

GA: update on geophysical survey progress from the Geological Surveys of Western Australia, South Australia, Northern Territory, Queensland and Victoria (information current on 15 January 2016)

Further information on these surveys is available from Murray Richardson at GA via email at Murray.Richardson@ga.gov.au or telephone on (02) 6249 9229.

Table 1. Airborne magnetic and radiometric surveys

| Survey name | Client | Project management | Contractor | Start flying | Line km | Spacing AGL Dir | Area (km ²) | End flying | Final data to GA | Locality diagram (Preview) | GADDs release |
|-----------------------|--------|--------------------|------------------|--------------|--------------|-----------------------|-------------------------|-------------|--|----------------------------|---|
| Coompana | GSSA | GA | GPX Surveys | 7 Feb 2015 | 255 265 | 400 m 80 m E-W | 85 910 | 8 Nov 2015 | Dec 2015 for magnetic and elevation data | 173: Dec 2014 p. 24 | The magnetic and elevation data were released via GADDs on 10 Dec 2015. The radiometric data is expected to be released in Feb 2016 |
| Delamere/Spirit Hills | NTGS | GA | Thomson Aviation | 20 Jul 2015 | 96 500 est. | 400 m 80 m N-S | 33 690 | 7 Nov 2015 | Expected to be supplied to GA in Jan or Feb 2016 | 176: Jun 2015 p. 22 | TBA |
| Yalgoo | GSWA | GA | MAGSPEC Surveys | 30 May 2015 | 110 516 est. | 100/200 m 50 m E-W | 11 200 | 27 Sep 2015 | Nov 2015 | 176: Jun 2015 p. 23 | 10 Dec 2015 |

TBA, to be advised.

Table 2. Gravity surveys

| Survey name | Client | Project management | Contractor | Start survey | No. of stations | Station spacing (km) | Area (km ²) | End survey | Final data to GA | Locality diagram (Preview) | GADDs release |
|---------------------|--------|--------------------|------------|--|-----------------------------------|---|-------------------------|-----------------------------|--|---|---------------------------------|
| Gippsland | GSV | GA | Atlas | 30 Jun 2014 | 1440 | 12 traverses at 500 m station spacing | 8358 | 21 Jul 2015 | 2015 | 170: Jun 2014 p. 25 | 10 Dec 2015 |
| Northern Wiso Basin | NTGS | GA | Atlas | 18 Jun 2015 | 5020 | 4 km regular grid with areas of 2 km and 1 km infill | 83 240 | 9 Aug 2015 | Preliminary final data supplied to GA in Sep 2015 | 176: Jun 2015 p. 24 | 14 Oct 2015 |
| SW Yilgarn | GSWA | GA | Atlas | 12 Jun 2015 | 27 678 | 2 km along public roads and tracks | 175 000 | 100% complete to 3 Dec 2015 | TBA | 176: Jun 2015 p. 24 | Proposed release on 11 Feb 2016 |
| Victoria Basin | NTGS | GA | Atlas | 14 Aug 2015 | 6300 | 4 km regular grid | 99 170 | 17 Sep 2015 | Preliminary final data supplied to GA on 13 Nov 2015 | 177: Aug 2015 p. 17 | 10 Dec 2015 |
| Stavelly | GSV | GA | TBA | Survey Quotation Request in preparation | Approx. 8000 in 9 separate areas | 500 m regular grid in 8 areas and 500 m station interval along one traverse | TBA | TBA | TBA | 177: Aug 2015 p. 18 | TBA |
| Wiluna | GSWA | GA | TBA | The Survey Quotation Request was released on 28 Jan and closes on 23 Feb | Approx 17 000 in 2 separate areas | 2500 m regular grid | 103 000 | TBA | TBA | The proposed survey covers parts of the Bullen, Trainor, Nabberu, Wiluna, Sir Samuel, Madley, Herbert, Robert Standard 1:250 000 map sheets | TBA |

TBA, to be advised.

Table 3. AEM surveys

| Survey name | Client | Project management | Contractor | Start flying | Line km | Spacing AGL Dir | Area (km ²) | End flying | Final data to GA | Locality diagram (Preview) | GADDS release |
|----------------------------------|---|--------------------|------------------|-----------------------------------|-------------|---------------------|-------------------------|------------|------------------|---|---|
| Musgrave Region | GSSA | GA | TBA | Mar 2016 | 16 000 est. | 2 km; E-W lines | 30 691 | TBA | TBA | 179: Dec 2015 p. 23 | The Quotation Request was released on 12 Oct 2015 and closed on 30 Oct 2015. The proposed survey covers parts of the Mann, Woodroffe, Alberga, Birksgate, Lindsay and Everard Standard 1:250 000 map sheets |
| West Kimberley and Ord-Bonaparte | WA Government: Departments of Water, Agriculture and Food | GA | SkyTEM Australia | 26 Sep 2015 | 7837 | Various + traverses | TBA | 3 Nov 2015 | TBA | 178: Oct 2015 pp. 30–31 | TBA |
| Isa Region | GSQ | GA | TBA | Winter 2016. Centred on Cloncurry | TBA | TBA | TBA | TBA | TBA | The Technical Specifications of the survey are being planned between GSQ and GA | The National Collaboration Framework Agreement was executed between GA and GSQ on 16 Dec 2015 |

TBA, to be advised.

