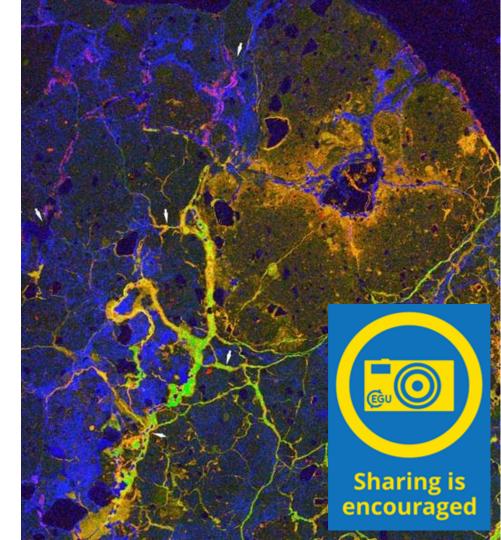




Reimagining the
AuScope Virtual
Research Environment
Through HumanCentred Design

doi:10.5194/egusphere-egu22-3261

J. Klump, U. Engelke, V. Fazio, P. Golodoniuc, L. Wyborn, T. Rawling | 23 May 2022



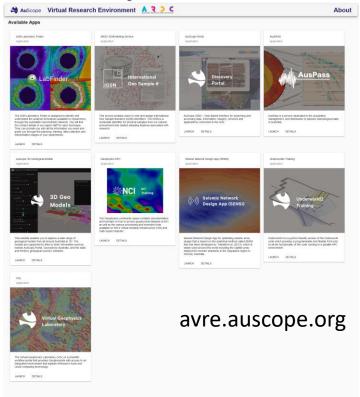


I would like to begin by acknowledging the Whadjuk people of the Noongar nation as the Traditional Owners of the land from where I am speaking to you today, and pay my respect to their Elders past and present.





AuScope AVRE



- AuScope Virtual Research
 Environments (AVRE) is a collection
 of tools for processing and analysis
 of geoscience data, the AuScope
 Discovery Portal, and the Virtual
 Geophysics Lab.
- The system was launched in 2008 and has been expanded since then.



Human-Centred Design

Design principles:

- 1. Build the right thing
- 2. Build the thing right
- 3. Open Source
- 4. FAIR Data
- Requirements gathering though User interviews.
- Co-design process with users.





Interviews

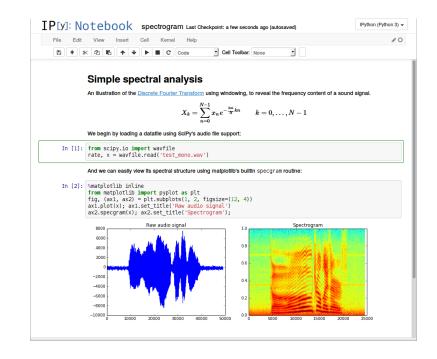
- Target audience:
 - AuScope Programs
 - NCRIS Facilities
 - Research geologists
- 14 hours of interviews, 1778 items noted.
- Common themes vs. variable domain specific requirements.

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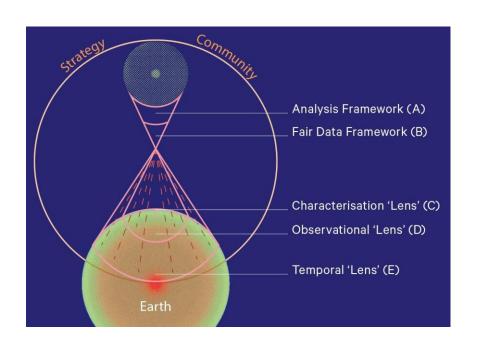
Initial Plans

- Improve search function.
- Improve download function.
- Shift from custom-made applications to Jupyter Notebooks:
 - Worked examples to introduce the API
 - Option for researchers to interact with the code.





AVRE Going Forward



- AVRE is part of the FAIR Data Framework in the "Downward Looking Telescope".
- Further improve user experience.
- Build more tools through short-term projects.
- Extend links to other portals in Australia and abroad.





Thank you

CSIRO Mineral Resources

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