

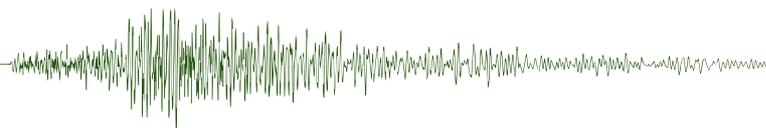
Update on geophysical survey progress from Geoscience Australia and the Geological Surveys of Western Australia, South Australia, Northern Territory, Queensland, New South Wales, Victoria and Tasmania (information current on 8 March 2018)

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
Andamooka	GSSA	GA	Sander Geophysics	23 Feb 2017	81 396	200 m 60 m E-W	14 560	6 Jun 2017	Final data QA/QC in progress	183: Aug 2016 p. 34	TBA
Barton	GSSA	GA	Thomson Aviation	22 Jan 2017	111 758	200 m 60 m E-W	20 560	11 May 2017	Final radiometric data QA/QC in progress	183: Aug 2016 p. 34	TBA
Fowler	GSSA	GA	Thomson Aviation	18 Feb 2017	95 009	200 m 60 m E-W	17 360	2 Jun 2017	Final radiometric data QA/QC in progress	183: Aug 2016 p. 34	TBA
Torrens	GSSA	GA	Sander Geophysics	4 Mar 2017	79 990	200 m 60 m E-W	14 800	15 Jun 2017	Final data QA/QC in progress	183: Aug 2016 p. 34	TBA
Tasmanian Tiers	MRT	GA	TBA	TBA	Up to an estimated 66 000	200 m 60 m N-S or E-W	11 000	TBA	TBA	TBA	National Collaborative Framework Agreement between GA and MRT is being updated. The survey has been deferred to occur between Oct 2017 and Mar 2018
Isa Region	GSQ	GA	GPX	3 Jul 2017	120 062	100 m 50 m E-W	11 000	5 Nov 2017	Preliminary final gridded data made available to GA on 13 Feb 2018	188: Jun 2017 p. 21	TBA
Tallaringa N (1A)	GSSA	GA	TBA	26 Oct 2017	97 762	200 m 60 m E-W	17 320	85.7%	TBA	190: Oct 2017 p. 26	TBA
Tallaringa S (1B)	GSSA	GA	TBA	26 Sep 2017	145 042	200 m 60 m E-W	26 010	70.8%	TBA	190: Oct 2017 p. 26	TBA
Cooper Pedy (8A)	GSSA	GA	TBA	18 Sep 2017	90 627	200 m 60 m N-S	16 140	21 Dec 2017	TBA	190: Oct 2017 p. 26	TBA
Billa Kalina (8B)	GSSA	GA	TBA	10 Oct 2017	90 625	200 m 60 m N-S	16 140	18 Dec 2017	TBA	190: Oct 2017 p. 26	TBA
Childara (9A)	GSSA	GA	TBA	5 Nov 2017	135 021	200 m 60 m N-S	23 910	62.0%	TBA	190: Oct 2017 p. 26	TBA
Lake Eyre (10)	GSSA	GA	TBA	2 Oct 2017	91 800	200 m 60 m E-W	16 180	93.6%	TBA	190: Oct 2017 p. 26	TBA

TBA, to be advised.



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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
Tanami-Kimberley	GSWA	GA	Thomson Aviation	16 Jun 2017	49 825	2500 m line spacing	110 000	31 Oct 2017	Preliminary final data made available to GA on 27 Feb 2018	The survey area covers the Billiluna (all), and parts of the Lucas, Cornish, Mount Bannerman, Mount Ramsay, Noonkanbah, Lansdowne, Lennard River, Derby, Charnley and Yampi 1:250 k standard map sheets	TBA
Kidson Sub-basin	GSWA	GA	CGG Aviation (Australia)	14 Jul 2017	72 933	2500 m line spacing	155 000	TBA	81.2%	The survey area covers the Anketell, Joanna Spring, Dummer, Paterson Range, Sahara, Percival, Helena, Rudall, Tabletop, Ural, Wilson, Runton, Morris and Ryan 1:250 k standard map sheet areas	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
East Kimberley	GA	GA	SkyTEM Australia	26 May 2017	13 723	Variable	N/A	24 Aug 2017	Nov 2017	TBA	TBA
AusAEM (Year 1)	GA	GA	CGG	TBA	59 349	20 km with areas of infill	TBA	TBA	45.8%	186: Feb 2017 p. 18	TBA
Surat-Galilee Basins QLD	GA	GA	SkyTEM Australia	2 Jul 2017	4627	Variable	Traverses	23 Jul 2017	Nov 2017	188: Jun 2017 p. 21	TBA
Stuart Corridor, NT	GA	GA	SkyTEM Australia	6 Jul 2017	9832	Variable	Traverses	12 Aug 2017	Nov 2017	188: Jun 2017 p. 22	TBA
Olympic Domain	GSSA	GA	SkyTEM Australia	14 Nov 2017	3181	1.5 & 3 km E-W	33 200	21 Nov 2017	Raw edited data to GA in Dec 2017	190: Oct 2017 p. 27	TBA
Fowler Domain	GSSA	GA	SkyTEM Australia	Early Dec 2017	3057	5 km NW-SE	15 000	5 Dec 2017	Raw edited data to GA in Dec 2017	190: Oct 2017 p. 27	TBA

