



Australian Government

Department of Climate Change, Energy, the Environment and Water

Australian Antarctic Division



AUSTRALIAN
ANTARCTIC
PROGRAM

Australian report to SCAGI

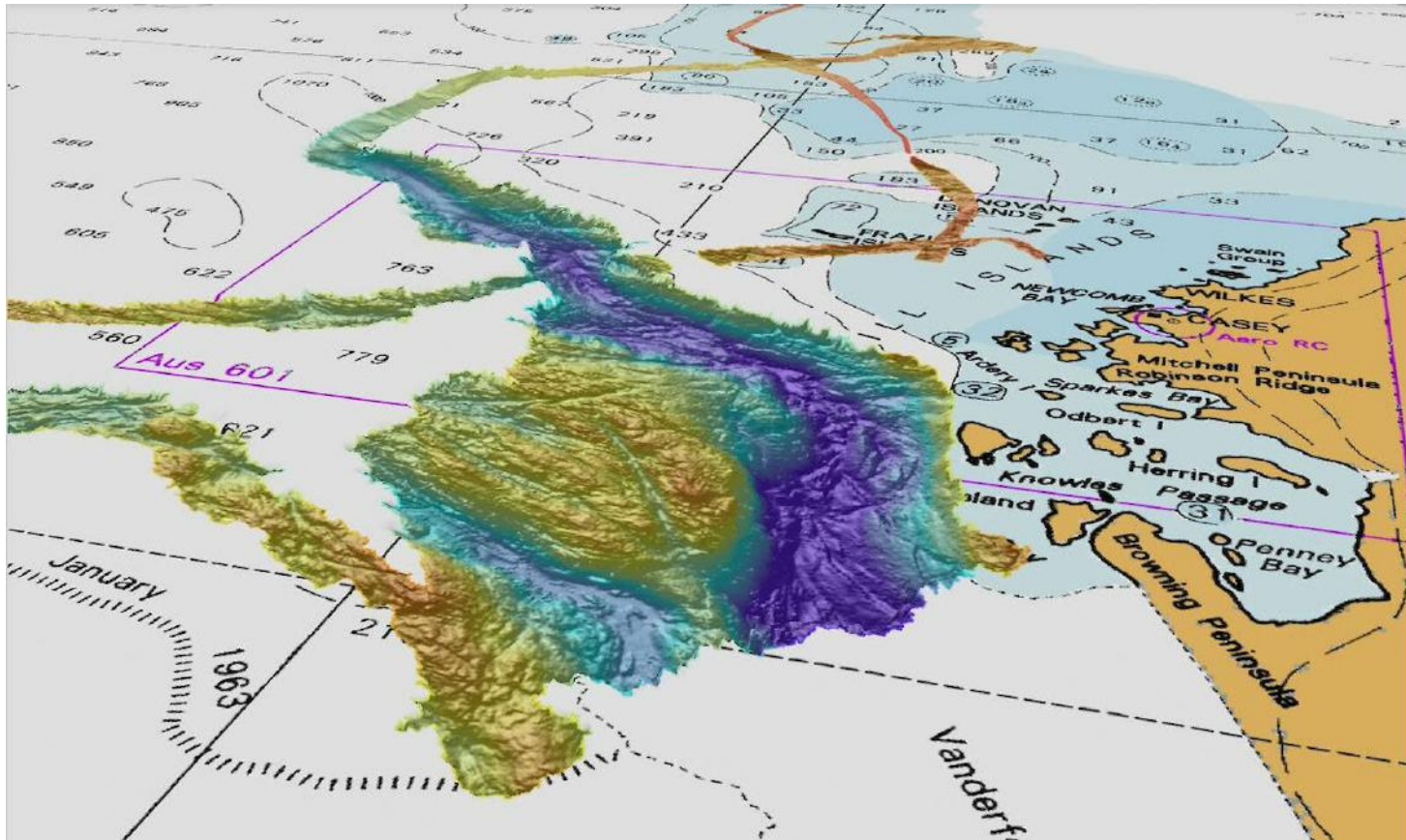
October 2022



East Antarctic Mapping Program Proposed Activities

2022-2027

- Mapping
- Charting / multibeam surveys
- Digital Earth Antarctica
- Global Navigation Satellite System improvements
- Real-time kinematic capability
- Drones
- Laser scanning



