

Tidal reference points and nomenclature.

The graphic opposite clearly describes the reference points that a skipper must understand and use when deciding if their boat can traverse estuaries, anchor safely in bays or pass safely under bridges.

- All soundings on a chart relate to Chart Datum.(Charted depth)
- All drying heights also relate to Chart Datum.
- However the heights of lighthouses or overhead hazards relates to MHWS (Mean high water springs).

Note that the range of high and low waters are greatest on Springs and least on Neaps.

The height of tide must be determined by use of tide tables and an almanac.

A yacht's depth sounder should only be used to give a skipper an indication of depth below the keel at the time of use.

The well prepared skipper should work out if the tide will rise or fall and by how much, for the time the yacht is likely to rest while at anchor.

Tide levels and datums

When reading a chart, it is essential to remember that the actual depth of water and the heights of charted objects almost never correspond with the soundings and elevations shown on the chart. This diagram sums up the most important levels and datums involved with heights, depths, and tidal calculations.

