

Title	RULSE Factors
Abstract	<p>This landing page is the collection of data packages that are derived as input to the Hillslope Erosion equation.</p> <p>The Universal Soil Loss Equation (USLE) and its main derivate, the Revised Universal Soil Loss Equation (RUSLE), are widely used in estimating hillslope erosion</p> <p>Soil Erodibility (K-factor)</p> <p>Soil erodibility represents the soil's response to rainfall and run-off erosivity and is related to soil properties such as organic matter content, texture, structure, permeability and aggregate stability.</p> <p>Slope and Steepness (LS-factor)</p> <p>The effects of topography on hillslope erosion are estimated through the product of slope length (L) and slope steepness (S) subfactors, or LS factor, which often contains the highest detail and plays the most influential role in RUSLE.</p> <p>Rainfall Erosivity (R-factor)</p> <p>Rainfall is a main driver of soil erosion by water. The relation between rainfall and sediment yield is given by the rainfall erosivity. The R-factor is the sum of all erosive events during a 1-year period.</p> <p>Cover and Management (C-factor)</p> <p>One of the important and dynamic elements in the RUSLE model is the cover and management factor (C-factor), which represents effects of vegetation canopy and ground cover in reducing soil loss.</p>
Resource locator	
Data Quality Statement	<p>Name: Data Quality Statement</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Data quality statement for RULSE Factors</p> <p>Function: download</p>
Digital mapping of soil erodibility for water erosion in NSW.	<p>Name: Digital mapping of soil erodibility for water erosion in NSW.</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>CSIRO Publication</p> <p>Function: download</p>
RUSLE slope length and steepness factor across NSW, Australia	<p>Name: RUSLE slope length and steepness factor across NSW, Australia</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>CSIRO Publication</p> <p>Function: download</p>
Modelling and mapping rainfall erosivity in NSW, Australia	<p>Name: Modelling and mapping rainfall erosivity in NSW, Australia</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>CSIRO Publication</p> <p>Function: download</p>
Deriving RUSLE cover	<p>Name: Deriving RUSLE cover factor from time-series fractional vegetation</p>

[factor from time-series
fractional vegetation
cover in NSW](#)

cover in NSW

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

CSIRO Publication

Function: download

[RULSE_K](#)

Name: RULSE_K

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

The soil erodibility (K) factor for NSW in unit (t.ha.h.ha-1.MJ-1.mm-1) - RASTER data

Function: download

[RULSE_LS](#)

Name: RULSE_LS

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

The slope and steepness (LS) factor for NSW (unitless) - RASTER data

Function: download

Unique resource identifier

Code	e4f8e129-25a9-4e54-b3ef-f7a290f40412
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Presentation form	Map digital
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Edition	1.0
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Dataset language	English
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Metadata standard

Name	ISO 19115
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Edition	2016
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Dataset URI	https://datasets.seed.nsw.gov.au/dataset/e4f8e129-25a9-4e54-b3ef-f7a290f40412
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Purpose	Data for land management and environment monitoring
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Status	On going
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Spatial representation type	grid
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Spatial reference system

Code identifying the spatial reference system	4283
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Spatial resolution	100 m
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Additional information source	Annual Hillslope Erosion is provided as Yearly timeseries commencing 2001
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Topic category	
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Keyword set	
keyword value	SOIL-Erosion
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	140.5
East bounding longitude	153.5
North bounding latitude	-37.5
South bounding latitude	-28.5
NSW Place Name	New South Wales
Vertical extent information	
Minimum value	-100
Maximum value	2228
Coordinate reference system	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
Temporal extent	
Begin position	2001-01-01
End position	N/A
Dataset reference date	
Resource maintenance	
Maintenance and update frequency	As needed
Contact info	
Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
Telephone number	131555
Email address	data.broker@environment.nsw.gov.au
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew
Responsible party role	pointOfContact
Lineage	Annual hillslope erosion was estimated from annual mean groundcover and rainfall erosivity from 2001. The mean annual hillslope erosion is the average annual erosion between years.

Limitations on public access	
Responsible party	
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Metadata date	2024-08-09T04:04:55.084459
Metadata language	