



Koninklijk Nederlands
Meteorologisch Instituut
Ministerie van Infrastructuur en Waterstaat



Climate Change

New integrated Data Rescue Portal – Facilitating DARE projects

Marlies van der Schee, Gerard van der Schrier, Martijn Majoor, Kirien Whan,
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Rob Allan, and Peter Thorne .



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Problem to solve

Extension of problem:

- Numerous archives in uncontrolled climatic environments exists
- Data is at risk to be damaged by extreme events
- Even today NMHSs write observations in notebooks without a clear push to have this digitized



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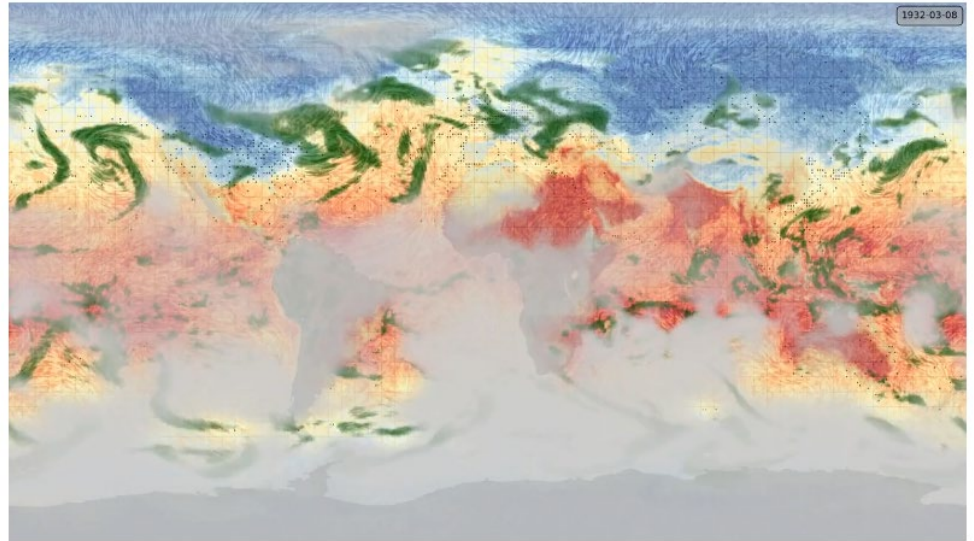


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Importance Data Rescue

Historical data is used for climate analyses:

- Historical data is included in climate models such as ERA5, E-OBS and 20CRv3
- Used for climate analysis, such as climate change attribution
- Including more data increases our understanding on climate and extreme weather events



20CRv3: grey fog masks indicate high uncertainty (Temperature, 1932-03-08)



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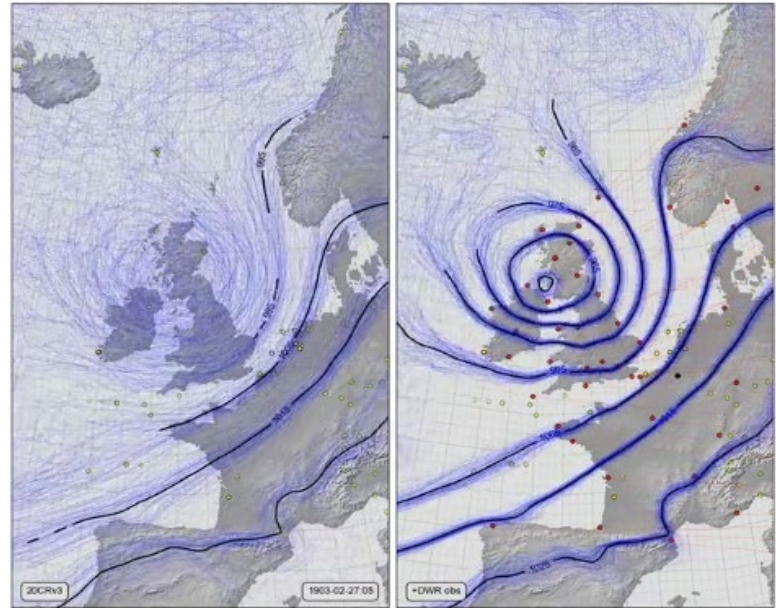


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Inlcuding 44 stations (red dots) increases the understanding of the pressure contours of the Ulysses storm in 1903, UK.



