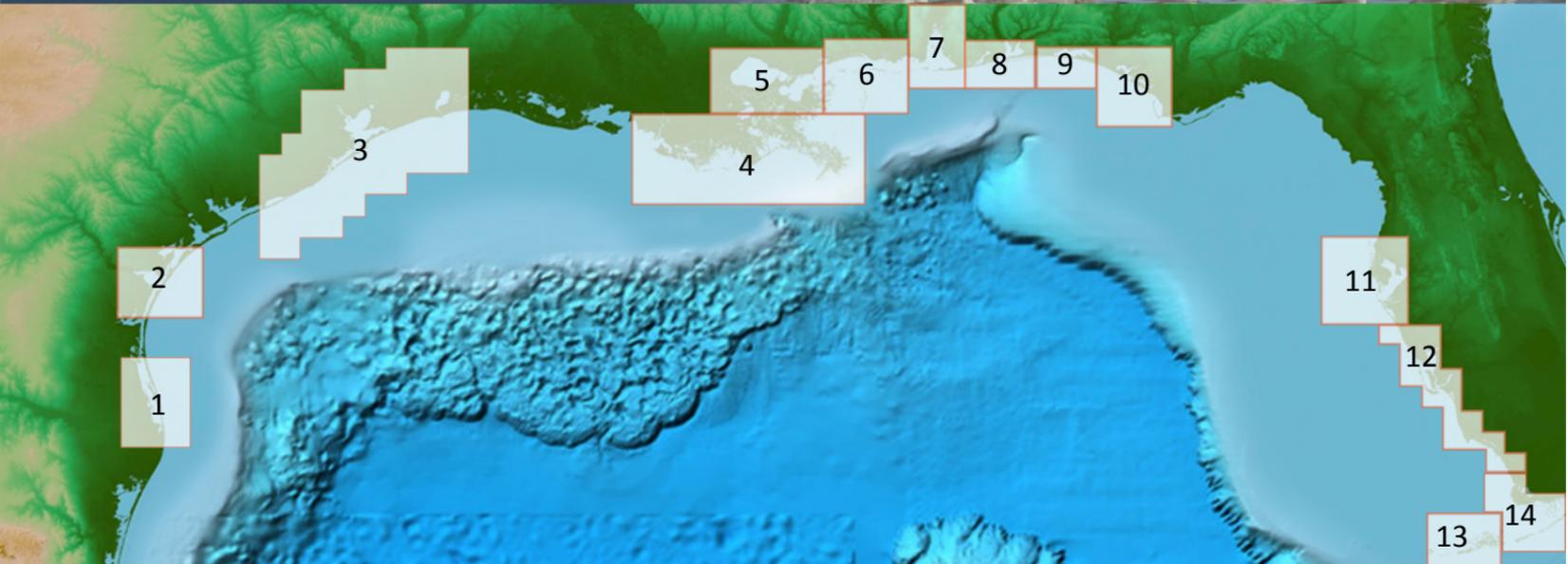


GULF COAST

digital elevation models



www.ngdc.noaa.gov/mgg/coastal



1. South Padre Island (2012)
2. Corpus Christi (2007)
3. Houston/Galveston (2017)
4. Southern Louisiana (2012)

5. New Orleans (2010)
6. Biloxi (2007)
7. Mobile (2009)
8. Pensacola (2015)

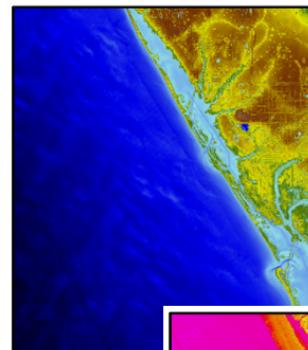
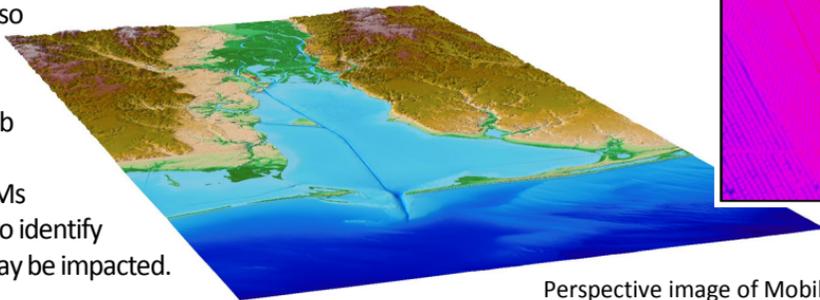
9. Destin (2015)
10. Panama City (2010)
11. Tampa Bay (2014)
12. Southwest Florida (2017)

13. Key West (2014)
14. Florida Keys (2016)

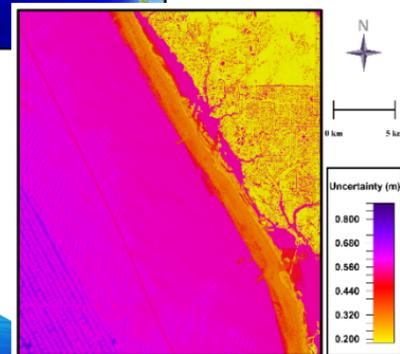


NOAA's National Centers for Environmental Information (NCEI) builds and distributes high-resolution, coastal digital elevation models (DEMs) that integrate ocean bathymetry and land topography to support NOAA's mission to understand and predict changes in Earth's environment, and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs. The DEMs can be used for the modeling of coastal process, ecosystems management and habitat research, coastal and marine spatial planning, and hazard mitigation and community preparedness.

The Gulf of Mexico supports a wide variety of activities, including fishing, transportation, recreation and tourism, and the extraction of economic resources, such as sand and oil. These activities are often dependent upon the shorelines and coastal tributaries in the region, and may in turn affect the coastal zone. The beach and barrier islands in the Gulf are also impacted by seasonal storms and coastal erosion processes. Development in the area can disturb habitats, modify flood plains, cause pollution, and increase erosion. DEMs support these activities by helping to identify how and where the coastal zone may be impacted.



DEM of SW Florida (left) and accompanying uncertainty surface (below) representing potential DEM errors at the individual pixel-level.



Perspective image of Mobile, AL DEM (left)