

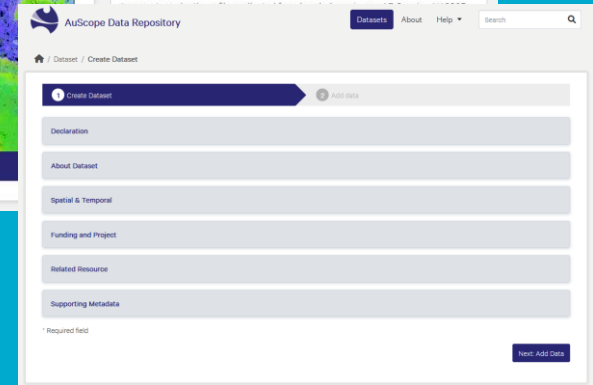
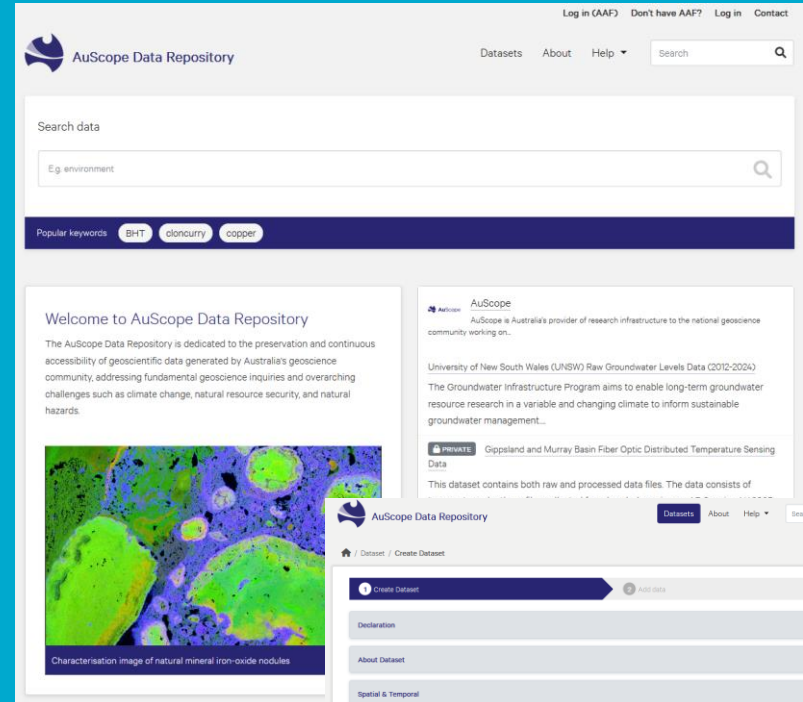


A Trusted Digital Repository for Australian Geoscience Research Communities

The AuScope Data Repository

Stuart Woodman | 29-10-2024

Australia's National Science Agency





Project Team

Project Champions:

- Rebecca Farrington (AuScope)
- Jens Klump (CSIRO)
- Lesley Wyborn (ANU)

Project and Data Management:

- Anusuriya Devaraju (CSIRO)

Technical Lead:

- Stuart Woodman (CSIRO)

Infrastructure:

- Benyamin Motevalli Soumehsaraei (CSIRO)
- Sam Bradley (CSIRO)

Front-End Development

- Neda Taherifar (CSIRO)

Engineer

- Vincent Fazio (CSIRO)



AuScope Australia

- Providing research tools, data, analytics and support to Australia's geoscience community.
- Government funded.
- Working with (amongst others) Geoscience Australia, CSIRO, state and territory geological surveys and universities across Australia.
- This project developed under the AuScope Virtual Research Environment (AVRE) program.

<https://www.auscope.org.au/avre>



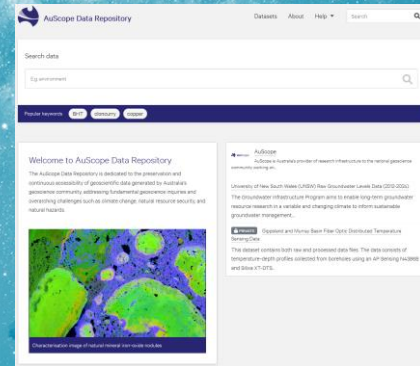
AuScope



The AuScope Data Repository

<https://repository.data.auscope.org.au>

- The **AuScope Discovery Portal** aggregates spatial layers from its partners and collaborators.
- The general repositories provided by partners and universities are not enough for effectively preserving and discovering geoscience data.
- The repository provides a domain repository for curating, publishing and sharing **geoscience data in Australia**.





