

Selection of appropriate sites for tidal stations is a critical precursor to the acquisition of accurate height recordings.

The PCTMSL recommends that the following be taken into consideration with regard to the selection of the site for tidal height recording stations:-

1. Tectonic/geological stability of the site;
2. Stability of the supporting structure;
3. Proximity to existing or specially installed high stability benchmarks;
4. Exposure of the site to the tidal regime of the open ocean;
5. minimum exposure to tidal streams or currents exceeding 0.5 knots;
6. Water column stability, i.e. minimum exposure to estuarine - river discharge effects;
7. Minimum exposure to wave energy;
8. Avoidance of proximity to headlands and harbours with restricted entrances;
9. Minimum subjection to siltation ;
10. Minimum subjection to marine growth;
11. Protection from vandalism;
12. Proximity to mains power and telephone; and
13. Ease of access:-
 - a. For servicing the instrumentation: and,
 - b. To high-precision level connection to stable benchmarks.

Attention to factors 1, 2, and 3 ensures that the height datum will be stable over a long time providing readings that can be used for many purposes well past the time at which they were made.

The environmental factors 4, 5, 6, 7, 8, 9, and 10 are important. Their application ensures that the recorded heights are truly representative of the tide.

Convenience is important, factors 12, and 13. Servicing tidal stations is an onerous task and any thing that makes it easier for the technicians will be appreciated.

Factors 11 and 12 contribute to maintaining a high level of serviceability from the station.

After considering all of the above factors, acceptance of a compromise will ensure that the best possible tidal readings will be obtained from the site selected.