



## **Technical Report**

# **PACE Gawler Craton Airborne Geophysical Survey Program: Block 3B - Torrens**

**South Australia  
2017**

**for**

**Geoscience Australia**



Sander Geophysics Limited  
260 Hunt Club Road  
Ottawa, ON Canada K1V 1C1

Tel: +1 613.521.9626

Fax: +1 613.521.0215

[www.sgl.com](http://www.sgl.com)



Martin Bates, Ph.D., P.Geo.

Jennifer Dennis



## TABLE OF CONTENTS

|                                                                      |           |
|----------------------------------------------------------------------|-----------|
| <b>1.EXECUTIVE SUMMARY.....</b>                                      | <b>1</b>  |
| <b>2.INTRODUCTION.....</b>                                           | <b>2</b>  |
| Project Brief.....                                                   | 3         |
| <b>3.SURVEY AREA.....</b>                                            | <b>4</b>  |
| Survey Area Map.....                                                 | 4         |
| Survey Boundary.....                                                 | 6         |
| <b>4.SURVEY SPECIFICATIONS.....</b>                                  | <b>7</b>  |
| Data Recording.....                                                  | 7         |
| Technical Specifications.....                                        | 7         |
| Flight Line Specifications.....                                      | 8         |
| Survey Ground Speed.....                                             | 9         |
| Terrain Clearance.....                                               | 9         |
| <b>5.SURVEY EQUIPMENT.....</b>                                       | <b>10</b> |
| Airborne Navigation and Data Acquisition System.....                 | 10        |
| Aerial and Ground Magnetometers.....                                 | 10        |
| Magnetic Compensation System.....                                    | 10        |
| Airborne Gamma-Ray Spectrometer System.....                          | 10        |
| Reference Station Acquisition System.....                            | 11        |
| Reference Station and Airborne Acquisition System GPS Receivers..... | 11        |
| Altimeters.....                                                      | 11        |
| Air Temperature Sensor.....                                          | 11        |
| Survey Aircraft.....                                                 | 11        |
| Data Processing Hardware and Software.....                           | 12        |
| <b>6.SYSTEM TESTS.....</b>                                           | <b>13</b> |
| Magnetometer System Tests.....                                       | 13        |
| <i>Magnetometer Heading Test.....</i>                                | <i>13</i> |
| <i>Compensation Calibration.....</i>                                 | <i>13</i> |
| <i>Instrumentation Lag.....</i>                                      | <i>16</i> |
| Spectrometer System Tests.....                                       | 16        |
| <i>Ground Calibration Pads Test.....</i>                             | <i>16</i> |
| <i>Attenuation Test.....</i>                                         | <i>17</i> |
| <i>System Sensitivity.....</i>                                       | <i>18</i> |
| <i>Cosmic and Aircraft Background.....</i>                           | <i>19</i> |
| <i>Radon Background Calibration.....</i>                             | <i>21</i> |
| <i>Ground Component.....</i>                                         | <i>22</i> |
| <i>Pre- and Post-Flight Test Lines.....</i>                          | <i>22</i> |
| <i>Thorium Source Tests.....</i>                                     | <i>23</i> |
| Altimeter System, Position and Digital Terrain Model Tests.....      | 24        |
| <i>Radar And Laser Altimeter Calibration.....</i>                    | <i>24</i> |
| <i>Stationary Aircraft GPS Position Test.....</i>                    | <i>25</i> |
| <b>7.FIELD OPERATIONS.....</b>                                       | <b>26</b> |
| Survey Summary.....                                                  | 27        |

|                                          |           |
|------------------------------------------|-----------|
| Reference Stations.....                  | 27        |
| Re-flights.....                          | 28        |
| Field Personnel.....                     | 29        |
| <b>8.DIGITAL DATA COMPILATION.....</b>   | <b>30</b> |
| Magnetometer Data.....                   | 30        |
| <i>Levelling.....</i>                    | 32        |
| <i>Micro-Levelling.....</i>              | 32        |
| <i>Gridding.....</i>                     | 32        |
| <i>Reduction To Pole.....</i>            | 32        |
| Spectrometer Data.....                   | 33        |
| <i>Spectral Component Analysis.....</i>  | 33        |
| <i>Energy Calibration.....</i>           | 33        |
| <i>Regions of Interest.....</i>          | 33        |
| <i>Standard Corrections.....</i>         | 36        |
| Positional Data.....                     | 41        |
| Radar and Barometric Altimeter Data..... | 43        |
| Temperature Data.....                    | 43        |
| Processing Personnel.....                | 43        |
| <b>9.FINAL PRODUCTS.....</b>             | <b>44</b> |
| Magnetic Line Data Format.....           | 44        |
| Radiometric Line Data Format.....        | 44        |
| Elevation Line Data Format.....          | 44        |
| Digital Grids.....                       | 44        |
| Maps.....                                | 44        |

## LIST OF FIGURES

|                                                                                      |    |
|--------------------------------------------------------------------------------------|----|
| Figure 1: Survey Area.....                                                           | 4  |
| Figure 2: Survey Area Flight Lines (only every 10 <sup>th</sup> line displayed)..... | 5  |
| Figure 3: Compensation calibration test Flt 9204 on March 3 2017.....                | 14 |
| Figure 4: Compensation calibration test Flt 9206 on March 10 2017.....               | 15 |
| Figure 5: Instrumentation lag test.....                                              | 16 |
| Figure 6: Spectrometer attenuation test.....                                         | 18 |
| Figure 7: Cosmic test.....                                                           | 20 |
| Figure 8: Radon tests.....                                                           | 21 |
| Figure 9: Thorium test line results.....                                             | 22 |
| Figure 10: Thorium source tests.....                                                 | 23 |
| Figure 11: Altimeter test.....                                                       | 24 |
| Figure 12: GPS accuracy test results.....                                            | 25 |
| Figure 13: Magnetometer data processing flowchart.....                               | 31 |
| Figure 14: Spectrometer data processing flowchart.....                               | 34 |
| Figure 15: NASVD Components.....                                                     | 35 |
| Figure 16: Positional data processing flowchart.....                                 | 42 |

## LIST OF TABLES

|                                             |   |
|---------------------------------------------|---|
| Table 1: Survey Boundary (datum GDA94)..... | 6 |
| Table 2: Flight line specifications.....    | 8 |

|                                                                   |    |
|-------------------------------------------------------------------|----|
| Table 3: Magnetometer heading test.....                           | 13 |
| Table 4: Magnetic compensation calibration tests and results..... | 14 |
| Table 5: Spectrometer stripping ratios.....                       | 17 |
| Table 6: Spectrometer calibration test data.....                  | 17 |
| Table 7: Spectrometer attenuation coefficients.....               | 17 |
| Table 8: Ground Survey for Sensitivity Calibration.....           | 19 |
| Table 9: Cosmic coefficients.....                                 | 19 |
| Table 10: Radon correction coefficients.....                      | 21 |
| Table 11: Spectrometer ground component coefficients.....         | 22 |
| Table 12: Locations of reference stations, Datum WGS-84.....      | 27 |
| Table 13: Re-flight list.....                                     | 28 |
| Table 14: Survey field crew for Blocks 3A and 3B.....             | 29 |
| Table 15: Gamma Ray Regions of Interest (ROIs) or “windows”.....  | 33 |
| Table 16: Spectrometer processing parameters.....                 | 36 |
| Table 17: Ellipsoid parameters for WGS-84.....                    | 41 |
| Table 18: Ellipsoid parameters for GDA94.....                     | 41 |
| Table 19: Datum conversion parameters from WGS-84 to GDA94.....   | 41 |
| Table 20: Data processing personnel.....                          | 43 |
| Table 21: Delivered digital grids.....                            | 44 |

## LIST OF PICTURES

|                                                                  |    |
|------------------------------------------------------------------|----|
| Picture 1: Typical scenery found in the survey area.....         | 2  |
| Picture 2: Local wildlife.....                                   | 2  |
| Picture 3: View of the survey area from the survey aircraft..... | 6  |
| Picture 4: Preparing the aircraft for a survey flight.....       | 26 |

## Appendix

- I. Sander Geophysics Company Profile
- II. Planned Survey Lines
- III. Flown Survey Lines
- IV. Survey Equipment List
- V. Survey Aircraft
- VI. Weekly Reports
- VII. Delivered Data Channels
- VIII. Low Pass Filter Charts
- IX. Gamma Ray Data Adjustments
- X. Maps



## 1. EXECUTIVE SUMMARY

Sander Geophysics Limited (SGL) conducted a fixed-wing high resolution aeromagnetic and gamma-ray spectrometric survey over the Block 3B "Torrens" area in South Australia for Geoscience Australia. Please refer to *Appendix I* for a Company Profile of SGL.

The survey was flown using SGL's Cessna Grand Caravan 208B, registration C-GSGJ. Production flights commenced on March 4, 2017 and data acquisition was completed on June 22, 2017. A total of 80 (2001 to 2080) flights were flown during the survey to complete the planned 82,808 line kilometres. The survey operations were conducted from Leigh Creek Airport, YLEC (LGH), Leigh Creek, South Australia. Simultaneously while Block 3B was being flown with C-GSGJ, an adjacent Block 3A "Andamooka" was flown with Cessna Grand Caravan, C-GSGA. Block 3B is located directly south of Block 3A. Both blocks were flown around the same time from the same survey base. All the details regarding Block 3A can be found in a separate Data Acquisition and Processing report.

The traverse lines are oriented east-west and spaced at 200 m, while the tie-lines are oriented at north-south and spaced at 2,000 m. A drape surface was created taking into account the terrain and the performance of the aircraft at the modelled altitudes and estimated temperature. The survey was flown with a target clearance of 60 m above ground level. The target average ground speed was 70 m/s. Two additional traverse lines were flown outside the survey boundary and the tie-lines extended beyond the boundary by 1000 metres.

## 2. INTRODUCTION

This report describes the survey that Sander Geophysics Limited (SGL) flew for Geoscience Australia from March to June 2017 in the Torrens area of South Australia.

Magnetic and radiometric data were gathered during this survey. The instruments used to collect the data are described in this report as well as the tests performed to ensure optimal data quality.

The Digital Data Compilation section details all processing performed from data acquisition to final product creation.

The Field Operations section contains all information relating to operations at the survey location including the airport used, reference station coordinates and any problems encountered during the survey. Re-flights are listed as well as field crew members.



*Picture 1: Typical scenery found in the survey area*

One page colour maps of all significant survey data types are included in the appendices, to give a meaningful overview of the extensive data gathered.



*Picture 2: Local wildlife*

The following Project Brief gives a quick reference of the details of the survey.

## Project Brief

|                                  |                                                                                                  |
|----------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Survey Title</b>              | PACE Gawler Craton Airborne Geophysical Survey Program: Block 3B - Torrens                       |
| Client:                          | Geoscience Australia                                                                             |
| Survey Location:                 | South Australia                                                                                  |
| Survey Start Date:               | March 4, 2017                                                                                    |
| Survey End Date:                 | June 22, 2017                                                                                    |
| Contact:                         | David McInnes (David.McInnes@ga.gov.au)                                                          |
| Technical Inspector:             | Aki Nakamura (MineralGeophysics@ga.gov.au)                                                       |
| Field Office Location:           | Leigh Creek, South Australia                                                                     |
| Airport Used:                    | Leigh Creek Airport, YLEC (LGH)                                                                  |
| Aircraft Type:                   | Cessna Grand Caravan 208B                                                                        |
| Total line kilometres:           | 82,808                                                                                           |
| <b>Survey Flying Particulars</b> |                                                                                                  |
| Traverse Lines                   |                                                                                                  |
| Line numbers:                    | 3500010 to 3505600                                                                               |
| Line direction:                  | east-west                                                                                        |
| Line spacing:                    | 200 m                                                                                            |
| Tie-Lines                        |                                                                                                  |
| Line numbers:                    | 3590010 to 3590730                                                                               |
| Line direction:                  | north-south                                                                                      |
| Line spacing:                    | 2,000 m                                                                                          |
| Survey Altitude:                 | smoothed drape with target height of 60 m above ground.                                          |
| Digital Terrain Source:          | SRTM                                                                                             |
| Number of Flights (numbers):     | 80 (2001 to 2080)                                                                                |
| Aircraft Target Ground Speed     | 70 m/s                                                                                           |
| <b>Data</b>                      |                                                                                                  |
| Base Station Locations (WGS-84)  | REF1: S30:35:55.1452 E138:25:16.6700 268.8840m<br>REF2: S30:36:01.9375 E138:25:12.3668 274.0983m |
| Delivery Datum:                  | GDA94                                                                                            |
| Projection                       | MGA53                                                                                            |

The survey area is in the south central part of the province of South Australia. Topography consists of relatively flat plains with scattered large knobby hills. A number of ephemeral salt lakes occur in the block including a large part of Lake Torrens. The vegetation in this arid region is variable with palm trees, boab trees, grassland savanna and desert all in the block. There is very little human presence in the area. While the climate is temperate, at the time of the survey, very hot day time temperatures were experienced. The weather had only a small impact on survey flying.

Figure 1 shows the geographical location of the survey area. The planned survey lines are illustrated in Figure 2. To better illustrate the lines flown only every 10<sup>th</sup> line is shown. A complete list of the planned survey lines can be found in *Appendix II*.



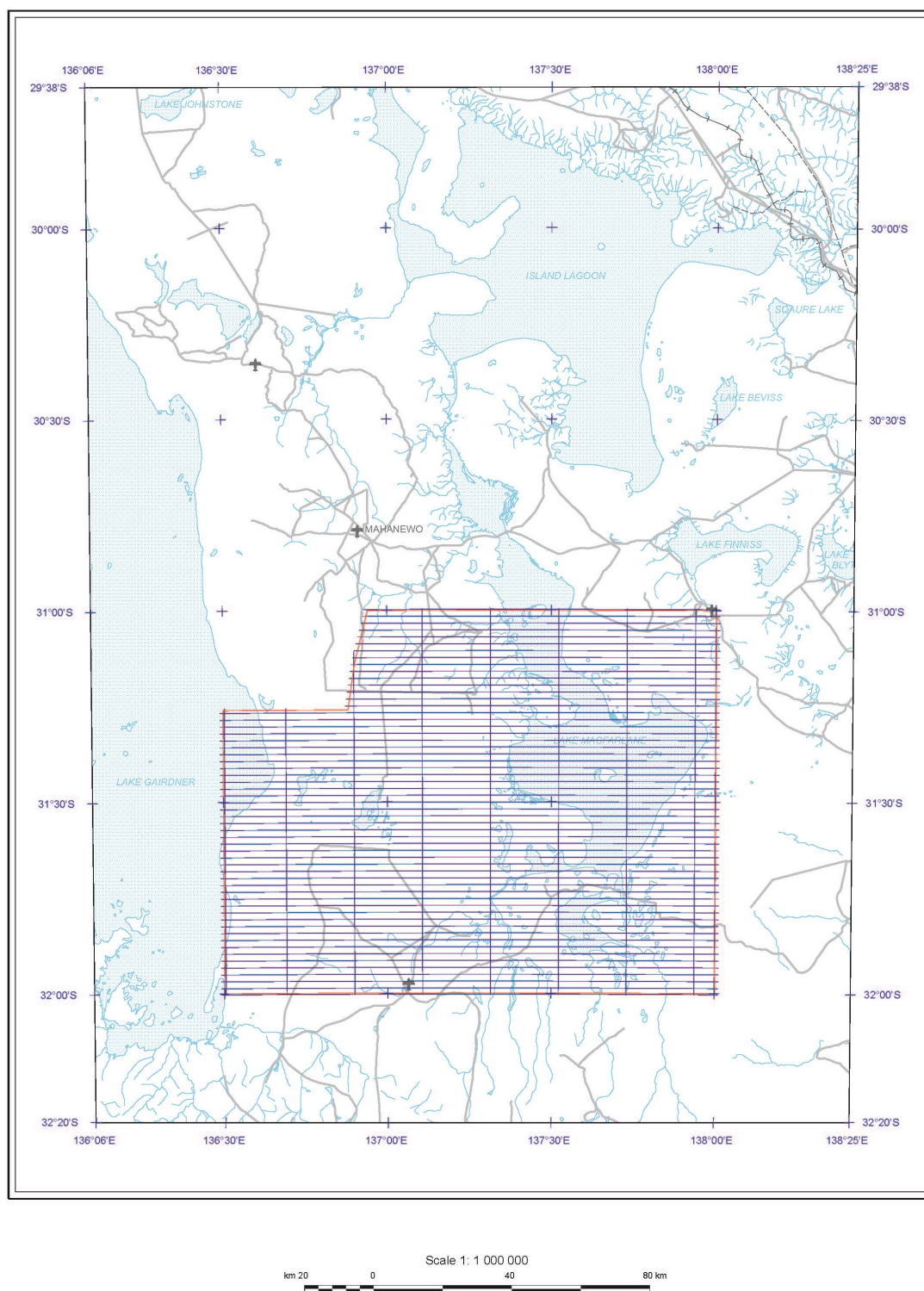


Figure 2: Survey Area Flight Lines (only every 10<sup>th</sup> line displayed).  
Please note: Flight lines have been plotted on incorrect background image.

## Survey Boundary

The block is bounded by the coordinates provided in *Table 1*.

*Table 1: Survey Boundary (datum GDA94)*

| Longitude    | Latitude     |
|--------------|--------------|
| 138.000 East | 31.000 South |
| 138.000 East | 32.000 South |
| 136.500 East | 32.000 South |
| 136.500 East | 31.250 South |
| 136.875 East | 31.250 South |
| 136.875 East | 31.125 South |
| 136.925 East | 31.000 South |



*Picture 3: View of the survey area from the survey aircraft*

## 4. SURVEY SPECIFICATIONS

### Data Recording

In the aircraft:

- GPS positional data (time, latitude, longitude, altitude and raw range from each satellite being tracked) 10 readings per second (10 Hz);
- Altitude as measured by the barometric altimeter at 10 readings per second (10 Hz);
- Terrain clearance as measured by the radar altimeter at 10 readings per second (10 Hz);
- Terrain clearance as measured by the laser altimeter at 3.3 readings per second (3.3 Hz);
- Total magnetic field recorded at 160 readings per second (160 Hz);
- Airborne spectrometer data recorded in windowed and 256 channel spectral format at 1 reading per second (1 Hz);
- Outside air temperature at 10 readings per second (10 Hz).

At the base and remote magnetic/GPS reference stations:

- Total magnetic field at 11 readings per second (11 Hz);
- GPS positional data (time, latitude, longitude, and raw range from each satellite being tracked) at 10 readings per second (10 Hz).

### Technical Specifications

The following technical specifications were adhered to:

1. Fill-in, tie-line or repeated flight lines will be required where flight or tie-lines are more than 20 metres off course over a continuous distance of 1000 metres or more.
2. A re-fly line must overlap a good line for 2 tie-lines. In the case of a re-fly filling a gap within a line it must overlap 2 tie-lines on each side of the gap.
3. Where the terrain clearance varies from the nominated by more than 10 metres over a continuous distance of 1000 metres or more, a fill-in line will be flown at the Contractor's expense unless it can be reasonably demonstrated that such flying would put the pilot and crew at risk.
4. It is considered desirable to minimise elevation difference between flight lines and tie-lines to less than 10 metres at their intersections.
5. Where two aircraft are being utilised for data acquisition, each aircraft must acquire data over separate contiguous blocks.
6. If two or more aircraft are being utilised for data acquisition then the data from each aircraft should be distinguished by the addition of a flag field in the located data that records the call sign of each aircraft that acquired the data.
7. Navigation must use differential GPS methods with recording of GPS positions of 1 second intervals or closer. Positional accuracy must be better than 5 metres in horizontal position and better than 10 metres in height.
8. Contractor will not fly when less than 6 satellites are receivable or the calculated position dilution of precision (PDOP/HDOP) is considered to be outside the accuracy criteria. Geoscience Australia considers that while surveying the HDOP must be less than 4 and the PDOP must be less than 6.
9. Fill-in flight lines or repeated flight lines will be required where magnetic data sampling distances along flight or tie-lines varies from 7 metres by more than +/- 1 metre over a continuous distance of 1000 metres or more.
10. Data will only be accepted when the corresponding magnetic diurnal varies smoothly and slowly. If diurnal magnetic variations are greater than 5 nT in 5 minutes or less, lines flown during the period of magnetic disturbance must be re-flown at the Contractor's expense.

11. In addition the diurnal variation must be less than 1.0 nT when measured from any chord 1 minute long across the diurnal record. Lines not meeting this condition must be re-flown at the Contractor's expense.
12. Before and after every calibration, thorium source tests must be performed to establish that the system sensitivity has not changed during the calibration. A thorium source must be placed at least 40 cm from the centre of each detector package so that all detectors are adequately illuminated. The average of the dead-time and background-corrected thorium window count rate from the thorium source must be calculated. If the pre and post calibration source checks differ by more than 3 percent, the calibration must be repeated. The average of the pre and post calibration source tests must also not differ by more than 3 percent from the average of all other calibrations in the current series, otherwise that calibration must be repeated.
13. In order to verify that the system sensitivity has remained constant since the last series of calibrations, a thorium source test and a background measurement must be carried out prior to the commencement of the survey. If the dead-time and background-corrected thorium window count rate varies by more than 3 percent from the average of all pre and post calibrations source tests, all calibrations must be repeated.
14. In order to verify that the system sensitivity has remained constant throughout the survey, thorium source tests and a background measurements must be carried out before and after every day of flying. If the dead-time and background-corrected thorium window count rate differs by more than 5 percent from the average of all measurements carried out during the most recent calibrations, flights must be suspended until the problem has been rectified.
15. Each day the overall system resolution must be measured with a thorium source placed at least 40 cm from each detector package. At the start of the survey, system resolution should be better than or equal to 7 percent. If the resolution has deteriorated by more than 1 percent (e.g. 6 to 7 percent) from the resolution at the beginning of the survey, flights should be suspended until the problem has been rectified.
16. Survey test lines of at least 100 seconds duration should be flown each day at the nominal survey ground clearance to monitor the effects of soil moisture and verify that the system is functioning correctly. If the background and height-corrected thorium window count rate varies by more than +/- 10 percent from the mean of the previous measurements, flights should be suspended until the thorium count rate has returned to acceptable levels.
17. Unless otherwise advised in writing by Geoscience Australia, the Contractor shall abide by the following conditions if part of the survey area is affected by
  1. No flying in the affected area until 3 hours after rain has ceased.
  2. No flying in the affected area until surficial water has dissipated; and
  3. A 100-second duration portion of a previously flown line, in the vicinity of the affected area, should be re-flown to determine whether any moisture effects are evident. No flying is to be done until the moisture effects have disappeared.

## Flight Line Specifications

The survey area flight line specifications are listed in the following table. Rhumb lines were used for line direction and thus defined by lines of longitude or latitude.

Table 2: Flight line specifications

|                | Line Direction | Line Spacing (m) |
|----------------|----------------|------------------|
| Traverse Lines | east-west      | 200              |
| Tie-Lines      | north-south    | 2,000            |

## Survey Ground Speed

The survey target average ground speed was 70 m/s.

## Terrain Clearance

A pre-planned drape surface was prepared for the survey to guide the aircraft over the topography in a consistent manner, as close to the minimum clearance as possible so as to meet the desired standard of intersection elevation differences of less than 10 m. The drape surface was prepared with digital elevation model (DEM) data obtained from the Shuttle Radar Topography Mission (<http://srtm.usgs.gov/>) for the area in question. The DEM included an extension beyond the survey boundary to allow the aircraft to achieve the drape clearance before coming on line.

The drape surface created used a climb and descent rate of 339 ft/nm at 207 m and 327 ft/nm at an altitude of 2,362 m above sea level (ASL). Interpolation or extrapolation was used to calculate climb and descent rates for the smooth surface for all locations. The temperature component used for the calculation was based on published weather history. The gentle drape surface created was below the maximum climbing and descending capabilities of the survey aircraft and guided the aircraft as close to the target height of 60 m above the terrain as possible in all locations whilst retaining reasonable safety margins.

## 5. SURVEY EQUIPMENT

SGL provided the following instrumentation for this survey; see *Appendix IV* for further details:

### Airborne Navigation and Data Acquisition System

#### *Sander Geophysics Data Acquisition System (SGDAS)*

The SGDAS is the latest version of airborne navigation and data acquisition computers developed by SGL. It is the data gathering core for all the different types of survey data. The computer incorporates an altimeter analog to digital converter and a NovAtel GPS multi-frequency receiver (see the GNSS and GPS Receivers section below for the details) which automatically provides the UTC time base for the recorded data. The system acquires the different data streams from the sensors and receives and processes GPS signals from the GPS antenna. Navigation information from the navigation side of the computer guides the pilots along the pre-planned flight path in all three dimensions. Profiles of the incoming data are displayed in real-time to the pilots for continuous monitoring. The data are recorded in database format on redundant solid-state data storage modules.

### Aerial and Ground Magnetometers

#### *Geometrics G-822A*

Both the ground and airborne systems used a non-oriented (strap-down) optically-pumped cesium split-beam sensor. These magnetometers have a sensitivity of 0.005 nT and a range of 20,000 to 100,000 nT with a sensor noise of less than 0.0005 nT. The airborne sensor was mounted in a fibreglass stinger extending from the tail of the aircraft. Total magnetic field measurements were recorded at 160 Hz in the aircraft, then later down sampled to 10 Hz during data processing. The ground systems recorded magnetic data at 11 Hz.

### Magnetic Compensation System

#### *Sander Geophysics AIRComp*

SGL's own hardware and software system, AIRComp, was used to remove the effects of the aircraft and its manoeuvres from the recorded magnetic data. This system records the magnetic field measured by up to 4 cesium magnetometers, as well as the three axis output of a fluxgate magnetometer. These data are recorded for post-processing. Calibration of the magnetic effects of the aircraft is carried out as described in section 6, System Tests. Coefficients to be used for compensation are derived by processing the calibration flight data. The compensation coefficients are applied to data recorded during normal survey operations to produce compensated magnetic data.

### Airborne Gamma-Ray Spectrometer System

#### *Exploranium GR820 with crystal detector packs GPX-1024*

The Exploranium spectrometer system includes an on-board computer for real-time signal processing and analysis, allowing automatic gain control for individual crystals using the natural thorium peak, and multi-channel recording and analysis. The system utilizes a NaI(Tl) detector volume of 42.0 L consisting of 8 downward-looking and 2 upward-looking parallelepiped crystals of 4.2 L each, housed in two detector packs. Data were recorded in 256 channel spectral mode and windowed data mode at 1 Hz.

## Reference Station Acquisition System

### *Sander Geophysics SGRef*

The SGRef reference (ground) station is a dual reference station. One half consists of a data acquisition computer with a cesium magnetometer interface and frequency counter to process the signal from the magnetometer sensor and from the GPS receiver (see GPS Receivers section below for the details). The other half contains only a GPS receiver. These two halves operate independently of each other. The time base (UTC) of both the ground and airborne systems is automatically provided by the GPS receiver, ensuring proper merging of both data sets. All data are displayed on an LCD flat panel monitor. The magnetic data, sampled at 11 Hz and the GPS data, sampled at 10 Hz, are recorded on solid state data storage modules. The entire reference data acquisition system was set for automatic, unattended recording. The noise level of the reference station magnetometer is less than 0.1 nT.

## Reference Station and Airborne Acquisition System GPS Receivers

### *NovAtel OEMV-3 receiver board*

The NovAtel OEMV-3, multi-frequency GNSS (Global Navigation Satellite System) receiver is configurable up to 72 channels with the tracking of GPS (L1, L2, L5), GLONASS (L1, L2), SBAS, and L-band satellites and signals. It provides averaged position and raw range information of all satellites in view. With the high random vibration performance feature the NovAtel OEMV-3 is ideal for demanding applications. GNSS positional data are recorded at 10 Hz.

## Altimeters

### *SLas-P - Riegl LD90-31K-HiP Laser Rangefinder*

The Riegl laser altimeter uses a single optical laser beam to measure distance to the ground. It is effective over water and is eye safe. This profilometer has a range of 1,500 m, a resolution of 0.01 m with an accuracy of 5 cm and a 3.3 Hz data rate.

### *TRT ERT 530A Digital Radar Altimeter*

The TRT uses radio wave echoing to determine the height above ground. It will generally “see through” foliage. The TRT radar altimeter has a resolution of 0.5 m, an accuracy of 1%, a range of 1 to 2,440 m and a 10 Hz data rate.

### *Sensotec Digital Barometric Pressure Sensor*

The barometric pressure sensor measures static pressure to an accuracy of  $\pm 4$  m and resolution of 2 m over a range up to 30,000 ft above sea level. The barometric altimeter data is sampled at 10 Hz.

## Air Temperature Sensor

### *Omega RTD-805 Outside Air Temperature Probe*

The outside air temperature is measured at 10 Hz with a resolution of 0.1 °C. The temperature sensor has a range of  $\pm 100$  °C and an accuracy of  $\pm 0.2$  °C. The temperature sensor is mounted in an air inlet duct at the point where the wing strut attaches to the right hand wing.

## Survey Aircraft

### *Cessna 208B Grand Caravan (C-GSGJ)*

The Cessna 208B Grand Caravan is an all metal, high wing single-engine aircraft powered by a Pratt & Whitney Canada PT6A-114A engine driving a constant speed, full feathering, reversible propeller. The aircraft has fixed gear, extendable flaps, manually adjustable trim tabs, full de-icing equipment, and sufficient avionics for instrument flying. The Grand Caravan is equipped with a rigid aluminum and composite material 3 m tail stinger designed to accommodate the magnetometer sensor. The belly of the aircraft has a 14 cm diameter glass opening allowing for

the laser altimeter and video camera. The airframe has been extensively modified to reduce the magnetic signature of the aircraft by replacing ferromagnetic parts with those made from special non-magnetic stainless steel or aluminum. Several wiring changes have also been made to the electrical system to reduce the magnetic field variations around the aircraft. Other alterations have been made to the Grand Caravan allowing for gravity, spectrometer, LiDAR and methane sensing surveys. All survey modifications are certified to meet the requirements of the Canadian Aviation Regulations (CARs). A complete description of this survey aircraft is given in *Appendix V*.

### **Data Processing Hardware and Software**

Compilation of the data was performed on high performance desktop and laptop computers optimized for data processing tasks. SGL's proprietary geophysical software was used for data processing.

## 6. SYSTEM TESTS

### Magnetometer System Tests

#### **Magnetometer Heading Test**

A test was performed to measure the heading error of the magnetic system in the survey aircraft. The test was performed by flying a "cloverleaf" pattern over a known point at survey altitude. The cloverleaf consists of a pass over the known point orientated in all four directions of the traverse lines and tie-lines.

The heading test was performed prior to the start of the survey in South Australia on February 23, 2017. The heading test flight lines were pre-planned, and reference ground magnetic data were obtained through the use of an SGL reference station.

The results of the heading test are presented in *Table 3*. The test determined an average north-south heading error of -0.71 nT and an average east-west heading error of -0.32 nT. The heading error remains consistent through the duration of the survey, and is fully corrected in the normal airborne magnetic data during processing.

*Table 3: Magnetometer heading test*

| Aircraft type : Cessna 208B       |         | Date:                     | March 13, 2017         |
|-----------------------------------|---------|---------------------------|------------------------|
| Registration : C-GSGJ             |         | Height flown:             | 3000 m ASL             |
| Field Location: South Australia   |         | Magnetometer type :       | Geometrics G-822A      |
| Organization : Sander Geophysics  |         | Compensator:              | SGL AIRComp            |
| Pilot : Tomo Nishimura            |         | Sampling rate :           | 10/s                   |
| Co-Pilot : Kyle Tiessen           |         | Data acquisition system : | Sander SGDAS           |
| Direction                         | Line #  | Diurnally Corrected Mag   | Variation from Average |
| N                                 | 529.02  | -228.2                    | 0.20                   |
| S                                 | 529.01  | -228.3                    | 0.08                   |
| E                                 | 5209.01 | -228.3                    | 0.09                   |
| W                                 | 5209.02 | -229.0                    | -0.61                  |
| N                                 | 529.04  | -228.1                    | 0.23                   |
| S                                 | 529.03  | -228.1                    | 0.24                   |
| E                                 | 5209.03 | -228.1                    | 0.31                   |
| W                                 | 5209.04 | -228.9                    | -0.54                  |
| Average North-South Heading Error |         | 0.06 nT                   |                        |
| Average East-West Heading Error   |         | 0.77 nT                   |                        |

#### **Compensation Calibration**

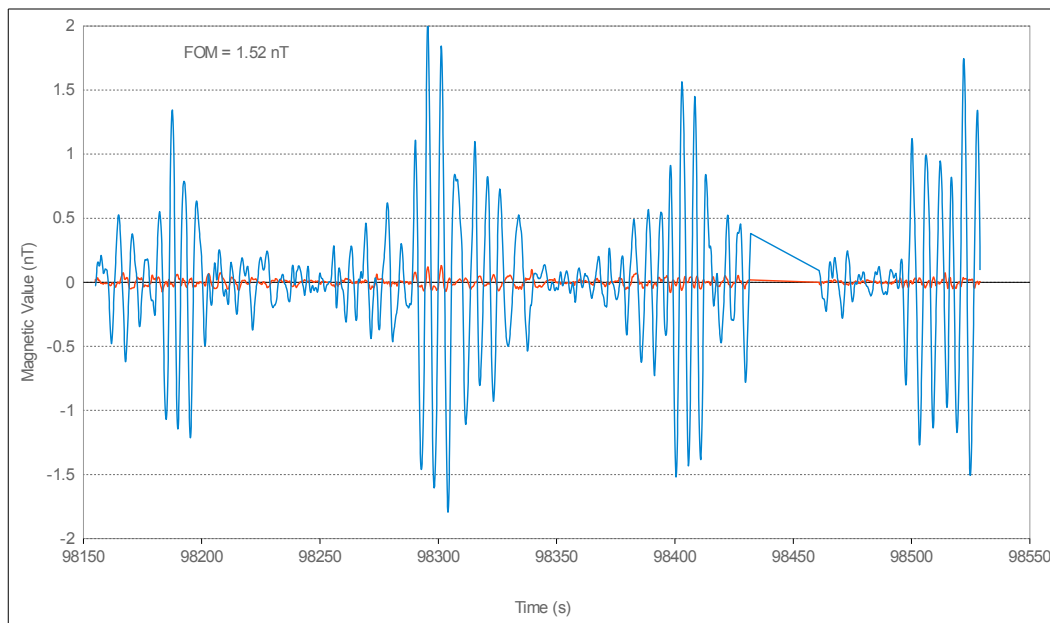
Compensation calibrations determine the magnetic influence of aircraft and its manoeuvres. During the compensation calibration flight, the aircraft performs sets of three pitches ( $\pm 5^\circ$ ), rolls ( $\pm 10^\circ$ ), and yaws ( $\pm 5^\circ$ ), while flying in the four flight line directions at high altitude over a magnetically quiet area. The coefficients calculated from the calibration are applied to the acquired magnetometer data to measure the effectiveness of the compensation system in mitigating the magnetic interference.

The total compensated signal noise resulting from the twelve manoeuvres, referred to as the Figure of Merit (FOM), is calculated from the maximum peak-to-peak value resulting from each manoeuvre. A new compensation calibration must be performed after any aircraft or system modifications that may affect the aircraft's magnetic field interference. *Table 4* shows the compensation calibration tests performed and the results. See *Figures 3* and *4* for an illustration of the compensated and

uncompensated data acquired during the compensation calibration. The second calibration on March 10, 2017 was required due to the replacement of the fluxgate magnetometer.

*Table 4: Magnetic compensation calibration tests and results*

| Date           | Flight | FOM (nT) | Used for Flights |
|----------------|--------|----------|------------------|
| March 3, 2017  | 9204   | 1.52     | 2001-2006        |
| March 10, 2017 | 9206   | 1.45     | 2007-2080        |



*Figure 3: Compensation calibration test Flt 9204 on March 3 2017*

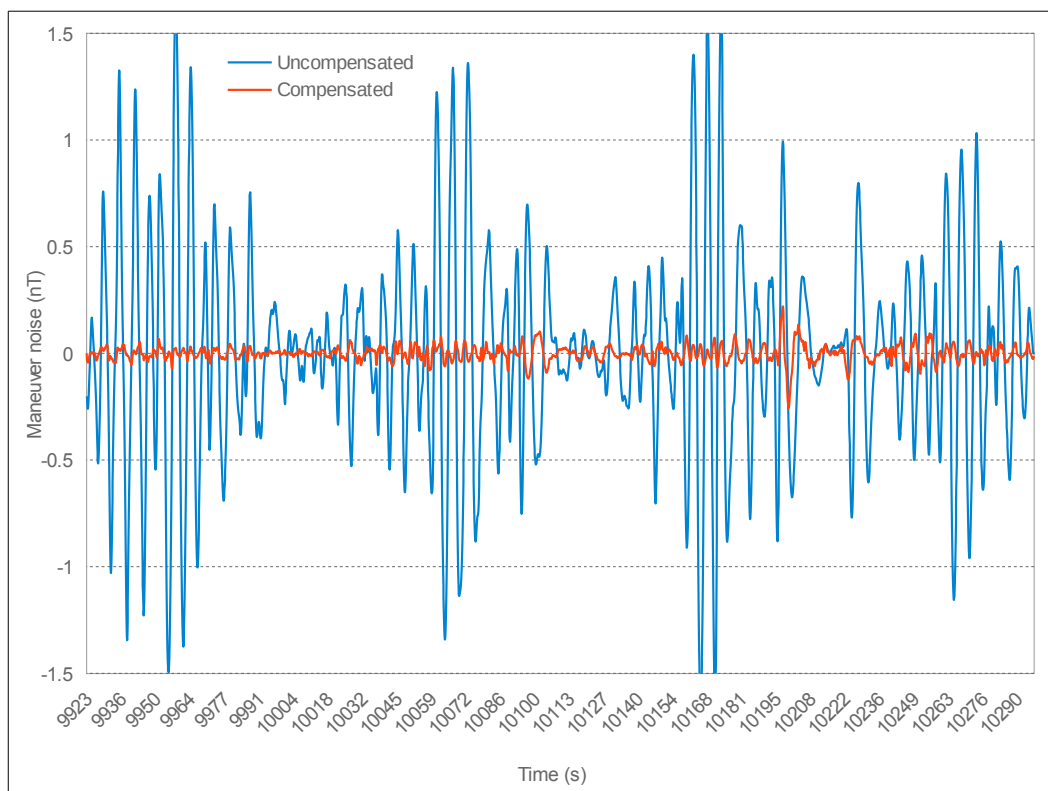


Figure 4: Compensation calibration test Flt 9206 on March 10 2017

### Instrumentation Lag

The lag in the magnetic data is a function of two components, a static lag due to signal processing and a speed-dependent dynamic lag due to the physical offset of the magnetometer and the GPS antenna. Both elements of the lag are well-known. The static lag is known to be 0.244 s from the filters applied during signal processing. The dynamic lag is equal to the offset of the sensors, known to be 12 m, divided by the flying speed. For this test the dynamic lag averaged 0.18 s, for a total lag of 0.42 s.

The lag test was flown on March 3, 2017 at the field location by flying over a local sharp 400 nT anomaly in Lake Torrens in opposite directions. The results are shown in *Figure 5*. The lag correction is applied in the first step of magnetic data compilation.

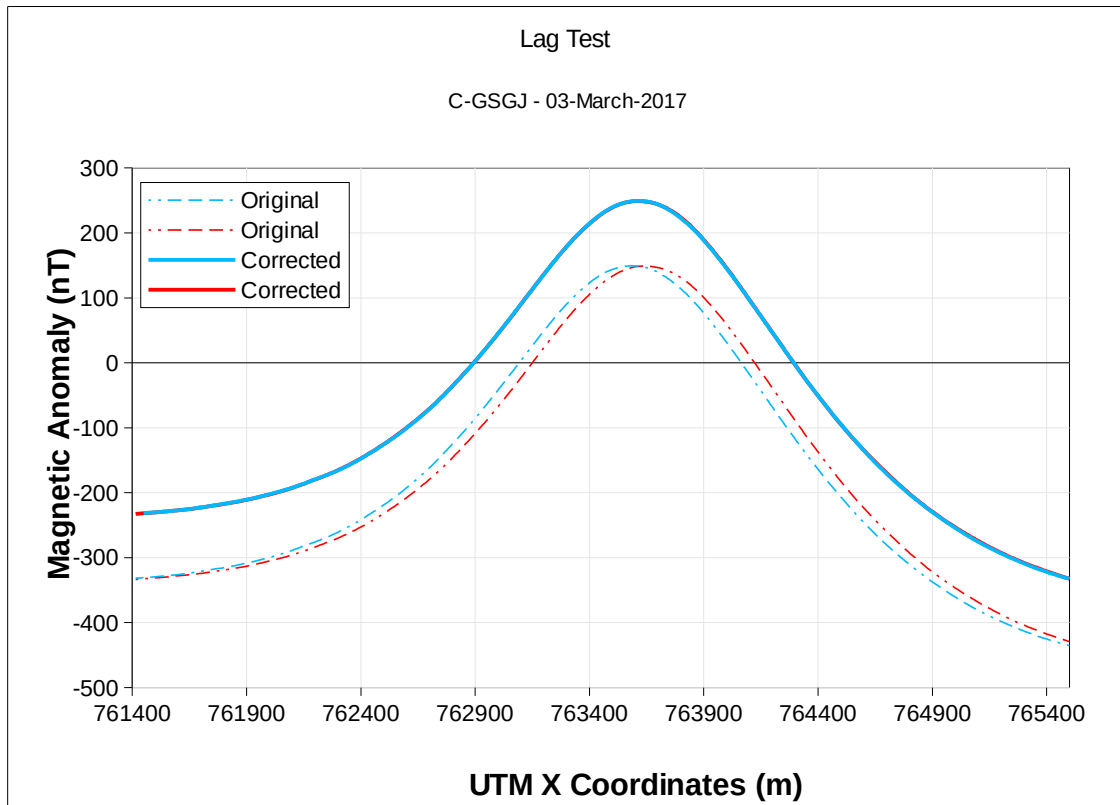


Figure 5: Instrumentation lag test

## Spectrometer System Tests

### Ground Calibration Pads Test

The stripping ratios for the gamma-ray spectrometer were determined on December 23, 2016, in Ottawa, Canada. The Geological Survey of Canada calibration pads, which are stored at the SGL hangar in Ottawa, were used. The tests were performed with the detectors installed in survey configuration on board an aircraft. Each detector was tested separately and the test results were averaged to create stripping ratios for this system. See Table 5 for a list of stripping ratios.

The following procedure was carried out:

- Cesium stabilization
- Thorium stabilization
- Pre-pads source test, one thorium source below pack

- Stabilization on thorium taken off
- Pads test carried out in order: background, potassium (six minutes recording each)
- Re-stabilize on thorium
- Stabilization on thorium taken off
- Pads test carried out in order: uranium, thorium, and background (six minutes recording each)
- Stabilization on thorium put on
- Post-pads source test, one thorium source below pack

Table 5: Spectrometer stripping ratios

|                                     |        |
|-------------------------------------|--------|
| Thorium into Uranium ( $\alpha$ )   | 0.2381 |
| Thorium into Potassium ( $\beta$ )  | 0.3908 |
| Uranium into Potassium ( $\gamma$ ) | 0.7163 |
| Uranium into Thorium ( $\alpha$ )   | 0.0477 |
| Potassium into Thorium ( $\beta$ )  | 0.0011 |
| Potassium into Uranium ( $\gamma$ ) | 0.0069 |

### Attenuation Test

The exponential height attenuation coefficients for the spectrometer were calculated using the data acquired during a pre-survey test flight over the Carnamah Radiometric Test Range near Perth, Western Australia on February 15, 2017. The calibration flights were carried out from approximately 50 m to 225 m mean terrain clearance at 25 m intervals. Results of this test are given in Table 6.

After correction for background and stripping, the variation in count rate with effective height was used to determine the attenuation coefficients shown in Table 7. Results of the attenuation test are shown in Figure 6.

Table 6: Spectrometer calibration test data

| Altitude at STP (m) | Total Counts (cps) | Potassium (cps) | Uranium (cps) | Thorium (cps) |
|---------------------|--------------------|-----------------|---------------|---------------|
| 49.94               | 5454.6             | 396.665         | 53.006        | 261.434       |
| 74.94               | 4556.4             | 312.045         | 45.080        | 219.533       |
| 98.59               | 3875.9             | 248.247         | 40.884        | 183.317       |
| 125.69              | 3179.2             | 194.435         | 29.674        | 153.800       |
| 148.92              | 2735.9             | 158.328         | 26.766        | 131.001       |
| 175.82              | 2292.6             | 126.961         | 20.433        | 110.960       |
| 199.36              | 1946.6             | 101.971         | 18.209        | 93.530        |
| 225.58              | 1616.4             | 86.541          | 13.824        | 76.608        |

Table 7: Spectrometer attenuation coefficients

|           | Coefficients ( $m^{-1}$ ) |
|-----------|---------------------------|
| Total     | -0.006880                 |
| Potassium | -0.008764                 |
| Uranium   | -0.007664                 |
| Thorium   | -0.006895                 |

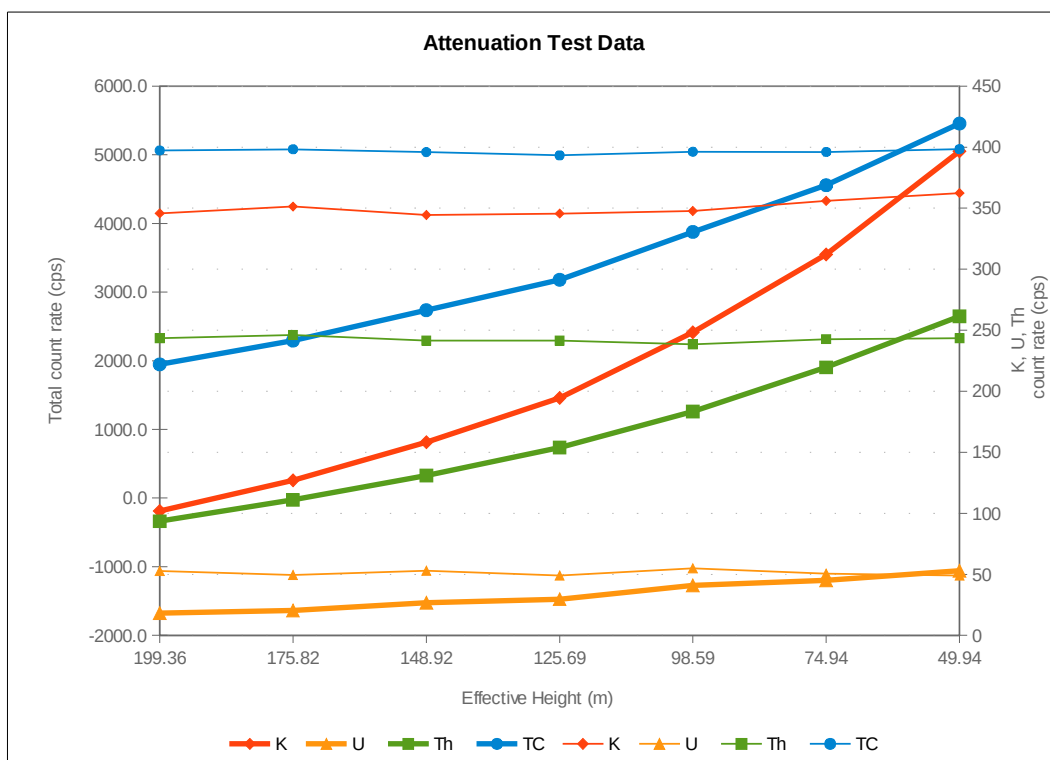


Figure 6: Spectrometer attenuation test

### System Sensitivity

A pre-survey test flight was carried out over the Carnamah Radiometric Test Range near Perth, Western Australia on February 15, 2017. The test flight served to determine system sensitivities through comparison of airborne data with data acquired on the ground, as well as to determine the variation of the window counts with aircraft altitude (see attenuation coefficients above).

The ground measurements made using an Exploranium portable gamma-ray spectrometer, were acquired at 24 different sites along the 2.5 km length of the calibration range (the last station was inaccessible). Measurements were also made using the portable spectrometer on the small lake system close by the test range to determine background radiation due to cosmic radiation, radon decay products in the air and any radioactivity of the equipment. The background was subtracted from the ground measurements and the ground concentrations of potassium, uranium and thorium were determined using calibration coefficients for the portable spectrometer determined using the Geological Survey of Canada calibration pads located at Ottawa Airport.

The sensitivities of the airborne system for potassium, equivalent uranium, and equivalent thorium were calculated by dividing the average count rates corrected to an effective height of 60 m above ground by the measured ground concentrations. The results are presented in Table 8.

Table 8: Ground Survey for Sensitivity Calibration

|                    | Average counts at<br>60 m<br>(cps) | Ground<br>Concentrations | Sensitivities   |
|--------------------|------------------------------------|--------------------------|-----------------|
| Potassium          | 352.7                              | 2.9854%                  | 118.1416 cps/%  |
| Equivalent Uranium | 51.0                               | 3.8823 ppm               | 13.1258 cps/ppm |
| Equivalent Thorium | 242.2                              | 32.9083 ppm              | 7.3602 cps/ppm  |

**Cosmic and Aircraft Background**

A cosmic and aircraft background test was performed for the spectrometer on March 2, 2017 near Whyalla, South Australia. The test flight consisted of flying at heights of 1000 m to 3000 m above ground level at 250 m intervals, recording approximately 6 minutes of data at each altitude. Coefficients are determined by linear regression of cosmic counts versus each spectral window as described in the IAEA Report 323 (1991). Table 9 lists the computed cosmic and aircraft background coefficients. Figure 7 shows the cosmic test results.

Table 9: Cosmic coefficients

|           | Cosmic Stripping Factor | Aircraft Background |
|-----------|-------------------------|---------------------|
| Total     | 0.6603                  | 78.42               |
| Potassium | 0.0394                  | 11.56               |
| Uranium   | 0.0286                  | 0.50                |
| Thorium   | 0.0347                  | 2.95                |
| Upward    | 0.0077                  | 0.17                |

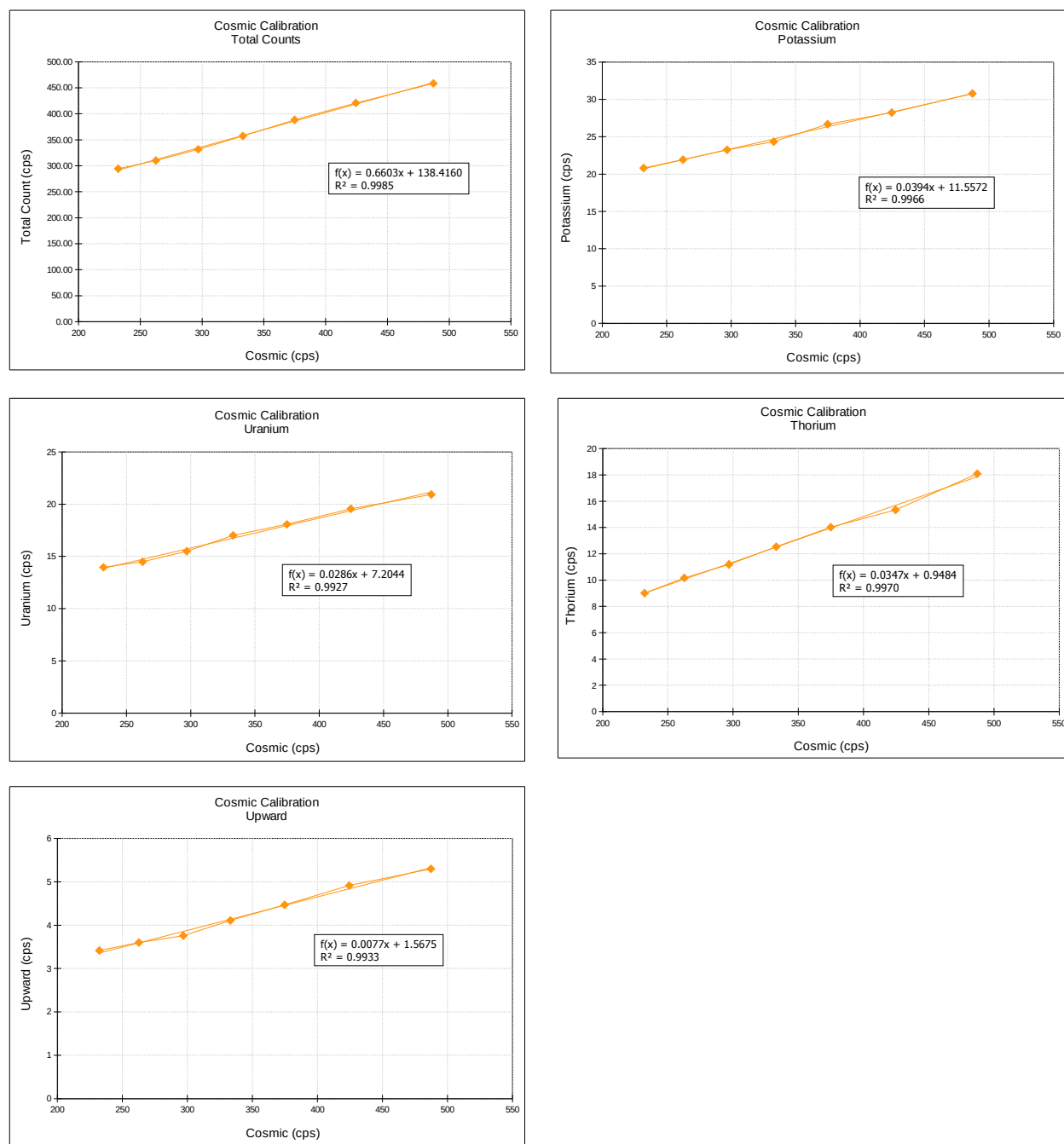


Figure 7: Cosmic test

### Radon Background Calibration

Radon background was monitored through the use of two upward looking detectors. No suitable body of water was available, so coefficients relating the count rate in the uranium window from the upward detectors to the count rate in the potassium, uranium, thorium and total count windows from the downward facing detectors were determined using the land test lines from a period where the conditions were relatively stable as monitored by the Thorium count rates.

The cosmic and background corrected data from each of the up (ur), thorium (Tr), potassium (Kr) and total (Ir) windows are plotted against the counts in the uranium (Ur) window for each line flown. The coefficients determined for this survey are presented in *Table 10*. Linear regressions of these plots provide the radon coefficients to be used in the radiometric data processing are shown in *Figure 8*. Because the coefficients are determined over land, not water, the small b coefficients cannot be determined and are assumed to be zero.

Table 10: Radon correction coefficients

|                       | <i>a</i> | <i>b</i> |
|-----------------------|----------|----------|
| $I_r = a_I U_r + b_I$ | 12.8786  | 0.0000   |
| $K_r = a_K U_r + b_K$ | 0.7063   | 0.0000   |
| $T_r = a_T U_r + b_T$ | 0.0319   | 0.0000   |
| $u_r = a_u U_r + b_u$ | 0.2543   | 0.0000   |

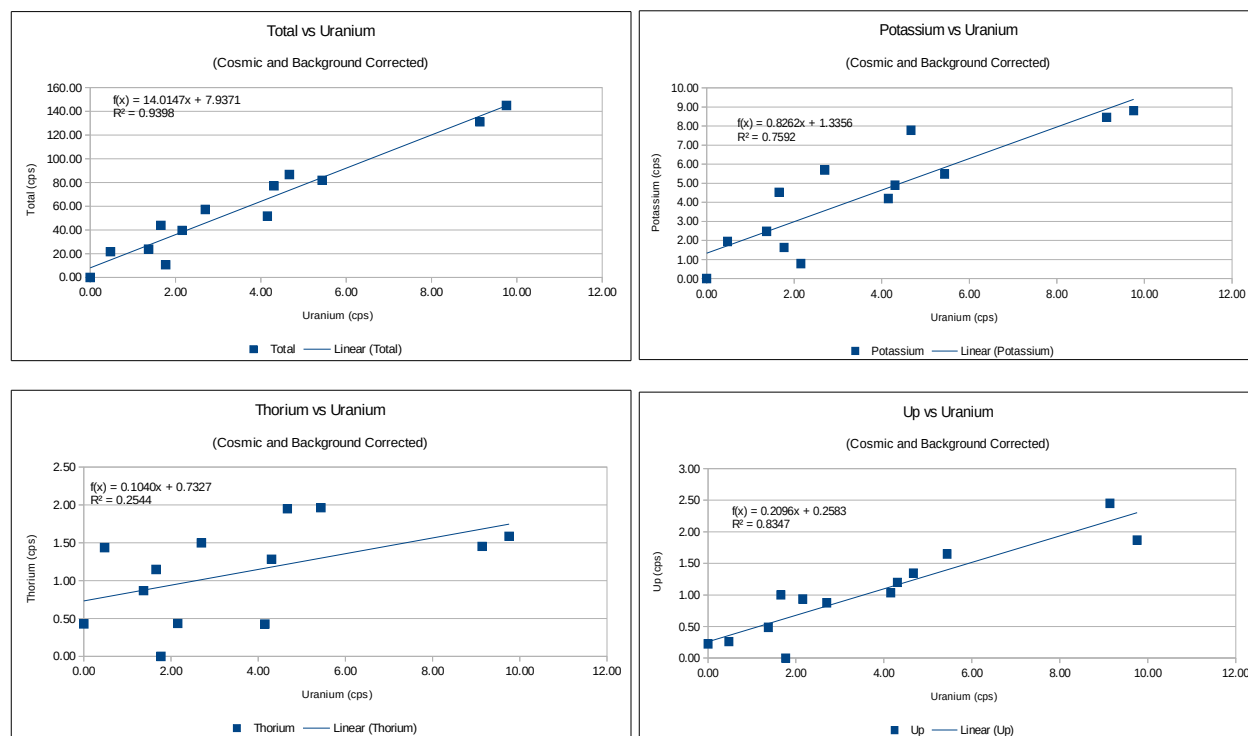


Figure 8: Radon tests

### Ground Component

The ground component coefficients are used to quantify the response of the upward looking detector to radiation from the ground using the technique described in IAEA Report 323. This involves computing two coefficients based on the counts in the uranium and thorium windows as follows:

$$u_g = a_1 U_g + a_2 T_g$$

where:  $u_g$  is the upward window count from the ground  
 $U_g$  is the downward uranium window count  
 $T_g$  is the downward thorium window count  
 $a_1$  and  $a_2$  are the ground coefficients

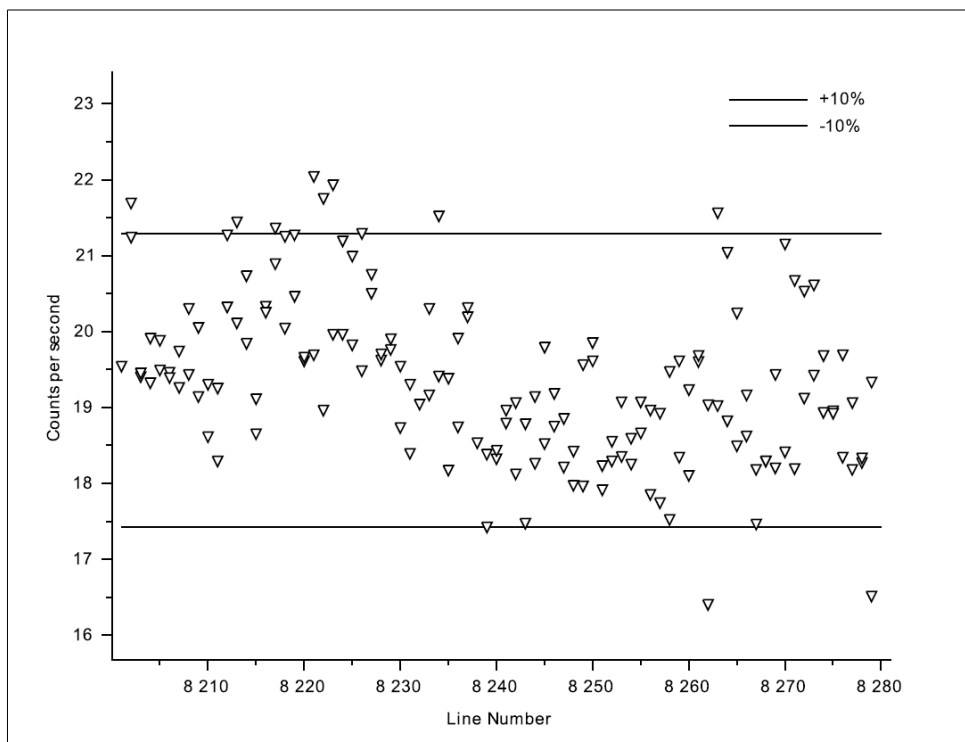
The ground component coefficients used for this project are listed in *Table 11*.

*Table 11: Spectrometer ground component coefficients*

| $a_1$ (uranium) | $a_2$ (thorium) |
|-----------------|-----------------|
| 0.031247        | 0.022579        |

### Pre- and Post-Flight Test Lines

Overland test lines were flown at survey height and survey speed at the beginning and end of all production flights. The test line was located south of the base of operations. Corrected thorium data for the test line were generally within +/- 10% of the average, see *Figure 9*.



*Figure 9: Thorium test line results*

### Thorium Source Tests

Thorium source tests were performed at the start and end of each production day. A thorium source was positioned beneath each crystal pack. Data from the thorium, and background windows were recorded for a minimum of 120 seconds during each test. These tests were performed at the same aircraft parking location on the ramp with full fuel (post flight source tests performed after fueling had been complete). Recorded data were dead-time and background corrected and statistics were compiled. Thorium source test results were well within  $\pm 5\%$  of the mean value, see Figure 10. The coherence of the data indicates that the system is operating correctly.

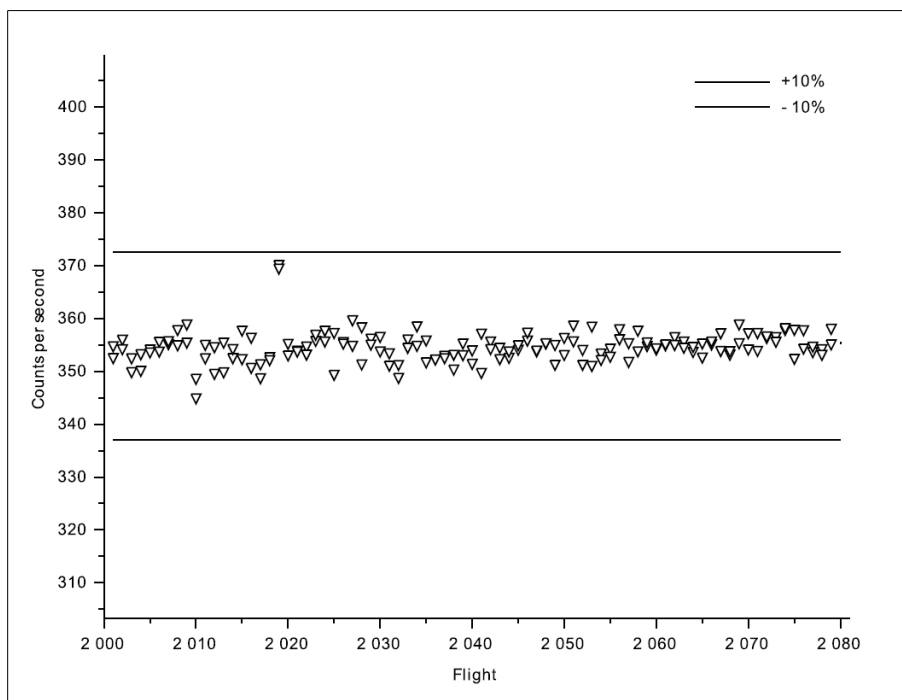


Figure 10: Thorium source tests

## Altimeter System, Position and Digital Terrain Model Tests

### Radar And Laser Altimeter Calibration

A test flight to calibrate the radar and laser altimeters was flown prior to the start of the survey on March 2, 2017 over the runway at Whyalla Airport, South Australia. Six passes were conducted over the runway at heights from 0 to 300 m above ground at various levels. The altimeter values were compared to the post-flight differentially corrected GPS altitude information for calibration. An ideal altimeter would yield a slope of 1 and an intercept of 0. The TRT radar altimeter slope was 1.0014 and the intercept -1.4349 m. The laser altimeter slope was 1.0025 and the intercept was 1.4977 m. The Bendix/King radar altimeter slope was 1.0264 and the intercept was 0.0055 m. These results are well within the expected accuracy of the altimeters. Please refer to *Figure 11* which illustrates the results of the altimeter test.

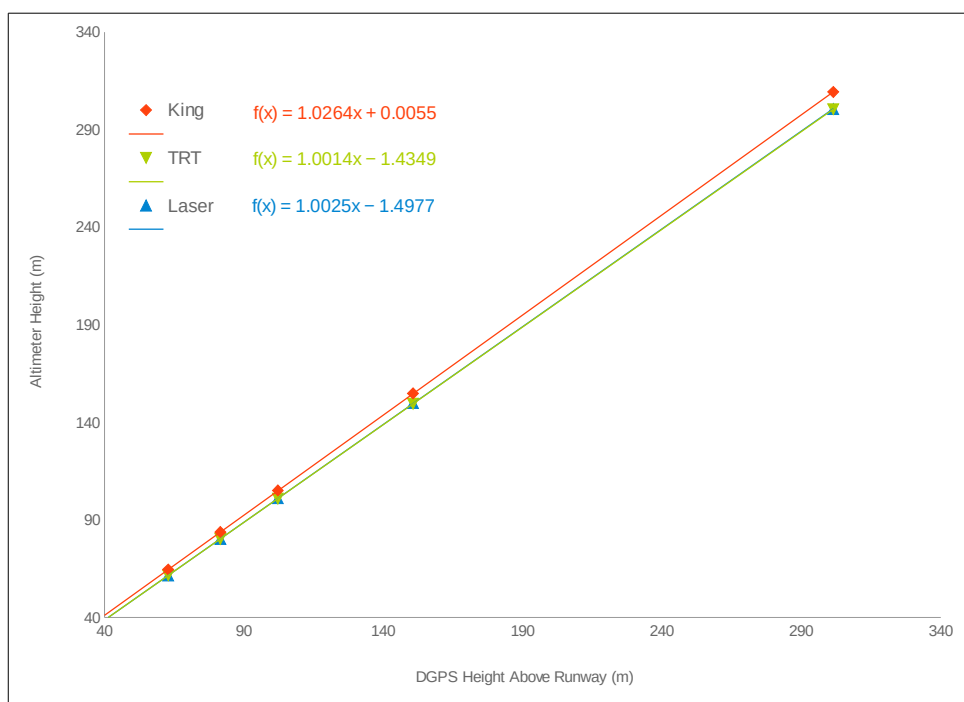


Figure 11: Altimeter test

### Stationary Aircraft GPS Position Test

The GPS system accuracy was measured by assessing the repeatability of the static position of the aircraft. Static position data was gathered pre- and post-flight on the tarmac of the Leigh Creek Airport. The results were analyzed and shown in *Figure 12*. The relatively large variance in location is the result of inconsistency in the parking location of the aircraft due in part to a lack of tie downs early in the survey and the requirements of refuelling at Whyalla Airport.

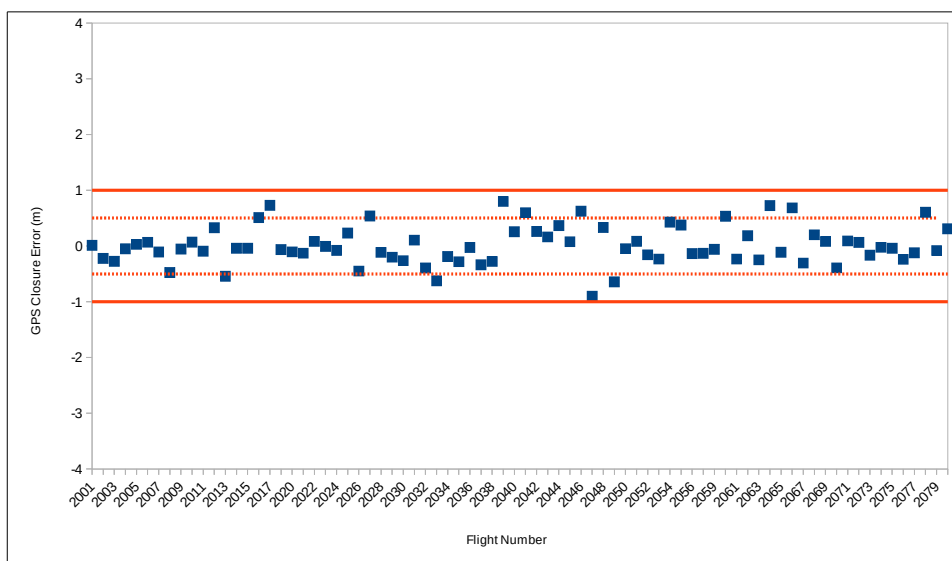


Figure 12: GPS accuracy test results

For all survey data gathered, accurate locations of the GPS antenna were determined through Precise Point Positioning (PPP) corrections using the algorithm developed by the Natural Resources Canada (NRCAN) (<http://webapp.geod.nrcan.gc.ca/geod/tools-outils/ppp.php>) and adapted to run under SGL's suite of software. The technique produces a receiver location accuracy of better than 5 cm.

## 7. FIELD OPERATIONS

Field operations were conducted from Leigh Creek Airport, YLEC (LGH), Leigh Creek, South Australia. The survey required 80 production flights, from March 4 to June 22, 2017.

Pre-survey tests started on February 15 with a flight over the Carnamah Radiometric Test Range in Western Australia. Mobilization of the SGL crew and equipment to South Australia began in early February with the arrival of the Caravan C-GSGJ. The field office was set up in one of the three rented houses in Leigh Creek. Leigh Creek Airport features two main hard surfaced runways of 5,610 ft and 4,021 ft. The first combined magnetometer and GPS reference station was installed in a field at Leigh Creek Airport compound on February 15. The second reference station was set-up at Leigh Creek Airport in a field further to the south of the first station on February 22. The magnetic compensation and heading test took place on March 1. On March 2 C-GSGJ flew cosmic over the sea and the altimeter test at Whyalla Airport. On March 3 the Whyalla test range, lag and compensation tests were flown. Mobilization to Leigh Creek was completed on March 3. The first production flight took place on March 4.



*Picture 4: Preparing the aircraft for a survey flight*

This survey was characterized by good production rates throughout the time in Leigh Creek and minimal downtime was due to pilot rest days and a few small bouts of bad weather. Cessna Grand Caravan C-GSGA flew Block 3A simultaneously as Cessna Grand Caravan, C-GSGJ flew Block 3B.

## Survey Summary

The following table is a time line of significant events during the field work for Block 3B.

| Date                 | Description                                                                                                                                                                                                                  |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 February 17       | <ul style="list-style-type: none"> <li>pilot check rides complete</li> </ul>                                                                                                                                                 |
| 14 February 17       | <ul style="list-style-type: none"> <li>Crew Chief, Oteng Matsetse arrives in Leigh Creek</li> <li>equipment arrives in Leigh Creek.</li> </ul>                                                                               |
| 15 February 17       | <ul style="list-style-type: none"> <li>Carnamah Radiometric Test Range surveyed</li> <li>ground survey and over the lake portion of the radiometric test also complete</li> <li>first reference station installed</li> </ul> |
| 21 February 17       | <ul style="list-style-type: none"> <li>further work on reference station set-up</li> <li>all crew now in Leigh Creek</li> </ul>                                                                                              |
| 22 February 17       | <ul style="list-style-type: none"> <li>additional equipment setup, ground power and second reference station</li> <li>safety meeting and HSE audit</li> </ul>                                                                |
| 28 February 17       | <ul style="list-style-type: none"> <li>spare parts for C-GSGJ arrived</li> </ul>                                                                                                                                             |
| 1 March 17           | <ul style="list-style-type: none"> <li>mag compensation and heading test flown</li> </ul>                                                                                                                                    |
| 2 March 17           | <ul style="list-style-type: none"> <li>cosmic test flown over the sea and altimeter test flown at the Whyalla airport</li> </ul>                                                                                             |
| 3 March 17           | <ul style="list-style-type: none"> <li>Whyalla test range flown along with lag and mag compensation tests</li> <li>mobilisation complete</li> </ul>                                                                          |
| 4 March 17           | <ul style="list-style-type: none"> <li>production begins</li> </ul>                                                                                                                                                          |
| 20 April-25 April 17 | <ul style="list-style-type: none"> <li>little or no production due to rain showers in the block and surface water issues</li> </ul>                                                                                          |
| 17 June 17           | <ul style="list-style-type: none"> <li>initial production for Block 3B complete and some reflights flown</li> </ul>                                                                                                          |
| 22 June 17           | <ul style="list-style-type: none"> <li>final reflights flown</li> </ul>                                                                                                                                                      |
| 23 June 17           | <ul style="list-style-type: none"> <li>demobilization from Leigh Creek begins, C-GSGJ flies to Kununurra</li> </ul>                                                                                                          |
| 30 June 17           | <ul style="list-style-type: none"> <li>demobilization complete, Crew Chief, Adam Jones departs Leigh Creek</li> </ul>                                                                                                        |

The Weekly Reports are in *Appendix VI*.

## Reference Stations

The first reference station was set-up at the airport on February 15 about 100 m south of the airport apron in a tent. Magnetic sensor and GPS antenna extended a further 60 and 30 m further south respectively. The second reference station was also located within the airport perimeter approximately 90 m south of the airport apron, housed inside a truck box and powered by solar panels. *Table 12* shows the WGS-84 coordinates of the reference stations.

*Table 12: Locations of reference stations, Datum WGS-84*

| Station # | Location    | Latitude       | Longitude       | Elevation  |
|-----------|-------------|----------------|-----------------|------------|
| REF1      | Leigh Creek | 30:35:55.1452S | 138:25:16.6700E | 268.8840 m |
| REF2      | Leigh Creek | 30:36:01.9375S | 138:25:12.3668E | 274.0983 m |

The position of the REF1 reference station GPS antenna was differentially corrected using data from four International GPS Service (IGS) reference stations within South Australia: ANDA (Andamooka); BBOO (Buckleboo); BMAN (Blinman) and SA45 (Saltia) using data recorded on days 46, 47 and 48. Base station REF2's position was differentially corrected using data from the same stations as REF1 on days 53, 54 and 55.

## Re-flights

Demobilization started after C-GSGJ flew the last flight in Block 3B on June 22. *Table 13* shows a list of re-flights for Block 3A and the reasons why they were required.

*Table 13: Re-flight list*

| Original Flight |        | Re-Flights |        |                                                        |
|-----------------|--------|------------|--------|--------------------------------------------------------|
| Line            | Flight | Line       | Flight | Reason                                                 |
| 3505010         | 2003   | 3505011    | 2079   | Noisy total fluxgate                                   |
| 3505020         | 2003   | 3505021    | 2079   | Noisy total fluxgate                                   |
| 3505030         | 2003   | 3505031    | 2079   | Noisy total fluxgate                                   |
| 3501600         | 2039   | 3501601    | 2079   | Gamma ray data values low, ground saturated            |
| 3503120         | 2039   | 3503121    | 2079   | Gamma ray data values low, ground saturated            |
| 3502870         | 2042   | 3502871    | 2079   | Noisy mag at the end of line due to early turn         |
| 3502261         | 2064   | 3502262    | 2079   | Mag spike caused by a manoeuvre to avoid a bird        |
| 3590010         | 2007   | 3590011    | 2052   | Fluxgate issues                                        |
| 3590020         | 2007   | 3590021    | 2052   | Fluxgate issues                                        |
| 3504160         | 2007   | 3504161    | 2048   | Loss of Up stabilization, uranium issues               |
| 3503860         | 2015   | 3503861    | 2049   | Loss of Up stabilization, uranium issues               |
| 3503870         | 2015   | 3503871    | 2049   | Loss of Up stabilization, uranium issues               |
| 3503880         | 2015   | 3503881    | 2049   | Loss of Up stabilization, uranium issues               |
| 3503890         | 2015   | 3503891    | 2049   | Loss of Up stabilization, uranium issues               |
| 3503900         | 2015   | 3503901    | 2049   | Loss of Up stabilization, uranium issues               |
| 3503910         | 2015   | 3503911    | 2048   | Loss of Up stabilization, uranium issues               |
| 3503920         | 2015   | 3503921    | 2048   | Loss of Up stabilization, uranium issues               |
| 3503930         | 2015   | 3503931    | 2048   | Loss of Up stabilization, uranium issues               |
| 3503940         | 2015   | 3503941    | 2048   | Loss of Up stabilization, uranium issues               |
| 3503950         | 2015   | 3503951    | 2048   | Loss of Up stabilization, uranium issues               |
| 3503960         | 2015   | 3503961    | 2048   | Loss of Up stabilization, uranium issues               |
| 3503970         | 2015   | 3503971    | 2048   | Loss of Up stabilization, uranium issues               |
| 3503140         | 2037   | 3503141    | 2051   | Up crystal drifted affecting corrected uranium channel |
| 3503150         | 2037   | 3503151    | 2051   | Up crystal drifted affecting corrected uranium channel |
| 3503160         | 2037   | 3503161    | 2051   | Up crystal drifted affecting corrected uranium channel |
| 3503170         | 2037   | 3503171    | 2050   | Up crystal drifted affecting corrected uranium channel |
| 3503180         | 2037   | 3503181    | 2050   | Up crystal drifted affecting corrected uranium channel |
| 3503190         | 2037   | 3503191    | 2050   | Up crystal drifted affecting corrected uranium channel |
| 3503200         | 2037   | 3503201    | 2050   | Up crystal drifted affecting corrected uranium channel |
| 3503210         | 2037   | 3503211    | 2050   | Up crystal drifted affecting corrected uranium channel |
| 3503220         | 2037   | 3503221    | 2050   | Up crystal drifted affecting corrected uranium channel |

| Original Flight |        | Re-Flights         |              |                                                                                           |
|-----------------|--------|--------------------|--------------|-------------------------------------------------------------------------------------------|
| Line            | Flight | Line               | Flight       | Reason                                                                                    |
| 3503230         | 2037   | 3503231            | 2049         | Up crystal drifted affecting corrected uranium channel                                    |
| 3503240         | 2037   | 3503241<br>3503242 | 2049<br>2050 | Up crystal drifted affecting corrected uranium channel                                    |
| 3503250         | 2037   | 3503251<br>3503252 | 2049<br>2050 | Up crystal drifted affecting corrected uranium channel and over drape due to a power line |
| 3502421         | 2075   | 3502422            | 2079         | Above drape for 4 km due to cloud                                                         |
| 3502750         | 2043   | 3502751            | 2080         | Gamma ray data issues                                                                     |
| 3502760         | 2042   | 3502761            | 2080         | Gamma ray data issues                                                                     |
| 3502990         | 2041   | 3502991            | 2080         | Gamma ray data issues                                                                     |
| 3503110         | 2040   | 3503111            | 2080         | Gamma ray data issues                                                                     |

Coordinates and times of the actual lines flown are listed in *Appendix III*.

## Field Personnel

Table 14 shows a list of SGL technical personnel who participated in the field operations for both Blocks 3A and 3B.

Table 14: Survey field crew for Blocks 3A and 3B

|                 | Name             | Dates in Field                               |
|-----------------|------------------|----------------------------------------------|
| Project Manager | Kevin Charles    | N/A                                          |
| Crew Chief      | Oteng Matsetse   | 9 February-9 May 17                          |
| Crew Chief      | Keith Wells      | 3 April-6 June 17                            |
| Crew Chief      | Adam Jones       | 9 May-30 June 17                             |
| Data Processor  | Colin Terry      | 10 February-5 April 17                       |
| Pilot           | Tim Hodson       | 6 February-15 April 17                       |
| Pilot           | Kyle Tiessen     | 6 February-5 April 17                        |
| Pilot           | Laura Johnstone  | 7 February-10 April 17,<br>11 May-25 June 17 |
| Pilot           | Tomo Nishimura   | 6 February-11 May 17                         |
| Pilot           | Peter Podebry    | 9 April-6 June 17                            |
| Pilot           | Kevin Michaud    | 10 April-26 June 17                          |
| Pilot           | Marianne Durette | 10 April-16 June 17                          |
| AME             | Roger Knott      | 20 February-16 May 17                        |
| AME             | Dwayne Bailey    | 14 May-11 June 17                            |
| AME             | Kevin Cahill     | 25 May-12 July 17                            |
| Technician      | Shandon Lomoro   | 7 February-10 April 17                       |

## 8. DIGITAL DATA COMPILATION

Preliminary processing for on-site quality control was performed in the field as each flight was completed. This included verifying the data on the computer screen, profiling all of the data channels, and creating preliminary data grids.

### Magnetometer Data

A magnetic data flowchart is presented in *Figure 13*. The airborne magnetometer data were recorded at 160 Hz, and down sampled to 10 Hz for processing. All magnetic data were plotted and checked for any spikes or noise. A 0.244 s static lag correction due to signal processing, plus a dynamic lag correction averaging 0.18 s but varying from between 0.16 s and 0.20 s depending on the instantaneous velocity of the aircraft was applied to each data point. The aircraft speed dependent dynamic lag was calculated using SGL's Dynlag software. While all raw mag data channels were delivered without the lag (parallax) correction all other mag channels were delivered with the correction.

Ground magnetometer data were inspected for cultural interference and edited where necessary. Higher frequency diurnal activity in the block and at the reference stations does not correlate entirely because of the distance between the base of operations and the survey block. All reference station magnetometer data were filtered using a 369 point low pass filter (see *Appendix VIII*) to remove any high frequency signal, but retain the low frequency diurnal variations.

A correction for the International Geomagnetic Reference Field (IGRF) year 2015 model, was extrapolated for all ground magnetometer data using the fixed ground station location (see Section 7 – FIELD OPERATIONS) and the recorded date for each flight. The mean residual value of the reference station calculated to be -354.988 nT was subtracted to remove any bias from the local anomalous field. While two different magnetic reference stations were installed, REF2 had superior data quality and was used for data processing for the whole survey. Diurnal variations in the airborne magnetometer data were removed by subtracting the corrected reference station data.

Some cultural effects were observed in the airborne data due to local infrastructure or man-made interference, but these effects were not removed from the data.

The airborne magnetometer data were corrected for the IGRF using the location, altitude, and date of each point. IGRF values were calculated using the year 2015 IGRF model. The altitude data used for the IGRF corrections are DGPS heights above the GRS-80 ellipsoid.

## MAGNETOMETER DATA PROCESSING

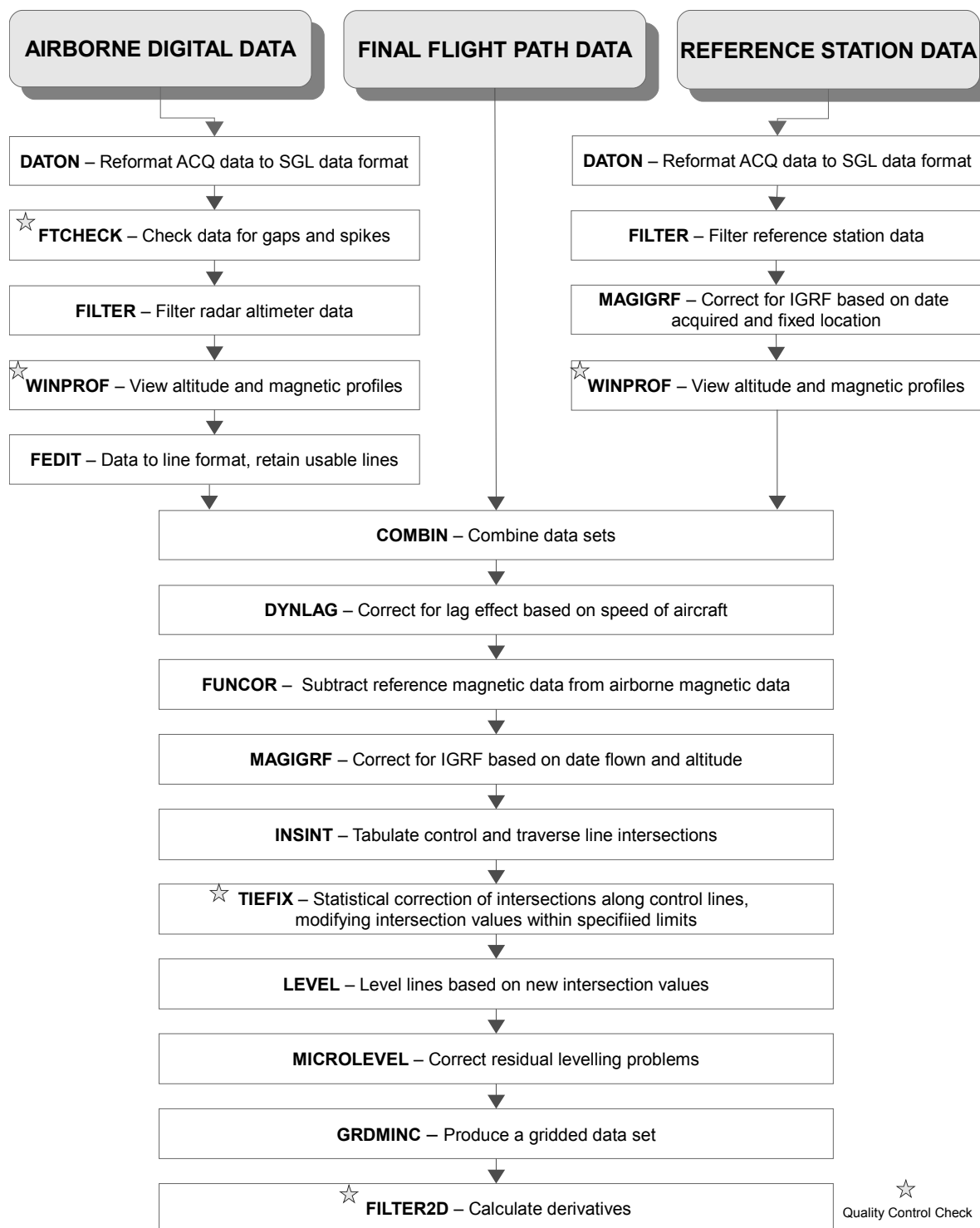


Figure 13: Magnetometer data processing flowchart

### **Levelling**

Intersections between tie-lines and traverse lines were determined by a program which extracts the magnetic, altitude, and x and y values of the traverse lines and tie-lines at each intersection point. Each tie-line was adjusted by a constant value to minimize the intersection differences, calculated as follows:

$$\sum |i - a| \text{ summed over all traverse lines}$$

where,  $i$  = (individual intersection difference)  
 $a$  = (average intersection difference for that traverse line)

Adjusted tie-lines were further corrected locally to minimize any residual differences. Traverse line levelling was carried out by the program CLEVEL that interpolates and extrapolates levelling values for each point based on the two closest levelling values. CLEVEL provides a curved correction using a function similar to spline interpolation. A third degree polynomial is used to interpolate between two intersections and the two values and two derivatives are chosen to determine the polynomial. CLEVEL is an improved method as it allows intersection points to be preserved with no mismatch and interpolation is smooth with the first derivative continuously approaching the same value from both sides of the intersection points.

The levelling procedure was verified through inspection of Total Magnetic Intensity (TMI) and vertical derivative grids, plotting profiles of corrections along lines, and examining levelling statistics to check for steep correction gradients. Traverse line levelling corrections are adjusted to remove residual levelling errors and reduce unwarranted high correction gradients that typically occur over areas of rapidly changing magnetic field. Where these adjustments are made the tie-lines become miss-tied to the traverse lines, and are left that way so as to retain the integrity of the tie-line profile.

### **Micro-Levelling**

Micro-levelling was applied to remove any residual diurnal effects from the data. This was achieved by using directional filters to identify and remove artifacts that are long wavelengths parallel to survey lines and short wavelengths perpendicular to survey lines. A limit of +/-0.50 nT was set for all micro-levelling corrections.

### **Gridding**

The grid of the total magnetic intensity was made using a minimum curvature algorithm to create a two-dimensional grid equally sampled in the x and y directions. The algorithm produces a smooth grid by iteratively solving a set of difference equations minimizing the total second horizontal derivative while attempting to honour the input data (Briggs, I.C, 1974, Geophysics, v 39, no. 1). Because tie-lines are not forced to tie with traverse lines as described above, they are omitted from the gridded data set. In addition, overlaps of partial traverse lines are also removed prior to gridding.

The final grids of the magnetic data were created with 40 m grid cell size appropriate for survey lines spaced at 200 m.

### **Reduction To Pole**

For ease of calculation, reduction to the pole (RTP) can be performed through filtering in the frequency domain using a constant (average/central) inclination and declination which can be considered valid throughout the entire grid. An inclination of -63.65° and declination of 5.63° was used. A regional field (planar trend) was removed during the RTP calculation.

## Spectrometer Data

A spectrometer data compilation flowchart is presented in *Figure 14*. A 0.5 second lag correction was applied to all data to correct for the time delay between detection and recording of the airborne data. In addition, a 3.43 m lag correction representing the separation between the center of the crystal packs and the GPS antenna was applied to each data point. The data were recorded at 1 Hz in asynchronous mode, and the native recorded times are retained during processing.

### **Spectral Component Analysis**

Raw 256 channel spectrometer data were analyzed using noise adjusted singular value decomposition (NASVD; J. Hovgaard and R L. Grasty paper 98; Geophysics and Geochemistry at the Millennium, Proceedings of the 4<sup>th</sup> Decennial International Conference on Mineral Exploration, 1997). Normalization with respect to the count rate is achieved by dividing each measured spectrum by the square root of the best fit of the mean spectra, i.e. component zero. The NASVD method determines the components in order of significance with respect to the amount of variance in the data they describe. Each component is a spectrum with 256 channels. In theory, there are as many components as there are channels. Variation in the signal is accounted for by the low order components, and variation due to noise is accounted for by the higher order components. Spectra are reconstructed from the low order signal only components, and the count rates in the standard windows are recalculated.