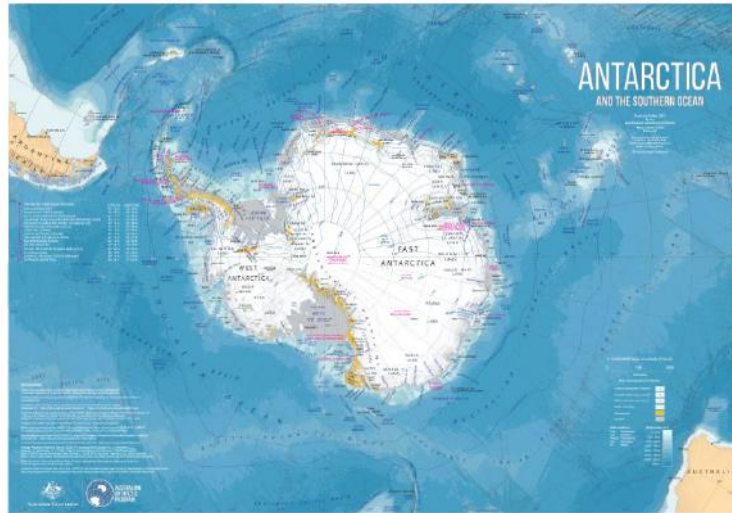
A false-colour image of the valley mapped using RSV Nuyina's multibeam echosounder, extending from beneath the Vanderford Glacier into the open ocean. The purple colour represents the deepest point mapped, which reaches to 2300 m. False colour image: Geoscience Australia. Chart: Hydrographic Material reproduced with permission of The Australian Hydrographic Office © Commonwealth of Australia 2022

Survey data from a vast underwater valley off East Antarctica, collected during icebreaker RSV *Nuyina's* first voyage, has been publicly released through the national seabed mapping program, [AusSeabed](#).

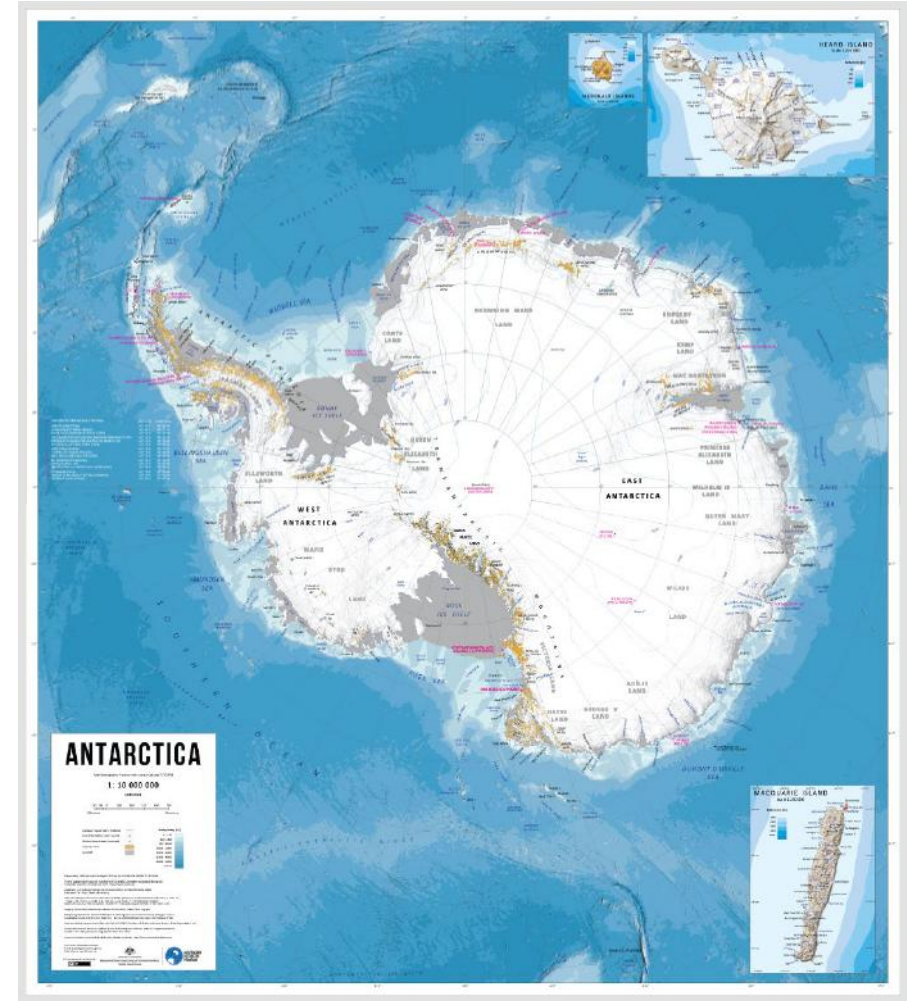
- [Browse a map of the data](#)
- [Download the data](#)

