



GPS in our National Parks

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National Park Service

Resource Information Services Division

Our Mission

"...to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

1916 NPS Organic Act

The National Park System



280 Million Recreation Visitors (2014)

Equates to 90% of US Population Visiting Annually

GPS/GNSS in the NPS

- Visitor and Resource Protection
 - Incident Command
- Cultural and Natural Resource Management
- Facilities Management



Fire Island
National Seashore
New York

Visitor and Resource Protection

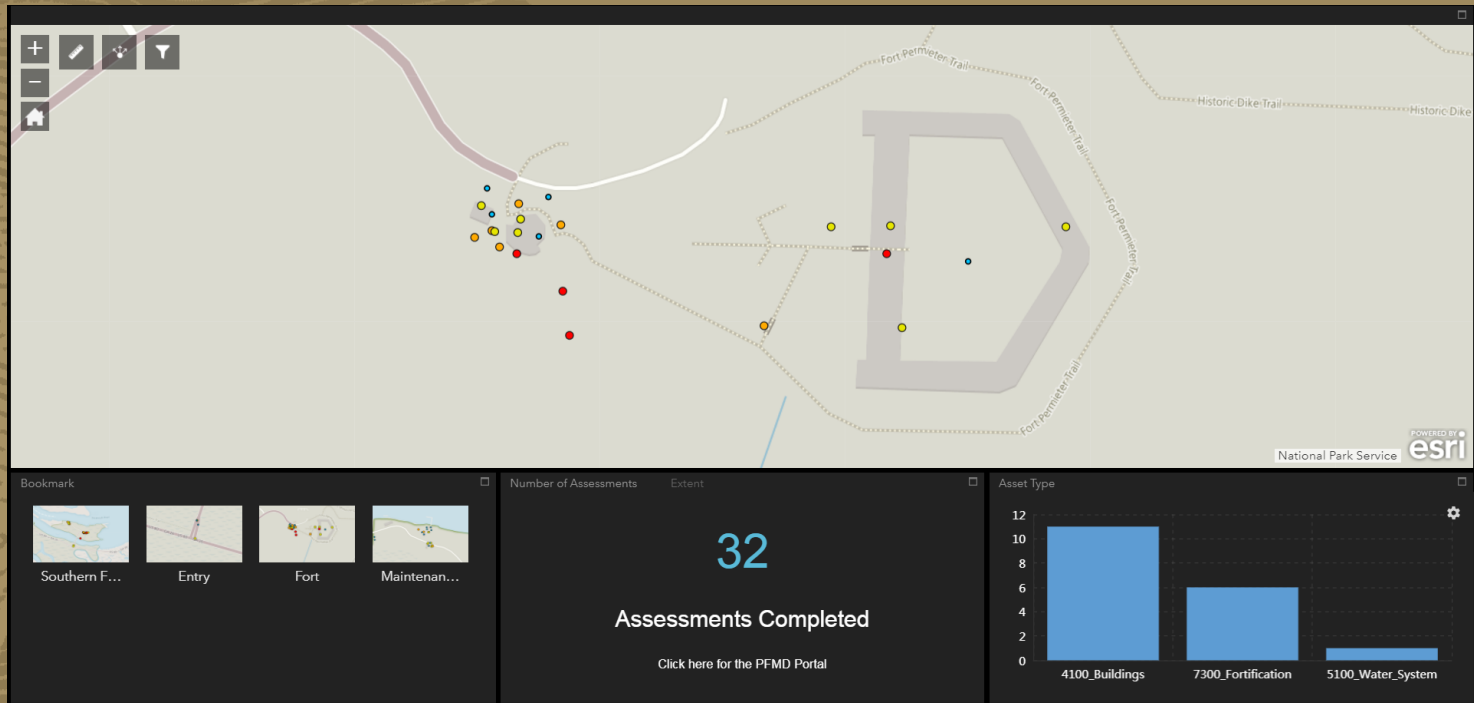
- Search and Rescue
- Aviation
- Wildland Fire



Visitor and Resource Protection

Hurricane Irma Recovery

Fort Pulaski National Memorial - Georgia



Survey123 for ArcGIS

My Survey

Park Name: *
Fort Pulaski National Memorial

Capture GPS Location:
Push the small white circle to capture your location.

