

European soil database (ESDB), Dominant STU rasters (Soil Topologycal Units) - version 2.0, May

The European Soil Database (ESDB) contains four discrete datasets: - the Soil Geographical Database of Eurasia at scale 1:1,000,000 (SGDBE) - the Pedotransfer Rules Database (PTRDB) - the Soil Profile Analytical Database of Europa (SPADBE) - the Database of Hydraulic Properties of European Soils (HYPRES) This 1km x 1km raster version release of the database is freely available to the public and contains a 1km raster version of the vector based soil geometry (which is part of the SGDBE).

Raster values have been derived using the "features to raster" tool in the Spatial Analyst extension of ArcGIS, the feature layer being a shapefile created from the SGDBE geometrical database to which attributes from SGDBE and PTRDB have been linked according to the "dominant STU" principle for the "dominant STU" rasters.

Dominant STU principle: For each SMU (Soil Mapping Unit): a "dominant STU" is associated. ("dominant" in terms of % of area). The value of a soil attribute A (e.g. depth-to-rock) for this SMU would be the value that A has within that dominant STU.

The attributes are described at:

http://eusoils.jrc.ec.europa.eu/ESDB Archive/raster archive/SG attr.htm

http://eusoils.jrc.ec.europa.eu/ESDB_Archive/raster_archive/pt_attr.htm

This metadata record is adapted from the orginal one received from JRC.

Simple

Date (Creation)	2006-05-31
Edition	2.0
Citation identifier	jrc_r_3035_1_km_esdb-dom-stu_2001-2006_rev02
Status	Obsolete

Point of contact

No information provided.

Point of contact

Point of contact	
No information provided.	
GEMET - INSPIRE themes, version 1.0	• Soil
GEMET	• soil
Keywords	
Keywords	
EEA topics	• Soil
Use limitation	Notification regarding these data:
	The ESDB data were developed in collaboration with the European Soil Bureau Network, which holds a joint copyright to the data with the European Commission. The DG-JRC, on behalf of the Commission, and the European Soil Bureau Network, do not accept any liability whatsoever for any error, missing data or omissions in the data, or for any loss or damage arising from its use. The DG JRC, on behalf of the Commission, agrees to provide the data free of charge but is not bound to justify the content and values contained in the databases.
	The user agrees to:
	a) Make proper reference to the source of the data when disseminating the results to which this agreement relates;

	b) Participate in the verification of the data (e.g. by noting and reporting any errors or omissions discovered to the JRC).
	Reference of source (Citations):
	Panagos P., Van Liedekerke M., Jones A., Montanarella L. European Soil Data Centre: Response to European policy support and public data requirements. (2012) Land Use Policy, 29 (2), pp. 329-338. doi:10.1016/j.landusepol.2011.07.003
	ESDBv2 Raster Library - a set of rasters derived from the European Soil Database distribution v2.0 (published by the European Commission and the European Soil Bureau Network, CD-ROM, EUR 19945 EN); Marc Van Liedekerke, Arwyn Jones, Panos Panagos; 2006.
	Panagos Panos. The European soil database (2006) GEO: connexion, 5 (7), pp. 32-33.
Access constraints	Other restrictions
Other constraints	no limitations to public access
Spatial representation type	Grid
Distance	1 km
Language of dataset	English
Character set	UTF8
Topic category	Geoscientific information
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segin date	2001-01-01
ind date	2006-05-31
dditional Information	Database Field: Description
	AGLI1NNI: Dominant limitation to agricultural use (without no information).
	AGLI2NNI: Secondary limitation to agricultural use (without no information).
	AGLIM1: Code of the most important limitation to agricultural use of the STU.
	AGLIM2: Code of a secondary limitation to agricultural use of the STU.
	ALT: Elevation
	ATC: Accumulated temperature class.
	AWC_SUB: Subsoil available water capacity.
	AWC_TOP: Topsoil available water capacity.
	BS_SUB: Base saturation of the subsoil.
	BS_TOP: Base saturation of the topsoil.
	CEC_SUB: Subsoil cation exchange capacity.
	CEC_TOP: Topsoil cation exchange capacity.
	CRUSTING: Soil crusting class.
	DGH: Depth to a gleyed horizon.
	DIFF: Soil profile differentiation.
	DIMP: Depth to an impermeable layer.
	DR: Depth to rock.
	EAWC_SUB: Subsoil easily available water capacity.
	EAWC_TOP: Topsoil easily available water capacity.
	ERODI: Soil erodibility class.
	FAO85FU: Full soil code of the STU from the 1974 (modified CEC 1985) FAO-UNESCO Soil Legend
	FAO90FU: Full soil code of the STU from the 1990 FAO-UNESCO Soil Legend.
	HG: Hydrogeological class.
	IL: Code for the presence of an impermeable layer within the soil profile of the STU.
	MIN: Profile mineralogy.
	MIN_SUB: Subsoil mineralogy.
	MIN_TOP: Topsoil mineralogy.
	OC_TOP: Topsoil organic carbon content.
	PARMATDO: Code for dominant parent material of the STU.