Data from AusSeabed also feeds in to global seabed mapping initiatives, such as the [Nippon-Foundation-GEBCO Seabed 2030 project](#), which aims to develop a definitive map of the world's ocean floor by 2030.

Australian small scale maps



1:20 million map of Antarctica
and the Southern Ocean
Published July 2021
SCAR Map 15310



1:10 million map of Antarctica
Published Aug 2022
SCAR Map 15785

Digital Earth Australia
<https://www.dea.ga.gov.au/>

Digital Earth Antarctica

The Digital Earth platform processes satellite images to be consistent over space and time, making it possible to perform large-scale analytics effectively.

We have funding and are now developing specifications for Digital Earth Antarctica, building on what's already available for Digital Earth Australia.



The screenshot shows the homepage of the Digital Earth Australia website. The header includes the Australian Government Geoscience Australia logo and the Digital Earth AUSTRALIA logo. Navigation links for 'About', 'Data and products', 'Learning hub', 'For developers', and 'News' are present, along with a search icon. The main content area features a satellite image of Australia and the headline 'Satellite imagery to inform Australia'. A prominent button reads 'Get started with our data'. Below this is a section titled 'Browse by product type' with six categories: 'Baseline satellite data', 'Land and vegetation', 'Inland water', 'Sea, ocean and coast', 'Hazards', and 'Interactive maps and tools'.

Australian Government
Geoscience Australia

Digital Earth
AUSTRALIA

About Data and products Learning hub For developers News Search

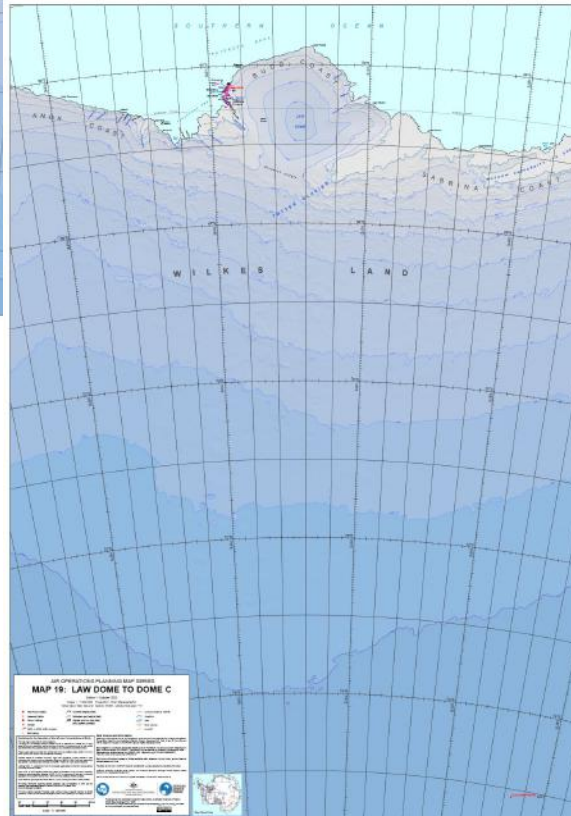
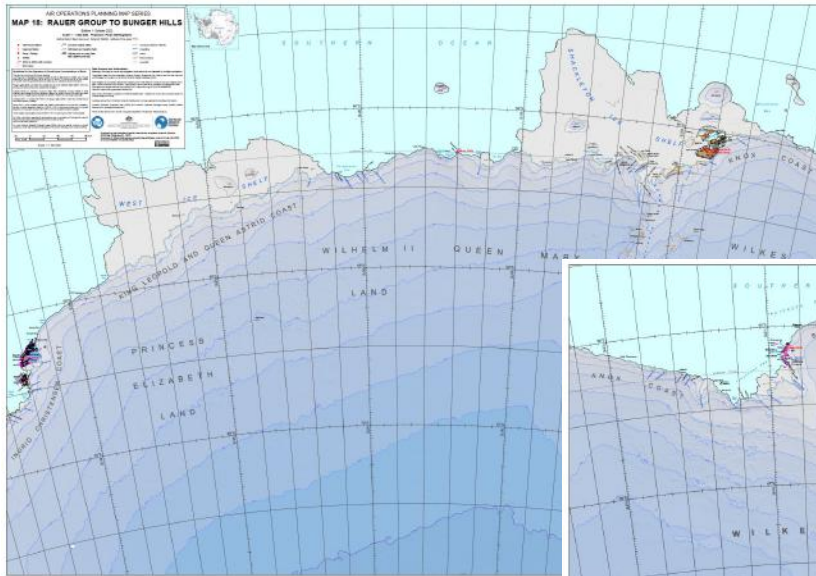
Satellite imagery to inform Australia

