

Making knowledge of Geoscience Australia's data and information assets accessible to the external community

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Geoscience Australia's two main catalogues

Geocat

Total number of records = **38 371**

Web visible records = **18 945**

Standards Compliant records

When started (April 2011) = **3**

After initial cleansing (May 2011) = **5893**

Now (October 2011) = **6798**

GeoMet

Total number of records = **2598**

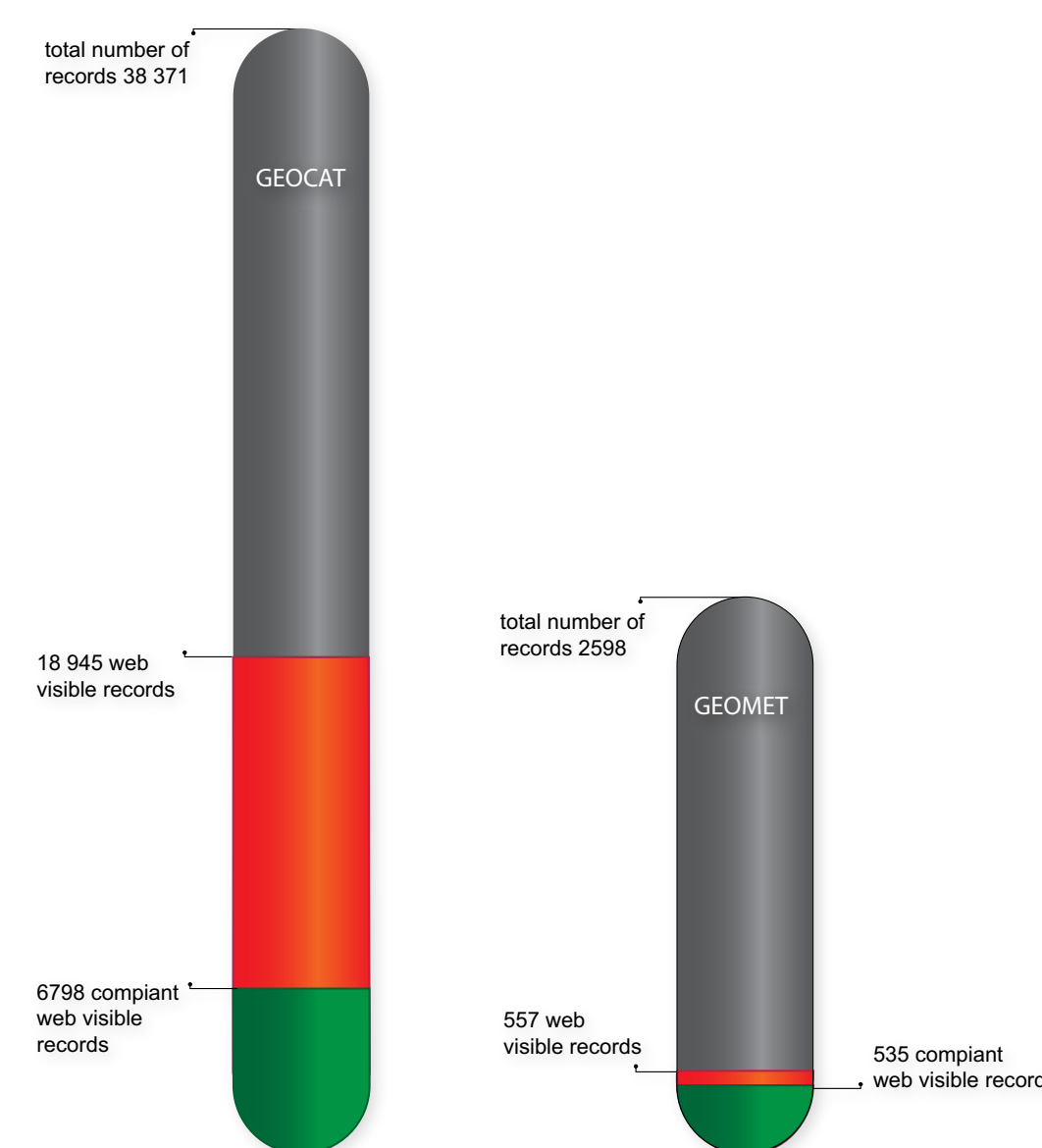
Web visible records = **557**

Standards Compliant records

When started (April 2011) = **271**

After initial cleansing (May 2011) = **535**

Now (October 2011) = **535**



Transformation Process

ANDS/GA joint project

In 2010, the Australian National Data Service (ANDS) and Geoscience Australia (GA) decided on a joint project to map GA's product catalogues to an industry standard, ISO19115 and then cross walked to RIF-CS.

The result was twofold: enabling GA to provide collection level metadata from these catalogues to Research Data Australia; plus providing GA with a baseline for an enterprise-wide metadata profile.

