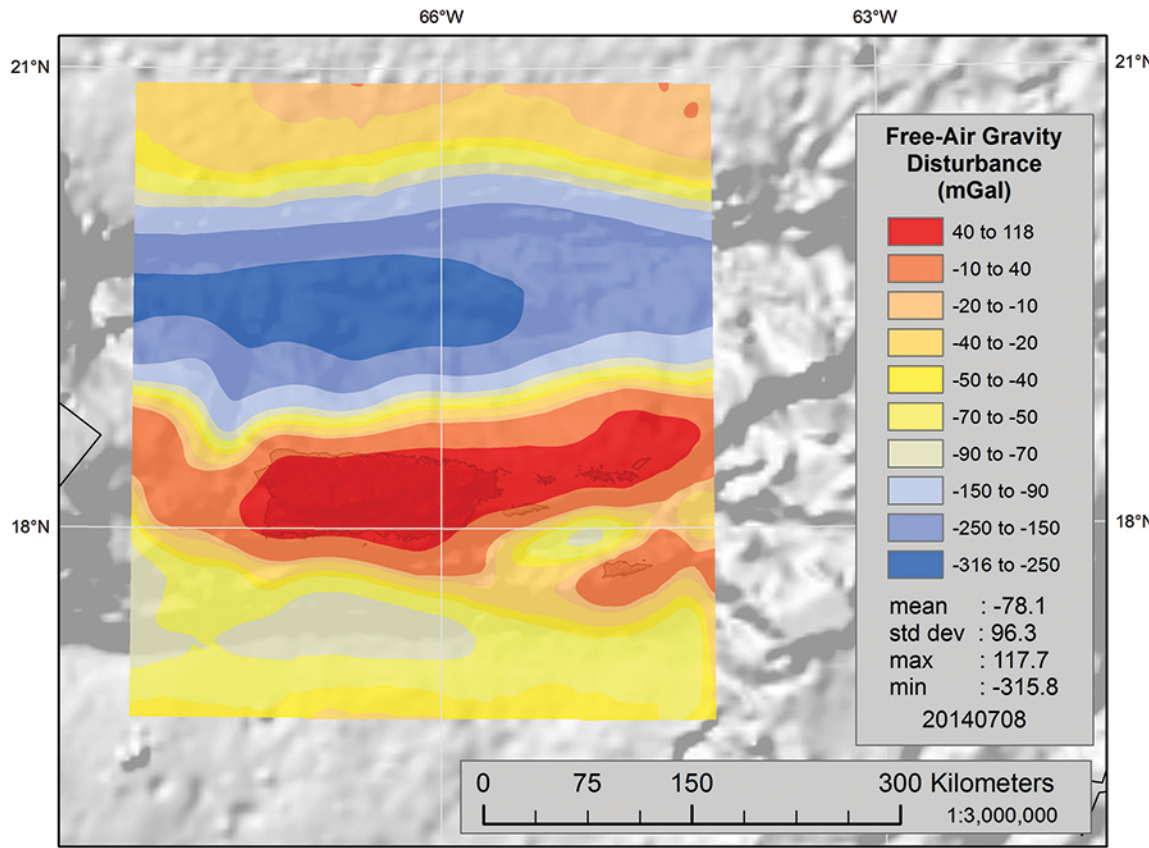
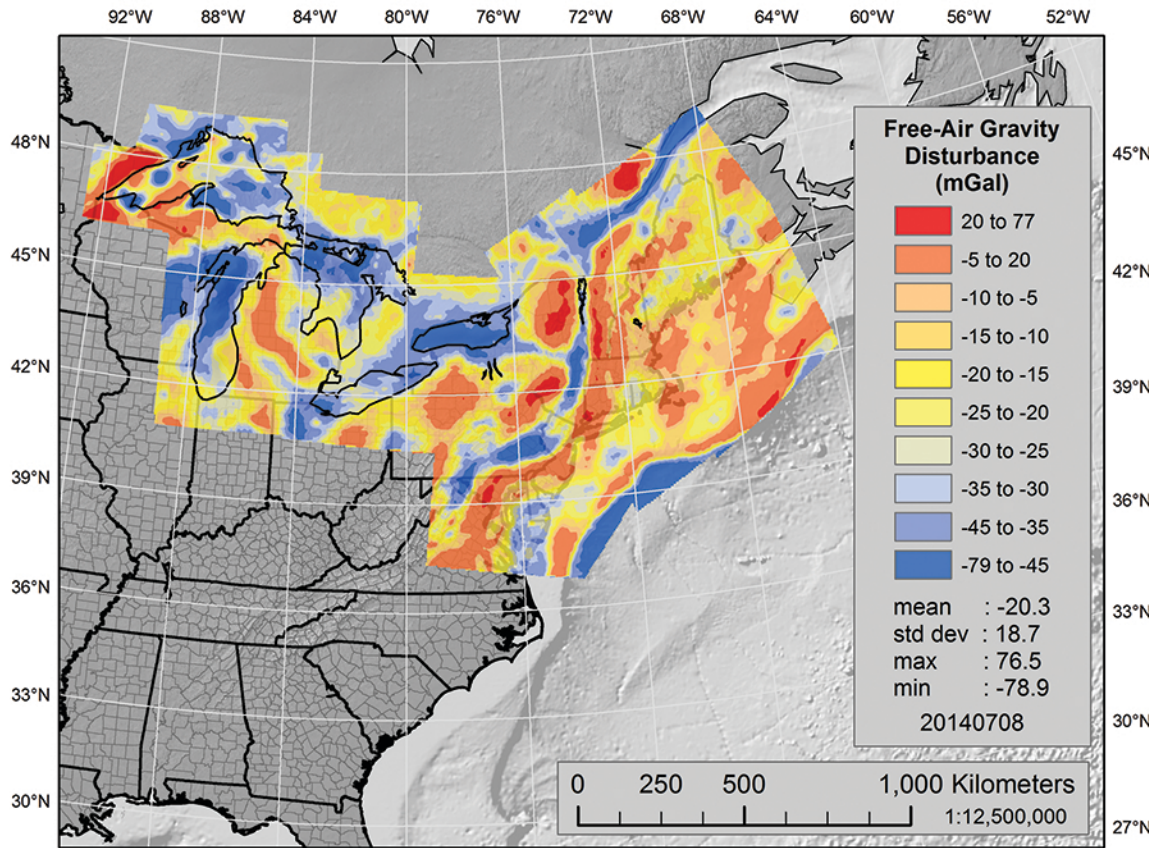
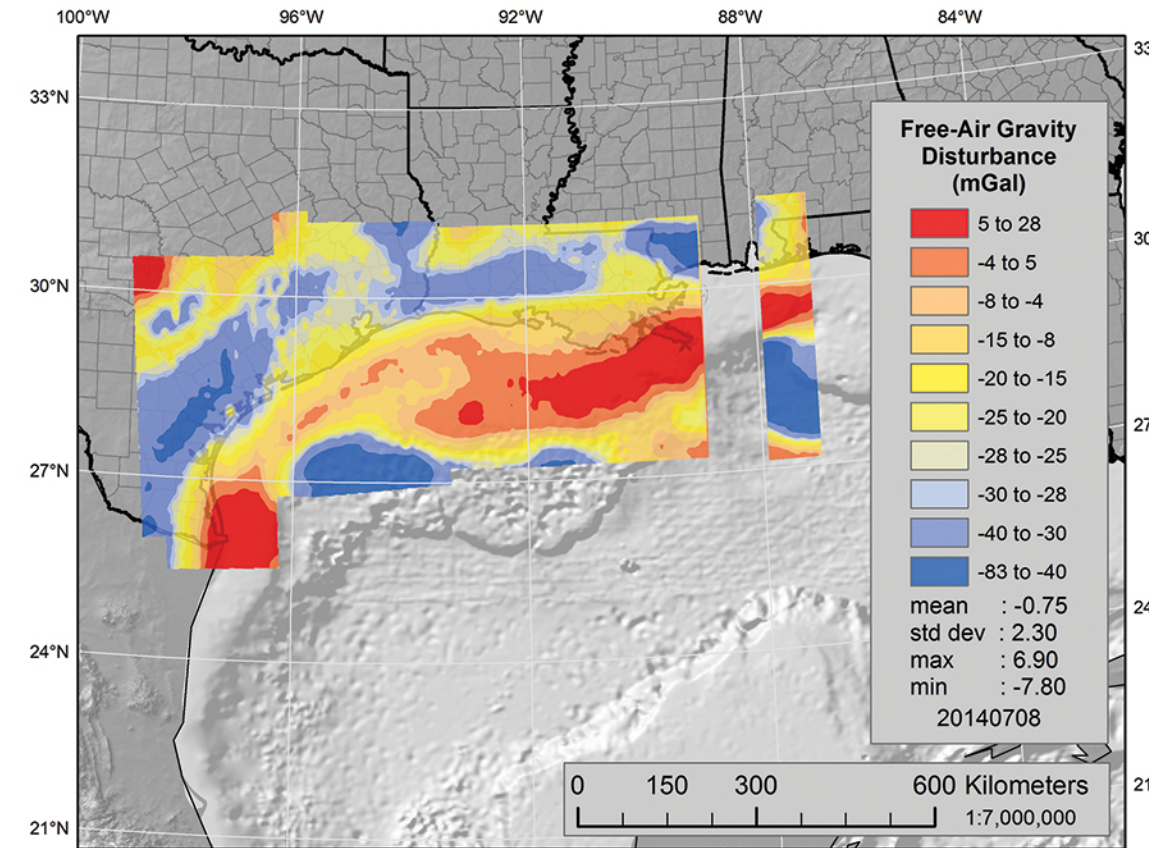
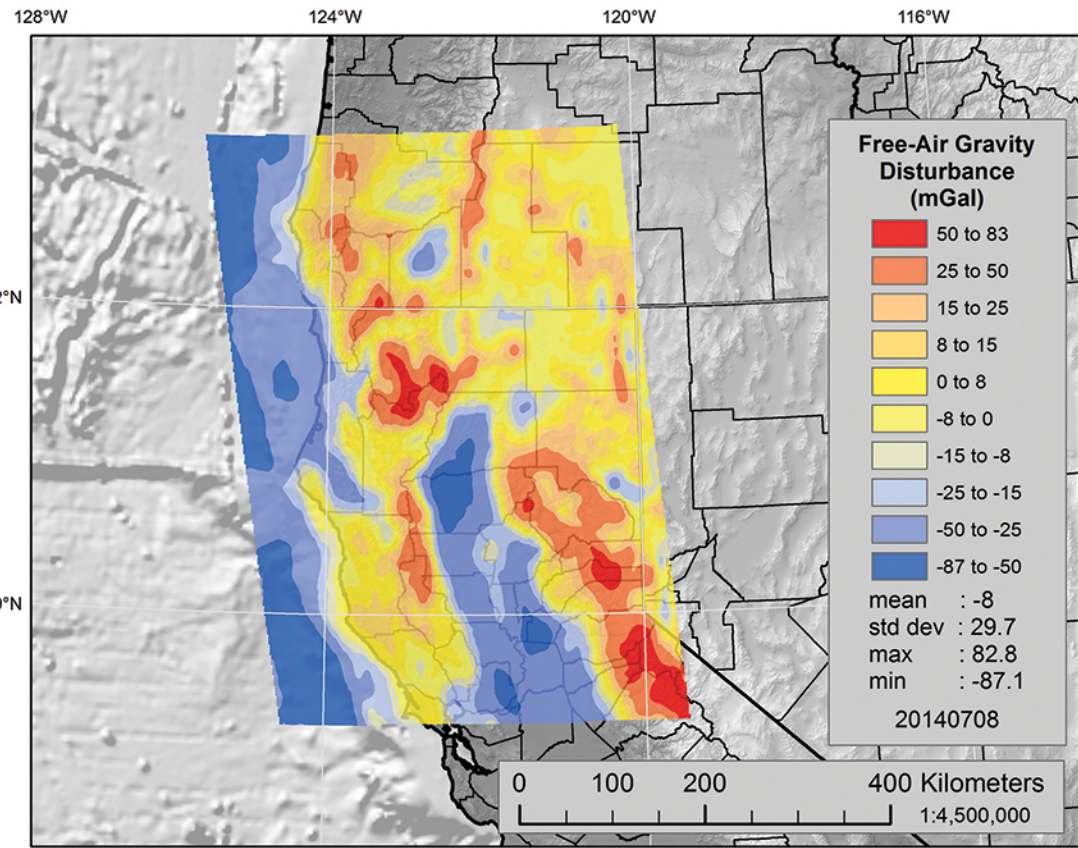
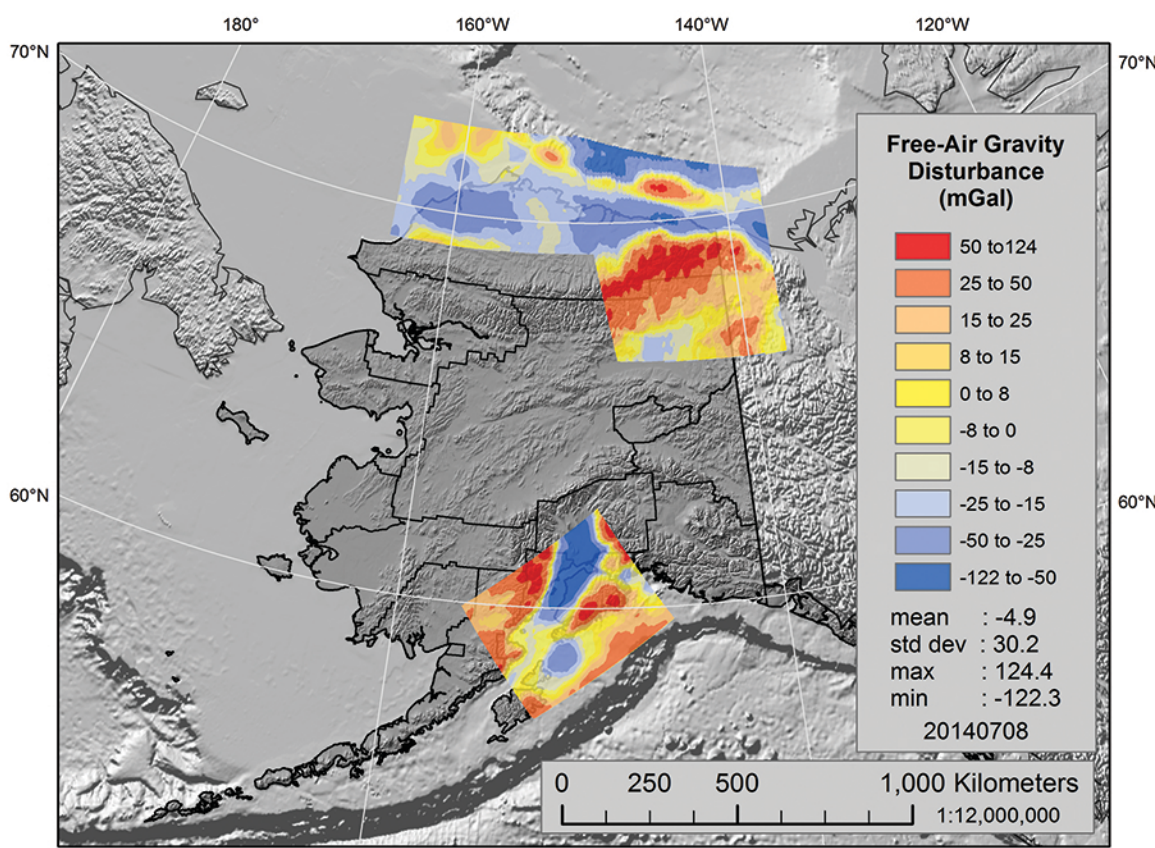
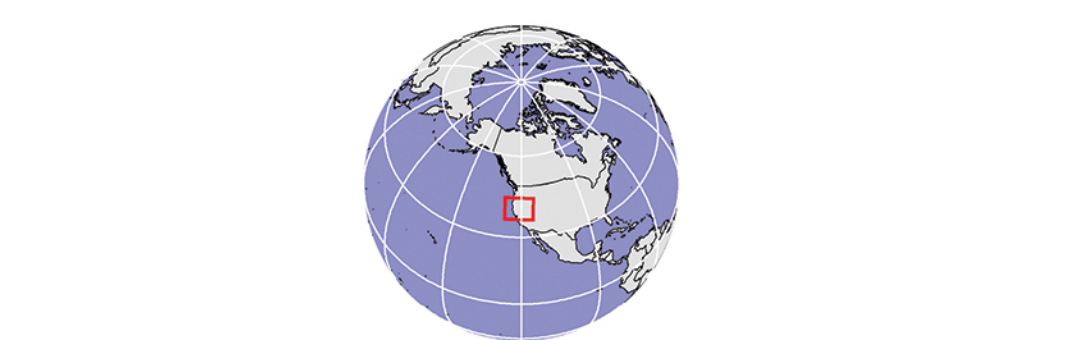
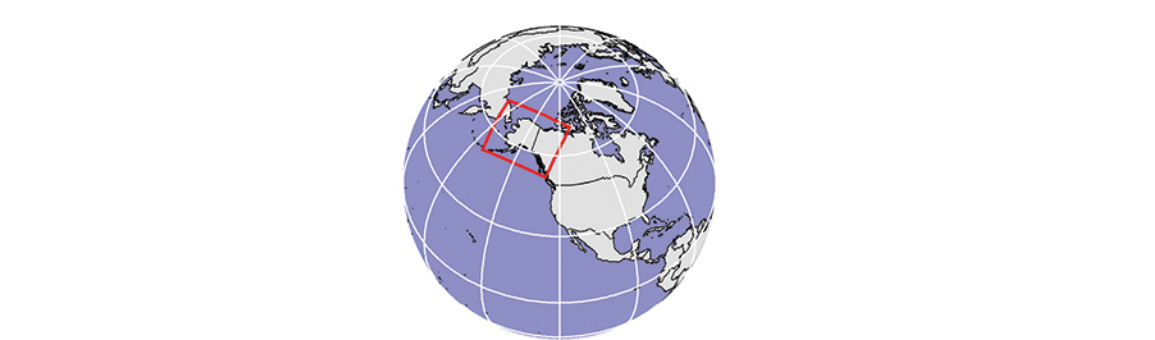
