HISTORICAL SHORELINE ANALYSIS OF THE MISSISSIPPI COASTLINE. Jack S. Moody* and Stephen M. Oivanki, Miss. Office of Geology, Jackson, MS 39289

As a part of a cooperative study between the Mississippi Office of Geology, the USGS, and Louisiana Geological Survey, the mainland shorelines of 1847, 1917, 1932, and 1951 were digitized. In addition, two aerial photo surveys, 1978 and 1986, were interpreted and the subsequent maps were digitized and stored on a GIS system. Several studies in the past documented the changes through the above time periods for the offshore islands but this is the first such study for the entire mainland coast. It is now possible for investigators to identify those parts of the Mississippi coastline which exhibit historical trends of erosion or accretion and establish their respective rates of change. This information will be used by the scientific community to study the evolution of Mississippi's microtidal storm-dominated coastline as it is subjected to worldwide sea level rise, low sediment input, human induced modifications of the coast, and frequent storm activity. This same information will prove helpful to coastal officials and planners as it identifies and quantifies areas of erosion.