This map is not intended for use in navigation.

Topography mapped using NASA Experimental Advanced Airborne Research Lidar (EAARL), May 2005.


NPS South Florida/Caribbean Network Inventory and Monitoring Program, Miami, FL.

USGS-Parks-NASA Bare Earth (BE) Lidar Topography Map Tile 390000e_4658000n_19z

By John C. Brock, C. Wayne Wright, Matt Patterson, Amar Nayegandhi, and Lauren Sla.s.

Further Reading


2007 USGS-NPS-NASA Bare Earth (BE) Lidar Topography Cape Cod National Seashore.

This Lidar-derived topographic map was produced as a collaborative effort between the U.S. Geological Survey (USGS), the National Aeronautics and Space Administration (NASA) Wallops Flight Facility, and the National Park Service (NPS) Cape Cod National Seashore.

The data were collected during May 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 used to create this map were collected during May 4, 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 data were generated from the Lidar data tile and incorporated into this map product. Contour line and hillshade layers were organized as 2 km by 2 km data tiles in 32-bit floating-point integer GeoTiff format.

The data were processed by the USGS FISC (Florida Integrated Science Center) office, St. Petersburg, FL.

The data were used to create 1-meter resolution raster images that can be easily ingested into a Geographic Information System (GIS). The data were used to monitor 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 Aeronautics and Space Administration (NASA) Wallops Flight Facility, and the National Aeronautics and Space Administration (NASA) Wallops Flight Facility.

The aim of the partnership that created this product is to develop advanced survey techniques for mapping barrier island geomorphology and habitats, and to enable the production of detailed topographic mapping for coastal science and resource management.

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