

September 2022

PRODUCT CATALOGUE

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Geological
maps
and GIS data

Map
explanatory
notes

Digital
information
packages

HyLogger
data

AGES
proceedings

Geoscientific
and
commodity
reports

Geophysical
images
and data



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Front cover: Sandstone of the Ediacaran Froud Formation, eastern Amadeus Basin. Photo courtesy of Anett Weisheit.

INTRODUCTION

Northern Territory Geological Survey (NTGS) products include printed and digital texts, maps, vector and raster map data, core hyperspectral data, geophysical imagery and datasets, geochemical and other geological data.

With the exception of certain identified products, and the Northern Territory of Australia, other government and corporate logos, all public publications are provided under a Creative Commons Attribution 4.0 International licence (<https://creativecommons.org/licenses/by/4.0/legalcode>).



How to download or order products

All products are available free of charge. The majority of NTGS products can be directly downloaded via the Geoscience Exploration and Mining Information System (GEMIS, www.geoscience.nt.gov.au/gemis) or ordered using the GEMIS request cart. They also can be found spatially using STRIKE (<https://strike.nt.gov.au/>). Larger data sets, eg geophysical survey data and HyLogger™ hyperspectral data, may be requested from the InfoCentre. Unpublished NTGS reports, historical mineral exploration and mining documents are findable through the library catalogue (<http://geoscience.nt.gov.au/InmagicGenie/opac.aspx>).

All products can also be obtained from:

Minerals and Energy InfoCentre
Northern Territory Geological Survey
Department of Industry, Tourism and Trade
3rd Floor Paspalis Centrepoint Building
48–50 Smith Street Mall, Darwin
GPO Box 4550
Darwin NT 0801, Australia

Arid Zone Research Institute (AZRI)
Sth Stuart Highway, Alice Springs
PO Box 8760
Alice Springs NT 0871, Australia

Email: geoscience.info@nt.gov.au

Telephone: +61 8 8999 6443

Website: www.minerals.nt.gov.au/ntgs

Bureau of Mineral Resources, Geology and Geophysics, Australia (BMR), Australian Geological Survey Organisation (AGSO) and Geoscience Australia (GA) products and publications

NTGS distributes some externally produced 1:250 000 and 1:100 000 scale maps and explanatory notes, which are available on digital media as NTGS Special Publications 3 and 4 respectively. NTGS also distributes some Geoscience Australia geophysical survey data for the Northern Territory.

Other BMR/AGSO/GA publications relating to Northern Territory geology can be found by searching Geoscience Australia's Online Product Catalogue. Access the catalogue via the GA website www.ga.gov.au or contact the Sales Centre at sales@ga.gov.au.

MAPS, GIS PRODUCTS AND EXPLANATORY NOTES

1:100 000 maps and explanatory notes series (ISSN 0811-6296)

The locations of geological and interpreted geological maps are shown in **Figures 1 and 2**. **Figure 3** shows the locations of GIS datasets. A compilation of 20 scanned BMR/AGSO 1:100 000 explanatory notes is available as Special Publication 4. All maps are available in PDF and ECW formats. They are also included in DIP 009, Northern Territory Geoscience Maps.

Table 1. 1:100 000 maps and explanatory notes

| Sheet | Year of map | 100k mapsheet number | Geology map | Interpreted geology map | GIS data | Explanatory notes |
|--|-------------|------------------------|----------------|-------------------------|----------|-------------------|
| Abner Range Region ¹³ | 1984 | 5964, 6063–64, 6163–64 | ✓ | | ✓ | |
| Alice Springs Region ¹ | 1983 | 5550, 5650, 5750 | ✓ | | | ✓* |
| Anson | 1985 | 4971 | ✓ | | | ✓ |
| Arltunga-Harts Range Region ² | 1984 | 5851, 5850 | ✓ | | | ✓* |
| Batchelor | 2009 | 5171 | | | ✓ | |
| Batchelor-Hayes Creek Region ³ | 1985 | 5171, 5170 | ✓ | | | |
| Bloods Range Special ⁴ | 2002 | 4848 | ✓ | | ✓ | ✓ ⁴ |
| Bynoe | 1986 | 5072 | ✓ | | | ✓ |
| Cahill | 1981 | 5472 | ✓ | | | ✓* |
| Carrara Range Region ⁵ | 1984 | 6360, 6460 | ✓ | | ✓ | ✓* |
| Daly River | 1987 | 5070 | ✓ | | ✓ | ✓ |
| Darwin | 1983 | 5073 | ✓ | | | ✓ |
| Devils Marbles Region ⁶ | 1986 | 5756–58 | ✓ | | ✓ | ✓* |
| Dneiper [†] | 1982 | 5952 | ✓ [†] | | | |
| East Alligator | 1980 | 5473 | ✓ | | | ✓* |
| Edith River Region ⁷ | 1989 | 5369, 5269 | ✓ | | | |
| Elkedra Region ⁸ | 1987 | 5855, 5955, 6055 | ✓ | | ✓ | ✓* |
| Extractive geology of the outer Darwin area ⁹ | 2001 | 5072–73, 5172–73 | ✓ | | ✓ | ✓ ⁹ |
| Flynn ¹⁰ | 1995 | 5759 | ✓ | | ✓ | ✓ ¹⁰ |
| Fog Bay | 1984 | 4972 | ✓ | | | ✓ |
| Greenwood | 1987 | 4970 | ✓ | | | ✓ |
| Hatches Creek Region ¹¹ | 1985 | 5956–57, 6056–57 | ✓ | | | ✓* |
| Howship ²³ | 2012 | 5572 | ✓ | | ✓ | ✓ ²³ |
| Hull Special ⁴ | 2002 | 4748 | ✓ | | ✓ | ✓ ⁴ |
| Jervois Range Special | 2019 | 6152, 6252 | ✓ [†] | | ✓ | ✓ |
| Koolpinyah | 1984 | 5173 | ✓ | | | ✓ |
| Kurundi Region ¹² | 1986 | 5856, 5857 | ✓ | | ✓ | ✓* |

¹ covers MacDonnell Ranges, Alice Springs and Undoolya.

² covers Riddoch and part of Fergusson Range.

³ covers Batchelor and part of Tipperary.

⁴ Hull-Bloods Range combined explanatory notes. Hull and Bloods Range Specials overlap by 5'.

⁵ covers parts of Mitchiebo and Carrara.

⁶ covers Bonney and parts of Tennant Creek and Wauchope.

⁷ covers parts of Katherine and Fergusson River.

⁸ covers parts of Murray Downs, Elkedra and George Creek.

⁹ covers parts of Darwin, Koolpinyah, Bynoe and Noonamah. Explanatory notes released as NTGS Report 14.

¹⁰ Flynn-Tennant Creek combined explanatory notes.

¹¹ covers Hatches and parts of Epenarra, Coolibah and Hanlon.

¹² covers Davenport Range and part of Ooradidgee.

¹³ covers Mallapunyah and parts of O.T. Downs, Kilgour, Lancewood and Glyde.

* In Special Publication 4

† Preliminary map only

Table 1. 1:100 000 maps and explanatory notes (continued).

| Sheet | Year of map | 100k mapsheet number | Geology map | Interpreted geology map | GIS data | Explanatory notes |
|--|-------------|---------------------------|-------------|-------------------------|-----------------|--------------------|
| Limbla | 1993 | 5950 | ✓ | | | |
| Mary River–Point Stuart Region ¹⁴ | 1983 | 5272, 5273 | ✓ | | | ✓* |
| McArthur River Region ¹⁵ | 1991 | 6065, 6165 | ✓ | | ✓ | ✓ |
| McKinlay River | 1985 | 5271 | ✓ | | ✓ | ✓* |
| Moyle | 1988 | 4969 | ✓ | | | ✓ |
| Mundogie | 1982 | 5371 | ✓ | | | ✓* |
| Narbarlek | 1982 | 5572, 5573 | ✓ | | | |
| Noonamah | 2004 | 5172 | ✓ | | ✓ | ✓ |
| Northeastern Amadeus Basin | 1991 | 5748–50, 5848–50, 5949–50 | ✓ | | ✓ | |
| Oenpelli ²³ | 2012 | 5573 | ✓ | | ✓ | ✓ ²³ |
| Pargee | 2001 | 4758 | ✓ | | | |
| Pargee | 2000 | 4758 | | ✓ | | |
| Pine Creek | 1985 | 5270 | ✓ | | ✓ | ✓* |
| Quartz | 1990 | 5951 | ✓ | | | ✓ |
| Ranford Hill | 1986 | 5370 | ✓ | | | ✓* |
| Reynolds Range Region ²⁴ | 1981 | 5452–54, 5552–53 | ✓ | | | ✓* |
| Reynolds River | 1989 | 5071 | ✓ | | ✓ | ✓ |
| Rum Jungle Mineral Field ^{16,17} | 2003 | 5071–72, 5171–72 | | ✓ | ✓ | ✓ ¹⁷ |
| Rum Jungle Uranium Field ¹⁶ | 1984 | 5071–72, 5171–72 | ✓ | | | ✓* |
| Seigal ¹⁸ | 1980 | 6462 | ✓ | | ✓ ¹⁹ | ✓ ^{18, *} |
| Short Range | 2001 | 5659 | ✓ | | ✓ | ✓ |
| Stow Region ²⁰ | 1988 | 5470, 5570 | ✓ | | | ✓* |
| Strangways Range Region ²¹ | 1984 | 5751, 5651 | ✓ | | | ✓* |
| Tanami | 2001 | 4858 | ✓ | | | |
| Tanami | 2000 | 4858 | | ✓ | | |
| Tawallah Range | 1992 | 6066 | ✓ | | ✓ | ✓ |
| Tea Tree | 1975 | 5553 | ✓† | | | |
| Tennant Creek ¹⁰ | 1995 | 5758 | ✓ | | ✓ | ✓ ¹⁰ |
| Tipperary | 1990 | 5170 | ✓ | | ✓ | ✓ |
| Umbeara | 2002 | 5646 | ✓ | | ✓ | ✓ |
| Wilson Creek | 2001 | 4959 | ✓ | | | |
| Wilson Creek | 2000 | 4959 | | ✓ | | |
| Wingate Mountains | 1989 | 5069 | ✓ | | | ✓ |
| Woodgreen | 2004 | 5753 | ✓ | | ✓ | ✓ |
| Yeuralba Region ²² | 1990 | 5468–69, 5569 | ✓ | | | |

¹⁴ covers Mary River and part of Point Stuart.

¹⁵ covers Batten and part of Borroloola.

¹⁶ covers parts of Bynoe, Noonamah, Reynolds River and Batchelor.

¹⁷ Explanatory notes released as NTGS Report 19

¹⁸ Seigal-Hedleys Creek (Qld) combined explanatory notes.

¹⁹ Seigal GIS dataset (MapInfo) in NTGS Record 1999-011.

²⁰ covers Stow and part of Snowdrop.

²¹ covers Laughlen and part of Burt.

²² covers parts of Eva Valley, Waterhouse and Maranboy.

²³ Howship-Oenpelli combined explanatory notes and combined GIS data.

²⁴ covers Reynolds Range and parts of Napperby, Mount Peake, Tea Tree, and Aileron.

* In Special Publication 4

† Preliminary map only

Figure 1. 1:100 000 geological maps.

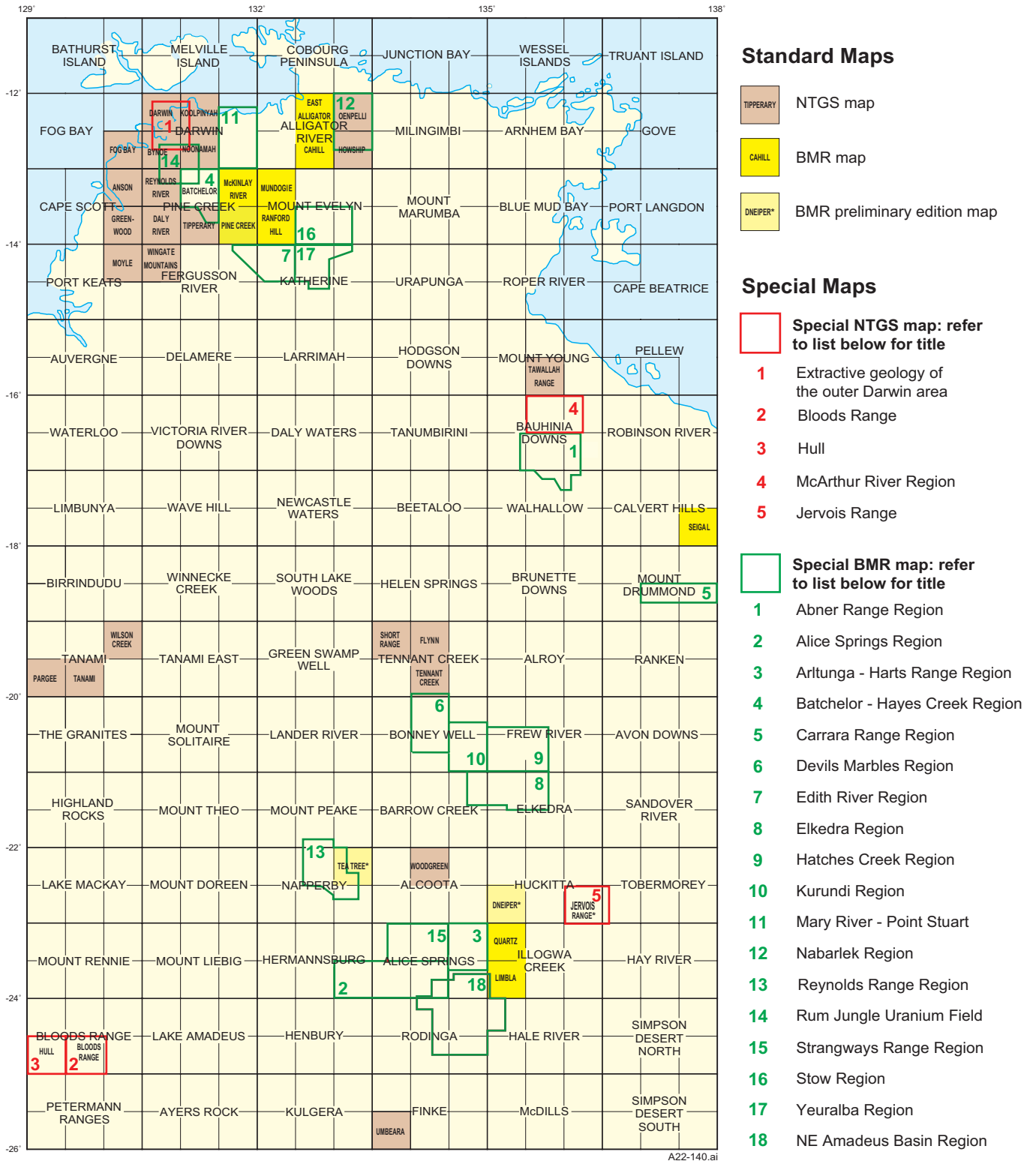


Figure 2. 1:100 000 interpreted geological maps.

