Technical Report

Fixed-Wing High-Resolution Aeromagnetic, Gamma-ray Spectrometric and Frequency-Domain Electromagnetic Survey

Tellus A2 Block, Republic of Ireland, 2016

for

Geological Survey of Ireland

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1. EXECUTIVE SUMMARY

Sander Geophysics Limited (SGL) conducted a fixed-wing high-resolution aeromagnetic, gamma-ray spectrometry and frequency-domain electromagnetic survey in the western part of the Republic of Ireland for the Geological Survey of Ireland (GSI) in the area around Galway incorporating most of County Galway and the south part of County Mayo. The survey block "A2" is part of the ongoing Tellus Programme that commenced with the Tellus Airborne Geophysical survey of Northern Ireland in 2005/2006, conducted by the British Geological Survey (BGS), and the subsequent Tellus Border Survey in 2012 jointly administered by the GSI and the Geological Survey of Northern Ireland (GSNI). The A2 Block survey is adjacent to and slightly overlaps the A1 Block survey that was flown in the vicinity of Dublin in 2015.

The survey was conducted using SGL's De Havilland DHC-6 Twin Otter, registration C-GSGF. Production flights commenced on June 2, 2016 and were completed on October 13, 2016. A total of 115 flights were flown during the survey to complete the planned 43,141 line kilometres. The survey operations were conducted from Weston (EIWT), Shannon (EINN) and Galway (EICM) airports.

The traverse lines were oriented N15°W and spaced at 200 m. The control lines were oriented E15°N and spaced at 2,000 m. The target clearance was 60 m above ground level, based on the Irish Aviation Authority (IAA) permit. The target average ground speed was 60 m/s, or 115 knots.

2. INTRODUCTION

This report describes the survey of the A2 Block flown by Sander Geophysics Limited (SGL) for the Geological Survey of Ireland (GSI) in the summer and autumn of 2016 in Republic of Ireland in the vicinity of Galway. See *Appendix I* for a company profile of SGL. The A2 Block survey was flown immediately after completing the Waterford Block survey for the same client that is subject of a separate technical report (TR831-2016-001) and some of the equipment calibrations are in common to both blocks.

Fixed-wing high-resolution aeromagnetic, gamma-ray spectrometric, and frequency-domain electromagnetic data was gathered during this survey. The instruments used to collect the data, the tests performed to ensure optimal data quality and the data processing methods are described in this report.

Picture 1: SGL's Twin Otter flying over the survey area

The Field Operations section contains all information relating to operations at the survey location including reference station coordinates and any problems encountered during the survey. Re-flights are listed as well as field crew members. The Digital Data Compilation section details all processing performed from data acquisition to final product creation.

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

Project Brief

Survey Title	Fixed-wing high-resolution aeromagnetic, gamma-ray spectrometric, and frequency-domain electromagnetic Survey, Republic of Ireland
Client:	Geological Survey of Ireland (GSI)
Survey Location:	Republic of Ireland
Survey Start Date:	June 2, 2016
Survey End Date:	October 13, 2016
Contact:	Jim Hodgson (jim.hodgson@gsi.ie / tellus@gsi.ie)
Field Office Location:	Oranmore, Ireland
Airports Used:	Weston (EIWT), Shannon (EINN) and Galway (EICM)
Aircraft Type:	De Havilland DHC-6 Twin Otter
Total line kilometres:	43,141
Survey Flying Particulars	
Traverse Lines	
Line numbers:	2001 to 2699
Line direction:	N15°W
Line spacing:	200 m
Control Lines	
Line numbers:	201 to 251
Line direction:	E15°N
Line spacing:	2000 m
Survey Altitude:	Target height of 60 m above ground. This number increased to 240m over built up areas and high fly zones outlined by the GSI.
Digital Terrain Source:	SRTM
Number of Flights (numbers):	115 (0001 to 0115)
Aircraft Target Ground Speed	60 m/s
Data	
Base Station Locations (WGS-84)	GND1: N53°13'29.31326" W08°56'54.49351" 63.6598 m GND2: N53°17'58.13872" W08°56'28.1690" 80.3453 m
Datum:	IRENET95
Projection:	Irish Transverse Mercator (ITM)

3. SURVEY AREA

The weather in the region is mild and wet, with temperatures that ranged from 15°C in June and most of the summer, down to 10°C in October during the survey period. Morning fog and overcast days with rain showers were common during the survey, and low visibility in the hills due to low cloud was a frequent occurrence.

Figure 1 shows the geographical location of the survey area. The area is mostly rural in character but contains a significant amount of infrastructure including many towns, villages, roads, railway lines and power lines. The topography in the area is fairly flat, but mountains of the Connemara National Park are present to the west of the area. Two significant lakes (Lough Corrib & Lough Mask) over 80 km2 are also present within the survey area. The planned survey lines are illustrated in *Figure 2* and listed in *Appendix II*. The flown lines are listed in *Appendix III*.

