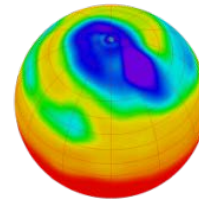




**National Centre for
Atmospheric Science**

NATURAL ENVIRONMENT RESEARCH COUNCIL



**Centre for Environmental
Data Archival**

SCIENCE AND TECHNOLOGY FACILITIES COUNCIL
NATURAL ENVIRONMENT RESEARCH COUNCIL

Introduction to CEDA

Thanks to all contributors:

Alison Pamment, Sam Pepler, Ag Stephens, Stephen Pascoe, Kevin Marsh, Anabelle Guillory, Graham Parton, Esther Conway, Eduardo Damasio Da Costa, Wendy Garland, Alan Iwi, Matt Pritchard and Sarah Callaghan.



Overview

- NERC data centres
- What is “CEDA”?
- Data users
- Data providers
- JASMIN users

NERC Data Centres

The UK's Natural Environment Research Council (NERC) funds six data centres which between them have responsibility for the long-term management of NERC's environmental data holdings.



British Geological Survey

NATURAL ENVIRONMENT RESEARCH COUNCIL



National Geoscience Data Centre



British Antarctic Survey

NATURAL ENVIRONMENT RESEARCH COUNCIL



Centre for Ecology & Hydrology

NATURAL ENVIRONMENT RESEARCH COUNCIL

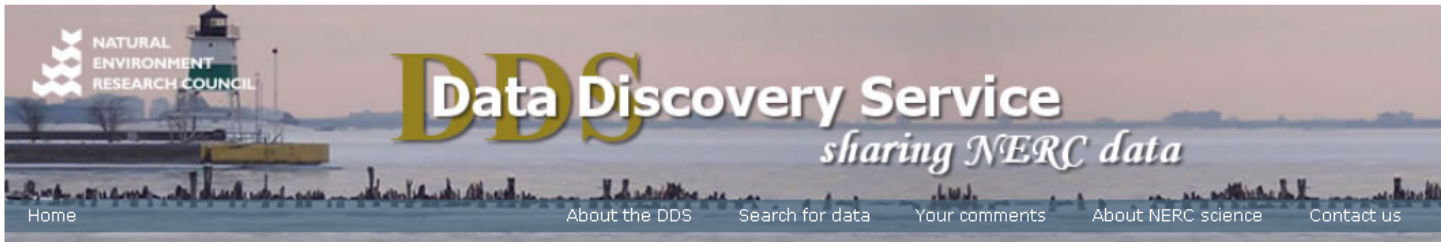


British Atmospheric Data Centre

NATIONAL CENTRE FOR ATMOSPHERIC SCIENCE
NATURAL ENVIRONMENT RESEARCH COUNCIL



The NERC Data Catalogue Service (DCS) allows data held by all NERC data centres to be located by users.



[About the DDS](#)

[Search for data](#)

[Results](#)

Discovery metadata within this portal are being continually improved. More records will be added over the next few months.

NERC Data Policy

The NERC Data Policy details our commitment to support the long-term management of data.

Find out more about our [Data Policy](#)

NERC Metadata Standard

The NERC Metadata Standard

Data Discovery Service (DDS)

The Earth changes constantly and understanding the past plays an important role in the prediction of future change. The data collected by NERC provide a unique and irreplaceable environmental record.

The NERC Data Centres are responsible, in accordance with the NERC Data Policy, for preserving NERC's data for the long term and for providing access to it as needed.



A small tortoiseshell butterfly

How can I find NERC's data?

The DDS allows you to [search a catalogue](#) of metadata (information describing data) to discover and gain access to NERC's data holdings and information products. The metadata are prepared to a common NERC Metadata Standard and are provided to the catalogue by the Data Centres.



Monitoring Earth from space

What can I do and get from the DDS?

You can [interrogate](#) the catalogue in the way that best fits your needs. You can find records of interest by searching for specific words or phrases, and/or a particular time period. You can also search for records by targeting specific metadata fields or search the records as a whole.

The abstracts that are displayed alongside the results of your search will allow you to identify which records to investigate further. We also indicate which records carry a link to an online resource. The full details of each

NERC Data Catalogue Service
data-search.nerc.ac.uk

Data Discovery



[About the DDS](#)

[Search for data](#)

[Results](#)

You are searching for...

documents containing rain in **62.00N 49.00S 4.00E -10.00W** Only returning records with an online resource.
13 results returned in **1.28** seconds.

Shortcut search

Click to search records for

[Atmosphere](#)
[Oceans](#)
[Biota](#)
[Geo-scientific Information](#)
[Inland waters](#)
[Environment](#)

Bookmark with:

Search for data

Please use one or more of the options below to search the catalogue. Alternatively, try our [advanced text search](#).