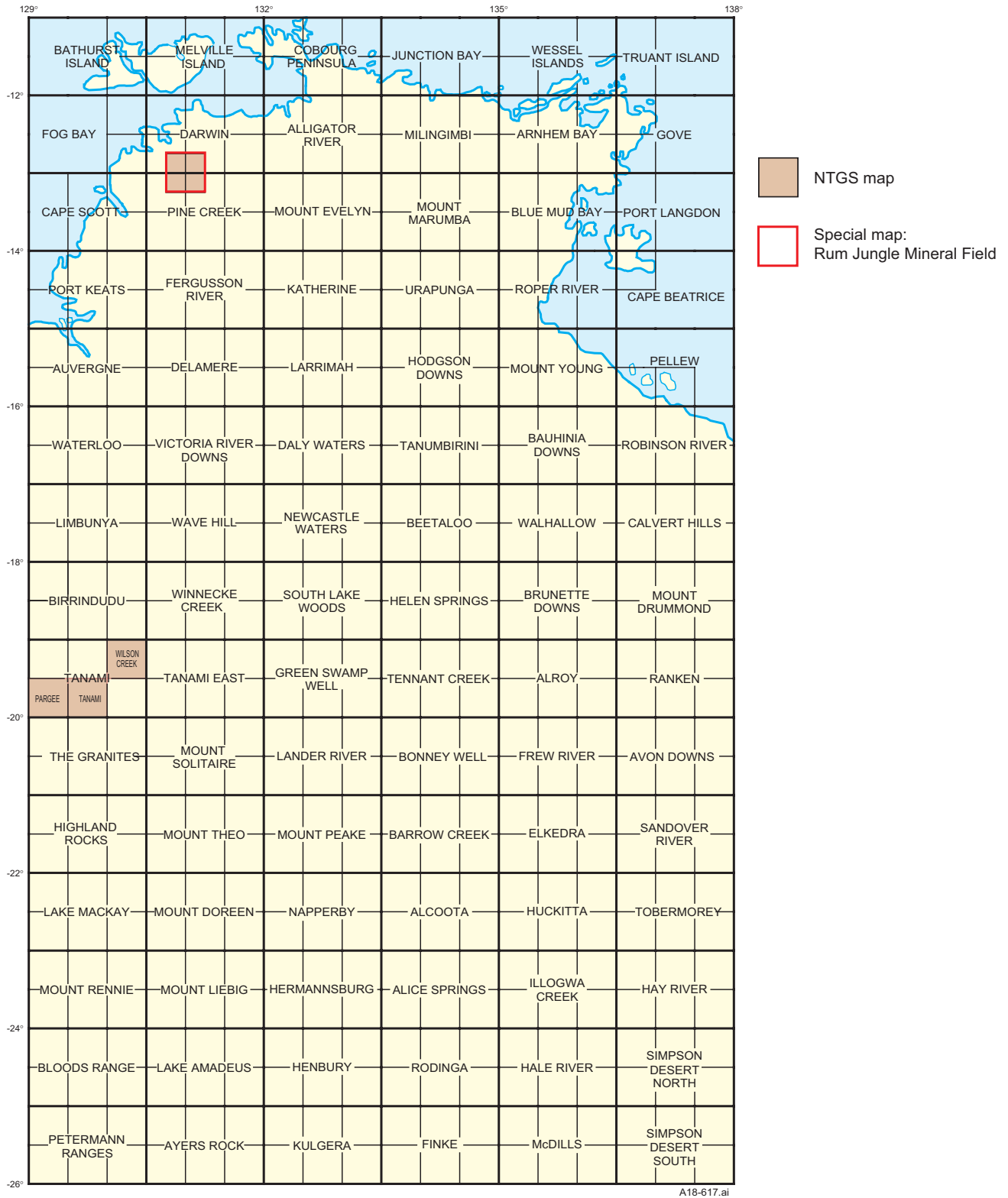
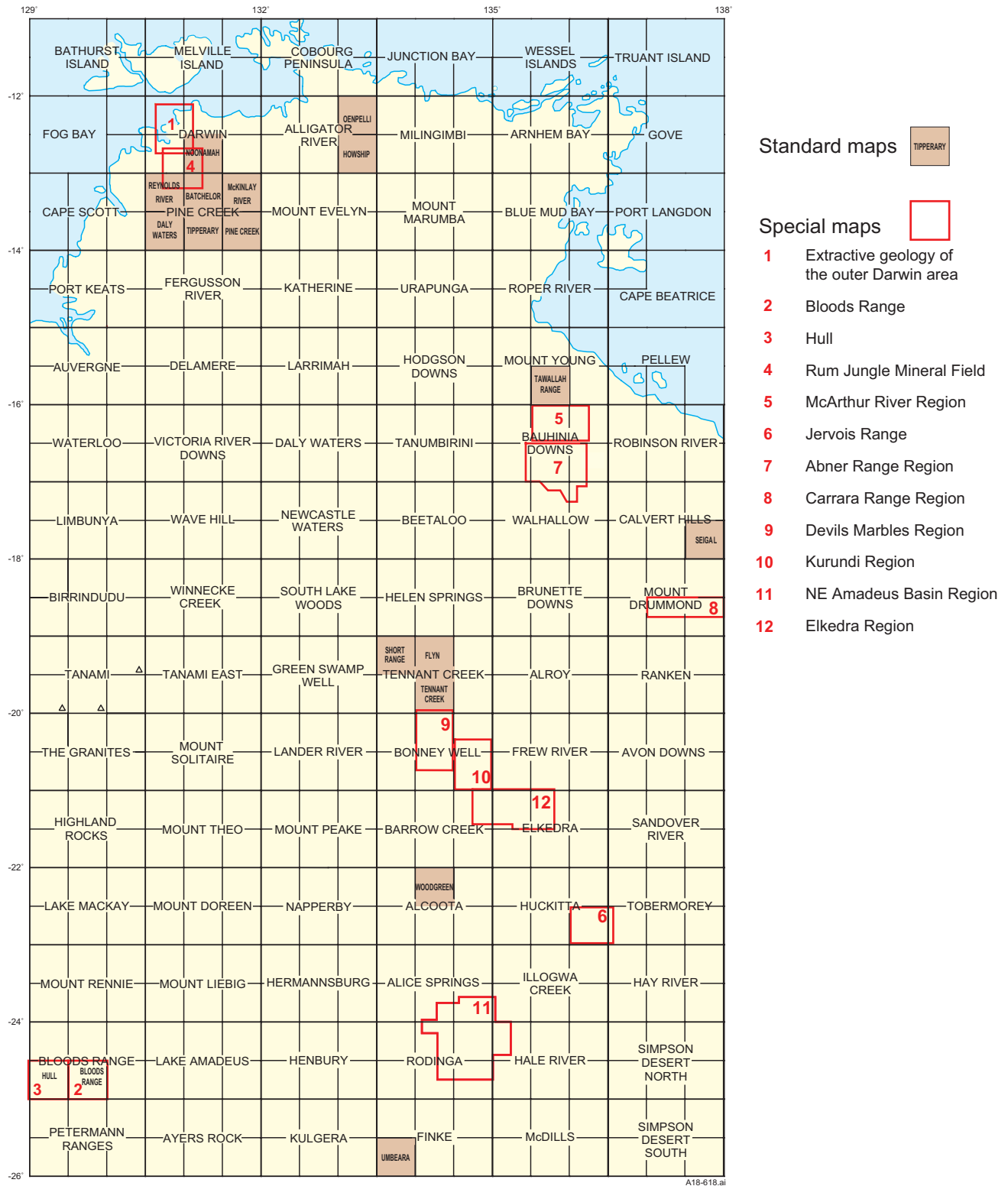


Figure 3. 1:100 000 geological GIS datasets.



1:250 000 maps and explanatory notes series (ISSN 0814-7485), including metallogenic studies explanatory notes series (ISSN 1032-5387)

The locations of geological and interpreted geological maps are shown in **Figures 4 and 5** respectively. **Figure 6** shows the locations of GIS datasets. A compilation of scanned BMR explanatory notes (85 titles) is available as Special Publication 3. All maps are available in PDF and ECW formats. They are also included in the compilation published as DIP 009.

Table 2. 1:250 000 geology maps and explanatory notes (continued next page).

| Sheet | Year of map | Map number | Geology map | Interpreted geology map | GIS data | Explanatory notes |
|-------------------------|-------------|---------------------|-------------|-------------------------|----------|-------------------|
| Alcoota | 1975 | SF53-10 | ✓ | | ✓ | ✓* |
| Alice Springs | 1983 | SF53-14 | ✓ | | ✓ | ✓* |
| Alligator River | 1983 | SD53-01 | ✓ | | ✓ | ✓* |
| Alroy | 2010 | SE53-15 | ✓ | | ✓ | ✓ ¹ |
| Arnhem Bay | 1997 | SD53-03 | ✓ | | ✓ | ✓ ² |
| Auvergne | 2015 | SD52-15 | ✓ | | ✓ | ✓ |
| Avon Downs | 2005 | SF53-04 | ✓ | | ✓ | ✓ ⁸ |
| Ayers Rock | 2002 | SG52-08 | ✓ | | ✓ | ✓ |
| Barrow Creek | 1991 | SF53-06 | ✓ | | ✓ | ✓ |
| Bathurst Island | 1975 | SC52-15 | ✓ | | ✓ | ✓ ^{3,*} |
| Bauhinia Downs | 1991 | SE53-03 | ✓ | | ✓ | ✓ |
| Beetaloo | 1969 | SE53-06 | ✓ | | ✓ | ✓* |
| Birrindudu | 2012 | SE52-11 | ✓ | | ✓ | ✓** [▲] |
| Bloods Range | 1967 | SG52-03 | ✓ | | ✓ | ✓* |
| Blue Mud Bay | 1999 | SD53-07 | ✓ | | ✓ | ✓ ⁴ |
| Bonney Well | 1986 | SF53-02 | ✓ | | ✓ | ✓ |
| Brunette Downs | 2010 | SE53-11 | ✓ | | ✓ | ✓ ¹ |
| Calvert Hills | 2014 | SE53-08 | ✓ | | ✓ | ✓ ⁵ |
| Cape Beatrice | 1964 | SD53-12 | ✓ | | ✓ | ✓ ^{7,*} |
| Cape Scott | 1971 | SD52-07 | ✓ | | ✓ | ✓* |
| Cobourg Peninsula | 1975 | SC53-13 | ✓ | | ✓ | ✓ ^{6,*} |
| Daly Waters | 1969 | SE53-01 | ✓ | | ✓ | ✓* |
| Darwin | 1987 | SD52-04 | ✓ | | ✓ | ✓ |
| Delamere | 2014 | SD52-16 | ✓ | | ✓ | ✓ |
| Elkedra | 1988 | SF53-07 | ✓ | | ✓ | ✓ |
| Fergusson River | 1972 | SD52-12 | ✓ | | ✓ | ✓* |
| Finke | 1968 | SG53-06 | ✓ | | ✓ | ✓* |
| Fog Bay | 1975 | SD52-03 | ✓ | | ✓ | ✓* |
| Frew River ¹ | 2010 | SF53-03 | ✓ | | ✓ | ✓ ¹ |
| Gove | 1997 | SD53-04 | ✓ | | ✓ | ✓ ² |
| Green Swamp Well | 1978 | SE53-13 | ✓ | | ✓ | ✓* |
| Groote Eylandt Region | 1995 | SD53-07, 08, 11, 12 | ✓ | | ✓ | ✓ |
| Hale River | 1968 | SG53-03 | ✓ | | ✓ | ✓* |
| Hay River | 1963 | SF53-16 | ✓ | | ✓ | ✓* |
| Helen Springs | 2001 | SE53-10 | ✓ | | ✓ | ✓ |
| Henbury | 1968 | SG53-01 | ✓ | | ✓ | ✓* |
| Hermannsburg | 1995 | SF53-13 | ✓ | | ✓ | ✓ |
| Highland Rocks | 2006 | SF52-07 | ✓ | ✓ | ✓ | ** [▲] |
| Hodgson Downs | 1964 | SD53-14 | ✓ | | ✓ | ✓* |
| Huckitta | 1986 | SF53-11 | ✓ | | ✓ | ✓ |
| Illogwa Creek | 1985 | SF53-15 | ✓ | | ✓ | ✓* |
| Junction Bay | 1965 | SC53-14 | ✓ | | ✓ | ✓* |
| Katherine | 1994 | SD53-09 | ✓ | | ✓ | ✓ |
| Kulgera | 1993 | SG53-05 | ✓ | | ✓ | ✓ |

¹ Alroy, Brunette Downs, Walhallow and Frew River combined explanatory notes; ² Arnhem Bay-Gove combined map/explanatory notes; ³ Bathurst Island-Melville Island (except easternmost part of Melville Island) combined map/explanatory notes; ⁴ NW portion of Port Langdon included in Second Edition Blue Mud Bay (1999), SW portion of Port Langdon included in Groote Eylandt Region; ⁵ Metallogenic map series (discontinued) equivalent to revised 1st edition, explanatory notes; ⁶ Cobourg Peninsula-Melville Island (easternmost part of Melville Island only) combined map/explanatory notes; ⁷ Roper River/Cape Beatrice combined explanatory notes, 1963; ⁸ Ranken-Avon Downs combined explanatory notes.

* Refers to Special Publication 3.

[▲] No 2nd edition explanatory notes available.

Table continued on next page

Table 2. 1:250 000 geology maps and explanatory notes (continued).

| Sheet | Year of map | Map number | Geology map | Interpreted geology map | GIS data | Explanatory notes |
|-------------------------------------|-------------|---------------------|-------------|-------------------------|----------|----------------------|
| Lake Amadeus | 1968 | SG52-04 | ✓ | | ✓ | ✓* |
| Lake Mackay | 2008 | SF52-11 | ✓ | ✓ | ✓ | *▲ |
| Lander River | 2008 | SF53-01 | ✓ | ✓ | ✓ | ✓ ¹² |
| Larrimah | 1969 | SD53-13 | ✓ | | ✓ | ✓* |
| Limbunya | 2014 | SE52-07 | ✓ | | ✓ | ✓ |
| Litchfield North Special | 2010 | SD52-03, 04, 07, 08 | | ✓ | ✓ | |
| Litchfield South Special | 2010 | SD52-11, 12 | | ✓ | ✓ | |
| McDills | 1968 | SG53-07 | ✓ | ✓ | ✓ | ✓* |
| Melville Island | 1975 | SC52-16 | ✓ | | ✓ | ✓ ^{3, 6, *} |
| Milingimbi | 1999 | SD53-02 | ✓ | | ✓ | ✓ |
| Mount Doreen | 1995 | SF52-12 | ✓ | ✓ | ✓ | ✓ |
| Mount Drummond | 2006 | SE53-12 | ✓ | | ✓ | ✓ |
| Mount Evelyn | 2003 | SD53-05 | ✓ | | ✓ | ✓ |
| Mount Liebig | 2003 | SF52-16 | ✓ | ✓ | ✓ | ✓ |
| Mount Marumba | 1999 | SD53-06 | ✓ | | ✓ | ✓ |
| Mount Peake | 2007 | SF53-05 | ✓ | ✓ | ✓ | ✓ ¹² |
| Mount Rennie | 2004 | SF52-15 | ✓ | ✓ | ✓ | *▲ |
| Mount Solitaire | 2005 | SF52-04 | ✓ | ✓ | ✓ | *▲ |
| Mount Theo | 2005 | SF52-08 | ✓ | ✓ | ✓ | *▲ |
| Mount Young | 1993 | SD53-15 | ✓ | | ✓ | ✓ |
| Napperby | 1982 | SF53-09 | ✓ | | ✓ | ✓* |
| Newcastle Waters | 1969 | SE53-05 | ✓ | | ✓ | ✓* |
| Northwestern Musgrave Block Special | 2003 | SG52-03, 07 | ✓ | | ✓ | ✓ ⁹ |
| Northwestern Musgrave Block Special | 2000 | SG52-03, 07 | | ✓ | ✓ | ✓ ⁹ |
| Pellew | 1963 | SD53-16 | ✓ | | ✓ | ✓* |
| Petermann Ranges | 1999 | SG52-07 | ✓ | | ✓ | ✓ |
| Pine Creek | 2011 | SD52-08 | ✓ | | ✓ | ✓ ⁵ |
| Port Keats | 1971 | SD52-11 | ✓ | | ✓ | ✓* |
| Port Langdon | 1999 | SD53-08 | ✓ | | ✓ | ✓ ^{4, *} |
| Ranken | 2005 | SE53-16 | ✓ | | ✓ | ✓ ⁸ |
| Robinson River | 2002 | SE53-04 | ✓ | | ✓ | ✓ |
| Rodinga | 1968 | SG53-02 | ✓ | | ✓ | ✓* |
| Roper River | 2001 | SD53-11 | ✓ | | ✓ | ✓ ¹⁰ |
| Sandover River | 2003 | SF53-08 | ✓ | | ✓ | ✓ |
| Simpson Desert North | 1973 | SG53-04 | ✓ | | ✓ | ✓* |
| Simpson Desert South | 1973 | SG53-08 | ✓ | | ✓ | ✓* |
| South Lake Woods | 1978 | SE53-09 | ✓ | | ✓ | ✓* |
| Tanami | 1975 | SE52-15 | ✓ | | ✓ | ✓* |
| Tanami | 2000 | SE52-15 | | ✓ | ✓ | |
| Tanami East | 1978 | SE52-16 | ✓ | | ✓ | ✓* |
| Tanumbirini | 1964 | SE53-02 | ✓ | | ✓ | ✓* |
| Tennant Creek | 1999 | SE53-14 | ✓ | | ✓ | ✓ |
| Tennant Creek | 2003 | SE53-14 | | ✓ | ✓ | |
| The Granites | 2000 | SF52-03 | | ✓ | ✓ | |
| The Granites | 2014 | SF52-03 | ✓ | | ✓ | ✓* |
| Tobermorey | 2003 | SF53-12 | ✓ | | ✓ | ✓ ¹¹ |
| Truant Island | 1965 | SC53-16 | ✓ | | ✓ | ✓ ^{13, *} |
| Urapunga - Roper River Special | 2001 | SD53-10 | ✓ | | ✓ | ✓ ¹⁰ |
| Victoria River Downs | 2015 | SE52-04 | ✓ | | ✓ | ✓* |
| Walhallow | 2010 | SE53-07 | ✓ | | ✓ | ✓ ¹ |
| Waterloo | 2015 | SE52-03 | ✓ | | ✓ | ✓*▲ |
| Wave Hill | 2014 | SE52-08 | ✓ | | ✓ | ✓*▲ |
| Wessel Islands | 1965 | SC53-15 | ✓ | | ✓ | ✓ ^{13, *} |
| Winnecke Creek | 1978 | SE52-12 | ✓ | | ✓ | ✓* |

⁹ Covers Petermann Ranges and southern half of Bloods Range (see NTGS Report 15 – ‘Geology of the Musgrave Block, Northern Territory’); ¹⁰ Urapunga-Roper River Special combined map/explanatory notes; ¹¹ change of mapsheet name from Tobermory to Tobermorey in 2002; ¹² Mount Peake-Lander River combined explanatory notes; ¹³ Wessel Islands-Truant Island combined map/explanatory notes.

* Refers to Special Publication 3.

▲ No 2nd edition explanatory notes available.

Figure 4. 1:250 000 geological maps.