GSSA: Coompana magnetic and radiometric survey and future initiatives

The largest airborne magnetic and radiometric survey ever conducted in South Australia was completed in late 2015. The survey covers the Coompana Province and parts of the Officer, Eucla and Bight Basins, representing under-explored frontier areas in the State's far west. The survey collected over 250 000 line kilometres of pre-competitive geophysical data at 400 m line spacing, with 200 m infill over the Coompana Anomaly, at 60 m flight height.

The Coompana magnetic survey (2015SA0001) (Figures 1–3) is available for download from SARIG using the Geophysical Data Downloads tool. Some simple instructions for using the tool can be found at: http://minerals.statedevelopment.sa.gov.au/online_tools/free_data_delivery_and_publication_downloads/sarig/geophysical_data.

At the time of writing the radiometric data is being processed and should be

available on SARIG by late January.

The SA Government has committed \$20M to exploration in South Australia as part of the PACE Copper Strategy. At the time of writing we are in the early planning stages of several major geophysical activities in South Australia. As well as re-flying some key areas of the Gawler Province at 200 m resolution, we're hoping to undertake gravity infill in areas with sparse coverage. The details of these exciting programmes will become available over coming months, so stay tuned!

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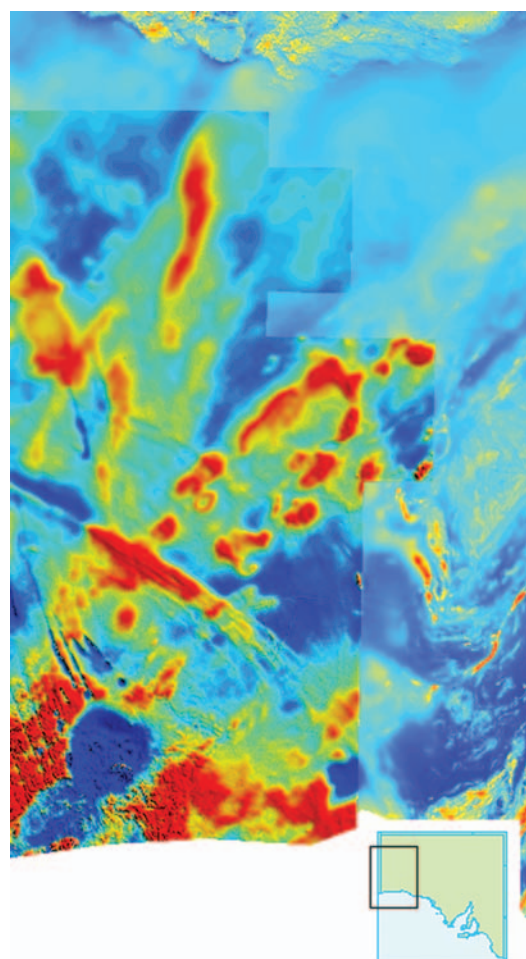


Figure 1. Coompana Total Magnetic Intensity image.

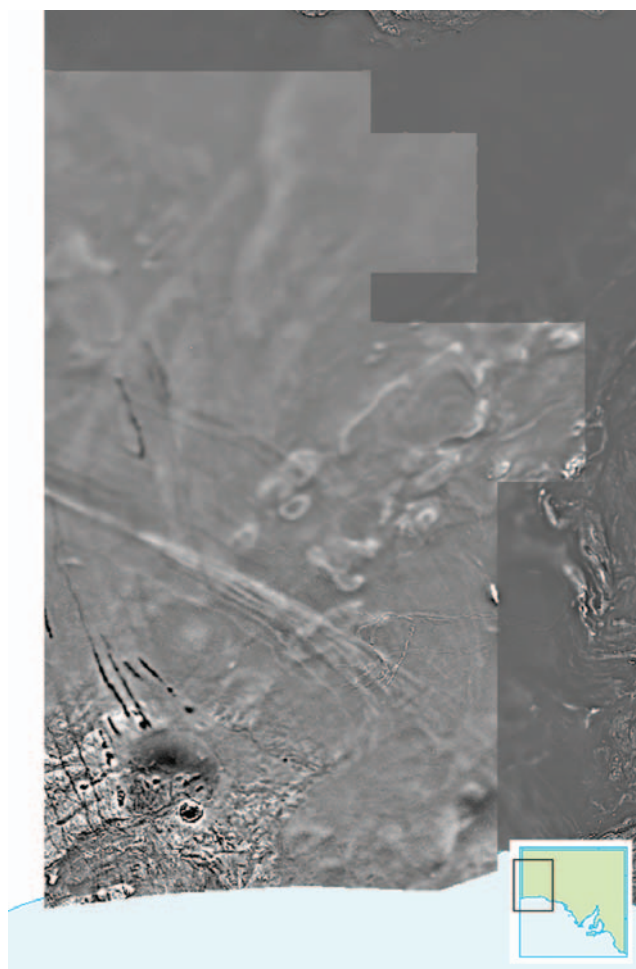
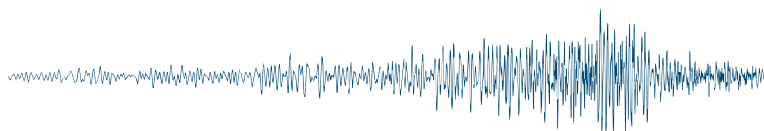


