TEESPORT TIDE TABLES 2023

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Every care has been exercised to ensure accuracy, but PD Ports does not accept responsibility for any inaccuracy on the part of themselves or others.

Times throughout are Greenwich Mean Time British Summer Time commences 26th March and ends 29th October.

Arrangements for the acceptance of vessels should be made with the VTS Centre on all occasions.

All depths are expressed as nominal dredged depths at Lowest Astronomical Tide (LAT) and are affected by both siltation and tidal conditions. Detailed information on these conditions, or when vessels approach the maximum indicated for a particular dock or berth, should always be obtained from the port operations centre (24 hours).

Heights are given in metres; however, it should be noted that the tidal predictions may be subject to error due to meteorological reasons.

TEESPORT: A BRIEF HISTORY

The River Tees rises on the slopes of Crossfell and works its way 109km to the sea at Middlesbrough.

The Tees has been commercially important since the 13th Century, when a crossing point was needed on the trade route between Durham and York. Its main port was originally Yarm and vessels of up to 65 tonnes would sail the 37km upstream.

The construction of a low level bridge at Stockton in 1770 cut off Yarm and trade moved down river. With the discovery of local iron ore and coal in the 1800's, traffic increased and the extension of the railway to Middlesbrough in 1826 moved activity nearer to the river mouth.

In 1911, Middlesbrough's new Transporter Bridge still allowed tallmasted vessels to proceed to Stockton and 1934 saw the building of the Tees (Newport) Bridge. In 1963, Tees Dock was constructed and opened, followed by an Act of Parliament in 1966 which established Tees and Hartlepool Port Authority as the controlling body for the river. Later in the 1990's, the Port was privatised and today Teesport remains a port authority with complete responsibility for river conservancy.

Tees and Hartlepool Ports

Tees and Hartlepool are deep-water, lock free ports on the North East coast of England. Approximately 5000 vessels (up to 200,000 dwt) berth each year, carrying a diverse range of cargoes from all corners of the globe. Collectively, the ports are a key driver in the North-east economy and a key piece of UK infrastructure.

Tees Valley and the River Tees

The area is strongly associated with petrochemical, manufacturing and engineering industries.

Companies based at Seal Sands, a major petrochemical complex on the North bank of the river, include Wood Group and ConocoPhillips who are responsible for the two major North Sea pipelines which come ashore on Teesside. Thirty more companies are located along a 17km stretch of the river, including ICL, Ineos, SABIC, Interterminals, Navigator Terminals and Greenergy.

Smaller wharves, including AV Dawson, Able and Portrack Seafreight, offer handling and storage facilities, primarily for dry bulks, steel and project cargoes.

Other companies are involved in specialist support services to the oil, gas and renewable energy sectors; several of these are located at Teesport Commerce Park, a major offshore support facility.

Tees Dock

In addition to its role as Statutory Harbour Authority, PD Ports also operates Tees Dock, a major deep sea complex and national asset for trade.

Tees Dock is a tidal inset dock, located on the South bank of the river just 8km from the sea. Handling 28 million tonnes of cargo per year, the port supports international movement of imports and exports including bulk cargo, steel, project cargo, general liner and unitised traffic.

With over 1300m of quay divided into seven berths, continuous quay lengths of 363m and 732m are available, with three general, steel and bulk cargo berths and two for ro-ro traffic. With the exception of one ro-ro berth, (with a dredged depth of 8.8m) the alongside dredged depths of the general cargo berths are between 10.9m - 14.5m (LAT).

Tees Dock is equipped with one 63 tonne and four 100 tonne harbour mobiles. Alongside each berth sits adjacent warehousing and large open storage areas. Most recently, £9.2 million was invested to renovate and refurbish 300,000 sq. ft. of warehousing space, delivering a modernised warehousing facility comprised of seven walled bays.

Significant volumes of steel, dry bulk products and intermodel traffic are handled by rail as well as road, providing an environmentally sustainable and cost-effective solution for domestic exports.

Teesport Container Terminal

There are two container terminals at Teesport, both 8km inland and located within the Teesport Estate. Over the last seven years, the container terminal has seen £120 million invested, bringing improvements in infrastructure and state-of-the-art equipment to increase capacity.

TCT1 is a riverside facility consisting of two berths with a continuous quay of 294m. Tees Dock 9 has an alongside depth of 7.5m (LAT) and Tees Dock 8 has a depth of 8.5m (LAT). Each has a ship-to-shore gantry crane with a maximum lifting capacity of 40 tonnes.

TCT2, located within Tees Dock, consists of two berths with a continuous quay of 360m and an alongside depth of 10.9 (LAT). There are three Liebherr gantry cranes capable of handling Panamax size vessels and lifting up to 45 tonnes. The terminal has rubber tyre gantry cranes, an integrated terminal operating system and extensive box storage areas. The terminal has rubber tyre gantry cranes, an integrated terminal operating system, extensive box storage areas, and an innovative gate automation process.

Hartlepool Dock

Hartlepool, which is located 6km north of the Tees, handles cargoes such as forest products, dry bulks and steel, as well as

serving offshore support activity. It is a large tidal harbour with open access to the sea, has a smaller enclosed basin and is rail connected.

The main tidal basin has a dredged depth of 6.8m (LAT). The three main quays, Victoria Quay, Irvine's Quay and the Deep Water Berth have continuous lengths of 150m, 380m and 300m respectively.

Access to the enclosed North Basin is restricted by the entrance width of 21.3m and a depth-on-sill of 3.11m (LAT). The lock gates are normally open from one hour before to one hour after high water.

The berths within the dock have two rail mounted quay cranes of 10 tonne capacity and three 63 tonne harbour mobiles. Other equipment includes four ramps for ro-ro vessels and a full range of bulk grabs and cargo-handling equipment.

General

A traffic control system operates on the Tees for the movement of certain types of vessels. Apart from these restrictions and tidal limitations, Teesport and Hartlepool are open to shipping 24 hours a day. Clearances at the Tees River Crossings (in metres at MHWS) are as follows:

Priestman Bridge	2.1
A19 Road Bridge	18.3
Tees (Newport) Bridge	6.4
Transporter Bridge	48.8
Teesport Cable Crossing	93.2
(Effective Safe Height	87.9)

Svitzer Marine Ltd +44 (0) 1642 258300 provide a towing service for the Ports of Tees and Hartlepool.

Pilotage (Tees Bay Pilots +44 (0) 1642 485648) for the Ports of Tees and Hartlepool is compulsory for certain categories of ships

(details of which are available from the Harbour Master). This service is provided by the Tees and Hartlepool Pilotage Company Ltd.

Tees Licensed Foyboatmen +44(0)1642 244298 & Hartlepool Licensed Foyboatmen +44 (0) 1429 273642 provide a 24-hour mooring service.

River Tees Predictions

River Tees predictions are related to Lowest Astronomical Tide (LAT), which is Chart Datum on the Admiralty Metric Charts Nos. 2566 and 2567 and is 2.85m below Ordnance Datum (Newlyn).

Hartlepool Predictions

Hartlepool predictions are related to Lowest Astronomical Tide (LAT), which is Chart Datum on the Admiralty Metric Charts Nos. 2566 and 2567 and is 2. 70m below Ordnance Datum (Newlyn).

River Tees Barrage

Mariners are advised that the Barrage has the effect of truncating the salt water wedge in that vicinity, causing a change in the tidal flow of the river.

It is possible that this effect may be felt a number of miles downstream of the Barrage and could in some instances result in actual tidal flows being opposite to those which the predictions would cause Mariners to expect.

In the times shown in these tables, 00h is midnight and 12h is noon.

RIVER TEES TIDE TABLES

JANUARY 2023 –
DECEMBER 2023

RIVER TEES ENTRANCE
LAT 54°38′N LONG 1°09′W

January 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m	Time	m	Time	m	Time	m
1 SU	0512	1.6	**9** M	0503	4.9	**17** TU	0501	1.8	**25** W	0008	0.3
	1128	4.4		1102	1.5		1116	4.4		0612	5.4
	1734	2.1		1706	5.1		1728	2.1		1219	1.0
	2335	4.6		2335	1.2		2335	4.5		1815	5.7
2 M	0619	1.7	**10** TU	0537	4.9	**18** W	0610	1.7	**26** TH	0052	0.4
	1231	4.5		1134	1.6		1220	4.5		0700	5.2
	1840	2.0		1740	5.1		1839	1.9		1302	1.2
										1901	5.5
3 TU	0041	4.6	**11** W	0009	1.2	**19** TH	0044	4.7	**27** F	0137	0.7
	0718	1.7		0614	4.8		0717	1.5		0748	5.0
	1324	4.6		1208	1.6		1319	4.7		1346	1.5
	1937	1.8		1817	5.0		1946	1.5		1949	5.2
4 W	0139	4.7	**12** TH	0044	1.3	**20** F	0150	4.9	**28** SA	0223	1.1
	0805	1.7		0652	4.7		0817	1.3		0838	4.7
	1411	4.8		1245	1.8		1415	5.0		1434	1.7
	2026	1.6		1855	4.9		2046	1.2	☽	2041	4.9
5 TH	0229	4.7	**13** F	0122	1.4	**21** SA	0249	5.2	**29** SU	0315	1.5
	0847	1.6		0734	4.6		0912	1.1		0932	4.4
	1452	4.9		1325	1.9		1507	5.3		1532	2.0
	2108	1.4		1937	4.8	●	2142	0.8		2142	4.6
6 F	0312	4.8	**14** SA	0204	1.5	**22** SU	0344	5.4	**30** M	0417	1.9
	0924	1.6		0821	4.5		1003	1.0		1034	4.2
	1528	5.0		1409	2.0		1556	5.5		1644	2.2
○	2147	1.3		2024	4.6		2233	0.5		2252	4.3
7 SA	0351	4.9	**15** SU	0254	1.6	**23** M	0435	5.5	**31** TU	0534	2.1
	0958	1.6		0914	4.4		1051	0.9		1145	4.2
	1602	5.1		1504	2.1		1643	5.7		1807	2.2
	2224	1.2	☾	2120	4.5		2322	0.3			
8 SU	0427	4.9	**16** M	0353	1.7	**24** TU	0524	5.5			
	1030	1.5		1013	4.3		1136	0.9			
	1634	5.1		1612	2.2		1729	5.7			
	2300	1.2		2225	4.5						