Get started with our data

Browse by product type

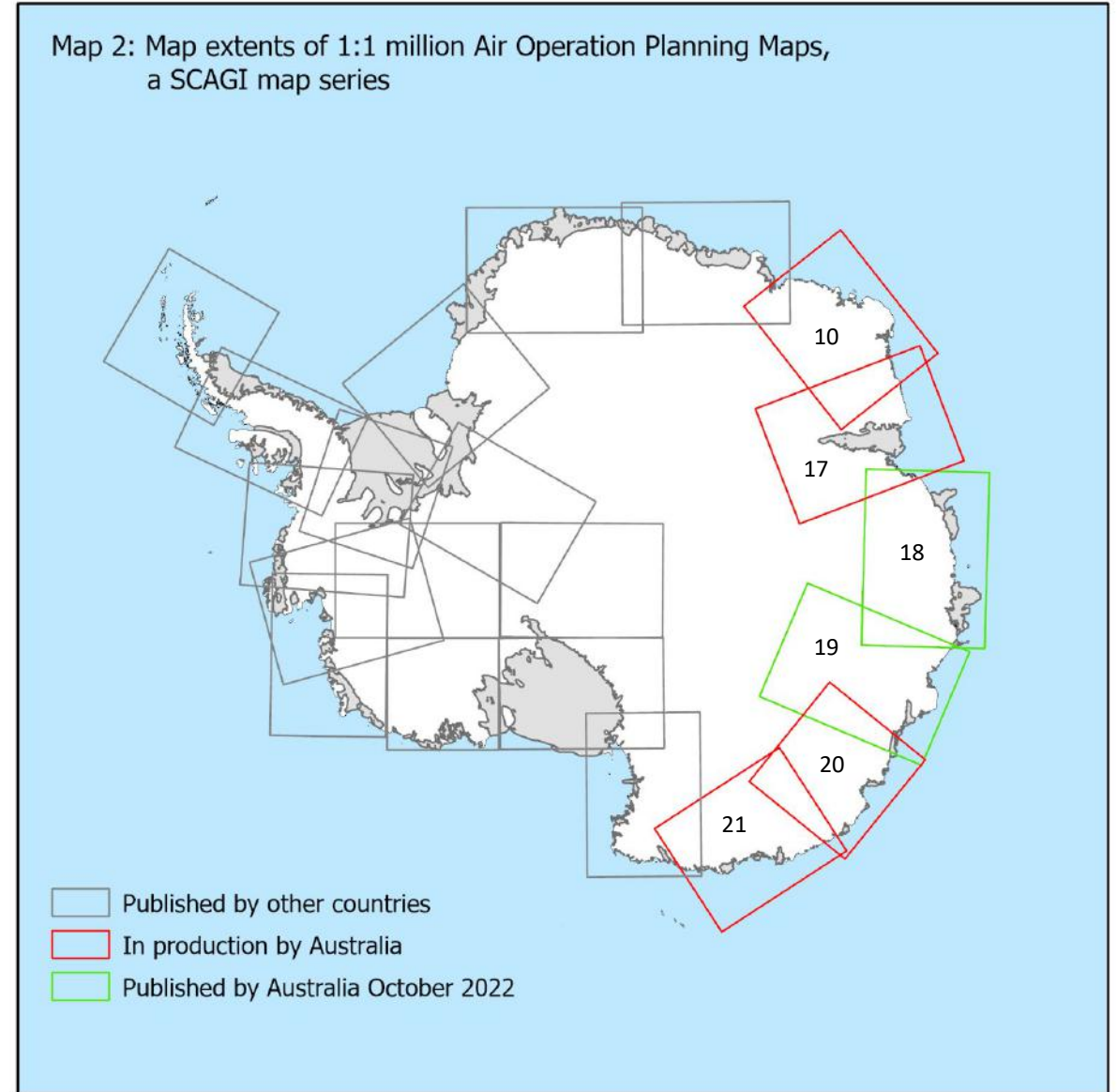
- Baseline satellite data
- Land and vegetation
- Inland water
- Sea, ocean and coast
- Hazards
- Interactive maps and tools