No Location

Press to capture location using a map

Date & Time: *
The date and time are auto-populated.
9/24/2017 4:30 PM

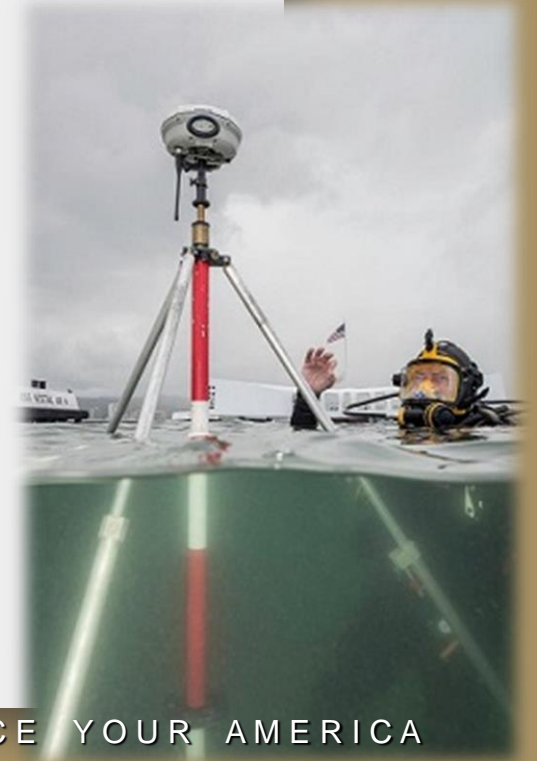
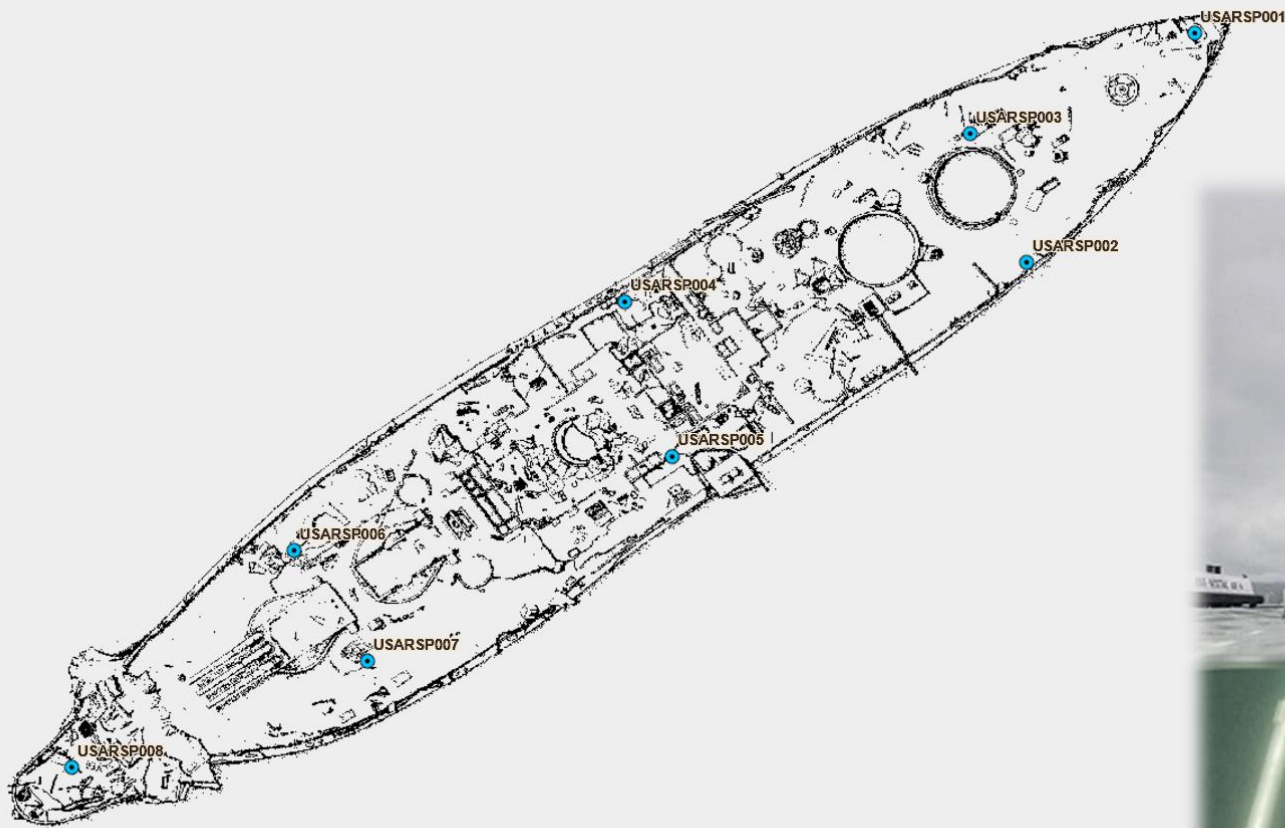
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Choose an asset type from the list.

