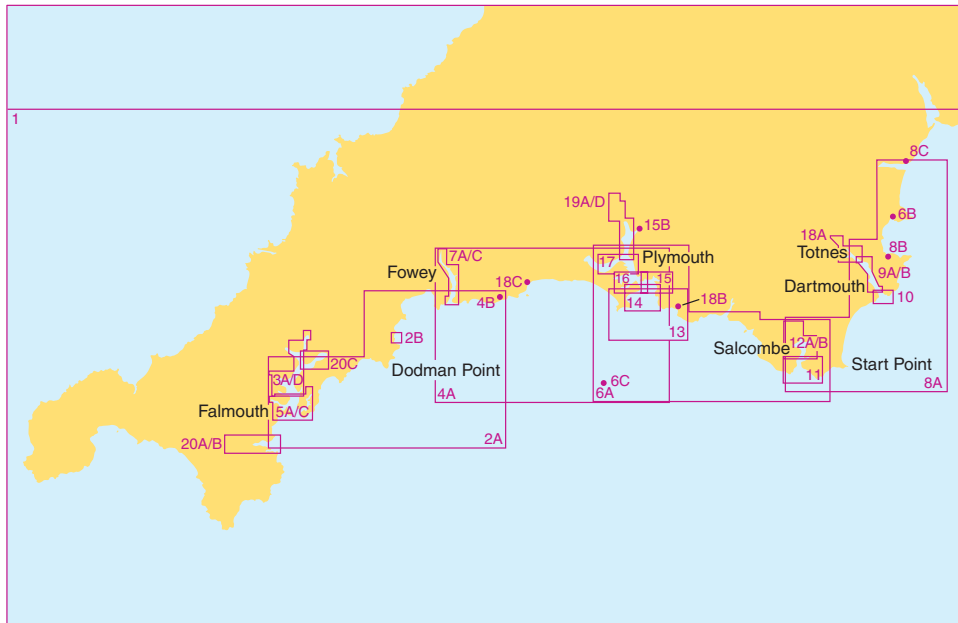




The West Country: Falmouth to Teignmouth

Coverage Diagram



5602	Chart Title	Natural Scale 1:
1	The West Country and Approaches	325,000
2A	Helford River to Fowey	75,000
2B	Mevagissey	2,500
3A	Saint Just Pool to Truro River	12,500
3B	Continuation of Truro River	12,500
3C	Continuation of Tresillian River	20,000
3D	Continuation of Carnon River	12,500
4A	Fowey to Plymouth	75,000
4B	Polperro	3,500
5A	Falmouth Harbour	12,500
5B	Upper reaches of Percuil River	12,500
5C	Penryn Harbour	12,500
6A	Plymouth to Salcombe	75,000
6B	Torquay	4,000
6C	Eddystone Rocks	7,500

5602	Chart Title	Natural Scale 1:
7A	Fowey Harbour	6,250
7B	River Fowey - Mixtow to Saint Winnow	15,000
7C	Continuation of River Fowey - Saint Winnow to Lostwithiel	15,000
8A	Salcombe to Teignmouth	75,000
8B	Brixham	7,500
8C	Teignmouth	7,500
9A	Dartmouth	6,250
9B	Higher Noss Point to Blackness Point	6,250
10	Approaches to the River Dart	6,250
11	Approaches to Salcombe	12,500
12A	Salcombe Harbour	12,500
12B	Salcombe	5,000
13	Outer Approaches to Plymouth	25,000
14	Plymouth Sound	12,500
15A	Plymouth Sound - Northeastern Part	7,500
15B	River Tavy	20,000
16	Drake Channel to Hamoaze	7,500
17A	Hamoaze	12,500
17B	River Lynher	20,000
18	Upper Reaches of River Dart, River Yealm and Looe	
18A	Blackness Point to Totnes	12,500
18B	River Yealm	12,500
18C	Looe	15,000
19A	River Tamar, Bull Point to Neal Point	12,500
19B	Neal Point to Halton Quay	12,500
19C	Halton Quay to Cotehele Quay	12,500
19D	Cotehele Quay to Calstock	12,500
20A	Helford River	12,500
20B	Continuation to Gweek	12,500
20C	Continuation of River Fal (Ruan Creek)	20,000

Notes

DATUM

All 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.


OVERHEAD CABLES

Overhead cables may conduct high voltages; contact with or proximity to these poses extreme danger. Sufficient clearance must be allowed.

LIGHTS

Light stars without legends represent two fixed lights displayed vertically. They are seen as red to port and green to starboard when proceeding upriver.

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.

MARINE FARMS

Marine farms exist within the area of this folio. 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.

AUTOMATIC IDENTIFICATION SYSTEM

Many of the navigation lights in France shown on this chart are fitted with AIS transmitters. See ADMIRALTY List of Radio Signals for further details.

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.

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)

LADEN TANKERS

Laden tankers over 10,000 GRT using the Traffic Separation Scheme off Land's End, between Seven Stones and Longships, should keep at least 3 nautical miles to seaward of Wolf Rock and should not use the scheme in restricted visibility or other adverse weather. For reporting procedures see ADMIRALTY List of Radio Signals.

SURFACED SUBMARINES

Within this area, submarines occasionally tow sonar equipment. Other vessels are recommended to remain 1500 metres clear when crossing astern of a surfaced submarine.

TORBAY-CONTROLLED AREAS

The controlled areas charted around the coast of Tor Bay are mainly for the use of Swimmers and are in use between May and September. Within these areas and in the enclosed harbours, vessels should proceed with caution and must not exceed 5 knots.

VESSEL REPORTING

For details of the following vessel reporting systems, see ADMIRALTY List of Radio Signals:

- Falmouth Local Port Service
- Plymouth VTS

SUBMARINE CABLES AND PIPELINES

Mariners should not anchor, trawl or engage in seabed 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.

HISTORIC AND MILITARY WRECKS

The sites of historic and military wrecks are protected from unauthorised interference.

ANCHORING PROHIBITED

Under the Dockyard Port of Plymouth Order, 1999, vessels must not anchor on the line of any submarine cables shown on this chart or indicated by posts or other means on the shore.

OYSTER AND MUSSEL BEDS

Oyster beds may be marked by lit or unlit buoys or beacons. Vessels should avoid grounding in these areas.

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.

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 may 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.

OPERATIONAL SEA TRAINING

Warships and auxiliaries engaged in Operational Sea Training may be encountered both in the approaches to Plymouth Sound and north of Plymouth Breakwater. Their movements may not follow customary traffic patterns.

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.

FALMOUTH COASTGUARD (MRCC)

Tel: +44 (0) 1326 317575

MMSI: 002320014

e-mail: zone23@hmcg.gov.uk (FAO Falmouth Coastguard)

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 environment offshore is now well established,
with users in all areas of the commercial, fishing and leisure communities.