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Data Rescue Portal



Homepage DARE portal

Implemented by ECMWF as part of The Copernicus Programme Login Registration English



Home About Tools Science Inventories Data sharing News



Range of software and technical tools for data rescuers from entry to expert levels

The data rescue portal is designed to facilitate and coordinate the rescue of weather and climate data from around the world. The service runs an online user-based system that provides access to information on past, current and planned data rescue projects, as well as tools and guidance to facilitate each stage of the data rescue process.

Mission of the Data Rescue Portal:

- a collaborative framework on sharing information, best practices, know-how, guidance, metadata on data rescue projects and activities worldwide.
- provides a single entry point for accessing information on the status of climate data being digitized or in need of recovery and digitization.
- enables collaboration among organizations, development agencies, donors, scientists, NGOs, citizens, to work on the data recovery and digitization of climate heritage which is at risk of loss forever.
- through above and capacity building responds to the need for accelerating data rescue in support of climate assessment and adaptation, risk management and disaster risk reduction.

The practical information, data rescue projects and metadata inventories originate from initiative of both the [World Meteorological Organization](#) (WMO) and [Copernicus Climate](#)

News

Upcoming presentation DARE Portal at EMS, Barcelona

2024-08-26

The new data rescue portal will be presented at the EMS Annual Meeting in the session on [Climate Monitoring, data rescue, management, quality and homogenization](#) on Friday afternoon the 6th September. Read the [abstract](#) on the website of the EMS.

Marilys van der Schee will present on the changes from the last portal and she will...

Mission :

- Share information as guidance
- Single entry point on current data rescue projects
- Enabling collaboration among organizations, development agencies, donors, scientists NGOs, etc.
- Accelerate data rescue in support of climate assessment and adaptation



been set up and will be further developed in close collaboration with WMO.

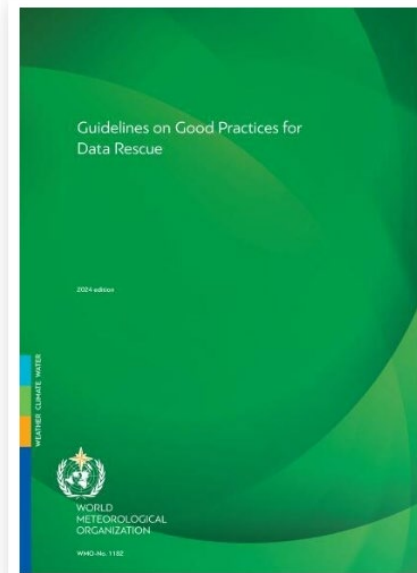
Old WMO I-DARE portal



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Share information as guidance

- List success stories, including citizen science projects
- Reference to current scientific to data rescue projects and advances
- Links to important guidelines on data rescue, including the updated WMO DARE guidelines
- New items on DARE events or project highlights



*Updated WMO guideline on DARE
(2024 edition)*



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News



[Consultancy post for DARE for Djibouti](#)

2024-09-03

The WMO has opened up a consultancy post for data rescue work for Djibouti. The expert will assess the current status of data recovery activities in Djibouti, both within the Agence Nationale de la Météorologie (ANM) and at the Centre d'Études et de Recherche de Djibouti (CERD), and develop an implementation plan to advance data recovery in accordance with the guidance provided in the Good Practice Guidelines for Data Recovery, 2024 Edition (WMO-No. 1182, WMO

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[International ACRE Drought and Flood Conference, 23-26 September](#)

2024-08-07

ACRE is organizing a 3-day [ACRE meeting](#) on the island of Corfu in Greece to discuss droughts and floods. These enhance stresses and induces wide ranging impacts across both natural ecosystems and human societies, with losses of life, habitat, drinking water and food production. However, the great bulk of drought and flood studies have... [more](#)

News items at DARE portal



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DARE projects

139 project available:

- Register and let the world know on your work
- Make sure data is not recued twice
- Ask for assistance
- Attract possible donors



Locations of projects included on the portal

Project title*

Country

Institute (or other) name

Contact information (email address)

Rescue Status

Rescue Status Date

The date when the rescue status was estimated. This might be the date when you fill in this form.