PARMATSEC: Code for secondary parent material of the STU.

PD_SUB: Subsoil packing density.

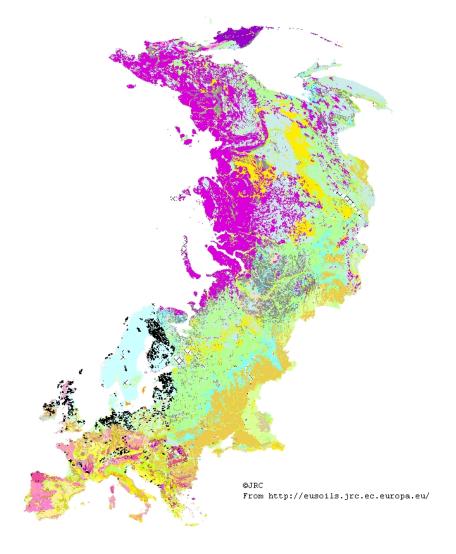
	PEAT: Peat.
	PHYSCHIM: Physi-chemical factor of soil crusting & erodibility.
	PMH: Parent material hydrogeological type.
	ROO: Depth class of an obstacle to roots within the STU.
	SLOPEDO: Dominant slope class of the STU.
	SLOPESE: Secondary slope class of the STU.
	STR_SUB: Subsoil structure.
	STR_TOP: Topsoil structure.
	TD: Rule infered subsoil 3.
	TEXT: Dominant surface textural class (completed from dominant STU).
	TXTCRUST: Textural factor of soil crusting.
	TXTDEPCHG: Depth class to a textural change of the dominant and/or secondary surface 3 of the STU.
	TXTEROD: Textural factor of soil erodibility.
	TXTSRFDO: Dominant surface textural class of the STU.
	TXTSRFSE: Secondary surface textural class of the STU.
	TXTSUBDO: Dominant sub-surface textural class of the STU.
	TXTSUBSE: Secondary sub-surface textural class of the STU.
	USE: Regrouped land use class.
	USEDO: Code for dominant land use of the STU.
	USESE: Code for secondary land use of the STU.
	VS: Volume of stones
	WM1: Code for normal presence and purpose of an existing water management system in agricultural land on more than 50% of the STU.
	WM2: Code for the type of an existing water management system.
	WR: Dominant annual average soil water regime class of the soil profile of the STU.
	WRBFU: Full soil code of the STU from the World Reference Base (WRB) for Soil Resources.
	ZMAX: Maximum elevation above sea level of the STU (in metres).
	ZMIN: Minimum elevation above sea level of the STU (in metres).
Coordinate reference system identifier	EPSG:3035
Distribution format	• AAlGrid()
OnLine resource	
No information provided.	
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Hierarchy level	Dataset
Conformance result	
Title	Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services
Date (Publication)	2010-12-08
Explanation	See the referenced specification

PD_TOP: Topsoil packing density.

Metadata

File identifier 41d55e8f-4fcf-41f9-8d97-14613fcd1f9c X Metadata language English UTF8 Hierarchy level Dataset Date stamp 2025-01-07T06:49:40.222429Z Metadata standard name ISO 19115/19139 Metadata standard version 1.0 Metadata author Organisation name	1L	
Character set UTF8 Hierarchy level Dataset Date stamp 2025-01-07T06:49:40.222429Z Metadata standard name ISO 19115/19139 Metadata standard version 1.0 Metadata author		
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European Environment Agency	Individual name	sdi@eea.

Overviews



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