Asset Description: *
Please be as detailed as possible when describing the asset so that it can be properly identified and coded. Information such as serial number, make/model, material type, capacity, identifying numbers or letters, etc...should be identified in this section.

EXPERIENCE YOUR AMERICA

Cultural Resource Management

World War II Valor in the Pacific National Monument
USS Arizona Memorial - Hawaii

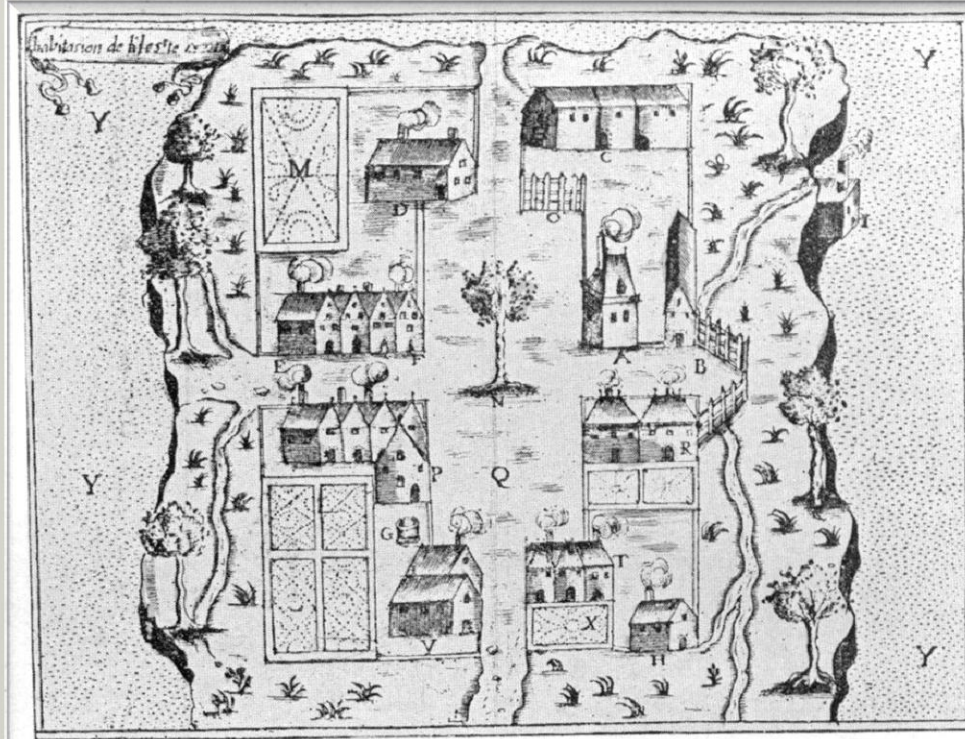


EXPERIENCE YOUR AMERICA

Cultural Resource Management

Saint Croix Island International Historic Site

Maine



BUILDINGS ON STE. CROIX ISLAND, 1613

(From Champlain's diagram)



