SoilHive data download

Hello!

Thank you for requesting the data. Please find below more information about the different files you have received.

In this folder, along with this readme.pdf file, you will find:
hex_grid.geojson = This file contains the hexagons (h3 cells) corresponding to your selection

You can locate your data within the folder that corresponds to its data type:

RASTER = This folder contains all the requested raster files organized by database. Each datasource will have its own subfolder.

POINT = This folder organizes all point data into a table with the requested data sources, available in both *.csv* and *.geojson*:

- all_point.csv
- all_point.geojson

Table data will be organized in columns as follows:

id	**observation id**
lat	**latitude**
lon	**longitude**
property	**parameter name in SoilHive**
original_name	**original parameter name**
upper_depth	**upper sampling depth**
lower_depth	**lower sampling depth**
value	**value of the observation**
unit	**unit of measurement**
sampling_date	**sampling date**
h3_index	**h3 cell id**
publication_date	**publication date**
data_source	**data source name**

We hope you had a positive experience in SoilHive!

Please feel free to give us some feedback here

Metadata

In the following section you can find all the metadata for the data you asked for:

- SoilGrids250m

SoilGrids250m

Metadata	Logical Data Model
Full name	SoilGrids — global gridded soil information
Version	2.0
Organization or Author	ISRIC - World Soil Information
Abstract	SoilGrids is designed as a globally consistent, data-driven system that predicts soil properties and classes using global covariates and globally fitted models. If you are looking for soil information on national and/or local levels we advise you, before using SoilGrids, to compare SoilGrids predictions with soil maps derived from national and local soil geographical databases. National soil maps are usually based on more detailed input soil information and therefore are often more accurate than SoilGrids (within the local coverage area). For an overview of national and regional soil databases, please refer to the Soil Geographic Databases compendium. The selection of soil profiles underpinning SoilGrids is larger than the publicly available set ('wosis_latest') displayed here (for details see the ESSD paper). The actual number of observations for each property varies (greatly) between profiles and with depth, generally depending on the objectives of the initial soil sampling programmes. National soil survey organisations will generally maintain a wider selection of soil profiles/properties for their country in their databases.
Service location	https://soilgrids.org/
Geographical coverage	Global
GIS data type	Raster
Spatial resolution	250 m
Publication date	2021-05-11
Reference period start	1905-04-01
Reference period stop	2016-07-05
License	

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Soil properties	Bulk Density, Cation Exchange Capacity, Coarse Fragments, Clay, Nitrogen, Organic Carbon Density, Organic Carbon Stock, pH in water, Sand, Silt, Soil Organic Carbon Content, Volumetric Water Content at -10 kPa, Volumetric Water Content at -33 kPa, Volumetric Water Content at -1500 kPa
Soil depth (cm)	up to 200 cm depth
Citation	Poggio, L., de Sousa, L. M., Batjes, N. H., Heuvelink, G. B. M., Kempen, B., Ribeiro, E., and Rossiter, D.: SoilGrids 2.0: producing soil information for the globe with quantified spatial uncertainty, SOIL, 7, 217–240, https://doi.org/10.5194/soil-7-217-2021 , 2021.

Soil parameter name	Unit of measurement	Description	Global min value	Global max value
bdod_0-5cm_mean_250	cg/cm3	Bulk density of the fine earth fraction(0-5)	---	---
bdod_5-15cm_mean_250	cg/cm3	Bulk density of the fine earth fraction(5-15)	---	---
bdod_15-30cm_mean_250	cg/cm3	Bulk density of the fine earth fraction(15-30)	---	---
bdod_30-60cm_mean_250	cg/cm3	Bulk density of the fine earth fraction(30-60)	---	---
bdod_60-100cm_mean_250	cg/cm3	Bulk density of the fine earth fraction(60-100)	---	---
bdod_100-200cm_mean_250	cg/cm3	Bulk density of the fine earth fraction(100-200)	---	---