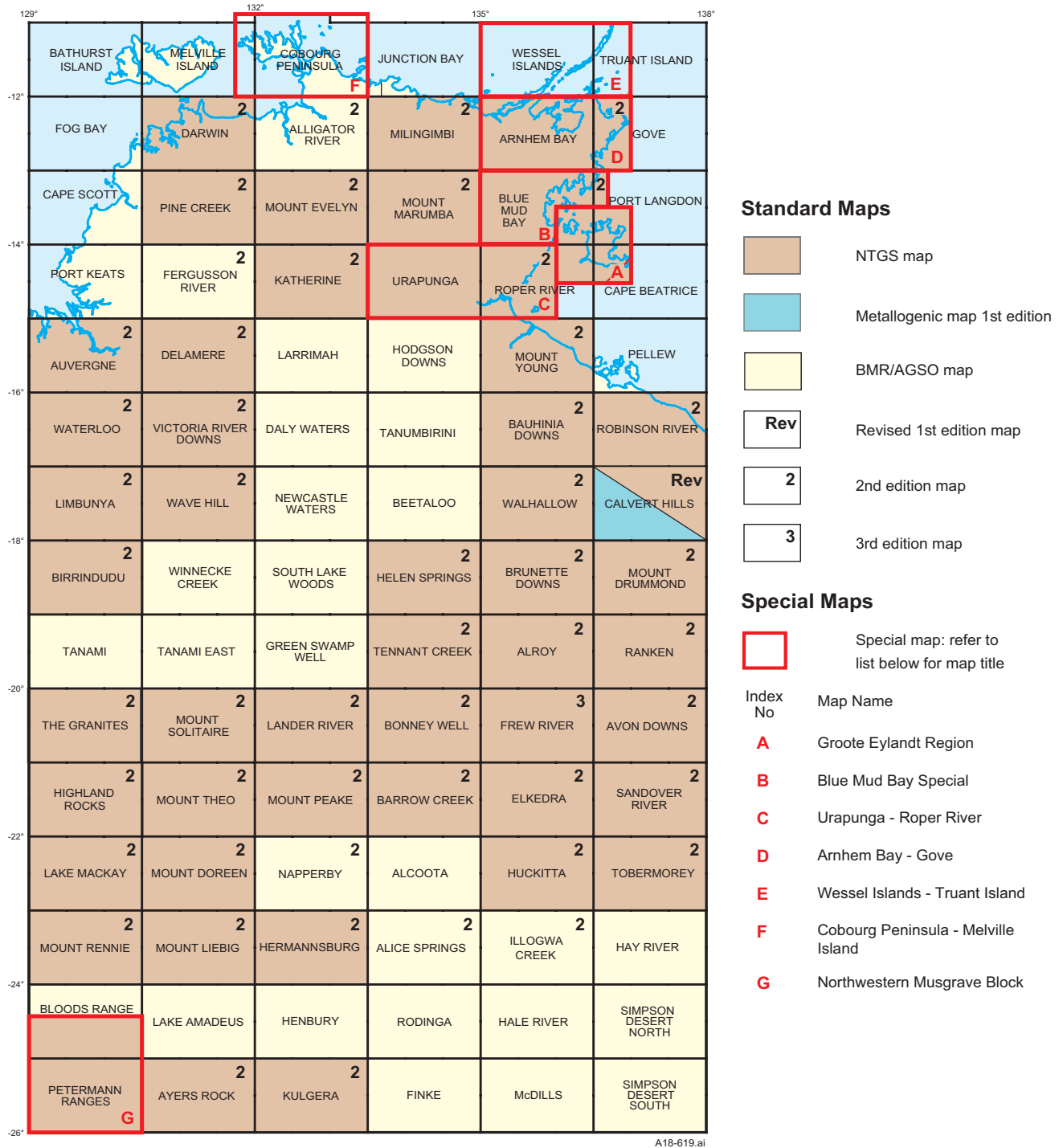
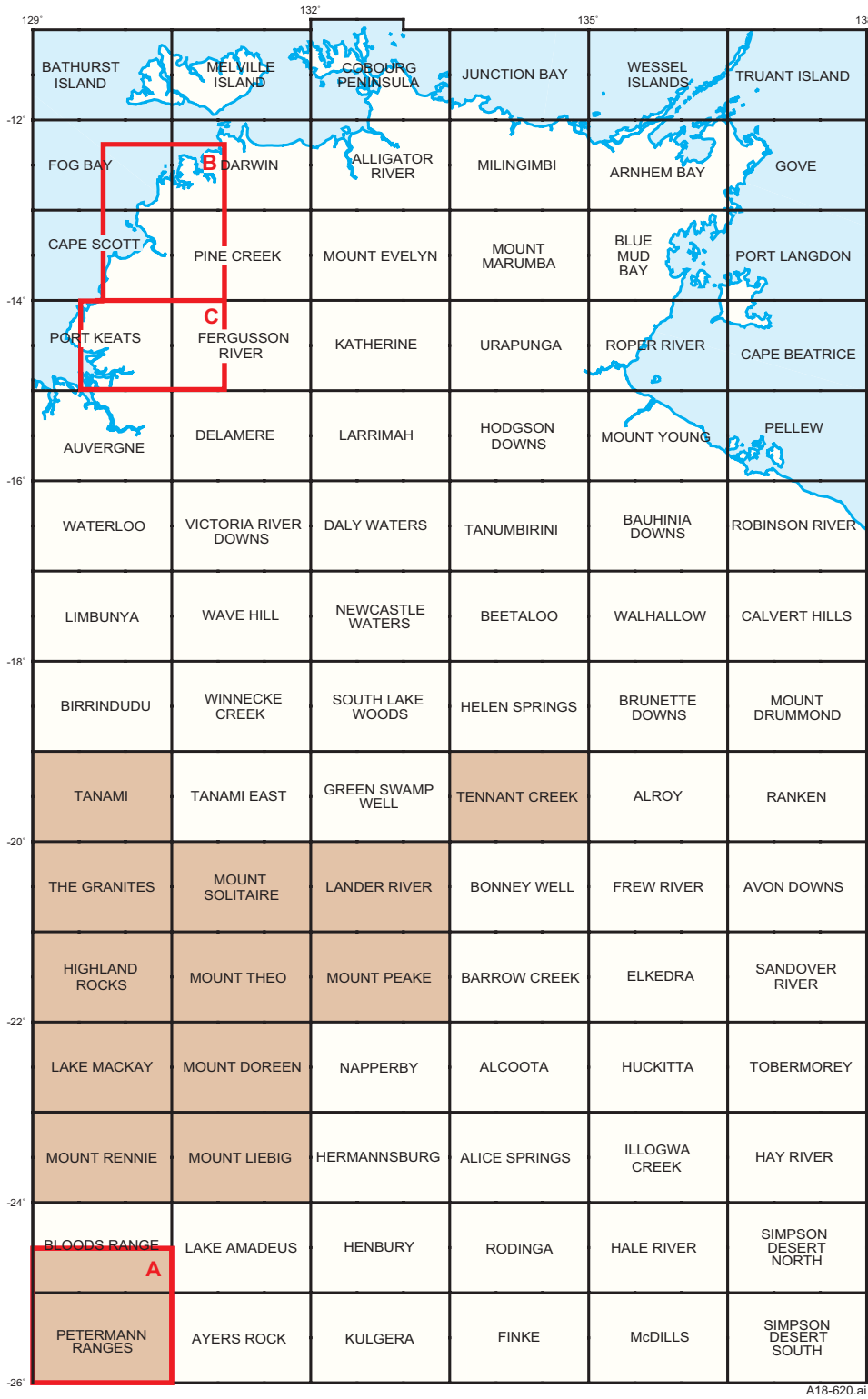




Figure 5. 1:250 000 interpreted geological maps.

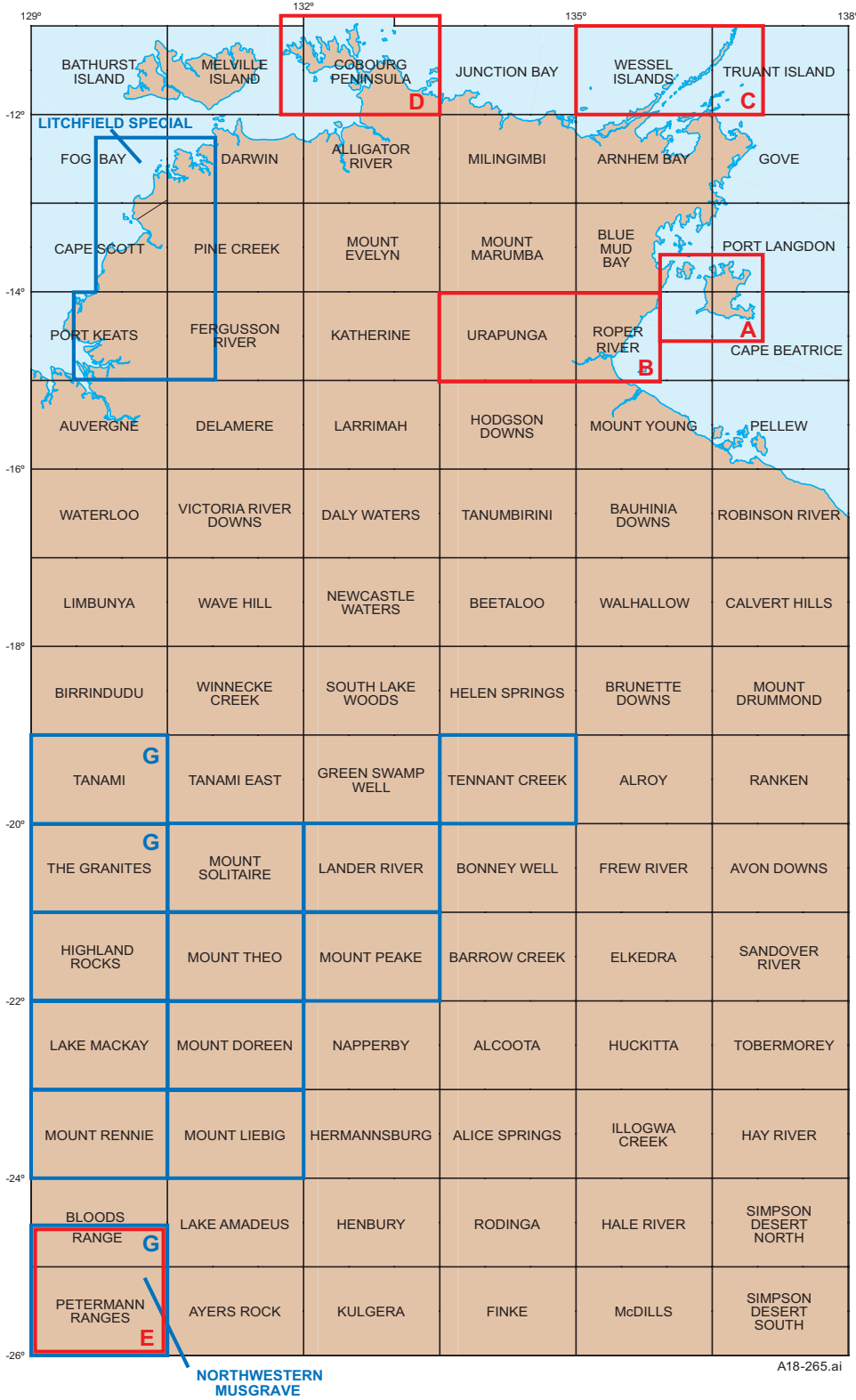


 NTGS Map
 NTGS special map: refer to list below for title

Special Maps

| Index No | Map Name |
|----------|-----------------------------|
| A | Northwestern Musgrave Block |
| B | Litchfield North Special |
| C | Litchfield South Special |

Figure 6. 1:250 000 outcrop and interpreted GIS datasets.



All GIS data is available in MapInfo or ArcGis format and is for current maps (latest edition).

- 1:250 000 outcrop geology
Full attribution
- 1:250 000 outcrop geology
special maps
Full attribution
- A** Groote Eylandt Region
- B** Urapunga - Roper River
- C** Wessel Islands - Truant Island
- D** Cobourg Peninsula - Melville Island
- E** Northwestern Musgrave Block
- 1:250 000 interpreted geology
Full attribution
- G 1:250 000 interpreted geology
Graphic - no attribution

Regional maps – various scales

NTGS also produces occasional regional geological and interpreted geological maps at various scales, the locations of which are shown in **Figures 6** and **7** respectively.

Table 3. Regional geological and interpreted geological maps.

| Map | Year | Scale | GIS data | PDF |
|---|------|-------|----------|-----|
| Tectonostratigraphy of the McArthur Basin | 2001 | 1M | ✓ | ✓ |
| Interpreted geology of the Tennant Region | 2004 | 500k | ✓ | ✓ |
| Geology of the Tennant Region | 2004 | 500k | ✓ | ✓ |
| Integrated interpretation of the geophysics and geology of the Musgrave Block | 2004 | 500k | ✓ | ✓ |
| Geology of the Musgrave Block | 2004 | 500k | ✓ | ✓ |
| Geology of the southern Georgina Basin | 2005 | 500k | ✓ | ✓ |
| Pine Creek Orogen interpreted geology | 2005 | 500k | ✓ | |
| West Amadeus Basin interpreted geology* | 2021 | 500k | ✓ | ✓ |

* includes Explanatory notes

1:2 500 000 Territory-wide maps

Territory-wide geophysical images and geology GIS datasets can be accessed via the NTGS online mapping application, STRIKE (geoscience.nt.gov.au/strike). The images are also available via the Geophysical Image Web Server (GIWS; www.geoscience.nt.gov.au/giws).

Table 4. 1:2 500 000 Territory-wide maps.

| Map | Year | GIS data | ECW image | PDF |
|---|------|----------|-----------|-----|
| Mosaic of 1:250 000 geological maps of the Northern Territory | 2015 | | ✓ | ✓ |
| Geological map of the Northern Territory | 2006 | ✓ | | ✓ |
| Geological regions of the Northern Territory | 2010 | ✓ | | ✓ |
| Regolith map of the Northern Territory | 2006 | ✓ | | ✓ |
| Magnetic map of the Northern Territory | 2020 | | ✓ | ✓ |
| Elevation map of the Northern Territory | 2017 | | ✓ | ✓ |
| Radiometric map of the Northern Territory | 2020 | | ✓ | ✓ |
| Gravity map of the Northern Territory | 2020 | | ✓ | ✓ |
| Relief map of the Northern Territory | 2017 | | ✓ | ✓ |
| Magnetic depths of the Northern Territory | 2008 | | ✓ | ✓ |
| Metallogenic map of the Northern Territory | 2022 | | | ✓ |

Figure 7. Regional geological maps and GIS datasets.

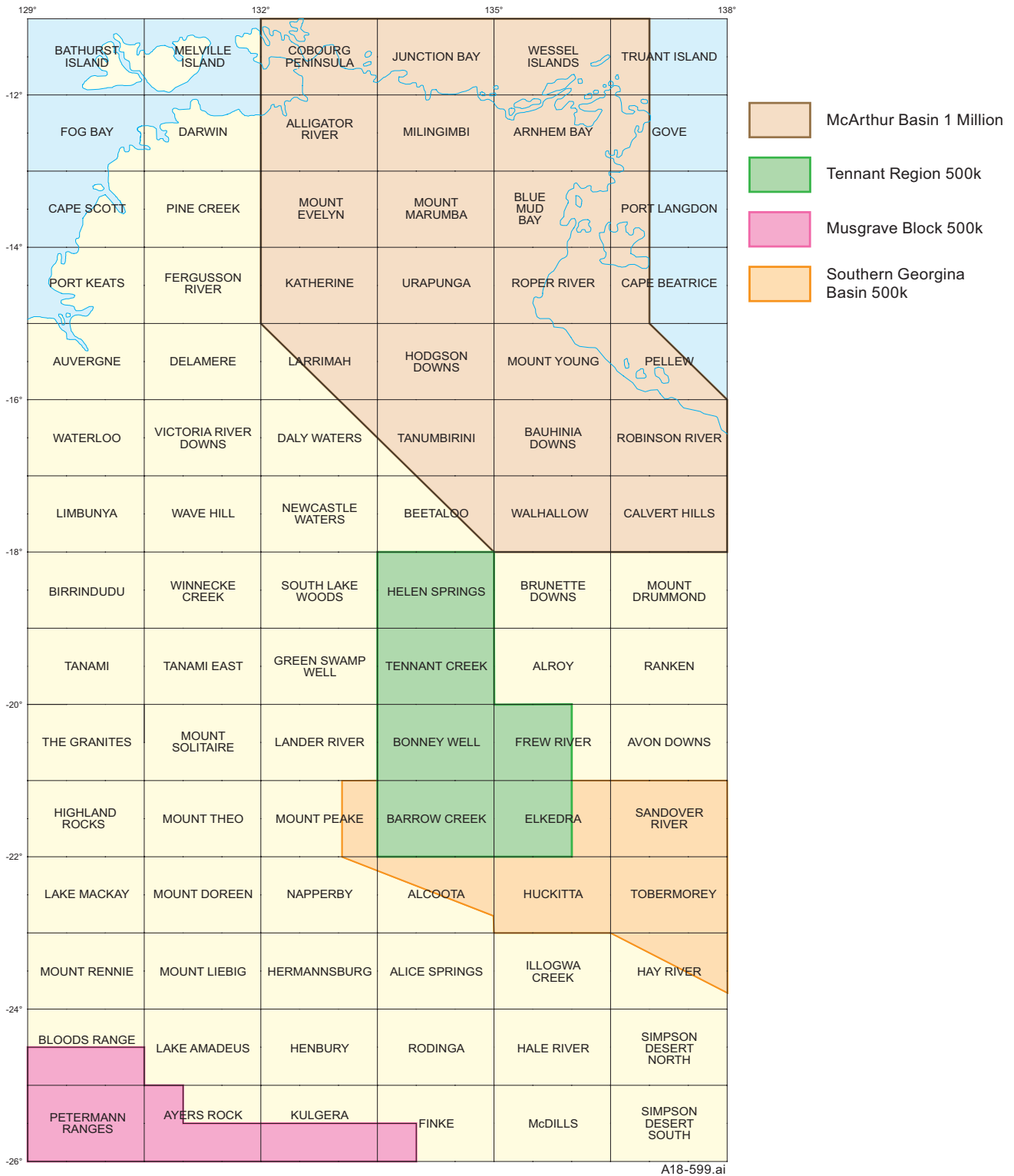
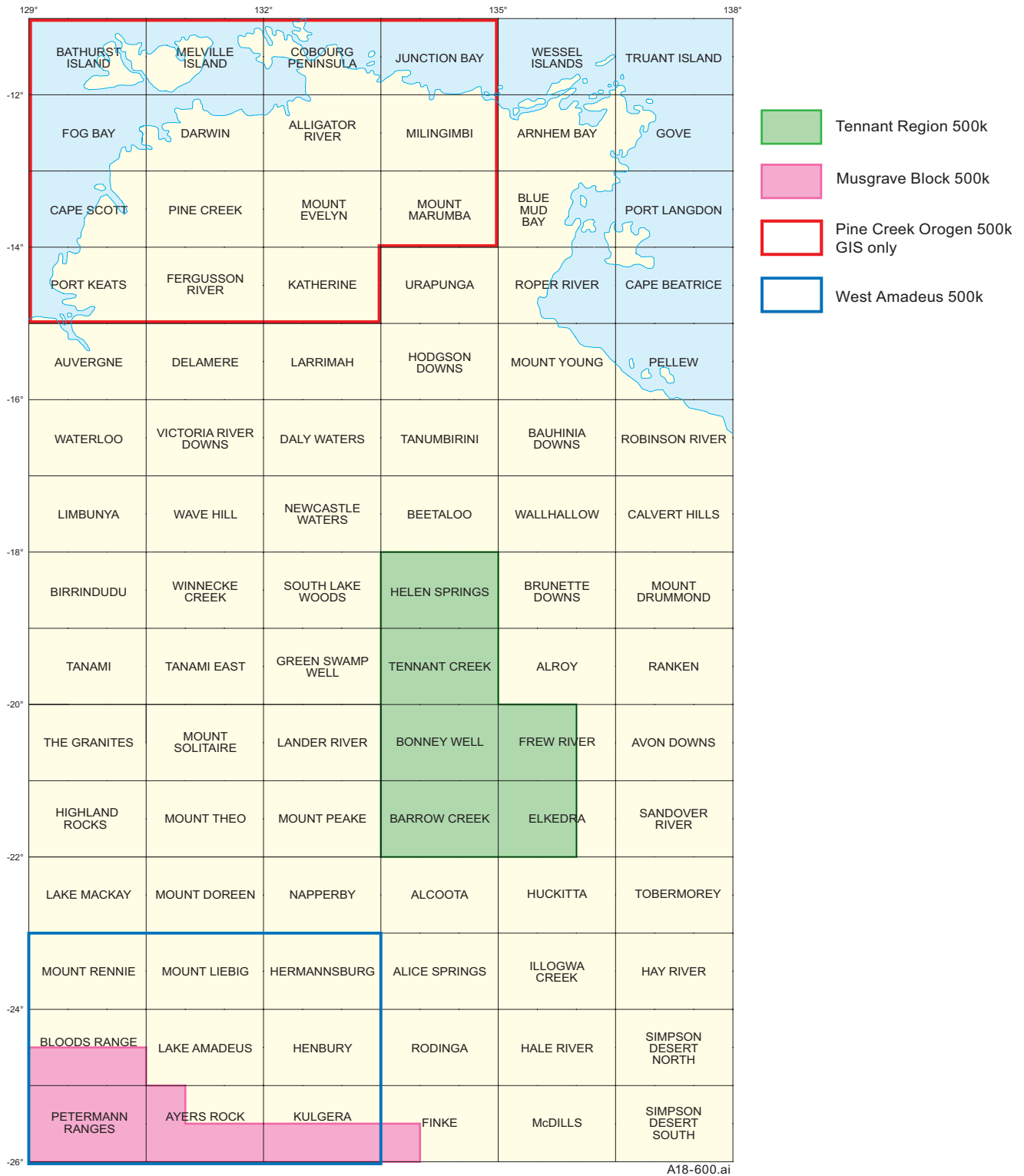


