This map is not intended for use in navigation.

Northern Florida Keys Reef Tract
USGS-NPS-NASA EAARL Submarine (ST) Topography
Map Tile 5800000_2792000n_172

By John C. Brock, C. Wayne Wright, Matt Patterson, Iris Wilson, and Laurinda J. Travers

This map was produced as a collaborative effort between the U.S. Geological Survey (USGS), the National Park Service (NPS), and the National Aeronautics and Space Administration (NASA). The USGS, NPS, and NASA are partners that created this product to develop advanced survey techniques for mapping barrier island geomorphology and to enable the monitoring of ecological and geological change within National Seashores. This product is based on data from an innovative airborne lidar instrument under development at the NASA Wallops Flight Facility, the NASA Experimental Advanced Airborne Research Lidar (EAARL).

The laser soundings used to create this map were collected during July 2001, September 2001 and August 2002 by the NASA Experimental Advanced Airborne Research Lidar (EAARL). The EAARL system is typically flown at 300 m altitude AGL, 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 was acquired through a cooperative agreement between the USGS, NPS, and NASA in 2000 and is operated by ETI Professionals, Inc., a private company selected through a competitive bidding process. Further Reading


Wright, C.W. and Brock, J.C., 2001, Experimental airborne laser mapping and aerial stereo photogrammetry: Application to study of submerged coral reef and coastal habitats, and to enable the monitoring of ecological and geological change within National Seashores. This product is based on data from an innovative airborne lidar instrument under development at the NASA Wallops Flight Facility, the NASA Experimental Advanced Airborne Research Lidar (EAARL). The EAARL system is typically flown at 300 m altitude AGL, 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 was acquired through a cooperative agreement between the USGS, NPS, and NASA in 2000 and is operated by ETI Professionals, Inc., a private company selected through a competitive bidding process.