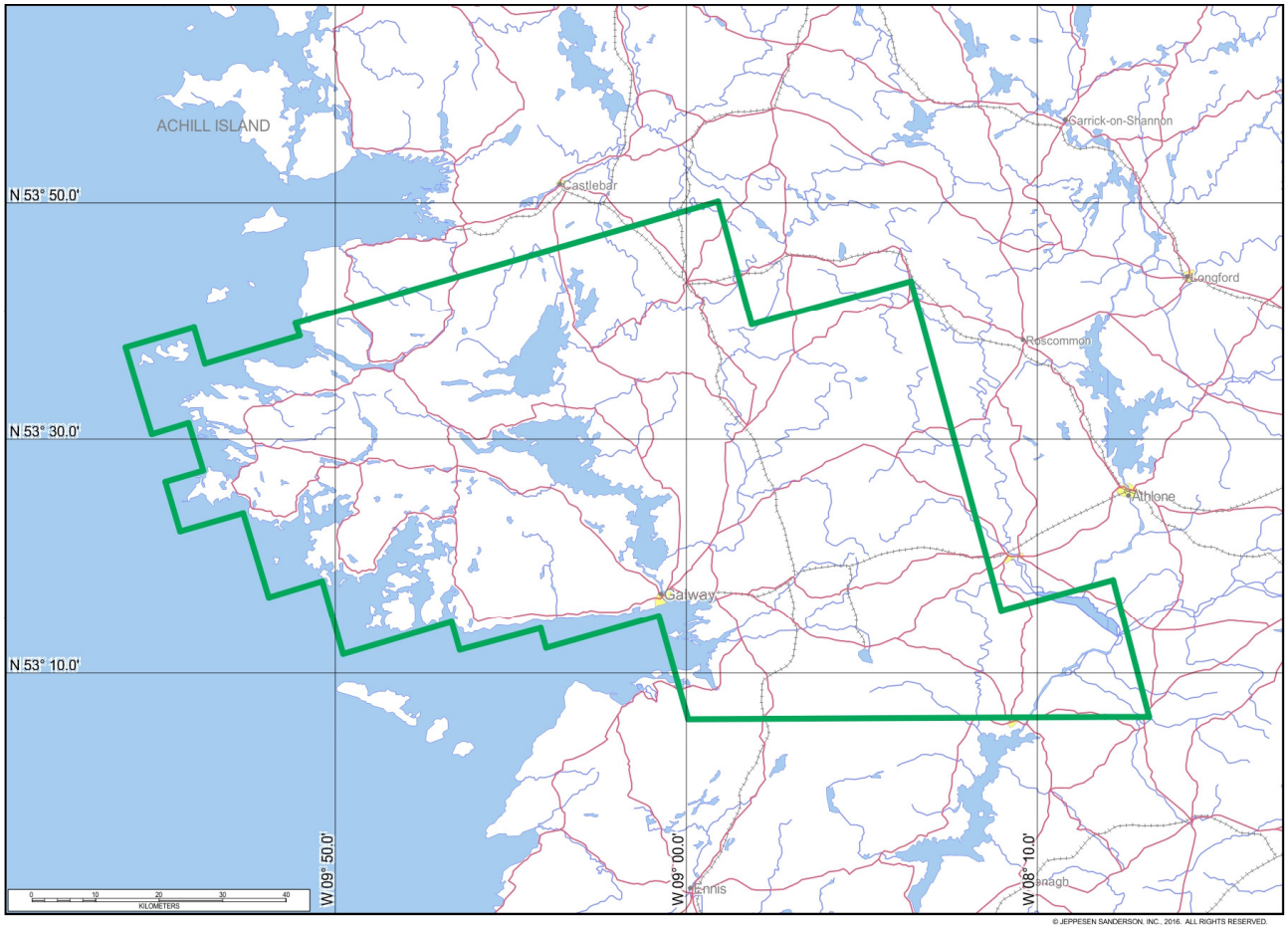


Figure 1: Survey Location Map of the A2 Block

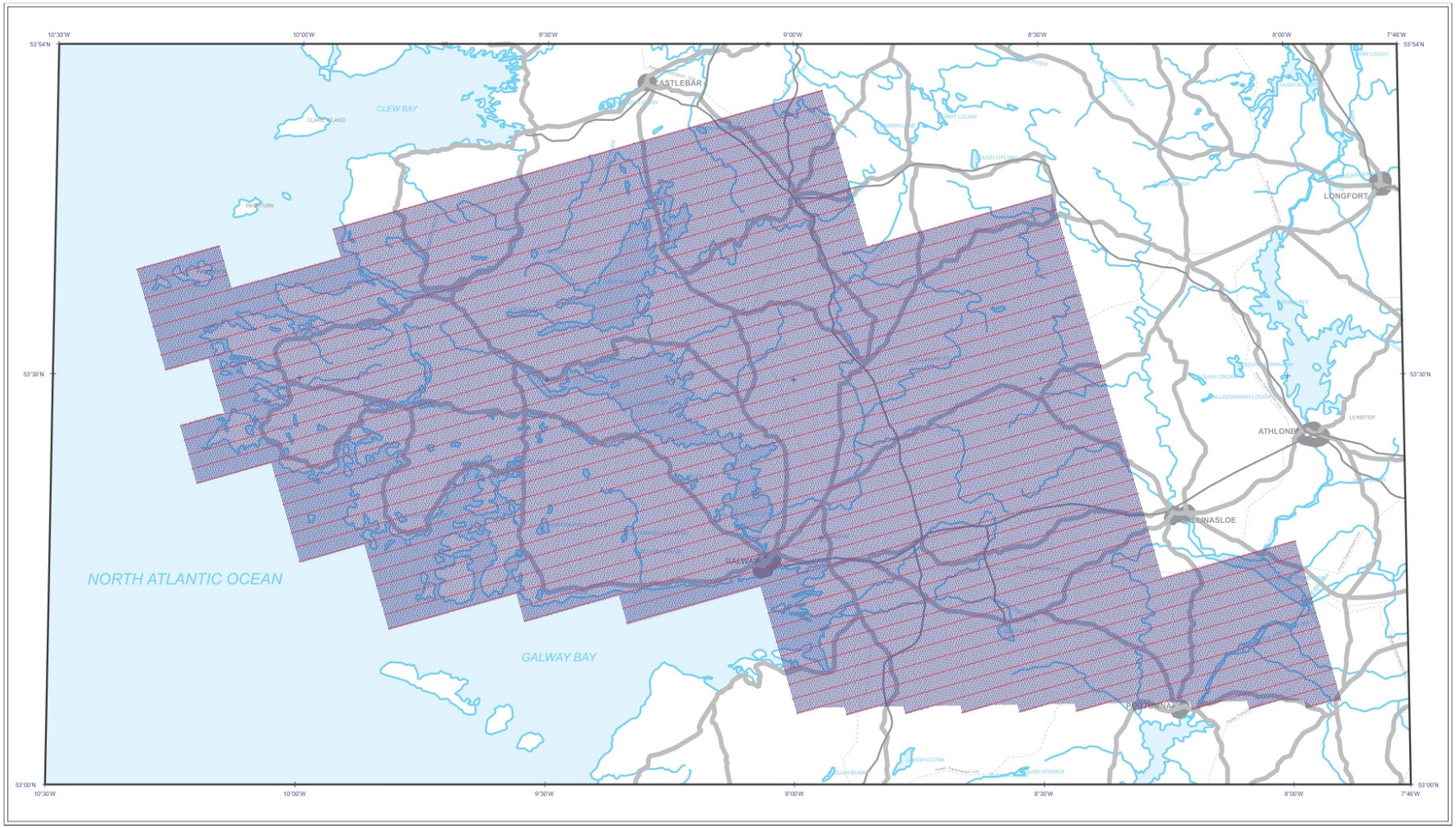


Figure 2: Planned survey lines

Survey Boundary

The A2 Block is bounded by the coordinates provided in *Table 1* in the IRENET95 datum, Irish Transverse Mercator (ITM) projection:

Table 1: Survey Boundaries (IRENET95, ITM)

Easting (m)	Northing (m)
456773.000000	770002.000000
458321.000000	764255.000000
472963.000000	768133.000000
471978.000000	772003.000000
538213.690968	789756.245934
543809.000000	768469.000000
568806.058556	775143.238028
582755.801136	722943.626753
600788.048914	727743.836281
606620.667257	705821.384043
605256.000000	705697.000000
601729.894079	704787.042979
601521.000000	705882.000000
601262.000000	705912.000000
598363.000000	705913.000000
594068.108420	704825.351908
593806.000000	705916.000000
590700.000000	705918.000000
586489.000000	704821.000000
586143.000000	705921.000000
582783.000000	705898.000000
578527.453175	704774.273336
578272.000000	705926.000000
575167.000000	705919.000000
570865.667517	704825.351908
570608.000000	705931.000000
567501.000000	705933.000000
563191.112215	704812.582265
562943.000000	705936.000000
559836.000000	705938.000000
555542.096199	704825.351908
555279.000000	705940.000000
551972.000000	705917.000000
547893.080183	704876.430479

Easting (m)	Northing (m)
547615.000000	705945.000000
544254.000000	705929.000000
540014.210598	704838.121550
539744.000000	705950.000000
536638.000000	705951.000000
533284.608861	705080.744763
528707.000000	722405.000000
510669.571525	717607.764315
509685.000000	721512.000000
496852.818054	718156.858954
495895.000000	721959.000000
478656.077114	717377.910745
475578.593208	728921.667804
466831.387914	726674.210678
463281.427226	740158.953437
453180.639799	737490.098099
451022.570172	745637.130183
457024.302271	747297.183742
455119.000000	754490.000000
449222.050542	752979.674772
445429.466641	766962.433600

4. SURVEY EQUIPMENT

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

Frequency Domain Electromagnetic (FEM) System

SGFEM four frequency (1) EM System (0.9, 3, 12, 24.5 kHz)