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

RIVER TEES ENTRANCE
LAT 54°38′N LONG 1°09′W

February 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE **UT (GMT)**

	Time	m		Time	m		Time	m		Time	m
1	0011	4.2	**9**	0547	5.0	**17**	0032	4.5	**25**	0104	0.7
	0650	2.1		1149	1.3		0705	1.8		0711	5.0
W	1256	4.3	TH	1750	5.2	F	1302	4.6	SA	1311	1.2
	1919	2.0					1940	1.5		1916	5.3
2	0125	4.3	**10**	0017	1.0	**18**	0145	4.8	**26**	0142	1.1
	0748	2.0		0621	4.9		0810	1.5		0754	4.7
TH	1352	4.5	F	1220	1.4	SA	1404	4.9	SU	1351	1.5
	2014	1.7		1823	5.1		2042	1.0		2004	4.9
3	0219	4.5	**11**	0051	1.1	**19**	0245	5.1	**27**	0223	1.6
	0833	1.9		0657	4.8		0905	1.2		0842	4.4
F	1438	4.7	SA	1254	1.5	SU	1457	5.3	M	1441	1.9
	2058	1.5		1858	5.0		2136	0.6	☽	2101	4.4
4	0302	4.7	**12**	0128	1.3	**20**	0336	5.4	**28**	0317	2.1
	0911	1.7		0738	4.6		0952	0.9		0940	4.1
SA	1516	4.9	SU	1331	1.7	M	1543	5.6	TU	1554	2.2
	2136	1.3		1940	4.8	●	2223	0.3		2213	4.1
5	0340	4.8	**13**	0210	1.5	**21**	0422	5.5			
	0945	1.6		0826	4.4		1036	0.8			
SU	1549	5.1	M	1417	1.9	TU	1627	5.8			
○	2211	1.1	☾	2034	4.6		2307	0.1			
6	0414	4.9	**14**	0304	1.7	**22**	0506	5.6			
	1017	1.4		0925	4.3		1118	0.7			
M	1620	5.2	TU	1520	2.0	W	1709	5.9			
	2244	1.0		2144	4.4		2348	0.1			
7	0446	5.0	**15**	0416	1.9	**23**	0548	5.5			
	1048	1.4		1035	4.2		1157	0.8			
TU	1649	5.2	W	1647	2.1	TH	1750	5.8			
	2316	1.0		2308	4.3						
8	0516	5.0	**16**	0542	2.0	**24**	0026	0.3			
	1118	1.3		1151	4.3		0630	5.3			
W	1719	5.2	TH	1820	1.9	F	1234	0.9			
	2346	1.0					1832	5.6			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

RIVER TEES ENTRANCE

LAT 54°38′N LONG 1°09′W

March 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE **UT (GMT)**

	Time	m	Time	m	Time	m	Time	m
1 W	0441	2.4	**9** TH	0448	5.1	**17** F	0530	2.1
	1056	4.0		1055	1.1		1132	4.2
	1733	2.2		1651	5.3		1817	1.8
	2343	4.0		2319	0.7			
2 TH	0621	2.4	**10** F	0517	5.1	**18** SA	0030	4.4
	1224	4.1		1124	1.1		0657	1.9
	1859	2.0		1720	5.3		1250	4.5
				2349	0.8		1935	1.3
3 F	0108	4.1	**11** SA	0548	5.1	**19** SU	0141	4.8
	0728	2.2		1155	1.1		0759	1.5
	1330	4.3		1751	5.2		1351	4.9
	1956	1.7					2032	0.8
4 SA	0204	4.4	**12** SU	0021	0.9	**20** M	0234	5.1
	0814	2.0		0622	5.0		0849	1.2
	1417	4.6		1226	1.2		1440	5.3
	2039	1.4		1828	5.1		2120	0.4
5 SU	0244	4.6	**13** M	0056	1.1	**21** TU	0319	5.4
	0852	1.7		0700	4.8		0933	0.9
	1455	4.9		1303	1.4		1524	5.6
	2116	1.2		1911	4.9	●	2203	0.2
6 M	0320	4.8	**14** TU	0137	1.5	**22** W	0401	5.5
	0926	1.5		0746	4.5		1014	0.7
	1528	5.0		1348	1.7		1605	5.8
	2149	1.0		2008	4.6		2243	0.1
7 TU	0351	5.0	**15** W	0230	1.8	**23** TH	0441	5.5
	0956	1.3		0847	4.3		1052	0.6
	1557	5.2		1453	1.9		1644	5.8
○	2220	0.9	☾	2125	4.3		2320	0.2
8 W	0420	5.1	**16** TH	0348	2.1	**24** F	0519	5.4
	1026	1.2		1006	4.1		1129	0.7
	1624	5.2		1631	2.0		1724	5.7
	2250	0.8		2258	4.2		2355	0.5
						25 SA	0556	5.3
							1204	0.8
							1804	5.5
						26 SU	0029	0.8
							0633	5.0
							1239	1.1
							1846	5.1
						27 M	0102	1.3
							0711	4.7
							1317	1.4
							1932	4.7
						28 TU	0137	1.7
							0754	4.4
							1403	1.8
							2027	4.3
						29 W	0221	2.2
							0849	4.1
							1513	2.1
						☽	2138	4.0
						30 TH	0343	2.5
							1006	3.9
							1656	2.2
							2311	3.8
						31 F	0542	2.5
							1141	4.0
							1825	2.0

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

RIVER TEES ENTRANCE
LAT 54°38′N LONG 1°09′W

April 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m		Time	m		Time	m		Time	m
1 SA	0037	4.0	**9** SU	0518	5.2	**17** M	0126	4.8	**25** TU	0028	1.5
	0655	2.3		1131	0.9		0736	1.5		0636	4.7
	1254	4.2		1728	5.3		1330	5.0		1253	1.4
	1923	1.7		2356	0.9		2010	0.7		1908	4.6
2 SU	0133	4.3	**10** M	0553	5.0	**18** TU	0214	5.1	**26** W	0102	1.8
	0743	2.0		1207	1.1		0824	1.2		0718	4.5
	1343	4.5		1810	5.1		1418	5.3		1339	1.7
	2006	1.4					2056	0.5		2000	4.3
3 M	0214	4.6	**11** TU	0033	1.2	**19** W	0257	5.3	**27** TH	0144	2.2
	0821	1.7		0634	4.8		0907	0.9		0809	4.2
	1422	4.8		1247	1.3		1500	5.5		1443	1.9
	2043	1.1		1900	4.8		2137	0.4	☽	2105	4.0
4 TU	0249	4.8	**12** W	0116	1.5	**20** TH	0336	5.4	**28** F	0252	2.5
	0855	1.4		0724	4.6		0947	0.8		0918	4.0
	1455	5.0		1339	1.5		1540	5.6		1611	2.1
	2117	0.9		2004	4.5	●	2215	0.4		2227	3.9
5 W	0319	5.0	**13** TH	0213	1.9	**21** F	0413	5.4	**29** SA	0443	2.5
	0926	1.2		0828	4.3		1025	0.7		1045	4.0
	1524	5.1		1451	1.8		1619	5.6		1734	1.9
	2148	0.8	☾	2124	4.2		2251	0.5		2347	4.0
6 TH	0347	5.1	**14** F	0339	2.2	**22** SA	0448	5.3	**30** SU	0603	2.4
	0957	1.1		0949	4.2		1102	0.7		1201	4.2
	1553	5.2		1633	1.8		1659	5.4		1834	1.7
○	2218	0.7		2257	4.2		2324	0.8			
7 F	0416	5.2	**15** SA	0520	2.1	**23** SU	0523	5.2			
	1027	1.0		1117	4.3		1138	0.9			
	1621	5.3		1808	1.5		1739	5.2			
	2249	0.7					2357	1.1			
8 SA	0446	5.2	**16** SU	0023	4.5	**24** M	0558	5.0			
	1059	0.9		0639	1.9		1214	1.1			
	1653	5.3		1232	4.6		1821	4.9			
	2321	0.7		1917	1.1						

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

RIVER TEES ENTRANCE

LAT 54°38′N LONG 1°09′W

May 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m	Time	m	Time	m	Time	m
1 M	0047	4.2	**9** TU	0536	5.1	**17** W	0148	5.0	**25** TH	0039	1.8
	0657	2.1		1157	1.0		0756	1.3		0652	4.6
	1254	4.4		1806	5.0		1352	5.2		1322	1.6
	1922	1.4					2028	0.7		1936	4.3
2 TU	0131	4.5	**10** W	0020	1.2	**18** TH	0231	5.1	**26** F	0121	2.1
	0739	1.8		0622	4.9		0840	1.1		0740	4.4
	1336	4.7		1245	1.1		1437	5.3		1416	1.7
	2002	1.2		1903	4.8		2110	0.7		2031	4.2
3 W	0207	4.7	**11** TH	0109	1.6	**19** F	0310	5.2	**27** SA	0217	2.3
	0816	1.5		0715	4.7		0922	1.0		0837	4.3
	1413	4.9		1344	1.3		1519	5.3		1520	1.9
	2038	1.0		2009	4.5	●	2148	0.8	☽	2134	4.1
4 TH	0239	4.9	**12** F	0212	1.9	**20** SA	0347	5.2	**28** SU	0334	2.4
	0850	1.3		0820	4.5		1002	0.9		0944	4.2
	1446	5.1		1500	1.5		1559	5.3		1629	1.9
	2112	0.8	☾	2125	4.4		2224	0.9		2242	4.1
5 F	0311	5.1	**13** SA	0334	2.1	**21** SU	0422	5.1	**29** M	0452	2.3
	0925	1.1		0937	4.4		1040	0.9		1053	4.2
	1520	5.2		1624	1.4		1640	5.2		1731	1.7
○	2146	0.7		2246	4.4		2258	1.1		2343	4.2
6 SA	0344	5.2	**14** SU	0457	2.0	**22** M	0456	5.1	**30** TU	0554	2.2
	1000	0.9		1056	4.5		1118	1.0		1153	4.4
	1555	5.3		1743	1.3		1721	5.0		1825	1.6
	2221	0.7					2331	1.3			
7 SU	0418	5.2	**15** M	0000	4.5	**23** TU	0531	5.0	**31** W	0034	4.4
	1036	0.9		0608	1.8		1157	1.1		0646	1.9
	1634	5.3		1205	4.7		1803	4.8		1243	4.6
	2258	0.8		1848	1.0					1913	1.4
8 M	0455	5.2	**16** TU	0059	4.8	**24** W	0003	1.6			
	1115	0.9		0706	1.5		0610	4.8			
	1717	5.2		1303	5.0		1237	1.3			
	2337	1.0		1941	0.8		1848	4.6			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

