

Metadata Elements

Title *	Moorland Change Map
Alternative Title	MCM
Dataset Language *	eng
Abstract *	<p>The Moorland Change Map (MCM) is a vector dataset which shows whether the heather dominant uplands being monitored contain change during the period of monitoring. Approximately monitoring covers the moorland burning season of Oct to Apr. The MCM is an earth observation derived product, using the Sentinel-2 satellites.</p> <p>Validation of the the results happens for each year per upland and Nationally. The validation shows the accuracy of the MCM results and are available in the associated Excel spreadsheet.</p>
Resource Locator	0
Data Format	shp, tab, file geodatabase
Resource Type *	dataset
Unique Resource Identifier	0

Classification of Spatial Data & Services

Topic Category *	environment
INSPIRE Themes	Land use
Spatial Data Service Type	n/a
Coupled Resource	n/a

Keyword

Keyword	Geographic Information
Originating Controlled Vocabulary	Natural England Corporate Vocabulary

Geographic Location

Extent *	England
West Bound Longitude *	-7.05
East Bound Longitude *	2.07
North Bound Longitude *	55.81
South Bound Longitude *	49.86
Vertical Minimum Extent	0m
Vertical Maximum Extent	0m
Spatial Reference System *	British National Grid

Temporal Reference

Temporal Extent - Start Date of Data Capture *	2015-09-01
Temporal Extent - End Date of Data Capture *	2021-07-31
Date of Creation *	2021-10-19
Date of Last Revision *	2021-10-19
Dataset Reference Date *	2021-10-19
Dataset Reference Type *	revision

Quality & Validity

Lineage *	<p>The MCM analysis uses Sentinel 2 Analysis Ready Data from the DEFRA Earth Observation Data Service (EODS), a vector dataset showing Heather dominated habitat, and training data collected from visual assessment of the Sentinel 2 imagery. The MCM process is undertaken primarily through the Python and R scripting language. These access a variety of modules, the majority of which are open source. This process goes through many stages, including calculating a Normalised Difference Vegetation Index (NDVI) difference dataset and thresholding upon this to separate change and no change. The threshold value is set individually for each upland, each year. These values are calculated from the medium threshold value of several models, trained using data collated from reviewing Sentinel 2 data.</p> <p>The analysis takes Sentinel 2 imagery for before and after the burn season. Due to cloud conditions, which are especially problematic in the uplands, the images can be a couple of months before the burn season starts or after the burn season finishes. As such, the change identified will not have necessarily have happened within the managed burn season. Clouds can also still be found obscuring some areas and these are masked from the analysis and marked as cloud in the results.</p> <p>The MCM results, as with all EO analysis, are not 100% accurate and validation is undertaken to assess the level of the analysis. Validation data comes from a combination of field data, collected by Natural England's local and national teams and further data collected from visual assessment of the Sentinel 2 imagery.</p> <p>Further details of the MCM are available through the Technical Information Note available here: http://publications.naturalengland.org.uk/publication/5699825585881088</p>
Spatial Resolution	0
Additional Information Source	0
Frequency of Update *	annually
Equivalent Scale	0

Conformity

Specification	0
Degree	conformant
Explanation	conformant

Constraints Related To Access & Use

Use Constraints *	No Conditions Apply
	0
Limitations on Public Use *	Publically Accessible
Licence*	Open Government Licence
	0
Copyright*	Copyright statement: "Sentinel 2 analysis-ready data supplied under the Open Government License v3 by the Defra Earth Observation Data Service [earthobs.defra.gov.uk] © Natural England"

Responsible Organisation

Contact Title *	Evidence Earth Observation Service
Organisation Name *	Natural England

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Web URL:	0
Responsible Party Role *	custodian

Metadata on Metadata

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Data Management Information

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