SGL's DHC-6 Twin Otter is configured with a four-frequency, wingtip mounted Frequency Electromagnetic (FEM) system that operates at four frequencies, 912, 3005, 11962 and 24510 Hz. This configuration results in a large transmitter-receiver coil separation which improves the signal to noise ratio. The transmitter-receiver coil pairs are mounted in a vertical-coplanar orientation which reduces noise by minimizing coupling with the wingtip surface. Additionally, the coils in any one set (transmitter or receiver) are axially offset and are kept adequately separated from each other. The system also comes equipped with a 50/60 Hz power line monitor which becomes particularly useful in identifying cultural interference when surveying in urban settings. The system has a 40 Hz sampling rate which is later decimated to 10 Hz in the processing.

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. One airborne sensor was mounted in a fibreglass stinger extending from the tail of the aircraft and a second sensor was housed in the left FEM pod attached to the left wingtip. 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 0.02 nT. Total magnetic field measurements were recorded at 160 Hz in the aircraft then later decimated to 10 Hz in the processing. The ground systems recorded magnetic data at 11 Hz. For the primary purpose of the survey, the wingtip sensor is considered to be redundant.

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 maneuvers 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.

Gamma Ray Spectrometer System

Radiation Solutions RS-501 with Crystal Detector Packs RS5558, RS5557, RS5444, RS5632

The Radiation Solutions spectrometer system includes an on-board ADS computer for each crystal, providing real-time signal processing and analysis, and allowing automatic gain control for individual crystals using the natural thorium peak, and multi-channel recording and analysis. The system utilizes 16 downward-looking and 3 upward-looking parallelepiped

NaI(Tl) crystals of 4.2 L each for a total downward volume of 67.2 litres and upward volume of 12.6 litres. The crystal are housed in four detector packs, four downward crystals in each pack and one upward crystal in three of the packs. Data were recorded in 1024 channel spectral mode and windowed data mode at an interval of 1 s.