TBA, to be advised.

Table 4. Magnetotelluric (MT) surveys

Location	State	Survey name	Total number of MT stations deployed	Spacing	Technique	Comments
Northern Australia	Qld/NT	Exploring for the Future – AusLAMP	150 stations deployed in 2017	50 km	Long period MT	The survey covers the area between Tennant Creek and Mount Isa. The next field season resumes in mid-April 2018.
AusLAMP NSW	NSW	AusLAMP NSW	25 stations deployed in 2018	50 km	Long period MT	Covering the state of NSW with long period MT stations at approximately 50 km spacing

Table 5. Seismic reflection surveys

Location	State	Survey name	Line km	Geophone interval	VP/SP interval	Record length	Technique	Comments
Northern Australia	Qld/NT	South Nicholson Basin	1100	20 m	40 m	20 seconds	2D – Deep Crustal Seismic Reflection	The survey covers the region between the southern McArthur Basin to the Mt Isa western succession, crossing the South Nicholson Basin and Murphy Province. The data acquisition phase of the survey started on 23 May and was completed in Aug 2017. Raw data were released in Mar 2018.
South East Lachlan	Vic/NSW	SE Lachlan	Approx. 450	10 m	40 m	20 seconds	2D – Deep Crustal Seismic Reflection	The survey covers the South East Lachlan Orogen crossing the Victorian–New South Wales border. The data acquisition phase of the survey commenced on 5 Mar 2018 near Benalla in Victoria. The survey will complete data acquisition south of Eden in NSW.

Geological Survey of South Australia: National Regolith Conference, Wallaroo, Yorke Peninsula

Dr Carmen Krapf from 'Characterising the Cover' program at GSSA is the organiser of the 5th Australian Regolith Geoscientists Association (ARGA) conference to be held from 8–11 April 2018 at Wallaroo on the Yorke Peninsula, South Australia. Two days of technical presentations will be combined with pre-, post- and mid-conference field trips that include the influence of bedrock on the soils and vines of the Clare Valley, aspects of transported and *in situ* regolith of the Yorke Peninsula, and the influence on metal dispersion and choice of effective surface techniques for mineral exploration. Members of the GSSA are involved in organising and leading the field excursions and will present on aspects of geochemistry and mineralogy of the cover within the context of informing the national UNCOVER initiative.

Technical presentations include keynotes by Ignacio González-Álvarez (CSIRO) on 'Insights on the paradigms applied for mineral exploration in deeply weathered landscapes' and Allan Chivas (University of Wollongong) on 'Oxygen isotope dating the Australian regolith'. A wide range of regolith-related topics will be covered by some 20 talks and 8 posters that include aspects of regolith geochemistry, passive seismic surveys for estimating regolith thickness, regolith mineralogy and hydrogeology, and aeolian regolith from New Zealand, northern Himalayas and Namibia.

Further information is available at <http://regolith.org.au/conference2018.html>.

Carmen Krapf and John Keeling
Carmen.Krapf@sa.gov.au
John.Keeling@sa.gov.au

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4/133 Kelvin Rd, Maddington
Western Australia 6109

PO Box 3215, Lesmurdie
Western Australia 6076

p. (08) 9291 7733

f. (08) 9459 3953

e. sales@vortexgeophysics.com.au



VORTEX GEOPHYSICS
www.vortexgeophysics.com.au