Researchers and other parties can now see descriptions and access requirements of GA's products, including:

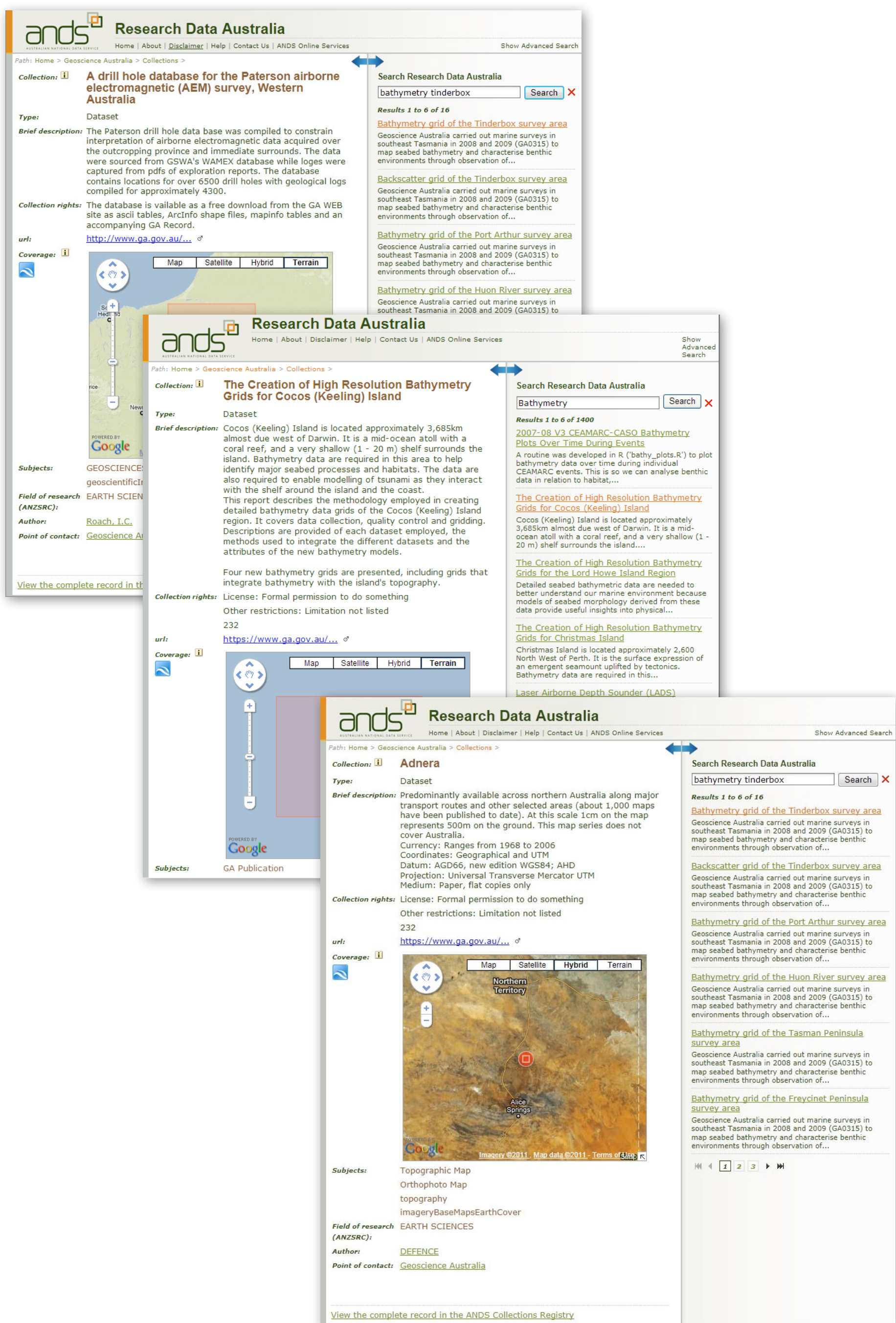
- Satellite images/datasets - landsat, radarset, etc.
- Geological and Topographical maps of various scales
- AUSGeoid98 series of various scales
- Other geoscientific thematic maps
- Acreage release permit titles, petroleum exploration areas, etc.
- Boundary Datasets: Maritime, Aboriginal Commission, postcodes, etc.
- Thematic GIS datasets
- Registers for Geographic Extent names

GA Metadata profile

- Based on ANZLIC Metadata Profile
- Intensive internal consultation were held in April-June 2011 to define business requirements with:
 - Frequent Geocat/Geomet Users
 - Scientific Community of Practice
 - New /existing GA projects
- GA's business requirements were mapped to the ISO 19115 elements
- Reviewed by external standards specialists (Simon Cox, John Hockaday) to ensure compliance with ISO 19115 and ANZLIC metadata standards
- Cross-walking to other ISO 19115-based standards such as Energy Industry Metadata Profile, ISO Data Product Specification, and RIF-CS
- Approved by GA's Executive Board Committee in July 2011.

Translation routine

- A routine has been developed in-house at GA that implements the mapping of the Geomet and Geocat metadata databases to the GA Metadata profile.
- The routine translates metadata records held in the Geomet and Geocat metadata databases into XML documents conforming to the GA Metadata profile.
- The translation routine is modular and extensible in design, enabling future adaptations for use both with other metadata databases within GA and new metadata profiles.



GeoNetwork installation

- The Geocat and Geomet metadata records translated into GA Metadata profile XML documents are harvested into an instance of GeoNetwork deployed to the GA Internet website.
- Harvesting occurs on a nightly basis to ensure the GeoNetwork repository is synchronised with additions and modifications to the Geomet and Geocat metadata databases.
- The GeoNetwork instance exposes service interfaces conforming to two protocols for querying and retrieving metadata from the GeoNetwork catalogue:
 - CSW — the Open Geospatial Consortium's Catalogue Service for the Web specification.
 - OAI-PMH — Open Archives Initiative Protocol for Metadata Harvesting.
- The GeoNetwork deployment is a modified instance of stable release 2.6.3, containing modifications supplied by CSIRO to enable provision of the GA Metadata profile records in the ANDS RIF-CS profile.

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