UK Hydrographic Office

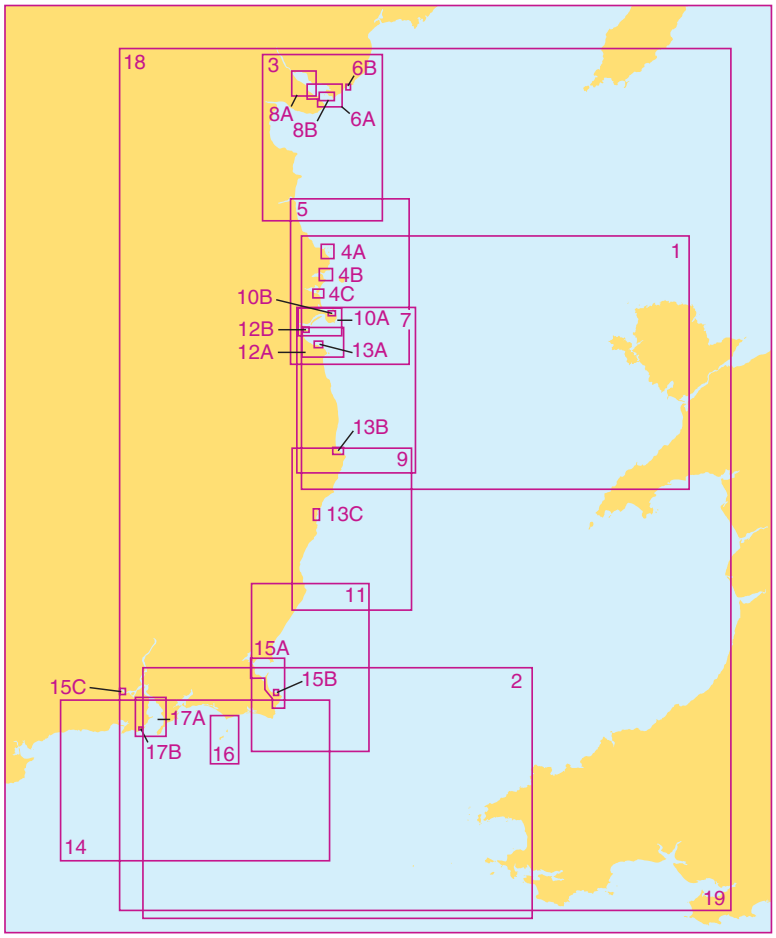
5621

Updated to February 2024

Version 1.0

Ireland – East Coast

Coverage Diagram



5621	Chart Title	Natural Scale 1:
1	Dublin to Anglesey	200,000
2	Waterford to Saint David's Head	200,000
3	Drogheda to Carlingford Lough	100,000
4A	Skerries Islands	12,500
4B	Rogerstown Inlet	20,000
4C	Malahide Inlet	10,000
5	Dublin to Drogheda	100,000
6A	Carlingford Lough - Southern Part	20,000
6B	Kilkeel Harbour	5,000
7	Ben of Howth to Wicklow Head	100,000

5621	Chart Title	Natural Scale 1:
8A	Carlingford Lough - Northern Part	20,000
8B	Entrance of Carlingford Lough	12,500
9	Wicklow Head to Cahore Point	100,000
10A	Dublin Bay - Northern Part	25,000
10B	Howth	7,500
11	Cahore Point to Carnsore Point	100,000
12A	Dublin Bay - Southern Part	25,000
12B	Port of Dublin	7,500
13	Harbours on the East Coast of Ireland	
13A	Dun Laoghaire Harbour	7,500
13B	Wicklow	10,000
13C	Arklow	10,000
14	Tusker Rock to Dunabrattin Head	150,000
15A	Wexford and Rosslare	30,000
15B	Rosslare Europort	10,000
15C	Waterford	7,500
16	Saltee Islands	25,000
17A	Entrance to Waterford Harbour	25,000
17B	Dunmore East Harbour	5,000
18	Irish Sea and Saint George's Channel	500,000

Notes

Positions are referred to the WGS84 compatible datum, European Terrestrial Reference System 1989 Datum.
Depths are in metres and are reduced to Chart Datum, which is approximately the level of Lowest Astronomical Tide.
Heights are in metres. Underlined figures are drying heights above Chart Datum. Overhead clearance heights are above Highest Astronomical Tide. All other heights are above Mean High Water Springs.
Navigational marks: IALA Maritime Buoyage System-Region A (Red to port)

DATUM

All the charts are referred to WGS84. Any positions taken from GPS (referred to WGS84) or from ADMIRALTY Notices to Mariners (referred to ETRS89) can be plotted directly on all charts.

MARINE FARMS

Marine farms exist within the area of these charts. They may not all be shown individually and their positions may change frequently. Marine farms may be marked by lit or unlit buoys or beacons. Mariners are advised to avoid these structures and their associated moorings.

OIL AND GAS FIELDS

Production platforms and associated structures, including tanker moorings, storage tankers and platforms on pipelines, generally exhibit Mo(U) lights, aircraft obstruction lights, and audible fog signals. Unauthorised navigation is prohibited within 500 metres of all such structures, including storage tankers which can swing about their moorings. Tankers manoeuvring in the vicinity of platforms and moorings should be given a wide berth. For further information see The Mariner's Handbook.

OMISSION OF DETAIL

Within the limit marked _ _ _ and the coastline, this chart should only be used for planning purposes as features such as depths, platforms, wrecks, pipelines, minor aids to navigation and cables have been omitted. Larger scale ADMIRALTY charts are available for mariners intending to navigate in this area.

VESSEL REPORTING

For details of the following vessel traffic services, see ADMIRALTY List of Radio Signals:
- Dublin Vessel Traffic Service
- Drogheda Reporting System
- Douglas Harbour Control
- Holyhead Local Port Service

HIGH SPEED CRAFT

High speed craft operate in the area of these charts. Mariners are advised to maintain a good lookout. Some high speed craft generate large waves, which can have a serious impact on small craft and their moorings close to the shoreline and on shallow off-lying banks.

FIRING PRACTICE AREAS

No restrictions are placed on the right to transit the firing practice areas at any time. The firing practice areas are operated using a clear range procedure; exercises and firing only take place when the areas are considered to be clear of all shipping.

MORLAIS TIDAL ENERGY DEMONSTRATION ZONE

Scientific instruments exist in this area in preparation for the installation and testing of tidal energy devices. Mariners should exercise caution whilst navigating in this vicinity. For details see www.morlaisenergy.com

LADEN TANKERS

1. **The Smalls and Grassholm** (51°43′N 5°40′W). Laden tankers should avoid the area between The Off Smalls Traffic Separation Scheme and The Smalls. Laden tankers over 10,000 GT should not use the channel between Grassholm and Skomer Island (51°44′·0N 5°24′·0W) unless moving between Saint. Bride's Bay and Milford Haven.
2. **The Skerries** (53°25′N 4°37′W). Laden tankers should avoid the area between The Skerries Traffic Separation Scheme and the adjacent coast.

AREA TO BE AVOIDED BETWEEN THE SMALLS (51°43′N 5°40′W) AND GRASSHOLM(51°44′N 5°29′W)

All vessels laden with oil, gas or noxious liquid substances and all other vessels of more than 500 GRT should avoid the area indicated. This area is IMO-adopted.

