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| <b>Title</b>   | Historical Fire Extent and Severity Mapping (FESM) - Blue Mountains Region   |
| <b>Alternative title(s)</b>  | FESM - Blue Mtns   |
| <b>Abstract</b>  | <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 Blue Mountains 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="#">FESM method publication</a>  | <p>Name: FESM method publication</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>  |
| <a href="#">FESM method publication - comparison of satellites</a>                   | <p>Name: FESM method publication - comparison of satellites</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Comparing Fire Extent and Severity Mapping between Sentinel 2 and Landsat 8 Satellite Sensors</p> <p>Function: download</p>  |
| <a href="#">Historical FESM - Blue Mtns - Wildfire - 1989-90 to 2015-16</a>          | <p>Name: Historical FESM - Blue Mtns - 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 Blue Mountains 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 - Blue Mtns - Hazard Reductions - 1989-90 to 2015-16</a> | <p>Name: Historical FESM - Blue Mtns - 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>   |

Function: download

[Blue Mountains Area of Interest shapefile](#)

Name: Blue Mountains Area of Interest shapefile

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

Description:

This shapefile delineates the region used to intersect with the fire history in order to select the fires to process through FESM.

Function: download

## Unique resource identifier

Code 990d14ea-aa82-4e3c-bfed-aabc6634a34f

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/990d14ea-aa82-4e3c-bfed-aabc6634a34f>

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<br>ECOLOGY-Landscape<br>ECOLOGY-Habitat<br>VEGETATION  |
| <b>Originating controlled vocabulary</b>         |   |
| Title  | ANZLIC Search Words   |
| Reference date                                   | 2008-05-16  |
| <b>Geographic location</b>                       |   |
| West bounding longitude                          | 149.501953  |
| East bounding longitude                          | 151.358643  |
| North bounding latitude                          | -34.358647  |
| South bounding latitude                          | -32.330561  |
| NSW Place Name                                   | Blue Mountains 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**

|                        |   |
|------------------------|---|
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| 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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| Responsible party role | pointOfContact  |

**Metadata date** 2024-02-26T13:06:41.131641

**Metadata language**