EXPERIENCE YOUR AMERICA

Natural Resource Management

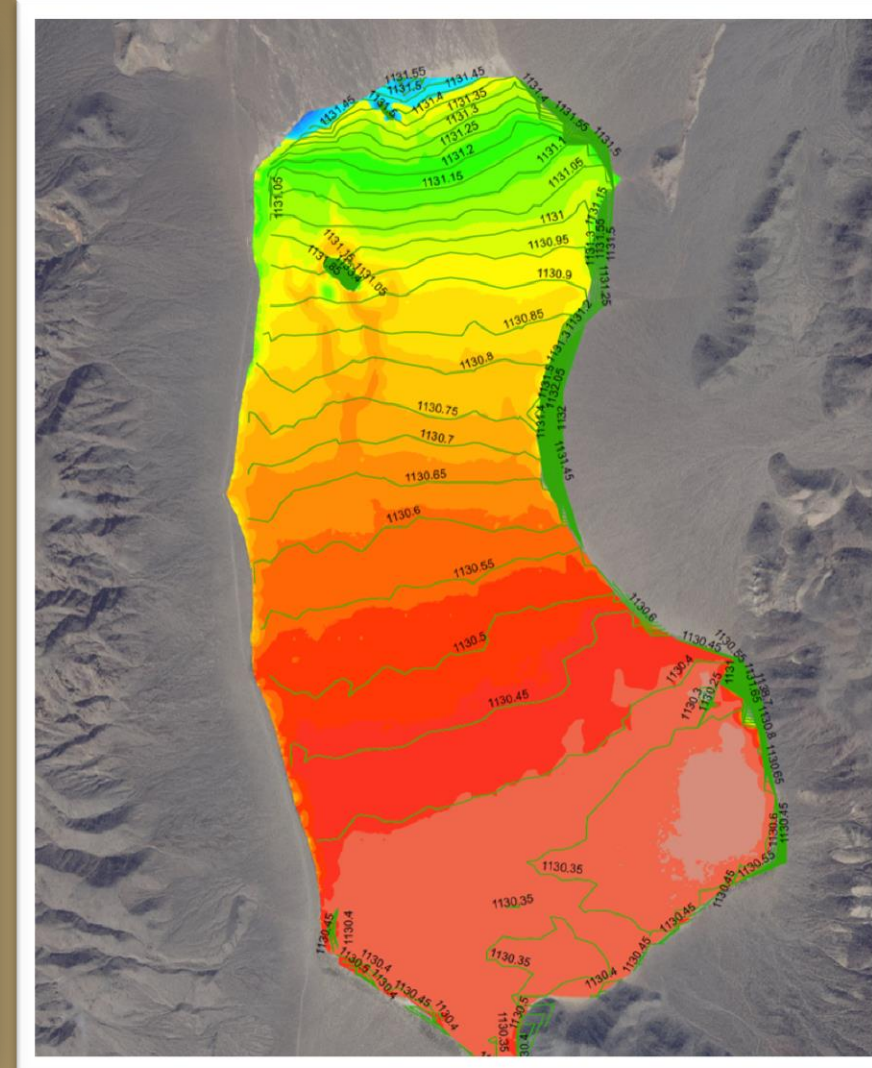
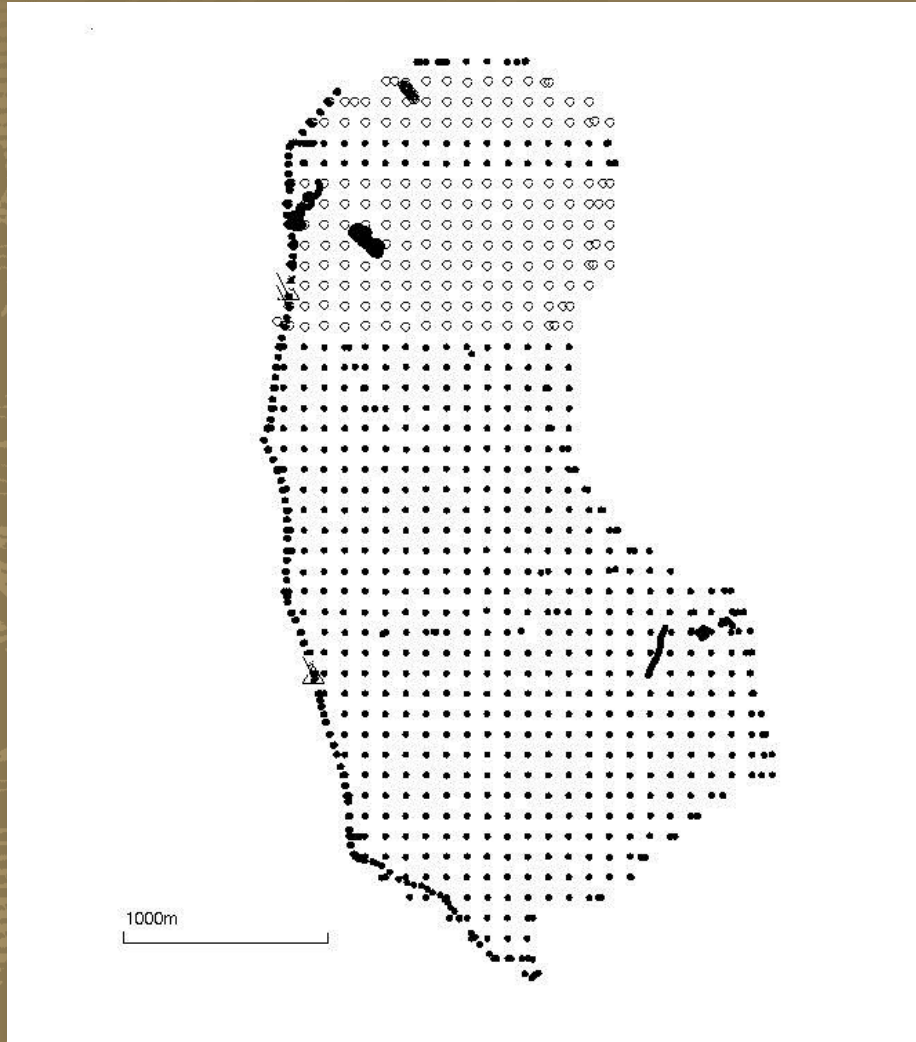
Racetrack Playa, Death Valley National Park - California