SHELLFISH BEDS

Vessels should avoid grounding in areas of shellfish beds.

MOVEMENT OF SHIPPING

Vesssels navigating in the approaches to Milford Haven should do so with caution as deep-draught vessels with limited manoeuvrability may be encountered. Passing vessels are advised to keep at least 5 miles off Middle Channel Rocks Lighthouse (51°40′·3N 5°09′·8W). Contact Milford Haven Port Control to obtain information on movement of shipping in and out of the Port of Milford Haven.

SUBMARINE CABLES AND PIPELINES

Mariners should not anchor, trawl or engage in sea-bed operations in the vicinity of submarine cables and pipelines. Submarine cables support national infrastructure; damage to them may affect critical services and can result in serious consequences, as well as creating a potential hazard to mariners. Wilful or neglectful damage to a cable may result in legal action. Pipelines are not always buried and their presence may significantly reduce the charted depth. They may also span seabed undulations and cause fishing gear to become irrecoverably snagged, putting a vessel in severe danger.

WETREP

Tankers of more than 600 dwt carrying heavy crude oil, heavy fuel oil or bitumen and tar and their emulsions are required to participate in the Western European Tanker Reporting System (WETREP). See ADMIRALTY List of Radio Signals for further details.

HISTORIC WRECKS

The sites of historic wrecks are protected from unauthorised interference.

HM Coastguard Services and Safety Information

VHF MARITIME RADIO

Coastguard Maritime Rescue Co-ordination Centres are on constant watch on Channel 16 - the distress, safety and calling channel. Initial calls should normally be on Ch 16.

HM COASTGUARD
HOLYHEAD (MRCC)
Tel. +44 (0) 1407 762051
MMSI: 002320018
e-mail: zone31@hmcg.gov.uk (FAO Holyhead Coastguard)

BELFAST (MRCC)
Tel. +44 (0) 2891 463933
MMSI: 002320021
e-mail: zone34@hmcg.gov.uk (FAO Belfast Coastguard)

MILFORD HAVEN (MRCC)
Tel. +44 (0) 1646 690909
MMSI: 002320017
e-mail: zone28@hmcg.gov.uk (FAO Milford Haven Coastguard)

DUBLIN (MRCC)
Tel. +353 (1) 6620922
+353 (1) 6620923
MMSI: 002500300
e-mail: coastguardNMOC@dttas.gov.ie
mrccdublin@irishcoastguard.ie

MAILN HEAD (MRSC)
Tel. +353 (74) 9370103
MMSI: 002500100
e-mail: mrscmalin@dttas.ie
mrscmalinhead@irishcoastguard.ie

VALENTIA (MRSC)
Tel. +353 66 9476109
MMSI: 002500200
e-mail: mrscvalentia@irishcoastguard.ie
mrscvalentia@dttas.ie

Distress and Safety Communication

Distress - Urgency

A Distress or Urgency message has absolute priority.
Make a call on VHF Channel 16 and give the following essential information:
Distress Call **MAYDAY MAYDAY MAYDAY**

- Name and Call Sign and MMSI number Position
- Nature of Distress
- Type of assistance required
- Type of boat - number of crew - intentions

Urgency (eg. if you break down in bad weather or a crewman requires medical attention)
Call **PANPAN PANPAN PANPAN** and give:

- Name and Call Sign and MMSI number Position
- Nature of Distress
- Type of assistance required
- Type of boat - number of crew - intentions

Other Distress Signals

Other recognised signals are:

- Red flares (parachute, multi stars or hand held) Orange smoke signal
- The flag signal NC
- The morse signal SOS ... --- ... by light
- An article of clothing on an oar
- Slowly and repeatedly raising and lowering outstretched arms
- A square flag with anything resembling a ball above or below it
- Continuous sounding of a siren or whistle will also be recognised, or smoke and flames from the vessel
- The carriage of an Emergency Position Indicating Radio Beacon (406 EPIRB) will improve your chances of being located if conventional means fail. 406 EPIRBs are detected by satellite, in addition to aircraft, and transmitted to a Coastguard Maritime Rescue Co-ordination Centre.

THE USE OF MOBILE TELEPHONES IN DISTRESS AND SAFETY COMMUNICATIONS

The use of mobile telephones in the marine environent offshore is now well established, with users in all areas of the commercial, fishing and leisure communities.

Incidents have occured where vessels requiring assistance from rescue services have used the inland emergency service, or alternatively telephoned direct to request assistance. (e.g. Lifeboat services). This procedure through a mobile telephone is strongly discouraged.

Use of mobile telephones by-passes the existing dedicated well-established international marine distress communications systems.

Mobile telephone coverage offshore is limited and does not afford the same extensive safety coverage as VHF Channel 16. Consequently a greater risk exists of communications difficulties or even a complete breakdown if an accident should occur at the edge of a cell coverage area.

Subsequent on-scene communications would be restricted and delayed if mobile telephone communications were exclusively maintained throughout. There is always a risk that elements of vital information could be lost or misinterpreted by the introduction of further relay links in the communication chain. Mobile telephones are also highly susceptible to failure due to water ingress.

It is not possible to communicate direct to another vessel able to render assistance unless that vessel is also fitted with a mobile telephone and the telephone number is known. Requests for assistance cannot be monitored by other vessels in a position to render assistance.
Valuable time would be lost whilst the relevent Coastguard Rescue Coordination Centre receives and then re-broadcasts the information to all ships on the appropriate distress channel(s).

In the interests of Safety Of Life At Sea (SOLAS), owners of vessels are urged to carry MARINE communications equipment onboard and to use this medium as the primary means of Distress and Safety communications.

Product Specifications

PRODUCT USAGE CAUTION

This product is specifically designed, in conjunction with other charts and publications, as an aid to the navigation of leisure craft and locally regulated workboats and fishing vessels and therefore should be used by competent (preferably qualified) maritime navigators. Although this product contains the best information available at the time of publication, the user should navigate with caution, particularly in areas of shallow or confined waters where the depth of water is likely to change due to local conditions. The information provided in this product comes from the latest source information held and is updated by Notice to Mariners upon receipt of new information critical to safe navigation. To help maintain this product for all users, users are asked to notify the United Kingdom Hydrographic Office of any differences found between what is depicted and actual conditions encountered.

KEEPING THIS CHART UPDATED

Updates for the charts are published using the Notices to Mariners Service on the ADMIRALTY Notices to Mariners page found on our website at admiralty.co.uk/msi. All updates for the latest edition of the chart are listed and can be quickly and easily downloaded. All the charts are derived from standard ADMIRALTY charts. No updates are applied to the charts by the United Kingdom Hydrographic Office or its agents after printing. For those who do not have internet access, please contact Tel. 01823 484444 for assistance.

TIDAL STREAMS

Full details of the tidal streams in the area covered by this folio are given in the following ADMIRALTY Tidal Stream Atlases: NP256 Irish Sea and Bristol Channel.