SCAGI Air Operations Planning Maps

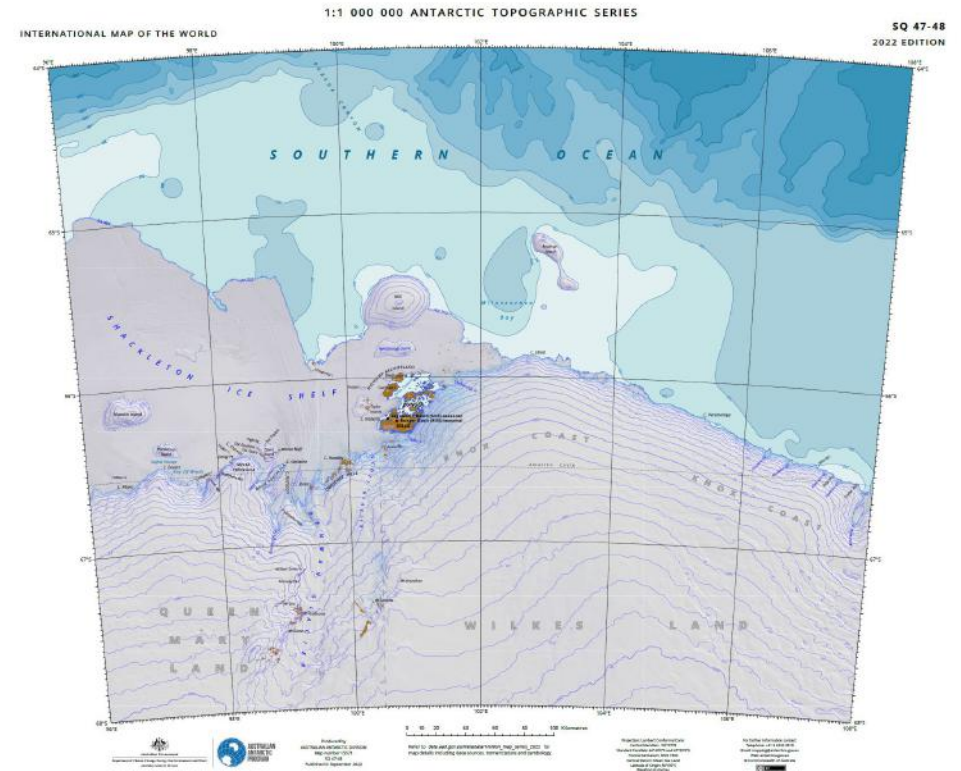
