This map is not intended for use in navigation.


The laser soundings used to create this map were collected during April 2005 by the NASA EAARL system mounted on a Cessna 310 aircraft. The EAARL uses a “waveform-resolving” green laser capable of mapping submarine and subaerial (land) topography in a single overflight. The EAARL system is typically flown at 300 m altitude AGL, resulting in a 240 m swath width. The laser soundings were collected at a density of one sounding per square meter. The data were processed by the USGS FISC (Florida Integrated Science Center) office, St. Petersburg, FL to produce 1-meter resolution raster images that can be easily ingested into a Geographic Information System (GIS). The data were organized as 2 km by 2 km data tiles in 32-bit floating-point integer GeoTiff form.

This Lidar-derived topographic map was produced as a collaborative effort between the U.S. Geological Survey (USGS) and the National Aeronautics and Space Administration (NASA) Wallops Flight Facility. The project is to develop and use advanced survey techniques for mapping barrier island geomorphology and habitats, and to enable the monitoring of ecological and geological change within National Seashores. This product is based on data from an innovative airborne Light Detection and Ranging (LiDAR) instrument under development at the NASA Wallops Flight Facility, the National Environmental Technology Institute Research Lab (ETI).

Prepared in cooperation with the NATIONAL PARK SERVICE (NPS) and THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)