AUSTRALIA MINERALS REALISE THE OPPORTUNITY

South Australia: Geoscience Data Delivery

Delivering future tools to enable data-driven exploration and discovery



Christie Gerrard Department for Energy and Mining



Australia Minerals | 04 March 2024 | #energyminingsa #AustraliaMinerals

South Australia – embracing technology to drive innovation

- on track to 100% Renewable Energy
- becoming a green hydrogen superpower
- the rising force in Critical Minerals
- world-class mineral resources, hosting 69% of Australia's copper resources, 82% of Australia's uranium resources, 26% of Australia's gold resources, and 76% of Australia's graphite reserves.

South Australia's economy is ranked number one in the nation, according to the latest CommSec State of the States. Jan 2024, State and Territory Economic Performance Report.

AUSTRALIA MINERALS | SOUTH AUSTRALIA

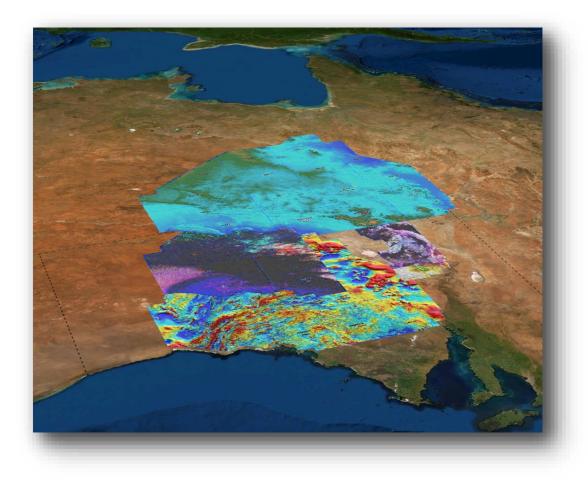


Adelaide Drone Pano Torrens

South Australia – Geological Survey of South Australia

Support mineral exploration by delivering geoscience data and knowledge.

- Global data challenge competition: Explore SA
- Digital Strategy: Digital to the Core
 - Discovery Mapping project
 - Data Acquisition and Legacy Data programs.
 - Geochemistry Delivery
 - Delivery SARIG Map, Catalogue, Explore and Core



Geological Survey of South Australia – Digital Strategy 2021 - 2025

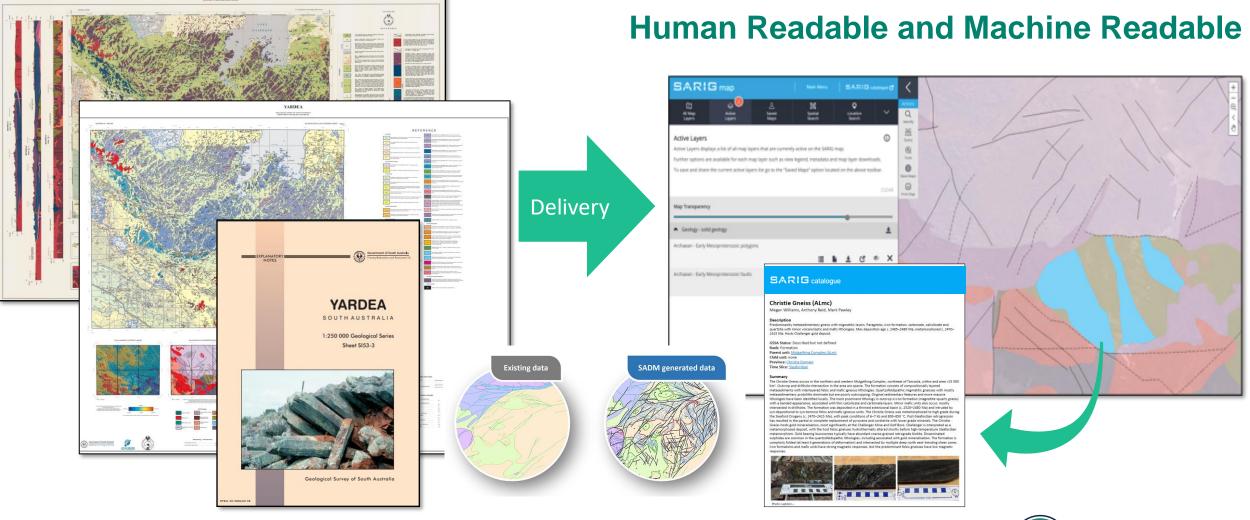
GSSA strategy for unlocking the value of geoscience data and enable modern data-driven exploration.