RIVER TEES ENTRANCE
LAT 54°38′N LONG 1°09′W

June 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m		Time	m		Time	m		Time	m
1 TH	0118	4.6	**9** F	0109	1.5	**17** SA	0249	4.9	**25** SU	0145	2.0
	0731	1.7		0710	5.0		0903	1.2		0800	4.5
	1328	4.8		1349	1.0		1505	5.0		1431	1.6
	1956	1.2		2006	4.7		2127	1.3		2045	4.3
2 F	0158	4.8	**10** SA	0209	1.7	**18** SU	0328	5.0	**26** M	0237	2.1
	0813	1.4		0810	4.9		0945	1.1		0853	4.4
	1411	5.0		1453	1.1		1548	5.0		1525	1.7
	2037	1.0	☾	2111	4.6	●	2204	1.3	☽	2140	4.2
3 SA	0237	5.0	**11** SU	0315	1.9	**19** M	0404	5.0	**27** TU	0339	2.2
	0855	1.2		0917	4.8		1025	1.1		0951	4.4
	1453	5.1		1600	1.2		1629	4.9		1623	1.8
	2118	0.9		2218	4.5		2239	1.4		2238	4.2
4 SU	0317	5.1	**12** M	0423	1.9	**20** TU	0438	5.0	**28** W	0446	2.2
	0938	1.0		1026	4.7		1105	1.1		1052	4.4
	1538	5.2		1708	1.2		1708	4.9		1723	1.7
○	2201	0.9		2325	4.5		2313	1.5		2335	4.3
5 M	0358	5.2	**13** TU	0530	1.8	**21** W	0513	5.0	**29** TH	0548	2.0
	1022	0.8		1133	4.8		1143	1.2		1152	4.5
	1625	5.3		1813	1.2		1748	4.8		1821	1.6
	2244	0.9					2347	1.6			
6 TU	0441	5.3	**14** W	0026	4.6	**22** TH	0550	4.9	**30** F	0030	4.5
	1108	0.8		0633	1.7		1222	1.3		0646	1.8
	1715	5.2		1234	4.8		1828	4.7		1249	4.7
	2329	1.1		1911	1.2					1917	1.4
7 W	0527	5.2	**15** TH	0120	4.7	**23** F	0022	1.7			
	1157	0.8		0728	1.5		0630	4.8			
	1808	5.1		1330	4.9		1302	1.4			
				2002	1.2		1910	4.5			
8 TH	0017	1.3	**16** F	0207	4.9	**24** SA	0101	1.9			
	0616	5.1		0818	1.3		0713	4.7			
	1250	0.9		1420	5.0		1344	1.5			
	1905	4.9		2046	1.2		1955	4.4			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

RIVER TEES ENTRANCE
LAT 54°38′N LONG 1°09′W

July 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m		Time	m		Time	m		Time	m
1	0122	4.7	**9**	0151	1.4	**17**	0315	4.9	**25**	0152	1.9
	0740	1.6		0751	5.2		0936	1.3		0805	4.7
SA	1343	4.9	SU	1430	0.9	M	1540	4.9	TU	1433	1.6
	2009	1.3		2044	4.8	●	2151	1.6	☽	2049	4.4
2	0211	4.9	**10**	0245	1.6	**18**	0352	5.0	**26**	0240	2.0
	0833	1.3		0848	5.0		1015	1.2		0857	4.5
SU	1436	5.1	M	1527	1.1	TU	1618	4.9	W	1526	1.8
	2100	1.1	☾	2142	4.6		2225	1.5		2144	4.3
3	0258	5.1	**11**	0345	1.8	**19**	0425	5.1	**27**	0341	2.1
	0924	1.0		0951	4.8		1051	1.1		0959	4.4
M	1528	5.2	TU	1629	1.4	W	1654	4.9	TH	1630	1.9
○	2149	1.0		2244	4.5		2258	1.5		2246	4.3
4	0345	5.3	**12**	0451	1.9	**20**	0458	5.1	**28**	0456	2.1
	1015	0.8		1058	4.6		1127	1.1		1109	4.4
TU	1620	5.3	W	1736	1.6	TH	1729	4.9	F	1740	1.8
	2238	1.0		2350	4.4		2330	1.5		2351	4.3
5	0432	5.4	**13**	0601	1.9	**21**	0530	5.1	**29**	0611	2.0
	1106	0.6		1208	4.6		1201	1.1		1221	4.5
W	1711	5.4	TH	1843	1.7	F	1803	4.9	SA	1849	1.7
	2326	1.0									
6	0519	5.5	**14**	0053	4.5	**22**	0002	1.5	**30**	0054	4.5
	1156	0.5		0707	1.8		0605	5.0		0720	1.7
TH	1803	5.3	F	1314	4.6	SA	1234	1.2	SU	1328	4.8
				1942	1.7		1840	4.8		1953	1.5
7	0013	1.1	**15**	0148	4.6	**23**	0035	1.6	**31**	0152	4.8
	0607	5.5		0804	1.6		0642	4.9		0822	1.3
F	1246	0.5	SA	1411	4.7	SU	1310	1.3	M	1427	5.0
	1856	5.2		2031	1.7		1918	4.7		2049	1.3
8	0101	1.2	**16**	0235	4.8	**24**	0112	1.7			
	0658	5.4		0853	1.4		0721	4.8			
SA	1337	0.7	SU	1459	4.8	M	1348	1.5			
	1949	5.0		2113	1.6		2001	4.5			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

RIVER TEES ENTRANCE
LAT 54°38′N LONG 1°09′W

August 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m	Time	m	Time	m	Time	m
1 TU ○	0244	5.1	**9** W	0304	1.8	**17** TH	0408	5.2
	0918	0.9		0914	4.7		1032	1.0
	1521	5.3		1546	1.7		1634	5.0
	2141	1.1		2201	4.3		2238	1.4
2 W	0333	5.4	**10** TH	0412	2.0	**18** F	0437	5.2
	1010	0.6		1025	4.4		1103	1.0
	1612	5.5		1659	2.0		1704	5.1
	2229	0.9		2311	4.2		2307	1.3
3 TH	0419	5.6	**11** F	0535	2.1	**19** SA	0506	5.2
	1058	0.3		1147	4.3		1133	1.0
	1700	5.6		1822	2.1		1733	5.1
	2315	0.9					2337	1.3
4 F	0505	5.8	**12** SA	0028	4.3	**20** SU	0535	5.2
	1145	0.2		0655	1.9		1203	1.0
	1747	5.6		1307	4.4		1805	5.0
	2358	0.9		1929	2.1			
5 SA	0550	5.8	**13** SU	0132	4.5	**21** M	0007	1.4
	1230	0.3		0757	1.7		0607	5.1
	1834	5.4		1405	4.5		1234	1.2
				2019	1.9		1840	4.9
6 SU	0040	1.0	**14** M	0221	4.7	**22** TU	0039	1.5
	0636	5.7		0844	1.5		0641	5.0
	1313	0.5		1450	4.7		1309	1.3
	1921	5.2		2100	1.8		1918	4.7
7 M	0123	1.2	**15** TU	0302	4.9	**23** W	0113	1.7
	0723	5.4		0923	1.3		0720	4.8
	1359	0.9		1528	4.9		1349	1.6
	2009	4.9		2135	1.6		2002	4.5
8 TU ☾	0210	1.5	**16** W ●	0337	5.1	**24** TH ☽	0155	1.9
	0815	5.1		0959	1.1		0810	4.6
	1448	1.3		1602	5.0		1439	1.8
	2102	4.6		2208	1.5		2057	4.3
						25 F	0252	2.1
							0917	4.4
							1546	2.1
							2205	4.2
						26 SA	0416	2.2
							1041	4.3
							1712	2.1
							2321	4.2
						27 SU	0552	2.0
							1207	4.4
							1836	2.0
						28 M	0035	4.5
							0712	1.6
							1321	4.7
							1944	1.7
						29 TU	0138	4.9
							0815	1.2
							1420	5.1
							2039	1.3
						30 W	0230	5.3
							0908	0.7
							1510	5.4
							2127	1.0
						31 TH	0317	5.6
							0956	0.4
							1556	5.6
						○	2212	0.8

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

RIVER TEES ENTRANCE September 2023

LAT 54°38′N LONG 1°09′W

TIMES AND HEIGHTS OF HIGH AND LOW WATERS TIME ZONE **UT (GMT)**

	Time	m	Time	m	Time	m	Time	m
1 F	0401	5.9	**9** SA	0514	2.2	**17** SU	0436	5.3
	1041	0.1		1129	4.1		1101	0.9
	1640	5.7		1801	2.5		1700	5.2
	2254	0.7					2308	1.2
2 SA	0443	6.0	**10** SU	0001	4.1	**18** M	0503	5.3
	1123	0.1		0642	2.0		1130	1.0
	1723	5.7		1256	4.2		1730	5.2
	2334	0.7		1911	2.3		2338	1.2
3 SU	0525	5.9	**11** M	0111	4.4	**19** TU	0533	5.2
	1203	0.3		0741	1.7		1201	1.1
	1805	5.5		1350	4.5		1802	5.0
				1959	2.0			
4 M	0012	0.8	**12** TU	0200	4.7	**20** W	0009	1.4
	0608	5.8		0824	1.4		0607	5.1
	1242	0.6		1430	4.7		1235	1.3
	1847	5.3		2038	1.8		1839	4.9
5 TU	0051	1.1	**13** W	0239	5.0	**21** TH	0043	1.5
	0653	5.5		0900	1.2		0648	4.9
	1322	1.0		1505	4.9		1314	1.6
	1931	4.9		2111	1.6		1922	4.6
6 W	0133	1.4	**14** TH	0312	5.1	**22** F	0125	1.8
	0742	5.0		0933	1.0		0742	4.6
	1406	1.6		1537	5.1		1403	2.0
☾	2019	4.6		2142	1.4	☽	2019	4.4
7 TH	0224	1.8	**15** F	0342	5.3	**23** SA	0224	2.0
	0840	4.6		1004	0.9		0856	4.3
	1500	2.1		1606	5.2		1516	2.3
	2117	4.3	●	2211	1.3		2134	4.2
8 F	0335	2.1	**16** SA	0410	5.3	**24** SU	0359	2.1
	0955	4.2		1033	0.9		1029	4.2
	1621	2.4		1633	5.2		1658	2.3
	2232	4.1		2239	1.2		2259	4.2
						25 M	0546	1.9
							1202	4.4
							1826	2.1
						26 TU	0018	4.5
							0704	1.5
							1313	4.8
							1929	1.7
						27 W	0120	5.0
							0801	1.0
							1406	5.2
							2020	1.3
						28 TH	0211	5.4
							0849	0.6
							1452	5.5
							2105	1.0
						29 F	0255	5.7
							0934	0.3
							1534	5.7
						○	2147	0.8
						30 SA	0337	5.9
							1016	0.2
							1614	5.7
							2227	0.7

