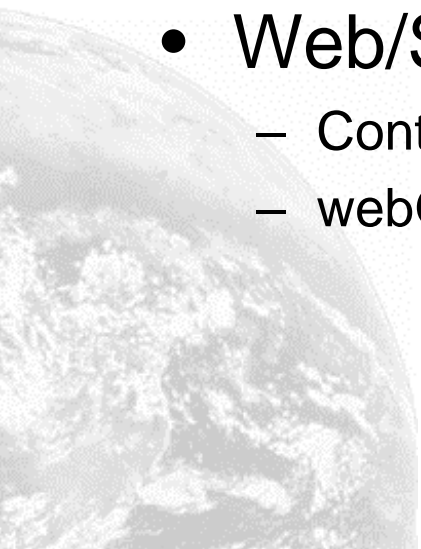


GeoData Institute

- University Research Consultancy (est. 1984)
- Data Management
 - GIS / Environment / Coast
- Web/Software Development team
 - Content / Data Management
 - webGIS / Coastal data



Sectors and Methodologies

- GIS
- Database
- Web
- Data
- Training
- Field survey
- Environment (rivers, coasts)
- Application development (web/GIS/Database)
- International Development
- Poverty Health and Welfare

Scales of activity

- Internal (UoS)
- Local (FC, NHS, SCC, HCC, local companies)
- Regional (SEEDA, South Downs)
- National (EA, CA, Defra, EH, SEPA)
- International (EU, Africa, Asia, US)



Channel Coastal Observatory

The data management and regional coordination centre for the Southeast Regional Coastal Monitoring Programme.

... a consistent regional approach to coastal process monitoring, providing information for development of strategic shoreline management plans, coastal defence strategies and operational management of coastal protection and flood defence.

www.channelcoast.org

- Website and Data Management delivered by GeoData
 - Open Standards
 - Open Source

Coastal Data Management

- Survey data (aerial, hydro, topo, photogrammetric, waves, lidar...)
- Spatial metadata standards (FGDC/ISO)
- Validation + Storage through XML technologies
- Discovery + Visualisation - webGIS
- Download



Web GIS View

Navigation - Web GIS View

Map-based multiple selection

Metadata results / Basket

Date	Type	Area	Reference	In Basket
06/05/2001	aerial	ortho-rectified	st1992nw_anc st1992nw_3ab	View
06/05/2001	aerial	ortho-rectified	st1992nw_anc st1992nw_3ab	View
06/05/2001	aerial	ortho-rectified	st1992nw_anc st1992nw_3ab	View
06/05/2001	aerial	ortho-rectified	st1992nw_anc st1992nw_3ab	View
06/05/2001	aerial	ortho-rectified	st2092nw_anc st2092nw_3ab	View
06/05/2001	aerial	ortho-rectified	st2092nw_anc st2092nw_3ab	View
06/05/2001	aerial	ortho-rectified	st2092nw_anc st2092nw_3ab	View
06/05/2001	aerial	ortho-rectified	st2092nw_anc st2092nw_3ab	View
06/05/2001	aerial	ortho-rectified	st2192nw_anc st2192nw_3ab	View
06/05/2001	aerial	ortho-rectified	st2192nw_anc st2192nw_3ab	View
06/05/2001	aerial	ortho-rectified	st2192nw_anc st2192nw_3ab	View
06/05/2001	aerial	ortho-rectified	st2192nw_anc st2192nw_3ab	View
06/05/2001	aerial	ortho-rectified	st2292nw_anc st2292nw_3ab	View
06/05/2001	aerial	ortho-rectified	st2292nw_anc st2292nw_3ab	View
06/05/2001	aerial	ortho-rectified	st2292nw_anc st2292nw_3ab	View

