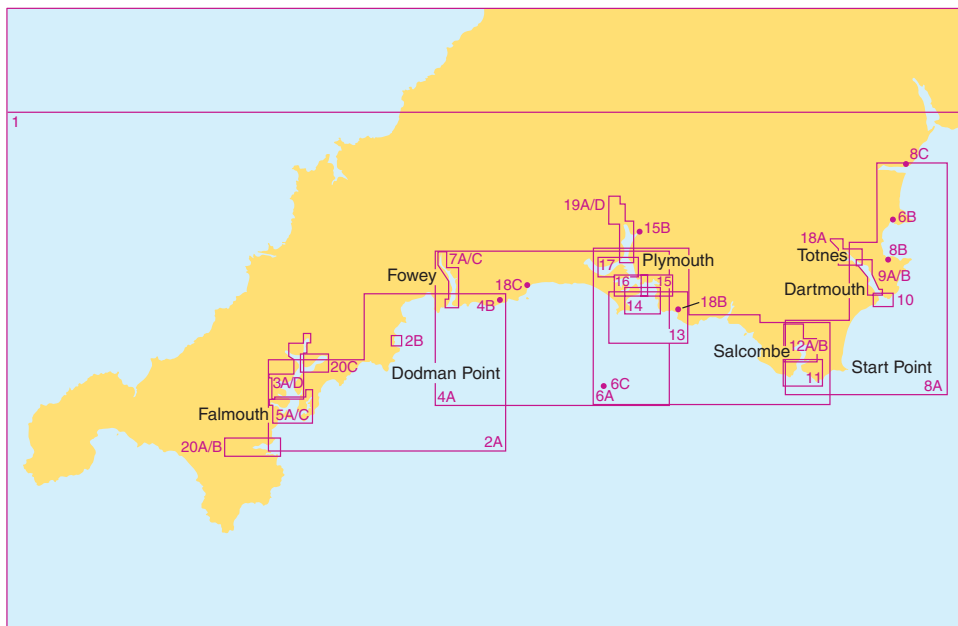




The West Country: Falmouth to Teignmouth

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

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 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.

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.

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

Submarine cables are not shown in Hamoaze, The Narrows, Cattewater and River Yealm. 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)

MARITIME SAFETY INFORMATION

Maritime Safety Information (MSI) is broadcast by FALMOUTH COASTGUARD at 0110, 0410, 0710, 1010, 1310, 1610, 1910 & 2210 (local time). These will include gale warnings, local inshore forecasts and navigational warnings. Mariners should listen to the MSI announcement on VHF Channel 16 for details of the working channel to be used for the broadcast.

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 | 211 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 | 398 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 | | |
|-------------------------|---------|----|
| 015 | 0·0 0·0 | -6 |
| 027 | 0·2 0·1 | -5 |
| 040 | 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 | | |
|-------------------------|---------|----|
| 015 | 0·0 0·0 | -6 |
| 027 | 0·2 0·1 | -5 |
| 040 | 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 |  50°18'33 N 4 10·87W |  50°20'23 N 4 09·77W |  50°20'03 N 4 07·97W |  50°18'33 N 4 07·77W | | | | | |
|-------------------|---|--|--|--|--|-----|---------|-----|---------|----|
| Before High Water | Directions of streams (degrees) | 236 | 0·7 0·4 | 156 | 0·2 0·1 | 276 | 0·2 0·1 | 297 | 0·8 0·4 | -6 |
| | | 264 | 0·6 0·3 | 051 | 0·6 0·3 | 328 | 0·7 0·3 | 306 | 0·7 0·3 | -5 |
| | | 316 | 0·6 0·3 | 046 | 1·3 0·6 | 342 | 1·2 0·6 | 307 | 0·6 0·3 | -4 |
| | | 031 | 0·5 0·2 | 035 | 1·3 0·6 | 350 | 1·1 0·6 | 304 | 0·3 0·2 | -3 |
| | | 047 | 0·7 0·4 | 038 | 0·9 0·4 | 358 | 0·8 0·4 | 098 | 0·3 0·1 | -2 |
| | | 053 | 1·0 0·5 | 048 | 0·5 0·3 | 014 | 0·5 0·2 | 109 | 0·7 0·3 | -1 |
| After High Water | Rates at spring tides (knots) | 081 | 1·0 0·5 | 054 | 0·1 0·0 | 061 | 0·2 0·1 | 110 | 0·9 0·4 | 0 |
| | | 111 | 0·8 0·4 | 232 | 0·4 0·2 | 145 | 0·3 0·2 | 111 | 0·8 0·4 | +1 |
| | | 129 | 0·3 0·2 | 228 | 0·8 0·4 | 168 | 0·7 0·3 | 121 | 0·6 0·3 | +2 |
| | | 235 | 0·3 0·1 | 226 | 1·1 0·5 | 171 | 0·9 0·4 | 156 | 0·3 0·2 | +3 |
| | | 242 | 0·8 0·4 | 225 | 1·1 0·5 | 174 | 1·0 0·5 | 265 | 0·4 0·2 | +4 |
| | | 236 | 0·8 0·4 | 213 | 0·8 0·4 | 174 | 0·7 0·3 | 294 | 0·7 0·4 | +5 |
| | | 232 | 0·9 0·5 | 190 | 0·3 0·1 | 221 | 0·2 0·1 | 296 | 0·8 0·4 | +6 |