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

RIVER TEES ENTRANCE
LAT 54°38′N LONG 1°09′W

October 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m	Time	m	Time	m	Time	m
1 SU	0417	6.0	**9** M	0611	2.0	**17** TU	0435	5.3	**25** W	0642	1.3
	1055	0.2		1227	4.2		1100	1.0		1255	4.9
	1654	5.7		1838	2.4		1658	5.3		1903	1.7
	2306	0.7					2313	1.1			
2 M	0458	5.9	**10** TU	0035	4.4	**18** W	0508	5.3	**26** TH	0056	5.1
	1133	0.5		0708	1.7		1133	1.1		0737	0.9
	1733	5.5		1320	4.5		1732	5.1		1344	5.2
	2344	0.8		1927	2.1		2347	1.3		1954	1.4
3 TU	0540	5.7	**11** W	0126	4.6	**19** TH	0547	5.1	**27** F	0146	5.4
	1209	0.8		0750	1.5		1209	1.4		0824	0.6
	1811	5.2		1359	4.7		1811	4.9		1428	5.4
				2005	1.8					2039	1.1
4 W	0022	1.1	**12** TH	0205	4.9	**20** F	0025	1.4	**28** SA	0231	5.6
	0625	5.3		0826	1.2		0635	4.9		0908	0.5
	1245	1.3		1433	4.9		1250	1.7		1509	5.6
	1852	4.9		2039	1.6		1858	4.7	○	2121	0.9
5 TH	0103	1.4	**13** F	0239	5.1	**21** SA	0113	1.7	**29** SU	0313	5.8
	0714	4.9		0900	1.1		0735	4.6		0948	0.5
	1324	1.8		1504	5.1		1343	2.1		1548	5.6
	1937	4.6		2111	1.4		1957	4.5		2202	0.8
6 F	0152	1.8	**14** SA	0310	5.2	**22** SU	0219	1.9	**30** M	0354	5.8
	0811	4.4		0930	0.9		0852	4.3		1027	0.6
	1412	2.3		1532	5.2		1501	2.3		1625	5.5
☾	2032	4.3	●	2141	1.2	☽	2113	4.3		2241	0.8
7 SA	0303	2.1	**15** SU	0338	5.3	**23** M	0357	1.9	**31** TU	0436	5.6
	0926	4.1		1000	0.9		1023	4.3		1103	0.8
	1538	2.6		1559	5.3		1643	2.3		1703	5.4
	2149	4.1		2210	1.1		2238	4.4		2320	0.9
8 SU	0445	2.2	**16** M	0405	5.3	**24** TU	0532	1.7			
	1102	4.0		1029	0.9		1150	4.5			
	1727	2.7		1627	5.3		1803	2.1			
	2322	4.1		2241	1.1		2355	4.7			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

RIVER TEES ENTRANCE November 2023

LAT 54°38′N LONG 1°09′W

TIMES AND HEIGHTS OF HIGH AND LOW WATERS TIME ZONE **UT (GMT)**

	Time	m		Time	m		Time	m		Time	m
1	0519	5.4	**9**	0037	4.5	**17**	0542	5.1	**25**	0120	5.2
	1139	1.2		0706	1.6		1154	1.4		0758	0.9
W	1740	5.2	TH	1316	4.6	F	1757	5.1	SA	1403	5.2
	2359	1.1		1924	2.0					2013	1.3
2	0603	5.1	**10**	0121	4.7	**18**	0021	1.3	**26**	0209	5.4
	1214	1.5		0746	1.4		0635	4.9		0843	0.9
TH	1819	5.0	F	1353	4.8	SA	1240	1.7	SU	1445	5.3
				2001	1.7		1847	4.9		2059	1.1
3	0041	1.4	**11**	0159	4.9	**19**	0115	1.4	**27**	0254	5.4
	0652	4.7		0822	1.2		0737	4.6		0924	0.9
F	1250	1.9	SA	1425	5.0	SU	1337	2.0	M	1525	5.3
	1903	4.7		2035	1.5		1946	4.7	○	2142	1.0
4	0130	1.7	**12**	0233	5.1	**20**	0223	1.6	**28**	0338	5.4
	0747	4.4		0855	1.1		0848	4.5		1004	1.0
SA	1334	2.3	SU	1456	5.2	M	1452	2.2	TU	1603	5.3
	1954	4.4		2109	1.3	☽	2056	4.6		2223	1.0
5	0234	2.0	**13**	0306	5.2	**21**	0343	1.6	**29**	0422	5.3
	0854	4.1		0927	1.0		1006	4.4		1041	1.2
SU	1444	2.6	M	1527	5.3	TU	1615	2.2	W	1640	5.3
☾	2101	4.2	●	2143	1.2		2212	4.6		2304	1.0
6	0357	2.1	**14**	0340	5.3	**22**	0502	1.5	**30**	0505	5.1
	1015	4.0		1001	1.0		1122	4.6		1117	1.4
M	1627	2.7	TU	1600	5.3	W	1728	2.0	TH	1717	5.2
	2225	4.2		2218	1.1		2324	4.8		2344	1.2
7	0518	2.0	**15**	0416	5.3	**23**	0610	1.2			
	1134	4.1		1036	1.0		1225	4.8			
TU	1746	2.5	W	1635	5.3	TH	1831	1.8			
	2341	4.3		2256	1.1						
8	0619	1.8	**16**	0456	5.2	**24**	0026	5.0			
	1233	4.4		1113	1.2		0708	1.0			
W	1840	2.3	TH	1714	5.2	F	1317	5.0			
				2336	1.1		1925	1.5			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

RIVER TEES ENTRANCE December 2023

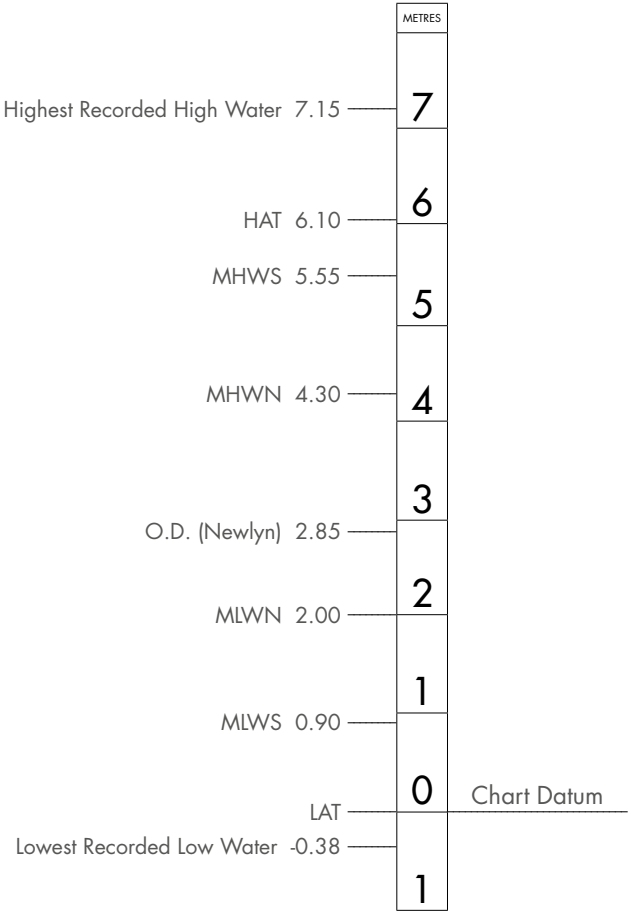
LAT 54°38′N LONG 1°09′W

TIMES AND HEIGHTS OF HIGH AND LOW WATERS TIME ZONE **UT (GMT)**

	Time	m	Time	m	Time	m	Time	m
1 F	0548	4.9	**9** SA	0026	4.5	**17** SU	0023	0.9
	1151	1.7		0657	1.6		0635	5.0
	1755	5.0		1303	4.6		1238	1.5
				1916	1.9		1839	5.2
2 SA	0026	1.3	**10** SU	0114	4.7	**18** M	0116	1.0
	0634	4.7		0740	1.5		0732	4.9
	1227	1.9		1344	4.8		1332	1.7
	1837	4.9		1959	1.7		1933	5.1
3 SU	0111	1.5	**11** M	0158	4.9	**19** TU	0214	1.1
	0722	4.5		0821	1.3		0833	4.7
	1307	2.2		1422	5.0		1432	1.9
	1924	4.7		2040	1.4	☽	2034	4.9
4 M	0201	1.8	**12** TU	0240	5.0	**20** W	0317	1.3
	0816	4.3		0900	1.2		0937	4.6
	1358	2.4		1501	5.1		1539	2.0
	2017	4.5	●	2122	1.2		2139	4.8
5 TU	0300	1.9	**13** W	0323	5.2	**21** TH	0423	1.4
	0917	4.2		0940	1.1		1043	4.6
	1508	2.5		1540	5.3		1647	2.0
☾	2120	4.3		2204	1.1		2247	4.8
6 W	0407	2.0	**14** TH	0407	5.2	**22** F	0532	1.4
	1022	4.1		1022	1.1		1149	4.6
	1626	2.5		1621	5.3		1754	1.9
	2229	4.3		2248	1.0		2355	4.8
7 TH	0511	1.9	**15** F	0453	5.2	**23** SA	0637	1.4
	1125	4.2		1105	1.2		1249	4.7
	1734	2.4		1704	5.3		1858	1.7
	2332	4.4		2334	0.9			
8 F	0608	1.8	**16** SA	0542	5.2	**24** SU	0058	4.9
	1218	4.4		1150	1.4		0735	1.4
	1829	2.2		1749	5.3		1341	4.9
							1955	1.5
25 M	0155	5.0	**26** TU	0246	5.0	**27** W	0333	5.0
	0825	1.3		0909	1.4		0949	1.4
	1428	5.0		1511	5.1		1550	5.2
	2045	1.3		2131	1.2	○	2214	1.1
28 TH	0415	5.0	**29** F	0456	5.0	**30** SA	0535	4.9
	1027	1.5		1102	1.5		1136	1.6
	1627	5.2		1702	5.2		1738	5.1
	2254	1.1		2333	1.1			
31 SU	0010	1.2						
	0615	4.8						
	1208	1.7						
	1815	5.0						

