

# INVESTIGATING CRUSTAL ANOMALIES IN THE CURNAMONA-MUNDI MUNDI REGION USING AN INTEGRATED GEOPHYSICAL APPROACH

COMPANY SPONSORED PROJECT

## PHD PROJECT

University of Adelaide

## PREREQUISITES AND INTERESTS

BSc Honours (1st or 2A) or Masters in Geoscience, with geophysics as a major. Field, laboratory and data analysis skills.

## PRIMARY SUPERVISOR

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## CO-SUPERVISORS

Dr. Lucy McGee (University of Adelaide)

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## PARTICIPATING ORGANISATIONS



## RESEARCH PROJECT

The Curnamona Province crossing the South Australia-New South Wales border (containing the Mundi NDI area in NSW) has been the subject of recently acquired and future planned geophysical surveys. This includes national magnetotelluric, broadband magnetotelluric, seismic, potential field and airborne electromagnetic data. Recent broadband magnetotelluric work has shown interesting mid- to shallow-crustal conductive anomalies beneath the Curnamona Province extending to shallow levels under the Mundi NDI area (see figure below).

The aim of this project is to integrate these magnetotelluric, electromagnetic, potential field and seismic data (as well as other existing datasets) to develop a 3D understanding of the crust, particularly faults, major lithological and intrusive complexes, and fluid flow pathways. The project may involve further targeted acquisition of data, to test ideas and increase resolution. (2022 or 2023 start).

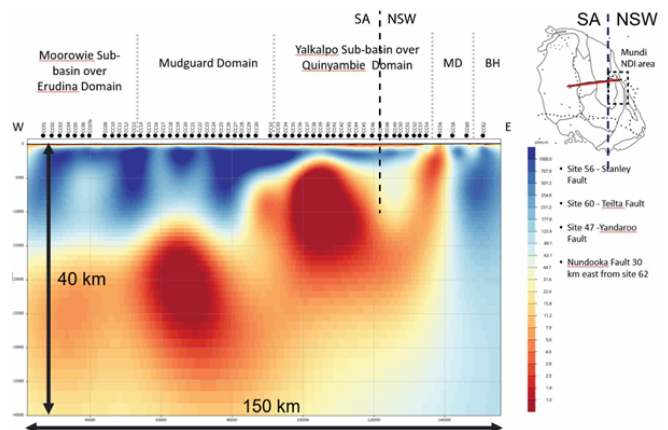


Figure: Showing a cross section from a broadband magnetotelluric survey beneath the Curnamona Province (image modified from B. Kay)