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 | 353 | 0·8 0·4 |
| 020 | 0·7 0·3 | 020 | 0·7 0·3 |
| 025 | 0·8 0·4 | 025 | 0·8 0·4 |
| 030 | 0·1 0·1 | 030 | 0·1 0·1 |
| 048 | 0·5 0·3 | 048 | 0·5 0·3 |
| 098 | 0·3 0·1 | 098 | 0·3 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 | 090 | 0·2 0·1 |
| 342 | 1·1 0·5 | 305 | 0·2 0·1 | 332 | 0·6 0·3 | 238 | 1·0 0·4 |
| 346 | 1·6 0·7 | 005 | 0·8 0·3 | 331 | 1·1 0·5 | 223 | 1·9 0·9 |
| 347 | 1·3 0·6 | 353 | 0·8 0·4 | 342 | 1·0 0·5 | 237 | 1·6 0·7 |
| 352 | 0·7 0·3 | 020 | 0·7 0·3 | 347 | 0·7 0·3 | 242 | 1·2 0·6 |
| 030 | 0·1 0·1 | 025 | 0·8 0·4 | 333 | 0·5 0·2 | 233 | 1·1 0·5 |
| 148 | 0·4 0·2 | 030 | 0·5 0·2 | 317 | 0·3 0·1 | 232 | 0·5 0·2 |
| 148 | 1·1 0·5 | 180 | 0·5 0·2 | 178 | 0·3 0·1 | 073 | 0·4 0·2 |
| 147 | 1·6 0·7 | 204 | 0·9 0·4 | 146 | 0·6 0·3 | 068 | 1·0 0·5 |
| 145 | 2·3 1·0 | 192 | 1·1 0·5 | 140 | 1·0 0·5 | 068 | 1·4 0·6 |
| 150 | 2·4 1·1 | 198 | 0·7 0·3 | 143 | 1·1 0·5 | 070 | 1·4 0·6 |
| 143 | 1·3 0·6 | 184 | 0·4 0·2 | 143 | 0·8 0·4 | 070 | 1·0 0·5 |
| 139 | 0·5 0·2 | 177 | 0·3 0·1 | 138 | 0·3 0·1 | 076 | 0·6 0·3 |
| 090 | 0·2 0·1 | 090 | 0·2 0·1 | 090 | 0·2 0·1 | 113 | 0·2 0·1 |
| 000 | 0·2 0·1 | 295 | 0·3 0·1 | 085 | 0·3 0·1 | 102 | 0·4 0·2 |
| 299 | 0·8 0·4 | 070 | 0·6 0·3 | 094 | 0·5 0·2 | 098 | 0·5 0·2 |
| 291 | 0·9 0·4 | 074 | 0·4 0·2 | 098 | 0·5 0·2 | 100 | 0·3 0·1 |
| 308 | 0·6 0·3 | 068 | 0·4 0·2 | 098 | 0·2 0·1 | 264 | 0·1 0·0 |
| 328 | 0·5 0·2 | 058 | 0·3 0·1 | 000 | 0·0 0·0 | 230 | 0·2 0·1 |
| 308 | 0·3 0·1 | 000 | 0·0 0·0 | 240 | 0·5 0·3 | 287 | 0·4 0·2 |
| 102 | 0·4 0·2 | 240 | 0·5 0·3 | 250 | 0·7 0·3 | 287 | 0·4 0·2 |
| 122 | 0·8 0·4 | 250 | 0·7 0·3 | 252 | 0·5 0·2 | 294 | 0·3 0·1 |
| 128 | 1·1 0·5 | 252 | 0·5 0·2 | 292 | 0·3 0·1 | 292 | 0·1 0·1 |
| 129 | 0·8 0·4 | 247 | 0·0 0·0 | 000 | 0·0 0·0 | 000 | 0·0 0·0 |
| 115 | 0·4 0·2 | 000 | 0·0 0·0 | 000 | 0·0 0·0 | 000 | 0·0 0·0 |







