

# PLEISTOCENE SHORELINES AND PALEO GEOGRAPHIC FEATURES, MISSISSIPPI GULF COAST

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## ABSTRACT

Geologic-geomorphic studies of the Mississippi Gulf Coast identified five (5) relic nearshore marine trends which are related to Pleistocene high sea-level stands. These trends were delineated through detailed analyses of topographic and soils maps supplemented by high-altitude false color and black and white infrared aerial photography and conventional black and white aerial photography. Lithologic associations were established from several hundred core-hole descriptions and electric logs as well as numerous continuous cores collected at selected locations.

Trends were designated by specific geographic localities where they are best preserved and not as previously defined stratigraphic units. Laterally along strike, these trends are discontinuous—frequently occurring as features isolated by fluvial entrenchment, thus complicating stratigraphic correlations. These five (5) trends (in order from oldest to youngest) are Big Ridge, Texas Flats, Gulfport-Belle Fontaine, Port Bienville, and Point aux Chenes. Coastal features identified within these trends include: mainland spits, coastal barriers, strandplains, wave-cut escarpments, and tidal inlets.

Correlations of sea-level trend elevations in Mississippi with those previously established for Florida and the Atlantic Coast are generally compatible. Radiocarbon dating of these trends is incomplete.

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