The National Shoreline

shoreline

NOAA's National Geodetic Survey (NGS) produces the national shoreline which provides critical baseline data for updating nautical charts; defining our nation's territorial limits, including the Exclusive Economic Zone; and managing our coastal resources. The national shoreline contributes to our nation's economy by supporting: maritime trade and transportation, coastal and marine spatial planning, coastal engineering, academic research, and insurance activities, to provide a means for enhancing our global competitiveness and more efficiently managing our resources.

An accurate, consistent, and up-to-date national shoreline can provide and improve:

- Official nautical charts for maritime navigation,
- Data to model sea level change, storm surge, coastal flooding, and pollution trajectories,
- Contemporary ocean management plans,
- Wave and wind energy site selection,
- Land and marine geographic information system base layers, and
- Environmental analysis and monitoring.

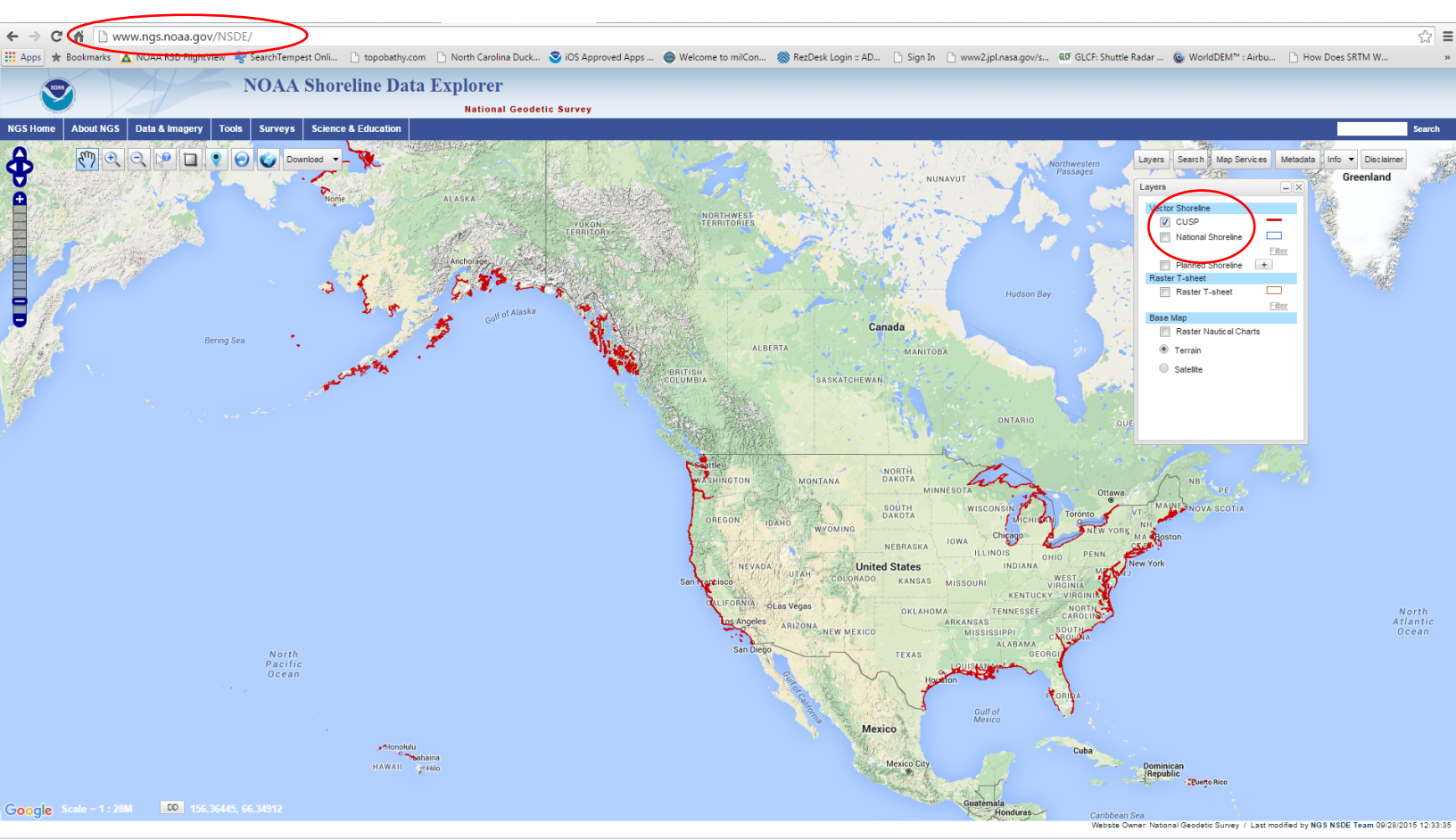
NGS delineates the shoreline through various photogrammetric sources, including tide-coordinated stereo aerial photographs, commercial satellite imagery, Light Detection and Ranging (LiDAR), and related remote sensing technologies. The data-gathering process results in a vector database of the national shoreline and products such as high-resolution aerial frame photographs, orthoimagery, and coastal LiDAR data sets.