Airborne Navigation and Data Acquisition System

Sander NavDAS

The NavDAS is the latest version of airborne navigation and data acquisition computers developed by SGL. It displays all incoming data on a flat panel screen for real-time monitoring. The data are recorded in database format on a solid-state internal hard drive and a removable hard drive simultaneously for transfer of data to the field office. The computer incorporates a magnetometer coupler, an altimeter analogue to digital converter and a GPS multi-frequency receiver NovAtel OEM4 tracking 14 GPS Satellites, 12 GLONASS Satellites, 2 SBAS and 1 L-Band which automatically provides the UTC time base for the recorded data. In addition to providing essential post-mission positional data, the NavDAS computer processes user-received GPS or real-time differentially corrected GPS (RDGPS) data and compares the data to the coordinates of a theoretical flight plan in order to guide pilots along the desired survey line in three dimensions.

Septentrio PolaRx2, 48 channel dual-frequency GNSS GPS receiver

The PolaRx2 system is a 3-antenna, 48-channel L1/L2 GPS receiver, designed to record attitude data of the airplane.

Reference Station Acquisition System

SGRef

The reference station system SGRef, consists of a ground data acquisition computer with a Sander magnetometer frequency counter to process the signal from the magnetometer sensor and from the GPS receiver. The noise level of the station magnetometer is less than 0.1 nT. 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 GPS data, sampled at 10 Hz, are recorded on the internal hard drive of the computer and the removable hard drive simultaneously for transfer to the processing computers in the field office. The entire reference data acquisition system is fully automatic and was set for unattended recording.

Reference Station GPS Receiver

NovAtel OEM4 receiver boards

The OEM4 is a high performance, high accuracy, dual-frequency GPS receiver that is capable of receiving and tracking the L1 C/A code, L1 and L2 carrier phase, and L2 P-code (or encrypted Y-code) of up to 24 GPS satellites. The GPS data are recorded at 10 Hz. The OEM4 is employed in both the airborne NAVDAS and ground based SGREF acquisition computers.

Digital Video System

SGDIS - Sander Geophysics Digital Imaging System

The video camera is mounted in the floor of the aircraft and oriented to look vertically below while in flight. Real time text annotation of position, flight information and fiducial marking are incorporated for flight path verification. The data are stored, by flight line, in avi format, viewable by any commercial media player.

Altimeters

SGLas-P - Riegl LD90-3300VHS-FLP Laser Rangefinder

The Riegl laser altimeter is an eye safe laser, has a range of 338 m, a resolution of 0.01 m with an accuracy of 5 cm and a 20 Hz data rate.

Collins AL-101 Radar Altimeter

The Collins radar altimeter has a resolution of 0.5 m, an accuracy of 5%, a range of 0 to 408 m., and a 10 Hz data rate. This system is actively employed for survey guidance and data acquisition.

Honeywell Barometric Pressure Sensor

The barometric pressure sensor measures static pressure to an accuracy of ± 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.

Omega RTD-805 Outside Air Temperature Probe

The outside air temperature is measured at 10 Hz with a resolution of 0.1º C. The temperature sensor has a range of +/-100º C and an accuracy of +/-0.2º 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

De Havilland DHC-6 Twin Otter (C-GSGF)

The De Havilland DHC-6 Twin Otter (C-GSGF) is an all metal, high-wing, twin-engine, short takeoff and landing (STOL) aircraft. It is powered by two Pratt & Whitney Canada PT6A-27 engines that run a constant speed, fully feathering, reversible propeller. The PT6 turbine engines provide ample power for climbing over steep terrain, working at altitudes up to 7,000 m and can withstand frequent rapid power changes. The aircraft is highly manoeuvrable, rugged in design and can be flown at speeds from 80 to 160 knots. The low stall speeds and abundant available power make the Twin Otter a safe and effective aircraft

Picture 2: SGL's Twin Otter, Registration C-GSGF

for surveys requiring flying over rough topography, low air speeds or flights at high altitude. The aircraft has fixed gear, extendable flaps and manually adjustable trim tabs on the primary controls for the roll and pitch axes and full rudder trim for the yaw axis. The aircraft is equipped with full de-icing equipment and sufficient avionics for instrument flying, including a flight control system. Supplementary fuel can be added for transoceanic flight. The Twin Otter is certified for IFR flights in known icing conditions.

The SGL Twin Otter is fully equipped for airborne magnetic, radiometric and frequency-domain Electromagnetic (FEM) surveys. EM fields are measured with the SGL frequency-domain EM system (SGFEM). The four-frequency FEM transmitter is located in the right wingtip FEM pod, and the receiver is located in the left wingtip FEM pod. The magnetic field is measured by up to two sensors allowing for horizontal gradient with one sensor in the composite tail stinger and one in the left wingtip FEM pod. The Twin Otter can carry up to 79.8 litres of detector crystals for gamma-ray spectrometer surveys. The aircraft conforms to Canadian aeronautical regulations in survey configuration. See *Appendix XI*.

Data Processing Hardware and Software

Processing was performed on high performance desktop computers optimized for processing tasks. SGL's proprietary geophysical software was used for data processing.