Through such an analysis, it was determined that components 6-8 and all components higher than order 10 contained only variation due to noise, thus only components 0 to 5 and 9 to 10 were used in the final data. *Figure 15* shows charts of the significant NASVD components.

### **Energy Calibration**

Spectrometers are affected by energy drift in the measured full spectrum primarily due to changing gains of the photomultiplier tubes. Spectra were adjusted so that the measured center of the potassium, uranium and thorium peaks lined up with their expected values. Each spectra was individually analyzed and calibrated.

### **Regions of Interest**

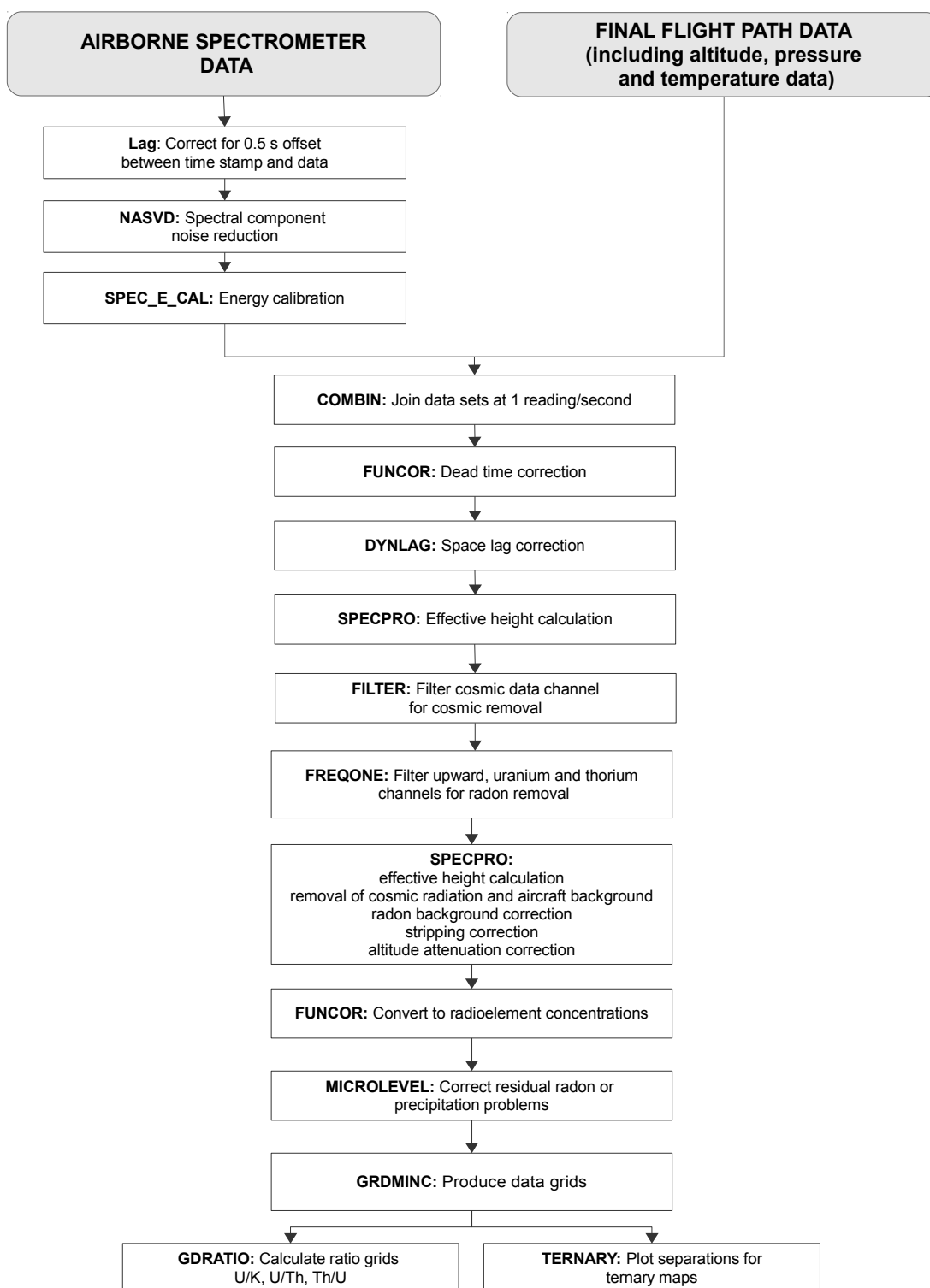
Regions of Interest (ROIs) or “windows” were extracted from the full spectrum downward facing data as shown in *Table 15*:

*Table 15: Gamma Ray Regions of Interest (ROIs) or “windows”*

| ROI         | Channel   | Energy (Kev) |
|-------------|-----------|--------------|
| Total count | 33 – 234  | 401 – 2807   |
| Potassium   | 114 – 131 | 1368 – 1572  |
| Uranium     | 138 – 155 | 1655 – 1859  |
| Thorium     | 201 – 234 | 2411 – 2807  |

The upward ROI was extracted from the upward facing spectra using the same parameters as used for uranium. The cosmic ROI was extracted from the downward spectra for all energies >3000 Kev.

## SPECTROMETER DATA PROCESSING



v1.0

Figure 14: Spectrometer data processing flowchart

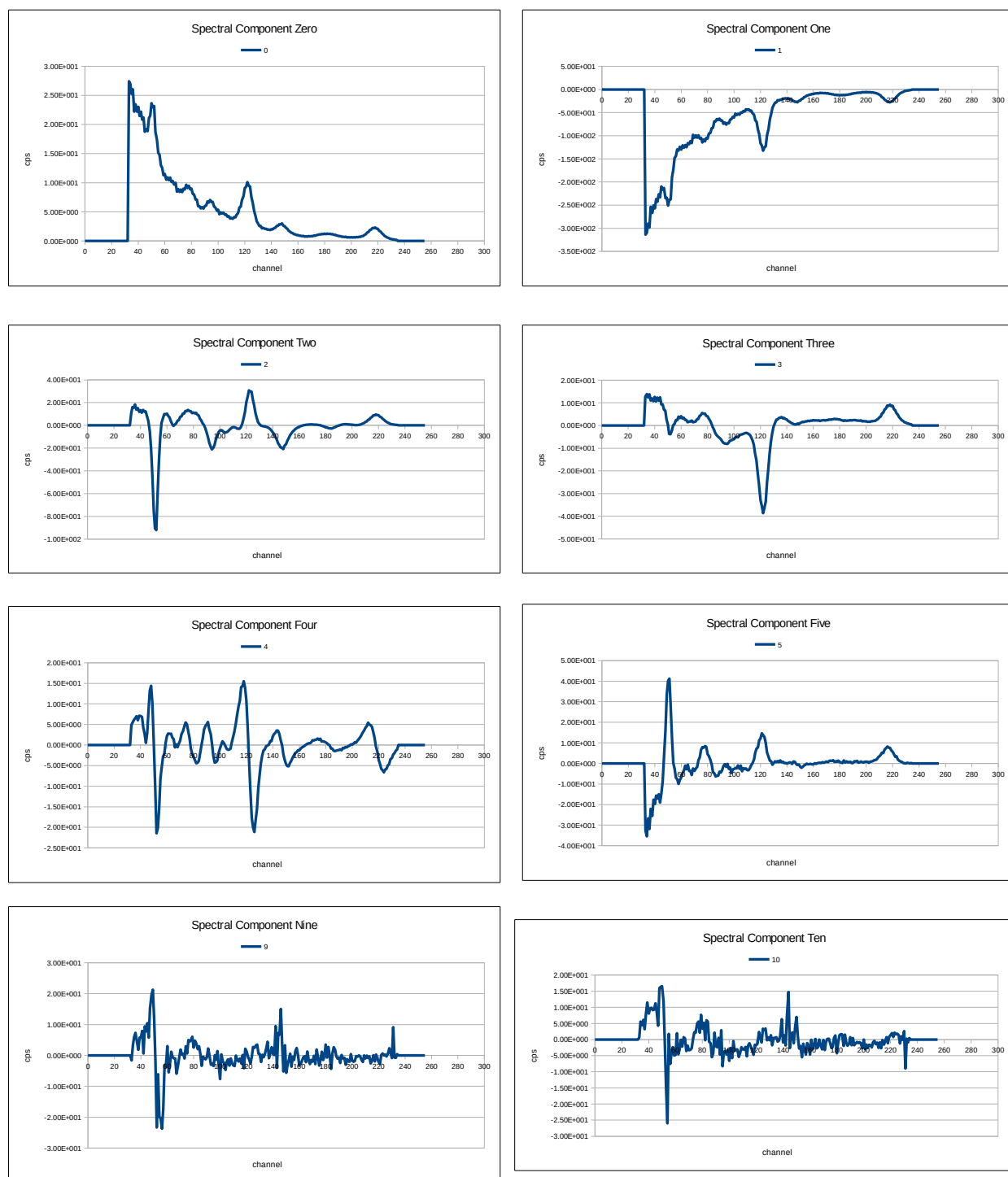


Figure 15: NASVD Components

### Standard Corrections

Spectrometer data were corrected as documented in the Geological Survey of Canada Open File No. 109 and the IAEA report "Airborne gamma-ray spectrometer surveying; Technical Report Series No. 323 (International Atomic Energy Agency, Vienna). The gamma-ray spectroscopy processing parameters are shown in Table 16.

Table 16: Spectrometer processing parameters

Table 10. Spectrometer processing parameters

| Spectrometer Processing Parameters          |                            |                                                |
|---------------------------------------------|----------------------------|------------------------------------------------|
| Window                                      | Cosmic Stripping Ratio (b) | Aircraft Background (a)                        |
| Total                                       | 0.6603                     | 78.42                                          |
| Potassium                                   | 0.0394                     | 11.56                                          |
| Uranium                                     | 0.0286                     | 0.50                                           |
| Thorium                                     | 0.0347                     | 2.95                                           |
| Upward                                      | 0.0077                     | 0.17                                           |
| Radon Component                             | a                          | b                                              |
| Total (I <sub>r</sub> )                     | 12.8786                    | 0.0000                                         |
| Potassium (K <sub>r</sub> )                 | 0.7063                     | 0.0000                                         |
| Thorium (T <sub>r</sub> )                   | 0.0319                     | 0.0000                                         |
| Up (u <sub>r</sub> )                        | 0.2543                     | 0.0000                                         |
| Ground Component                            | a <sub>1</sub>             | a <sub>2</sub>                                 |
| Up (u <sub>g</sub> )                        | 0.031247                   | 0.022579                                       |
| Stripping Ratios                            | Contribution on the Ground | Effective Height Adjustment (m <sup>-1</sup> ) |
| α                                           | 0.2381                     | 0.00049                                        |
| β                                           | 0.3908                     | 0.00065                                        |
| γ                                           | 0.7163                     | 0.00069                                        |
| a                                           | 0.0477                     |                                                |
| b                                           | 0.0011                     |                                                |
| g                                           | 0.0069                     |                                                |
| Attenuation Coefficients (m <sup>-1</sup> ) |                            |                                                |
| Total                                       | -0.006880                  |                                                |
| Potassium                                   | -0.008764                  |                                                |
| Uranium                                     | -0.007664                  |                                                |
| Thorium                                     | -0.006895                  |                                                |
| Sensitivities                               |                            |                                                |
| Potassium                                   | 118.1416 cps/%             |                                                |
| Uranium                                     | 13.1258 cps/eU ppm         |                                                |
| Thorium                                     | 7.3602 cps/eTh ppm         |                                                |

Before gridding, the following corrections were applied to the spectrometer data in the order shown:

#### Dead-time correction

The system live time was recorded by the spectrometer and represents the time that the system was available to accept incoming gamma radiation pulses. Live time is reduced, and dead-time increased, as count rates increase and the time taken by the spectrometer to process measured pulses increases. The cosmic channel does not receive a dead-time correction as it is processed by separate circuitry in a GR820 spectrometer. The dead-time correction was applied to each window in both the upward and downward looking detector data using the following equation:

$$N = \frac{n}{t}$$

where,  $N$  = the corrected count rate in each channel  
 $n$  = the raw count recorded in each second  
 $t$  = the recorded live time (fraction of a second).

#### Calculation of effective height above ground level (AGL)

Low pass filters are applied to radar altimeter data and barometric altimeter data (see "Radar, Laser & Barometric Data"). The barometric altimeter data was then converted to equivalent pressure and used with the digitally recorded temperature to convert the radar altimeter data to effective height at standard pressure and temperature (STP) as follows:

$$h_e = h \times \frac{273.15}{T + 273.15} \times \frac{P}{101.325}$$

where,  $h_e$  = the effective height  
 $h$  = the observed radar altitude in metres  
 $T$  = the observed air temperature in degrees Celsius and  
 $P$  = the observed barometric pressure in kPa.

#### Removal of cosmic radiation and aircraft background radiation

A 67-point low pass filter (see *Appendix VIII*) is applied to 1 Hz cosmic data to reduce statistical noise. Cosmic radiation and aircraft background radiation are removed from each spectral window using the cosmic coefficients and aircraft background values determined from test flight data using the following equation:

$$N = a + b C$$

where,  $N$  = the combined cosmic and aircraft background in each spectral window,  
 $a$  = the aircraft background in the window,  
 $b$  = the cosmic stripping factor for the window, and  
 $C$  = the cosmic channel count.

### Radon background corrections

A low pass filter with a 199-pt running average is applied to 1 Hz downward uranium, downward thorium and upward uranium count data for the purpose of radon correction only. The radon component in the uranium window is calculated using the radon coefficients determined from the survey data using the following equation:

$$U_r = \frac{u - a_1 U - a_2 T + a_2 b_T - b_u}{a_u - a_1 - a_2 a_T}$$

where,  $U_r$  = the radon background measured in the downward uranium window,

$u$  = the filtered observed count in the upward uranium window,

$U$  = the filtered observed count in the downward uranium window,

$T$  = the filtered observed count in the downward thorium window,

$a_1$  and  $a_2$  = the ground component coefficients,

$a_u$  and  $b_u$  = the radon coefficients for uranium,

$a_T$  and  $b_T$  = the radon coefficients for thorium.

The radon counts in the uranium upward window and the potassium, thorium and total count downward windows are calculated from  $U_r$  using the following equations:

$$u_r = a_u U_r + b_u$$

$$K_r = a_K U_r + b_K$$

$$T_r = a_T U_r + b_T$$

$$I_r = a_I U_r + b_I$$

Where  $u_r$  is the radon component in the upward uranium window,  $K_r$ ,  $U_r$ ,  $T_r$  and  $I_r$  are the radon components in the various windows of the downward detectors, and  $a$  and  $b$  are the radon calibration coefficients.

### Stripping

The stripping ratios for the spectrometer system are determined experimentally. The stripped count rates for the potassium, uranium and thorium downward windows are calculated using the following equations:

$$N_K = \frac{n_{Th} (\alpha \gamma - \beta) + n_U (\alpha \beta - \gamma) + n_K (1 - a \alpha)}{A}$$

$$N_U = \frac{n_{Th} (g \beta - \alpha) + n_U (1 - b \beta) + n_K (b \alpha - g)}{A}$$

$$N_{Th} = \frac{n_{Th} (1 - g \gamma) + n_U (b \gamma - a) + n_K (a g - b)}{A}$$

where  $A$  has the value:

$$A = 1 - g \gamma - a(\alpha - g \beta) - b(\beta - \alpha \gamma)$$

and where,

- $n_K$ ,  $n_U$  and  $n_{Th}$  = the unstripped potassium, uranium and thorium downward windows counts,  
 $N_K$ ,  $N_U$  and  $N_{Th}$  = the stripped potassium, uranium and thorium downward windows counts,  
 $\alpha$ ,  $\beta$ , and  $\gamma$  = the forward stripping ratios, and  
 $a$ ,  $b$  and  $g$  = the reverse stripping ratios.

$\alpha$ ,  $\beta$ , and  $\gamma$  are adjusted for effective height (as calculated above) by standard factors given in *Table 16 Spectrometer Processing Parameters*.

### Altitude attenuation correction

This correction normalizes the data to a constant terrain clearance of 60 m above ground level (AGL) at standard temperature and pressure (STP). Attenuation coefficients for each of the downward windows were determined from test flights. The measured count rate is related to the actual count rate at the nominal survey altitude by the equation:

$$N_s = N_m (e^{\mu(h_o - h)})$$

- where,  $N_s$  = the count rate normalized to the nominal survey altitude,  $h_o$ ,  
 $N_m$  = the background corrected, stripped count rate at effective height  $h$ ,  
 $\mu$  = the attenuation coefficient for that window,  
 $h_o$  = the nominal survey altitude, and  
 $h$  = the effective height.

The effective height was determined in step 2. A cap of 250 m was set for effective height so that any data acquired above this level were assigned an effective height of 250 m.

### Shifting

Significant rainfall occurred during the survey, affecting count rates most notably in areas of ephemeral lakes that occur extensively in the survey area. It was also apparent that at certain times, the upward detectors did not pick up all the radon in the air probably due to a lack of mixing in the air that can occur during calm conditions. The data most adversely affected by precipitation was reflight. To resolve the residual radon and precipitation effects sections of some survey lines were adjusted by adding or subtracting counts as required. In some cases whole or parts of lines were adjusted as necessary (see *Appendix IX*).

### Conversion to radio element concentration

Sensitivities are determined experimentally from the test flight data. The units of the count rates in each spectral window are converted to "apparent radio element concentrations" using the following equation:

$$C = \frac{N}{S}$$

- where,  $C$  = the concentration of the element(s)  
 $N$  = the count rate for the window after correction for dead-time, background, stripping and attenuation  
 $S$  = the broad source sensitivity for the window

Potassium concentration is expressed as a percentage and equivalent uranium and thorium as parts per million of the accepted standards. Uranium and thorium are described as "equivalent" since their presence is inferred from gamma-ray radiation from daughter elements ( $^{214}\text{Bi}$  for uranium,  $^{208}\text{Th}$  for thorium).

**Micro-Levelling**

Micro-levelling was applied to remove any residual radon and/or precipitation effects from the data. This was achieved by using directional filters to identify and remove artifacts that are long wavelengths parallel to survey lines and short wavelengths perpendicular to survey lines. The following limits were set for the micro-levelling corrections:

- Total Count  $\pm 3.0$  nGy/hr
- Potassium  $\pm 0.2\%$
- Uranium  $\pm 0.6$  ppm
- Thorium  $\pm 0.5$  ppm

**Data gridding**

The grid of the gamma-ray data was made using a minimum curvature algorithm to create a two-dimensional grid equally sampled in the x and y directions. The algorithm produces a smooth grid by iteratively solving a set of difference equations minimizing the total second horizontal derivative while attempting to honour the input data (Briggs, I.C, 1974, *Geophysics*, v 39, no. 1). The final grids of the radiometric data were created with 40 m grid cell size appropriate for survey lines spaced at 200 m. Tie-lines were not included in the gridding procedure.

## Positional Data

A positional data flowchart is presented in *Figure 16*. A number of programs were executed for the compilation of navigation data in order to reformat and recalculate positions from raw 10 Hz range data obtained from the moving (airborne) receivers using combinations of L1 and L2 phase signal.

Accurate locations of the GPS antenna were determined through Precise Point Positioning (PPP) corrections using the algorithm developed by the Natural Resources Canada (NRCAN) (<http://webapp.geod.nrcan.gc.ca/geod/tools-outils/ppp.php>) adapted to run under SGL's suite of software. This technique provides a final receiver location with an accuracy of better than 5 cm.

Positional data (x, y, z) were recorded and all data processing was performed in the WGS-84 datum. The delivered data are provided with x, y locations in the datum GDA94, UTM projection zone MGA-53. See *Tables 17 and 18* for the ellipsoid parameters and *Table 19* for the datum conversion parameters. Because the GDA94 datum moves with respect to WGS-84, the conversion parameters were calculated for the 18<sup>th</sup> February 2017.

*Table 17: Ellipsoid parameters for WGS-84*

| Ellipsoid       | WGS-84        |
|-----------------|---------------|
| Semi-major axis | 6378137.0     |
| 1/flattening    | 298.257223563 |

*Table 18: Ellipsoid parameters for GDA94*

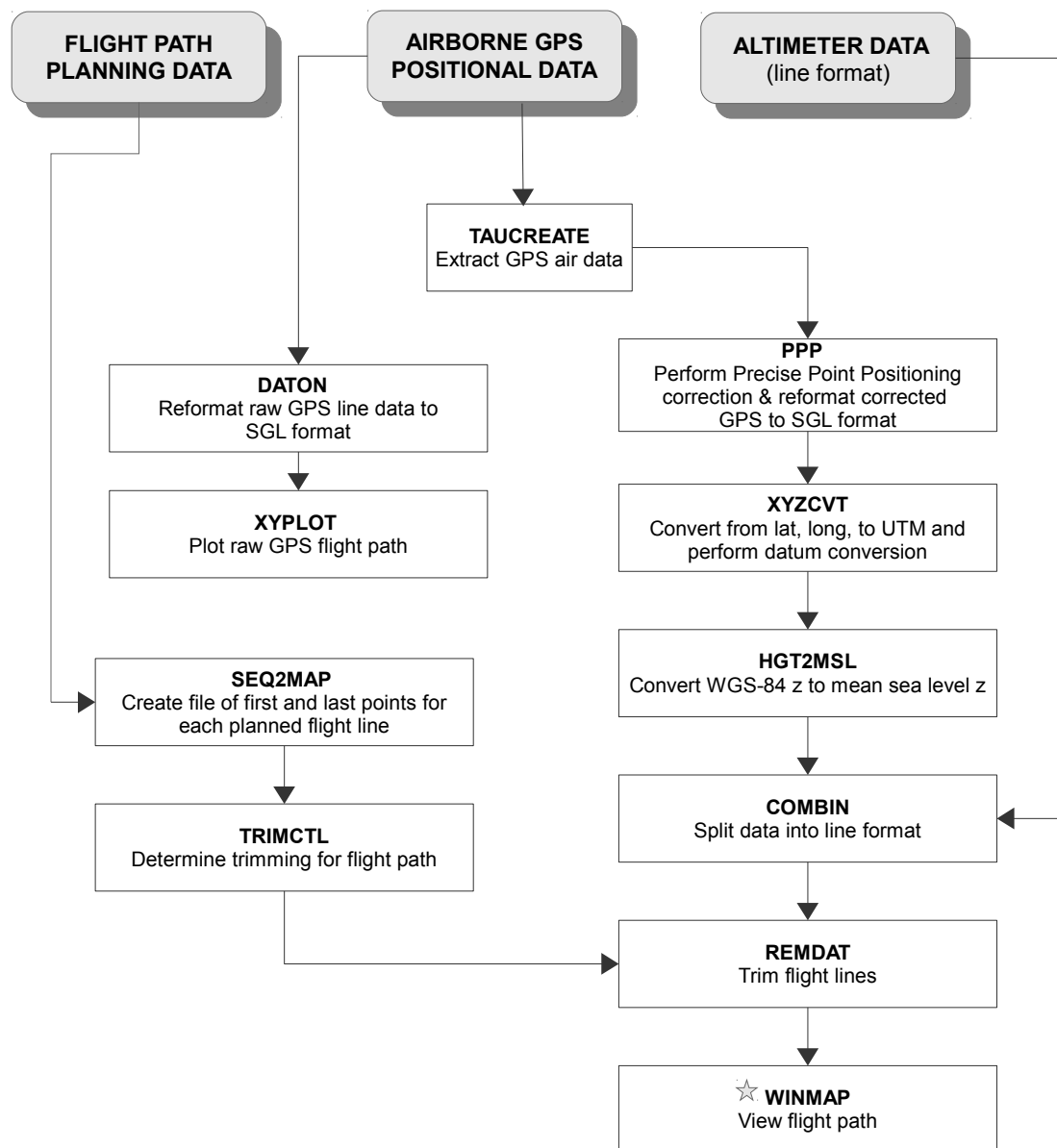
| Ellipsoid       | GRS-80        |
|-----------------|---------------|
| Semi-major axis | 6378137.0     |
| 1/flattening    | 298.257222101 |

*Table 19: Datum conversion parameters from WGS-84 to GDA94*

|                  |             |
|------------------|-------------|
| x shift (m)      | -0.0575133  |
| y shift (m)      | 0.00621621  |
| z shift (m)      | 0.0492283   |
| x rotation (rad) | 1.41342e-7  |
| y rotation (rad) | 1.20579e-07 |
| z rotation (rad) | 1.18781e-07 |

Elevation data were recorded relative to the GRS-80 ellipsoid and transformed to mean sea level (MSL) using the Australian Height Datum (AHD) model.

## POSITIONAL DATA PROCESSING



☆ Quality Control Check

v1.1

Figure 16: Positional data processing flowchart

## Radar and Barometric Altimeter Data

The terrain clearance measured by the radar altimeter was recorded at 10 Hz. The radar altimeter data were filtered to remove high-frequency noise using a 67-point low pass filter (*Appendix VIII*).

The terrain clearance measured by the laser altimeter was recorded at 3.3 Hz. Even though the laser altimeter can record returns from more than 700 m above the ground with a high degree of certainty, some laser data dropouts occurred over areas of poor reflectivity. Any such gaps were bridged using radar data.

A digital elevation model (DEM) was derived by subtracting the laser altimeter data from the GPS altitude with respect to mean sea level referred to the Australian Height Datum (AHD). In addition an alternative DEM was derived by subtracting the radar altimeter data from the same GPS altitude. Both types of DEM are provided as grids with a 40 m cell size. In many circumstances the main difference between these two types of DEM is the different degree to which they penetrate vegetation. Laser data can typically penetrate between trees and bushes to reach the ground, so that it jumps up and down as areas of relatively bare ground are encountered between vegetation. On the other hand radar data returns the closest point within its footprint, and tends to track the tops of vegetation. Due to the lack of vegetation in the survey area the two DEMs are very similar. However, both types of DEM required microlevelling to remove artifacts from variable reflectivity. This is a common problem over unconsolidated and damp ground, both of which occur in the survey area.

The altitude above mean sea level as measured by the barometric altimeter was recorded at 10 Hz. Barometric data was smoothed using a cosine tapered low pass frequency domain filter that rolls off between 42 and 47 points. The barometric altimeter data was not used for location because of the availability of more accurate GPS altitudes. However barometric data is employed in the calculation of effective height when processing gamma ray data (see "Calculation of Effective height above ground level") since it is a direct reflection of local pressure conditions.

## Temperature Data

Outside air temperature was recorded at 10 Hz and smoothed using a 199 point low pass filter. Temperature data is employed in the calculation of effective height when processing gamma ray data (see "Calculation of Effective height above ground level").

## Processing Personnel

*Table 20* shows a list of SGL personnel who participated data processing at SGL's head office in Ottawa, Canada.

*Table 20: Data processing personnel*

|                    | Name                                     |
|--------------------|------------------------------------------|
| Manager            | Martin Bates                             |
| Flight Path        | Keith Wells, Nicholas Lynch, Derek Kouhi |
| Magnetic Data      | Derek Kouhi                              |
| Spectrometer Data  | Keith Wells, Sol Meyer                   |
| Report Preparation | Jennifer Dennis, Dominique Howatt        |

## 9. FINAL PRODUCTS

### Magnetic Line Data Format

A listing of the raw and final data channels delivered in ASCII format with a sampling rate of 10 Hz can be found in *Appendix VII*.

### Radiometric Line Data Format

A listing of the raw, final and NASVD data channels delivered in ASCII format with a sampling rate of 1 Hz can be found in *Appendix VII*.

### Elevation Line Data Format

A listing of the raw and final data channels delivered in ASCII format with a sampling rate of 10 Hz can be found in *Appendix VII*.

### Digital Grids

The following are provided as digital grids in Grid Exchange Format (GXF) and ASCII XYZ format, in datum GDA94, UTM projection zone MGA-53 and also in the Geodetic Projection (latitude & longitude):

|                 |                                 |
|-----------------|---------------------------------|
| Formats:        | Grid Exchange (GXF) & XYZ (XYZ) |
| Grid Cell Size: | 40 m and 0.000417°              |
| Datum:          | GDA94                           |
| Projection:     | MGA53 and Geodetic              |

Table 21: Delivered digital grids

| Grid Type                                                  | Units |
|------------------------------------------------------------|-------|
| Magnetics                                                  | nT    |
| Magnetics reduced to the pole                              | nT    |
| First vertical derivative of magnetics reduced to the pole | nT/m  |
| Dose rate                                                  | nGy/h |
| Potassium concentration                                    | %     |
| Uranium concentration                                      | ppm   |
| Thorium concentration                                      | ppm   |
| Ground elevation                                           | m     |

### Maps

Maps are not part of this contract but images of the eight grids delivered (see above) can be found in *Appendix X*.



## Appendix I







## COMPANY PROFILE

### ABOUT US

Sander Geophysics Limited (SGL) provides worldwide airborne geophysical surveys for petroleum and mineral exploration, and geological and environmental mapping. Services offered include high resolution airborne gravity, magnetic, electromagnetic, and radiometric surveys, using fixed-wing aircraft and helicopters.



*SGL head office in Ottawa, Canada*

Dr. George W. Sander (1924–2008) founded SGL in 1956 to provide ground geophysical surveys. The first airborne surveys were performed as early as 1958, and by 1967 airborne geophysical surveys were the company's main focus. Operations have expanded steadily since SGL was founded 60 years ago. The company is led by co-Presidents Luise Sander and Stephan Sander.

### WORLDWIDE OPERATIONS

SGL's head office and aircraft maintenance hangar are located at the International Airport in Ottawa, Canada. Sander Geophysics has operated on every continent including Antarctica, over diverse conditions ranging from the tropics to deserts, mountains and offshore.

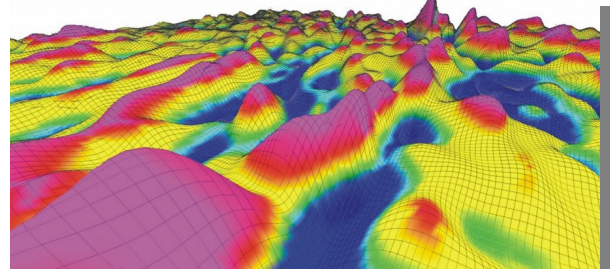
Facilities at the head office include a state of the art data processing department with an integrated digital cartographic department and a fully equipped electronics workshop for research, development and production of geophysical instruments. A Transport Canada Approved Maintenance Organization (AMO) for fixed-wing aircraft and helicopters allows most aircraft maintenance and modifications to be performed in-house.

### SERVICES

#### AIRBORNE SURVEYS

- **Gravity (AIRGrav)**
- **Magnetic Total Field**
- **Magnetic Gradient**
- **Electromagnetic**
- **Gamma-ray Spectrometer**
- **Scanning LiDAR**

SGL offers gravity surveys with **AIRGrav** (Airborne Inertially Referenced Gravimeter), which was designed specifically for the unique characteristics of the airborne environment and is the highest resolution airborne gravimeter available. **AIRGrav** can be flown in an efficient survey aircraft during normal daytime conditions and is routinely flown in combination with magnetometer systems in SGL's airplanes and helicopters.



*AIRGrav data: 3d image of the first vertical derivative of terrain corrected Bouguer gravity*

#### DATA PROCESSING

Immediate data processing is part of SGL's standard quality control procedure, and provides clients with rapid results for evaluation while a survey is in progress. Sander Geophysics offers a full range of data enhancement programs and integrated interpretation services by experienced geoscientists. Available products in digital and/or hard copy include:

- **Contour, colour or shaded relief maps of any parameter or combination of parameters**
- **NASVD processed gamma-ray spectrometer data**
- **Filtered line or grid products such as vertical or horizontal gradients, frequency slices,**

**high/low-pass or band-pass filtered, amplitude of the analytic signal, reduction to the pole, upward or downward continuation**

- **Computed depth to basement**
- **Calculated digital terrain models**
- **Two- or three-dimensional modelling**
- **Cultural editing**
- **Complete geophysical interpretative reports**

## ENVIRONMENTAL MONITORING

The company also provides environmental monitoring services using gamma-ray spectrometers and specialized processing to detect and quantify natural and anthropogenic radiation.

## HEALTH & SAFETY

Sander Geophysics is a founding and active executive member of the International Airborne Geophysics Safety Association (IAGSA), which promotes the safe operation of helicopters and fixed-wing aircraft on airborne geophysical surveys.

SGL has developed and implemented a Safety Management System (SMS) and comprehensive Health, Safety and Environment (HSE) policies that govern all aspects of company operations. Safety initiatives include:

- **Project-specific Aviation Risk Analysis (ARA) and Personnel Risk Analysis (PRA) for all surveys**
- **Real-time satellite tracking of SGL aircraft**
- **HSE and first aid training for all field personnel**
- **Low-level flight and aircraft simulator training for pilots**
- **Advanced safety training appropriate to the survey location, such as water-egress, wilderness survival, etc.**

SGL's excellent safety record reflects the quality and experience of its survey crews. This, combined with management's ongoing commitment to safety, helps to ensure that Sander Geophysics is a safe and reliable choice for airborne geophysical surveys.

## PERSONNEL

Sander Geophysics has over 160 experienced permanent employees, including geophysicists, software and hardware engineers, aircraft maintenance engineers and pilots.

## AIRCRAFT

SGL owns and operates fourteen aircraft, including eight Cessna Grand Caravans and a Twin Otter all equipped for geophysical surveys.

The Grand Caravans have been modified to allow the installation of a tri-axial magnetic gradiometer system. The company's fleet also includes two AS350 B3 helicopters equipped for gravity, magnetic and radiometric surveys. Extensive modifications have been made to all of the survey aircraft to accommodate geophysical instruments and to reduce the aircraft's magnetic field. Typical Figures of Merit (FOM) for Sander Geophysics' fixed-wing aircraft are less than 1 nT. The company's aircraft are flown and maintained by licensed and experienced permanent employees of Sander Geophysics.



SGL aircraft

## RESEARCH & DEVELOPMENT

Nearly one-third of the company's resources are devoted to developing new and more efficient instrumentation for airborne geophysical surveying, and to further refine its full suite of software for geophysical data processing.



## Appendix II





**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3590010       | S32:00.27 | E136:30.22 | S31:15.33 | E136:30.22 | 44.97  | 83.29  |
| 3590020       | S32:00.27 | E136:31.46 | S31:15.33 | E136:31.46 | 44.97  | 83.29  |
| 3590030       | S32:00.27 | E136:32.71 | S31:15.33 | E136:32.71 | 44.97  | 83.29  |
| 3590040       | S32:00.27 | E136:33.96 | S31:15.33 | E136:33.96 | 44.97  | 83.29  |
| 3590050       | S32:00.27 | E136:35.20 | S31:15.33 | E136:35.20 | 44.97  | 83.29  |
| 3590060       | S32:00.27 | E136:36.45 | S31:15.33 | E136:36.45 | 44.97  | 83.29  |
| 3590070       | S32:00.27 | E136:37.69 | S31:15.33 | E136:37.69 | 44.97  | 83.29  |
| 3590080       | S32:00.27 | E136:38.94 | S31:15.33 | E136:38.94 | 44.97  | 83.29  |
| 3590090       | S32:00.27 | E136:40.19 | S31:15.33 | E136:40.19 | 44.97  | 83.29  |
| 3590100       | S32:00.27 | E136:41.43 | S31:15.33 | E136:41.43 | 44.97  | 83.29  |
| 3590110       | S32:00.27 | E136:42.68 | S31:15.33 | E136:42.68 | 44.97  | 83.29  |
| 3590120       | S32:00.27 | E136:43.93 | S31:15.33 | E136:43.93 | 44.97  | 83.29  |
| 3590130       | S32:00.27 | E136:45.17 | S31:15.33 | E136:45.17 | 44.97  | 83.29  |
| 3590140       | S32:00.27 | E136:46.42 | S31:15.33 | E136:46.42 | 44.97  | 83.29  |
| 3590150       | S32:00.27 | E136:47.66 | S31:15.33 | E136:47.66 | 44.97  | 83.29  |
| 3590160       | S32:00.27 | E136:48.91 | S31:15.33 | E136:48.91 | 44.97  | 83.29  |
| 3590170       | S32:00.27 | E136:50.16 | S31:15.33 | E136:50.16 | 44.97  | 83.29  |
| 3590180       | S32:00.27 | E136:51.40 | S31:15.33 | E136:51.40 | 44.97  | 83.29  |
| 3590190       | S32:00.27 | E136:52.65 | S31:12.66 | E136:52.65 | 47.64  | 88.23  |
| 3590200       | S32:00.27 | E136:53.89 | S31:06.51 | E136:53.89 | 53.79  | 99.63  |
| 3590210       | S32:00.27 | E136:55.14 | S31:02.20 | E136:55.14 | 58.11  | 107.63 |
| 3590220       | S32:00.27 | E136:56.39 | S30:59.73 | E136:56.39 | 60.58  | 112.19 |
| 3590230       | S32:00.27 | E136:57.63 | S30:59.73 | E136:57.63 | 60.58  | 112.19 |
| 3590240       | S32:00.27 | E136:58.88 | S30:59.73 | E136:58.88 | 60.58  | 112.19 |
| 3590250       | S32:00.27 | E137:00.12 | S30:59.73 | E137:00.12 | 60.58  | 112.19 |
| 3590260       | S32:00.27 | E137:01.37 | S30:59.73 | E137:01.37 | 60.58  | 112.19 |
| 3590270       | S32:00.27 | E137:02.62 | S30:59.73 | E137:02.62 | 60.58  | 112.19 |
| 3590280       | S32:00.27 | E137:03.86 | S30:59.73 | E137:03.86 | 60.58  | 112.19 |
| 3590290       | S32:00.27 | E137:05.11 | S30:59.73 | E137:05.11 | 60.58  | 112.19 |
| 3590300       | S32:00.27 | E137:06.36 | S30:59.73 | E137:06.36 | 60.58  | 112.19 |
| 3590310       | S32:00.27 | E137:07.60 | S30:59.73 | E137:07.60 | 60.58  | 112.19 |
| 3590320       | S32:00.27 | E137:08.85 | S30:59.73 | E137:08.85 | 60.58  | 112.19 |
| 3590330       | S32:00.27 | E137:10.09 | S30:59.73 | E137:10.09 | 60.58  | 112.19 |
| 3590340       | S32:00.27 | E137:11.34 | S30:59.73 | E137:11.34 | 60.58  | 112.19 |
| 3590350       | S32:00.27 | E137:12.59 | S30:59.73 | E137:12.59 | 60.58  | 112.19 |
| 3590360       | S32:00.27 | E137:13.83 | S30:59.73 | E137:13.83 | 60.58  | 112.19 |
| 3590370       | S32:00.27 | E137:15.08 | S30:59.73 | E137:15.08 | 60.58  | 112.19 |
| 3590380       | S32:00.27 | E137:16.32 | S30:59.73 | E137:16.32 | 60.58  | 112.19 |
| 3590390       | S32:00.27 | E137:17.57 | S30:59.73 | E137:17.57 | 60.58  | 112.19 |
| 3590400       | S32:00.27 | E137:18.82 | S30:59.73 | E137:18.82 | 60.58  | 112.19 |
| 3590410       | S32:00.27 | E137:20.06 | S30:59.73 | E137:20.06 | 60.58  | 112.19 |
| 3590420       | S32:00.27 | E137:21.31 | S30:59.73 | E137:21.31 | 60.58  | 112.19 |
| 3590430       | S32:00.27 | E137:22.55 | S30:59.73 | E137:22.55 | 60.58  | 112.19 |
| 3590440       | S32:00.27 | E137:23.80 | S30:59.73 | E137:23.80 | 60.58  | 112.19 |
| 3590450       | S32:00.27 | E137:25.05 | S30:59.73 | E137:25.05 | 60.58  | 112.19 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3590460       | S32:00.27 | E137:26.29 | S30:59.73 | E137:26.29 | 60.58  | 112.19 |
| 3590470       | S32:00.27 | E137:27.54 | S30:59.73 | E137:27.54 | 60.58  | 112.19 |
| 3590480       | S32:00.27 | E137:28.79 | S30:59.73 | E137:28.79 | 60.58  | 112.19 |
| 3590490       | S32:00.27 | E137:30.03 | S30:59.73 | E137:30.03 | 60.58  | 112.19 |
| 3590500       | S32:00.27 | E137:31.28 | S30:59.73 | E137:31.28 | 60.58  | 112.19 |
| 3590510       | S32:00.27 | E137:32.52 | S30:59.73 | E137:32.52 | 60.58  | 112.19 |
| 3590520       | S32:00.27 | E137:33.77 | S30:59.73 | E137:33.77 | 60.58  | 112.19 |
| 3590530       | S32:00.27 | E137:35.02 | S30:59.73 | E137:35.02 | 60.58  | 112.19 |
| 3590540       | S32:00.27 | E137:36.26 | S30:59.73 | E137:36.26 | 60.58  | 112.19 |
| 3590550       | S32:00.27 | E137:37.51 | S30:59.73 | E137:37.51 | 60.58  | 112.19 |
| 3590560       | S32:00.27 | E137:38.75 | S30:59.73 | E137:38.75 | 60.58  | 112.19 |
| 3590570       | S32:00.27 | E137:40.00 | S30:59.73 | E137:40.00 | 60.58  | 112.19 |
| 3590580       | S32:00.27 | E137:41.25 | S30:59.73 | E137:41.25 | 60.58  | 112.19 |
| 3590590       | S32:00.27 | E137:42.49 | S30:59.73 | E137:42.49 | 60.58  | 112.19 |
| 3590600       | S32:00.27 | E137:43.74 | S30:59.73 | E137:43.74 | 60.58  | 112.19 |
| 3590610       | S32:00.27 | E137:44.98 | S30:59.73 | E137:44.98 | 60.58  | 112.19 |
| 3590620       | S32:00.27 | E137:46.23 | S30:59.73 | E137:46.23 | 60.58  | 112.19 |
| 3590630       | S32:00.27 | E137:47.48 | S30:59.73 | E137:47.48 | 60.58  | 112.19 |
| 3590640       | S32:00.27 | E137:48.72 | S30:59.73 | E137:48.72 | 60.58  | 112.19 |
| 3590650       | S32:00.27 | E137:49.97 | S30:59.73 | E137:49.97 | 60.58  | 112.19 |
| 3590660       | S32:00.27 | E137:51.21 | S30:59.73 | E137:51.21 | 60.58  | 112.19 |
| 3590670       | S32:00.27 | E137:52.46 | S30:59.73 | E137:52.46 | 60.58  | 112.19 |
| 3590680       | S32:00.27 | E137:53.71 | S30:59.73 | E137:53.71 | 60.58  | 112.19 |
| 3590690       | S32:00.27 | E137:54.95 | S30:59.73 | E137:54.95 | 60.58  | 112.19 |
| 3590700       | S32:00.27 | E137:56.20 | S30:59.73 | E137:56.20 | 60.58  | 112.19 |
| 3590710       | S32:00.27 | E137:57.45 | S30:59.73 | E137:57.45 | 60.58  | 112.19 |
| 3590720       | S32:00.27 | E137:58.69 | S30:59.73 | E137:58.69 | 60.58  | 112.19 |
| 3590730       | S32:00.27 | E137:59.94 | S30:59.73 | E137:59.94 | 60.58  | 112.19 |
| 3500010       | S32:00.17 | E136:29.36 | S32:00.17 | E138:00.64 | 77.46  | 143.45 |
| 3500020       | S32:00.06 | E136:29.36 | S32:00.06 | E138:00.64 | 77.46  | 143.45 |
| 3500030       | S31:59.96 | E136:29.36 | S31:59.96 | E138:00.64 | 77.46  | 143.45 |
| 3500040       | S31:59.85 | E136:29.36 | S31:59.85 | E138:00.64 | 77.46  | 143.45 |
| 3500050       | S31:59.74 | E136:29.36 | S31:59.74 | E138:00.64 | 77.46  | 143.45 |
| 3500060       | S31:59.63 | E136:29.36 | S31:59.63 | E138:00.64 | 77.46  | 143.46 |
| 3500070       | S31:59.53 | E136:29.36 | S31:59.53 | E138:00.64 | 77.46  | 143.46 |
| 3500080       | S31:59.42 | E136:29.36 | S31:59.42 | E138:00.64 | 77.46  | 143.46 |
| 3500090       | S31:59.31 | E136:29.36 | S31:59.31 | E138:00.64 | 77.47  | 143.47 |
| 3500100       | S31:59.20 | E136:29.36 | S31:59.20 | E138:00.64 | 77.47  | 143.47 |
| 3500110       | S31:59.09 | E136:29.36 | S31:59.09 | E138:00.64 | 77.47  | 143.47 |
| 3500120       | S31:58.99 | E136:29.36 | S31:58.99 | E138:00.64 | 77.47  | 143.47 |
| 3500130       | S31:58.88 | E136:29.36 | S31:58.88 | E138:00.64 | 77.47  | 143.48 |
| 3500140       | S31:58.77 | E136:29.36 | S31:58.77 | E138:00.64 | 77.47  | 143.48 |
| 3500150       | S31:58.66 | E136:29.36 | S31:58.66 | E138:00.64 | 77.47  | 143.48 |
| 3500160       | S31:58.55 | E136:29.36 | S31:58.55 | E138:00.64 | 77.48  | 143.49 |
| 3500170       | S31:58.45 | E136:29.36 | S31:58.45 | E138:00.64 | 77.48  | 143.49 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3500180       | S31:58.34 | E136:29.36 | S31:58.34 | E138:00.64 | 77.48  | 143.49 |
| 3500190       | S31:58.23 | E136:29.36 | S31:58.23 | E138:00.64 | 77.48  | 143.49 |
| 3500200       | S31:58.12 | E136:29.36 | S31:58.12 | E138:00.64 | 77.48  | 143.50 |
| 3500210       | S31:58.01 | E136:29.36 | S31:58.01 | E138:00.64 | 77.48  | 143.50 |
| 3500220       | S31:57.91 | E136:29.36 | S31:57.91 | E138:00.64 | 77.48  | 143.50 |
| 3500230       | S31:57.80 | E136:29.36 | S31:57.80 | E138:00.64 | 77.49  | 143.50 |
| 3500240       | S31:57.69 | E136:29.36 | S31:57.69 | E138:00.64 | 77.49  | 143.51 |
| 3500250       | S31:57.58 | E136:29.36 | S31:57.58 | E138:00.64 | 77.49  | 143.51 |
| 3500260       | S31:57.47 | E136:29.36 | S31:57.47 | E138:00.64 | 77.49  | 143.51 |
| 3500270       | S31:57.37 | E136:29.36 | S31:57.37 | E138:00.64 | 77.49  | 143.52 |
| 3500280       | S31:57.26 | E136:29.36 | S31:57.26 | E138:00.64 | 77.49  | 143.52 |
| 3500290       | S31:57.15 | E136:29.36 | S31:57.15 | E138:00.64 | 77.50  | 143.52 |
| 3500300       | S31:57.04 | E136:29.36 | S31:57.04 | E138:00.64 | 77.50  | 143.52 |
| 3500310       | S31:56.94 | E136:29.36 | S31:56.94 | E138:00.64 | 77.50  | 143.53 |
| 3500320       | S31:56.83 | E136:29.36 | S31:56.83 | E138:00.64 | 77.50  | 143.53 |
| 3500330       | S31:56.72 | E136:29.36 | S31:56.72 | E138:00.64 | 77.50  | 143.53 |
| 3500340       | S31:56.61 | E136:29.36 | S31:56.61 | E138:00.64 | 77.50  | 143.53 |
| 3500350       | S31:56.50 | E136:29.36 | S31:56.50 | E138:00.64 | 77.50  | 143.54 |
| 3500360       | S31:56.40 | E136:29.36 | S31:56.40 | E138:00.64 | 77.51  | 143.54 |
| 3500370       | S31:56.29 | E136:29.36 | S31:56.29 | E138:00.64 | 77.51  | 143.54 |
| 3500380       | S31:56.18 | E136:29.36 | S31:56.18 | E138:00.64 | 77.51  | 143.55 |
| 3500390       | S31:56.07 | E136:29.36 | S31:56.07 | E138:00.64 | 77.51  | 143.55 |
| 3500400       | S31:55.96 | E136:29.36 | S31:55.96 | E138:00.64 | 77.51  | 143.55 |
| 3500410       | S31:55.86 | E136:29.36 | S31:55.86 | E138:00.64 | 77.51  | 143.55 |
| 3500420       | S31:55.75 | E136:29.36 | S31:55.75 | E138:00.64 | 77.51  | 143.56 |
| 3500430       | S31:55.64 | E136:29.36 | S31:55.64 | E138:00.64 | 77.52  | 143.56 |
| 3500440       | S31:55.53 | E136:29.36 | S31:55.53 | E138:00.64 | 77.52  | 143.56 |
| 3500450       | S31:55.42 | E136:29.36 | S31:55.42 | E138:00.64 | 77.52  | 143.57 |
| 3500460       | S31:55.32 | E136:29.36 | S31:55.32 | E138:00.64 | 77.52  | 143.57 |
| 3500470       | S31:55.21 | E136:29.36 | S31:55.21 | E138:00.64 | 77.52  | 143.57 |
| 3500480       | S31:55.10 | E136:29.36 | S31:55.10 | E138:00.64 | 77.52  | 143.57 |
| 3500490       | S31:54.99 | E136:29.36 | S31:54.99 | E138:00.64 | 77.53  | 143.58 |
| 3500500       | S31:54.88 | E136:29.36 | S31:54.88 | E138:00.64 | 77.53  | 143.58 |
| 3500510       | S31:54.78 | E136:29.36 | S31:54.78 | E138:00.64 | 77.53  | 143.58 |
| 3500520       | S31:54.67 | E136:29.36 | S31:54.67 | E138:00.64 | 77.53  | 143.58 |
| 3500530       | S31:54.56 | E136:29.36 | S31:54.56 | E138:00.64 | 77.53  | 143.59 |
| 3500540       | S31:54.45 | E136:29.36 | S31:54.45 | E138:00.64 | 77.53  | 143.59 |
| 3500550       | S31:54.35 | E136:29.36 | S31:54.35 | E138:00.64 | 77.53  | 143.59 |
| 3500560       | S31:54.24 | E136:29.36 | S31:54.24 | E138:00.64 | 77.54  | 143.60 |
| 3500570       | S31:54.13 | E136:29.36 | S31:54.13 | E138:00.64 | 77.54  | 143.60 |
| 3500580       | S31:54.02 | E136:29.36 | S31:54.02 | E138:00.64 | 77.54  | 143.60 |
| 3500590       | S31:53.91 | E136:29.36 | S31:53.91 | E138:00.64 | 77.54  | 143.60 |
| 3500600       | S31:53.81 | E136:29.36 | S31:53.81 | E138:00.64 | 77.54  | 143.61 |
| 3500610       | S31:53.70 | E136:29.36 | S31:53.70 | E138:00.64 | 77.54  | 143.61 |
| 3500620       | S31:53.59 | E136:29.36 | S31:53.59 | E138:00.64 | 77.54  | 143.61 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3500630       | S31:53.48 | E136:29.36 | S31:53.48 | E138:00.64 | 77.55  | 143.62 |
| 3500640       | S31:53.37 | E136:29.36 | S31:53.37 | E138:00.64 | 77.55  | 143.62 |
| 3500650       | S31:53.27 | E136:29.36 | S31:53.27 | E138:00.64 | 77.55  | 143.62 |
| 3500660       | S31:53.16 | E136:29.36 | S31:53.16 | E138:00.64 | 77.55  | 143.62 |
| 3500670       | S31:53.05 | E136:29.36 | S31:53.05 | E138:00.64 | 77.55  | 143.63 |
| 3500680       | S31:52.94 | E136:29.36 | S31:52.94 | E138:00.64 | 77.55  | 143.63 |
| 3500690       | S31:52.83 | E136:29.36 | S31:52.83 | E138:00.64 | 77.56  | 143.63 |
| 3500700       | S31:52.73 | E136:29.36 | S31:52.73 | E138:00.64 | 77.56  | 143.63 |
| 3500710       | S31:52.62 | E136:29.36 | S31:52.62 | E138:00.64 | 77.56  | 143.64 |
| 3500720       | S31:52.51 | E136:29.36 | S31:52.51 | E138:00.64 | 77.56  | 143.64 |
| 3500730       | S31:52.40 | E136:29.36 | S31:52.40 | E138:00.64 | 77.56  | 143.64 |
| 3500740       | S31:52.29 | E136:29.36 | S31:52.29 | E138:00.64 | 77.56  | 143.65 |
| 3500750       | S31:52.19 | E136:29.36 | S31:52.19 | E138:00.64 | 77.56  | 143.65 |
| 3500760       | S31:52.08 | E136:29.36 | S31:52.08 | E138:00.64 | 77.57  | 143.65 |
| 3500770       | S31:51.97 | E136:29.36 | S31:51.97 | E138:00.64 | 77.57  | 143.65 |
| 3500780       | S31:51.86 | E136:29.36 | S31:51.86 | E138:00.64 | 77.57  | 143.66 |
| 3500790       | S31:51.76 | E136:29.36 | S31:51.76 | E138:00.64 | 77.57  | 143.66 |
| 3500800       | S31:51.65 | E136:29.36 | S31:51.65 | E138:00.64 | 77.57  | 143.66 |
| 3500810       | S31:51.54 | E136:29.36 | S31:51.54 | E138:00.64 | 77.57  | 143.67 |
| 3500820       | S31:51.43 | E136:29.36 | S31:51.43 | E138:00.64 | 77.57  | 143.67 |
| 3500830       | S31:51.32 | E136:29.36 | S31:51.32 | E138:00.64 | 77.58  | 143.67 |
| 3500840       | S31:51.22 | E136:29.36 | S31:51.22 | E138:00.64 | 77.58  | 143.67 |
| 3500850       | S31:51.11 | E136:29.36 | S31:51.11 | E138:00.64 | 77.58  | 143.68 |
| 3500860       | S31:51.00 | E136:29.36 | S31:51.00 | E138:00.64 | 77.58  | 143.68 |
| 3500870       | S31:50.89 | E136:29.36 | S31:50.89 | E138:00.64 | 77.58  | 143.68 |
| 3500880       | S31:50.78 | E136:29.36 | S31:50.78 | E138:00.64 | 77.58  | 143.68 |
| 3500890       | S31:50.68 | E136:29.36 | S31:50.68 | E138:00.64 | 77.58  | 143.69 |
| 3500900       | S31:50.57 | E136:29.36 | S31:50.57 | E138:00.64 | 77.59  | 143.69 |
| 3500910       | S31:50.46 | E136:29.36 | S31:50.46 | E138:00.64 | 77.59  | 143.69 |
| 3500920       | S31:50.35 | E136:29.36 | S31:50.35 | E138:00.64 | 77.59  | 143.70 |
| 3500930       | S31:50.24 | E136:29.36 | S31:50.24 | E138:00.64 | 77.59  | 143.70 |
| 3500940       | S31:50.14 | E136:29.36 | S31:50.14 | E138:00.64 | 77.59  | 143.70 |
| 3500950       | S31:50.03 | E136:29.36 | S31:50.03 | E138:00.64 | 77.59  | 143.70 |
| 3500960       | S31:49.92 | E136:29.36 | S31:49.92 | E138:00.64 | 77.60  | 143.71 |
| 3500970       | S31:49.81 | E136:29.36 | S31:49.81 | E138:00.64 | 77.60  | 143.71 |
| 3500980       | S31:49.71 | E136:29.36 | S31:49.71 | E138:00.64 | 77.60  | 143.71 |
| 3500990       | S31:49.60 | E136:29.36 | S31:49.60 | E138:00.64 | 77.60  | 143.71 |
| 3501000       | S31:49.49 | E136:29.36 | S31:49.49 | E138:00.64 | 77.60  | 143.72 |
| 3501010       | S31:49.38 | E136:29.36 | S31:49.38 | E138:00.64 | 77.60  | 143.72 |
| 3501020       | S31:49.27 | E136:29.36 | S31:49.27 | E138:00.64 | 77.60  | 143.72 |
| 3501030       | S31:49.17 | E136:29.37 | S31:49.17 | E138:00.64 | 77.61  | 143.73 |
| 3501040       | S31:49.06 | E136:29.36 | S31:49.06 | E138:00.63 | 77.61  | 143.73 |
| 3501050       | S31:48.95 | E136:29.36 | S31:48.95 | E138:00.64 | 77.61  | 143.73 |
| 3501060       | S31:48.84 | E136:29.36 | S31:48.84 | E138:00.63 | 77.61  | 143.73 |
| 3501070       | S31:48.73 | E136:29.37 | S31:48.73 | E138:00.63 | 77.61  | 143.74 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3501080       | S31:48.63 | E136:29.37 | S31:48.63 | E138:00.63 | 77.61  | 143.74 |
| 3501090       | S31:48.52 | E136:29.37 | S31:48.52 | E138:00.63 | 77.61  | 143.74 |
| 3501100       | S31:48.41 | E136:29.37 | S31:48.41 | E138:00.63 | 77.62  | 143.75 |
| 3501110       | S31:48.30 | E136:29.37 | S31:48.30 | E138:00.63 | 77.62  | 143.75 |
| 3501120       | S31:48.19 | E136:29.37 | S31:48.19 | E138:00.63 | 77.62  | 143.75 |
| 3501130       | S31:48.09 | E136:29.37 | S31:48.09 | E138:00.63 | 77.62  | 143.75 |
| 3501140       | S31:47.98 | E136:29.37 | S31:47.98 | E138:00.63 | 77.62  | 143.76 |
| 3501150       | S31:47.87 | E136:29.37 | S31:47.87 | E138:00.63 | 77.62  | 143.76 |
| 3501160       | S31:47.76 | E136:29.37 | S31:47.76 | E138:00.63 | 77.63  | 143.76 |
| 3501170       | S31:47.65 | E136:29.37 | S31:47.65 | E138:00.63 | 77.63  | 143.76 |
| 3501180       | S31:47.55 | E136:29.37 | S31:47.55 | E138:00.63 | 77.63  | 143.77 |
| 3501190       | S31:47.44 | E136:29.37 | S31:47.44 | E138:00.63 | 77.63  | 143.77 |
| 3501200       | S31:47.33 | E136:29.37 | S31:47.33 | E138:00.63 | 77.63  | 143.77 |
| 3501210       | S31:47.22 | E136:29.37 | S31:47.22 | E138:00.63 | 77.63  | 143.78 |
| 3501220       | S31:47.12 | E136:29.37 | S31:47.12 | E138:00.63 | 77.63  | 143.78 |
| 3501230       | S31:47.01 | E136:29.37 | S31:47.01 | E138:00.63 | 77.64  | 143.78 |
| 3501240       | S31:46.90 | E136:29.37 | S31:46.90 | E138:00.63 | 77.64  | 143.78 |
| 3501250       | S31:46.79 | E136:29.37 | S31:46.79 | E138:00.63 | 77.64  | 143.79 |
| 3501260       | S31:46.68 | E136:29.37 | S31:46.68 | E138:00.63 | 77.64  | 143.79 |
| 3501270       | S31:46.58 | E136:29.37 | S31:46.58 | E138:00.63 | 77.64  | 143.79 |
| 3501280       | S31:46.47 | E136:29.37 | S31:46.47 | E138:00.63 | 77.64  | 143.79 |
| 3501290       | S31:46.36 | E136:29.37 | S31:46.36 | E138:00.63 | 77.64  | 143.80 |
| 3501300       | S31:46.25 | E136:29.37 | S31:46.25 | E138:00.63 | 77.65  | 143.80 |
| 3501310       | S31:46.14 | E136:29.37 | S31:46.14 | E138:00.63 | 77.65  | 143.80 |
| 3501320       | S31:46.04 | E136:29.37 | S31:46.04 | E138:00.63 | 77.65  | 143.81 |
| 3501330       | S31:45.93 | E136:29.37 | S31:45.93 | E138:00.63 | 77.65  | 143.81 |
| 3501340       | S31:45.82 | E136:29.37 | S31:45.82 | E138:00.63 | 77.65  | 143.81 |
| 3501350       | S31:45.71 | E136:29.37 | S31:45.71 | E138:00.63 | 77.65  | 143.81 |
| 3501360       | S31:45.60 | E136:29.37 | S31:45.60 | E138:00.63 | 77.65  | 143.82 |
| 3501370       | S31:45.50 | E136:29.37 | S31:45.50 | E138:00.63 | 77.66  | 143.82 |
| 3501380       | S31:45.39 | E136:29.37 | S31:45.39 | E138:00.63 | 77.66  | 143.82 |
| 3501390       | S31:45.28 | E136:29.37 | S31:45.28 | E138:00.63 | 77.66  | 143.83 |
| 3501400       | S31:45.17 | E136:29.37 | S31:45.17 | E138:00.63 | 77.66  | 143.83 |
| 3501410       | S31:45.06 | E136:29.37 | S31:45.06 | E138:00.63 | 77.66  | 143.83 |
| 3501420       | S31:44.96 | E136:29.37 | S31:44.96 | E138:00.63 | 77.66  | 143.83 |
| 3501430       | S31:44.85 | E136:29.37 | S31:44.85 | E138:00.63 | 77.67  | 143.84 |
| 3501440       | S31:44.74 | E136:29.37 | S31:44.74 | E138:00.63 | 77.67  | 143.84 |
| 3501450       | S31:44.63 | E136:29.37 | S31:44.63 | E138:00.63 | 77.67  | 143.84 |
| 3501460       | S31:44.53 | E136:29.37 | S31:44.53 | E138:00.63 | 77.67  | 143.84 |
| 3501470       | S31:44.42 | E136:29.37 | S31:44.42 | E138:00.63 | 77.67  | 143.85 |
| 3501480       | S31:44.31 | E136:29.37 | S31:44.31 | E138:00.63 | 77.67  | 143.85 |
| 3501490       | S31:44.20 | E136:29.37 | S31:44.20 | E138:00.63 | 77.67  | 143.85 |
| 3501500       | S31:44.09 | E136:29.37 | S31:44.09 | E138:00.63 | 77.68  | 143.86 |
| 3501510       | S31:43.99 | E136:29.37 | S31:43.99 | E138:00.63 | 77.68  | 143.86 |
| 3501520       | S31:43.88 | E136:29.37 | S31:43.88 | E138:00.63 | 77.68  | 143.86 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3501530       | S31:43.77 | E136:29.37 | S31:43.77 | E138:00.63 | 77.68  | 143.86 |
| 3501540       | S31:43.66 | E136:29.37 | S31:43.66 | E138:00.63 | 77.68  | 143.87 |
| 3501550       | S31:43.55 | E136:29.37 | S31:43.55 | E138:00.63 | 77.68  | 143.87 |
| 3501560       | S31:43.45 | E136:29.37 | S31:43.45 | E138:00.63 | 77.68  | 143.87 |
| 3501570       | S31:43.34 | E136:29.37 | S31:43.34 | E138:00.63 | 77.69  | 143.87 |
| 3501580       | S31:43.23 | E136:29.37 | S31:43.23 | E138:00.63 | 77.69  | 143.88 |
| 3501590       | S31:43.12 | E136:29.37 | S31:43.12 | E138:00.63 | 77.69  | 143.88 |
| 3501600       | S31:43.01 | E136:29.37 | S31:43.01 | E138:00.63 | 77.69  | 143.88 |
| 3501610       | S31:42.91 | E136:29.37 | S31:42.91 | E138:00.63 | 77.69  | 143.89 |
| 3501620       | S31:42.80 | E136:29.37 | S31:42.80 | E138:00.63 | 77.69  | 143.89 |
| 3501630       | S31:42.69 | E136:29.37 | S31:42.69 | E138:00.63 | 77.70  | 143.89 |
| 3501640       | S31:42.58 | E136:29.37 | S31:42.58 | E138:00.63 | 77.70  | 143.89 |
| 3501650       | S31:42.47 | E136:29.37 | S31:42.47 | E138:00.63 | 77.70  | 143.90 |
| 3501660       | S31:42.37 | E136:29.37 | S31:42.37 | E138:00.63 | 77.70  | 143.90 |
| 3501670       | S31:42.26 | E136:29.37 | S31:42.26 | E138:00.63 | 77.70  | 143.90 |
| 3501680       | S31:42.15 | E136:29.37 | S31:42.15 | E138:00.63 | 77.70  | 143.90 |
| 3501690       | S31:42.04 | E136:29.37 | S31:42.04 | E138:00.63 | 77.70  | 143.91 |
| 3501700       | S31:41.94 | E136:29.37 | S31:41.94 | E138:00.63 | 77.71  | 143.91 |
| 3501710       | S31:41.83 | E136:29.37 | S31:41.83 | E138:00.63 | 77.71  | 143.91 |
| 3501720       | S31:41.72 | E136:29.37 | S31:41.72 | E138:00.63 | 77.71  | 143.92 |
| 3501730       | S31:41.61 | E136:29.37 | S31:41.61 | E138:00.63 | 77.71  | 143.92 |
| 3501740       | S31:41.50 | E136:29.37 | S31:41.50 | E138:00.63 | 77.71  | 143.92 |
| 3501750       | S31:41.40 | E136:29.37 | S31:41.40 | E138:00.63 | 77.71  | 143.92 |
| 3501760       | S31:41.29 | E136:29.37 | S31:41.29 | E138:00.63 | 77.71  | 143.93 |
| 3501770       | S31:41.18 | E136:29.37 | S31:41.18 | E138:00.63 | 77.72  | 143.93 |
| 3501780       | S31:41.07 | E136:29.37 | S31:41.07 | E138:00.63 | 77.72  | 143.93 |
| 3501790       | S31:40.96 | E136:29.37 | S31:40.96 | E138:00.63 | 77.72  | 143.94 |
| 3501800       | S31:40.86 | E136:29.37 | S31:40.86 | E138:00.63 | 77.72  | 143.94 |
| 3501810       | S31:40.75 | E136:29.37 | S31:40.75 | E138:00.63 | 77.72  | 143.94 |
| 3501820       | S31:40.64 | E136:29.37 | S31:40.64 | E138:00.63 | 77.72  | 143.94 |
| 3501830       | S31:40.53 | E136:29.37 | S31:40.53 | E138:00.63 | 77.72  | 143.95 |
| 3501840       | S31:40.42 | E136:29.37 | S31:40.42 | E138:00.63 | 77.73  | 143.95 |
| 3501850       | S31:40.32 | E136:29.37 | S31:40.32 | E138:00.63 | 77.73  | 143.95 |
| 3501860       | S31:40.21 | E136:29.37 | S31:40.21 | E138:00.63 | 77.73  | 143.95 |
| 3501870       | S31:40.10 | E136:29.37 | S31:40.10 | E138:00.63 | 77.73  | 143.96 |
| 3501880       | S31:39.99 | E136:29.37 | S31:39.99 | E138:00.63 | 77.73  | 143.96 |
| 3501890       | S31:39.88 | E136:29.37 | S31:39.88 | E138:00.63 | 77.73  | 143.96 |
| 3501900       | S31:39.78 | E136:29.37 | S31:39.78 | E138:00.63 | 77.74  | 143.97 |
| 3501910       | S31:39.67 | E136:29.37 | S31:39.67 | E138:00.63 | 77.74  | 143.97 |
| 3501920       | S31:39.56 | E136:29.37 | S31:39.56 | E138:00.63 | 77.74  | 143.97 |
| 3501930       | S31:39.45 | E136:29.37 | S31:39.45 | E138:00.63 | 77.74  | 143.97 |
| 3501940       | S31:39.35 | E136:29.37 | S31:39.35 | E138:00.63 | 77.74  | 143.98 |
| 3501950       | S31:39.24 | E136:29.37 | S31:39.24 | E138:00.63 | 77.74  | 143.98 |
| 3501960       | S31:39.13 | E136:29.37 | S31:39.13 | E138:00.63 | 77.74  | 143.98 |
| 3501970       | S31:39.02 | E136:29.37 | S31:39.02 | E138:00.63 | 77.75  | 143.98 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3501980       | S31:38.91 | E136:29.37 | S31:38.91 | E138:00.63 | 77.75  | 143.99 |
| 3501990       | S31:38.81 | E136:29.37 | S31:38.81 | E138:00.63 | 77.75  | 143.99 |
| 3502000       | S31:38.70 | E136:29.37 | S31:38.70 | E138:00.63 | 77.75  | 143.99 |
| 3502010       | S31:38.59 | E136:29.37 | S31:38.59 | E138:00.63 | 77.75  | 144.00 |
| 3502020       | S31:38.48 | E136:29.37 | S31:38.48 | E138:00.63 | 77.75  | 144.00 |
| 3502030       | S31:38.37 | E136:29.37 | S31:38.37 | E138:00.63 | 77.75  | 144.00 |
| 3502040       | S31:38.27 | E136:29.37 | S31:38.27 | E138:00.63 | 77.76  | 144.00 |
| 3502050       | S31:38.16 | E136:29.37 | S31:38.16 | E138:00.63 | 77.76  | 144.01 |
| 3502060       | S31:38.05 | E136:29.37 | S31:38.05 | E138:00.63 | 77.76  | 144.01 |
| 3502070       | S31:37.94 | E136:29.37 | S31:37.94 | E138:00.63 | 77.76  | 144.01 |
| 3502080       | S31:37.83 | E136:29.37 | S31:37.83 | E138:00.63 | 77.76  | 144.01 |
| 3502090       | S31:37.73 | E136:29.37 | S31:37.73 | E138:00.63 | 77.76  | 144.02 |
| 3502100       | S31:37.62 | E136:29.37 | S31:37.62 | E138:00.63 | 77.76  | 144.02 |
| 3502110       | S31:37.51 | E136:29.37 | S31:37.51 | E138:00.63 | 77.77  | 144.02 |
| 3502120       | S31:37.40 | E136:29.37 | S31:37.40 | E138:00.63 | 77.77  | 144.03 |
| 3502130       | S31:37.29 | E136:29.37 | S31:37.29 | E138:00.63 | 77.77  | 144.03 |
| 3502140       | S31:37.19 | E136:29.37 | S31:37.19 | E138:00.63 | 77.77  | 144.03 |
| 3502150       | S31:37.08 | E136:29.37 | S31:37.08 | E138:00.63 | 77.77  | 144.03 |
| 3502160       | S31:36.97 | E136:29.37 | S31:36.97 | E138:00.63 | 77.77  | 144.04 |
| 3502170       | S31:36.86 | E136:29.37 | S31:36.86 | E138:00.63 | 77.78  | 144.04 |
| 3502180       | S31:36.76 | E136:29.37 | S31:36.76 | E138:00.63 | 77.78  | 144.04 |
| 3502190       | S31:36.65 | E136:29.37 | S31:36.65 | E138:00.63 | 77.78  | 144.05 |
| 3502200       | S31:36.54 | E136:29.37 | S31:36.54 | E138:00.63 | 77.78  | 144.05 |
| 3502210       | S31:36.43 | E136:29.37 | S31:36.43 | E138:00.63 | 77.78  | 144.05 |
| 3502220       | S31:36.32 | E136:29.37 | S31:36.32 | E138:00.63 | 77.78  | 144.05 |
| 3502230       | S31:36.22 | E136:29.37 | S31:36.22 | E138:00.63 | 77.78  | 144.06 |
| 3502240       | S31:36.11 | E136:29.37 | S31:36.11 | E138:00.63 | 77.79  | 144.06 |
| 3502250       | S31:36.00 | E136:29.37 | S31:36.00 | E138:00.63 | 77.79  | 144.06 |
| 3502260       | S31:35.89 | E136:29.37 | S31:35.89 | E138:00.63 | 77.79  | 144.06 |
| 3502270       | S31:35.78 | E136:29.37 | S31:35.78 | E138:00.63 | 77.79  | 144.07 |
| 3502280       | S31:35.68 | E136:29.37 | S31:35.68 | E138:00.63 | 77.79  | 144.07 |
| 3502290       | S31:35.57 | E136:29.37 | S31:35.57 | E138:00.63 | 77.79  | 144.07 |
| 3502300       | S31:35.46 | E136:29.37 | S31:35.46 | E138:00.63 | 77.79  | 144.08 |
| 3502310       | S31:35.35 | E136:29.37 | S31:35.35 | E138:00.63 | 77.80  | 144.08 |
| 3502320       | S31:35.24 | E136:29.37 | S31:35.24 | E138:00.63 | 77.80  | 144.08 |
| 3502330       | S31:35.14 | E136:29.37 | S31:35.14 | E138:00.63 | 77.80  | 144.08 |
| 3502340       | S31:35.03 | E136:29.37 | S31:35.03 | E138:00.63 | 77.80  | 144.09 |
| 3502350       | S31:34.92 | E136:29.37 | S31:34.92 | E138:00.63 | 77.80  | 144.09 |
| 3502360       | S31:34.81 | E136:29.37 | S31:34.81 | E138:00.63 | 77.80  | 144.09 |
| 3502370       | S31:34.71 | E136:29.37 | S31:34.71 | E138:00.63 | 77.80  | 144.09 |
| 3502380       | S31:34.60 | E136:29.37 | S31:34.60 | E138:00.63 | 77.81  | 144.10 |
| 3502390       | S31:34.49 | E136:29.37 | S31:34.49 | E138:00.63 | 77.81  | 144.10 |
| 3502400       | S31:34.38 | E136:29.37 | S31:34.38 | E138:00.63 | 77.81  | 144.10 |
| 3502410       | S31:34.27 | E136:29.37 | S31:34.27 | E138:00.63 | 77.81  | 144.11 |
| 3502420       | S31:34.17 | E136:29.37 | S31:34.17 | E138:00.63 | 77.81  | 144.11 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3502430       | S31:34.06 | E136:29.37 | S31:34.06 | E138:00.63 | 77.81  | 144.11 |
| 3502440       | S31:33.95 | E136:29.37 | S31:33.95 | E138:00.63 | 77.82  | 144.11 |
| 3502450       | S31:33.84 | E136:29.37 | S31:33.84 | E138:00.63 | 77.82  | 144.12 |
| 3502460       | S31:33.73 | E136:29.37 | S31:33.73 | E138:00.63 | 77.82  | 144.12 |
| 3502470       | S31:33.63 | E136:29.37 | S31:33.63 | E138:00.63 | 77.82  | 144.12 |
| 3502480       | S31:33.52 | E136:29.37 | S31:33.52 | E138:00.63 | 77.82  | 144.12 |
| 3502490       | S31:33.41 | E136:29.37 | S31:33.41 | E138:00.63 | 77.82  | 144.13 |
| 3502500       | S31:33.30 | E136:29.37 | S31:33.30 | E138:00.63 | 77.82  | 144.13 |
| 3502510       | S31:33.19 | E136:29.37 | S31:33.19 | E138:00.63 | 77.83  | 144.13 |
| 3502520       | S31:33.09 | E136:29.37 | S31:33.09 | E138:00.63 | 77.83  | 144.14 |
| 3502530       | S31:32.98 | E136:29.37 | S31:32.98 | E138:00.63 | 77.83  | 144.14 |
| 3502540       | S31:32.87 | E136:29.37 | S31:32.87 | E138:00.63 | 77.83  | 144.14 |
| 3502550       | S31:32.76 | E136:29.37 | S31:32.76 | E138:00.63 | 77.83  | 144.14 |
| 3502560       | S31:32.65 | E136:29.37 | S31:32.65 | E138:00.63 | 77.83  | 144.15 |
| 3502570       | S31:32.55 | E136:29.37 | S31:32.55 | E138:00.63 | 77.83  | 144.15 |
| 3502580       | S31:32.44 | E136:29.37 | S31:32.44 | E138:00.63 | 77.84  | 144.15 |
| 3502590       | S31:32.33 | E136:29.37 | S31:32.33 | E138:00.63 | 77.84  | 144.15 |
| 3502600       | S31:32.22 | E136:29.37 | S31:32.22 | E138:00.63 | 77.84  | 144.16 |
| 3502610       | S31:32.12 | E136:29.37 | S31:32.12 | E138:00.63 | 77.84  | 144.16 |
| 3502620       | S31:32.01 | E136:29.37 | S31:32.01 | E138:00.63 | 77.84  | 144.16 |
| 3502630       | S31:31.90 | E136:29.37 | S31:31.90 | E138:00.63 | 77.84  | 144.17 |
| 3502640       | S31:31.79 | E136:29.37 | S31:31.79 | E138:00.63 | 77.84  | 144.17 |
| 3502650       | S31:31.68 | E136:29.37 | S31:31.68 | E138:00.63 | 77.85  | 144.17 |
| 3502660       | S31:31.58 | E136:29.37 | S31:31.58 | E138:00.63 | 77.85  | 144.17 |
| 3502670       | S31:31.47 | E136:29.37 | S31:31.47 | E138:00.63 | 77.85  | 144.18 |
| 3502680       | S31:31.36 | E136:29.37 | S31:31.36 | E138:00.63 | 77.85  | 144.18 |
| 3502690       | S31:31.25 | E136:29.37 | S31:31.25 | E138:00.63 | 77.85  | 144.18 |
| 3502700       | S31:31.14 | E136:29.37 | S31:31.14 | E138:00.63 | 77.85  | 144.18 |
| 3502710       | S31:31.04 | E136:29.37 | S31:31.04 | E138:00.63 | 77.86  | 144.19 |
| 3502720       | S31:30.93 | E136:29.37 | S31:30.93 | E138:00.63 | 77.86  | 144.19 |
| 3502730       | S31:30.82 | E136:29.37 | S31:30.82 | E138:00.63 | 77.86  | 144.19 |
| 3502740       | S31:30.71 | E136:29.37 | S31:30.71 | E138:00.63 | 77.86  | 144.20 |
| 3502750       | S31:30.60 | E136:29.37 | S31:30.60 | E138:00.63 | 77.86  | 144.20 |
| 3502760       | S31:30.50 | E136:29.37 | S31:30.50 | E138:00.63 | 77.86  | 144.20 |
| 3502770       | S31:30.39 | E136:29.37 | S31:30.39 | E138:00.63 | 77.86  | 144.20 |
| 3502780       | S31:30.28 | E136:29.37 | S31:30.28 | E138:00.63 | 77.87  | 144.21 |
| 3502790       | S31:30.17 | E136:29.37 | S31:30.17 | E138:00.63 | 77.87  | 144.21 |
| 3502800       | S31:30.06 | E136:29.37 | S31:30.06 | E138:00.63 | 77.87  | 144.21 |
| 3502810       | S31:29.96 | E136:29.37 | S31:29.96 | E138:00.63 | 77.87  | 144.21 |
| 3502820       | S31:29.85 | E136:29.37 | S31:29.85 | E138:00.63 | 77.87  | 144.22 |
| 3502830       | S31:29.74 | E136:29.37 | S31:29.74 | E138:00.63 | 77.87  | 144.22 |
| 3502840       | S31:29.63 | E136:29.37 | S31:29.63 | E138:00.63 | 77.87  | 144.22 |
| 3502850       | S31:29.53 | E136:29.37 | S31:29.53 | E138:00.63 | 77.88  | 144.23 |
| 3502860       | S31:29.42 | E136:29.37 | S31:29.42 | E138:00.63 | 77.88  | 144.23 |
| 3502870       | S31:29.31 | E136:29.37 | S31:29.31 | E138:00.63 | 77.88  | 144.23 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3502880       | S31:29.20 | E136:29.37 | S31:29.20 | E138:00.63 | 77.88  | 144.23 |
| 3502890       | S31:29.09 | E136:29.37 | S31:29.09 | E138:00.63 | 77.88  | 144.24 |
| 3502900       | S31:28.99 | E136:29.37 | S31:28.99 | E138:00.63 | 77.88  | 144.24 |
| 3502910       | S31:28.88 | E136:29.37 | S31:28.88 | E138:00.63 | 77.88  | 144.24 |
| 3502920       | S31:28.77 | E136:29.37 | S31:28.77 | E138:00.63 | 77.89  | 144.25 |
| 3502930       | S31:28.66 | E136:29.37 | S31:28.66 | E138:00.63 | 77.89  | 144.25 |
| 3502940       | S31:28.55 | E136:29.37 | S31:28.55 | E138:00.63 | 77.89  | 144.25 |
| 3502950       | S31:28.45 | E136:29.37 | S31:28.45 | E138:00.63 | 77.89  | 144.25 |
| 3502960       | S31:28.34 | E136:29.37 | S31:28.34 | E138:00.63 | 77.89  | 144.26 |
| 3502970       | S31:28.23 | E136:29.37 | S31:28.23 | E138:00.63 | 77.89  | 144.26 |
| 3502980       | S31:28.12 | E136:29.37 | S31:28.12 | E138:00.63 | 77.89  | 144.26 |
| 3502990       | S31:28.01 | E136:29.37 | S31:28.01 | E138:00.63 | 77.90  | 144.26 |
| 3503000       | S31:27.91 | E136:29.37 | S31:27.91 | E138:00.63 | 77.90  | 144.27 |
| 3503010       | S31:27.80 | E136:29.37 | S31:27.80 | E138:00.63 | 77.90  | 144.27 |
| 3503020       | S31:27.69 | E136:29.37 | S31:27.69 | E138:00.63 | 77.90  | 144.27 |
| 3503030       | S31:27.58 | E136:29.37 | S31:27.58 | E138:00.63 | 77.90  | 144.28 |
| 3503040       | S31:27.47 | E136:29.37 | S31:27.47 | E138:00.63 | 77.90  | 144.28 |
| 3503050       | S31:27.37 | E136:29.37 | S31:27.37 | E138:00.63 | 77.91  | 144.28 |
| 3503060       | S31:27.26 | E136:29.37 | S31:27.26 | E138:00.63 | 77.91  | 144.28 |
| 3503070       | S31:27.15 | E136:29.37 | S31:27.15 | E138:00.63 | 77.91  | 144.29 |
| 3503080       | S31:27.04 | E136:29.37 | S31:27.04 | E138:00.63 | 77.91  | 144.29 |
| 3503090       | S31:26.94 | E136:29.37 | S31:26.94 | E138:00.63 | 77.91  | 144.29 |
| 3503100       | S31:26.83 | E136:29.37 | S31:26.83 | E138:00.63 | 77.91  | 144.29 |
| 3503110       | S31:26.72 | E136:29.37 | S31:26.72 | E138:00.63 | 77.91  | 144.30 |
| 3503120       | S31:26.61 | E136:29.37 | S31:26.61 | E138:00.63 | 77.92  | 144.30 |
| 3503130       | S31:26.50 | E136:29.37 | S31:26.50 | E138:00.63 | 77.92  | 144.30 |
| 3503140       | S31:26.40 | E136:29.37 | S31:26.40 | E138:00.63 | 77.92  | 144.31 |
| 3503150       | S31:26.29 | E136:29.37 | S31:26.29 | E138:00.63 | 77.92  | 144.31 |
| 3503160       | S31:26.18 | E136:29.37 | S31:26.18 | E138:00.63 | 77.92  | 144.31 |
| 3503170       | S31:26.07 | E136:29.37 | S31:26.07 | E138:00.63 | 77.92  | 144.31 |
| 3503180       | S31:25.96 | E136:29.37 | S31:25.96 | E138:00.63 | 77.92  | 144.32 |
| 3503190       | S31:25.86 | E136:29.37 | S31:25.86 | E138:00.63 | 77.93  | 144.32 |
| 3503200       | S31:25.75 | E136:29.37 | S31:25.75 | E138:00.63 | 77.93  | 144.32 |
| 3503210       | S31:25.64 | E136:29.37 | S31:25.64 | E138:00.63 | 77.93  | 144.32 |
| 3503220       | S31:25.53 | E136:29.37 | S31:25.53 | E138:00.63 | 77.93  | 144.33 |
| 3503230       | S31:25.42 | E136:29.37 | S31:25.42 | E138:00.63 | 77.93  | 144.33 |
| 3503240       | S31:25.32 | E136:29.37 | S31:25.32 | E138:00.63 | 77.93  | 144.33 |
| 3503250       | S31:25.21 | E136:29.37 | S31:25.21 | E138:00.63 | 77.93  | 144.34 |
| 3503260       | S31:25.10 | E136:29.37 | S31:25.10 | E138:00.63 | 77.94  | 144.34 |
| 3503270       | S31:24.99 | E136:29.37 | S31:24.99 | E138:00.63 | 77.94  | 144.34 |
| 3503280       | S31:24.88 | E136:29.37 | S31:24.88 | E138:00.63 | 77.94  | 144.34 |
| 3503290       | S31:24.78 | E136:29.37 | S31:24.78 | E138:00.63 | 77.94  | 144.35 |
| 3503300       | S31:24.67 | E136:29.37 | S31:24.67 | E138:00.63 | 77.94  | 144.35 |
| 3503310       | S31:24.56 | E136:29.37 | S31:24.56 | E138:00.63 | 77.94  | 144.35 |
| 3503320       | S31:24.45 | E136:29.37 | S31:24.45 | E138:00.63 | 77.95  | 144.35 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3503330       | S31:24.35 | E136:29.37 | S31:24.35 | E138:00.63 | 77.95  | 144.36 |
| 3503340       | S31:24.24 | E136:29.37 | S31:24.24 | E138:00.63 | 77.95  | 144.36 |
| 3503350       | S31:24.13 | E136:29.37 | S31:24.13 | E138:00.63 | 77.95  | 144.36 |
| 3503360       | S31:24.02 | E136:29.37 | S31:24.02 | E138:00.63 | 77.95  | 144.37 |
| 3503370       | S31:23.91 | E136:29.37 | S31:23.91 | E138:00.63 | 77.95  | 144.37 |
| 3503380       | S31:23.81 | E136:29.37 | S31:23.81 | E138:00.63 | 77.95  | 144.37 |
| 3503390       | S31:23.70 | E136:29.37 | S31:23.70 | E138:00.63 | 77.96  | 144.37 |
| 3503400       | S31:23.59 | E136:29.37 | S31:23.59 | E138:00.63 | 77.96  | 144.38 |
| 3503410       | S31:23.48 | E136:29.37 | S31:23.48 | E138:00.63 | 77.96  | 144.38 |
| 3503420       | S31:23.37 | E136:29.37 | S31:23.37 | E138:00.63 | 77.96  | 144.38 |
| 3503430       | S31:23.27 | E136:29.37 | S31:23.27 | E138:00.63 | 77.96  | 144.38 |
| 3503440       | S31:23.16 | E136:29.37 | S31:23.16 | E138:00.63 | 77.96  | 144.39 |
| 3503450       | S31:23.05 | E136:29.37 | S31:23.05 | E138:00.63 | 77.96  | 144.39 |
| 3503460       | S31:22.94 | E136:29.37 | S31:22.94 | E138:00.63 | 77.97  | 144.39 |
| 3503470       | S31:22.83 | E136:29.37 | S31:22.83 | E138:00.63 | 77.97  | 144.40 |
| 3503480       | S31:22.73 | E136:29.37 | S31:22.73 | E138:00.63 | 77.97  | 144.40 |
| 3503490       | S31:22.62 | E136:29.37 | S31:22.62 | E138:00.63 | 77.97  | 144.40 |
| 3503500       | S31:22.51 | E136:29.37 | S31:22.51 | E138:00.63 | 77.97  | 144.40 |
| 3503510       | S31:22.40 | E136:29.37 | S31:22.40 | E138:00.63 | 77.97  | 144.41 |
| 3503520       | S31:22.29 | E136:29.37 | S31:22.29 | E138:00.63 | 77.97  | 144.41 |
| 3503530       | S31:22.19 | E136:29.37 | S31:22.19 | E138:00.63 | 77.98  | 144.41 |
| 3503540       | S31:22.08 | E136:29.37 | S31:22.08 | E138:00.63 | 77.98  | 144.41 |
| 3503550       | S31:21.97 | E136:29.37 | S31:21.97 | E138:00.63 | 77.98  | 144.42 |
| 3503560       | S31:21.86 | E136:29.37 | S31:21.86 | E138:00.63 | 77.98  | 144.42 |
| 3503570       | S31:21.76 | E136:29.37 | S31:21.76 | E138:00.63 | 77.98  | 144.42 |
| 3503580       | S31:21.65 | E136:29.37 | S31:21.65 | E138:00.63 | 77.98  | 144.43 |
| 3503590       | S31:21.54 | E136:29.37 | S31:21.54 | E138:00.63 | 77.98  | 144.43 |
| 3503600       | S31:21.43 | E136:29.37 | S31:21.43 | E138:00.63 | 77.99  | 144.43 |
| 3503610       | S31:21.32 | E136:29.37 | S31:21.32 | E138:00.63 | 77.99  | 144.43 |
| 3503620       | S31:21.22 | E136:29.37 | S31:21.22 | E138:00.63 | 77.99  | 144.44 |
| 3503630       | S31:21.11 | E136:29.37 | S31:21.11 | E138:00.63 | 77.99  | 144.44 |
| 3503640       | S31:21.00 | E136:29.37 | S31:21.00 | E138:00.63 | 77.99  | 144.44 |
| 3503650       | S31:20.89 | E136:29.37 | S31:20.89 | E138:00.63 | 77.99  | 144.44 |
| 3503660       | S31:20.78 | E136:29.37 | S31:20.78 | E138:00.63 | 78.00  | 144.45 |
| 3503670       | S31:20.68 | E136:29.37 | S31:20.68 | E138:00.63 | 78.00  | 144.45 |
| 3503680       | S31:20.57 | E136:29.37 | S31:20.57 | E138:00.63 | 78.00  | 144.45 |
| 3503690       | S31:20.46 | E136:29.37 | S31:20.46 | E138:00.63 | 78.00  | 144.46 |
| 3503700       | S31:20.35 | E136:29.37 | S31:20.35 | E138:00.63 | 78.00  | 144.46 |
| 3503710       | S31:20.24 | E136:29.37 | S31:20.24 | E138:00.63 | 78.00  | 144.46 |
| 3503720       | S31:20.14 | E136:29.37 | S31:20.14 | E138:00.63 | 78.00  | 144.46 |
| 3503730       | S31:20.03 | E136:29.37 | S31:20.03 | E138:00.63 | 78.01  | 144.47 |
| 3503740       | S31:19.92 | E136:29.37 | S31:19.92 | E138:00.63 | 78.01  | 144.47 |
| 3503750       | S31:19.81 | E136:29.37 | S31:19.81 | E138:00.63 | 78.01  | 144.47 |
| 3503760       | S31:19.71 | E136:29.37 | S31:19.71 | E138:00.63 | 78.01  | 144.47 |
| 3503770       | S31:19.60 | E136:29.37 | S31:19.60 | E138:00.63 | 78.01  | 144.48 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3503780       | S31:19.49 | E136:29.37 | S31:19.49 | E138:00.63 | 78.01  | 144.48 |
| 3503790       | S31:19.38 | E136:29.37 | S31:19.38 | E138:00.63 | 78.01  | 144.48 |
| 3503800       | S31:19.27 | E136:29.37 | S31:19.27 | E138:00.63 | 78.02  | 144.49 |
| 3503810       | S31:19.17 | E136:29.37 | S31:19.17 | E138:00.63 | 78.02  | 144.49 |
| 3503820       | S31:19.06 | E136:29.37 | S31:19.06 | E138:00.63 | 78.02  | 144.49 |
| 3503830       | S31:18.95 | E136:29.37 | S31:18.95 | E138:00.63 | 78.02  | 144.49 |
| 3503840       | S31:18.84 | E136:29.37 | S31:18.84 | E138:00.63 | 78.02  | 144.50 |
| 3503850       | S31:18.73 | E136:29.37 | S31:18.73 | E138:00.63 | 78.02  | 144.50 |
| 3503860       | S31:18.63 | E136:29.37 | S31:18.63 | E138:00.63 | 78.02  | 144.50 |
| 3503870       | S31:18.52 | E136:29.37 | S31:18.52 | E138:00.63 | 78.03  | 144.50 |
| 3503880       | S31:18.41 | E136:29.37 | S31:18.41 | E138:00.63 | 78.03  | 144.51 |
| 3503890       | S31:18.30 | E136:29.37 | S31:18.30 | E138:00.63 | 78.03  | 144.51 |
| 3503900       | S31:18.19 | E136:29.37 | S31:18.19 | E138:00.63 | 78.03  | 144.51 |
| 3503910       | S31:18.09 | E136:29.37 | S31:18.09 | E138:00.63 | 78.03  | 144.52 |
| 3503920       | S31:17.98 | E136:29.37 | S31:17.98 | E138:00.63 | 78.03  | 144.52 |
| 3503930       | S31:17.87 | E136:29.37 | S31:17.87 | E138:00.63 | 78.03  | 144.52 |
| 3503940       | S31:17.76 | E136:29.37 | S31:17.76 | E138:00.63 | 78.04  | 144.52 |
| 3503950       | S31:17.65 | E136:29.37 | S31:17.65 | E138:00.63 | 78.04  | 144.53 |
| 3503960       | S31:17.55 | E136:29.37 | S31:17.55 | E138:00.63 | 78.04  | 144.53 |
| 3503970       | S31:17.44 | E136:29.37 | S31:17.44 | E138:00.63 | 78.04  | 144.53 |
| 3503980       | S31:17.33 | E136:29.37 | S31:17.33 | E138:00.63 | 78.04  | 144.53 |
| 3503990       | S31:17.22 | E136:29.37 | S31:17.22 | E138:00.63 | 78.04  | 144.54 |
| 3504000       | S31:17.12 | E136:29.37 | S31:17.12 | E138:00.63 | 78.05  | 144.54 |
| 3504010       | S31:17.01 | E136:29.37 | S31:17.01 | E138:00.63 | 78.05  | 144.54 |
| 3504020       | S31:16.90 | E136:29.37 | S31:16.90 | E138:00.63 | 78.05  | 144.54 |
| 3504030       | S31:16.79 | E136:29.37 | S31:16.79 | E138:00.63 | 78.05  | 144.55 |
| 3504040       | S31:16.68 | E136:29.37 | S31:16.68 | E138:00.63 | 78.05  | 144.55 |
| 3504050       | S31:16.58 | E136:29.37 | S31:16.58 | E138:00.63 | 78.05  | 144.55 |
| 3504060       | S31:16.47 | E136:29.37 | S31:16.47 | E138:00.63 | 78.05  | 144.56 |
| 3504070       | S31:16.36 | E136:29.37 | S31:16.36 | E138:00.63 | 78.06  | 144.56 |
| 3504080       | S31:16.25 | E136:29.37 | S31:16.25 | E138:00.63 | 78.06  | 144.56 |
| 3504090       | S31:16.14 | E136:29.37 | S31:16.14 | E138:00.63 | 78.06  | 144.56 |
| 3504100       | S31:16.04 | E136:29.37 | S31:16.04 | E138:00.63 | 78.06  | 144.57 |
| 3504110       | S31:15.93 | E136:29.37 | S31:15.93 | E138:00.63 | 78.06  | 144.57 |
| 3504120       | S31:15.82 | E136:29.37 | S31:15.82 | E138:00.63 | 78.06  | 144.57 |
| 3504130       | S31:15.71 | E136:29.37 | S31:15.71 | E138:00.63 | 78.06  | 144.57 |
| 3504140       | S31:15.60 | E136:29.37 | S31:15.60 | E138:00.63 | 78.07  | 144.58 |
| 3504150       | S31:15.50 | E136:29.37 | S31:15.50 | E138:00.63 | 78.07  | 144.58 |
| 3504160       | S31:15.39 | E136:29.37 | S31:15.39 | E138:00.63 | 78.07  | 144.58 |
| 3504170       | S31:15.28 | E136:52.22 | S31:15.28 | E138:00.63 | 58.52  | 108.38 |
| 3504180       | S31:15.17 | E136:52.24 | S31:15.17 | E138:00.63 | 58.51  | 108.35 |
| 3504190       | S31:15.06 | E136:52.26 | S31:15.06 | E138:00.63 | 58.49  | 108.33 |
| 3504200       | S31:14.96 | E136:52.28 | S31:14.96 | E138:00.63 | 58.48  | 108.30 |
| 3504210       | S31:14.85 | E136:52.29 | S31:14.85 | E138:00.63 | 58.46  | 108.27 |
| 3504220       | S31:14.74 | E136:52.31 | S31:14.74 | E138:00.63 | 58.45  | 108.25 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3504230       | S31:14.63 | E136:52.33 | S31:14.63 | E138:00.63 | 58.43  | 108.22 |
| 3504240       | S31:14.53 | E136:52.35 | S31:14.53 | E138:00.63 | 58.42  | 108.19 |
| 3504250       | S31:14.42 | E136:52.37 | S31:14.42 | E138:00.63 | 58.41  | 108.17 |
| 3504260       | S31:14.31 | E136:52.38 | S31:14.31 | E138:00.63 | 58.39  | 108.14 |
| 3504270       | S31:14.20 | E136:52.40 | S31:14.20 | E138:00.63 | 58.38  | 108.11 |
| 3504280       | S31:14.09 | E136:52.42 | S31:14.09 | E138:00.63 | 58.36  | 108.09 |
| 3504290       | S31:13.99 | E136:52.44 | S31:13.99 | E138:00.63 | 58.35  | 108.06 |
| 3504300       | S31:13.88 | E136:52.46 | S31:13.88 | E138:00.63 | 58.33  | 108.04 |
| 3504310       | S31:13.77 | E136:52.47 | S31:13.77 | E138:00.63 | 58.32  | 108.01 |
| 3504320       | S31:13.66 | E136:52.49 | S31:13.66 | E138:00.63 | 58.31  | 107.98 |
| 3504330       | S31:13.55 | E136:52.51 | S31:13.55 | E138:00.63 | 58.29  | 107.96 |
| 3504340       | S31:13.45 | E136:52.53 | S31:13.45 | E138:00.63 | 58.28  | 107.93 |
| 3504350       | S31:13.34 | E136:52.55 | S31:13.34 | E138:00.63 | 58.26  | 107.90 |
| 3504360       | S31:13.23 | E136:52.56 | S31:13.23 | E138:00.63 | 58.25  | 107.88 |
| 3504370       | S31:13.12 | E136:52.58 | S31:13.12 | E138:00.63 | 58.23  | 107.85 |
| 3504380       | S31:13.01 | E136:52.60 | S31:13.01 | E138:00.63 | 58.22  | 107.82 |
| 3504390       | S31:12.91 | E136:52.62 | S31:12.91 | E138:00.63 | 58.21  | 107.80 |
| 3504400       | S31:12.80 | E136:52.62 | S31:12.80 | E138:00.63 | 58.21  | 107.80 |
| 3504410       | S31:12.69 | E136:52.62 | S31:12.69 | E138:00.63 | 58.21  | 107.80 |
| 3504420       | S31:12.58 | E136:52.67 | S31:12.58 | E138:00.63 | 58.16  | 107.72 |
| 3504430       | S31:12.47 | E136:52.69 | S31:12.47 | E138:00.63 | 58.15  | 107.69 |
| 3504440       | S31:12.37 | E136:52.71 | S31:12.37 | E138:00.63 | 58.13  | 107.66 |
| 3504450       | S31:12.26 | E136:52.73 | S31:12.26 | E138:00.63 | 58.12  | 107.64 |
| 3504460       | S31:12.15 | E136:52.74 | S31:12.15 | E138:00.63 | 58.11  | 107.61 |
| 3504470       | S31:12.04 | E136:52.76 | S31:12.04 | E138:00.63 | 58.09  | 107.58 |
| 3504480       | S31:11.94 | E136:52.78 | S31:11.94 | E138:00.63 | 58.08  | 107.56 |
| 3504490       | S31:11.83 | E136:52.80 | S31:11.83 | E138:00.63 | 58.06  | 107.53 |
| 3504500       | S31:11.72 | E136:52.82 | S31:11.72 | E138:00.63 | 58.05  | 107.51 |
| 3504510       | S31:11.61 | E136:52.83 | S31:11.61 | E138:00.63 | 58.03  | 107.48 |
| 3504520       | S31:11.50 | E136:52.85 | S31:11.50 | E138:00.63 | 58.02  | 107.45 |
| 3504530       | S31:11.40 | E136:52.87 | S31:11.40 | E138:00.63 | 58.01  | 107.43 |
| 3504540       | S31:11.29 | E136:52.89 | S31:11.29 | E138:00.63 | 57.99  | 107.40 |
| 3504550       | S31:11.18 | E136:52.91 | S31:11.18 | E138:00.63 | 57.98  | 107.37 |
| 3504560       | S31:11.07 | E136:52.92 | S31:11.07 | E138:00.63 | 57.96  | 107.35 |
| 3504570       | S31:10.96 | E136:52.94 | S31:10.96 | E138:00.63 | 57.95  | 107.32 |
| 3504580       | S31:10.86 | E136:52.96 | S31:10.86 | E138:00.63 | 57.93  | 107.29 |
| 3504590       | S31:10.75 | E136:52.98 | S31:10.75 | E138:00.63 | 57.92  | 107.27 |
| 3504600       | S31:10.64 | E136:53.00 | S31:10.64 | E138:00.63 | 57.91  | 107.24 |
| 3504610       | S31:10.53 | E136:53.01 | S31:10.53 | E138:00.63 | 57.89  | 107.21 |
| 3504620       | S31:10.42 | E136:53.03 | S31:10.42 | E138:00.63 | 57.88  | 107.19 |
| 3504630       | S31:10.32 | E136:53.05 | S31:10.32 | E138:00.63 | 57.86  | 107.16 |
| 3504640       | S31:10.21 | E136:53.07 | S31:10.21 | E138:00.63 | 57.85  | 107.13 |
| 3504650       | S31:10.10 | E136:53.09 | S31:10.10 | E138:00.63 | 57.83  | 107.11 |
| 3504660       | S31:09.99 | E136:53.10 | S31:09.99 | E138:00.63 | 57.82  | 107.08 |
| 3504670       | S31:09.88 | E136:53.12 | S31:09.88 | E138:00.63 | 57.80  | 107.05 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3504680       | S31:09.78 | E136:53.14 | S31:09.78 | E138:00.63 | 57.79  | 107.03 |
| 3504690       | S31:09.67 | E136:53.16 | S31:09.67 | E138:00.63 | 57.78  | 107.00 |
| 3504700       | S31:09.56 | E136:53.18 | S31:09.56 | E138:00.63 | 57.76  | 106.97 |
| 3504710       | S31:09.45 | E136:53.19 | S31:09.45 | E138:00.63 | 57.75  | 106.95 |
| 3504720       | S31:09.35 | E136:53.21 | S31:09.35 | E138:00.63 | 57.73  | 106.92 |
| 3504730       | S31:09.24 | E136:53.23 | S31:09.24 | E138:00.63 | 57.72  | 106.90 |
| 3504740       | S31:09.13 | E136:53.25 | S31:09.13 | E138:00.63 | 57.70  | 106.87 |
| 3504750       | S31:09.02 | E136:53.27 | S31:09.02 | E138:00.63 | 57.69  | 106.84 |
| 3504760       | S31:08.91 | E136:53.28 | S31:08.91 | E138:00.63 | 57.68  | 106.82 |
| 3504770       | S31:08.81 | E136:53.30 | S31:08.81 | E138:00.63 | 57.66  | 106.79 |
| 3504780       | S31:08.70 | E136:53.32 | S31:08.70 | E138:00.63 | 57.65  | 106.76 |
| 3504790       | S31:08.59 | E136:53.34 | S31:08.59 | E138:00.63 | 57.63  | 106.74 |
| 3504800       | S31:08.48 | E136:53.36 | S31:08.48 | E138:00.63 | 57.62  | 106.71 |
| 3504810       | S31:08.37 | E136:53.38 | S31:08.37 | E138:00.63 | 57.60  | 106.68 |
| 3504820       | S31:08.27 | E136:53.41 | S31:08.27 | E138:00.63 | 57.58  | 106.63 |
| 3504830       | S31:08.16 | E136:53.44 | S31:08.16 | E138:00.63 | 57.55  | 106.58 |
| 3504840       | S31:08.05 | E136:53.47 | S31:08.05 | E138:00.63 | 57.53  | 106.54 |
| 3504850       | S31:07.94 | E136:53.50 | S31:07.94 | E138:00.63 | 57.50  | 106.49 |
| 3504860       | S31:07.83 | E136:53.53 | S31:07.83 | E138:00.63 | 57.48  | 106.44 |
| 3504870       | S31:07.73 | E136:53.56 | S31:07.73 | E138:00.63 | 57.45  | 106.40 |
| 3504880       | S31:07.62 | E136:53.59 | S31:07.62 | E138:00.63 | 57.42  | 106.35 |
| 3504890       | S31:07.51 | E136:53.62 | S31:07.51 | E138:00.63 | 57.40  | 106.30 |
| 3504900       | S31:07.40 | E136:53.65 | S31:07.40 | E138:00.63 | 57.37  | 106.26 |
| 3504910       | S31:07.29 | E136:53.69 | S31:07.29 | E138:00.63 | 57.35  | 106.21 |
| 3504920       | S31:07.19 | E136:53.72 | S31:07.19 | E138:00.63 | 57.32  | 106.16 |
| 3504930       | S31:07.08 | E136:53.75 | S31:07.08 | E138:00.63 | 57.30  | 106.11 |
| 3504940       | S31:06.97 | E136:53.78 | S31:06.97 | E138:00.63 | 57.27  | 106.07 |
| 3504950       | S31:06.86 | E136:53.81 | S31:06.86 | E138:00.63 | 57.25  | 106.02 |
| 3504960       | S31:06.76 | E136:53.84 | S31:06.76 | E138:00.63 | 57.22  | 105.97 |
| 3504970       | S31:06.65 | E136:53.86 | S31:06.65 | E138:00.63 | 57.20  | 105.94 |
| 3504980       | S31:06.54 | E136:53.86 | S31:06.54 | E138:00.63 | 57.20  | 105.94 |
| 3504990       | S31:06.43 | E136:53.93 | S31:06.43 | E138:00.63 | 57.15  | 105.83 |
| 3505000       | S31:06.32 | E136:53.96 | S31:06.32 | E138:00.63 | 57.12  | 105.79 |
| 3505010       | S31:06.22 | E136:53.99 | S31:06.22 | E138:00.63 | 57.09  | 105.74 |
| 3505020       | S31:06.11 | E136:54.03 | S31:06.11 | E138:00.63 | 57.07  | 105.69 |
| 3505030       | S31:06.00 | E136:54.06 | S31:06.00 | E138:00.63 | 57.04  | 105.65 |
| 3505040       | S31:05.89 | E136:54.09 | S31:05.89 | E138:00.63 | 57.02  | 105.60 |
| 3505050       | S31:05.78 | E136:54.12 | S31:05.78 | E138:00.63 | 56.99  | 105.55 |
| 3505060       | S31:05.68 | E136:54.15 | S31:05.68 | E138:00.63 | 56.97  | 105.50 |
| 3505070       | S31:05.57 | E136:54.18 | S31:05.57 | E138:00.63 | 56.94  | 105.46 |
| 3505080       | S31:05.46 | E136:54.21 | S31:05.46 | E138:00.63 | 56.92  | 105.41 |
| 3505090       | S31:05.35 | E136:54.24 | S31:05.35 | E138:00.63 | 56.89  | 105.36 |
| 3505100       | S31:05.24 | E136:54.27 | S31:05.24 | E138:00.63 | 56.87  | 105.32 |
| 3505110       | S31:05.14 | E136:54.30 | S31:05.14 | E138:00.63 | 56.84  | 105.27 |
| 3505120       | S31:05.03 | E136:54.33 | S31:05.03 | E138:00.63 | 56.82  | 105.22 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3505130       | S31:04.92 | E136:54.36 | S31:04.92 | E138:00.63 | 56.79  | 105.18 |
| 3505140       | S31:04.81 | E136:54.40 | S31:04.81 | E138:00.63 | 56.76  | 105.13 |
| 3505150       | S31:04.71 | E136:54.43 | S31:04.71 | E138:00.63 | 56.74  | 105.08 |
| 3505160       | S31:04.60 | E136:54.46 | S31:04.60 | E138:00.63 | 56.71  | 105.03 |
| 3505170       | S31:04.49 | E136:54.49 | S31:04.49 | E138:00.63 | 56.69  | 104.99 |
| 3505180       | S31:04.38 | E136:54.52 | S31:04.38 | E138:00.63 | 56.66  | 104.94 |
| 3505190       | S31:04.27 | E136:54.55 | S31:04.27 | E138:00.63 | 56.64  | 104.89 |
| 3505200       | S31:04.17 | E136:54.58 | S31:04.17 | E138:00.63 | 56.61  | 104.85 |
| 3505210       | S31:04.06 | E136:54.61 | S31:04.06 | E138:00.63 | 56.59  | 104.80 |
| 3505220       | S31:03.95 | E136:54.64 | S31:03.95 | E138:00.63 | 56.56  | 104.75 |
| 3505230       | S31:03.84 | E136:54.67 | S31:03.84 | E138:00.63 | 56.54  | 104.71 |
| 3505240       | S31:03.73 | E136:54.70 | S31:03.73 | E138:00.63 | 56.51  | 104.66 |
| 3505250       | S31:03.63 | E136:54.73 | S31:03.63 | E138:00.63 | 56.49  | 104.61 |
| 3505260       | S31:03.52 | E136:54.77 | S31:03.52 | E138:00.63 | 56.46  | 104.56 |
| 3505270       | S31:03.41 | E136:54.80 | S31:03.41 | E138:00.63 | 56.43  | 104.52 |
| 3505280       | S31:03.30 | E136:54.83 | S31:03.30 | E138:00.63 | 56.41  | 104.47 |
| 3505290       | S31:03.19 | E136:54.86 | S31:03.19 | E138:00.63 | 56.38  | 104.42 |
| 3505300       | S31:03.09 | E136:54.89 | S31:03.09 | E138:00.63 | 56.36  | 104.38 |
| 3505310       | S31:02.98 | E136:54.92 | S31:02.98 | E138:00.63 | 56.33  | 104.33 |
| 3505320       | S31:02.87 | E136:54.95 | S31:02.87 | E138:00.63 | 56.31  | 104.28 |
| 3505330       | S31:02.76 | E136:54.98 | S31:02.76 | E138:00.63 | 56.28  | 104.24 |
| 3505340       | S31:02.65 | E136:55.01 | S31:02.65 | E138:00.63 | 56.26  | 104.19 |
| 3505350       | S31:02.55 | E136:55.04 | S31:02.55 | E138:00.63 | 56.23  | 104.14 |
| 3505360       | S31:02.44 | E136:55.07 | S31:02.44 | E138:00.63 | 56.21  | 104.09 |
| 3505370       | S31:02.33 | E136:55.10 | S31:02.33 | E138:00.63 | 56.18  | 104.05 |
| 3505380       | S31:02.22 | E136:55.11 | S31:02.22 | E138:00.63 | 56.18  | 104.04 |
| 3505390       | S31:02.12 | E136:55.17 | S31:02.12 | E138:00.63 | 56.13  | 103.95 |
| 3505400       | S31:02.01 | E136:55.20 | S31:02.01 | E138:00.63 | 56.10  | 103.91 |
| 3505410       | S31:01.90 | E136:55.23 | S31:01.90 | E138:00.63 | 56.08  | 103.86 |
| 3505420       | S31:01.79 | E136:55.26 | S31:01.79 | E138:00.63 | 56.05  | 103.81 |
| 3505430       | S31:01.68 | E136:55.29 | S31:01.68 | E138:00.63 | 56.03  | 103.77 |
| 3505440       | S31:01.58 | E136:55.32 | S31:01.58 | E138:00.63 | 56.00  | 103.72 |
| 3505450       | S31:01.47 | E136:55.35 | S31:01.47 | E138:00.63 | 55.98  | 103.67 |
| 3505460       | S31:01.36 | E136:55.38 | S31:01.36 | E138:00.63 | 55.95  | 103.62 |
| 3505470       | S31:01.25 | E136:55.41 | S31:01.25 | E138:00.63 | 55.93  | 103.58 |
| 3505480       | S31:01.14 | E136:55.44 | S31:01.14 | E138:00.63 | 55.90  | 103.53 |
| 3505490       | S31:01.04 | E136:55.47 | S31:01.04 | E138:00.63 | 55.88  | 103.48 |
| 3505500       | S31:00.93 | E136:55.51 | S31:00.93 | E138:00.63 | 55.85  | 103.44 |
| 3505510       | S31:00.82 | E136:55.54 | S31:00.82 | E138:00.63 | 55.83  | 103.39 |
| 3505520       | S31:00.71 | E136:55.57 | S31:00.71 | E138:00.63 | 55.80  | 103.34 |
| 3505530       | S31:00.60 | E136:55.60 | S31:00.60 | E138:00.63 | 55.77  | 103.29 |
| 3505540       | S31:00.50 | E136:55.63 | S31:00.50 | E138:00.63 | 55.75  | 103.25 |
| 3505550       | S31:00.39 | E136:55.66 | S31:00.39 | E138:00.63 | 55.72  | 103.20 |
| 3505560       | S31:00.28 | E136:55.69 | S31:00.28 | E138:00.63 | 55.70  | 103.15 |
| 3505570       | S31:00.17 | E136:55.72 | S31:00.17 | E138:00.63 | 55.67  | 103.11 |

