

Lymington Wave Recorder

Location

OS: 434877E 93528N
 WGS84: Latitude: 50° 44' 25.18947" N Longitude: 01° 30' 25.60798"W

Water Depth

Approx. 3m

Instrument Type

Valeport pressure transducer Type 730D (modified)

Data Quality

C1 (%)	Sample interval
92	60 minutes

Monthly Means

Lymington 2004							
Month	H _s	H _{max}	T _z	T _p	Direction	SST	No. of days
	(m)	(m)	(s)	(s)	(°)	(°C)	
January	0.193	0.289	2.9	2.8	-	7.2	29
February	0.191	0.285	2.8	2.7	-	7.3	25
March	0.160	0.242	2.8	2.7	-	6.7	29
April	0.124	0.191	2.9	2.7	-	9.9	29
May	0.110	0.171	2.7	2.6	-	13.1	29
June	0.130	0.200	2.8	2.6	-	16.8	28
July	0.122	0.189	2.7	2.6	-	17.7	27
August	0.153	0.234	2.7	2.6	-	19.4	29
September	0.205	0.306	2.8	2.7	-	17.2	27
October	0.265	0.390	2.9	2.7	-	13.6	30
November	0.092	0.144	2.8	2.7	-	10.9	27
December	0.129	0.197	3.0	2.8	-	8.3	28

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 2004									
Date/Time	H _s	T _p	T _z	Dir.	Water level elevation [*] (OD)	Tidal stage	Tidal range (m)	Tidal surge* (m)	Max. surge* (m)
23-Jun-2004 12:00	1.108	2.9	2.8	-	-	HW -5	-	-	-
19-Mar-2004 09:00	1.058	2.8	2.8	-	0.91	HW -2	2.6	-	-
31-Jan-2004 14:00	1.035	3.1	2.8	-	0.24	HW +4	0.7	-	-
08-Jan-2004 08:00	0.983	2.8	2.6	-	0.37	HW -3	1.9	-	-
01-Feb-2004 18:00	0.980	3.1	2.8	-	0.24	HW -1	1.0	-	-

* Tidal information is obtained from the nearest recording tide gauge (co-located on the Royal Lymington Yacht Club Starting Platform). 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)	
	0.5%	1%	2%	5%	10%	Date	A_{max}
2003	0.66	0.61	0.55	0.44	0.34	03-Nov-2003 04:00	0.81
2004	0.79	0.70	0.62	0.49	0.36	23-Jun-2004 12:00	1.11
2005							

* i.e. 5 % of the H_s values measured in 2003 exceeded 0.44m

Distribution plots

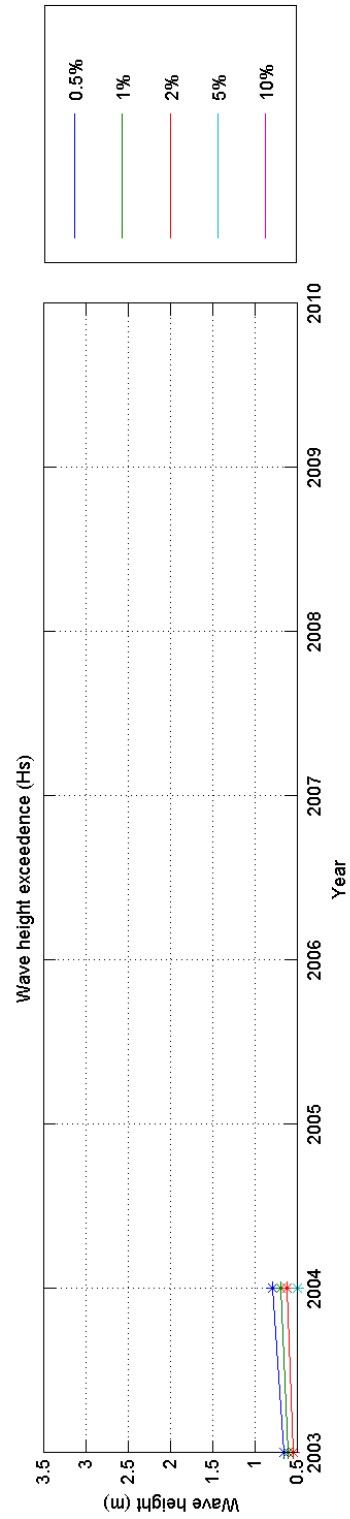
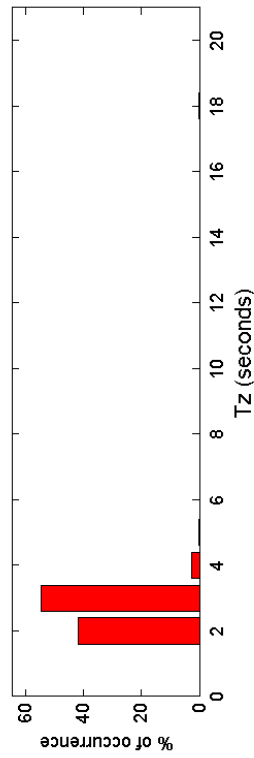
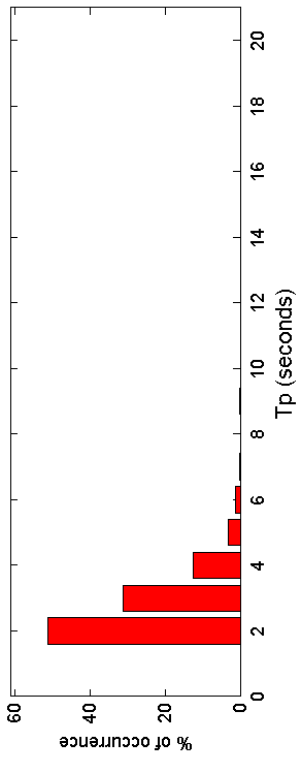
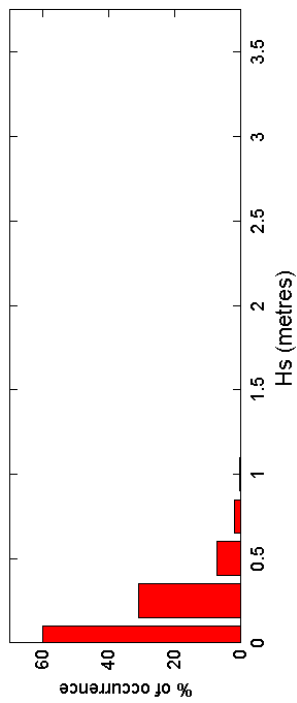
The distribution of wave parameters are shown in the accompanying graphs of:

