Soil layers – metadata

Soil Texture data downloaded January 26, 2015 from <http://www.nws.noaa.gov/oh/hrl/dmip/2/statsgo.html>. This data was developed by Miller and White (1998) and is also available from the Penn State Center for Environmental Informatics Database <http://dbwww.essc.psu.edu/> . The extracted grids contain the dominant soil texture class for each of 11 standard soil layers derived from State Soil Geographic (STASGO) soil data compiled by the Natural Resources Conservation Service (NRCS) of the U.S. Department of Agriculture. The spatial resolution of the 11 standard layers defined by Miller and White (1998) are: 0-5 cm, 5-10 cm, 10-20 cm, 20-30 cm, 30-40 cm, 40-60 cm, 60-80 cm, 80-100 cm, 100-150 cm, 150-200 cm, 200-250 cm. For many STASGO components, a depth-to-bedrock value of 152 cm was used to indicate that the soil was sampled only to this depth, and no bedrock was encountered. As a result, for many map units a soil texture of 'bedrock' for the two lowest standard layers (150cm to 250cm) may actually indicate 'no data'. Only the top 8 layers were used i.e. down to 100cm. Definition of soil texture classes:

0 - No data

1 - Sand

2 - Loamy sand

3 - Sandy loam

4 - Silt loam

5 - Silt

6 - Loam

7 - Sandy clay loam

8 - Silty clay loam

9 - Clay loam

10 - Sandy clay

11 - Silty clay

12 - Clay

13 - Organic materials

14 - Water

15 - Bedrock

16 - Other

The Depth\_To\_Bedrock\_Water.asc file was generated from the 8 soil layers using the Java algorithm AscUtility. computeSoilWaterDepthLayer(). Cell values in this file represent the depth in cms to either bedrock or water (land classes 15 & 14). 100cm values indicate at least 100cm.

Asc file format is common and is easily converted to other GIS file formats. These files can be inspected with Microsoft NotePad.

Marshall J. Heap PhD

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