PROVIDE UPDATED INFORMATION

To help maintain this product users are asked to notify the United Kingdom Hydrographic Office of any differences found between what is depicted and actual conditions encountered. Users can do this by submitting a Hydrographic Note form, found on our website admiralty.co.uk/msi or by downloading our H-Note App. The H-Note App is freely available to download on Android and iOS devices. For more information please see here:

IMPROVEMENTS TO THIS PRODUCT

ADMIRALTY Small Craft Charts are designed for use on leisure craft and locally regulated workboats and fishing vessels, where the smaller format charts fit more conveniently into the limited space available. Users with specific suggestions for the improvement of this product or ideas for the expansion of the series are requested to forward their comments to:

Customer Services, The UK Hydrographic Office,
Admiralty Way, Taunton. +44(0)1823 484444

E-mail customerservices@ukho.gov.uk

To view all ADMIRALTY Products and services, visit admiralty.co.uk

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T: +44 (0)1823 484444 Find out more at **admiralty.co.uk**

Tidal Stream Information

5621_1 Tidal Streams referred to HW at LIVERPOOL (GLADSTONE DOCK)

Hours | Geographical Position | Directions of streams (degrees) | Rates at spring tides (knots) | Rates at neap tides (knots)

Hours				A 53°29′·0N 4 22·0W			B 53°28′·5N 4 45·2W			C 53°26′·0N 5 33·0W			D 53°19′·3N 5 54·5W			E 53°05′·5N 4 44·6W			F 53°04′·8N 5 20·0W			G 53°03′·6N 5 44·5W			H 52°53′·7N 5 50·5W			
Before High Water	6	−6		028	0·4	0·2	203	0·4	0·2	221	0·3	0·1	002	1·0	0·5	002	0·2	0·2	071	0·2	0·1	027	1·9	1·1	025	1·4	0·8	−6
	5	−5		086	1·9	1·0	075	1·4	0·7	330	1·0	0·4	002	1·9	1·0	002	1·2	0·7	006	1·0	0·4	025	3·3	1·8	025	3·1	1·8	−5
	4	−4		094	3·2	1·6	051	3·0	1·5	350	1·8	0·8	002	2·1	1·2	002	2·0	1·1	003	2·2	1·2	025	3·6	2·0	025	3·8	2·2	−4
	3	−3		098	3·3	1·6	047	3·6	1·9	350	2·2	1·0	002	1·8	0·9	002	2·2	1·2	001	2·7	1·5	025	3·1	1·7	025	3·5	1·9	−3
	2	−2		101	2·5	1·3	049	3·0	1·6	349	2·0	0·8	002	1·0	0·6	002	1·6	0·9	359	2·6	1·4	028	1·9	1·0	025	2·2	1·2	−2
	1	−1		118	1·0	0·4	053	1·7	0·8	352	1·3	0·5	002	0·2	0·2	002	0·8	0·5	356	1·4	0·7	155	0·5	0·3	025	0·6	0·3	−1
High Water		0		242	0·8	0·4	158	0·4	0·2	016	0·4	0·2	155	0·8	0·4	155	0·4	0·2	223	0·4	0·2	201	2·2	1·2	178	1·3	0·7	0
After High Water	1	+1		273	2·0	1·0	219	1·4	0·7	140	0·6	0·3	182	1·8	0·9	182	1·2	0·6	193	1·2	0·6	206	3·4	1·8	205	3·1	1·7	+1
	2	+2		276	2·9	1·4	230	3·0	1·5	168	1·6	0·7	182	2·2	1·2	182	1·8	1·0	184	2·3	1·2	206	3·5	1·9	205	3·8	2·2	+2
	3	+3		277	2·8	1·4	231	3·6	1·8	170	2·1	1·0	182	1·9	1·0	182	2·1	1·2	179	2·8	1·6	206	2·9	1·6	205	3·5	1·9	+3
	4	+4		279	2·3	1·1	230	3·0	1·5	171	2·2	1·0	182	1·2	0·7	182	1·8	0·9	175	2·2	1·2	206	1·9	1·0	205	2·4	1·3	+4
	5	+5		282	1·5	0·8	228	2·0	1·0	174	1·6	0·7	182	0·3	0·2	182	1·0	0·6	178	1·3	0·7	206	0·5	0·3	205	0·8	0·4	+5
	6	+6		314	0·5	0·2	221	0·9	0·4	186	0·6	0·3	029	0·6	0·4	029	0·2	0·2	180	0·3	0·1	055	1·1	0·6	052	0·9	0·5	+6

5621_2 Tidal Streams referred to HW at MILFORD HAVEN

	A 52°10′·5N 6 56·4W			B 52°02′·3N 6 40·0W			C 52°06′·7N 6 24·6W			D 51°34′·0N 6 23·1W			E 52°15′·1N 6 18·3W			F 52°10′·6N 6 14·6W			G 52°12′·2N 6 10·9W			H 52°06′·5N 5 54·4W			J 52°00′·3N 5 36·6W			K 51°36′·5N 5 17·1W		
−6	205	0·1	0·1	248	1·3	0·7	249	2·3	1·3	211	0·9	0·5	119	2·7	1·5	224	2·7	1·5	136	0·8	0·4	203	1·6	0·7	206	2·4	1·1	143	1·6	0·8
−5	005	0·3	0·2	253	1·9	1·0	249	2·7	1·5	206	1·0	0·5	120	2·3	1·3	234	2·5	1·4	133	2·0	1·1	206	2·4	1·1	208	2·9	1·3	137	2·2	1·0
−4	006	0·6	0·3	265	1·6	0·8	251	2·3	1·3	196	0·8	0·4	118	1·7	0·9	228	1·2	0·6	134	3·1	1·6	209	2·6	1·2	211	2·6	1·2	127	2·1	1·0
−3	011	0·5	0·3	276	1·0	0·6	255	1·3	0·7	170	0·4	0·2	110	1·2	0·6	059	0·3	0·1	136	3·3	1·8	207	1·9	0·9	204	1·7	0·8	115	1·5	0·7
−2	015	0·3	0·2	330	0·2	0·1	010	0·1	0·1	090	0·3	0·1	020	0·4	0·2	047	0·9	0·5	139	2·8	1·5	215	0·6	0·3	182	0·7	0·3	084	0·7	0·3
−1	011	0·1	0·1	055	0·6	0·3	067	1·0	0·6	042	0·6	0·3	332	1·7	0·9	050	1·2	0·6	154	1·2	0·6	012	0·7	0·3	040	0·9	0·4	355	0·9	0·4
0	210	0·2	0·1	066	1·3	0·7	069	2·1	1·2	035	0·9	0·5	331	1·6	0·8	048	1·3	0·7	040	0·6	0·3	021	1·7	0·8	030	2·2	1·0	323	1·7	0·8
+1	206	0·9	0·5	069	1·7	0·9	070	2·4	1·3	027	1·0	0·5	331	1·0	0·5	048	1·7	0·9	043	3·4	1·8	023	2·2	1·0	028	2·8	1·3	318	2·1	1·0
+2	205	1·4	0·8	081	1·5	0·8	071	2·1	1·1	015	0·9	0·5	350	0·4	0·2	053	1·5	0·8	028	3·1	1·6	023	2·4	1·1	024	2·6	1·2	314	2·0	0·9
+3	205	1·5	0·8	095	1·0	0·6	073	1·2	0·7	356	0·5	0·3	077	0·4	0·2	059	0·8	0·4	033	3·2	1·7	030	1·9	0·9	023	1·7	0·8	306	1·5	0·7
+4	205	1·3	0·7	111	0·5	0·3	082	0·4	0·2	305	0·1	0·1	106	1·2	0·6	260	0·3	0·1	046	3·0	1·6	040	1·1	0·5	020	0·8	0·4	278	0·6	0·3
+5	205	1·0	0·5	215	0·3	0·2	243	0·7	0·4	221	0·5	0·2	117	2·1	1·1	226	1·2	0·6	054	1·2	0·6	130	0·3	0·1	216	0·5	0·2	189	0·6	0·3
+6	205	0·4	0·2	246	1·0	0·6	248	1·7	1·0	212	0·8	0·4	119	2·5	1·3	220	2·3	1·2	112	0·4	0·2	200	1·2	0·5	208	1·8	0·8	146	1·3	0·6