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

TIDAL DATA RIVER TEES



HARTLEPOOL TIDE TABLES

JANUARY 2023 –
DECEMBER 2023

ENGLAND - HARTLEPOOL January 2023

LAT 54°42'N LONG 1°12'W

TIMES AND HEIGHTS OF HIGH AND LOW WATERS TIME ZONE UT (GMT)

	Time	m		Time	m		Time	m		Time	m
1	0506	1.4	**9**	0459	4.8	**17**	0455	1.6	**25**	0002	0.3
	1124	4.3		1056	1.4		1112	4.3		0608	5.3
SU	1728	1.9	M	1702	5.0	TU	1722	1.9	W	1213	0.9
	2331	4.5		2329	1.1		2331	4.4		1811	5.6
2	0613	1.5	**10**	0533	4.8	**18**	0604	1.5	**26**	0046	0.4
	1227	4.4		1128	1.4		1216	4.4		0656	5.1
M	1834	1.8	TU	1736	5.0	W	1833	1.7	TH	1256	1.1
										1857	5.4
3	0037	4.5	**11**	0003	1.1	**19**	0040	4.6	**27**	0131	0.6
	0712	1.5		0610	4.7		0711	1.4		0744	4.9
TU	1320	4.5	W	1202	1.5	TH	1315	4.6	F	1340	1.3
	1931	1.6		1813	4.9		1940	1.4		1945	5.1
4	0135	4.6	**12**	0038	1.2	**20**	0146	4.8	**28**	0217	1.0
	0759	1.5		0648	4.6		0811	1.2		0834	4.6
W	1407	4.7	TH	1239	1.6	F	1411	4.9	SA	1428	1.6
	2020	1.4		1851	4.8		2040	1.0	☽	2037	4.8
5	0225	4.6	**13**	0116	1.3	**21**	0245	5.1	**29**	0309	1.3
	0841	1.5		0730	4.5		0906	1.0		0928	4.3
TH	1448	4.8	F	1319	1.7	SA	1503	5.2	SU	1526	1.8
	2102	1.3		1933	4.7	●	2136	0.7		2138	4.5
6	0308	4.7	**14**	0158	1.4	**22**	0340	5.3	**30**	0411	1.7
	0918	1.4		0817	4.4		0957	0.9		1030	4.1
F	1524	4.9	SA	1403	1.8	SU	1552	5.4	M	1638	2.0
○	2141	1.2		2020	4.5		2227	0.4		2248	4.2
7	0347	4.8	**15**	0248	1.5	**23**	0431	5.4	**31**	0528	1.9
	0952	1.4		0910	4.3		1045	0.8		1141	4.1
SA	1558	5.0	SU	1458	1.9	M	1639	5.6	TU	1801	1.9
	2218	1.1	☾	2116	4.4		2316	0.3			
8	0423	4.8	**16**	0347	1.6	**24**	0520	5.4			
	1024	1.4		1009	4.2		1130	0.8			
SU	1630	5.0	M	1606	2.0	TU	1725	5.6			
	2254	1.1		2221	4.4						

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

ENGLAND - HARTLEPOOL February 2023

LAT 54°42'N LONG 1°12'W

TIMES AND HEIGHTS OF HIGH AND LOW WATERS TIME ZONE **UT (GMT)**

	Time	m	Time	m	Time	m	Time	m
1 W	0007	4.1	**9** TH	0543	4.9	**17** F	0028	4.4
	0644	1.9		1143	1.2		0659	1.6
	1252	4.2		1746	5.1		1258	4.5
	1913	1.8					1934	1.3
2 TH	0121	4.2	**10** F	0011	0.9	**18** SA	0141	4.7
	0742	1.8		0617	4.8		0804	1.3
	1348	4.4		1214	1.3		1400	4.8
	2008	1.5		1819	5.0		2036	0.9
3 F	0215	4.4	**11** SA	0045	1.0	**19** SU	0241	5.0
	0827	1.7		0653	4.7		0859	1.1
	1434	4.6		1248	1.4		1453	5.2
	2052	1.3		1854	4.9		2130	0.5
4 SA	0258	4.6	**12** SU	0122	1.1	**20** M	0332	5.3
	0905	1.5		0734	4.5		0946	0.8
	1512	4.8		1325	1.5		1539	5.5
	2130	1.1		1936	4.7	●	2217	0.2
5 SU	0336	4.7	**13** M	0204	1.3	**21** TU	0418	5.4
	0939	1.4		0822	4.3		1030	0.7
	1545	5.0		1411	1.7		1623	5.7
○	2205	1.0	☾	2030	4.5		2301	0.1
6 M	0410	4.8	**14** TU	0258	1.6	**22** W	0502	5.5
	1011	1.3		0921	4.2		1112	0.6
	1616	5.1		1514	1.8		1705	5.8
	2238	0.9		2140	4.3		2342	0.1
7 TU	0442	4.9	**15** W	0410	1.7	**23** TH	0544	5.4
	1042	1.2		1031	4.1		1151	0.7
	1645	5.1		1641	1.9		1746	5.7
	2310	0.9		2304	4.2			
8 W	0512	4.9	**16** TH	0536	1.8	**24** F	0020	0.3
	1112	1.2		1147	4.2		0626	5.2
	1715	5.1		1814	1.7		1228	0.8
	2340	0.8					1828	5.5
						25 SA	0058	0.6
							0707	4.9
							1305	1.1
							1912	5.2
						26 SU	0136	1.0
							0750	4.6
							1345	1.4
							2000	4.8
						27 M	0217	1.5
							0838	4.3
							1435	1.7
						☽	2057	4.3
						28 TU	0311	1.9
							0936	4.0
							1548	2.0
							2209	4.0

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

ENGLAND - HARTLEPOOL March 2023

LAT 54°42'N LONG 1°12'W

TIMES AND HEIGHTS OF HIGH AND LOW WATERS TIME ZONE **UT (GMT)**

	Time	m	Time	m	Time	m	Time	m
1 W	0435	2.2	**9** TH	0444	5.0	**17** F	0524	1.9
	1052	3.9		1049	1.0		1128	4.1
	1727	2.0		1647	5.2		1811	1.6
	2339	3.9		2313	0.7			
2 TH	0615	2.2	**10** F	0513	5.0	**18** SA	0026	4.3
	1220	4.0		1118	1.0		0651	1.7
	1853	1.8		1716	5.2		1246	4.4
				2343	0.7		1929	1.2
3 F	0104	4.0	**11** SA	0544	5.0	**19** SU	0137	4.7
	0722	2.0		1149	1.0		0753	1.3
	1326	4.2		1747	5.1		1347	4.8
	1950	1.6					2026	0.7
4 SA	0200	4.3	**12** SU	0015	0.8	**20** M	0230	5.0
	0808	1.8		0618	4.9		0843	1.0
	1413	4.5		1220	1.1		1436	5.2
	2033	1.3		1824	5.0		2114	0.4
5 SU	0240	4.5	**13** M	0050	1.0	**21** TU	0315	5.3
	0846	1.5		0656	4.7		0927	0.8
	1451	4.8		1257	1.3		1520	5.5
	2110	1.1		1907	4.8	●	2157	0.2
6 M	0316	4.7	**14** TU	0131	1.3	**22** W	0357	5.4
	0920	1.3		0742	4.4		1008	0.6
	1524	4.9		1342	1.5		1601	5.7
	2143	0.9		2004	4.5		2237	0.1
7 TU	0347	4.9	**15** W	0224	1.6	**23** TH	0437	5.4
	0950	1.2		0843	4.2		1046	0.5
	1553	5.1		1447	1.7		1640	5.7
○	2214	0.8	☾	2121	4.2		2314	0.2
8 W	0416	5.0	**16** TH	0342	1.9	**24** F	0515	5.3
	1020	1.0		1002	4.0		1123	0.6
	1620	5.1		1625	1.8		1720	5.6
	2244	0.7		2254	4.1		2349	0.4
						25 SA	0552	5.2
							1158	0.7
							1800	5.4
						26 SU	0023	0.7
							0629	4.9
							1233	1.0
							1842	5.0
						27 M	0056	1.1
							0707	4.6
							1311	1.3
							1928	4.6
						28 TU	0131	1.6
							0750	4.3
							1357	1.6
							2023	4.2
						29 W	0215	2.0
							0845	4.0
							1507	1.9
						☽	2134	3.9
						30 TH	0337	2.3
							1002	3.8
							1650	2.0
							2307	3.7
						31 F	0536	2.3
							1137	3.9
							1819	1.8