5602_16

| Hours | Geographical Position | | 50°21'03N 4 09·57W | | 50°21'13N 4 09·77W | | 50°21'43N 4 08·77W | | 50°21'53N 4 08·87W | | 50°21'53N 4 09·37W | | 50°21'63N 4 10·17W | | 50°21'89N 4 10·96W | | 50°21'91N 4 11·09W | | | | | |
|----------------------|----------------------------|---------------------------------|-------------------------------|-----------------------------|-----------------------|---------|-----------------------|---------|-----------------------|---------|-----------------------|---------|-----------------------|---------|-----------------------|---------|-----------------------|---------|-----|---------|----|--|
| Before High Water | 6 5 4 3 2 1 | Directions of streams (degrees) | Rates at spring tides (knots) | Rates at neap tides (knots) | 100 | 0·1 0·1 | 080 | 0·1 0·0 | 113 | 0·1 0·0 | 113 | 0·2 0·1 | 090 | 0·2 0·1 | 180 | 0·8 0·4 | 305 | 0·1 0·1 | 296 | 0·4 0·2 | | |
| | | | | | 342 | 1·1 0·5 | 320 | 0·2 0·1 | 332 | 0·6 0·3 | 295 | 0·3 0·1 | 238 | 1·0 0·4 | 322 | 0·7 0·3 | 305 | 0·5 0·2 | 315 | 1·0 0·5 | | |
| | | | | | 346 | 1·6 0·7 | 289 | 0·6 0·3 | 331 | 1·1 0·5 | 299 | 0·8 0·4 | 223 | 1·9 0·9 | 323 | 1·2 0·6 | 289 | 1·8 0·8 | 316 | 1·7 0·8 | | |
| | | | | | 347 | 1·3 0·6 | 270 | 1·1 0·5 | 342 | 1·0 0·5 | 291 | 0·9 0·4 | 237 | 1·6 0·7 | 308 | 1·3 0·6 | 282 | 2·0 0·9 | 311 | 0·9 0·4 | | |
| | | | | | 352 | 0·7 0·3 | 260 | 0·9 0·4 | 347 | 0·7 0·3 | 308 | 0·6 0·3 | 242 | 1·2 0·6 | 313 | 1·0 0·5 | 282 | 1·6 0·7 | 302 | 1·0 0·5 | | |
| | | | | | 030 | 0·1 0·1 | 260 | 0·5 0·2 | 333 | 0·5 0·2 | 328 | 0·5 0·2 | 233 | 1·1 0·5 | 313 | 0·4 0·2 | 281 | 0·8 0·4 | 266 | 0·2 0·1 | | |
| After High Water | 1 2 3 4 5 6 | Directions of streams (degrees) | Rates at spring tides (knots) | Rates at neap tides (knots) | 148 | 0·4 0·2 | 220 | 0·1 0·0 | 317 | 0·3 0·1 | 308 | 0·3 0·1 | 232 | 0·5 0·2 | 170 | 0·4 0·2 | 158 | 0·3 0·1 | 109 | 0·3 0·1 | | |
| | | | | | 148 | 1·1 0·5 | 140 | 0·8 0·4 | 178 | 0·3 0·1 | 073 | 0·4 0·2 | 158 | 1·1 0·5 | 123 | 0·8 0·4 | 097 | 1·0 0·5 | +1 | | | |
| | | | | | 147 | 1·6 0·7 | 145 | 1·6 0·7 | 146 | 0·6 0·3 | 102 | 0·4 0·2 | 068 | 1·0 0·5 | 161 | 1·9 0·9 | 112 | 0·5 0·2 | 125 | 1·1 0·5 | +2 | |
| | | | | | 145 | 2·3 1·0 | 145 | 1·9 0·9 | 140 | 1·0 0·5 | 122 | 0·8 0·4 | 068 | 1·4 0·6 | 167 | 2·8 1·3 | 111 | 1·0 0·4 | 142 | 1·4 0·6 | +3 | |
| | | | | | 150 | 2·4 1·1 | 138 | 1·6 0·7 | 143 | 1·1 0·5 | 128 | 1·1 0·5 | 070 | 1·4 0·6 | 185 | 2·5 1·2 | 109 | 0·6 0·3 | 137 | 1·1 0·5 | +4 | |
| | | | | | 143 | 1·3 0·6 | 134 | 1·1 0·5 | 143 | 0·8 0·4 | 129 | 0·8 0·4 | 070 | 1·0 0·5 | 180 | 1·7 0·8 | 130 | 0·2 0·1 | 170 | 0·4 0·2 | +5 | |
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5602_17(A)