cec_0-5cm_mean_250	mmolc/kg	Cation Exchange Capacity of the soil (0-5)	---	---
cec_5-15cm_mean_250	mmolc/kg	Cation Exchange Capacity of the soil(5-15)	---	---
cec_15-30cm_mean_250	mmolc/kg	Cation Exchange Capacity of the soi(15-30)l	---	---
cec_30-60cm_mean_250	mmolc/kg	Cation Exchange Capacity of the soil(30-60)	---	---
cec_60-100cm_mean_250	mmolc/kg	Cation Exchange Capacity of the soil(60-100)	---	---
cec_100-200cm_mean_250	mmolc/kg	Cation Exchange Capacity of the soil(100-200)	---	---
cfvo_0-5cm_mean_250	cm3/dm3	Volumetric fraction of coarse fragments (> 2 mm) (0-5)	---	---
cfvo_5-15cm_mean_250	cm3/dm3	Volumetric fraction of coarse fragments (> 2 mm) (5-15)	---	---
cfvo_15-30cm_mean_250	cm3/dm3	Volumetric fraction of coarse fragments (> 2 mm) (15-30)	---	---
cfvo_30-60cm_mean_250	cm3/dm3	Volumetric fraction of coarse fragments (> 2 mm) (30-60)	---	---
cfvo_60-100cm_mean_250	cm3/dm3	Volumetric fraction of coarse fragments (> 2 mm)(60-100)	---	---
cfvo_100-200cm_mean_250	cm3/dm3	Volumetric fraction of coarse fragments (> 2 mm) (100-200)	---	---
nitrogen_0-5cm_mean_250	cg/kg	Total nitrogen (N) (0-5)	---	---
nitrogen_5-15cm_mean_250	cg/kg	Total nitrogen (N) (5-15)	---	---
nitrogen_15-30cm_mean_250	cg/kg	Total nitrogen (N) (15-30)	---	---
nitrogen_30-60cm_mean_250	cg/kg	Total nitrogen (N) (30-60)	---	---
nitrogen_60-100cm_mean_250	cg/kg	Total nitrogen (N) (60-100)	---	---
nitrogen_100-200cm_mean_250	cg/kg	Total nitrogen (N) (100-200)	---	---
phh2o_0-5cm_mean_250	pHx10	Soil pH(0-5)	---	---

phh2o_5-15cm_mean_250	pHx10	Soil pH(5-15)	---	---
phh2o_15-30cm_mean_250	pHx10	Soil pH(15-30)	---	---
phh2o_30-60cm_mean_250	pHx10	Soil pH(30-60)	---	---
phh2o_60-100cm_mean_250	pHx10	Soil pH60-(100)	---	---
phh2o_100-200cm_mean_250	pHx10	Soil pH(100-200)	---	---
clay_0-5cm_mean_250	g/kg	Proportion of clay particles (< 0.002 mm) in the fine earth fraction(0-5)	---	---
clay_5-15cm_mean_250	g/kg	Proportion of clay particles (< 0.002 mm) in the fine earth fraction(5-15)	---	---
clay_15-30cm_mean_250	g/kg	Proportion of clay particles (< 0.002 mm) in the fine earth fraction(15-30)	---	---
clay_30-60cm_mean_250	g/kg	Proportion of clay particles (< 0.002 mm) in the fine earth fraction(30-60)	---	---
clay_100-200cm_mean_250	g/kg	Proportion of clay particles (< 0.002 mm) in the fine earth fraction(100-200)	---	---
clay_60-100cm_mean_250	g/kg	Proportion of clay particles (< 0.002 mm) in the fine earth fraction(60-100)	---	---
sand_0-5cm_mean_250	g/kg	Proportion of sand particles (> 0.05 mm) in the fine earth fraction(0-5)	---	---
sand_5-15cm_mean_250	g/kg	Proportion of sand particles (> 0.05 mm) in the fine earth fraction(5-15)	---	---
sand_15-30cm_mean_250	g/kg	Proportion of sand particles (> 0.05 mm) in the fine earth fraction(15-30)	---	---
sand_30-60cm_mean_250	g/kg	Proportion of sand particles (> 0.05 mm) in the fine earth fraction(30-60)	---	---
sand_60-100cm_mean_250	g/kg	Proportion of sand particles (> 0.05 mm)	---	---

		in the fine earth fraction(60-100)		
sand_100-200cm_mean_250	g/kg	Proportion of sand particles (> 0.05 mm) in the fine earth fraction(100-200)	---	---
silt_0-5cm_mean_250	g/kg	Proportion of silt particles (≥ 0.002 mm and ≤ 0.05 mm) in the fine earth fraction(0-5)	---	---
silt_5-15cm_mean_250	g/kg	Proportion of silt particles (≥ 0.002 mm and ≤ 0.05 mm) in the fine earth fraction(5-15)	---	---
silt_15-30cm_mean_250	g/kg	Proportion of silt particles (≥ 0.002 mm and ≤ 0.05 mm) in the fine earth fraction(15-30)	---	---
silt_30-60cm_mean_250	g/kg	Proportion of silt particles (≥ 0.002 mm and ≤ 0.05 mm) in the fine earth fraction(30-60)	---	---
silt_60-100cm_mean_250	g/kg	Proportion of silt particles (≥ 0.002 mm and ≤ 0.05 mm) in the fine earth fraction(60-100)	---	---
silt_100-200cm_mean_250	g/kg	Proportion of silt particles (≥ 0.002 mm and ≤ 0.05 mm) in the fine earth fraction(100-200)	---	---
soc_0-5cm_mean_250	dg/kg	Soil organic carbon content in the fine earth fraction()	---	---
soc_5-15cm_mean_250	dg/kg	Soil organic carbon content in the fine earth fraction()	---	---
soc_15-30cm_mean_250	dg/kg	Soil organic carbon content in the fine earth fraction()	---	---
soc_30-60cm_mean_250	dg/kg	Soil organic carbon content in the fine earth fraction()	---	---
soc_60-100cm_mean_250	dg/kg	Soil organic carbon content in the fine earth fraction()	---	---
soc_100-200cm_mean_250	dg/kg	Soil organic carbon content in the fine earth fraction()	---	---