5. 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 rangefinder at 20 readings per second (20 Hz);
- Total magnetic field recorded at 160 readings per second (160 Hz);
- Airborne spectrometer data recorded in windowed and 1024 channel spectral format at 1 reading per second (1 Hz);
- Outside air temperature at 10 readings per second (10 Hz);
- Digital video at 30 frames per second (30 Hz).
- Electromagnetic in-phase and quadrature components for four frequencies (912, 3005, 11962 and 24510 Hz designated as P09, Q09, P3, Q3, P12, Q12, P25 and Q25 respectively) recorded at 40 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:

- The horizontal accuracy of the final flight path after correction shall typically be +/- 0.5 m.
- Traverse lines with deviation greater than 45 m from the planned line over a distance of 2.5 km or more, or greater than 90 m from the planned line over any distance, will be reflown (except where ground conditions dictate otherwise).
- Tie lines with deviation greater than 100 m from the planned line over a distance of 2.5 km or more, or greater than 200 m from the planned line over any distance, will be reflown (except where ground conditions dictate otherwise).
- Lines where terrain clearance exceeds +/- 20 m from the nominal survey height for more than 2.5 km or 40 m form the nominal survey height at any time on any line will be reflown (unless local topography makes it unavoidable).
- The average flying speed for the survey aircraft is 116 knots or 60 m/s and should not be exceeded by more than 30% for more than 2.5 km.
- The aircraft shall be equipped with a survey magnetometer fitted according to the manufacturer's specification, with a resolution of 0.001 nT and a noise envelope of <0.1 nT.

- The aircraft magnetic heading error after compensation shall be less than +/- 1.0 nT on reciprocal survey headings.
- The envelope sum of the compensation maneuvers shall not exceed 3 nT.
- During data acquisition magnetic variations recorded at the local base magnetometer should not exceed 12 nT over any 3 minute chord or exceed 2 nT over any 30 second chord, on flight lines or tie lines.
- Relative count rates above background during the pre/post flight source tests will be within two standard deviations of the average sample checks for the survey.
- The average line gamma spectra for any line should not appear anomalous by comparison with previously acquired data.
- The calculated PDOP should be <6 and more than 4 satellites should be available.
- If both primary and secondary GPS base stations fail to record for 30 minutes or more simultaneously the affected lines will be reflown.
- If both primary and secondary magnetic base stations fail to record for 30 minutes or more simultaneously the affected lines will be reflown.
- The calibration of the EM system should not deviate significantly from the norm.
- A reflown line must overlap a good line for two tie lines.

Flight Line Specifications

The survey area flight line specifications were as follows (line direction is with respect to the UTM zone reference frame):

Table 2: Flight Lines Specification

	Line Direction	Line Spacing (m)
Traverse Lines	N15°W	200
Control Lines	E15°N	2,000

Terrain Clearance

Flying guidance was provided primarily by SGNav, a flexible and simple navigation system specifically designed by SGL for the airborne geophysical environment. Following the pre-planned survey lines, SGL's SGNav system guides the pilots from their point of departure to the start of a specific line, directs them along the survey line, and then to the next line or any other line of their choosing. While flying along a line, the SGNav system shows the pilots the correct x and y location and their altitude on a small LCD screen mounted in the pilot's line of vision.

Additional navigation parameters are displayed, such as DTS (distance to start of line), DTE (distance to end of line), TMG (track made good), SPD (aircraft ground speed), XHT (up/down error), DTK (desired heading), TTS (time to start of line), TTE (time to end of line), TKE (track error).

For the A2 Block survey, the target height was set to 60 metres above ground level in accordance with the IAA permit. The altitude measurements were provided by an aviation

radar altimeter. The system is equipped with a safety pull up mode that warns the pilots if the clearance is below a pre-determined height, set at 50 metres above ground level in this case. Each survey line is flown as close to the target height as possible so as to maximize the quality and coverage of the frequency domain EM data which drops off rapidly in signal strength with distance from the source. FEM data quality is very good up to altitudes of about 75 m above ground whilst data collected above 150 m is usually unreliable due to reduced coupling. For this reason, the altitude in adjacent lines and at intersections of lines is not consistent, as would normally be preferred for aeromagnetic data acquisition.

A Garmin GNS430/530 was employed as a second guidance system for this survey with dual receiver navigation system that uses a Jeppesen NavData database. A Garmin was installed on each pilot's yoke that displayed the survey lines and also let the pilots know which lines have already been flown. Another important use for this GPS system was to mark pre-determined areas that pilots had to avoid flying low over. This included towns, farms, equestrian centres etc. Each pre-determined high-fly area had a buffer around it to allow the plane to climb to a higher altitude before reaching the area. The method for dealing with areas to be avoided is discussed in more detail in the *Public Relations and Flying* section below.

Public Relations and Flying

A public relations (PR) campaign was set up by GSI to inform the public about the Tellus survey. A website was set up showing the survey area and the layout of the flight lines, along with some information about the survey. Each week the website was updated with lines that SGL planned to fly that week. This information was submitted to the PR representatives each week by the crew. There was also a phone hotline set up where the public could call with concerns, usually issues related to low flying. People also had the option to become a 'notify' or a 'high-fly'. The people on the 'notify' list were notified before each day that SGL planned to fly over their property. The people on the 'high-fly' list were generally not notified but the plane flew at 240 m over their property to avoid disruption of people and animals. In such a case the person gave the GPS coordinates of their property to the PR group, who in turn passed it along to the crew. This polygon was then input into the Garmin GPS along with a buffer area. This allowed the pilots to see the areas they needed to avoid during the flight and plan accordingly. High-Fly polygons were also made for large towns and cities (with a population of 2500 people or greater) without previous request from any specific person. In some cases the pilots climbed over a built up area that was not marked in their GPS to avoid complaints from the public.