| A 50°21'9N 4 11:1W | B 50°22'4N 4 11:3W | C 50°22'9N 4 11:5W | D 50°23'3N 4 11:8W | E 50°23'5N 4 11:6W | F 50°23'8N 4 12:6W | G 50°23'8N 4 13:0W | H 50°23'5N 4 13:4W | J 50°23'0N 4 14:7W | |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|----|
| 296 04 02 | 188 06 03 | 120 01 00 | 135 01 00 | 061 02 01 | 173 04 02 | 325 01 00 | 057 02 01 | 334 01 00 | -5 |
| 315 10 05 | 310 02 01 | 010 02 01 | 300 03 01 | 00 00 | 327 02 01 | 304 07 03 | 240 05 02 | 221 05 03 | -6 |
| 316 17 08 | 331 03 01 | 353 07 03 | 320 10 05 | 00 00 | 344 11 05 | 294 10 05 | 220 19 09 | 221 09 04 | -4 |
| 311 09 04 | 339 13 06 | 345 08 04 | 313 10 05 | 245 01 00 | 336 13 06 | 295 07 03 | 215 21 10 | 218 09 04 | -3 |
| 302 10 05 | 325 03 01 | 312 06 03 | 285 07 03 | 240 02 01 | 355 07 03 | 285 06 03 | 215 16 07 | 221 08 04 | -2 |
| 266 02 01 | 180 01 01 | 316 03 01 | 275 05 03 | 245 02 01 | 355 06 03 | 291 03 01 | 225 11 05 | 214 05 02 | -1 |
| 109 03 01 | 165 05 02 | 151 01 00 | 210 01 00 | 232 01 00 | 230 01 01 | 281 01 00 | 050 02 01 | 157 01 01 | 0 |
| 097 10 05 | 175 06 03 | 148 05 02 | 137 05 02 | 100 02 01 | 158 05 02 | 115 03 01 | 060 10 05 | 037 05 02 | + |
| 125 11 05 | 175 11 05 | 146 09 04 | 128 10 05 | 090 03 01 | 155 12 06 | 082 07 03 | 065 15 07 | 034 08 04 | + |
| 142 14 06 | 178 15 07 | 146 13 06 | 131 12 06 | 107 02 01 | 160 12 06 | 096 11 05 | 070 20 09 | 042 10 05 | +3 |
| 137 11 05 | 175 14 07 | 146 10 05 | 135 09 04 | 00 00 | 172 12 06 | 089 12 05 | 070 18 08 | 041 09 04 | + |
| 170 04 02 | 177 12 06 | 145 05 02 | 139 06 03 | 078 03 01 | 190 08 04 | 073 05 02 | 070 13 06 | 031 05 02 | + |
| 293 03 01 | 177 11 05 | 150 02 01 | 138 02 01 | 067 03 01 | 181 06 03 | 044 01 00 | 065 06 03 | 035 01 00 | + |