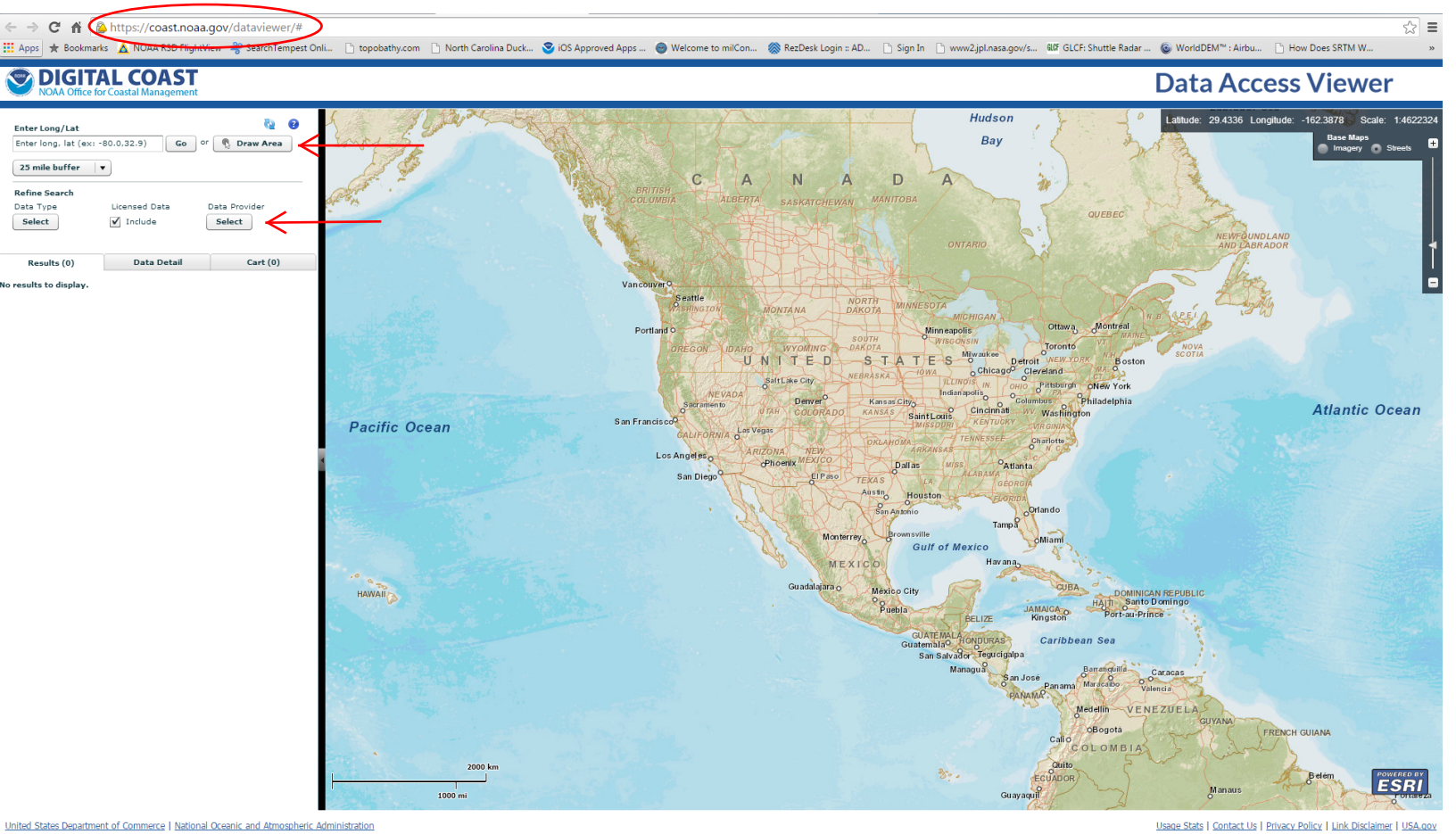
Image of Jones Inlet, Long Island, NY using Applanix Digital Sensor System. The green line represents marsh (apparent) shoreline, and red line represents mean-high water shoreline.

Additionally, **NGS is exploring the use of emerging remote sensing technologies and methodologies to map the shoreline**.

For more information, contact NGS:

- **On the Web:** http://geodesy.noaa.gov/RSD/cmp.shtml
- **By Email**: ngs.shoreline@noaa.gov



Shoreline Data Explorer for vector, points, and polygons of shoreline and alongshore features
www.ngs.noaa.gov/NSDE/

NOAA Digital coast for NGS imagery and coastal elevation data https://coast.noaa.gov/dataviewer/#