

Title	Historical Fire Extent and Severity Mapping (FESM) - Macquarie Marshes
Alternative title(s)	FESM - Macquarie Marshes
Abstract	<p>Fire severity is a metric of the loss of biomass caused by fire. In collaboration with the NSW Rural Fire Service, DPE Remote Sensing &amp; Regulatory Mapping team has developed a semi-automated approach to mapping fire extent and severity through a machine learning framework based on satellite imagery.</p> <p>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).</p> <p>Here we provide historical severity mapping for the Macquarie Marshes 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.</p>
<b>Resource locator</b>	
<a href="#">Data Quality Statement</a>	<p>Name: Data Quality Statement</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Data quality statement for Historical Fire Extent and Severity Mapping (FESM) - Blue Mountains Region</p> <p>Function: download</p>
<a href="#">Macquarie Marshes Area of Interest shapefile</a>	<p>Name: Macquarie Marshes Area of Interest shapefile</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Shapefile for the Macquarie Marshes area of interest</p> <p>Function: download</p>
<a href="#">Historical FESM - Macquarie Marshes - Wildfire - 1989-90 to 2015-16</a>	<p>Name: Historical FESM - Macquarie Marshes - Wildfire - 1989-90 to 2015-16</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Historical FESM mapping for the Macquarie Marshes region of wildfires from 1989-90 to 2015-16. See the FESM statewide dataset for coverage of this region from 2016-17 onwards.</p> <p>Function: download</p>
<a href="#">Historical FESM - Macquarie Marshes - Hazard Reductions - 1989-90 to 2015-16</a>	<p>Name: Historical FESM - Macquarie Marshes - Hazard Reductions - 1989-90 to 2015-16</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Historical FESM mapping for the Blue Mountains region of hazard reduction burns from 1989-90 to 2015-16.</p> <p>Function: download</p>
<a href="#">FESM method publication</a>	<p>Name: FESM method publication</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>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.</p>

Function: download

[FESM method publication - comparison of satellites](#)

Name: FESM method publication - comparison of satellites

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

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 747e4d09-875c-4866-a516-fa0c53cb22fa

Presentation form Image digital

Edition FESMv3

Dataset language English

## Metadata standard

Name ISO 19115

Edition 2016

Dataset URI <https://datasets.seed.nsw.gov.au/dataset/747e4d09-875c-4866-a516-fa0c53cb22fa>

Purpose fire management planning and reporting, landscape and fire ecology research

Status Completed

Spatial representation type grid

## Spatial reference system

Code identifying the spatial reference system 4283

Spatial resolution 30 m

## Topic category

<b>Keyword set</b>	
keyword value	HAZARDS-Fire ECOLOGY-Landscape ECOLOGY-Habitat VEGETATION
<b>Originating controlled vocabulary</b>	
Title	ANZLIC Search Words
Reference date	2008-05-16
<b>Geographic location</b>	
West bounding longitude	147.293701
East bounding longitude	147.875977
North bounding latitude	-31.254096
South bounding latitude	-30.428743
NSW Place Name	Macquarie Marshes Region
<b>Vertical extent information</b>	
Minimum value	-100
Maximum value	2228
<b>Coordinate reference system</b>	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
<b>Temporal extent</b>	
Begin position	1989-01-07
End position	N/A
<b>Dataset reference date</b>	
<b>Resource maintenance</b>	
Maintenance and update frequency	Not planned
<b>Contact info</b>	
Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
Telephone number	131555
Email address	<a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>
Web address	<a href="https://www.nsw.gov.au/departments-and-agencies/dcceew">https://www.nsw.gov.au/departments-and-agencies/dcceew</a>
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	<a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>
Web address	<a href="https://www.nsw.gov.au/departments-and-agencies/dcceew">https://www.nsw.gov.au/departments-and-agencies/dcceew</a>
Responsible party role	pointOfContact

**Metadata point of contact**

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Web address	<a href="https://www.nsw.gov.au/departments-and-agencies/dcceew">https://www.nsw.gov.au/departments-and-agencies/dcceew</a>
Responsible party role	pointOfContact

**Metadata date** 2024-02-26T13:14:25.713311

**Metadata language**