

Tidal Datum Consistency for Marine Cadastre Littoral Zone Commencement in Malaysia

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SUMMARY

Marine cadastre is the key in managing a complex marine administration. The rapid development of coastal areas in Malaysia for economic generation activities and public interests has triggered the needs for a new system of marine administration. A tidal datum is a standard elevation defined by a certain phase of the tide. Tidal datum is also the basis for establishing privately owned land, state owned land, territorial sea, exclusive economic zone, and high seas boundaries. This paper reviews some concepts and issues pertaining to the delineation of the tidal line for marine cadastre in Malaysia. This study will assess the use of Lowest Astronomical Tide (LAT) as reference datum in marine cadastre. Tide data acquired from Department of Survey and Mapping Malaysia (DSMM) will be processed using Total Tide Solution (TOTIS) to compute the LAT as the reference datum for marine cadastre. From the tidal data observed, tidal analysis can be made on sea levels, chart datum, types of tide and tidal constituents. This paper aims to produce the tidal lines and littoral zone for use in marine cadastre procedures and practices. Based on the analysis, it can be concluded that the LAT is consistent and can potentially be used for marine cadastre reference level in order to improve the effectiveness of implementing the marine cadastre.