

Presentation 5: Eric Swanson

Re-modeling GoM Theoretical Principles behind Technology

Scientific understanding and developments in the capabilities of offshore survey methodologies have changed significantly over the last 20 years of offshore survey. Prevailing models show evidence for Pre-Clovis occupation of the North American shorelines that border the Gulf of Mexico Basin. These discoveries aid in supporting re-evaluation of the models that define the parameters in which geophysical surveys are conducted to determine the extent in which archaeological sites are found in the Gulf of Mexico. Determining the extent of cultural landforms is not to identify a bathymetric contour, but to identify the regularly occurring geological landform that would espouse the existence of such archaeological resources present within the outer continental shelf of the Gulf of Mexico. Modern survey methodologies can refine vertical acoustic datasets to decimeter accuracy to depths greater than 20 meters. The Pleistocene boundary should serve as the governing point in which future studies command the search for cultural resources buried in the Gulf of Mexico. Identifying the common geologic boundary where these landforms would likely exist is the beginning of creating a standard in which scientists can define the places people would have utilize within the distant cultural past. Combining high-resolution information is essential for the future of identifying potentially significant archaeological resources in the Gulf of Mexico. Survey methodology should logically meet the objectives of identifying cultural resources and should not be limited. Future discovery and protection of submerged archaeological resources in the Gulf of Mexico is dependent on the development of technology and survey methodology.