Figure 8. Regional interpreted geological maps and GIS datasets.



REPORT SERIES (ISSN 0814-7477)

The Report series comprises substantial, high-quality geoscientific material, fully formatted to prescribed standards. NTGS Reports cover a wide range of subjects, including geological regions, basin summaries, commodity reviews, and specialist geoscientific studies.

Table 5. NTGS Reports.

| No | Title | Author(s) | Year | Hard copy | Web download |
|----|--|---|------|-----------|--------------|
| 1 | Geology of Keep River National Park | Whitehead BR, Mulder CA | 1985 | ✓ | ✓ |
| 2 | Geology and mining history of the Arltunga goldfield 1887–1985 * | Mackie AW | 1986 | ✓ | ✓ |
| 3 | Geology of Katherine Gorge National Park * | Whitehead BR, Mulder CA | 1988 | ✓ | ✓ |
| 4 | Geology of Kings Canyon National Park * | Bagas L | 1989 | ✓ | ✓ |
| 5 | Geology of the Alice Springs Telegraph Station historical reserve * | Derriman MDJ | 1989 | ✓ | ✓ |
| 6 | Geology of Simpsons Gap National Park * | Wakelin-King GA | 1989 | ✓ | ✓ |
| 7 | Cambrian palaeontology of the Daly Basin | Kruse PD | 1990 | ✓ | ✓ |
| 8 | A contribution of geology, petrology and geochemistry to the Cullen Batholith and related hydrothermal activity responsible for mineralization, Pine Creek Geosyncline, Northern Territory | Bajwah ZU | 1994 | ✓ | ✓ |
| 9 | Cambrian palaeontology of the eastern Wiso and western Georgina Basins | Kruse PD | 1998 | ✓ | ✓ |
| 10 | Atlas of the mineral occurrences and petroleum fields of the Northern Territory | Wygralak AS, Ahmad M | 1999 | | ✓ |
| 11 | Gold deposits of the Northern Territory (Second edition) | Ahmad M, Wygralak AS, Ferenczi PA (Updated by Wygralak AS, Scrimgeour IR) | 2009 | | ✓ |
| 12 | Tectonic and thermal events in the northeastern Arunta Province | Scrimgeour I, Raith J | 2001 | ✓ | ✓ |
| 13 | Iron ore, manganese and bauxite deposits of the Northern Territory | Ferenczi PA | 2001 | | ✓ |
| 14 | Extractive minerals within the outer Darwin area * | Doyle N | 2001 | ✓ | ✓ |
| 15 | Geology of the Musgrave Block, Northern Territory | Edgoose CJ, Scrimgeour IR, Close DF | 2003 | | ✓ |
| 16 | Tin-Tantalum pegmatite mineralisation of the Northern Territory | Frater KM | 2005 | | ✓ |
| 17 | Geology and origin of some Cu-Pb-Zn (-Au-Ag) deposits in the Strangways Metamorphic Complex, Arunta Region, Northern Territory | Hussey KJ, Huston DL, Claoué-Long JC | 2005 | | ✓ |
| 18 | Gold mineral system of the Tanami Region | Wygralak AS, Mernagh, TP, Huston DL, Ahmad M | 2005 | | ✓ |
| 19 | Economic geology of the Rum Jungle Mineral Field. | Ahmad M, Lally JH, McCready AJ | 2006 | | ✓ |
| 20 | Uranium deposits of the Northern Territory | Lally JH, Bajwah ZU | 2006 | | ✓ |
| 22 | Petroleum geology and potential of the onshore Northern Territory, 2014. | Munson TJ | 2014 | | ✓ |

* Includes map

RECORD SERIES (ISSN 1443-1149)

NTGS Records provide geoscientific information on a wide variety of topics. **Table 6** lists the available records; superceded publications have been removed from the list. Prior to 1999, material that today would be published in the Record series was included within the unpublished Geological Survey Technical Report series. The older GS Technical Reports are included in the online library catalogue and can be copied to digital media on request.

Table 6. NTGS Records

| No | Title | Author(s) |
|-------------|--|--|
| 1999 | | |
| 1999-001 | 1998 Huckitta field observations | Scrimgeour IR |
| 1999-002 | MODAT system documentation | Bentley C |
| 1999-004 | Alice Springs fill site | Doyle N |
| 1999-005 | Stuart Highway materials report | Doyle N, Kamphuis P |
| 1999-006 | Victoria-Birrindudu Basins proposed drilling programme | Beier PR, Cutovinos A |
| 1999-009 | Resource drilling for sand and gravel in parts of Litchfield Shire | Bajwah ZU |
| 1999-011 | Seigal 1:100 000 map sheet GIS dataset | |
| 2000 | | |
| 2000-002 | Operations and processing report, Rum Jungle area airborne geophysical survey, NTGS 1999 (flown by WGC, covering parts of Darwin and Pine Creek 1:250 000 map sheets) | World Geoscience Corporation |
| 2000-003 | Operations and processing report, South Lake Woods airborne geophysical survey, NTGS 1999 (flown by Kevron Geophysics, covering parts of South Lake Woods, Newcastle Waters and Beetaloo 1:250 000 map sheets) | Kevron Geophysics |
| 2000-004 | Operations and processing report, Amadeus West airborne geophysical survey, NTGS 1999 (flown by AGS, covering parts of Bloods Range, Lake Amadeus, Henbury, Mt Rennie and Mt Liebig 1:250 000 map sheets) | Australian Geophysical Surveys |
| 2000-005 | Operations and processing report, Bonney Well airborne geophysical survey, NTGS 1999 (flown by AGS, covering parts of Bonney Well, Lander River and Frew River 1:250 000 map sheets) | Australian Geophysical Surveys |
| 2000-008 | Logistics report, Mt Doreen, Mt Liebig and Mackay/Rennie airborne geophysical survey | Australian Geophysical Surveys |
| 2000-009 | Operations and processing report, Victoria River Downs airborne geophysical survey, NTGS 1998 (flown by Kevron Geophysics, covering parts of Auvergne, Delamere, Waterloo and Victoria River Downs 1:250 000 map sheets) | Kevron Geophysics |
| 2000-010 | Annual Geoscience Exploration Seminar (AGES) 2000. Record of abstracts | |
| 2000-011 | Structure of the Woodcutters open pit and implications for mineralisation models | Taylor K |
| 2000-013 | Palaeoproterozoic stratigraphy of the Tanami region: regional correlations and relation to mineralisation – preliminary results | Hendrickx MA, Slater KR, Crispe AJ, Dean AA, Vandenberg LC, Smith J |
| 2000-014 | Tanami region geochemical dataset (MapInfo format) | Mügge A |
| 2000-015 | Carbonatites and related mineral deposits | Wygralak AS |
| 2000-017 | Hydrocarbon prospectivity of the Pedirka Basin, onshore Northern Territory | Ambrose GJ |

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Table 6. NTGS Records (continued).

| No | Title | Author(s) |
|-------------|---|--|
| 2001 | | |
| 2001-003 | Igneous rocks of the Tanami Region | Dean AA |
| 2001-004 | Structural geology of the Tanami Region | Vandenberg LC, Hendrickx MA, Crispe AJ |
| 2001-006 | Annual Geoscience Exploration Seminar (AGES) 2001. Record of abstracts | |
| 2001-007 | Summary of results. Joint NTGS–AGSO age determination program 1999–2001 | Smith J |
| 2001-009 | Northern Territory airborne geophysical survey specifications (4th edition) | Brescianini RF |
| 2001-010 | The geology of the McArthur Basin in Mount Evelyn | Sweet IP |
| 2001-011 | Gold mineralisation of the Tanami region | Wygralak AS, Mernagh TP |
| 2002 | | |
| 2002-001 | Guide to NTGS Authors (2 nd edition) | |
| 2002-003 | Annual Geoscience Exploration Seminar (AGES) 2002. Record of abstracts | |
| 2002-004 | Georgina Basin SEEBASE Project, April–May 2002 | Teasdale J, Pryer L |
| 2002-005 | Stratigraphy, structure and mineralisation, Rum Jungle mineral field | Lally JH |
| 2002-006 | Drillhole completion report 99VRNTGSDD1 and 99VRNTGSDD2, Victoria River Downs 1:250 000 sheet area Victoria Basin, Northern Territory | Dunster JN, Cutovinos A |
| 2002-007 | The Amadeus Basin: essential geochemical data | Marshall T |
| 2002-008 | NTGS Exploration Initiative: 1998–2002 | |
| 2002-009 | The Arunta Province: open file exploration licence drillhole and geochemical data | |
| 2003 | | |
| 2003-001 | Annual Geoscience Exploration Seminar (AGES) 2003. Record of abstracts | |
| 2003-003 | Pine Creek Orogen: field excursion guide. Chief Government Geologists Conference 28 April–2 May 2003 | Ahmad M, Lally JH |
| 2003-004 | Rare earth elements mineralisation in the eastern Arunta Region | Hussey KJ |
| 2003-005 | Georgina Basin stratigraphic drilling and petrography 1999–2002 | Kruse PD |
| 2003-006 | Summary of results. Joint NTGS–GA geochronology project: Tanami Region 2001–2002 | Cross AJ, Claoué-Long JC, Crispe AJ |
| 2004 | | |
| 2004-001 | Annual Geoscience Exploration Seminar (AGES) 2004. Record of Abstracts | |
| 2004-003 | Summary of results. Joint NTGS–GA geochronology project: southern Arunta Region | Cross A, Claoué-Long JC, Scrimgeour IR, Close DF, Edgoose CJ |
| 2004-004 | Summary of results. Joint NTGS–GA geochronology project: August 2003–December 2004 | Worden KE, Claoué-Long JC, Scrimgeour, IR, Lally JH |
| 2004-006 | Geology and palaeontology of the Ord Basin | |
| 2004-007 | Drilling manual | Dunster JN |
| 2004-008 | A review of source rocks in the Amadeus Basin | Marshall TR |
| 2004-009 | Mineral commodities of the Northern Territory: compilation of seven 1989 reports prepared by Eupene Exploration Enterprises Pty Ltd | |
| 2004-010 | Amadeus Basin SEEBASE™ Project. September 2004 | Munroe S, Ham A, Griffin S |
| 2004-011 | Amadeus Basin seismic interpretation project | Young Geoconsultants Pty Ltd |

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Table 6. NTGS Records (continued).

| No | Title | Author(s) |
|-------------|--|--|
| 2005 | | |
| 2005-001 | Annual Geoscience Exploration Seminar (AGES) 2005. Record of Abstracts | |
| 2005-003 | Summary of results. Joint NTGS–GA geochronology project: northern Arunta and Tanami regions, 2000–2003 | Cross A, Claoué-Long JC, Scrimgeour IR, Crispe AJ, Donnellan N |
| 2005-004 | Importance of fault seal and strategic assessment of future petroleum exploration potential of the Amadeus Basin. A collaborative evaluation by the Northern Territory Geological Survey, FaultSeal Pty Ltd and Executive Insight Pty Ltd, version 2, May 2005 | Warburton J, Murray T, Marshall T |
| 2005-005 | Central Australian Basins Symposium 2005. Amadeus Basin excursion guide | Edgoose CJ, Flottmann T |
| 2005-006 | Summary of results. Joint NTGS–GA geochronology project: Rum Jungle, eastern Arunta Region and basement to southern Georgina Basin 2001–2003 | Cross A, Claoué-Long JC, Scrimgeour IR, Ahmad M, Kruse PD |
| 2006 | | |
| 2006-001 | Pine Creek Drilling Report 2004 | Doyle N, Ahmad M, Ferenczi PA |
| 2006-002 | Annual Geoscience Exploration Seminar (AGES) 2006. Record of abstracts | |
| 2006-003 | Northern Territory of Australia, Onshore hydrocarbon potential, 2006 | Ambrose GJ |
| 2006-004 | Progress under Building the Territory’s Resource Base from July 2003 to March 2006 | Dunster JN |
| 2006-005 | Summary of results. Joint NTGS–GA geochronology project: Pine Creek Orogen and Arunta Region January–June 2004 | Worden KE, Claoué-Long JC, Scrimgeour IR, Doyle N |
| 2006-006 | Summary of results. Joint NTGS–GA geochronology project: Pine Creek Orogen, Tanami Region, Arunta Region and Amadeus Basin, July–December 2004 | Worden KE, Claoué-Long JC, Scrimgeour IR |
| 2007 | | |
| 2007-001 | Annual Geoscience Exploration Seminar (AGES) 2007. Record of abstracts | |
| 2007-002 | Geology and volcanology of the Ware Group and Winnecke Granophyre, northern Tanami Region, Northern Territory. | Orth K |
| 2007-003 | Phosphate testing of waterbores and diamond drillcores in the Georgina, Wiso and Daly basins, Northern Territory. | Khan M, Ferenczi PA, Ahmad M, Kruse PD |
| 2007-004 | Geothermal energy potential of the Northern Territory. (note: GIS component [2.03 Gb] available on digital media only) | Beardsmore G |
| 2007-005 | Bringing forward discovery. Review of the NT Exploration Investment Attraction programs 1999–2007 and recommendations for future strategies and work | ACIL–Tasman Pty Ltd |
| 2008 | | |
| 2008-001 | Georgina Basin stratigraphic drilling 2002–2006 and petrography 2000–2007 | Kruse PD |
| 2008-002 | Annual Geoscience Exploration Seminar (AGES) 2008. Record of abstracts | |
| 2008-003 | Summary of results. Joint NTGS–GA geochronology: Tanami Region, Arunta Region, Pine Creek Orogen and Halls Creek Orogen correlatives, January 2005–March 2007 | Worden KE, Carson CJ, Close DF, Donnellan N, Scrimgeour IR |
| 2008-004 | Composition, provenance and timing of hydrothermal fluids in the Tanami–Arunta regions | Wygalak AS, Mernagh TP |
| 2008-005 | Report on NBDH37, a cored diamond drillhole at Nolans Bore P-REE-Th-U deposit, Reynolds Range, Arunta Region | Hussey KJ |

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Table 6. NTGS Records (continued).

