

SCOTLAND; WEST COAST

No.	PLACE	Lat. N.	Long. W.	TIME DIFFERENCES				HEIGHT DIFFERENCES (IN METRES)				M.L. Z ₀ m.
				High Water Zone U.T.(G.M.T.)	Low Water	MHWS	MHWN	MLWN	MLWS			
404	GREENOCK	(see page 134)		0000 and 1200	0600 and 1800	0000 and 1200	0600 and 1800	3.4	2.8	1.0	0.3	
<i>Loch Fyne</i>												
394	East Loch Tarbert	55 52	5 24	-0005	-0005	0000	-0005	+0.2	+0.1	0.0	0.0	2.03
395	Inveraray	56 14	5 04	+0011	+0011	+0034	+0034	-0.1	+0.1	-0.5	-0.2	⊙
<i>Kyles of Bute</i>												
396	Rubha Bodach	55 55	5 09	-0020	-0010	-0007	-0007	-0.2	-0.1	+0.2	+0.2	1.78
396a	Tighnabruich	55 55	5 13	+0007	-0010	-0002	-0015	0.0	+0.2	+0.4	+0.5	2.08
<i>Firth of Clyde (cont.)</i>												
398	Millport	55 45	4 56	-0005	-0025	-0025	-0005	0.0	-0.1	0.0	+0.1	1.99
399	Rothesay Bay	55 51	5 03	-0020	-0015	-0010	-0002	+0.2	+0.2	+0.2	+0.2	1.90
399a	Wemyss Bay	55 53	4 53	-0005	-0005	-0005	-0005	0.0	0.0	+0.1	+0.1	⊙
<i>Loch Long</i>												
399b	Coulport	56 03	4 53	-0011	-0011	-0008	-0008	0.0	0.0	0.0	0.0	2.01
399c	Lochgoilhead	56 10	4 54	+0015	0000	-0005	-0005	-0.2	-0.3	-0.3	-0.3	1.71
401	Arrochar	56 12	4 45	-0005	-0005	-0005	-0005	0.0	0.0	-0.1	-0.1	⊙
<i>Gare Loch</i>												
402	Rosneath	56 01	4 47	-0005	-0005	-0005	-0005	0.0	-0.1	0.0	0.0	2.02
402a	Faslane	56 04	4 49	-0010	-0010	-0010	-0010	0.0	0.0	-0.1	-0.2	1.87
402b	Garelochhead	56 05	4 50	0000	0000	0000	0000	0.0	0.0	0.0	-0.1	⊙
<i>River Clyde</i>												
403	Helensburgh	56 00	4 44	0000	0000	0000	0000	0.0	0.0	0.0	0.0	⊙
404	GREENOCK	55 57	4 46	STANDARD PORT				See Table V				1.97
405	Port Glasgow	55 56	4 41	+0010	+0005	+0010	+0020	+0.2	+0.1	0.0	0.0	⊙
406	Bowling	55 56	4 29	+0020	+0010	+0030	+0055	+0.6	+0.5	+0.3	+0.1	⊙
406a	Renfrew	55 53	4 23	+0025	+0015	+0035	+0100	+0.9	+0.8	+0.5	+0.2	⊙
407	Glasgow	55 51	4 16	+0025	+0015	+0035	+0105	+1.3	+1.2	+0.6	+0.4	2.89 c
<i>Firth of Clyde (cont.)</i>												
408	Brodick Bay	55 35	5 08	0000	0000	+0005	+0005	-0.2	-0.2	0.0	0.0	1.86
409	Lamlash	55 32	5 07	-0016	-0036	-0024	-0004	-0.2	-0.2	⊙	⊙	⊙
410	Ardrossan	55 38	4 49	-0020	-0010	-0010	-0010	-0.2	-0.2	+0.1	+0.1	1.86
411	Irvine	55 36	4 41	-0020	-0020	-0030	-0010	-0.3	-0.3	-0.1	0.0	⊙
412	Troon	55 33	4 41	-0025	-0025	-0020	-0020	-0.2	-0.2	0.0	0.0	1.91
413	Ayr	55 28	4 39	-0025	-0025	-0030	-0015	-0.4	-0.3	+0.1	+0.1	⊙
414	Girvan	55 15	4 52	-0025	-0040	-0035	-0010	-0.3	-0.3	-0.1	0.0	1.82
<i>Loch Ryan</i>												
414a	Stranraer	54 55	5 03	-0020	-0020	-0017	-0017	-0.4	-0.4	-0.4	-0.2	⊙
452	LIVERPOOL	(see page 142)		0000 and 1200	0600 and 1800	0200 and 1400	0800 and 2000	9.3	7.4	2.9	0.9	
415	Portpatrick	54 50	5 07	+0018	+0026	0000	-0035	-5.5	-4.4	-2.0	-0.6	2.06
<i>Wigtown Bay</i>												
420	Drummore	54 41	4 53	+0030	+0040	+0015	+0020	-3.4	-2.5	-0.9	-0.3	3.32
420a	Port William	54 43	4 40	+0030	+0030	+0025	0000	-2.9	-2.2	-0.8	⊙	⊙
421	Isle of Whithorn	54 42	4 22	+0020	+0025	+0025	+0005	-2.4	-2.0	-0.8	-0.2	3.74
422	Garlieston	54 47	4 21	+0025	+0035	+0030	+0005	-2.3	-1.7	-0.5	⊙	⊙
<i>Solway Firth</i>												
422a	Kirkcudbright Bay	54 48	4 04	+0015	+0015	+0010	0000	-1.8	-1.5	-0.5	-0.1	⊙
424	Hestan Islet	54 50	3 48	+0025	+0025	+0020	+0025	-1.0	-1.1	-0.5	0.0	4.21
425	Southernness Point	54 52	3 36	+0030	+0030	+0030	+0010	-0.7	-0.7	⊙	⊙	⊙
426	Annan Waterfoot	54 58	3 16	+0050	+0105	+0220	+0310	-2.2	-2.6	-2.7	‡	⊙ *
430	Torduff Point	54 58	3 09	+0105	+0140	+0520	+0410	-4.1	-4.9	‡	‡	⊙ *
431	Redkirk	54 59	3 06	+0110	+0215	+0715	+0445	-5.5	-6.2	‡	‡	⊙ *
England												
432	Silloth	54 52	3 24	+0030	+0040	+0045	+0055	-0.1	-0.3	-0.6	-0.1	⊙
433	Maryport	54 43	3 30	+0017	+0032	+0020	+0005	-0.7	-0.8	-0.4	0.0	⊙
434	Workington	54 39	3 34	+0020	+0020	+0020	+0010	-1.2	-1.1	-0.3	0.0	4.54
435	Whitehaven	54 33	3 36	+0005	+0015	+0010	+0005	-1.3	-1.1	-0.5	+0.1	4.53
436	Tarn Point	54 17	3 25	+0005	+0005	+0010	0000	-1.0	-1.0	-0.4	0.0	⊙
437	Duddon Bar	54 09	3 20	+0003	+0003	+0008	+0002	-0.8	-0.8	-0.3	0.0	⊙