**3B TORRENS - PLANNED SURVEY LINES**  
**WGS-84**

| SEGMENT<br>NO | START     |            | END       |            | LENGTH |        |
|---------------|-----------|------------|-----------|------------|--------|--------|
|               | LAT       | LONG       | LAT       | LONG       | NM     | KM     |
| 3505580       | S31:00.06 | E136:55.75 | S31:00.06 | E138:00.63 | 55.65  | 103.06 |
| 3505590       | S30:59.96 | E136:55.75 | S30:59.96 | E138:00.63 | 55.65  | 103.06 |
| 3505600       | S30:59.85 | E136:55.75 | S30:59.85 | E138:00.63 | 55.65  | 103.06 |

Total tie-line length = 4119.20 nautical miles  
= 7628.76 kilometers.

Total traverse line length = 40593.62 nautical miles  
= 75179.39 kilometers.

Total length of all lines = 44712.83 nautical miles  
= 82808.15 kilometers.





## Appendix III





**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3590011 | 86148.70  | 87356.60  | 642027.17 | 643171.73 | 6457982.05 | 6541206.61 | 2052   | 131 | 2017 |
| 3590021 | 87454.80  | 88673.50  | 643988.12 | 645152.84 | 6457957.96 | 6541174.96 | 2052   | 131 | 2017 |
| 3590030 | 90512.70  | 91740.70  | 645948.73 | 647128.58 | 6457926.79 | 6541147.61 | 2008   | 70  | 2017 |
| 3590040 | 91901.60  | 93113.00  | 647903.81 | 649106.20 | 6457898.23 | 6541124.24 | 2008   | 70  | 2017 |
| 3590050 | 93208.50  | 94479.50  | 649872.77 | 651077.20 | 6457868.27 | 6541096.29 | 2008   | 70  | 2017 |
| 3590060 | 94637.70  | 95854.80  | 651834.44 | 653060.54 | 6457837.33 | 6541068.00 | 2008   | 70  | 2017 |
| 3590070 | 95948.40  | 97238.80  | 653789.58 | 655031.36 | 6457811.73 | 6541036.28 | 2008   | 70  | 2017 |
| 3590080 | 97325.20  | 98553.20  | 655756.22 | 657015.40 | 6457784.14 | 6541010.64 | 2008   | 70  | 2017 |
| 3590090 | 98717.60  | 99976.70  | 657719.05 | 658990.52 | 6457751.89 | 6540977.72 | 2008   | 70  | 2017 |
| 3590100 | 100051.10 | 101255.50 | 659682.52 | 660974.23 | 6457718.60 | 6540945.77 | 2008   | 70  | 2017 |
| 3590110 | 80922.80  | 82138.30  | 661642.55 | 662950.00 | 6457690.74 | 6540917.92 | 2013   | 75  | 2017 |
| 3590120 | 82257.80  | 83465.90  | 663606.28 | 664921.09 | 6457656.29 | 6540883.73 | 2013   | 75  | 2017 |
| 3590130 | 83581.50  | 84784.00  | 665568.01 | 666902.45 | 6457627.27 | 6540857.49 | 2013   | 75  | 2017 |
| 3590140 | 84907.80  | 86109.30  | 667529.79 | 668881.29 | 6457593.79 | 6540822.56 | 2013   | 75  | 2017 |
| 3590150 | 93972.80  | 95161.30  | 669492.95 | 670859.44 | 6457559.83 | 6540794.66 | 2012   | 74  | 2017 |
| 3590160 | 92622.20  | 93847.00  | 671454.26 | 672840.26 | 6457531.85 | 6540758.67 | 2012   | 74  | 2017 |
| 3590170 | 91290.00  | 92482.90  | 673416.96 | 674815.69 | 6457496.99 | 6540728.98 | 2012   | 74  | 2017 |
| 3590180 | 89922.70  | 91175.30  | 675376.96 | 676795.56 | 6457462.24 | 6540696.03 | 2012   | 74  | 2017 |
| 3590190 | 79558.90  | 80918.10  | 677343.22 | 678855.78 | 6457428.92 | 6545584.90 | 2012   | 74  | 2017 |
| 3590200 | 88166.40  | 89594.00  | 679300.22 | 681025.31 | 6457396.05 | 6556912.66 | 2012   | 74  | 2017 |
| 3590210 | 86433.70  | 88052.60  | 681264.29 | 683150.67 | 6457357.19 | 6564857.11 | 2012   | 74  | 2017 |
| 3590220 | 84693.20  | 86299.50  | 683225.05 | 685209.60 | 6457322.59 | 6569376.92 | 2012   | 74  | 2017 |
| 3590230 | 82858.60  | 84566.10  | 685187.81 | 687193.55 | 6457292.10 | 6569341.44 | 2012   | 74  | 2017 |
| 3590240 | 81120.00  | 82713.00  | 687154.74 | 689178.04 | 6457255.01 | 6569310.20 | 2012   | 74  | 2017 |
| 3590250 | 98570.90  | 100174.50 | 689115.16 | 691159.09 | 6457215.66 | 6569274.42 | 2006   | 67  | 2017 |
| 3590260 | 96861.70  | 98467.00  | 691074.15 | 693140.80 | 6457180.81 | 6569233.48 | 2006   | 67  | 2017 |
| 3590270 | 95156.10  | 96768.70  | 693036.30 | 695123.11 | 6457146.15 | 6569197.56 | 2006   | 67  | 2017 |
| 3590280 | 93463.50  | 95060.70  | 695000.00 | 697112.32 | 6457107.48 | 6569164.47 | 2006   | 67  | 2017 |
| 3590290 | 91744.50  | 93358.80  | 696961.48 | 699092.34 | 6457066.61 | 6569128.46 | 2006   | 67  | 2017 |
| 3590300 | 90046.50  | 91642.50  | 698927.36 | 701079.14 | 6457033.30 | 6569090.27 | 2006   | 67  | 2017 |
| 3590310 | 88332.50  | 89962.50  | 700885.91 | 703059.91 | 6456994.41 | 6569053.90 | 2006   | 67  | 2017 |
| 3590320 | 86603.10  | 88218.50  | 702846.48 | 705049.44 | 6456952.83 | 6569012.66 | 2006   | 67  | 2017 |
| 3590330 | 84894.20  | 86520.50  | 704809.92 | 707025.14 | 6456911.38 | 6568976.38 | 2006   | 67  | 2017 |
| 3590340 | 83157.40  | 84773.20  | 706772.64 | 709010.55 | 6456877.87 | 6568934.91 | 2006   | 67  | 2017 |
| 3590350 | 94685.70  | 96312.20  | 708733.64 | 710994.59 | 6456837.15 | 6568895.17 | 2005   | 66  | 2017 |
| 3590360 | 92919.90  | 94548.90  | 710693.91 | 712978.84 | 6456795.62 | 6568856.38 | 2005   | 66  | 2017 |
| 3590370 | 91179.20  | 92806.20  | 712659.00 | 714964.14 | 6456753.92 | 6568820.68 | 2005   | 66  | 2017 |
| 3590380 | 89425.50  | 91056.20  | 714624.08 | 716947.92 | 6456712.59 | 6568775.77 | 2005   | 66  | 2017 |
| 3590390 | 87655.70  | 89287.50  | 716580.78 | 718928.90 | 6456668.10 | 6568735.52 | 2005   | 66  | 2017 |
| 3590400 | 85906.10  | 87534.50  | 718546.22 | 720911.77 | 6456630.70 | 6568693.00 | 2005   | 66  | 2017 |
| 3590410 | 84158.60  | 85776.20  | 720510.55 | 722895.11 | 6456588.40 | 6568653.16 | 2005   | 66  | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3590420 | 82413.30  | 84029.60  | 722471.14 | 724882.65 | 6456542.55 | 6568613.33 | 2005   | 66  | 2017 |
| 3590430 | 80659.00  | 82283.70  | 724435.84 | 726863.49 | 6456501.82 | 6568566.81 | 2005   | 66  | 2017 |
| 3590440 | 78902.30  | 80532.20  | 726395.14 | 728848.98 | 6456456.30 | 6568529.73 | 2005   | 66  | 2017 |
| 3590450 | 78836.60  | 80494.70  | 728355.47 | 730832.59 | 6456417.53 | 6568485.38 | 2021   | 86  | 2017 |
| 3590460 | 94216.10  | 95804.60  | 730319.83 | 732812.32 | 6456369.85 | 6568438.67 | 2021   | 86  | 2017 |
| 3590470 | 81254.60  | 82882.80  | 732283.80 | 734795.43 | 6456323.00 | 6568398.66 | 2022   | 87  | 2017 |
| 3590480 | 96733.40  | 98377.60  | 734244.40 | 736777.21 | 6456280.43 | 6568355.84 | 2022   | 87  | 2017 |
| 3590490 | 79478.30  | 81137.70  | 736205.25 | 738762.23 | 6456233.40 | 6568307.51 | 2023   | 88  | 2017 |
| 3590500 | 94841.70  | 96448.60  | 738172.57 | 740748.40 | 6456189.26 | 6568264.04 | 2023   | 88  | 2017 |
| 3590510 | 79375.90  | 81060.90  | 740132.53 | 742729.06 | 6456146.01 | 6568219.54 | 2025   | 90  | 2017 |
| 3590520 | 94789.20  | 96369.80  | 742090.69 | 744715.54 | 6456096.50 | 6568176.41 | 2025   | 90  | 2017 |
| 3590530 | 82420.70  | 84066.50  | 744053.29 | 746700.87 | 6456053.03 | 6568129.37 | 2027   | 92  | 2017 |
| 3590540 | 97916.30  | 99522.20  | 746017.10 | 748684.88 | 6456007.70 | 6568078.07 | 2027   | 92  | 2017 |
| 3590550 | 86091.60  | 87736.70  | 747981.88 | 750668.07 | 6455957.41 | 6568035.19 | 2028   | 93  | 2017 |
| 3590560 | 101544.40 | 103131.80 | 749937.77 | 752651.14 | 6455911.15 | 6567984.97 | 2028   | 93  | 2017 |
| 3590570 | 81909.00  | 83510.10  | 751904.56 | 754633.21 | 6455864.74 | 6567943.15 | 2030   | 95  | 2017 |
| 3590580 | 97302.30  | 98928.00  | 753869.36 | 756621.03 | 6455811.90 | 6567895.64 | 2030   | 95  | 2017 |
| 3590590 | 80558.20  | 82181.20  | 755831.39 | 758603.44 | 6455763.53 | 6567847.77 | 2031   | 96  | 2017 |
| 3590600 | 96061.80  | 97750.80  | 757792.84 | 760584.99 | 6455715.37 | 6567796.65 | 2031   | 96  | 2017 |
| 3590610 | 82013.30  | 83622.50  | 759757.57 | 762571.40 | 6455665.28 | 6567747.06 | 2062   | 146 | 2017 |
| 3590620 | 94789.30  | 96402.70  | 761723.55 | 764556.20 | 6455615.81 | 6567695.00 | 2024   | 89  | 2017 |
| 3590630 | 79119.70  | 80748.40  | 763683.53 | 766537.18 | 6455563.31 | 6567648.49 | 2024   | 89  | 2017 |
| 3590640 | 97014.80  | 98699.70  | 765644.04 | 768522.91 | 6455514.38 | 6567594.21 | 2020   | 84  | 2017 |
| 3590650 | 81562.60  | 83172.50  | 767606.89 | 770501.58 | 6455459.50 | 6567546.81 | 2020   | 84  | 2017 |
| 3590660 | 93965.70  | 95560.40  | 769573.53 | 772489.94 | 6455410.63 | 6567497.15 | 2019   | 81  | 2017 |
| 3590670 | 78665.10  | 80279.30  | 771532.78 | 774473.69 | 6455357.79 | 6567445.53 | 2019   | 81  | 2017 |
| 3590680 | 96988.40  | 98578.40  | 773494.83 | 776457.01 | 6455307.45 | 6567393.39 | 2018   | 80  | 2017 |
| 3590690 | 81888.90  | 83477.40  | 775457.35 | 778440.78 | 6455253.68 | 6567340.95 | 2018   | 80  | 2017 |
| 3590700 | 93495.20  | 95097.50  | 777419.77 | 780422.52 | 6455197.97 | 6567288.51 | 2017   | 79  | 2017 |
| 3590710 | 78582.60  | 80175.30  | 779384.49 | 782409.61 | 6455146.54 | 6567234.90 | 2017   | 79  | 2017 |
| 3590720 | 96307.30  | 97894.00  | 781346.89 | 784395.72 | 6455088.07 | 6567184.44 | 2016   | 78  | 2017 |
| 3590730 | 81248.80  | 82904.30  | 783309.01 | 786375.27 | 6455034.38 | 6567128.62 | 2016   | 78  | 2017 |
| 3500010 | 83061.00  | 85124.20  | 640585.70 | 784520.40 | 6455278.40 | 6458275.45 | 2016   | 78  | 2017 |
| 3500020 | 85254.40  | 87346.50  | 640587.95 | 784519.60 | 6455476.63 | 6458472.89 | 2016   | 78  | 2017 |
| 3500030 | 87487.50  | 89555.40  | 640589.41 | 784527.89 | 6455679.18 | 6458677.35 | 2016   | 78  | 2017 |
| 3500040 | 89677.00  | 91778.10  | 640597.54 | 784531.67 | 6455879.86 | 6458877.55 | 2016   | 78  | 2017 |
| 3500050 | 91902.40  | 93942.90  | 640601.03 | 784535.49 | 6456076.59 | 6459074.25 | 2016   | 78  | 2017 |
| 3500060 | 94030.50  | 96117.20  | 640603.95 | 784541.12 | 6456275.46 | 6459273.55 | 2016   | 78  | 2017 |
| 3500070 | 80403.30  | 82464.50  | 640601.95 | 784546.32 | 6456472.81 | 6459474.00 | 2017   | 79  | 2017 |
| 3500080 | 82553.00  | 84610.50  | 640608.50 | 784549.45 | 6456674.70 | 6459673.94 | 2017   | 79  | 2017 |
| 3500090 | 84718.90  | 86793.70  | 640608.23 | 784558.77 | 6456878.95 | 6459870.72 | 2017   | 79  | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME     | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|----------|-----------|-----------|------------|------------|--------|-----|------|
| 3500100 | 86923.40 | 88982.40 | 640609.43 | 784562.58 | 6457076.73 | 6460068.49 | 2017   | 79  | 2017 |
| 3500110 | 89087.80 | 91152.80 | 640618.42 | 784567.99 | 6457277.07 | 6460268.58 | 2017   | 79  | 2017 |
| 3500120 | 91281.20 | 93323.90 | 640617.82 | 784573.73 | 6457472.64 | 6460465.45 | 2017   | 79  | 2017 |
| 3500130 | 83698.70 | 85764.70 | 640617.34 | 784580.27 | 6457673.37 | 6460671.42 | 2018   | 80  | 2017 |
| 3500140 | 85904.30 | 87961.40 | 640623.70 | 784588.59 | 6457870.80 | 6460869.13 | 2018   | 80  | 2017 |
| 3500150 | 88089.00 | 90147.10 | 640623.88 | 784589.84 | 6458074.81 | 6461070.16 | 2018   | 80  | 2017 |
| 3500160 | 90238.60 | 92317.50 | 640629.98 | 784594.27 | 6458268.57 | 6461270.38 | 2018   | 80  | 2017 |
| 3500170 | 92446.20 | 94504.50 | 640630.86 | 784604.77 | 6458471.04 | 6461466.85 | 2018   | 80  | 2017 |
| 3500180 | 94608.20 | 96679.10 | 640631.92 | 784606.98 | 6458667.26 | 6461667.53 | 2018   | 80  | 2017 |
| 3500190 | 80613.60 | 82688.80 | 640637.82 | 784615.26 | 6458870.13 | 6461865.43 | 2019   | 81  | 2017 |
| 3500200 | 82832.00 | 84917.60 | 640638.08 | 784622.00 | 6459065.75 | 6462064.73 | 2019   | 81  | 2017 |
| 3500210 | 85049.50 | 87125.70 | 640640.67 | 784626.12 | 6459269.39 | 6462267.37 | 2019   | 81  | 2017 |
| 3500220 | 87247.30 | 89339.00 | 640643.55 | 784627.29 | 6459471.31 | 6462464.38 | 2019   | 81  | 2017 |
| 3500230 | 89450.20 | 91510.10 | 640649.64 | 784632.90 | 6459669.98 | 6462660.90 | 2019   | 81  | 2017 |
| 3500240 | 91617.30 | 93684.20 | 640650.72 | 784641.83 | 6459867.35 | 6462860.05 | 2019   | 81  | 2017 |
| 3500250 | 83530.50 | 85580.60 | 640656.31 | 784649.87 | 6460061.61 | 6463062.49 | 2020   | 84  | 2017 |
| 3500260 | 85681.80 | 87778.60 | 640653.48 | 784650.23 | 6460269.14 | 6463261.40 | 2020   | 84  | 2017 |
| 3500270 | 87892.50 | 89960.10 | 640661.94 | 784655.24 | 6460471.30 | 6463461.07 | 2020   | 84  | 2017 |
| 3500280 | 90062.70 | 92147.50 | 640664.81 | 784660.74 | 6460666.36 | 6463661.87 | 2020   | 84  | 2017 |
| 3500290 | 92251.10 | 94376.40 | 640666.10 | 784669.24 | 6460863.19 | 6463859.20 | 2020   | 84  | 2017 |
| 3500300 | 94506.40 | 96607.70 | 640668.18 | 784673.07 | 6461064.57 | 6464061.54 | 2020   | 84  | 2017 |
| 3500310 | 80717.90 | 82029.80 | 640671.64 | 730513.77 | 6462631.22 | 6464258.61 | 2021   | 86  | 2017 |
| 3500311 | 93199.60 | 93982.80 | 730419.63 | 784682.20 | 6461264.11 | 6462626.92 | 2021   | 86  | 2017 |
| 3500320 | 82173.30 | 84263.10 | 640676.17 | 784683.85 | 6461459.75 | 6464456.50 | 2021   | 86  | 2017 |
| 3500330 | 84391.90 | 86461.90 | 640677.85 | 784691.26 | 6461665.77 | 6464656.01 | 2021   | 86  | 2017 |
| 3500340 | 86605.40 | 88683.60 | 640676.48 | 784696.65 | 6461860.62 | 6464855.86 | 2021   | 86  | 2017 |
| 3500350 | 88802.40 | 90869.10 | 640681.59 | 784699.48 | 6462065.86 | 6465056.24 | 2021   | 86  | 2017 |
| 3500360 | 90996.60 | 93073.20 | 640687.25 | 784706.44 | 6462262.33 | 6465255.41 | 2021   | 86  | 2017 |
| 3500370 | 83094.70 | 84482.70 | 640684.38 | 736428.05 | 6463692.80 | 6465457.08 | 2022   | 87  | 2017 |
| 3500371 | 95624.60 | 96401.60 | 736334.78 | 784713.33 | 6462460.16 | 6463692.20 | 2022   | 87  | 2017 |
| 3500380 | 84586.00 | 86651.30 | 640689.38 | 784719.50 | 6462658.86 | 6465652.47 | 2022   | 87  | 2017 |
| 3500390 | 86774.40 | 88875.50 | 640690.57 | 784726.66 | 6462858.40 | 6465853.32 | 2022   | 87  | 2017 |
| 3500400 | 88988.70 | 91058.80 | 640698.28 | 784725.65 | 6463060.65 | 6466054.02 | 2022   | 87  | 2017 |
| 3500410 | 91168.80 | 93299.20 | 640700.54 | 784733.64 | 6463258.86 | 6466249.13 | 2022   | 87  | 2017 |
| 3500420 | 93421.10 | 95515.30 | 640700.66 | 784739.46 | 6463458.06 | 6466456.37 | 2022   | 87  | 2017 |
| 3500430 | 81365.40 | 82709.20 | 640700.80 | 734491.45 | 6464928.46 | 6466648.12 | 2023   | 88  | 2017 |
| 3500431 | 93812.70 | 94546.70 | 734397.49 | 784748.62 | 6463657.17 | 6464931.79 | 2023   | 88  | 2017 |
| 3500440 | 82844.30 | 84902.90 | 640703.93 | 784752.71 | 6463859.53 | 6466849.87 | 2023   | 88  | 2017 |
| 3500450 | 85035.20 | 87096.20 | 640712.90 | 784753.78 | 6464058.22 | 6467047.48 | 2023   | 88  | 2017 |
| 3500460 | 87216.10 | 89302.90 | 640712.45 | 784764.14 | 6464254.55 | 6467250.85 | 2023   | 88  | 2017 |
| 3500470 | 89423.80 | 91481.10 | 640718.14 | 784766.45 | 6464457.94 | 6467446.14 | 2023   | 88  | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3500480 | 91616.70  | 93698.10  | 640719.18 | 784776.34 | 6464659.00 | 6467646.84 | 2023   | 88  | 2017 |
| 3500490 | 81227.00  | 83288.90  | 640719.49 | 784780.40 | 6464852.90 | 6467846.30 | 2024   | 89  | 2017 |
| 3500500 | 83422.10  | 85487.90  | 640723.82 | 784782.87 | 6465056.35 | 6468044.99 | 2024   | 89  | 2017 |
| 3500510 | 85605.20  | 87658.20  | 640725.62 | 784792.26 | 6465255.45 | 6468247.88 | 2024   | 89  | 2017 |
| 3500520 | 87773.20  | 89865.70  | 640728.01 | 784796.99 | 6465453.70 | 6468443.59 | 2024   | 89  | 2017 |
| 3500530 | 89967.80  | 92036.30  | 640733.99 | 784803.80 | 6465655.12 | 6468645.89 | 2024   | 89  | 2017 |
| 3500540 | 92180.40  | 94306.00  | 640734.63 | 784809.04 | 6465852.40 | 6468841.77 | 2024   | 89  | 2017 |
| 3500550 | 81285.40  | 82697.20  | 640739.57 | 740434.70 | 6467191.59 | 6469042.86 | 2025   | 90  | 2017 |
| 3500551 | 93813.30  | 94444.90  | 740343.93 | 784809.45 | 6466051.48 | 6467189.89 | 2025   | 90  | 2017 |
| 3500560 | 82820.00  | 84898.10  | 640737.08 | 784814.19 | 6466248.86 | 6469241.31 | 2025   | 90  | 2017 |
| 3500570 | 85016.90  | 87065.30  | 640741.95 | 784825.46 | 6466449.49 | 6469442.26 | 2025   | 90  | 2017 |
| 3500580 | 87194.00  | 89307.20  | 640746.14 | 784826.24 | 6466649.44 | 6469643.15 | 2025   | 90  | 2017 |
| 3500590 | 89432.40  | 91497.10  | 640744.70 | 784832.85 | 6466849.19 | 6469843.30 | 2025   | 90  | 2017 |
| 3500600 | 91631.30  | 93702.30  | 640751.12 | 784842.60 | 6467049.19 | 6470035.56 | 2025   | 90  | 2017 |
| 3500610 | 84345.40  | 85770.70  | 640756.06 | 740466.06 | 6468392.38 | 6470242.66 | 2027   | 92  | 2017 |
| 3500611 | 96868.00  | 97504.90  | 740374.21 | 784843.02 | 6467249.67 | 6468383.51 | 2027   | 92  | 2017 |
| 3500620 | 85901.50  | 88001.30  | 640756.88 | 784850.92 | 6467445.04 | 6470438.92 | 2027   | 92  | 2017 |
| 3500630 | 88121.20  | 90173.10  | 640760.81 | 784854.86 | 6467642.33 | 6470640.47 | 2027   | 92  | 2017 |
| 3500640 | 90310.60  | 92393.80  | 640762.10 | 784861.94 | 6467846.86 | 6470838.85 | 2027   | 92  | 2017 |
| 3500650 | 92507.80  | 94558.40  | 640766.32 | 784864.24 | 6468046.47 | 6471036.98 | 2027   | 92  | 2017 |
| 3500660 | 94668.30  | 96757.10  | 640769.51 | 784873.57 | 6468245.63 | 6471235.59 | 2027   | 92  | 2017 |
| 3500670 | 88004.60  | 89534.10  | 640766.19 | 748351.82 | 6469391.64 | 6471433.21 | 2028   | 93  | 2017 |
| 3500671 | 100666.10 | 101190.10 | 748261.63 | 784878.56 | 6468445.90 | 6469397.81 | 2028   | 93  | 2017 |
| 3500680 | 89647.70  | 91725.60  | 640775.56 | 784881.84 | 6468640.61 | 6471637.99 | 2028   | 93  | 2017 |
| 3500690 | 91858.00  | 93912.40  | 640773.77 | 784888.13 | 6468843.44 | 6471835.45 | 2028   | 93  | 2017 |
| 3500700 | 94030.50  | 96101.80  | 640777.62 | 784895.34 | 6469046.10 | 6472035.29 | 2028   | 93  | 2017 |
| 3500710 | 96246.60  | 98320.90  | 640781.62 | 784901.86 | 6469242.52 | 6472236.85 | 2028   | 93  | 2017 |
| 3500720 | 98455.00  | 100540.90 | 640784.34 | 784906.97 | 6469443.26 | 6472431.69 | 2028   | 93  | 2017 |
| 3500730 | 83819.50  | 85388.00  | 640788.89 | 750346.24 | 6470544.87 | 6472634.20 | 2030   | 95  | 2017 |
| 3500731 | 96444.50  | 96957.00  | 750257.72 | 784909.80 | 6469644.35 | 6470548.48 | 2030   | 95  | 2017 |
| 3500740 | 85514.70  | 87591.00  | 640787.87 | 784916.03 | 6469843.05 | 6472832.85 | 2030   | 95  | 2017 |
| 3500750 | 87711.30  | 89767.90  | 640790.60 | 784924.46 | 6470043.94 | 6473032.13 | 2030   | 95  | 2017 |
| 3500760 | 89890.00  | 91951.00  | 640795.71 | 784929.86 | 6470239.88 | 6473230.89 | 2030   | 95  | 2017 |
| 3500770 | 92064.40  | 94144.70  | 640796.03 | 784935.74 | 6470438.74 | 6473430.94 | 2030   | 95  | 2017 |
| 3500780 | 94264.20  | 96347.50  | 640800.94 | 784935.97 | 6470640.71 | 6473629.37 | 2030   | 95  | 2017 |
| 3500790 | 82517.60  | 84213.30  | 640799.47 | 758240.09 | 6471544.92 | 6473832.87 | 2031   | 96  | 2017 |
| 3500791 | 95284.30  | 95669.10  | 758144.05 | 784946.42 | 6470840.66 | 6471548.37 | 2031   | 96  | 2017 |
| 3500800 | 84333.40  | 86412.40  | 640807.11 | 784949.93 | 6471039.01 | 6474026.47 | 2031   | 96  | 2017 |
| 3500810 | 86542.40  | 88597.80  | 640808.30 | 784955.60 | 6471238.64 | 6474227.22 | 2031   | 96  | 2017 |
| 3500820 | 88718.60  | 90805.80  | 640814.43 | 784962.07 | 6471436.10 | 6474429.82 | 2031   | 96  | 2017 |
| 3500830 | 90926.30  | 92994.70  | 640813.64 | 784968.69 | 6471638.03 | 6474625.28 | 2031   | 96  | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME     | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|----------|-----------|-----------|------------|------------|--------|-----|------|
| 3500840 | 93100.10 | 95172.40 | 640816.84 | 784968.26 | 6471832.92 | 6474825.32 | 2031   | 96  | 2017 |
| 3500850 | 84256.30 | 86341.80 | 640820.88 | 784975.94 | 6472035.52 | 6475029.17 | 2062   | 146 | 2017 |
| 3500860 | 86422.90 | 88503.70 | 640822.04 | 784984.43 | 6472237.89 | 6475218.51 | 2062   | 146 | 2017 |
| 3500870 | 88646.70 | 90753.80 | 640824.00 | 784991.04 | 6472434.67 | 6475422.53 | 2062   | 146 | 2017 |
| 3500880 | 90851.70 | 92922.10 | 640827.27 | 784993.26 | 6472636.02 | 6475630.11 | 2062   | 146 | 2017 |
| 3500890 | 93074.10 | 95174.80 | 640829.75 | 784999.87 | 6472837.10 | 6475825.93 | 2062   | 146 | 2017 |
| 3500900 | 95306.70 | 97374.00 | 640834.58 | 785007.77 | 6473030.87 | 6476023.13 | 2062   | 146 | 2017 |
| 3500910 | 82750.00 | 84923.00 | 640837.05 | 785008.03 | 6473233.51 | 6476218.18 | 2063   | 147 | 2017 |
| 3500920 | 85026.20 | 87087.40 | 640835.86 | 785015.03 | 6473433.21 | 6476422.64 | 2063   | 147 | 2017 |
| 3500930 | 87218.70 | 89414.80 | 640838.75 | 785022.54 | 6473627.08 | 6476625.18 | 2063   | 147 | 2017 |
| 3500940 | 89531.30 | 91583.20 | 640846.08 | 785026.12 | 6473831.03 | 6476820.31 | 2063   | 147 | 2017 |
| 3500950 | 91685.00 | 93881.30 | 640844.95 | 785032.60 | 6474033.44 | 6477022.85 | 2063   | 147 | 2017 |
| 3500960 | 94004.50 | 96090.10 | 640852.11 | 785038.33 | 6474231.95 | 6477219.53 | 2063   | 147 | 2017 |
| 3500970 | 82776.30 | 84853.10 | 640855.99 | 785043.93 | 6474426.69 | 6477419.89 | 2065   | 151 | 2017 |
| 3500980 | 84987.40 | 87117.70 | 640857.71 | 785048.02 | 6474632.62 | 6477617.96 | 2065   | 151 | 2017 |
| 3500990 | 87236.20 | 89298.60 | 640854.57 | 785057.28 | 6474828.46 | 6477815.24 | 2065   | 151 | 2017 |
| 3501000 | 89411.70 | 91525.90 | 640857.86 | 785060.63 | 6475030.85 | 6478016.18 | 2065   | 151 | 2017 |
| 3501010 | 91652.10 | 93724.30 | 640862.41 | 785064.86 | 6475230.11 | 6478218.13 | 2065   | 151 | 2017 |
| 3501020 | 93828.80 | 95772.50 | 640863.36 | 774091.18 | 6475734.02 | 6478413.70 | 2065   | 151 | 2017 |
| 3501021 | 96130.00 | 96289.00 | 773995.14 | 785068.32 | 6475425.72 | 6475726.59 | 2065   | 151 | 2017 |
| 3501030 | 83306.30 | 85381.60 | 640870.66 | 785077.94 | 6475626.96 | 6478614.13 | 2066   | 152 | 2017 |
| 3501040 | 85487.60 | 87603.70 | 640872.65 | 785079.85 | 6475828.51 | 6478812.97 | 2066   | 152 | 2017 |
| 3501050 | 87735.70 | 89823.90 | 640871.42 | 785085.00 | 6476024.10 | 6479014.20 | 2066   | 152 | 2017 |
| 3501060 | 89953.40 | 92030.70 | 640875.92 | 785090.56 | 6476227.09 | 6479211.63 | 2066   | 152 | 2017 |
| 3501070 | 92129.00 | 94217.50 | 640882.61 | 785101.79 | 6476425.42 | 6479412.94 | 2066   | 152 | 2017 |
| 3501080 | 94335.20 | 96419.90 | 640883.95 | 785104.36 | 6476626.12 | 6479610.67 | 2066   | 152 | 2017 |
| 3501090 | 83148.40 | 85239.40 | 640883.19 | 785108.87 | 6476825.89 | 6479809.86 | 2067   | 154 | 2017 |
| 3501100 | 85381.70 | 87475.00 | 640889.60 | 785113.61 | 6477019.66 | 6480007.22 | 2067   | 154 | 2017 |
| 3501110 | 87604.30 | 89677.60 | 640888.24 | 785119.20 | 6477220.94 | 6480208.98 | 2067   | 154 | 2017 |
| 3501120 | 89795.50 | 91891.90 | 640894.24 | 785123.32 | 6477421.97 | 6480405.66 | 2067   | 154 | 2017 |
| 3501130 | 92011.20 | 94092.10 | 640897.56 | 785134.40 | 6477619.84 | 6480612.21 | 2067   | 154 | 2017 |
| 3501140 | 94200.60 | 96273.40 | 640898.17 | 785137.50 | 6477819.86 | 6480803.31 | 2067   | 154 | 2017 |
| 3501150 | 82859.30 | 84949.30 | 640902.88 | 785143.79 | 6478018.34 | 6481007.36 | 2068   | 155 | 2017 |
| 3501160 | 85064.70 | 87130.60 | 640906.36 | 785147.16 | 6478221.93 | 6481210.14 | 2068   | 155 | 2017 |
| 3501170 | 87266.10 | 89355.80 | 640905.71 | 785156.22 | 6478417.95 | 6481406.78 | 2068   | 155 | 2017 |
| 3501180 | 89473.20 | 91533.90 | 640911.51 | 785158.32 | 6478614.63 | 6481603.19 | 2068   | 155 | 2017 |
| 3501190 | 91639.80 | 93720.40 | 640911.20 | 785167.66 | 6478816.89 | 6481805.88 | 2068   | 155 | 2017 |
| 3501200 | 93842.10 | 95918.70 | 640912.81 | 785173.30 | 6479016.81 | 6482003.06 | 2068   | 155 | 2017 |
| 3501210 | 83998.70 | 84589.10 | 744592.05 | 785172.25 | 6479216.09 | 6480265.65 | 2069   | 156 | 2017 |
| 3501211 | 87757.10 | 89318.20 | 640921.07 | 744686.52 | 6480260.31 | 6482205.25 | 2073   | 160 | 2017 |
| 3501220 | 91094.60 | 93229.60 | 640918.33 | 785180.93 | 6479416.27 | 6482403.23 | 2073   | 160 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3501230 | 85570.50 | 87647.10  | 640924.95 | 785183.19 | 6479618.42 | 6482598.10 | 2073   | 160 | 2017 |
| 3501240 | 83838.60 | 84560.10  | 734760.69 | 785191.81 | 6479815.12 | 6481095.77 | 2072   | 159 | 2017 |
| 3501241 | 89642.90 | 90989.00  | 640926.05 | 734857.90 | 6481091.29 | 6482801.49 | 2073   | 160 | 2017 |
| 3501250 | 99437.40 | 101570.90 | 640931.40 | 785197.62 | 6480014.98 | 6483004.21 | 2071   | 158 | 2017 |
| 3501260 | 97246.70 | 99316.60  | 640934.43 | 785206.84 | 6480214.50 | 6483200.93 | 2071   | 158 | 2017 |
| 3501270 | 95052.80 | 97146.70  | 640936.72 | 785211.83 | 6480412.57 | 6483403.07 | 2071   | 158 | 2017 |
| 3501280 | 92843.80 | 94924.00  | 640937.00 | 785215.74 | 6480618.43 | 6483598.39 | 2071   | 158 | 2017 |
| 3501290 | 90663.20 | 92739.50  | 640940.87 | 785221.42 | 6480808.09 | 6483794.82 | 2071   | 158 | 2017 |
| 3501300 | 88463.00 | 90539.70  | 640941.62 | 785224.76 | 6481014.48 | 6483998.64 | 2071   | 158 | 2017 |
| 3501310 | 86254.80 | 88323.10  | 640943.67 | 785231.39 | 6481213.06 | 6484194.54 | 2071   | 158 | 2017 |
| 3501320 | 84051.80 | 86132.90  | 640947.21 | 785233.78 | 6481408.85 | 6484397.89 | 2071   | 158 | 2017 |
| 3501330 | 98358.90 | 100442.90 | 640953.66 | 785239.85 | 6481611.60 | 6484606.55 | 2070   | 157 | 2017 |
| 3501340 | 96165.50 | 98255.80  | 640953.28 | 785248.04 | 6481812.83 | 6484793.18 | 2070   | 157 | 2017 |
| 3501350 | 93969.20 | 96055.80  | 640956.89 | 785253.33 | 6482010.61 | 6484997.60 | 2070   | 157 | 2017 |
| 3501360 | 91781.70 | 93864.70  | 640959.48 | 785255.68 | 6482210.56 | 6485194.21 | 2070   | 157 | 2017 |
| 3501370 | 89580.40 | 91663.20  | 640960.19 | 785263.00 | 6482407.02 | 6485395.09 | 2070   | 157 | 2017 |
| 3501380 | 87362.20 | 89455.60  | 640968.60 | 785269.45 | 6482606.45 | 6485596.42 | 2070   | 157 | 2017 |
| 3501390 | 85135.60 | 87257.40  | 640966.53 | 785277.13 | 6482810.83 | 6485790.74 | 2070   | 157 | 2017 |
| 3501400 | 82948.60 | 85022.30  | 640969.62 | 785281.30 | 6483000.68 | 6485992.74 | 2070   | 157 | 2017 |
| 3501410 | 98991.20 | 101071.70 | 640976.79 | 785283.81 | 6483201.68 | 6486192.65 | 2060   | 142 | 2017 |
| 3501420 | 96758.50 | 98866.60  | 640975.71 | 785291.82 | 6483411.29 | 6486388.61 | 2060   | 142 | 2017 |
| 3501430 | 94573.30 | 96640.40  | 640977.62 | 785300.36 | 6483605.46 | 6486593.46 | 2060   | 142 | 2017 |
| 3501440 | 92326.60 | 94443.90  | 640978.42 | 785301.53 | 6483805.12 | 6486792.81 | 2060   | 142 | 2017 |
| 3501450 | 90141.30 | 92218.80  | 640986.95 | 785311.78 | 6484004.61 | 6486988.92 | 2060   | 142 | 2017 |
| 3501460 | 87897.40 | 90010.40  | 640989.87 | 785310.44 | 6484206.86 | 6487190.55 | 2060   | 142 | 2017 |
| 3501470 | 85699.60 | 87770.60  | 640990.73 | 785320.76 | 6484400.10 | 6487389.95 | 2060   | 142 | 2017 |
| 3501480 | 83508.20 | 85593.10  | 640993.23 | 785327.65 | 6484604.77 | 6487585.98 | 2060   | 142 | 2017 |
| 3501490 | 97707.40 | 99780.20  | 640997.20 | 785327.82 | 6484798.98 | 6487787.11 | 2058   | 140 | 2017 |
| 3501500 | 95504.10 | 97573.40  | 641000.59 | 785336.00 | 6485003.63 | 6487988.46 | 2058   | 140 | 2017 |
| 3501510 | 93307.50 | 95380.40  | 641000.11 | 785339.17 | 6485205.65 | 6488185.26 | 2058   | 140 | 2017 |
| 3501520 | 91088.60 | 93169.70  | 641000.74 | 785346.54 | 6485404.51 | 6488387.01 | 2058   | 140 | 2017 |
| 3501530 | 88892.90 | 90968.20  | 641004.50 | 785353.45 | 6485600.09 | 6488586.65 | 2058   | 140 | 2017 |
| 3501540 | 86696.50 | 88781.70  | 641008.19 | 785359.37 | 6485799.52 | 6488785.04 | 2058   | 140 | 2017 |
| 3501550 | 84476.00 | 86563.00  | 641013.22 | 785360.42 | 6485995.66 | 6488982.08 | 2058   | 140 | 2017 |
| 3501560 | 82298.20 | 84363.00  | 641016.82 | 785365.39 | 6486200.53 | 6489181.29 | 2058   | 140 | 2017 |
| 3501570 | 98200.30 | 100290.20 | 641019.14 | 785373.42 | 6486402.59 | 6489380.21 | 2057   | 138 | 2017 |
| 3501580 | 95954.50 | 98092.70  | 641019.63 | 785379.60 | 6486594.34 | 6489584.63 | 2057   | 138 | 2017 |
| 3501590 | 93716.20 | 95823.20  | 641025.39 | 785383.25 | 6486798.65 | 6489781.04 | 2057   | 138 | 2017 |
| 3501601 | 92136.80 | 94198.30  | 641025.24 | 785389.56 | 6486996.76 | 6489978.05 | 2079   | 167 | 2017 |
| 3501610 | 91507.00 | 93612.40  | 641031.00 | 785398.70 | 6487195.06 | 6490179.34 | 2057   | 138 | 2017 |
| 3501620 | 89252.40 | 91374.80  | 641029.70 | 785404.40 | 6487397.44 | 6490379.33 | 2057   | 138 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3501630 | 87024.40  | 89130.10  | 641031.99 | 785405.57 | 6487598.33 | 6490577.08 | 2057   | 138 | 2017 |
| 3501640 | 84789.80  | 86905.80  | 641036.81 | 785410.66 | 6487791.70 | 6490777.77 | 2057   | 138 | 2017 |
| 3501650 | 82536.80  | 84645.80  | 641040.47 | 785418.97 | 6487992.27 | 6490974.95 | 2057   | 138 | 2017 |
| 3501660 | 98003.30  | 100100.30 | 641044.98 | 785425.41 | 6488191.35 | 6491176.46 | 2056   | 137 | 2017 |
| 3501670 | 95786.70  | 97871.00  | 641044.03 | 785429.43 | 6488396.39 | 6491375.43 | 2056   | 137 | 2017 |
| 3501680 | 93564.00  | 95677.80  | 641045.87 | 785437.78 | 6488595.16 | 6491572.66 | 2056   | 137 | 2017 |
| 3501690 | 91359.20  | 93450.70  | 641049.18 | 785440.82 | 6488790.02 | 6491773.91 | 2056   | 137 | 2017 |
| 3501700 | 89144.00  | 91248.90  | 641050.07 | 785448.26 | 6488991.50 | 6491972.02 | 2056   | 137 | 2017 |
| 3501710 | 86948.70  | 89037.70  | 641055.55 | 785448.32 | 6489192.34 | 6492172.11 | 2056   | 137 | 2017 |
| 3501720 | 84710.60  | 86823.90  | 641058.32 | 785458.09 | 6489387.56 | 6492369.77 | 2056   | 137 | 2017 |
| 3501730 | 82504.20  | 84606.70  | 641064.37 | 785462.51 | 6489586.03 | 6492570.53 | 2056   | 137 | 2017 |
| 3501740 | 101012.50 | 103138.30 | 641065.89 | 785466.53 | 6489790.39 | 6492770.21 | 2055   | 134 | 2017 |
| 3501750 | 98798.20  | 100889.10 | 641069.95 | 785469.53 | 6489990.43 | 6492970.72 | 2055   | 134 | 2017 |
| 3501760 | 96548.10  | 98691.90  | 641066.64 | 785476.61 | 6490187.20 | 6493168.12 | 2055   | 134 | 2017 |
| 3501770 | 94320.50  | 96421.50  | 641071.60 | 785484.40 | 6490387.88 | 6493371.56 | 2055   | 134 | 2017 |
| 3501780 | 98054.50  | 100203.30 | 641072.12 | 785487.97 | 6490588.66 | 6493569.19 | 2054   | 133 | 2017 |
| 3501790 | 95842.20  | 97929.60  | 641077.11 | 785494.46 | 6490786.60 | 6493769.32 | 2054   | 133 | 2017 |
| 3501800 | 93589.30  | 95730.40  | 641080.52 | 785499.85 | 6490985.20 | 6493965.49 | 2054   | 133 | 2017 |
| 3501810 | 91396.80  | 93468.70  | 641083.75 | 785502.28 | 6491182.37 | 6494163.64 | 2054   | 133 | 2017 |
| 3501820 | 89111.60  | 91281.20  | 641087.31 | 785512.66 | 6491380.31 | 6494366.27 | 2054   | 133 | 2017 |
| 3501830 | 86910.80  | 88987.40  | 641091.61 | 785515.08 | 6491585.21 | 6494563.82 | 2054   | 133 | 2017 |
| 3501840 | 84618.40  | 86787.80  | 641090.22 | 785525.54 | 6491783.62 | 6494762.38 | 2054   | 133 | 2017 |
| 3501850 | 82411.80  | 84495.60  | 641096.95 | 785526.90 | 6491982.34 | 6494962.36 | 2054   | 133 | 2017 |
| 3501860 | 98222.60  | 100329.00 | 641094.57 | 785536.52 | 6492184.72 | 6495162.35 | 2053   | 132 | 2017 |
| 3501870 | 96034.30  | 98096.90  | 641098.59 | 785537.99 | 6492381.06 | 6495364.57 | 2053   | 132 | 2017 |
| 3501880 | 93760.10  | 95904.20  | 641104.67 | 785543.50 | 6492578.91 | 6495561.51 | 2053   | 132 | 2017 |
| 3501890 | 91570.70  | 93642.80  | 641103.55 | 785547.52 | 6492781.67 | 6495762.49 | 2053   | 132 | 2017 |
| 3501900 | 89271.00  | 91450.70  | 641106.19 | 785552.63 | 6492980.06 | 6495957.15 | 2053   | 132 | 2017 |
| 3501910 | 87054.60  | 89126.10  | 641109.72 | 785558.10 | 6493178.58 | 6496160.50 | 2053   | 132 | 2017 |
| 3501920 | 84715.50  | 86926.10  | 641111.78 | 785566.60 | 6493378.07 | 6496357.17 | 2053   | 132 | 2017 |
| 3501930 | 82497.90  | 84580.20  | 641115.53 | 785569.67 | 6493573.19 | 6496563.33 | 2053   | 132 | 2017 |
| 3501940 | 98392.20  | 100494.40 | 641116.82 | 785575.93 | 6493779.63 | 6496759.98 | 2052   | 131 | 2017 |
| 3501950 | 96168.10  | 98261.50  | 641121.51 | 785584.01 | 6493977.18 | 6496956.08 | 2052   | 131 | 2017 |
| 3501960 | 93888.80  | 96047.00  | 641125.89 | 785590.81 | 6494176.97 | 6497156.57 | 2052   | 131 | 2017 |
| 3501970 | 91671.40  | 93748.50  | 641127.92 | 785590.92 | 6494377.73 | 6497357.50 | 2052   | 131 | 2017 |
| 3501980 | 100218.90 | 102284.80 | 641128.54 | 785597.93 | 6494576.09 | 6497558.68 | 2047   | 124 | 2017 |
| 3501990 | 98006.90  | 100104.30 | 641130.38 | 785603.76 | 6494777.68 | 6497756.31 | 2047   | 124 | 2017 |
| 3502000 | 94242.10  | 96318.70  | 641138.48 | 785613.19 | 6494976.13 | 6497955.31 | 2029   | 94  | 2017 |
| 3502010 | 92067.10  | 94127.80  | 641138.75 | 785616.88 | 6495176.92 | 6498154.16 | 2029   | 94  | 2017 |
| 3502020 | 89889.10  | 91966.60  | 641141.63 | 785619.12 | 6495373.80 | 6498353.87 | 2029   | 94  | 2017 |
| 3502030 | 87711.60  | 89769.00  | 641142.27 | 785623.68 | 6495571.86 | 6498556.55 | 2029   | 94  | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3502040 | 85486.00 | 87573.00  | 641144.57 | 785632.43 | 6495772.57 | 6498751.00 | 2029   | 94  | 2017 |
| 3502050 | 83312.00 | 85373.00  | 641146.36 | 785640.34 | 6495971.54 | 6498952.04 | 2029   | 94  | 2017 |
| 3502060 | 96425.40 | 98489.60  | 641154.10 | 785642.22 | 6496173.97 | 6499151.36 | 2029   | 94  | 2017 |
| 3502070 | 98622.80 | 100692.60 | 641152.12 | 785650.87 | 6496371.15 | 6499351.22 | 2029   | 94  | 2017 |
| 3502080 | 89399.40 | 91565.90  | 641154.36 | 785652.88 | 6496570.91 | 6499546.74 | 2052   | 131 | 2017 |
| 3502090 | 83335.10 | 85435.90  | 641162.61 | 785658.72 | 6496776.02 | 6499748.93 | 2052   | 131 | 2017 |
| 3502100 | 98385.90 | 100501.90 | 641162.30 | 785664.31 | 6496970.13 | 6499947.55 | 2051   | 130 | 2017 |
| 3502110 | 96154.70 | 98253.40  | 641163.27 | 785668.16 | 6497169.80 | 6500149.68 | 2051   | 130 | 2017 |
| 3502120 | 93942.60 | 96041.80  | 641165.66 | 785676.89 | 6497370.06 | 6500348.72 | 2051   | 130 | 2017 |
| 3502130 | 91729.00 | 93810.50  | 641173.07 | 785679.21 | 6497570.52 | 6500546.99 | 2051   | 130 | 2017 |
| 3502140 | 89510.50 | 91620.50  | 641176.86 | 785688.84 | 6497767.85 | 6500743.08 | 2051   | 130 | 2017 |
| 3502150 | 95820.10 | 97907.10  | 641176.37 | 785693.86 | 6497968.02 | 6500945.18 | 2047   | 124 | 2017 |
| 3502160 | 93582.70 | 95702.20  | 641177.68 | 785696.18 | 6498168.72 | 6501142.62 | 2047   | 124 | 2017 |
| 3502170 | 91380.40 | 93475.80  | 641183.39 | 785701.01 | 6498365.18 | 6501355.11 | 2047   | 124 | 2017 |
| 3502180 | 89144.30 | 91273.30  | 641181.71 | 785705.75 | 6498567.27 | 6501543.24 | 2047   | 124 | 2017 |
| 3502190 | 86904.60 | 89003.00  | 641185.34 | 785715.20 | 6498768.54 | 6501745.65 | 2047   | 124 | 2017 |
| 3502200 | 84663.20 | 86804.50  | 641189.02 | 785719.56 | 6498960.46 | 6501939.99 | 2047   | 124 | 2017 |
| 3502210 | 98176.60 | 100287.50 | 641189.37 | 785724.86 | 6499165.01 | 6502138.06 | 2046   | 123 | 2017 |
| 3502220 | 97233.20 | 98064.10  | 641193.43 | 697860.31 | 6501412.64 | 6502342.17 | 2046   | 123 | 2017 |
| 3502221 | 90093.90 | 91367.90  | 697765.57 | 785730.44 | 6499360.69 | 6501416.27 | 2064   | 148 | 2017 |
| 3502230 | 96278.00 | 97137.70  | 641200.34 | 699831.87 | 6501573.91 | 6502543.24 | 2046   | 123 | 2017 |
| 3502231 | 91598.70 | 92837.90  | 699740.12 | 785736.75 | 6499565.36 | 6501577.06 | 2064   | 148 | 2017 |
| 3502240 | 95336.00 | 96164.00  | 641202.26 | 697870.57 | 6501810.68 | 6502738.75 | 2046   | 123 | 2017 |
| 3502241 | 92941.30 | 94220.10  | 697774.76 | 785743.42 | 6499765.42 | 6501814.37 | 2064   | 148 | 2017 |
| 3502250 | 94390.40 | 95245.20  | 641206.41 | 699840.15 | 6501972.30 | 6502940.86 | 2046   | 123 | 2017 |
| 3502251 | 94446.60 | 95682.60  | 699747.12 | 785747.79 | 6499963.38 | 6501973.94 | 2064   | 148 | 2017 |
| 3502260 | 93457.00 | 94275.60  | 641207.18 | 697873.12 | 6502210.21 | 6503137.00 | 2046   | 123 | 2017 |
| 3502261 | 96115.00 | 97097.00  | 697776.79 | 764886.49 | 6500715.56 | 6502212.59 | 2064   | 148 | 2017 |
| 3502262 | 94442.10 | 94740.50  | 764798.79 | 785754.12 | 6500160.91 | 6500717.75 | 2079   | 167 | 2017 |
| 3502270 | 92447.00 | 93340.40  | 641209.63 | 701824.49 | 6502335.53 | 6503338.34 | 2046   | 123 | 2017 |
| 3502271 | 97385.40 | 98595.80  | 701733.22 | 785756.21 | 6500360.75 | 6502337.08 | 2064   | 148 | 2017 |
| 3502280 | 91489.70 | 92341.80  | 641213.20 | 699850.68 | 6502569.38 | 6503534.78 | 2046   | 123 | 2017 |
| 3502281 | 83273.20 | 84523.00  | 699760.52 | 785760.23 | 6500559.58 | 6502574.95 | 2074   | 161 | 2017 |
| 3502290 | 90505.80 | 91401.20  | 641214.81 | 701832.14 | 6502731.55 | 6503735.27 | 2046   | 123 | 2017 |
| 3502291 | 84752.90 | 85965.30  | 701738.47 | 785769.49 | 6500760.50 | 6502732.30 | 2074   | 161 | 2017 |
| 3502300 | 89537.40 | 90386.60  | 641219.32 | 699861.90 | 6502972.49 | 6503933.97 | 2046   | 123 | 2017 |
| 3502301 | 86099.90 | 87342.90  | 699765.93 | 785777.41 | 6500958.49 | 6502975.17 | 2074   | 161 | 2017 |
| 3502310 | 88461.70 | 89407.90  | 641221.53 | 703806.73 | 6503093.53 | 6504133.24 | 2046   | 123 | 2017 |
| 3502311 | 87579.40 | 88762.30  | 703712.36 | 785781.88 | 6501158.45 | 6503099.56 | 2074   | 161 | 2017 |
| 3502320 | 87476.00 | 88354.20  | 641223.64 | 701840.08 | 6503327.16 | 6504333.30 | 2046   | 123 | 2017 |
| 3502321 | 88893.50 | 90094.40  | 701751.95 | 785783.71 | 6501360.60 | 6503337.11 | 2074   | 161 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME     | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|----------|-----------|-----------|------------|------------|--------|-----|------|
| 3502330 | 86441.60 | 87390.90 | 641225.02 | 703814.26 | 6503491.02 | 6504529.45 | 2046   | 123 | 2017 |
| 3502331 | 90326.20 | 91497.70 | 703721.05 | 785787.90 | 6501557.22 | 6503492.94 | 2074   | 161 | 2017 |
| 3502340 | 85462.90 | 86308.60 | 641230.66 | 699877.03 | 6503768.30 | 6504732.88 | 2046   | 123 | 2017 |
| 3502341 | 91605.90 | 92839.00 | 699780.11 | 785799.22 | 6501756.25 | 6503771.20 | 2074   | 161 | 2017 |
| 3502350 | 84436.80 | 85346.10 | 641233.84 | 703826.06 | 6503890.23 | 6504933.24 | 2046   | 123 | 2017 |
| 3502351 | 93082.00 | 94259.60 | 703731.46 | 785799.01 | 6501954.76 | 6503891.77 | 2074   | 161 | 2017 |
| 3502360 | 82225.90 | 84317.10 | 641233.11 | 785805.91 | 6502164.80 | 6505130.97 | 2046   | 123 | 2017 |
| 3502370 | 97811.20 | 99989.70 | 641236.62 | 785809.61 | 6502359.00 | 6505331.79 | 2045   | 122 | 2017 |
| 3502380 | 96497.20 | 97480.10 | 641237.11 | 709746.99 | 6504369.85 | 6505529.06 | 2045   | 122 | 2017 |
| 3502381 | 94358.70 | 95456.20 | 709651.50 | 785817.65 | 6502553.51 | 6504374.19 | 2074   | 161 | 2017 |
| 3502390 | 95297.20 | 96374.10 | 641242.46 | 713695.80 | 6504485.10 | 6505729.31 | 2045   | 122 | 2017 |
| 3502391 | 95713.50 | 96741.80 | 713604.84 | 785821.99 | 6502753.29 | 6504492.63 | 2074   | 161 | 2017 |
| 3502400 | 94198.70 | 95183.80 | 641245.45 | 709757.35 | 6504771.00 | 6505928.16 | 2045   | 122 | 2017 |
| 3502401 | 96854.10 | 97952.80 | 709661.59 | 785828.72 | 6502952.85 | 6504773.49 | 2074   | 161 | 2017 |
| 3502410 | 92958.70 | 94085.40 | 641248.67 | 713702.71 | 6504889.81 | 6506128.80 | 2045   | 122 | 2017 |
| 3502411 | 98195.90 | 99223.70 | 713613.09 | 785835.93 | 6503156.05 | 6504888.79 | 2074   | 161 | 2017 |
| 3502420 | 91852.60 | 92840.20 | 641250.36 | 709761.96 | 6505169.10 | 6506326.68 | 2045   | 122 | 2017 |
| 3502422 | 88239.90 | 89328.70 | 709670.13 | 785840.34 | 6503353.59 | 6505175.72 | 2079   | 167 | 2017 |
| 3502430 | 90657.00 | 91747.60 | 641252.69 | 713714.53 | 6505284.92 | 6506524.83 | 2045   | 122 | 2017 |
| 3502431 | 87223.00 | 88285.90 | 713618.69 | 785847.18 | 6503552.04 | 6505288.59 | 2076   | 163 | 2017 |
| 3502440 | 89615.00 | 90530.50 | 641252.81 | 705828.05 | 6505648.64 | 6506727.25 | 2045   | 122 | 2017 |
| 3502441 | 83168.20 | 84339.30 | 705736.77 | 785850.15 | 6503751.78 | 6505644.89 | 2076   | 163 | 2017 |
| 3502450 | 88453.00 | 89499.00 | 641255.96 | 709778.29 | 6505765.49 | 6506927.54 | 2045   | 122 | 2017 |
| 3502451 | 85865.70 | 86970.30 | 709681.16 | 785857.17 | 6503948.26 | 6505768.34 | 2076   | 163 | 2017 |
| 3502460 | 87380.40 | 88340.70 | 641260.60 | 707807.02 | 6506007.75 | 6507125.03 | 2045   | 122 | 2017 |
| 3502461 | 84617.90 | 85762.20 | 707709.12 | 785862.14 | 6504146.41 | 6506009.34 | 2076   | 163 | 2017 |
| 3502470 | 86255.00 | 87291.40 | 641265.04 | 709785.21 | 6506164.24 | 6507324.65 | 2045   | 122 | 2017 |
| 3502471 | 88384.40 | 89475.00 | 709692.72 | 785865.23 | 6504350.76 | 6506171.73 | 2076   | 163 | 2017 |
| 3502480 | 84026.80 | 86116.30 | 641268.55 | 785871.27 | 6504547.29 | 6507522.07 | 2045   | 122 | 2017 |
| 3502490 | 96329.50 | 98416.70 | 641270.54 | 785880.61 | 6504747.77 | 6507724.21 | 2044   | 119 | 2017 |
| 3502500 | 95150.00 | 96206.50 | 641272.83 | 711765.10 | 6506720.53 | 6507926.42 | 2044   | 119 | 2017 |
| 3502501 | 89709.40 | 90802.60 | 711671.58 | 785885.31 | 6504949.23 | 6506728.61 | 2076   | 163 | 2017 |
| 3502510 | 94005.30 | 95048.60 | 641277.10 | 713749.95 | 6506881.67 | 6508122.27 | 2044   | 119 | 2017 |
| 3502511 | 92193.50 | 93265.80 | 713655.83 | 785887.97 | 6505148.01 | 6506881.60 | 2076   | 163 | 2017 |
| 3502520 | 92888.30 | 93909.50 | 641274.29 | 711777.52 | 6507123.01 | 6508325.06 | 2044   | 119 | 2017 |
| 3502521 | 90918.40 | 91981.90 | 711687.54 | 785895.79 | 6505346.83 | 6507127.71 | 2076   | 163 | 2017 |
| 3502530 | 91719.50 | 92748.10 | 641280.00 | 711789.94 | 6507322.26 | 6508518.19 | 2044   | 119 | 2017 |
| 3502531 | 93368.30 | 94433.40 | 711696.93 | 785903.01 | 6505541.74 | 6507325.15 | 2076   | 163 | 2017 |
| 3502540 | 90567.80 | 91591.80 | 641282.00 | 711795.00 | 6507521.04 | 6508717.39 | 2044   | 119 | 2017 |
| 3502541 | 95825.70 | 96886.70 | 711700.24 | 785905.96 | 6505750.58 | 6507530.02 | 2076   | 163 | 2017 |
| 3502550 | 89411.00 | 90471.50 | 641282.41 | 713760.21 | 6507680.93 | 6508919.64 | 2044   | 119 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3502551 | 94661.30  | 95730.10  | 713668.51 | 785909.56 | 6505948.87 | 6507683.10 | 2076   | 163 | 2017 |
| 3502560 | 88253.50  | 89300.20  | 641291.67 | 713764.68 | 6507881.60 | 6509116.29 | 2044   | 119 | 2017 |
| 3502561 | 97105.80  | 98167.80  | 713668.63 | 785914.13 | 6506149.14 | 6507883.46 | 2076   | 163 | 2017 |
| 3502570 | 87005.50  | 88142.40  | 641291.88 | 717717.97 | 6507994.23 | 6509323.96 | 2044   | 119 | 2017 |
| 3502571 | 86528.40  | 87524.00  | 717624.96 | 785921.07 | 6506349.09 | 6508001.34 | 2077   | 165 | 2017 |
| 3502580 | 85876.90  | 86900.20  | 641295.08 | 711799.94 | 6508318.08 | 6509517.75 | 2044   | 119 | 2017 |
| 3502581 | 82808.10  | 83886.80  | 711707.14 | 785928.77 | 6506545.96 | 6508321.49 | 2077   | 165 | 2017 |
| 3502590 | 84647.50  | 85748.10  | 641295.90 | 715750.86 | 6508442.10 | 6509717.43 | 2044   | 119 | 2017 |
| 3502591 | 85274.90  | 86283.60  | 715653.29 | 785933.22 | 6506743.95 | 6508438.02 | 2077   | 165 | 2017 |
| 3502600 | 82431.90  | 84526.60  | 641299.69 | 785940.54 | 6506943.54 | 6509915.52 | 2044   | 119 | 2017 |
| 3502610 | 100717.60 | 102831.60 | 641304.23 | 785941.46 | 6507145.35 | 6510114.40 | 2043   | 118 | 2017 |
| 3502620 | 99375.90  | 100619.90 | 641301.20 | 727596.82 | 6508783.99 | 6510314.97 | 2043   | 118 | 2017 |
| 3502621 | 98244.00  | 99075.50  | 727500.03 | 785951.75 | 6507341.61 | 6508791.13 | 2076   | 163 | 2017 |
| 3502630 | 97931.10  | 99258.10  | 641305.27 | 731544.32 | 6508897.60 | 6510515.56 | 2043   | 118 | 2017 |
| 3502631 | 99303.40  | 100088.40 | 731449.19 | 785955.35 | 6507547.05 | 6508898.86 | 2076   | 163 | 2017 |
| 3502640 | 96780.10  | 97826.90  | 641310.47 | 713800.00 | 6509474.37 | 6510715.19 | 2043   | 118 | 2017 |
| 3502641 | 84122.10  | 85180.50  | 713701.76 | 785957.77 | 6507743.57 | 6509479.54 | 2077   | 165 | 2017 |
| 3502650 | 95598.40  | 96699.70  | 641314.72 | 715775.56 | 6509632.92 | 6510916.00 | 2043   | 118 | 2017 |
| 3502651 | 88896.50  | 89906.70  | 715685.06 | 785968.84 | 6507938.72 | 6509637.90 | 2077   | 165 | 2017 |
| 3502660 | 94421.00  | 95463.00  | 641318.91 | 713809.16 | 6509876.68 | 6511110.17 | 2043   | 118 | 2017 |
| 3502661 | 87623.30  | 88674.40  | 713714.69 | 785973.94 | 6508138.61 | 6509881.43 | 2077   | 165 | 2017 |
| 3502670 | 93256.00  | 94340.10  | 641318.12 | 715780.09 | 6510031.37 | 6511316.89 | 2043   | 118 | 2017 |
| 3502671 | 98475.30  | 99492.70  | 715687.24 | 785975.02 | 6508339.84 | 6510031.39 | 2075   | 162 | 2017 |
| 3502680 | 91569.60  | 91890.00  | 763033.29 | 785981.55 | 6508544.34 | 6509147.51 | 2038   | 108 | 2017 |
| 3502681 | 89490.80  | 91261.70  | 641319.29 | 763129.03 | 6509139.79 | 6511513.20 | 2043   | 118 | 2017 |
| 3502690 | 90941.00  | 91344.10  | 759101.10 | 785984.65 | 6508738.87 | 6509447.36 | 2038   | 108 | 2017 |
| 3502691 | 91460.00  | 93156.50  | 641321.49 | 759191.29 | 6509438.86 | 6511709.14 | 2043   | 118 | 2017 |
| 3502700 | 90157.30  | 90794.80  | 741344.44 | 785992.79 | 6508936.46 | 6510067.36 | 2038   | 108 | 2017 |
| 3502701 | 86344.30  | 87806.00  | 641324.75 | 741439.45 | 6510067.35 | 6511907.18 | 2043   | 118 | 2017 |
| 3502710 | 89260.20  | 89971.50  | 737404.52 | 786001.13 | 6509139.25 | 6510360.37 | 2038   | 108 | 2017 |
| 3502711 | 88001.80  | 89383.50  | 641330.95 | 737495.82 | 6510358.23 | 6512111.20 | 2043   | 118 | 2017 |
| 3502720 | 87037.70  | 89126.10  | 641334.79 | 786001.11 | 6509337.74 | 6512309.06 | 2038   | 108 | 2017 |
| 3502730 | 85846.90  | 86896.70  | 641335.26 | 713834.91 | 6511266.45 | 6512509.37 | 2038   | 108 | 2017 |
| 3502731 | 97202.90  | 98237.70  | 713741.09 | 786009.71 | 6509537.68 | 6511274.21 | 2075   | 162 | 2017 |
| 3502740 | 84636.30  | 85720.70  | 641337.03 | 715813.62 | 6511429.79 | 6512713.25 | 2038   | 108 | 2017 |
| 3502741 | 96042.10  | 97069.00  | 715718.64 | 786016.76 | 6509739.36 | 6511431.05 | 2075   | 162 | 2017 |
| 3502750 | 85381.00  | 86227.40  | 641343.09 | 700033.00 | 6511946.21 | 6512909.29 | 2043   | 118 | 2017 |
| 3502751 | 85597.00  | 86817.30  | 699936.94 | 786021.97 | 6509939.11 | 6511947.39 | 2080   | 172 | 2017 |
| 3502760 | 97104.50  | 97954.90  | 641344.60 | 700037.27 | 6512143.89 | 6513110.41 | 2042   | 117 | 2017 |
| 3502761 | 86961.20  | 88205.80  | 699944.63 | 786029.19 | 6510137.54 | 6512146.82 | 2080   | 172 | 2017 |
| 3502770 | 95924.70  | 97002.80  | 641345.20 | 715822.01 | 6512032.69 | 6513302.55 | 2042   | 117 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3502771 | 94791.40 | 95807.80  | 715728.83 | 786030.45 | 6510333.49 | 6512028.64 | 2075   | 162 | 2017 |
| 3502780 | 94711.80 | 95852.10  | 641350.93 | 717799.50 | 6512184.38 | 6513506.42 | 2042   | 117 | 2017 |
| 3502781 | 93684.20 | 94667.50  | 717709.64 | 786035.18 | 6510534.34 | 6512188.13 | 2075   | 162 | 2017 |
| 3502790 | 93503.50 | 94583.70  | 641352.96 | 715834.17 | 6512426.18 | 6513704.36 | 2042   | 117 | 2017 |
| 3502791 | 92419.00 | 93442.40  | 715735.95 | 786044.44 | 6510733.68 | 6512430.72 | 2075   | 162 | 2017 |
| 3502800 | 92197.30 | 93353.50  | 641353.98 | 719788.17 | 6512537.92 | 6513903.38 | 2042   | 117 | 2017 |
| 3502801 | 91337.90 | 92307.10  | 719691.85 | 786049.95 | 6510932.59 | 6512544.84 | 2075   | 162 | 2017 |
| 3502810 | 91015.10 | 92099.10  | 641356.96 | 715840.23 | 6512826.32 | 6514105.44 | 2042   | 117 | 2017 |
| 3502811 | 90094.60 | 91102.50  | 715747.24 | 786053.20 | 6511133.49 | 6512829.52 | 2075   | 162 | 2017 |
| 3502820 | 89742.90 | 90894.40  | 641361.60 | 719796.50 | 6512945.87 | 6514304.09 | 2042   | 117 | 2017 |
| 3502821 | 89001.90 | 89961.70  | 719702.66 | 786060.23 | 6511334.72 | 6512944.03 | 2075   | 162 | 2017 |
| 3502830 | 88486.40 | 89616.90  | 641360.23 | 719799.57 | 6513139.26 | 6514501.70 | 2042   | 117 | 2017 |
| 3502831 | 87782.20 | 88749.00  | 719702.68 | 786062.46 | 6511530.31 | 6513146.04 | 2075   | 162 | 2017 |
| 3502840 | 87221.60 | 88404.10  | 641363.48 | 721767.42 | 6513294.55 | 6514698.01 | 2042   | 117 | 2017 |
| 3502841 | 86725.60 | 87646.60  | 721676.66 | 786068.90 | 6511731.86 | 6513300.24 | 2075   | 162 | 2017 |
| 3502850 | 85993.30 | 87089.80  | 641365.42 | 717830.77 | 6513579.02 | 6514897.19 | 2042   | 117 | 2017 |
| 3502851 | 85477.80 | 86476.40  | 717742.51 | 786075.00 | 6511930.98 | 6513580.64 | 2075   | 162 | 2017 |
| 3502860 | 84743.10 | 85895.90  | 641368.01 | 719811.69 | 6513737.77 | 6515100.45 | 2042   | 117 | 2017 |
| 3502861 | 84395.50 | 85359.00  | 719718.95 | 786079.44 | 6512128.38 | 6513739.00 | 2075   | 162 | 2017 |
| 3502870 | 82833.70 | 84627.20  | 641370.33 | 765196.63 | 6512881.85 | 6515300.49 | 2042   | 117 | 2017 |
| 3502871 | 94995.20 | 95294.20  | 765103.60 | 786085.40 | 6512331.31 | 6512884.22 | 2079   | 167 | 2017 |
| 3502880 | 99372.50 | 101500.00 | 641378.46 | 786089.40 | 6512529.41 | 6515500.94 | 2041   | 116 | 2017 |
| 3502890 | 98082.10 | 99248.80  | 641375.88 | 721794.53 | 6514296.29 | 6515697.18 | 2041   | 116 | 2017 |
| 3502891 | 90047.10 | 90974.90  | 721703.40 | 786094.47 | 6512730.84 | 6514302.07 | 2077   | 165 | 2017 |
| 3502900 | 96786.80 | 97993.10  | 641380.53 | 723769.66 | 6514445.08 | 6515896.65 | 2041   | 116 | 2017 |
| 3502901 | 91215.40 | 92111.20  | 723681.56 | 786099.26 | 6512926.82 | 6514456.33 | 2077   | 165 | 2017 |
| 3502910 | 95505.30 | 96684.70  | 641384.51 | 721806.88 | 6514697.17 | 6516096.17 | 2041   | 116 | 2017 |
| 3502911 | 92212.80 | 93136.10  | 721710.65 | 786110.52 | 6513129.79 | 6514698.18 | 2077   | 165 | 2017 |
| 3502920 | 94145.60 | 95354.60  | 641389.23 | 723777.44 | 6514847.22 | 6516296.82 | 2041   | 116 | 2017 |
| 3502921 | 93357.20 | 94256.60  | 723688.88 | 786113.00 | 6513326.52 | 6514853.46 | 2077   | 165 | 2017 |
| 3502930 | 92890.00 | 94038.60  | 641386.71 | 719840.86 | 6515132.45 | 6516497.25 | 2041   | 116 | 2017 |
| 3502931 | 94376.00 | 95321.40  | 719746.96 | 786120.99 | 6513524.18 | 6515138.73 | 2077   | 165 | 2017 |
| 3502940 | 91577.60 | 92770.30  | 641395.51 | 723787.65 | 6515251.70 | 6516698.12 | 2041   | 116 | 2017 |
| 3502941 | 95572.60 | 96468.10  | 723699.86 | 786124.39 | 6513724.73 | 6515250.73 | 2077   | 165 | 2017 |
| 3502950 | 90259.50 | 91444.80  | 641391.65 | 721820.34 | 6515495.15 | 6516895.86 | 2041   | 116 | 2017 |
| 3502951 | 96568.90 | 97495.30  | 721729.41 | 786126.65 | 6513924.71 | 6515494.86 | 2077   | 165 | 2017 |
| 3502960 | 88928.90 | 90160.60  | 641396.16 | 723796.51 | 6515645.25 | 6517095.17 | 2041   | 116 | 2017 |
| 3502961 | 97733.50 | 98634.90  | 723705.13 | 786138.67 | 6514124.29 | 6515651.15 | 2077   | 165 | 2017 |
| 3502970 | 87659.40 | 88805.50  | 641397.19 | 719853.67 | 6515935.22 | 6517291.75 | 2041   | 116 | 2017 |
| 3502971 | 98749.80 | 99702.60  | 719760.83 | 786141.76 | 6514329.18 | 6515936.59 | 2077   | 165 | 2017 |
| 3502980 | 86336.10 | 87538.00  | 641400.76 | 723806.52 | 6516047.33 | 6517489.19 | 2041   | 116 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3502981 | 99919.80  | 100814.80 | 723711.31 | 786145.87 | 6514522.58 | 6516051.53 | 2077   | 165 | 2017 |
| 3502990 | 85365.20  | 86217.40  | 641406.07 | 700123.17 | 6516730.40 | 6517694.37 | 2041   | 116 | 2017 |
| 3502991 | 88328.60  | 89556.90  | 700034.43 | 786153.44 | 6514723.05 | 6516736.25 | 2080   | 172 | 2017 |
| 3503000 | 103598.50 | 105701.10 | 641412.14 | 786154.50 | 6514920.01 | 6517896.52 | 2040   | 115 | 2017 |
| 3503010 | 101999.10 | 103493.80 | 641412.59 | 741582.31 | 6516254.84 | 6518092.39 | 2040   | 115 | 2017 |
| 3503011 | 82917.00  | 83556.20  | 741488.38 | 786164.56 | 6515122.33 | 6516254.89 | 2078   | 166 | 2017 |
| 3503020 | 100388.20 | 101907.10 | 641411.75 | 743559.92 | 6516408.88 | 6518291.88 | 2040   | 115 | 2017 |
| 3503021 | 83824.30  | 84439.20  | 743466.52 | 786169.07 | 6515322.03 | 6516406.22 | 2078   | 166 | 2017 |
| 3503030 | 99080.80  | 100288.90 | 641415.55 | 721854.46 | 6517087.57 | 6518488.02 | 2040   | 115 | 2017 |
| 3503031 | 84557.20  | 85477.40  | 721764.90 | 786173.53 | 6515521.71 | 6517090.80 | 2078   | 166 | 2017 |
| 3503040 | 97724.70  | 98966.20  | 641421.43 | 725803.50 | 6517200.16 | 6518694.06 | 2040   | 115 | 2017 |
| 3503041 | 85764.10  | 86632.90  | 725709.47 | 786178.64 | 6515721.09 | 6517204.96 | 2078   | 166 | 2017 |
| 3503050 | 96370.00  | 97603.40  | 641421.75 | 723835.98 | 6517445.26 | 6518888.02 | 2040   | 115 | 2017 |
| 3503051 | 86757.70  | 87645.30  | 723743.91 | 786184.34 | 6515921.67 | 6517448.94 | 2078   | 166 | 2017 |
| 3503060 | 95053.90  | 96281.60  | 641421.63 | 725812.41 | 6517597.36 | 6519083.90 | 2040   | 115 | 2017 |
| 3503061 | 87907.70  | 88775.30  | 725719.31 | 786187.92 | 6516119.40 | 6517609.28 | 2078   | 166 | 2017 |
| 3503070 | 93675.40  | 94914.80  | 641428.20 | 723842.25 | 6517842.17 | 6519289.62 | 2040   | 115 | 2017 |
| 3503071 | 88900.10  | 89793.00  | 723749.47 | 786193.72 | 6516321.35 | 6517844.68 | 2078   | 166 | 2017 |
| 3503080 | 92362.00  | 93590.70  | 641428.59 | 725819.86 | 6517997.95 | 6519486.80 | 2040   | 115 | 2017 |
| 3503081 | 90052.00  | 90921.10  | 725727.59 | 786203.61 | 6516520.21 | 6518002.78 | 2078   | 166 | 2017 |
| 3503090 | 91057.20  | 92258.60  | 641433.42 | 721874.42 | 6518286.15 | 6519686.02 | 2040   | 115 | 2017 |
| 3503091 | 91035.20  | 91955.00  | 721782.94 | 786204.29 | 6516715.97 | 6518286.29 | 2078   | 166 | 2017 |
| 3503100 | 89701.70  | 90923.80  | 641433.59 | 725828.07 | 6518395.50 | 6519881.74 | 2040   | 115 | 2017 |
| 3503101 | 92211.60  | 93075.60  | 725735.29 | 786213.70 | 6516915.08 | 6518401.26 | 2078   | 166 | 2017 |
| 3503110 | 88719.30  | 89574.40  | 641439.56 | 700171.38 | 6519119.73 | 6520083.62 | 2040   | 115 | 2017 |
| 3503111 | 89661.40  | 90924.00  | 700079.27 | 786219.69 | 6517115.90 | 6519124.77 | 2080   | 172 | 2017 |
| 3503121 | 89565.70  | 91638.80  | 641440.36 | 786222.46 | 6517317.81 | 6520284.46 | 2079   | 167 | 2017 |
| 3503130 | 82366.30  | 84472.30  | 641444.83 | 786228.31 | 6517516.15 | 6520483.29 | 2038   | 108 | 2017 |
| 3503141 | 87082.90  | 89174.00  | 641443.23 | 786234.31 | 6517713.84 | 6520683.36 | 2051   | 130 | 2017 |
| 3503151 | 84834.90  | 86960.80  | 641451.18 | 786237.88 | 6517913.92 | 6520880.02 | 2051   | 130 | 2017 |
| 3503161 | 82632.30  | 84724.10  | 641455.07 | 786244.86 | 6518111.54 | 6521081.64 | 2051   | 130 | 2017 |
| 3503171 | 96384.40  | 98493.70  | 641452.82 | 786247.80 | 6518315.33 | 6521282.32 | 2050   | 128 | 2017 |
| 3503181 | 94159.40  | 96258.70  | 641458.85 | 786254.19 | 6518516.16 | 6521481.48 | 2050   | 128 | 2017 |
| 3503191 | 91879.90  | 94026.80  | 641460.01 | 786260.99 | 6518713.69 | 6521681.86 | 2050   | 128 | 2017 |
| 3503201 | 89652.30  | 91740.10  | 641463.72 | 786263.51 | 6518915.31 | 6521876.61 | 2050   | 128 | 2017 |
| 3503211 | 87359.50  | 89547.10  | 641467.92 | 786273.49 | 6519111.23 | 6522079.31 | 2050   | 128 | 2017 |
| 3503221 | 85143.20  | 87230.10  | 641466.26 | 786277.79 | 6519304.89 | 6522274.31 | 2050   | 128 | 2017 |
| 3503231 | 96216.50  | 98495.10  | 641473.60 | 786280.84 | 6519511.36 | 6522479.38 | 2049   | 127 | 2017 |
| 3503241 | 94706.00  | 96074.70  | 641473.66 | 735764.60 | 6520973.12 | 6522672.20 | 2049   | 127 | 2017 |
| 3503242 | 83042.80  | 83771.50  | 735670.08 | 786289.41 | 6519707.84 | 6520977.01 | 2050   | 128 | 2017 |
| 3503251 | 93015.10  | 94562.00  | 641475.88 | 741694.93 | 6521037.88 | 6522877.13 | 2049   | 127 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3503252 | 84366.40 | 85036.70  | 741597.48 | 786294.40 | 6519911.86 | 6521037.10 | 2050   | 128 | 2017 |
| 3503260 | 98950.80 | 101053.80 | 641478.68 | 786295.75 | 6520110.16 | 6523072.30 | 2036   | 103 | 2017 |
| 3503270 | 97585.40 | 98816.90  | 641481.36 | 725903.68 | 6521784.64 | 6523275.52 | 2036   | 103 | 2017 |
| 3503271 | 85352.70 | 86230.60  | 725810.97 | 786302.67 | 6520306.55 | 6521791.10 | 2069   | 156 | 2017 |
| 3503280 | 96205.40 | 97466.50  | 641485.19 | 727877.99 | 6521944.69 | 6523470.33 | 2036   | 103 | 2017 |
| 3503281 | 86353.00 | 87202.20  | 727788.03 | 786307.36 | 6520508.58 | 6521949.49 | 2069   | 156 | 2017 |
| 3503290 | 94841.80 | 96072.70  | 641489.86 | 725916.43 | 6522188.22 | 6523671.27 | 2036   | 103 | 2017 |
| 3503291 | 87490.80 | 88374.30  | 725822.29 | 786317.32 | 6520704.86 | 6522194.91 | 2069   | 156 | 2017 |
| 3503300 | 93460.70 | 94727.60  | 641493.19 | 727891.72 | 6522344.75 | 6523869.13 | 2036   | 103 | 2017 |
| 3503301 | 89614.90 | 90455.80  | 727795.34 | 786319.58 | 6520904.89 | 6522349.48 | 2069   | 156 | 2017 |
| 3503310 | 92112.10 | 93318.20  | 641490.82 | 723950.49 | 6522631.19 | 6524071.63 | 2036   | 103 | 2017 |
| 3503311 | 88490.50 | 89386.20  | 723856.30 | 786327.20 | 6521105.51 | 6522633.61 | 2069   | 156 | 2017 |
| 3503320 | 90700.10 | 91961.50  | 641498.68 | 727898.26 | 6522738.03 | 6524271.16 | 2036   | 103 | 2017 |
| 3503321 | 91710.80 | 92568.80  | 727807.37 | 786329.96 | 6521304.56 | 6522749.75 | 2069   | 156 | 2017 |
| 3503330 | 89327.60 | 90556.20  | 641495.54 | 725933.95 | 6522986.05 | 6524470.10 | 2036   | 103 | 2017 |
| 3503331 | 90564.70 | 91437.00  | 725837.15 | 786340.74 | 6521514.66 | 6522990.60 | 2069   | 156 | 2017 |
| 3503340 | 87866.30 | 89141.60  | 641502.21 | 727904.51 | 6523139.19 | 6524670.04 | 2036   | 103 | 2017 |
| 3503341 | 93751.40 | 94611.30  | 727813.97 | 786345.12 | 6521704.84 | 6523143.54 | 2069   | 156 | 2017 |
| 3503350 | 86467.00 | 87685.70  | 641500.18 | 725939.32 | 6523387.19 | 6524870.26 | 2036   | 103 | 2017 |
| 3503351 | 92684.30 | 93548.50  | 725842.17 | 786349.62 | 6521904.47 | 6523388.89 | 2069   | 156 | 2017 |
| 3503360 | 85044.80 | 86338.80  | 641504.37 | 727914.62 | 6523543.90 | 6525068.64 | 2036   | 103 | 2017 |
| 3503361 | 94739.00 | 95586.90  | 727824.23 | 786351.57 | 6522105.33 | 6523540.96 | 2069   | 156 | 2017 |
| 3503370 | 82809.50 | 84899.90  | 641509.66 | 786356.17 | 6522303.77 | 6525268.83 | 2036   | 103 | 2017 |
| 3503380 | 98269.70 | 100371.70 | 641510.31 | 786367.56 | 6522501.12 | 6525468.33 | 2035   | 102 | 2017 |
| 3503390 | 96710.80 | 98157.50  | 641517.17 | 741755.27 | 6523826.51 | 6525667.10 | 2035   | 102 | 2017 |
| 3503391 | 96833.70 | 97470.70  | 741666.03 | 786369.86 | 6522704.40 | 6523830.87 | 2069   | 156 | 2017 |
| 3503400 | 95118.10 | 96620.30  | 641516.84 | 743737.57 | 6523982.23 | 6525884.47 | 2035   | 102 | 2017 |
| 3503401 | 97719.90 | 98346.20  | 743644.88 | 786375.83 | 6522902.57 | 6523982.44 | 2069   | 156 | 2017 |
| 3503410 | 93759.60 | 94994.10  | 641517.94 | 725964.18 | 6524580.87 | 6526063.32 | 2035   | 102 | 2017 |
| 3503411 | 95863.60 | 96736.50  | 725873.43 | 786377.59 | 6523098.20 | 6524584.78 | 2069   | 156 | 2017 |
| 3503420 | 92402.60 | 93655.20  | 641524.88 | 727943.91 | 6524737.00 | 6526264.73 | 2035   | 102 | 2017 |
| 3503421 | 85882.50 | 86720.90  | 727846.78 | 786385.07 | 6523301.93 | 6524739.68 | 2079   | 167 | 2017 |
| 3503430 | 91034.20 | 92274.40  | 641525.84 | 725973.52 | 6524979.73 | 6526466.23 | 2035   | 102 | 2017 |
| 3503431 | 86855.70 | 87716.90  | 725880.50 | 786389.89 | 6523498.82 | 6524984.51 | 2079   | 167 | 2017 |
| 3503440 | 89692.80 | 90930.60  | 641527.88 | 727952.82 | 6525142.33 | 6526665.31 | 2035   | 102 | 2017 |
| 3503441 | 98565.00 | 99404.50  | 727858.78 | 786397.91 | 6523702.33 | 6525141.28 | 2078   | 166 | 2017 |
| 3503450 | 88387.10 | 89584.40  | 641527.42 | 724005.96 | 6525427.33 | 6526863.32 | 2035   | 102 | 2017 |
| 3503451 | 97438.60 | 98329.80  | 723906.69 | 786400.72 | 6523902.80 | 6525420.39 | 2078   | 166 | 2017 |
| 3503460 | 86980.80 | 88242.80  | 641532.66 | 727956.17 | 6525542.06 | 6527063.21 | 2035   | 102 | 2017 |
| 3503461 | 96473.10 | 97308.40  | 727862.19 | 786410.72 | 6524098.10 | 6525536.95 | 2078   | 166 | 2017 |
| 3503470 | 85677.60 | 86869.80  | 641534.65 | 724014.86 | 6525823.50 | 6527264.63 | 2035   | 102 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3503471 | 95296.40  | 96191.70  | 723917.42 | 786410.69 | 6524297.54 | 6525821.71 | 2078   | 166 | 2017 |
| 3503480 | 84260.30  | 85525.00  | 641536.38 | 727968.82 | 6525931.46 | 6527464.85 | 2035   | 102 | 2017 |
| 3503481 | 94330.30  | 95165.70  | 727874.19 | 786421.10 | 6524497.70 | 6525936.93 | 2078   | 166 | 2017 |
| 3503490 | 82033.80  | 84115.70  | 641538.48 | 786425.24 | 6524699.58 | 6527660.05 | 2035   | 102 | 2017 |
| 3503500 | 98880.10  | 100977.20 | 641547.55 | 786427.03 | 6524893.85 | 6527862.45 | 2034   | 99  | 2017 |
| 3503510 | 97514.10  | 98767.70  | 641546.42 | 727981.23 | 6526532.66 | 6528058.88 | 2034   | 99  | 2017 |
| 3503511 | 93246.20  | 94088.40  | 727889.19 | 786434.80 | 6525095.50 | 6526532.30 | 2078   | 166 | 2017 |
| 3503520 | 96138.60  | 97413.90  | 641548.21 | 729960.19 | 6526688.03 | 6528259.36 | 2034   | 99  | 2017 |
| 3503521 | 99097.00  | 99929.50  | 729866.71 | 786439.40 | 6525297.16 | 6526691.04 | 2073   | 160 | 2017 |
| 3503530 | 94770.20  | 96028.80  | 641552.10 | 727989.99 | 6526935.58 | 6528458.68 | 2034   | 99  | 2017 |
| 3503531 | 98013.30  | 98855.20  | 727900.97 | 786445.06 | 6525493.05 | 6526933.10 | 2073   | 160 | 2017 |
| 3503540 | 93373.50  | 94665.30  | 641557.05 | 729970.14 | 6527086.73 | 6528655.65 | 2034   | 99  | 2017 |
| 3503541 | 97068.80  | 97893.90  | 729871.73 | 786448.03 | 6525699.43 | 6527091.50 | 2073   | 160 | 2017 |
| 3503550 | 92007.00  | 93252.50  | 641560.67 | 727999.86 | 6527329.64 | 6528856.78 | 2034   | 99  | 2017 |
| 3503551 | 95927.70  | 96777.20  | 727907.07 | 786458.50 | 6525893.49 | 6527334.14 | 2073   | 160 | 2017 |
| 3503560 | 90608.60  | 91897.50  | 641561.65 | 729975.18 | 6527489.75 | 6529057.14 | 2034   | 99  | 2017 |
| 3503561 | 94980.40  | 95817.60  | 729885.75 | 786461.25 | 6526096.27 | 6527489.45 | 2073   | 160 | 2017 |
| 3503570 | 89232.80  | 90479.40  | 641562.02 | 728008.71 | 6527729.07 | 6529254.11 | 2034   | 99  | 2017 |
| 3503571 | 93904.10  | 94738.20  | 727915.02 | 786465.21 | 6526294.84 | 6527730.68 | 2073   | 160 | 2017 |
| 3503580 | 87844.40  | 89138.00  | 641567.04 | 729990.25 | 6527887.21 | 6529457.27 | 2034   | 99  | 2017 |
| 3503581 | 83968.60  | 84813.10  | 729891.97 | 786476.39 | 6526488.97 | 6527890.02 | 2073   | 160 | 2017 |
| 3503590 | 86475.50  | 87727.20  | 641569.73 | 728024.22 | 6528129.14 | 6529655.56 | 2034   | 99  | 2017 |
| 3503591 | 82894.40  | 83726.40  | 727929.75 | 786479.41 | 6526687.26 | 6528131.94 | 2073   | 160 | 2017 |
| 3503600 | 85090.40  | 86375.00  | 641571.24 | 729994.70 | 6528286.46 | 6529853.04 | 2034   | 99  | 2017 |
| 3503601 | 99633.50  | 100450.80 | 729901.61 | 786483.05 | 6526887.51 | 6528288.46 | 2072   | 159 | 2017 |
| 3503610 | 82876.10  | 84960.00  | 641574.92 | 786489.44 | 6527089.73 | 6530058.50 | 2034   | 99  | 2017 |
| 3503620 | 98231.70  | 100354.20 | 641577.45 | 786494.63 | 6527288.93 | 6530255.01 | 2033   | 98  | 2017 |
| 3503630 | 96643.40  | 98145.90  | 641578.88 | 743847.46 | 6528569.33 | 6530454.80 | 2033   | 98  | 2017 |
| 3503631 | 100573.60 | 101186.10 | 743757.05 | 786503.46 | 6527490.07 | 6528574.17 | 2072   | 159 | 2017 |
| 3503640 | 94980.00  | 96473.90  | 641583.71 | 745827.85 | 6528722.63 | 6530651.41 | 2033   | 98  | 2017 |
| 3503641 | 101424.10 | 102014.80 | 745735.08 | 786504.68 | 6527689.64 | 6528725.16 | 2072   | 159 | 2017 |
| 3503650 | 93579.00  | 94852.50  | 641583.63 | 726069.26 | 6529367.53 | 6530852.69 | 2033   | 98  | 2017 |
| 3503651 | 98540.50  | 99411.10  | 725976.95 | 786510.18 | 6527888.60 | 6529370.00 | 2072   | 159 | 2017 |
| 3503660 | 92179.70  | 93422.70  | 641588.94 | 728047.55 | 6529525.21 | 6531047.40 | 2033   | 98  | 2017 |
| 3503661 | 97561.10  | 98417.10  | 727953.22 | 786514.73 | 6528088.73 | 6529523.92 | 2072   | 159 | 2017 |
| 3503670 | 90794.00  | 92073.10  | 641590.64 | 726077.79 | 6529764.71 | 6531249.01 | 2033   | 98  | 2017 |
| 3503671 | 96454.90  | 97315.30  | 725984.90 | 786525.23 | 6528288.12 | 6529765.69 | 2072   | 159 | 2017 |
| 3503680 | 89387.10  | 90638.00  | 641596.18 | 728054.78 | 6529921.69 | 6531445.81 | 2033   | 98  | 2017 |
| 3503681 | 95484.80  | 96334.20  | 727961.33 | 786524.13 | 6528484.72 | 6529927.24 | 2072   | 159 | 2017 |
| 3503690 | 88002.70  | 89272.00  | 641593.42 | 728059.74 | 6530121.73 | 6531650.04 | 2033   | 98  | 2017 |
| 3503691 | 94386.00  | 95222.20  | 727966.90 | 786536.62 | 6528686.33 | 6530122.21 | 2072   | 159 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME     | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|----------|-----------|-----------|------------|------------|--------|-----|------|
| 3503700 | 86616.50 | 87862.20 | 641601.03 | 728065.92 | 6530322.39 | 6531847.66 | 2033   | 98  | 2017 |
| 3503701 | 93390.00 | 94273.80 | 727971.96 | 786539.44 | 6528881.99 | 6530323.06 | 2072   | 159 | 2017 |
| 3503710 | 85281.70 | 86516.10 | 641604.60 | 726096.25 | 6530562.98 | 6532047.01 | 2033   | 98  | 2017 |
| 3503711 | 92259.30 | 93126.70 | 725999.62 | 786544.22 | 6529086.20 | 6530564.26 | 2072   | 159 | 2017 |
| 3503720 | 83870.60 | 85116.60 | 641607.63 | 728074.79 | 6530722.19 | 6532247.24 | 2033   | 98  | 2017 |
| 3503721 | 91258.60 | 92116.40 | 727979.46 | 786547.29 | 6529286.01 | 6530720.13 | 2072   | 159 | 2017 |
| 3503730 | 81616.70 | 83752.40 | 641609.30 | 786556.58 | 6529479.73 | 6532444.88 | 2033   | 98  | 2017 |
| 3503740 | 97880.90 | 99945.20 | 641613.08 | 786560.61 | 6529685.26 | 6532642.68 | 2032   | 97  | 2017 |
| 3503750 | 96220.20 | 97777.50 | 641609.04 | 747851.01 | 6530865.90 | 6532846.24 | 2032   | 97  | 2017 |
| 3503751 | 89962.10 | 90562.90 | 747758.15 | 786567.02 | 6529884.31 | 6530874.97 | 2059   | 141 | 2017 |
| 3503760 | 94542.80 | 96103.00 | 641612.72 | 749834.23 | 6531023.95 | 6533040.28 | 2032   | 97  | 2017 |
| 3503761 | 90833.50 | 91363.40 | 749745.95 | 786569.14 | 6530082.42 | 6531021.55 | 2059   | 141 | 2017 |
| 3503770 | 93092.50 | 94428.70 | 641619.11 | 730072.25 | 6531672.82 | 6533245.88 | 2032   | 97  | 2017 |
| 3503771 | 87932.00 | 88765.20 | 729979.11 | 786579.04 | 6530283.57 | 6531675.80 | 2059   | 141 | 2017 |
| 3503780 | 91661.00 | 92969.80 | 641620.65 | 732056.77 | 6531831.66 | 6533443.78 | 2032   | 97  | 2017 |
| 3503781 | 89028.60 | 89833.90 | 731965.62 | 786582.42 | 6530480.31 | 6531832.99 | 2059   | 141 | 2017 |
| 3503790 | 90243.30 | 91541.90 | 641621.10 | 730078.55 | 6532070.44 | 6533641.20 | 2032   | 97  | 2017 |
| 3503791 | 85902.10 | 86744.00 | 729985.20 | 786586.96 | 6530677.19 | 6532074.15 | 2059   | 141 | 2017 |
| 3503800 | 88827.80 | 90128.20 | 641625.56 | 732061.71 | 6532226.80 | 6533843.62 | 2032   | 97  | 2017 |
| 3503801 | 87007.30 | 87804.50 | 731966.17 | 786591.11 | 6530876.43 | 6532227.61 | 2059   | 141 | 2017 |
| 3503810 | 87429.00 | 88718.40 | 641630.42 | 730091.01 | 6532468.93 | 6534040.81 | 2032   | 97  | 2017 |
| 3503811 | 83892.30 | 84713.00 | 729993.09 | 786600.06 | 6531080.78 | 6532472.35 | 2059   | 141 | 2017 |
| 3503820 | 86016.40 | 87314.40 | 641629.06 | 732070.95 | 6532627.37 | 6534239.35 | 2032   | 97  | 2017 |
| 3503821 | 84983.10 | 85791.30 | 731977.24 | 786603.93 | 6531278.30 | 6532631.55 | 2059   | 141 | 2017 |
| 3503830 | 84621.40 | 85906.20 | 641636.16 | 730101.19 | 6532869.34 | 6534441.51 | 2032   | 97  | 2017 |
| 3503831 | 81847.20 | 82671.70 | 730004.17 | 786607.89 | 6531479.89 | 6532872.07 | 2059   | 141 | 2017 |
| 3503840 | 83191.60 | 84510.20 | 641638.44 | 732078.42 | 6533026.13 | 6534637.67 | 2032   | 97  | 2017 |
| 3503841 | 82917.40 | 83760.00 | 731989.55 | 786613.89 | 6531677.05 | 6533025.08 | 2059   | 141 | 2017 |
| 3503850 | 80979.80 | 83068.10 | 641639.04 | 786619.27 | 6531878.60 | 6534839.77 | 2032   | 97  | 2017 |
| 3503861 | 90665.20 | 92722.60 | 641645.42 | 786628.30 | 6532083.69 | 6535033.05 | 2049   | 127 | 2017 |
| 3503871 | 88335.90 | 90536.50 | 641643.02 | 786628.47 | 6532278.20 | 6535238.77 | 2049   | 127 | 2017 |
| 3503881 | 86132.50 | 88217.10 | 641648.89 | 786632.63 | 6532474.75 | 6535438.29 | 2049   | 127 | 2017 |
| 3503891 | 83844.50 | 86015.70 | 641647.12 | 786644.13 | 6532674.75 | 6535636.53 | 2049   | 127 | 2017 |
| 3503901 | 81639.30 | 83725.50 | 641656.62 | 786644.55 | 6532873.58 | 6535834.41 | 2049   | 127 | 2017 |
| 3503911 | 97678.70 | 99739.40 | 641655.92 | 786653.31 | 6533073.88 | 6536038.63 | 2048   | 125 | 2017 |
| 3503921 | 95358.50 | 97539.90 | 641656.95 | 786658.89 | 6533273.82 | 6536234.07 | 2048   | 125 | 2017 |
| 3503931 | 93139.30 | 95225.90 | 641660.00 | 786663.50 | 6533473.80 | 6536434.41 | 2048   | 125 | 2017 |
| 3503941 | 90852.40 | 93026.90 | 641665.22 | 786668.78 | 6533676.31 | 6536635.67 | 2048   | 125 | 2017 |
| 3503951 | 88673.90 | 90750.80 | 641668.74 | 786672.70 | 6533873.36 | 6536831.99 | 2048   | 125 | 2017 |
| 3503961 | 86424.30 | 88554.70 | 641667.25 | 786679.54 | 6534071.61 | 6537031.81 | 2048   | 125 | 2017 |
| 3503971 | 84216.30 | 86316.00 | 641669.64 | 786687.48 | 6534270.66 | 6537231.82 | 2048   | 125 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3503980 | 95945.60  | 98031.40  | 641673.44 | 786693.46 | 6534473.87 | 6537428.59 | 2014   | 76  | 2017 |
| 3503990 | 94507.60  | 95814.80  | 641678.24 | 732142.72 | 6536014.46 | 6537628.31 | 2014   | 76  | 2017 |
| 3503991 | 96947.60  | 97759.70  | 732052.81 | 786698.19 | 6534672.08 | 6536020.97 | 2063   | 147 | 2017 |
| 3504000 | 93072.10  | 94389.80  | 641681.86 | 734129.64 | 6536175.18 | 6537828.49 | 2014   | 76  | 2017 |
| 3504001 | 97986.50  | 98741.10  | 734034.06 | 786702.83 | 6534868.03 | 6536175.57 | 2063   | 147 | 2017 |
| 3504010 | 91639.00  | 92946.20  | 641683.86 | 732155.99 | 6536419.67 | 6538027.12 | 2014   | 76  | 2017 |
| 3504011 | 98859.80  | 99693.30  | 732057.76 | 786704.29 | 6535068.96 | 6536420.50 | 2063   | 147 | 2017 |
| 3504020 | 90120.60  | 91476.50  | 641687.87 | 736108.48 | 6536526.84 | 6538228.62 | 2014   | 76  | 2017 |
| 3504021 | 99966.20  | 100695.00 | 736016.74 | 786714.03 | 6535268.06 | 6536528.76 | 2063   | 147 | 2017 |
| 3504030 | 88645.10  | 89982.00  | 641691.29 | 734141.37 | 6536774.32 | 6538427.56 | 2014   | 76  | 2017 |
| 3504031 | 85453.70  | 86224.60  | 734051.20 | 786719.60 | 6535468.15 | 6536770.65 | 2072   | 159 | 2017 |
| 3504040 | 87121.50  | 88490.40  | 641690.45 | 736123.89 | 6536929.37 | 6538629.24 | 2014   | 76  | 2017 |
| 3504041 | 86353.00  | 87082.30  | 736028.53 | 786722.40 | 6535666.15 | 6536924.57 | 2072   | 159 | 2017 |
| 3504050 | 85643.90  | 86971.90  | 641695.84 | 734146.56 | 6537168.15 | 6538824.75 | 2014   | 76  | 2017 |
| 3504051 | 88205.40  | 88962.00  | 734055.21 | 786729.43 | 6535866.08 | 6537173.69 | 2072   | 159 | 2017 |
| 3504060 | 84098.40  | 85477.10  | 641698.84 | 736134.90 | 6537324.13 | 6539025.40 | 2014   | 76  | 2017 |
| 3504061 | 87341.20  | 88086.40  | 736039.02 | 786733.22 | 6536066.99 | 6537327.81 | 2072   | 159 | 2017 |
| 3504070 | 82614.10  | 83948.20  | 641698.90 | 734159.40 | 6537570.92 | 6539226.99 | 2014   | 76  | 2017 |
| 3504071 | 89222.90  | 89997.00  | 734061.11 | 786742.30 | 6536266.28 | 6537572.37 | 2072   | 159 | 2017 |
| 3504080 | 81092.60  | 82469.50  | 641704.39 | 736138.66 | 6537724.98 | 6539426.73 | 2014   | 76  | 2017 |
| 3504081 | 90122.60  | 90855.70  | 736044.06 | 786747.52 | 6536465.34 | 6537727.68 | 2072   | 159 | 2017 |
| 3504090 | 78855.70  | 80942.70  | 641706.35 | 786747.95 | 6536661.50 | 6539622.73 | 2014   | 76  | 2017 |
| 3504100 | 78300.20  | 80405.20  | 641704.07 | 786754.22 | 6536867.32 | 6539822.96 | 2013   | 75  | 2017 |
| 3504110 | 85526.60  | 87662.90  | 641710.02 | 786758.98 | 6537061.20 | 6540022.48 | 2009   | 71  | 2017 |
| 3504120 | 83341.80  | 85425.30  | 641712.89 | 786763.40 | 6537268.76 | 6540222.16 | 2009   | 71  | 2017 |
| 3504130 | 81122.90  | 83231.70  | 641713.44 | 786770.24 | 6537464.39 | 6540420.60 | 2009   | 71  | 2017 |
| 3504140 | 78922.00  | 81005.30  | 641715.78 | 786776.63 | 6537662.63 | 6540620.17 | 2009   | 71  | 2017 |
| 3504150 | 88084.90  | 90321.40  | 641722.17 | 786782.66 | 6537856.44 | 6540817.62 | 2008   | 70  | 2017 |
| 3504161 | 81977.20  | 84087.50  | 641726.65 | 786786.58 | 6538060.86 | 6541020.68 | 2048   | 125 | 2017 |
| 3504170 | 101512.70 | 103096.90 | 677997.54 | 786792.39 | 6538257.81 | 6540665.65 | 2008   | 70  | 2017 |
| 3504180 | 103207.10 | 104963.10 | 678029.17 | 786801.22 | 6538457.48 | 6540867.52 | 2008   | 70  | 2017 |
| 3504190 | 105099.70 | 106689.20 | 678065.52 | 786802.77 | 6538657.65 | 6541066.73 | 2008   | 70  | 2017 |
| 3504200 | 87784.90  | 89371.90  | 678095.99 | 786810.53 | 6538852.05 | 6541263.02 | 2009   | 71  | 2017 |
| 3504210 | 89493.20  | 91085.20  | 678123.30 | 786816.76 | 6539057.85 | 6541460.58 | 2009   | 71  | 2017 |
| 3504220 | 91218.50  | 92803.10  | 678156.52 | 786820.34 | 6539256.75 | 6541660.19 | 2009   | 71  | 2017 |
| 3504230 | 92900.60  | 94484.00  | 678188.08 | 786827.25 | 6539454.19 | 6541860.00 | 2009   | 71  | 2017 |
| 3504240 | 95287.50  | 96863.50  | 678220.81 | 786830.04 | 6539655.95 | 6542056.76 | 2012   | 74  | 2017 |
| 3504250 | 86265.60  | 87129.00  | 678252.57 | 736219.03 | 6541116.65 | 6542256.99 | 2013   | 75  | 2017 |
| 3504251 | 98495.30  | 99247.40  | 736127.69 | 786837.49 | 6539856.26 | 6541119.21 | 2062   | 146 | 2017 |
| 3504260 | 87259.00  | 88064.50  | 678289.50 | 734240.54 | 6541355.59 | 6542457.26 | 2013   | 75  | 2017 |
| 3504261 | 99504.50  | 100258.90 | 734153.34 | 786842.21 | 6540056.39 | 6541362.60 | 2062   | 146 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3504270 | 88213.80  | 89080.80  | 678315.60 | 736226.05 | 6541510.47 | 6542654.78 | 2013   | 75  | 2017 |
| 3504271 | 100361.70 | 101160.70 | 736135.54 | 786850.57 | 6540257.06 | 6541520.86 | 2062   | 146 | 2017 |
| 3504280 | 89224.60  | 90029.90  | 678348.69 | 734252.17 | 6541753.31 | 6542851.43 | 2013   | 75  | 2017 |
| 3504281 | 97274.10  | 98044.60  | 734159.25 | 786852.35 | 6540462.56 | 6541759.55 | 2065   | 151 | 2017 |
| 3504290 | 90184.30  | 91041.30  | 678379.12 | 736241.80 | 6541911.74 | 6543053.79 | 2013   | 75  | 2017 |
| 3504291 | 98308.40  | 99034.50  | 736145.35 | 786857.08 | 6540652.06 | 6541918.33 | 2065   | 151 | 2017 |
| 3504300 | 91183.20  | 91985.70  | 678416.78 | 734263.02 | 6542162.04 | 6543252.37 | 2013   | 75  | 2017 |
| 3504301 | 99172.60  | 99928.90  | 734163.04 | 786867.78 | 6540853.59 | 6542160.73 | 2065   | 151 | 2017 |
| 3504310 | 92133.70  | 92985.50  | 678445.12 | 736243.98 | 6542309.63 | 6543449.94 | 2013   | 75  | 2017 |
| 3504311 | 100157.50 | 100888.00 | 736148.51 | 786872.12 | 6541051.33 | 6542316.53 | 2065   | 151 | 2017 |
| 3504320 | 93127.80  | 93925.30  | 678480.68 | 734269.19 | 6542553.56 | 6543647.23 | 2013   | 75  | 2017 |
| 3504321 | 96807.10  | 97556.10  | 734176.46 | 786874.57 | 6541253.63 | 6542559.36 | 2068   | 155 | 2017 |
| 3504330 | 94055.00  | 94889.50  | 678508.43 | 736252.97 | 6542715.98 | 6543850.01 | 2013   | 75  | 2017 |
| 3504331 | 97771.10  | 98493.00  | 736159.57 | 786883.37 | 6541451.21 | 6542712.64 | 2068   | 155 | 2017 |
| 3504340 | 95034.50  | 95820.90  | 678540.49 | 734278.56 | 6542953.96 | 6544043.27 | 2013   | 75  | 2017 |
| 3504341 | 98614.90  | 99378.40  | 734183.19 | 786882.88 | 6541649.70 | 6542958.40 | 2068   | 155 | 2017 |
| 3504350 | 95949.90  | 97506.00  | 678574.96 | 786888.75 | 6541850.94 | 6544242.20 | 2013   | 75  | 2017 |
| 3504360 | 98140.80  | 99719.10  | 678604.69 | 786899.06 | 6542047.84 | 6544443.75 | 2026   | 91  | 2017 |
| 3504370 | 97221.40  | 98021.70  | 678634.54 | 734293.94 | 6543555.22 | 6544649.28 | 2026   | 91  | 2017 |
| 3504371 | 99593.00  | 100346.00 | 734202.27 | 786905.36 | 6542250.27 | 6543554.19 | 2068   | 155 | 2017 |
| 3504380 | 96271.90  | 97116.10  | 678670.97 | 736276.09 | 6543705.96 | 6544845.06 | 2026   | 91  | 2017 |
| 3504381 | 99777.60  | 100508.50 | 736185.62 | 786905.96 | 6542447.25 | 6543709.81 | 2074   | 161 | 2017 |
| 3504390 | 95341.70  | 96145.10  | 678704.89 | 734303.05 | 6543945.13 | 6545039.09 | 2026   | 91  | 2017 |
| 3504391 | 99979.40  | 100728.40 | 734209.70 | 786913.26 | 6542647.76 | 6543954.51 | 2075   | 162 | 2017 |
| 3504400 | 94408.60  | 95249.00  | 678700.92 | 736281.84 | 6544101.18 | 6545238.29 | 2026   | 91  | 2017 |
| 3504401 | 84632.80  | 85374.70  | 736188.00 | 786916.63 | 6542847.24 | 6544107.97 | 2079   | 167 | 2017 |
| 3504410 | 93487.70  | 94294.50  | 678702.99 | 734310.02 | 6544349.66 | 6545437.18 | 2026   | 91  | 2017 |
| 3504411 | 82700.40  | 83453.00  | 734219.78 | 786923.72 | 6543052.90 | 6544349.48 | 2079   | 167 | 2017 |
| 3504420 | 92539.20  | 93381.20  | 678797.07 | 736290.43 | 6544503.29 | 6545643.85 | 2026   | 91  | 2017 |
| 3504421 | 83765.90  | 84492.60  | 736200.55 | 786928.72 | 6543242.98 | 6544507.27 | 2079   | 167 | 2017 |
| 3504430 | 91629.00  | 92433.90  | 678830.77 | 734315.89 | 6544745.40 | 6545839.09 | 2026   | 91  | 2017 |
| 3504431 | 97215.50  | 97978.40  | 734222.37 | 786936.44 | 6543447.86 | 6544748.20 | 2067   | 154 | 2017 |
| 3504440 | 90680.70  | 91530.90  | 678862.92 | 736305.71 | 6544904.43 | 6546037.70 | 2026   | 91  | 2017 |
| 3504441 | 98233.50  | 98967.40  | 736209.32 | 786942.82 | 6543645.67 | 6544907.21 | 2067   | 154 | 2017 |
| 3504450 | 89750.20  | 90557.40  | 678896.11 | 734324.81 | 6545147.84 | 6546235.70 | 2026   | 91  | 2017 |
| 3504451 | 99096.60  | 99854.50  | 734234.65 | 786942.53 | 6543845.22 | 6545152.45 | 2067   | 154 | 2017 |
| 3504460 | 88805.60  | 89647.00  | 678923.32 | 736310.15 | 6545301.74 | 6546432.68 | 2026   | 91  | 2017 |
| 3504461 | 100089.00 | 100818.30 | 736221.82 | 786951.97 | 6544045.14 | 6545303.88 | 2067   | 154 | 2017 |
| 3504470 | 87906.50  | 88703.20  | 678954.53 | 734331.83 | 6545541.20 | 6546637.95 | 2026   | 91  | 2017 |
| 3504471 | 97421.70  | 98178.90  | 734235.58 | 786956.59 | 6544246.90 | 6545548.50 | 2066   | 152 | 2017 |
| 3504480 | 86939.00  | 87792.30  | 678986.66 | 736318.33 | 6545698.25 | 6546831.43 | 2026   | 91  | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3504481 | 98415.80  | 99145.30  | 736227.96 | 786962.81 | 6544441.99 | 6545701.94 | 2066   | 152 | 2017 |
| 3504490 | 86045.90  | 86844.10  | 679022.66 | 734341.49 | 6545946.09 | 6547031.34 | 2026   | 91  | 2017 |
| 3504491 | 99260.10  | 100013.90 | 734249.70 | 786967.41 | 6544646.12 | 6545950.39 | 2066   | 152 | 2017 |
| 3504500 | 85086.80  | 85937.50  | 679050.64 | 736334.52 | 6546103.67 | 6547232.15 | 2026   | 91  | 2017 |
| 3504501 | 100277.80 | 101015.50 | 736235.48 | 786970.99 | 6544843.43 | 6546099.80 | 2066   | 152 | 2017 |
| 3504510 | 84178.80  | 84972.00  | 679086.57 | 734355.59 | 6546340.19 | 6547425.76 | 2026   | 91  | 2017 |
| 3504511 | 99274.70  | 100038.10 | 734261.30 | 786975.55 | 6545042.90 | 6546344.99 | 2064   | 148 | 2017 |
| 3504520 | 83181.20  | 84071.10  | 679119.16 | 736333.05 | 6546497.55 | 6547624.88 | 2026   | 91  | 2017 |
| 3504521 | 100313.90 | 101049.30 | 736243.67 | 786982.69 | 6545240.51 | 6546502.34 | 2064   | 148 | 2017 |
| 3504530 | 81489.00  | 83050.00  | 679151.15 | 786986.56 | 6545442.78 | 6547826.46 | 2026   | 91  | 2017 |
| 3504540 | 77809.50  | 79368.80  | 679181.63 | 786993.02 | 6545638.96 | 6548020.16 | 2012   | 74  | 2017 |
| 3504550 | 94707.20  | 96283.80  | 679212.05 | 787000.01 | 6545838.94 | 6548227.95 | 2011   | 73  | 2017 |
| 3504560 | 93552.50  | 94577.60  | 679244.36 | 750217.65 | 6546977.49 | 6548421.18 | 2011   | 73  | 2017 |
| 3504561 | 99860.60  | 100389.20 | 750125.94 | 787007.43 | 6546039.78 | 6546971.00 | 2026   | 91  | 2017 |
| 3504570 | 92331.50  | 93386.80  | 679275.41 | 752201.01 | 6547136.82 | 6548623.32 | 2011   | 73  | 2017 |
| 3504571 | 100622.40 | 101137.60 | 752102.07 | 787011.45 | 6546237.02 | 6547128.85 | 2026   | 91  | 2017 |
| 3504580 | 91405.70  | 92207.40  | 679310.45 | 734386.30 | 6547736.38 | 6548820.11 | 2011   | 73  | 2017 |
| 3504581 | 99227.70  | 99986.60  | 734297.29 | 787013.38 | 6546437.17 | 6547739.23 | 2020   | 84  | 2017 |
| 3504590 | 90439.30  | 91266.70  | 679344.33 | 736367.90 | 6547897.17 | 6549022.39 | 2011   | 73  | 2017 |
| 3504591 | 100195.60 | 100951.60 | 736279.38 | 787019.09 | 6546638.18 | 6547893.93 | 2020   | 84  | 2017 |
| 3504600 | 89526.60  | 90324.30  | 679375.08 | 734397.09 | 6548137.15 | 6549220.88 | 2011   | 73  | 2017 |
| 3504601 | 87625.80  | 88382.30  | 734302.34 | 787023.66 | 6546838.18 | 6548140.10 | 2064   | 148 | 2017 |
| 3504610 | 88554.10  | 89382.60  | 679407.46 | 736374.92 | 6548297.26 | 6549419.22 | 2011   | 73  | 2017 |
| 3504611 | 88630.70  | 89372.10  | 736286.17 | 787032.81 | 6547035.28 | 6548297.09 | 2064   | 148 | 2017 |
| 3504620 | 87624.80  | 88421.60  | 679436.36 | 734399.17 | 6548537.55 | 6549613.29 | 2011   | 73  | 2017 |
| 3504621 | 85732.70  | 86502.90  | 734310.13 | 787035.45 | 6547232.65 | 6548536.46 | 2064   | 148 | 2017 |
| 3504630 | 86641.80  | 87465.80  | 679467.64 | 736384.85 | 6548693.66 | 6549813.72 | 2011   | 73  | 2017 |
| 3504631 | 86780.50  | 87517.50  | 736292.89 | 787041.43 | 6547431.83 | 6548693.78 | 2064   | 148 | 2017 |
| 3504640 | 85726.90  | 86523.40  | 679498.96 | 734415.94 | 6548938.01 | 6550014.77 | 2011   | 73  | 2017 |
| 3504641 | 83886.70  | 84646.70  | 734320.45 | 787046.01 | 6547634.69 | 6548937.13 | 2064   | 148 | 2017 |
| 3504650 | 84756.00  | 85587.20  | 679532.64 | 736394.82 | 6549094.18 | 6550214.19 | 2011   | 73  | 2017 |
| 3504651 | 84883.10  | 85611.10  | 736303.39 | 787054.76 | 6547831.35 | 6549092.11 | 2064   | 148 | 2017 |
| 3504660 | 83829.10  | 84626.30  | 679566.98 | 734420.00 | 6549335.91 | 6550414.01 | 2011   | 73  | 2017 |
| 3504661 | 82990.30  | 83755.50  | 734331.09 | 787061.86 | 6548030.14 | 6549334.86 | 2064   | 148 | 2017 |
| 3504670 | 82879.40  | 83697.60  | 679600.66 | 736406.71 | 6549488.18 | 6550611.63 | 2011   | 73  | 2017 |
| 3504671 | 81931.80  | 82676.50  | 736311.17 | 787061.44 | 6548229.51 | 6549493.84 | 2064   | 148 | 2017 |
| 3504680 | 81957.20  | 82747.80  | 679631.83 | 734425.48 | 6549738.89 | 6550810.01 | 2011   | 73  | 2017 |
| 3504681 | 91380.00  | 92142.30  | 734332.49 | 787072.88 | 6548430.78 | 6549735.73 | 2061   | 143 | 2017 |
| 3504690 | 80966.80  | 81787.80  | 679659.32 | 736414.61 | 6549894.52 | 6551010.51 | 2011   | 73  | 2017 |
| 3504691 | 92377.80  | 93103.10  | 736321.96 | 787075.28 | 6548633.41 | 6549893.82 | 2061   | 143 | 2017 |
| 3504700 | 79283.00  | 80835.80  | 679693.87 | 787077.52 | 6548831.33 | 6551210.74 | 2011   | 73  | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3504710 | 97455.70  | 98991.90  | 679722.65 | 787083.98 | 6549032.46 | 6551409.68 | 2010   | 72  | 2017 |
| 3504720 | 95791.20  | 97335.90  | 679758.49 | 787094.69 | 6549232.67 | 6551601.89 | 2010   | 72  | 2017 |
| 3504730 | 94155.50  | 95678.30  | 679787.18 | 787095.31 | 6549431.91 | 6551803.84 | 2010   | 72  | 2017 |
| 3504740 | 92491.40  | 94033.60  | 679822.82 | 787100.43 | 6549631.03 | 6552005.48 | 2010   | 72  | 2017 |
| 3504750 | 90829.60  | 92359.30  | 679856.00 | 787110.94 | 6549829.41 | 6552202.41 | 2010   | 72  | 2017 |
| 3504760 | 89172.70  | 90703.00  | 679886.87 | 787114.98 | 6550029.74 | 6552404.00 | 2010   | 72  | 2017 |
| 3504770 | 87486.00  | 89025.70  | 679916.02 | 787117.43 | 6550227.47 | 6552596.78 | 2010   | 72  | 2017 |
| 3504780 | 85811.50  | 87343.50  | 679949.04 | 787125.10 | 6550428.52 | 6552799.12 | 2010   | 72  | 2017 |
| 3504790 | 84143.90  | 85687.30  | 679979.16 | 787132.27 | 6550626.30 | 6552999.03 | 2010   | 72  | 2017 |
| 3504800 | 82476.90  | 84006.40  | 680009.85 | 787134.95 | 6550825.83 | 6553192.70 | 2010   | 72  | 2017 |
| 3504810 | 80799.90  | 82349.30  | 680049.08 | 787140.43 | 6551024.81 | 6553398.41 | 2010   | 72  | 2017 |
| 3504820 | 79139.00  | 80673.00  | 680099.46 | 787145.12 | 6551224.21 | 6553597.54 | 2010   | 72  | 2017 |
| 3504830 | 101759.80 | 103308.90 | 680154.80 | 787149.25 | 6551421.01 | 6553792.01 | 2004   | 65  | 2017 |
| 3504840 | 100825.90 | 101622.90 | 680209.35 | 734500.55 | 6552921.93 | 6553991.51 | 2004   | 65  | 2017 |
| 3504841 | 91772.50  | 92528.60  | 734406.43 | 787155.47 | 6551625.52 | 6552928.81 | 2059   | 141 | 2017 |
| 3504850 | 99865.00  | 100698.10 | 680256.94 | 736485.93 | 6553081.39 | 6554188.86 | 2004   | 65  | 2017 |
| 3504851 | 92808.80  | 93560.60  | 736394.07 | 787160.97 | 6551827.56 | 6553081.74 | 2059   | 141 | 2017 |
| 3504860 | 98928.00  | 99713.40  | 680312.20 | 734510.29 | 6553325.89 | 6554386.73 | 2004   | 65  | 2017 |
| 3504861 | 93670.50  | 94456.50  | 734413.31 | 787164.50 | 6552021.40 | 6553324.02 | 2059   | 141 | 2017 |
| 3504870 | 97955.00  | 98772.00  | 680364.42 | 736497.63 | 6553477.33 | 6554587.99 | 2004   | 65  | 2017 |
| 3504871 | 94724.20  | 95454.20  | 736399.61 | 787172.23 | 6552218.00 | 6553485.82 | 2059   | 141 | 2017 |
| 3504880 | 97023.10  | 97803.10  | 680418.66 | 734516.03 | 6553717.13 | 6554787.49 | 2004   | 65  | 2017 |
| 3504881 | 95593.60  | 96353.40  | 734423.79 | 787178.44 | 6552420.20 | 6553726.73 | 2059   | 141 | 2017 |
| 3504890 | 96102.70  | 96909.40  | 680469.74 | 736501.21 | 6553874.12 | 6554982.28 | 2004   | 65  | 2017 |
| 3504891 | 96631.30  | 97378.60  | 736410.43 | 787184.33 | 6552621.42 | 6553878.76 | 2059   | 141 | 2017 |
| 3504900 | 95203.40  | 95981.20  | 680521.85 | 734530.18 | 6554119.97 | 6555179.16 | 2004   | 65  | 2017 |
| 3504901 | 97486.80  | 98265.20  | 734432.23 | 787187.90 | 6552821.84 | 6554122.83 | 2059   | 141 | 2017 |
| 3504910 | 94243.60  | 95053.40  | 680571.51 | 736512.52 | 6554274.17 | 6555382.19 | 2004   | 65  | 2017 |
| 3504911 | 98506.30  | 99239.60  | 736415.32 | 787192.83 | 6553017.66 | 6554277.45 | 2059   | 141 | 2017 |
| 3504920 | 93314.60  | 94096.30  | 680623.38 | 734536.31 | 6554515.92 | 6555580.71 | 2004   | 65  | 2017 |
| 3504921 | 99366.00  | 100128.30 | 734446.43 | 787201.75 | 6553218.42 | 6554522.98 | 2059   | 141 | 2017 |
| 3504930 | 92400.10  | 93217.20  | 680678.17 | 736520.09 | 6554678.23 | 6555779.95 | 2004   | 65  | 2017 |
| 3504931 | 100398.50 | 101160.60 | 736430.39 | 787205.05 | 6553419.05 | 6554678.17 | 2059   | 141 | 2017 |
| 3504940 | 90888.00  | 91663.80  | 680729.90 | 734545.07 | 6554920.28 | 6555981.72 | 2004   | 65  | 2017 |
| 3504941 | 89500.30  | 90274.70  | 734449.57 | 787212.24 | 6553619.37 | 6554916.63 | 2061   | 143 | 2017 |
| 3504950 | 89925.30  | 90742.40  | 680785.98 | 736529.81 | 6555071.75 | 6556180.02 | 2004   | 65  | 2017 |
| 3504951 | 90520.20  | 91248.80  | 736436.99 | 787215.69 | 6553816.60 | 6555076.07 | 2061   | 143 | 2017 |
| 3504960 | 89018.40  | 89602.30  | 694840.73 | 734553.21 | 6555311.37 | 6556124.72 | 2004   | 65  | 2017 |
| 3504961 | 91821.30  | 92026.60  | 680837.14 | 694929.70 | 6556122.98 | 6556372.87 | 2004   | 65  | 2017 |
| 3504962 | 87668.70  | 88434.70  | 734458.22 | 787221.10 | 6554015.79 | 6555321.82 | 2061   | 143 | 2017 |
| 3504970 | 88070.20  | 88870.10  | 680873.09 | 736538.94 | 6555471.22 | 6556571.94 | 2004   | 65  | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3504971 | 88659.00  | 89378.00  | 736443.93 | 787226.95 | 6554216.88 | 6555473.82 | 2061   | 143 | 2017 |
| 3504980 | 87150.60  | 87937.20  | 680880.09 | 734562.56 | 6555714.42 | 6556769.56 | 2004   | 65  | 2017 |
| 3504981 | 85773.70  | 86552.90  | 734467.31 | 787231.38 | 6554420.60 | 6555717.69 | 2061   | 143 | 2017 |
| 3504990 | 86187.80  | 87001.10  | 680996.20 | 736544.88 | 6555868.88 | 6556971.34 | 2004   | 65  | 2017 |
| 3504991 | 86812.80  | 87550.00  | 736450.64 | 787237.70 | 6554614.48 | 6555873.47 | 2061   | 143 | 2017 |
| 3505000 | 84534.90  | 86076.70  | 681043.21 | 787244.28 | 6554816.91 | 6557196.92 | 2004   | 65  | 2017 |
| 3505011 | 95904.80  | 97444.30  | 681101.86 | 787251.02 | 6555017.50 | 6557364.86 | 2079   | 167 | 2017 |
| 3505021 | 84058.10  | 84773.60  | 738450.44 | 787252.57 | 6555213.35 | 6556426.06 | 2061   | 143 | 2017 |
| 3505022 | 98550.10  | 99383.00  | 681150.03 | 738542.54 | 6556424.95 | 6557567.27 | 2079   | 167 | 2017 |
| 3505031 | 84995.10  | 85663.10  | 740432.28 | 787260.40 | 6555412.13 | 6556579.21 | 2061   | 143 | 2017 |
| 3505032 | 97580.50  | 98422.50  | 681204.47 | 740526.39 | 6556579.82 | 6557761.95 | 2079   | 167 | 2017 |
| 3505040 | 98352.30  | 99126.70  | 681256.45 | 734588.05 | 6556912.05 | 6557963.51 | 2003   | 64  | 2017 |
| 3505041 | 82162.20  | 82942.00  | 734494.95 | 787262.02 | 6555613.68 | 6556914.27 | 2061   | 143 | 2017 |
| 3505050 | 97451.30  | 98242.50  | 681310.11 | 736569.17 | 6557067.70 | 6558158.57 | 2003   | 64  | 2017 |
| 3505051 | 83196.00  | 83931.10  | 736474.77 | 787270.96 | 6555811.64 | 6557069.26 | 2061   | 143 | 2017 |
| 3505060 | 96561.70  | 97330.60  | 681363.47 | 734597.51 | 6557314.11 | 6558359.78 | 2003   | 64  | 2017 |
| 3505061 | 104185.30 | 104949.80 | 734508.50 | 787275.64 | 6556009.68 | 6557315.67 | 2055   | 134 | 2017 |
| 3505070 | 95656.50  | 96451.10  | 681416.07 | 736577.16 | 6557467.92 | 6558556.06 | 2003   | 64  | 2017 |
| 3505071 | 105184.00 | 105921.20 | 736484.02 | 787281.33 | 6556215.26 | 6557464.96 | 2055   | 134 | 2017 |
| 3505080 | 94760.40  | 95537.10  | 681464.78 | 734604.95 | 6557707.94 | 6558758.78 | 2003   | 64  | 2017 |
| 3505081 | 100967.60 | 101745.40 | 734511.08 | 787289.69 | 6556411.79 | 6557712.92 | 2050   | 128 | 2017 |
| 3505090 | 93853.00  | 94657.50  | 681515.13 | 736595.77 | 6557863.36 | 6558955.57 | 2003   | 64  | 2017 |
| 3505091 | 101991.50 | 102738.40 | 736500.23 | 787292.08 | 6556609.67 | 6557865.32 | 2050   | 128 | 2017 |
| 3505100 | 92956.30  | 93727.80  | 681568.03 | 734613.12 | 6558114.74 | 6559157.81 | 2003   | 64  | 2017 |
| 3505101 | 99113.20  | 99876.20  | 734519.70 | 787295.27 | 6556806.03 | 6558114.12 | 2050   | 128 | 2017 |
| 3505110 | 92049.80  | 92846.80  | 681624.89 | 736605.66 | 6558265.32 | 6559351.82 | 2003   | 64  | 2017 |
| 3505111 | 100124.30 | 100859.10 | 736514.86 | 787301.34 | 6557009.68 | 6558267.87 | 2050   | 128 | 2017 |
| 3505120 | 91146.90  | 91919.00  | 681673.70 | 734624.45 | 6558509.36 | 6559550.22 | 2003   | 64  | 2017 |
| 3505121 | 99082.50  | 99842.80  | 734530.04 | 787310.09 | 6557212.77 | 6558513.81 | 2049   | 127 | 2017 |
| 3505130 | 90260.70  | 91054.00  | 681727.52 | 736614.98 | 6558662.30 | 6559749.62 | 2003   | 64  | 2017 |
| 3505131 | 100075.00 | 100858.90 | 736521.70 | 787314.37 | 6557409.67 | 6558664.61 | 2049   | 127 | 2017 |
| 3505140 | 89371.40  | 90137.40  | 681782.54 | 734633.57 | 6558906.59 | 6559948.26 | 2003   | 64  | 2017 |
| 3505141 | 100148.80 | 100916.10 | 734540.25 | 787315.89 | 6557601.25 | 6558912.77 | 2048   | 125 | 2017 |
| 3505150 | 88474.90  | 89270.40  | 681832.21 | 736622.61 | 6559060.42 | 6560141.76 | 2003   | 64  | 2017 |
| 3505151 | 101168.10 | 101907.80 | 736527.40 | 787320.27 | 6557804.77 | 6559061.64 | 2048   | 125 | 2017 |
| 3505160 | 87580.90  | 88344.60  | 681885.21 | 734637.50 | 6559306.36 | 6560343.94 | 2003   | 64  | 2017 |
| 3505161 | 100807.40 | 101568.60 | 734545.81 | 787327.42 | 6558007.60 | 6559307.41 | 2045   | 122 | 2017 |
| 3505170 | 86665.30  | 87459.60  | 681935.71 | 736628.30 | 6559461.34 | 6560543.37 | 2003   | 64  | 2017 |
| 3505171 | 101853.70 | 102630.20 | 736535.91 | 787334.59 | 6558207.67 | 6559462.76 | 2045   | 122 | 2017 |
| 3505180 | 85756.50  | 86543.30  | 681992.31 | 736635.28 | 6559659.36 | 6560743.69 | 2003   | 64  | 2017 |
| 3505181 | 99894.30  | 100628.10 | 736539.57 | 787343.85 | 6558409.17 | 6559664.92 | 2042   | 117 | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3505190 | 84807.70  | 85628.00  | 682040.62 | 738621.86 | 6559814.79 | 6560939.26 | 2003   | 64  | 2017 |
| 3505191 | 100898.40 | 101619.20 | 738524.69 | 787346.05 | 6558605.38 | 6559820.58 | 2042   | 117 | 2017 |
| 3505200 | 83163.30  | 84684.30  | 682098.55 | 787348.74 | 6558805.78 | 6561140.43 | 2003   | 64  | 2017 |
| 3505210 | 96693.20  | 98208.80  | 682150.16 | 787355.93 | 6559004.11 | 6561336.38 | 2002   | 63  | 2017 |
| 3505220 | 95833.30  | 96578.50  | 682202.00 | 734672.33 | 6560503.79 | 6561535.47 | 2002   | 63  | 2017 |
| 3505221 | 99231.60  | 99996.90  | 734574.48 | 787364.16 | 6559205.76 | 6560504.57 | 2031   | 96  | 2017 |
| 3505230 | 94935.50  | 95722.80  | 682255.43 | 736657.41 | 6560655.82 | 6561733.52 | 2002   | 63  | 2017 |
| 3505231 | 99454.50  | 100194.90 | 736565.27 | 787368.50 | 6559401.36 | 6560661.81 | 2030   | 95  | 2017 |
| 3505240 | 94030.90  | 94776.30  | 682305.01 | 734680.23 | 6560901.14 | 6561931.90 | 2002   | 63  | 2017 |
| 3505241 | 98243.50  | 98999.80  | 734588.00 | 787371.25 | 6559604.35 | 6560904.86 | 2031   | 96  | 2017 |
| 3505250 | 93076.80  | 93871.90  | 682357.43 | 736668.53 | 6561058.28 | 6562132.80 | 2002   | 63  | 2017 |
| 3505251 | 103620.30 | 104355.40 | 736571.70 | 787376.92 | 6559801.68 | 6561060.12 | 2028   | 93  | 2017 |
| 3505260 | 92175.90  | 92929.30  | 682414.71 | 734685.47 | 6561300.76 | 6562332.10 | 2002   | 63  | 2017 |
| 3505261 | 80646.90  | 81401.20  | 734593.90 | 787381.61 | 6560000.87 | 6561303.63 | 2030   | 95  | 2017 |
| 3505270 | 91275.30  | 92061.70  | 682464.52 | 736673.82 | 6561455.78 | 6562527.78 | 2002   | 63  | 2017 |
| 3505271 | 99952.80  | 100684.00 | 736579.42 | 787387.23 | 6560197.60 | 6561455.27 | 2027   | 92  | 2017 |
| 3505280 | 90373.70  | 91121.60  | 682512.46 | 734698.71 | 6561699.59 | 6562723.67 | 2002   | 63  | 2017 |
| 3505281 | 84867.90  | 85612.90  | 734607.89 | 787392.54 | 6560400.23 | 6561701.07 | 2028   | 93  | 2017 |
| 3505290 | 89444.30  | 90238.60  | 682567.26 | 736683.69 | 6561856.46 | 6562925.37 | 2002   | 63  | 2017 |
| 3505291 | 81307.60  | 82031.20  | 736590.71 | 787399.27 | 6560598.42 | 6561852.12 | 2027   | 92  | 2017 |
| 3505300 | 88557.50  | 89316.80  | 682618.62 | 734705.61 | 6562096.03 | 6563123.18 | 2002   | 63  | 2017 |
| 3505301 | 96905.40  | 97691.40  | 734612.74 | 787405.03 | 6560801.74 | 6562099.70 | 2025   | 90  | 2017 |
| 3505310 | 87525.60  | 88305.50  | 682674.23 | 736692.96 | 6562252.29 | 6563324.57 | 2002   | 63  | 2017 |
| 3505311 | 78323.70  | 79049.40  | 736595.65 | 787407.01 | 6561000.05 | 6562256.02 | 2025   | 90  | 2017 |
| 3505320 | 86618.70  | 87366.10  | 682725.09 | 734715.16 | 6562494.06 | 6563517.83 | 2002   | 63  | 2017 |
| 3505321 | 96825.80  | 97594.60  | 734619.86 | 787412.39 | 6561198.12 | 6562497.66 | 2024   | 89  | 2017 |
| 3505330 | 85689.60  | 86477.70  | 682775.07 | 736700.70 | 6562650.12 | 6563716.29 | 2002   | 63  | 2017 |
| 3505331 | 97806.80  | 98539.40  | 736604.58 | 787419.50 | 6561395.86 | 6562648.71 | 2024   | 89  | 2017 |
| 3505340 | 84803.60  | 85569.40  | 682829.58 | 734722.64 | 6562893.92 | 6563917.54 | 2002   | 63  | 2017 |
| 3505341 | 96812.80  | 97574.80  | 734631.21 | 787425.61 | 6561595.04 | 6562895.37 | 2023   | 88  | 2017 |
| 3505350 | 83907.00  | 84687.40  | 682883.76 | 736705.41 | 6563050.18 | 6564117.49 | 2002   | 63  | 2017 |
| 3505351 | 78432.30  | 79164.10  | 736616.03 | 787428.71 | 6561795.92 | 6563052.86 | 2023   | 88  | 2017 |
| 3505360 | 83005.50  | 83748.20  | 682932.11 | 734735.39 | 6563296.81 | 6564315.74 | 2002   | 63  | 2017 |
| 3505361 | 98663.00  | 99423.60  | 734642.64 | 787437.71 | 6561992.64 | 6563297.96 | 2022   | 87  | 2017 |
| 3505370 | 82080.50  | 82871.60  | 682985.12 | 736720.77 | 6563449.87 | 6564511.62 | 2002   | 63  | 2017 |
| 3505371 | 80245.10  | 80983.80  | 736625.82 | 787438.84 | 6562195.98 | 6563452.51 | 2022   | 87  | 2017 |
| 3505380 | 81213.30  | 81960.70  | 682998.96 | 734738.91 | 6563690.95 | 6564713.62 | 2002   | 63  | 2017 |
| 3505381 | 96851.60  | 97612.10  | 734647.60 | 787449.37 | 6562395.37 | 6563694.23 | 2021   | 86  | 2017 |
| 3505390 | 80319.50  | 81088.80  | 683092.11 | 736731.31 | 6563846.07 | 6564908.33 | 2002   | 63  | 2017 |
| 3505391 | 95993.50  | 96727.70  | 736637.38 | 787453.13 | 6562593.49 | 6563848.33 | 2021   | 86  | 2017 |
| 3505400 | 78683.20  | 80172.20  | 683143.73 | 787461.52 | 6562792.95 | 6565107.47 | 2002   | 63  | 2017 |

