Holocene sea level changes in Peninsular Malaysia

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In Holocene sea level study, the selection and identification of appropriate sea level indicator is a prerequisite in order that the sea level index points can be useful and significant. This requires the identification and determination of the indicative meaning. The indicative meaning of the sea level indicator is defined as the altitudinal relationship of the local environment in which it accumulated to the contemporaneous reference tide level.

This study identifies the sea level index points using the litho-, bio-, and chrono- stratigraphic approach. The sea level indicator is derived from the regressive contact of the intercalated peat and marine Holocene sequences from Meru and Mardi in Kelang and Penor in Kuantan, while the indicative meaning is estimated based upon the microfossil relationship between the fossil sea level indicator with contemporary samples from various present-day ecological environments.

Seven sea level index points identified in the study are compared to the corrected sea level indicator data from earlier works. In Peninsular Malaysia, a general trend of high sea level from about mid-Holocene to the present is depicted.

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