
Sheet A-12—CEUS SSC Project GIS Data Summary
USGS Crustal Database—Seismic Properties of North America
and the Surrounding Ocean Basins
CEUS_crustal_db_USGS_R0.shp

Data Description: Data set of the USGS global structure database developed by Walter Mooney. Attributes include basement thickness, sediment thickness, heat flow values, V_p , and V_s . Sediment thickness, contained in the attribute “sed_thick”, was derived from the subtraction of basement thickness from thickness with sediment (“thickw_sed”). Values for V_p are extracted from the source data set for the first basement depth layer (below the sediment layers, if present). Values for V_s are not complete; only 150 of the 5,237 data points have values for V_s greater than zero. Values of V_s equal to “0.00” indicate no data entry. Values for heat flow are not complete in this version of the database provided by the USGS. Units of heat flow are milliwatts per square meter.

We expect continued updates of the database by the USGS. Check the website below for the most current version.

Source (Internet URL, CD/DVD-ROM): <http://earthquake.usgs.gov/research/structure/crust/nam.php>.

Author/Publisher/Year: USGS Crustal Database—Seismic properties of North America and the surrounding ocean basins. Data accessed April 24, 2008, from the above website.

Data Summary: ESRI point shapefile developed from ASCII-formatted data available at the above website. Data are presented in geographic coordinates on the North American Datum of 1983.

Disclaimer or Constraints on Use: No constraints identified other than the limited V_s values and heat flow values noted above.