Search refinement – time / space / theme

View Metadata

View datasets

Raw data download / specific use

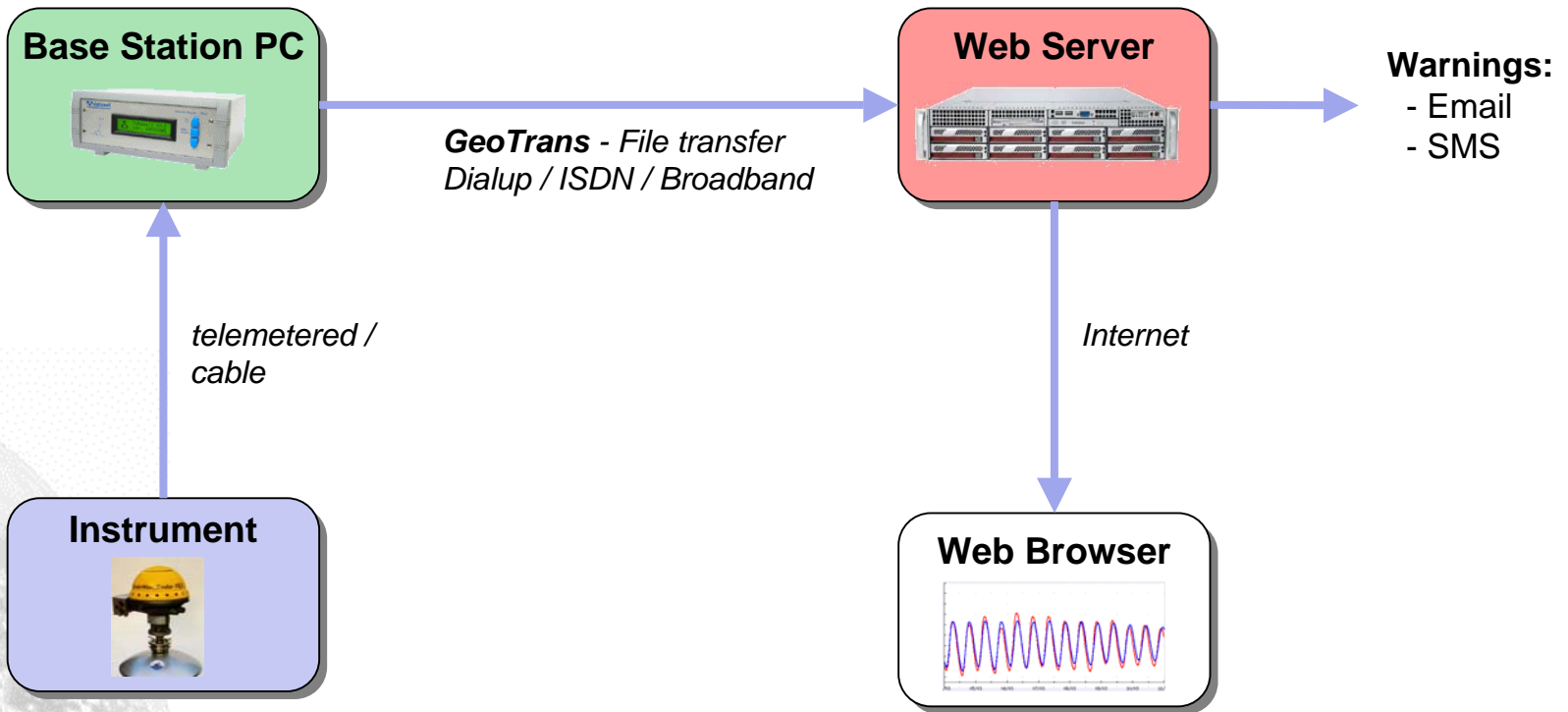
Real-time Data Management

- Wave, Tide + Met stations
 - Datawell Directional WaveRider
 - Saab WaveRadar Rex
 - Pressure recorder
 - Etrometa step gauge
- South coast, SW + Anglian coasts
- Data telemetered to capture station PC
- Transferred to Web server via Internet - GeoTrans:
 - connection types (dialup / ISDN / Broadband)
 - unreliable networks (queuing, retransmission)
 - Multiple destinations

Real-time Data Management cont.

- Delivery of (near) real-time graphs and tables
 - Latest
 - Day/Week/Month
 - 2003...present
- Warning Email/SMS messages:
 - out of position (distance/bearing from average)
 - parameter out of range
 - Missing/corrupt data
- Extreme values quarantine + management
- Statistics

Data flow



Deal Pier Tidal Elevation

Graphs Table Additional information

Display to date:

Go

Select today

Prev



Range

Week

Next



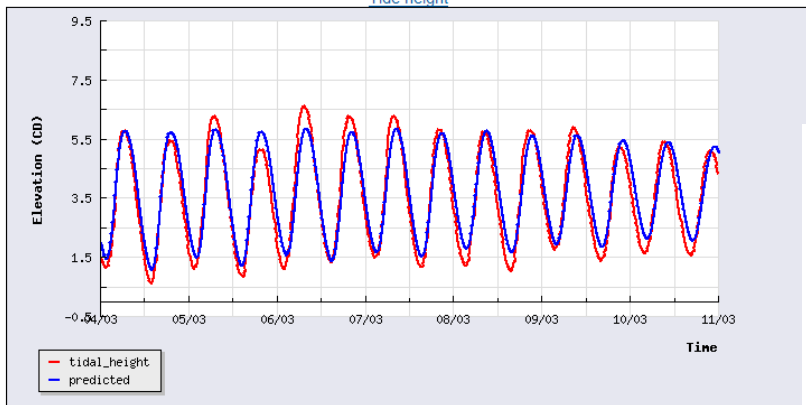
Select Datum

Chart Datum

Latest Data:

Time (GMT)	Elevation	Residual	Next HW	Next LW	Date	Highest 2007	Date	Lowest 2007
11-03-2007 17:31	4.32	-0.72	04:48 GMT, 5.17m	22:44 GMT, 2.33m	04-01	6.656m	20-02	0.574m

Tide height



[Data Issues](#)

Boscombe Buoy

Graphs Table Additional information Statistics

Display to date:

Go

Select today

Prev



Range

Day

Next

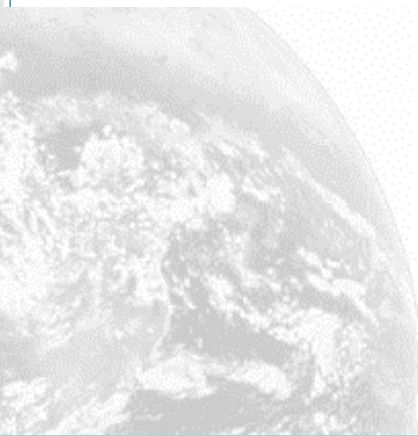


Latest Data:

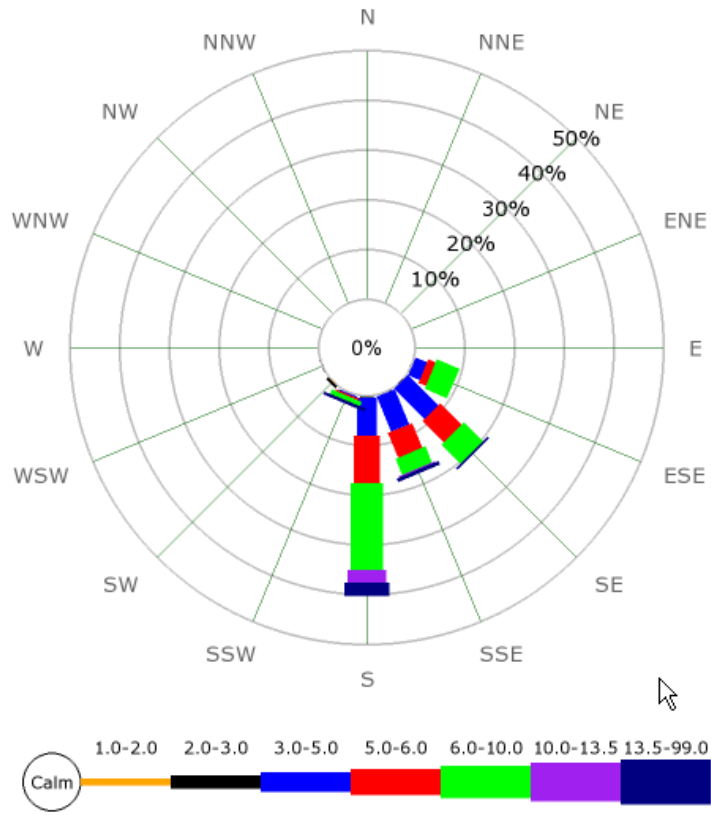
Time (GMT)	Latitude	Longitude	Wave Height (m)	Max Wave Height (m)	Tpeak (s)	Tz (s)	Mean Direction (°)	Spread (°)	Sea Temp (°C)
11-03-2007 17:00	50.71120	-1.83993	0.8	1.39	4.2	4.0	170	27	10.2

