Australian Government







Government of South Australia

Department for Energy and Mining

# Activity notice Eastern Resources Corridor Airborne Gravity Survey

Geoscience Australia, in collaboration with state governments, will be carrying out airborne gravity surveying in south-eastern South Australia and north-western Victoria during 2022 and 2023. This survey is part of the Australian Government's Exploring for the Future program, which, is committed to supporting a strong economy, resilient society and sustainable environment for the benefit of Australians. At its heart, the program is about contributing to a sustainable, long-term future for Australia through an improved understanding of the nation's mineral, energy and groundwater resource potential.

#### Why is this survey important?

Airborne surveys are regularly used by government geoscience agencies as a cost-effective and efficient way to collect geoscientific data for a wide range of applications.

This survey will capture observations of the Earth's gravity across the project area to help upgrade Australia's Geospatial Reference System. This will improve the accuracy of positioning information for things like mobile phones, navigation systems, precision agriculture and farming, and autonomous vehicles. The information will also support future informed decision-making for resource management and assist geologists to understand the geological architecture of the subsurface.

## Airborne gravity survey method

Light aircraft are fitted with instruments that can detect subtle differences in the force of gravity due to the different rocks below the Earth's surface. The gravity-sensing instrument does not emit any signal. The technique used during the airborne gravity survey does not have any impact on people or animals. The survey will not involve any disturbance to the ground. Many of these surveys have successfully been carried out all over Australia.

More information about gravity surveys can be found at https://www.ga.gov.au/scientifictopics/disciplines/geophysics/gravity

#### What you may see or hear

A fixed-wing aircraft will fly in public airspace along straight paths ~2 km apart. The aircraft used are usually standard 10-12 passenger light aircraft, with seats removed and surveying equipment installed.

In order to obtain the required accuracy, aircraft will fly at a height no lower than 300 m in built-up urban areas and 150 m in rural areas.

Noise levels on the ground will be minimal due to the flying height, and use of modern turbine or pistonengine aircraft. Most lines will only be flown once.

#### Timeframe and work area

The airborne survey (see map) is expected to be carried out during late 2022 and early 2023. More detailed information about timing for specific areas will be released as it becomes available.



Figure 1: Survey location

## Important to know

Precompetitive data acquired by Geoscience Australia for the Exploring for the Future program will be publicly available after quality control and assurance checks have been performed. Public release of this information may contain explicit spatial location information, such as specific deployment locations and/or areas which may be interpreted as containing groundwater and resource potential.

## COVID-19 protocols

Geoscience Australia staff and contractors comply with all Commonwealth and state government COVID-19 legislation, including public health orders and directions, to protect the health and wellbeing of the community.

#### For further information

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