- Percentage of occurrence of H_s , T_p , and T_z for 2004
- Percentage wave height exceedance (all recorded years) – note that the statistics for 2003 were based on measurements from July to December only
- Joint distribution of all parameters for 2004, given both as number of observations and as percentage of occurrence
- Cumulative joint distribution of parameters from start of records (percentage of occurrence only)
- Incidence of storms during 2004 and for all previous years. 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 waves threshold)

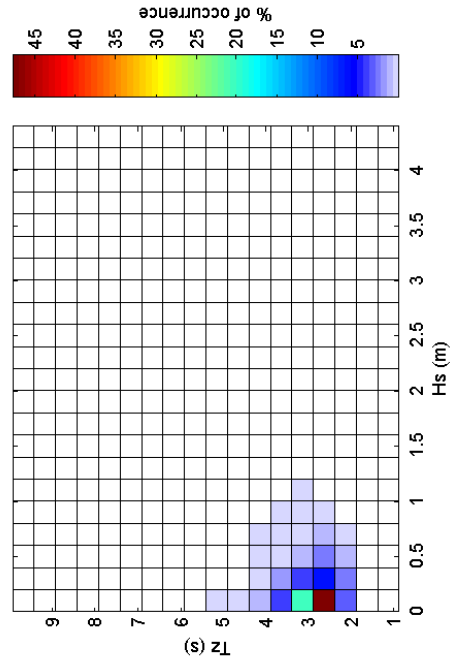
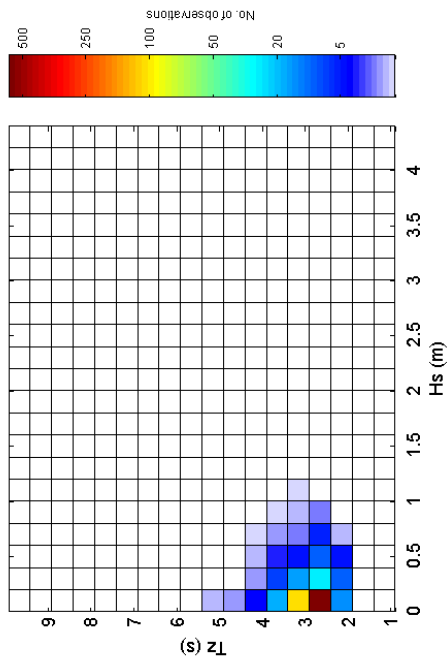
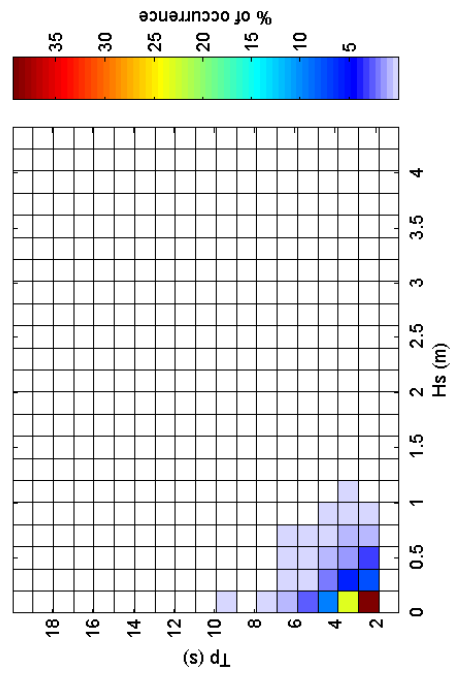
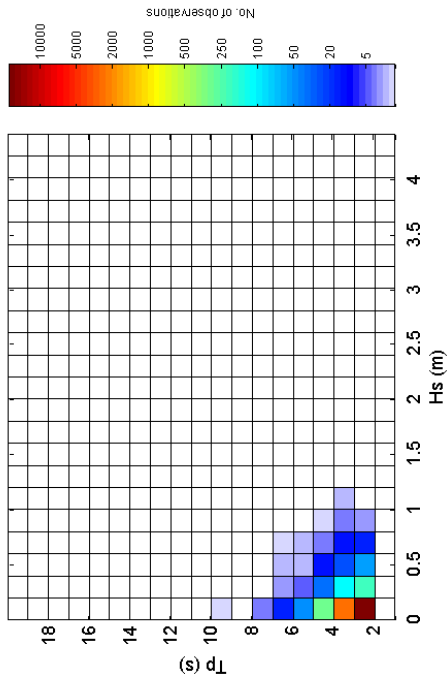
General

The pressure transducer was first deployed on 10 August 2003.

Lymington 2004



Lymington 2004 - Joint distribution



Lymington 2003 to 2004 - Joint distribution (% of occurrence)

