Title	Historical Fire Extent and Severity Mapping (FESM) - Pilliga Region	
Alternative title(s)	FESM - Blue Mtns	
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 satellite imagery.	
	The method uses 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).	
	Here we provide historical severity mapping for the Pilliga region from 1989/90 to 2015/16, which is based on Landsat satellite imagery. From 2016/17 to the current fire year, this region is covered in the statewide FESM data, which is based on Sentinel 2 satellite imagery.	
Resource locator		
<u>Data Quality</u> <u>Statement</u>	Name: Data Quality Statement	
	Protocol: WWW:DOWNLOAD-1.0-httpdownload	
	Description:	
	Data quality statement for Historical Fire Extent and Severity Mapping (FESM) - Blue Mountains Region	
	Function: download	
<u> Historical FESM -</u>	Name: Historical FESM - Pilliga Region - Wildfire - 1989-90 to 2015-16	
Pilliga Region -	Protocol: WWW:DOWNLOAD-1.0-httpdownload	
Wildfire - 1989-90 to 2015-16	Description:	
	Historical FESM mapping for the Pilliga region of wildfires from 1989-90 to 2015-16. See the FESM statewide dataset for coverage of this region from 2016-17 onwards.	
	Function: download	
Historical FESM - Pilliga Region - Hazard Reductions - 1989-90 to 2015- 16	Name: Historical FESM - Pilliga Region - Hazard Reductions - 1989-90 to 2015-16	
	Protocol: WWW:DOWNLOAD-1.0-httpdownload	
	Description:	
	Historical FESM mapping for the Pilliga region of hazard reduction burns from 1989-90 to 2015-16.	
	Function: download	
Pilliga Area of Interest shapefile	Name: Pilliga Area of Interest shapefile	
	Protocol: WWW:DOWNLOAD-1.0-httpdownload	
	Description:	
	Shapefile for the Pilliga area of interest	
	Function: download	
FESM method publication	Name: FESM method publication	
	Protocol: WWW:DOWNLOAD-1.0-httpdownload	
	Description:	
	Remote Sensing of Environment Journal Article titled 'A remote sensing approach to mapping fire severity in south-eastern Australia using sentinel 2 and random forest' published in April 2020.	

satellites Description: Remote Sensing Journal Article title 'Comparing Fire Extent and Severity Mapping between Sentinel 2 and Landsat 8 Satellite Sensors' Function: download Unique resource identifier Code 0ec3bccc-d5f8-4bf0-8e5b-5b52e0aae0c0 Presentation Image digital form Edition FESMv3 Dataset **English** language Metadata standard Name ISO 19115 Edition 2016 **Dataset URI** https://datasets.seed.nsw.gov.au/dataset/0ec3bccc-d5f8-4bf0-8e5b-5b52e0aae0c0 **Purpose** fire management planning and reporting, landscape and fire ecology research Completed Status **Spatial** representationgrid type Spatial reference system Code identifying the spatial 4283 reference system Spatial 30 m resolution Topic category

Name: FESM method publication - comparison of satellites

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

Function: download

FESM method publication -

comparison of

Keyword set		
keyword value	HAZARDS-Fire	
	ECOLOGY-Landscape	
	ECOLOGY-Habitat	
	VEGETATION	
Originating controlled vocabulary		
Title	ANZLIC Search Words	
Reference date	2008-05-16	
Geographic location		
West bounding longitude	148.491211	
East bounding longitude	149.875488	
North bounding latitude	-31.370445	
South bounding latitude	-30.266579	
NSW Place Name	Pilliga Region	
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	1989-01-07	
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

Individual fire events are processed then mosaicked into a region wide layer for each fire year in the record.

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 <u>data.broker@environment.nsw.gov.au</u>

Web address https://www.nsw.gov.au/departments-and-agencies/dcceew

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Responsible party role pointOfContact

Metadata date 2024-02-26T13:33:34.024779

Metadata language