5621_2 continued

	L 52°15′·0N 5 16·6W			M 51°59′·9N 5 10·2W		
213	1·7	0·8	237	2·6	1·1	−6
217	2·4	1·2	218	2·5	1·1	−5
216	2·3	1·2	224	2·4	1·0	−4
220	1·6	0·8	206	0·7	0·3	−3
232	0·5	0·2	060	0·6	0·3	−2
027	0·7	0·4	044	1·7	0·7	−1
033	1·7	0·9	048	2·5	1·1	0
036	2·3	1·1	051	2·6	1·1	+1
038	2·3	1·1	045	1·4	0·6	+2
039	1·5	0·8	069	0·5	0·2	+3
036	0·6	0·3	292	0·5	0·2	+4
209	0·4	0·2	237	1·3	0·6	+5
211	1·3	0·6	240	2·3	1·0	+6

5621_5 Tidal Streams referred to HW at DUBLIN (NORTH WALL)

	A 53°19′·3N 5 54·5W			B 53°27′·0N 6 06·3W		
−6	002	1·3	0·7	359	0·4	0·2
−5	002	2·1	1·1	359	0·8	0·4
−4	002	2·1	1·2	353	1·0	0·5
−3	002	1·5	0·9	353	0·8	0·4
−2	002	0·8	0·5	351	0·6	0·3
−1	182	0·1	0·0	345	0·2	0·1
0	182	1·1	0·6	186	0·2	0·1
+1	182	2·0	1·1	175	0·8	0·4
+2	182	2·2	1·2	175	1·0	0·5
+3	182	1·8	1·0	174	0·9	0·5
+4	182	1·0	0·5	171	0·5	0·3
+5	182	0·1	0·0	167	0·2	0·1
+6	002	0·9	0·5	358	0·2	0·1

5621_7 Tidal Streams referred to HW at DUBLIN (NORTH WALL)

	A 53°03′·6N 5 44·5W			B 53°19′·3N 5 54·3W		
−6	026	2·5	1·4	002	1·3	0·7
−5	025	3·6	2·0	002	2·1	1·1
−4	025	3·5	2·0	002	2·1	1·2
−3	025	2·9	1·6	002	1·5	0·9
−2	030	1·4	0·8	002	0·8	0·5
−1	194	0·7	0·4	182	0·1	0·0
0	206	2·8	1·5	182	1·1	0·6
+1	206	3·6	2·0	182	2·0	1·1
+2	206	3·4	1·9	182	2·2	1·2
+3	206	2·6	1·5	182	1·8	1·0
+4	206	1·5	0·9	182	1·0	0·5
+5		0·0	0·0	182	0·1	0·0
+6	028	1·3	0·7	002	0·9	0·5

5621_9 Tidal Streams referred to HW at DUBLIN (NORTH WALL)

	A 52°53′·7N 5 50·5W			B 52°41′·2N 5 56·5W			C 52°30′·8N 6 04·6W		
−6	025	2·0	1·1	024	1·3	0·7	014	1·7	0·9
−5	025	3·6	2·0	025	2·6	1·4	014	2·9	1·6
−4	025	3·9	2·2	025	3·3	1·8	014	3·1	1·8
−3	025	3·2	1·8	025	2·9	1·6	014	2·6	1·5
−2	025	1·7	0·9	025	1·9	1·1	014	1·6	0·9
−1	025	0·1	0·0	027	0·6	0·3	014	0·3	0·2
0	205	1·8	1·0	202	0·9	0·5	194	1·3	0·7
+1	205	3·6	2·0	204	2·5	1·4	194	2·6	1·5
+2	205	3·9	2·2	205	3·3	1·9	194	3·2	1·8
+3	205	3·3	1·8	205	3·3	1·8	194	2·9	1·6
+4	205	1·9	1·0	206	2·2	1·2	194	2·0	1·1
+5	205	0·3	0·2	207	0·8	0·5	194	0·6	0·3
+6	025	1·3	0·7	023	0·6	0·4	014	0·9	0·5

5621_11

Tidal Streams referred to HW at DUBLIN (NORTH WALL)

	A 52°30′·7N 6 04·5W		B 52°21′·5N 6 10·5W		C 52°15′·2N 6 18·3W		D 52°12′·5N 6 10·8W		E 52°10′·7N 6 14·5W		F 52°06′·8N 6 24·5W		G 52°06′·5N 5 54·5W	
−6	014	1·7 0·9	017	2·3 1·3	331	1·8 1·0	051	0·2 0·1	049	1·3 0·7	068	1·6 0·8	018	1·2 0·5
−5	014	2·9 1·6	023	2·7 1·5	331	1·3 0·7	050	2·4 1·3	047	1·5 0·8	069	2·2 1·2	022	2·0 0·9
−4	014	3·1 1·8	026	2·3 1·3	333	0·6 0·3	030	3·3 1·7	052	1·7 0·9	071	2·2 1·2	023	2·3 1·1
−3	014	2·6 1·5	028	1·6 0·9	030	0·3 0·1	032	3·1 1·7	057	1·2 0·6	072	1·6 0·8	026	2·1 1·0
−2	014	1·6 0·9	039	0·6 0·3	090	0·6 0·3	042	3·2 1·7	036	0·3 0·1	077	0·7 0·4	034	1·5 0·7
−1	014	0·3 0·2	181	0·7 0·4	114	1·7 0·9	053	1·6 0·9	236	0·7 0·4	241	0·3 0·2	057	0·6 0·3
0	194	1·3 0·7	192	1·8 1·1	119	2·3 1·3	079	0·5 0·2	220	1·7 0·9	247	1·3 0·7	191	0·7 0·3
+1	194	2·6 1·5	201	2·8 1·6	119	2·7 1·5	134	1·1 0·6	226	2·8 1·5	249	2·2 1·2	204	1·7 0·8
+2	194	3·2 1·8	204	2·7 1·5	119	2·3 1·3	133	2·5 1·3	234	2·2 1·2	249	2·6 1·4	206	2·4 1·1
+3	194	2·9 1·6	207	2·0 1·1	117	1·7 0·9	134	3·2 1·7	228	0·9 0·5	252	2·1 1·1	208	2·3 1·1
+4	194	2·0 1·1	216	0·8 0·5	106	1·0 0·5	137	3·1 1·7	052	0·4 0·2	256	1·1 0·6	207	1·7 0·8
+5	194	0·6 0·3	355	0·6 0·3	001	0·4 0·2	142	2·1 1·1	047	1·0 0·5	035	0·1 0·1	216	0·4 0·2
+6	014	0·9 0·5	012	1·9 1·1	331	1·8 1·0	159	0·5 0·2	050	1·2 0·7	067	1·1 0·6	015	0·8 0·4