Repository Principles

Open access with appropriate attributions

FAIR (Findable, Accessible, Interoperable and Reusable) data for humans and machines

CARE Principles for Indigenous Data Governance

Alignment with community practices (national, international)

Editorial for ensuring high-quality data publication

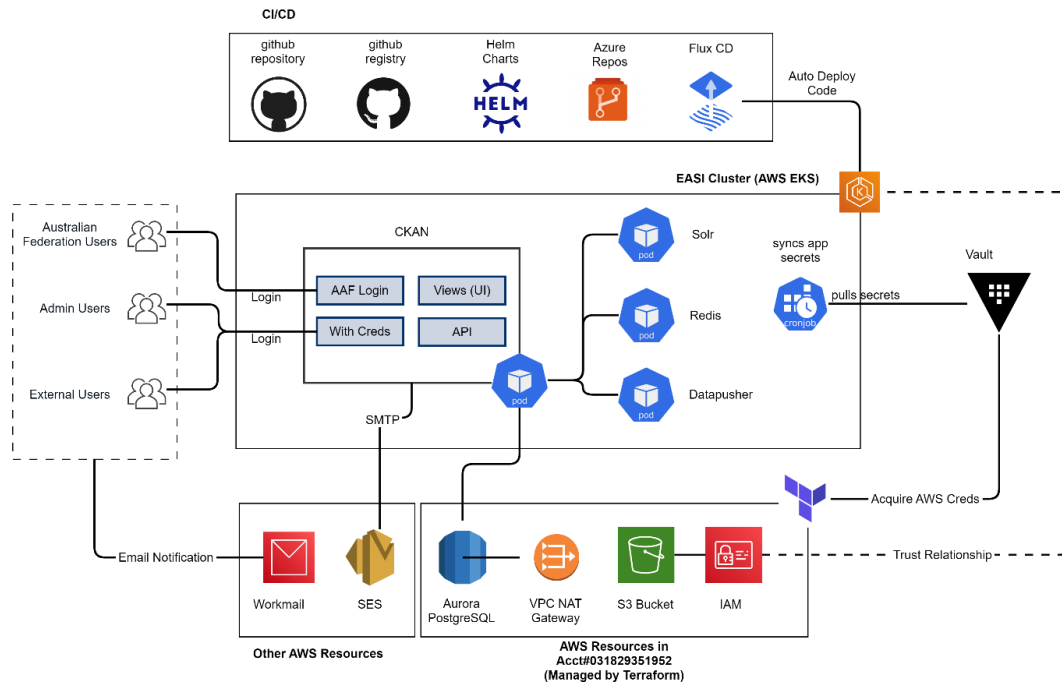
Interfacing with relevant data services for enhanced data discovery and reuse

Sustainable and secured infrastructure

Educate and engage with the user community



System Overview

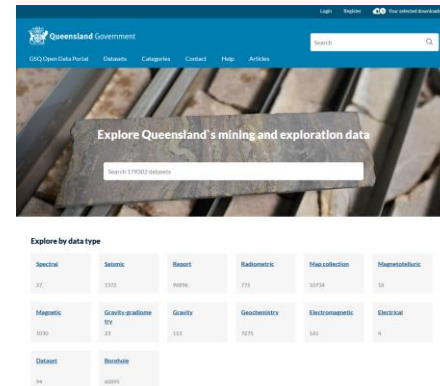
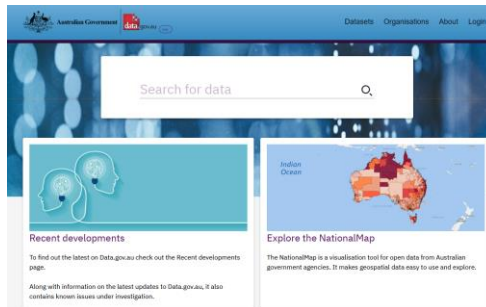