Incidents have occurred 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 relevant 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: NP250 The English Channel, NP254 The West Country - Falmouth to Teignmouth and NP221 Plymouth Harbour and Approaches.

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

Tidal Stream Information

Tidal Streams referred to HW at Plymouth (Devonport)

5602_1

Hours	Geographical Position	A 50°00'2 N 5 46-7W	B 49°52'2 N 5 11-0W	C 49°43'0 N 4 42-0W	D 50°12'1 N 4 30-1W	E 49°48'7 N 4 01-3W	F 50°07'8 N 3 55-3W	
Before High Water	Directions of streams (degrees)	316 2-2 1-0	256 1-8 0-9	250 1-1 0-6	253 0-5 0-2	259 1-2 0-6	282 1-4 0-7	-6
High Water	Rates at spring tides (knots)	324 2-2 1-0	254 1-2 0-6	267 0-5 0-3	261 0-4 0-2	257 0-9 0-5	282 1-4 0-6	-5
After High Water	Rates at neap tides (knots)	331 1-7 0-8	234 0-4 0-2	0-0 0-0	261 0-2 0-1	255 0-6 0-3	286 1-1 0-5	-4
		344 1-3 0-6	045 0-4 0-2	063 0-3 0-2	089 0-1 0-0	0-0 0-0	291 0-3 0-1	-3
		019 0-7 0-3	054 1-0 0-5	076 1-0 0-5	089 0-3 0-2	077 0-7 0-4	091 0-5 0-2	-2
		091 0-7 0-3	059 1-8 0-9	065 1-3 0-6	080 0-5 0-2	078 1-2 0-7	098 1-1 0-5	-1
		118 1-5 0-7	067 2-3 1-1	073 1-7 0-8	076 0-5 0-2	081 1-2 0-7	096 1-4 0-7	0
		127 2-3 1-1	075 1-8 0-9	063 0-7 0-4	068 0-3 0-1	075 1-0 0-5	103 1-3 0-6	+1
		146 2-5 1-2	082 0-8 0-4	104 0-2 0-1	059 0-2 0-1	056 0-4 0-2	105 0-9 0-4	+2
		166 2-1 1-0	203 0-4 0-2	241 0-3 0-2	266 0-1 0-0	231 0-1 0-0	129 0-2 0-1	+3
		200 1-3 0-6	233 1-4 0-7	239 0-8 0-4	247 0-3 0-1	250 0-5 0-3	261 0-4 0-2	+4
		288 0-9 0-4	247 2-3 1-1	249 1-3 0-6	258 0-5 0-2	258 0-9 0-5	273 0-9 0-4	+5
		313 1-8 0-9	257 1-9 0-9	247 1-4 0-7	252 0-5 0-3	259 1-2 0-6	277 1-3 0-6	+6

5602_2(A)

A 50°08'5 N 5 01-6W	B 50°08'0 N 4 52-4W	
339 0-2 0-1	222 0-4 0-2	-6
005 0-6 0-3	249 0-2 0-1	-5
022 0-9 0-4	0-0 0-0	-4
023 0-6 0-3	077 0-2 0-1	-3
022 0-4 0-2	037 0-4 0-2	-2
036 0-2 0-1	042 0-5 0-3	-1
0-0 0-0	040 0-7 0-3	0
217 0-3 0-1	036 0-5 0-2	+1
213 0-5 0-2	0-0 0-0	+2
207 0-7 0-3	210 0-2 0-1	+3
190 0-8 0-4	219 0-6 0-3	+4
180 0-5 0-2	211 0-7 0-4	+5
276 0-1 0-0	216 0-5 0-3	+6

5602_3(A)

A 50°11'4 N 5 02-8W	B 50°10'8 N 5 01-7W	
350 0-1 0-0	339 0-2 0-1	-6
342 0-4 0-2	340 0-5 0-2	-5
323 0-6 0-3	337 0-5 0-2	-4
323 0-4 0-2	329 0-4 0-2	-3
318 0-1 0-1	324 0-2 0-1	-2
325 0-1 0-0	317 0-1 0-1	-1
355 0-1 0-0	0-0 0-0	0
123 0-1 0-1	172 0-2 0-1	+1
146 0-3 0-1	162 0-4 0-2	+2
152 0-4 0-2	155 0-5 0-2	+3
168 0-5 0-2	145 0-4 0-2	+4
138 0-3 0-1	141 0-3 0-1	+5
0-0 0-0	0-0 0-0	+6

5602_4(A)

A 50°12'1 N 4 30-1W	B 50°17'0 N 4 26-7W	C 50°18'3 N 4 10-9W	D 50°18'3 N 4 07-8W	
253 0-5 0-2	253 0-8 0-4	236 0-7 0-4	297 0-8 0-4	-6
261 0-4 0-2	270 0-7 0-3	264 0-6 0-3	306 0-7 0-3	-5
261 0-2 0-1	282 0-5 0-2	316 0-6 0-3	307 0-6 0-3	-4
089 0-1 0-0	352 0-3 0-1	031 0-5 0-2	304 0-3 0-2	-3
089 0-3 0-2	040 0-5 0-3	047 0-7 0-4	098 0-3 0-1	-2
080 0-5 0-2	060 0-8 0-4	053 1-0 0-5	109 0-7 0-3	-1
076 0-5 0-2	072 0-9 0-5	081 1-0 0-5	110 0-9 0-4	0
068 0-3 0-1	084 0-9 0-4	111 0-8 0-4	111 0-8 0-4	+1
059 0-2 0-1	103 0-6 0-3	129 0-3 0-2	121 0-6 0-3	+2
266 0-1 0-0	136 0-4 0-2	235 0-3 0-1	156 0-3 0-2	+3
247 0-3 0-1	207 0-3 0-2	242 0-8 0-4	265 0-4 0-2	+4
258 0-5 0-2	241 0-6 0-3	236 0-8 0-4	294 0-7 0-4	+5
252 0-5 0-3	249 0-8 0-4	232 0-9 0-5	296 0-8 0-4	+6

5602_5(A)

A 50°10'0 N 5 02-4W	B 50°09'4 N 5 02-8W	C 50°08'5 N 5 01-6W	
358 0-2 0-1	180 0-2 0-1	339 0-2 0-1	-6
011 0-4 0-2	300 0-2 0-1	005 0-6 0-3	-5
016 0-5 0-2	300 0-3 0-2	022 0-9 0-4	-4
034 0-3 0-1	300 0-5 0-2	023 0-6 0-3	-3
032 0-2 0-1	300 0-3 0-2	022 0-4 0-2	-2
034 0-1 0-0	300 0-2 0-1	036 0-2 0-1	-1
0-0 0-0	180 0-2 0-1	0-0 0-0	0
196 0-3 0-1	175 0-5 0-3	217 0-3 0-1	+1
196 0-4 0-2	175 0-6 0-3	213 0-5 0-2	+2
197 0-4 0-2	170 0-6 0-3	207 0-7 0-3	+3
189 0-2 0-1	160 0-5 0-2	190 0-8 0-4	+4
248 0-2 0-1	160 0-4 0-2	180 0-5 0-2	+5
328 0-1 0-0	160 0-1 0-0	276 0-1 0-0	+6

