The geomorphology of southeast Johor

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A geomorphological study of southeast Johor was conducted to assess the influence of environment on landform. The study showed that the present geomorphic expression of southeast Johor is a result of several dynamic processes operating in the present and in the past. The geological structure and lithology of the region exert a strong influence on the drainage network, relief expression and the shape of the coastline. The structural directions that have the strongest influence on landforms are the northwest and north-northwest regional strike directions as well as the west-northwest direction corresponding to the Mersing fault zone.

Gentle and discontinuous tilting due largely to the isostatic adjustment of the landmass was also noted. Tilting was in small blocks of landmass. Major tilt directions are in the southwest, north-northeast and northwest directions. West and north tilt directions were also noted.

Sea-level changes occurred on several occasions. Abrasion terraces occurring at 4-5 m are considered to

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be the result of the marine transgression at 5,000-6,000 y BP. Higher levels of flat surfaces are due to a combination of the effect of sea-levels and tilting of the landmass.