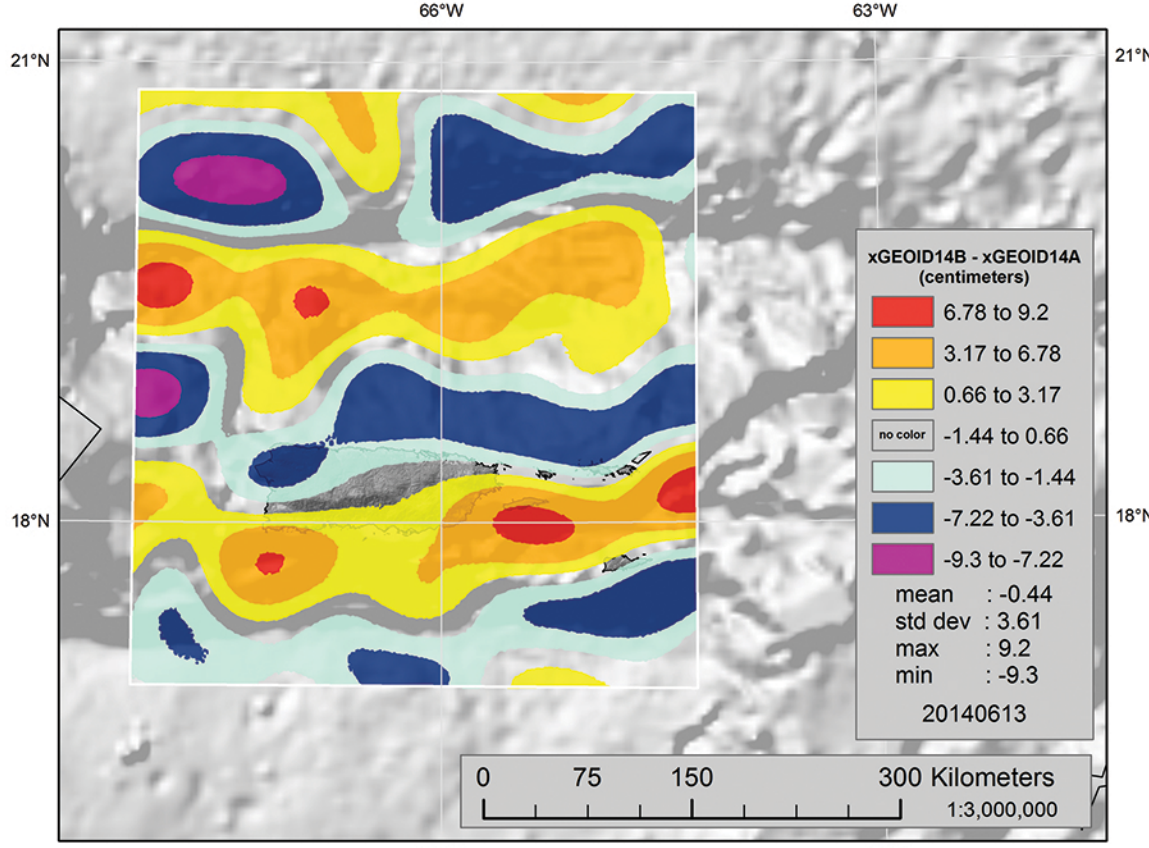
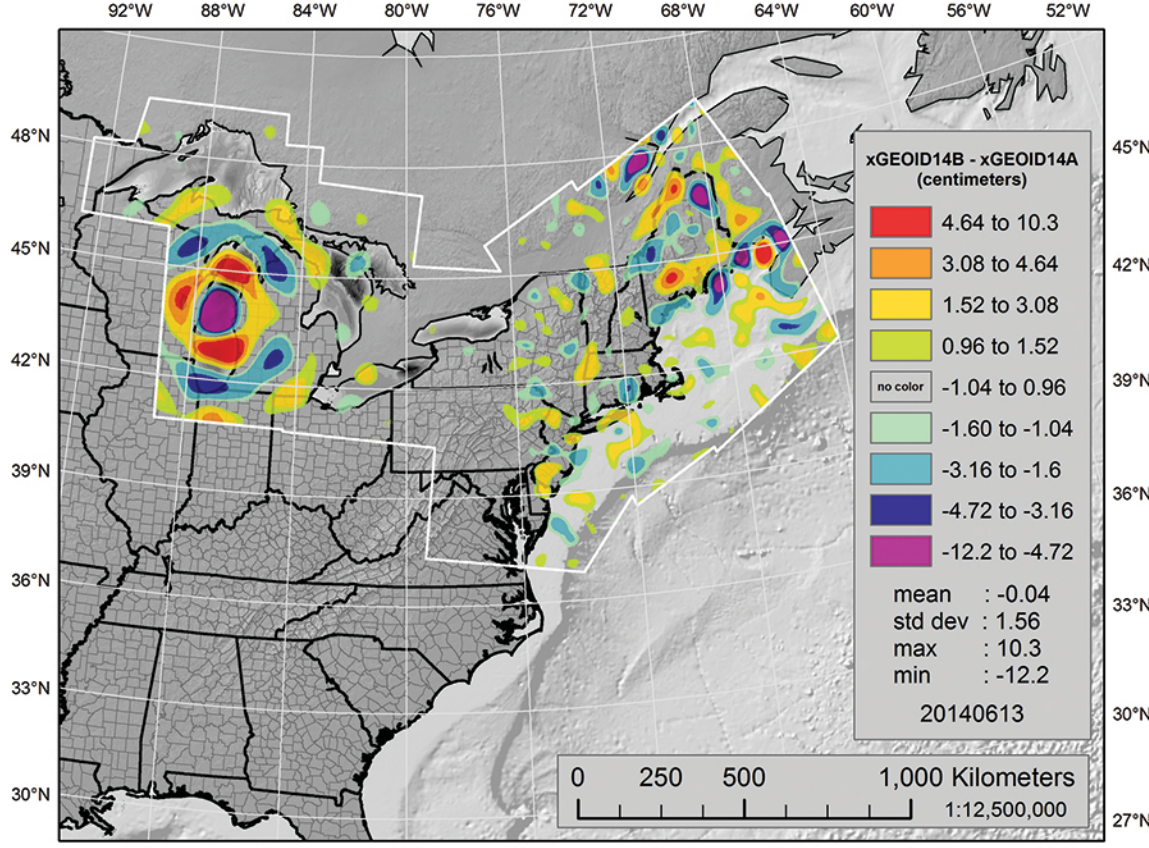
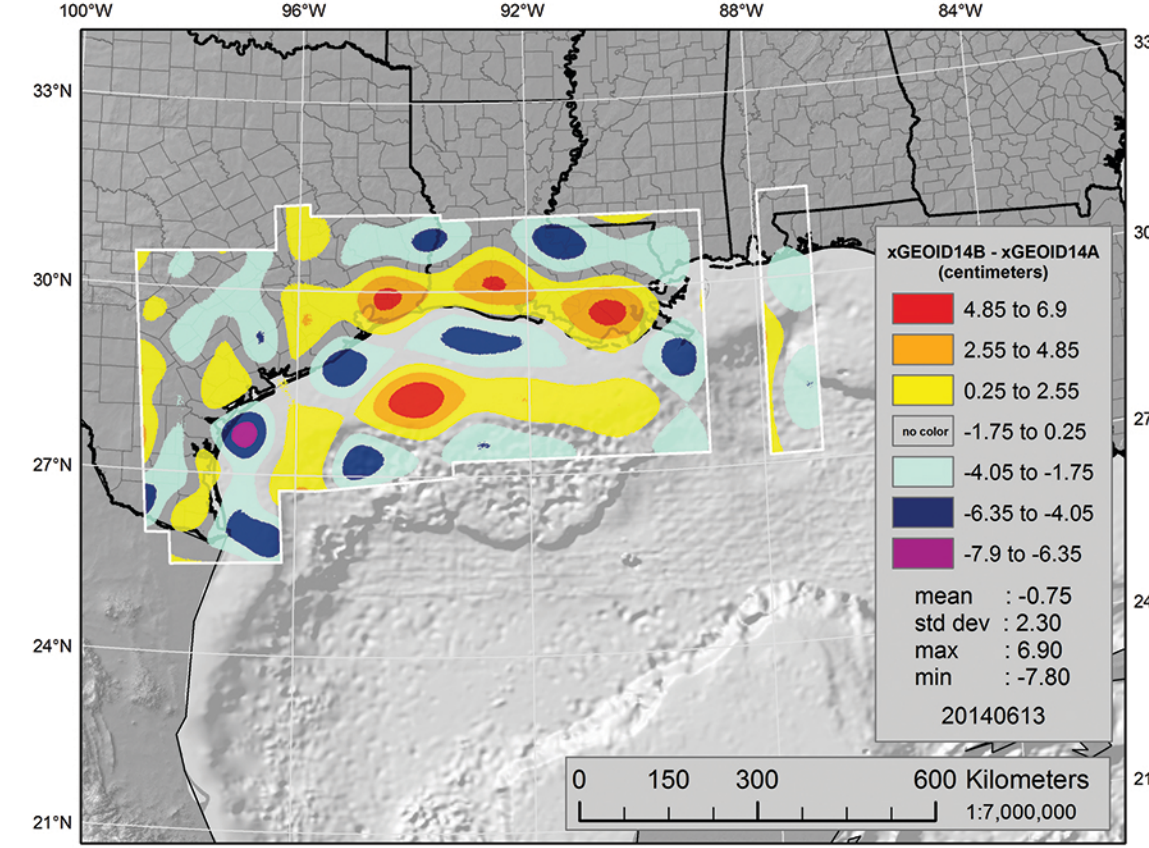
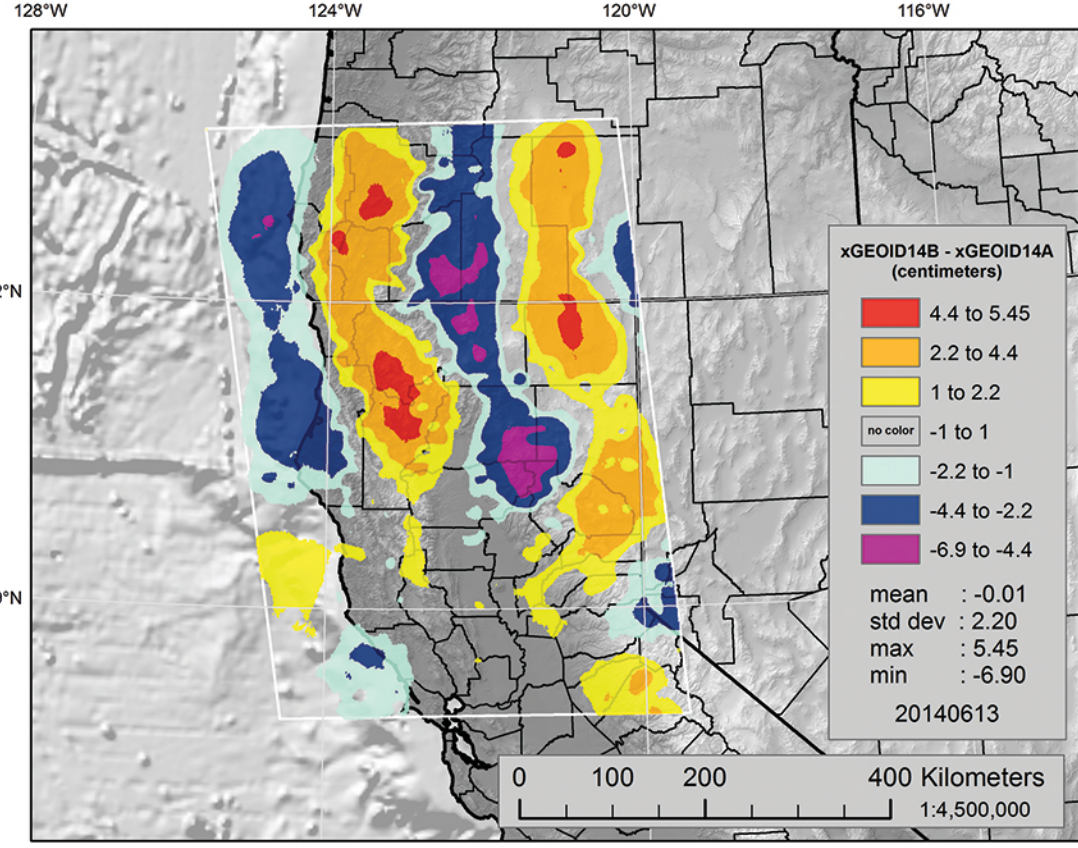
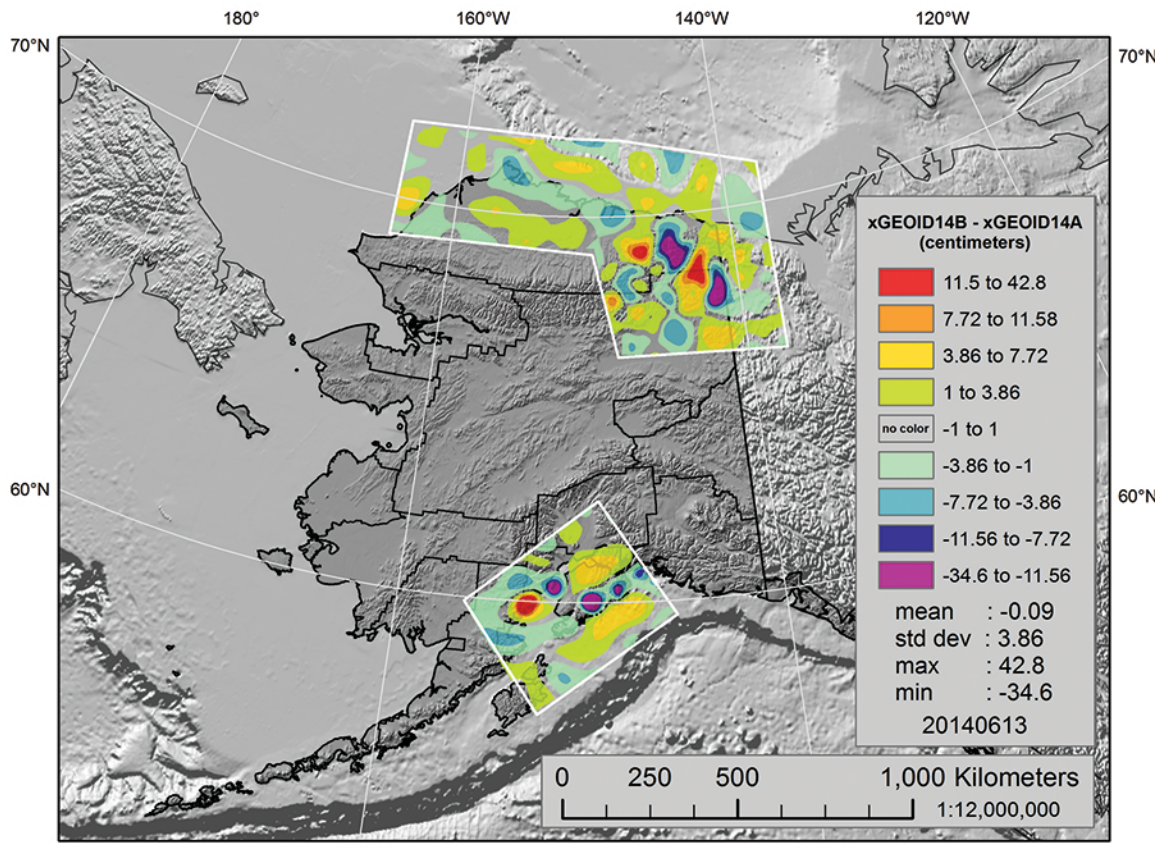
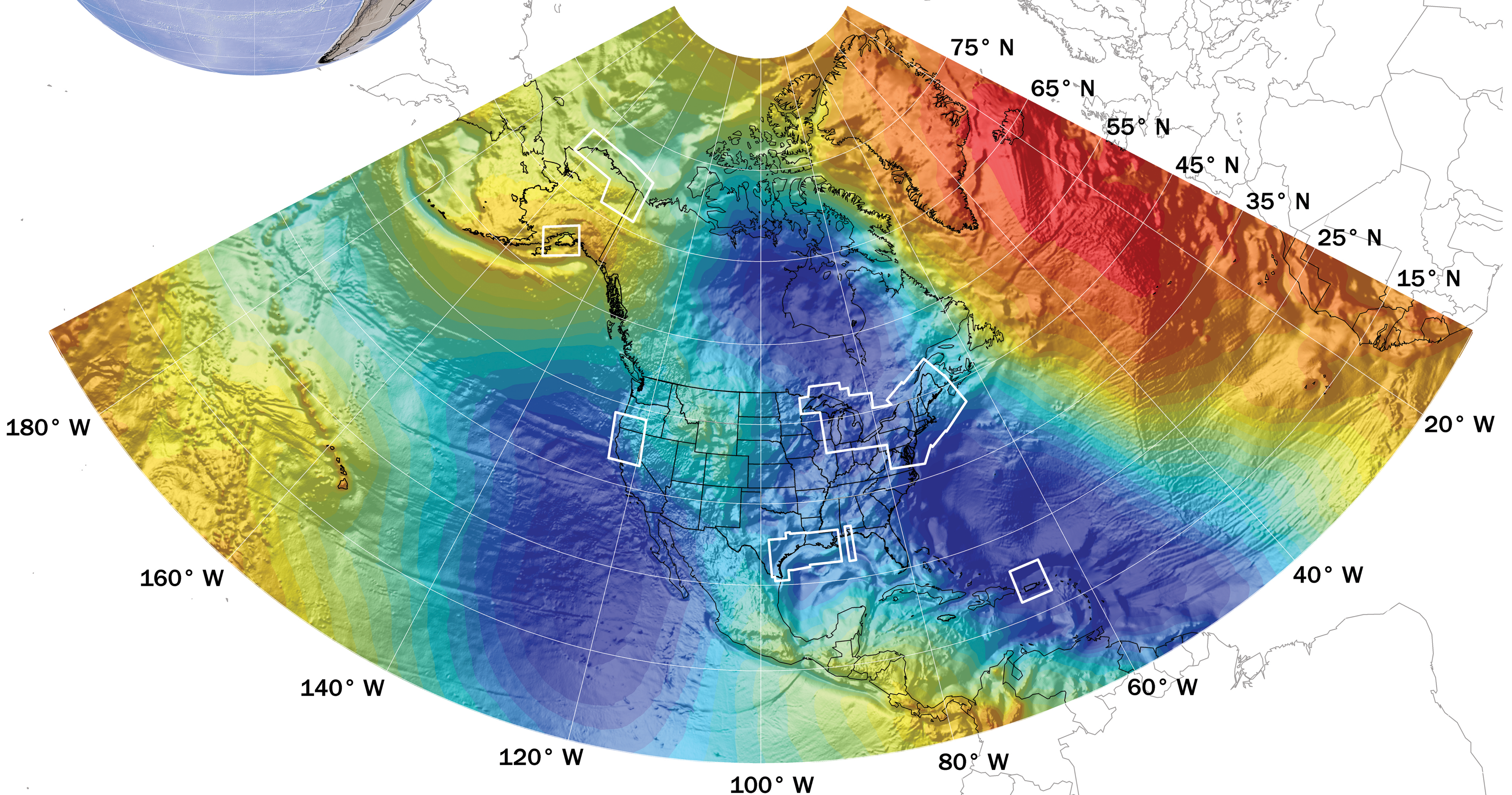
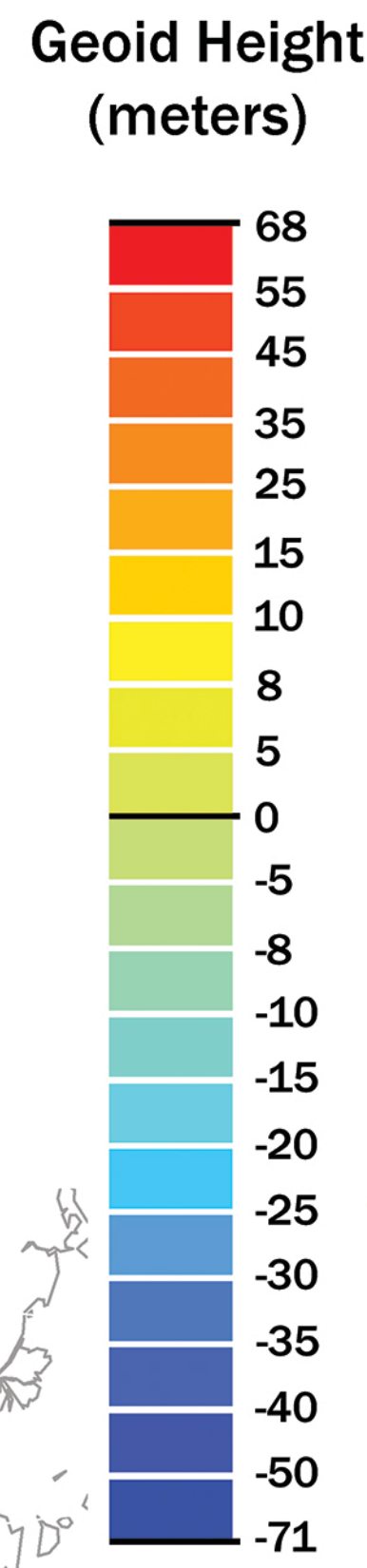
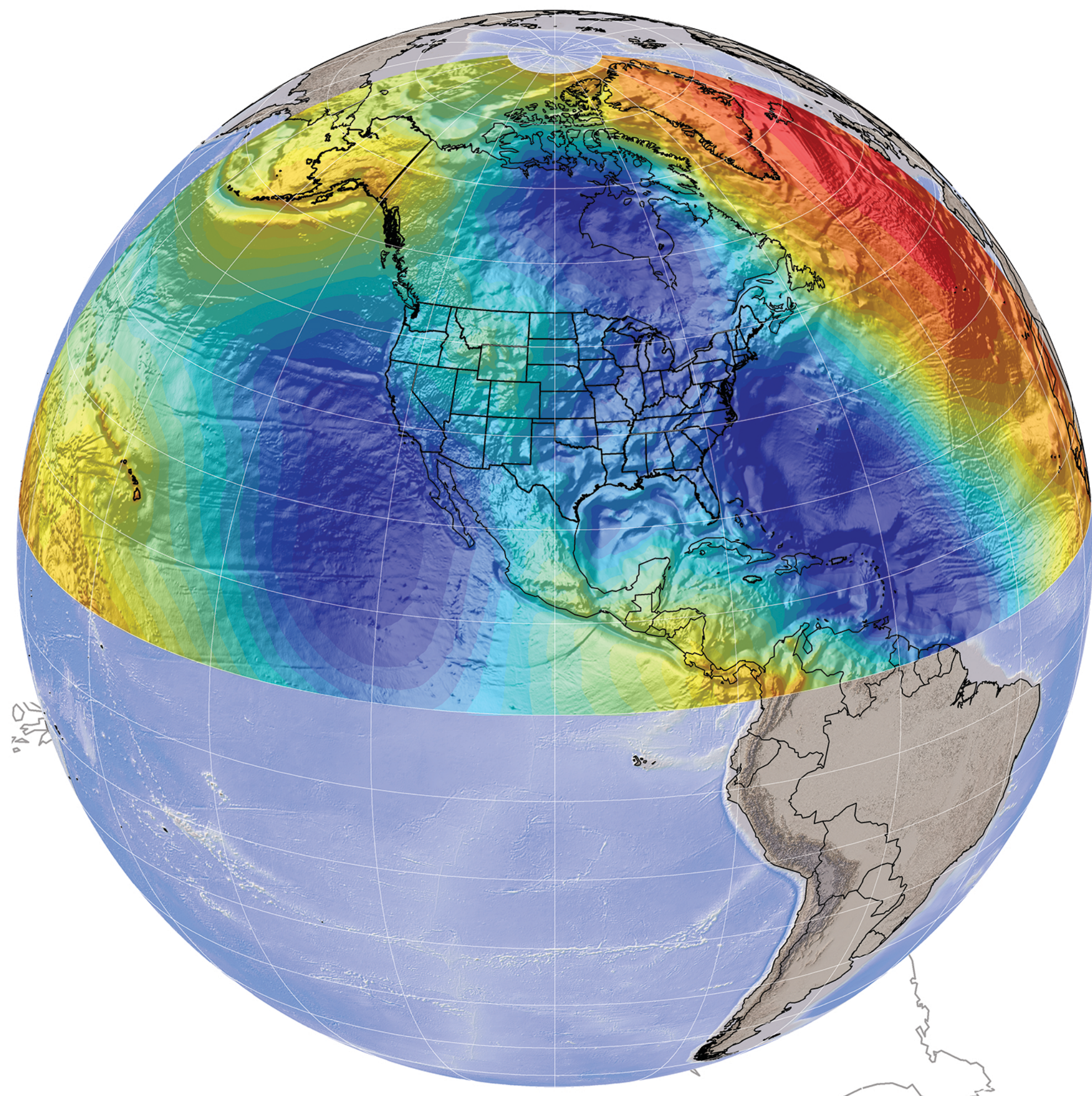