5602_6(A)

Hours	Geographical Position	A 50°12'54 N 4 05-27W	B 50°18'33 N 4 07-77W	C 50°18'33 N 4 10-87W	
Before High Water	Directions of streams (degrees)	266 0-8 0-4	297 0-8 0-4	236 0-7 0-4	-6
High Water	Rates at spring tides (knots)	284 0-8 0-4	306 0-7 0-3	264 0-6 0-3	-5
After High Water	Rates at neap tides (knots)	294 0-8 0-4	307 0-6 0-3	316 0-6 0-3	-4
		318 0-5 0-2	304 0-3 0-2	031 0-5 0-2	-3
		069 0-4 0-2	098 0-3 0-1	047 0-7 0-4	-2
		087 0-8 0-4	109 0-7 0-3	053 1-0 0-5	-1
		098 1-0 0-5	110 0-9 0-4	081 1-0 0-5	0
		110 0-9 0-4	111 0-8 0-4	111 0-8 0-4	+1
		129 0-6 0-4	121 0-6 0-3	129 0-3 0-2	+2
		170 0-2 0-1	156 0-3 0-2	235 0-3 0-1	+3
		267 0-2 0-1	265 0-4 0-2	242 0-8 0-4	+4
		271 0-6 0-3	294 0-7 0-4	236 0-8 0-4	+5
		264 0-8 0-4	296 0-8 0-4	232 0-9 0-5	+6

5602_8(A)

A 50°13'04 N 3 37-07W	B 50°17'04 N 3 35-07W	
203 2-2 1-1	206 1-0 0-5	-6
192 1-5 0-8	213 1-0 0-5	-4
137 0-7 0-4	235 0-5 0-3	-3
057 2-9 1-4	072 0-3 0-2	-2
043 3-0 1-5	044 0-7 0-3	-1
046 2-5 1-2	039 1-2 0-6	0
049 2-2 1-1	031 1-1 0-5	+1
061 1-4 0-7	035 0-8 0-4	+2
137 0-7 0-4	044 0-5 0-2	+3
186 1-5 0-8	046 0-1 0-1	+4
200 2-1 1-0	214 0-5 0-2	+5
202 2-2 1-1	209 0-8 0-4	+6

5602_9(A) + (B)

A 50°20'53 N 3 33-81W	B 50°20'74 N 3 34-38W	C 50°20'95 N 3 34-47W	D 50°21'09 N 3 34-49W	E 50°21'45 N 3 34-46W	F 50°21'64 N 3 34-66W	G 50°21'93 N 3 34-87W	
144 0-6 0-3	105 0-2 0-1	230 0-2 0-1	207 0-2 0-1	173 0-2 0-1	078 0-1 0-0	252 0-1 0-0	-6
319 0-8 0-4	351 0-2 0-1	029 0-4 0-2	008 0-5 0-2	328 0-5 0-2	345 0-4 0-2	030 0-2 0-1	-5
321 1-0 0-5	311 0-4 0-2	035 0-6 0-3	006 0-7 0-3	331 0-8 0-4	340 0-5 0-2	027 0-5 0-2	-4
322 1-1 0-5	298 0-9 0-4	033 0-7 0-3	011 0-7 0-3	334 0-9 0-4	323 0-6 0-3	026 0-5 0-2	-3
326 1-2 0-6	300 0-8 0-4	024 0-9 0-4	013 0-7 0-3	338 0-9 0-4	318 0-8 0-4	023 0-6 0-3	-2
330 1-2 0-5	296 0-6 0-3	015 0-9 0-4	015 0-7 0-3	340 0-7 0-3	325 0-8 0-4	019 0-6 0-3	-1
336 0-5 0-2	289 0-4 0-2	018 0-7 0-3	013 0-3 0-1	341 0-5 0-2	342 0-2 0-1	015 0-4 0-2	0
157 0-4 0-2	075 0-2 0-1	203 0-2 0-1	197 0-2 0-1	165 0-3 0-1	102 0-2 0-1	180 0-1 0-0	+1
150 0-9 0-4	109 0-5 0-2	193 0-7 0-3	192 0-6 0-3	156 0-7 0-3	142 0-4 0-2	193 0-4 0-2	+2
143 1-5 0-7	125 0-7 0-3	195 0-9 0-4	193 0-8 0-4	149 1-1 0-5	155 1-1 0-5	195 0-6 0-3	+3
146 1-4 0-7	133 0-9 0-4	203 1-1 0-5	183 1-0 0-5	155 1-1 0-5	156 1-2 0-5	196 0-6 0-3	+4
146 1-0 0-5	130 0-7 0-3	207 0-9 0-4	189 0-7 0-3	157 0-8 0-4	160 0-8 0-4	202 0-5 0-2	+5
146 0-7 0-3	116 0-3 0-1	217 0-3 0-2	200 0-3 0-2	158 0-5 0-2	144 0-2 0-1	239 0-1 0-1	+6

5602_10

A 50°20'20N 3 33·49W			B 50°20'53N 3 33·81W		
175	0·4 0·2		144	0·6 0·3	-6
319	0·2 0·1		319	0·8 0·4	-5
353	0·3 0·1		321	1·0 0·5	-4
003	0·4 0·2		322	1·1 0·5	-3
357	0·5 0·2		326	1·2 0·6	-2
344	0·5 0·2		330	1·2 0·5	-1
302	0·2 0·1		336	0·5 0·2	0
233	0·2 0·1		157	0·4 0·2	+1
162	0·3 0·1		150	0·9 0·4	+2
139	0·5 0·2		143	1·5 0·7	+3
170	0·2 0·1		146	1·4 0·7	+4
159	0·5 0·2		146	1·0 0·5	+5
149	0·7 0·3		146	0·7 0·3	+6

5602_11

A 50°14'04N 3°46·07W		
	0·0 0·0	-6
015	0·2 0·1	-5
027	1·0 0·5	-4
040	1·6 0·7	-3
035	1·6 0·7	-2
035	1·2 0·5	-1
045	0·2 0·1	0
211	0·4 0·2	+1
211	1·1 0·5	+2
215	1·9 0·8	+3
219	1·5 0·7	+4
214	0·6 0·3	+5
230	0·1 0·0	+6

5602_12(A) + (B)