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 | 6 5 4 3 2 1 | Directions of streams (degrees) Rates at spring tides (knots) Rates at neap tides (knots) | 173 | 0.4 0.2 | 185 | 0.4 0.2 | 320 | 0.1 0.0 | 023 | 0.4 0.2 | 325 | 0.1 0.0 | -6 |
| | | | 327 | 0.2 0.1 | 005 | 0.5 0.2 | 025 | 1.1 0.5 | 034 | 1.8 0.8 | 304 | 0.7 0.3 | -5 |
| | | | 344 | 1.1 0.5 | 359 | 1.6 0.7 | 028 | 1.7 0.8 | 038 | 1.7 0.8 | 294 | 1.0 0.5 | -4 |
| | | | 336 | 1.3 0.6 | 007 | 1.7 0.8 | 027 | 1.3 0.6 | 031 | 1.3 0.6 | 295 | 0.7 0.3 | -3 |
| | | | 355 | 0.7 0.3 | 012 | 1.4 0.6 | 034 | 0.7 0.3 | 030 | 0.6 0.3 | 285 | 0.6 0.3 | -2 |
| | | | 355 | 0.6 0.3 | 001 | 0.7 0.3 | 029 | 0.6 0.3 | 016 | 0.3 0.2 | 291 | 0.3 0.1 | -1 |
| High Water | 1 2 3 4 5 6 | Directions of streams (degrees) Rates at spring tides (knots) Rates at neap tides (knots) | 230 | 0.1 0.1 | 170 | 0.2 0.1 | | 00 00 | 210 | 0.2 0.1 | 281 | 0.1 0.0 | 0 |
| | | | 158 | 0.5 0.2 | 190 | 0.9 0.4 | 203 | 0.6 0.3 | 201 | 0.6 0.3 | 115 | 0.3 0.1 | +1 |
| | | | 155 | 1.2 0.6 | 183 | 1.2 0.5 | 212 | 0.9 0.4 | 196 | 0.9 0.4 | 082 | 0.7 0.3 | +2 |
| | | | 160 | 1.2 0.6 | 182 | 1.3 0.6 | 212 | 1.3 0.6 | 197 | 1.1 0.5 | 096 | 1.1 0.5 | +3 |
| | | | 172 | 1.2 0.6 | 177 | 1.2 0.6 | 203 | 1.3 0.6 | 190 | 1.1 0.5 | 089 | 1.2 0.5 | +4 |
| | | | 190 | 0.8 0.4 | 170 | 1.0 0.5 | 205 | 1.2 0.5 | 193 | 1.2 0.5 | 073 | 0.5 0.2 | +5 |
| After High Water | 6 5 4 3 2 1 | Directions of streams (degrees) Rates at spring tides (knots) Rates at neap tides (knots) | 181 | 0.6 0.3 | 186 | 0.7 0.3 | 212 | 0.6 0.3 | | 00 00 | 044 | 0.1 0.0 | +6 |