EXPERIENCE YOUR AMERICA

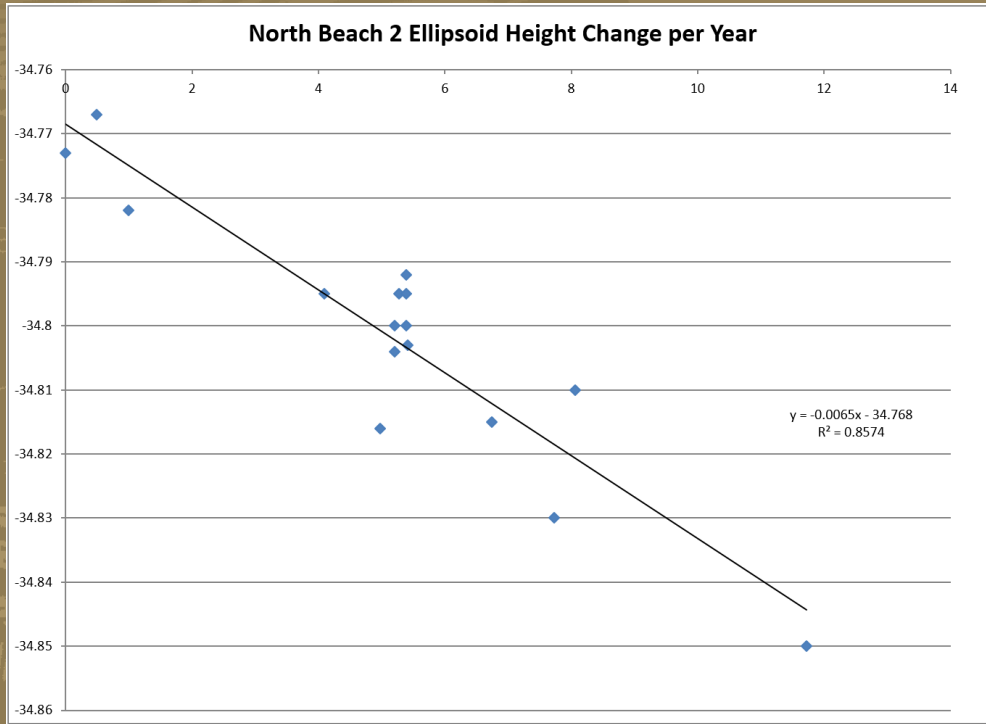
Natural Resource Science

Racetrack Playa, Death Valley National Park - California



Natural Resource Management

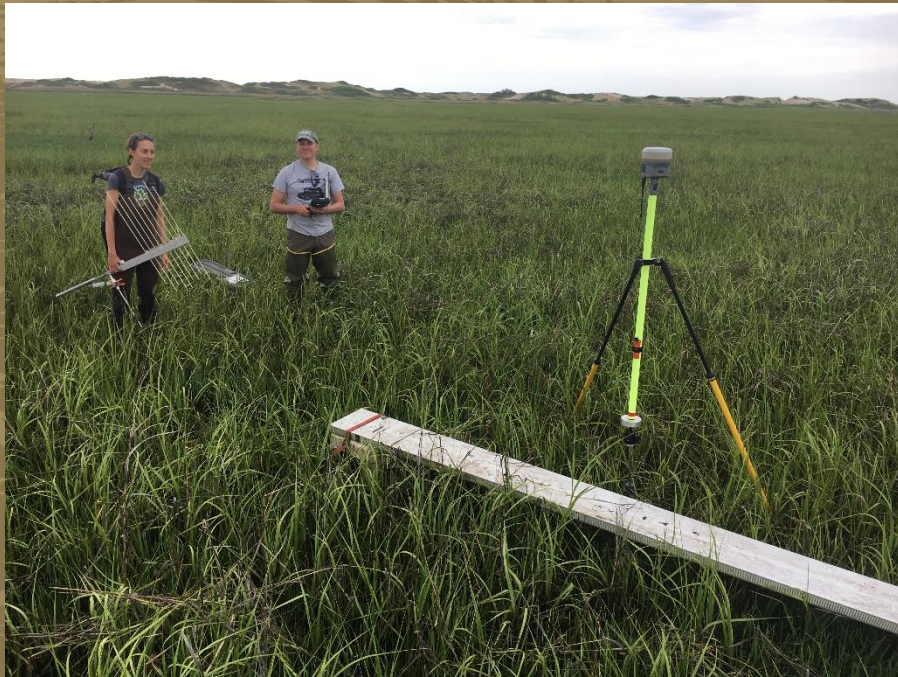
Assateague Island National Seashore - Maryland



Natural Resource Management and Science

Assateague Island National Seashore
- Maryland

Cape Cod National Seashore – Massachusetts



EXPERIENCE YOUR AMERICA