| No | Title | Author(s) |
|-------------|---|--|
| 2009 | | |
| 2009-001 | Summary of results. Joint NTGS–GA geochronology project: Central and eastern Arunta Region and Pine Creek Orogen, July 2006–May 2007. | Carson CJ, Claoué-Long J, Stern R, Close DF, Scrimgeour IR, Glass LM |
| 2009-002 | Annual Geoscience Exploration Seminar (AGES) 2009. Record of abstracts | |
| 2009-003 | Progress report on <i>Bringing Forward Discovery</i> . Report on activities and achievements in the first two years of the initiative, 1 July 2007–30 June 2009 | Scrimgeour IR, Rogers TC, Close DF, Mutch LM |
| 2010 | | |
| 2010-001 | Summary of results. NTGS laser U–Pb and Hf geochronology project: Pine Creek Orogen, Murphy Inlier, McArthur Basin and Arunta Region, July 2007–June 2008. | Hollis JA, Beyer EE, Whelan JA, Kemp AIS, Scherstén A, Greig A |
| 2010-002 | Annual Geoscience Exploration Seminar (AGES) 2010. Record of abstracts | |
| 2010-003 | Geology, volcanology and mineral potential of the Cliffdale and Seigal volcanics, Calvert Hills 1:250 000 geological mapsheet, SE 53-09, Northern Territory. | Orth K |
| 2010-004 | Summary of results. Joint NTGS–GA geochronology project: East Arunta Region, Pine Creek Orogen and Murphy Inlier, July 2007–June 2009. | Carson CJ, Hollis JA, Glass LM, Close DF, Whelan JA, Wygralak W |
| 2010-005 | Palaeoproterozoic island-arc-related rocks of the Litchfield Province, western Pine Creek Orogen, Northern Territory. | Glass LM |
| 2010-006* | Drillhole report for 09CPD002, Irindina Province, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 2–7 | Smith BR |
| 2010-007* | Drillhole report for MURD002, Murphy Inlier, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 2–7. | Smith BR, Huntington JF |
| 2010-008* | Drillhole report for TDD01, Tennant Region, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 2–7. | Smith BR, Huntington JF |
| 2010-009* | Drillhole report for CHDDH56, Pine Creek Orogen, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 2–7. | Smith BR |
| 2010-010* | Drillhole report for CHDDH77, Pine Creek Orogen, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 2–7. | Smith BR |
| 2010-011* | Drillhole report for CHDDH100, Pine Creek Orogen, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 2–7. | Smith BR |
| 2010-012* | Drillhole report for CHDDH102, Pine Creek Orogen, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 2–7. | Smith BR |
| 2010-013* | Drillhole report for LBD1, Birrindudu Basin, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 2–7. | Smith BR, Huntington JF |
| 2010-014* | Drillhole report for Jamison No.1, McArthur Basin, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 2–7. | Smith BR |
| 2010-015 | Well completion reports for NTGS stratigraphic drillholes LA05DD01 and BR05DD01, southwestern Amadeus Basin | Ambrose GJ, Dunster JD, Munston TJ, Edgoose CE |
| 2011 | | |
| 2011-001* | Drillhole report for MURD013, Murphy Inlier, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 2–7. | Smith BR |
| 2011-003 | Annual Geoscience Exploration Seminar (AGES) 2011. Record of abstracts | |

* Record includes data; only pdf report available online

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Table 6. NTGS Records (continued).

| No | Title | Author(s) |
|-------------|---|--|
| 2012 | | |
| 2012-001 | Diamond exploration and prospectivity of the Northern Territory | Hutchison MT |
| 2012-002 | Annual Geoscience Exploration Seminar (AGES) 2012. Record of abstracts | |
| 2012-003* | JSU Ngalia Basin Uranium Mineral System Project. CSIRO National Research Flagships, Minerals Down Under. | Schmid S, Foss C, Hill J, Quigley M, Schaub P, Cleverley J, Robinson J |
| 2012-004* | JSU – ERA Ranger Mineral System Project Final Report. CSIRO National Research Flagships, Minerals Down Under. | Potma W, Fisher L, Schaub P, Cleverley J, Corbel S, Lau I, Phang C, Hough R |
| 2012-005 | National Geochemical Survey of Australia: Interpretation of the selected Northern Territory Data. | Wygralak AS |
| 2012-006 | Annual Geoscience Exploration Seminar (AGES) 2012. Record of presentations | |
| 2012-007 | Summary of results. NTGS laser ablation ICPMS and SHRIMP U–Pb, Hf and O geochronology project: Pine Creek Orogen, Arunta Region and McArthur Basin, July 2008–May 2011. | Beyer EE, Hollis JA, Whelan JA, Glass LM, Donnellan N, Yaxley G, Armstrong R, Allen C, Scherstén A |
| 2012-008 | Summary of results. Joint NTGS–GA geochronology project: Arunta Region, Davenport Province and Pine Creek Orogen.. | Kositcin N, Carson CJ, Hollis JA, Glass LM, Close DF, Whelan JA, Webb G, Donnellan N |
| 2012-009* | Drillhole report for LA05DD01, Amadeus Basin, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 3–7. | Smith BR |
| 2013 | | |
| 2013-001 | Annual Geoscience Exploration Seminar (AGES) 2013. Record of abstracts. | |
| 2013-002 | Annual Geoscience Exploration Seminar (AGES) 2013. Presentations. | |
| 2013-003 | Summary of results. Joint NTGS–GA geochronology project: Central and eastern Arunta Region, January 2008 – June 2011. | Bodorkos S, Beyer EE, Edgoose CJ, Whelan JA, Webb G, Vandenberg LC, Hallett L |
| 2013-004 | Summary of results. Joint NTGS–GA geochronology project: Arunta Region, Ngalia Basin, Tanami Region and Murphy Province, July 2011–June 2012. | Kositcin N, Beyer EE, Whelan JA, Close DF, Hallett L, Dunkley DJ |
| 2013-005 | Summary of NTGS activities and achievements, 2007–2012. | |
| 2013-007* | Drillhole report for BR05DD01, Amadeus Basin, Northern Territory: National Virtual Core Library NTGS Node: HyLogger 3–7. | Smith BR |
| 2014 | | |
| 2014-001 | Annual Geoscience Exploration Seminar (AGES) 2014. Record of abstracts. | |
| 2014-002 | Zircon LA–ICPMS Hf and SIMS O isotopic data for granitic gneiss of the Billabong Complex, Tanami Region. | Whelan JA, Woodhead JD, Cliff J |
| 2014-003 | Annual Geoscience Exploration Seminar (AGES) 2014. Presentations. | |
| 2014-005 | Summary of results. Joint NTGS–GA geochronology project: Amadeus Basin, Arunta Region and Murphy Province, July 2012–June 2013. | Kositcin N, Whelan JA, Hallett L, Beyer EE |
| 2014-006 | Stratigraphic drilling report for the TANAMI and THE GRANITES 1:250 000 map areas, Northern Territory. | Vandenberg L, Hendrickx M, Crispe A, Dean A, Khan M, Slater K |
| 2014-007 | Meteorites and impact structures in the Northern Territory | Dunster JN, Haines PW, Munson TJ |
| 2014-008 | Summary of results. Joint NTGS – GA SHRIMP geochronology project: Arunta Region, July 2013 – June 2014. | Kositcin N, Beyer EE, Whelan JA |

* Record includes data; only pdf report available online

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Table 6. NTGS Records (continued).

| No | Title | Author(s) |
|-------------|--|---|
| 2015 | | |
| 2015-001 | Summary of results. Joint NTGS–GA geochronology project: Amadeus Basin, July 2013–June 2014. | Kositcin N, Normington V, Edgoose CJ |
| 2015-002 | Annual Geoscience Exploration Seminar (AGES) 2015. Record of abstracts. | |
| 2015-003 | Annual Geoscience Exploration Seminar (AGES) 2015. Presentations. | |
| 2015-004 | Methodology for shale analysis of onshore basins, Northern Territory: a compilation of analytical methodologies used by Weatherford Laboratories (Australia) Pty Ltd | Revie D |
| 2015-005 | NTGS LA–ICPMS program: zircon Hf isotope characteristics of Salthole Gneiss, Aileron Province, Arunta Region | Whelan JA, Armstrong RA |
| 2015-006 | Sedimentological review of the Barney Creek Formation in drillholes LV09001, BJ2, McA5, McArthur Basin | Schmid S |
| 2015-007 | Summary of results. Joint NTGS–GA geochronology project: Arunta Region, July 2014–June 2015 | Kositcin N, Reno BL, Whelan JA |
| 2015-008 | Summary of results. Joint NTGS–GA geochronology project: McArthur Basin, July 2014–June 2015 | Kositcin N, Whelan JA, Edgoose CJ |
| 2015-009 | Summary of results. NTGS laser ablation ICPMS U–Pb and Hf geochronology project: selected samples from NAPPERBY 1:250 000 mapsheet area, Arunta Region, July 2010 – January 2012 | Beyer EE, Allen CM, Armstrong R, Woodhead JD |
| 2015-010 | Summary of results. Joint NTGS–GA geochronology project: Arnhem Province, July 2014 – June 2015 | Kositcin N, Kraus S, Whelan JA, Reno BL |
| 2016 | | |
| 2016-001 | Annual Geoscience Exploration Seminar (AGES) 2016. Presentations | |
| 2016-002 | Summary of results. NTGS laser ablation ICP–MS in situ zircon and baddeleyite geochronology project: Mount Peake Gabbro, Arunta Region | Beyer EE, Donellan N, Meffre S, Thompson JM |
| 2016-003 | Sedimentary characterisation of the Wilton package, greater McArthur Basin, Northern Territory | Munson TJ |
| 2016-004 | Summary of results. NTGS laser ablation ICP–MS in situ monazite and xenotime geochronology project: Arunta Region, Jervois Range 1:100 000 mapsheet | Reno BL, Whelan JA, Weisheit A, Kraus S, Beyer EE, Thompson J, Meffre S |
| 2016-005 | Summary of results. NTGS LA–ICP–MS U–Pb program: Amadeus Basin, July 2014–June 2015 | Normington VJ, Edgoose CJ, Donellan N, Thompson J, Meffre S |
| 2016-006 | Summary of results. Re–Os molybdenite dating of W–Mo mineralisation in the Barrow Creek pegmatite field, Barrow Creek, Aileron Province | McGloin MV, Creaser RA |
| 2017 | | |
| 2017-001 | Shale analysis methodology of the greater McArthur Basin shale study: a compilation of analytical methodologies used by Weatherford Laboratories (Australia) Pty Ltd | Revie D |
| 2017-002 | Unconventional petroleum resources of the Roper Group, McArthur Basin | Revie D |
| 2017-003 | Kyalla and middle Velkerri Resource Assessment: Gorrie, Beetaloo, OT Downs, and Broadmere Sub-basins. Study Project No. AB-74329 | Weatherford Laboratories |
| 2017-004 | Nature and prospectivity of high-heat-producing granites of the central Aileron Province | Beyer EE |
| 2017-005 | Annual Geoscience Exploration Seminar (AGES) 2017. Presentations | |
| 2017-006 | Summary of results. NTGS LA–ICP–MS geochronology project: Jervois mineral field, Arunta Region | McGloin MV, Whelan JA, Beyer EE, Thompson JM, Thompson JA, Meffre S |
| 2017-007 | Summary of results. NTGS laser ablation ICP–MS in situ monazite geochronology project: Arnhem Province, Gove and Blue Mud Bay 1:250 000 map sheets | Reno BL, Whelan JA, Kraus S, Thompson JM, Meffre S |

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Table 6. NTGS Records (continued).

| No | Title | Author(s) |
|-------------------------|---|--|
| 2017 (continued) | | |
| 2017-008 | Summary of results. Joint NTGS–GA geochronology project: Arnhem Province, July 2014–June 2016 | Kositcin N, Whelan JA, Reno BL, Kraus S, Beyer EE |
| 2017-009 | NTGS laser ablation ICP–MS in situ zircon petrochronology project: Arnhem Province, GOVE 1:250 000 mapsheet, July 2014–June 2016 | Reno BL, Whelan JA, Kraus S, Thompson JM, Meffre S |
| 2017-010 | Summary of Results. Re–Os molybdenite dating of the Johnnies Reward prospect, Strangways Range, Aileron Province | McGloin MV, Creaser RA |
| 2017-011 | Summary of results. Joint NTGS–GA geochronology project: Aileron Province, July 2016–June 2017 | Kositcin N, McGloin MV |
| 2017-012 | Summary of results. Joint NTGS–GA geochronology project: greater McArthur Basin, July 2016–June 2017 | Kositcin N, Munson TJ, Whelan JA |
| 2017-014 | Summary of results. Re–Os molybdenite dating of the Mount Hardy deposit, Aileron Province | McGloin MV, Creaser RA |
| 2017-015 | Revised stratigraphy of drillholes CPDD001, CPDD002 and CPDD003, Pipeline Prospect, northeast Amadeus Basin | Normington VJ |
| 2018 | | |
| 2018-001 | Summary of results. NTGS laser ablation ICP–MS U–Pb–Hf geochronology project: selected samples from Jervois Range 1:100 000 and TOBERMOREY 1:250 000 mapsheets, Aileron and Irindina provinces, January 2014 – December 2016 | Beyer EE, Reno BL, Weisheit A, Whelan JA, Thompson JM, Meffre S, Woodhead JD |
| 2018-002 | Annual Geoscience Exploration Seminar (AGES) 2018. Presentations and posters | |
| 2018-003 | NTGS laser ablation ICP–MS in situ zircon petrochronology project: Aileron Province, JINKA and DNEIPER 1:100 000 mapsheets | Reno BL, Beyer EE, Thompson JM, Meffre S |
| 2018-004 | Summary of Results. NTGS LA–ICP–MS geochronology project: Nimbuwah Domain, Pine Creek Orogen, December 2015 | Whelan JA, Thompson JM, Meffre S |
| 2018-005 | Summary of results. Joint NTGS–GA geochronology project: Aileron Province, July 2015–June 2016 | Kositcin N, Reno BL, Beyer EE |
| 2018-006 | Stratigraphic subdivision of the Velkerri Formation, Roper Group, McArthur Basin, Northern Territory | Munson TJ, Revie D |
| 2018-007 | Summary of results. NTGS laser ablation ICP–MS U–Pb and Lu–Hf geochronology project: Roper Group (McArthur Basin), overlying ungrouped units (Beetaloo Sub-basin), Renner Group (Tomkinson Province), and Tijunna Group (Birrindudu Basin). | Munson TJ, Thompson JM, Zhukova I, Meffre S, Beyer EE, Woodhead JD, Whelan JA |
| 2018-008 | Revised Neoproterozoic stratigraphy in the Mount Conner area, Amadeus Basin, Northern Territory | Edgoose CJ, Normington VJ, Haines PW, Allen HJ |
| 2018-009 | Summary of results. Joint NTGS–GA geochronology project: Base metal and tungsten mineralisation, and skarn alteration in the Aileron Province, July 2017–June 2018 | Kositcin N, McGloin MV, Reno BL, Weisheit A, Beyer EE, |
| 2018-010 | Summary of results. Joint NTGS – GA geochronology project: Amadeus Basin, July 2017–June 2018 | Kositcin N, Normington VJ, Edgoose CJ |
| 2018-011 | Summary of results. NTGS LA–ICP–MS U–Pb geochronology project: selected samples from the central Amadeus Basin, July 2014 – June 2016 | Normington VJ, Donnellan N, Thompson JM, Meffre S |
| 2018-012 | Summary of results. NTGS LA–ICP–MS geochronology project: Jervois mineral field, Bonya Hills and Jinka Plain in HUCKITTA, Aileron Province, May 2014–December 2015 | McGloin MV, Whelan JA, Reno BL, Beyer EE, Weisheit A, Thompson JM, Meffre S, Zhukova I |
| 2018-013 | Constraints on the timing of sulfide breccia formation at the Grapple Cu–Au–Ag–Zn prospect, central Australia: <i>in situ</i> LA–ICP–MS monazite geochronology of a new Proterozoic greenfields discovery | Reno BL, McGloin MV, Meffre S |

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Table 6. NTGS Records (continued).

