

Title	Fire Extent and Severity Mapping (FESM) 2019/20
Alternative title(s)	FESMv3
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 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).</p> <p>This dataset represents the 2019/20 fire year including all wildfires &gt;10ha with a fire start date between July 2019 and June 2020.</p>
Resource locator	
<a href="#">Show on SEED Web Map</a>	<p>Name: Show on SEED Web Map</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Display dataset on SEED's map</p> <p>Function: download</p>
<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 Fire Extent and Severity Mapping (FESM)</p> <p>Function: download</p>
<a href="#">NSW Fire Extent and Severity Mapping (FESMv3) Factsheet</a>	<p>Name: NSW Fire Extent and Severity Mapping (FESMv3) Factsheet</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Function: download</p>
<a href="#">Data Download Package</a>	<p>Name: Data Download Package</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>FESM v3 - data in ESRI GRID format + ESRI Layer file</p> <p>Function: download</p>
<a href="#">Data Download Package</a>	<p>Name: Data Download Package</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>FESM v3 - data in IMG and TIFF format</p> <p>Function: download</p>
<a href="#">ArcGIS REST Service</a>	<p>Name: ArcGIS REST Service</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>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</p>

geographical information users, and will require access to geographical information system (GIS) software such as ArcGIS/ArcMap.

Function: download

## Unique resource identifier

Code f7eb3f73-5831-4cc9-8259-8d1f210214ac

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/f7eb3f73-5831-4cc9-8259-8d1f210214ac>

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

<b>Keyword set</b>	
keyword value	HAZARDS-Fire ECOLOGY-Ecosystem ECOLOGY-Habitat VEGETATION
<b>Originating controlled vocabulary</b>	
Title	ANZLIC Search Words
Reference date	2008-05-16
<b>Geographic location</b>	
West bounding longitude	140.273438
East bounding longitude	155.083008
North bounding latitude	-36.354774
South bounding latitude	-27.999058
NSW Place Name	NSW
<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	2019-01-01
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
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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

## 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	<a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>
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Responsible party role	pointOfContact

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Responsible party role	pointOfContact

**Metadata date** 2024-09-16T23:18:20.135658

**Metadata language**