DARE maturity level

- 1. Archive paper, microfilm/microfiche and other outdated media records
- 2. Image media
- 3. Digitize data values
- 4. Archive digital media
- 5. Include data in global repositories

[More information about the maturity levels.](#)





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Locations of projects included on the portal

ACMAD Madagascar

Project information



Description

THE ACMAD Collection was created in the late 1980s after the Royal Meteorological Institute of Belgium imaged documents containing daily and sub-daily data from 44 African countries. The film and fiche the images were saved on were themselves at risk of degradation, so a further rescue project was carried out by the Copernicus Climate Change Service to save the images onto a tape archive managed by the ECMWF.

A digitisation project was developed involving students in Maynooth University, Ireland, to digitise sub-daily data from across Madagascar using images taken from the ACMAD Collection. This project was part of the second year of studies for geography students in the university and will be continued for future classes. Further funding from the WMO allowed for the further rescue of data. Variables digitised include precipitation, evaporation, temperature, cloud, humidity, barometric pressure and wind. So far, sub-daily data from the following stations and their time periods

Features

Contact information (email address)

Simon.Noone@mu.ie

Rescue Status

0%

Type of assistance required

We have plenty of data from Madagascar to be digitised. Please contact if interested.

Need assistance

Yes

Country

[Ireland](#)

Institute (or other) name

Maynooth University

WMO Region

[WMO Region I \(Africa\)](#)

Parameters

[Surface pressure](#)

[Wind](#)

[Precipitation](#)

[Temperature](#)



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DARE projects

139 project available:

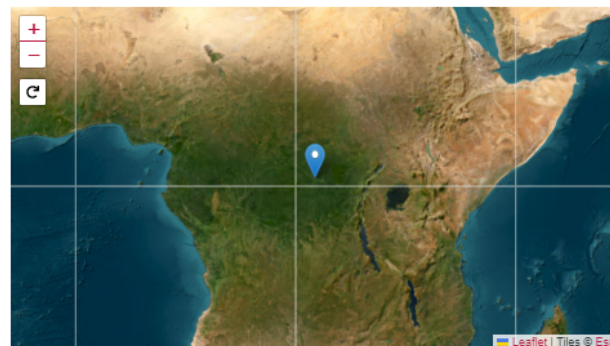
- Register and let the world know on your work
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Locations of projects included on the portal

Hydroclimatic Data Rescue Mission in the Democratic Republic of the Congo

Project information



Description

Our project focuses on the transcription of a long-term dataset of hydroclimatic time series data for the Congo Basin, currently preserved in archives as handwritten records. This dataset includes daily records of precipitation and temperature from the 1960s within the Congo Basin.

At the start of this project, we conducted a comprehensive inventory of all available hard-copy records of precipitation and temperature hosted in the archives of L'Institut National pour l'Étude et la Recherche Agronomiques (INERA) in Yangambi, Democratic Republic of the Congo (DRC). These archives contain post-1960 hydroclimate data recorded at 37 meteorological stations across the DRC. We

Features

Contact information (email address)

derrick.muheki@vub.be

Rescue Status

75%

Rescue Status Date

Mon, 09/02/2024 - 12:00

Need assistance

No

Country

[Congo](#)

Institute (or other) name

Vrije Universiteit Brussel and L'Institut National pour l'Étude et la Recherche Agronomiques (INERA)

WMO Region

[WMO Region I \(Africa\)](#)

More information

This project is led by the Department of Water



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Conclusion

- Visit the website at <https://datarescue.climate.copernicus.eu/en/>
- Include your data rescue project to the portal
- Stay tuned on this important topic by following the News item



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