| No | Title | Author(s) |
|-------------|--|---|
| 2019 | | |
| 2019-001 | Using tourmaline to indicate base metal and tungsten mineralising processes in the Jervois mineral field and Bonya Hills, Aileron Province | McGloin MV, Weisheit A, Trumbull RB, Maas R |
| 2019-002 | Summary of results. Joint NTGS–GA geochronology project: greater McArthur Basin, July 2017–August 2018 | Kositcin N, Munson TJ |
| 2019-003 | Annual Geoscience Exploration Seminar (AGES) 2019. Presentations and posters | |
| 2019-004 | Summary of Results. NTGS LA–ICP–MS U–Pb geochronology project: selected samples from HENBURY 1:250 000 mapsheet, Amadeus Basin, July 2016–June 2017 | Normington VJ, Donnellan N, Orth K, Thompson JM, Meffre S |
| 2019-005 | Summary of Results NTGS LA–ICP–MS Hf program: Amadeus Basin, July 2013–June 2015 | Normington VJ, Beyer EE, Whelan JA, Edgoose CJ, Woodhead JD |
| 2019-006 | Summary of results. ⁴⁰ Ar/ ³⁹ Ar step-heating muscovite dating, Wolfram Hill (MOUNT DOREEN) tungsten-copper deposit, Aileron Province | McGloin MV, Matchan E |
| 2019-007 | Summary of results. NTGS LA–ICP–MS U–Pb–Hf program, McArthur Basin, July 2015–June 2016. | Whelan JA, Munson TJ, Weisheit A, Woodhead JD, Thompson J, Meffre S |
| 2019-008 | Summary of results. NTGS laser ablation ICP–MS in situ monazite geochronology project: Constraining the timing of mineralisation and deformation at the Johnnies Reward prospect, Oonagalabi, and Home of Bullion deposits of the Aileron Province | Reno BL, McGloin MV, Thompson J, Meffre S |
| 2019-009 | Summary of results. Re–Os molybdenite dating of the Explorer 27 copper–molybdenum prospect of the Tennant Creek mineral field, the Pioneer deposit of the Hatches Creek tungsten field, and the Hill of Leaders and North Curtis prospects of the Mosquito Creek tungsten field, Warramunga Province | McGloin MV, Creaser RC |
| 2019-010 | Summary of results. Re–Os molybdenite dating of Hit or Miss deposit, Hatches Creek tungsten field, Warramunga Province | McGloin MV, Huston DH, Norman M |
| 2019-011 | Summary of results. Joint NTGS–GA geochronology project: Cu–Au–Ag–Zn mineralisation in MOUNT RENNIE, Aileron Province, March–September 2018 | Kositcin N, McGloin MV, Reno BL, Beyer EE |
| 2019-013 | Summary of Results. NTGS LA–ICP–MS U–Pb geochronology project: Detrital zircon U–Pb geochronology of the Parke Siltstone, HENBURY 1:250 000 mapsheet, Amadeus Basin | Verdel C, Edgoose CJ, Donnellan N, Huang H |
| 2019-014 | Structural evolution of basement and basin rocks in the Jervois Range Special 1:100 000 mapsheet | Weisheit A |
| 2019-015 | Definition of the Beetaloo Sub-basin. | Williams B |
| 2020 | | |
| 2020-001 | Summary of results. Joint NTGS–GA geochronology project: Aileron and Irindina provinces, Jinka and Dneiper 1:100 000 mapsheets, 2019 | Kositcin N, Reno BL |
| 2020-002 | Summary of results. Joint NTGS–GA geochronology project: Balbirini Dolostone, southern McArthur Basin, June 2019–September 2019 | Kositcin N, Munson TJ |
| 2020-003 | Annual Geoscience Exploration Seminar (AGES) 2020. Presentations and posters | |
| 2020-004 | Summary of results. NTGS in situ (U Th)– Pb monazite geochronology project: Constraining the chronologic history of the Aileron Province in the Delny Shear Zone, Dneiper 1:100 000 mapsheet | Reno BL, Weisheit A, Goemann K |
| 2020-005 | Sulfide δ ³⁴ S composition of Palaeoproterozoic mineralisation in the Aileron Province, central Australia: an igneous sulfur source? | Simmons J, McGloin MV |
| 2020-006 | Summary of results. Joint NTGS–GA geochronology project: western Amadeus Basin, July 2019–June 2020 | Beyer E, Verdel C, Normington VJ, Magee C |
| 2020-007 | Revised stratigraphy for NTGS stratigraphic drillholes LA05DD01 and BR05DD01, western Amadeus Basin, Northern Territory | Normington VJ, Allen HJ, Edgoose CJ, Haines PQ, Grey K |

Table continued on next page

Table 6. NTGS Records (continued).

| No | Title | Author(s) |
|-------------------------|--|---|
| 2020 (continued) | | |
| 2020-008 | Summary of results. NTGS laser ablation ICP–MS <i>in situ</i> monazite geochronology project: Constraining the chronologic history of the Delny and Entire Point shear zones, and the timing of metamorphism in the Aileron and Irindina provinces, HUCKITTA | Reno BL, Weisheit A, Beyer EE, Thompson JM, Meffre S |
| 2020-009 | Summary of results. NTGS laser ablation ICP–MS U–Pb geochronology project: Habgood and Balma groups (McArthur Basin), Namerinni Group (Tomkinson Province), and unnamed units from drillholes NDW12-01 and Jamison-1, July 2016–May 2019 | Munson TJ, Thompson JM, Meffre S, Orth K |
| 2020-010 | Characterisation of the Neoproterozoic succession of the northeast Amadeus Basin | Normington VJ, Donnellan N, |
| 2020-011 | Summary of results: central and western Aileron Province | Kositcin N, Scrimgeour I |
| 2020-012 | Revised stratigraphy for drillhole BL002, northern Amadeus Basin | Normington VJ |
| 2021 | | |
| 2021-001 | Summary of results. Joint NTGS–GA geochronology project: Constraining cooling and deformation in the eastern Aileron Province through ⁴⁰ Ar/ ³⁹ Ar step-heating of hornblende, muscovite, and biotite | Reno BL, Fraser GL |
| 2021-002 | Summary of results. Joint NTGS–GA geochronology project: western Amadeus Basin, July–August 2020 | Kositcin N, Verdel C, Normington VJ, Simmons JM |
| 2021-003 | Summary of results. Joint NTGS–GA geochronology project: Rover mineral field, Warramunga Province, January–June 2020 | Cross A, Huston D and Farias P |
| 2021-004 | Annual Geoscience Exploration Seminar (AGES). Presentations and posters | |
| 2021-005 | Lithology and petrology of the Rover field, Warramunga Province: Selected unmineralised drill core. | Farias PG |
| 2021-006 | Lithology and petrology of drillhole TDD001, Bluebush area, Warramunga Province. | Farias PG |
| 2021-007 | Summary of results. Laser ablation ICP–MS <i>in situ</i> apatite geochronology of the Molyhil tungsten–molybdenum deposit and Prospect D nickel–copper prospect | Reno BL, McGloin MV, Thompson JM and Meffre S |
| 2021-008 | Summary of results. Joint NTGS–GA geochronology project: Aileron Province, Jinka and Dneiper 1:100 000 mapsheets, 2020 | Kositcin N, Beyer EE and Reno BL |
| 2021-009 | Summary of results. NTGS LA–ICP–MS Hf program: Amadeus Basin, 2015 | Verdel C and Woodhead JD |
| 2021-010 | X-Ray Diffraction (XRD) data release of shales from the greater McArthur Basin | Revie D and Jarrett AJM |
| 2022 | | |
| 2022-001 | Epigenetic copper and tungsten mineralisation in the Aileron Province, central Australia: examples from Molyhil, Bonya Hills, and the Jervois mineral field | McGloin MV and Weisheit A |
| 2022-002 | Summary of results. Joint NTGS–GA geochronology project: Crystalline basement intersected by the Mount Kitty-1 and Magee-1 drillholes south of Alice Springs, March 2021 | Kositcin N, Verdel C and Edgoose C |
| 2022-003 | Summary of results. Laser ablation ICP–MS <i>in situ</i> apatite geochronology of the base metal and copper–gold–bismuth deposits of the Rover field, and the copper–nickel–chromium mineralisation of the Bluebush area | Farias PG, Reno BL, Whelan JA and Danyushevsky LV |
| 2022-004 | Annual Geoscience Exploration Seminar (AGES). Presentations and posters | |
| 2022-005 | Summary of results. Joint NTGS–GA geochronology project: Rover mineral field, Warramunga Province, July–December 2020 | Cross AJ, Farias PG and Huston DL |
| 2022-006 | Atlas of spectral reflectance rock characteristics, Tennant Creek, Northern Territory, Australia | Smith BR, Huntington JF, Gordon GA and Green A |
| 2022-007 | Summary of results. NTGS LA–ICP–MS U–Pb–Hf geochronology project: selected samples from HUCKITTA 1:250 000 mapsheet, May 2011–October 2018 | Beyer EE, Whelan JA, Reno BL, Weisheit A, Thompson JM, Meffre S, Huang H, Woodhead JD and Armstrong R |
| 2022-008 | Characterising VMS mineralisation at the Palaeoproterozoic Home of Bullion copper deposit, Aileron Province, central Australia | Stuart CA |

AGES PROCEEDINGS, SPECIAL AND OTHER PUBLICATIONS

Geoscientific information other than NTGS standard series publications.

Table 7. Special publications.

| No | Title | Author(s) | Year |
|--------|---|---------------------------------|------|
| SP 001 | Proceedings of the Timor Sea Symposium, Darwin Northern Territory 19–20 June 2003. | Ellis GK, Baillie PW, Munson TJ | 2004 |
| SP 002 | Proceedings of the Central Australian Basins Symposium (CABS), Alice Springs Northern Territory, 16–18 August 2005. | Munson TJ, Ambrose GJ | 2007 |
| SP 003 | Bureau of Mineral Resources, Geology and Geophysics, Australia, 1:250 000 geological map series explanatory notes of the Northern Territory. Contains 85 scanned BMR explanatory notes. | | 2007 |
| SP 004 | Bureau of Mineral Resources, Geology and Geophysics, Australia, 1:100 000 geological map series explanatory notes of the Northern Territory. Contains 20 scanned BMR explanatory notes. | | 2007 |
| SP 005 | Geology and mineral resources of the Northern Territory * | Ahmad M, Munson TJ | 2013 |

* Hard cover-bound printed book is available for purchase – see inside back cover for order information.

Table 8. Other publications.

| Title - other publication | Author(s) | Year |
|--|-----------------------------------|------|
| Pegging the Northern Territory: a history of mining in the Territory | Jones TG | 1987 |
| A guide to the geology and landforms of central Australia | Thompson RB | 1995 |
| Introduction to the petroleum geology of the Northern Territory of Australia | Pegum DM | 1997 |
| Atlas of regolith materials of the Northern Territory | Robertson IDM, Craig MA, Anand RR | 2006 |

Table 9. Annual Geoscience Exploration Seminar (AGES) Proceedings.*

| Title | Year |
|--|------|
| Annual Geoscience Exploration Seminar (AGES) Proceedings, Alice Springs, Northern Territory 15–16 March 2016 | 2016 |
| Annual Geoscience Exploration Seminar (AGES) Proceedings, Alice Springs, Northern Territory 28–29 March 2017 | 2017 |
| Annual Geoscience Exploration Seminar (AGES) Proceedings, Alice Springs, Northern Territory 20–21 March 2018 | 2018 |
| Annual Geoscience Exploration Seminar (AGES) Proceedings, Alice Springs, Northern Territory 19–20 March 2019 | 2019 |
| Annual Geoscience Exploration Seminar (AGES) Proceedings, Alice Springs, Northern Territory 24–25 March 2020 | 2020 |
| Annual Geoscience Exploration Seminar (AGES) Proceedings, Alice Springs, Northern Territory 20–21 April 2021 | 2021 |
| Annual Geoscience Exploration Seminar (AGES) Proceedings, Alice Springs, Northern Territory 5–6 April 2022 | 2022 |

* Prior to 2016, AGES conference papers/abstracts were published as Records.

DIGITAL INFORMATION PACKAGES (DIP) (ISSN 1445-5358)

Digital Information Packages are a major outlet for databases and GIS datasets, including the Mineral Occurrence Database (MODAT) and the NT geoscience GIS data package (DIP 008). They may be updated periodically. The DIP version is indicated by month and year.

Table 10. Digital Information Packages (DIP)

| No | Title | Latest update |
|---------|--|---------------|
| DIP 001 | Northern Territory Geochemical Datasets. Database of open file geochemical data in MapInfo format. | 03/2022 |
| DIP 002 | Stream sediment survey of western MacDonnell Ranges – statistical and GIS-based interpretation (authors: Dunster J and Mügge A). | 2001 |
| DIP 003 | MODAT mineral occurrence database (version 1.2). | |
| DIP 003 | Database of mineral occurrences in the Northern Territory. Includes geological and resource information in a Microsoft Access run-time database, and system documentation. Formerly available as Mineral Deposit Data Series (now discontinued). | 03/2022 |
| DIP 007 | Geology and resource potential of the southern Georgina Basin (authors: Dunster JN, Kruse PD, Duffett ML and Ambrose GJ). GIS package and report. | 10/2007 |
| DIP 008 | NT geoscience data package (NT wide GIS datasets and geophysical imagery). | 04/2021 |
| DIP 009 | Northern Territory Geoscience Maps (Geological and geophysical maps in PDF and ECW format). | 04/2021 |
| DIP 010 | Regolith GIS of the Northern Territory (Compilers: May TA, Edgoose CJ, Craig MA, Robertson IDM and Anand RR). | 03/2011 |
| DIP 011 | Northern Territory Diamond Exploration Database (author: Hutchison MT). | 12/2011 |
| DIP 012 | 3D model of the greater McArthur Basin. | 03/2017 |
| DIP 013 | Rock property dataset of the Northern Territory. | 03/2022 |
| DIP 014 | Shale resource data from the greater McArthur Basin. | 03/2022 |
| DIP 015 | Geophysical and Structural Interpretation of the greater McArthur Basin. | 05/2015 |
| DIP 016 | COBRA – Amadeus Basin Assessment of Resource Potential. | 03/2016 |
| DIP 017 | SEEBASE® study and GIS for greater McArthur Basin. | 07/2018 |
| DIP 018 | SEEBASE® study and GIS for greater McArthur Basin: Supplementary data. | 05/2018 |
| DIP 019 | Interpretation-ready Kingdom® seismic project - Beetaloo Sub-basin. | 04/2018 |
| DIP 020 | CSIRO-NTGS McArthur Basin Project | 02/2021 |
| DIP 021 | CSIRO-NTGS Tanami Project - GIS | 04/2021 |
| DIP 022 | CSIRO-NTGS Tanami Project - Geophysical Data | 04/2021 |
| DIP 023 | Warramunga Province mineral deposit series: Rover field regional 3D compilation and interpreted geology | 08/2020 |
| DIP 024 | Warramunga Province mineral deposit series: Rover 1 3D compilation and deposit atlas. | 08/2020 |
| DIP 025 | Warramunga Province mineral deposit series: Explorer 108 and Curiosity 3D compilation and deposit atlas. | 08/2020 |
| DIP 026 | Warramunga Province mineral deposit series: Explorer 142 3D compilation and deposit atlas. | 08/2020 |
| DIP 027 | Warramunga Province mineral deposit series: White Devil | 12/2020 |
| DIP 028 | Warramunga Province mineral deposit series: Warrego | 12/2020 |
| DIP 030 | NT SEEBASE and GIS | 01/2021 |
| DIP 031 | NT SEEBASE and GIS: Gravity and Magnetics | 01/2021 |
| DIP 032 | Compilation of industry geophysical data over the Tennant Creek and Rover mineral fields | 04/2021 |
| DIP 033 | CSIRO–NTGS McArthur Basin Project: Analysis and interpretation of historical AEM data sets | 09/2021 |
| DIP 034 | Petroleum geoscience data from the Warburton, Pedirka and Eromanga basins | 09/2021 |
| DIP 035 | Geological interpretation and structural analysis of the northwest Aileron and southwest Davenport provinces | 08/2022 |

HYLOGGER™ DATA PACKAGES (HDP)

HyLogger Data Packages have been developed to aid clients in accessing and interpreting hyperspectral data collected by processing of drill core through the HyLogger scanning equipment. The data includes an overview document, high resolution core imagery and a dataset that can be viewed using The Spectral Geologist (TSG) free viewer. The interpretation reports are available for GEMIS download; however, due to their size, the full HDPs are not available for download and must be ordered through GEMIS.

There are a few earlier NTGS records describing HyLogger results for various drill holes (eg NTGS Record 2013-007).

Table 11. Hylogger™ Data Packages (HDP).

| No | Title | Date |
|----------|---|---------|
| HDP 0001 | HyLogger drillhole report for 877554_DD90VRB1 'Pear Tree 1', Birrindudu Basin (Second Edition) | 01/2016 |
| HDP 0002 | HyLogger drillhole report for 879511_DD90VRB2 'Pear Tree 2', Birrindudu Basin (Second Edition) | 01/2016 |
| HDP 0003 | HyLogger drillhole report for 8445392_MANT79_2 'Caranbirini prospect', McArthur Basin (Second Edition) | 01/2016 |
| HDP 0004 | HyLogger drillhole report for 1176904_BB2, 'Bing Bong prospect', McArthur Basin | 02/2014 |
| HDP 0005 | HyLogger drillhole report for 830846_McA5, 'McArthur', McArthur Basin (Second Edition) | 06/2016 |
| HDP 0006 | Drillhole report for 8440854_Undandita 1A, Amadeus Basin: National Virtual Core Library NTGS Node: HyLogger 3-7 | 02/2014 |
| HDP 0007 | HyLogger drillhole report for 61605_GSD7, 'Gundy Springs', McArthur Basin | 11/2013 |
| HDP 0008 | HyLogger drillhole report for MacIntyre 1, Georgina Basin | 09/2014 |
| HDP 0009 | HyLogger drillhole report for Finke 1, Amadeus Basin | 05/2014 |
| HDP 0010 | HyLogger drillhole report for Mt Winter 2A, Amadeus Basin | 06/2014 |
| HDP 0011 | HyLogger drillhole report for Wallara 1, Amadeus Basin | 06/2014 |
| HDP 0012 | HyLogger drillhole report for Scarborough No1, McArthur Basin | 08/2014 |
| HDP 0013 | HyLogger drillhole report for MBXDD001, Matchbox Project, McArthur Basin | 08/2014 |
| HDP 0014 | HyLogger drillhole report for Sever 1, McArthur Basin | 09/2014 |
| HDP 0015 | HyLogger drillhole report for Tempe Vale 1, Amadeus Basin | 10/2014 |
| HDP 0016 | HyLogger drillhole report for DDHMN1, McArthur Basin | 10/2014 |
| HDP 0017 | HyLogger drillhole report for Tent Hill 1, Amadeus Basin | 10/2014 |
| HDP 0018 | HyLogger drillhole report for Lady Penrhyn 1, McArthur Basin | 10/2014 |
| HDP 0019 | HyLogger drillhole report for Baldwin 1, Georgina Basin | 11/2014 |
| HDP 0020 | HyLogger drillhole report for BHD9, Boat Hill prospect, Georgina Basin | 11/2014 |
| HDP 0021 | HyLogger drillhole report for Hacking 1, Georgina Basin | 11/2014 |
| HDP 0022 | HyLogger drillhole report for CKAD0001, Georgina Basin | 11/2014 |
| HDP 0023 | HyLogger drillhole report for DD88SC1, Georgina Basin | 11/2014 |
| HDP 0024 | HyLogger drillhole report for Phillip 2, Georgina Basin | 11/2014 |
| HDP 0025 | HyLogger drillhole report for Owen 2, Georgina Basin | 11/2014 |
| HDP 0026 | HyLogger drillhole report for 8445424_NTGS96_1, Georgina Basin | 11/2014 |
| HDP 0027 | HyLogger drillhole report for NTGS99_1, Georgina Basin | 11/2014 |
| HDP 0028 | HyLogger drillhole report for Ross 1, Georgina Basin | 12/2014 |
| HDP 0029 | HyLogger drillhole report for MSFDD001, 'Mt Sandford' Birrindudu Basin | 12/2014 |
| HDP 0030 | HyLogger drillhole report for AY06DD01, Georgina Basin | 12/2014 |
| HDP 0031 | HyLogger drillhole report for Atree 2, Beetaloo Sub-basin, McArthur Basin | 03/2015 |
| HDP 0032 | HyLogger drillhole report for DWD1, 'Daly Waters', McArthur Basin | 03/2015 |
| HDP 0033 | HyLogger drillhole report for Dneiper 1, Arunta Region, | 03/2015 |
| HDP 0034 | HyLogger drillhole report for Broughton 1, McArthur Basin | 04/2015 |
| HDP 0035 | HyLogger drillhole report for 13BARCD038, Black Angus prospect, Arunta Region | 04/2015 |
| HDP 0036 | HyLogger drillhole report for MYD7, 'Mt Young', McArthur Basin | 04/2015 |
| HDP 0037 | HyLogger drillhole report for DD91RC18, McArthur Basin | 04/2015 |
| HDP 0038 | HyLogger drillhole report for Lawrence 1, McArthur Basin | 06/2015 |
| HDP 0039 | HyLogger drillhole report for DD97WR002, 'Waterhouse Range', Amadeus Basin | 06/2015 |
| HDP 0040 | HyLogger drillhole report for Bullo River 1, Victoria Basin | 06/2015 |
| HDP 0041 | HyLogger drillhole report for LBD1, Birrindudu Basin | 06/2015 |
| HDP 0042 | HyLogger drillhole report for BMR Urapunga 5, McArthur Basin | 06/2015 |

