

Title	Fire Extent and Severity Mapping (FESM) 2023/24
Alternative title(s)	FESMv3
Abstract	<p>Fire severity is a metric of the loss of biomass caused by fire. In collaboration with the NSW Rural Fire Service, DCCEE Remote Sensing & Regulatory Mapping team has developed a semi-automated approach to mapping fire extent and severity through a machine learning framework based on sentinel 2 satellite imagery. The statewide severity map has standardised classes to allow comparison of different fires across the landscape. The FESM severity classes include: unburnt, extent only (grass fires), low severity (burnt understory, unburnt canopy), moderate severity (partial canopy scorch), high severity (complete canopy scorch, partial canopy consumption), extreme (full canopy consumption).</p> <p>This dataset represents the 2023/24 fire year including all wildfires >10ha with a fire start date between 1 July 2023 and 30 June 2024.</p>
Resource locator	
Show on SEED Web Map	<p>Name: Show on SEED Web Map</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Display dataset on SEED's map</p> <p>Function: download</p>
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 Fire Extent and Severity Mapping (FESM) 2023-24</p> <p>Function: download</p>
Published journal article	<p>Name: Published journal article</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>A remote sensing approach to mapping fire severity in south-eastern Australia using sentinel 2 and random forest.</p> <p>Function: download</p>
Download Package	<p>Name: Download Package</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>FESM 2023-24 - Erdas Imaging .img format</p> <p>Function: download</p>
Download Package	<p>Name: Download Package</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>FESM 2023-24 - ArcGIS GRID format</p> <p>Function: download</p>
Download Package	<p>Name: Download Package</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p>

FESM 2023-24 - Tiff format

Function: download

Unique resource identifier

Code f8e725eb-132d-43bf-b6bc-31048540fb53

Presentation form Map digital

Edition FESMv3

Dataset language English

Metadata standard

Name ISO 19115

Edition 2016

Dataset URI <https://datasets.seed.nsw.gov.au/dataset/f8e725eb-132d-43bf-b6bc-31048540fb53>

Purpose Bushfire response planning and analysis by land and environmental managers

Status Completed

Spatial representation type grid

Spatial reference system

Code identifying the spatial reference system 4283

Spatial resolution 10 m

Topic category

Keyword set	
keyword value	HAZARDS-Fire ECOLOGY-Ecosystem ECOLOGY-Habitat VEGETATION
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	140.273438
East bounding longitude	155.083008
North bounding latitude	-36.354774
South bounding latitude	-27.999058
NSW Place Name	NSW
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	2023-01-07
End position	N/A
Dataset reference date	
Resource maintenance	
Maintenance and update frequency	Not planned
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

Layer was developed with a semi-automated approach to mapping fire extent and severity through a machine learning framework based on sentinel 2 satellite imagery. The severity maps have standardised classes to allow comparison of different fires across the landscape.

Originally the layer was produced as an Lamberts Conic Conformal projection IMG TIFF file (but converted to a 10m Esri GRID in in line with internal EES spatial convention for storage on P and SDE).

Limitations on public access

Responsible party

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
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Metadata date 2024-09-03T06:31:08.140106

Metadata language