TIME & HEIGHT DIFFERENCES FOR PREDICTING THE TIDE AT SECONDARY PORTS

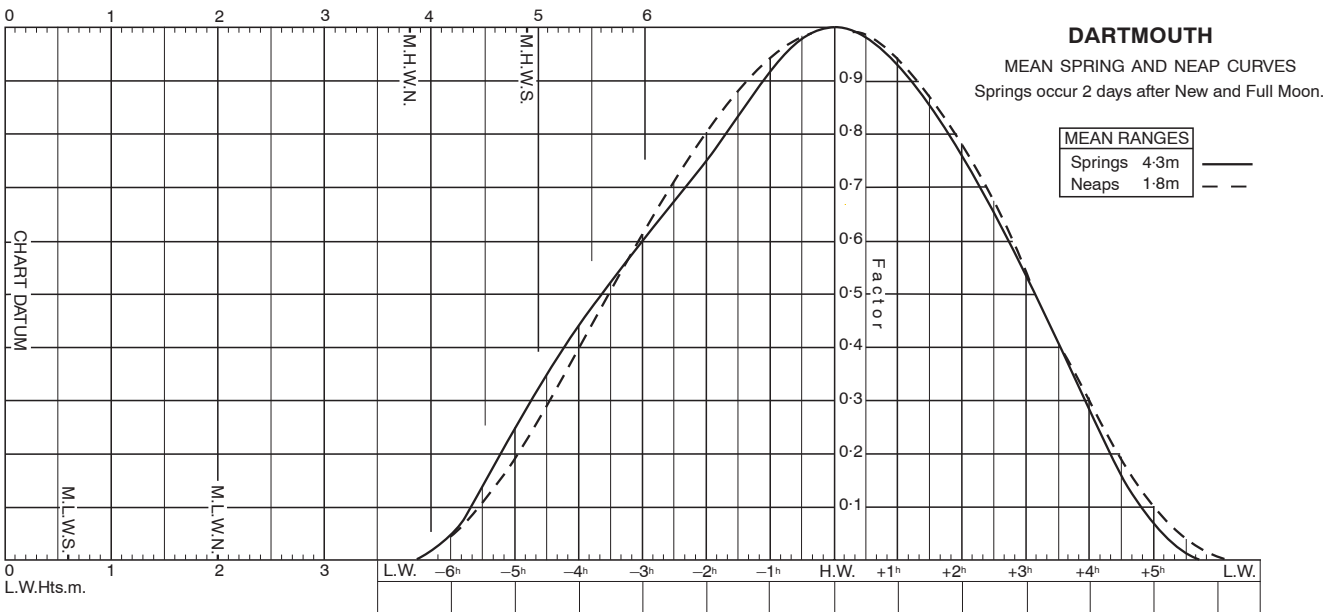
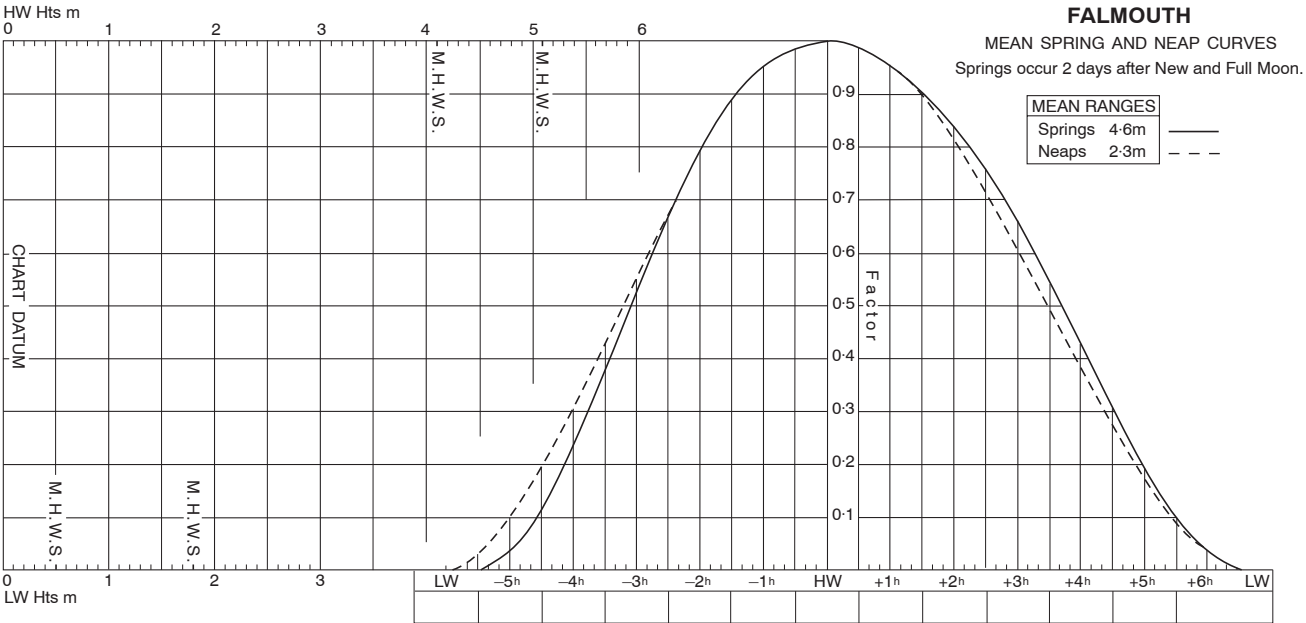
| PLACE | Lat. N | Long. W | TIME DIFFERENCES | | | | HEIGHT DIFFERENCES (IN METRES) | | | |
|--------------------------------|-----------|------------|---------------------|---------------------|---------------------|---------------------|---|------|------|-------|
| | | | High Water | | Low Water | | 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 |
| 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 | 0.5 |
| TORQUAY | 5.0 | 3.9 | 2.2 | 0.9 |

