EEA geospatial data catalogue

Soil erodibility (K-Factor), May 2011

One key parameter for soil erosion modelling is the soil erodibility, expressed as the K- factor in the commonly used soil erosion model USLE (Universal Soil Loss Equation). The K-factor is related to crucial soil factors triggering erosion (organic matter content, soil texture, soil structure, permeability). We calculated soil erodibility using measured soil data, collected during the 2009 LUCAS (Land Use and Cover Area frame Survey) soil survey campaign across the member states of the European Union. The estimation method of soil erodibility is based on the LUCAS point data. Since the density of points has a variety, we have performed a first assessment of Uncertainty based on the number of points in the 10km Grid Cell (dataset called uncertainty.tif available in the same folder as k-factor).

Soil erodibility is expressed in [(t ha h)/(ha MJ mm)].

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

Simple

Date (Creation)	2011-05-01
Citation identifier	jrc_r_3035_10_km_esdb-k-factor_2009
Status	Obsolete

Point of contact

No information provided.

Point of contact

No information provided.

GEMET - INSPIRE themes, version 1.0	• Soil
GEMET	• soil
Keywords	
Keywords	
EEA topics	• Soil • Water • Sustainability challenges
Use limitation	Notification regarding these data: The data provided has been prepared for use by internal research activities in the Land Management and Natural Hazards Unit of the Institute for Environment & Sustainability, JRC Ispra. The data produced in 2009 LUCAS (Land Use and Cover Area frame Survey) soil survey campaign and are made available for research and development purposes. The data were developed for research purposes in the SOIL Action of the Joint Research Centre. The JRC does not accept any liability whatsoever for any error, missing data or omission in the data, or for any loss or damage arising from its use. The JRC agrees to provide the data free of charge but is not bound to justify the content and values contained in the databases. The permission to use the data specified above is granted on condition that, under NO CIRCUMSTANCES are these data passed to third parties. Moreover they must NOT be used in any way for commercial gain or for purposes other than those specified above . 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., Meusburger, K., Alewell, C., Montanarella, L. Soil erodibility estimation using LUCAS point survey data of Europe, Environmental Modelling & Software, Volume 30, April 2012, Pages 143-145, doi:10.1016/j.envsoft.2011.11.002 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
Access constraints	Other restrictions
Other constraints	no limitations to public access
Spatial representation type	Grid
Distance	10 km
Language of dataset	English
Character set	UTF8
Topic category	• Geoscientific information

71.00	N	27.50	S	32.00	E	-32.00	W

Begin date	2009-01-01
End date	2009-12-31
Coordinate reference system identifier	EPSG:3035
Distribution format	• GeoTIFF ( )

OnLine resource

No information provided.

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
Statement	Refer to http://eusoils.jrc.ec.europa.eu/library/themes/erosion/Erodibility/ and to Panagos, P., Meusburger, K., Alewell, C., Montanarella, L., Soil erodibility estimation using LUCAS point survey data of Europe, Environmental Modelling & Software, Volume 30, April 2012, Pages 143-145, doi:10.1016/j.envsoft.2011.11.002 [http://www.sciencedirect.com/science/article/pii/S1364815211002465].

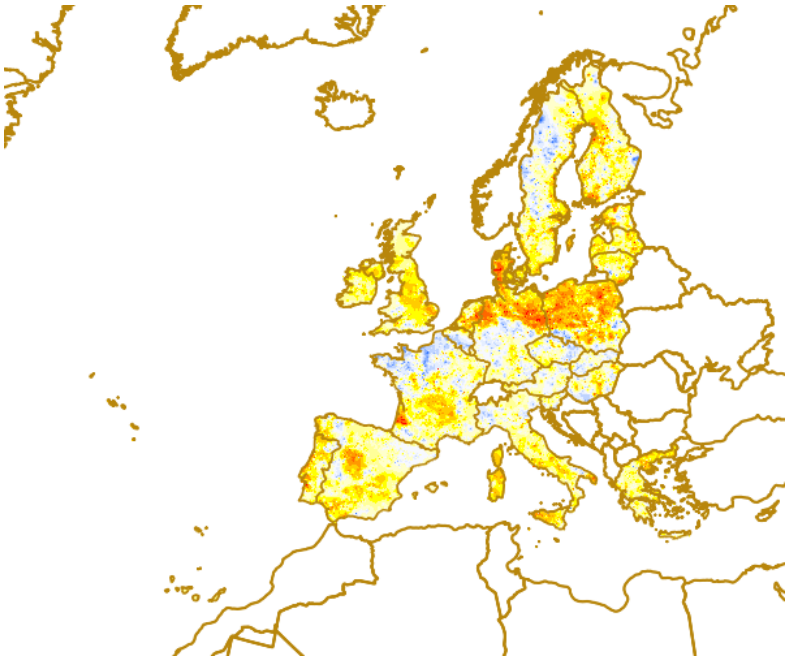
Metadata

File identifier	dafcec7e-b3bb-4583-a6c7-e0b8ade20553 XML
Metadata language	English
Character set	UTF8
Hierarchy level	Dataset
Date stamp	2025-01-10T08:29:26.443284Z
Metadata standard name	ISO 19115/19139
Metadata standard version	

	1.0

Metadata author	Organisation name	Individual name	Electronic mail address	Website	Role
	European Environment Agency		sdi@eea.europa.eu		Point of contact

Overviews



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