Source:
Benjamin Motevalli
Soumehsaraei

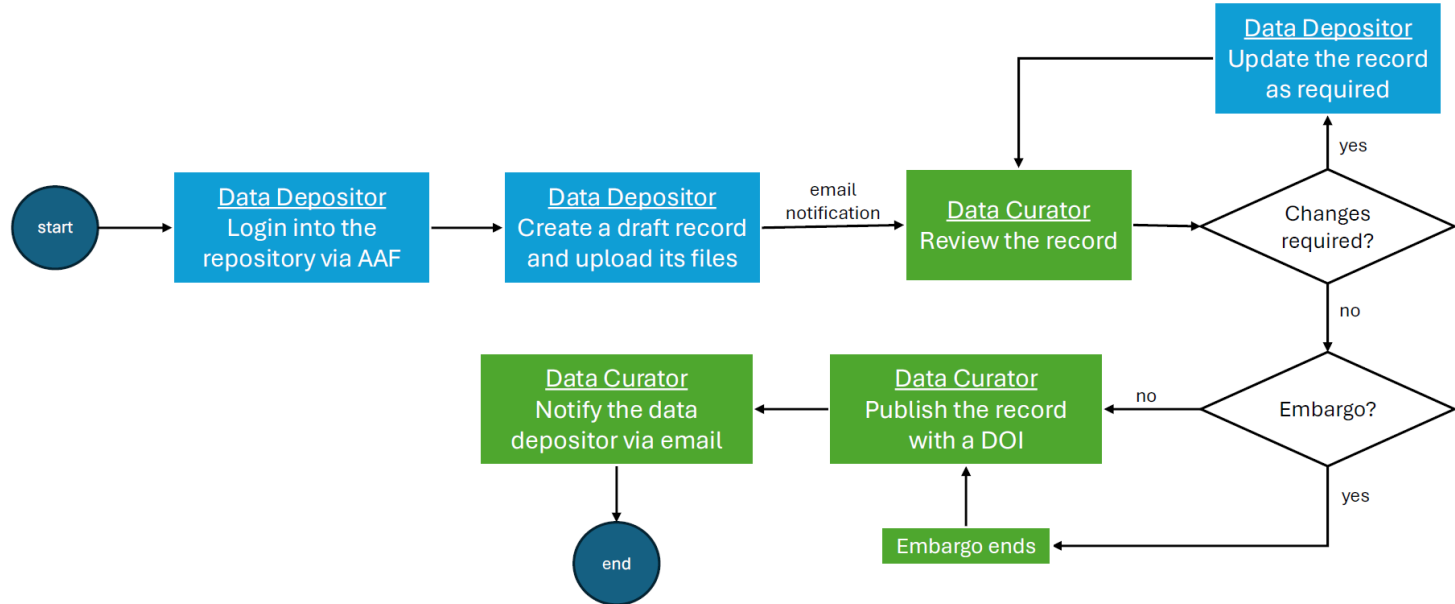


CKAN – The Heart of the System

- Comprehensive Knowledge Archive Network (CKAN).
- Open-source data portal for storage and distribution of open data.
- Easily extensible with many existing plug-ins available.



Data Curation





Adding a Dataset

Home / Dataset / Create Dataset

1 Create Dataset 2 Add data

Declaration

About Dataset

Spatial & Temporal

Funding and Project

Related Resource

Supporting Metadata

* Required field

Next: Add Data

Home / Organizations / AuScope / Presentation Dataset / Edit / Add New Resource

1 Create Dataset 2 Add data

Data and Resources

This dataset has no data, why not add some?

What's a resource?

A resource can be any file or link to a file containing useful data.

Data:

Upload Link

There is a time limit of 10 minutes for each upload. If you experience a timeout error due to a large upload, please contact us on the [CSIRO Support](#) Web site to assist you with data migration. Uploading via the browser can take time, please be patient and do not navigate away from this page while uploading.

Name:

Description:

Some useful notes about the data

You can use Markdown formatting here

Format:

eg CSV, XML, or JSON

Previous Save & add another Finish

Datasets

Organizations / AuScope / University of New South...

University of New South Wales (UNSW) Raw Groundwater Levels Data (2012-2024)

Followers 0

Social

- Twitter
- Facebook
- License

CC BY 4.0 International

Dataset Groups

University of New South Wales (UNSW) Raw Groundwater Levels Data (2012-2024)

The Groundwater Infrastructure Program aims to enable long-term groundwater resource research in a variable and changing climate to inform sustainable groundwater management. This dataset contains the groundwater levels and temperature (plus corresponding manual dip measurements) across selected NCRIS sites in New South Wales collected by the Groundwater Research at UNSW.