- Build our strength in digital governance and skills in emerging technologies.
- Expand the digital footprint of South Australian geoscience information to unlock mineral resources.
- Improve access to accurate, up-to-date geoscience data for exploration drilling decision making.
- Enhance government open API endpoints making geoscience data finable, accessible, interoperable and reusable (FAIR data principles).



https://www.energymining.sa.gov.au/industry/geologicalsurvey/digital-strategy

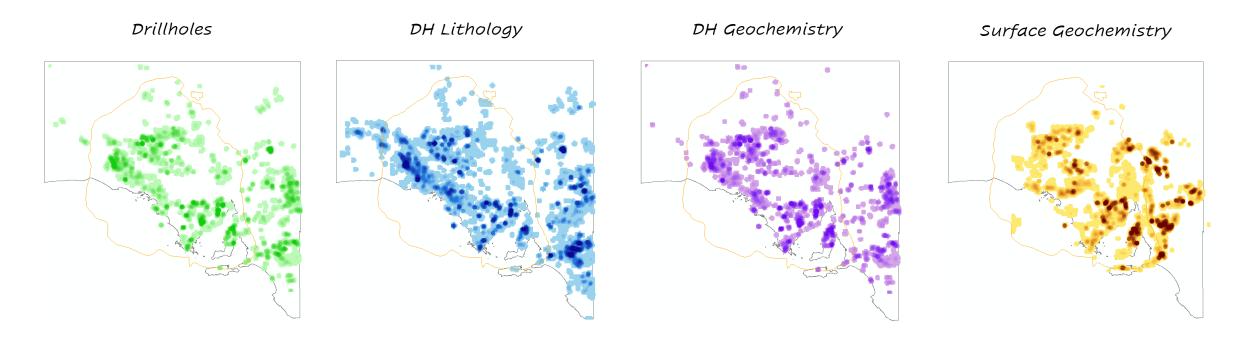
Geological Survey of South Australia – Discovery mapping project







Geological Survey of South Australia – Legacy data programs



Over 1000 km of logged core, estimated value of data made accessible \$350 million

DIGITAL DELIVERY Innovation, digital science and insight

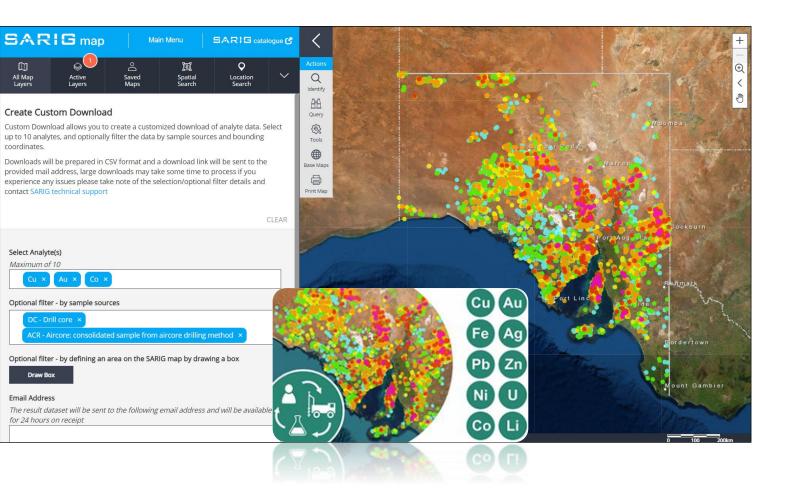
Geological Survey of South Australia – Geochemistry data delivery

Custom downloads

- Seamless access to government and open file mineral company drilling geochemistry.
- Data cleansing and standard units (ppm), removal of string values and wide file format delivery.

Maximum downhole geochemistry

- Suite of commodities
- Symbolised by normalised times average crustal abundance value
- Dataset includes drillhole location, analysis method, original assay.