Tidal Curve Diagrams



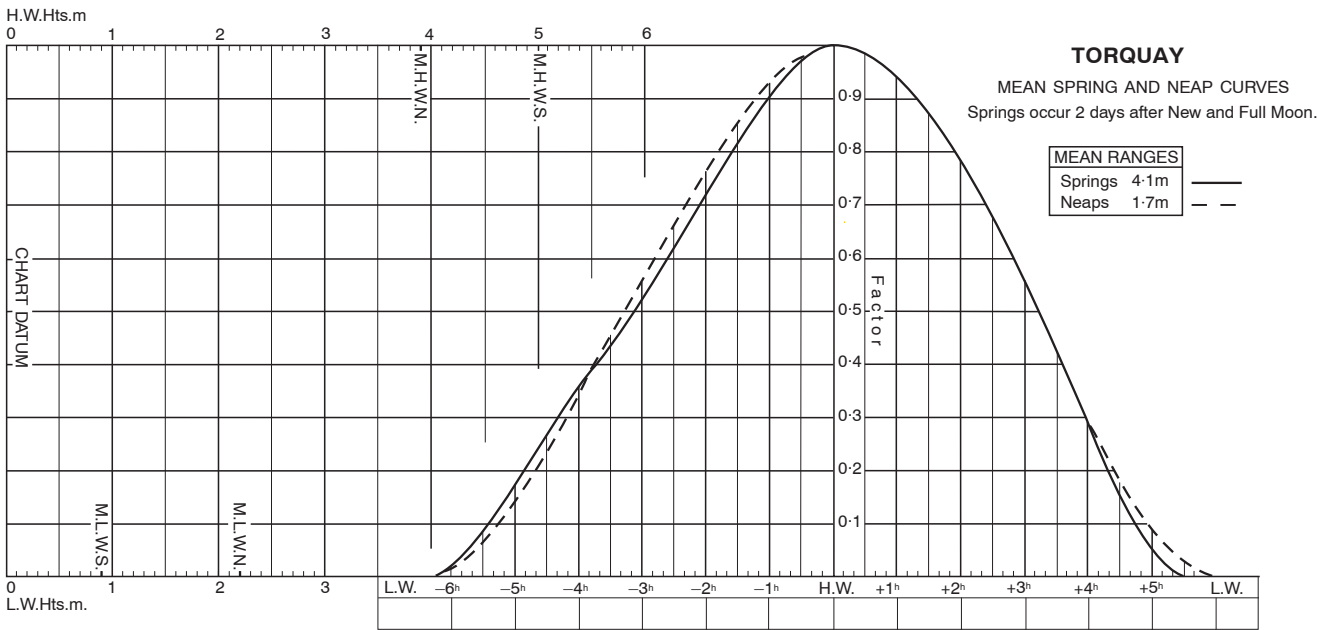
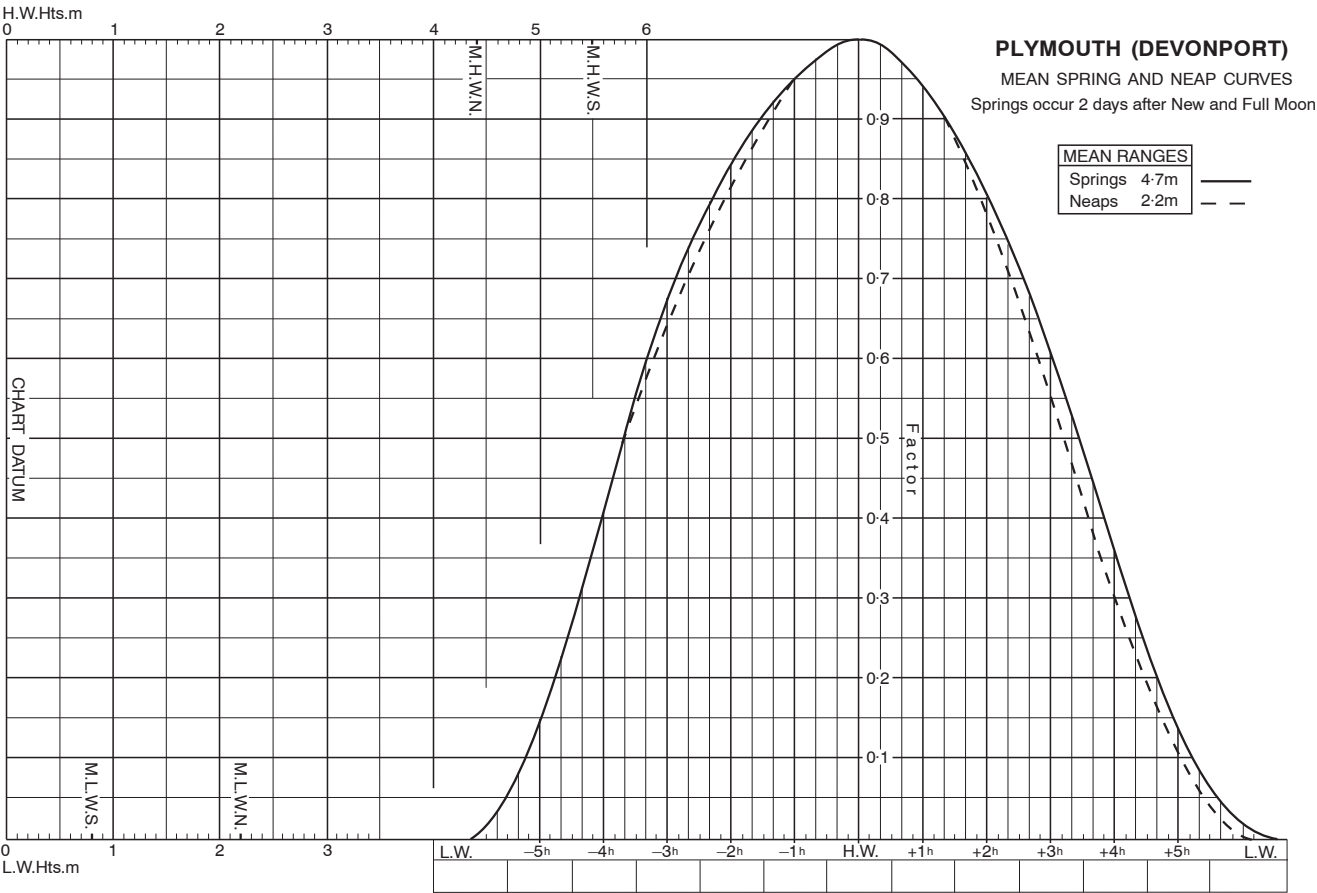