**FLOWN LINES - MAGNETIC & ELEVATION - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3505410 | 96661.50  | 98175.80  | 683198.51 | 787465.00 | 6562993.66 | 6565308.19 | 2001   | 62  | 2017 |
| 3505420 | 95806.20  | 96546.00  | 683250.22 | 734756.61 | 6564493.89 | 6565506.47 | 2001   | 62  | 2017 |
| 3505421 | 77772.00  | 78534.70  | 734666.73 | 787467.58 | 6563192.97 | 6564490.53 | 2021   | 86  | 2017 |
| 3505430 | 94914.60  | 95686.70  | 683301.83 | 736747.05 | 6564650.32 | 6565702.13 | 2001   | 62  | 2017 |
| 3505431 | 98158.90  | 98893.00  | 736657.46 | 787472.34 | 6563389.72 | 6564645.57 | 2019   | 81  | 2017 |
| 3505440 | 94066.30  | 94806.30  | 683355.96 | 734764.99 | 6564890.38 | 6565905.29 | 2001   | 62  | 2017 |
| 3505441 | 97183.60  | 97934.70  | 734669.14 | 787478.89 | 6563587.44 | 6564891.59 | 2019   | 81  | 2017 |
| 3505450 | 93172.00  | 93947.60  | 683405.11 | 736753.68 | 6565045.84 | 6566102.93 | 2001   | 62  | 2017 |
| 3505451 | 96322.00  | 97054.30  | 736661.58 | 787488.24 | 6563789.58 | 6565045.30 | 2019   | 81  | 2017 |
| 3505460 | 92256.10  | 93035.00  | 683460.89 | 736759.47 | 6565240.54 | 6566300.53 | 2001   | 62  | 2017 |
| 3505461 | 98894.90  | 99622.90  | 736667.27 | 787493.26 | 6563988.83 | 6565245.60 | 2018   | 80  | 2017 |
| 3505470 | 91341.10  | 92081.80  | 683510.20 | 734856.70 | 6565485.56 | 6566496.20 | 2001   | 62  | 2017 |
| 3505471 | 99835.00  | 100478.40 | 742557.82 | 787494.36 | 6564184.61 | 6565312.87 | 2018   | 80  | 2017 |
| 3505472 | 95982.70  | 96153.70  | 732699.91 | 744691.13 | 6565261.66 | 6565530.06 | 2019   | 81  | 2017 |
| 3505480 | 90479.80  | 91213.90  | 683567.27 | 734778.79 | 6565685.46 | 6566696.08 | 2001   | 62  | 2017 |
| 3505481 | 95340.80  | 96088.50  | 734686.04 | 787504.80 | 6564391.18 | 6565690.23 | 2017   | 79  | 2017 |
| 3505490 | 89577.20  | 90355.10  | 683617.25 | 736769.38 | 6565842.76 | 6566896.95 | 2001   | 62  | 2017 |
| 3505491 | 96258.10  | 96974.30  | 736676.29 | 787510.19 | 6564586.32 | 6565845.37 | 2017   | 79  | 2017 |
| 3505500 | 88698.00  | 89431.00  | 683668.65 | 734788.54 | 6566081.97 | 6567096.77 | 2001   | 62  | 2017 |
| 3505501 | 97069.30  | 97831.70  | 734696.48 | 787513.25 | 6564786.27 | 6566086.97 | 2017   | 79  | 2017 |
| 3505510 | 87785.10  | 88549.40  | 683722.36 | 736779.90 | 6566237.65 | 6567294.25 | 2001   | 62  | 2017 |
| 3505511 | 98000.30  | 98731.30  | 736689.35 | 787519.45 | 6564986.50 | 6566242.15 | 2017   | 79  | 2017 |
| 3505520 | 86935.70  | 87664.20  | 683777.57 | 734798.13 | 6566483.06 | 6567490.56 | 2001   | 62  | 2017 |
| 3505521 | 98014.40  | 98769.80  | 734708.15 | 787522.97 | 6565188.45 | 6566489.44 | 2016   | 78  | 2017 |
| 3505530 | 86005.90  | 86768.20  | 683829.95 | 736789.90 | 6566638.66 | 6567688.88 | 2001   | 62  | 2017 |
| 3505531 | 98944.70  | 99672.80  | 736697.98 | 787528.89 | 6565386.57 | 6566641.75 | 2016   | 78  | 2017 |
| 3505540 | 85132.50  | 85858.70  | 683880.02 | 734807.97 | 6566883.28 | 6567887.79 | 2001   | 62  | 2017 |
| 3505541 | 99798.60  | 100545.90 | 734714.54 | 787531.43 | 6565584.70 | 6566890.29 | 2016   | 78  | 2017 |
| 3505550 | 84267.20  | 85037.80  | 683930.68 | 736796.53 | 6567036.17 | 6568084.79 | 2001   | 62  | 2017 |
| 3505551 | 100708.70 | 101457.60 | 736705.30 | 787542.97 | 6565781.61 | 6567040.79 | 2016   | 78  | 2017 |
| 3505560 | 83409.50  | 84131.00  | 683983.71 | 734820.49 | 6567284.57 | 6568286.57 | 2001   | 62  | 2017 |
| 3505561 | 100801.50 | 101563.50 | 734725.17 | 787545.27 | 6565981.10 | 6567280.11 | 2006   | 67  | 2017 |
| 3505570 | 82538.80  | 83309.60  | 684039.58 | 736806.67 | 6567437.11 | 6568485.70 | 2001   | 62  | 2017 |
| 3505571 | 81992.90  | 82730.80  | 736716.53 | 787550.24 | 6566184.72 | 6567440.10 | 2006   | 67  | 2017 |
| 3505580 | 81649.90  | 82375.00  | 684093.05 | 734825.75 | 6567683.33 | 6568686.41 | 2001   | 62  | 2017 |
| 3505581 | 96667.30  | 97434.30  | 734730.54 | 787552.51 | 6566384.60 | 6567683.47 | 2005   | 66  | 2017 |
| 3505590 | 80804.10  | 81564.10  | 684091.73 | 736817.49 | 6567838.84 | 6568882.13 | 2001   | 62  | 2017 |
| 3505591 | 77952.90  | 78689.30  | 736721.83 | 787561.09 | 6566585.39 | 6567845.68 | 2005   | 66  | 2017 |
| 3505600 | 79197.40  | 80676.80  | 684098.08 | 787557.92 | 6566788.66 | 6569081.34 | 2001   | 62  | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3590010 | 82637.00  | 83826.00  | 642024.43 | 643168.58 | 6458011.98 | 6541187.64 | 2007   | 68  | 2017 |
| 3590011 | 86149.00  | 87356.00  | 642027.19 | 643171.47 | 6458002.29 | 6541164.67 | 2052   | 131 | 2017 |
| 3590020 | 83951.00  | 85168.00  | 643988.05 | 645145.88 | 6458011.93 | 6541137.53 | 2007   | 68  | 2017 |
| 3590021 | 87455.00  | 88673.00  | 643988.68 | 645152.43 | 6457993.76 | 6541162.11 | 2052   | 131 | 2017 |
| 3590030 | 90513.00  | 91740.00  | 645949.21 | 647128.39 | 6457975.76 | 6541127.02 | 2008   | 70  | 2017 |
| 3590040 | 91902.00  | 93113.00  | 647903.98 | 649106.20 | 6457923.99 | 6541124.24 | 2008   | 70  | 2017 |
| 3590050 | 93209.00  | 94479.00  | 649872.97 | 651077.19 | 6457901.70 | 6541064.86 | 2008   | 70  | 2017 |
| 3590060 | 94638.00  | 95854.00  | 651834.70 | 653060.04 | 6457856.88 | 6541008.79 | 2008   | 70  | 2017 |
| 3590070 | 95949.00  | 97238.00  | 653791.14 | 655031.33 | 6457862.53 | 6540998.62 | 2008   | 70  | 2017 |
| 3590080 | 97326.00  | 98553.00  | 655758.47 | 657015.15 | 6457843.62 | 6540996.83 | 2008   | 70  | 2017 |
| 3590090 | 98718.00  | 99976.00  | 657719.40 | 658990.52 | 6457799.14 | 6540952.35 | 2008   | 70  | 2017 |
| 3590100 | 100052.00 | 101255.00 | 659682.92 | 660973.54 | 6457778.20 | 6540911.96 | 2008   | 70  | 2017 |
| 3590110 | 80923.00  | 82138.00  | 661642.63 | 662949.79 | 6457710.86 | 6540905.08 | 2013   | 75  | 2017 |
| 3590120 | 82258.00  | 83465.00  | 663606.31 | 664919.11 | 6457669.94 | 6540823.22 | 2013   | 75  | 2017 |
| 3590130 | 83582.00  | 84784.00  | 665568.01 | 666902.16 | 6457627.27 | 6540823.44 | 2013   | 75  | 2017 |
| 3590140 | 84908.00  | 86109.00  | 667530.08 | 668880.98 | 6457608.03 | 6540802.10 | 2013   | 75  | 2017 |
| 3590150 | 93973.00  | 95161.00  | 669493.23 | 670859.40 | 6457574.33 | 6540773.15 | 2012   | 74  | 2017 |
| 3590160 | 92623.00  | 93847.00  | 671454.26 | 672838.90 | 6457531.85 | 6540708.17 | 2012   | 74  | 2017 |
| 3590170 | 91290.00  | 92482.00  | 673416.96 | 674814.31 | 6457496.99 | 6540667.29 | 2012   | 74  | 2017 |
| 3590180 | 89923.00  | 91175.00  | 675377.15 | 676795.17 | 6457482.74 | 6540676.74 | 2012   | 74  | 2017 |
| 3590190 | 79559.00  | 80918.00  | 677343.24 | 678855.71 | 6457435.59 | 6545578.98 | 2012   | 74  | 2017 |
| 3590200 | 88167.00  | 89594.00  | 679301.05 | 681025.31 | 6457437.74 | 6556912.66 | 2012   | 74  | 2017 |
| 3590210 | 86434.00  | 88052.00  | 681265.59 | 683150.42 | 6457397.56 | 6564837.67 | 2012   | 74  | 2017 |
| 3590220 | 84694.00  | 86299.00  | 683225.86 | 685208.65 | 6457379.04 | 6569342.07 | 2012   | 74  | 2017 |
| 3590230 | 82859.00  | 84566.00  | 685187.84 | 687193.18 | 6457298.69 | 6569317.56 | 2012   | 74  | 2017 |
| 3590240 | 81120.00  | 82713.00  | 687154.74 | 689178.04 | 6457255.01 | 6569310.20 | 2012   | 74  | 2017 |
| 3590250 | 98571.00  | 100174.00 | 689115.33 | 691158.40 | 6457222.61 | 6569238.56 | 2006   | 67  | 2017 |
| 3590260 | 96862.00  | 98467.00  | 691074.15 | 693140.34 | 6457180.81 | 6569212.44 | 2006   | 67  | 2017 |
| 3590270 | 95157.00  | 96768.00  | 693037.24 | 695121.99 | 6457204.66 | 6569148.74 | 2006   | 67  | 2017 |
| 3590280 | 93464.00  | 95060.00  | 695000.47 | 697110.74 | 6457153.88 | 6569129.72 | 2006   | 67  | 2017 |
| 3590290 | 91745.00  | 93358.00  | 696962.20 | 699091.64 | 6457100.92 | 6569073.09 | 2006   | 67  | 2017 |
| 3590300 | 90047.00  | 91642.00  | 698928.21 | 701078.06 | 6457068.35 | 6569055.36 | 2006   | 67  | 2017 |
| 3590310 | 88333.00  | 89962.00  | 700886.64 | 703059.27 | 6457029.40 | 6569019.11 | 2006   | 67  | 2017 |
| 3590320 | 86604.00  | 88218.00  | 702847.21 | 705048.89 | 6456988.39 | 6568949.49 | 2006   | 67  | 2017 |
| 3590330 | 84895.00  | 86520.00  | 704811.09 | 707024.52 | 6456968.20 | 6568943.64 | 2006   | 67  | 2017 |
| 3590340 | 83158.00  | 84773.00  | 706772.84 | 709009.98 | 6456891.61 | 6568892.96 | 2006   | 67  | 2017 |
| 3590350 | 94686.00  | 96312.00  | 708734.18 | 710994.27 | 6456858.11 | 6568881.43 | 2005   | 66  | 2017 |
| 3590360 | 92920.00  | 94548.00  | 710694.35 | 712978.65 | 6456857.61 | 6568849.53 | 2005   | 66  | 2017 |
| 3590370 | 91180.00  | 92806.00  | 712660.11 | 714963.90 | 6456810.40 | 6568807.21 | 2005   | 66  | 2017 |
| 3590380 | 89426.00  | 91056.00  | 714624.39 | 716946.84 | 6456725.94 | 6568741.28 | 2005   | 66  | 2017 |
| 3590390 | 87656.00  | 89287.00  | 716581.17 | 718928.35 | 6456689.14 | 6568701.17 | 2005   | 66  | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3590400 | 85907.00  | 87534.00  | 718547.14 | 720910.74 | 6456665.19 | 6568632.98 | 2005   | 66  | 2017 |
| 3590410 | 84159.00  | 85776.00  | 720511.29 | 722894.79 | 6456616.09 | 6568639.53 | 2005   | 66  | 2017 |
| 3590420 | 82414.00  | 84029.00  | 722471.72 | 724881.23 | 6456583.95 | 6568566.08 | 2005   | 66  | 2017 |
| 3590430 | 80659.00  | 82283.00  | 724435.84 | 726862.54 | 6456501.82 | 6568518.59 | 2005   | 66  | 2017 |
| 3590440 | 78903.00  | 80532.00  | 726395.58 | 728848.36 | 6456470.14 | 6568482.22 | 2005   | 66  | 2017 |
| 3590450 | 78837.00  | 80494.00  | 728356.71 | 730832.16 | 6456464.47 | 6568459.23 | 2021   | 86  | 2017 |
| 3590460 | 94217.00  | 95804.00  | 730322.22 | 732810.98 | 6456433.16 | 6568397.36 | 2021   | 86  | 2017 |
| 3590470 | 81255.00  | 82882.00  | 732285.66 | 734794.89 | 6456377.85 | 6568373.03 | 2022   | 87  | 2017 |
| 3590480 | 96734.00  | 98377.00  | 734245.54 | 736776.55 | 6456321.07 | 6568316.40 | 2022   | 87  | 2017 |
| 3590490 | 79479.00  | 81137.00  | 736206.46 | 738760.98 | 6456282.22 | 6568265.84 | 2023   | 88  | 2017 |
| 3590500 | 94842.00  | 96448.00  | 738172.58 | 740747.49 | 6456211.10 | 6568224.26 | 2023   | 88  | 2017 |
| 3590510 | 79376.00  | 81060.00  | 740133.93 | 742728.99 | 6456210.13 | 6568213.33 | 2025   | 90  | 2017 |
| 3590520 | 94790.00  | 96369.00  | 742092.07 | 744715.43 | 6456152.78 | 6568121.05 | 2025   | 90  | 2017 |
| 3590530 | 82421.00  | 84066.00  | 744053.79 | 746700.66 | 6456087.50 | 6568111.01 | 2027   | 92  | 2017 |
| 3590540 | 97917.00  | 99522.00  | 746017.58 | 748684.56 | 6456057.98 | 6568064.20 | 2027   | 92  | 2017 |
| 3590550 | 86092.00  | 87736.00  | 747983.35 | 750667.36 | 6456005.30 | 6568008.88 | 2028   | 93  | 2017 |
| 3590560 | 101545.00 | 103131.00 | 749940.17 | 752649.35 | 6455954.07 | 6567929.10 | 2028   | 93  | 2017 |
| 3590570 | 81909.00  | 83510.00  | 751904.68 | 754633.21 | 6455872.01 | 6567943.15 | 2030   | 95  | 2017 |
| 3590580 | 97303.00  | 98928.00  | 753870.55 | 756621.03 | 6455859.88 | 6567895.64 | 2030   | 95  | 2017 |
| 3590590 | 80559.00  | 82181.00  | 755831.74 | 758602.09 | 6455777.78 | 6567794.24 | 2031   | 96  | 2017 |
| 3590600 | 96062.00  | 97750.00  | 757793.27 | 760582.71 | 6455727.87 | 6567739.04 | 2031   | 96  | 2017 |
| 3590610 | 82014.00  | 83622.00  | 759757.92 | 762570.05 | 6455700.39 | 6567698.94 | 2062   | 146 | 2017 |
| 3590620 | 94790.00  | 96402.00  | 761724.81 | 764555.22 | 6455662.60 | 6567646.56 | 2024   | 89  | 2017 |
| 3590630 | 79120.00  | 80748.00  | 763683.94 | 766536.81 | 6455591.51 | 6567628.29 | 2024   | 89  | 2017 |
| 3590640 | 97015.00  | 98699.00  | 765644.51 | 768521.58 | 6455526.63 | 6567545.13 | 2020   | 84  | 2017 |
| 3590650 | 81563.00  | 83172.00  | 767607.21 | 770500.82 | 6455495.44 | 6567518.67 | 2020   | 84  | 2017 |
| 3590660 | 93966.00  | 95560.00  | 769573.54 | 772489.35 | 6455431.82 | 6567469.02 | 2019   | 81  | 2017 |
| 3590670 | 78666.00  | 80279.00  | 771533.29 | 774472.37 | 6455378.47 | 6567383.38 | 2019   | 81  | 2017 |
| 3590680 | 96989.00  | 98578.00  | 773496.15 | 776456.44 | 6455348.54 | 6567365.26 | 2018   | 80  | 2017 |
| 3590690 | 81889.00  | 83477.00  | 775457.98 | 778440.58 | 6455280.78 | 6567334.02 | 2018   | 80  | 2017 |
| 3590700 | 93496.00  | 95097.00  | 777420.24 | 780421.72 | 6455257.46 | 6567254.10 | 2017   | 79  | 2017 |
| 3590710 | 78583.00  | 80175.00  | 779384.52 | 782408.91 | 6455165.52 | 6567206.53 | 2017   | 79  | 2017 |
| 3590720 | 96308.00  | 97894.00  | 781347.78 | 784395.72 | 6455137.54 | 6567184.44 | 2016   | 78  | 2017 |
| 3590730 | 81249.00  | 82904.00  | 783309.59 | 786374.93 | 6455052.92 | 6567114.68 | 2016   | 78  | 2017 |
| 3500010 | 83061.00  | 85124.00  | 640599.63 | 784520.40 | 6455278.40 | 6458275.40 | 2016   | 78  | 2017 |
| 3500020 | 85255.00  | 87346.00  | 640628.31 | 784486.85 | 6455477.35 | 6458472.28 | 2016   | 78  | 2017 |
| 3500030 | 87488.00  | 89555.00  | 640617.88 | 784492.75 | 6455680.09 | 6458676.92 | 2016   | 78  | 2017 |
| 3500040 | 89677.00  | 91778.00  | 640597.54 | 784525.28 | 6455879.99 | 6458877.55 | 2016   | 78  | 2017 |
| 3500050 | 91903.00  | 93942.00  | 640664.01 | 784492.96 | 6456078.13 | 6459073.86 | 2016   | 78  | 2017 |
| 3500060 | 94031.00  | 96117.00  | 640640.29 | 784526.87 | 6456275.90 | 6459273.29 | 2016   | 78  | 2017 |
| 3500070 | 80404.00  | 82464.00  | 640637.21 | 784500.16 | 6456474.77 | 6459473.55 | 2017   | 79  | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME     | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|----------|-----------|-----------|------------|------------|--------|-----|------|
| 3500080 | 82553.00 | 84610.00 | 640608.50 | 784515.72 | 6456675.71 | 6459673.94 | 2017   | 79  | 2017 |
| 3500090 | 84719.00 | 86793.00 | 640656.52 | 784552.14 | 6456879.06 | 6459870.03 | 2017   | 79  | 2017 |
| 3500100 | 86924.00 | 88982.00 | 640651.38 | 784534.40 | 6457077.27 | 6460067.51 | 2017   | 79  | 2017 |
| 3500110 | 89088.00 | 91152.00 | 640671.91 | 784554.63 | 6457277.43 | 6460268.57 | 2017   | 79  | 2017 |
| 3500120 | 91282.00 | 93323.00 | 640672.39 | 784508.76 | 6457475.03 | 6460465.42 | 2017   | 79  | 2017 |
| 3500130 | 83699.00 | 85764.00 | 640667.20 | 784559.44 | 6457673.96 | 6460671.06 | 2018   | 80  | 2017 |
| 3500140 | 85905.00 | 87961.00 | 640667.72 | 784561.59 | 6457871.69 | 6460867.90 | 2018   | 80  | 2017 |
| 3500150 | 88089.00 | 90147.00 | 640630.97 | 784589.84 | 6458074.81 | 6461070.13 | 2018   | 80  | 2017 |
| 3500160 | 90239.00 | 92317.00 | 640656.72 | 784561.56 | 6458269.69 | 6461270.24 | 2018   | 80  | 2017 |
| 3500170 | 92447.00 | 94504.00 | 640665.42 | 784550.68 | 6458473.82 | 6461466.80 | 2018   | 80  | 2017 |
| 3500180 | 94609.00 | 96679.00 | 640681.93 | 784600.57 | 6458667.50 | 6461666.08 | 2018   | 80  | 2017 |
| 3500190 | 80614.00 | 82688.00 | 640695.39 | 784586.87 | 6458870.94 | 6461865.32 | 2019   | 81  | 2017 |
| 3500200 | 82832.00 | 84917.00 | 640638.08 | 784583.88 | 6459066.79 | 6462064.73 | 2019   | 81  | 2017 |
| 3500210 | 85050.00 | 87125.00 | 640689.19 | 784591.32 | 6459269.97 | 6462267.20 | 2019   | 81  | 2017 |
| 3500220 | 87248.00 | 89339.00 | 640689.96 | 784627.29 | 6459471.31 | 6462463.37 | 2019   | 81  | 2017 |
| 3500230 | 89451.00 | 91510.00 | 640656.60 | 784575.49 | 6459670.67 | 6462660.82 | 2019   | 81  | 2017 |
| 3500240 | 91618.00 | 93684.00 | 640698.66 | 784628.76 | 6459868.23 | 6462859.12 | 2019   | 81  | 2017 |
| 3500250 | 83531.00 | 85580.00 | 640699.50 | 784613.57 | 6460063.58 | 6463061.79 | 2020   | 84  | 2017 |
| 3500260 | 85682.00 | 87778.00 | 640666.23 | 784613.05 | 6460271.25 | 6463261.39 | 2020   | 84  | 2017 |
| 3500270 | 87893.00 | 89960.00 | 640668.97 | 784619.98 | 6460472.26 | 6463461.06 | 2020   | 84  | 2017 |
| 3500280 | 90063.00 | 92147.00 | 640685.11 | 784630.25 | 6460667.66 | 6463661.57 | 2020   | 84  | 2017 |
| 3500290 | 92252.00 | 94376.00 | 640693.60 | 784607.69 | 6460865.22 | 6463858.71 | 2020   | 84  | 2017 |
| 3500300 | 94507.00 | 96607.00 | 640700.49 | 784629.21 | 6461065.36 | 6464060.68 | 2020   | 84  | 2017 |
| 3500310 | 80718.00 | 82029.00 | 640727.55 | 730506.76 | 6462631.33 | 6464258.24 | 2021   | 86  | 2017 |
| 3500311 | 93200.00 | 93982.00 | 730474.40 | 784653.44 | 6461264.66 | 6462626.11 | 2021   | 86  | 2017 |
| 3500320 | 82174.00 | 84263.00 | 640725.17 | 784678.08 | 6461459.87 | 6464456.16 | 2021   | 86  | 2017 |
| 3500330 | 84392.00 | 86461.00 | 640741.77 | 784684.33 | 6461665.95 | 6464655.03 | 2021   | 86  | 2017 |
| 3500340 | 86606.00 | 88683.00 | 640718.68 | 784657.65 | 6461862.27 | 6464855.08 | 2021   | 86  | 2017 |
| 3500350 | 88803.00 | 90869.00 | 640688.55 | 784656.64 | 6462067.07 | 6465056.23 | 2021   | 86  | 2017 |
| 3500360 | 90997.00 | 93073.00 | 640713.68 | 784693.29 | 6462262.67 | 6465254.53 | 2021   | 86  | 2017 |
| 3500370 | 83095.00 | 84482.00 | 640733.41 | 736407.07 | 6463693.23 | 6465456.65 | 2022   | 87  | 2017 |
| 3500371 | 95625.00 | 96401.00 | 736370.65 | 784688.39 | 6462460.77 | 6463691.28 | 2022   | 87  | 2017 |
| 3500380 | 84586.00 | 86651.00 | 640689.38 | 784699.28 | 6462659.53 | 6465652.47 | 2022   | 87  | 2017 |
| 3500390 | 86775.00 | 88875.00 | 640724.87 | 784690.98 | 6462859.48 | 6465852.86 | 2022   | 87  | 2017 |
| 3500400 | 88989.00 | 91058.00 | 640719.44 | 784672.93 | 6463062.51 | 6466053.71 | 2022   | 87  | 2017 |
| 3500410 | 91169.00 | 93299.00 | 640714.33 | 784719.95 | 6463259.37 | 6466249.07 | 2022   | 87  | 2017 |
| 3500420 | 93422.00 | 95515.00 | 640765.31 | 784719.83 | 6463458.44 | 6466455.32 | 2022   | 87  | 2017 |
| 3500430 | 81366.00 | 82709.00 | 640714.87 | 734450.62 | 6464929.13 | 6466647.94 | 2023   | 88  | 2017 |
| 3500431 | 93813.00 | 94546.00 | 734446.11 | 784728.82 | 6463657.39 | 6464930.43 | 2023   | 88  | 2017 |
| 3500440 | 82845.00 | 84902.00 | 640752.89 | 784690.06 | 6463861.92 | 6466849.24 | 2023   | 88  | 2017 |
| 3500450 | 85036.00 | 87096.00 | 640727.26 | 784702.18 | 6464058.71 | 6467047.22 | 2023   | 88  | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3500460 | 87217.00  | 89302.00  | 640773.38 | 784701.31 | 6464256.45 | 6467249.90 | 2023   | 88  | 2017 |
| 3500470 | 89424.00  | 91481.00  | 640725.31 | 784753.41 | 6464458.39 | 6467446.10 | 2023   | 88  | 2017 |
| 3500480 | 91617.00  | 93698.00  | 640740.50 | 784769.44 | 6464659.23 | 6467646.71 | 2023   | 88  | 2017 |
| 3500490 | 81227.00  | 83288.00  | 640781.38 | 784780.40 | 6464852.90 | 6467845.97 | 2024   | 89  | 2017 |
| 3500500 | 83423.00  | 85487.00  | 640784.25 | 784723.34 | 6465057.93 | 6468043.77 | 2024   | 89  | 2017 |
| 3500510 | 85606.00  | 87658.00  | 640739.33 | 784735.64 | 6465257.29 | 6468247.84 | 2024   | 89  | 2017 |
| 3500520 | 87774.00  | 89865.00  | 640779.38 | 784749.87 | 6465454.83 | 6468443.18 | 2024   | 89  | 2017 |
| 3500530 | 89968.00  | 92036.00  | 640753.85 | 784789.87 | 6465655.25 | 6468645.57 | 2024   | 89  | 2017 |
| 3500540 | 92181.00  | 94306.00  | 640775.42 | 784809.04 | 6465852.40 | 6468840.74 | 2024   | 89  | 2017 |
| 3500550 | 81286.00  | 82697.00  | 640753.57 | 740392.28 | 6467191.80 | 6469042.72 | 2025   | 90  | 2017 |
| 3500551 | 93814.00  | 94444.00  | 740406.99 | 784761.24 | 6466053.01 | 6467188.35 | 2025   | 90  | 2017 |
| 3500560 | 82820.00  | 84898.00  | 640737.08 | 784807.18 | 6466249.06 | 6469241.31 | 2025   | 90  | 2017 |
| 3500570 | 85017.00  | 87065.00  | 640762.91 | 784818.30 | 6466449.78 | 6469441.97 | 2025   | 90  | 2017 |
| 3500580 | 87194.00  | 89307.00  | 640746.14 | 784812.65 | 6466649.86 | 6469643.15 | 2025   | 90  | 2017 |
| 3500590 | 89433.00  | 91497.00  | 640751.61 | 784791.13 | 6466850.43 | 6469843.24 | 2025   | 90  | 2017 |
| 3500600 | 91632.00  | 93702.00  | 640797.80 | 784822.17 | 6467050.17 | 6470034.26 | 2025   | 90  | 2017 |
| 3500610 | 84346.00  | 85770.00  | 640806.09 | 740426.72 | 6468393.61 | 6470242.01 | 2027   | 92  | 2017 |
| 3500611 | 96868.00  | 97504.00  | 740436.50 | 784843.02 | 6467249.67 | 6468382.93 | 2027   | 92  | 2017 |
| 3500620 | 85902.00  | 88001.00  | 640789.90 | 784830.58 | 6467445.65 | 6470438.22 | 2027   | 92  | 2017 |
| 3500630 | 88122.00  | 90173.00  | 640767.80 | 784796.26 | 6467644.40 | 6470640.37 | 2027   | 92  | 2017 |
| 3500640 | 90311.00  | 92393.00  | 640788.16 | 784808.65 | 6467848.36 | 6470838.32 | 2027   | 92  | 2017 |
| 3500650 | 92508.00  | 94558.00  | 640794.56 | 784850.56 | 6468046.76 | 6471036.62 | 2027   | 92  | 2017 |
| 3500660 | 94669.00  | 96757.00  | 640817.77 | 784866.45 | 6468245.81 | 6471235.13 | 2027   | 92  | 2017 |
| 3500670 | 88005.00  | 89534.00  | 640773.20 | 748323.36 | 6469393.35 | 6471433.21 | 2028   | 93  | 2017 |
| 3500671 | 100667.00 | 101190.00 | 748268.73 | 784815.73 | 6468447.43 | 6469397.63 | 2028   | 93  | 2017 |
| 3500680 | 89648.00  | 91725.00  | 640795.92 | 784840.44 | 6468642.48 | 6471637.57 | 2028   | 93  | 2017 |
| 3500690 | 91858.00  | 93912.00  | 640801.76 | 784888.13 | 6468843.44 | 6471835.31 | 2028   | 93  | 2017 |
| 3500700 | 94031.00  | 96101.00  | 640811.46 | 784838.98 | 6469046.70 | 6472034.86 | 2028   | 93  | 2017 |
| 3500710 | 96247.00  | 98320.00  | 640844.96 | 784874.44 | 6469243.53 | 6472236.16 | 2028   | 93  | 2017 |
| 3500720 | 98455.00  | 100540.00 | 640784.34 | 784846.15 | 6469445.83 | 6472431.69 | 2028   | 93  | 2017 |
| 3500730 | 83820.00  | 85388.00  | 640788.89 | 750311.56 | 6470545.83 | 6472634.20 | 2030   | 95  | 2017 |
| 3500731 | 96445.00  | 96957.00  | 750257.72 | 784877.88 | 6469644.74 | 6470548.48 | 2030   | 95  | 2017 |
| 3500740 | 85515.00  | 87591.00  | 640808.26 | 784916.03 | 6469843.05 | 6472832.32 | 2030   | 95  | 2017 |
| 3500750 | 87712.00  | 89767.00  | 640853.76 | 784874.14 | 6470045.11 | 6473031.52 | 2030   | 95  | 2017 |
| 3500760 | 89890.00  | 91951.00  | 640795.71 | 784929.86 | 6470239.88 | 6473230.89 | 2030   | 95  | 2017 |
| 3500770 | 92065.00  | 94144.00  | 640845.29 | 784894.09 | 6470439.72 | 6473429.90 | 2030   | 95  | 2017 |
| 3500780 | 94265.00  | 96347.00  | 640856.59 | 784903.25 | 6470641.61 | 6473628.55 | 2030   | 95  | 2017 |
| 3500790 | 82518.00  | 84213.00  | 640820.55 | 758212.92 | 6471545.61 | 6473832.61 | 2031   | 96  | 2017 |
| 3500791 | 95285.00  | 95669.00  | 758151.12 | 784899.32 | 6470842.39 | 6471548.08 | 2031   | 96  | 2017 |
| 3500800 | 84334.00  | 86412.00  | 640846.53 | 784921.88 | 6471040.14 | 6474026.42 | 2031   | 96  | 2017 |
| 3500810 | 86543.00  | 88597.00  | 640864.59 | 784913.04 | 6471239.58 | 6474226.96 | 2031   | 96  | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME     | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|----------|-----------|-----------|------------|------------|--------|-----|------|
| 3500820 | 88719.00 | 90805.00 | 640841.57 | 784906.47 | 6471438.06 | 6474429.72 | 2031   | 96  | 2017 |
| 3500830 | 90927.00 | 92994.00 | 640862.95 | 784918.85 | 6471640.28 | 6474625.17 | 2031   | 96  | 2017 |
| 3500840 | 93101.00 | 95172.00 | 640879.30 | 784940.75 | 6471833.87 | 6474823.72 | 2031   | 96  | 2017 |
| 3500850 | 84257.00 | 86341.00 | 640878.50 | 784926.08 | 6472037.15 | 6475028.32 | 2062   | 146 | 2017 |
| 3500860 | 86423.00 | 88503.00 | 640829.26 | 784936.08 | 6472239.65 | 6475218.50 | 2062   | 146 | 2017 |
| 3500870 | 88647.00 | 90753.00 | 640877.44 | 784970.16 | 6472435.47 | 6475421.52 | 2062   | 146 | 2017 |
| 3500880 | 90852.00 | 92922.00 | 640848.03 | 784986.31 | 6472636.29 | 6475629.92 | 2062   | 146 | 2017 |
| 3500890 | 93075.00 | 95174.00 | 640886.07 | 784938.17 | 6472839.10 | 6475824.85 | 2062   | 146 | 2017 |
| 3500900 | 95307.00 | 97374.00 | 640855.98 | 785007.77 | 6473030.87 | 6476022.85 | 2062   | 146 | 2017 |
| 3500910 | 82750.00 | 84923.00 | 640837.05 | 785008.03 | 6473233.51 | 6476218.18 | 2063   | 147 | 2017 |
| 3500920 | 85027.00 | 87087.00 | 640893.71 | 784986.89 | 6473434.27 | 6476420.59 | 2063   | 147 | 2017 |
| 3500930 | 87219.00 | 89414.00 | 640894.10 | 785003.43 | 6473627.43 | 6476624.97 | 2063   | 147 | 2017 |
| 3500940 | 89532.00 | 91583.00 | 640896.75 | 785012.69 | 6473831.33 | 6476819.75 | 2063   | 147 | 2017 |
| 3500950 | 91685.00 | 93881.00 | 640865.55 | 785032.60 | 6474033.44 | 6477022.37 | 2063   | 147 | 2017 |
| 3500960 | 94005.00 | 96090.00 | 640887.14 | 785031.45 | 6474232.12 | 6477218.51 | 2063   | 147 | 2017 |
| 3500970 | 82777.00 | 84853.00 | 640863.07 | 784993.99 | 6474427.92 | 6477419.83 | 2065   | 151 | 2017 |
| 3500980 | 84988.00 | 87117.00 | 640894.93 | 785002.52 | 6474634.41 | 6477617.05 | 2065   | 151 | 2017 |
| 3500990 | 87237.00 | 89298.00 | 640897.10 | 785000.86 | 6474829.91 | 6477815.06 | 2065   | 151 | 2017 |
| 3501000 | 89412.00 | 91525.00 | 640877.74 | 784998.92 | 6475033.29 | 6478016.10 | 2065   | 151 | 2017 |
| 3501010 | 91653.00 | 93724.00 | 640882.92 | 785002.10 | 6475231.83 | 6478217.95 | 2065   | 151 | 2017 |
| 3501020 | 93829.00 | 95772.00 | 640876.78 | 774056.56 | 6475735.58 | 6478413.57 | 2065   | 151 | 2017 |
| 3501021 | 96130.00 | 96289.00 | 773995.14 | 785068.32 | 6475425.72 | 6475726.59 | 2065   | 151 | 2017 |
| 3501030 | 83307.00 | 85381.00 | 640912.94 | 785029.17 | 6475628.00 | 6478613.86 | 2066   | 152 | 2017 |
| 3501040 | 85488.00 | 87603.00 | 640899.07 | 785032.03 | 6475830.16 | 6478812.65 | 2066   | 152 | 2017 |
| 3501050 | 87736.00 | 89823.00 | 640934.99 | 785064.11 | 6476024.63 | 6479013.90 | 2066   | 152 | 2017 |
| 3501060 | 89954.00 | 92030.00 | 640915.88 | 785044.35 | 6476228.37 | 6479211.27 | 2066   | 152 | 2017 |
| 3501070 | 92129.00 | 94217.00 | 640917.75 | 785101.79 | 6476425.42 | 6479412.35 | 2066   | 152 | 2017 |
| 3501080 | 94336.00 | 96419.00 | 640939.46 | 785042.23 | 6476627.97 | 6479609.70 | 2066   | 152 | 2017 |
| 3501090 | 83149.00 | 85239.00 | 640910.96 | 785068.26 | 6476826.79 | 6479809.52 | 2067   | 154 | 2017 |
| 3501100 | 85382.00 | 87475.00 | 640910.40 | 785113.61 | 6477019.66 | 6480006.91 | 2067   | 154 | 2017 |
| 3501110 | 87605.00 | 89677.00 | 640930.03 | 785070.91 | 6477222.68 | 6480208.96 | 2067   | 154 | 2017 |
| 3501120 | 89796.00 | 91891.00 | 640927.38 | 785060.29 | 6477423.89 | 6480405.27 | 2067   | 154 | 2017 |
| 3501130 | 92012.00 | 94092.00 | 640904.69 | 785079.78 | 6477620.86 | 6480612.19 | 2067   | 154 | 2017 |
| 3501140 | 94201.00 | 96273.00 | 640924.78 | 785109.44 | 6477820.83 | 6480802.68 | 2067   | 154 | 2017 |
| 3501150 | 82860.00 | 84949.00 | 640923.55 | 785095.32 | 6478019.72 | 6481007.05 | 2068   | 155 | 2017 |
| 3501160 | 85065.00 | 87130.00 | 640927.90 | 785104.82 | 6478223.21 | 6481210.13 | 2068   | 155 | 2017 |
| 3501170 | 87267.00 | 89355.00 | 640962.02 | 785093.40 | 6478419.68 | 6481406.14 | 2068   | 155 | 2017 |
| 3501180 | 89474.00 | 91533.00 | 640967.98 | 785095.20 | 6478616.15 | 6481602.50 | 2068   | 155 | 2017 |
| 3501190 | 91640.00 | 93720.00 | 640939.23 | 785154.08 | 6478817.15 | 6481805.62 | 2068   | 155 | 2017 |
| 3501200 | 93843.00 | 95918.00 | 640975.47 | 785125.03 | 6479018.46 | 6482002.85 | 2068   | 155 | 2017 |
| 3501210 | 83999.00 | 84589.00 | 744598.86 | 785151.39 | 6479216.67 | 6480265.44 | 2069   | 156 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3501211 | 87758.00 | 89318.00  | 640976.57 | 744673.21 | 6480260.66 | 6482203.75 | 2073   | 160 | 2017 |
| 3501220 | 91095.00 | 93229.00  | 640943.38 | 785140.08 | 6479416.87 | 6482402.56 | 2073   | 160 | 2017 |
| 3501230 | 85571.00 | 87647.00  | 640931.95 | 785147.44 | 6479619.28 | 6482598.00 | 2073   | 160 | 2017 |
| 3501240 | 83839.00 | 84560.00  | 734766.98 | 785162.50 | 6479815.90 | 6481095.42 | 2072   | 159 | 2017 |
| 3501241 | 89643.00 | 90989.00  | 640926.05 | 734851.08 | 6481091.52 | 6482801.49 | 2073   | 160 | 2017 |
| 3501250 | 99438.00 | 101570.00 | 640971.88 | 785136.56 | 6480016.27 | 6483003.30 | 2071   | 158 | 2017 |
| 3501260 | 97247.00 | 99316.00  | 640976.60 | 785187.76 | 6480214.87 | 6483199.59 | 2071   | 158 | 2017 |
| 3501270 | 95053.00 | 97146.00  | 640950.34 | 785163.50 | 6480414.01 | 6483402.69 | 2071   | 158 | 2017 |
| 3501280 | 92844.00 | 94924.00  | 640937.00 | 785202.47 | 6480618.70 | 6483598.39 | 2071   | 158 | 2017 |
| 3501290 | 90664.00 | 92739.00  | 640991.88 | 785187.23 | 6480808.93 | 6483794.77 | 2071   | 158 | 2017 |
| 3501300 | 88463.00 | 90539.00  | 640990.68 | 785224.76 | 6481014.48 | 6483997.48 | 2071   | 158 | 2017 |
| 3501310 | 86255.00 | 88323.00  | 640957.43 | 785224.52 | 6481213.22 | 6484194.49 | 2071   | 158 | 2017 |
| 3501320 | 84052.00 | 86132.00  | 641009.05 | 785219.69 | 6481409.24 | 6484396.69 | 2071   | 158 | 2017 |
| 3501330 | 98359.00 | 100442.00 | 640960.01 | 785177.43 | 6481613.07 | 6484606.55 | 2070   | 157 | 2017 |
| 3501340 | 96166.00 | 98255.00  | 641009.04 | 785214.65 | 6481814.00 | 6484791.96 | 2070   | 157 | 2017 |
| 3501350 | 93970.00 | 96055.00  | 641008.45 | 785197.28 | 6482011.44 | 6484996.34 | 2070   | 157 | 2017 |
| 3501360 | 91782.00 | 93864.00  | 641008.19 | 785236.01 | 6482210.98 | 6485193.13 | 2070   | 157 | 2017 |
| 3501370 | 89581.00 | 91663.00  | 640998.92 | 785249.41 | 6482407.28 | 6485393.97 | 2070   | 157 | 2017 |
| 3501380 | 87363.00 | 89455.00  | 641010.15 | 785214.40 | 6482607.97 | 6485595.41 | 2070   | 157 | 2017 |
| 3501390 | 85136.00 | 87257.00  | 640991.69 | 785249.88 | 6482811.33 | 6485790.51 | 2070   | 157 | 2017 |
| 3501400 | 82949.00 | 85022.00  | 640990.04 | 785254.97 | 6483000.69 | 6485992.28 | 2070   | 157 | 2017 |
| 3501410 | 98992.00 | 101071.00 | 641033.95 | 785234.80 | 6483203.37 | 6486191.21 | 2060   | 142 | 2017 |
| 3501420 | 96759.00 | 98866.00  | 641018.30 | 785260.07 | 6483412.20 | 6486387.59 | 2060   | 142 | 2017 |
| 3501430 | 94574.00 | 96640.00  | 641027.62 | 785272.23 | 6483606.03 | 6486592.43 | 2060   | 142 | 2017 |
| 3501440 | 92327.00 | 94443.00  | 641039.44 | 785275.47 | 6483806.08 | 6486792.76 | 2060   | 142 | 2017 |
| 3501450 | 90142.00 | 92218.00  | 641036.06 | 785256.24 | 6484005.75 | 6486988.05 | 2060   | 142 | 2017 |
| 3501460 | 87898.00 | 90010.00  | 641017.62 | 785269.18 | 6484207.73 | 6487190.20 | 2060   | 142 | 2017 |
| 3501470 | 85700.00 | 87770.00  | 641017.99 | 785278.65 | 6484401.63 | 6487389.46 | 2060   | 142 | 2017 |
| 3501480 | 83509.00 | 85593.00  | 641000.03 | 785271.28 | 6484606.17 | 6487585.91 | 2060   | 142 | 2017 |
| 3501490 | 97708.00 | 99780.00  | 641039.13 | 785313.45 | 6484799.54 | 6487787.10 | 2058   | 140 | 2017 |
| 3501500 | 95505.00 | 97573.00  | 641028.48 | 785276.77 | 6485005.37 | 6487988.31 | 2058   | 140 | 2017 |
| 3501510 | 93308.00 | 95380.00  | 641035.31 | 785310.95 | 6485206.46 | 6488184.41 | 2058   | 140 | 2017 |
| 3501520 | 91089.00 | 93169.00  | 641050.03 | 785320.96 | 6485404.97 | 6488386.52 | 2058   | 140 | 2017 |
| 3501530 | 88893.00 | 90968.00  | 641010.42 | 785339.51 | 6485600.24 | 6488586.56 | 2058   | 140 | 2017 |
| 3501540 | 86697.00 | 88781.00  | 641055.99 | 785323.82 | 6485800.38 | 6488784.35 | 2058   | 140 | 2017 |
| 3501550 | 84476.00 | 86563.00  | 641013.22 | 785360.42 | 6485995.66 | 6488982.08 | 2058   | 140 | 2017 |
| 3501560 | 82299.00 | 84363.00  | 641016.82 | 785308.66 | 6486202.38 | 6489181.29 | 2058   | 140 | 2017 |
| 3501570 | 98201.00 | 100290.00 | 641066.61 | 785359.23 | 6486402.99 | 6489378.83 | 2057   | 138 | 2017 |
| 3501580 | 95955.00 | 98092.00  | 641066.34 | 785346.63 | 6486595.45 | 6489583.99 | 2057   | 138 | 2017 |
| 3501590 | 93717.00 | 95823.00  | 641079.58 | 785369.36 | 6486799.17 | 6489780.01 | 2057   | 138 | 2017 |
| 3501601 | 92137.00 | 94198.00  | 641039.17 | 785368.55 | 6486997.41 | 6489977.58 | 2079   | 167 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3501610 | 91507.00  | 93612.00  | 641057.62 | 785398.70 | 6487195.06 | 6490178.38 | 2057   | 138 | 2017 |
| 3501620 | 89253.00  | 91374.00  | 641071.11 | 785350.38 | 6487398.78 | 6490379.00 | 2057   | 138 | 2017 |
| 3501630 | 87025.00  | 89130.00  | 641038.91 | 785364.81 | 6487599.32 | 6490577.03 | 2057   | 138 | 2017 |
| 3501640 | 84790.00  | 86905.00  | 641050.81 | 785358.37 | 6487793.47 | 6490777.61 | 2057   | 138 | 2017 |
| 3501650 | 82537.00  | 84645.00  | 641095.53 | 785405.83 | 6487992.77 | 6490973.85 | 2057   | 138 | 2017 |
| 3501660 | 98004.00  | 100100.00 | 641092.03 | 785404.32 | 6488191.56 | 6491176.22 | 2056   | 137 | 2017 |
| 3501670 | 95787.00  | 97871.00  | 641044.03 | 785409.62 | 6488397.21 | 6491375.43 | 2056   | 137 | 2017 |
| 3501680 | 93564.00  | 95677.00  | 641045.87 | 785382.92 | 6488596.82 | 6491572.66 | 2056   | 137 | 2017 |
| 3501690 | 91360.00  | 93450.00  | 641095.89 | 785388.38 | 6488791.28 | 6491773.50 | 2056   | 137 | 2017 |
| 3501700 | 89144.00  | 91248.00  | 641050.07 | 785386.75 | 6488992.85 | 6491972.02 | 2056   | 137 | 2017 |
| 3501710 | 86949.00  | 89037.00  | 641104.12 | 785427.87 | 6489193.11 | 6492171.23 | 2056   | 137 | 2017 |
| 3501720 | 84711.00  | 86823.00  | 641086.16 | 785396.36 | 6489388.69 | 6492368.95 | 2056   | 137 | 2017 |
| 3501730 | 82505.00  | 84606.00  | 641109.65 | 785407.59 | 6489587.57 | 6492570.27 | 2056   | 137 | 2017 |
| 3501740 | 101013.00 | 103138.00 | 641097.44 | 785445.38 | 6489791.02 | 6492769.66 | 2055   | 134 | 2017 |
| 3501750 | 98799.00  | 100889.00 | 641076.98 | 785415.63 | 6489990.45 | 6492970.64 | 2055   | 134 | 2017 |
| 3501760 | 96549.00  | 98691.00  | 641122.56 | 785414.54 | 6490188.74 | 6493167.63 | 2055   | 134 | 2017 |
| 3501770 | 94321.00  | 96421.00  | 641105.98 | 785451.20 | 6490388.82 | 6493370.80 | 2055   | 134 | 2017 |
| 3501780 | 98055.00  | 100203.00 | 641104.29 | 785467.16 | 6490589.45 | 6493568.52 | 2054   | 133 | 2017 |
| 3501790 | 95843.00  | 97929.00  | 641119.60 | 785439.64 | 6490788.33 | 6493768.71 | 2054   | 133 | 2017 |
| 3501800 | 93590.00  | 95730.00  | 641126.25 | 785472.11 | 6490985.75 | 6493965.10 | 2054   | 133 | 2017 |
| 3501810 | 91397.00  | 93468.00  | 641132.76 | 785488.66 | 6491182.75 | 6494162.73 | 2054   | 133 | 2017 |
| 3501820 | 89112.00  | 91281.00  | 641113.72 | 785499.35 | 6491380.68 | 6494366.20 | 2054   | 133 | 2017 |
| 3501830 | 86911.00  | 88987.00  | 641118.88 | 785501.04 | 6491585.68 | 6494563.53 | 2054   | 133 | 2017 |
| 3501840 | 84619.00  | 86787.00  | 641130.09 | 785471.87 | 6491785.08 | 6494762.11 | 2054   | 133 | 2017 |
| 3501850 | 82412.00  | 84495.00  | 641138.45 | 785513.51 | 6491982.83 | 6494962.07 | 2054   | 133 | 2017 |
| 3501860 | 98223.00  | 100329.00 | 641120.85 | 785536.52 | 6492184.72 | 6495161.88 | 2053   | 132 | 2017 |
| 3501870 | 96035.00  | 98096.00  | 641157.47 | 785489.76 | 6492382.52 | 6495363.27 | 2053   | 132 | 2017 |
| 3501880 | 93761.00  | 95904.00  | 641162.86 | 785530.07 | 6492578.97 | 6495560.33 | 2053   | 132 | 2017 |
| 3501890 | 91571.00  | 93642.00  | 641159.38 | 785526.64 | 6492782.14 | 6495761.13 | 2053   | 132 | 2017 |
| 3501900 | 89271.00  | 91450.00  | 641106.19 | 785506.05 | 6492981.28 | 6495957.15 | 2053   | 132 | 2017 |
| 3501910 | 87055.00  | 89126.00  | 641116.77 | 785529.19 | 6493179.42 | 6496160.40 | 2053   | 132 | 2017 |
| 3501920 | 84716.00  | 86926.00  | 641141.79 | 785559.73 | 6493378.26 | 6496356.97 | 2053   | 132 | 2017 |
| 3501930 | 82498.00  | 84580.00  | 641129.59 | 785562.52 | 6493573.32 | 6496563.01 | 2053   | 132 | 2017 |
| 3501940 | 98393.00  | 100494.00 | 641167.45 | 785547.83 | 6493780.37 | 6496759.65 | 2052   | 131 | 2017 |
| 3501950 | 96169.00  | 98261.00  | 641156.56 | 785521.30 | 6493978.81 | 6496955.34 | 2052   | 131 | 2017 |
| 3501960 | 93889.00  | 96047.00  | 641138.24 | 785590.81 | 6494176.97 | 6497156.15 | 2052   | 131 | 2017 |
| 3501970 | 91672.00  | 93748.00  | 641163.16 | 785552.17 | 6494378.49 | 6497356.76 | 2052   | 131 | 2017 |
| 3501980 | 100219.00 | 102284.00 | 641135.20 | 785543.33 | 6494577.77 | 6497558.52 | 2047   | 124 | 2017 |
| 3501990 | 98007.00  | 100104.00 | 641150.51 | 785597.55 | 6494777.93 | 6497755.85 | 2047   | 124 | 2017 |
| 3502000 | 94243.00  | 96318.00  | 641199.07 | 785565.92 | 6494976.75 | 6497954.59 | 2029   | 94  | 2017 |
| 3502010 | 92068.00  | 94127.00  | 641194.24 | 785554.13 | 6495178.25 | 6498152.93 | 2029   | 94  | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3502020 | 89890.00 | 91966.00  | 641201.48 | 785577.07 | 6495374.67 | 6498353.07 | 2029   | 94  | 2017 |
| 3502030 | 87712.00 | 89769.00  | 641142.27 | 785594.94 | 6495572.80 | 6498556.55 | 2029   | 94  | 2017 |
| 3502040 | 85486.00 | 87573.00  | 641144.57 | 785632.43 | 6495772.57 | 6498751.00 | 2029   | 94  | 2017 |
| 3502050 | 83312.00 | 85373.00  | 641146.36 | 785640.34 | 6495971.54 | 6498952.04 | 2029   | 94  | 2017 |
| 3502060 | 96426.00 | 98489.00  | 641197.16 | 785600.21 | 6496175.15 | 6499151.32 | 2029   | 94  | 2017 |
| 3502070 | 98623.00 | 100692.00 | 641165.92 | 785609.64 | 6496371.40 | 6499351.01 | 2029   | 94  | 2017 |
| 3502080 | 89400.00 | 91565.00  | 641194.60 | 785592.53 | 6496572.77 | 6499545.78 | 2052   | 131 | 2017 |
| 3502090 | 83336.00 | 85435.00  | 641224.21 | 785596.14 | 6496776.80 | 6499748.01 | 2052   | 131 | 2017 |
| 3502100 | 98386.00 | 100501.00 | 641168.89 | 785600.50 | 6496972.21 | 6499947.48 | 2051   | 130 | 2017 |
| 3502110 | 96155.00 | 98253.00  | 641191.24 | 785649.00 | 6497170.35 | 6500149.13 | 2051   | 130 | 2017 |
| 3502120 | 93943.00 | 96041.00  | 641192.05 | 785620.58 | 6497371.37 | 6500348.26 | 2051   | 130 | 2017 |
| 3502130 | 91729.00 | 93810.00  | 641207.45 | 785679.21 | 6497570.52 | 6500546.05 | 2051   | 130 | 2017 |
| 3502140 | 89511.00 | 91620.00  | 641211.75 | 785654.98 | 6497768.62 | 6500742.54 | 2051   | 130 | 2017 |
| 3502150 | 95821.00 | 97907.00  | 641239.02 | 785686.67 | 6497968.24 | 6500944.80 | 2047   | 124 | 2017 |
| 3502160 | 93583.00 | 95702.00  | 641191.40 | 785677.39 | 6498168.86 | 6501142.43 | 2047   | 124 | 2017 |
| 3502170 | 91381.00 | 93475.00  | 641223.22 | 785644.77 | 6498366.55 | 6501351.84 | 2047   | 124 | 2017 |
| 3502180 | 89145.00 | 91273.00  | 641202.35 | 785659.44 | 6498568.58 | 6501542.75 | 2047   | 124 | 2017 |
| 3502190 | 86905.00 | 89003.00  | 641211.52 | 785715.20 | 6498768.54 | 6501745.21 | 2047   | 124 | 2017 |
| 3502200 | 84664.00 | 86804.00  | 641222.01 | 785665.42 | 6498962.11 | 6501939.74 | 2047   | 124 | 2017 |
| 3502210 | 98177.00 | 100287.00 | 641213.72 | 785689.67 | 6499166.15 | 6502137.54 | 2046   | 123 | 2017 |
| 3502220 | 97234.00 | 98064.00  | 641200.29 | 697808.11 | 6501413.89 | 6502341.87 | 2046   | 123 | 2017 |
| 3502221 | 90094.00 | 91367.00  | 697826.96 | 785723.70 | 6499360.93 | 6501415.26 | 2064   | 148 | 2017 |
| 3502230 | 96278.00 | 97137.00  | 641200.34 | 699781.85 | 6501574.77 | 6502543.21 | 2046   | 123 | 2017 |
| 3502231 | 91599.00 | 92837.00  | 699761.11 | 785672.59 | 6499567.13 | 6501576.83 | 2064   | 148 | 2017 |
| 3502240 | 95336.00 | 96164.00  | 641202.26 | 697870.57 | 6501810.68 | 6502738.75 | 2046   | 123 | 2017 |
| 3502241 | 92942.00 | 94220.00  | 697781.73 | 785695.04 | 6499766.27 | 6501814.27 | 2064   | 148 | 2017 |
| 3502250 | 94391.00 | 95245.00  | 641244.98 | 699825.93 | 6501972.54 | 6502939.92 | 2046   | 123 | 2017 |
| 3502251 | 94447.00 | 95682.00  | 699775.04 | 785705.86 | 6499964.99 | 6501973.54 | 2064   | 148 | 2017 |
| 3502260 | 93457.00 | 94275.00  | 641249.22 | 697873.12 | 6502210.21 | 6503136.10 | 2046   | 123 | 2017 |
| 3502261 | 96115.00 | 97097.00  | 697776.79 | 764886.49 | 6500715.56 | 6502212.59 | 2064   | 148 | 2017 |
| 3502262 | 94443.00 | 94740.00  | 764833.72 | 785691.13 | 6500162.98 | 6500716.89 | 2079   | 167 | 2017 |
| 3502270 | 92447.00 | 93340.00  | 641209.63 | 701797.35 | 6502335.86 | 6503338.33 | 2046   | 123 | 2017 |
| 3502271 | 97386.00 | 98595.00  | 701774.28 | 785700.85 | 6500362.31 | 6502335.87 | 2064   | 148 | 2017 |
| 3502280 | 91490.00 | 92341.00  | 641267.80 | 699830.93 | 6502569.69 | 6503533.45 | 2046   | 123 | 2017 |
| 3502281 | 83274.00 | 84523.00  | 699760.52 | 785703.92 | 6500561.32 | 6502574.95 | 2074   | 161 | 2017 |
| 3502290 | 90506.00 | 91401.00  | 641227.26 | 701818.74 | 6502731.88 | 6503735.14 | 2046   | 123 | 2017 |
| 3502291 | 84753.00 | 85965.00  | 701745.41 | 785749.14 | 6500760.90 | 6502732.14 | 2074   | 161 | 2017 |
| 3502300 | 89538.00 | 90386.00  | 641260.32 | 699819.55 | 6502974.60 | 6503932.80 | 2046   | 123 | 2017 |
| 3502301 | 86100.00 | 87342.00  | 699829.66 | 785770.54 | 6500958.71 | 6502973.86 | 2074   | 161 | 2017 |
| 3502310 | 88462.00 | 89407.00  | 641239.54 | 703748.89 | 6503094.18 | 6504132.87 | 2046   | 123 | 2017 |
| 3502311 | 87580.00 | 88762.00  | 703753.80 | 785761.35 | 6501159.27 | 6503098.46 | 2074   | 161 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME     | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|----------|-----------|-----------|------------|------------|--------|-----|------|
| 3502320 | 87476.00 | 88354.00 | 641237.64 | 701840.08 | 6503327.16 | 6504333.02 | 2046   | 123 | 2017 |
| 3502321 | 88894.00 | 90094.00 | 701780.15 | 785749.44 | 6501361.64 | 6503336.62 | 2074   | 161 | 2017 |
| 3502330 | 86442.00 | 87390.00 | 641249.80 | 703753.26 | 6503492.27 | 6504529.25 | 2046   | 123 | 2017 |
| 3502331 | 90327.00 | 91497.00 | 703776.78 | 785739.69 | 6501558.40 | 6503491.39 | 2074   | 161 | 2017 |
| 3502340 | 85463.00 | 86308.00 | 641271.99 | 699870.14 | 6503768.53 | 6504732.88 | 2046   | 123 | 2017 |
| 3502341 | 91606.00 | 92839.00 | 699780.11 | 785792.87 | 6501756.42 | 6503771.20 | 2074   | 161 | 2017 |
| 3502350 | 84437.00 | 85346.00 | 641246.55 | 703819.31 | 6503890.35 | 6504932.96 | 2046   | 123 | 2017 |
| 3502351 | 93082.00 | 94259.00 | 703731.46 | 785756.70 | 6501956.22 | 6503891.77 | 2074   | 161 | 2017 |
| 3502360 | 82226.00 | 84317.00 | 641240.06 | 785799.27 | 6502164.95 | 6505130.87 | 2046   | 123 | 2017 |
| 3502370 | 97812.00 | 99989.00 | 641286.50 | 785761.98 | 6502360.57 | 6505331.52 | 2045   | 122 | 2017 |
| 3502380 | 96498.00 | 97480.00 | 641244.23 | 709694.67 | 6504371.95 | 6505528.99 | 2045   | 122 | 2017 |
| 3502381 | 94359.00 | 95456.00 | 709665.21 | 785796.70 | 6502554.03 | 6504373.75 | 2074   | 161 | 2017 |
| 3502390 | 95298.00 | 96374.00 | 641287.20 | 713689.25 | 6504485.22 | 6505727.55 | 2045   | 122 | 2017 |
| 3502391 | 95714.00 | 96741.00 | 713639.88 | 785765.57 | 6502755.04 | 6504492.12 | 2074   | 161 | 2017 |
| 3502400 | 94199.00 | 95183.00 | 641301.96 | 709736.40 | 6504771.49 | 6505928.01 | 2045   | 122 | 2017 |
| 3502401 | 96855.00 | 97952.00 | 709716.30 | 785767.39 | 6502955.38 | 6504772.76 | 2074   | 161 | 2017 |
| 3502410 | 92959.00 | 94085.00 | 641266.90 | 713677.34 | 6504890.33 | 6506128.58 | 2045   | 122 | 2017 |
| 3502411 | 98196.00 | 99223.00 | 713619.88 | 785787.26 | 6503157.57 | 6504888.58 | 2074   | 161 | 2017 |
| 3502420 | 91853.00 | 92840.00 | 641264.45 | 709733.61 | 6505169.20 | 6506326.37 | 2045   | 122 | 2017 |
| 3502421 | 82920.00 | 84106.00 | 704123.37 | 786589.71 | 6503331.42 | 6505929.45 | 2075   | 162 | 2017 |
| 3502422 | 88240.00 | 89328.00 | 709677.23 | 785791.29 | 6503354.90 | 6505175.60 | 2079   | 167 | 2017 |
| 3502430 | 90657.00 | 91747.00 | 641252.69 | 713677.27 | 6505285.99 | 6506524.83 | 2045   | 122 | 2017 |
| 3502431 | 87223.00 | 88285.00 | 713618.69 | 785785.33 | 6503554.23 | 6505288.59 | 2076   | 163 | 2017 |
| 3502440 | 89615.00 | 90530.00 | 641288.47 | 705828.05 | 6505648.64 | 6506726.69 | 2045   | 122 | 2017 |
| 3502441 | 83169.00 | 84339.00 | 705756.83 | 785794.00 | 6503753.18 | 6505644.53 | 2076   | 163 | 2017 |
| 3502450 | 88453.00 | 89499.00 | 641255.96 | 709778.29 | 6505765.49 | 6506927.54 | 2045   | 122 | 2017 |
| 3502451 | 85866.00 | 86970.00 | 709701.72 | 785837.17 | 6503949.23 | 6505767.79 | 2076   | 163 | 2017 |
| 3502460 | 87381.00 | 88340.00 | 641308.51 | 707768.46 | 6506007.76 | 6507123.89 | 2045   | 122 | 2017 |
| 3502461 | 84618.00 | 85762.00 | 707715.90 | 785848.19 | 6504146.54 | 6506009.18 | 2076   | 163 | 2017 |
| 3502470 | 86255.00 | 87291.00 | 641265.04 | 709758.37 | 6506164.81 | 6507324.63 | 2045   | 122 | 2017 |
| 3502471 | 88385.00 | 89475.00 | 709692.72 | 785824.20 | 6504351.93 | 6506171.73 | 2076   | 163 | 2017 |
| 3502480 | 84027.00 | 86116.00 | 641289.03 | 785856.92 | 6504547.71 | 6507522.07 | 2045   | 122 | 2017 |
| 3502490 | 96330.00 | 98416.00 | 641305.39 | 785830.59 | 6504749.30 | 6507723.60 | 2044   | 119 | 2017 |
| 3502500 | 95150.00 | 96206.00 | 641305.44 | 711765.10 | 6506720.53 | 6507925.95 | 2044   | 119 | 2017 |
| 3502501 | 89710.00 | 90802.00 | 711712.18 | 785844.17 | 6504950.42 | 6506727.57 | 2076   | 163 | 2017 |
| 3502510 | 94006.00 | 95048.00 | 641325.99 | 713708.63 | 6506882.18 | 6508120.94 | 2044   | 119 | 2017 |
| 3502511 | 92194.00 | 93265.00 | 713689.70 | 785833.56 | 6505150.60 | 6506880.82 | 2076   | 163 | 2017 |
| 3502520 | 92889.00 | 93909.00 | 641308.24 | 711730.52 | 6507123.01 | 6508323.82 | 2044   | 119 | 2017 |
| 3502521 | 90919.00 | 91981.00 | 711744.90 | 785853.64 | 6505348.20 | 6507125.97 | 2076   | 163 | 2017 |
| 3502530 | 91720.00 | 92748.00 | 641314.50 | 711782.77 | 6507322.40 | 6508517.71 | 2044   | 119 | 2017 |
| 3502531 | 93369.00 | 94433.00 | 711725.20 | 785858.08 | 6505545.00 | 6507324.49 | 2076   | 163 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3502540 | 90568.00  | 91591.00  | 641337.61 | 711781.98 | 6507521.44 | 6508716.67 | 2044   | 119 | 2017 |
| 3502541 | 95826.00  | 96886.00  | 711745.99 | 785885.36 | 6505751.21 | 6507528.76 | 2076   | 163 | 2017 |
| 3502550 | 89411.00  | 90471.00  | 641282.41 | 713725.67 | 6507681.82 | 6508919.64 | 2044   | 119 | 2017 |
| 3502551 | 94662.00  | 95730.00  | 713717.55 | 785902.79 | 6505949.10 | 6507681.98 | 2076   | 163 | 2017 |
| 3502560 | 88254.00  | 89300.00  | 641305.28 | 713730.05 | 6507881.95 | 6509116.26 | 2044   | 119 | 2017 |
| 3502561 | 97106.00  | 98167.00  | 713682.43 | 785860.63 | 6506151.26 | 6507883.01 | 2076   | 163 | 2017 |
| 3502570 | 87006.00  | 88142.00  | 641324.38 | 717691.51 | 6507995.09 | 6509323.69 | 2044   | 119 | 2017 |
| 3502571 | 86529.00  | 87524.00  | 717664.69 | 785921.07 | 6506349.09 | 6508001.06 | 2077   | 165 | 2017 |
| 3502580 | 85877.00  | 86900.00  | 641309.01 | 711793.15 | 6508318.22 | 6509517.53 | 2044   | 119 | 2017 |
| 3502581 | 82809.00  | 83886.00  | 711761.59 | 785860.69 | 6506548.67 | 6508320.22 | 2077   | 165 | 2017 |
| 3502590 | 84648.00  | 85748.00  | 641329.61 | 715744.29 | 6508442.20 | 6509716.76 | 2044   | 119 | 2017 |
| 3502591 | 85275.00  | 86283.00  | 715695.85 | 785926.34 | 6506744.10 | 6508437.36 | 2077   | 165 | 2017 |
| 3502600 | 82432.00  | 84526.00  | 641340.63 | 785933.72 | 6506943.58 | 6509914.93 | 2044   | 119 | 2017 |
| 3502610 | 100718.00 | 102831.00 | 641330.41 | 785899.03 | 6507145.77 | 6510113.46 | 2043   | 118 | 2017 |
| 3502620 | 99376.00  | 100619.00 | 641361.92 | 727589.81 | 6508784.12 | 6510314.18 | 2043   | 118 | 2017 |
| 3502621 | 98244.00  | 99075.00  | 727534.35 | 785951.75 | 6507341.61 | 6508789.67 | 2076   | 163 | 2017 |
| 3502630 | 97932.00  | 99258.00  | 641366.00 | 731537.41 | 6508897.82 | 6510515.54 | 2043   | 118 | 2017 |
| 3502631 | 99304.00  | 100088.00 | 731489.99 | 785927.92 | 6507547.77 | 6508898.37 | 2076   | 163 | 2017 |
| 3502640 | 96781.00  | 97826.00  | 641373.94 | 713739.30 | 6509474.41 | 6510713.09 | 2043   | 118 | 2017 |
| 3502641 | 84123.00  | 85180.00  | 713762.23 | 785923.56 | 6507744.22 | 6509478.30 | 2077   | 165 | 2017 |
| 3502650 | 95599.00  | 96699.00  | 641352.97 | 715727.22 | 6509633.72 | 6510915.63 | 2043   | 118 | 2017 |
| 3502651 | 88897.00  | 89906.00  | 715720.75 | 785921.25 | 6507940.35 | 6509637.41 | 2077   | 165 | 2017 |
| 3502660 | 94421.00  | 95463.00  | 641318.91 | 713809.16 | 6509876.68 | 6511110.17 | 2043   | 118 | 2017 |
| 3502661 | 87624.00  | 88674.00  | 713742.39 | 785926.84 | 6508140.16 | 6509880.79 | 2077   | 165 | 2017 |
| 3502670 | 93256.00  | 94340.00  | 641318.12 | 715773.29 | 6510031.39 | 6511316.89 | 2043   | 118 | 2017 |
| 3502671 | 98476.00  | 99492.00  | 715736.10 | 785926.46 | 6508341.01 | 6510030.47 | 2075   | 162 | 2017 |
| 3502680 | 91570.00  | 91890.00  | 763061.80 | 785981.55 | 6508544.34 | 6509146.51 | 2038   | 108 | 2017 |
| 3502681 | 89491.00  | 91261.00  | 641331.43 | 763082.45 | 6509141.24 | 6511512.92 | 2043   | 118 | 2017 |
| 3502690 | 90941.00  | 91344.00  | 759107.71 | 785984.65 | 6508738.87 | 6509447.31 | 2038   | 108 | 2017 |
| 3502691 | 91460.00  | 93156.00  | 641356.50 | 759191.29 | 6509438.86 | 6511708.81 | 2043   | 118 | 2017 |
| 3502700 | 90158.00  | 90794.00  | 741392.58 | 785939.32 | 6508937.89 | 6510065.81 | 2038   | 108 | 2017 |
| 3502701 | 86345.00  | 87806.00  | 641368.75 | 741439.45 | 6510067.35 | 6511907.14 | 2043   | 118 | 2017 |
| 3502710 | 89261.00  | 89971.00  | 737437.53 | 785948.40 | 6509141.81 | 6510359.22 | 2038   | 108 | 2017 |
| 3502711 | 88002.00  | 89383.00  | 641366.35 | 737482.08 | 6510358.65 | 6512110.75 | 2043   | 118 | 2017 |
| 3502720 | 87038.00  | 89126.00  | 641355.27 | 785994.22 | 6509337.87 | 6512309.01 | 2038   | 108 | 2017 |
| 3502730 | 85847.00  | 86896.00  | 641383.28 | 713828.80 | 6511266.75 | 6512508.36 | 2038   | 108 | 2017 |
| 3502731 | 97203.00  | 98237.00  | 713790.39 | 786002.59 | 6509537.85 | 6511273.62 | 2075   | 162 | 2017 |
| 3502740 | 84637.00  | 85720.00  | 641381.54 | 715767.31 | 6511430.75 | 6512712.85 | 2038   | 108 | 2017 |
| 3502741 | 96043.00  | 97069.00  | 715780.37 | 786016.76 | 6509739.36 | 6511429.66 | 2075   | 162 | 2017 |
| 3502750 | 85381.00  | 86227.00  | 641370.65 | 700033.00 | 6511946.21 | 6512908.19 | 2043   | 118 | 2017 |
| 3502751 | 85597.00  | 86817.00  | 699958.20 | 786021.97 | 6509939.11 | 6511947.10 | 2080   | 172 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3502760 | 97105.00 | 97954.00  | 641377.12 | 699974.70 | 6512145.24 | 6513110.38 | 2042   | 117 | 2017 |
| 3502761 | 86962.00 | 88205.00  | 699995.91 | 785973.75 | 6510138.98 | 6512145.76 | 2080   | 172 | 2017 |
| 3502770 | 95925.00 | 97002.00  | 641401.53 | 715800.46 | 6512033.37 | 6513301.49 | 2042   | 117 | 2017 |
| 3502771 | 94792.00 | 95807.00  | 715786.88 | 785987.65 | 6510334.80 | 6512026.74 | 2075   | 162 | 2017 |
| 3502780 | 94712.00 | 95852.00  | 641363.71 | 717793.06 | 6512184.45 | 6513506.29 | 2042   | 117 | 2017 |
| 3502781 | 93685.00 | 94667.00  | 717764.71 | 786000.17 | 6510534.87 | 6512187.40 | 2075   | 162 | 2017 |
| 3502790 | 93504.00 | 94583.00  | 641401.33 | 715797.90 | 6512426.94 | 6513703.34 | 2042   | 117 | 2017 |
| 3502791 | 92419.00 | 93442.00  | 715764.36 | 786044.44 | 6510733.68 | 6512430.18 | 2075   | 162 | 2017 |
| 3502800 | 92198.00 | 93353.00  | 641398.04 | 719754.23 | 6512538.03 | 6513902.68 | 2042   | 117 | 2017 |
| 3502801 | 91338.00 | 92307.00  | 719698.75 | 786043.02 | 6510932.76 | 6512544.69 | 2075   | 162 | 2017 |
| 3502810 | 91016.00 | 92099.00  | 641363.67 | 715777.29 | 6512828.11 | 6514105.15 | 2042   | 117 | 2017 |
| 3502811 | 90095.00 | 91102.00  | 715781.21 | 786025.13 | 6511134.30 | 6512828.73 | 2075   | 162 | 2017 |
| 3502820 | 89743.00 | 90894.00  | 641368.04 | 719769.76 | 6512946.47 | 6514304.00 | 2042   | 117 | 2017 |
| 3502821 | 89002.00 | 89961.00  | 719709.50 | 786012.05 | 6511335.85 | 6512943.91 | 2075   | 162 | 2017 |
| 3502830 | 88487.00 | 89616.00  | 641423.26 | 719762.19 | 6513139.46 | 6514501.22 | 2042   | 117 | 2017 |
| 3502831 | 87783.00 | 88749.00  | 719702.68 | 786006.66 | 6511531.58 | 6513146.04 | 2075   | 162 | 2017 |
| 3502840 | 87222.00 | 88404.00  | 641391.84 | 721760.41 | 6513294.65 | 6514697.57 | 2042   | 117 | 2017 |
| 3502841 | 86726.00 | 87646.00  | 721704.78 | 786026.96 | 6511733.07 | 6513299.58 | 2075   | 162 | 2017 |
| 3502850 | 85994.00 | 87089.00  | 641421.32 | 717784.65 | 6513580.63 | 6514896.75 | 2042   | 117 | 2017 |
| 3502851 | 85478.00 | 86476.00  | 717770.28 | 786061.69 | 6511931.30 | 6513580.22 | 2075   | 162 | 2017 |
| 3502860 | 84744.00 | 85895.00  | 641424.52 | 719750.26 | 6513739.11 | 6515100.05 | 2042   | 117 | 2017 |
| 3502861 | 84396.00 | 85359.00  | 719753.50 | 786079.44 | 6512128.38 | 6513738.21 | 2075   | 162 | 2017 |