5621_14

Tidal Streams referred to HW at COBH

	A 52°12′·0N 06 10·6W		B 52°10′·6N 06 14·5W		C 52°10′·4N 06 56·8W		D 52°06′·7N 06 24·5W		E 52°02′·3N 06 40·0W	
−6	069	0·5 0·3	219	1·8 1·0	205	0·7 0·4	247	1·3 0·7	244	0·7 0·4
−5	135	1·2 0·6	228	2·9 1·6		0·0 0·0	249	2·2 1·2	248	1·4 0·8
−4	133	2·3 1·2	233	2·1 1·2	005	0·4 0·2	250	2·6 1·4	254	1·9 1·0
−3	134	3·2 1·7	227	0·8 0·4	010	0·7 0·4	252	2·2 1·2	265	1·5 0·8
−2	137	3·2 1·7	051	0·4 0·2	015	0·5 0·3	256	1·1 0·6	276	0·9 0·5
−1	142	2·2 1·2	047	1·0 0·5	015	0·3 0·2	043	0·2 0·1	001	0·2 0·1
0	159	0·6 0·3	050	1·2 0·7	010	0·1 0·1	067	1·2 0·7	058	0·7 0·4
+1	051	1·6 0·8	047	1·5 0·8	210	0·2 0·1	069	2·2 1·2	067	1·5 0·8
+2	036	3·5 1·8	051	1·8 1·0	205	1·1 0·6	070	2·4 1·3	071	1·7 0·9
+3	030	3·0 1·6	055	1·3 0·7	205	1·5 0·8	071	1·9 1·1	084	1·4 0·8
+4	037	3·3 1·7	053	0·5 0·3	205	1·5 0·8	074	1·1 0·6	097	0·9 0·5
+5	051	2·4 1·3	244	0·5 0·3	205	1·3 0·7	100	0·2 0·1	120	0·4 0·2
+6	057	0·9 0·5	222	1·4 0·8	205	0·9 0·5	245	0·9 0·5	231	0·4 0·2

5621_15

Tidal Streams referred to HW at DUBLIN (NORTH WALL)

	A 52°15′·1 N 6 18·3W	
−6	331	1·8 1·0
−5	331	1·3 0·7
−4	333	0·6 0·3
−3	030	0·3 0·1
−2	090	0·6 0·3
−1	114	1·7 0·9
0	119	2·3 1·3
+1	119	2·7 1·5
+2	119	2·3 1·3
+3	117	1·7 0·9
+4	106	1·0 0·5
+5	001	0·4 0·2
+6	331	1·8 1·0

5621_17

Tidal Streams referred to HW at COBH

	A 52°10′·5 N 6 56·4W	
−6	205	0·7 0·4
−5		0·0 0·0
−4	005	0·4 0·2
−3	010	0·7 0·4
−2	015	0·5 0·3
−1	015	0·3 0·2
0	010	0·1 0·1
+1	210	0·2 0·1
+2	205	1·1 0·6
+3	205	1·5 0·8
+4	205	1·5 0·8
+5	205	1·3 0·7
+6	205	0·9 0·5

5621_14

Tidal Streams referred to HW at COBH

	A 52°12′·0N 06 10·6W		B 52°10′·6N 06 14·5W		C 52°10′·4N 06 56·8W		D 52°06′·7N 06 24·5W		E 52°02′·3N 06 40·0W	
−6	069	0·5 0·3	219	1·8 1·0	205	0·7 0·4	247	1·3 0·7	244	0·7 0·4
−5	135	1·2 0·6	228	2·9 1·6		0·0 0·0	249	2·2 1·2	248	1·4 0·8
−4	133	2·3 1·2	233	2·1 1·2	005	0·4 0·2	250	2·6 1·4	254	1·9 1·0
−3	134	3·2 1·7	227	0·8 0·4	010	0·7 0·4	252	2·2 1·2	265	1·5 0·8
−2	137	3·2 1·7	051	0·4 0·2	015	0·5 0·3	256	1·1 0·6	276	0·9 0·5
−1	142	2·2 1·2	047	1·0 0·5	015	0·3 0·2	043	0·2 0·1	001	0·2 0·1
0	159	0·6 0·3	050	1·2 0·7	010	0·1 0·1	067	1·2 0·7	058	0·7 0·4
+1	051	1·6 0·8	047	1·5 0·8	210	0·2 0·1	069	2·2 1·2	067	1·5 0·8
+2	036	3·5 1·8	051	1·8 1·0	205	1·1 0·6	070	2·4 1·3	071	1·7 0·9
+3	030	3·0 1·6	055	1·3 0·7	205	1·5 0·8	071	1·9 1·1	084	1·4 0·8
+4	037	3·3 1·7	053	0·5 0·3	205	1·5 0·8	074	1·1 0·6	097	0·9 0·5
+5	051	2·4 1·3	244	0·5 0·3	205	1·3 0·7	100	0·2 0·1	120	0·4 0·2
+6	057	0·9 0·5	222	1·4 0·8	205	0·9 0·5	245	0·9 0·5	231	0·4 0·2

5621_15

Tidal Streams referred to HW at DUBLIN (NORTH WALL)

	A 52°15′·1 N 6 18·3W	
−6	331	1·8 1·0
−5	331	1·3 0·7
−4	333	0·6 0·3
−3	030	0·3 0·1
−2	090	0·6 0·3
−1	114	1·7 0·9
0	119	2·3 1·3
+1	119	2·7 1·5
+2	119	2·3 1·3
+3	117	1·7 0·9
+4	106	1·0 0·5
+5	001	0·4 0·2
+6	331	1·8 1·0

5621_17

Tidal Streams referred to HW at COBH

	A 52°10′·5 N 6 56·4W	
−6	205	0·7 0·4
−5		0·0 0·0
−4	005	0·4 0·2
−3	010	0·7 0·4
−2	015	0·5 0·3
−1	015	0·3 0·2
0	010	0·1 0·1
+1	210	0·2 0·1
+2	205	1·1 0·6
+3	205	1·5 0·8
+4	205	1·5 0·8
+5	205	1·3 0·7
+6	205	0·9 0·5