Diagram to show the changes in Chart Datum in the Fal, Penryn and Truro Rivers.

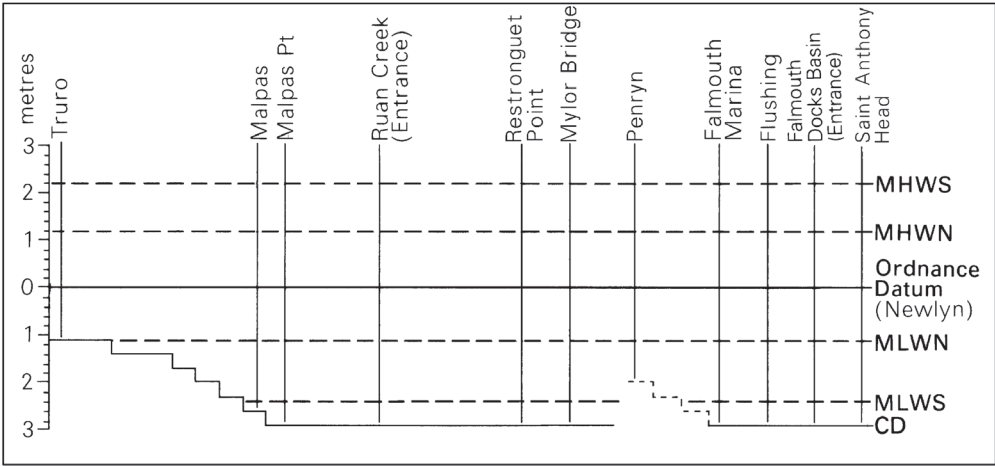


Diagram to show the changes in Chart Datum in the River Dart

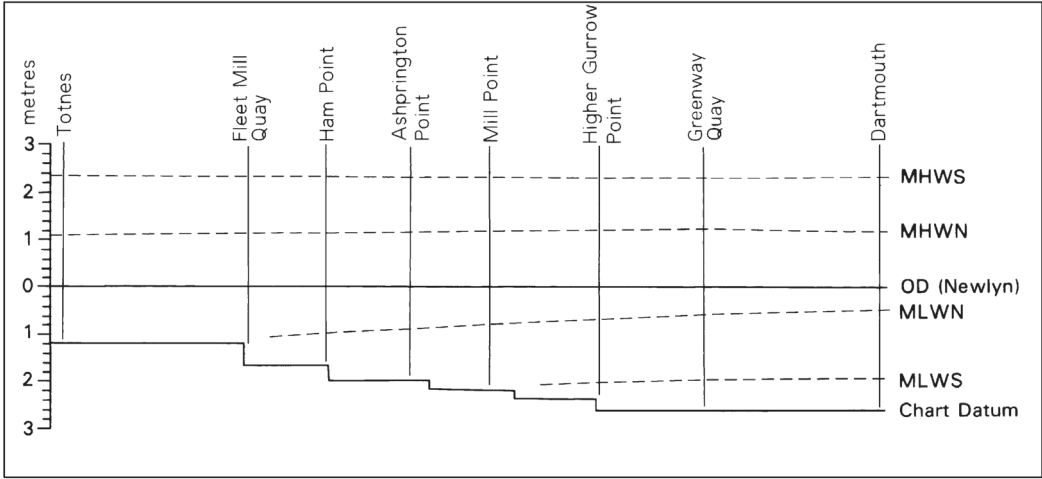


Diagram to show changes in Chart Datum in the River Fowey

