

GlobalSoilMaps Released

USDA/NRCS National Soil Survey Center announces the release of US soil property maps that meet the GlobalSoilMap standards for Tier 2 requirements by providing estimated soil properties on block average (100x100m) grid cell size. The estimated soil properties are organic carbon, pH 1:5 water, clay, silt, sand, coarse fragments, ECEC, bulk density (for < than 2 mm soil fraction and whole soil), available water capacity, and soil depth. Each soil property is represented by mean or representative values (R), with upper (H) and lower (L) limit values also considered as 90% Confidence Intervals (90% CI). The estimated soil properties are provided for 6 standard soil thickness layers (0-5 cm, 5-15 cm, 15-30 cm, 30-60 cm, 60-100 cm and 100-200 cm).

The released products are based on U.S. Soil General Map – STATSGO2 (Version 0.1) and Soil Survey geographic database – SSURGO filled in with STATSGO2 (Version 0.5). The support data for GSM V0.1 and V0.5 is the same as those for gridded STATSGO2 and gridded SSURGO respectively. However, the data processing for GSM versions follows the GSM specifications and differs from gSTATSGO2 and gSSURGO with respect to standardized soil thickness that are derived from spline function, grid resolution, soil property units, and projections. The use of this data is subject to the same limitations as those specified for STASGO2 and SSURGO. The data is available at:

https://nrcsgeoservices.sc.egov.usda.gov/arcgis/rest/services/GlobalSoilMap_v01_STATSGO2
https://nrcsgeoservices.sc.egov.usda.gov/arcgis/rest/services/GlobalSoilMap_v05

Additional information on GlobalSoilMap, SSURGO, and gSSURGO can be found online at:

[Description of the Global Soil Map Database](#)
[Description of the SSURGO Database](#)
[Description of the gSSURGO Database](#)

The raster map layers can be viewed in several online web service platforms that are WMS, which allows use from a broader range of client applications such as QGIS, ArcGIS Java Script Arc Map, Arc GIS Explorer, AutoCad Civil 3D, Google Earth, Geoportal Map Viewer, and ERDAS Apollo. The raster map layer data can be readily combined with other national regional and local raster layers, e.g. National Land Cover Database (NLCD), the National Agricultural Statistics Service (NASS), Crop Data Layer, or National Elevation Dataset (NED).

Scientists from the NSSC in Lincoln, Nebraska; Geospatial Data Unit and the West Virginia University in Morgantown; and USGS Earth Resources Observation and Science Center (EROS) in Sioux Fall, South Dakota developed the database while USDA-NRCS National Geospatial Center of Excellence (NGCE) in Ft. Worth, Texas compiled and released the database suitable for various delivery platforms.

GSM Version 0.1
(STATSGO2)

GSM Version 0.5
(SSURGO)