5621_19

Tidal Streams referred to HW at DOVER

	A 54°06′·5N 4 08·5W		B 53°40′·2N 5 09·3W		C 53°28′·5N 4 45·1W		D 53°26′·0N 5 33·0W		E 53°05′·5N 4 44·5W		F 53°04′·8N 5 20·0W		G 52°44′·8N 5 20·2W		H 52°32′·6N 5 39·5W		J 52°24′·5N 5 00·5W		K 52°06′·5N 5 54·3W		L 52°00′·3N 5 36·5W	
−6	214	0·4 0·2	231	1·0 0·5	205	0·3 0·2	211	0·2 0·1	002	0·1 0·1		0·0 0·0	127	0·2 0·1	356	0·6 0·3	017	0·8 0·5	012	0·7 0·3	038	0·9 0·4
−5	087	0·5 0·3	275	0·5 0·3	055	1·5 0·8	345	1·0 0·4	002	1·2 0·7	006	0·9 0·5	019	1·3 0·7	014	2·2 1·1	016	1·7 1·0	021	1·5 0·7	030	2·2 1·0
−4	074	1·3 0·7	350	0·6 0·3	050	3·2 1·6	351	1·9 0·8	002	2·0 1·2	005	2·0 1·1	017	2·7 1·5	018	3·0 1·5	017	2·1 1·3	022	2·2 1·0	028	2·8 1·3
−3	067	1·8 1·0	025	1·3 0·7	046	3·8 1·9	350	2·3 1·0	002	2·3 1·3	002	2·6 1·4	015	3·4 1·8	023	2·9 1·5	017	2·1 1·2	023	2·3 1·1	024	2·6 1·2
−2	056	1·6 0·9	033	1·9 1·0	049	3·0 1·5	349	1·9 0·9	002	1·7 1·0	359	2·7 1·5	013	2·9 1·6	027	2·1 1·0	019	1·7 1·0	029	1·9 0·9	024	1·8 0·8
−1	049	1·0 0·6	039	1·7 0·9	053	1·6 0·8	353	1·3 0·6	002	0·9 0·5	357	1·7 0·9	010	1·8 1·0	027	0·8 0·4	025	0·8 0·5	039	1·2 0·5	020	0·9 0·4
0	353	0·3 0·2	043	1·1 0·6	125	0·1 0·1	011	0·3 0·1	182	0·1 0·1	344	0·3 0·1	028	0·4 0·2	189	0·6 0·3	182	0·4 0·2	099	0·3 0·1	215	0·5 0·2
+1	264	0·6 0·4	130	0·1 0·1	226	1·5 0·8	160	0·7 0·3	182	1·1 0·6	195	1·0 0·5	185	0·9 0·5	190	1·8 0·9	194	1·4 0·8	200	1·3 0·6	208	1·8 0·8
+2	250	0·9 0·5	207	0·6 0·3	231	2·9 1·5	169	1·6 0·7	182	1·9 1·1	185	2·0 1·1	195	1·3 0·7	195	2·9 1·5	200	2·1 1·2	205	2·2 1·0	207	2·8 1·3
+3	241	1·2 0·7	213	1·2 0·6	231	3·7 1·8	170	2·2 1·0	182	2·1 1·2	180	2·8 1·5	197	3·3 1·8	201	3·1 1·6	201	2·3 1·4	206	2·6 1·2	210	2·8 1·3
+4	238	1·4 0·8	215	1·5 0·8	230	2·9 1·5	170	2·3 1·0	182	1·9 1·1	175	2·4 1·3	196	3·1 1·7	206	2·6 1·3	202	1·9 1·1	207	2·1 1·0	207	2·1 1·0
+5	234	1·2 0·7	218	1·7 0·9	228	1·9 0·9	174	1·6 0·7	182	1·1 0·6	176	1·4 0·8	195	2·0 1·1	213	1·5 0·7	198	1·0 0·6	208	1·3 0·6	194	1·1 0·5
+6	228	0·7 0·4	223	1·4 0·7	223	0·8 0·4	183	0·5 0·2	182	0·2 0·1	180	0·4 0·2	185	0·7 0·4	292	0·2 0·1	025	0·2 0·1	000	0·2 0·1	064	0·4 0·2

For additional information see ADMIRALTY Tidal Stream Atlases N.P.s 218 and 256

TIME & HEIGHT DIFFERENCES FOR PREDICTING THE TIDE AT SECONDARY PORTS

PLACE	Lat N	Long W	TIME DIFFERENCES High Water	TIME DIFFERENCES Low Water	HEIGHT DIFFERENCES (IN METRES) MHWS	MHWN	MLWN	MLWS
			Zone UT(GMT)					
HOLYHEAD	53 19	4 37	**0000 and 1200**	**0600 and 1800** / **0500 and 1700** / **1100 and 2300**	**5.6**	**4.4**	**2.0**	**0.7**
Menai Strait								
Fort Belan	53 07	4 20	-0040	-0015 / -0025 / -0005	-1.0	-0.9	-0.2	-0.1
Amlwch	53 25	4 20	+0020	+0010 / +0035 / +0025	+1.6	+1.3	+0.5	+0.2
Cemaes Bay	53 25	4 27	+0020	+0025 / +0040 / +0035	+1.0	+0.7	+0.3	+0.1
HOLYHEAD	53 19	4 37	STANDARD PORT					
Trearddur Bay	53 16	4 37	-0045	-0025 / -0015 / -0015	-0.4	-0.4	0.0	+0.1
Porth Trecastell	53 12	4 30	-0045	-0025 / -0005 / -0015	-0.6	-0.6	0.0	0.0
Llanddwyn Island	53 08	4 25	-0115	-0055 / -0030 / -0020	-0.7	-0.5	-0.1	0.0
Trefor	53 00	4 25	-0115	-0100 / -0030 / -0020	-0.8	-0.9	-0.2	-0.1
Porth Dinllaen	52 57	4 34	-0120	-0105 / -0035 / -0025	-1.0	-1.0	-0.2	-0.2
Porth Ysgaden	52 54	4 39	-0125	-0110 / -0040 / -0035	-1.1	-1.0	-0.1	-0.1
MILFORD HAVEN	51 42	5 03	**0100 and 1300**	**0800 and 2000** / **0100 and 1300** / **0700 and 1900**	**7.0**	**5.2**	**2.5**	**0.7**
Cardigan Bay								
Porthgain	51 57	5 11	+0055	+0045 / +0045 / +0100	-2.5	-1.8	-0.6	0.0
Ramsey Sound	51 53	5 19	+0030	+0030 / +0030 / +0030	-1.9	-1.3	-0.3	0.0
Solva	51 52	5 12	+0015	+0010 / +0035 / +0015	-1.5	-1.0	-0.2	0.0
Little Haven	51 46	5 07	+0010	+0010 / +0025 / +0015	-1.1	-0.8	-0.2	0.0
Martin's Haven	51 44	5 15	+0010	+0010 / +0015 / +0015	-0.8	-0.5	+0.1	+0.1
Skomer Island	51 44	5 17	-0005	-0005 / +0005 / +0005	-0.4	-0.1	0.0	0.0
Dale Roads	51 42	5 09	-0005	-0005 / -0008 / -0008	0.0	0.0	0.0	-0.1
MILFORD HAVEN	51 42	5 03	STANDARD PORT					
DUBLIN (NORTH WALL)	53 21	6 13	**0000 and 1200**	**0700 and 1900** / **0000 and 1200** / **0500 and 1700**	**4.1**	**3.4**	**1.5**	**0.7**
Ireland								
Courtown	52 39	6 13	-0328	-0242 / -0158 / -0138	-2.8	-2.4	-0.5	0.0
Arklow	52 48	6 08	-0315	-0201 / -0140 / -0134	-2.7	-2.2	-0.6	-0.1
Wicklow	52 59	6 02	-0019	-0019 / -0024 / -0026	-1.4	-1.1	-0.4	0.0
Greystones	53 09	6 04	-0008	-0008 / -0008 / -0008	-0.5	-0.4	⊙	⊙
Dun Laoghaire	53 18	6 08	+0000	+0000 / +0002 / +0003	0.0	+0.1	0.0	0.0
Dublin Bar	53 21	6 09	-0006	-0001 / -0002 / -0003	0.0	0.0	0.0	+0.1
DUBLIN (NORTH WALL)	53 21	6 13	STANDARD PORT					
Howth	53 23	6 04	-0007	-0005 / +0001 / +0005	0.0	-0.1	-0.2	-0.2
Malahide	53 27	6 09	+0002	+0003 / +0009 / +0009	+0.1	-0.2	-0.4	-0.2
Balbriggan	53 37	6 11	-0021	-0015 / +0010 / +0002	+0.3	+0.2	⊙	⊙
River Boyne								
Entrance	53 43	6 14	-0015	-0009 / -0001 / +0005	+0.9	+0.6	+0.2	+0.1
Dunany Point	53 52	6 14	-0028	-0018 / -0008 / -0006	+0.7	+0.9	⊙	⊙
Dundalk								
Soldiers Point	54 00	6 21	-0010	-0010 / +0000 / +0045	+1.0	+0.8	+0.1	-0.1
Carlingford Lough								
Cranfield Point	54 01	6 04	-0027	-0011 / +0005 / -0010	+0.7	+0.9	+0.3	+0.2
Warrenpoint	54 06	6 15	-0020	-0010 / +0025 / +0035	+1.0	+0.7	+0.2	0.0
BELFAST			**0100 and 1300**	**0700 and 1900** / **0000 and 1200** / **0600 and 1800**	**3.5**	**3.0**	**1.1**	**0.4**
Northern Ireland								
Kilkeel	54 03	5 59	+0040	+0030 / +0010 / +0010	+1.2	+1.1	+0.4	+0.4
COBH	51 51	8 18	**0500 and 1700**	**1100 and 2300** / **0500 and 1700** / **1100 and 2300**	**4.1**	**3.2**	**1.3**	**0.4**
Waterford Harbour								
Dunmore East	52 09	6 59	+0008	+0003 / +0000 / +0000	+0.1	0.0	+0.1	+0.2
Cheekpoint	52 16	7 00	+0026	+0021 / +0019 / +0022	+0.5	+0.4	+0.3	+0.2
Kilmokea Point	52 17	7 00	+0026	+0022 / +0020 / +0020	+0.2	+0.1	+0.1	+0.1
Waterford	52 16	7 06	+0053	+0032 / +0015 / +0100	+0.6	+0.6	+0.4	+0.2
New Ross	52 24	6 57	+0100	+0030 / +0055 / +0130	+0.3	+0.4	+0.3	+0.4
Baginbun Head	52 10	6 50	+0003	+0003 / -0008 / -0008	-0.2	-0.1	+0.2	+0.2
Great Saltee	52 07	6 37	+0019	+0009 / -0004 / +0006	-0.3	-0.4	⊙	⊙

