



## Significant State- and Continent-Scale Expansion of Data Capture

ML for Capturing & Generating Knowledge for Early Decision-making in Targeting

SensOre's  
Australia Data  
Hypercube is  
Growing

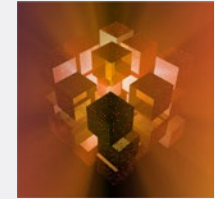
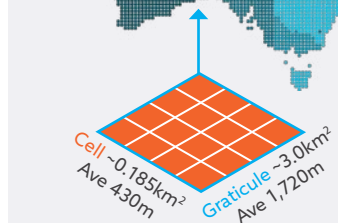
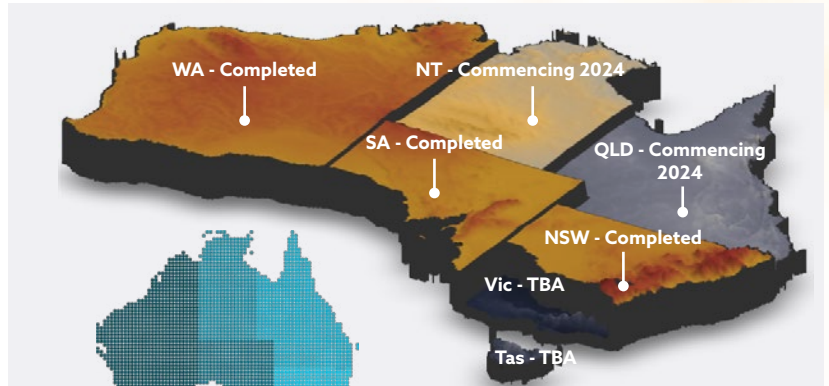
SensOre Ltd is boldly changing the way exploration targeting is carried out by harnessing and fusing the vast quantities of underutilised geoscience and environmental data from the public domain into its Australian Data Hypercube. SensOre's most valuable (non-human) asset is its Data Hypercube. The data in the database resides in a common, globally scalable gridded geospatial architecture consisting of layers of geoscience data including geology, geochemistry, and geophysics. It is central to all SensOre models generated on open data and underpins our targeting services allowing SensOre to generate high-quality, data-driven exploration targets.

### State-scale geoscience data is now ingested for WA, SA, and NSW

SensOre achieved a significant milestone of compiling, cleaning, merging, and ingesting the vast quantities of all openly available state-scale geoscience data across SA and NSW, adding to the completed data hypercube for WA. This was accomplished with the support of industry clients in SA and competitive government co-funding in NSW from the Critical Minerals and high-Tech Metals Activation fund. The Data Hypercube currently contains approximately 2,000 layers of geoscience data with more than 63 billion data points occupying the cells within the Data Hypercube.

The Data Hypercube includes SensOre's **Discoveries Database**, an extensive metallogenic database of compiled and cleaned deposit and mineral occurrence data from many sources. This database is updated quarterly and is expanding to include more commodities. This database provides accurate point location, resource footprints, and mineral endowments and grades calculated from (mines, resource, reserves, and historical production), deposit depth including tested deposit depth and depth to top of deposit, mineral deposit type. The Discoveries Database is one of our most valuable data assets as it functions as one of our primary training datasets containing 61,660 occurrences for gold, nickel, copper, and lithium.

Combined, the Data Hypercube and the Discovery Database are deployed in SensOre's machine learning (ML) workflows to target critical minerals, including Au, Ni, Cu, Co, PGE's, Li and REE's.



33M cells | 1,953 layers | 63.7B data cells

Cell 400 x 400m	Layer Type	Number of layers	Data Cell Points
	Geophysics	130	4.3B
	Geochemistry	67	2.2B
	Geology (Incl. A/P Geological words & phrases)	1,401	46.2B
	Aster	16	0.5B
	Metallogeny (MINEDEX)	28	0.2B
	Derivatives (e.g., PCs, predictions, etc)	130	4.3B
	Derivatives (Litho-chemical, litho-geo-physical)	148	4.84B
	Training deposits / occurrences - 2023	16	0.53M
	Predictive Ore Deposit Models (e.g., Cu-VMs)	17	0.56B
	<b>Total Cube</b>		<b>1,953</b>



Contact SensOre to maximize your exploration success by utilising our proprietary Australia Data Hypercube. SensOre is here to help you get the most out of your geological data on your way to making a discovery.