| 3502870 | 82834.00 | 84627.00  | 641384.29 | 765175.93 | 6512882.42 | 6515300.29 | 2042   | 117 | 2017 |
| 3502871 | 94996.00 | 95294.00  | 765160.52 | 786071.32 | 6512331.73 | 6512882.99 | 2079   | 167 | 2017 |
| 3502880 | 99373.00 | 101500.00 | 641412.94 | 786089.40 | 6512529.41 | 6515500.75 | 2041   | 116 | 2017 |
| 3502890 | 98083.00 | 99248.00  | 641431.04 | 721735.84 | 6514298.25 | 6515696.72 | 2041   | 116 | 2017 |
| 3502891 | 90048.00 | 90974.00  | 721766.27 | 786030.69 | 6512732.32 | 6514300.62 | 2077   | 165 | 2017 |
| 3502900 | 96787.00 | 97993.00  | 641393.94 | 723762.95 | 6514445.22 | 6515896.64 | 2041   | 116 | 2017 |
| 3502901 | 91216.00 | 92111.00  | 723722.72 | 786085.07 | 6512927.44 | 6514455.48 | 2077   | 165 | 2017 |
| 3502910 | 95506.00 | 96684.00  | 641432.75 | 721759.40 | 6514698.85 | 6516095.45 | 2041   | 116 | 2017 |
| 3502911 | 92213.00 | 93136.00  | 721717.53 | 786097.89 | 6513130.06 | 6514698.09 | 2077   | 165 | 2017 |
| 3502920 | 94146.00 | 95354.00  | 641415.90 | 723736.25 | 6514847.51 | 6516296.22 | 2041   | 116 | 2017 |
| 3502921 | 93358.00 | 94256.00  | 723744.01 | 786070.91 | 6513327.44 | 6514852.57 | 2077   | 165 | 2017 |
| 3502930 | 92890.00 | 94038.00  | 641426.99 | 719840.86 | 6515132.45 | 6516496.68 | 2041   | 116 | 2017 |
| 3502931 | 94376.00 | 95321.00  | 719774.44 | 786120.99 | 6513524.18 | 6515138.42 | 2077   | 165 | 2017 |
| 3502940 | 91578.00 | 92770.00  | 641424.22 | 723767.29 | 6515252.16 | 6516697.25 | 2041   | 116 | 2017 |
| 3502941 | 95573.00 | 96468.00  | 723727.59 | 786117.32 | 6513725.00 | 6515250.19 | 2077   | 165 | 2017 |
| 3502950 | 90260.00 | 91444.00  | 641447.43 | 721787.67 | 6515496.23 | 6516894.94 | 2041   | 116 | 2017 |
| 3502951 | 96569.00 | 97495.00  | 721750.28 | 786119.93 | 6513924.89 | 6515494.63 | 2077   | 165 | 2017 |
| 3502960 | 88929.00 | 90160.00  | 641402.78 | 723755.05 | 6515646.49 | 6517095.16 | 2041   | 116 | 2017 |
| 3502961 | 97734.00 | 98634.00  | 723740.67 | 786075.70 | 6514125.04 | 6515650.33 | 2077   | 165 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3502970 | 87660.00  | 88805.00  | 641431.25 | 719812.59 | 6515935.86 | 6517291.73 | 2041   | 116 | 2017 |
| 3502971 | 98750.00  | 99702.00  | 719801.88 | 786128.08 | 6514329.46 | 6515935.89 | 2077   | 165 | 2017 |
| 3502980 | 86337.00  | 87538.00  | 641460.07 | 723806.52 | 6516047.33 | 6517489.16 | 2041   | 116 | 2017 |
| 3502981 | 99920.00  | 100814.00 | 723725.41 | 786089.56 | 6514523.95 | 6516051.39 | 2077   | 165 | 2017 |
| 3502990 | 85366.00  | 86217.00  | 641433.38 | 700067.48 | 6516731.87 | 6517693.95 | 2041   | 116 | 2017 |
| 3502991 | 88329.00  | 89556.00  | 700099.37 | 786125.41 | 6514723.99 | 6516735.35 | 2080   | 172 | 2017 |
| 3503000 | 103599.00 | 105701.00 | 641448.00 | 786147.53 | 6514920.14 | 6517895.70 | 2040   | 115 | 2017 |
| 3503010 | 102000.00 | 103493.00 | 641466.19 | 741522.38 | 6516256.35 | 6518091.30 | 2040   | 115 | 2017 |
| 3503011 | 82917.00  | 83556.00  | 741503.19 | 786164.56 | 6515122.33 | 6516254.70 | 2078   | 166 | 2017 |
| 3503020 | 100389.00 | 101907.00 | 641468.16 | 743553.17 | 6516408.90 | 6518289.03 | 2040   | 115 | 2017 |
| 3503021 | 83825.00  | 84439.00  | 743513.38 | 786155.08 | 6515322.49 | 6516405.04 | 2078   | 166 | 2017 |
| 3503030 | 99081.00  | 100288.00 | 641476.69 | 721840.66 | 6517087.70 | 6518486.50 | 2040   | 115 | 2017 |
| 3503031 | 84558.00  | 85477.00  | 721792.94 | 786117.82 | 6515523.05 | 6517090.19 | 2078   | 166 | 2017 |
| 3503040 | 97725.00  | 98966.00  | 641441.61 | 725790.44 | 6517200.60 | 6518693.63 | 2040   | 115 | 2017 |
| 3503041 | 85765.00  | 86632.00  | 725772.60 | 786114.93 | 6515722.90 | 6517203.78 | 2078   | 166 | 2017 |
| 3503050 | 96370.00  | 97603.00  | 641448.28 | 723835.98 | 6517445.26 | 6518887.31 | 2040   | 115 | 2017 |
| 3503051 | 86758.00  | 87645.00  | 723764.90 | 786163.84 | 6515922.11 | 6517448.52 | 2078   | 166 | 2017 |
| 3503060 | 95054.00  | 96281.00  | 641428.40 | 725775.08 | 6517599.11 | 6519083.76 | 2040   | 115 | 2017 |
| 3503061 | 87908.00  | 88775.00  | 725739.75 | 786166.69 | 6516120.15 | 6517608.66 | 2078   | 166 | 2017 |
| 3503070 | 93676.00  | 94914.00  | 641481.21 | 723804.13 | 6517842.96 | 6519288.94 | 2040   | 115 | 2017 |
| 3503071 | 88901.00  | 89793.00  | 723749.47 | 786130.67 | 6516322.99 | 6517844.68 | 2078   | 166 | 2017 |
| 3503080 | 92362.00  | 93590.00  | 641428.59 | 725772.48 | 6517999.79 | 6519486.72 | 2040   | 115 | 2017 |
| 3503081 | 90052.00  | 90921.00  | 725727.59 | 786196.67 | 6516520.40 | 6518002.78 | 2078   | 166 | 2017 |
| 3503090 | 91058.00  | 92258.00  | 641473.18 | 721822.75 | 6518286.60 | 6519685.68 | 2040   | 115 | 2017 |
| 3503091 | 91036.00  | 91955.00  | 721782.94 | 786150.04 | 6516717.32 | 6518286.29 | 2078   | 166 | 2017 |
| 3503100 | 89702.00  | 90923.00  | 641453.99 | 725774.18 | 6518396.87 | 6519881.11 | 2040   | 115 | 2017 |
| 3503101 | 92212.00  | 93075.00  | 725763.56 | 786172.05 | 6516916.10 | 6518400.77 | 2078   | 166 | 2017 |
| 3503110 | 88720.00  | 89574.00  | 641466.53 | 700129.64 | 6519119.75 | 6520082.91 | 2040   | 115 | 2017 |
| 3503111 | 89662.00  | 90924.00  | 700117.73 | 786219.69 | 6517115.90 | 6519123.89 | 2080   | 172 | 2017 |
| 3503120 | 88486.00  | 90573.00  | 641450.35 | 786185.68 | 6517317.42 | 6520280.78 | 2039   | 112 | 2017 |
| 3503130 | 82367.00  | 84472.00  | 641465.01 | 786180.81 | 6517517.57 | 6520483.01 | 2038   | 108 | 2017 |
| 3503141 | 87083.00  | 89174.00  | 641443.23 | 786227.16 | 6517713.99 | 6520683.36 | 2051   | 130 | 2017 |
| 3503151 | 84835.00  | 86960.00  | 641458.03 | 786184.45 | 6517915.34 | 6520879.92 | 2051   | 130 | 2017 |
| 3503161 | 82633.00  | 84724.00  | 641462.04 | 786195.34 | 6518112.65 | 6521081.55 | 2051   | 130 | 2017 |
| 3503171 | 96385.00  | 98493.00  | 641491.94 | 786198.06 | 6518316.66 | 6521281.82 | 2050   | 128 | 2017 |
| 3503181 | 94160.00  | 96258.00  | 641507.52 | 786211.40 | 6518517.77 | 6521481.16 | 2050   | 128 | 2017 |
| 3503191 | 91880.00  | 94026.00  | 641466.57 | 786206.66 | 6518715.15 | 6521681.65 | 2050   | 128 | 2017 |
| 3503201 | 89653.00  | 91740.00  | 641470.56 | 786214.26 | 6518916.17 | 6521876.51 | 2050   | 128 | 2017 |
| 3503211 | 87360.00  | 89547.00  | 641499.69 | 786267.08 | 6519111.29 | 6522078.51 | 2050   | 128 | 2017 |
| 3503221 | 85144.00  | 87230.00  | 641473.24 | 786222.15 | 6519308.33 | 6522274.21 | 2050   | 128 | 2017 |
| 3503231 | 96217.00  | 98495.00  | 641503.86 | 786274.57 | 6519511.54 | 6522478.84 | 2049   | 127 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3503241 | 94706.00 | 96074.00  | 641522.89 | 735764.60 | 6520973.12 | 6522671.20 | 2049   | 127 | 2017 |
| 3503242 | 83043.00 | 83771.00  | 735704.68 | 786275.19 | 6519708.14 | 6520976.31 | 2050   | 128 | 2017 |
| 3503251 | 93016.00 | 94562.00  | 641536.48 | 741694.93 | 6521037.88 | 6522876.33 | 2049   | 127 | 2017 |
| 3503252 | 84367.00 | 85036.00  | 741636.55 | 786249.28 | 6519913.34 | 6521035.59 | 2050   | 128 | 2017 |
| 3503260 | 98951.00 | 101053.00 | 641492.48 | 786239.79 | 6520111.58 | 6523072.15 | 2036   | 103 | 2017 |
| 3503270 | 97586.00 | 98816.00  | 641544.23 | 725864.31 | 6521785.90 | 6523274.54 | 2036   | 103 | 2017 |
| 3503271 | 85353.00 | 86230.00  | 725831.48 | 786261.80 | 6520307.82 | 6521790.46 | 2069   | 156 | 2017 |
| 3503280 | 96206.00 | 97466.00  | 641525.61 | 727842.24 | 6521945.54 | 6523470.33 | 2036   | 103 | 2017 |
| 3503281 | 86353.00 | 87202.00  | 727802.04 | 786307.36 | 6520508.58 | 6521949.39 | 2069   | 156 | 2017 |
| 3503290 | 94842.00 | 96072.00  | 641538.98 | 725902.73 | 6522188.36 | 6523671.18 | 2036   | 103 | 2017 |
| 3503291 | 87491.00 | 88374.00  | 725836.00 | 786296.89 | 6520705.43 | 6522194.33 | 2069   | 156 | 2017 |
| 3503300 | 93461.00 | 94727.00  | 641514.06 | 727850.14 | 6522345.51 | 6523868.71 | 2036   | 103 | 2017 |
| 3503301 | 89615.00 | 90455.00  | 727802.06 | 786264.86 | 6520906.89 | 6522349.30 | 2069   | 156 | 2017 |
| 3503310 | 92113.00 | 93318.00  | 641504.29 | 723885.35 | 6522633.11 | 6524071.34 | 2036   | 103 | 2017 |
| 3503311 | 88491.00 | 89386.00  | 723870.05 | 786294.02 | 6521106.85 | 6522633.36 | 2069   | 156 | 2017 |
| 3503320 | 90701.00 | 91961.00  | 641561.08 | 727864.71 | 6522738.40 | 6524270.03 | 2036   | 103 | 2017 |
| 3503321 | 91711.00 | 92568.00  | 727820.48 | 786274.67 | 6521305.80 | 6522749.43 | 2069   | 156 | 2017 |
| 3503330 | 89328.00 | 90556.00  | 641509.13 | 725905.74 | 6522986.54 | 6524469.84 | 2036   | 103 | 2017 |
| 3503331 | 90565.00 | 91437.00  | 725837.15 | 786320.15 | 6521514.74 | 6522990.60 | 2069   | 156 | 2017 |
| 3503340 | 87867.00 | 89141.00  | 641551.20 | 727866.20 | 6523140.91 | 6524669.80 | 2036   | 103 | 2017 |
| 3503341 | 93752.00 | 94611.00  | 727854.50 | 786325.11 | 6521705.48 | 6523142.45 | 2069   | 156 | 2017 |
| 3503350 | 86467.00 | 87685.00  | 641547.19 | 725939.32 | 6523387.19 | 6524869.13 | 2036   | 103 | 2017 |
| 3503351 | 92685.00 | 93548.00  | 725876.19 | 786300.37 | 6521906.12 | 6523387.79 | 2069   | 156 | 2017 |
| 3503360 | 85045.00 | 86338.00  | 641517.43 | 727864.35 | 6523545.42 | 6525068.50 | 2036   | 103 | 2017 |
| 3503361 | 94739.00 | 95586.00  | 727888.41 | 786351.57 | 6522105.33 | 6523539.82 | 2069   | 156 | 2017 |
| 3503370 | 82810.00 | 84899.00  | 641574.49 | 786320.82 | 6522304.46 | 6525267.87 | 2036   | 103 | 2017 |
| 3503380 | 98270.00 | 100371.00 | 641530.60 | 786316.63 | 6522502.96 | 6525467.13 | 2035   | 102 | 2017 |
| 3503390 | 96711.00 | 98157.00  | 641551.50 | 741742.25 | 6523826.84 | 6525666.10 | 2035   | 102 | 2017 |
| 3503391 | 96834.00 | 97470.00  | 741715.08 | 786349.63 | 6522705.09 | 6523829.96 | 2069   | 156 | 2017 |
| 3503400 | 95119.00 | 96620.00  | 641577.52 | 743716.52 | 6523982.64 | 6525878.89 | 2035   | 102 | 2017 |
| 3503401 | 97720.00 | 98346.00  | 743652.06 | 786361.79 | 6522902.84 | 6523982.18 | 2069   | 156 | 2017 |
| 3503410 | 93760.00 | 94994.00  | 641524.79 | 725938.02 | 6524581.01 | 6526063.13 | 2035   | 102 | 2017 |
| 3503411 | 95864.00 | 96736.00  | 725900.80 | 786342.27 | 6523098.94 | 6524584.06 | 2069   | 156 | 2017 |
| 3503420 | 92403.00 | 93655.00  | 641552.34 | 727929.88 | 6524737.09 | 6526264.25 | 2035   | 102 | 2017 |
| 3503421 | 85883.00 | 86720.00  | 727880.47 | 786321.95 | 6523304.12 | 6524738.63 | 2079   | 167 | 2017 |
| 3503430 | 91035.00 | 92274.00  | 641553.75 | 725919.66 | 6524980.84 | 6526465.53 | 2035   | 102 | 2017 |
| 3503431 | 86856.00 | 87716.00  | 725943.49 | 786368.95 | 6523499.29 | 6524982.67 | 2079   | 167 | 2017 |
| 3503440 | 89693.00 | 90930.00  | 641541.50 | 727910.69 | 6525142.65 | 6526665.26 | 2035   | 102 | 2017 |
| 3503441 | 98565.00 | 99404.00  | 727858.78 | 786362.65 | 6523703.08 | 6525141.28 | 2078   | 166 | 2017 |
| 3503450 | 88388.00 | 89584.00  | 641555.04 | 723941.18 | 6525428.95 | 6526862.97 | 2035   | 102 | 2017 |
| 3503451 | 97439.00 | 98329.00  | 723962.84 | 786373.02 | 6523903.36 | 6525418.81 | 2078   | 166 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3503460 | 86981.00  | 88242.00  | 641546.11 | 727900.83 | 6525543.01 | 6527063.17 | 2035   | 102 | 2017 |
| 3503461 | 96474.00  | 97308.00  | 727924.94 | 786382.27 | 6524098.76 | 6525536.35 | 2078   | 166 | 2017 |
| 3503470 | 85678.00  | 86869.00  | 641589.51 | 723986.47 | 6525824.20 | 6527262.98 | 2035   | 102 | 2017 |
| 3503471 | 95297.00  | 96191.00  | 723967.37 | 786369.50 | 6524298.68 | 6525820.93 | 2078   | 166 | 2017 |
| 3503480 | 84261.00  | 85525.00  | 641584.50 | 727968.82 | 6525931.49 | 6527463.92 | 2035   | 102 | 2017 |
| 3503481 | 94331.00  | 95165.00  | 727922.78 | 786371.20 | 6524499.03 | 6525936.15 | 2078   | 166 | 2017 |
| 3503490 | 82034.00  | 84115.00  | 641587.53 | 786410.86 | 6524700.07 | 6527659.11 | 2035   | 102 | 2017 |
| 3503500 | 98881.00  | 100977.00 | 641607.79 | 786413.45 | 6524894.03 | 6527861.79 | 2034   | 99  | 2017 |
| 3503510 | 97515.00  | 98767.00  | 641594.76 | 727920.51 | 6526533.62 | 6528057.80 | 2034   | 99  | 2017 |
| 3503511 | 93247.00  | 94088.00  | 727916.65 | 786379.28 | 6525096.98 | 6526531.68 | 2078   | 166 | 2017 |
| 3503520 | 96139.00  | 97413.00  | 641575.41 | 729900.89 | 6526689.90 | 6528259.14 | 2034   | 99  | 2017 |
| 3503521 | 99097.00  | 99929.00  | 729866.71 | 786403.86 | 6525297.44 | 6526691.04 | 2073   | 160 | 2017 |
| 3503530 | 94771.00  | 96028.00  | 641607.07 | 727940.59 | 6526935.59 | 6528458.06 | 2034   | 99  | 2017 |
| 3503531 | 98014.00  | 98855.00  | 727914.54 | 786399.71 | 6525493.84 | 6526932.71 | 2073   | 160 | 2017 |
| 3503540 | 93374.00  | 94665.00  | 641591.33 | 729950.74 | 6527087.17 | 6528654.81 | 2034   | 99  | 2017 |
| 3503541 | 97069.00  | 97893.00  | 729884.69 | 786384.51 | 6525702.52 | 6527091.21 | 2073   | 160 | 2017 |
| 3503550 | 92007.00  | 93252.00  | 641594.97 | 727999.86 | 6527329.64 | 6528855.75 | 2034   | 99  | 2017 |
| 3503551 | 95928.00  | 96777.00  | 727920.60 | 786439.00 | 6525893.85 | 6527333.98 | 2073   | 160 | 2017 |
| 3503560 | 90609.00  | 91897.00  | 641588.61 | 729941.41 | 6527490.35 | 6529056.31 | 2034   | 99  | 2017 |
| 3503561 | 94981.00  | 95817.00  | 729926.33 | 786419.78 | 6526097.02 | 6527488.35 | 2073   | 160 | 2017 |
| 3503570 | 89233.00  | 90479.00  | 641589.62 | 727994.96 | 6527729.51 | 6529253.56 | 2034   | 99  | 2017 |
| 3503571 | 93905.00  | 94738.00  | 727928.80 | 786403.01 | 6526295.92 | 6527730.31 | 2073   | 160 | 2017 |
| 3503580 | 87845.00  | 89138.00  | 641608.59 | 729990.25 | 6527887.21 | 6529455.95 | 2034   | 99  | 2017 |
| 3503581 | 83969.00  | 84813.00  | 729918.85 | 786469.80 | 6526489.07 | 6527889.48 | 2073   | 160 | 2017 |
| 3503590 | 86476.00  | 87727.00  | 641583.66 | 727990.81 | 6528129.22 | 6529655.20 | 2034   | 99  | 2017 |
| 3503591 | 82895.00  | 83726.00  | 727957.30 | 786438.80 | 6526688.42 | 6528131.27 | 2073   | 160 | 2017 |
| 3503600 | 85091.00  | 86375.00  | 641611.93 | 729994.70 | 6528286.46 | 6529852.91 | 2034   | 99  | 2017 |
| 3503601 | 99634.00  | 100450.00 | 729936.31 | 786428.20 | 6526889.51 | 6528287.94 | 2072   | 159 | 2017 |
| 3503610 | 82877.00  | 84960.00  | 641574.92 | 786424.06 | 6527091.63 | 6530058.50 | 2034   | 99  | 2017 |
| 3503620 | 98232.00  | 100354.00 | 641597.90 | 786480.74 | 6527289.24 | 6530254.53 | 2033   | 98  | 2017 |
| 3503630 | 96644.00  | 98145.00  | 641640.30 | 743808.40 | 6528569.80 | 6530454.80 | 2033   | 98  | 2017 |
| 3503631 | 100574.00 | 101186.00 | 743764.02 | 786475.10 | 6527490.96 | 6528573.88 | 2072   | 159 | 2017 |
| 3503640 | 94980.00  | 96473.00  | 641583.71 | 745762.69 | 6528723.72 | 6530651.41 | 2033   | 98  | 2017 |
| 3503641 | 101425.00 | 102014.00 | 745797.37 | 786449.74 | 6527691.00 | 6528724.35 | 2072   | 159 | 2017 |
| 3503650 | 93579.00  | 94852.00  | 641616.31 | 726069.26 | 6529367.53 | 6530851.78 | 2033   | 98  | 2017 |
| 3503651 | 98541.00  | 99411.00  | 725983.82 | 786476.93 | 6527889.92 | 6529369.91 | 2072   | 159 | 2017 |
| 3503660 | 92180.00  | 93422.00  | 641610.67 | 727996.40 | 6529526.25 | 6531047.27 | 2033   | 98  | 2017 |
| 3503661 | 97562.00  | 98417.00  | 728013.40 | 786507.73 | 6528088.95 | 6529522.39 | 2072   | 159 | 2017 |
| 3503670 | 90794.00  | 92073.00  | 641597.27 | 726077.79 | 6529764.71 | 6531248.82 | 2033   | 98  | 2017 |
| 3503671 | 96455.00  | 97315.00  | 726005.99 | 786518.51 | 6528288.29 | 6529765.27 | 2072   | 159 | 2017 |
| 3503680 | 89388.00  | 90638.00  | 641659.64 | 728054.78 | 6529921.69 | 6531445.39 | 2033   | 98  | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME     | TIME     | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|----------|----------|-----------|-----------|------------|------------|--------|-----|------|
| 3503681 | 95485.00 | 96334.00 | 727974.70 | 786510.04 | 6528484.97 | 6529926.96 | 2072   | 159 | 2017 |
| 3503690 | 88003.00 | 89272.00 | 641593.42 | 728041.23 | 6530122.08 | 6531650.04 | 2033   | 98  | 2017 |
| 3503691 | 94386.00 | 95222.00 | 727980.64 | 786536.62 | 6528686.33 | 6530121.94 | 2072   | 159 | 2017 |
| 3503700 | 86617.00 | 87862.00 | 641636.36 | 728051.50 | 6530322.46 | 6531847.35 | 2033   | 98  | 2017 |
| 3503701 | 93390.00 | 94273.00 | 727971.96 | 786485.83 | 6528883.21 | 6530323.06 | 2072   | 159 | 2017 |
| 3503710 | 85282.00 | 86516.00 | 641611.57 | 726075.38 | 6530563.07 | 6532046.74 | 2033   | 98  | 2017 |
| 3503711 | 92260.00 | 93126.00 | 726049.08 | 786494.84 | 6529087.75 | 6530562.69 | 2072   | 159 | 2017 |
| 3503720 | 83871.00 | 85116.00 | 641635.99 | 728031.86 | 6530723.23 | 6532246.92 | 2033   | 98  | 2017 |
| 3503721 | 91259.00 | 92116.00 | 728005.80 | 786519.71 | 6529286.87 | 6530719.48 | 2072   | 159 | 2017 |
| 3503730 | 81617.00 | 83752.00 | 641637.28 | 786536.46 | 6529480.49 | 6532444.21 | 2033   | 98  | 2017 |
| 3503740 | 97881.00 | 99945.00 | 641620.31 | 786546.29 | 6529685.59 | 6532642.64 | 2032   | 97  | 2017 |
| 3503750 | 96221.00 | 97777.00 | 641643.77 | 747795.02 | 6530868.97 | 6532845.68 | 2032   | 97  | 2017 |
| 3503751 | 89963.00 | 90562.00 | 747815.59 | 786509.96 | 6529884.94 | 6530874.25 | 2059   | 141 | 2017 |
| 3503760 | 94543.00 | 96103.00 | 641626.82 | 749834.23 | 6531023.95 | 6533039.80 | 2032   | 97  | 2017 |
| 3503761 | 90834.00 | 91363.00 | 749781.52 | 786541.32 | 6530083.34 | 6531020.42 | 2059   | 141 | 2017 |
| 3503770 | 93093.00 | 94428.00 | 641668.63 | 730042.21 | 6531672.91 | 6533244.87 | 2032   | 97  | 2017 |
| 3503771 | 87932.00 | 88765.00 | 729992.78 | 786579.04 | 6530283.57 | 6531675.69 | 2059   | 141 | 2017 |
| 3503780 | 91661.00 | 92969.00 | 641620.65 | 732004.12 | 6531833.37 | 6533443.78 | 2032   | 97  | 2017 |
| 3503781 | 89029.00 | 89833.00 | 731992.72 | 786526.64 | 6530482.05 | 6531832.26 | 2059   | 141 | 2017 |
| 3503790 | 90244.00 | 91541.00 | 641684.44 | 730032.94 | 6532071.74 | 6533640.59 | 2032   | 97  | 2017 |
| 3503791 | 85903.00 | 86744.00 | 729985.20 | 786533.46 | 6530679.93 | 6532074.15 | 2059   | 141 | 2017 |
| 3503800 | 88828.00 | 90128.00 | 641639.53 | 732047.99 | 6532226.93 | 6533843.47 | 2032   | 97  | 2017 |
| 3503801 | 87008.00 | 87804.00 | 732013.56 | 786557.33 | 6530877.21 | 6532227.27 | 2059   | 141 | 2017 |
| 3503810 | 87429.00 | 88718.00 | 641657.93 | 730091.01 | 6532468.93 | 6534040.17 | 2032   | 97  | 2017 |
| 3503811 | 83893.00 | 84713.00 | 729993.09 | 786550.29 | 6531081.67 | 6532472.35 | 2059   | 141 | 2017 |
| 3503820 | 86017.00 | 87314.00 | 641669.84 | 732042.84 | 6532628.05 | 6534238.81 | 2032   | 97  | 2017 |
| 3503821 | 84984.00 | 85791.00 | 732037.93 | 786584.42 | 6531279.00 | 6532629.58 | 2059   | 141 | 2017 |
| 3503830 | 84622.00 | 85906.00 | 641650.13 | 730060.31 | 6532870.70 | 6534441.25 | 2032   | 97  | 2017 |
| 3503831 | 81848.00 | 82671.00 | 730051.91 | 786551.75 | 6531481.28 | 6532871.11 | 2059   | 141 | 2017 |
| 3503840 | 83192.00 | 84510.00 | 641666.28 | 732064.42 | 6533026.29 | 6534637.04 | 2032   | 97  | 2017 |
| 3503841 | 82918.00 | 83760.00 | 732029.49 | 786613.89 | 6531677.05 | 6533024.19 | 2059   | 141 | 2017 |
| 3503850 | 80980.00 | 83068.00 | 641646.02 | 786605.50 | 6531878.94 | 6534839.63 | 2032   | 97  | 2017 |
| 3503861 | 90666.00 | 92722.00 | 641687.81 | 786573.34 | 6532084.85 | 6535032.72 | 2049   | 127 | 2017 |
| 3503871 | 88336.00 | 90536.00 | 641649.20 | 786595.99 | 6532278.87 | 6535238.64 | 2049   | 127 | 2017 |
| 3503881 | 86133.00 | 88217.00 | 641655.78 | 786594.14 | 6532475.77 | 6535438.07 | 2049   | 127 | 2017 |
| 3503891 | 83845.00 | 86015.00 | 641678.12 | 786600.58 | 6532675.59 | 6535636.00 | 2049   | 127 | 2017 |
| 3503901 | 81640.00 | 83725.00 | 641691.82 | 786596.12 | 6532875.35 | 6535834.03 | 2049   | 127 | 2017 |
| 3503911 | 97679.00 | 99739.00 | 641676.83 | 786625.51 | 6533074.30 | 6536038.24 | 2048   | 125 | 2017 |
| 3503921 | 95359.00 | 97539.00 | 641717.69 | 786626.42 | 6533274.46 | 6536232.91 | 2048   | 125 | 2017 |
| 3503931 | 93140.00 | 95225.00 | 641711.52 | 786602.83 | 6533475.62 | 6536432.61 | 2048   | 125 | 2017 |
| 3503941 | 90853.00 | 93026.00 | 641730.04 | 786631.84 | 6533677.07 | 6536634.79 | 2048   | 125 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3503951 | 88674.00  | 90750.00  | 641676.03 | 786616.93 | 6533874.92 | 6536831.85 | 2048   | 125 | 2017 |
| 3503961 | 86425.00  | 88554.00  | 641715.36 | 786633.50 | 6534073.46 | 6537030.83 | 2048   | 125 | 2017 |
| 3503971 | 84217.00  | 86316.00  | 641717.40 | 786687.48 | 6534270.66 | 6537231.28 | 2048   | 125 | 2017 |
| 3503980 | 95946.00  | 98031.00  | 641701.60 | 786665.64 | 6534474.24 | 6537428.16 | 2014   | 76  | 2017 |
| 3503990 | 94508.00  | 95814.00  | 641736.19 | 732117.15 | 6536015.40 | 6537628.07 | 2014   | 76  | 2017 |
| 3503991 | 96948.00  | 97759.00  | 732099.05 | 786671.02 | 6534672.70 | 6536019.93 | 2063   | 147 | 2017 |
| 3504000 | 93073.00  | 94389.00  | 641746.01 | 734074.76 | 6536176.09 | 6537827.96 | 2014   | 76  | 2017 |
| 3504001 | 97987.00  | 98741.00  | 734069.44 | 786695.74 | 6534868.19 | 6536174.90 | 2063   | 147 | 2017 |
| 3504010 | 91639.00  | 92946.00  | 641698.10 | 732155.99 | 6536419.67 | 6538026.89 | 2014   | 76  | 2017 |
| 3504011 | 98860.00  | 99693.00  | 732078.52 | 786691.96 | 6535069.37 | 6536419.89 | 2063   | 147 | 2017 |
| 3504020 | 90121.00  | 91476.00  | 641715.26 | 736073.58 | 6536527.32 | 6538228.07 | 2014   | 76  | 2017 |
| 3504021 | 99967.00  | 100695.00 | 736072.47 | 786714.03 | 6535268.06 | 6536527.82 | 2063   | 147 | 2017 |
| 3504030 | 88646.00  | 89982.00  | 641691.29 | 734077.99 | 6536775.44 | 6538427.56 | 2014   | 76  | 2017 |
| 3504031 | 85454.00  | 86224.00  | 734072.14 | 786677.41 | 6535469.40 | 6536770.12 | 2072   | 159 | 2017 |
| 3504040 | 87122.00  | 88490.00  | 641724.42 | 736096.70 | 6536929.87 | 6538628.42 | 2014   | 76  | 2017 |
| 3504041 | 86353.00  | 87082.00  | 736048.52 | 786722.40 | 6535666.15 | 6536924.36 | 2072   | 159 | 2017 |
| 3504050 | 85644.00  | 86971.00  | 641759.52 | 734139.39 | 6537168.23 | 6538823.75 | 2014   | 76  | 2017 |
| 3504051 | 88206.00  | 88962.00  | 734055.21 | 786688.22 | 6535867.73 | 6537173.69 | 2072   | 159 | 2017 |
| 3504060 | 84099.00  | 85477.00  | 641737.69 | 736128.02 | 6537324.33 | 6539025.01 | 2014   | 76  | 2017 |
| 3504061 | 87342.00  | 88086.00  | 736093.09 | 786705.19 | 6536067.73 | 6537326.65 | 2072   | 159 | 2017 |
| 3504070 | 82615.00  | 83948.00  | 641712.87 | 734091.92 | 6537573.74 | 6539226.94 | 2014   | 76  | 2017 |
| 3504071 | 89223.00  | 89997.00  | 734067.76 | 786742.30 | 6536266.28 | 6537572.23 | 2072   | 159 | 2017 |
| 3504080 | 81093.00  | 82469.00  | 641726.32 | 736103.90 | 6537725.51 | 6539426.70 | 2014   | 76  | 2017 |
| 3504081 | 90123.00  | 90855.00  | 736092.32 | 786720.05 | 6536466.19 | 6537727.19 | 2072   | 159 | 2017 |
| 3504090 | 78856.00  | 80942.00  | 641754.32 | 786728.13 | 6536661.97 | 6539621.75 | 2014   | 76  | 2017 |
| 3504100 | 78301.00  | 80405.00  | 641717.94 | 786697.19 | 6536869.30 | 6539822.82 | 2013   | 75  | 2017 |
| 3504110 | 85527.00  | 87662.00  | 641737.53 | 786696.67 | 6537062.76 | 6540022.28 | 2009   | 71  | 2017 |
| 3504120 | 83342.00  | 85425.00  | 641733.45 | 786749.76 | 6537269.08 | 6540221.54 | 2009   | 71  | 2017 |
| 3504130 | 81123.00  | 83231.00  | 641720.11 | 786721.40 | 6537465.89 | 6540420.51 | 2009   | 71  | 2017 |
| 3504140 | 78922.00  | 81005.00  | 641735.97 | 786776.63 | 6537662.63 | 6540620.01 | 2009   | 71  | 2017 |
| 3504150 | 88085.00  | 90321.00  | 641748.86 | 786775.86 | 6537856.60 | 6540817.33 | 2008   | 70  | 2017 |
| 3504161 | 81978.00  | 84087.00  | 641760.94 | 786732.34 | 6538062.40 | 6541020.30 | 2048   | 125 | 2017 |
| 3504170 | 101513.00 | 103096.00 | 678017.43 | 786731.94 | 6538259.11 | 6540665.65 | 2008   | 70  | 2017 |
| 3504180 | 103208.00 | 104963.00 | 678035.71 | 786746.16 | 6538459.00 | 6540867.50 | 2008   | 70  | 2017 |
| 3504190 | 105100.00 | 106689.00 | 678086.28 | 786789.49 | 6538658.12 | 6541065.70 | 2008   | 70  | 2017 |
| 3504200 | 87785.00  | 89371.00  | 678158.61 | 786803.55 | 6538852.27 | 6541262.06 | 2009   | 71  | 2017 |
| 3504210 | 89494.00  | 91085.00  | 678177.73 | 786802.95 | 6539058.18 | 6541459.48 | 2009   | 71  | 2017 |
| 3504220 | 91219.00  | 92803.00  | 678163.08 | 786785.14 | 6539257.99 | 6541660.08 | 2009   | 71  | 2017 |
| 3504230 | 92901.00  | 94484.00  | 678214.75 | 786827.25 | 6539454.19 | 6541859.67 | 2009   | 71  | 2017 |
| 3504240 | 95288.00  | 96863.00  | 678254.55 | 786795.56 | 6539656.99 | 6542056.75 | 2012   | 74  | 2017 |
| 3504250 | 86266.00  | 87129.00  | 678279.11 | 736219.03 | 6541116.65 | 6542256.89 | 2013   | 75  | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3504251 | 98496.00  | 99247.00  | 736153.82 | 786793.12 | 6539857.69 | 6541118.38 | 2062   | 146 | 2017 |
| 3504260 | 87259.00  | 88064.00  | 678324.05 | 734240.54 | 6541355.59 | 6542456.77 | 2013   | 75  | 2017 |
| 3504261 | 99505.00  | 100258.00 | 734188.90 | 786779.93 | 6540057.61 | 6541361.61 | 2062   | 146 | 2017 |
| 3504270 | 88214.00  | 89080.00  | 678327.51 | 736173.88 | 6541512.32 | 6542654.62 | 2013   | 75  | 2017 |
| 3504271 | 100362.00 | 101160.00 | 736179.59 | 786831.90 | 6540257.36 | 6541520.82 | 2062   | 146 | 2017 |
| 3504280 | 89225.00  | 90029.00  | 678410.92 | 734225.00 | 6541753.93 | 6542851.43 | 2013   | 75  | 2017 |
| 3504281 | 97275.00  | 98044.00  | 734199.67 | 786791.24 | 6540462.57 | 6541758.70 | 2065   | 151 | 2017 |
| 3504290 | 90185.00  | 91041.00  | 678424.43 | 736222.63 | 6541912.05 | 6543053.48 | 2013   | 75  | 2017 |
| 3504291 | 98309.00  | 99034.00  | 736186.88 | 786821.96 | 6540653.14 | 6541917.54 | 2065   | 151 | 2017 |
| 3504300 | 91184.00  | 91985.00  | 678465.09 | 734206.63 | 6542163.17 | 6543251.33 | 2013   | 75  | 2017 |
| 3504301 | 99173.00  | 99928.00  | 734222.82 | 786839.86 | 6540854.34 | 6542158.80 | 2065   | 151 | 2017 |
| 3504310 | 92134.00  | 92985.00  | 678464.22 | 736211.84 | 6542310.46 | 6543449.04 | 2013   | 75  | 2017 |
| 3504311 | 100158.00 | 100888.00 | 736182.79 | 786872.12 | 6541051.33 | 6542315.42 | 2065   | 151 | 2017 |
| 3504320 | 93128.00  | 93925.00  | 678501.04 | 734255.78 | 6542553.84 | 6543647.03 | 2013   | 75  | 2017 |
| 3504321 | 96808.00  | 97556.00  | 734183.37 | 786812.27 | 6541254.40 | 6542559.22 | 2068   | 155 | 2017 |
| 3504330 | 94055.00  | 94889.00  | 678508.43 | 736218.30 | 6542717.59 | 6543850.01 | 2013   | 75  | 2017 |
| 3504331 | 97772.00  | 98493.00  | 736222.40 | 786883.37 | 6541451.21 | 6542711.64 | 2068   | 155 | 2017 |
| 3504340 | 95035.00  | 95820.00  | 678603.46 | 734243.77 | 6542954.48 | 6544042.60 | 2013   | 75  | 2017 |
| 3504341 | 98615.00  | 99378.00  | 734210.75 | 786876.23 | 6541649.91 | 6542958.01 | 2068   | 155 | 2017 |
| 3504350 | 95950.00  | 97506.00  | 678581.58 | 786888.75 | 6541850.94 | 6544242.08 | 2013   | 75  | 2017 |
| 3504360 | 98141.00  | 99719.00  | 678618.39 | 786892.22 | 6542048.01 | 6544443.40 | 2026   | 91  | 2017 |
| 3504370 | 97222.00  | 98021.00  | 678685.60 | 734253.92 | 6543555.99 | 6544648.75 | 2026   | 91  | 2017 |
| 3504371 | 99593.00  | 100346.00 | 734202.27 | 786905.36 | 6542250.27 | 6543554.19 | 2068   | 155 | 2017 |
| 3504380 | 96272.00  | 97116.00  | 678677.61 | 736269.37 | 6543706.22 | 6544844.88 | 2026   | 91  | 2017 |
| 3504381 | 99778.00  | 100508.00 | 736218.91 | 786877.83 | 6542448.06 | 6543708.90 | 2074   | 161 | 2017 |
| 3504390 | 95342.00  | 96145.00  | 678711.87 | 734282.91 | 6543945.38 | 6545039.01 | 2026   | 91  | 2017 |
| 3504391 | 99980.00  | 100728.00 | 734236.78 | 786871.53 | 6542649.35 | 6543953.95 | 2075   | 162 | 2017 |
| 3504400 | 94409.00  | 95249.00  | 678727.22 | 736281.84 | 6544101.18 | 6545237.63 | 2026   | 91  | 2017 |
| 3504401 | 84633.00  | 85374.00  | 736234.88 | 786903.19 | 6542847.47 | 6544106.56 | 2079   | 167 | 2017 |
| 3504410 | 93488.00  | 94294.00  | 678737.58 | 734289.34 | 6544350.27 | 6545436.68 | 2026   | 91  | 2017 |
| 3504411 | 82701.00  | 83453.00  | 734219.78 | 786881.78 | 6543053.81 | 6544349.48 | 2079   | 167 | 2017 |
| 3504420 | 92540.00  | 93381.00  | 678851.25 | 736277.60 | 6544503.64 | 6545641.65 | 2026   | 91  | 2017 |
| 3504421 | 83766.00  | 84492.00  | 736207.54 | 786886.78 | 6543244.16 | 6544507.08 | 2079   | 167 | 2017 |
| 3504430 | 91629.00  | 92433.00  | 678895.76 | 734315.89 | 6544745.40 | 6545837.95 | 2026   | 91  | 2017 |
| 3504431 | 97216.00  | 97978.00  | 734248.75 | 786903.42 | 6543449.24 | 6544747.69 | 2067   | 154 | 2017 |
| 3504440 | 90681.00  | 91530.00  | 678881.76 | 736244.99 | 6544906.22 | 6546037.29 | 2026   | 91  | 2017 |
| 3504441 | 98234.00  | 98967.00  | 736244.82 | 786914.86 | 6543646.72 | 6544907.01 | 2067   | 154 | 2017 |
| 3504450 | 89751.00  | 90557.00  | 678923.11 | 734270.84 | 6545149.97 | 6546234.88 | 2026   | 91  | 2017 |
| 3504451 | 99097.00  | 99854.00  | 734269.15 | 786915.35 | 6543846.25 | 6545151.38 | 2067   | 154 | 2017 |
| 3504460 | 88806.00  | 89647.00  | 678949.24 | 736310.15 | 6545301.74 | 6546432.31 | 2026   | 91  | 2017 |
| 3504461 | 100089.00 | 100818.00 | 736221.82 | 786930.90 | 6544045.32 | 6545303.88 | 2067   | 154 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3504470 | 87907.00  | 88703.00  | 678968.61 | 734296.17 | 6545542.26 | 6546637.51 | 2026   | 91  | 2017 |
| 3504471 | 97422.00  | 98178.00  | 734299.02 | 786935.99 | 6544247.60 | 6545546.73 | 2066   | 152 | 2017 |
| 3504480 | 86939.00  | 87792.00  | 678986.66 | 736298.13 | 6545698.74 | 6546831.43 | 2026   | 91  | 2017 |
| 3504481 | 98416.00  | 99145.00  | 736241.97 | 786941.85 | 6544442.60 | 6545701.61 | 2066   | 152 | 2017 |
| 3504490 | 86046.00  | 86844.00  | 679029.19 | 734334.48 | 6545946.19 | 6547031.21 | 2026   | 91  | 2017 |
| 3504491 | 99261.00  | 100013.00 | 734314.06 | 786907.37 | 6544647.73 | 6545947.24 | 2066   | 152 | 2017 |
| 3504500 | 85087.00  | 85937.00  | 679063.31 | 736301.16 | 6546103.73 | 6547231.82 | 2026   | 91  | 2017 |
| 3504501 | 100278.00 | 101015.00 | 736248.84 | 786936.84 | 6544844.06 | 6546099.63 | 2066   | 152 | 2017 |
| 3504510 | 84179.00  | 84972.00  | 679086.57 | 734341.53 | 6546340.50 | 6547425.76 | 2026   | 91  | 2017 |
| 3504511 | 99275.00  | 100038.00 | 734268.43 | 786954.54 | 6545043.45 | 6546344.77 | 2064   | 148 | 2017 |
| 3504520 | 83182.00  | 84071.00  | 679168.57 | 736326.84 | 6546497.65 | 6547624.03 | 2026   | 91  | 2017 |
| 3504521 | 100314.00 | 101049.00 | 736250.64 | 786961.82 | 6545240.93 | 6546502.16 | 2064   | 148 | 2017 |
| 3504530 | 81489.00  | 83050.00  | 679151.15 | 786986.56 | 6545442.78 | 6547826.46 | 2026   | 91  | 2017 |
| 3504540 | 77810.00  | 79368.00  | 679235.31 | 786958.63 | 6545639.88 | 6548019.79 | 2012   | 74  | 2017 |
| 3504550 | 94708.00  | 96283.00  | 679268.72 | 786943.29 | 6545841.01 | 6548226.98 | 2011   | 73  | 2017 |
| 3504560 | 93553.00  | 94577.00  | 679286.49 | 750184.39 | 6546978.67 | 6548421.17 | 2011   | 73  | 2017 |
| 3504561 | 99861.00  | 100389.00 | 750139.91 | 786979.49 | 6546040.58 | 6546970.77 | 2026   | 91  | 2017 |
| 3504570 | 92332.00  | 93386.00  | 679310.82 | 752148.47 | 6547138.01 | 6548622.37 | 2011   | 73  | 2017 |
| 3504571 | 100623.00 | 101137.00 | 752141.97 | 786971.05 | 6546238.28 | 6547127.67 | 2026   | 91  | 2017 |
| 3504580 | 91406.00  | 92207.00  | 679337.37 | 734365.48 | 6547736.72 | 6548819.57 | 2011   | 73  | 2017 |
| 3504581 | 99228.00  | 99986.00  | 734340.31 | 786993.67 | 6546438.18 | 6547738.66 | 2020   | 84  | 2017 |
| 3504590 | 90440.00  | 91266.00  | 679392.28 | 736319.55 | 6547898.10 | 6549021.43 | 2011   | 73  | 2017 |
| 3504591 | 100196.00 | 100951.00 | 736305.09 | 786978.30 | 6546639.86 | 6547893.37 | 2020   | 84  | 2017 |
| 3504600 | 89527.00  | 90324.00  | 679395.46 | 734369.64 | 6548138.26 | 6549220.23 | 2011   | 73  | 2017 |
| 3504601 | 87626.00  | 88382.00  | 734323.39 | 787009.90 | 6546838.54 | 6548139.68 | 2064   | 148 | 2017 |
| 3504610 | 88555.00  | 89382.00  | 679467.75 | 736335.20 | 6548297.44 | 6549417.94 | 2011   | 73  | 2017 |
| 3504611 | 88631.00  | 89372.00  | 736306.65 | 787025.90 | 6547035.44 | 6548296.57 | 2064   | 148 | 2017 |
| 3504620 | 87625.00  | 88421.00  | 679477.96 | 734385.00 | 6548537.75 | 6549612.21 | 2011   | 73  | 2017 |
| 3504621 | 85733.00  | 86502.00  | 734373.81 | 787015.36 | 6547233.48 | 6548535.64 | 2064   | 148 | 2017 |
| 3504630 | 86642.00  | 87465.00  | 679481.68 | 736331.22 | 6548694.93 | 6549813.60 | 2011   | 73  | 2017 |
| 3504631 | 86781.00  | 87517.00  | 736324.49 | 787006.78 | 6547432.78 | 6548692.90 | 2064   | 148 | 2017 |
| 3504640 | 85727.00  | 86523.00  | 679525.90 | 734409.32 | 6548938.27 | 6550014.05 | 2011   | 73  | 2017 |
| 3504641 | 83887.00  | 84646.00  | 734369.41 | 787026.30 | 6547635.26 | 6548935.99 | 2064   | 148 | 2017 |
| 3504650 | 84756.00  | 85587.00  | 679532.64 | 736381.74 | 6549094.46 | 6550214.19 | 2011   | 73  | 2017 |
| 3504651 | 84884.00  | 85611.00  | 736363.95 | 787047.86 | 6547831.48 | 6549090.76 | 2064   | 148 | 2017 |
| 3504660 | 83830.00  | 84626.00  | 679587.26 | 734357.38 | 6549337.59 | 6550413.28 | 2011   | 73  | 2017 |
| 3504661 | 82991.00  | 83755.00  | 734377.18 | 787027.21 | 6548031.05 | 6549334.30 | 2064   | 148 | 2017 |
| 3504670 | 82880.00  | 83697.00  | 679642.32 | 736365.75 | 6549489.21 | 6550611.37 | 2011   | 73  | 2017 |
| 3504671 | 81932.00  | 82676.00  | 736342.89 | 787047.99 | 6548229.75 | 6549492.93 | 2064   | 148 | 2017 |
| 3504680 | 81958.00  | 82747.00  | 679685.56 | 734370.04 | 6549739.67 | 6550808.99 | 2011   | 73  | 2017 |
| 3504681 | 91380.00  | 92142.00  | 734353.35 | 787072.88 | 6548430.78 | 6549735.11 | 2061   | 143 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3504690 | 80967.00  | 81787.00  | 679672.68 | 736359.76 | 6549895.30 | 6551010.21 | 2011   | 73  | 2017 |
| 3504691 | 92378.00  | 93103.00  | 736336.05 | 787068.31 | 6548633.47 | 6549893.58 | 2061   | 143 | 2017 |
| 3504700 | 79283.00  | 80835.00  | 679747.25 | 787077.52 | 6548831.33 | 6551209.74 | 2011   | 73  | 2017 |
| 3504710 | 97456.00  | 98991.00  | 679743.02 | 787019.91 | 6549033.91 | 6551409.37 | 2010   | 72  | 2017 |
| 3504720 | 95792.00  | 97335.00  | 679821.35 | 787042.30 | 6549234.15 | 6551601.08 | 2010   | 72  | 2017 |
| 3504730 | 94156.00  | 95678.00  | 679821.15 | 787074.08 | 6549432.16 | 6551803.54 | 2010   | 72  | 2017 |
| 3504740 | 92492.00  | 94033.00  | 679864.68 | 787061.13 | 6549632.08 | 6552004.15 | 2010   | 72  | 2017 |
| 3504750 | 90830.00  | 92359.00  | 679884.20 | 787090.23 | 6549829.95 | 6552202.24 | 2010   | 72  | 2017 |
| 3504760 | 89173.00  | 90703.00  | 679886.87 | 787094.34 | 6550030.51 | 6552404.00 | 2010   | 72  | 2017 |
| 3504770 | 87486.00  | 89025.00  | 679916.02 | 787069.14 | 6550229.26 | 6552596.78 | 2010   | 72  | 2017 |
| 3504780 | 85812.00  | 87343.00  | 679983.70 | 787090.98 | 6550429.61 | 6552798.32 | 2010   | 72  | 2017 |
| 3504790 | 84144.00  | 85687.00  | 679985.90 | 787111.44 | 6550626.68 | 6552998.96 | 2010   | 72  | 2017 |
| 3504800 | 82477.00  | 84006.00  | 680037.49 | 787128.14 | 6550826.00 | 6553192.18 | 2010   | 72  | 2017 |
| 3504810 | 80800.00  | 82349.00  | 680055.49 | 787119.45 | 6551025.44 | 6553398.30 | 2010   | 72  | 2017 |
| 3504820 | 79139.00  | 80673.00  | 680099.46 | 787145.12 | 6551224.21 | 6553597.54 | 2010   | 72  | 2017 |
| 3504830 | 101760.00 | 103308.00 | 680168.72 | 787088.36 | 6551424.20 | 6553791.38 | 2004   | 65  | 2017 |
| 3504840 | 100826.00 | 101622.00 | 680270.02 | 734493.79 | 6552922.23 | 6553990.27 | 2004   | 65  | 2017 |
| 3504841 | 91773.00  | 92528.00  | 734448.67 | 787120.52 | 6551626.63 | 6552928.13 | 2059   | 141 | 2017 |
| 3504850 | 99865.00  | 100698.00 | 680256.94 | 736479.47 | 6553081.63 | 6554188.86 | 2004   | 65  | 2017 |
| 3504851 | 92809.00  | 93560.00  | 736407.47 | 787120.50 | 6551828.44 | 6553081.66 | 2059   | 141 | 2017 |
| 3504860 | 98928.00  | 99713.00  | 680340.78 | 734510.29 | 6553325.89 | 6554386.16 | 2004   | 65  | 2017 |
| 3504861 | 93671.00  | 94456.00  | 734447.73 | 787131.80 | 6552022.07 | 6553323.74 | 2059   | 141 | 2017 |
| 3504870 | 97955.00  | 98772.00  | 680364.42 | 736497.63 | 6553477.33 | 6554587.99 | 2004   | 65  | 2017 |
| 3504871 | 94725.00  | 95454.00  | 736455.64 | 787158.34 | 6552218.47 | 6553484.31 | 2059   | 141 | 2017 |
| 3504880 | 97024.00  | 97803.00  | 680425.73 | 734456.66 | 6553718.91 | 6554787.37 | 2004   | 65  | 2017 |
| 3504881 | 95594.00  | 96353.00  | 734452.00 | 787150.31 | 6552420.72 | 6553725.84 | 2059   | 141 | 2017 |
| 3504890 | 96103.00  | 96909.00  | 680490.26 | 736473.58 | 6553874.74 | 6554981.89 | 2004   | 65  | 2017 |
| 3504891 | 96632.00  | 97378.00  | 736456.56 | 787143.64 | 6552622.59 | 6553877.26 | 2059   | 141 | 2017 |
| 3504900 | 95204.00  | 95981.00  | 680535.33 | 734489.97 | 6554121.32 | 6555179.03 | 2004   | 65  | 2017 |
| 3504901 | 97487.00  | 98265.00  | 734446.16 | 787174.22 | 6552822.19 | 6554122.58 | 2059   | 141 | 2017 |
| 3504910 | 94244.00  | 95053.00  | 680599.44 | 736485.15 | 6554274.75 | 6555381.75 | 2004   | 65  | 2017 |
| 3504911 | 98507.00  | 99239.00  | 736463.68 | 787151.45 | 6553019.12 | 6554276.51 | 2059   | 141 | 2017 |
| 3504920 | 93315.00  | 94096.00  | 680643.94 | 734508.97 | 6554516.98 | 6555580.32 | 2004   | 65  | 2017 |
| 3504921 | 99366.00  | 100128.00 | 734467.28 | 787201.75 | 6553218.42 | 6554522.62 | 2059   | 141 | 2017 |
| 3504930 | 92401.00  | 93217.00  | 680737.13 | 736506.95 | 6554678.62 | 6555779.17 | 2004   | 65  | 2017 |
| 3504931 | 100399.00 | 101160.00 | 736462.16 | 787162.96 | 6553420.02 | 6554677.33 | 2059   | 141 | 2017 |
| 3504940 | 90888.00  | 91663.00  | 680781.06 | 734545.07 | 6554920.28 | 6555981.11 | 2004   | 65  | 2017 |
| 3504941 | 89501.00  | 90274.00  | 734496.36 | 787166.04 | 6553620.82 | 6554915.42 | 2061   | 143 | 2017 |
| 3504950 | 89926.00  | 90742.00  | 680834.20 | 736503.68 | 6555072.53 | 6556178.52 | 2004   | 65  | 2017 |
| 3504951 | 90521.00  | 91248.00  | 736491.25 | 787160.60 | 6553817.79 | 6555074.29 | 2061   | 143 | 2017 |
| 3504960 | 89019.00  | 89602.00  | 694862.20 | 734512.75 | 6555311.54 | 6556124.25 | 2004   | 65  | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3504961 | 91822.00  | 92026.00  | 680881.52 | 694888.79 | 6556124.54 | 6556372.30 | 2004   | 65  | 2017 |
| 3504962 | 87669.00  | 88434.00  | 734506.05 | 787200.43 | 6554016.35 | 6555321.11 | 2061   | 143 | 2017 |
| 3504970 | 88071.00  | 88870.00  | 680926.09 | 736532.10 | 6555471.32 | 6556570.77 | 2004   | 65  | 2017 |
| 3504971 | 88659.00  | 89378.00  | 736443.93 | 787226.95 | 6554216.88 | 6555473.82 | 2061   | 143 | 2017 |
| 3504980 | 87151.00  | 87937.00  | 680893.62 | 734536.93 | 6555714.89 | 6556769.35 | 2004   | 65  | 2017 |
| 3504981 | 85774.00  | 86552.00  | 734528.81 | 787210.35 | 6554421.02 | 6555716.21 | 2061   | 143 | 2017 |
| 3504990 | 86188.00  | 87001.00  | 681009.46 | 736538.13 | 6555869.12 | 6556971.09 | 2004   | 65  | 2017 |
| 3504991 | 86813.00  | 87550.00  | 736464.08 | 787237.70 | 6554614.48 | 6555873.16 | 2061   | 143 | 2017 |
| 3505000 | 84535.00  | 86076.00  | 681087.65 | 787237.35 | 6554817.11 | 6557188.70 | 2004   | 65  | 2017 |
| 3505010 | 101150.00 | 102680.00 | 681140.66 | 787207.34 | 6555010.12 | 6557363.50 | 2003   | 64  | 2017 |
| 3505011 | 95905.00  | 97444.00  | 681121.33 | 787237.06 | 6555017.94 | 6557364.40 | 2079   | 167 | 2017 |
| 3505020 | 100185.00 | 101042.00 | 681176.61 | 740522.24 | 6555692.27 | 6557564.44 | 2003   | 64  | 2017 |
| 3505021 | 84059.00  | 84773.00  | 738492.18 | 787193.70 | 6555215.02 | 6556425.16 | 2061   | 143 | 2017 |
| 3505022 | 98551.00  | 99383.00  | 681150.03 | 738481.90 | 6556427.00 | 6557567.27 | 2079   | 167 | 2017 |
| 3505030 | 99252.00  | 100139.00 | 681208.35 | 741981.67 | 6556200.78 | 6557760.83 | 2003   | 64  | 2017 |
| 3505031 | 84996.00  | 85663.00  | 740495.24 | 787253.37 | 6555412.27 | 6556578.17 | 2061   | 143 | 2017 |
| 3505032 | 97581.00  | 98422.00  | 681239.36 | 740491.19 | 6556580.27 | 6557761.54 | 2079   | 167 | 2017 |
| 3505040 | 98353.00  | 99126.00  | 681304.06 | 734540.68 | 6556913.33 | 6557962.47 | 2003   | 64  | 2017 |
| 3505041 | 82163.00  | 82942.00  | 734494.95 | 787207.74 | 6555615.45 | 6556914.27 | 2061   | 143 | 2017 |
| 3505050 | 97452.00  | 98242.00  | 681357.18 | 736533.73 | 6557068.82 | 6558158.36 | 2003   | 64  | 2017 |
| 3505051 | 83196.00  | 83931.00  | 736474.77 | 787264.20 | 6555811.76 | 6557069.26 | 2061   | 143 | 2017 |
| 3505060 | 96562.00  | 97330.00  | 681406.13 | 734578.56 | 6557314.13 | 6558358.51 | 2003   | 64  | 2017 |
| 3505061 | 104186.00 | 104949.00 | 734565.68 | 787226.87 | 6556011.02 | 6557314.87 | 2055   | 134 | 2017 |
| 3505070 | 95657.00  | 96451.00  | 681447.62 | 736570.00 | 6557468.13 | 6558554.55 | 2003   | 64  | 2017 |
| 3505071 | 105184.00 | 105921.00 | 736484.02 | 787267.55 | 6556215.56 | 6557464.96 | 2055   | 134 | 2017 |
| 3505080 | 94761.00  | 95537.00  | 681472.00 | 734566.98 | 6557710.02 | 6558758.72 | 2003   | 64  | 2017 |
| 3505081 | 100968.00 | 101745.00 | 734538.64 | 787263.17 | 6556412.72 | 6557712.23 | 2050   | 128 | 2017 |
| 3505090 | 93853.00  | 94657.00  | 681515.13 | 736560.19 | 6557864.37 | 6558955.56 | 2003   | 64  | 2017 |
| 3505091 | 101992.00 | 102738.00 | 736533.70 | 787264.67 | 6556610.09 | 6557864.68 | 2050   | 128 | 2017 |
| 3505100 | 92957.00  | 93727.00  | 681624.51 | 734565.51 | 6558115.20 | 6559155.67 | 2003   | 64  | 2017 |
| 3505101 | 99114.00  | 99876.00  | 734533.74 | 787240.27 | 6556807.78 | 6558113.79 | 2050   | 128 | 2017 |
| 3505110 | 92050.00  | 92846.00  | 681638.05 | 736549.17 | 6558266.06 | 6559351.41 | 2003   | 64  | 2017 |
| 3505111 | 100125.00 | 100859.00 | 736562.52 | 787294.67 | 6557009.80 | 6558266.83 | 2050   | 128 | 2017 |
| 3505120 | 91147.00  | 91919.00  | 681673.70 | 734618.30 | 6558509.36 | 6559550.22 | 2003   | 64  | 2017 |
| 3505121 | 99083.00  | 99842.00  | 734586.85 | 787276.06 | 6557213.72 | 6558511.82 | 2049   | 127 | 2017 |
| 3505130 | 90261.00  | 91054.00  | 681745.31 | 736614.98 | 6558662.30 | 6559748.98 | 2003   | 64  | 2017 |
| 3505131 | 100075.00 | 100858.00 | 736521.70 | 787256.02 | 6557411.14 | 6558664.61 | 2049   | 127 | 2017 |
| 3505140 | 89372.00  | 90137.00  | 681810.66 | 734592.76 | 6558906.65 | 6559947.67 | 2003   | 64  | 2017 |
| 3505141 | 100149.00 | 100916.00 | 734546.68 | 787302.45 | 6557601.63 | 6558912.55 | 2048   | 125 | 2017 |
| 3505150 | 88475.00  | 89270.00  | 681838.89 | 736596.27 | 6559060.87 | 6560141.58 | 2003   | 64  | 2017 |
| 3505151 | 101169.00 | 101907.00 | 736590.69 | 787264.86 | 6557806.78 | 6559059.68 | 2048   | 125 | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3505160 | 87581.00  | 88344.00  | 681926.40 | 734630.61 | 6559306.55 | 6560343.31 | 2003   | 64  | 2017 |
| 3505161 | 100808.00 | 101568.00 | 734588.35 | 787286.50 | 6558008.36 | 6559306.08 | 2045   | 122 | 2017 |
| 3505170 | 86666.00  | 87459.00  | 681979.40 | 736585.31 | 6559461.95 | 6560542.39 | 2003   | 64  | 2017 |
| 3505171 | 101854.00 | 102630.00 | 736555.37 | 787322.05 | 6558207.97 | 6559462.39 | 2045   | 122 | 2017 |
| 3505180 | 85757.00  | 86543.00  | 682013.10 | 736604.50 | 6559659.63 | 6560742.89 | 2003   | 64  | 2017 |
| 3505181 | 99895.00  | 100628.00 | 736546.61 | 787298.06 | 6558409.80 | 6559664.76 | 2042   | 117 | 2017 |
| 3505190 | 84808.00  | 85628.00  | 682061.18 | 738621.86 | 6559814.79 | 6560938.96 | 2003   | 64  | 2017 |
| 3505191 | 100899.00 | 101619.00 | 738563.36 | 787332.62 | 6558605.60 | 6559819.58 | 2042   | 117 | 2017 |
| 3505200 | 83164.00  | 84684.00  | 682119.50 | 787297.84 | 6558806.66 | 6561140.21 | 2003   | 64  | 2017 |
| 3505210 | 96694.00  | 98208.00  | 682198.47 | 787300.12 | 6559006.24 | 6561336.24 | 2002   | 63  | 2017 |
| 3505220 | 95834.00  | 96578.00  | 682235.97 | 734622.87 | 6560504.48 | 6561534.32 | 2002   | 63  | 2017 |
| 3505221 | 99232.00  | 99996.00  | 734602.04 | 787300.18 | 6559205.86 | 6560503.94 | 2031   | 96  | 2017 |
| 3505230 | 94936.00  | 95722.00  | 682286.15 | 736601.24 | 6560656.24 | 6561733.08 | 2002   | 63  | 2017 |
| 3505231 | 99455.00  | 100194.00 | 736599.29 | 787304.66 | 6559402.46 | 6560660.82 | 2030   | 95  | 2017 |
| 3505240 | 94031.00  | 94776.00  | 682325.69 | 734673.28 | 6560901.28 | 6561931.53 | 2002   | 63  | 2017 |
| 3505241 | 98244.00  | 98999.00  | 734644.10 | 787338.12 | 6559605.12 | 6560904.10 | 2031   | 96  | 2017 |
| 3505250 | 93077.00  | 93871.00  | 682369.53 | 736607.37 | 6561059.21 | 6562132.78 | 2002   | 63  | 2017 |
| 3505251 | 103621.00 | 104355.00 | 736618.80 | 787349.56 | 6559802.88 | 6561059.27 | 2028   | 93  | 2017 |
| 3505260 | 92176.00  | 92929.00  | 682436.18 | 734678.67 | 6561300.92 | 6562331.82 | 2002   | 63  | 2017 |
| 3505261 | 80647.00  | 81401.00  | 734608.01 | 787374.61 | 6560001.14 | 6561303.34 | 2030   | 95  | 2017 |
| 3505270 | 91276.00  | 92061.00  | 682507.82 | 736628.20 | 6561456.96 | 6562527.31 | 2002   | 63  | 2017 |
| 3505271 | 99953.00  | 100684.00 | 736592.91 | 787387.23 | 6560197.60 | 6561455.14 | 2027   | 92  | 2017 |
| 3505280 | 90374.00  | 91121.00  | 682555.03 | 734678.86 | 6561699.81 | 6562723.00 | 2002   | 63  | 2017 |
| 3505281 | 84868.00  | 85612.00  | 734673.13 | 787385.19 | 6560400.45 | 6561699.30 | 2028   | 93  | 2017 |
| 3505290 | 89445.00  | 90238.00  | 682612.96 | 736643.80 | 6561857.67 | 6562924.20 | 2002   | 63  | 2017 |
| 3505291 | 81308.00  | 82031.00  | 736604.74 | 787370.66 | 6560599.23 | 6561851.87 | 2027   | 92  | 2017 |
| 3505300 | 88558.00  | 89316.00  | 682676.11 | 734670.65 | 6562096.26 | 6563122.23 | 2002   | 63  | 2017 |
| 3505301 | 96906.00  | 97691.00  | 734652.18 | 787377.95 | 6560802.33 | 6562099.14 | 2025   | 90  | 2017 |
| 3505310 | 87526.00  | 88305.00  | 682700.41 | 736658.89 | 6562253.16 | 6563324.24 | 2002   | 63  | 2017 |
| 3505311 | 78324.00  | 79049.00  | 736623.77 | 787385.89 | 6561000.44 | 6562255.65 | 2025   | 90  | 2017 |
| 3505320 | 86619.00  | 87366.00  | 682731.99 | 734694.46 | 6562495.31 | 6563517.63 | 2002   | 63  | 2017 |
| 3505321 | 96826.00  | 97594.00  | 734663.01 | 787398.15 | 6561198.56 | 6562496.21 | 2024   | 89  | 2017 |
| 3505330 | 85690.00  | 86477.00  | 682801.91 | 736652.98 | 6562651.11 | 6563715.38 | 2002   | 63  | 2017 |
| 3505331 | 97807.00  | 98539.00  | 736618.15 | 787391.18 | 6561396.61 | 6562648.30 | 2024   | 89  | 2017 |
| 3505340 | 84804.00  | 85569.00  | 682857.13 | 734695.60 | 6562894.31 | 6563916.73 | 2002   | 63  | 2017 |
| 3505341 | 96813.00  | 97574.00  | 734644.45 | 787369.94 | 6561595.51 | 6562895.14 | 2023   | 88  | 2017 |
| 3505350 | 83907.00  | 84687.00  | 682883.76 | 736677.22 | 6563050.56 | 6564117.49 | 2002   | 63  | 2017 |
| 3505351 | 78433.00  | 79164.00  | 736623.09 | 787379.30 | 6561797.26 | 6563052.66 | 2023   | 88  | 2017 |
| 3505360 | 83006.00  | 83748.00  | 682946.14 | 734701.36 | 6563297.49 | 6564315.41 | 2002   | 63  | 2017 |
| 3505361 | 98663.00  | 99423.00  | 734642.64 | 787395.30 | 6561993.76 | 6563297.96 | 2022   | 87  | 2017 |
| 3505370 | 82081.00  | 82871.00  | 683018.73 | 736677.69 | 6563450.99 | 6564510.50 | 2002   | 63  | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| LINE    | TIME      | TIME      | MIN X     | MAX X     | MIN Y      | MAX Y      | FLIGHT | DAY | YEAR |
|---------|-----------|-----------|-----------|-----------|------------|------------|--------|-----|------|
| 3505371 | 80246.00  | 80983.00  | 736682.55 | 787373.40 | 6562197.92 | 6563451.29 | 2022   | 87  | 2017 |
| 3505380 | 81214.00  | 81960.00  | 683048.79 | 734689.17 | 6563692.75 | 6564712.43 | 2002   | 63  | 2017 |
| 3505381 | 96852.00  | 97612.00  | 734654.57 | 787421.81 | 6562396.26 | 6563694.08 | 2021   | 86  | 2017 |
| 3505390 | 80320.00  | 81088.00  | 683124.58 | 736674.14 | 6563847.06 | 6564907.93 | 2002   | 63  | 2017 |
| 3505391 | 95994.00  | 96727.00  | 736673.32 | 787404.57 | 6562594.57 | 6563847.30 | 2021   | 86  | 2017 |
| 3505400 | 78684.00  | 80172.00  | 683157.59 | 787406.40 | 6562794.89 | 6565107.26 | 2002   | 63  | 2017 |
| 3505410 | 96662.00  | 98175.00  | 683232.15 | 787407.63 | 6562995.08 | 6565307.68 | 2001   | 62  | 2017 |
| 3505420 | 95807.00  | 96546.00  | 683250.22 | 734700.41 | 6564494.13 | 6565506.47 | 2001   | 62  | 2017 |
| 3505421 | 77772.00  | 78534.00  | 734714.89 | 787467.58 | 6563192.97 | 6564489.81 | 2021   | 86  | 2017 |
| 3505430 | 94915.00  | 95686.00  | 683326.30 | 736699.75 | 6564651.82 | 6565701.88 | 2001   | 62  | 2017 |
| 3505431 | 98159.00  | 98893.00  | 736664.60 | 787472.34 | 6563389.72 | 6564645.47 | 2019   | 81  | 2017 |
| 3505440 | 94067.00  | 94806.00  | 683376.36 | 734717.28 | 6564891.07 | 6565904.68 | 2001   | 62  | 2017 |
| 3505441 | 97184.00  | 97934.00  | 734718.52 | 787450.86 | 6563588.06 | 6564890.20 | 2019   | 81  | 2017 |
| 3505450 | 93172.00  | 93947.00  | 683405.11 | 736711.75 | 6565046.64 | 6566102.93 | 2001   | 62  | 2017 |
| 3505451 | 96322.00  | 97054.00  | 736661.58 | 787467.09 | 6563790.30 | 6565045.30 | 2019   | 81  | 2017 |
| 3505460 | 92257.00  | 93035.00  | 683460.89 | 736703.85 | 6565242.88 | 6566300.53 | 2001   | 62  | 2017 |
| 3505461 | 98895.00  | 99622.00  | 736730.17 | 787486.47 | 6563988.95 | 6565244.53 | 2018   | 80  | 2017 |
| 3505470 | 91342.00  | 92109.00  | 683572.78 | 736736.24 | 6565445.89 | 6566494.78 | 2001   | 62  | 2017 |
| 3505471 | 99751.00  | 100478.00 | 736678.25 | 787466.71 | 6564185.12 | 6565450.95 | 2018   | 80  | 2017 |
| 3505472 | 95983.00  | 96153.00  | 732747.38 | 744670.93 | 6565262.43 | 6565529.25 | 2019   | 81  | 2017 |
| 3505480 | 90480.00  | 91213.00  | 683631.93 | 734765.76 | 6565685.68 | 6566695.02 | 2001   | 62  | 2017 |
| 3505481 | 95341.00  | 96088.00  | 734720.02 | 787491.23 | 6564391.55 | 6565689.09 | 2017   | 79  | 2017 |
| 3505490 | 89578.00  | 90355.00  | 683667.09 | 736762.53 | 6565842.88 | 6566895.27 | 2001   | 62  | 2017 |
| 3505491 | 96259.00  | 96974.00  | 736741.74 | 787488.55 | 6564587.13 | 6565844.03 | 2017   | 79  | 2017 |
| 3505500 | 88698.00  | 89431.00  | 683668.65 | 734788.54 | 6566081.97 | 6567096.77 | 2001   | 62  | 2017 |
| 3505501 | 97070.00  | 97831.00  | 734745.32 | 787464.86 | 6564787.69 | 6566086.19 | 2017   | 79  | 2017 |
| 3505510 | 87786.00  | 88549.00  | 683782.84 | 736753.05 | 6566238.10 | 6567293.65 | 2001   | 62  | 2017 |
| 3505511 | 98001.00  | 98731.00  | 736738.50 | 787498.64 | 6564987.38 | 6566241.38 | 2017   | 79  | 2017 |
| 3505520 | 86936.00  | 87664.00  | 683791.84 | 734777.83 | 6566483.35 | 6567490.20 | 2001   | 62  | 2017 |
| 3505521 | 98015.00  | 98769.00  | 734762.64 | 787481.81 | 6565189.28 | 6566487.71 | 2016   | 78  | 2017 |
| 3505530 | 86006.00  | 86768.00  | 683836.20 | 736775.88 | 6566638.96 | 6567688.77 | 2001   | 62  | 2017 |
| 3505531 | 98945.00  | 99672.00  | 736718.55 | 787473.46 | 6565387.45 | 6566641.09 | 2016   | 78  | 2017 |
| 3505540 | 85133.00  | 85858.00  | 683929.55 | 734772.96 | 6566884.21 | 6567887.06 | 2001   | 62  | 2017 |
| 3505541 | 99799.00  | 100545.00 | 734776.21 | 787503.58 | 6565585.64 | 6566890.18 | 2016   | 78  | 2017 |
| 3505550 | 84268.00  | 85037.00  | 683977.74 | 736740.65 | 6567037.12 | 6568083.45 | 2001   | 62  | 2017 |
| 3505551 | 100709.00 | 101457.00 | 736725.74 | 787502.12 | 6565781.75 | 6567040.40 | 2016   | 78  | 2017 |
| 3505560 | 83410.00  | 84131.00  | 683983.71 | 734787.07 | 6567284.86 | 6568286.57 | 2001   | 62  | 2017 |
| 3505561 | 100802.00 | 101563.00 | 734759.66 | 787509.57 | 6565981.94 | 6567279.35 | 2006   | 67  | 2017 |
| 3505570 | 82539.00  | 83309.00  | 684052.42 | 736764.44 | 6567438.11 | 6568485.37 | 2001   | 62  | 2017 |
| 3505571 | 81993.00  | 82730.00  | 736772.13 | 787543.36 | 6566184.87 | 6567438.49 | 2006   | 67  | 2017 |
| 3505580 | 81650.00  | 82375.00  | 684093.05 | 734818.67 | 6567683.59 | 6568686.41 | 2001   | 62  | 2017 |

