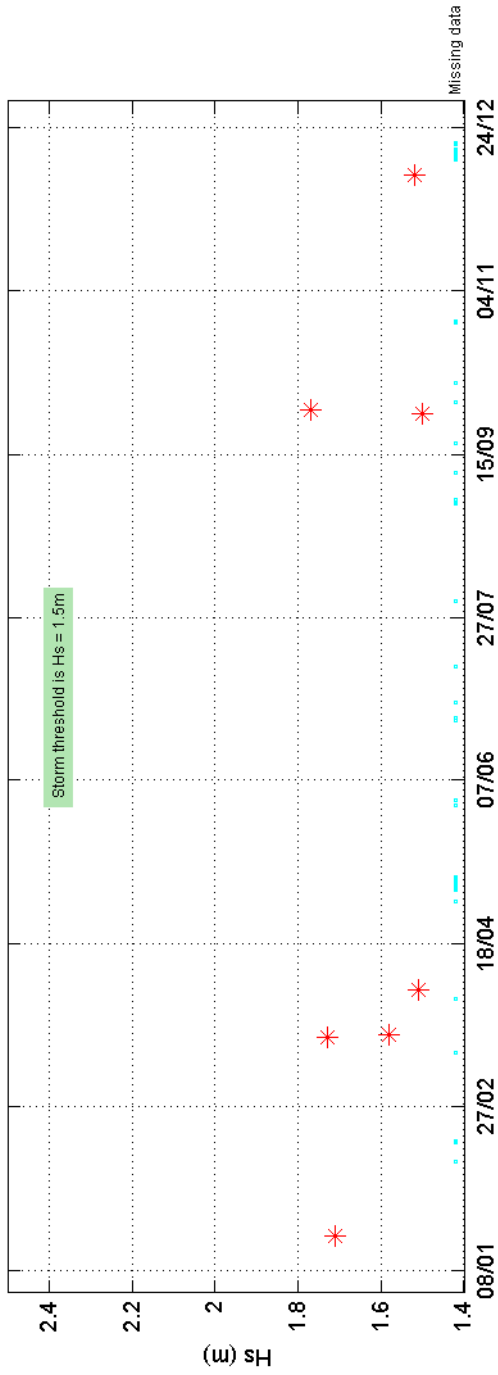
Deal Pier 2007 - Joint distribution



Deal Pier 2005 to 2007 - Joint distribution (% of occurrence)



Storms at Deal Pier during 2007



Storms at Deal Pier - all years