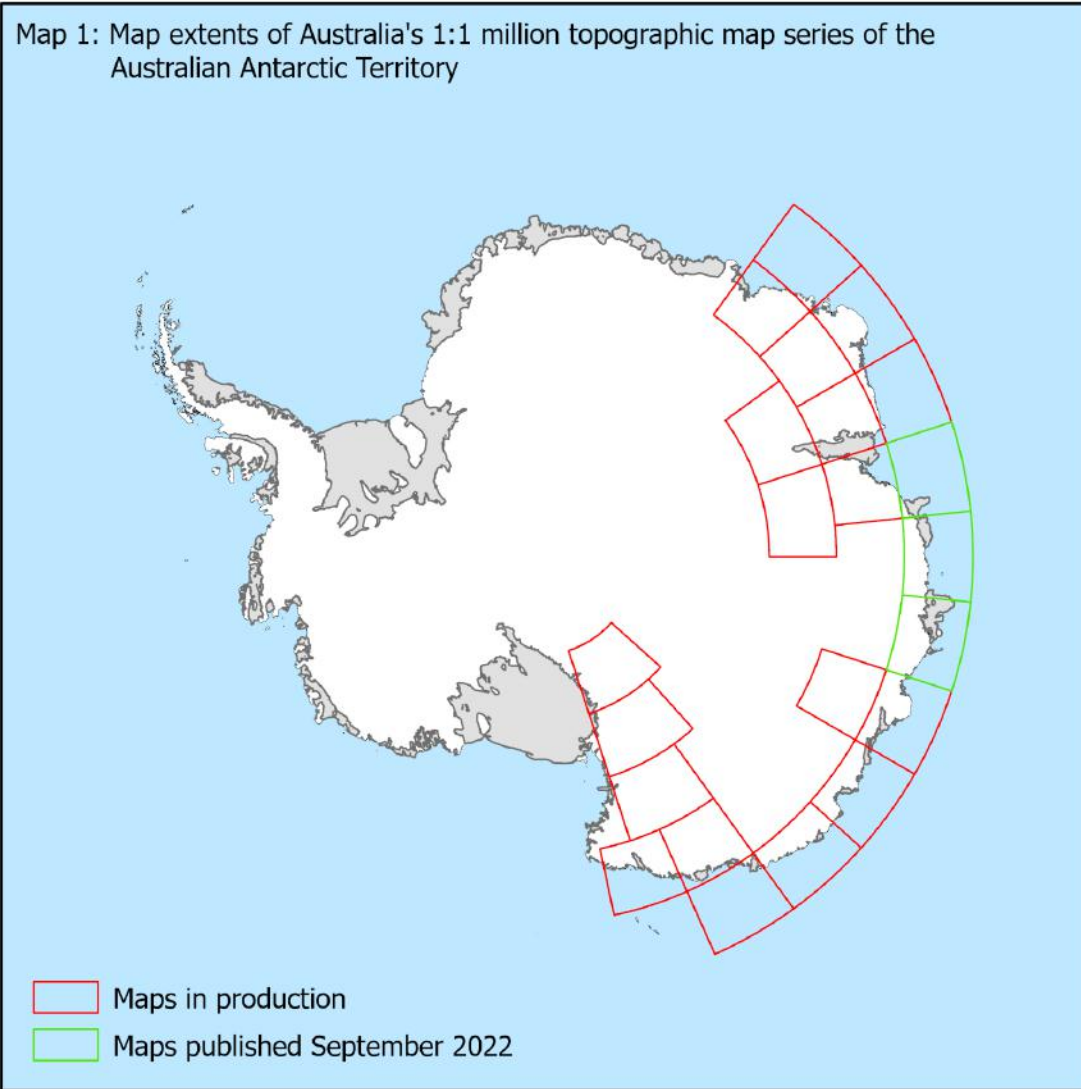