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

ENGLAND - HARTLEPOOL
LAT 54°42′N LONG 1°12′W

April 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m		Time	m		Time	m		Time	m
1 SA	0033	3.9	**9** SU	0514	5.1	**17** M	0122	4.7	**25** TU	0022	1.3
	0649	2.1		1125	0.8		0730	1.3		0632	4.6
	1250	4.1		1724	5.2		1326	4.9		1247	1.2
	1917	1.5		2350	0.8		2004	0.6		1904	4.5
2 SU	0129	4.2	**10** M	0549	4.9	**18** TU	0210	5.0	**26** W	0056	1.6
	0737	1.8		1201	0.9		0818	1.0		0714	4.4
	1339	4.4		1806	5.0		1414	5.2		1333	1.5
	2000	1.2					2050	0.4		1956	4.2
3 M	0210	4.5	**11** TU	0027	1.0	**19** W	0253	5.2	**27** TH	0138	2.0
	0815	1.5		0630	4.7		0901	0.8		0805	4.1
	1418	4.7		1241	1.1		1456	5.4		1437	1.7
	2037	1.0		1856	4.7		2131	0.3	☽	2101	3.9
4 TU	0245	4.7	**12** W	0110	1.4	**20** TH	0332	5.3	**28** F	0246	2.2
	0849	1.3		0720	4.5		0941	0.7		0914	3.9
	1451	4.9		1333	1.4		1536	5.5		1605	1.8
	2111	0.8		2000	4.4	●	2209	0.3		2223	3.8
5 W	0315	4.9	**13** TH	0207	1.7	**21** F	0409	5.3	**29** SA	0437	2.3
	0920	1.1		0824	4.2		1019	0.6		1041	3.9
	1520	5.0		1445	1.6		1615	5.5		1728	1.7
	2142	0.7	☾	2120	4.1		2245	0.5		2343	3.9
6 TH	0343	5.0	**14** F	0333	2.0	**22** SA	0444	5.2	**30** SU	0557	2.1
	0951	0.9		0945	4.1		1056	0.6		1157	4.1
	1549	5.1		1627	1.6		1655	5.3		1828	1.5
○	2212	0.6		2253	4.1		2318	0.7			
7 F	0412	5.1	**15** SA	0514	1.9	**23** SU	0519	5.1			
	1021	0.8		1113	4.2		1132	0.8			
	1617	5.2		1802	1.3		1735	5.1			
	2243	0.6					2351	1.0			
8 SA	0442	5.1	**16** SU	0019	4.4	**24** M	0554	4.9			
	1053	0.8		0633	1.7		1208	1.0			
	1649	5.2		1228	4.5		1817	4.8			
	2315	0.6		1911	1.0						

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

ENGLAND - HARTLEPOOL

LAT 54°42′N LONG 1°12′W

May 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m	Time	m	Time	m	Time	m
1 M	0043	4.1	**9** TU	0532	5.0	**17** W	0144	4.9
	0651	1.9		1151	0.8		0750	1.1
	1250	4.3		1802	4.9		1348	5.1
	1916	1.3					2022	0.6
2 TU	0127	4.4	**10** W	0014	1.1	**18** TH	0227	5.0
	0733	1.6		0618	4.8		0834	1.0
	1332	4.6		1239	1.0		1433	5.2
	1956	1.1		1859	4.7		2104	0.6
3 W	0203	4.6	**11** TH	0103	1.4	**19** F	0306	5.1
	0810	1.3		0711	4.6		0916	0.8
	1409	4.8		1338	1.2		1515	5.2
	2032	0.9		2005	4.4	●	2142	0.7
4 TH	0235	4.8	**12** F	0206	1.7	**20** SA	0343	5.1
	0844	1.1		0816	4.4		0956	0.8
	1442	5.0		1454	1.3		1555	5.2
	2106	0.7	☾	2121	4.3		2218	0.8
5 F	0307	5.0	**13** SA	0328	1.9	**21** SU	0418	5.0
	0919	1.0		0933	4.3		1034	0.8
	1516	5.1		1618	1.3		1636	5.1
○	2140	0.6		2242	4.3		2252	1.0
6 SA	0340	5.1	**14** SU	0451	1.8	**22** M	0452	5.0
	0954	0.8		1052	4.4		1112	0.9
	1551	5.2		1737	1.1		1717	4.9
	2215	0.6		2356	4.4		2325	1.2
7 SU	0414	5.1	**15** M	0602	1.6	**23** TU	0527	4.9
	1030	0.8		1201	4.6		1151	1.0
	1630	5.2		1842	0.9		1759	4.7
	2252	0.7					2357	1.4
8 M	0451	5.1	**16** TU	0055	4.7	**24** W	0606	4.7
	1109	0.8		0700	1.4		1231	1.2
	1713	5.1		1259	4.9		1844	4.5
	2331	0.9		1935	0.7			
25 TH	0033	1.6						
	0648	4.5						
	1316	1.4						
	1932	4.2						
26 F	0115	1.8						
	0736	4.3						
	1410	1.6						
	2027	4.1						
27 SA	0211	2.0						
	0833	4.2						
	1514	1.7						
☽	2130	4.0						
28 SU	0328	2.1						
	0940	4.1						
	1623	1.7						
	2238	4.0						
29 M	0446	2.1						
	1049	4.1						
	1725	1.6						
	2339	4.1						
30 TU	0548	1.9						
	1149	4.3						
	1819	1.4						
31 W	0030	4.3						
	0640	1.7						
	1239	4.5						
	1907	1.2						

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

ENGLAND - HARTLEPOOL
LAT 54°42′N LONG 1°12′W

June 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m		Time	m		Time	m		Time	m
1 TH	0114	4.5	**9** F	0103	1.3	**17** SA	0245	4.8	**25** SU	0139	1.8
	0725	1.5		0706	4.9		0857	1.1		0756	4.4
	1324	4.7		1343	0.9		1501	4.9		1425	1.5
	1950	1.0		2002	4.6		2121	1.1		2041	4.2
2 F	0154	4.7	**10** SA	0203	1.5	**18** SU	0324	4.9	**26** M	0231	1.9
	0807	1.2		0806	4.8		0939	1.0		0849	4.3
	1407	4.9		1447	1.0		1544	4.9		1519	1.6
	2031	0.9	☾	2107	4.5	●	2158	1.2	☽	2136	4.1
3 SA	0233	4.9	**11** SU	0309	1.7	**19** M	0400	4.9	**27** TU	0333	2.0
	0849	1.0		0913	4.7		1019	1.0		0947	4.3
	1449	5.0		1554	1.1		1625	4.8		1617	1.6
	2112	0.8		2214	4.4		2233	1.3		2234	4.1
4 SU	0313	5.0	**12** M	0417	1.7	**20** TU	0434	4.9	**28** W	0440	2.0
	0932	0.9		1022	4.6		1059	1.0		1048	4.3
	1534	5.1		1702	1.1		1704	4.8		1717	1.5
○	2155	0.8		2321	4.4		2307	1.3		2331	4.2
5 M	0354	5.1	**13** TU	0524	1.6	**21** W	0509	4.9	**29** TH	0542	1.8
	1016	0.7		1129	4.7		1137	1.0		1148	4.4
	1621	5.2		1807	1.1		1744	4.7		1815	1.4
	2238	0.8					2341	1.4			
6 TU	0437	5.2	**14** W	0022	4.5	**22** TH	0546	4.8	**30** F	0026	4.4
	1102	0.7		0627	1.5		1216	1.1		0640	1.6
	1711	5.1		1230	4.7		1824	4.6		1245	4.6
	2323	0.9		1905	1.1					1911	1.3
7 W	0523	5.1	**15** TH	0116	4.6	**23** F	0016	1.5			
	1151	0.7		0722	1.4		0626	4.7			
	1804	5.0		1326	4.8		1256	1.2			
				1956	1.1		1906	4.4			
8 TH	0011	1.1	**16** F	0203	4.8	**24** SA	0055	1.7			
	0612	5.0		0812	1.2		0709	4.6			
	1244	0.8		1416	4.9		1338	1.4			
	1901	4.8		2040	1.1		1951	4.3			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

ENGLAND - HARTLEPOOL
LAT 54°42′N LONG 1°12′W

July 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m		Time	m		Time	m		Time	m
1 SA	0118	4.6	**9** SU	0145	1.3	**17** M	0311	4.8	**25** TU	0146	1.7
	0734	1.4		0747	5.1		0930	1.1		0801	4.6
	1339	4.8		1424	0.8		1536	4.8		1427	1.4
	2003	1.1		2040	4.7	●	2145	1.4	☽	2045	4.3
2 SU	0207	4.8	**10** M	0239	1.5	**18** TU	0348	4.9	**26** W	0234	1.8
	0827	1.1		0844	4.9		1009	1.0		0853	4.4
	1432	5.0		1521	1.0		1614	4.8		1520	1.6
	2054	1.0	☾	2138	4.5		2219	1.4		2140	4.2
3 M	0254	5.0	**11** TU	0339	1.6	**19** W	0421	5.0	**27** TH	0335	1.9
	0918	0.9		0947	4.7		1045	1.0		0955	4.3
	1524	5.1		1623	1.3		1650	4.8		1624	1.7
○	2143	0.9		2240	4.4		2252	1.3		2242	4.2
4 TU	0341	5.2	**12** W	0445	1.7	**20** TH	0454	5.0	**28** F	0450	1.9
	1009	0.7		1054	4.5		1121	1.0		1105	4.3
	1616	5.2		1730	1.4		1725	4.8		1734	1.7
	2232	0.9		2346	4.3		2324	1.3		2347	4.2
5 W	0428	5.3	**13** TH	0555	1.7	**21** F	0526	5.0	**29** SA	0605	1.8
	1100	0.5		1204	4.5		1155	1.0		1217	4.4
	1707	5.3		1837	1.5		1759	4.8		1843	1.5
	2320	0.9					2356	1.4			
6 TH	0515	5.4	**14** F	0049	4.4	**22** SA	0601	4.9	**30** SU	0050	4.4
	1150	0.4		0701	1.6		1228	1.1		0714	1.5
	1759	5.2		1310	4.5		1836	4.7		1324	4.7
				1936	1.5					1947	1.4
7 F	0007	1.0	**15** SA	0144	4.5	**23** SU	0029	1.5	**31** M	0148	4.7
	0603	5.4		0758	1.4		0638	4.8		0816	1.2
	1240	0.5		1407	4.6		1304	1.2		1423	4.9
	1852	5.1		2025	1.5		1914	4.6		2043	1.2
8 SA	0055	1.1	**16** SU	0231	4.7	**24** M	0106	1.6			
	0654	5.3		0847	1.3		0717	4.7			
	1331	0.6		1455	4.7		1342	1.3			
	1945	4.9		2107	1.4		1957	4.4			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

ENGLAND - HARTLEPOOL
LAT 54°42'N LONG 1°12'W

August 2023

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

TIME ZONE UT (GMT)