Date	Highest Hs 2007
18-01	2.53m

Time (GMT)	Latitude	Longitude	Wave Height (m)	Max Wave Height (m)	Tpeak (s)	Tz (s)	Mean Direction (°)	Spread (°)	Sea Temp (°C)
11-03-2007 17:00	50.71120	-1.83993	0.8	1.39	4.2	4.0	170	27	10.2
11-03-2007 16:30	50.71130	-1.83939	0.8	1.16	15.4	4.0	190	23	10.3
11-03-2007 16:00	50.71137	-1.83935	0.7	1.32	4.8	3.9	177	22	10.3
11-03-2007 15:30	50.71139	-1.83933	0.7	1.12	4.2	3.8	173	26	10.2
11-03-2007 15:00	50.71143	-1.83935	0.6	1.19	14.3	3.8	198	22	10.2
11-03-2007 14:30	50.71143	-1.83929	0.6	0.95	15.4	3.6	194	27	10.2
11-03-2007 14:00	50.71142	-1.83931	0.6	0.85	15.4	3.6	186	22	10.2
11-03-2007 13:30	50.71143	-1.83929	0.6	0.93	15.4	3.4	191	30	10.1
11-03-2007 13:00	50.71140	-1.83933	0.6	0.80	14.3	3.2	176	30	10.1
11-03-2007 12:30	50.71139	-1.83931	0.6	0.89	3.9	3.1	181	30	9.8
11-03-2007 12:00	50.71145	-1.83933	0.6	0.78	14.3	3.1	187	31	9.8
11-03-2007 11:30	50.71141	-1.83933	0.7	0.78	3.2	3.1	193	20	9.8
11-03-2007 11:00	50.71136	-1.83933	0.6	0.83	3.0	3.1	190	18	9.7
11-03-2007 10:30	50.71151	-1.83944	0.7	1.06	13.3	3.2	188	27	9.7
11-03-2007 10:00	50.71159	-1.83963	0.6	1.14	3.7	3.2	180	22	9.7
11-03-2007 09:30	50.71160	-1.83976	0.6	1.03	14.3	3.4	186	19	9.6
11-03-2007 09:00	50.71157	-1.83987	0.6	0.80	14.3	3.4	181	21	9.6
11-03-2007 08:30	50.71145	-1.84006	0.6	0.87	15.4	3.5	183	28	9.5
11-03-2007 08:00	50.71142	-1.84008	0.6	0.85	15.4	3.3	186	31	9.6



Boscombe - January (data from 2003 to All years).
Dominant Wave Period, Tpeak (seconds).

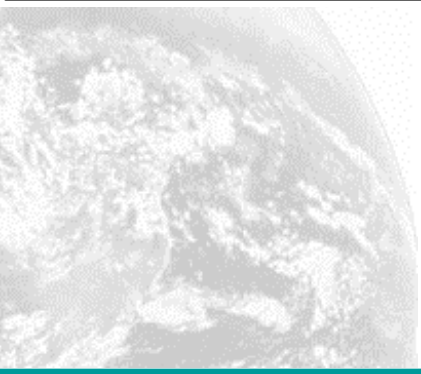
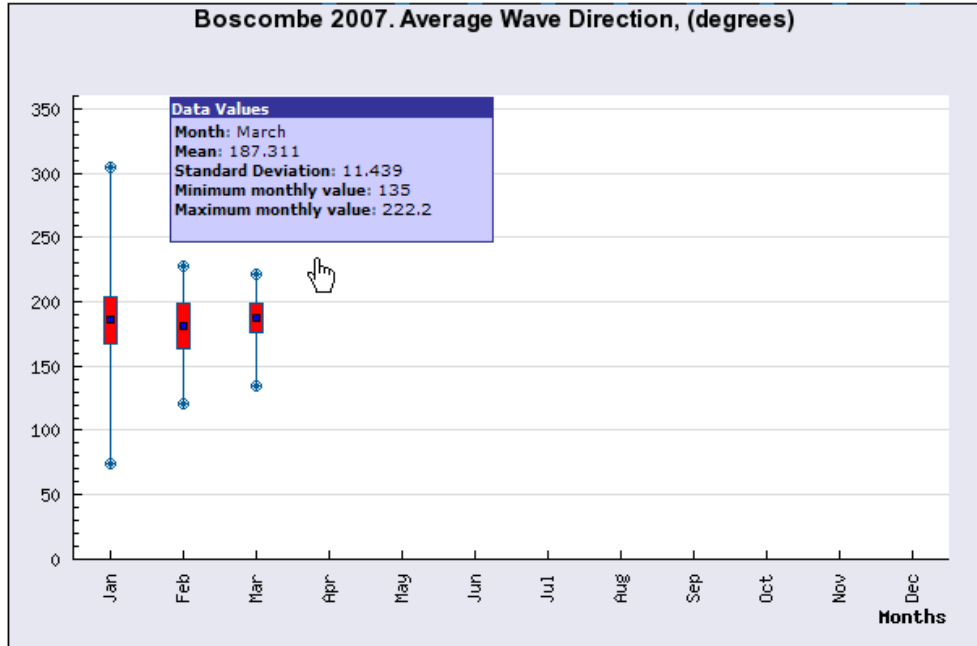


> Data management > Wave Charts > Boscombe Buoy

Boscombe Buoy

[Graphs](#)
[Table](#)
[Additional information](#)
[Statistics](#)

Boscombe 2007. Average Wave Direction, (degrees)



Further information

- Channel Coastal Observatory

www.channelcoast.org

- GeoData Institute

www.geodata.soton.ac.uk

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jds@geodata.soton.ac.uk