⊙ No data.

* See notes on page 324.

§ Dries out except for river water.

‡ The tide does not normally fall below Chart Datum.

c For intermediate heights, use harmonic constants (see Part III).

x M.L. inferred.

ENGLAND, WEST COAST; ISLE OF MAN; WALES

No.	PLACE	Lat. N.	Long. W.	TIME DIFFERENCES				HEIGHT DIFFERENCES (IN METRES)				M.L. Z ₀ m.
				High Water	Low Water	MHWS	MHWN	MLWN	MLWS			
				Zone U.T.(G.M.T.)								
439	BARROW (RAMSDEN DOCK)	(see page 138)		0000 and 1200	0600 and 1800	0100 and 1300	0700 and 1900	9.3	7.1	3.0	1.1	5.02
<i>Morecambe Bay</i>												
439a	Roa Island	54 04	3 10	-0004	-0004	-0004	-0004	-0.1	0.0	0.0	-0.1	4.96
439b	Haws Point	54 03	3 10	-0007	-0004	-0002	-0005	+0.1	0.0	0.0	0.0	4.89
439c	Halfway Shoal	54 02	3 12	-0012	-0008	-0007	-0022	-0.4	-0.3	-0.2	-0.1	4.89
452	LIVERPOOL	(see page 142)		0000 and 1200	0600 and 1800	0200 and 1400	0700 and 1900	9.3	7.4	2.9	0.9	
440	Ulverston	54 11	3 04	+0020	+0040	⊙	⊙	0.0	-0.1	⊙	⊙	⊙
440a	Arnside	54 12	2 51	+0100	+0135	⊙	⊙	+0.5	+0.2	⊙	⊙	⊙
440b	Morecambe	54 04	2 52	+0005	+0010	+0030	+0015	+0.2	0.0	0.0	+0.2	⊙
441	Heysham	54 02	2 55	+0005	+0005	+0015	0000	+0.1	0.0	0.0	+0.2	5.10
<i>River Lune</i>												
442	Glasson Dock	54 00	2 51	+0020	+0030	+0220	+0240	-2.7	-3.0	⊙	⊙	⊙
442a	Lancaster	54 03	2 49	+0110	+0030	§	§	-5.0	-4.9	§	§	⊙
<i>River Wyre</i>												
443	Wyre Lighthouse	53 57	3 02	-0010	-0010	+0005	0000	-0.1	-0.1	⊙	⊙	⊙
444	Fleetwood	53 56	3 00	-0008	-0008	-0003	-0003	-0.1	-0.1	+0.1	+0.3	5.03
445	Blackpool	53 49	3 04	-0015	-0005	-0005	-0015	-0.4	-0.4	-0.1	+0.1	⊙
<i>River Ribble</i>												
446	Preston	53 46	2 45	+0010	+0010	+0335	+0310	-4.0	-4.1	-2.8	-0.8	⊙
<i>Liverpool Bay</i>												
447	Southport	53 39	3 01	-0020	-0010	⊙	⊙	-0.3	-0.3	⊙	⊙	⊙
448	Formby	53 32	3 07	-0015	-0010	-0020	-0020	-0.3	-0.1	0.0	+0.1	5.15
<i>River Mersey</i>												
451	Gladstone Dock	53 27	3 01	-0003	-0003	-0003	-0003	-0.1	-0.1	0.0	-0.1	5.15
452	LIVERPOOL (ALFRED DOCK)	53 24	3 01	STANDARD PORT				See Table V				5.13
453	Eastham	53 19	2 57	+0010	+0010	+0009	+0009	+0.3	+0.1	-0.1	-0.3	5.17
455	Hale Head	53 19	2 48	+0030	+0025	⊙	⊙	-2.4	-2.5	⊙	⊙	⊙
456	Widnes	53 21	2 44	+0040	+0045	+0400	+0345	-4.2	-4.4	-2.5	-0.3	⊙