**FLOWN LINES - RADIOMETRIC - TORRENS 3B**  
**MGA53, Datum GDA94**

| <b>LINE</b> | <b>TIME</b> | <b>TIME</b> | <b>MIN X</b> | <b>MAX X</b> | <b>MIN Y</b> | <b>MAX Y</b> | <b>FLIGHT DAY</b> | <b>YEAR</b> |
|-------------|-------------|-------------|--------------|--------------|--------------|--------------|-------------------|-------------|
| 3505581     | 96668.00    | 97434.00    | 734778.30    | 787531.55    | 6566385.23   | 6567682.28   | 2005 66           | 2017        |
| 3505590     | 80805.00    | 81564.00    | 684155.62    | 736810.53    | 6567839.10   | 6568881.57   | 2001 62           | 2017        |
| 3505591     | 77953.00    | 78689.00    | 736742.12    | 787554.04    | 6566585.57   | 6567845.27   | 2005 66           | 2017        |
| 3505600     | 79198.00    | 80676.00    | 684155.48    | 787516.13    | 6566789.62   | 6569080.23   | 2001 62           | 2017        |





## Appendix IV





### Equipment List

| Part                         | Serial No.   | Description                                               | Manufacturer                     |
|------------------------------|--------------|-----------------------------------------------------------|----------------------------------|
| Aircraft C-GSGJ              | 208B-1187    | Cessna 208B Grand Caravan,<br>Engine Pratt&Whitney Canada | Cessna                           |
| Data Acquisition Computer    | CDAC-08      | CPCI Data Acquisition Computer                            | SGL                              |
| Data Acquisition Computer    | CDAC-17      | CPCI Data Acquisition Computer                            | SGL                              |
| Fluxgate Magnetometer        | 789          | Model TFM100G2-1E                                         | Billingsley<br>Magnetics         |
| Fluxgate Magnetometer        | 876          | Model TFM100G2-1E                                         | Billingsley<br>Magnetics         |
| GPS Antenna                  | 512C-10087   | Model 512C, L1/L2                                         | Novatel                          |
| INMARSAT Transceiver         | DCC007FEA495 | Transceiver D+, P/N SM200217-<br>BHG, ModelDMR200L        | Skywave Mobile<br>Communications |
| Laser Profilometer           | 9994629      | LD90-31K-HiP, 11-28VDC laser<br>rangefinder               | Riegl                            |
| Magnetometer Sensor          | 75294-C2622  | Model G-822A, Sensor S/N G1208                            | Geometrics                       |
| Magnetometer Sensor          | 75421-C1961  | Model G-822A                                              | Geometrics                       |
| Magnetometer Sensor          | 75534-C2450  | Model G822A, Sensor S/N C2450                             | Geometrics                       |
| Magnetometer Sensor          | 75308-C1320  | Model G-822-A, Sensor S/N C1320                           | Geometrics                       |
| Magnetometer Sensor          | 75289-C234   | Model G-822A, Sensor S/N C234                             | Geometrics                       |
| RA Transceiver - TRT         | 1936         | Model ERT-530A                                            | Thomson TRT<br>Defense SA        |
| SGRef Station                | M-SGREF-70   | CPCI ground station - 28Vdc input                         | SGL                              |
| Spectrometer                 | 8326         | GR 820 Gamma Ray Spectrum<br>Processor                    | SGL                              |
| Spectrometer                 | 8245         | GR 820 Gamma Ray Spectrum<br>Processor                    | SGL                              |
| Spectrometer                 | 8222         | GR 820 Gamma Ray Spectrum<br>Processor                    | SGL                              |
| Spectrometer detector 5-pack | 2655         | GPX-1024/256, 5-pack                                      | Exploranium                      |
| Spectrometer detector 5-pack | 2632         | GPX-1024/256, 5-pack                                      | Exploranium                      |
| Video Camera                 | 596028       | Model TNC4604                                             | Elmo                             |





## Appendix V







## GEOPHYSICAL SURVEY AIRCRAFT

# CESSNA 208B GRAND CARAVAN

| Registration | C-GSGW   | C-GSGY   | C-GSGZ   | C-GSGL   | C-GSGV   | C-GSGU   | C-GSGJ   | C-GSGA   |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Serial #     | 208B0646 | 208B0600 | 208B0493 | 208B0783 | 208B0524 | 208B0747 | 208B1187 | 208B1228 |

The Cessna 208B Grand Caravan is an all metal, high wing, single-engine aircraft powered by a Pratt & Whitney Canada PT6A-114A engine. This engine drives a constant speed, fully feathering, reversible propeller. The aircraft has fixed gear, extendable flaps and manually adjustable trim tabs on the primary controls for the roll and pitch axis and full rudder trim for the yaw axes. The aircraft is equipped with full de-icing equipment and sufficient avionics for instrument flying including a flight control system and weather radar. Supplementary fuel can be added for transoceanic flight. The Caravan is certified for IFR flights in known icing conditions.



## ■ GEOPHYSICAL SURVEYING

SGL aircraft have a rigid aluminum and composite material 3 m tail stinger designed to accommodate the magnetometer sensor. The stinger can be easily removed and the aircraft returned to its original configuration. There is a camera hole in the belly of the aircraft and provisions for other survey and navigation systems.

The Cessna Grand Caravan uses the extremely reliable Pratt & Whitney Canada PT6 turbine engine. These engines have recorded tens of millions of hours of flight time and with virtually no in-flight engine stoppages due to mechanical failure. Over 2,000 Caravans are in use around the world. Because the Caravan has one engine, fixed landing gear, and no single engine control speed limitations, it is considered an easy and very safe aircraft to fly. The PT6 turbine engine provides ample power for climbing over terrain, working at altitudes up to 7,000 m and can withstand frequent rapid power changes. The low stall speeds and abundant available power, mean that the Caravan is a safe and effective aircraft for surveys which require low airspeeds, draping flying over rough topography, or flights at high altitudes.

## CESSNA 208B GRAND CARAVAN SPECIFICATIONS

### Crew Capacity:

- 2 pilots, 1 operator (optional)

### Fuselage:

- semi-monocoque

### Wings:

- strut braced, high wing
- outboard ailerons with spoiler and trim tab

### Tail:

- conventional stabilizers
- elevator and rudder with trim tabs

### Power Plant:

- Pratt & Whitney Canada PT6A-114A, 675 shp, free-turbine gas engine, overhaul 4,600 hours
- three-blade, fully-feathering, constant-speed, reversible propeller, overhaul 4,000 hours or 10 years

### Systems:

- dual flight controls with IFR instruments and avionics
- 2 axis autopilot
- weather radar
- full airframe and propeller de-icing

### Dimensions:

|                                         |              |         |
|-----------------------------------------|--------------|---------|
| Wing span                               | 52 ft 1 in   | 16.11 m |
| Exterior length                         | 41 ft 7 in   | 12.68 m |
| Exterior height                         | 15 ft 5.5 in | 4.72 m  |
| Interior usable length                  | 15 ft 10 in  | 4.83 m  |
| Interior usable width                   | 5 ft 4 in    | 1.63 m  |
| Interior height                         | 4 ft 6 in    | 1.37 m  |
| Usable fuel capacity (with survey tank) | 519 US gal   | 2,011 l |

### Weights:

|                  |          |          |
|------------------|----------|----------|
| Empty            | 4,237 lb | 1,926 kg |
| Maximum take-off | 9,062 lb | 4,119 kg |

### Performance (2000 ft ASL, standard day, maximum take-off weight, 1900 rpm, 1375 ft-lb tq):

|                                           |             |           |
|-------------------------------------------|-------------|-----------|
| Range, maximum range power (plus reserve) | 1,450 nm    | 2,685 km  |
| Cruise speed at maximum range power       | 155 kt      | 287 km/h  |
| Fuel flow at maximum range power          | 50 US gal/h | 189 l/h   |
| Stall airspeed, landing configuration     | 61 kt       | 113 km/h  |
| Service ceiling                           | 25,000 ft   | 7,620 m   |
| Minimum required runway length            | 2,500 ft    | 765 m     |
| Rate of climb                             | 975 ft/min  | 297 m/min |
| Maximum sustained climb gradient          | 650 ft/nm   | 107 m/km  |

### Type of Aviation Fuel:

Jet A, A-1, B, JP-1, 4, 5, 8

### Maximum Endurance:

8 hours plus 1 hour reserve at maximum range power

## GEOPHYSICAL CAPABILITIES

**AIRGrav**, SGL airborne gravimeter

**Magnetic total field**

**Tri-axial magnetic gradient**

**Gamma-ray spectrometer**, up to 63 litres (3,840 in<sup>3</sup>) of detector crystals

**SGMethane**, methane gas sensing

### Additional Features:

- Tail stinger, 3 m long, 21 cm in diameter, capable of housing a 5.5 kg sensor
- HF radio
- Video camera mount with 14 cm diameter glass covered opening in the belly of the aircraft
- Two instrument racks, standard 48 cm (19 in) width
- Radar altimeter, 0–3,000 m
- Electrical power capacity, 28 VDC at 200 amp
- Static inverters, 115 VAC – 400 Hz, 110 VAC – 60 Hz
- GPS receiver and antenna plus data link for real-time corrections
- Cabin fuel tank certified for a normal production flying

v2.0



## Appendix VI



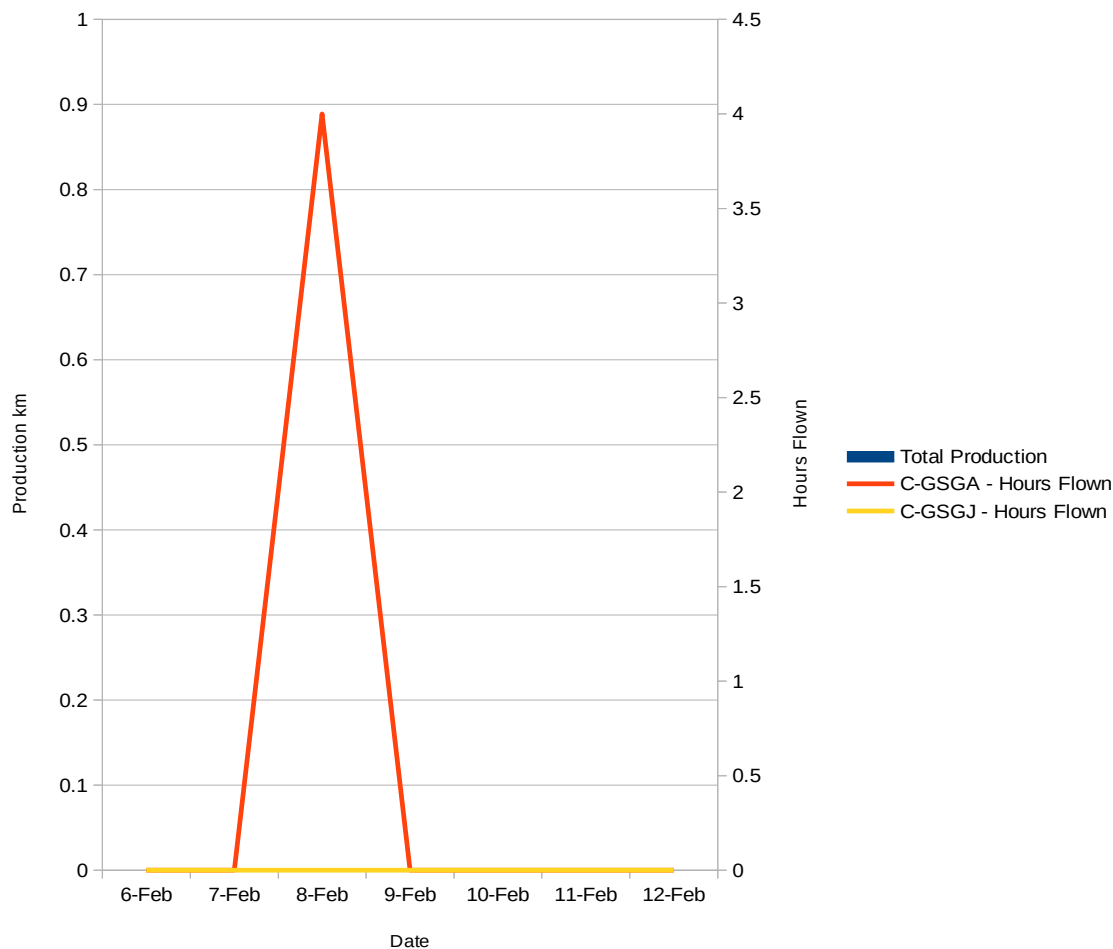




|                |  |                |                                                                                                         |
|----------------|--|----------------|---------------------------------------------------------------------------------------------------------|
| <b>Weather</b> |  | <b>Remarks</b> | Oteng Matsetse continues with the shopping for Leigh Creek in Port Augusta. All check flights completed |
| <b>Geomag</b>  |  |                |                                                                                                         |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        | 6-Feb-17          |                     | ON SITE  | 7                             | 7                           |
| Kyle Tiessen                | Pilot        | 6-Feb-17          |                     | ON SITE  | 7                             | 7                           |
| Laura Johnstone             | Pilot        | 7-Feb-17          |                     | ON SITE  | 6                             | 6                           |
| Tomo Nishimura              | Pilot        | 6-Feb-17          |                     | ON SITE  | 7                             | 7                           |
| Shandon Lomoro              | Technician   | 7-Feb-17          |                     | ON SITE  | 6                             | 6                           |
| Colin Terry                 | Data Analyst | 10-Feb-17         |                     | ON SITE  | 3                             | 3                           |
| Oteng Matsetse              | Crew Chief   | 9-Feb-17          |                     | ON SITE  | 4                             | 4                           |
| Roger Knott                 | AME          |                   |                     |          | 0                             | 0                           |
| Keith Wells                 | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Peter Podebry               | Pilot        |                   |                     |          | 0                             | 0                           |
| Kevin Michaud               | Pilot        |                   |                     |          | 0                             | 0                           |
| Marianne Durette            | Pilot        |                   |                     |          | 0                             | 0                           |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

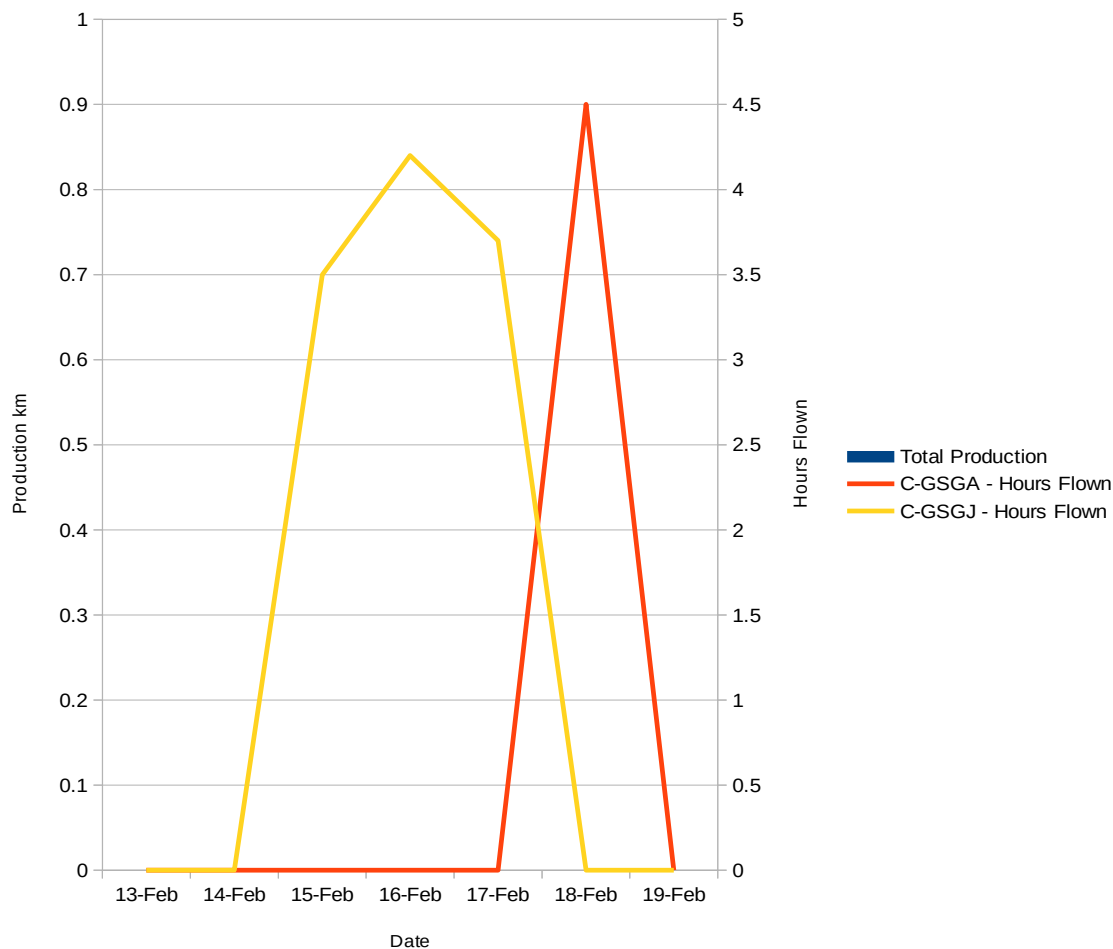




|  |  |
|--|--|
|  |  |
|  |  |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     | ON SITE  | 7                             | 14                          |
| Kyle Tiessen                | Pilot        |                   |                     | ON SITE  | 7                             | 14                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 13                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 14                          |
| Shandon Lomoro              | Technician   |                   |                     | ON SITE  | 7                             | 13                          |
| Colin Terry                 | Data Analyst |                   |                     | ON SITE  | 7                             | 10                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 11                          |
| Roger Knott                 | AME          |                   |                     |          | 0                             | 0                           |
| Keith Wells                 | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Peter Podebry               | Pilot        |                   |                     |          | 0                             | 0                           |
| Kevin Michaud               | Pilot        |                   |                     |          | 0                             | 0                           |
| Marianne Durette            | Pilot        |                   |                     |          | 0                             | 0                           |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

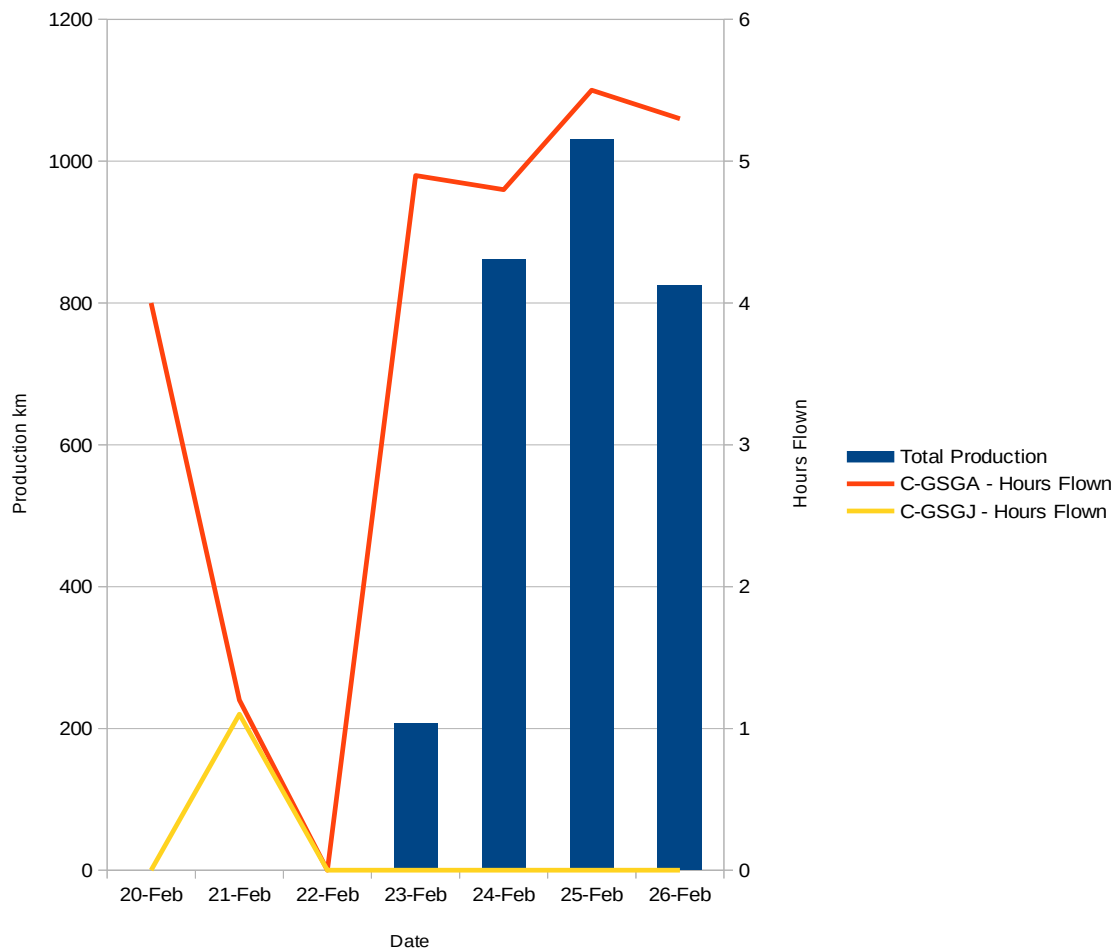




|  |  |
|--|--|
|  |  |
|  |  |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     | ON SITE  | 7                             | 21                          |
| Kyle Tiessen                | Pilot        |                   |                     | ON SITE  | 7                             | 21                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 20                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 21                          |
| Shandon Lomoro              | Technician   |                   |                     | ON SITE  | 7                             | 20                          |
| Colin Terry                 | Data Analyst |                   |                     | ON SITE  | 7                             | 17                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 18                          |
| Roger Knott                 | AME          | 20-Feb-17         |                     | ON SITE  | 7                             | 7                           |
| Keith Wells                 | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Peter Podebry               | Pilot        |                   |                     |          | 0                             | 0                           |
| Kevin Michaud               | Pilot        |                   |                     |          | 0                             | 0                           |
| Marianne Durette            | Pilot        |                   |                     |          | 0                             | 0                           |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

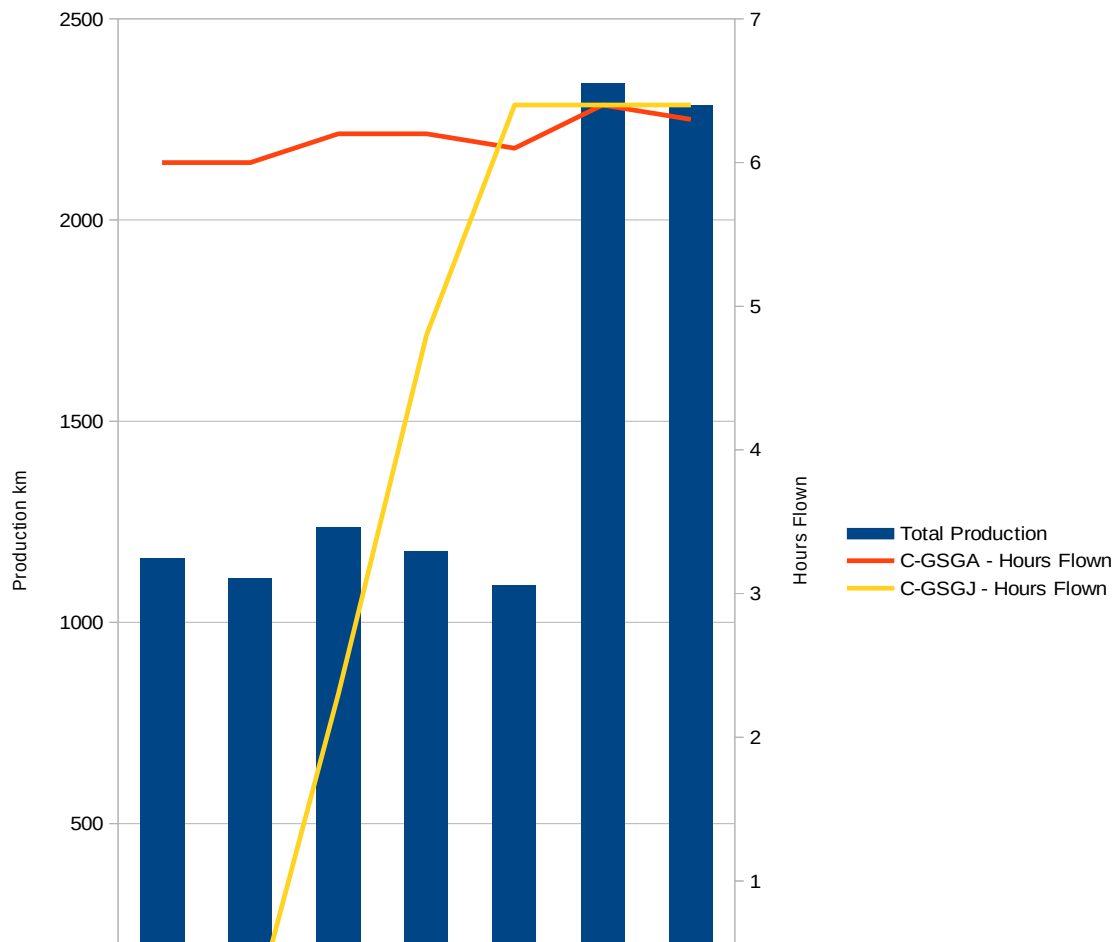




| SURVEY DETAILS            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------|------------|--------------|------------|
| Survey Name               | Andamooka (3A) and Torrens (3B) SA Airborne Magnetic, Radiometric, and Digital Elevation Survey                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |             | Client Name                                                                                                                                                                                   | Geoscience Australia                                         |                 |            |              |            |
| Survey Location           | South Australia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |             | Contact Name                                                                                                                                                                                  | David McInnes                                                |                 |            |              |            |
| Project Code              | Geo3AB16.AUS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |             | Contact Phone                                                                                                                                                                                 | +61 419 863 303                                              |                 |            |              |            |
| Total km                  | 163628                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |             | Client Address                                                                                                                                                                                | Cnr Jerrabomberra Ave and Hindmarsh Dr., Symonston, ACT 2609 |                 |            |              |            |
| Line Spacing              | 1958.373 X 199.9909                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
| Survey Type               | Mag, spec                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |             | Email                                                                                                                                                                                         | david.mcinnnes@ga.gov.au                                     |                 |            |              |            |
| SURVEY PRODUCTION SUMMARY |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
|                           | 3A Andamooka                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            | 3B Torrens  |                                                                                                                                                                                               |                                                              | 3A Andamooka    |            | 3B Torrens   |            |
| Production This Week (km) | 8144.8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | 2256.3      |                                                                                                                                                                                               | Total km Flown to Date                                       | 11067.0         |            | 2256.3       |            |
| Total Remaining (km)      | 69753.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            | 80551.8     |                                                                                                                                                                                               | km Reflown This Week                                         | 0.0             |            | 0.0          |            |
| Percent Complete (%)      | 13.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            | 2.7         |                                                                                                                                                                                               | Flight Time This Week (h)                                    | 69.5            |            |              |            |
| Prod km/Day This Week     | 1163.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | 322.3       |                                                                                                                                                                                               | Prod km/Flt Hour This Week                                   | 149.7           |            |              |            |
| WEEKLY PRODUCTION         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
| Week 4                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Flight No. | Flight Time | No. of Lines Flown                                                                                                                                                                            | No. Reflight Lines Flown                                     | Production (km) |            | Reflown (km) |            |
|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |             |                                                                                                                                                                                               |                                                              | 3A Andamooka    | 3B Torrens | 3A Andamooka | 3B Torrens |
| TOTALS                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            | 69.5        | 90.5                                                                                                                                                                                          | 0.0                                                          | 8144.8          | 2256.3     | 0.0          | 0.0        |
| 27-Feb                    | Monday                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | 6.0         | 11.2                                                                                                                                                                                          | 0.0                                                          | 1158.5          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1005       | 6.0         | 11.2                                                                                                                                                                                          | 0.0                                                          | 1158.5          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | 0.0         | 0.0                                                                                                                                                                                           | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
| Weather                   | Clear skies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            | Remarks     | SGA flew production on block 3A, SGJ awaiting spare parts. Tim and Tomo drove to Adelaide to collect shipment for SGJ spares                                                                  |                                                              |                 |            |              |            |
| Geomag                    | Low/Quiet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
| 28-Feb                    | Tuesday                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            | 6.0         | 10.8                                                                                                                                                                                          | 0.0                                                          | 1109.5          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1006       | 6.0         | 10.8                                                                                                                                                                                          | 0.0                                                          | 1109.5          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | 0.0         | 0.0                                                                                                                                                                                           | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
| Weather                   | Overcast to partly cloudy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            | Remarks     | SGA flew production on block 3A, Tomo and Tim arrived with Parts for SGJ, survey parts replaced and SGJ now ready to fly.                                                                     |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
| 1-Mar                     | Wednesday                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            | 8.5         | 12.0                                                                                                                                                                                          | 0.0                                                          | 1237.5          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1007       | 6.2         | 12.0                                                                                                                                                                                          | 0.0                                                          | 1237.5          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 9202       | 2.3         | 0.0                                                                                                                                                                                           | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
| Weather                   | Partly cloudy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |            | Remarks     | SGA flew production on block 3A, SGJ attempted compensation and heading test but experienced fluxgate problems. Fluxgate module was replaced together with power distribution box.            |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
| 2-Mar                     | Thursday                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            | 11.0        | 11.4                                                                                                                                                                                          | 0.0                                                          | 1177.5          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1008       | 6.2         | 11.4                                                                                                                                                                                          | 0.0                                                          | 1177.5          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 9203       | 4.8         | 0.0                                                                                                                                                                                           | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
| Weather                   | Partly cloudy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |            | Remarks     | SGA flew production on block3A. SGJ flew cosmic and altimeter test over the sea and Whyalla airport runway respectively.                                                                      |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
| 3-Mar                     | Friday                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | 12.5        | 10.6                                                                                                                                                                                          | 0.0                                                          | 1092.0          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1009       | 6.1         | 10.6                                                                                                                                                                                          | 0.0                                                          | 1092.0          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 9204       | 6.4         | 0.0                                                                                                                                                                                           | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
| Weather                   | Clear skies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            | Remarks     | SGA flew production on Block 3A and Lag test, SGJ flew Whyalla test range, Lag test and mag compensation.                                                                                     |                                                              |                 |            |              |            |
| Geomag                    | quiet to medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
| 4-Mar                     | Saturday                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            | 12.8        | 23.4                                                                                                                                                                                          | 0.0                                                          | 1195.3          | 1145.5     | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1010       | 6.4         | 11.6                                                                                                                                                                                          | 0.0                                                          | 1195.3          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2001       | 6.4         | 11.8                                                                                                                                                                                          | 0.0                                                          | 0.0             | 1145.5     | 0.0          | 0.0        |
| Weather                   | Clear skies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            | Remarks     | Both airplanes flew production in their respective blocks 3A for SGA and 3B for SGJ. 1NT/1min mag chord out of spec for very short sections of about three lines (3100860, 3100990 & 3505430) |                                                              |                 |            |              |            |
| Geomag                    | medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
| 5-Mar                     | Sunday                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | 12.7        | 11.2                                                                                                                                                                                          | 0.0                                                          | 1174.6          | 1110.9     | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1011       | 6.3         | 0.0                                                                                                                                                                                           | 0.0                                                          | 1174.6          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2002       | 6.4         | 11.2                                                                                                                                                                                          | 0.0                                                          | 0.0             | 1110.9     | 0.0          | 0.0        |
| Weather                   | Clear skies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            | Remarks     | Both airplanes flew production in their respective blocks 3A for SGA and 3B for SGJ. Lines 3190290 and 3505320 barely out of spec for 1nt/1min chord.                                         |                                                              |                 |            |              |            |
| Geomag                    | quiet/micropulsations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
| Comments                  | Production continued this week with SGA. SGJ commenced with test flights then completed the week with production. SGA total lag=0.40sec, SGJ lag=0.42sec, Lag Offsets close to 0sec after lag correction. SGJ cosmic (Stripping Coeffs- Tot-0.6603, K-0.0394, U-0.0286, Th-0.0347, Up-0.0077, Aircraft bkgnd- Tot- +138.4160, K- +11.5572, Ur- +7.2044, Th- +0.9484, Up- +1.5675), Altimeter test (TRT-slope 1.0014 Intercept -1.4349, laser slope 10025 intercept -1.4977 , compensation test FOM peak to peak maneuvers within 0.2nTspec. Lines 3100860, 3100990,3190290 in 3A & 3505320, 3505430 in 3B slightly out of spec for 1nt/1min mag chord. |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |
| Signed                    | Oteng Matsetse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |             |                                                                                                                                                                                               |                                                              |                 |            |              |            |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     | ON SITE  | 7                             | 28                          |
| Kyle Tiessen                | Pilot        |                   |                     | ON SITE  | 7                             | 28                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 27                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 28                          |
| Shandon Lomoro              | Technician   |                   |                     | ON SITE  | 7                             | 27                          |
| Colin Terry                 | Data Analyst |                   |                     | ON SITE  | 7                             | 24                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 25                          |
| Roger Knott                 | AME          |                   |                     | ON SITE  | 7                             | 14                          |
| Keith Wells                 | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Peter Podebry               | Pilot        |                   |                     |          | 0                             | 0                           |
| Kevin Michaud               | Pilot        |                   |                     |          | 0                             | 0                           |
| Marianne Durette            | Pilot        |                   |                     |          | 0                             | 0                           |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

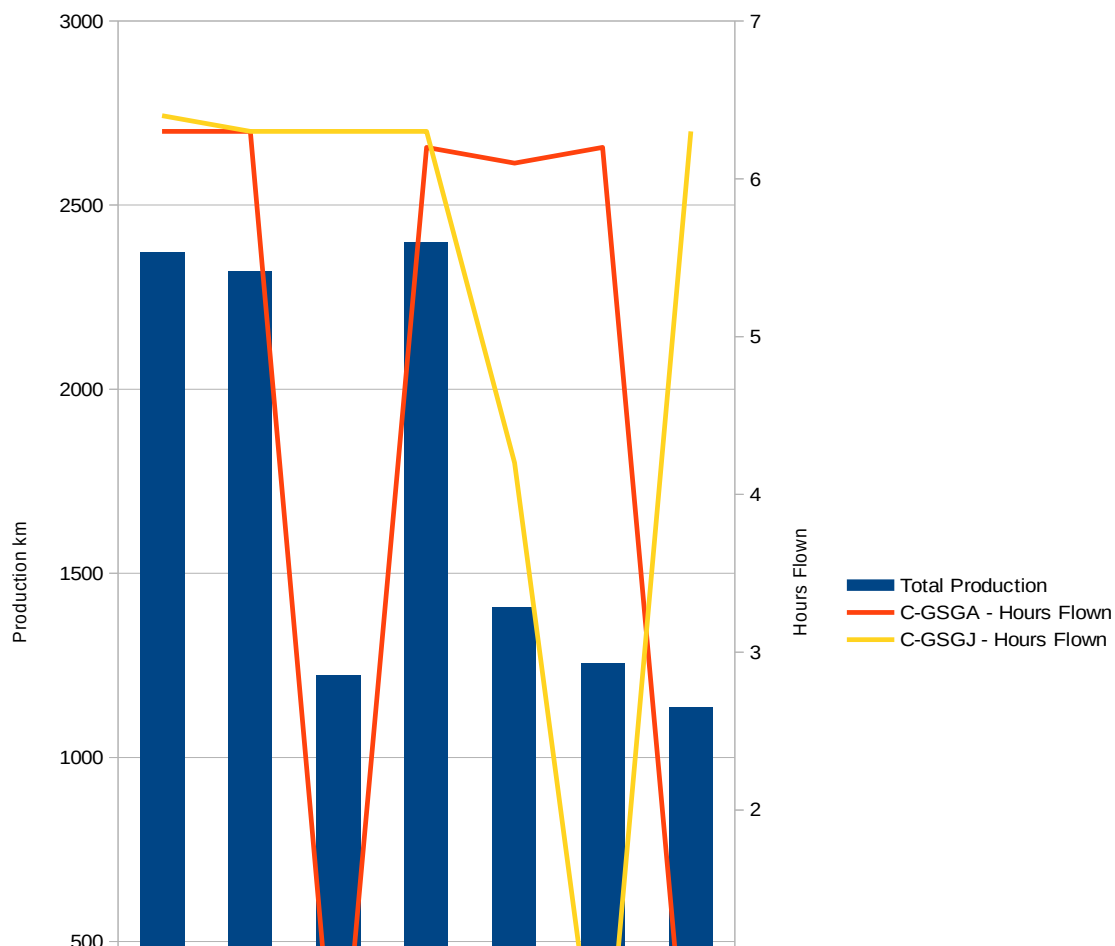




| SURVEY DETAILS            |                                                                                                                                                                                  |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------|------------|--------------|------------|
| Survey Name               | Andamooka (3A) and Torrens (3B) SA Airborne Magnetic, Radiometric, and Digital Elevation Survey                                                                                  |            |             | Client Name                                                                                                                                                                                                                  | Geoscience Australia                                         |                 |            |              |            |
| Survey Location           | South Australia                                                                                                                                                                  |            |             | Contact Name                                                                                                                                                                                                                 | David McInnes                                                |                 |            |              |            |
| Project Code              | Geo3AB16.AUS                                                                                                                                                                     |            |             | Contact Phone                                                                                                                                                                                                                | +61 419 863 303                                              |                 |            |              |            |
| Total km                  | 163628                                                                                                                                                                           |            |             | Client Address                                                                                                                                                                                                               | Cnr Jerrabomberra Ave and Hindmarsh Dr., Symonston, ACT 2609 |                 |            |              |            |
| Line Spacing              | 1958.373 X 199.9909                                                                                                                                                              |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
| Survey Type               | Mag, spec                                                                                                                                                                        |            |             | Email                                                                                                                                                                                                                        | david.mcinnnes@ga.gov.au                                     |                 |            |              |            |
| SURVEY PRODUCTION SUMMARY |                                                                                                                                                                                  |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
|                           | 3A Andamooka                                                                                                                                                                     |            | 3B Torrens  |                                                                                                                                                                                                                              |                                                              | 3A Andamooka    |            | 3B Torrens   |            |
| Production This Week (km) | 6016.6                                                                                                                                                                           |            | 6102.5      |                                                                                                                                                                                                                              | Total km Flown to Date                                       | 17083.6         |            | 8358.8       |            |
| Total Remaining (km)      | 63736.4                                                                                                                                                                          |            | 74449.4     |                                                                                                                                                                                                                              | km Reflown This Week                                         | 0.0             |            | 0.0          |            |
| Percent Complete (%)      | 21.1                                                                                                                                                                             |            | 10.1        |                                                                                                                                                                                                                              | Flight Time This Week (h)                                    | 66.9            |            |              |            |
| Prod km/Day This Week     | 859.5                                                                                                                                                                            |            | 871.8       |                                                                                                                                                                                                                              | Prod km/Flt Hour This Week                                   | 181.2           |            |              |            |
| WEEKLY PRODUCTION         |                                                                                                                                                                                  |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
| Week 5                    |                                                                                                                                                                                  | Flight No. | Flight Time | No. of Lines Flown                                                                                                                                                                                                           | No. Reflight Lines Flown                                     | Production (km) |            | Reflown (km) |            |
|                           |                                                                                                                                                                                  |            |             |                                                                                                                                                                                                                              |                                                              | 3A Andamooka    | 3B Torrens | 3A Andamooka | 3B Torrens |
| TOTALS                    |                                                                                                                                                                                  |            | 66.9        | 119.7                                                                                                                                                                                                                        | 0.0                                                          | 6016.6          | 6102.5     | 0.0          | 0.0        |
| 6-Mar                     | Monday                                                                                                                                                                           |            | 12.7        | 22.1                                                                                                                                                                                                                         | 0.0                                                          | 1177.8          | 1195.6     | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                           | 1012       | 6.3         | 10.7                                                                                                                                                                                                                         | 0.0                                                          | 1177.8          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                           | 2003       | 6.4         | 11.4                                                                                                                                                                                                                         | 0.0                                                          | 0.0             | 1195.6     | 0.0          | 0.0        |
| Weather                   | Clear Skies                                                                                                                                                                      |            | Remarks     | Both airplanes flew production in their respective blocks 3A for SGA. Fluxgate on SGJ beginning to malfunction. Replacement on the way.                                                                                      |                                                              |                 |            |              |            |
| Geomag                    | Quiet/micropulsations                                                                                                                                                            |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
| 7-Mar                     | Tuesday                                                                                                                                                                          |            | 12.6        | 21.5                                                                                                                                                                                                                         | 0.0                                                          | 1226.6          | 1094.1     | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                           | 1013       | 6.3         | 11.2                                                                                                                                                                                                                         | 0.0                                                          | 1226.6          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                           | 2004       | 6.3         | 10.3                                                                                                                                                                                                                         | 0.0                                                          | 0.0             | 1094.1     | 0.0          | 0.0        |
| Weather                   | Clear Skies                                                                                                                                                                      |            | Remarks     | Both airplanes flew production. Part of one line reflown by SGJ to cover horizontal deviation while avoiding powerline. 2 <sup>nd</sup> button holder installed underneath SGA before flight for more consistant button test |                                                              |                 |            |              |            |
| Geomag                    | Quiet/micropulsations                                                                                                                                                            |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
| 8-Mar                     | Wednesday                                                                                                                                                                        |            | 6.3         | 11.0                                                                                                                                                                                                                         | 0.0                                                          | 0.0             | 1224.5     | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                           |            | 0.0         | 0.0                                                                                                                                                                                                                          | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                           | 2005       | 6.3         | 11.0                                                                                                                                                                                                                         | 0.0                                                          | 0.0             | 1224.5     | 0.0          | 0.0        |
| Weather                   | Clear Skies                                                                                                                                                                      |            | Remarks     | SGJ flew production, SGA on the ground due to pilot rest day. Vertical deviations along tie lines 3590390, 3590400, 3590410, 3590420, 3590430, & 3590440 due to power lines.                                                 |                                                              |                 |            |              |            |
| Geomag                    | Quiet/micropulsations                                                                                                                                                            |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
| 9-Mar                     | Thursday                                                                                                                                                                         |            | 12.5        | 24.1                                                                                                                                                                                                                         | 0.0                                                          | 1175.0          | 1224.5     | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                           | 1014       | 6.2         | 13.1                                                                                                                                                                                                                         | 0.0                                                          | 1175.0          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                           | 2006       | 6.3         | 11.0                                                                                                                                                                                                                         | 0.0                                                          | 0.0             | 1224.5     | 0.0          | 0.0        |
| Weather                   | Partly cloudy to clear skies                                                                                                                                                     |            | Remarks     | Both airplanes flew production. Sections of Lines 3590350 to 3590440 have vertical deviations due to power lines. Lines 3190120 to 3190210 flown higher over Olympic Dam.                                                    |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                                                                            |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
| 10-Mar                    | Friday                                                                                                                                                                           |            | 10.3        | 18.1                                                                                                                                                                                                                         | 0.0                                                          | 1181.8          | 227.9      | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                           | 1015       | 6.1         | 15.1                                                                                                                                                                                                                         | 0.0                                                          | 1181.8          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                           | 2007/9206  | 4.2         | 3.0                                                                                                                                                                                                                          | 0.0                                                          | 0.0             | 227.9      | 0.0          | 0.0        |
| Weather                   | Clear Skies                                                                                                                                                                      |            | Remarks     | Both airplanes flew production. SGJ aborted production due to fluxgate malfunction. Lines affected are 3590010 and 3590020. Mag card replaced then attempted compensation flight.                                            |                                                              |                 |            |              |            |
| Geomag                    | Quiet /micropulsations                                                                                                                                                           |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
| 11-Mar                    | Saturday                                                                                                                                                                         |            | 6.2         | 11.0                                                                                                                                                                                                                         | 0.0                                                          | 1255.4          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                           | 1016       | 6.2         | 11.0                                                                                                                                                                                                                         | 0.0                                                          | 1255.4          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                           |            | 0.0         | 0.0                                                                                                                                                                                                                          | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
| Weather                   | Clear Skies                                                                                                                                                                      |            | Remarks     | SGA flew production. SGJ on the ground due to pilots on rest day. Minor maintenance done on SGJ.                                                                                                                             |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                                                                            |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
| 12-Mar                    | Sunday                                                                                                                                                                           |            | 6.3         | 12.0                                                                                                                                                                                                                         | 0.0                                                          | 0.0             | 1136.0     | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                                                                           |            | 0.0         | 0.0                                                                                                                                                                                                                          | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                                                                           | 2008       | 6.3         | 12.0                                                                                                                                                                                                                         | 0.0                                                          | 0.0             | 1136.0     | 0.0          | 0.0        |
| Weather                   | Light rain showers early morning at base to clear skies                                                                                                                          |            | Remarks     | SGJ flew production, SGA on the ground due to pilot rest day.                                                                                                                                                                |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                                                                            |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
| Comments                  | Production continued with both airplanes this week. Fluxgate hardware replaced on SGJ and compensation flight done thereafter. Compensation results meet contract specification. |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |
| Signed                    | Oteng Matsetse                                                                                                                                                                   |            |             |                                                                                                                                                                                                                              |                                                              |                 |            |              |            |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     | ON SITE  | 7                             | 35                          |
| Kyle Tiessen                | Pilot        |                   |                     | ON SITE  | 7                             | 35                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 34                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 35                          |
| Shandon Lomoro              | Technician   |                   |                     | ON SITE  | 7                             | 34                          |
| Colin Terry                 | Data Analyst |                   |                     | ON SITE  | 7                             | 31                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 32                          |
| Roger Knott                 | AME          |                   |                     | ON SITE  | 7                             | 21                          |
| Keith Wells                 | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Peter Podebry               | Pilot        |                   |                     |          | 0                             | 0                           |
| Kevin Michaud               | Pilot        |                   |                     |          | 0                             | 0                           |
| Marianne Durette            | Pilot        |                   |                     |          | 0                             | 0                           |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

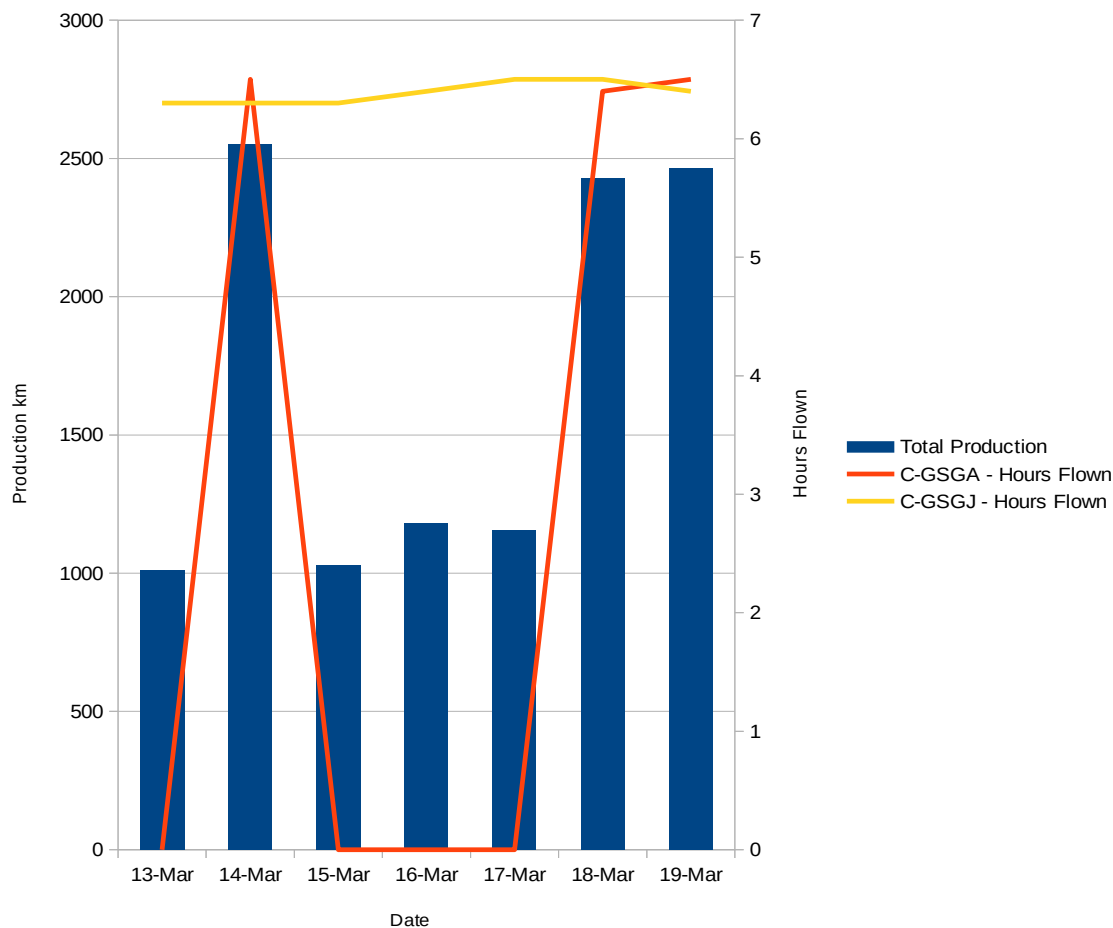




|               |                |
|---------------|----------------|
| <b>Signed</b> | Oteng Matsetse |
|---------------|----------------|