6. OTTAWA 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 high altitude (roughly 10,000 ft) to limit the contribution of ground magnetic signal as much as possible. The cloverleaf consists of a pass over the known point orientated in the north-south and east-west directions.

A heading test was performed prior to the aircraft leaving Ottawa. A test was flown on April 4, 2016 for the tail magnetometer in the same flight in which the compensation test was performed.

The results of the heading test are presented in *Table 3.* The test determined an average north-south (N-S) heading error for the tail magnetometer of 0.54 nT and an average east-west (E-W) heading error of -0.11 nT.

Table 3: Tail magnetometer heading test

Aircraft type:	DHC6 Twin Otter
Registration:	C-GSGF
Field Location:	Ottawa, Canada
Organization:	Sander Geophysics
Pilot:	Charles Dicks
Date:	4 April 2016
Height flown:	~10,000 ft AGL
Magnetometer type:	Geometrics G-822A
Compensator:	SGL AIRComp
Sampling rate:	10/s
Data acquisition system:	Sander SGDAS-3

Dir	Line #	Diurnally Corrected Mag	Variation from Average
N	1	6.7	0.03
S	2	6.3	-0.43
E	3	6.4	-0.33
W	4	6.6	-0.10
N	5	7.2	0.50
S	6	6.6	-0.11
E	7	6.9	0.22
W	8	6.9	0.21
Average N-S Heading Error: 0.54 nT			
Average E-W Heading Error: -0.11 nT			

Compensation Calibration

Compensation calibrations determine the magnetic influence of aircraft and its maneuvers. During the compensation calibration flight, the aircraft performs sets of three pitches (+/-5°), rolls (+/-10°), and yaws (+/-5°), 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 maneuvers, referred to as the Figure of Merit (FOM), is calculated from the maximum peak-to-peak value resulting from each maneuver. A compensation calibration was performed on April 4, 2016 for the tail magnetometer before the aircraft left Ottawa. See *Figure 3* for an illustration of the compensated and uncompensated data acquired during the compensation calibration.

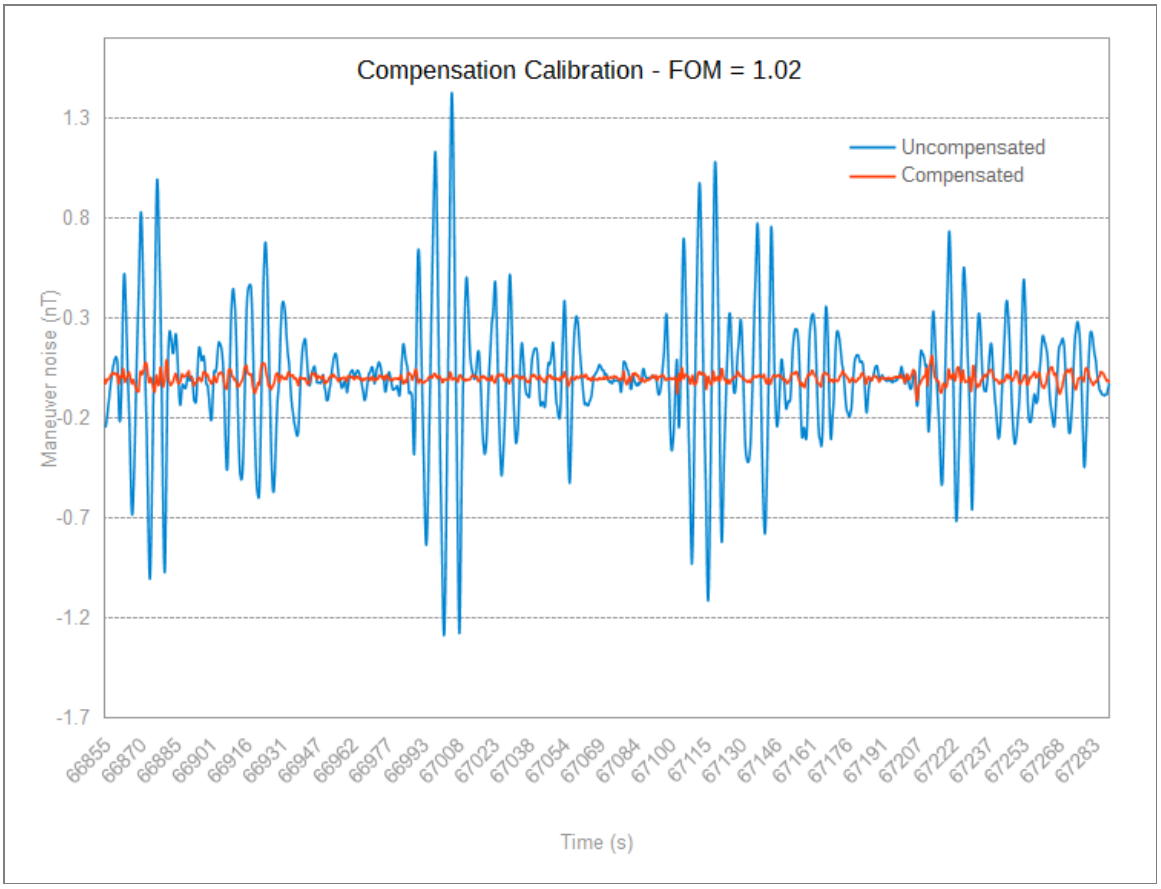


Figure 3: Tail magnetometer compensation calibration test, April 4, 2016

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 along the long axis of the aircraft, known to be 15.55 m for the tail magnetometer divided by the flying speed. For this test the dynamic tail magnetometer lag averaged 0.287 s, for a total lag of 0.53 s.