Facilities Management

Statue of Liberty National Monument – New York

2003



2013



Facilities Management

Colonial National Historic Park - Virginia



Everglades National Park - Florida



Merging Technologies

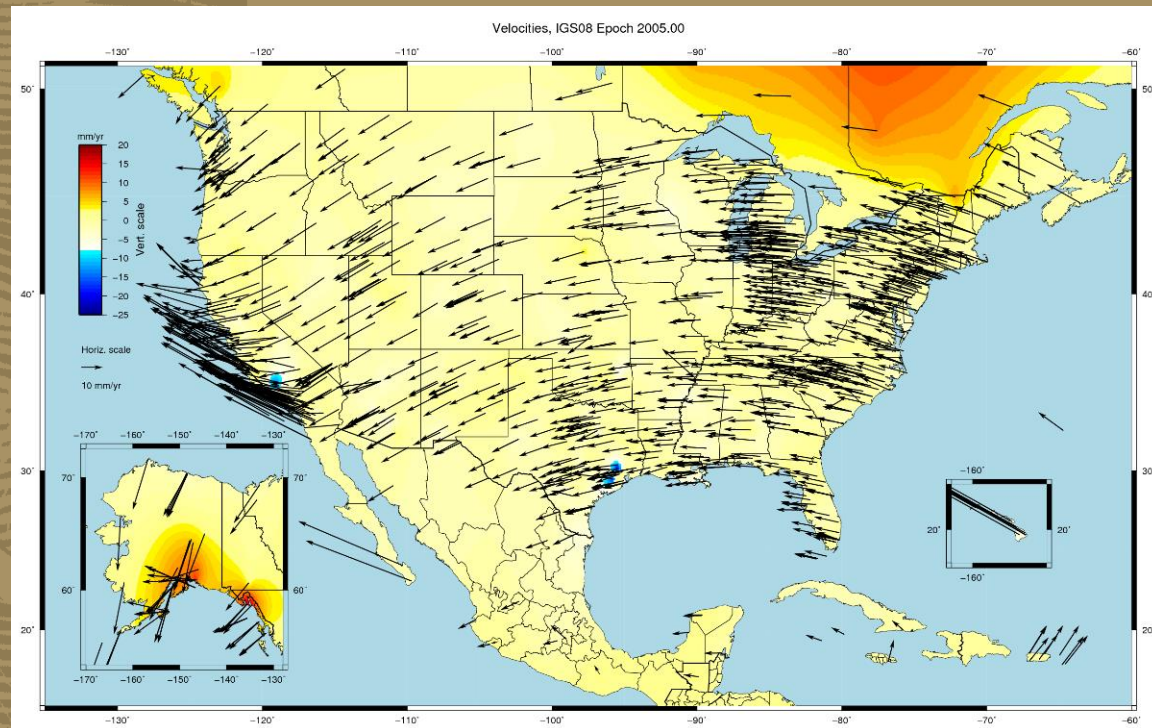
- GNSS Signal Improvements
 - Canopy
 - High latitudes
 - Autonomous Precision
- User-friendly GIS software
 - Real-time mapping
 - Accessible to novice user