A 50°14'04N 3°46·07W		
	0·0 0·0	-6
015	0·2 0·1	-5
027	1·0 0·5	-4
040	1·6 0·7	-3
035	1·6 0·7	-2
035	1·2 0·5	-1
045	0·2 0·1	0
211	0·4 0·2	+1
211	1·1 0·5	+2
215	1·9 0·8	+3
219	1·5 0·7	+4
214	0·6 0·3	+5
230	0·1 0·0	+6

5602_13

Hours	Geographical Position	A 50°18'33N 4 10·87W	B 50°20'23N 4 09·77W	C 50°20'03N 4 07·97W	D 50°18'33N 4 07·77W
Before High Water	Directions of streams (degrees)	236	0·7 0·4	156	0·2 0·1
		264	0·6 0·3	051	0·6 0·3
		316	0·6 0·3	046	1·3 0·6
		031	0·5 0·2	035	1·3 0·6
		047	0·7 0·4	038	0·9 0·4
		053	1·0 0·5	048	0·5 0·3
After High Water	Rates at spring tides (knots)	081	1·0 0·5	054	0·1 0·0
		111	0·8 0·4	232	0·4 0·2
		129	0·3 0·2	228	0·8 0·4
		235	0·3 0·1	226	1·1 0·5
		242	0·8 0·4	225	1·1 0·5
		236	0·8 0·4	213	0·8 0·4
High Water	Rates at neap tides (knots)	232	0·9 0·5	190	0·3 0·1
		276	0·2 0·1	297	0·8 0·4
		328	0·7 0·3	306	0·7 0·3
		342	1·2 0·6	307	0·6 0·3
		350	1·1 0·6	304	0·3 0·2
		358	0·8 0·4	098	0·3 0·1
High Water	Directions of streams (degrees)	014	0·5 0·2	109	0·7 0·3
		110	0·9 0·4	0	
		145	0·3 0·2	111	0·8 0·4
		168	0·7 0·3	121	0·6 0·3
		156	0·3 0·2	265	0·4 0·2
		294	0·7 0·4	296	0·8 0·4

5602_14

A 50°20'03N 4 07·97W	B 50°20'23N 4 09·77W	C 50°21'03N 4 09·57W	D 50°21'13N 4 08·67W
276	0·2 0·1	156	0·2 0·1
328	0·7 0·3	051	0·6 0·3
342	1·2 0·6	046	1·3 0·6
350	1·1 0·6	035	1·3 0·6
358	0·8 0·4	038	0·9 0·4
014	0·5 0·2	048	0·5 0·3
061	0·2 0·1	054	0·1 0·0
145	0·3 0·2	232	0·4 0·2
168	0·7 0·3	228	0·8 0·4
171	0·9 0·4	226	1·1 0·5
174	1·0 0·5	225	1·1 0·5
174	0·7 0·3	213	0·8 0·4
221	0·2 0·1	190	0·3 0·1
100	0·1 0·1	175	0·1 0·1
342	1·1 0·5	350	0·2 0·1
005	0·8 0·3	005	0·8 0·3
353	0·8 0·4	020	0·7 0·3
020	0·7 0·3	025	0·8 0·4
030	0·1 0·1	030	0·1 0·1
148	0·4 0·2	148	0·4 0·2
180	0·5 0·2	180	0·5 0·2
204	0·9 0·4	204	0·9 0·4
192	1·1 0·5	192	1·1 0·5
198	0·7 0·3	198	0·7 0·3
184	0·4 0·2	184	0·4 0·2
177	0·3 0·1	177	0·3 0·1










5602_15(A)

A 50°21'03N 4 09·57W	B 50°21'13N 4 08·67W	C 50°21'43N 4 08·77W	D 50°21'53N 4 09·37W	E 50°21'53N 4 08·37W	F 50°21'53N 4 08·87W	G 50°21'63N 4 07·37W	H 50°21'83N 4 07·77W
100	0·1 0·1	175	0·1 0·1	113	0·2 0·1		0·0 0·0
342	1·1 0·5	350	0·2 0·1	238	1·0 0·4	000	0·2 0·1
346	1·6 0·7	005	0·8 0·3	223	1·9 0·9	295	0·3 0·1
347	1·3 0·6	353	0·8 0·4	237	1·6 0·7	299	0·8 0·4
352	0·7 0·3	020	0·7 0·3	242	1·2 0·6	291	0·9 0·4
030	0·1 0·1	025	0·8 0·4	333	0·5 0·2	308	0·6 0·3
148	0·4 0·2	030	0·5 0·2	232	0·5 0·2	328	0·5 0·2
180	0·5 0·2	178	0·3 0·1	073	0·4 0·2	308	0·3 0·1
147	1·6 0·7	204	0·9 0·4	240	0·1 0·1		0·0 0·0
145	2·3 1·0	192	1·1 0·5	195	0·2 0·1	230	0·2 0·1
150	2·4 1·1	198	0·7 0·3	068	1·4 0·6	240	0·5 0·3
143	1·3 0·6	184	0·4 0·2	068	1·4 0·6	250	0·7 0·3
139	0·5 0·2	177	0·3 0·1	070	1·4 0·6	252	0·5 0·2
				070	1·0 0·5	247	0·3 0·1
				076	0·6 0·3		0·0 0·0
				110	0·4 0·2		0·0 0·0
				090	0·2 0·1		0·0 0·0
				000	0·2 0·1		0·0 0·0
				350	0·5 0·2		0·0 0·0
				342	0·5 0·3		0·0 0·0
				340	0·3 0·2		0·0 0·0
				330	0·2 0·1		0·0 0·0
				280	0·1 0·1		0·0 0·0
				240	0·1 0·1		0·0 0·0
				195	0·2 0·1		0·0 0·0
				170	0·3 0·2		0·0 0·0
				157	0·6 0·3		0·0 0·0
				127	0·6 0·3		0·0 0·0
				129	0·8 0·4		0·0 0·0
				115	0·4 0·2		0·0 0·0






