# Global Data Set of Derived Soil Properties, 0.5-Degree Grid (ISRIC-WISE)

### **Summary:**

The World Inventory of Soil Emission Potentials (WISE) database currently contains data for over 4300 soil profiles collected mostly between 1950 and 1995. This database has been used to generate a series of uniform data sets of derived soil properties for each of the 106 soil units considered in the Soil Map of the World (FAO-UNESCO, 1974). These data sets were then linked to a 1/2 degree longitude by 1/2 degree latitude version of the edited and digital Soil Map of the World (FAO, 1995) to generate GIS raster image files for the following variables:

- total available water capacity (mm water per 1 m soil depth),
- soil organic carbon density (kg C/m\*\*2 for 0-30cm depth range),
- soil organic carbon density (kg C/m\*\*2 for 0-100cm depth range),
- soil carbonate carbon density (kg C/m\*\*2 for 0-100cm depth range),
- soil pH (0-30 cm depth range), and
- soil pH (30-100 cm depth range).

#### **Data Citation:**

Cite this data set as follows (citation revised on June 26, 2002):

Batjes, N. H. (ed.). 2000. Global Data Set of Derived Soil Properties, 0.5-Degree Grid (ISRIC-WISE). [Global Data Set of Derived Soil Properties, 0.5-Degree Grid (International Soil Reference and Information Centre - World Inventory of Soil Emission Potentials)]. Data set. Available on-line [http://www.daac.ornl.gov] from Oak Ridge National Laboratory Distributed Active Archive Center, Oak Ridge, Tennessee, U.S.A. doi:10.3334/ORNLDAAC/546.

#### **References:**

Batjes, N. H. (ed.). 1996. Documentation to ISRIC-WISE global data set of derived soil properties on a 1/2 deg by 1/2 deg grid (Version 1.0). Working paper and Preprint 96/05. International Soil Reference and Information Centre (ISRIC), Wageningen, The Netherlands.

Food and Agriculture Organization of the United Nations (FAO). 1995. Digital Soil Map of the World and Derived Soil Properties (Version 3.5). FAO, Rome, Italy.

Food and Agriculture Organization - United Nations Educational, Scientific and Cultural Organization (FAO-UNESCO). 1974. Soil Map of the World. Volume I: Legend. UNESCO, Paris, France.

#### Data Format:

For information on parameter/variable names, variable description/definition, units of measurement, and data file format, see this companion file <a href="ftp://www.daac.ornl.gov/data/global\_soil/IsricWiseGrids/comp/isric\_wp.pdf">ftp://www.daac.ornl.gov/data/global\_soil/IsricWiseGrids/comp/isric\_wp.pdf</a>.

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