Title	Fire Extent and Severity Mapping (FESM) 2022/23
Alternative title(s)	FESMv3
Abstract	Fire severity is a metric of the loss of biomass caused by fire. In collaboration with the NSW Rural Fire Service, DPE 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). This dataset represents the 2022/23 fire year including all wildfires >10ha with a fire start date between 1 July 2022 and 30 June 2023.

Resource locator

Data Quality Statement	Name: Data Quality Statement Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data quality statement for Fire Extent and Severity Mapping (FESM) 2021/22 Function: download
Published journal article	Name: Published journal article Protocol: WWW:DOWNLOAD-1.0-http--download Description: A remote sensing approach to mapping fire severity in south-eastern Australia using sentinel 2 and random forest. Function: download
Download Package	Name: Download Package Protocol: WWW:DOWNLOAD-1.0-http--download Description: FESM GRID Function: download
Download Package	Name: Download Package Protocol: WWW:DOWNLOAD-1.0-http--download Description: FESM 2022/23 Function: download
NSW Fire Extent and Severity Mapping (FESMv3) Factsheet	Name: NSW Fire Extent and Severity Mapping (FESMv3) Factsheet Protocol: WWW:DOWNLOAD-1.0-http--download Description: Metadata and method factsheet Function: download

Unique resource identifier

Code	5c256ed5-5268-4b20-9564-5c9f297f01e2

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/5c256ed5-5268-4b20-9564-5c9f297f01e2
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	2021-01-07
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
Responsible party role	pointOfContact

Metadata point of contact

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

Metadata date

2024-02-26T13:13:38.158795

Metadata language