The lag test was flown on April 4, 2016 for the tail magnetometer before the aircraft left Ottawa. The test was performed by flying in opposite directions over a railway bridge west of Ottawa that generates a sharp magnetic anomaly. The results are shown in *Figure 4.* The lag correction is applied in the first step of magnetic data compilation.

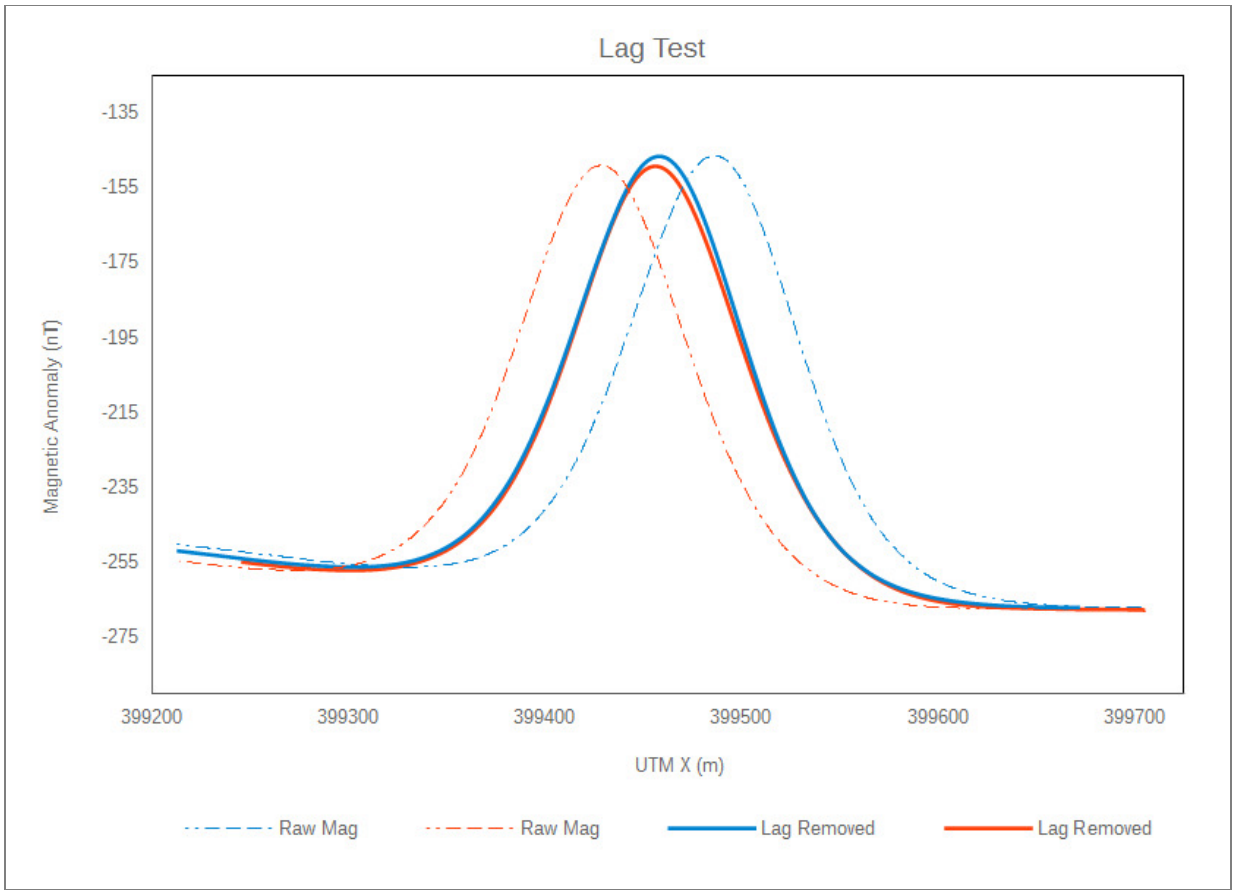


Figure 4: Tail magnetometer lag test; blue traces and red traces are magnetic profiles from data flown in opposite directions.

Spectrometer System Tests

Ground Calibration Pads Test

The stripping ratios for the gamma-ray spectrometer were determined on March 30, 2016 before the aircraft departed Ottawa. The Geological Survey of Canada (GSC) 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 the aircraft. Each detector was tested separately and the test results were averaged to create stripping ratios for this system. See *Table 4* for a complete list of stripping ratios.

The following procedure was carried out:

- Pre-pads source test, one thorium source below pack
- Pads test carried out in order: background, potassium, uranium, thorium, and background (six minutes recording each)
- Post-pads source test, one thorium source below pack

Table 4: Spectrometer stripping ratios

	Crystal Pack A	Crystal Pack B	Crystal Pack C	Crystal Pack D	Overall System
Thorium into Uranium (α)	0.2737	0.2800	0.2718	0.2783	0.2760
Thorium into Potassium (β)	0.4349	0.4334	0.3948	0.4202	0.4208
Uranium into Potassium (γ)	0.7808	0.7730	0.7645	0.7623	0.7702
Uranium into Thorium (a)	0.0480	0.0435	0.0497	0.0357	0.0442
Potassium into Thorium (b)	0.0000	0.0000	0.0000	0.0000	0.0000
Potassium into Uranium (g)	0.0000	0.0007	0.0000	0.0028	0.0009

Attenuation Test

The exponential height attenuation coefficients for the spectrometer were calculated using the data acquired during a pre-survey test flight over the GSC test range at Breckenridge, Quebec near Ottawa on April 5, 2016. The calibration flights were carried out from approximately 150 m to 290 m mean terrain clearance at 15 m and 30 m intervals. A series of background measurements were made by flying the same altitudes over the Ottawa River to determine the background due to cosmic radiation, radon decay products in the air and the radioactivity of the aircraft and equipment. Results of this test are given in *Table 5*.