Free text

Please enter your search terms below or leave blank to match everything ([help](#))

Only return records with an online resource

Date range

Match data overlapping the period ([help](#))

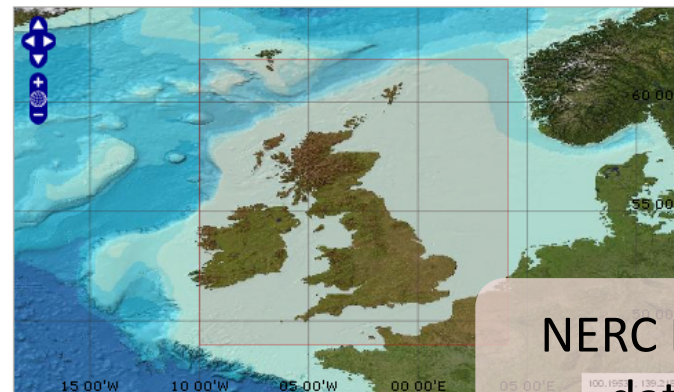
From To

Dates should be in the format YYYY-MM-DD or YYYY

Geographic search

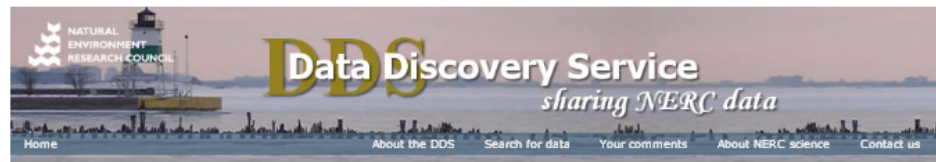
The map display lets you draw a box to define an area of interest and only returns records that intersect the box. We also offer predefined areas below ([help](#))

Select a UK river catchment...



NERC Data Catalogue Service
data-search.nerc.ac.uk

Data Discovery



[About the DDS](#)

[Search for data](#)

[Results](#)

You are searching for...

documents containing rain in **62.00N 49.00S 4.00E -10.00W** Only returning records with an online resource.
13 results returned in **4.07** seconds.

[Edit this search](#)

[Bookmark these results with:](#)

Results

[RSS](#) [Atom](#)

Your search returned **13** results. Showing **all results** ([help](#)). You may like related search terms ([show](#))



[view geographic coverage](#)

[Change](#) the number of results per page.

Dataset description	Resource type	Online resource
1. Met Office - MIDAS Land Surface Stations data (1853-current) Land surface observations data from the Met Office station network and other world wide stations as stored in the Met Office MIDAS database. Data are available for the period 1853 to present. The dataset comprises daily and hourly weather measurement... [more]	series	yes
2. Met Office - Land Surface Stations data (1900-2000) Historic land surface observations data from the Met Office station network. Data are available for the period 1900 to 1999 for daily measurements. Hourly observations are for now available back to January 1985. The dataset comprises daily and hou... [more]	series	yes
3. Bolton Experiment Microwave attenuation and rain gauge data from the Bolton experiment	series	yes
4. Chilbolton Facility for Atmospheric and Radio Research (CFARR) Data from observations made using Chilbolton Facility for Atmospheric and Radio Research (CFARR).The Science and Technology Facilities Council (STFC) facility at Chilbolton Observatory, Hampshire (51.1445N, 1.4270W) is the home of many observatio... [more]	series	yes
5. Time series of water levels and chemical parameters in Blind Beck and Low Hall stream, Eden Time series data (15 minute resolution) was collected using the WISER station on Blind Beck (NY 753131) and on a tributary of Blind Beck (Low Hall stream NY 753130), to investigate the different flow pathways suggested by the different chemical si... [more]	dataset	yes
6. Monitoring of the Blind Beck subcatchment of the River Eden,	series	yes

NERC Data Catalogue Service
data-search.nerc.ac.uk

Data Discovery



[About the DDS](#)

[Search for data](#)

[Results](#)

You are searching for...

documents containing rain in **62.00N 49.00S 4.00E -10.00W** Only returning records with an online resource.
13 results returned in 0.40 seconds.

[Return to your results](#)
[Edit this search](#)

[Bookmark this record with:](#)

Download

The metadata is available for downloading in the following formats:

[NERC format \(CSV\)](#)
[NERC format \(XML version 0.7\)](#)

This metadata complies with INSPIRE and GEMINI 2 standards.

Details

[Provide feedback](#)

Title: Met Office - MIDAS Land Surface Stations data (1853-current)

Abstract: Land surface observations data from the Met Office station network and other world wide stations as stored in the Met Office MIDAS database. Data are available for the period 1853 to present. The dataset comprises daily and hourly weather measurements, hourly wind parameters, max and min air temperatures, soil temperatures, sunshine duration and radiation measurements and daily, hourly and sub-hourly rain measurements and some climatology data.