5602_16

Hours	Geographical Position	A 50°21'03N 4 09·57W	B 50°21'33N 4 09·77W	C 50°21'43N 4 08·77W	D 50°21'53N 4 08·87W	E 50°21'53N 4 09·37W	F 50°21'63N 4 10·17W	G 50°21'89N 4 10·96W	H 50°21'91N 4 11·09W
Before High Water	Directions of streams (degrees)	100	0·1 0·1	080	0·1 0·0	113	0·1 0·0	113	0·2 0·1
		342	1·1 0·5	320	0·2 0·1	332	0·6 0·3	295	0·3 0·1
		346	1·6 0·7	289	0·6 0·3	331	1·1 0·5	299	0·8 0·4
		347	1·3 0·6	270	1·1 0·5	342	1·0 0·5	291	0·9 0·4
		352	0·7 0·3	260	0·9 0·4	347	0·7 0·3	308	0·6 0·3
		030	0·1 0·1	260	0·5 0·2	333	0·5 0·2	328	0·5 0·2
After High Water	Rates at spring tides (knots)	148	0·4 0·2	220	0·1 0·0	317	0·3 0·1	308	0·3 0·1
		148	1·1 0·5	140	0·8 0·4	178	0·3 0·1	073	0·4 0·2
		147	1·6 0·7	145	1·6 0·7	146	0·6 0·3	102	0·4 0·2
		145	2·3 1·0	145	1·9 0·9	140	1·0 0·5	122	0·8 0·4
		150	2·4 1·1	138	1·6 0·7	143	1·1 0·5	128	1·1 0·5
		143	1·3 0·6	134	1·1 0·5	143	0·8 0·4	129	0·8 0·4
High Water	Rates at neap tides (knots)	139	0·5 0·2	115	0·3 0·1	138	0·3 0·1	115	0·4 0·2
		180	0·8 0·4	305	0·5 0·2	315	1·0 0·5	180	1·7 0·8
		322	0·7 0·3	305	1·8 0·8	289	1·6 0·7	282	2·0 0·9
		323	1·2 0·6	308	1·3 0·6	313	1·0 0·5	282	1·6 0·7
		308	1·3 0·6	282	1·6 0·7	313	0·4 0·2	281	0·8 0·4
		170	0·4 0·2	158	0·3 0·1	109	0·3 0·1	0	
High Water	Directions of streams (degrees)	158	1·1 0·5	123	0·8 0·4	097	1·0 0·5	+1	
		161	1·9 0·9	112	0·5 0·2	125	1·1 0·5	+2	
		167	2·8 1·3	111	1·0 0·4	142	1·4 0·6	+3	
		185	2·5 1·2	109	0·6 0·3	137	1·1 0·5	+4	
		180	1·7 0·8	130	0·2 0·1	170	0·4 0·2	+5	
		174	1·2 0·5	293	0·3 0·1	+6			

5602_17(A)

 50°21'9N 4 11:1W	 50°22'4N 4 11:3W	 50°22'9N 4 11:5W	 50°23'3N 4 11:8W	 50°23'5N 4 11:6W	 50°23'8N 4 12'6W	 50°23'8N 4 13:0W	 50°23'5N 4 13:4W	 50°23'0N 4 14:7W										
296 315 316 311 302 266	04 0:2 10 0:5 1:7 0:8 0:9 0:4 1:0 0:5 0:2 0:1	188 310 331 339 325 180	06 0:3 02 0:1 0:3 0:1 1:3 0:6 0:3 0:1 0:1 0:1	120 010 353 345 312 316	01 0:0 0:2 0:1 0:7 0:3 0:8 0:4 0:6 0:3 0:3 0:1	135 300 320 313 285 275	03 0:0 0:1 0:0 1:0 0:5 1:0 0:5 0:7 0:3 0:5 0:3	061 00 0:0 0:0 0:0 245 240 245	02 0:1 0:0 0:0 0:0 0:0 0:1 0:0 0:2 0:1 0:2 0:1	173 327 344 336 355 355	04 0:2 0:2 0:1 1:1 0:5 1:3 0:6 0:7 0:3 0:6 0:3	325 304 294 295 285 291	01 0:0 0:7 0:3 1:0 0:5 0:7 0:3 0:6 0:3 0:3 0:1	057 240 220 215 215 225	02 0:1 0:5 0:2 1:9 0:9 2:1 1:0 1:6 0:7 1:1 0:5	334 221 221 218 221 214	01 0:0 0:5 0:3 0:9 0:4 0:9 0:4 0:8 0:4 0:5 0:2	-6 -5 -4 -3 -2 -1
109	0:3 0:1	165	0:5 0:2	151	0:1 0:0	210	0:1 0:0	232	0:1 0:0	230	0:1 0:1	281	0:1 0:0	050	0:2 0:1	157	0:1 0:1	0
097	1:0 0:5	175	0:6 0:3	148	0:5 0:2	137	0:5 0:2	100	0:2 0:1	158	0:5 0:2	115	0:3 0:1	060	1:0 0:5	037	0:5 0:2	+1
125	1:1 0:5	175	1:1 0:5	146	0:9 0:4	128	1:0 0:5	090	0:3 0:1	155	1:2 0:6	082	0:7 0:3	065	1:5 0:7	034	0:8 0:4	+2
142	1:4 0:6	178	1:5 0:7	146	1:3 0:6	131	1:2 0:6	107	0:2 0:1	160	1:2 0:6	096	1:1 0:5	070	2:0 0:9	042	1:0 0:5	+3
137	1:1 0:5	175	1:4 0:7	146	1:0 0:5	135	0:9 0:4	000	0:0 0:0	172	1:2 0:6	089	1:2 0:5	070	1:8 0:8	041	0:9 0:4	+4
170	0:4 0:2	177	1:2 0:6	145	0:5 0:2	139	0:6 0:3	078	0:3 0:1	190	0:8 0:4	073	0:5 0:2	070	1:3 0:6	031	0:5 0:2	+5
293	0:3 0:1	177	1:1 0:5	150	0:2 0:1	138	0:2 0:1	067	0:3 0:1	181	0:6 0:3	044	0:1 0:0	065	0:6 0:3	035	0:1 0:0	+6

5602_19(A)+(B)

Hours	Geographical Position		 50°23'8N 4 12'6W	 50°24'7N 4 12'2W	 50°25'5N 4 12'1W	 50°25'7N 4 11'9W	 50°23'8N 4 13'0W						
Before High Water	<div><div>6</div><div>5</div><div>4</div><div>3</div><div>2</div><div>1</div></div>	Directions of streams (degrees) Rates at spring tides (knots) Rates at neap tides (knots)	173	04 02	185	04 02	320	01 00	023	04 02	325	01 00	-6
			327	02 01	005	05 02	025	11 05	034	18 08	304	07 03	-5
			344	11 05	359	16 07	028	17 08	031	17 08	294	10 05	-4
			336	13 06	007	17 08	027	13 06	038	13 06	295	07 03	-3
			355	07 03	012	14 06	034	07 03	030	06 03	285	06 03	-2
			355	06 03	001	07 03	029	06 03	016	03 02	291	03 01	-1
High Water		230	01 01	170	02 01		00 00	210	02 01	281	01 00	0	
	<div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div><div>6</div></div>	Directions of streams (degrees) Rates at spring tides (knots) Rates at neap tides (knots)	158	05 02	190	09 04	203	06 03	201	06 03	115	03 01	+1
			155	12 06	183	12 05	212	09 04	196	09 04	082	07 03	+2
			160	12 06	182	13 06	212	13 06	197	11 05	096	11 05	+3
			172	12 06	177	12 06	203	13 06	190	11 05	089	12 05	+4
			190	08 04	170	10 05	205	12 05	193	12 05	073	05 02	+5
181			06 03	186	07 03	212	06 03		00 00	044	01 00	+6	

