

GOM-SCHEMA Project: Deepwater shipwreck 3D data acquisition and archaeological analyses

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In 2013, C&C Technologies, Inc. (Now Oceaneering Survey Services) joined a multidisciplinary team to examine the impact of the Deepwater Horizon oil spill on deepwater shipwrecks in the Gulf of Mexico and oversee the archeological analysis for the study. Oceaneering also provided the Remotely Operated Vehicle (ROV) services for the project. A 3D scanning laser and high resolution multiband sonar collected with an Autonomous Underwater Vehicle (AUV), and 3D scanning sonar mounted to an ROV were used to collect high resolution 3-Dimensional scans of each wreck site. The shipwrecks ranged in date and type from nineteenth century wooden sailing vessels to twentieth century steel hull military and commercial vessels. The water depths of these sites range from 470 to 4,890 feet below sea level. The 3D data, with up to 5 mm of resolution, provides not only a highly accurate representation of each site but also a base line for long term monitoring of site changes and degradation.