456a	Fiddler's Ferry	53 22	2 39	+0100	+0115	+0540	+0450	-5.9	-6.3	-2.4	-0.4	⊙
<i>River Dee</i>												
461	Hilbre Island	53 23	3 13	-0015	-0012	-0010	-0015	-0.3	-0.2	+0.2	+0.4	5.15
462	Mostyn Docks	53 19	3 16	-0020	-0015	-0020	-0020	-0.8	-0.7	⊙	⊙	⊙
463	Connah's Quay	53 13	3 03	0000	+0015	+0355	+0340	-4.6	-4.4	§	§	⊙
464	Chester	53 12	2 54	+0105	+0105	+0500	+0500	-5.3	-5.4	§	§	⊙
<i>Isle of Man</i>												
466	Peel	54 14	4 42	-0015	+0010	0000	-0010	-4.0	-3.2	-1.4	-0.4	2.90
467	Ramsey	54 19	4 22	+0005	+0015	-0005	-0015	-1.9	-1.5	-0.6	0.0	4.16
468	Douglas	54 09	4 28	-0004	-0004	-0022	-0032	-2.4	-2.0	-0.5	-0.1	3.79
468a	Port St. Mary	54 04	4 44	+0005	+0015	-0010	-0030	-3.4	-2.6	-1.3	-0.4	3.25
469	Calf Sound	54 04	4 48	+0005	+0005	-0015	-0025	-3.2	-2.6	-0.9	-0.3	⊙
469a	Port Erin	54 05	4 46	-0005	+0015	-0010	-0050	-4.1	-3.2	-1.3	-0.5	2.73
Wales												
470	Colwyn Bay	53 18	3 43	-0005	-0010	⊙	⊙	-1.5	-1.3	⊙	⊙	⊙
471	Llandudno	53 20	3 50	-0005	-0010	-0030	-0040	-1.8	-1.3	-0.6	-0.2	4.15
478	HOLYHEAD	(see page 146)		0000 and 1200	0600 and 1800	0500 and 1700	1100 and 2300	5.6	4.4	2.0	0.7	
471a	Conwy	53 17	3 50	+0020	+0020	⊙	+0050	+2.1	+1.6	+0.3	⊙	⊙
<i>Menai Strait</i>												
472	Beaumaris	53 16	4 05	+0025	+0010	+0055	+0035	+2.0	+1.6	+0.5	+0.1	4.22
473	Menai Bridge	53 13	4 09	+0030	+0010	+0100	+0035	+1.7	+1.4	+0.3	0.0	4.05
474	Port Dinorwic	53 11	4 13	-0015	-0025	+0030	0000	0.0	0.0	0.0	+0.1	3.38
475	Caernarfon	53 09	4 16	-0030	-0030	+0015	-0005	-0.4	-0.4	-0.1	-0.1	3.04
475a	Fort Belan	53 07	4 20	-0040	-0015	-0025	-0005	-1.0	-0.9	-0.2	-0.1	2.83

SEASONAL CHANGES IN MEAN LEVEL

No.	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sep. 1	Oct. 1	Nov. 1	Dec. 1	Jan. 1
394 - 398	+0.1	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	+0.1	+0.1	+0.1
399 - 407	+0.2	+0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	+0.1	+0.2	+0.2
408 - 414a	+0.1	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	+0.1	+0.1	+0.1
415 - 444	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	+0.1	+0.1	0.0
445 - 464	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	+0.1	+0.1	0.0
466 - 478	+0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	+0.1	+0.1	+0.1