TIME & HEIGHT DIFFERENCES FOR PREDICTING THE TIDE AT SECONDARY PORTS

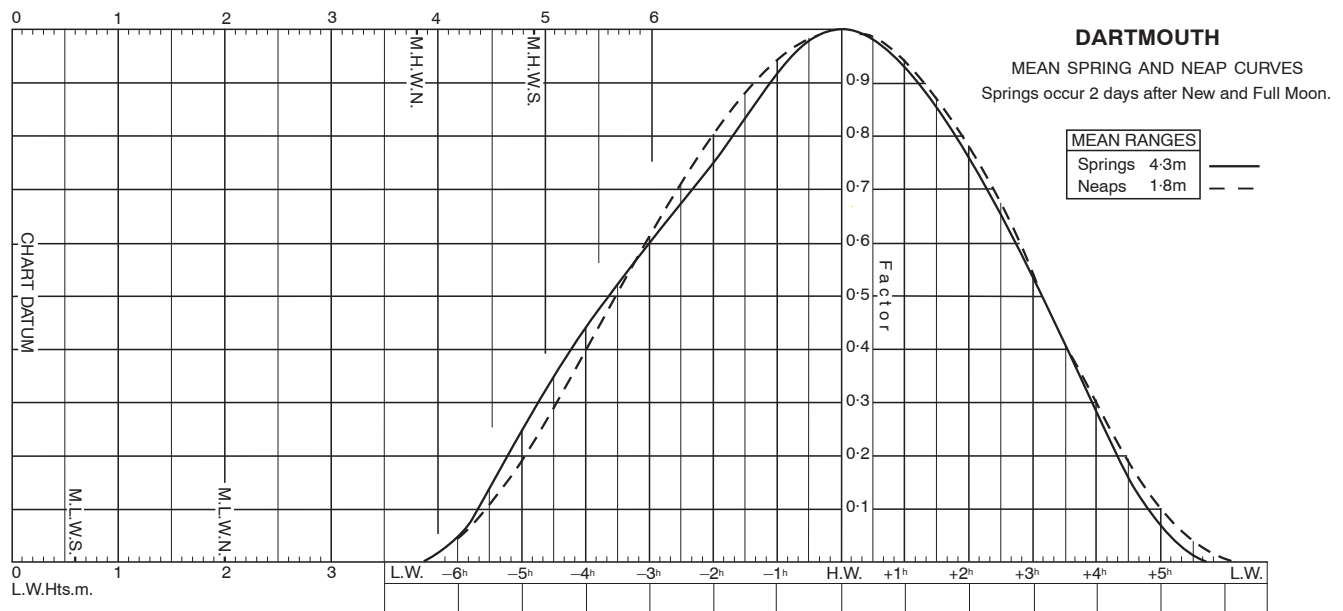
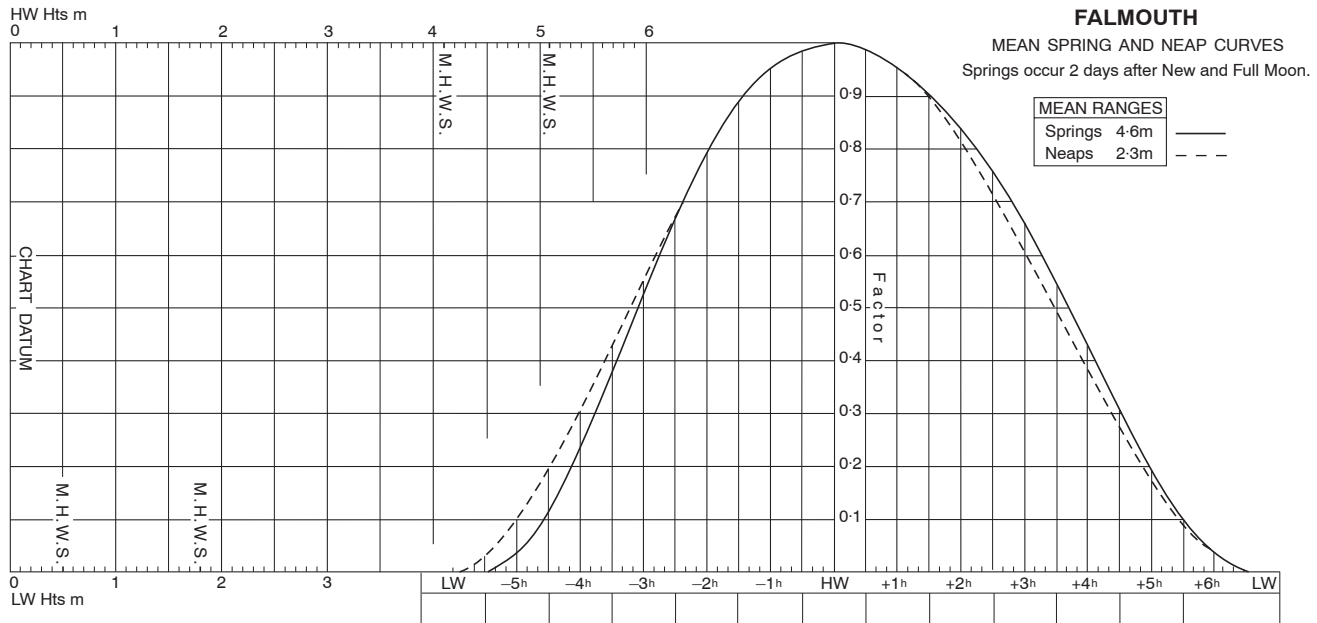
PLACE	Lat. N	Long. W	TIME DIFFERENCES				HEIGHT DIFFERENCES (IN METRES)			
			High Water		Low Water		MHWS	MHWN	MLWN	MLWS
			Zone UT (GMT)							
PLYMOUTH (DEVONPORT)	50 22	4 11	0000 and 1200	0600 and 1800	0000 and 1200	0600 and 1800	5.5	4.4	2.2	0.8
Helford River (Entrance)	50 05	5 05	-0030	-0035	-0015	-0010	-0.2	-0.2	-0.3	-0.2
FALMOUTH	50 09	5 03	STANDARD PORT				See Table of NON-REFERENCE STANDARD PORTS			
TRURO	50 16	5 03	STANDARD PORT				See Table of NON-REFERENCE STANDARD PORTS			
Mevagissey	50 16	4 47	-0015	-0020	-0010	-0005	-0.1	-0.1	-0.2	-0.1
Par	50 21	4 42	-0010	-0015	-0010	-0005	-0.4	-0.4	-0.4	-0.2
River Fowey										
Fowey	50 20	4.38	STANDARD PORT				See Table of NON-REFERENCE STANDARD PORTS			
Lostwithiel	50 24	4 40	+0005	-0010	§	§	-4.1	-4.1	§	§
Looe	50 21	4 27	-0010	-0010	-0005	-0005	-0.1	-0.2	-0.2	-0.2
Whitsand Bay	50 20	4 15	0000	0000	0000	0000	0.0	+0.1	-0.1	+0.2
River Tamar										
Saltash	50 24	4 12	0000	+0010	0000	-0005	+0.1	+0.1	+0.1	+0.1
Cargreen	50 27	4 12	0000	+0010	+0020	+0020	0.0	0.0	-0.1	0.0
Cotehele Quay	50 29	4 13	0000	+0020	+0045	+0045	-0.9	-0.9	-0.8	-0.4
River Tavy										
Lopwell	50 28	4 09	⊙	⊙	§	§	-2.6	-2.7	§	§
River Lynher										
Jupiter Point	50 23	4 14	+0010	+0005	0000	-0005	0.0	0.0	+0.1	0.0
Saint Germans	50 23	4 18	0000	0000	+0020	+0020	-0.3	-0.1	0.0	+0.2
Turnchapel	50 22	4 07	0000	0000	+0010	-0015	0.0	+0.1	+0.2	+0.1
Bovisand Pier	50 20	4 08	-0010	-0010	-0008	-0009	-0.1	0.0	+0.2	+0.2
River Yealm										
Entrance	50 19	4 04	+0006	+0006	+0002	+0002	-0.1	-0.1	-0.1	-0.1
PLYMOUTH (DEVONPORT)	50 22	4 11	0100 and 1300	0600 and 1800	0100 and 1300	0600 and 1800	5.5	4.4	2.2	0.8
Salcombe River										
Salcombe	50 13	3 47	0000	+0010	+0005	-0005	-0.2	-0.3	-0.1	-0.1
Start Point	50 13	3 39	+0015	+0015	+0005	+0010	-0.1	-0.2	+0.1	+0.2*
DARTMOUTH	50 21	3 35	STANDARD PORT				See Table of NON-REFERENCE STANDARD PORTS			
River Dart										
Greenway Quay	50 23	3 35	+0030	+0045	+0025	+0005	-0.6	-0.6	-0.2	-0.2
Stoke Gabriel (Duncannon)	50 24	3 38	+0035	+0040	+0020	+0030	-0.9	-0.8	-0.4	-0.3
Totnes	50 26	3 41	+0030	+0040	+0115	+0030	-2.0	-2.1	§	§
TORQUAY	50 28	3 32	STANDARD PORT				See Table of NON-REFERENCE STANDARD PORTS			
Teignmouth (Approaches)	50 33	3 29	+0020	+0050	0025	0000	-0.9	-0.8	-0.2	-0.1*
Teignmouth (New Quay)	50 33	3 30	+0025	+0055	+0040	+0005	-0.8	-0.8	-0.2	+0.1