ocd_0-5cm_mean_250	t/ha	Organic carbon density(0-5)	---	---
ocd_5-15cm_mean_250	t/ha	Organic carbon density(5-15)	---	---
ocd_15-30cm_mean_250	t/ha	Organic carbon density(15-30)	---	---
ocd_30-60cm_mean_250	t/ha	Organic carbon density(30-60)	---	---
ocd_60-100cm_mean_250	t/ha	Organic carbon density(60-100)	---	---
ocd_100-200cm_mean_250	t/ha	Organic carbon density(100-200)	---	---
ocs_0-30cm_mean_250	hg/dm³	Organic carbon stocks(0-30)	---	---
wv0010_0-5cm_mean_250	cm3/100cm3	Volumetric Water Content at 10kPa in 10-3 cm3/cm3 (0.1 v% or 1 mm/m) (0-5)	---	---
wv0010_5-15cm_mean_250	cm3/100cm3	Volumetric Water Content at 10kPa in 10-3 cm3/cm3 (0.1 v% or 1 mm/m) (5-15)	---	---
wv0010_15-30cm_mean_250	cm3/100cm3	Volumetric Water Content at 10kPa in 10-3 cm3/cm3 (0.1 v% or 1 mm/m) (15-30)	---	---
wv0010_30-60cm_mean_250	cm3/100cm3	Volumetric Water Content at 10kPa in 10-3 cm3/cm3 (0.1 v% or 1 mm/m) (30-60)	---	---
wv0010_60-100cm_mean_250	cm3/100cm3	Volumetric Water Content at 10kPa in 10-3 cm3/cm3 (0.1 v% or 1 mm/m) (60-100)	---	---
wv0010_100-200cm_mean_250	cm3/100cm3	Volumetric Water Content at 10kPa in 10-3 cm3/cm3 (0.1 v% or 1 mm/m) (100-200)	---	---
wv0033_0-5cm_mean_250	cm3/100cm3	Volumetric Water Content at 33kPa in 10-3 cm3cm-3 (0.1 v% or 1 mm/m) (0-5)	---	---
wv0033_5-15cm_mean_250	cm3/100cm3	Volumetric Water Content at 33kPa in 10-3 cm3cm-3 (0.1 v% or 1 mm/m) (5-15)	---	---
wv0033_15-30cm_mean_250	cm3/100cm3	Volumetric Water Content at 33kPa in 10-3 cm3cm-3 (0.1 v% or 1 mm/m) (15-30)	---	---
wv0033_30-60cm_mean_250	cm3/100cm3	Volumetric Water Content at 33kPa in	---	---

		10-3 cm3cm-3 (0.1 v% or 1 mm/m) (30-60)		
wv0033_60-100cm_mean_250	cm3/100cm3	Volumetric Water Content at 33kPa in 10-3 cm3cm-3 (0.1 v% or 1 mm/m) (60-100)	---	---
wv0033_100-200cm_mean_250	cm3/100cm3	Volumetric Water Content at 33kPa in 10-3 cm3cm-3 (0.1 v% or 1 mm/m) (100-200)	---	---
wv1500_0-5cm_mean_250	cm3/100cm3	Volumetric Water Content at 1500kPa in 10-3 cm3cm-3 (0.1 v% or 1 mm/m) (0-5)	---	---
wv1500_5-15cm_mean_250	cm3/100cm3	Volumetric Water Content at 1500kPa in 10-3 cm3cm-3 (0.1 v% or 1 mm/m) (5-15)	---	---
wv1500_15-30cm_mean_250	cm3/100cm3	Volumetric Water Content at 1500kPa in 10-3 cm3cm-3 (0.1 v% or 1 mm/m) (15-30)	---	---
wv1500_30-60cm_mean_250	cm3/100cm3	Volumetric Water Content at 1500kPa in 10-3 cm3cm-3 (0.1 v% or 1 mm/m) (30-60)	---	---
wv1500_60-100cm_mean_250	cm3/100cm3	Volumetric Water Content at 1500kPa in 10-3 cm3cm-3 (0.1 v% or 1 mm/m) (60-100)	---	---
wv1500_100-200cm_mean_250	cm3/100cm3	Volumetric Water Content at 1500kPa in 10-3 cm3cm-3 (0.1 v% or 1 mm/m) (100-200)	---	---