- The Namoi valley infrastructure has been established to develop an improved understanding of groundwater interactions with the Namoi, and Cockburn Rivers, and Maules Creek. A profile of double piezometers has been installed on the banks of the Namoi, close to the Maules Creek confluence. Maules Creek has both losing and gaining reaches and infrastructure (including two weather stations) has been installed in this part of the catchment and to provide permanent monitoring of the system. The Upper part of Maules Creek has been instrumented to estimate groundwater recharge from ephemeral streams.
- The Wellington site focuses on fractured rock aquifers. Fractured and cavernous limestone at the Wellington Caves has a combination of boreholes, a weather station and instrumented caves, uniquely using caves as an observatory of vadose zone processes. Fractured granites at Babbly have surface water, ground water, climate and tree water use all instrumented. Fractured Ordovician volcanics and metasediments at the UNSW Wellington Research Station have a borefield of over 40 bores in both alluvial sediments and the adjacent fractured rock aquifer. Abstraction bores in both aquifers facilitate experiments such as aquifer tests (pumping tests) and tracer experiments.

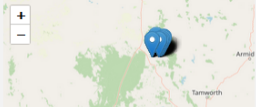
Cite this as
 Martin Andersen, Evan-Jensen (2024). University of New South Wales (UNSW) Raw Groundwater Levels Data (2012-2024). AuScope. (Dataset). <https://doi.org/10.60623/y1ua83li>

Data and Resources

- metadata_Namoi.csv**
metadata of boreholes and instruments at Namoi basin [Explore](#)
- NamoiElfinCrossing.zip**
Groundwater level data from the sub-basin Elfin Crossing [Explore](#)
- NamoiHorsearmCreek.zip**
Groundwater level data from the sub-basin Horsearm Creek [Explore](#)
- NamoiNamoiRivex.zip**
Groundwater level data from the sub-basin Namoi River [Explore](#)
- NamoiUpperMaules.zip**
Groundwater level data from the sub-basin Upper Maules [Explore](#)
- NamoinMountaintop.zip**
Groundwater level data from the sub-basin Mountain-Top [Explore](#)
- Read Me - Groundwater Data**
File and folder conventions plain notes on GA [Explore](#)
- Master Dip Archive.csv**
All dip measurements from all sites and bores [Explore](#)
- Wellington.zip**
Groundwater levels and temperature from the boreholes around the Wellington... [Explore](#)
- metadata_Wellington.csv**
metadata of boreholes and instruments at Wellington basin [Explore](#)

Groundwater Levels Groundwater Temperature Hydrology

Additional Info

Field	Value
DataCite DOI Identifier	10.60623/y1ua83li
Authors	<ul style="list-style-type: none"> Author Name: Martin Andersen Author Name Type: Personal Author Affiliation: UNSW Sydney Author Identifier Type: ORCID Author Identifier: https://orcid.org/0000-0001-7632-5491 Author Name: Evan Jensen Author Name Type: Personal Author Affiliation: UNSW Sydney Author Identifier Type: ORCID Author Identifier: https://orcid.org/0009-0006-3357-5339
Resource Type	Dataset
User Specified Keywords	Groundwater Levels, Groundwater Temperature, Hydrology
GCMD Science Keywords	HYDROLOGIC AND TERRESTRIAL WATER CYCLE MODELS KARST HYDROLOGY GROUNDWATER MANAGEMENT GROUND WATER PROCESSES/ MEASUREMENTS GROUND WATER
Fields of Research	Groundwater hydrology Groundwater quality processes and contaminated land assessment
Deposit Date	2024-10-01
Publication Date	2024-10-16
Embargo Date	
Start Date	2012-01-01
End Date	2024-10-01
Locality	Maules Creek Catchment, Upper Namoi Basin, Wellington
Location Details	



Features

Custom metadata schema

Australian Access Federation
(AAF) Login

Publication Process:

- Members add datasets (metadata and resources)
- Datasets are private and only visible to the creators and curators
- Curators review the data, publishing it to make it visible to all

Embargo periods

Automatic DOI minting

Export metadata in ISO
19115-3 XML format



And Finally...

Please share with any related networks you may have.

<https://repository.data.auscope.org.au>

Contact us:
help@data.auscope.org.au





Thank you

CSIRO Mineral Resources

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<https://www.csiro.au/>