

JRC Dataset

Soil erosion control

Description:

Soil erosion control is a key ecosystem service delivered by terrestrial ecosystems, mainly through vegetation cover. Two indicators are used to quantify capacity and use of the service. A first dimensionless indicator measures the capacity of ecosystems to avoid soil erosion by assigning values ranging from 0 to 1 at pixel level, covering the EU-28 territory for the year 2010. A second indicator measures how much soil is retained by vegetation based on the difference between soil erosion in presence of vegetation and soil erosion in absence of vegetation. The quantification is based on an application of the RUSLE model.

Contributors:

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How to cite:

Maes, Joachim(2010): Soil erosion control. European Commission, Joint Research Centre (JRC) [Dataset] PID: <http://data.europa.eu/89h/4ccd8bf0-fc7c-4fd7-bd8b-f11a06f5df0b>

Keywords:

Bio-geographical regions, Elevation, Habitats and biotopes, Hydrography, Land cover, Land use, Soil, ecosystem services, erosion, soil

Related resources:

Data access

Download baseline 2010

This compressed zipfile SEC.zip contains data at 100 m resolution assessed for the year 2010. SEC, or the capacity to avoid soil erosion is a dimensionless value between 0 and 10.

<http://cidportal.jrc.ec.europa.eu/ftp/jrc-opendata/MAES/baseline2010/raster/SoilRetention/SEC.zip>

Download baseline 2010

This compressed zipfile ASE.zip contains data at 100 m resolution assessed for the year 2010. ASE or avoided soil erosion is expressed in tonne soil retained per year.

<http://cidportal.jrc.ec.europa.eu/ftp/jrc-opendata/MAES/baseline2010/raster/SoilRetention/ASE.zip>

Publications

An assessment of soil erosion prevention by vegetation in Mediterranean Europe: current trends of ecosystem service provision

Bastos De Morais Guerra C, Maes J, Geijzendorffer I, Metzger M. An assessment of soil erosion prevention by vegetation in Mediterranean Europe: current trends of ecosystem service provision. ECOLOGICAL INDICATORS 60; 2016. p. 213-222. JRC92664

DOI:[10.1016/j.ecolind.2015.06.043](https://doi.org/10.1016/j.ecolind.2015.06.043)

Mapping and Assessment of Ecosystems and their Services: Trends in ecosystems and ecosystem services in the European Union between 2000 and 2010

Maes J, Fabrega Domenech N, Zulian G, Lopes Barbosa A, Vizcaino Martinez M, Ivits E, Polce C, Vandecasteele I, Mari Rivero I, Bastos De Morais Guerra C, Perpiña Castillo C, Vallecillo Rodriguez S, Baranzelli C, Ribeiro Barranco R, Batista E Silva F, Jacobs C, Trombetti M, Lavallo C. Mapping and Assessment of Ecosystems and their Services: Trends in ecosystems and ecosystem services in the European Union between 2000 and 2010. EUR 27143. Luxembourg (Luxembourg): Publications Office of the European Union; 2015. JRC94889

DOI:[10.2788/817609](https://doi.org/10.2788/817609)

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EuroVoc domain(s): 36 SCIENCE; 52 ENVIRONMENT; 56 AGRICULTURE, FORESTRY AND FISHERIES; 72 GEOGRAPHY

EuroVoc concept(s): biotope; hydrology; land use; soil resources

Identifier: <http://data.europa.eu/89h/4ccdbbf0-fc7c-4fd7-bd8b-f11a06f5df0b>

Geographic information:

Lineage: No additional information

Geographic bounding box: 81.4° N, 43.2° E, 35.3° S, -11.5° W

Coordinate Reference System: ETRS89 / LAEA Europe