Resource locator:

[Link to external data\(1\)](#)

[Link to external data\(2\)](#)

Conditions for access and use constraints: Restrictions Apply

Responsible party - Distributor

Data Center Contact Position: Data Center Contact
Telephone: +44 (0) 1235 44 64 32

Geographic extent



The metadata covers the area West - East from -180.0° to 180.0° and North - South from 90.0° to -90.0°. [Search for all metadata within this area.](#)

[KML](#)

Full metadata details

Unique resource identifier (info)	badc.nerc.ac.uk:NERC_DMS_0.7:dataent_ukmo-midas
Resource locator (info)	External link 1 External link 2
Limitations on public access (info)	otherRestrictions Definition: Limitation not listed. Other constraints: Restricted Data Access
Conditions for access and use constraints (info)	Restrictions Apply
Resource type (info)	series Definition: Information applies to a group of datasets linked by a common specification.

NERC Data Catalogue Service
data-search.nerc.ac.uk

What is CEDA?

www.ceda.ac.uk

Centre for Environmental Data Archival
SCIENCE AND TECHNOLOGY FACILITIES COUNCIL
NATURAL ENVIRONMENT RESEARCH COUNCIL

Home Data Centres Data Services **Projects** For Academics For Business About CEDA CEDA News

Data Centres

The Centre for Environmental Data Archival is responsible for the running of the following data centres:

- British Atmospheric Data Centre**
The British Atmospheric Data Centre (BADC), NERC's designated data centre for the UK atmospheric science community, covering climate, composition, observations and NWP data.
- The UK Solar System Data Centre**
The UK Solar System Data Centre, co-funded by STFC and NERC, curates and provides access to archives of data from the upper atmosphere, ionosphere and Earth's solar environment.
- NERC Earth Observation Data Centre**
The NEODC is NERC's designated data centre for Earth Observation data and is part of NERC's National Centre for Earth Observation.
- IPCC Data Distribution Centre**
The Intergovernmental Panel on Climate Change (IPCC) DDC provides climate, socio-economic and environmental data, both from the past and also in scenarios projected into the future. Technical guidelines on the selection and use of different types of data and scenarios in research and assessment are also provided. UK Climate Projections.

- ➔ 582 logical filesets
- ➔ 953 TB primary data, 1.3 PB primary storage, 2.2 PB total disk.
- ➔ 93 servers, 30 hypervisors, 265 distinct computer systems (inc. VMs)
- ➔ 140 distinct disk partitions
- ➔ 89 million primary files

Projects

CEDA aims to carry out projects that develop and enhance data and information services. This allows us to actively participate in emerging digital curation and informatics fields, and ultimately provide a better service for environmental science.

CEDA is presently involved in the following projects. For further information please select the title to go to the relevant website or contact CEDA for more information.

- IS-ENES**
Infrastructure for the European Network for Earth System Modelling (IS-ENES) is an FP7 project, funded by the European Commission under the Capacities Programme, Integrating Activities. IS-ENES has started on March 2009 and will finish on February 2013.
- JASMIN "super-data-cluster"**
The JASMIN "super-data-cluster" is being deployed to support the data analysis requirements of the UK and European climate and earth system modeling community. It consists of multi-Petabyte fast storage co-located with data analysis computing facilities, with satellite installations at Reading, Leeds and Bristol Universities.
- NERC Data Discovery Service**
CEDA is responsible for the web-service behind NERC's Data Discovery Service (DDS), harvesting metadata catalogues from NERC's designated data centres and collating them into one data discovery service.
- IS-ENES**
Infrastructure for the European Network for Earth System Modelling (IS-ENES) is an FP7 project, funded by the European Commission under the Capacities Programme, Integrating Activities. IS-ENES has started on March 2009 and will finish on February 2013.
- IS-BNES**
- ISIC**
CESM - facility for Climate and Environmental Monitoring from Space
CESM is one of four core partners in ISIC, the facility for Climate and Environmental Monitoring from Space. CESM, based in the International Space Innovation Centre (ISIC) at Harwell, will be a national centre for space-based Climate Change and Earth observation data and services.
- LTDP**
ESA Long-Term Data Preservation (LTDP)
CEDA is supporting the European Space Agency (ESA) in its programme for Long-Term Data Preservation (LTDP), providing management support and technical expertise to activities associated with European LTDP implementation and framework coordination.
- GSPAG**
ESPAS - Near-Earth Space Data Infrastructure for e-Science

Lots more

Approximate sizes (FTE): BADC, 8; NEODC, 3.5; SSDC, (0.75+0.75); DDC, 1.5; Projects, 8.5; Other, 1
Total (2012/13): 24



Our User Community

We provide data services for atmospheric and earth observation scientists who come to us as:

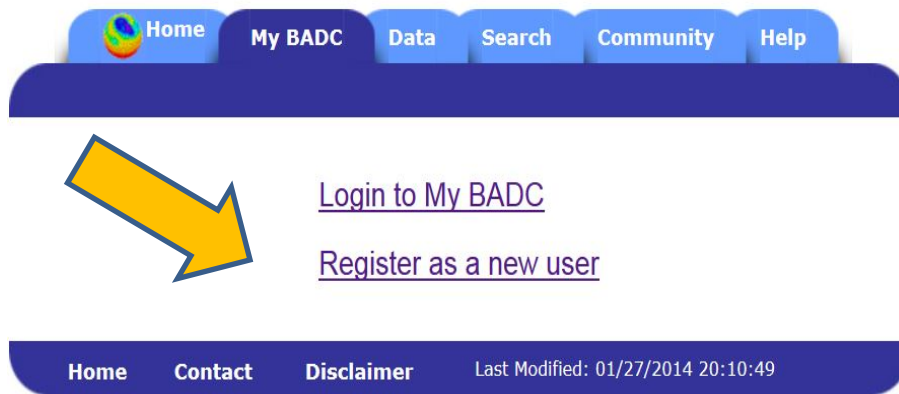
- Data users
- Data providers
- JASMIN users



User Registration

- Free & Easy Online Registration from either the BADC or NEODC.
- One account for access to either data centre.
- Registration is once and for all - You do not need to re-register

Go to <http://badc.nerc.ac.uk/MyBADC>



✓ completion of a form for basic information about you,

✓ choice of a username and password

✓ BADC Conditions including Data Protection Policy which the user must abide by to become a CEDA user.

[New User Registration Step-by-Step Web Guide](#) available.

Problems with registering? Contact CEDA Support (support@ceda.ac.uk)

User Registration

The screenshot shows a web page for user registration. At the top, there is a navigation bar with links: Home, My BADC, Data, Search, Community, Help, Get Data, Access Rules, and Submit Data. The main heading is "User registration". Below this, a note states "Items marked * must be completed". The form fields are: Surname*, Other names*, Title* (dropdown), Email Address* (with a note "Please use your institute email address"), Telephone number, Discipline* (dropdown), Institution name* (with a note "e.g name of University" and "Enter 'none' if not applicable"), Country* (dropdown), Department (if appropriate), Degree you are studying for (or RMS *) (dropdown), and Supervisor's name. At the bottom right of the form are "Submit" and "Reset" buttons. A footer bar contains links for Home, Contact, and Disclaimer. A footnote at the bottom of the form reads: "1 If you are an RMS fellow doing personal research then the RMS Executive Secretary acts in place of a supervisor. Send completed Road, Reading, Berkshire RG1 7LL, United Kingdom."

Home My BADC Data Search Community Help
Get Data Access Rules Submit Data

User registration

Items marked * must be completed

Surname*

Other names*

Title*

Email Address*
Please use your institute email address

Telephone number

Discipline*

Institution name*
e.g name of University
Enter 'none' if not applicable

Country*

Department (if appropriate)

Degree you are studying for (or RMS *)

Supervisor's name

Home Contact Disclaimer

¹ If you are an RMS fellow doing personal research then the RMS Executive Secretary acts in place of a supervisor. Send completed Road, Reading, Berkshire RG1 7LL, United Kingdom.

Problems with registering? Contact CEDA Support (support@ceda.ac.uk)



Types of CEDA Accounts

❑ **Web/FTP access account:**

By default, upon registration, all CEDA users are set up with a web/FTP access account. This allows CEDA users to access data and services over the web interface and also to download data via FTP (<ftp.ceda.ac.uk>) on their local machine.

❑ **JASMIN System account:**

This type of account is dedicated to those who require access to JASMIN Services (including HPC). Beyond registering as a CEDA user, there are additional steps that must be completed to get a login account on a login machine on the JASMIN network as detailed at:

<http://www.ceda.ac.uk/help/users-guide/jasmin-cems-access/>



Social Media Tools

The CEDA News service will post the most recent announcements including interruptions to services and new dataset and service releases.

Please follow us on Twitter, Facebook or using our RSS or Atom feeds.



@cedanews

LinkedIn



In addition to the above, CEDA Users may be directly contacted via the CEDA mailing list.



JASMIN Mailing List

- Distribution-only mailing list through JISCMail for all JASMIN Users
- New JASMIN users are automatically added upon being granted access to the JASMIN network
- The JASMIN Mailing list is used to warn users of upcoming disruption or release of new services associated to the JASMIN infrastructure



CEDA Helpdesk

For all enquiries related to CEDA activities:

Email address: support@ceda.ac.uk

Twitter: [@CEDAnews](https://twitter.com/CEDAnews)

Telephone/Voicemail: +44 (0) 1235 44 64 32