Table continued on next page

Table 11. Hylogger™ Data Packages (HDP) (continued).

| No | Title | Date |
|-----------|---|---------|
| HDP 0043 | HyLogger drillhole report for BOOM1, McArthur Basin | 06/2015 |
| HDP 0044 | HyLogger drillhole report for LV09001, ‘Leviathan Anomaly’, McArthur Basin | 06/2015 |
| HDP 0045 | HyLogger drillhole report for BMR Alice Springs 27, Amadeus Basin | 08/2015 |
| HDP 0046 | HyLogger drillhole report for DDHMA2, McArthur Basin | 08/2015 |
| HDP 0047 | HyLogger drillhole report for BB5, Bing Bong prospect, McArthur Basin | 08/2015 |
| HDP 0048 | HyLogger drillhole report for SLX001, Oonagalabi prospect, Arunta Region | 08/2015 |
| HDP 0049 | HyLogger drillhole report for CKAF001, Georgina Basin | 08/2015 |
| HDP 0049b | HyLogger drillhole report for CKAF001, Georgina Basin | 02/2022 |
| HDP 0050 | HyLogger drillhole report for MXCURD002, Curiosity prospect, Tennant Region | 08/2015 |
| HDP 0051 | HyLogger drillhole report for NA26, Nabarlek deposit, Nimbuwah Domain, Pine Creek Orogen | 09/2015 |
| HDP 0052 | HyLogger drillhole report for DVNP_050_1, Wiso Basin | 10/2015 |
| HDP 0053 | HyLogger drillhole report for McA20, McArthur Basin | 11/2015 |
| HDP 0054 | HyLogger drillhole report for DD91DC1 ‘Dingo Creek’, McArthur Basin | 11/2015 |
| HDP 0055 | HyLogger drillhole report for 12BC001 ‘Bundara Creek’, Carpentaria Basin | 01/2016 |
| HDP 0056 | HyLogger drillhole report for BMR Hermannsburg 41, Amadeus Basin | 01/2016 |
| HDP 0057 | HyLogger drillhole report for MBXDD002, Matchbox Project, McArthur Basin | 01/2016 |
| HDP 0058 | HyLogger drillhole report for NDW12-01, Daly Waters, McArthur Basin | 05/2016 |
| HDP 0059 | HyLogger drillhole report for BBDD002, ‘Bing Bong’, McArthur Basin | 10/2016 |
| HDP 0060 | HyLogger drillhole report for GODD032, Warramunga Province, Tennant Region | 10/2016 |
| HDP 0061 | HyLogger drillhole report for WRDD0134, ‘Wellington Range’ Nimbuwah Domain, Pine Creek Orogen | 05/2017 |
| HDP 0062 | HyLogger drillhole report for NB16DD018, Berjaya prospect, McArthur Basin, | 05/2017 |
| HDP 0063 | HyLogger drillhole report for CRDD001, Carrara Project, South Nicholson Basin. | 06/2017 |
| HDP 0064 | HyLogger drillhole report for WD 4, Walker Gossan, McArthur Basin. | 06/2017 |
| HDP 0065 | HyLogger drillhole report for MARD001, Ngalia Basin. | 12/2017 |
| HDP 0066 | HyLogger drillhole report for BADD001, ‘Barossa prospect’, Pine Creek Orogen. | 09/2017 |
| HDP 0067 | HyLogger drillhole report for TCDD002, ‘Tractor Corner’ prospect, Pine Creek Orogen. | 06/2018 |
| HDP 0068 | HyLogger drillhole report for HMRD100001, Homestead Project, Tanami Region. | 08/2018 |
| HDP 0069 | HyLogger drillhole report for YLDD001, YalcoProject, McArthur Basin. | 08/2018 |
| HDP 0070 | HyLogger drillhole report for NB17DD049, ‘Nhumby Nhumby prospect’, McArthur Basin. | 09/2018 |
| HDP0071 | HyLogger drillhole report for BJD04, McArthur Basin | 12/2018 |
| HDP0072 | HyLogger drillhole report for CCD10, Coppermine Creek, McArthur Basin | 01/2019 |
| HDP0073 | HyLogger drillhole report for SDTH03, Stromberg prospect | 01/2019 |
| HDP0074 | HyLogger drillhole report for Manbulloo S1, greater McArthur Basin | 01/2019 |
| HDP0075 | HyLogger drillhole report for NB18DD050, ‘Cow Lagoon’, McArthur Basin | 05/2019 |
| HDP0076 | HyLogger drillhole report for MND06, Mariner prospect, McArthur Basin | 06/2019 |
| HDP0077 | HyLogger drillhole report for DD84GI1, Gigantic prospect, Warramunga Province | 06/2019 |
| HDP0078 | HyLogger drillhole report for MCDD0005, McArthur Basin | 08/2019 |
| HDP0079 | HyLogger drillhole report for CPDH006, Caranbirini Project, McArthur Basin | 10/2019 |
| HDP0080 | HyLogger drillhole report for BLDD001, Capstan prospect, Tanami Region | 12/2019 |
| HDP0081 | HyLogger drillhole report for WD018-002, Wandie-Azaria Prospect, Pine Creek Orogen | 01/2020 |
| HDP0082 | HyLogger drillhole report WGR3D001, Rover 3 Prospect, Warramunga Province | 01/2020 |
| HDP0083 | HyLogger drillhole report WWD001, West Warrego, Warramunga Province | 02/2020 |
| HDP0084 | HyLogger drillhole report for APDD002, Aileron Province | 04/2020 |
| HDP0085 | HyLogger drillhole report for 19U4DD002, U40 project, Nimbuwah Domain, Pine Creek Orogen | 04/2020 |
| HDP0086 | HyLogger drillhole report for RVDD0002, Rover Project, Warramunga Province | 05/2020 |
| HDP0087 | HyLogger drillhole report for 19NBDD002, Nabarlek Project, Nimbuwah Domain, Pine Creek Orogen | 05/2020 |
| HDP0088 | HyLogger drillhole report for SDDD001, Stirling Deeps Project, Aileron Province | 05/2020 |
| HDP0089 | HyLogger drillhole report for 11CPD005, Plenty River Project, Irindina Province | 06/2020 |
| HDP0090 | HyLogger drillhole report for KJCD168, Jervois Project, Aileron Province | 06/2020 |
| HDP0091 | HyLogger drillhole report for BCF SC 04, McArthur Basin | 06/2020 |

Table continued on next page

Table 11. Hylogger™ Data Packages (HDP) (continued).

| No | Title | Date |
|---------|--|---------|
| HDP0092 | HyLogger drillhole report for SKDH05, Skyfall prospect, Pine Creek Orogen | 06/2020 |
| HDP0093 | HyLogger drillhole report for MDD003, Pine Creek Orogen, | 07/2020 |
| HDP0094 | HyLogger drillhole report for 12LE001, Larrimah East Project, McArthur Basin | 07/2020 |
| HDP0095 | HyLogger drillhole report for HED003, Headwaters project, Nimbuwah Domain, Pine Creek Orogen | 07/2020 |
| HDP0096 | HyLogger drillhole report for D009, Pine Creek Orogen | 07/2020 |
| HDP0097 | HyLogger drillhole report for GBD001, Georgina Basin | 07/2020 |
| HDP0098 | HyLogger drillhole report for TDD04, Pine Creek Orogen | 07/2020 |
| HDP0099 | HyLogger report for 14MCDDH002, McArthur Basin | 03/2021 |
| HDP0100 | HyLogger drillhole report for R1NARD22, Rover Project, Warramunga Province | 08/2020 |
| HDP0101 | HyLogger report for LWDDH01, Tomkinson Province | 10/2020 |
| HDP0102 | HyLogger report for EUR0018, Tanami Region | 10/2020 |
| HDP0103 | HyLogger report for OBRD14-127, Nimbuwah Domain, PCO | 11/2020 |
| HDP0104 | HyLogger report for EUR0032, Tanami Region | 02/2021 |
| HDP0105 | HyLogger report for RNRCD029, 'Anomaly 11', Pine Creek Orogen | 06/2021 |
| HDP0106 | HyLogger report for HYDD100054, 'Suplejack Fault' Tanami Region | 05/2021 |
| HDP0107 | HyLogger report for NDIBK10, MinEx CRC NDI, Campaign 1 East Tennant | 05/2021 |
| HDP0108 | HyLogger report for NDIBK07, MinEx CRC, NDI, Campaign 1 East Tennant | 05/2021 |
| HDP0109 | HyLogger report for NDIBK01, MinEx CRC, NDI, Campaign 1 East Tennant | 05/2022 |
| HDP0110 | HyLogger report for NDIBK02, MinEx CRC, NDI, Campaign 1, East Tennant | 08/2022 |

PETROLEUM BASIN STUDIES

These studies were prepared for NTGS by consultants between 1989 and 1994 and are part of the NTGS Technical Reports series.

Table 12. Petroleum basin studies

| Study title | Year | Pre-1999 ID |
|-----------------------|------|-------------|
| Amadeus Basin update | 1994 | GS1994-011 |
| Eastern Amadeus Basin | 1989 | GS1989-009 |
| Western Amadeus Basin | 1989 | GS1989-006 |
| Arafura Basin | 1989 | GS1989-009 |
| Bonaparte Basin | 1990 | GS1990-010 |
| Eromanga Basin | 1990 | GS1990-008 |
| Georgina Basin | 1994 | GS1994-010 |
| Ngalia Basin | 1998 | GS1989-008 |
| Wiso Basin | 1998 | GS1989-007 |

GEOPHYSICAL DATA

Digital data, in located 'L' and gridded 'G' form, are available on digital media for each of the NTGS and Geoscience Australia magnetic/radiometric and gravity surveys in the Northern Territory. Multichannel 'M' radiometric data are available for all surveys flown since 1996.

Geophysical images can also be viewed, overlain and downloaded via the Geophysical Image Web server (GIWS): <http://geoscience.nt.gov.au/giws> and via STRIKE: www.strike.nt.gov.au/strike.

Located data is supplied as ASCII columns, with corresponding data description files. Gridded data is available as ER Mapper (.ers) files.

All data can also be downloaded from the Geophysical Archive Data Delivery System (GADDS) at www.geoscience.gov.au/gadds.

Gravity data can be downloaded from GEMIS.

Table 13. NT-wide geophysical stitches

| NT-wide geophysical stitches | Grid | Year |
|------------------------------|------|------|
| Magnetics | G | 2020 |
| Gravity | G | 2020 |
| Radiometrics | G | 2020 |

Gravity data

Gravity datasets available are shown on **Figure 9**. All surveys except the West Arnhem survey are ground-based. The West Arnhem dataset is the first application of airborne gravity surveying by an Australian geological survey. All surveys and gridded data can be downloaded from Geophysical Archive Data Delivery System (GADDS). The surveys have been incorporated into the national gravity dataset.

Airborne geophysical data – magnetics and radiometrics

The spatial distribution of airborne geophysical surveys is shown in **Figure 10** and the availability of the different formats for each survey is shown in **Table 14**. When ordering, please specify located, gridded and/or multichannel data for each survey. Operators reports for the surveys listed in **Table 14** can be downloaded from GEMIS.

REMOTE SENSING

ASTER mineral maps

Northern Territory mineral index maps, generated using data from the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), were released in May 2012. The mineral maps are the result of a collaborative project with CSIRO, the Western Australian Centre of Excellence for Three Dimensional Mineral Mapping (C3DMM) and Geoscience Australia. See the Aster Mineral Maps project page on the NTGS website for more information.

The NT ASTER product is comprised of 14 VNIR-SWIR maps and 2 TIR maps. NT ASTER mineral maps are available as ECW images for viewing through the Geophysical Image Web Server and STRIKE.

A complete data set including ECW, TIF, JPG and BSQ data and comprehensive product notes is available from the InfoCentre but clients will be asked to supply a **new** portable hard drive with at least 500GB capacity. Clients should check with InfoCentre staff regarding the hard drive specifications before sending to the InfoCentre.

Figure 9 Spatial distribution of Northern Territory gravity surveys.

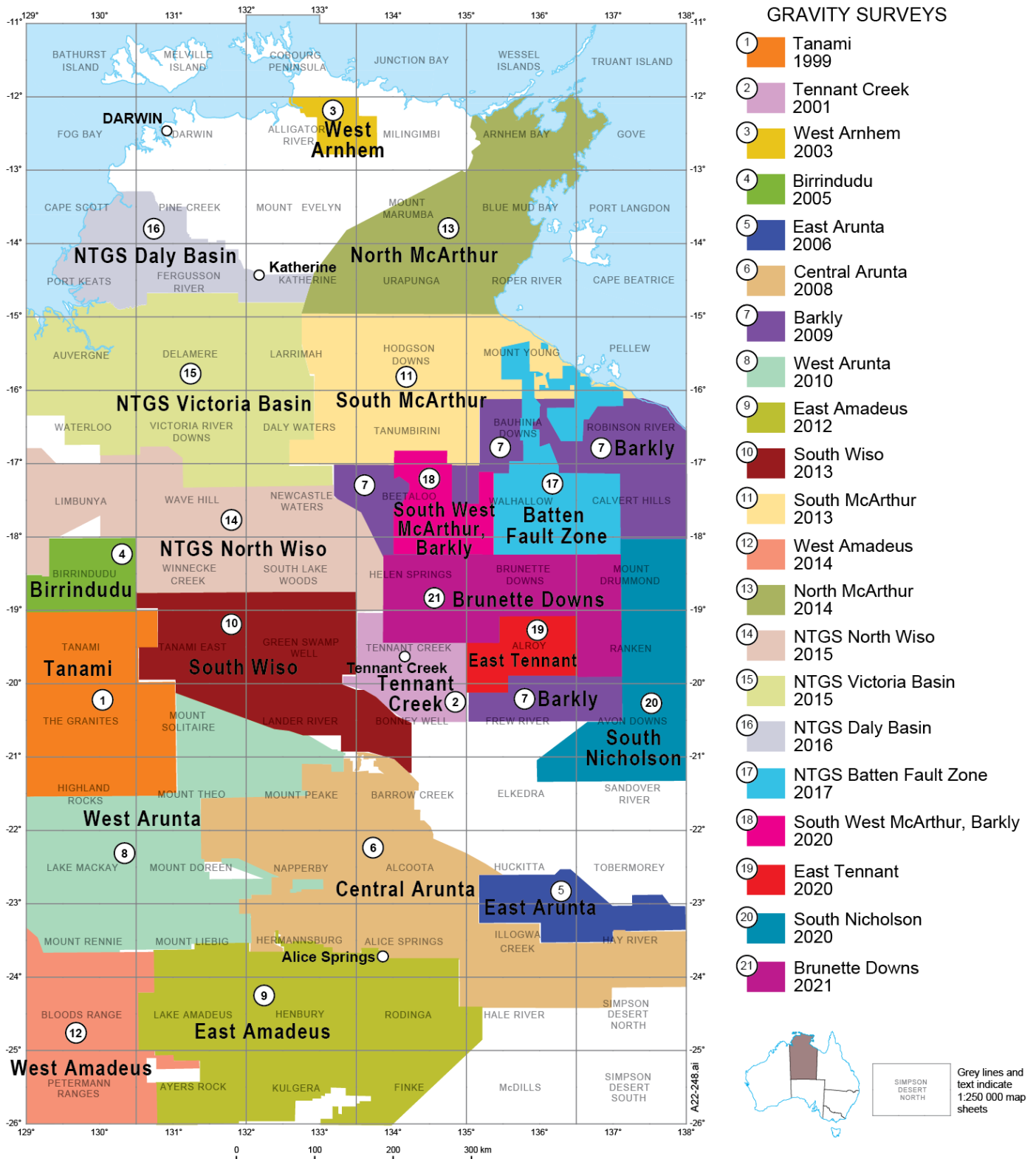


Figure 10. Spatial distribution of airborne geophysical surveys.