ROSSLARE EUROPORT	52 15	6 20	**0000 and 1200**	**0600 and 1800**	**0500 and 1700**	**1100 and 2300**	**2.3**	**1.8**	**1.1**	**0.7**
Carnsore Point	52 10	6 22	-0016	-0016	-0017	+0013	+0.7	+0.4	⊙	⊙
ROSSLARE EUROPORT	52 15	6 20		STANDARD PORT						
Wexford Harbour	52 20	6 27	+0040	+0030	+0100	+0120	-0.3	-0.4	-0.2	-0.2

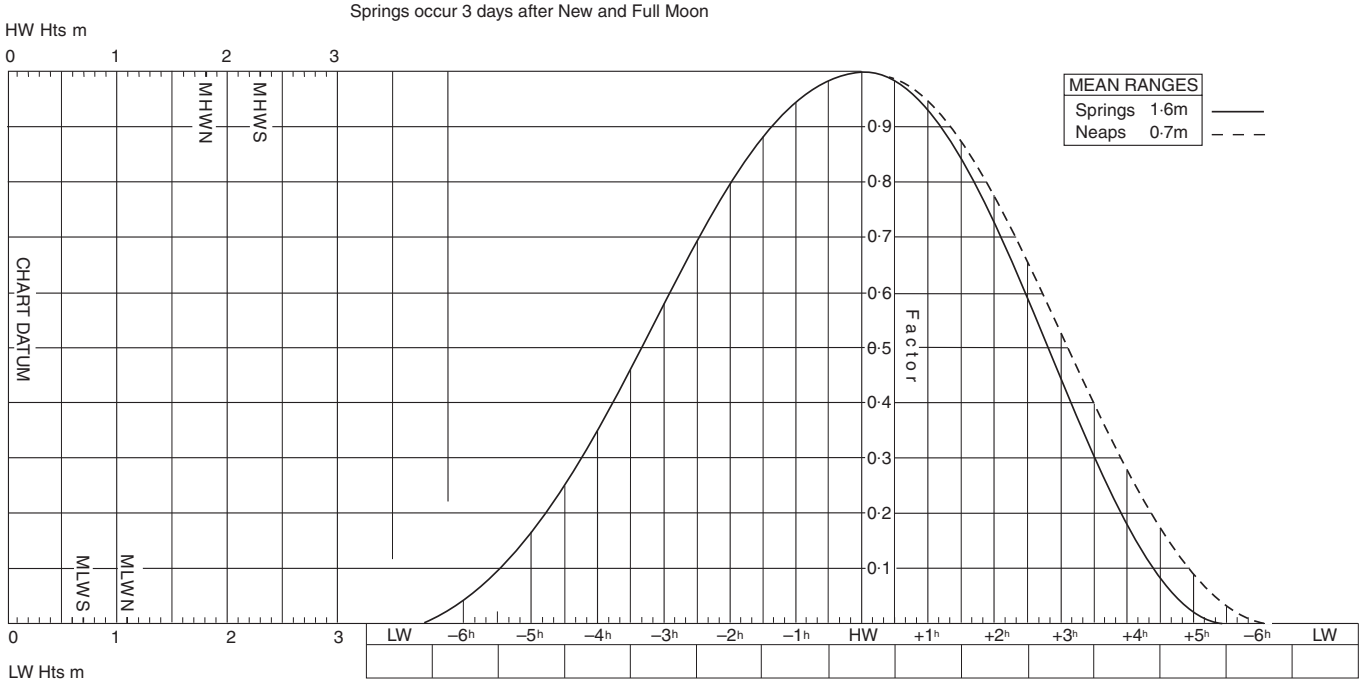
⊙ No Data

Tidal Curve Diagrams

ROSSLARE EUROPORT

MEAN SPRING AND NEAP CURVES

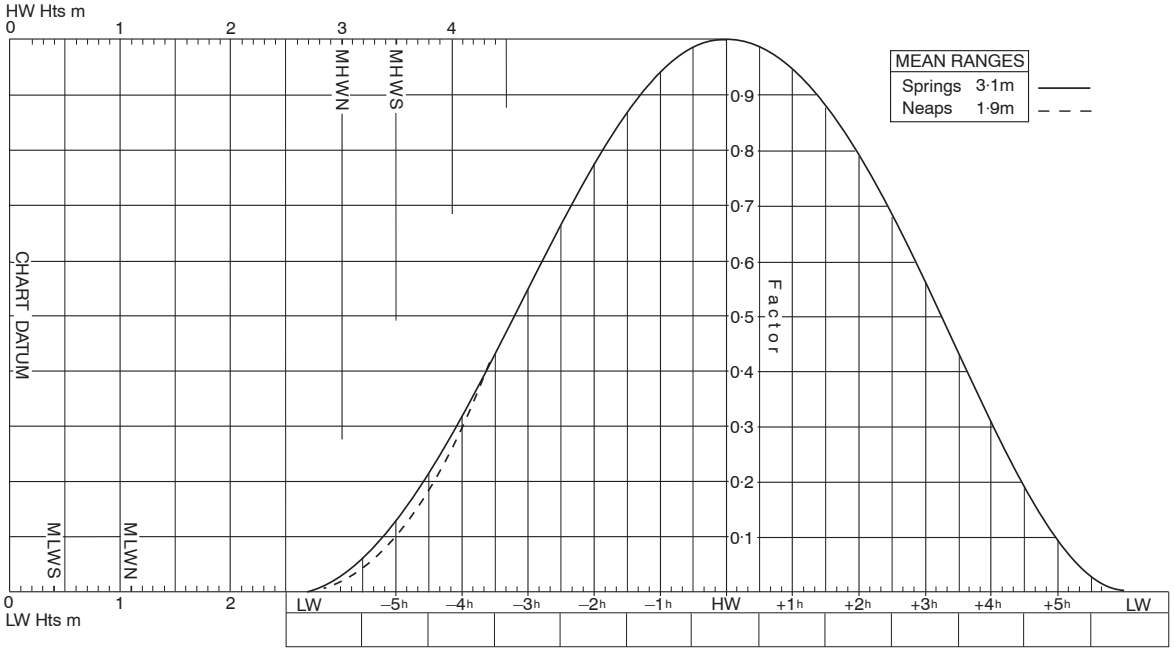