New edition of map 10
New maps 17-21

All maps produced completely in GIS software so they will be easy to update. New coastline and exposed datasets



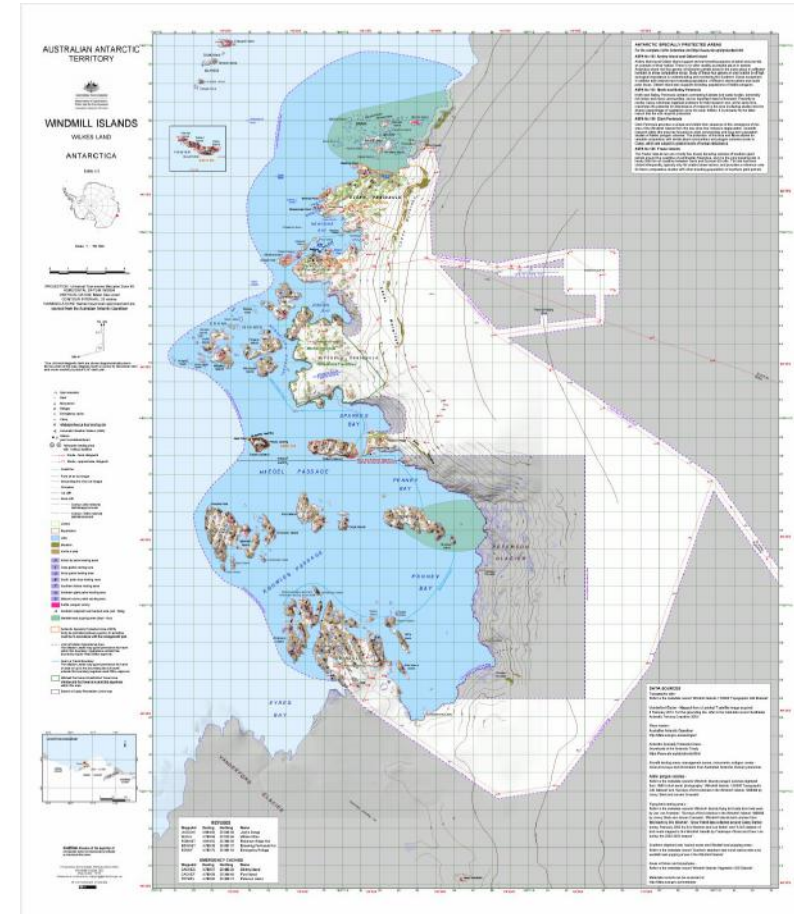
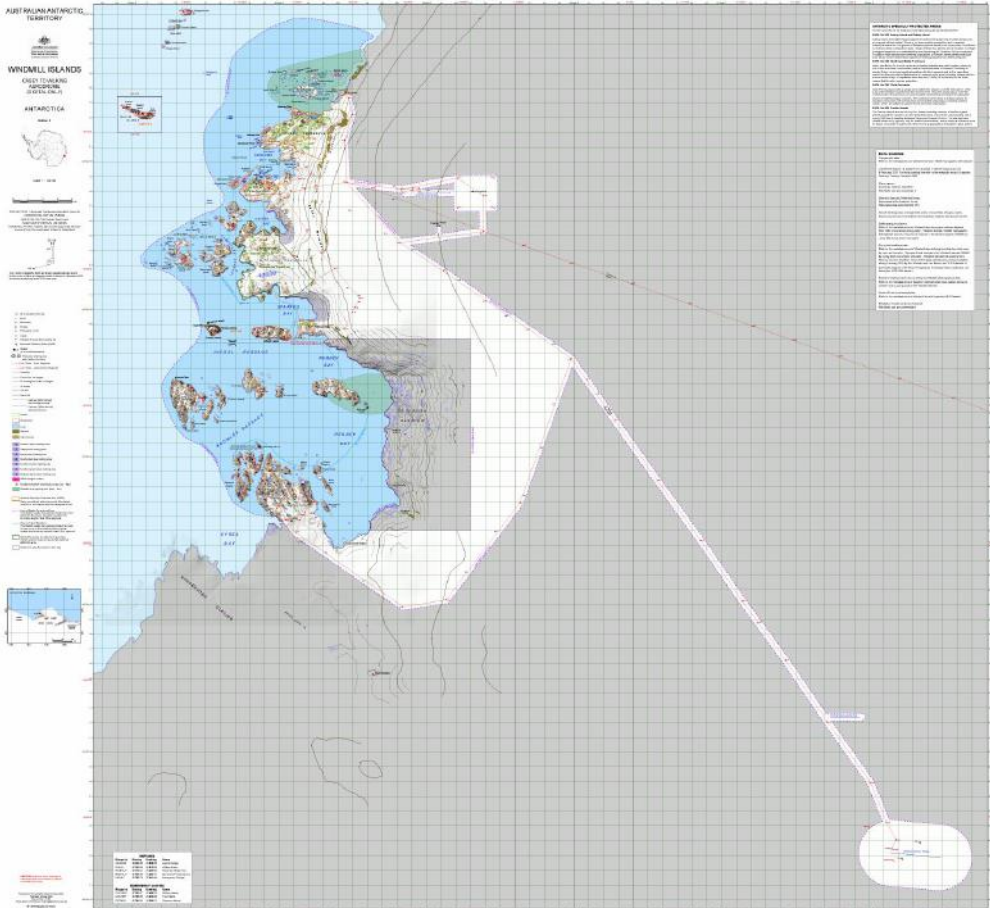
Australian 1:1M topographic maps



We are producing twenty two 1:1 Million topographic maps.

These maps are using our series mapping tool in our GIS.

Australian 1:50K maps



An example of a 1:50K map in the vicinity of our stations.

Georeferenced PDF too large for printing.
For use in navigation software.