Devil's Hole, Death Valley NP
Nevada



GPS/GNSS Data Challenges

- Precision vs. Accuracy
 - NAD83
 - NAVD88
 - NATRF2022
- Data Connectivity
 - Data Security
 - Data QA/QC

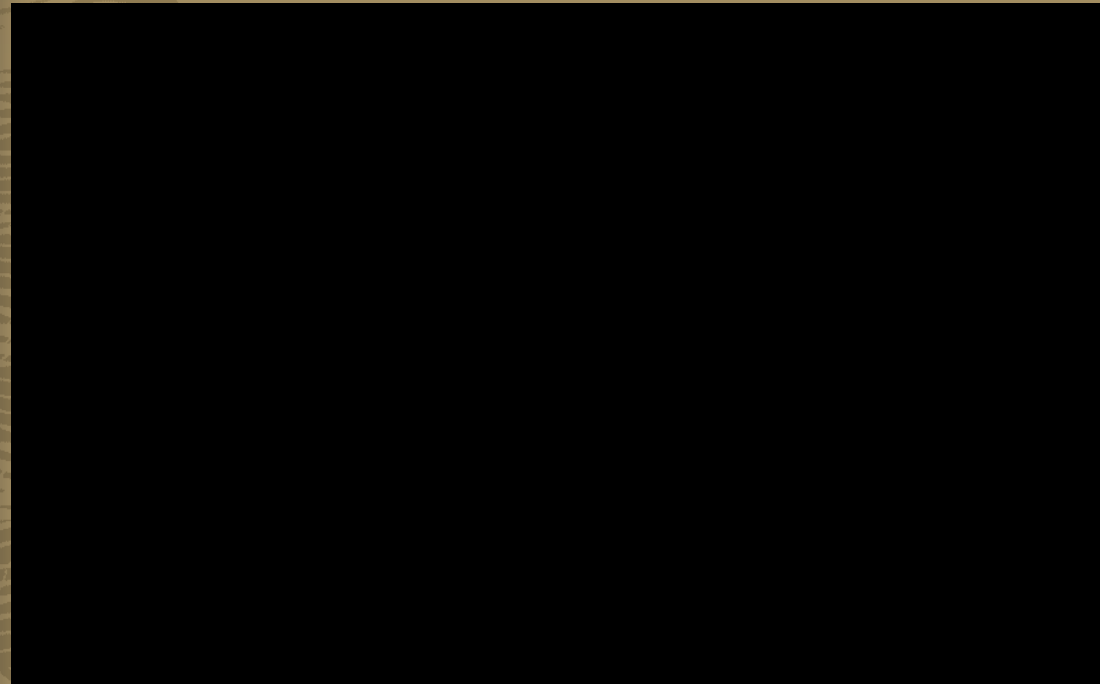


Source: NOAA NGS

EXPERIENCE YOUR AMERICA

Emerging Technologies

Devil's Tower National Monument - Wyoming



EXPERIENCE YOUR AMERICA