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### **Middle Holocene Sea-Level and Evolution of the Gulf of Mexico Coast**

Recently-published data suggest middle Holocene sea level along the Texas Gulf Coast was at -9 m at ca. 7800-7700 yrs BP, then rose rapidly to +2 m or more during the middle Holocene. This view contrasts with the traditional, widely accepted interpretations of continual submergence. Recently-recognized Holocene beach-ridge plains on the mainland central Texas coast, landward of Holocene barriers, may represent the geomorphic manifestation of this highstand. Long considered to be part of the last interglacial period shoreline, these Holocene beach-ridge plains attain elevations of 2.5-3 m, extend for 10's of km's along the mainland shore, and can be 1-3 km's in width, roughly the same scale as the Holocene barriers. We have also investigated previously mapped Holocene shorelines along the Alabama coast. A series of optical luminescence ages suggest that some of the shorelines are middle Holocene in age, ca. 6700-4000 yrs BP, whereas others are late Holocene in age, ca. 3500-2500 yrs BP. In aggregate, these data suggest that relative sea level was at, or very close to, present elevations throughout the middle to late Holocene along the Gulf of Mexico shoreline, both to the west and east of the subsiding Mississippi depocenter, and the model of continual submergence needs reevaluation.