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     | ON SITE  | 7                             | 42                          |
| Kyle Tiessen                | Pilot        |                   |                     | ON SITE  | 7                             | 42                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 41                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 42                          |
| Shandon Lomoro              | Technician   |                   |                     | ON SITE  | 7                             | 41                          |
| Colin Terry                 | Data Analyst |                   |                     | ON SITE  | 7                             | 38                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 39                          |
| Roger Knott                 | AME          |                   |                     | ON SITE  | 7                             | 28                          |
| Keith Wells                 | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Peter Podebry               | Pilot        |                   |                     |          | 0                             | 0                           |
| Kevin Michaud               | Pilot        |                   |                     |          | 0                             | 0                           |
| Marianne Durette            | Pilot        |                   |                     |          | 0                             | 0                           |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

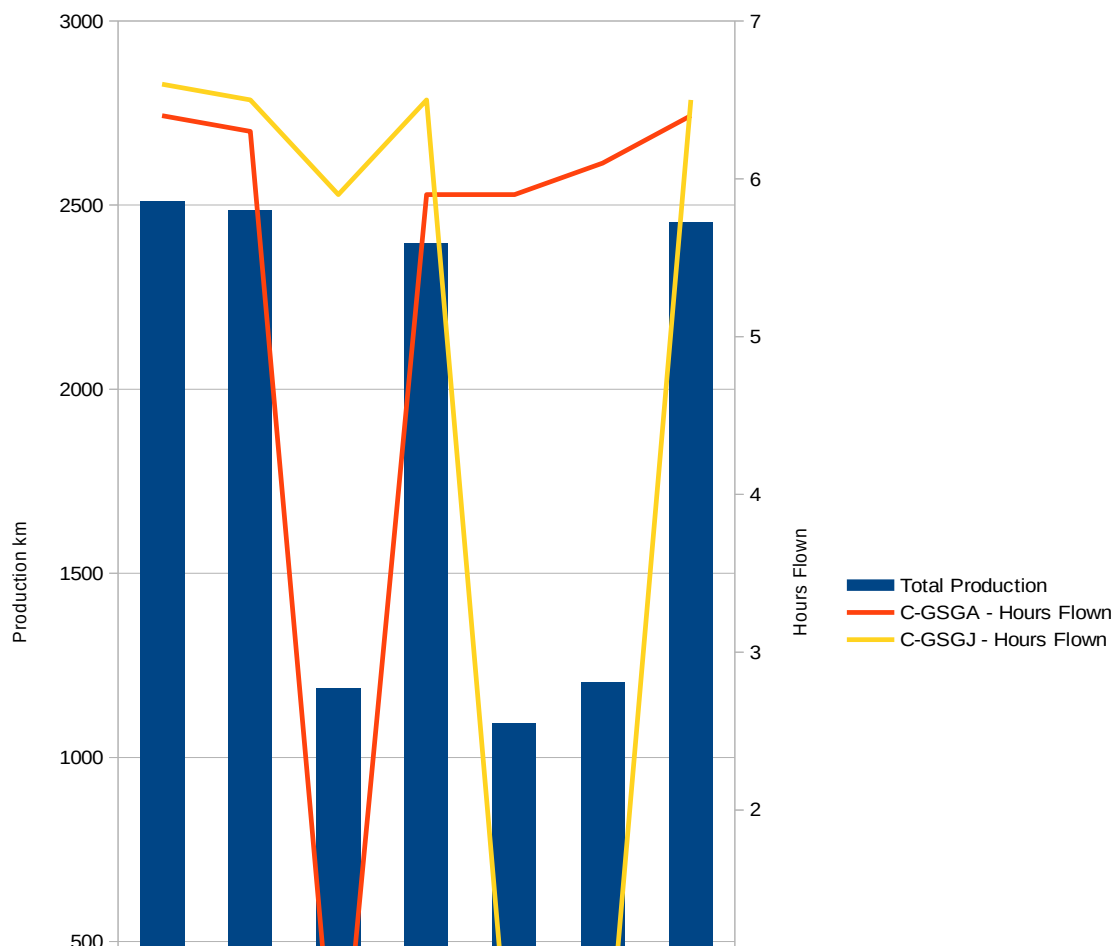
WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



[illegible]

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     | ON SITE  | 7                             | 49                          |
| Kyle Tiessen                | Pilot        |                   |                     | ON SITE  | 7                             | 49                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 48                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 49                          |
| Shandon Lomoro              | Technician   |                   |                     | ON SITE  | 7                             | 48                          |
| Colin Terry                 | Data Analyst |                   |                     | ON SITE  | 7                             | 45                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 46                          |
| Roger Knott                 | AME          |                   |                     | ON SITE  | 7                             | 35                          |
| Keith Wells                 | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Peter Podebry               | Pilot        |                   |                     |          | 0                             | 0                           |
| Kevin Michaud               | Pilot        |                   |                     |          | 0                             | 0                           |
| Marianne Durette            | Pilot        |                   |                     |          | 0                             | 0                           |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

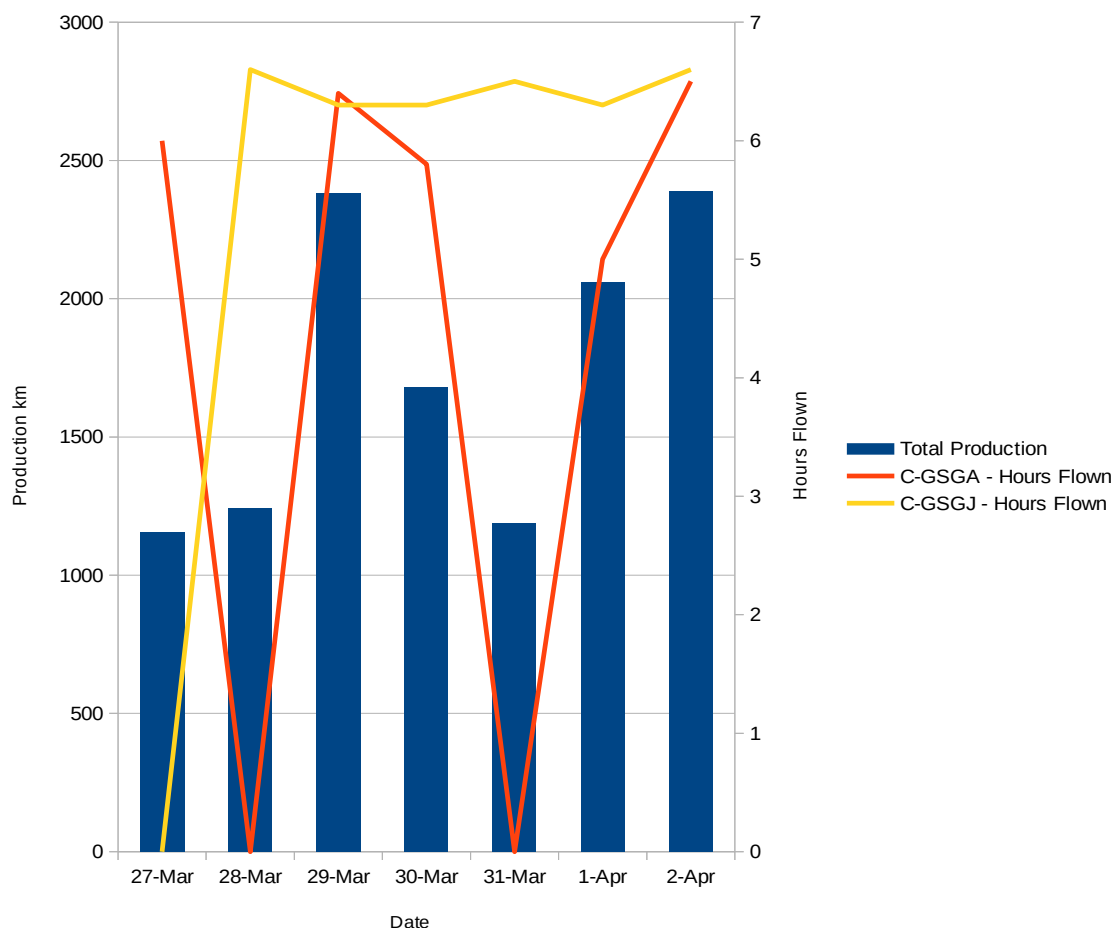




|  |  |
|--|--|
|  |  |
|  |  |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     | ON SITE  | 7                             | 56                          |
| Kyle Tiessen                | Pilot        |                   |                     | ON SITE  | 7                             | 56                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 55                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 56                          |
| Shandon Lomoro              | Technician   |                   |                     | ON SITE  | 7                             | 55                          |
| Colin Terry                 | Data Analyst |                   |                     | ON SITE  | 7                             | 52                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 53                          |
| Roger Knott                 | AME          |                   |                     | ON SITE  | 7                             | 42                          |
| Keith Wells                 | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Peter Podebry               | Pilot        |                   |                     |          | 0                             | 0                           |
| Kevin Michaud               | Pilot        |                   |                     |          | 0                             | 0                           |
| Marianne Durette            | Pilot        |                   |                     |          | 0                             | 0                           |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

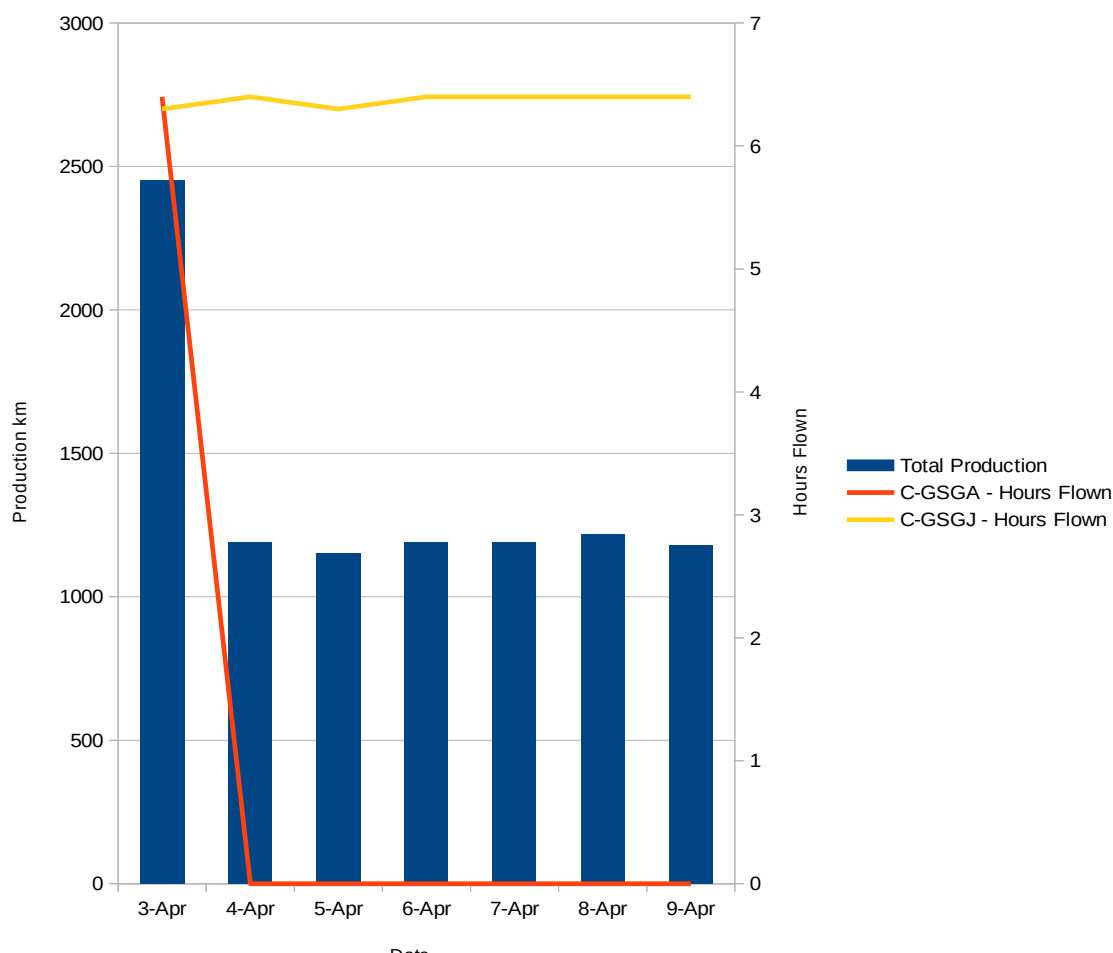
WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN





| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     | ON SITE  | 7                             | 63                          |
| Kyle Tiessen                | Pilot        |                   | 5-Apr-17            | ON SITE  | 3                             | 59                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 62                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 63                          |
| Shandon Lomoro              | Technician   |                   |                     | ON SITE  | 7                             | 62                          |
| Colin Terry                 | Data Analyst |                   | 5-Apr-17            | ON SITE  | 3                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 60                          |
| Roger Knott                 | AME          |                   |                     | ON SITE  | 7                             | 49                          |
| Keith Wells                 | Crew Chief   | 3-Apr-17          |                     | ON SITE  | 7                             | 7                           |
| Peter Podebry               | Pilot        | 9-Apr-17          |                     | ON SITE  | 1                             | 1                           |
| Kevin Michaud               | Pilot        |                   |                     |          | 0                             | 0                           |
| Marianne Durette            | Pilot        |                   |                     |          | 0                             | 0                           |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

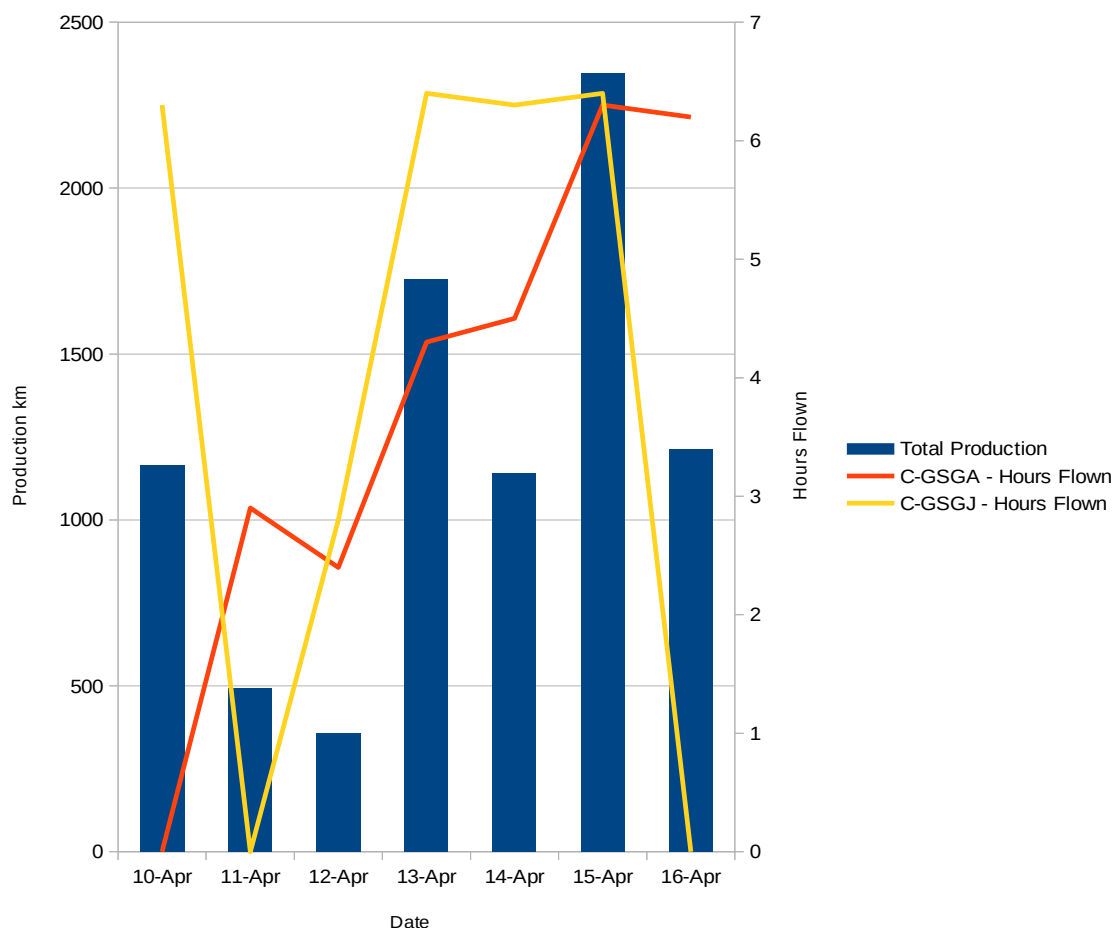




| SURVEY DETAILS            |                                                                                                                            |            |             |                                                                                                                        |                                                              |                 |            |              |            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------|------------|-------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-----------------|------------|--------------|------------|
| Survey Name               | Andamooka (3A) and Torrens (3B) SA Airborne Magnetic, Radiometric, and Digital Elevation Survey                            |            |             | Client Name                                                                                                            | Geoscience Australia                                         |                 |            |              |            |
| Survey Location           | South Australia                                                                                                            |            |             | Contact Name                                                                                                           | David McInnes                                                |                 |            |              |            |
| Project Code              | Geo3AB16.AUS                                                                                                               |            |             | Contact Phone                                                                                                          | +61 419 863 303                                              |                 |            |              |            |
| Total km                  | 163628                                                                                                                     |            |             | Client Address                                                                                                         | Cnr Jerrabomberra Ave and Hindmarsh Dr., Symonston, ACT 2609 |                 |            |              |            |
| Line Spacing              | 1958.373 X 199.9909                                                                                                        |            |             |                                                                                                                        |                                                              |                 |            |              |            |
| Survey Type               | Mag, spec                                                                                                                  |            |             | Email                                                                                                                  | david.mcinnis@ga.gov.au                                      |                 |            |              |            |
| SURVEY PRODUCTION SUMMARY |                                                                                                                            |            |             |                                                                                                                        |                                                              |                 |            |              |            |
|                           | 3A Andamooka                                                                                                               |            | 3B Torrens  |                                                                                                                        |                                                              | 3A Andamooka    |            | 3B Torrens   |            |
| Production This Week (km) | 3792.3                                                                                                                     |            | 4646.0      |                                                                                                                        | Total km Flown to Date                                       | 37948.6         |            | 42765.1      |            |
| Total Remaining (km)      | 42871.4                                                                                                                    |            | 40043.1     |                                                                                                                        | km Reflown This Week                                         | 0.0             |            | 0.0          |            |
| Percent Complete (%)      | 47.0                                                                                                                       |            | 51.6        |                                                                                                                        | Flight Time This Week (h)                                    | 54.8            |            |              |            |
| Prod km/Day This Week     | 541.8                                                                                                                      |            | 663.7       |                                                                                                                        | Prod km/Flt Hour This Week                                   | 154.0           |            |              |            |
| WEEKLY PRODUCTION         |                                                                                                                            |            |             |                                                                                                                        |                                                              |                 |            |              |            |
| Week 10                   |                                                                                                                            | Flight No. | Flight Time | No. of Lines Flown                                                                                                     | No. Reflight Lines Flown                                     | Production (km) |            | Reflown (km) |            |
|                           |                                                                                                                            |            |             |                                                                                                                        |                                                              | 3A Andamooka    | 3B Torrens | 3A Andamooka | 3B Torrens |
| TOTALS                    |                                                                                                                            |            | 54.8        | 58.4                                                                                                                   | 0.0                                                          | 3792.3          | 4646.0     | 0.0          | 0.0        |
| 10-Apr                    | Monday                                                                                                                     |            | 6.3         | 8.1                                                                                                                    | 0.0                                                          | 0.0             | 1163.9     | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                     |            | 0.0         | 0.0                                                                                                                    | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                     | 2034       | 6.3         | 8.1                                                                                                                    | 0.0                                                          | 0.0             | 1163.9     | 0.0          | 0.0        |
| Weather                   | Clear skies                                                                                                                |            | Remarks     | Production with SGJ. Peter Podebry drove to Port Augusta. Kevin Michad and Marianne Durette arrived in Adelaide.       |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                      |            |             |                                                                                                                        |                                                              |                 |            |              |            |
| 11-Apr                    | Tuesday                                                                                                                    |            | 2.9         | 3.5                                                                                                                    | 0.0                                                          | 492.0           | 0.0        | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                     | 1032       | 2.9         | 3.5                                                                                                                    | 0.0                                                          | 492.0           | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                     |            | 0.0         | 0.0                                                                                                                    | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
| Weather                   | Clear skies                                                                                                                |            | Remarks     | Short production with SGA due to pilots restricted hours. Peter Podebry arrived in Leigh Creek.                        |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                      |            |             |                                                                                                                        |                                                              |                 |            |              |            |
| 12-Apr                    | Wednesday                                                                                                                  |            | 5.2         | 2.5                                                                                                                    | 0.0                                                          | 356.2           | 0.0        | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                     | 1033       | 2.4         | 2.5                                                                                                                    | 0.0                                                          | 356.2           | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                     | Check ride | 2.8         | 0.0                                                                                                                    | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
| Weather                   | Clear skies                                                                                                                |            | Remarks     | SGJ did a check ride for Peter Podebry. SGA flew production. Kevin Michaud and Marianne Durette arrived in Leigh Creek |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                      |            |             |                                                                                                                        |                                                              |                 |            |              |            |
| 13-Apr                    | Thursday                                                                                                                   |            | 10.7        | 11.9                                                                                                                   | 0.0                                                          | 555.1           | 1171.5     | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                     | 1034       | 4.3         | 3.8                                                                                                                    | 0.0                                                          | 555.1           | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                     | 2035       | 6.4         | 8.1                                                                                                                    | 0.0                                                          | 0.0             | 1171.5     | 0.0          | 0.0        |
| Weather                   | Clear skies                                                                                                                |            | Remarks     | SGA did check ride for Kevin Michaud then production there after. SGJ also flew production.                            |                                                              |                 |            |              |            |
| Geomag                    | Quiet, micropulsations                                                                                                     |            |             |                                                                                                                        |                                                              |                 |            |              |            |
| 14-Apr                    | Friday                                                                                                                     |            | 10.8        | 7.9                                                                                                                    | 0.0                                                          | 0.0             | 1141.6     | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                     | Check ride | 4.5         | 0.0                                                                                                                    | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                     | 2036       | 6.3         | 7.9                                                                                                                    | 0.0                                                          | 0.0             | 1141.6     | 0.0          | 0.0        |
| Weather                   | Clear skies                                                                                                                |            | Remarks     | SGA did check ride for Marianne Durette. SGJ flew production.                                                          |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                      |            |             |                                                                                                                        |                                                              |                 |            |              |            |
| 15-Apr                    | Saturday                                                                                                                   |            | 12.7        | 16.2                                                                                                                   | 0.0                                                          | 1177.4          | 1169.0     | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                     | 1035       | 6.3         | 8.1                                                                                                                    | 0.0                                                          | 1177.4          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                     | 2037       | 6.4         | 8.1                                                                                                                    | 0.0                                                          | 0.0             | 1169.0     | 0.0          | 0.0        |
| Weather                   | Overcast                                                                                                                   |            | Remarks     | Both Airplanes flew production. Tim Hodson left the field.                                                             |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                      |            |             |                                                                                                                        |                                                              |                 |            |              |            |
| 16-Apr                    | Sunday                                                                                                                     |            | 6.2         | 8.3                                                                                                                    | 0.0                                                          | 1211.7          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGA                                                                                                                     | 1036       | 6.2         | 8.3                                                                                                                    | 0.0                                                          | 1211.7          | 0.0        | 0.0          | 0.0        |
|                           | C-GSGJ                                                                                                                     |            | 0.0         | 0.0                                                                                                                    | 0.0                                                          | 0.0             | 0.0        | 0.0          | 0.0        |
| Weather                   | Partly Cloudy                                                                                                              |            | Remarks     | SGA flew production. SGJ on the ground due to pilot rest day. The UP crystal on SGJ was replaced with a spare crystal. |                                                              |                 |            |              |            |
| Geomag                    | Quiet                                                                                                                      |            |             |                                                                                                                        |                                                              |                 |            |              |            |
| Comments                  | Production continued this week. Crew rotation also completed this week. Incoming Pilots were able to do their check rides. |            |             |                                                                                                                        |                                                              |                 |            |              |            |
| Signed                    | Oteng Matsetse                                                                                                             |            |             |                                                                                                                        |                                                              |                 |            |              |            |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   | 15-Apr-17           | ON SITE  | 6                             | 69                          |
| Kyle Tiessen                | Pilot        |                   |                     |          | 0                             | 59                          |
| Laura Johnstone             | Pilot        |                   | 10-Apr-17           | ON SITE  | 1                             | 63                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 70                          |
| Shandon Lomoro              | Technician   |                   | 10-Apr-17           | ON SITE  | 1                             | 63                          |
| Colin Terry                 | Data Analyst |                   |                     |          | 0                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 67                          |
| Roger Knott                 | AME          |                   |                     | ON SITE  | 7                             | 56                          |
| Keith Wells                 | Crew Chief   |                   |                     | ON SITE  | 7                             | 14                          |
| Peter Podebry               | Pilot        |                   |                     | ON SITE  | 7                             | 8                           |
| Kevin Michaud               | Pilot        | 10-Apr-17         |                     | ON SITE  | 7                             | 7                           |
| Marianne Durette            | Pilot        | 10-Apr-17         |                     | ON SITE  | 7                             | 7                           |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

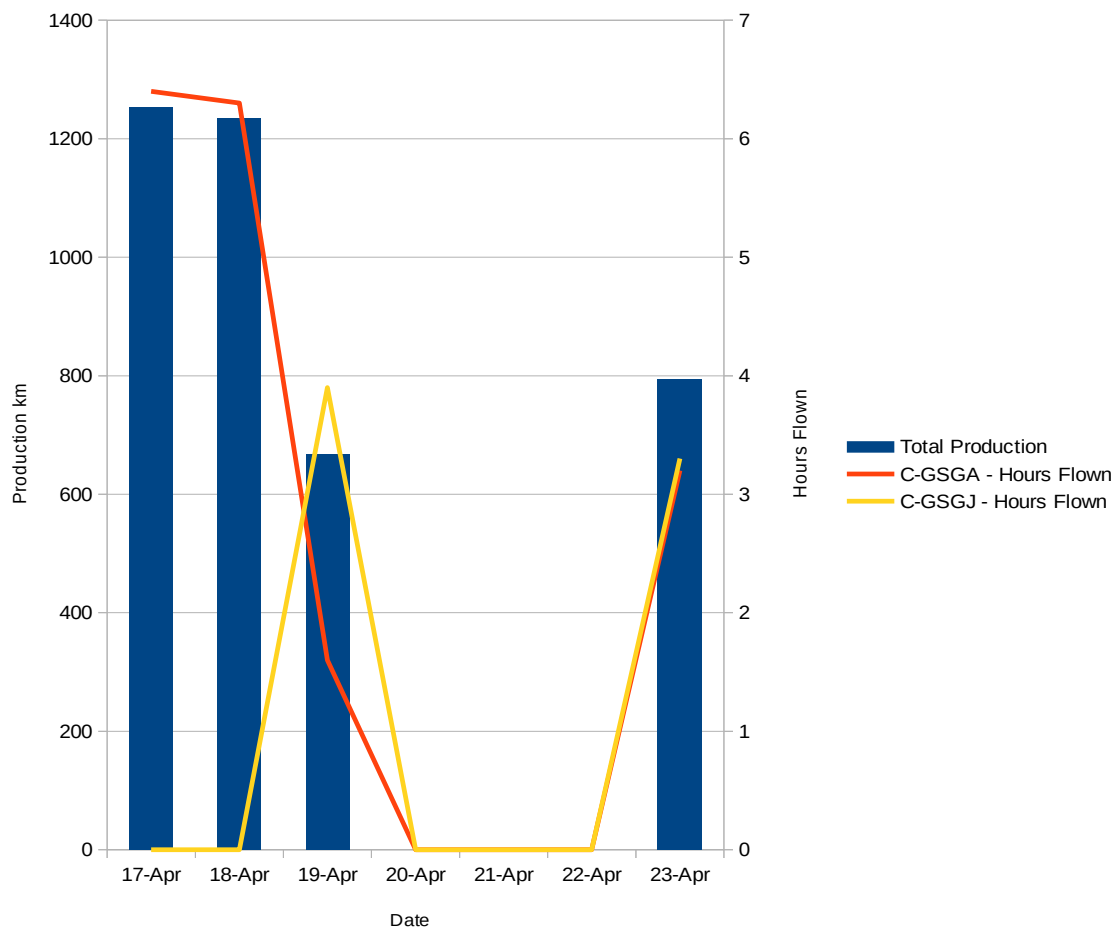




|                |               |                |                                                                                                                           |
|----------------|---------------|----------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Weather</b> | Partly Cloudy | <b>Remarks</b> | Both airplanes attempted production but aborted shortly due to several areas in the both blocks covered by surface water. |
| <b>Geomag</b>  | Active        |                |                                                                                                                           |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     |          | 0                             | 69                          |
| Kyle Tiessen                | Pilot        |                   |                     |          | 0                             | 59                          |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 63                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 77                          |
| Shandon Lomoro              | Technician   |                   |                     |          | 0                             | 63                          |
| Colin Terry                 | Data Analyst |                   |                     |          | 0                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 74                          |
| Roger Knott                 | AME          |                   |                     | ON SITE  | 7                             | 63                          |
| Keith Wells                 | Crew Chief   |                   |                     | ON SITE  | 7                             | 21                          |
| Peter Podebry               | Pilot        |                   |                     | ON SITE  | 7                             | 15                          |
| Kevin Michaud               | Pilot        |                   |                     | ON SITE  | 7                             | 14                          |
| Marianne Durette            | Pilot        |                   |                     | ON SITE  | 7                             | 14                          |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

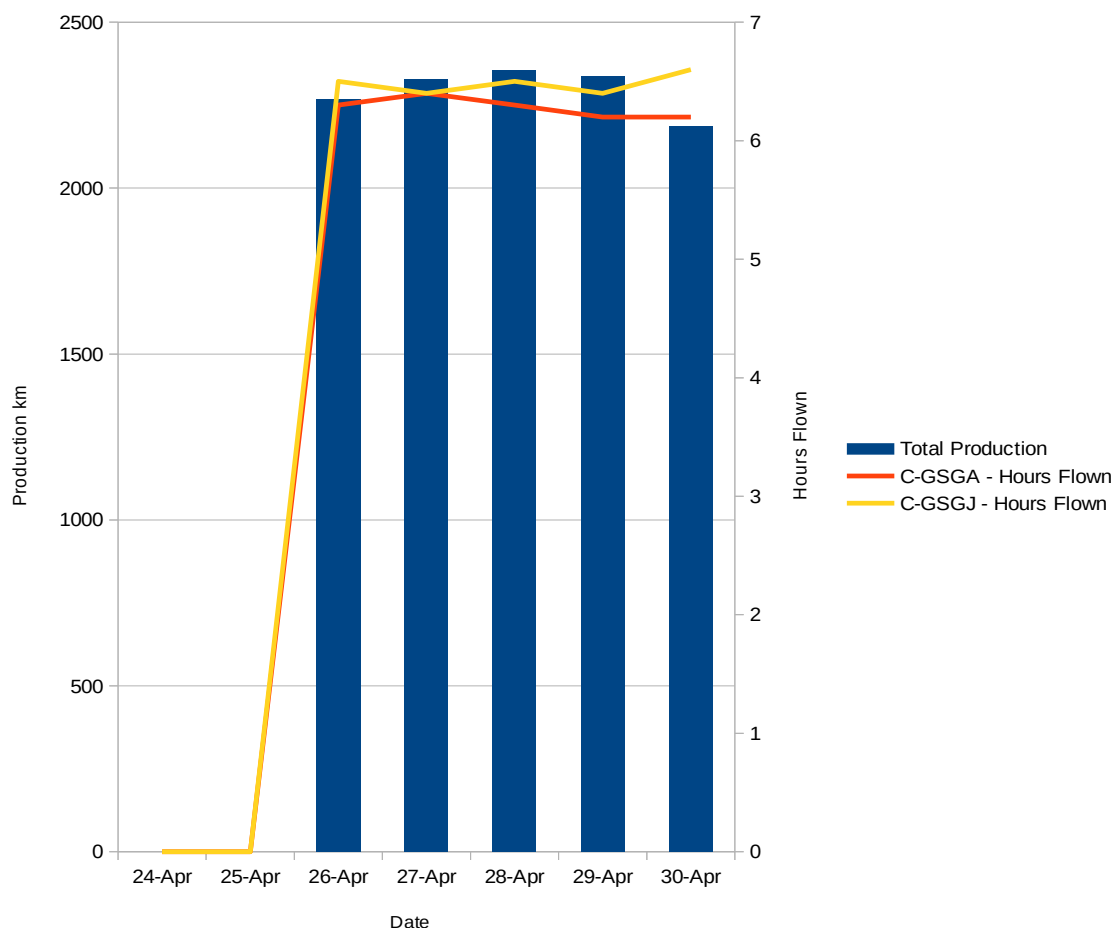




|               |                |
|---------------|----------------|
| <b>Signed</b> | Oteng Matsetse |
|---------------|----------------|

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     |          | 0                             | 69                          |
| Kyle Tiessen                | Pilot        |                   |                     |          | 0                             | 59                          |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 63                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 84                          |
| Shandon Lomoro              | Technician   |                   |                     |          | 0                             | 63                          |
| Colin Terry                 | Data Analyst |                   |                     |          | 0                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 81                          |
| Roger Knott                 | AME          |                   |                     | ON SITE  | 7                             | 70                          |
| Keith Wells                 | Crew Chief   |                   |                     | ON SITE  | 7                             | 28                          |
| Peter Podebry               | Pilot        |                   |                     | ON SITE  | 7                             | 22                          |
| Kevin Michaud               | Pilot        |                   |                     | ON SITE  | 7                             | 21                          |
| Marianne Durette            | Pilot        |                   |                     | ON SITE  | 7                             | 21                          |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

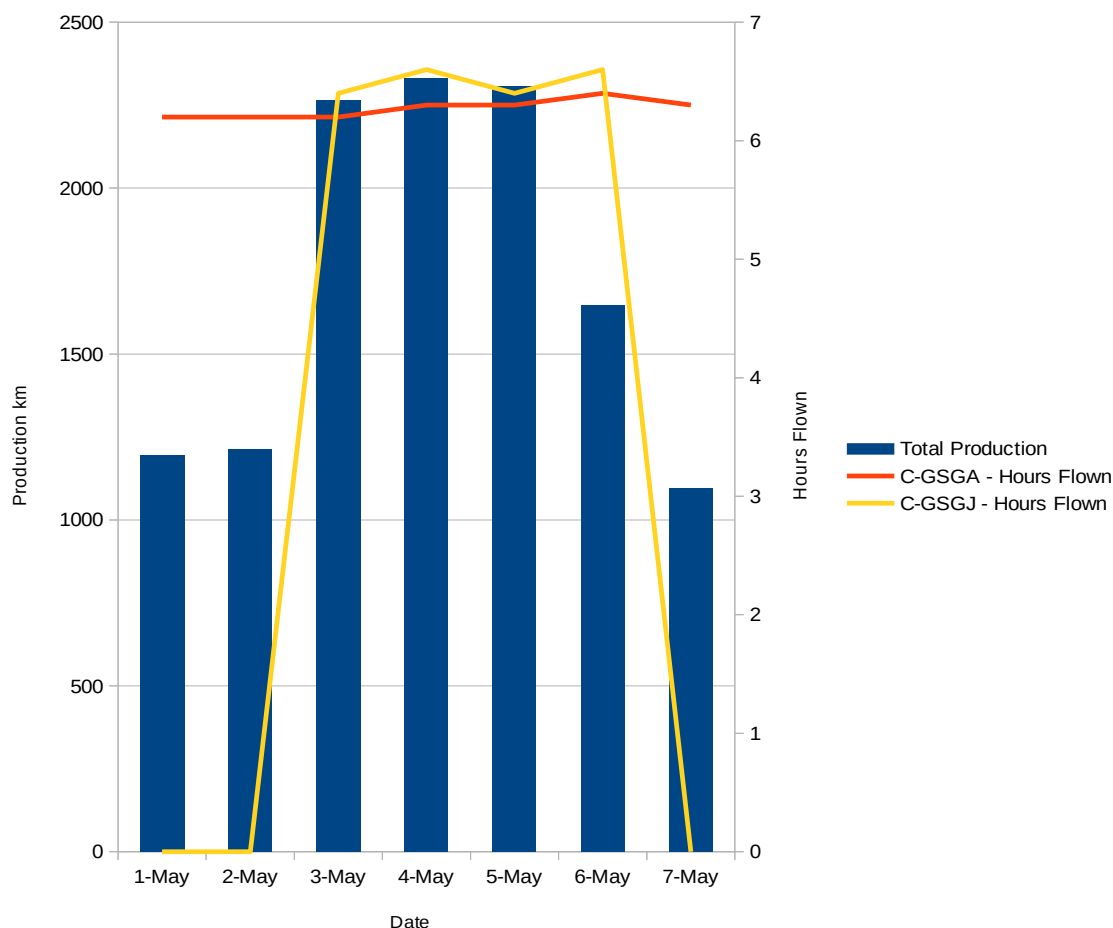




|  |  |
|--|--|
|  |  |
|  |  |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     |          | 0                             | 69                          |
| Kyle Tiessen                | Pilot        |                   |                     |          | 0                             | 59                          |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 63                          |
| Tomo Nishimura              | Pilot        |                   |                     | ON SITE  | 7                             | 91                          |
| Shandon Lomoro              | Technician   |                   |                     |          | 0                             | 63                          |
| Colin Terry                 | Data Analyst |                   |                     |          | 0                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   |                     | ON SITE  | 7                             | 88                          |
| Roger Knott                 | AME          |                   |                     | ON SITE  | 7                             | 77                          |
| Keith Wells                 | Crew Chief   |                   |                     | ON SITE  | 7                             | 35                          |
| Peter Podebry               | Pilot        |                   |                     | ON SITE  | 7                             | 29                          |
| Kevin Michaud               | Pilot        |                   |                     | ON SITE  | 7                             | 28                          |
| Marianne Durette            | Pilot        |                   |                     | ON SITE  | 7                             | 28                          |
| Adam Jones                  | Crew Chief   |                   |                     |          | 0                             | 0                           |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 0                           |
| Dwayne Bailey               | AME          |                   |                     |          | 0                             | 0                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

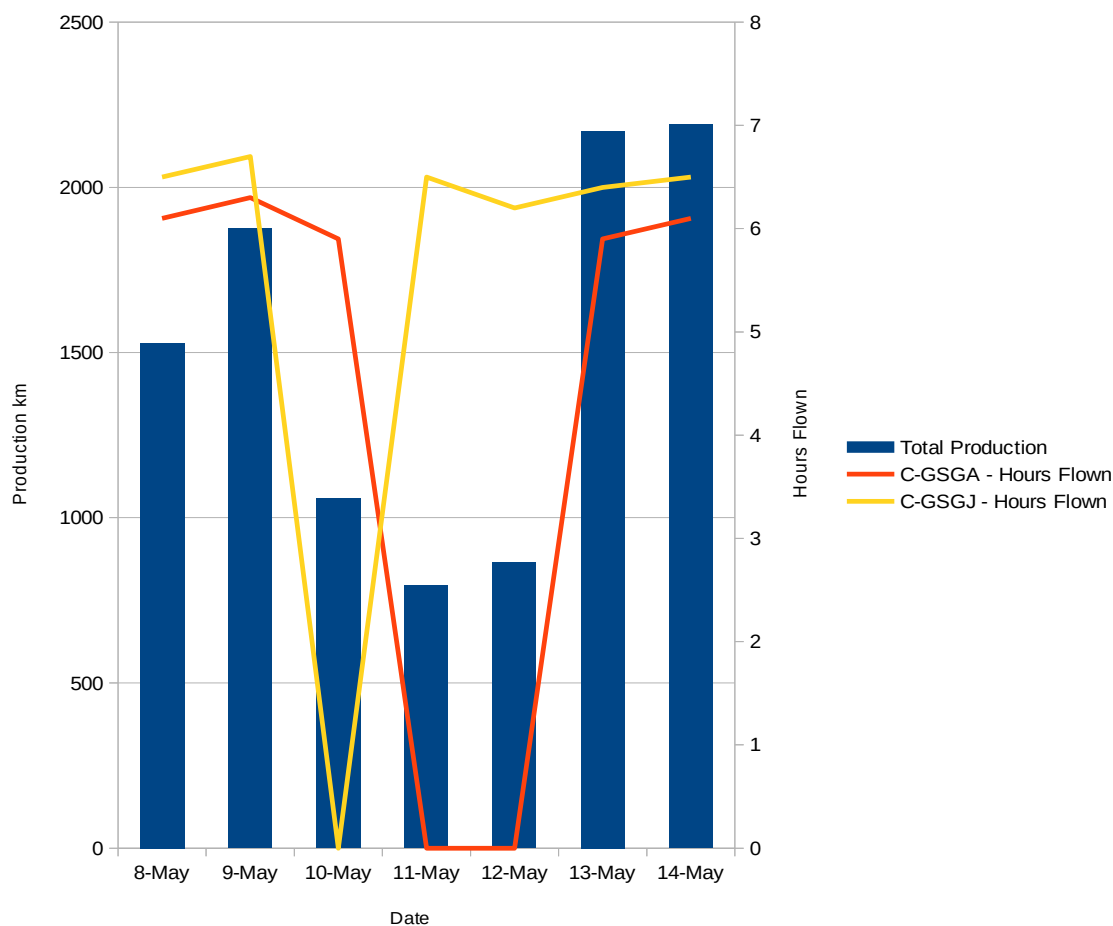




|  |  |
|--|--|
|  |  |
|  |  |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     |          | 0                             | 69                          |
| Kyle Tiessen                | Pilot        |                   |                     |          | 0                             | 59                          |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 63                          |
| Tomo Nishimura              | Pilot        |                   | 11-May-17           | ON SITE  | 4                             | 95                          |
| Shandon Lomoro              | Technician   |                   |                     |          | 0                             | 63                          |
| Colin Terry                 | Data Analyst |                   |                     |          | 0                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   | 9-May-17            | ON SITE  | 2                             | 90                          |
| Roger Knott                 | AME          |                   |                     | ON SITE  | 7                             | 84                          |
| Keith Wells                 | Crew Chief   |                   |                     | ON SITE  | 7                             | 42                          |
| Peter Podebry               | Pilot        |                   |                     | ON SITE  | 7                             | 36                          |
| Kevin Michaud               | Pilot        |                   |                     | ON SITE  | 7                             | 35                          |
| Marianne Durette            | Pilot        |                   |                     | ON SITE  | 7                             | 35                          |
| Adam Jones                  | Crew Chief   | 9-May-17          |                     | ON SITE  | 6                             | 6                           |
| Laura Johnstone             | Pilot        | 11-May-17         |                     | ON SITE  | 4                             | 4                           |
| Dwayne Bailey               | AME          | 14-May-17         |                     | ON SITE  | 1                             | 1                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

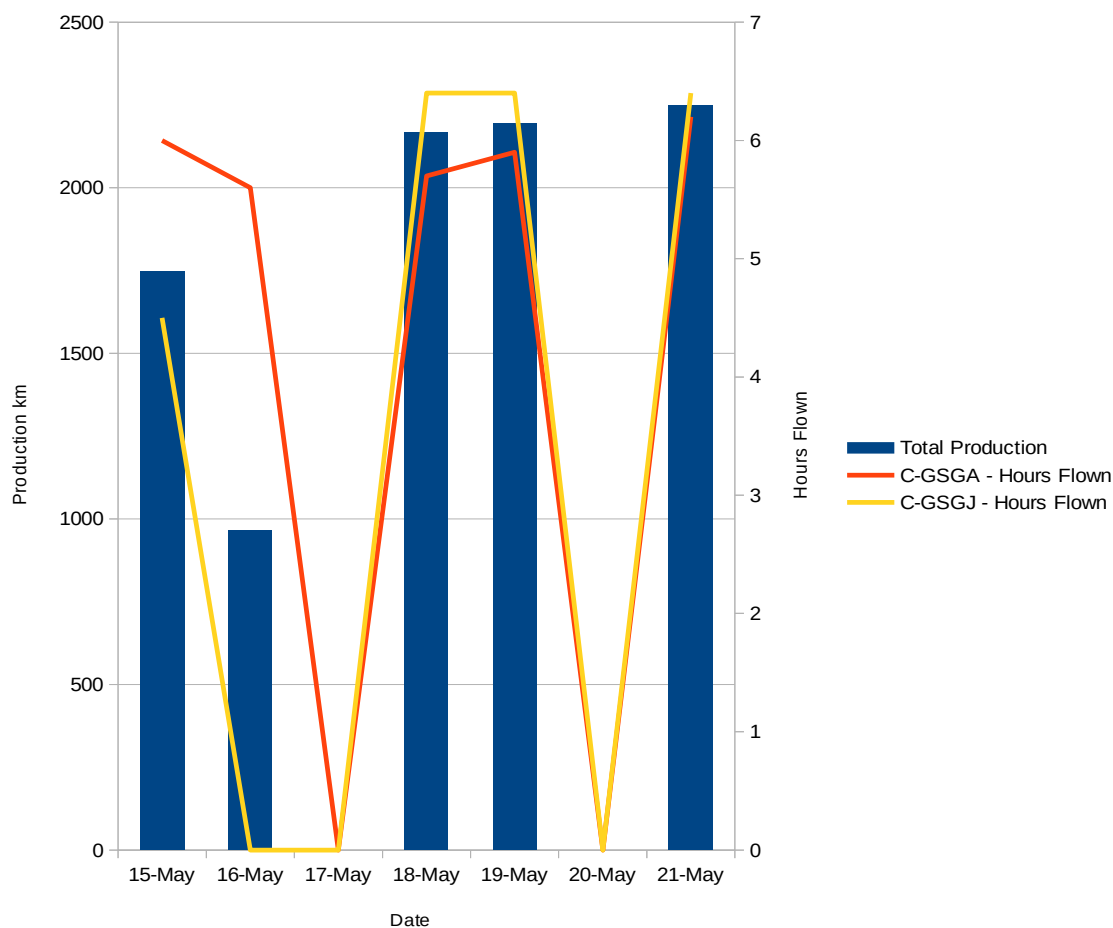




|         |
|---------|
| Weather |
| Geomag  |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     |          | 0                             | 69                          |
| Kyle Tiessen                | Pilot        |                   |                     |          | 0                             | 59                          |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 63                          |
| Tomo Nishimura              | Pilot        |                   |                     |          | 0                             | 95                          |
| Shandon Lomoro              | Technician   |                   |                     |          | 0                             | 63                          |
| Colin Terry                 | Data Analyst |                   |                     |          | 0                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   |                     |          | 0                             | 90                          |
| Roger Knott                 | AME          |                   | 16-May-17           | ON SITE  | 2                             | 86                          |
| Keith Wells                 | Crew Chief   |                   |                     | ON SITE  | 7                             | 49                          |
| Peter Podebry               | Pilot        |                   |                     | ON SITE  | 7                             | 43                          |
| Kevin Michaud               | Pilot        |                   |                     | ON SITE  | 7                             | 42                          |
| Marianne Durette            | Pilot        |                   |                     | ON SITE  | 7                             | 42                          |
| Adam Jones                  | Crew Chief   |                   |                     | ON SITE  | 7                             | 13                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 11                          |
| Dwayne Bailey               | AME          |                   |                     | ON SITE  | 7                             | 8                           |
| Kevin Cahill                | AME          |                   |                     |          | 0                             | 0                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

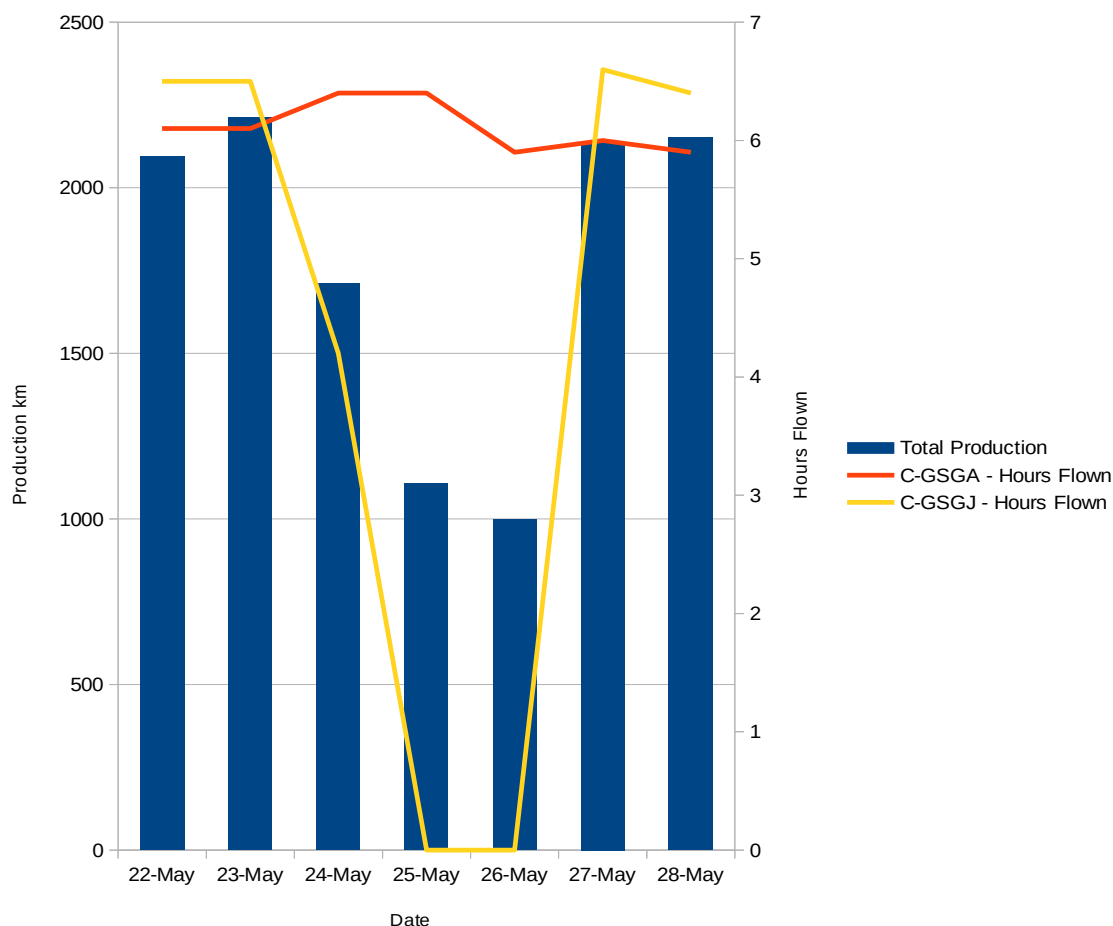




|         |
|---------|
| Weather |
| Geomag  |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     |          | 0                             | 69                          |
| Kyle Tiessen                | Pilot        |                   |                     |          | 0                             | 59                          |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 63                          |
| Tomo Nishimura              | Pilot        |                   |                     |          | 0                             | 95                          |
| Shandon Lomoro              | Technician   |                   |                     |          | 0                             | 63                          |
| Colin Terry                 | Data Analyst |                   |                     |          | 0                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   |                     |          | 0                             | 90                          |
| Roger Knott                 | AME          |                   |                     |          | 0                             | 86                          |
| Keith Wells                 | Crew Chief   |                   |                     | ON SITE  | 7                             | 56                          |
| Peter Podebry               | Pilot        |                   |                     | ON SITE  | 7                             | 50                          |
| Kevin Michaud               | Pilot        |                   |                     | ON SITE  | 7                             | 49                          |
| Marianne Durette            | Pilot        |                   |                     | ON SITE  | 7                             | 49                          |
| Adam Jones                  | Crew Chief   |                   |                     | ON SITE  | 7                             | 20                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 18                          |
| Dwayne Bailey               | AME          |                   |                     | ON SITE  | 7                             | 15                          |
| Kevin Cahill                | AME          | 25-May-17         |                     | ON SITE  | 4                             | 4                           |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

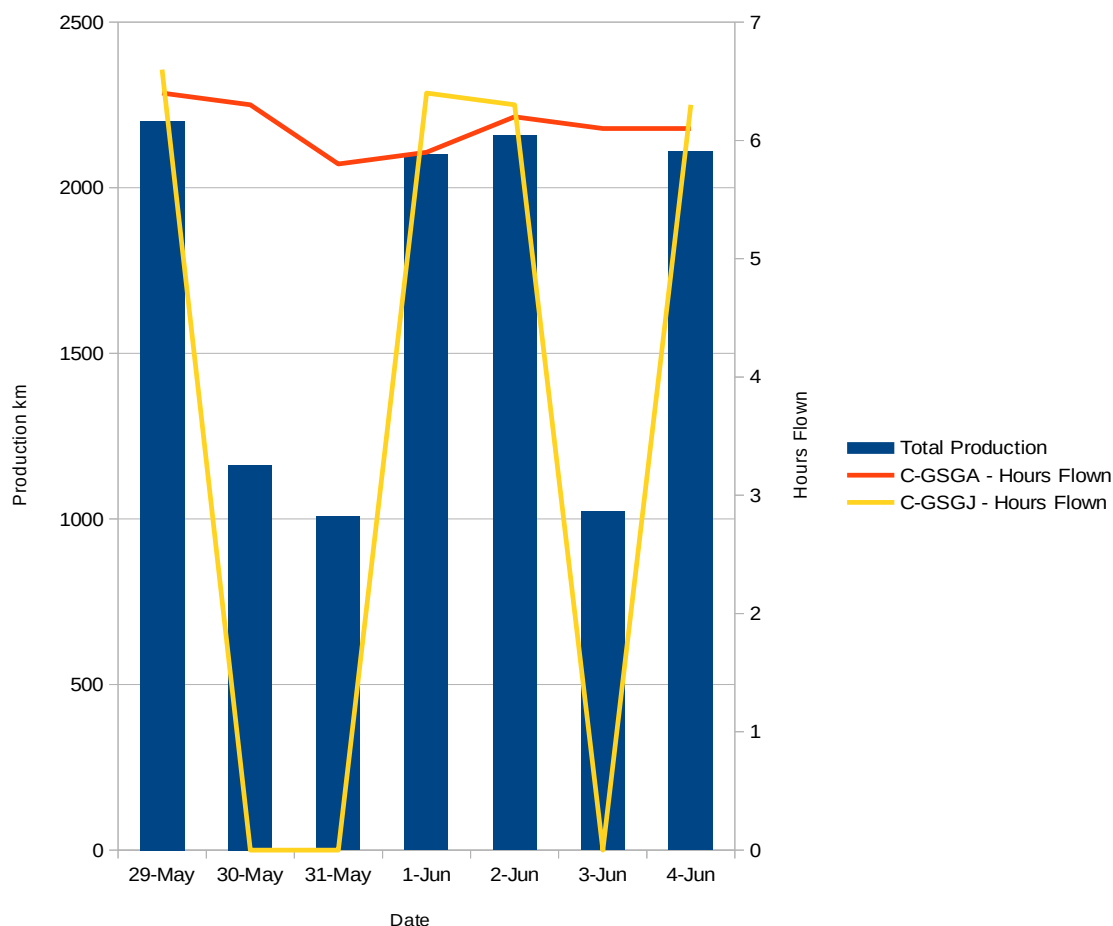




|  |  |
|--|--|
|  |  |
|  |  |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     |          | 0                             | 69                          |
| Kyle Tiessen                | Pilot        |                   |                     |          | 0                             | 59                          |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 63                          |
| Tomo Nishimura              | Pilot        |                   |                     |          | 0                             | 95                          |
| Shandon Lomoro              | Technician   |                   |                     |          | 0                             | 63                          |
| Colin Terry                 | Data Analyst |                   |                     |          | 0                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   |                     |          | 0                             | 90                          |
| Roger Knott                 | AME          |                   |                     |          | 0                             | 86                          |
| Keith Wells                 | Crew Chief   |                   |                     | ON SITE  | 7                             | 63                          |
| Peter Podebry               | Pilot        |                   |                     | ON SITE  | 7                             | 57                          |
| Kevin Michaud               | Pilot        |                   |                     | ON SITE  | 7                             | 56                          |
| Marianne Durette            | Pilot        |                   |                     | ON SITE  | 7                             | 56                          |
| Adam Jones                  | Crew Chief   |                   |                     | ON SITE  | 7                             | 27                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 25                          |
| Dwayne Bailey               | AME          |                   |                     | ON SITE  | 7                             | 22                          |
| Kevin Cahill                | AME          |                   |                     | ON SITE  | 7                             | 11                          |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

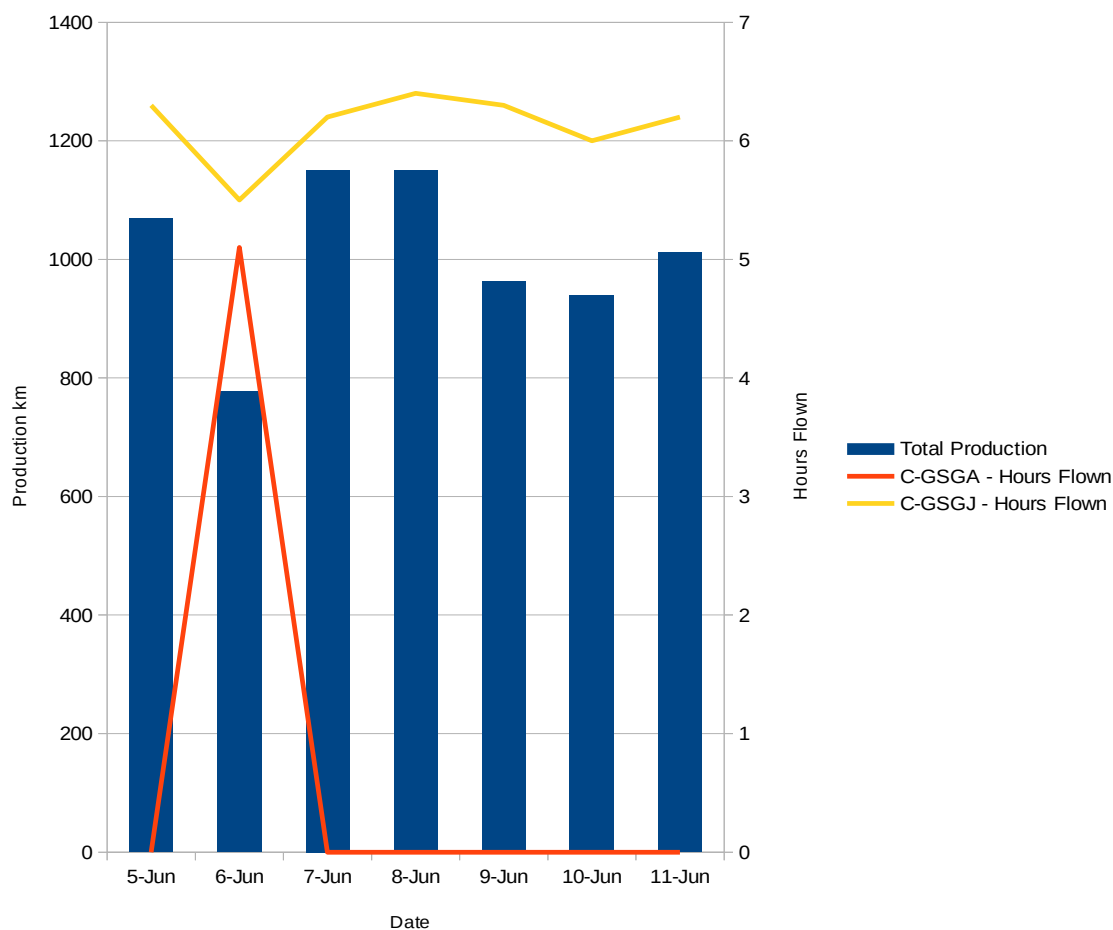




|  |  |
|--|--|
|  |  |
|  |  |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     |          | 0                             | 69                          |
| Kyle Tiessen                | Pilot        |                   |                     |          | 0                             | 59                          |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 63                          |
| Tomo Nishimura              | Pilot        |                   |                     |          | 0                             | 95                          |
| Shandon Lomoro              | Technician   |                   |                     |          | 0                             | 63                          |
| Colin Terry                 | Data Analyst |                   |                     |          | 0                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   |                     |          | 0                             | 90                          |
| Roger Knott                 | AME          |                   |                     |          | 0                             | 86                          |
| Keith Wells                 | Crew Chief   |                   | 6-Jun-17            | ON SITE  | 2                             | 65                          |
| Peter Podebry               | Pilot        |                   | 6-Jun-17            | ON SITE  | 2                             | 59                          |
| Kevin Michaud               | Pilot        |                   |                     | ON SITE  | 7                             | 63                          |
| Marianne Durette            | Pilot        |                   |                     | ON SITE  | 7                             | 63                          |
| Adam Jones                  | Crew Chief   |                   |                     | ON SITE  | 7                             | 34                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 32                          |
| Dwayne Bailey               | AME          |                   |                     | ON SITE  | 7                             | 29                          |
| Kevin Cahill                | AME          |                   |                     | ON SITE  | 7                             | 18                          |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

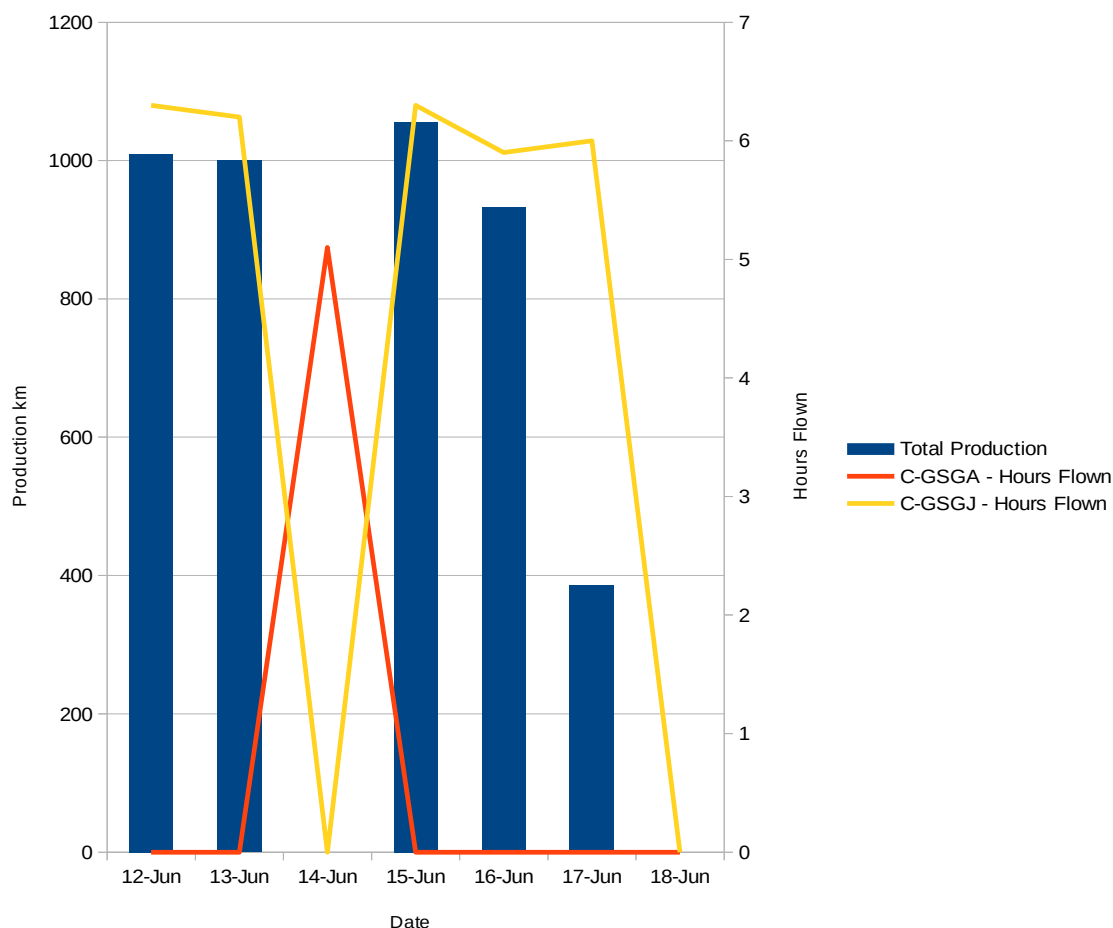




|  |  |
|--|--|
|  |  |
|  |  |

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     |          | 0                             | 69                          |
| Kyle Tiessen                | Pilot        |                   |                     |          | 0                             | 59                          |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 63                          |
| Tomo Nishimura              | Pilot        |                   |                     |          | 0                             | 95                          |
| Shandon Lomoro              | Technician   |                   |                     |          | 0                             | 63                          |
| Colin Terry                 | Data Analyst |                   |                     |          | 0                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   |                     |          | 0                             | 90                          |
| Roger Knott                 | AME          |                   |                     |          | 0                             | 86                          |
| Keith Wells                 | Crew Chief   |                   |                     |          | 0                             | 65                          |
| Peter Podebry               | Pilot        |                   |                     |          | 0                             | 59                          |
| Kevin Michaud               | Pilot        |                   |                     | ON SITE  | 7                             | 70                          |
| Marianne Durette            | Pilot        |                   | 16-Jun-17           | ON SITE  | 5                             | 68                          |
| Adam Jones                  | Crew Chief   |                   |                     | ON SITE  | 7                             | 41                          |
| Laura Johnstone             | Pilot        |                   |                     | ON SITE  | 7                             | 39                          |
| Dwayne Bailey               | AME          |                   |                     | ON SITE  | 7                             | 36                          |
| Kevin Cahill                | AME          |                   |                     | ON SITE  | 7                             | 25                          |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN

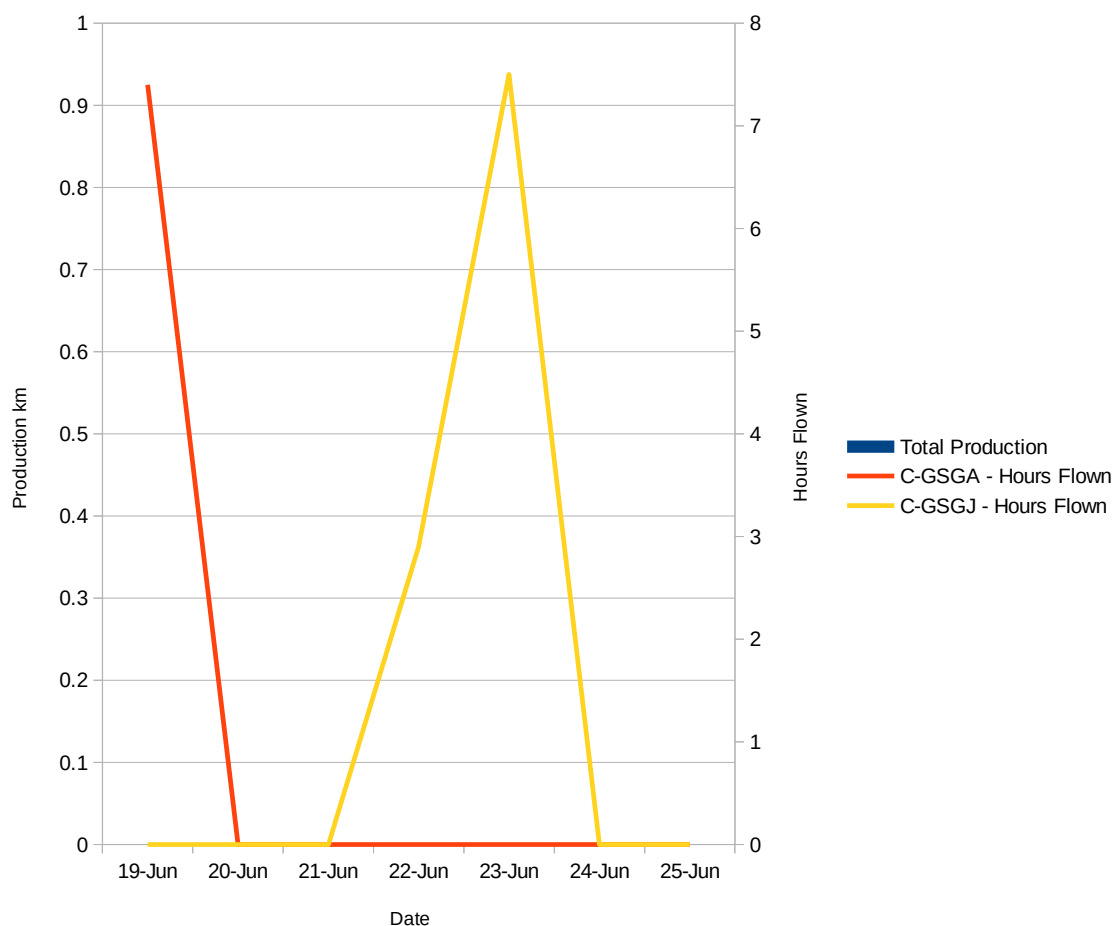




|               |         |
|---------------|---------|
| <b>Signed</b> | A.Jones |
|---------------|---------|

| PERSONNEL ON SITE THIS WEEK |              |                   |                     |          |                               |                             |
|-----------------------------|--------------|-------------------|---------------------|----------|-------------------------------|-----------------------------|
| Name                        | Position     | Arrival This Week | Departure This Week | On Site? | No. of Days On Site This Week | No. of Days on Site To Date |
| Tim Hodson                  | Pilot        |                   |                     |          | 0                             | 69                          |
| Kyle Tiessen                | Pilot        |                   |                     |          | 0                             | 59                          |
| Laura Johnstone             | Pilot        |                   |                     |          | 0                             | 63                          |
| Tomo Nishimura              | Pilot        |                   |                     |          | 0                             | 95                          |
| Shandon Lomoro              | Technician   |                   |                     |          | 0                             | 63                          |
| Colin Terry                 | Data Analyst |                   |                     |          | 0                             | 55                          |
| Oteng Matsetse              | Crew Chief   |                   |                     |          | 0                             | 90                          |
| Roger Knott                 | AME          |                   |                     |          | 0                             | 86                          |
| Keith Wells                 | Crew Chief   |                   |                     |          | 0                             | 65                          |
| Peter Podebry               | Pilot        |                   |                     |          | 0                             | 59                          |
| Kevin Michaud               | Pilot        |                   |                     | ON SITE  | 7                             | 77                          |
| Marianne Durette            | Pilot        |                   |                     |          | 0                             | 68                          |
| Adam Jones                  | Crew Chief   |                   |                     | ON SITE  | 7                             | 48                          |
| Laura Johnstone             | Pilot        |                   | 25-Jun-17           | ON SITE  | 7                             | 46                          |
| Dwayne Bailey               | AME          |                   |                     | ON SITE  | 7                             | 43                          |
| Kevin Cahill                | AME          |                   |                     | ON SITE  | 7                             | 32                          |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |
|                             |              |                   |                     |          |                               |                             |

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN





## Appendix VII





## Delivered Raw Data Channels

### Magnetic Line Data Format

Survey area: Torrens (Area 3B)  
Located data type: RAW EDITED Magnetics Data Flight 2001 to 2080  
Dates of acquisition: 23/02/2017 to 22/06/2017

#### CLIENT DETAILS

-----  
Company Flown by: SANDER GEOPHYSICS LTD.  
Company Processed: SANDER GEOPHYSICS LTD.  
Client: Geoscience Australia  
Client Project Number: 1283  
Company Project Number: 846

#### AIRBORNE SURVEY EQUIPMENT:

-----  
Aircraft: Cessna 208B Grand Caravan (C-GSGJ)  
Magnetometer: Geometrics G-822A  
Magnetometer Resolution: 0.001 nT  
Magnetometer Sample Interval: 10 Hz  
Data Acquisition: Sander Geophysics SGDAS  
Spectrometer: Exploranium GR820  
Crystal Size: 33.6L downward looking & 8.4L upward looking crystals  
Spectrometer Sample Interval: 1 Hz  
GPS Navigation System: NovAtel OEMV-3  
GPS Sample Interval: 10 Hz

#### Survey Design

-----  
Flight Line Direction: 090 – 270 degrees  
Flight Line Separation: 200 metres  
Tie Line Direction: 000 – 180 degrees  
Tie Line Separation: 2000 metres  
Terrain Clearance: 60 metres (MTC)  
Survey flown: 23/02/2017 to 22/06/2017

#### DATUMS and PROJECTION

-----  
Datum: Geodetic Datum of Australia 94. GDA94  
Projection: Map Grid of Australia. MGA  
Zone: Zone 53

#### Local Time Zone

-----  
Time Zone (LOCAL\_TIME): Australian Central Standard Time (UTC +9.5)

#### Diurnal Base Station Magnetometer

-----  
Base Station Magnetometer: Geometrics G-822A  
Base Station Sampling Rate: 10 Hz  
Base Station Location (GDA94): 30.60054S, 138.42010E  
Base Station Verage Value: -354.988 nT

#### Magnetic Sensor Parallax

-----  
X value added to GPS (right is Positive): 0.00 m  
Y value added to GPS (forward is positive): -12.09m  
Z value added to GPS (up is positive): 0.00 m

## Delivered Raw Data Channels

### DATA FORMAT

-----

|                                  |       |              |            |                                                                                                                |
|----------------------------------|-------|--------------|------------|----------------------------------------------------------------------------------------------------------------|
| survey                           | I6    | -9999        | -          | Project Number                                                                                                 |
| flight                           | I5    | -999         | -          | Flight number                                                                                                  |
| LINE                             | I9    | -9999999     | -          | Line number                                                                                                    |
| FID                              | I9    | -9999999     | -          | Fiducial number                                                                                                |
| dateCode                         | I10   | -99999999    | YYYYMMDD   | Date                                                                                                           |
| gps_time                         | F10.2 | -99999.99    | GPS Time   | seconds past midnight UT                                                                                       |
| local_time                       | F10.2 | -99999.99    | Local Time | seconds past midnight Australian Central Standard Time (UT +9.5)                                               |
| bearing                          | I5    | -999         | degrees    | Bearing                                                                                                        |
| longitude_gda94                  | F13.7 | -999.9999999 | degrees    | GDA94 Longitude (parallax corrected to location of Mag sensor)                                                 |
| latitude_gda94                   | F13.7 | -999.9999999 | degrees    | GDA94 Latitude (parallax corrected to location of Mag sensor)                                                  |
| easting_gda94                    | F11.2 | -999999.99   | metres     | GDA94 MGA53 Easting (parallax corrected to location of Mag sensor)                                             |
| northing_gda94                   | F12.2 | -9999999.99  | metres     | GDA94 MGA53 Northing (parallax corrected to location of Mag sensor)                                            |
| gps_height                       | F8.2  | -999.99      | metres     | GDA94 (ellipsoidal) GPS Height (parallax corrected to location of Mag sensor)                                  |
| zone                             | I4    | -99          | -          | MGA Zone Number                                                                                                |
| radar_alt                        | F8.2  | -999.99      | metres     | Radar Altimeter (edited & interpolated if required, calibrated & parallax corrected to location of mag sensor) |
| laser_alt                        | F8.2  | -999.99      | metres     | Laser Altimeter (edited & interpolated if required, calibrated & parallax corrected to location of mag sensor) |
| fluxgate_x                       | F10.2 | -99999.99    | nT         | Fluxgate X Component                                                                                           |
| fluxgate_y                       | F10.2 | -99999.99    | nT         | Fluxgate Y Component                                                                                           |
| fluxgate_z                       | F10.2 | -99999.99    | nT         | Fluxgate Z Component                                                                                           |
| magnetics_raw_uncompensated      | F10.2 | -99999.99    | nT         | Uncompensated Magnetics                                                                                        |
| magnetics_raw_compensated        | F10.2 | -99999.99    | nT         | Raw (no editing, no interpolation) Compensated (Comp flight adjusted) Magnetics                                |
| magnetics_raw_edited_compensated | F10.2 | -99999.99    | nT         | Raw Edited (spike removal and interpolated if required) Compensated Magnetics                                  |
| magnetic_diurnal                 | F10.2 | -99999.99    | nT         | Magnetic Diurnal (interpolated)                                                                                |

## Delivered Raw Data Channels

### Radiometric Line Data Format

Survey area: Torrens (Area 3B)  
Located data type: RAW EDITED Radiometric Data Flights 2001 to 2080

#### CLIENT DETAILS

-----  
Company Flown by: SANDER GEOPHYSICS LTD.  
Company Processed: SANDER GEOPHYSICS LTD.  
Client: Geoscience Australia  
Client Project Number: 1283  
Company Project Number: 846

#### AIRBORNE SURVEY EQUIPMENT:

-----  
Aircraft: Cessna 208B Grand Caravan (C-GSGJ)  
Magnetometer: Geometrics G-822A  
Magnetometer Resolution: 0.001 nT  
Magnetometer Sample Interval: 10 Hz  
Data Acquisition: Sander Geophysics SGDAS  
Spectrometer: Exploranium GR820  
Crystal Size: 33.6L downward looking & 8.4L upward looking crystals  
Spectrometer Sample Interval: 1 Hz  
GPS Navigation System: NovAtel OEMV-3  
GPS Sample Interval: 10 Hz

#### AIRBORNE SURVEY SPECIFICATIONS

-----  
Flight Line Direction: 090 – 270 degrees  
Flight Line Separation: 200 metres  
Tie Line Direction: 000 – 180 degrees  
Tie Line Separation: 2000 metres  
Terrain Clearance: 60 metres (MTC)  
Survey flown: 23/02/2017 to 22/06/2017

#### DATUMS and PROJECTION

-----  
Datum: Geodetic Datum of Australia 94. GDA94  
Projection: Map Grid of Australia. MGA  
Zone: Zone 53

#### Local Time Zone

-----  
Time Zone (LOCAL\_TIME): Australian Central Standard Time (UTC +9.5)

#### Spectrometer Parallax

-----  
A 0.5 second lag correction was applied to all data to correct for the time delay between detection and recording of the airborne data.  
In addition, a 3.43 m static lag correction representing the separation between the center of the crystal packs and the GPS antenna was applied to each data point.

#### System Corrections Summary:

##### AIRCRAFT BACKGROUND

-----  
Total Count 78.42  
Potassium 11.56  
Uranium 0.50  
Thorium 2.95

## Delivered Raw Data Channels

|                                |            |             |     |
|--------------------------------|------------|-------------|-----|
| Upward                         | 0.17       |             |     |
| COSMIC STRIPPING RATIOS        |            |             |     |
| Total Count                    | 0.6603     |             |     |
| Potassium                      | 0.0394     |             |     |
| Uranium                        | 0.0286     |             |     |
| Thorium                        | 0.0347     |             |     |
| Upward                         | 0.0077     |             |     |
| RADON STRIPPING RATIOS         |            |             |     |
| Total Count                    | 12.8786    |             |     |
| Potassium                      | 0.7063     |             |     |
| Thorium                        | 0.0319     |             |     |
| Upward                         | 0.2543     |             |     |
| GROUND COMPONENT               |            |             |     |
| A1                             | 0.031247   |             |     |
| A2                             | 0.022579   |             |     |
| COMPTON STRIPPING RATIOS       |            |             |     |
| alpha                          | 0.2381     |             |     |
| beta                           | 0.3908     |             |     |
| gamma                          | 0.7163     |             |     |
| a                              | 0.0477     |             |     |
| b                              | 0.0011     |             |     |
| g                              | 0.0069     |             |     |
| HEIGHT ATTENUATION COEFFICIENT |            |             |     |
| Total Count                    | 0.006880   |             |     |
| Potassium                      | 0.008764   |             |     |
| Uranium                        | 0.007664   |             |     |
| Thorium                        | 0.006895   |             |     |
| SENSITIVITY CONSTANTS          |            |             |     |
| Total Count                    | 46.0682    |             |     |
| Potassium                      | 118.1416   |             |     |
| Uranium                        | 13.1258    |             |     |
| Thorium                        | 7.3602     |             |     |
| WINDOW ENERGY LEVELS           | Low Energy | High Energy |     |
| Total Count                    | 401.0      | 2807.0      | keV |
| Potassium                      | 1368.0     | 1572.0      | keV |
| Uranium                        | 1655.0     | 1859.0      | keV |
| Thorium                        | 2411.0     | 2807.0      | keV |
| Upward                         | 1655.0     | 1859.0      | keV |
| Cosmic                         | 3000.0     | unlimited   | keV |

## Delivered Raw Data Channels

### DATA FORMAT

-----

|                      |       |              |              |                                                                  |
|----------------------|-------|--------------|--------------|------------------------------------------------------------------|
| survey               | I6    | -9999        | -            | Project Number                                                   |
| flight               | I5    | -999         | -            | Flight number                                                    |
| LINE                 | I9    | -9999999     | -            | Line number                                                      |
| FID                  | I9    | -9999999     | -            | Fiducial number                                                  |
| dateCode             | I10   | -99999999    | YYYYMMDD     | Date                                                             |
| gps_time             | F10.2 | -99999.99    | GPS Time     | seconds past midnight                                            |
| local_time           | F10.2 | -99999.99    | Local Time   | seconds after midnight Australian Central Standard Time (UT+9.5) |
| bearing              | I5    | -999         | degrees      | Bearing                                                          |
| longitude_gda94      | F13.7 | -999.9999999 | degrees      | GDA94 Longitude                                                  |
| latitude_gda94       | F13.7 | -999.9999999 | degrees      | GDA94 Latitude                                                   |
| easting_gda94        | F11.2 | -999999.99   | metres       | GDA94 MGA53 Easting                                              |
| northing_gda94       | F12.2 | -9999999.99  | metres       | GDA94 MGA53 Northing                                             |
| zone                 | I4    | -99          | -            | MGA Zone                                                         |
| radar_alt_raw_edited | F8.2  | -999.99      | meters       | Raw Parallax corrected & calibrated radar altimeter              |
| laser_alt_raw_edited | F8.2  | -999.99      | metres       | Raw Parallax corrected & calibrated laser altimeter              |
| pressure             | F8.2  | -999.99      | mbar         | Barometric pressure                                              |
| temperature          | F7.2  | -99.99       | degrees C    | Temperature                                                      |
| raw_k                | F9.2  | -999.99      | cps          | Raw K40                                                          |
| raw_u                | F9.2  | -999.99      | cps          | Raw Bi214                                                        |
| raw_th               | F9.2  | -999.99      | cps          | Raw TI208                                                        |
| raw_tc               | F10.2 | -9999.99     | cps          | Raw Total count                                                  |
| cosmic               | F9.2  | -999.99      | cps          | Cosmic                                                           |
| upward_u             | F9.2  | -999.99      | cps          | Upward looking detector (Nulls if not equipped)                  |
| sample               | I6    | -9999        | milliseconds | Sample time                                                      |
| live_time            | I6    | -9999        | milliseconds | Live time                                                        |
| resolution           | F6.2  | -9.99        | percent      | Spectrum resolution                                              |
| spectrum             | 256I6 | -99          | cps          | Channel Spectrum                                                 |

## Delivered Raw Data Channels

### Elevation Line Data Format

Survey area: Torrens (Area 3B)  
Located data type: RAW EDITED Elevation Data Flight 2001 to 2080  
Dates of acquisition: 23/02/2017 to 22/06/2017

#### CLIENT DETAILS

-----  
Company Flown by: SANDER GEOPHYSICS LTD.  
Company Processed: SANDER GEOPHYSICS LTD.  
Client: Geoscience Australia  
Client Project Number: 1283  
Company Project Number: 846

#### AIRBORNE SURVEY EQUIPMENT:

-----  
Aircraft: Cessna 208B Grand Caravan (C-GSGJ)  
Magnetometer: Geometrics G-822A  
Magnetometer Resolution: 0.001 nT  
Magnetometer Sample Interval: 10 Hz  
Data Acquisition: Sander Geophysics SGDAS  
Spectrometer: Exploranium GR820  
Crystal Size: 33.6L downward looking & 8.4L upward looking crystals  
Spectrometer Sample Interval: 1 Hz  
GPS Navigation System: NovAtel OEMV-3  
GPS Sample Interval: 10 Hz

#### Survey Design

-----  
Flight Line Direction: 090 – 270 degrees  
Flight Line Separation: 200 metres  
Tie Line Direction: 000 – 180 degrees  
Tie Line Separation: 2000 metres  
Terrain Clearance: 60 metres (MTC)  
Survey flown: 23/02/2017 to 22/06/2017

#### DATUMS and PROJECTION

-----  
Datum: Geodetic Datum of Australia 94. GDA94  
Projection: Map Grid of Australia. MGA  
Zone: Zone 53

#### Local Time Zone

-----  
Time Zone (LOCAL\_TIME): Australian Central Standard Time (UTC +9.5)

#### Laser Altimeter Parallax

-----  
Z value added to GPS (up is positive) -1.46 m

## Delivered Raw Data Channels

### DATA FORMAT

-----

|                       |       |              |          |                                                                                          |
|-----------------------|-------|--------------|----------|------------------------------------------------------------------------------------------|
| survey                | I6    | -9999        | -        | Project Number                                                                           |
| flight                | I5    | -999         | -        | Flight number                                                                            |
| LINE                  | I9    | -9999999     | -        | Line number                                                                              |
| FID                   | I9    | -9999999     | -        | Fiducial number                                                                          |
| dateCode              | I10   | -99999999    | YYYYMMDD | Date                                                                                     |
| gps_time              | F10.2 | -99999.99    | seconds  | seconds after midnight (UT)                                                              |
| local_time            | F10.2 | -99999.99    | seconds  | seconds after midnight (Australian Central Standard Time = UT +9.5hrs)                   |
| bearing               | I5    | -999         | degrees  | Bearing                                                                                  |
| longitude_gda94       | F13.7 | -999.9999999 | degrees  | GDA94 Longitude                                                                          |
| latitude_gda94        | F13.7 | -999.9999999 | degrees  | GDA94 Latitude                                                                           |
| easting_gda94         | F11.2 | -999999.99   | metres   | GDA94 MGA53 Easting                                                                      |
| northing_gda94        | F12.2 | -9999999.99  | metres   | GDA94 MGA53 Northing                                                                     |
| gps_height_raw        | F8.2  | -999.99      | metres   | GDA94 (ellipsoidal) Raw GPS Height (no interpolation, no editing)                        |
| gps_height_raw_edited | F8.2  | -999.99      | meters   | GDA94 (ellipsoidal) Edited GPS Height (spike removal and interpolated if/where required) |
| zone                  | I4    | -99          | -        | MGA Zone Number                                                                          |
| SV_number             | I4    | -99          | -        | Number of Satellites                                                                     |
| HDOP                  | F6.2  | -9.99        | -        | Horizontal Dilution of Precision                                                         |
| PDOP                  | F6.2  | -9.99        | -        | Position Dilution of Precision                                                           |
| radar_alt_raw         | F8.2  | -999.99      | metres   | Raw Radar Altimeter (parallax corrected to laser location, no interpolation, no editing) |
| radar_alt_raw_edited  | F8.2  | -999.99      | metres   | Edited Raw Radar Altimeter (spike removal and interpolated if/where required)            |
| laser_alt_raw         | F8.2  | -999.99      | metres   | Raw Laser Altimeter (no interpolation, no editing)                                       |
| laser_alt_raw_edited  | F8.2  | -999.99      | metres   | Edited Raw Laser Altimeter (spike removal and interpolated if/where required)            |

## Delivered Raw Data Channels

### NASVD smoothed Radiometric Line Data Format

Survey area: Torrens (Area 3B)  
Located data type: NASVD smoothed RAW EDITED Radiometric Data Flights 2001 to 2080

#### CLIENT DETAILS

-----  
Company Flown by: SANDER GEOPHYSICS LTD.  
Company Processed: SANDER GEOPHYSICS LTD.  
Client: Geoscience Australia  
Client Project Number: 1283  
Company Project Number: 846

#### AIRBORNE SURVEY EQUIPMENT:

-----  
Aircraft: Cessna 208B Grand Caravan (C-GSGJ)  
Magnetometer: Geometrics G-822A  
Magnetometer Resolution: 0.001 nT  
Magnetometer Sample Interval: 10 Hz  
Data Acquisition: Sander Geophysics SGDAS  
Spectrometer: Exploranium GR820  
Crystal Size: 33.6L downward looking & 8.4L upward looking crystals  
Spectrometer Sample Interval: 1 Hz  
GPS Navigation System: NovAtel OEMV-3  
GPS Sample Interval: 10 Hz

#### AIRBORNE SURVEY SPECIFICATIONS

-----  
Flight Line Direction: 090 – 270 degrees  
Flight Line Separation: 200 metres  
Tie Line Direction: 000 – 180 degrees  
Tie Line Separation: 2000 metres  
Terrain Clearance: 60 metres (MTC)  
Survey flown: 23/02/2017 to 22/06/2017

#### DATUMS and PROJECTION

-----  
Datum: Geodetic Datum of Australia 94. GDA94  
Projection: Map Grid of Australia. MGA  
Zone: Zone 53

#### Local Time Zone

-----  
Time Zone (LOCAL\_TIME): Australian Central Standard Time (UTC +9.5)

#### Spectrometer Parallax

-----  
A 0.5 second lag correction was applied to all data to correct for the time delay between detection and recording of the airborne data.  
In addition, a 3.43 m static lag correction representing the separation between the center of the crystal packs and the GPS antenna was applied to each data point.

