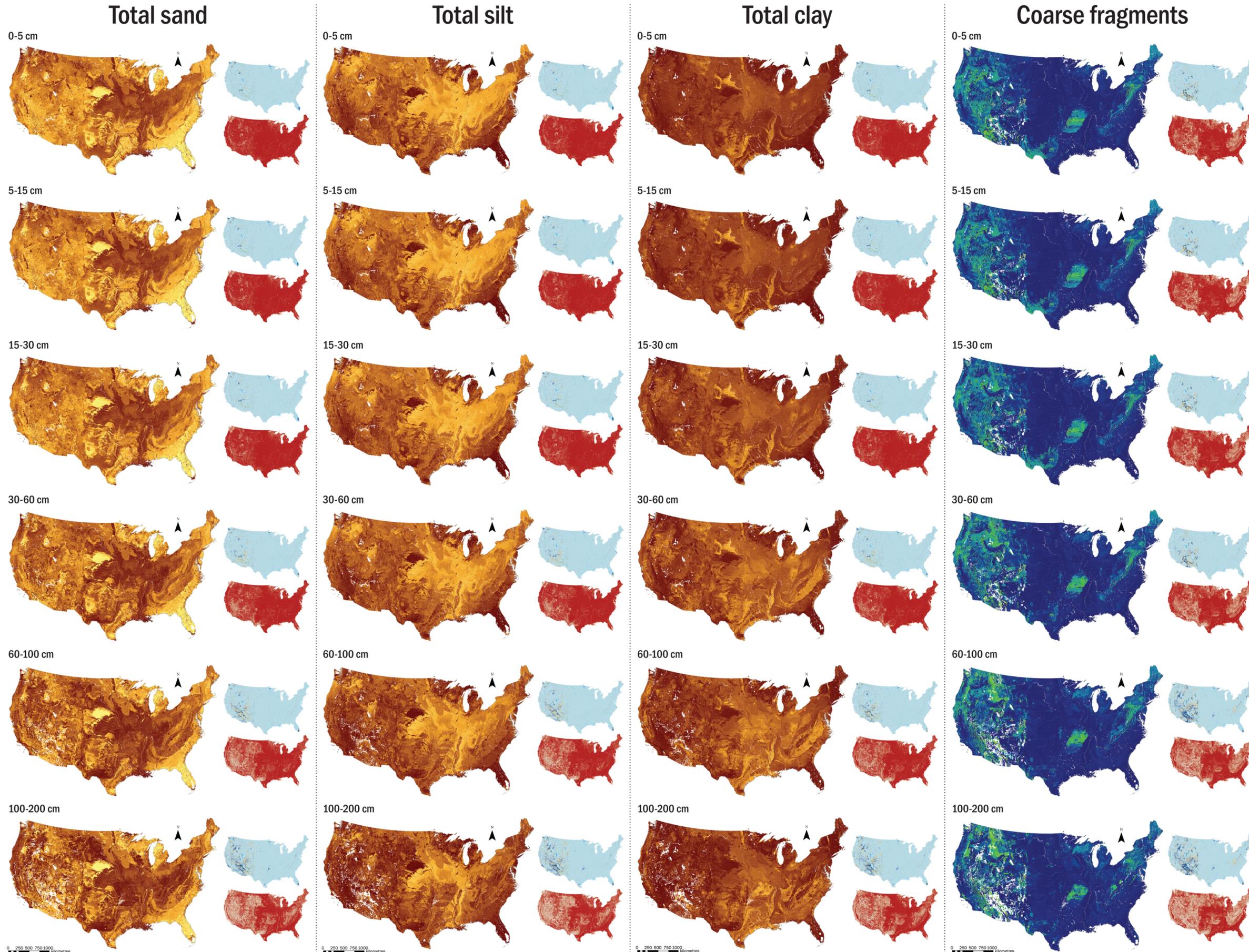


STATSGO2 weighted-means estimates of particle size for GlobalSoilMap.net



ABOUT THESE MAPS

These maps represent part of what is the preliminary version of GlobalSoilMap.net products for the United States. Data are based on the 12 December 2009 snapshot of the STATSGO2 database (Soil Survey Staff, 2006).

Equal-area splines (Bishop et al., 1999; Malone et al., 2009) were fitted to the target soil properties of soil components of the STATSGO2 map units, which allowed property estimates to be made at the standard depth increments identified in the GlobalSoilMap.net product specifications (GlobalSoilMap.net, 2011). The standard depth increments are 0-5 cm, 5-15 cm, 15-30 cm, 30-60 cm, 60-100 cm and 100-200 cm.

Weighted means were calculated within STATSGO2 map units at each standard depth for each target soil property, where more than one soil component possessed data. The weights are the areal proportion of the map unit for the given soil component.

Where not all soil components of a given map unit possessed soil property data for a given standard depth, the weighted mean represents only the area of soil in the map unit represented by the available components.

Where only one soil component possessed soil property data for a given standard depth, the soil component's soil property value was reported as-is without any area weighting.

Some map units possessed only one component in total. Where this was a soil component, the soil component's soil property value was reported as-is and is assumed to represent 100% of the area of the map unit.

Miscellaneous areas as defined in the STATSGO2 database (Soil Survey Staff, 2006) were not included in any weighted means calculations.

Where no data was reported, absence of data could be due to any combination of (i) bedrock component or bedrock map unit, (ii) soil components being shallower than the given standard depth or (iii) target soil property value not being measured for any soil components at the given standard depth.

LEGEND



Total sand, silt, clay (Soil Survey Staff, 1993):
0 to 1000 g kg⁻¹, fine earth

Coarse fragments (>2 mm):
0 to 1000 g kg⁻¹, whole earth

Type of reported value:
 Light blue: Weighted mean
 Green: Single-component map unit
 Yellow: Multi-component map unit, only one component
 White: Water
 Dark blue: No data available

Proportion of map unit represented by reported value:
 0 to 100 %

FOR MORE INFORMATION
 For more information, please contact Nathan Odgers (nathan.odgers@mail.wvu.edu) or Zamir Libohova (zamir.libohova@lin.usda.gov).

REFERENCES
 Bishop, T.F.A., McBratney, A.B., Lallier, G.M., 1999. Modelling soil at tribute depth functions with equal area quadratic smoothing splines. *Geoderma* 91, 27-45.
 GlobalSoilMap.net, 2011. Specifications, Version 1 GlobalSoilMap.net products, Release 2.1.
 Malone, B.P., McBratney, A.B., Minasny, B., Lallier, G.M., 2009. Mapping continuous depth functions of soil carbon storage and available water capacity. *Geoderma* 154, 138-152.
 Soil Survey Staff, 1993. Soil Survey Manual. United States Department of Agriculture.
 Soil Survey Staff, 2006. U.S. General Soil Map (STATSGO2). Natural Resources Conservation Service, United States Department of Agriculture.
 GRU-GSM-002-201110