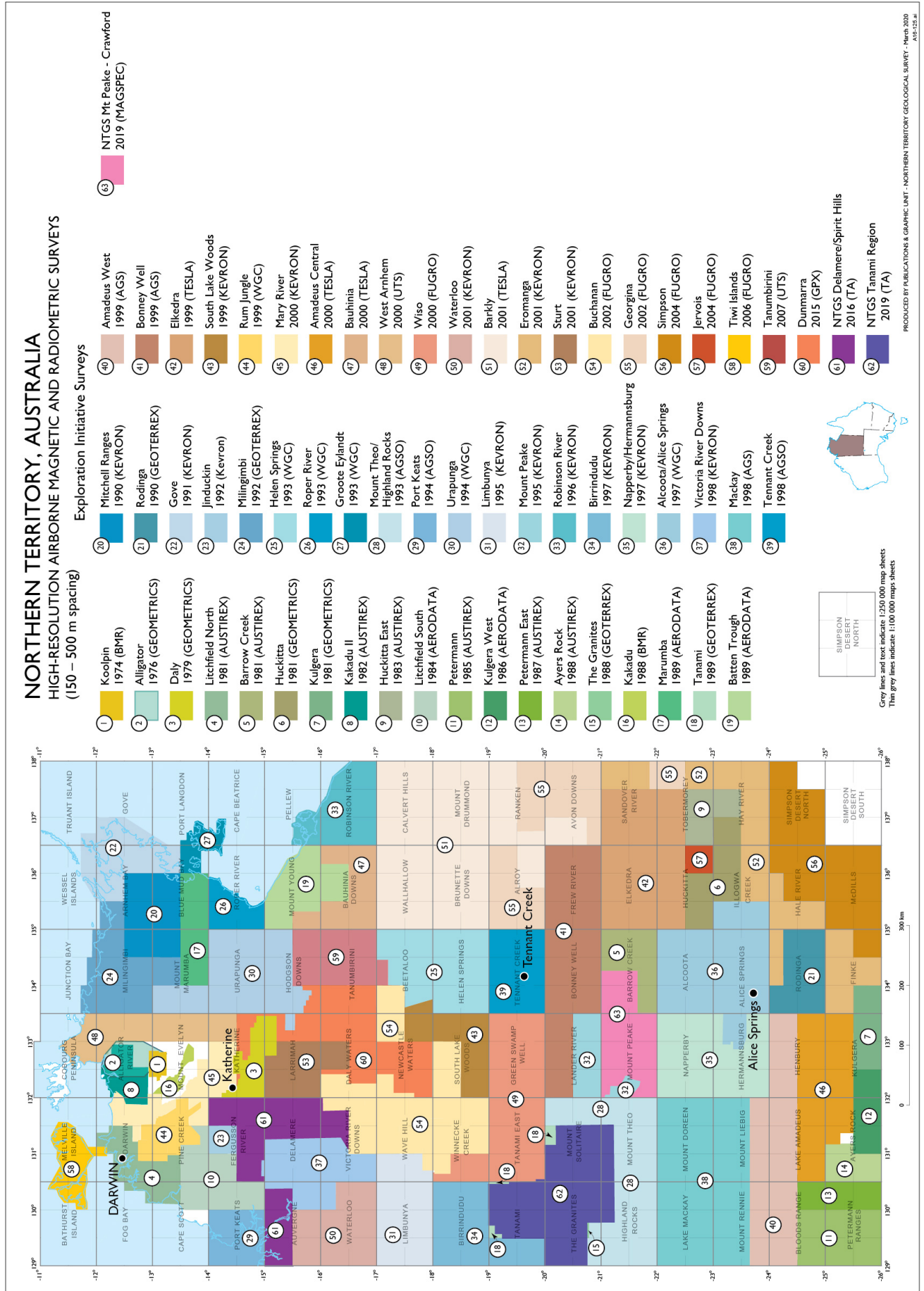


Table 14. Airborne geophysical data.

| Survey No | Survey Name | L | G | M | Survey No | Survey Name | L | G | M |
|-----------|---------------------------------|---|---|---|-----------|---------------------------|---|---|---|
| 01 (1974) | Koolpin | ✓ | ✓ | | 33 (1996) | Robinson River | ✓ | ✓ | ✓ |
| 02 (1976) | Alligator | ✓ | ✓ | | 34 (1997) | Birrindudu | ✓ | ✓ | ✓ |
| 03 (1979) | Daly | ✓ | ✓ | | 35 (1997) | Napperby/ Hermannsburg | ✓ | ✓ | ✓ |
| 04 (1981) | Litchfield North | ✓ | ✓ | | 36 (1997) | Alcoota/Alice Springs | ✓ | ✓ | ✓ |
| 05 (1981) | Barrow Creek | ✓ | ✓ | | 37 (1998) | Victoria River Downs | ✓ | ✓ | ✓ |
| 06 (1981) | Huckitta | ✓ | ✓ | | 38 (1998) | Mackay | ✓ | ✓ | ✓ |
| 07 (1981) | Kulgera | ✓ | ✓ | | 39 (1998) | Tennant Creek # | ✓ | ✓ | |
| 08 (1982) | Kakadu II | ✓ | ✓ | | 40 (1999) | Amadeus West | ✓ | ✓ | ✓ |
| 09 (1983) | Huckitta East | ✓ | ✓ | | 41 (1999) | Bonney Well | ✓ | ✓ | ✓ |
| 10 (1984) | Litchfield South | ✓ | ✓ | | 42 (1999) | Elkedra | ✓ | ✓ | ✓ |
| 11 (1985) | Petermann | ✓ | ✓ | | 43 (1999) | South Lake Woods | ✓ | ✓ | ✓ |
| 12 (1986) | Kulgera West | ✓ | ✓ | | 44 (1999) | Rum Jungle | ✓ | ✓ | ✓ |
| 13 (1987) | Petermann East | ✓ | ✓ | | 45 (2000) | Mary River | ✓ | ✓ | ✓ |
| 14 (1988) | Ayers Rock | ✓ | ✓ | | 46 (2000) | Amadeus Central | ✓ | ✓ | ✓ |
| 15 (1988) | The Granites | ✓ | ✓ | | 47 (2000) | Bauhinia | ✓ | ✓ | ✓ |
| 16 (1988) | Kakadu | ✓ | ✓ | | 48 (2000) | West Arnhem | ✓ | ✓ | ✓ |
| 17 (1989) | Marumba | ✓ | ✓ | | 49 (2000) | Wiso | ✓ | ✓ | ✓ |
| 18 (1989) | Tanami | ✓ | ✓ | | 50 (2001) | Waterloo | ✓ | ✓ | ✓ |
| 19 (1989) | Batten Trough | ✓ | ✓ | | 51 (2001) | Barkly | ✓ | ✓ | ✓ |
| 20 (1990) | Mitchell Ranges | ✓ | ✓ | | 52 (2001) | Eromanga | ✓ | ✓ | ✓ |
| 21 (1990) | Rodinga | ✓ | ✓ | | 53 (2001) | Sturt | ✓ | ✓ | ✓ |
| 22 (1991) | Gove | ✓ | ✓ | | 54 (2002) | Buchanan | ✓ | ✓ | ✓ |
| 23 (1992) | Jinduckin | ✓ | ✓ | | 55 (2002) | Georgina | ✓ | ✓ | ✓ |
| 24 (1992) | Milingimbi | ✓ | ✓ | | 56 (2004) | Simpson | ✓ | ✓ | ✓ |
| 25 (1993) | Helen Springs | ✓ | ✓ | | 57 (2004) | Jervois * | ✓ | ✓ | ✓ |
| 26 (1993) | Roper River | ✓ | ✓ | | 58 (2007) | Tiwi Islands | ✓ | ✓ | ✓ |
| 27 (1993) | Groote Eylandt | ✓ | ✓ | | 59 (2007) | Tanumbirini | ✓ | ✓ | ✓ |
| 28 (1993) | Mount Theo/ Highland Rocks # | ✓ | ✓ | | 60 (2015) | Dunmarra | ✓ | ✓ | ✓ |
| 29 (1994) | Port Keats # | ✓ | ✓ | | 61 (2016) | Delamere/ Spirit Hills | ✓ | ✓ | ✓ |
| 30 (1994) | Urapunga | ✓ | ✓ | | 62 (2019) | Tanami Region | | | |
| 31 (1995) | Limbunya | ✓ | ✓ | | 63 (2019) | Mount Peake–Crawford | ✓ | ✓ | ✓ |
| 32 (1995) | Mount Peake | ✓ | ✓ | | | | | | |

L= Located data; G= Gridded data; M= Multichannel data; # Geoscience Australia surveys, copyright vested in Commonwealth of Australia,* Previously incorporated within Simpson Geophysical Survey.

Landsat imagery

Under licensing agreements for Landsat data, Landsat 7 imagery obtained by an organisation can be distributed to third parties. NTGS possesses a sizeable archive of Landsat 7 data covering the Northern Territory. The archive comprises 48 scenes, as well as colour-balanced mosaics over several 1:250k mapsheets. All data have been processed to Level 9 (ie, geocoded to AMG/MGA using system parameters and 1:100k topographic control), and are available in ER Mapper (.ers) format. Composite 3-band ratios of bands 7 (Red), 4 (Green) and 1 (Blue) are also available as compressed .ecw images and in georeferenced MapInfo (.tab) format for all 48 scenes. The available coverage is shown in **Figures 11 and 12**.

The Landsat 7 sensor has (i) 7 spectral bands; bands 1–5 and 7 are at 30 m spatial resolution, and band 6 (thermal infrared) is at 60 m; (ii) a panchromatic band (band 8), with a spatial resolution of 15 m.

Additional information on the Landsat 7 satellite can be found on the Geoscience Australia website. Copyright for Landsat 7 data is vested in the Commonwealth of Australia.

Landsat data can be downloaded via GEMIS.

Figure 11. NTGS Landsat 7 data repository. 1:250 000 mapsheets and mosaics.

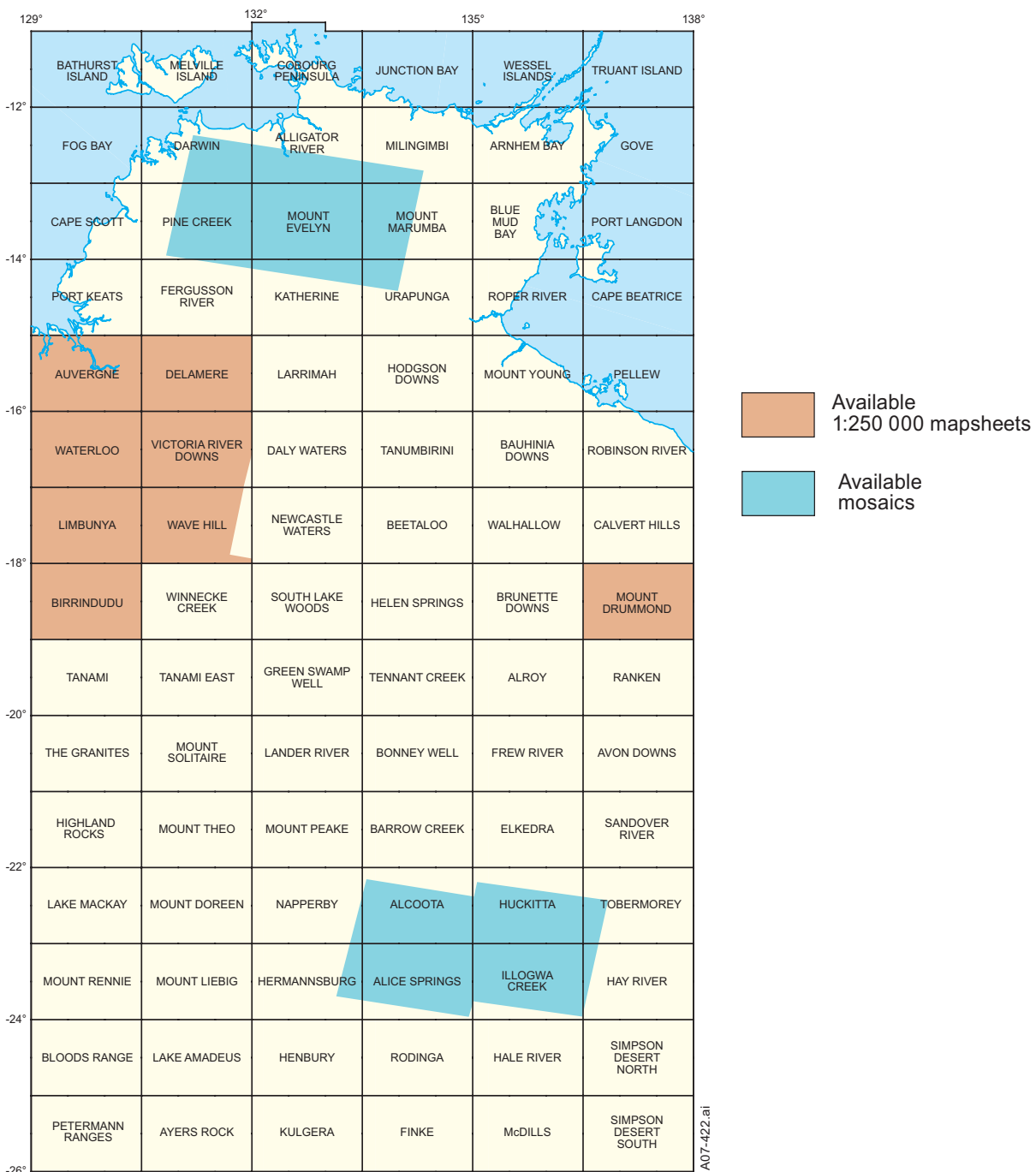
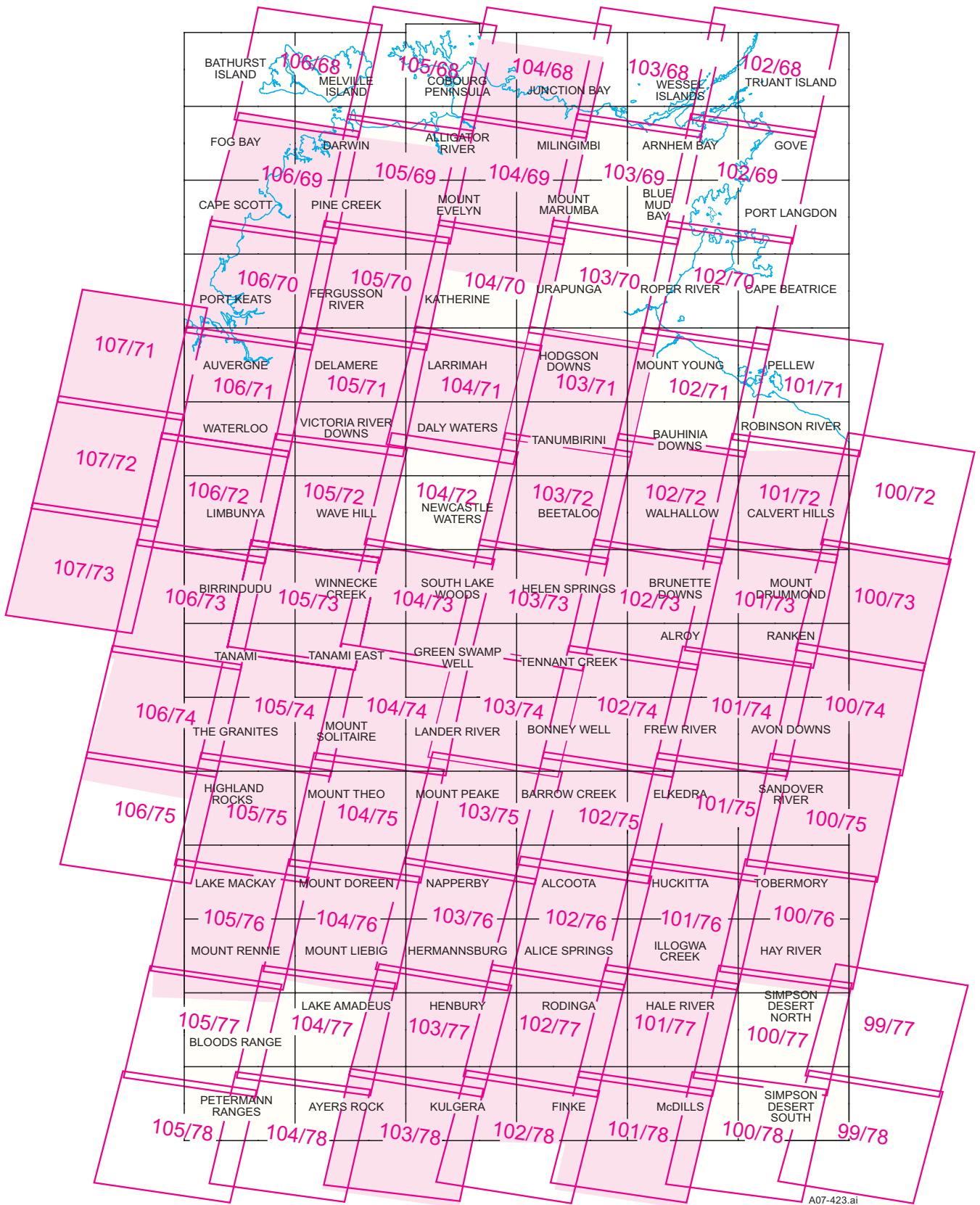


Figure 12. NTGS Landsat 7 data repository. Available coverage of standard scenes.



Geology and mineral resources of the Northern Territory

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- » Order online at <http://ntgs.shop033.com>
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