	Time	m	Time	m	Time	m	Time	m
1 TU ○	0240	5.0	**9** W	0258	1.6	**17** TH	0404	5.1
	0912	0.8		0910	4.6		1026	0.9
	1517	5.2		1540	1.6		1630	4.9
	2135	1.0		2157	4.2		2232	1.2
2 W	0329	5.3	**10** TH	0406	1.8	**18** F	0433	5.1
	1004	0.5		1021	4.3		1057	0.9
	1608	5.4		1653	1.8		1700	5.0
	2223	0.8		2307	4.1		2301	1.2
3 TH	0415	5.5	**11** F	0529	1.9	**19** SA	0502	5.1
	1052	0.3		1143	4.2		1127	0.9
	1656	5.5		1816	1.9		1729	5.0
	2309	0.8					2331	1.2
4 F	0501	5.7	**12** SA	0024	4.2	**20** SU	0531	5.1
	1139	0.2		0649	1.7		1157	0.9
	1743	5.5		1303	4.3		1801	4.9
	2352	0.8		1923	1.9			
5 SA	0546	5.7	**13** SU	0128	4.4	**21** M	0001	1.3
	1224	0.2		0751	1.5		0603	5.0
	1830	5.3		1401	4.4		1228	1.0
				2013	1.7		1836	4.8
6 SU	0034	0.9	**14** M	0217	4.6	**22** TU	0033	1.4
	0632	5.6		0838	1.3		0637	4.9
	1307	0.4		1446	4.6		1303	1.2
	1917	5.1		2054	1.6		1914	4.6
7 M	0117	1.1	**15** TU	0258	4.8	**23** W	0107	1.5
	0719	5.3		0917	1.1		0716	4.7
	1353	0.8		1524	4.8		1343	1.4
	2005	4.8		2129	1.4		1958	4.4
8 TU ☾	0204	1.3	**16** W ●	0333	5.0	**24** TH ☽	0149	1.7
	0811	5.0		0953	1.0		0806	4.5
	1442	1.2		1558	4.9		1433	1.7
	2058	4.5		2202	1.3		2053	4.2
						25 F	0246	1.9
							0913	4.3
							1540	1.9
							2201	4.1
						26 SA	0410	2.0
							1037	4.2
							1706	1.9
							2317	4.1
						27 SU	0546	1.8
							1203	4.3
							1830	1.8
						28 M	0031	4.4
							0706	1.5
							1317	4.6
							1938	1.5
						29 TU	0134	4.8
							0809	1.0
							1416	5.0
							2033	1.2
						30 W	0226	5.2
							0902	0.6
							1506	5.3
							2121	0.9
						31 TH ○	0313	5.5
							0950	0.3
							1552	5.5
							2206	0.7

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

ENGLAND - HARTLEPOOL September 2023

LAT 54°42'N LONG 1°12'W

TIMES AND HEIGHTS OF HIGH AND LOW WATERS — TIME ZONE UT (GMT)

	Time	m		Time	m		Time	m		Time	m
1	0357	5.8	**9**	0508	2.0	**17**	0432	5.2	**25**	0540	1.7
	1035	0.1		1125	4.0		1055	0.8		1158	4.3
F	1636	5.6	SA	1755	2.2	SU	1656	5.1	M	1820	1.9
	2248	0.6		2357	4.0		2302	1.1			
2	0439	5.9	**10**	0636	1.8	**18**	0459	5.2	**26**	0014	4.4
	1117	0.1		1252	4.1		1124	0.8		0658	1.3
SA	1719	5.6	SU	1905	2.1	M	1726	5.1	TU	1309	4.7
	2328	0.6					2332	1.1		1923	1.5
3	0521	5.8	**11**	0107	4.3	**19**	0529	5.1	**27**	0116	4.9
	1157	0.2		0735	1.5		1155	1.0		0755	0.9
SU	1801	5.4	M	1346	4.4	TU	1758	4.9	W	1402	5.1
				1953	1.8					2014	1.2
4	0006	0.7	**12**	0156	4.6	**20**	0003	1.2	**28**	0207	5.3
	0604	5.7		0818	1.3		0603	5.0		0843	0.5
M	1236	0.5	TU	1426	4.6	W	1229	1.2	TH	1448	5.4
	1843	5.2		2032	1.6		1835	4.8		2059	0.9
5	0045	1.0	**13**	0235	4.9	**21**	0037	1.4	**29**	0251	5.6
	0649	5.4		0854	1.1		0644	4.8		0928	0.2
TU	1316	0.9	W	1501	4.8	TH	1308	1.5	F	1530	5.6
	1927	4.8		2105	1.4		1918	4.5	○	2141	0.7
6	0127	1.3	**14**	0308	5.0	**22**	0119	1.6	**30**	0333	5.8
	0738	4.9		0927	0.9		0738	4.5		1010	0.1
W	1400	1.4	TH	1533	5.0	F	1357	1.8	SA	1610	5.6
☾	2015	4.5		2136	1.2	☽	2015	4.3		2221	0.6
7	0218	1.6	**15**	0338	5.2	**23**	0218	1.8			
	0836	4.5		0958	0.8		0852	4.2			
TH	1454	1.9	F	1602	5.1	SA	1510	2.0			
	2113	4.2	●	2205	1.1		2130	4.1			
8	0329	1.9	**16**	0406	5.2	**24**	0353	1.9			
	0951	4.1		1027	0.8		1025	4.1			
F	1615	2.2	SA	1629	5.1	SU	1652	2.1			
	2228	4.0		2233	1.1		2255	4.1			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

ENGLAND - HARTLEPOOL October 2023

LAT 54°42′N LONG 1°12′W

TIMES AND HEIGHTS OF HIGH AND LOW WATERS TIME ZONE **UT (GMT)**

	Time	m	Time	m	Time	m	Time	m
1 SU	0413	5.9	**9** M	0605	1.8	**17** TU	0431	5.2	**25** W	0636	1.1
	1049	0.2		1223	4.1		1054	0.9		1251	4.8
	1650	5.6		1832	2.2		1654	5.2		1857	1.6
	2300	0.6	○				2307	1.0			
2 M	0454	5.8	**10** TU	0031	4.3	**18** W	0504	5.2	**26** TH	0052	5.0
	1127	0.4		0702	1.6		1127	1.0		0731	0.8
	1729	5.4		1316	4.4		1728	5.0		1340	5.1
	2338	0.7		1921	1.9		2341	1.1		1948	1.2
3 TU	0536	5.6	**11** W	0122	4.5	**19** TH	0543	5.0	**27** F	0142	5.3
	1203	0.8		0744	1.3		1203	1.2		0818	0.5
	1807	5.1		1355	4.6		1807	4.8		1424	5.3
				1959	1.7					2033	1.0
4 W	0016	1.0	**12** TH	0201	4.8	**20** F	0019	1.3	**28** SA	0227	5.5
	0621	5.2		0820	1.1		0631	4.8		0902	0.4
	1239	1.2		1429	4.8		1244	1.5		1505	5.5
	1848	4.8		2033	1.4		1854	4.6	○	2115	0.8
5 TH	0057	1.3	**13** F	0235	5.0	**21** SA	0107	1.5	**29** SU	0309	5.7
	0710	4.8		0854	0.9		0731	4.5		0942	0.4
	1318	1.6		1500	5.0		1337	1.9		1544	5.5
	1933	4.5		2105	1.2		1953	4.4		2156	0.7
6 F	0146	1.6	**14** SA	0306	5.1	**22** SU	0213	1.7	**30** M	0350	5.7
	0807	4.3		0924	0.8		0848	4.2		1021	0.5
	1406	2.1		1528	5.1		1455	2.1		1621	5.4
☾	2028	4.2	●	2135	1.1	☽	2109	4.2		2235	0.7
7 SA	0257	1.9	**15** SU	0334	5.2	**23** M	0351	1.7	**31** TU	0432	5.5
	0922	4.0		0954	0.8		1019	4.2		1057	0.8
	1532	2.4		1555	5.2		1637	2.1		1659	5.3
	2145	4.0		2204	1.0		2234	4.3		2314	0.8
8 SU	0439	2.0	**16** M	0401	5.2	**24** TU	0526	1.5			
	1058	3.9		1023	0.8		1146	4.4			
	1721	2.4		1623	5.2		1757	1.9			
	2318	4.0		2235	1.0		2351	4.6			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

ENGLAND - HARTLEPOOL November 2023

LAT 54°42'N LONG 1°12'W

TIMES AND HEIGHTS OF HIGH AND LOW WATERS — TIME ZONE **UT (GMT)**

	Time	m	Time	m	Time	m	Time	m
1 W	0515	5.3	**9** TH	0033	4.4	**17** F	0538	5.0	**25** SA	0116	5.1
	1133	1.1		0700	1.4		1148	1.3		0752	0.8
	1736	5.1		1312	4.5		1753	5.0		1359	5.1
	2353	1.0		1918	1.8					2007	1.1
2 TH	0559	5.0	**10** F	0117	4.6	**18** SA	0015	1.1	**26** SU	0205	5.3
	1208	1.4		0740	1.2		0631	4.8		0837	0.8
	1815	4.9		1349	4.7		1234	1.6		1441	5.2
				1955	1.6		1843	4.8		2053	1.0
3 F	0035	1.3	**11** SA	0155	4.8	**19** SU	0109	1.3	**27** M	0250	5.3
	0648	4.6		0816	1.1		0733	4.5		0918	0.8
	1244	1.8		1421	4.9		1331	1.8		1521	5.2
	1859	4.6		2029	1.3		1942	4.6	○	2136	0.9
4 SA	0124	1.5	**12** SU	0229	5.0	**20** M	0217	1.4	**28** TU	0334	5.3
	0743	4.3		0849	1.0		0844	4.4		0958	0.9
	1328	2.1		1452	5.1		1446	2.0		1559	5.2
	1950	4.3		2103	1.2	☽	2052	4.5		2217	0.9
5 SU	0228	1.8	**13** M	0302	5.1	**21** TU	0337	1.4	**29** W	0418	5.2
	0850	4.0		0921	0.9		1002	4.3		1035	1.1
	1438	2.4		1523	5.2		1609	2.0		1636	5.2
☾	2057	4.1	●	2137	1.1		2208	4.5		2258	0.9
6 M	0351	1.9	**14** TU	0336	5.2	**22** W	0456	1.3	**30** TH	0501	5.0
	1011	3.9		0955	0.9		1118	4.5		1111	1.3
	1621	2.4		1556	5.2		1722	1.9		1713	5.1
	2221	4.1		2212	1.0		2320	4.7		2338	1.0
7 TU	0512	1.8	**15** W	0412	5.2	**23** TH	0604	1.1			
	1130	4.0		1030	0.9		1221	4.7			
	1740	2.3		1631	5.2		1825	1.6			
	2337	4.2		2250	1.0						
8 W	0613	1.6	**16** TH	0452	5.1	**24** F	0022	4.9			
	1229	4.3		1107	1.1		0702	0.9			
	1834	2.0		1710	5.1		1313	4.9			
				2330	1.0		1919	1.4			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

