Landsat satellite derived fire mapping

Citation

Title: Landsat satellite derived fire mapping

Custodians: Department of Biodiversity, Conservation and Attractions - Biodiversity and Conservation Science - Remote Sensing and Spatial Analysis

Great Victoria Desert Biodiversity Trust (Great Victoria Desert 2021 fire scars only).

Description

Abstract: This dataset is derived from the annual and monthly fire mapping history produced by the Remote Sensing and Spatial Analysis group within the Department of Biodiversity, Conservation and Attractions (DBCA) covering parts of Western Australia. The Great Victoria Desert Biodiversity Trust produced the Great Victoria Desert fire scars in 2021, using the same methodology developed by DBCA. This burnt area mapping is produced using Landsat satellite imagery. Burnt areas are identified and mapped using 2 image dates. The normalised burn ratio is used to enhance the visibility of burnt areas and help delineate the fire scar from surrounding unburnt vegetation. Where possible over some areas of Western Australia this mapping has classified fires into 2 date ranges over roughly a calendar year; those which occurred in the cool season months and include prescribed burns, and those which occurred in the hot season months and include bush fire and other un-planned burns. These date ranges are roughly April to August for cool season fires, fires which occur outside of this date range are classified as hot season burns.

Geographical Bounding Box

Pilbara region fires

North:	-20.626
South:	-25.398
East:	121.858
West:	113.763

These fires were mapped from the following Landsat scenes: 115075, 115076, 114075, 114076, 113075, 113076, 112075, 112076, 111075 and 111076.

Western Desert region fires

North:	-20.728
South:	-26.911
East:	120.108
West:	124.848

These fires were mapped from the following Landsat scenes: 110075, 110076, 110077, 110078, 109075,109076 and 109077.

Great Victoria Desert fires

North:	-25.103
South:	-31.213
East:	121.288
West:	129.645

These fires were mapped from following Landsat scenes: 109079, 108078, 108079, 108080, 108081, 107079, 107080, 107081, 106079, 106080, 105079 and 105080.

Data Currency and Status

Pilbara region fires

2020

Beginning Date:	17/12/2019
Ending Date:	23/02/2021
Progress:	Complete
Maintenance/Update:	Annually

2021

Beginning Date:	13/01/2021
Ending Date:	25/02/2022
Progress:	Complete
Maintenance/Update:	Annually

Western Desert region fires

2020

Beginning Date:	**21/01/2020**
Ending Date:	**05/04/2021**
Progress:	**Complete**
Maintenance/Update:	**Annually**

2021

Beginning Date:	**05/04/2021**
Ending Date:	**08/04/2022**
Progress:	**Complete**
Maintenance/Update:	**Annually**

Great Victoria Desert region fires

2020

Beginning Date:	**14/11/2019**
Ending Date:	**14/11/2020**
Progress:	**Complete**
Maintenance/Update:	**Annually**

2021

Beginning Date:	**14/11/2020**
Ending Date:	**26/12/2021**
Progress:	**Complete**
Maintenance/Update:	**Annually**

Access

Stored Data Format:	**Digital raster data (TIFF format)**
Access Constraints:	

Data Quality

Lineage:	**This data was derived from the Pilbara, Western Desert and Great Victoria Deserts annual fire scar mapping vector datasets. It was converted from a vector to raster format within ArcMap 10.6.1.**
Positional Accuracy:	**30 metres**
Attribute Accuracy:	**The imagery date used to map the fires will determine whether the fire is in the hot or cool season category. Cool season burns are from May to August. Fires which occur outside of this date range are classified as hot season burns.**
Logical Consistency:	
Completeness:	

Attributes List:

Name	Description
OID	Internal feature number.
Value	Value of 1 assigned to hot season burns, value of 2 assigned to cool season burns.
Count	

Contact Information

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Metadata Information

Metadata Date: **03/11/2022**
