

Metadata Elements

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|----------------------------|--|
| Title * | Moorland Change Map |
| Alternative Title | 0 |
| 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

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

Keyword

| | |
|-----------------------------------|------------------------|
| Keyword | Geographic Information |
| Originating Controlled Vocabulary | 0 |

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 | 0 |
| Vertical Maximum Extent | 0 |
| Spatial Reference System * | British National Grid |

Temporal Reference

| | |
|--|------------|
| Temporal Extent - Start Date of Data Capture * | 2015-10-01 |
| Temporal Extent - End Date of Data Capture * | 2022-07-16 |
| Date of Creation * | 2019-09-01 |
| Date of Last Revision * | 2022-09-06 |
| Dataset Reference Date * | 2022-09-06 |
| Dataset Reference Type * | revision |

Quality & Validity

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|-------------------------------|---|
| 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 | 0 |
| Explanation | 0 |

Constraints Related To Access & Use

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|-----------------------------|--|
| 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

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

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|--------------------------|---|
| Postal Address * | County Hall Spetchley Road Worcester WR5 2NP United Kingdom |
| Tel No: | 0 |
| E-Mail: * | earth.observation@naturalengland.org.uk |
| Web URL: | 0 |
| Responsible Party Role * | custodian |

Metadata on Metadata

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|-----------------------------|---|
| Metadata Point of Contact * | Evidence Earth Observation Service |
| Organisation Name * | Natural England |
| Postal Address * | County Hall Spetchley Road Worcester WR5 2NP United Kingdom |
| Tel No: | 0 |
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| Responsible Party Role * | custodian |
| Metadata Date * | 2022-09-06 |
| Metadata Language * | eng |

Data Management Information

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|---------------------|------------|
| NE Point of Contact | 00/01/1900 |
| Data Manager | 00/01/1900 |