⊙ No data § Dries out except for river water

Between Start Point and Portland the tidal curve gradually becomes more and more distorted, especially on the rising tide; the rise is relatively fast for the first hour after low water and there is then a noticeable slackening in the rate of rise for the next 1½ hours, after which the rapid rate of rise is resumed. There is often a "stand" at high water, which, while not very noticeable at Start Point, lasts for about an hour at Torquay.

Non-Reference Standard Ports				
STANDARD PORT	MHWS	MHWN	MLWN	MLWS
FALMOUTH	5.1	4.1	1.8	0.5
TRURO	3.5	2.4	⊙	⊙
FOWEY	-0.1	-0.1	-0.2	-0.2
DARTMOUTH	4.9	3.8	2.0	0.6
TORQUAY	5.0	3.9	2.2	0.9

Tidal Curve Diagrams



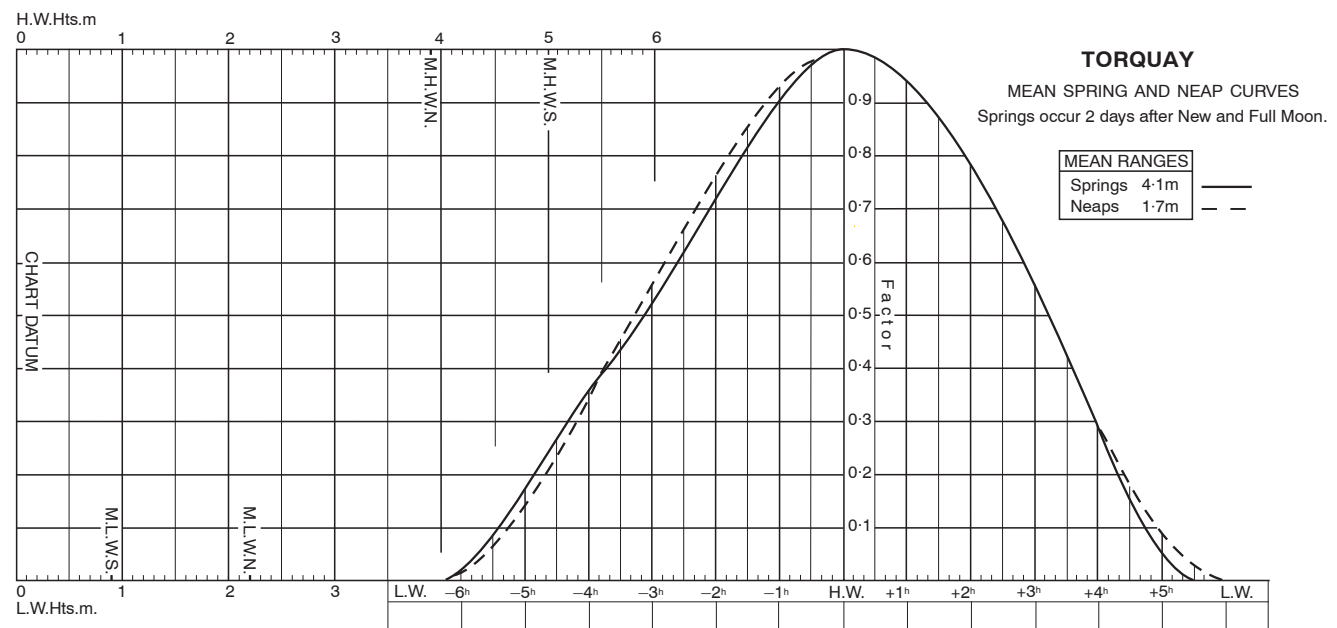
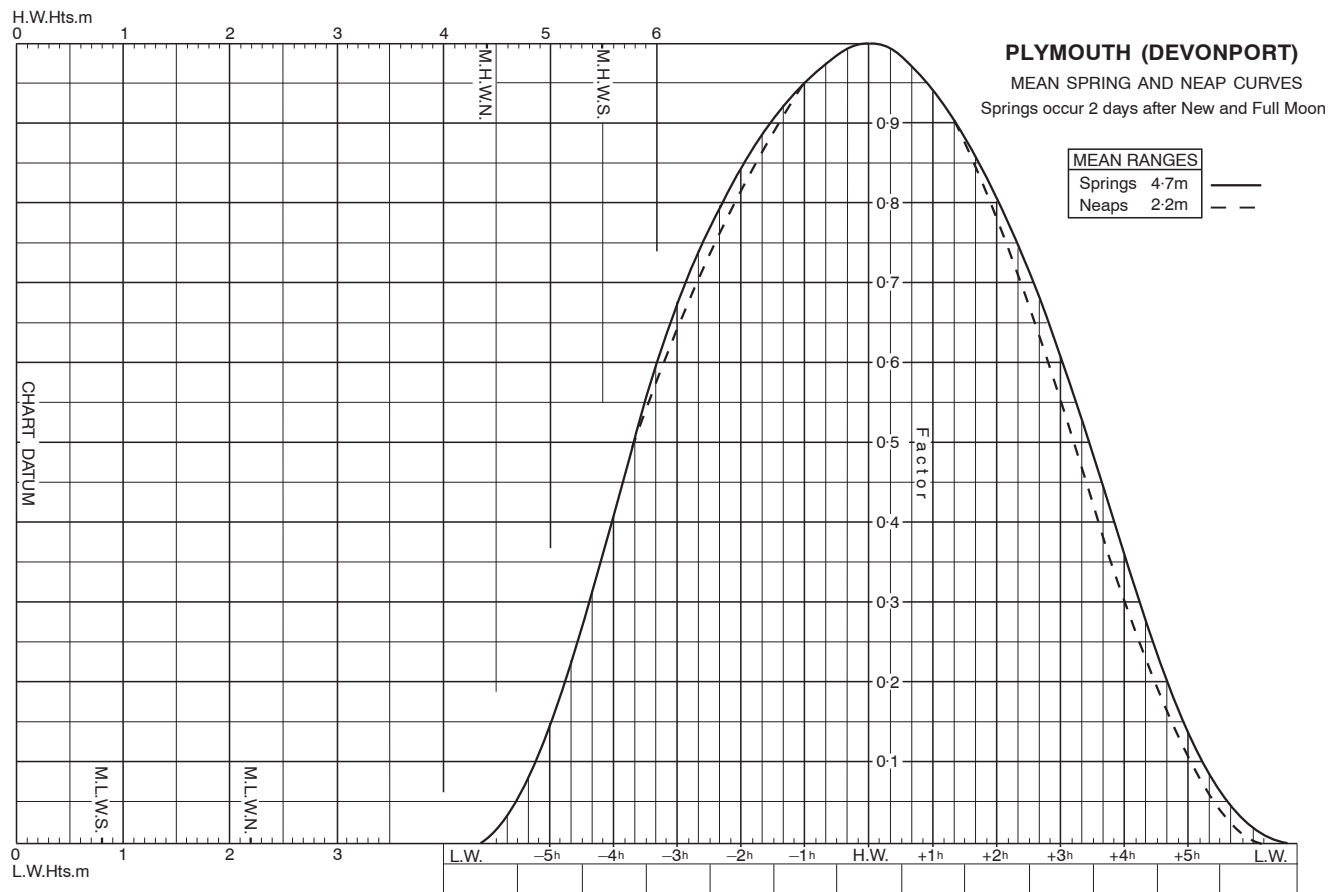


Diagram to show the changes in Chart Datum in the Fal, Penryn and Truro Rivers.

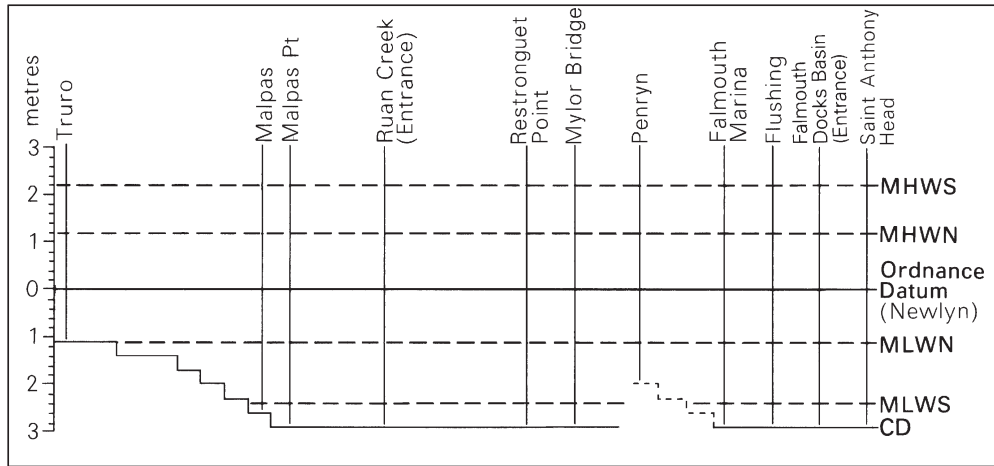


Diagram to show the changes in Chart Datum in the River Dart

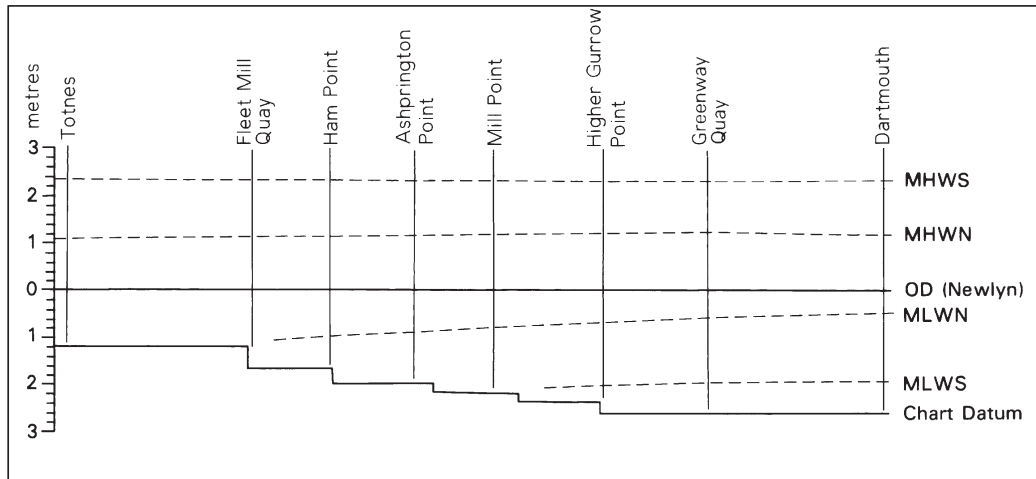


Diagram to show changes in Chart Datum in the River Fowey