RALIA

Geological Survey of South Australia

SARIG – South Australian Resources Information Gateway



DIGITAL DELIVERY Innovation, digital science and insight

Vision

Delivering pre-competitive geoscience and innovated data tools that enable data-driven exploration and discovery.

Strategy

Evolve SARIG's profile into a suite of digital service platforms:

SARIG map | SARIG explore | SARIG catalogue | SARIG core

Approach

RIDE – Revive, Improve, Deliver, Evolve

SARE

South Australian Resources Information Gateway

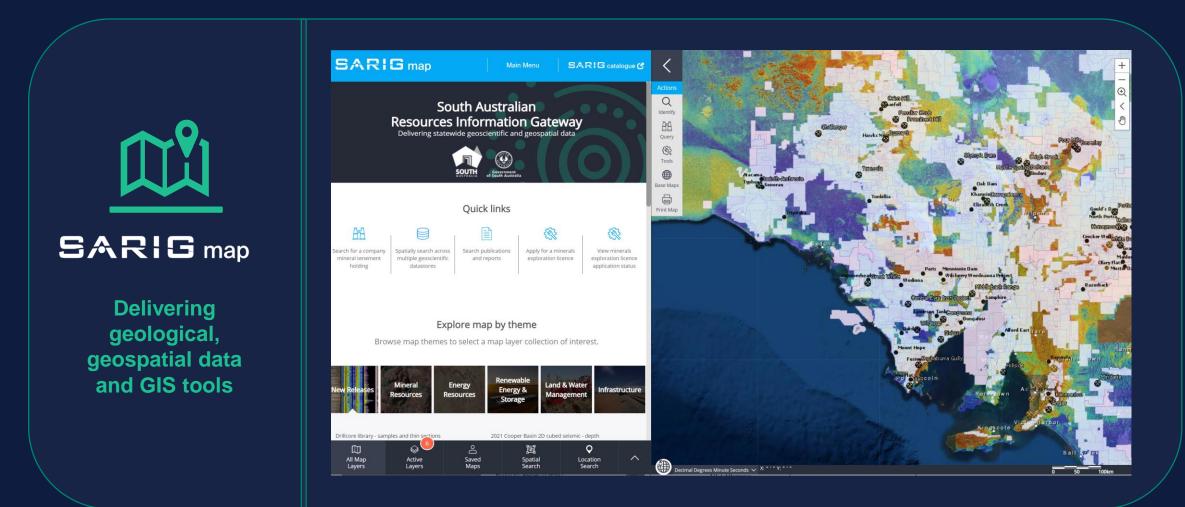
Globally No 1. Geological Databases, Fraser Institute, Annual Survey of Mining Companies, 2022



Global Recognition



South Australian Resources Information Gateway



SARIG

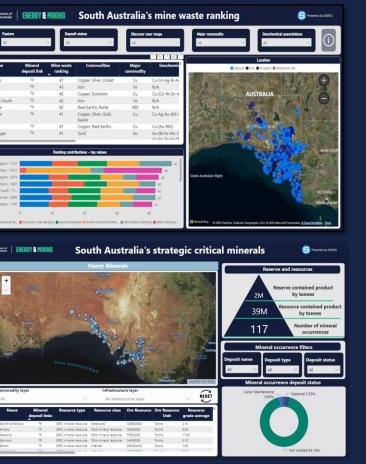
South Australian Resources Information Gateway