#### System Corrections Summary:

##### AIRCRAFT BACKGROUND

Total Count 78.42  
Potassium 11.56  
Uranium 0.50

## Delivered Raw Data Channels

|                                |            |             |     |
|--------------------------------|------------|-------------|-----|
| Thorium                        | 2.95       |             |     |
| Upward                         | 0.17       |             |     |
| COSMIC STRIPPING RATIOS        |            |             |     |
| Total Count                    | 0.6603     |             |     |
| Potassium                      | 0.0394     |             |     |
| Uranium                        | 0.0286     |             |     |
| Thorium                        | 0.0347     |             |     |
| Upward                         | 0.0077     |             |     |
| RADON STRIPPING RATIOS         |            |             |     |
| Total Count                    | 12.8786    |             |     |
| Potassium                      | 0.7063     |             |     |
| Thorium                        | 0.0319     |             |     |
| Upward                         | 0.2543     |             |     |
| GROUND COMPONENT               |            |             |     |
| A1                             | 0.031247   |             |     |
| A2                             | 0.022579   |             |     |
| COMPTON STRIPPING RATIOS       |            |             |     |
| alpha                          | 0.2381     |             |     |
| beta                           | 0.3908     |             |     |
| gamma                          | 0.7163     |             |     |
| a                              | 0.0477     |             |     |
| b                              | 0.0011     |             |     |
| g                              | 0.0069     |             |     |
| HEIGHT ATTENUATION COEFFICIENT |            |             |     |
| Total Count                    | 0.006880   |             |     |
| Potassium                      | 0.008764   |             |     |
| Uranium                        | 0.007664   |             |     |
| Thorium                        | 0.006895   |             |     |
| SENSITIVITY CONSTANTS          |            |             |     |
| Total Count                    | 46.0682    |             |     |
| Potassium                      | 118.1416   |             |     |
| Uranium                        | 13.1258    |             |     |
| Thorium                        | 7.3602     |             |     |
| WINDOW ENERGY LEVELS           |            |             |     |
|                                | Low Energy | High Energy |     |
| Total Count                    | 401.0      | 2807.0      | keV |
| Potassium                      | 1368.0     | 1572.0      | keV |
| Uranium                        | 1655.0     | 1859.0      | keV |
| Thorium                        | 2411.0     | 2807.0      | keV |
| Upward                         | 1655.0     | 1859.0      | keV |
| Cosmic                         | 3000.0     | unlimited   | keV |

## Delivered Raw Data Channels

### DATA FORMAT

|                 |         |              |              |                                                                            |
|-----------------|---------|--------------|--------------|----------------------------------------------------------------------------|
| survey          | I6      | -9999        | -            | Project Number                                                             |
| flight          | I5      | -999         | -            | Flight number                                                              |
| LINE            | I9      | -999999      | -            | Line number                                                                |
| FID             | I9      | -999999      | -            | Fiducial number                                                            |
| dateCode        | I10     | -99999999    | YYYYMMDD     | Date                                                                       |
| gps_time        | F10.2   | -99999.99    | seconds      | seconds after midnight in UTC time                                         |
| local_time      | F10.2   | -99999.99    | seconds      | seconds after midnight in local time<br>(Australian Central Standard Time) |
| bearing         | I5      | -999         | degrees      | Bearing of flight line                                                     |
| longitude_gda94 | F13.7   | -999.9999999 | degrees      | GDA94 Longitude                                                            |
| latitude_gda94  | F13.7   | -999.9999999 | degrees      | GDA94 Latitude                                                             |
| easting_gda94   | F11.2   | -999999.99   | metres       | GDA94 MGA53 Easting                                                        |
| northing_gda94  | F12.2   | -9999999.99  | metres       | GDA94 MGA53 Northing                                                       |
| Zone            | I4      | -99          | -            | MGA zone                                                                   |
| radar_alt       | F8.2    | -999.99      | metres       | Final Radar altimeter Parallax corrected to<br>spectrometer & calibrated   |
| laser_alt       | F8.2    | -999.99      | metres       | Final Laser altimeter Parallax corrected to<br>spectrometer & calibrated   |
| pressure        | F8.2    | -999.99      | mbar         | Barometric pressure                                                        |
| temperature     | F7.2    | -99.99       | degrees C    | Temperature                                                                |
| raw_k           | F9.2    | -999.99      | counts       | Raw K40                                                                    |
| raw_u           | F9.2    | -999.99      | counts       | Raw Bi214                                                                  |
| raw_th          | F9.2    | -999.99      | counts       | Raw TI208                                                                  |
| raw_tc          | F10.2   | -9999.99     | counts       | Raw Total count                                                            |
| cosmic          | F9.2    | -999.99      | counts       | Cosmic                                                                     |
| live_time       | I6      | -9999        | milliSeconds | Live time                                                                  |
| nasvd_k         | F9.2    | -999.99      | counts       | ONLY NASVD smoothed potassium window<br>counts                             |
| nasvd_u         | F9.2    | -999.99      | counts       | ONLY NASVD smoothed uranium window<br>counts                               |
| nasvd_th        | F9.2    | -999.99      | counts       | ONLY NASVD smoothed thorium window<br>counts                               |
| nasvd_tc        | F10.2   | -9999.99     | counts       | ONLY NASVD smoothed total count window<br>counts                           |
| nasvd_spectrum  | 256F6.1 | -99          | counts       | 256 Channel NASVD smoothed ONLY<br>spectrum                                |

## Delivered Final Data Channels

### Magnetic Line Data Format

Survey area: Torrens (Area 3B)  
Located data type: Final Magnetics Data  
Dates of acquisition: 23/02/2017 to 22/06/2017

#### CLIENT DETAILS

Company Flown by: SANDER GEOPHYSICS LTD.  
Company Processed: SANDER GEOPHYSICS LTD.  
Client: Geoscience Australia  
Client Project Number: 1283  
Company Project Number: 846

#### AIRBORNE SURVEY EQUIPMENT:

Aircraft: Cessna 208B Grand Caravan (C-GSGJ)  
Magnetometer: Geometrics G-822A  
Magnetometer Resolution: 0.001 nT  
Magnetometer Sample Interval: 10 Hz  
Data Acquisition: Sander Geophysics SGDAS  
Spectrometer: Exploranium GR820  
Crystal Size: 33.6L downward looking & 8.4L upward looking crystals  
Spectrometer Sample Interval: 1 Hz  
GPS Navigation System: NovAtel OEMV-3  
GPS Sample Interval: 10 Hz

#### Survey Design

Flight Line Direction: 090 – 270 degrees  
Flight Line Separation: 200 metres  
Tie Line Direction: 000 – 180 degrees  
Tie Line Separation: 2000 metres  
Terrain Clearance: 60 metres (MTC)  
Survey flown: 23/02/2017 to 22/06/2017

#### DATUMS and PROJECTION

Datum: Geodetic Datum of Australia 94. GDA94  
Projection: Map Grid of Australia. MGA  
Zone: Zone 53

#### Local Time Zone

Time Zone (LOCAL\_TIME): Australian Central Standard Time (UTC +9.5)

#### Diurnal Base Station Magnetometer

Base Station Magnetometer: Geometrics G-822A  
Base Station Sampling Rate: 10 Hz  
Base Station Location (GDA94): 30.60054S, 138.42010E  
Base Station Verage Value: -354.988 nT

#### Magnetic Sensor Parallax

X value added to GPS (right is Positive): 0.00 m  
Y value added to GPS (forward is positive): -12.09m  
Z value added to GPS (up is positive): 0.00 m

## Delivered Final Data Channels

Magnetic IGRF

-----

IGRF Model:

IGRF 2015 Model

DATE:

As Flown

DATA FORMAT

-----

|                                   |       |              |          |                                                                                                                |
|-----------------------------------|-------|--------------|----------|----------------------------------------------------------------------------------------------------------------|
| survey                            | I6    | -9999        | -        | Project Number                                                                                                 |
| flight                            | I5    | -999         | -        | Flight number                                                                                                  |
| LINE                              | I9    | -9999999     | -        | Line number                                                                                                    |
| FID                               | I9    | -9999999     | -        | Fiducial number                                                                                                |
| dateCode                          | I10   | -99999999    | YYYYMMDD | Date                                                                                                           |
| bearing                           | I5    | -999         | degrees  | Bearing                                                                                                        |
| longitude_GDA94                   | F13.7 | -999.9999999 | degrees  | GDA94 Longitude (parallax corrected to location of Mag sensor)                                                 |
| latitude_GDA94                    | F13.7 | -999.9999999 | degrees  | GDA94 Latitude (parallax corrected to location of Mag sensor)                                                  |
| easting_GDA94                     | F11.2 | -999999.99   | metres   | GDA94 MGA53 Easting (parallax corrected to location of Mag sensor)                                             |
| northing_GDA94                    | F12.2 | -9999999.99  | metres   | GDA94 MGA53 Northing (parallax corrected to location of Mag sensor)                                            |
| gps_height                        | F8.2  | -999.99      | metres   | GDA94 (ellipsoidal) GPS Height (parallax corrected to location of Mag sensor)                                  |
| zone                              | I4    | -99          | -        | MGA Zone Number                                                                                                |
| radar_alt                         | F8.2  | -999.99      | metres   | Radar Altimeter (edited & interpolated if required, calibrated & parallax corrected to location of mag sensor) |
| laser_alt                         | F8.2  | -999.99      | metres   | Laser Altimeter (edited & interpolated if required, calibrated & parallax corrected to location of mag sensor) |
| dem_laser_microlevelled           | F8.2  | -999.99      | metres   | Micro levelled Digital elevation model based on laser altimeter (AHD)                                          |
| dem_radar_microlevelled           | F8.2  | -999.99      | metres   | Micro levelled Digital elevation model based on radar altimeter (AHD)                                          |
| magnetics_raw_edited_compensated  | F10.2 | -99999.99    | nT       | Raw Edited (spike removal and interpolated if required) Compensated Magnetics                                  |
| magnetics_final_tielevelled       | F10.2 | -99999.99    | nT       | Final tie line levelled magnetics                                                                              |
| magnetics_final_microlevelled     | F10.2 | -99999.99    | nT       | Final microlevelled magnetics                                                                                  |
| magnetics_final_microlevelled_lvd | F10.2 | -99999.99    | nT/m     | First vertical derivative (fft line filter) of final microlevelled magnetics                                   |
| magnetics_diurnal                 | F10.2 | -99999.99    | nT       | Magnetic Diurnal (interpolated)                                                                                |
| magnetics_igrf                    | F10.2 | -99999.99    | nT       | Calculated IGRF                                                                                                |

## Delivered Final Data Channels

### Radiometric Line Data Format

Survey area: Torrens (Area 3B)  
Located data type: Final Radiometric Data  
Dates of acquisition: 23/02/2017 to 22/06/2017

#### CLIENT DETAILS

-----  
Company Flown by: SANDER GEOPHYSICS LTD.  
Company Processed: SANDER GEOPHYSICS LTD.  
Client: Geoscience Australia  
Client Project Number: 1283  
Company Project Number: 846

#### AIRBORNE SURVEY EQUIPMENT:

-----  
Aircraft: Cessna 208B Grand Caravan (C-GSGJ)  
Magnetometer: Geometrics G-822A  
Magnetometer Resolution: 0.001 nT  
Magnetometer Sample Interval: 10 Hz  
Data Acquisition: Sander Geophysics SGDAS  
Spectrometer: Exploranium GR820  
Crystal Size: 33.6L downward looking & 8.4L upward looking crystals  
Spectrometer Sample Interval: 1 Hz  
GPS Navigation System: NovAtel OEMV-3  
GPS Sample Interval: 10 Hz

#### AIRBORNE SURVEY SPECIFICATIONS

-----  
Flight Line Direction: 090 – 270 degrees  
Flight Line Separation: 200 metres  
Tie Line Direction: 000 – 180 degrees  
Tie Line Separation: 2000 metres  
Terrain Clearance: 60 metres (MTC)  
Survey flown: 23/02/2017 to 22/06/2017

#### DATUMS and PROJECTION

-----  
Datum: Geodetic Datum of Australia 94. GDA94  
Projection: Map Grid of Australia. MGA  
Zone: Zone 53

#### Local Time Zone

-----  
Time Zone (LOCAL\_TIME): Australian Central Standard Time (UTC +9.5)

#### Spectrometer Parallax

-----  
A 0.5 second lag correction was applied to all data to correct for the time delay between detection and recording of the airborne data.  
In addition, a 3.43 m static lag correction representing the separation between the center of the crystal packs and the GPS antenna was applied to each data point.

#### System Corrections Summary:

##### AIRCRAFT BACKGROUND

Total Count 78.42  
Potassium 11.56  
Uranium 0.50

## Delivered Final Data Channels

|                                |            |             |     |
|--------------------------------|------------|-------------|-----|
| Thorium                        | 2.95       |             |     |
| Upward                         | 0.17       |             |     |
| COSMIC STRIPPING RATIOS        |            |             |     |
| Total Count                    | 0.6603     |             |     |
| Potassium                      | 0.0394     |             |     |
| Uranium                        | 0.0286     |             |     |
| Thorium                        | 0.0347     |             |     |
| Upward                         | 0.0077     |             |     |
| RADON STRIPPING RATIOS         |            |             |     |
| Total Count                    | 12.8786    |             |     |
| Potassium                      | 0.7063     |             |     |
| Thorium                        | 0.0319     |             |     |
| Upward                         | 0.2543     |             |     |
| GROUND COMPONENT               |            |             |     |
| A1                             | 0.031247   |             |     |
| A2                             | 0.022579   |             |     |
| COMPTON STRIPPING RATIOS       |            |             |     |
| alpha                          | 0.2381     |             |     |
| beta                           | 0.3908     |             |     |
| gamma                          | 0.7163     |             |     |
| a                              | 0.0477     |             |     |
| b                              | 0.0011     |             |     |
| g                              | 0.0069     |             |     |
| HEIGHT ATTENUATION COEFFICIENT |            |             |     |
| Total Count                    | 0.006880   |             |     |
| Potassium                      | 0.008764   |             |     |
| Uranium                        | 0.007664   |             |     |
| Thorium                        | 0.006895   |             |     |
| SENSITIVITY CONSTANTS          |            |             |     |
| Total Count                    | 46.0682    |             |     |
| Potassium                      | 118.1416   |             |     |
| Uranium                        | 13.1258    |             |     |
| Thorium                        | 7.3602     |             |     |
| WINDOW ENERGY LEVELS           |            |             |     |
|                                | Low Energy | High Energy |     |
| Total Count                    | 401.0      | 2807.0      | keV |
| Potassium                      | 1368.0     | 1572.0      | keV |
| Uranium                        | 1655.0     | 1859.0      | keV |
| Thorium                        | 2411.0     | 2807.0      | keV |
| Upward                         | 1655.0     | 1859.0      | keV |
| Cosmic                         | 3000.0     | unlimited   | keV |

## Delivered Final Data Channels

### DATA FORMAT

-----

|                               |       |              |           |                                                                                        |
|-------------------------------|-------|--------------|-----------|----------------------------------------------------------------------------------------|
| survey                        | I6    | -9999        | -         | Project Number                                                                         |
| flight                        | I5    | -999         | -         | Flight number                                                                          |
| LINE                          | I9    | -9999999     | -         | Line number                                                                            |
| FID                           | I9    | -9999999     | -         | Fiducial number                                                                        |
| dateCode                      | I10   | -99999999    | YYYYMMDD  | Date                                                                                   |
| bearing                       | I5    | -999         | degrees   | Bearing                                                                                |
| longitude_gda94               | F13.7 | -999.9999999 | degrees   | GDA94 Longitude                                                                        |
| latitude_gda94                | F13.7 | -999.9999999 | degrees   | GDA94 Latitude                                                                         |
| easting_gda94                 | F11.2 | -999999.99   | metres    | GDA94 MGA53 Easting                                                                    |
| northing_gda94                | F12.2 | -9999999.99  | metres    | GDA94 MGA53 Northing                                                                   |
| gps_height                    | F8.2  | -999.99      | metres    | GDA94 (ellipsoidal) gps height (parallax corrected for spectrometer reading mid-point) |
| zone                          | I4    | -99          | -         | MGA Zone                                                                               |
| radar_alt                     | F9.2  | -999.99      | meters    | Parallax corrected & calibrated radar altimeter                                        |
| laser_alt                     | F9.2  | -999.99      | metres    | Parallax corrected & calibrated laser altimeter                                        |
| dem_laser                     | F9.2  | -999.99      | metres    | Digital elevation model based on laser altimeter                                       |
| dem_radar                     | F9.2  | -999.99      | metres    | Digital elevation model based on radar altimeter                                       |
| pressure                      | F8.2  | -999.99      | mbar      | Barometric pressure                                                                    |
| temperature                   | F8.2  | -99.99       | degrees C | Temperature                                                                            |
| doserate_no_nasvd             | F10.2 | -9999.99     | nGy/hr    | Final dose rate without nasvd spectral smoothing                                       |
| k_percent_no_nasvd            | F9.2  | -999.99      | %         | Final potassium concentration without nasvd spectral smoothing                         |
| u_ppm_no_nasvd                | F9.2  | -999.99      | ppm       | Final uranium concentration without nasvd spectral smoothing                           |
| th_ppm_no_nasvd               | F9.2  | -999.99      | ppm       | Final thorium concentration without nasvd spectral smoothing                           |
| dose_nasvd                    | F10.2 | -9999.99     | nGy/hr    | Final nasvd smoothed dose rate                                                         |
| k_percent_nasvd               | F9.2  | -999.99      | %         | Final nasvd smoothed potassium concentration                                           |
| u_ppm_nasvd                   | F9.2  | -999.99      | ppm       | Final nasvd smoothed uranium concentration                                             |
| th_ppm_nasvd                  | F9.2  | -999.99      | ppm       | Final nasvd smoothed thorium concentration                                             |
| dose_nasvd_microlevelled      | F10.2 | -9999.99     | nGy/hr    | Micro Levelled Final nasvd smoothed dose rate                                          |
| k_percent_nasvd_microlevelled | F9.2  | -999.99      | %         | Micro Levelled Final nasvd smoothed potassium concentration                            |

### Delivered Final Data Channels

|                                |      |         |     |                                                               |
|--------------------------------|------|---------|-----|---------------------------------------------------------------|
| u_ppm_nasvd_micr<br>olevelled  | F9.2 | -999.99 | ppm | Micro Levelled Final nasvd smnoothed<br>uranium concentration |
| th_ppm_nasvd_micr<br>olevelled | F9.2 | -999.99 | ppm | Micro Levelled Final nasvd smoothed<br>thorium concentration  |

## Delivered Final Data Channels

### Elevation Line Data Format

Survey area: Torrens (Area 3B)  
Located data type: Final Elevation Data  
Dates of acquisition: 23/02/2017 to 22/06/2017

#### CLIENT DETAILS

-----  
Company Flown by: SANDER GEOPHYSICS LTD.  
Company Processed: SANDER GEOPHYSICS LTD.  
Client: Geoscience Australia  
Client Project Number: 1283  
Company Project Number: 846

#### AIRBORNE SURVEY EQUIPMENT:

-----  
Aircraft: Cessna 208B Grand Caravan (C-GSGJ)  
Magnetometer: Geometrics G-822A  
Magnetometer Resolution: 0.001 nT  
Magnetometer Sample Interval: 10 Hz  
Data Acquisition: Sander Geophysics SGDAS  
Spectrometer: Exploranium GR820  
Crystal Size: 33.6L downward looking & 8.4L upward looking crystals  
Spectrometer Sample Interval: 1 Hz  
GPS Navigation System: NovAtel OEMV-3  
GPS Sample Interval: 10 Hz

#### Survey Design

-----  
Flight Line Direction: 090 – 270 degrees  
Flight Line Separation: 200 metres  
Tie Line Direction: 000 – 180 degrees  
Tie Line Separation: 2000 metres  
Terrain Clearance: 60 metres (MTC)  
Survey flown: 23/02/2017 to 22/06/2017

#### DATUMS and PROJECTION

-----  
Datum: Geodetic Datum of Australia 94. GDA94  
Projection: Map Grid of Australia. MGA  
Zone: Zone 53

#### Local Time Zone

-----  
Time Zone (LOCAL\_TIME): Australian Central Standard Time (UTC +9.5)

#### Laser Altimeter Parallax

-----  
Z value added to GPS (up is positive) -1.46 m

## Delivered Final Data Channels

### DATA FORMAT

-----

|                         |       |              |          |                                                             |
|-------------------------|-------|--------------|----------|-------------------------------------------------------------|
| survey                  | I6    | -9999        | -        | Project Number                                              |
| flight                  | I5    | -999         | -        | Flight number                                               |
| LINE                    | I9    | -9999999     | -        | Line number                                                 |
| FID                     | I9    | -9999999     | -        | Fiducial number                                             |
| dateCode                | I10   | -99999999    | YYYYMMDD | Date                                                        |
| bearing                 | I5    | -999         | degrees  | Bearing                                                     |
| longitude_gda94         | F13.7 | -999.9999999 | degrees  | GDA94 Longitude (parallax corrected to laser)               |
| latitude_gda94          | F13.7 | -999.9999999 | degrees  | GDA94 Latitude (parallax corrected to laser)                |
| easting_gda94           | F11.2 | -999999.99   | metres   | GDA94 MGA53 Easting (parallax corrected to laser)           |
| northing_gda94          | F12.2 | -9999999.99  | metres   | GDA94 MGA53 Northing (parallax corrected to laser)          |
| gps_height              | F8.2  | -999.99      | metres   | GPS Height (parallax corrected to laser, GDA94 ellipsoidal) |
| zone                    | I4    | -99          | -        | MGA Zone Number                                             |
| radar_alt               | F8.2  | -999.99      | metres   | Final Radar Altimeter                                       |
| laser_alt               | F8.2  | -999.99      | metres   | Final Laser Altimeter                                       |
| laser_height            | F8.2  | -999.99      | metres   | Final height of laser altimeter (AHD)                       |
| dem_laser               | F8.2  | -999.99      | metres   | Final DEM based on laser (AHD)                              |
| dem_radar               | F8.2  | -999.99      | metres   | Final DEM based on radar (AHD)                              |
| dem_laser_microlevelled | F8.2  | -999.99      | metres   | Micro-levelled Final DEM based on laser (AHD)               |
| dem_radar_microlevelled | F8.2  | -999.99      | metres   | Micro-levelled Final DEM based on radar (AHD)               |



## Appendix VIII





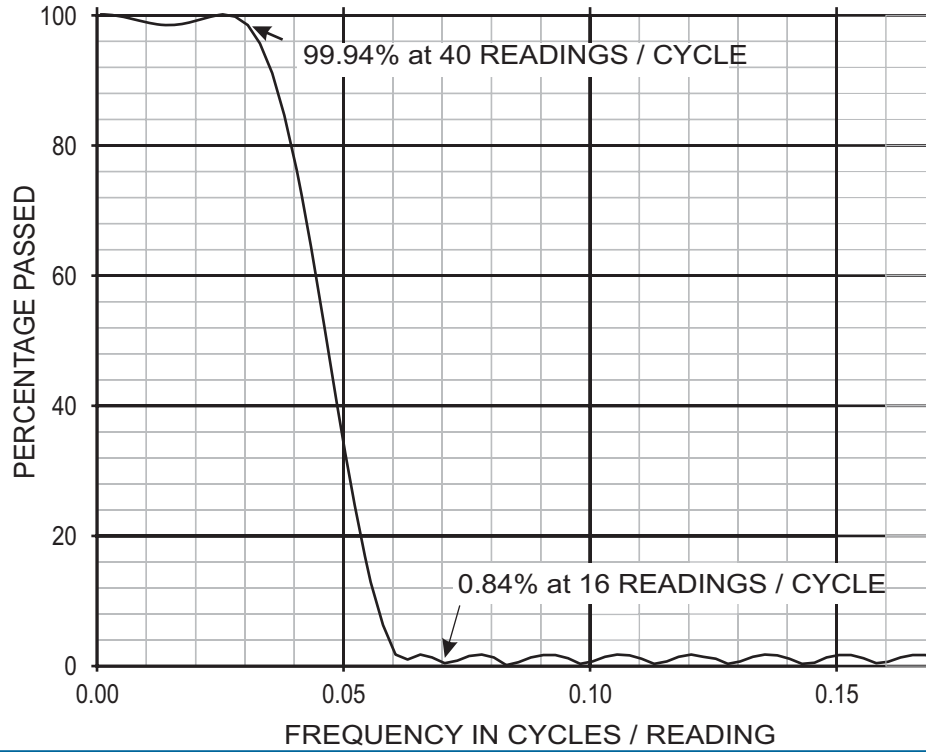
# 67 POINT FILTER

WAVELENGTH IN READINGS / CYCLE

20

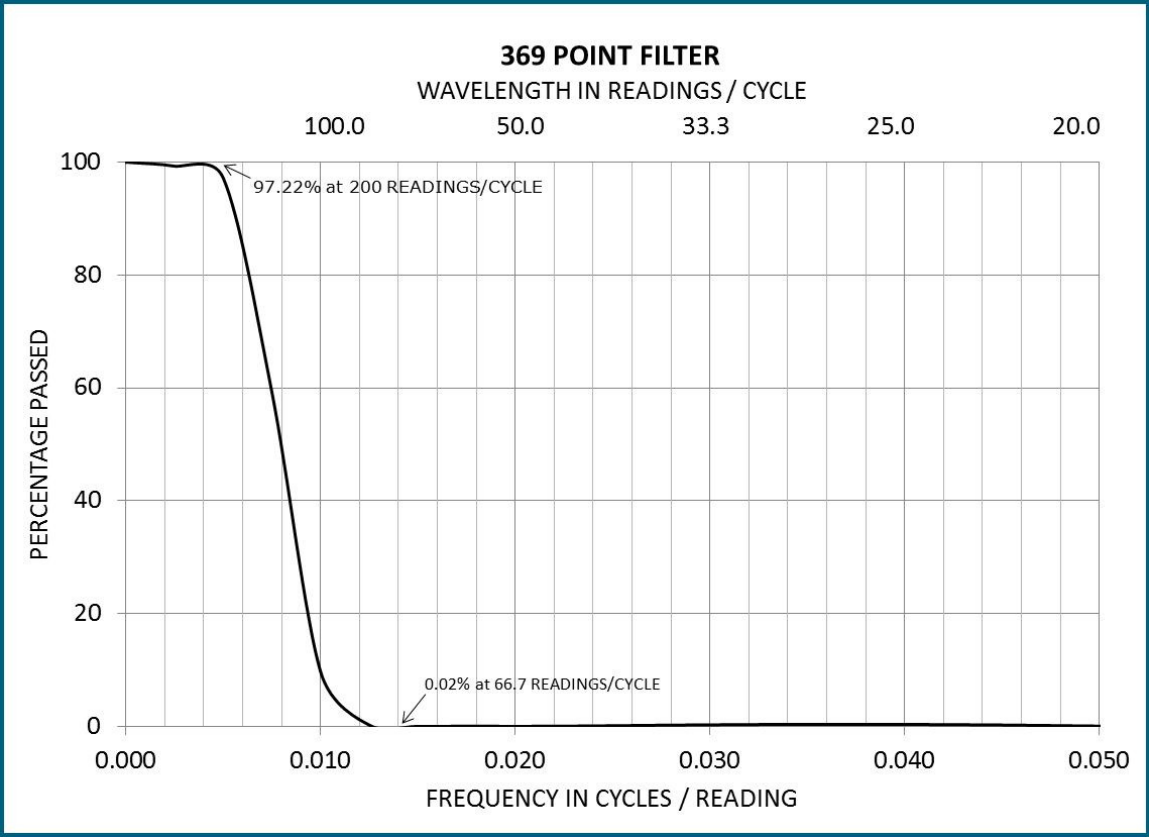
10

6.7



## FILTER 67 COEFFICIENTS

-.0073813819  
.0017786870  
.0022008393  
.0028708524  
.0036799926  
.0044552023  
.0050366484  
.0052816825  
.0050482578  
.0042355750  
.0028043608  
.0007561474  
.0018169265  
-.0047570802  
-.0078405226  
-.010776499  
-.013235446  
-.014878507  
-.015358825  
-.014386294  
-.011729066  
-.0072475690  
-.0009241524  
.0071362499  
.016706382  
.027417007  
.038819272  
.050368667  
.061476381  
.071564890  
.080079578  
.086310541  
.090552829  
.091944844





## Appendix IX





Table 1: Shifts by line

| Total Count<br>(cps) | Potassium<br>(cps) | Uranium<br>(cps) | Thorium<br>(cps) | Line<br>Number | Start Time<br>(sec) | End Time<br>(sec) |
|----------------------|--------------------|------------------|------------------|----------------|---------------------|-------------------|
| 050.0                | 000.0              | 005.0            | 000.0            | 3500030        | 088413.00           | 088779.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500140        | 086407.00           | 086588.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500150        | 089474.00           | 089537.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500160        | 090860.00           | 090950.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500190        | 081275.00           | 082204.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500200        | 083320.00           | 084181.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500210        | 085782.00           | 086631.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3500210        | 086042.00           | 086109.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500220        | 087735.00           | 088723.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500230        | 090051.00           | 091028.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500240        | 092101.00           | 093085.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500250        | 084118.00           | 085090.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500260        | 086182.00           | 087172.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500270        | 088490.00           | 089466.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3500300        | 095536.00           | 095711.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500480        | 092830.00           | 093051.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3500490        | 081773.00           | 081813.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3500490        | 081896.00           | 081956.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500530        | 090793.00           | 090887.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3500550        | 081291.00           | 081389.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3500560        | 084106.00           | 084151.00         |
| -025.0               | 000.0              | -002.5           | 000.0            | 3500560        | 084154.00           | 084254.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3500680        | 090906.00           | 090943.00         |
| 025.0                | 000.0              | 002.5            | 000.0            | 3500690        | 093269.00           | 093535.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3500710        | 096974.00           | 097014.00         |
| 025.0                | 000.0              | 002.5            | 000.0            | 3500730        | 084794.00           | 084993.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3500740        | 087103.00           | 087175.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3500770        | 092697.00           | 092773.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500850        | 084779.00           | 084841.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3500850        | 085023.00           | 085064.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500860        | 087316.00           | 087433.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500860        | 087869.00           | 087944.00         |
| 035.0                | 000.0              | 003.5            | 000.0            | 3500880        | 091800.00           | 091934.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3500880        | 091934.00           | 092092.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500880        | 092282.30           | 092357.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500890        | 093607.00           | 093901.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3500890        | 093876.00           | 093971.00         |
| 050.0                | 000.0              | 000.0            | 000.0            | 3500890        | 093876.00           | 093909.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500890        | 093989.00           | 094080.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3500900        | 096029.00           | 096138.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3500900        | 096402.00           | 096473.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3500900        | 096692.00           | 096817.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3500900        | 097241.00           | 999999.99         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3500910        | 083076.00           | 083146.00         |

| Total Count<br>(cps) | Potassium<br>(cps) | Uranium<br>(cps) | Thorium<br>(cps) | Line<br>Number | Start Time<br>(sec) | End Time<br>(sec) |
|----------------------|--------------------|------------------|------------------|----------------|---------------------|-------------------|
| -050.0               | 000.0              | -005.0           | 000.0            | 3500910        | 083887.00           | 083988.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3500920        | 086198.00           | 086341.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3500930        | 088026.00           | 088185.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3500970        | 083672.00           | 083709.00         |
| 075.0                | 000.0              | 005.0            | 000.0            | 3501020        | 094743.00           | 094955.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501030        | 084287.00           | 084388.00         |
| -025.0               | 000.0              | -002.5           | 000.0            | 3501030        | 084343.00           | 084380.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501030        | 092120.00           | 092188.00         |
| -025.0               | 000.0              | -002.5           | 000.0            | 3501040        | 086509.00           | 086551.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501050        | 089806.00           | 089916.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501060        | 088778.00           | 088893.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501071        | 086543.00           | 086649.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501080        | 095012.00           | 095316.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501081        | 083682.00           | 083768.00         |
| -075.0               | 000.0              | -007.5           | 000.0            | 3501090        | 083202.00           | 083266.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501090        | 083267.00           | 083456.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501090        | 083486.00           | 083541.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501090        | 083542.00           | 083575.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501090        | 083794.00           | 083893.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501090        | 084085.00           | 084152.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501090        | 084152.00           | 084247.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501090        | 084299.00           | 084387.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501090        | 084510.00           | 084644.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501090        | 084510.00           | 084543.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501090        | 084707.00           | 084781.00         |
| -075.0               | 000.0              | -007.5           | 000.0            | 3501090        | 084803.00           | 085063.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501090        | 084888.00           | 084949.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501090        | 085188.00           | 999999.99         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501091        | 086143.00           | 086269.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501100        | 000000.00           | 085430.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501100        | 085565.00           | 085764.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501100        | 085765.00           | 085818.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501100        | 085843.00           | 085896.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501100        | 085977.00           | 086066.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501100        | 086229.00           | 086342.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501100        | 086357.00           | 086538.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501100        | 086481.00           | 086555.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501100        | 086575.00           | 086624.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501100        | 086719.00           | 086838.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501100        | 087090.00           | 087117.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501110        | 087618.00           | 087697.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501110        | 087954.00           | 087975.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501110        | 088295.00           | 088347.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501110        | 088444.00           | 088504.00         |

| Total Count<br>(cps) | Potassium<br>(cps) | Uranium<br>(cps) | Thorium<br>(cps) | Line<br>Number | Start Time<br>(sec) | End Time<br>(sec) |
|----------------------|--------------------|------------------|------------------|----------------|---------------------|-------------------|
| -100.0               | 000.0              | -010.0           | 000.0            | 3501110        | 088518.00           | 088572.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501110        | 088588.00           | 088685.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501110        | 089201.00           | 089311.00         |
| -075.0               | 000.0              | -007.5           | 000.0            | 3501110        | 089305.00           | 089413.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501110        | 089639.00           | 999999.99         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501120        | 000000.00           | 089831.00         |
| -075.0               | 000.0              | -007.5           | 000.0            | 3501120        | 090065.00           | 090097.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501120        | 090166.00           | 090219.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501120        | 090975.00           | 091048.00         |
| 100.0                | 000.0              | 010.0            | 000.0            | 3501120        | 091643.00           | 091664.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501120        | 091786.00           | 999999.99         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501130        | 000000.00           | 092124.00         |
| 100.0                | 000.0              | 010.0            | 000.0            | 3501130        | 092234.00           | 092263.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501130        | 092852.00           | 092923.00         |
| 075.0                | 000.0              | 007.5            | 000.0            | 3501130        | 093757.00           | 093817.00         |
| 075.0                | 000.0              | 007.5            | 000.0            | 3501140        | 000000.00           | 094287.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501140        | 094493.00           | 094540.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501140        | 095354.00           | 095436.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501140        | 095506.00           | 095593.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501140        | 095946.00           | 095986.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501140        | 096011.00           | 096053.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501140        | 096079.00           | 096170.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501150        | 083039.00           | 083275.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501150        | 083801.00           | 083844.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501150        | 083985.00           | 084080.00         |
| -150.0               | 000.0              | -015.0           | 000.0            | 3501150        | 084170.00           | 084351.00         |
| 100.0                | 000.0              | 010.0            | 000.0            | 3501150        | 084206.00           | 084339.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501150        | 084411.00           | 084479.00         |
| -150.0               | 000.0              | -015.0           | 000.0            | 3501150        | 084569.00           | 084651.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501150        | 084866.00           | 999999.99         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501160        | 000000.00           | 085158.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501160        | 085362.00           | 085449.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501160        | 085532.00           | 085605.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501160        | 085650.00           | 085831.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501160        | 086715.00           | 087006.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501160        | 086855.00           | 086988.00         |
| -075.0               | 000.0              | -007.5           | 000.0            | 3501170        | 087593.00           | 087681.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501170        | 088337.00           | 088372.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501180        | 090635.00           | 090679.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501180        | 090826.00           | 090938.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501180        | 091219.00           | 091493.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501190        | 091684.00           | 091877.00         |
| 025.0                | 000.0              | 002.5            | 000.0            | 3501190        | 092293.00           | 092357.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501190        | 092412.00           | 092474.00         |

| Total Count<br>(cps) | Potassium<br>(cps) | Uranium<br>(cps) | Thorium<br>(cps) | Line<br>Number | Start Time<br>(sec) | End Time<br>(sec) |
|----------------------|--------------------|------------------|------------------|----------------|---------------------|-------------------|
| 050.0                | 000.0              | 005.0            | 000.0            | 3501190        | 092318.00           | 092447.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501190        | 092716.00           | 092768.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501190        | 093141.00           | 093238.00         |
| 075.0                | 000.0              | 007.5            | 000.0            | 3501190        | 093421.00           | 093450.00         |
| 075.0                | 000.0              | 007.5            | 000.0            | 3501190        | 093608.00           | 999999.99         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501200        | 000000.00           | 093954.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501200        | 094347.00           | 094401.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501200        | 094798.00           | 094883.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501200        | 094992.00           | 095083.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501200        | 095169.00           | 095204.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501200        | 095681.00           | 999999.99         |
| 025.0                | 000.0              | 002.5            | 000.0            | 3501290        | 091080.00           | 091243.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501300        | 090178.00           | 090265.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501310        | 000000.00           | 086347.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501310        | 086529.00           | 086641.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501310        | 087332.00           | 087399.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501310        | 087602.00           | 087654.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501320        | 084079.00           | 084173.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501320        | 084728.00           | 084784.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501320        | 084986.00           | 085054.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501320        | 085743.00           | 085864.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501320        | 085886.00           | 085932.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501320        | 086041.00           | 999999.99         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501350        | 000000.00           | 094008.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501370        | 089870.00           | 089911.00         |
| -075.0               | 000.0              | -007.5           | 000.0            | 3501380        | 088060.00           | 088100.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501380        | 089109.00           | 089170.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501390        | 085405.00           | 085502.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501390        | 086202.00           | 086297.00         |
| -075.0               | 000.0              | -007.5           | 000.0            | 3501390        | 086511.00           | 086550.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501400        | 083635.00           | 083696.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501400        | 083822.00           | 083886.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501400        | 084589.00           | 084745.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501400        | 084470.00           | 084592.00         |
| -075.0               | 000.0              | -007.5           | 000.0            | 3501400        | 084736.00           | 084778.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501400        | 084919.00           | 999999.99         |
| -015.0               | 000.0              | -001.5           | 000.0            | 3501430        | 095093.00           | 095147.00         |
| -015.0               | 000.0              | -001.5           | 000.0            | 3501440        | 093849.00           | 093924.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501460        | 087998.00           | 088071.00         |
| 000.0                | 001.0              | 002.0            | 004.0            | 3501460        | 089401.00           | 089647.00         |
| -025.0               | 000.0              | -002.5           | 000.0            | 3501470        | 085969.00           | 086147.00         |
| -100.0               | -010.0             | -002.0           | -004.0           | 3501470        | 086257.00           | 086291.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501470        | 086694.00           | 086868.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501470        | 087597.00           | 087668.00         |

| Total Count<br>(cps) | Potassium<br>(cps) | Uranium<br>(cps) | Thorium<br>(cps) | Line<br>Number | Start Time<br>(sec) | End Time<br>(sec) |
|----------------------|--------------------|------------------|------------------|----------------|---------------------|-------------------|
| 100.0                | 001.0              | 002.0            | 004.0            | 3501480        | 084999.00           | 085033.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501540        | 087533.00           | 087720.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501550        | 085572.00           | 085649.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501550        | 085796.00           | 085833.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501560        | 083015.00           | 083067.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501560        | 083321.00           | 083393.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501570        | 098900.00           | 098943.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501601        | 092768.00           | 092955.00         |
| 100.0                | 000.0              | 010.0            | 000.0            | 3501610        | 091756.00           | 091822.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501620        | 090087.00           | 090135.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501620        | 090285.00           | 090494.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501620        | 091052.00           | 091119.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501630        | 087481.00           | 087505.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501630        | 087482.00           | 087509.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501630        | 087751.00           | 087850.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501630        | 088877.00           | 088958.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501640        | 084962.00           | 085030.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501640        | 085169.00           | 085212.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501640        | 085273.00           | 085462.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501640        | 086432.00           | 086502.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501640        | 086435.00           | 086504.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501650        | 082698.00           | 082770.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3501650        | 082830.00           | 082932.00         |
| -075.0               | 000.0              | -007.5           | 000.0            | 3501650        | 083793.00           | 083878.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501650        | 083968.00           | 084193.00         |
| -110.0               | 000.0              | -011.0           | 000.0            | 3501650        | 084194.00           | 084265.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501650        | 084413.00           | 084522.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501660        | 099104.00           | 099201.00         |
| 035.0                | 000.0              | 003.5            | 000.0            | 3501670        | 096498.00           | 096593.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501670        | 096706.00           | 096847.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501670        | 097433.00           | 097500.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501700        | 090326.00           | 090384.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3501720        | 085960.00           | 086067.00         |
| -025.0               | 000.0              | -002.5           | 000.0            | 3501720        | 086001.00           | 086072.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3501730        | 082756.00           | 082971.00         |
| -025.0               | 000.0              | -002.5           | 000.0            | 3501730        | 083220.00           | 083378.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501730        | 084031.00           | 084083.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501780        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501790        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501800        | 000000.00           | 999999.99         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501800        | 094651.00           | 094716.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501810        | 000000.00           | 999999.99         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501810        | 092406.00           | 092440.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501820        | 000000.00           | 999999.99         |

| Total Count<br>(cps) | Potassium<br>(cps) | Uranium<br>(cps) | Thorium<br>(cps) | Line<br>Number | Start Time<br>(sec) | End Time<br>(sec) |
|----------------------|--------------------|------------------|------------------|----------------|---------------------|-------------------|
| 050.0                | 000.0              | 005.0            | 000.0            | 3501820        | 090192.00           | 090210.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501830        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501840        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501850        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501860        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501870        | 000000.00           | 999999.99         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3501870        | 097565.00           | 097766.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501880        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501890        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501900        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501910        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501920        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501930        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501940        | 000000.00           | 999999.99         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3501950        | 097734.00           | 097844.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3502050        | 085147.00           | 085209.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3502080        | 089483.00           | 089532.00         |
| 025.0                | 000.0              | 002.5            | 000.0            | 3502080        | 090079.00           | 090180.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3502090        | 084679.00           | 084760.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3502090        | 085301.00           | 085386.00         |
| -020.0               | 000.0              | -002.0           | 000.0            | 3502100        | 094675.00           | 094743.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3502100        | 099134.00           | 099220.00         |
| 025.0                | 000.0              | 002.5            | 000.0            | 3502100        | 099169.00           | 099292.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3502140        | 089606.00           | 089645.00         |
| -030.0               | 000.0              | -003.0           | 000.0            | 3502140        | 089839.00           | 089935.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3502140        | 090048.00           | 090123.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3502360        | 083519.00           | 083585.00         |
| 200.0                | 020.0              | 004.0            | 008.0            | 3502510        | 094915.00           | 094941.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3502571        | 087397.00           | 087483.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3502591        | 085292.00           | 085400.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3502600        | 083247.00           | 083408.00         |
| 025.0                | 000.0              | 002.5            | 000.0            | 3502600        | 084248.00           | 084334.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3502610        | 101847.00           | 102005.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3502620        | 099378.00           | 099491.00         |
| 020.0                | 000.0              | 002.0            | 000.0            | 3502630        | 099077.00           | 099212.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3502630        | 099080.00           | 099214.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3502641        | 084856.00           | 099965.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3502641        | 099965.00           | 999999.99         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3502651        | 089616.00           | 089788.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3502681        | 090660.00           | 090751.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3502691        | 091906.00           | 092044.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3502701        | 086977.00           | 087028.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3502701        | 087447.00           | 087604.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3502711        | 088133.00           | 088295.00         |

| Total Count<br>(cps) | Potassium<br>(cps) | Uranium<br>(cps) | Thorium<br>(cps) | Line<br>Number | Start Time<br>(sec) | End Time<br>(sec) |
|----------------------|--------------------|------------------|------------------|----------------|---------------------|-------------------|
| 010.0                | 000.0              | 001.0            | 000.0            | 3502730        | 086112.00           | 086240.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3502731        | 098046.00           | 098152.00         |
| 010.0                | 000.0              | 002.1            | 000.0            | 3502740        | 085049.00           | 085156.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3502750        | 085613.00           | 085679.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3502751        | 086529.00           | 086583.00         |
| 010.0                | 000.0              | 002.1            | 000.0            | 3502770        | 096240.00           | 096466.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3502850        | 086990.00           | 087041.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3502871        | 095004.00           | 095178.00         |
| -200.0               | -020.0             | -004.0           | -008.0           | 3502991        | 089379.00           | 089402.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3502991        | 089410.00           | 089514.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503031        | 085439.00           | 085476.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503101        | 092798.00           | 092856.00         |
| 020.0                | 000.0              | 002.0            | 000.0            | 3503110        | 000000.00           | 088723.00         |
| 020.0                | 000.0              | 002.0            | 000.0            | 3503111        | 000000.00           | 089785.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503111        | 089887.00           | 089988.00         |
| 025.0                | 000.0              | 002.5            | 000.0            | 3503120        | 088563.00           | 088834.00         |
| 025.0                | 000.0              | 002.5            | 000.0            | 3503120        | 089389.00           | 089502.00         |
| 020.0                | 000.0              | 002.0            | 000.0            | 3503120        | 089595.00           | 089858.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503120        | 090027.00           | 090114.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503120        | 090246.00           | 090535.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503130        | 082450.00           | 082718.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503130        | 083298.00           | 083398.00         |
| 025.0                | 000.0              | 002.5            | 000.0            | 3503130        | 084169.00           | 084326.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503141        | 083910.00           | 084007.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503141        | 087105.00           | 087155.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503141        | 087999.00           | 088076.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3503141        | 088016.00           | 088076.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503141        | 088351.00           | 088450.00         |
| -025.0               | 000.0              | -002.5           | 000.0            | 3503141        | 088941.00           | 088985.00         |
| -040.0               | 000.0              | -004.0           | 000.0            | 3503151        | 084982.00           | 085214.00         |
| -025.0               | 000.0              | -002.5           | 000.0            | 3503151        | 085535.00           | 085601.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503151        | 085951.00           | 085997.00         |
| -025.0               | 000.0              | -002.5           | 000.0            | 3503151        | 086629.00           | 086743.00         |
| -010.0               | 000.0              | -001.0           | 000.0            | 3503161        | 083543.00           | 083629.00         |
| -100.0               | 000.0              | -010.0           | 000.0            | 3503161        | 083697.00           | 083764.00         |
| -025.0               | 000.0              | -002.5           | 000.0            | 3503161        | 083789.00           | 083825.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503161        | 083933.00           | 084032.00         |
| -040.0               | 000.0              | -004.0           | 000.0            | 3503161        | 084344.00           | 084585.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503171        | 096862.00           | 096905.00         |
| 025.0                | 000.0              | 002.5            | 000.0            | 3503171        | 097108.00           | 097203.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503281        | 086968.00           | 087102.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503331        | 088561.00           | 088602.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503441        | 099130.00           | 099193.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3503451        | 098193.00           | 098305.00         |

| Total Count<br>(cps) | Potassium<br>(cps) | Uranium<br>(cps) | Thorium<br>(cps) | Line<br>Number | Start Time<br>(sec) | End Time<br>(sec) |
|----------------------|--------------------|------------------|------------------|----------------|---------------------|-------------------|
| 010.0                | 000.0              | 001.0            | 000.0            | 3503461        | 096703.00           | 096755.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503471        | 095889.00           | 095944.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3503471        | 096003.00           | 096168.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503481        | 094611.00           | 094687.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503490        | 082128.00           | 082199.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503500        | 100810.00           | 100872.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503500        | 100812.00           | 100900.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503511        | 093375.00           | 093508.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503560        | 090956.00           | 091012.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503570        | 090082.00           | 090137.00         |
| 200.0                | 020.0              | 004.0            | 008.0            | 3503751        | 089978.00           | 089992.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503771        | 088647.00           | 088748.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503781        | 089033.00           | 089145.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503791        | 086615.00           | 086719.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503801        | 000000.00           | 087110.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503811        | 084580.00           | 084698.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503820        | 086602.00           | 086655.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503840        | 083782.00           | 083835.00         |
| -600.0               | -060.0             | -012.0           | -024.0           | 3503850        | 080997.00           | 081020.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503850        | 082651.00           | 082717.00         |
| 400.0                | 040.0              | 008.0            | 016.0            | 3503861        | 090688.00           | 090706.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503881        | 086930.00           | 087058.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503901        | 081828.00           | 081941.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3503911        | 099464.00           | 099543.00         |
| -200.0               | -020.0             | -004.0           | -008.0           | 3503961        | 087704.00           | 087728.00         |
| -050.0               | 000.0              | -005.0           | 000.0            | 3503971        | 084691.00           | 084747.00         |
| -075.0               | 000.0              | -002.0           | 000.0            | 3503980        | 097377.00           | 097644.00         |
| -200.0               | -020.0             | -004.0           | -008.0           | 3503980        | 097559.00           | 097585.00         |
| -200.0               | -020.0             | -004.0           | -008.0           | 3504090        | 079302.00           | 079331.00         |
| 600.0                | 060.0              | 012.0            | 024.0            | 3504161        | 082033.00           | 082048.00         |
| 300.0                | 030.0              | 006.0            | 012.0            | 3504161        | 082105.00           | 082121.00         |
| 200.0                | 020.0              | 004.0            | 008.0            | 3504251        | 099007.00           | 099024.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3504331        | 098011.00           | 098213.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3504371        | 099609.00           | 099753.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3504371        | 100036.00           | 100108.00         |
| 200.0                | 020.0              | 004.0            | 008.0            | 3504391        | 100641.00           | 100663.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3504401        | 000000.00           | 084786.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3504411        | 000000.00           | 082857.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3504441        | 098598.00           | 098721.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3504451        | 099346.00           | 099480.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3504461        | 100419.00           | 100615.00         |
| -200.0               | -020.0             | -004.0           | -008.0           | 3504591        | 100343.00           | 100388.00         |
| 200.0                | 020.0              | 004.0            | 008.0            | 3504601        | 088129.00           | 088204.00         |
| 100.0                | 010.0              | 002.0            | 004.0            | 3504611        | 088777.00           | 088849.00         |

| Total Count<br>(cps) | Potassium<br>(cps) | Uranium<br>(cps) | Thorium<br>(cps) | Line<br>Number | Start Time<br>(sec) | End Time<br>(sec) |
|----------------------|--------------------|------------------|------------------|----------------|---------------------|-------------------|
| 200.0                | 020.0              | 004.0            | 008.0            | 3504691        | 092465.00           | 092495.00         |
| -200.0               | -020.0             | -004.0           | -008.0           | 3504700        | 079856.00           | 079879.00         |
| -200.0               | -020.0             | -004.0           | -008.0           | 3504700        | 079856.00           | 079917.00         |
| -200.0               | -020.0             | -004.0           | -008.0           | 3504700        | 079888.00           | 079919.00         |
| 400.0                | 040.0              | 008.0            | 016.0            | 3504740        | 093972.00           | 093996.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3504780        | 086018.00           | 086224.00         |
| 010.0                | 000.0              | 001.0            | 000.0            | 3504820        | 079481.00           | 079584.00         |
| -100.0               | -010.0             | -002.0           | -004.0           | 3504910        | 095029.00           | 098508.00         |
| 700.0                | 070.0              | 014.0            | 028.0            | 3504921        | 100096.00           | 100115.00         |
| -100.0               | -010.0             | -002.0           | -004.0           | 3504930        | 093190.00           | 093214.00         |
| 050.0                | 000.0              | 005.0            | 000.0            | 3505061        | 000000.00           | 104276.00         |
| 200.0                | 020.0              | 004.0            | 008.0            | 3505220        | 095863.00           | 095893.00         |
| 200.0                | 020.0              | 004.0            | 008.0            | 3505340        | 084828.00           | 084855.00         |
| -075.0               | 000.0              | -007.5           | 000.0            | 3505471        | 100298.00           | 999999.99         |

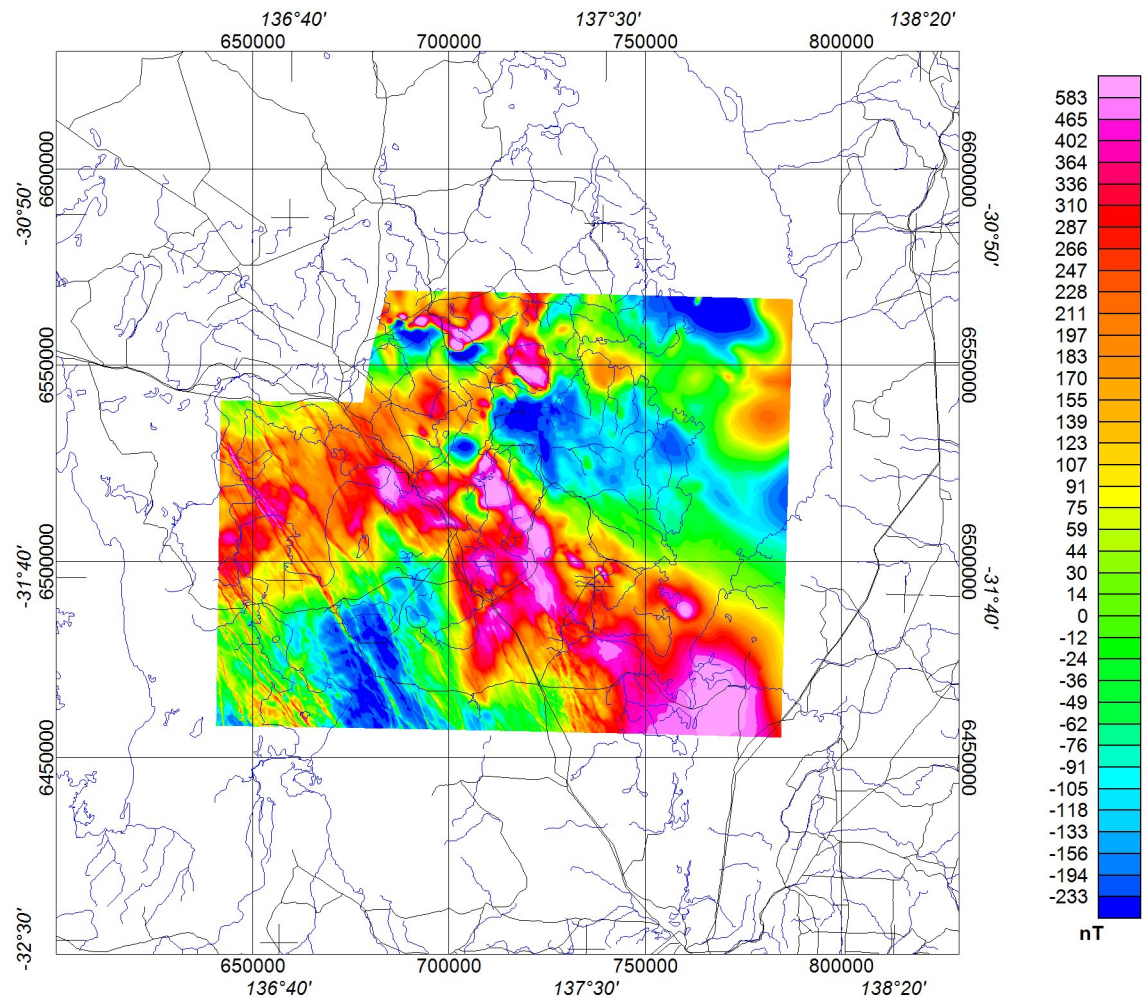




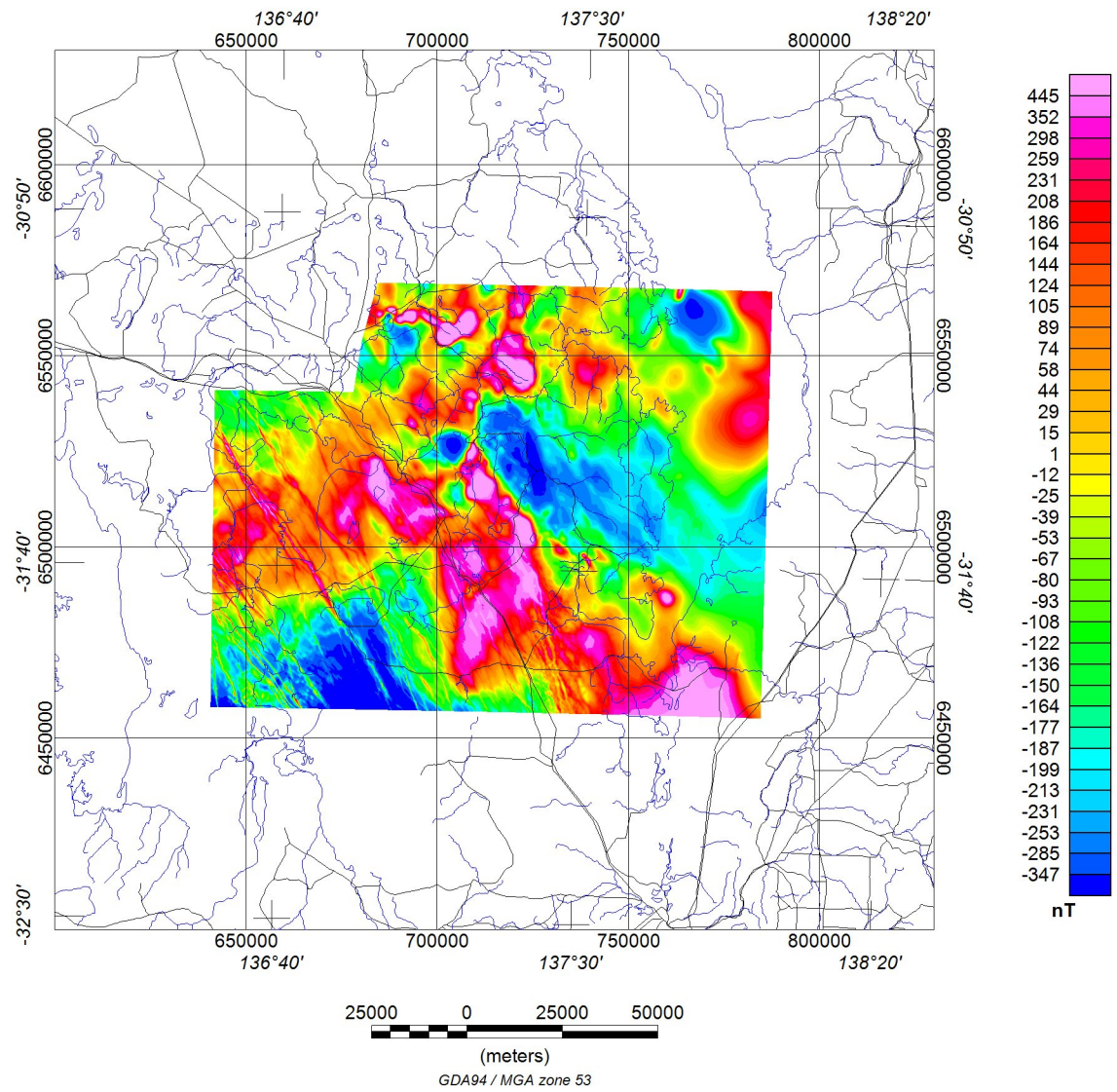
## Appendix X



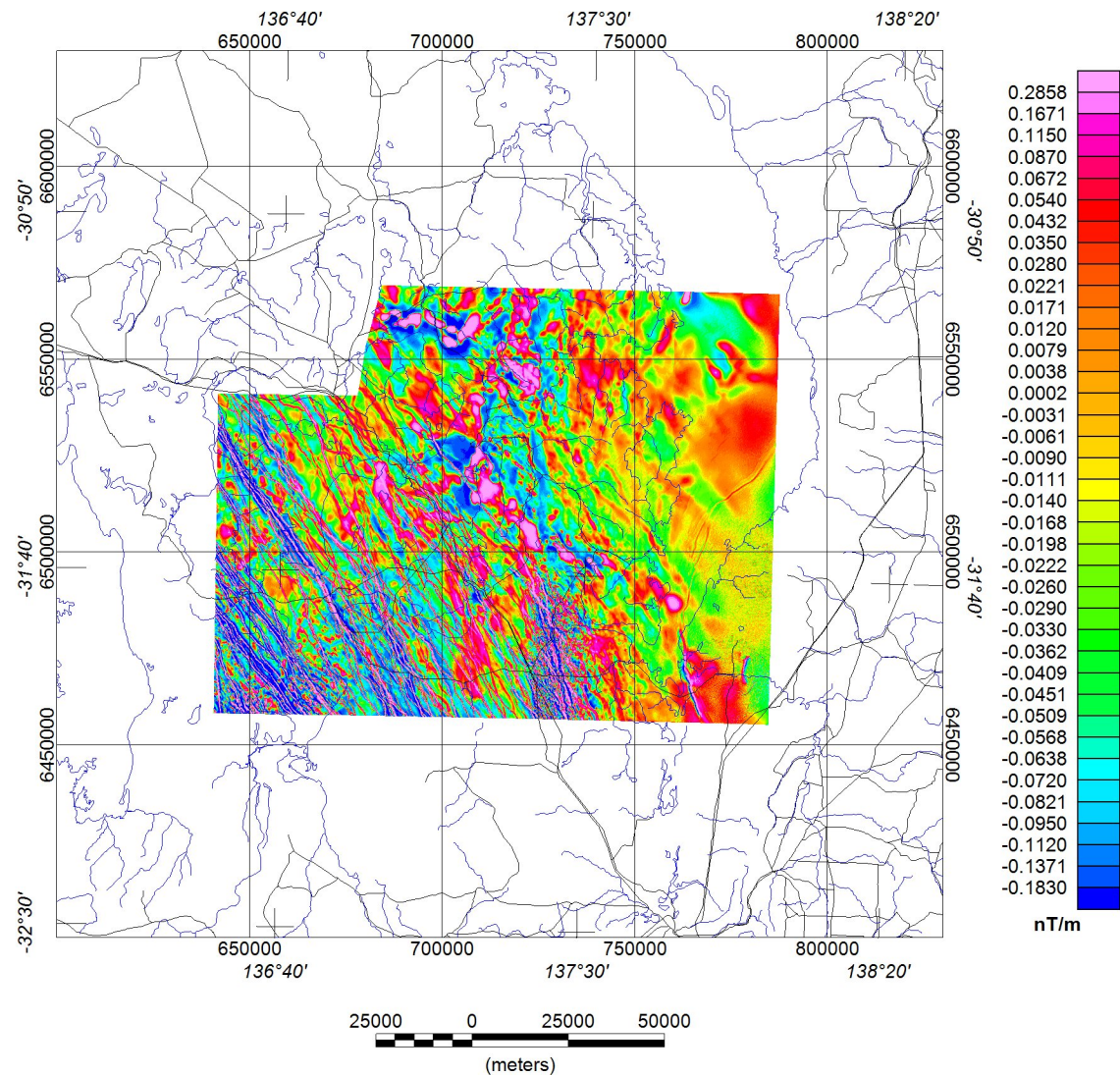




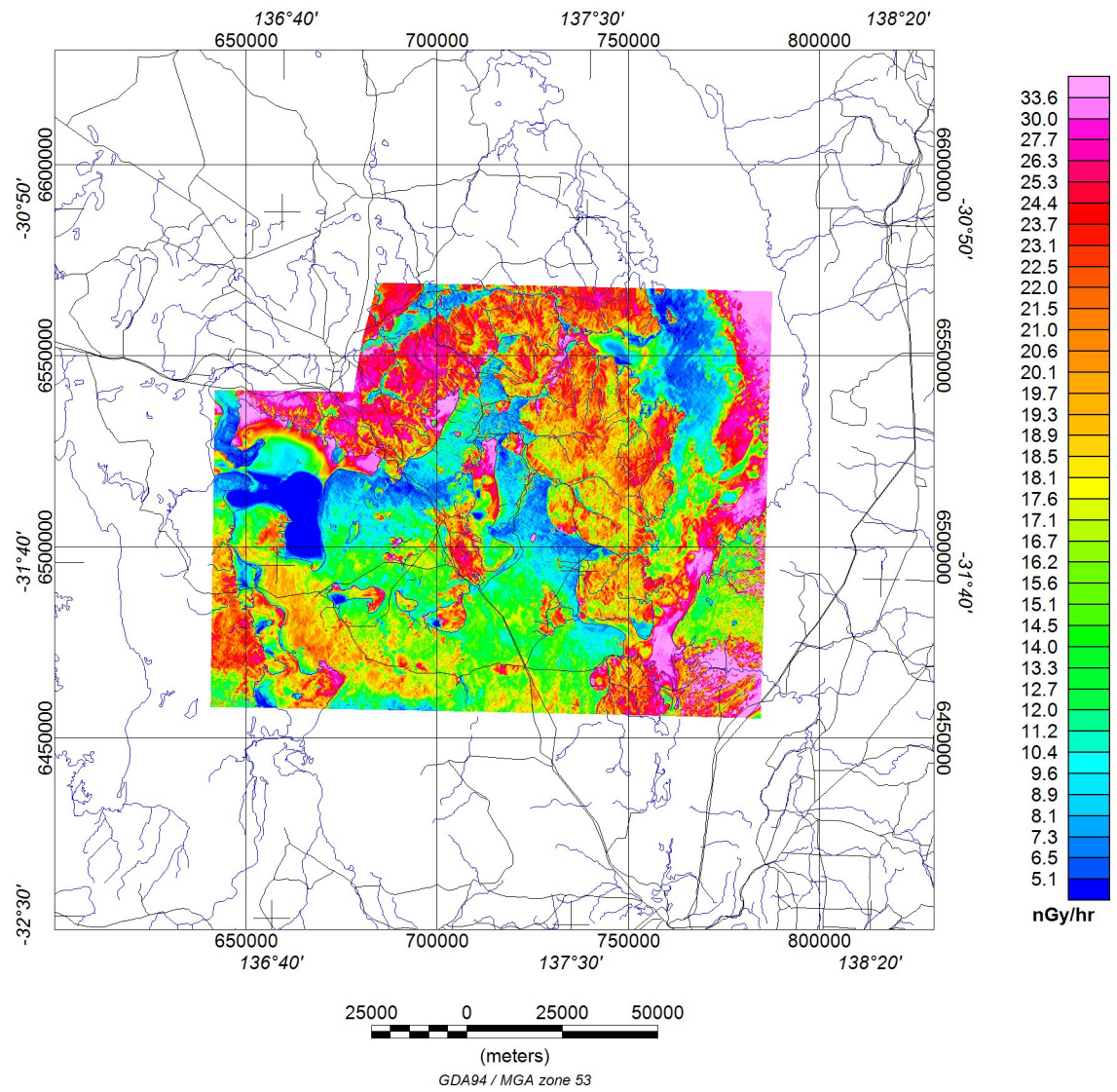
Magnetic Anomaly



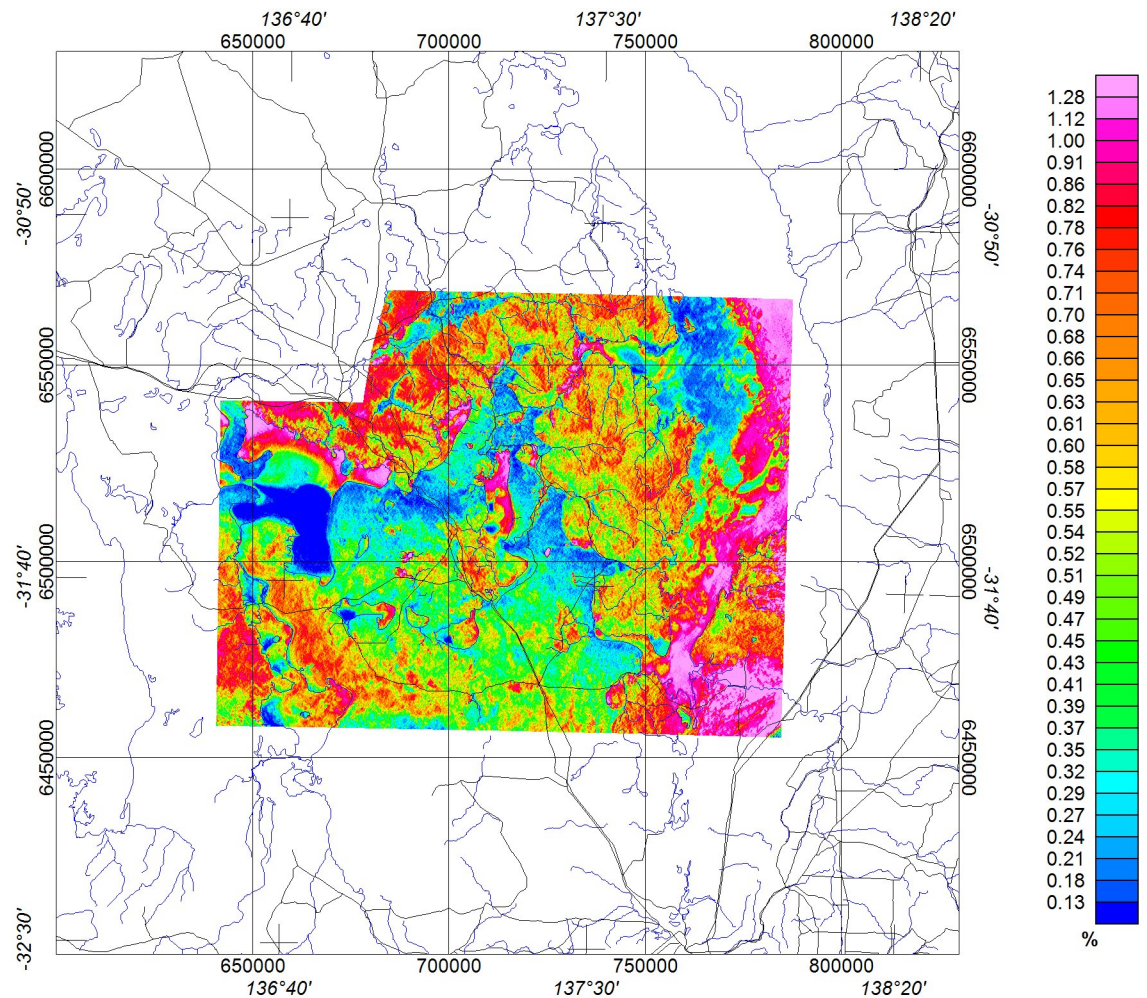
Magnetic Anomaly Reduced to the Pole



First Vertical Derivative of the Magnetic Anomaly  
Reduced to the Pole



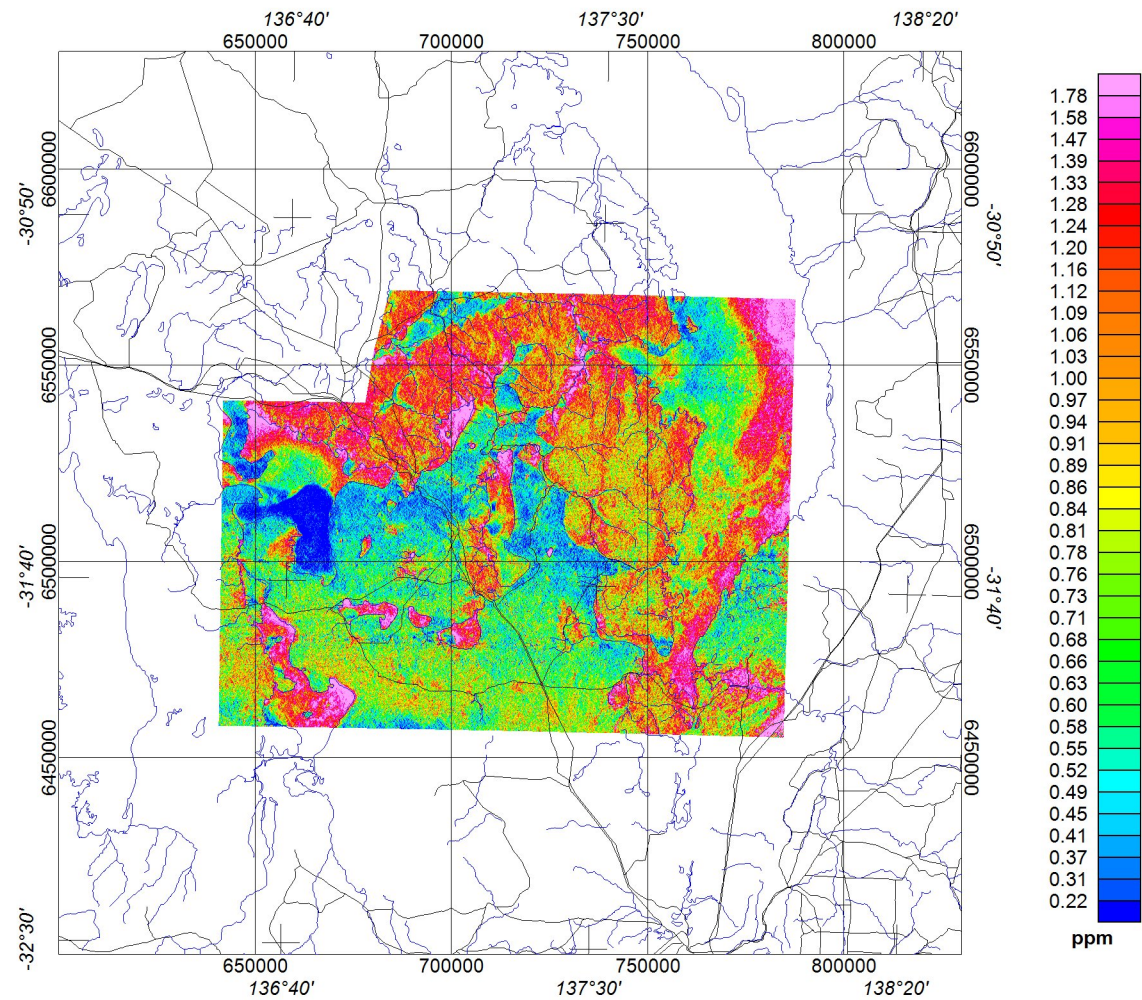
Air Absorbed Dose Rate



25000 0 25000 50000  
(meters)

GDA94 / MGA zone 53

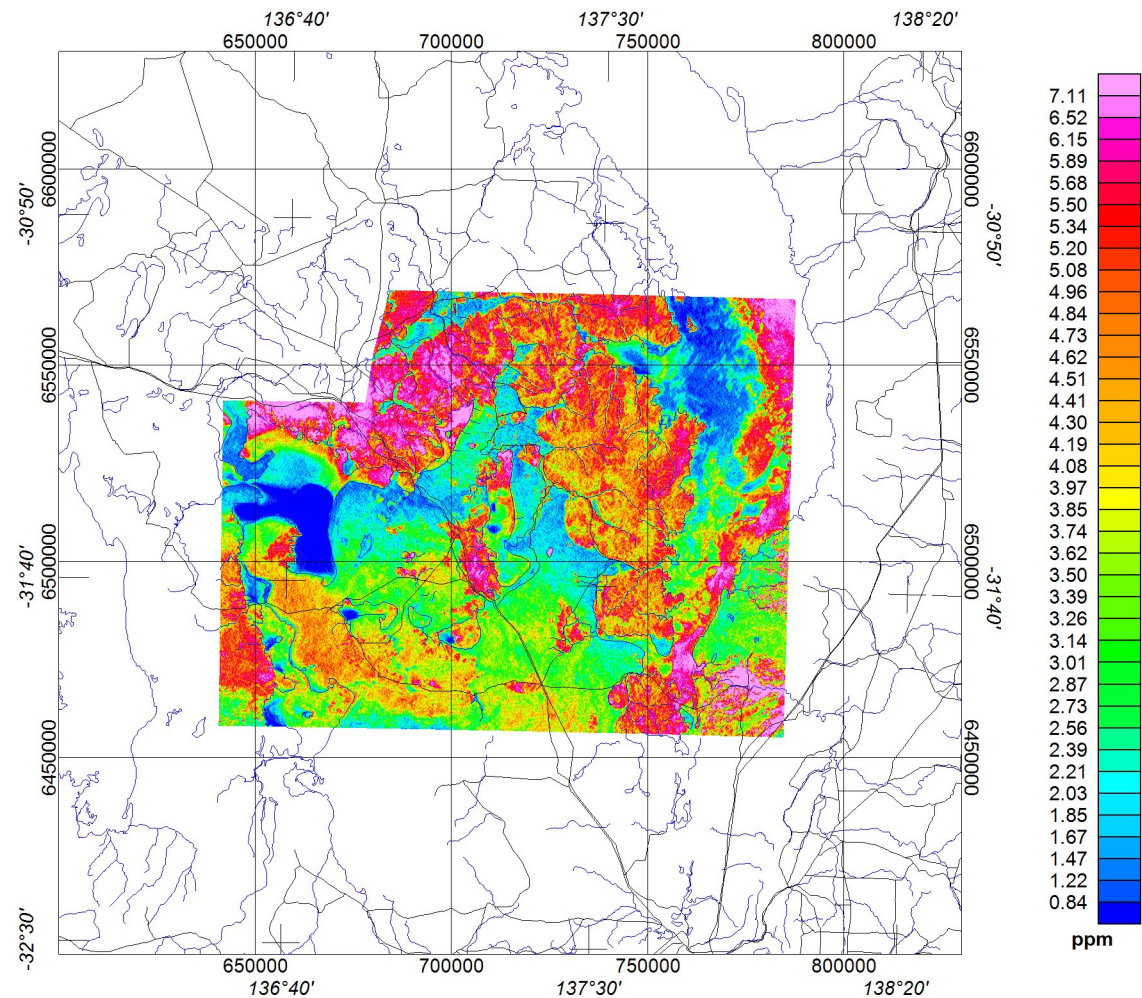
Potassium



25000 0 25000 50000  
(meters)

GDA94 / MGA zone 53

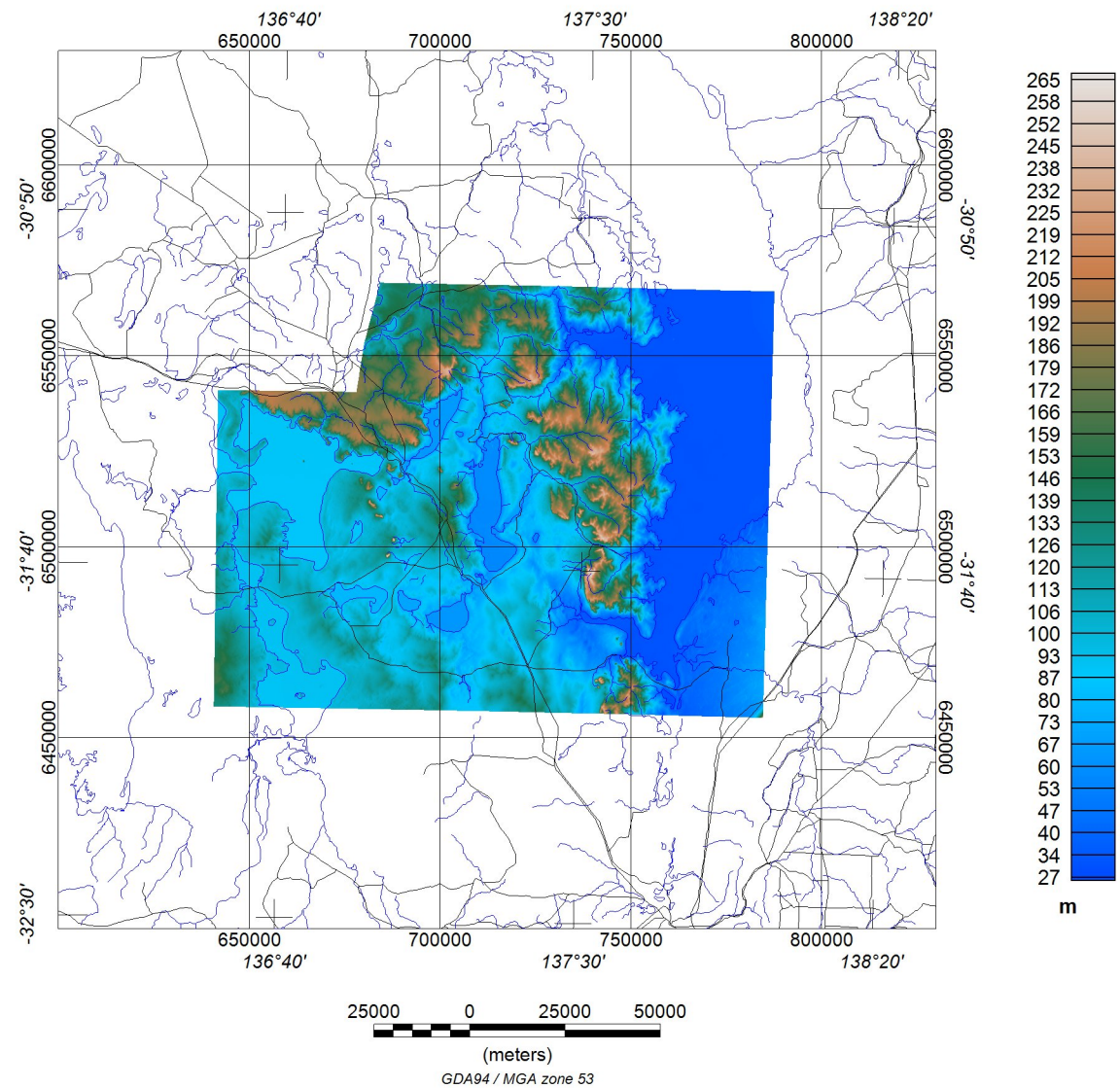
Uranium



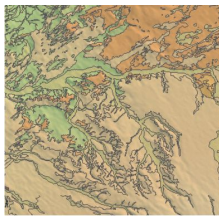
25000 0 25000 50000  
(meters)

GDA94 / MGA zone 53

Thorium



Digital Elevation Model

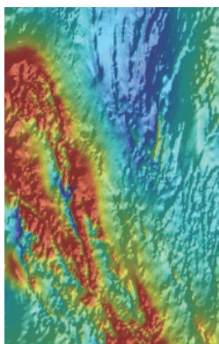


## Department of State Development

Metadata: PACE Copper Gawler Craton  
Airborne Survey, Region 3B, P1283,  
Torrens, 2017SA005



Date Printed: 16/04/2018



**Government of South Australia**  
Department of State Development

---

## Dataset

**Title:** PACE Copper Gawler Craton Airborne Survey, Region 3B, P1283, Torrens, 2017SA005

**Custodian:** Department of the Premier and Cabinet

**Jurisdiction:** SA

---

## Description

### Abstract:

The Gawler Craton Airborne Survey The survey will capture approximately 1,700,000 line kilometres of new geophysical data (magnetic, radiometric and digital elevation data) over an area of approximately 300,000 square kilometres. Magnetic data includes TMI, TMI reduced to pole and 1VD of RTP TMI; elevation data includes models derived from radar altimeter and laser altimeter subtracted from differential GPS heights; spectrometer data includes dose rate, uranium, thorium, potassium and ternary (RGB) radiometrics.

### ANZLIC Search Terms:

GEOSCIENCES Geophysics BOUNDARIES Surveys

**GEN Category:** GAWLER PROVINCE

**GEN Custodial Jurisdiction:** South Australia

**GEN Name:** Torrens Map Sheet, Gawler Craton

**Geographic Extent Polygon:** -30.965, 138.0597, -32.0417, 136.4566

**North bounding latitude:** -30.965

**South bounding latitude:** -32.0417

**East bounding longitude:** 138.0597

**West bounding longitude:** 136.4566

---

## Data Currency

**Beginning Date:** 04/03/2017

**End Date:** 16/04/2018

---

## Dataset Status

**Progress:** Complete

**Maintenance:** As required

**Version Number:** 1

---

## Access

**Stored format:** DIGITAL data are stored as located data (ascii), ERMapper grids, tif images.

**Available format(s):** DIGITAL

**Access constraint(s):** Data is released under Creative Commons CC-BY.

**SARIG Layer(s):** Gawler Craton Airborne Survey\Region 3B



---

## Data Quality

**Lineage:** The data was originally collected by government, released as located data and processed into grid and image products.

**Positional accuracy:** Original data were located using GPS. GPS units are accurate to less than 10 metres.

**Attribute accuracy:** Not Known

**Logical consistency:** All data have been quality controlled by the Geological Survey of South Australia.

**Completeness:** This survey is complete

---

## Contact Information

**Contact organisation:** Department of the Premier and Cabinet

**Contact position:** Customer Service Centre

**Contact mail address:** GPO box 320 Adelaide SA 5001

**Contact telephone:** 08 8463 3000

**Contact email:** Resources.CustomerServices@sa.gov.au

---

## Metadata Dates

**Add date:** 2018-04-16

**Change date:** 2018-04-16

---

## Responsible Party

**Responsible party:** Director, Geological Survey of South Australia

**Responsible party function:** Custodian/Steward

---

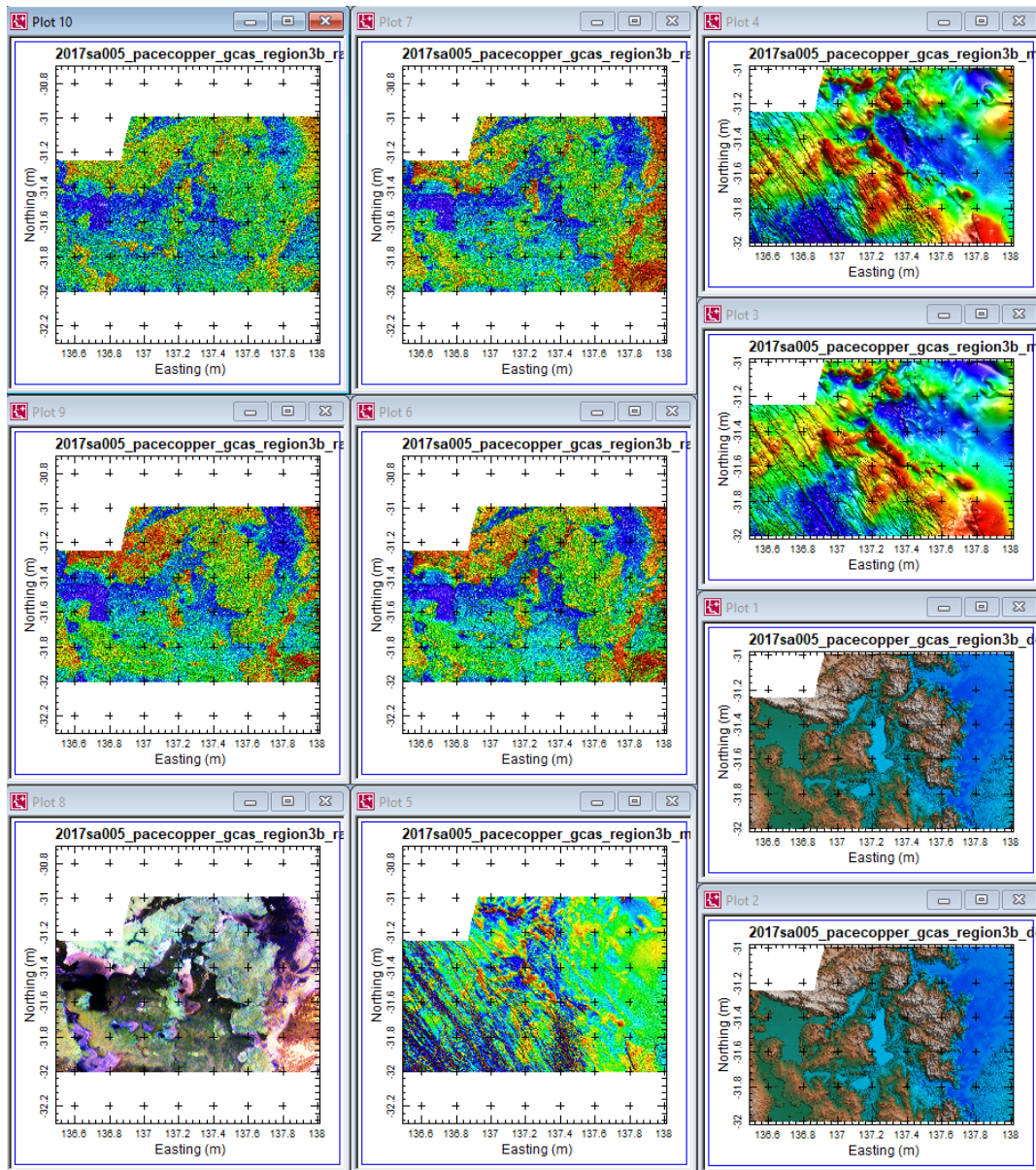
## Description

**Dataset classification:** Principal version

**Spatial representation type:** Matrix

**Dimension:** Other

**Sample Graphic(s)**



Gawler Craton Airborne Survey Block 3B - Torrens

## Usage

**Purpose:** This set of data is designed as an aid to geological exploration.

**Use:** Used to supply industry, government and the general public with geophysical information, primarily used for mineral exploration.

**Usage limitations:** Grid data has been gridded at one fifth of line spacing and interpretations should not be made at scales less than this.

---

## Dataset Associations

**Dependant datasets:** Airborne Magnetic Surveys of South Australia.

---

## Origin

**Dataset size:** 6.5 Gb

**Projection:** Geographical

**Datum:** GDA94

---

## Dataset Management

**Authorised by:** Director, Geological Survey of South Australia

## Attributes

---