Springs occur 3 days after New and Full Moon



BELFAST

MEAN SPRING AND NEAP CURVES

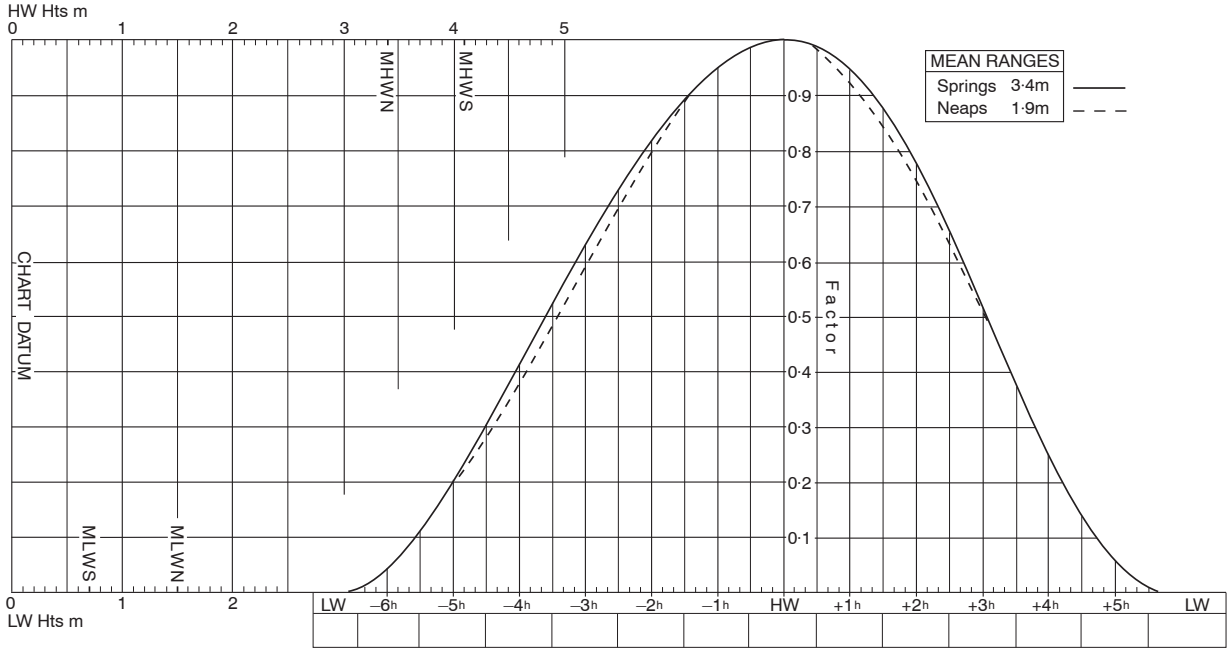
Springs occur 2 days after New and Full Moon



DUBLIN (NORTH WALL)

MEAN SPRING AND NEAP CURVES

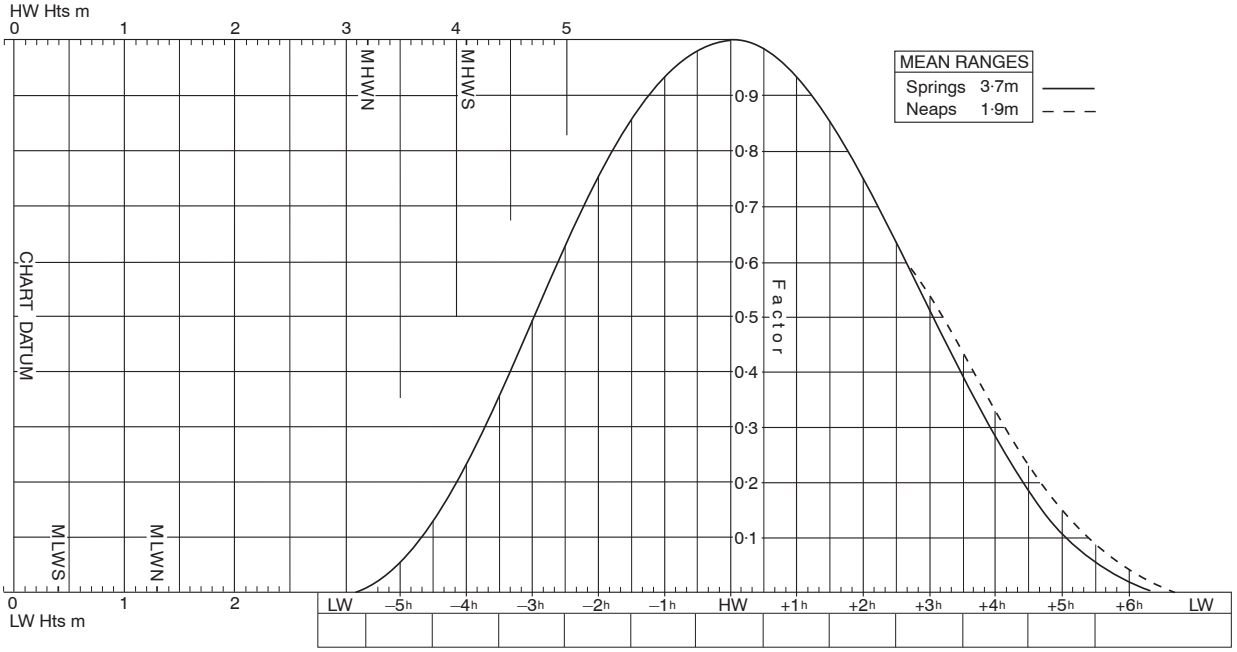
Springs occur 1 day after New and Full Moon



COBH

MEAN SPRING AND NEAP CURVES

Springs occur 2 days after New and Full Moon



For guidance on the use of Standard Curve Diagrams, see ADMIRALTY Tide Tables NP 201.