Title	Fire Extent and Severity Mapping (FESM)
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, DCCEEW 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, low severity (burnt understory, unburnt canopy), moderate severity (partial canopy scorch), high severity (complete canopy scorch, partial canopy consumption), extreme (full canopy consumption).

Resource locator

Show on SEED Web Map	Name: Show on SEED Web Map
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	Display dataset on SEED's map
	Function: download
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)
	Function: download
Please see 'Related Datasets' to download data for individual fire-years	Name: Please see 'Related Datasets' to download data for individual fire-years
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	text file only
	Function: download
ArcGIS REST Service	Name: ArcGIS REST Service
	Protocol: WWW:DOWNLOAD-1.0-http--download
	Description:
	An ArcGIS Server web service represents a GIS resource—such as a map, locator, or image—that is located on an ArcGIS Server site and is made available to client applications. Depending on the layers enabled, this web service allows a user to query its features and/or visualise the dataset. This service is aimed at advanced geographical information users, and will require access to geographical information system (GIS) software such as ArcGIS/ArcMap.
	Function: download

Unique resource identifier

Code	33c2ee86-d2f7-4aaf-8c40-76b6d393a35c
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/33c2ee86-d2f7-4aaf-8c40-76b6d393a35c
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	140.27344
East bounding longitude	155.08301
North bounding latitude	-36.35477
South bounding latitude	-27.99906
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	2017-01-01
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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Responsible party role	pointOfContact

Metadata date	2024-10-15T04:17:53.046000

Metadata language