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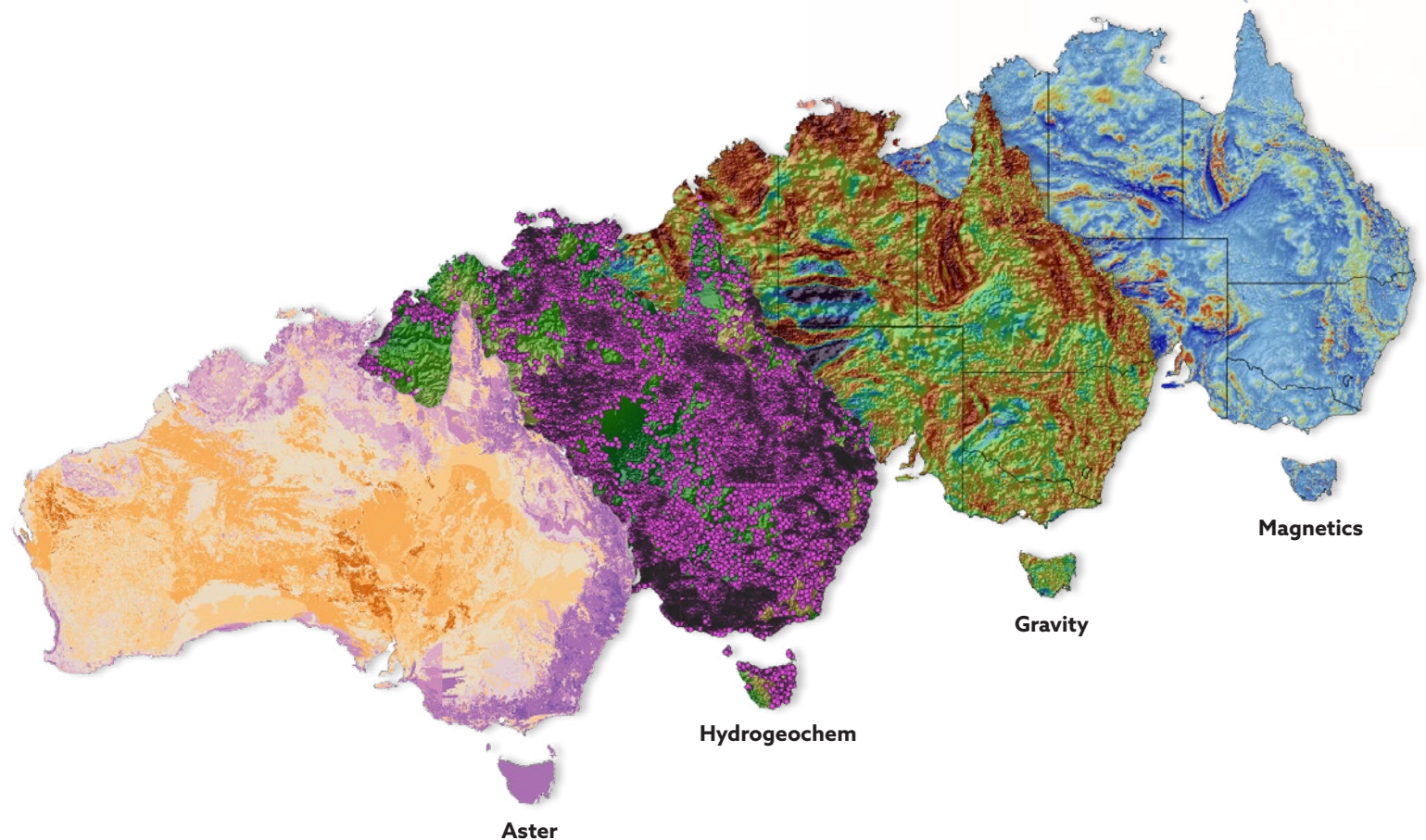
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#### Continental-scale geoscience data expansion

A second significant milestone was achieved this year with respect to our continental-scale geoscience data compilations. We have made considerable advancements in acquiring, processing, compiling, and merging continental-scale geophysical and geochemical data. SensOre has ingested CSIRO's ASTER, and hydrogeochemistry data.

Intrepid Geophysics has delivered their advanced processed continental merged compilations for magnetics, gravity and radiometrics data and approximately 54 derivative layers each for magnetics and gravity and 27 derivative layers for radiometrics. These data sets were added to our 430 m resolution Data Hypercube over the continent and are now suitable for application of machine learning algorithms as well as to our 80m resolution grids which aggregate to some 165 billion data cells over the continent.



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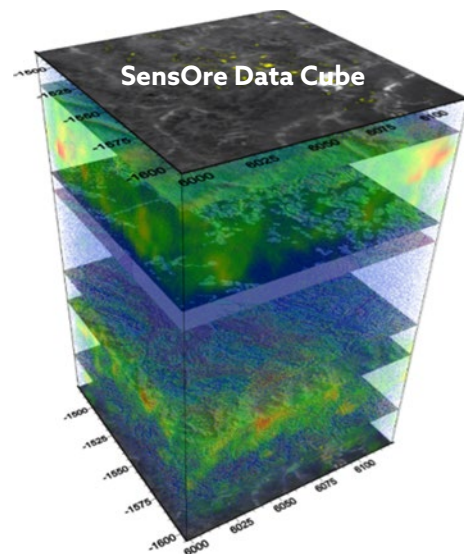


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### Why are SensOre's Data Hypercube expansions worth talking about?

- SensOre's Data Hypercube expansion is addressing a protracted, industry-wide dilemma namely, the underutilisation, underappreciation, and poor management of both new and legacy geoscience and environmental data that continues to obscure the potential utility of geoscience data.
- We've done the hard yards of compiling, cleaning, feature engineering and fusing massive amounts of geologically and environmentally significant data into a highly curated, proprietary database so you don't have to.
- The construction of Data Hypercube represents several millions of dollars of investment and years of human resources dedicated to curating geoscience data conservatively estimated to have cost industry more than \$20B to collect across three states.



- SensOre's Data Hypercube advancements are a ratchet in our ability to access, analyse, and visualise, decades of hard-won data in meaningful ways.
- The fusion of all types of geoscience data lends itself to using current ML technology to derive insights through target generation, improved mineral systems understanding thus enabling data-driven, evidence-based decision-making.
- The incorporation of significant continent-scale datasets has increased our flexibility for training, testing, and modelling across state boundaries for any commodity of interest.

### How do you get access to these resources?

Contact SensOre to maximize your exploration success by utilising our propriety advanced machine learning capabilities. SensOre is here to help you get the most out of your geological data on your way to making a discovery.

### AI ML - Fusing data to find the fingerprints of new deposits

#### Geochemistry

- Surface
- Drilling
- Hydro geochem
- Multispectral

#### Geology

- Text Data Mining
- Map Data Ingestion

#### Geophysics

- Gravity
- Magnetics
- Radiometrics
- AEM, Seismic, MT