Figure 2. Coompana First Vertical Derivative of TMI image.

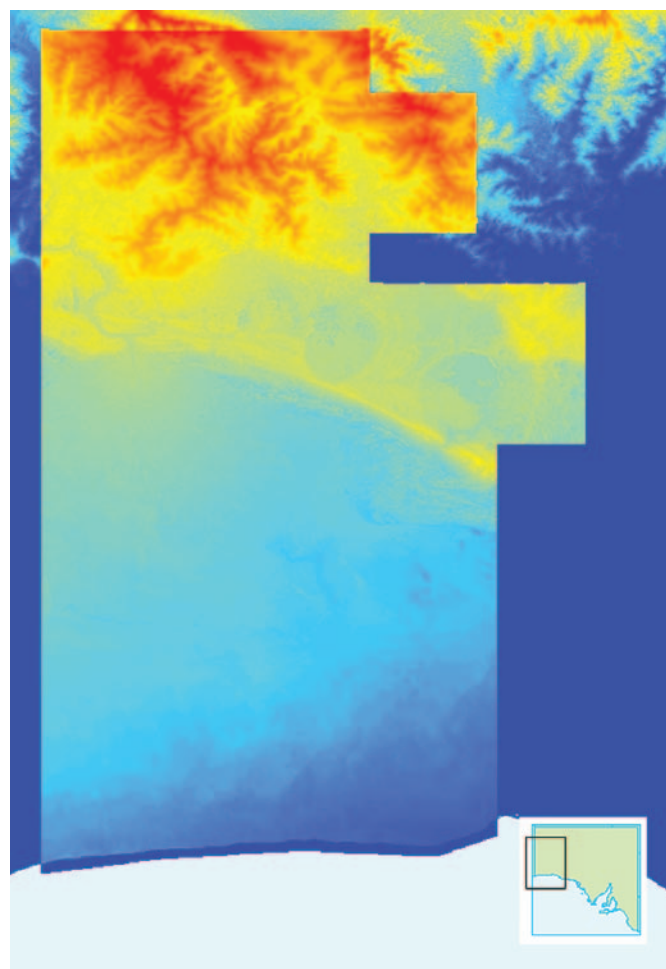







Figure 3. Coompana Digital Elevation Model.

| Resource Potentials | INNOVATIVE NEAR SURFACE SURVEY INSTRUMENTS | | micromed GEOPHYSICS |
|---|--|--|---|
| <div style="text-align: center;">  </div> <ul style="list-style-type: none"> • Small and light, high precision triaxial seismometer (0.1Hz – 2kHz range) • Self-contained with in-built data recorder and memory, GPS, radio trigger or synchronisation, powered by 2x AA batteries • Passive seismic (stratigraphy and depth to fresh rock soundings) and MASW • Vibration monitoring and model analysis of structures • USB download or interface for monitoring or linked arrays • Comes with Grilla processing and modelling software <div style="text-align: center;">  </div> | <div style="text-align: center;">  </div> <ul style="list-style-type: none"> • Digital multi-channel seismic for 1D/2D passive seismic and all conventional active seismic (MASW, refraction, reflection) • USB direct connection to and powered by a PC only • Comes with Grilla and acquisition software <div style="text-align: center;">  </div> | | <div style="text-align: center;">  </div> <ul style="list-style-type: none"> • Networked multi-channel resistivity surveying • USB direct connection to PC, comes with acquisition software <div style="text-align: center;">  </div> |
| <p>For sales, Tromino trade-ins, rentals, data processing and surveying enquiries, please contact Resource Potentials</p> <div style="display: flex; justify-content: space-between;"> <p>Phone: +61 8 9289 9100 Fax: +61 8 9328 5889</p> <p>Email: info@respot.com.au Website: www.respot.com.au</p> </div> | | | |