Disparate Late Quaternary shorelines in Peninsular Malaysia: Shift of the geoid or crustal movement?

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About two scores of radiometrically dated shoreline indicators of Late Pleistocene age from the Strait of Malacca and its eastern coastal plain define a sea level curve similar to those constructed for other regions. In Sundaland, which is tectonically stable, about four scores of sea level indicators suggest sea level in the past 6,000 years had reached a maximum of some 5 m above the present level and since then sea level had descended through a series of 2-m high fluctuations to its present position.

Several dated shoreline indicators of the Early Holocene and Late Pleistocene are at elevations several metres higher than those predicted by the constructed sea level curves. In addition, recently a few normal faults with decimetre-range throws have been recorded from Peninsular Malaysia. Together, these evidences suggest that shortly prior to the mid-Holocene either vertical crustal uplift or a shift (probably eastward) of the geoid of the order of a few metres had occurred in the Peninsula.

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Warta Geologi (Newsletter of the Geological Society of Malaysia), Vol. 12, No. 2, March-April 1986