ENGLAND - HARTLEPOOL December 2023

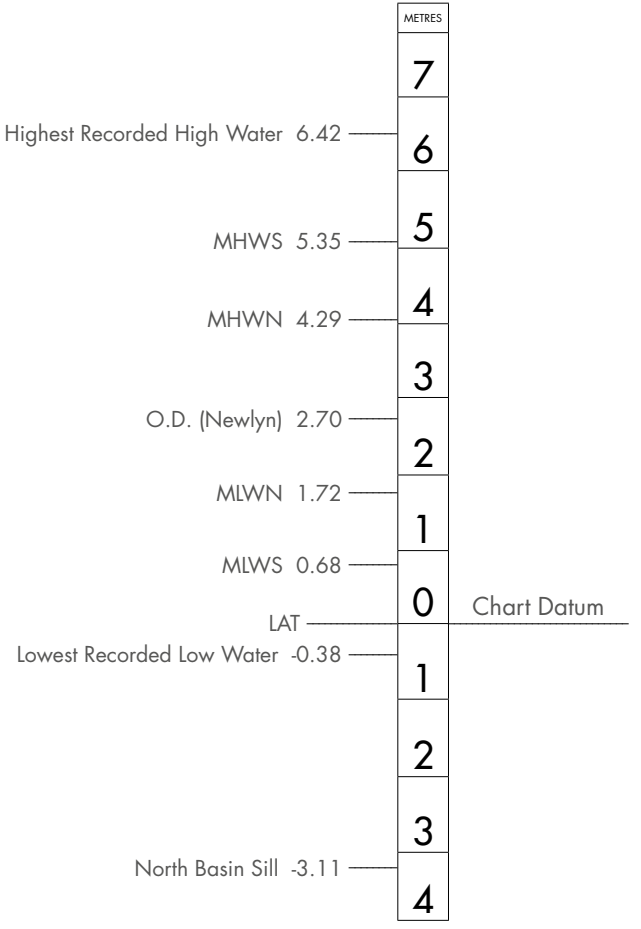
LAT 54°42'N LONG 1°12'W

TIMES AND HEIGHTS OF HIGH AND LOW WATERS TIME ZONE **UT (GMT)**

	Time	m		Time	m		Time	m		Time	m
1	0544	4.8	**9**	0022	4.4	**17**	0017	0.8	**25**	0151	4.9
	1145	1.5		0651	1.5		0631	4.9		0819	1.2
F	1751	4.9	SA	1259	4.5	SU	1232	1.4	M	1424	4.9
				1910	1.7		1835	5.1		2039	1.2
2	0020	1.2	**10**	0110	4.6	**18**	0110	0.9	**26**	0242	4.9
	0630	4.6		0734	1.3		0728	4.8		0903	1.2
SA	1221	1.7	SU	1340	4.7	M	1326	1.6	TU	1507	5.0
	1833	4.8		1953	1.5		1929	5.0		2125	1.1
3	0105	1.4	**11**	0154	4.8	**19**	0208	1.0	**27**	0329	4.9
	0718	4.4		0815	1.2		0829	4.6		0943	1.3
SU	1301	2.0	M	1418	4.9	TU	1426	1.7	W	1546	5.1
	1920	4.6		2034	1.3	☽	2030	4.8	○	2208	1.0
4	0155	1.6	**12**	0236	4.9	**20**	0311	1.1	**28**	0411	4.9
	0812	4.2		0854	1.1		0933	4.5		1021	1.3
M	1352	2.1	TU	1457	5.0	W	1533	1.8	TH	1623	5.1
	2013	4.4	●	2116	1.1		2135	4.7		2248	1.0
5	0254	1.7	**13**	0319	5.1	**21**	0417	1.2	**29**	0452	4.9
	0913	4.1		0934	1.0		1039	4.5		1056	1.4
TU	1502	2.3	W	1536	5.2	TH	1641	1.8	F	1658	5.1
☾	2116	4.2		2158	1.0		2243	4.7		2327	1.0
6	0401	1.8	**14**	0403	5.1	**22**	0526	1.3	**30**	0531	4.8
	1018	4.0		1016	1.0		1145	4.5		1130	1.5
W	1620	2.3	TH	1617	5.2	F	1748	1.7	SA	1734	5.0
	2225	4.2		2242	0.9		2351	4.7			
7	0505	1.7	**15**	0449	5.1	**23**	0631	1.2	**31**	0004	1.1
	1121	4.1		1059	1.1		1245	4.6		0611	4.7
TH	1728	2.2	F	1700	5.2	SA	1852	1.6	SU	1202	1.6
	2328	4.3		2328	0.8					1811	4.9
8	0602	1.6	**16**	0538	5.1	**24**	0054	4.8			
	1214	4.3		1144	1.2		0729	1.2			
F	1823	2.0	SA	1745	5.2	SU	1337	4.8			
							1949	1.4			

The time throughout is Greenwich Mean Time, therefore add 1 hour during the operation of British Summer Time. Heights are shown above the lowest astronomical tide (LAT), which is Chart Datum.

TIDAL DATA HARTLEPOOL



RIVER TEES TIDAL CURRENT INFORMATION LOCATIONS

		Below Surface	Below L.A.T.
A	Tees North Buoy		3.7
B	Tees No 3 Buoy		15.5
C	Tees No 10 Buoy	0.5 - 4cm	
D	Tees No. 16 Buoy	1 - 4m	
E	Tees No. 19 Buoy	0.5 - 1m	
F	Cargo Fleet Wharf	0.5 - 2m	

TIDAL CURRENT DATA (SPRINGS)

TIME	A		B		C		D		E		F	
	Dir.	Sp	Dir.	Sp	Dir.	Sp	Dir.	Sp	Dir.	Sp	Dir.	Sp
-6	355	0.5	303	0.3	64	0.1	7	0.3	23	0.3	60	0.5
-5	322	0.3	283	0.3	204	0.2	331	0.1	21	0.2	37	0.1
-4	275	0.1	259	0.2	226	0.5	171	0.3	266	0.2	160	0.3
-3	187	0.2	212	0.2	232	0.7	211	0.2	272	0.1	109	0.6
-2	170	0.4	187	0.2	227	0.7	159	0.2	158	0.3	129	0.3
-1	167	0.5	172	0.2	164	0.5	141	0.1	131	0.2	16	0.4
HW	164	0.4	166	0.2	45	0.4	99	0.1	69	0.2	125	0.4
+1	158	0.2	162	0.1	48	0.9	358	0.2	65	0.2	48	0.8
+2	121	0.1	227	0.2	39	1.0	360	0.5	47	0.5	57	0.8
+3	254	0.2	324	0.2	60	1.4	4	0.6	56	0.6	56	0.9
+4	347	0.4	331	0.3	41	1.1	8	0.2	45	0.9	60	1.0
+5	332	0.6	321	0.4	46	1.3	14	0.3	49	0.9	60	1.1
+6	335	0.5	306	0.4	52	1.1	352	0.4	45	0.5	25	0.5

Notes:- Directions are in degrees True, Speeds are in Knots.
The above data was collected between Feb. 1985 & March 1991

TIDAL CONSTANTS

For High Water, at the following places, adjustments as given below should be made to the times given for River Tees Entrance.

		h.m.
Blyth	Subtract	0 18
Dover	Subtract	4 56
Grangemouth	Subtract	0 51
Gravesend	Subtract	2 58
Grimsby	Add	1 53
Holy Island	Subtract	0 58
Hull	Add	2 32
Leith	Subtract	1 09
North Shields	Subtract	0 17
Seaham Harbour	Subtract	0 15
Sunderland	Subtract	0 17
Whitby	Add	0 14

RIVER TEES - TIDES

MEAN HIGH WATER SPRING	5.5M
MEAN LOW WATER SPRING	0.9M
MEAN SPRING RANGE	4.6M

INTERVAL (HOURS)	TIDAL HEIGHT (M)	HOURLY CHANGE (M)
-5.50	0.9	
		+0.3
-5.00	1.2	
		+0.8
-4.00	2.0	
		+1.3
-3.00	3.3	
		+1.1
-2.00	4.4	
		+0.8
-1.00	5.2	
		+0.3
HW	5.5	
		-0.3
+1.00	5.2	
		-0.8
+2.00	4.4	
		-1.1
+3.00	3.3	
		-1.0
+4.00	2.3	
		-0.9
+5.00	1.4	
		-0.4
+6.00	1.0	
		-0.1
+6.40	0.9	

MEAN HIGH WATER NEAP	4.3M
MEAN LOW WATER NEAP	2.0M
MEAN NEAP RANGE	2.3M

INTERVAL (HOURS)	TIDAL HEIGHT (M)	HOURLY CHANGE (M)
-6.15	2.0	
		–
-6.00	2.0	
		+0.2
-5.00	2.2	
		+0.4
-4.00	2.6	
		+0.6
-3.00	3.2	
		+0.6
-2.00	3.8	
		+0.4
-1.00	4.2	
		+0.1
HW	4.3	
		-0.1
+1.00	4.2	
		-0.4
+2.00	3.8	
		-0.6
+3.00	3.2	
		-0.5
+4.00	2.7	
		-0.4
+5.00	2.3	
		-0.2
+6.00	2.1	
		-0.1
+6.30	2.0	

Zero is Lowest Astronomical Tide (L.A.T.)

The information given above is approximate only as the height of the tide is liable to be affected by meterological conditions.

Strong winds from N.W. through North to N.E. increase tide.

Strong S.E. winds depress tide.

DISTANCE IN THE RIVER TEES FROM THE TEES APPROACH LIGHT BUOY

(Nautical Miles)

	N.M. between points	Continuous N.M.
Tees Approach Buoy		0.00
	3.48	
South Gare Lighthouse		3.48
	1.55	
No. 13 Beacon Light		5.03
	1.27	
Tees Dock Entrance		6.30
	0.96	
No. 23 Light Buoy (North Tees "A" Jetty)		7.26
	0.83	
No. 27 Light Buoy		8.09
	0.59	
No. 32 Buoy		8.68
	0.54	
Transporter Bridge		9.22
	0.80	
No. 37 Beacon Light		10.02
	0.92	
Inter Terminals Riverside Jetty		10.94
	0.50	
Tees (Newport) Bridge		11.44
	0.35	
A19 Viaduct		11.79
	0.65	
Tees Barrage		12.44

NOTES

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