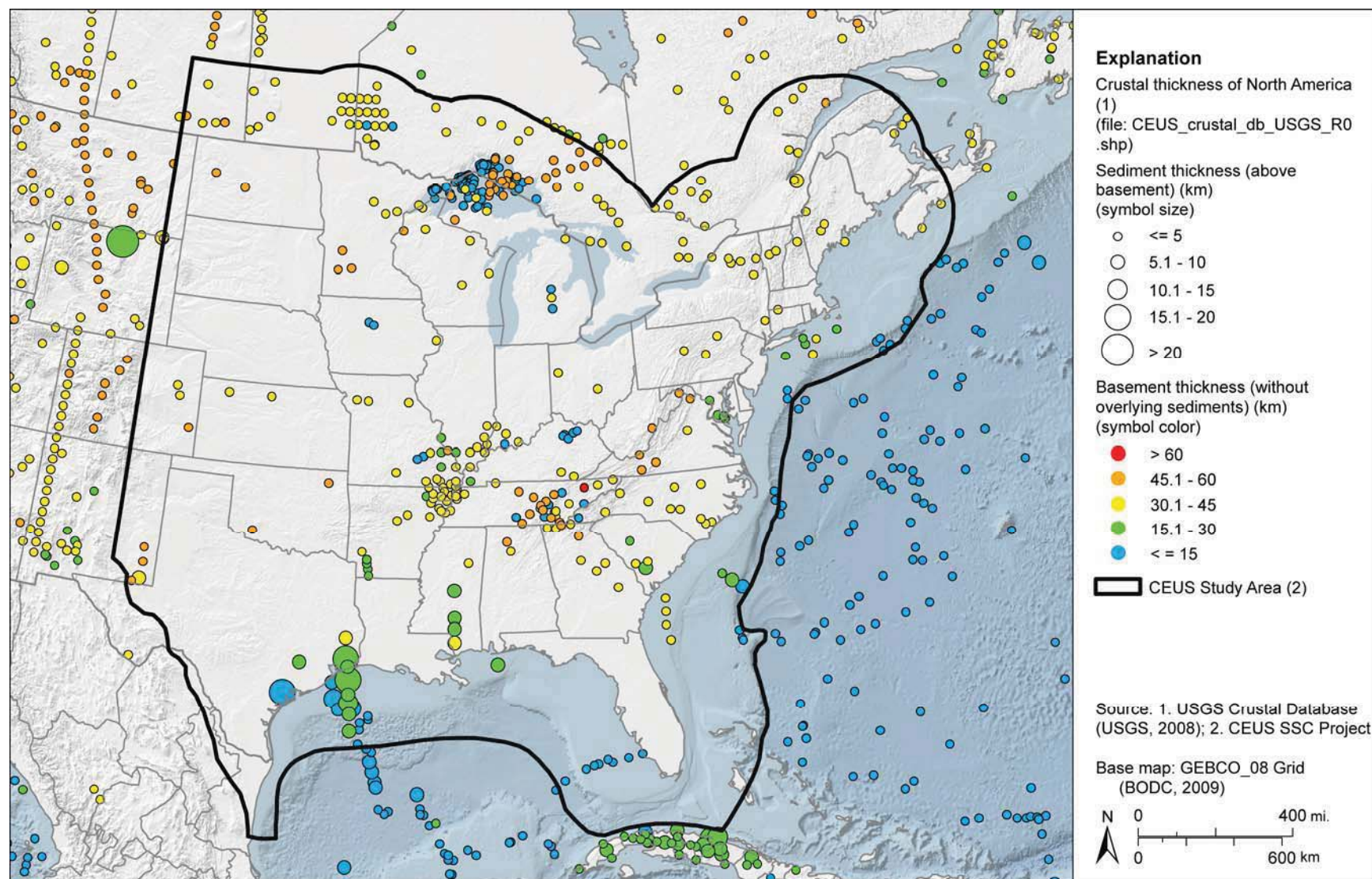


Figure A-12
Basement and sediment thickness in the USGS Crustal Database for North America. Symbol size represents overlying sediment thickness (km); symbol color represents basement thickness (km).

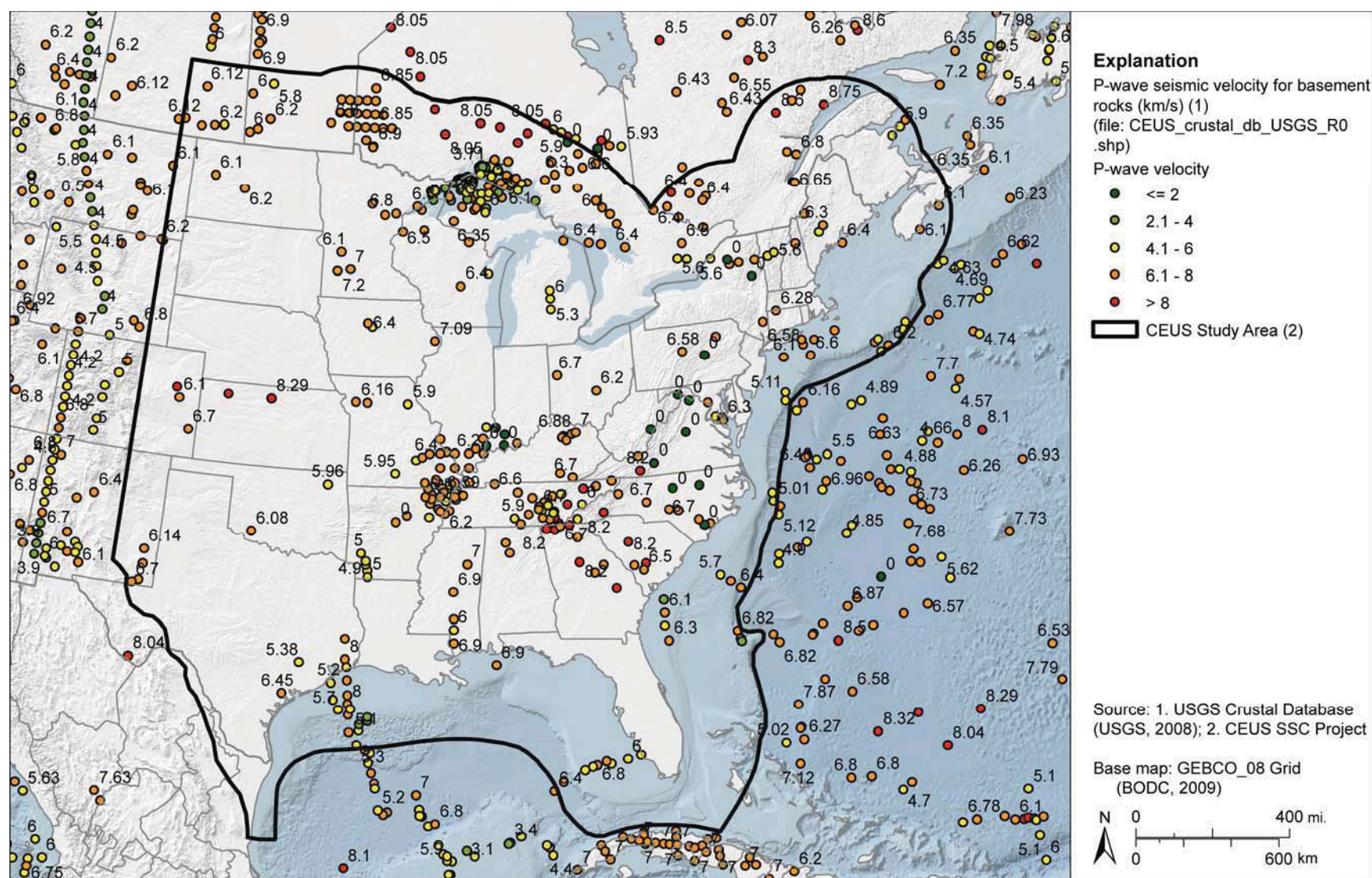


Figure A-13
Top of basement P-wave seismic velocity in the USGS Crustal Database for North America