# Experimental Geoid Models

In 2022, the National Geodetic Survey will replace NAVD 88 with a new geoid-based vertical datum for the United States. In order to create a geoid of sufficient accuracy, a consistent, updated gravity survey of the US and its territories was needed. The method chosen for this survey was airborne gravimetry, and the project under which this airborne survey falls is known as the Gravity for the Redefinition of the American Vertical Datum, or GRAV-D. The first two experimental geoid models were created earlier this year and are the best available experimental gravimetric geoid without aerogravity (xGEOID14A), and the best available experimental gravimetric geoid with aerogravity (xGEOID14B). The xGEOID14A and xGEOID14B models represent a first effort producing geoid height models that span all of Alaska, Hawaii, the CONterminous United States (CONUS), and Puerto Rico and the USVI (PRVI). Being developed from a single model means that derived heights will reference the same datum across all four regions. The maps to the left and just below depict the xGEOID14B model in its full extent. The top row of maps at the bottom of the page show the differences between where aerogravity was included between the two experimental models. The bottom row of maps below show the Free-air Gravity Disturbance for the aerogravity blocks used to create the xGEOID14B model.



**National Geodetic Survey**  
**National Ocean Service**  
**National Oceanic and Atmospheric Administration**  
**United States Department of Commerce**

By: Brian Shaw  
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 Data Sources: NOAA, USGS, U.S. Census, Esri  
 Data contributions by NGS GRAV-D and Geoid Teams  
 Datum: North American Datum of 1983 (2011)  
 Projection: USA Contiguous Lambert Conformal Conic

