

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
64	60 minutes

Monthly Means

Lymington 2005							
Month	H _s	H _{max}	T _z	T _p	Direction	SST	No. of days
	(m)	(m)	(s)	(s)	(°)	(°C)	
January	0.203	0.302	2.8	3.0	-	7.7	26
February	0.112	0.174	2.6	2.7	-	6.2	25
March	0.123	0.190	2.7	2.7	-	6.7	22
April	0.118	0.183	2.7	2.7	-	9.7	28
May	0.164	0.249	2.6	2.8	-	12.6	29
June	0.181	0.278	2.9	2.4	-	18.1	2
July	0.215	0.325	2.6	2.5	-	18.6	13
August	0.175	0.265	2.7	2.6	-	18.9	14
September	0.188	0.282	2.7	2.8	-	18.3	21
October	0.225	0.335	2.7	2.7	-	15.4	24
November	0.259	0.379	2.7	2.9	-	11.1	16
December	0.215	0.318	2.7	2.8	-	7.3	16

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 2005									
Date/Time	H _s	T _p	T _z	Dir.	Water level elevation [*] (OD)	Tidal stage	Tidal range (m)	Tidal surge* (m)	Max. surge* (m)
03-Nov-2005 06:00	1.425	2.6	2.6	-	-0.20	HW -5	2.4	-	-
08-Jan-2005 04:00	1.147	2.6	2.8	-	-0.04	HW -6	1.5	-	-
02-Dec-2005 17:00	1.120	2.9	2.7	-	-0.50	HW -6	2.1	-	-
06-Nov-2005 09:00	1.092	2.3	2.4	-	-0.14	HW -4	1.9	-	-
25-Oct-2005 01:00	1.001	2.4	2.6	-	-0.04	HW -4	1.4	-	-

* 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	0.91	0.81	0.71	0.53	0.37	03-Nov-2005 06:00	1.43

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

Distribution plots

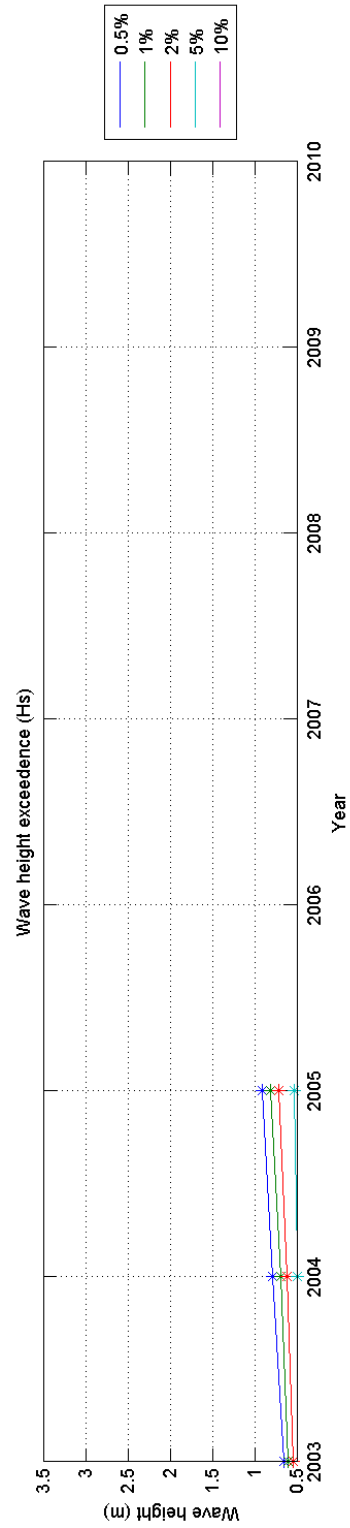
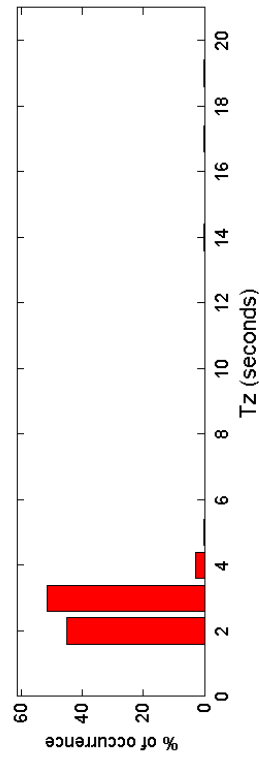
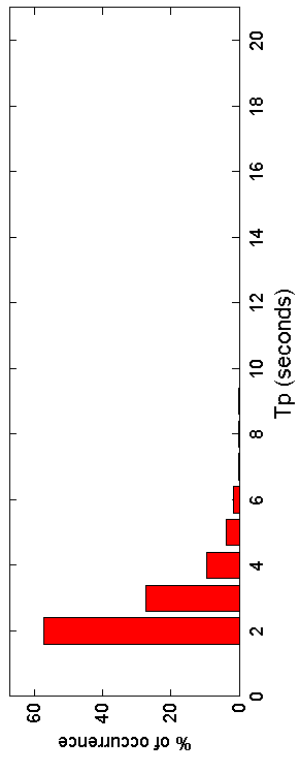
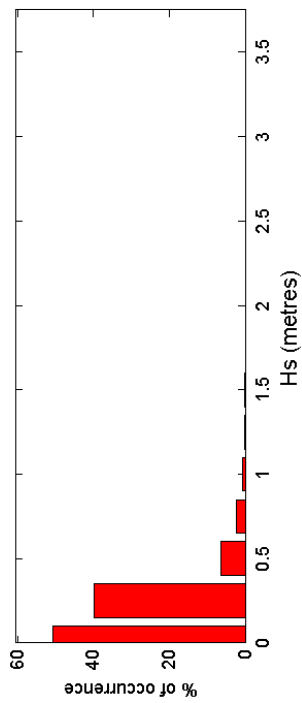
The distribution of wave parameters are shown in the accompanying graphs of:

- Percentage of occurrence of H_s , T_p , and T_z for 2005
- 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 2005, 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 2005 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)

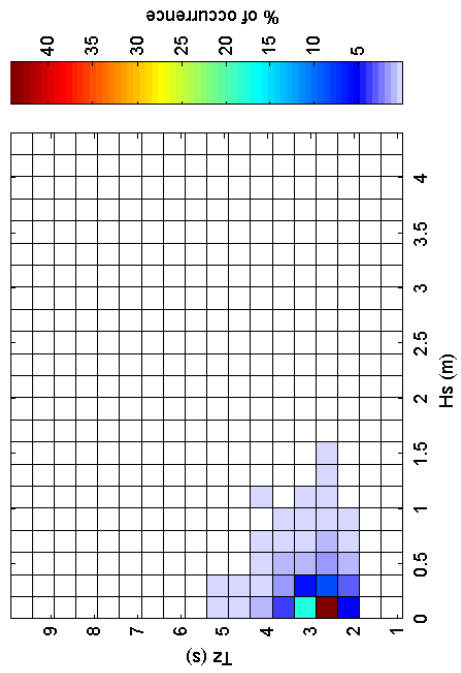
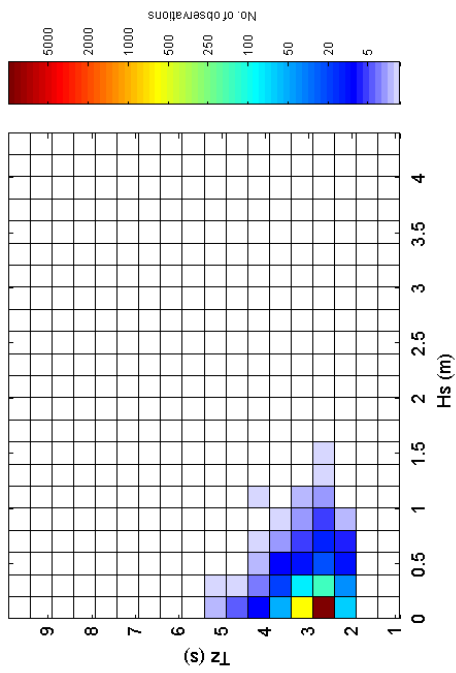
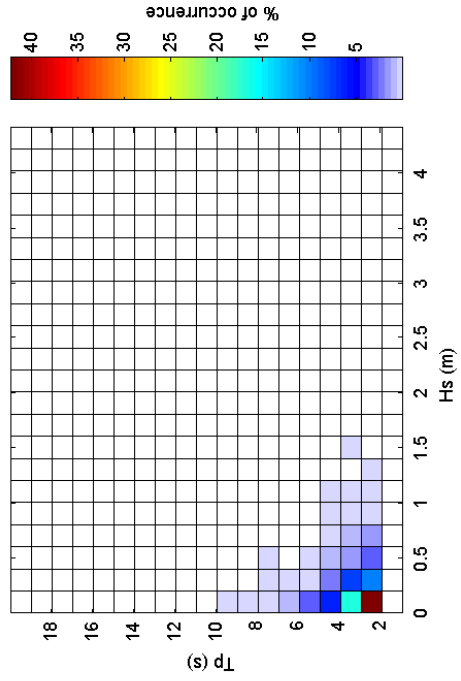
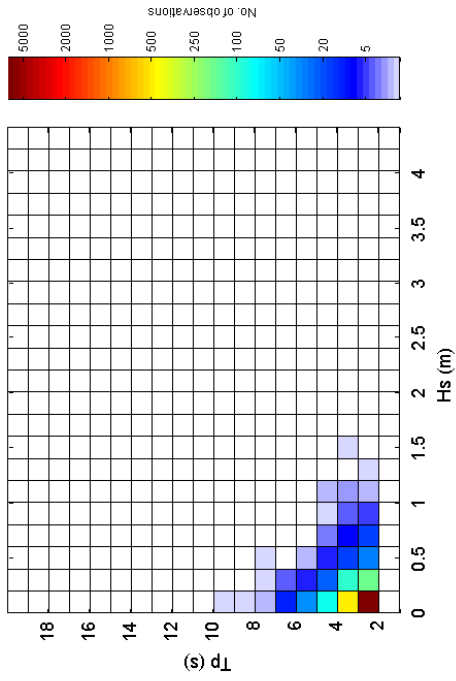
General

The pressure transducer was first deployed on 10 August 2003.

Lymington 2005



Lymington 2005 - Joint distribution



Lymington 2003 to 2005 - Joint distribution (% of occurrence)