SARIG explore

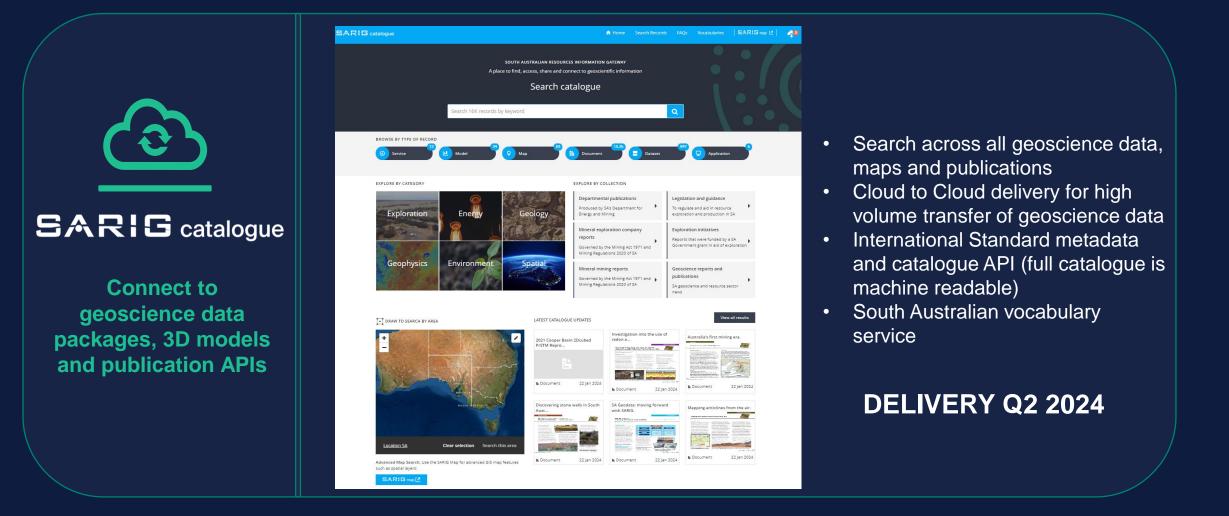
Visualise, interrogate to gain data-driven insights

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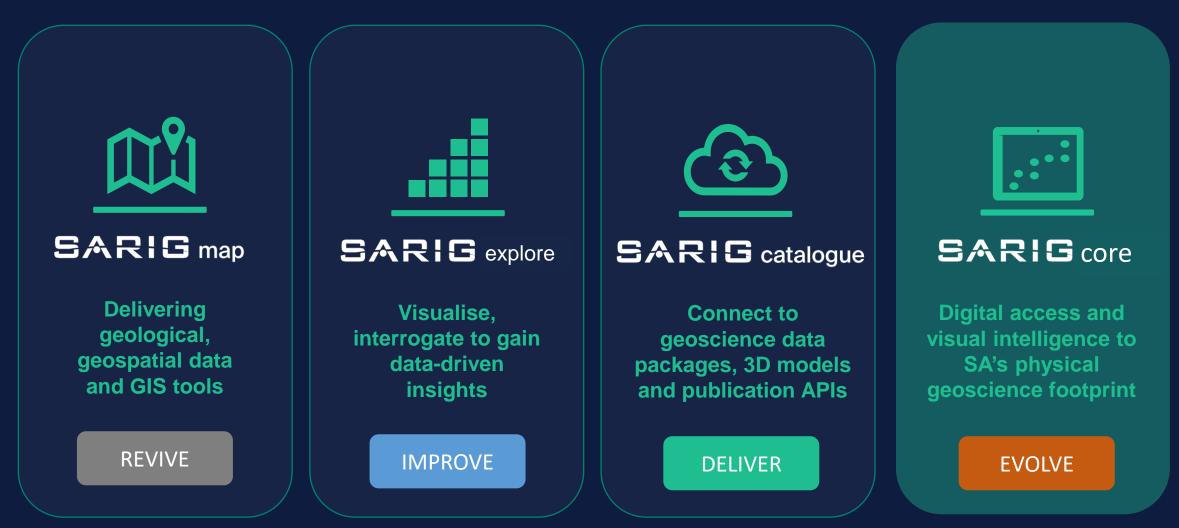
SARIG

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Delivering pre-competitive geoscience and innovated data tools that enable data-driven exploration and discovery

South Australia – next steps..

- Next generation digital geoscience, we're open to collaborations and partnerships to test, grow, communicate South Australia's digital geoscience potential.
- Interoperability takes time to be successful.
- SARIG Map | Explore | Catalogue | Core delivering accurate, up-to-date and ease of access to information for data-driven decisions.
- Unlock the core library to create new digital assets and insights.

We are open for business



AUSTRALIA MINERALS REALISE THE OPPORTUNITY

Thank you



- Contact the South Australian team:
 - DEM.CustomerServices@sa.gov.au
 - energymining.sa.gov.au