After correction for background and stripping, the variation in count rate with effective height was used to determine the attenuation coefficients shown in *Table 6*. Results of the attenuation test are shown in *Figure 5*.

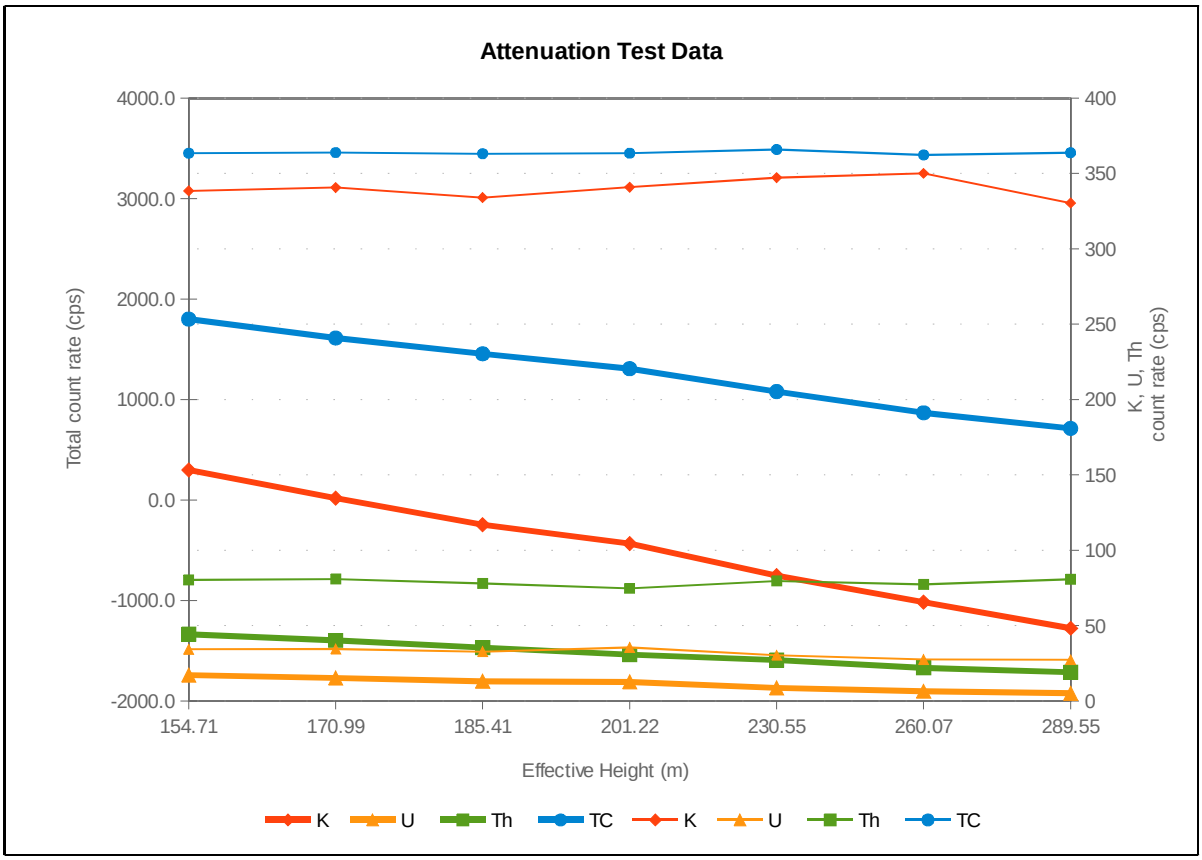


Figure 5: Spectrometer attenuation test

Table 5: Spectrometer calibration test data – height corrected values

Altitude at STP (m)	Total Counts (cps)	Potassium (cps)	Uranium (cps)	Thorium (cps)
289.55	3456.8	330.4	27.3	80.7
260.07	3434.6	350.1	27.5	77.3
230.55	3488.6	347.2	30.3	79.6
201.22	3452.2	341.0	35.4	74.7
185.41	3446.6	334.0	32.7	78.0
170.99	3458.2	340.7	34.4	80.9
154.71	3451.9	338.5	34.2	80.3

Table 6: Spectrometer attenuation coefficients

	Coefficients (m^{-1})
Total	-0.006882
Potassium	-0.008383
Uranium	-0.009370
Thorium	-0.006312

System Sensitivity

A pre-survey test flight to determine the gamma ray spectrometer sensitivity was carried out over the GSC test range at Breckenridge, Quebec on April 5, 2016 (the same test flight as performed to determine attenuation). The test flight served to determine system sensitivities through comparison of airborne data with data acquired on the ground.

The ground measurements were made using an Exploranium portable gamma-ray spectrometer, acquired at 25 different sites along the 10 km length of the calibration range. Measurements were also made using the portable spectrometer on a boat on the Ottawa River 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 by calibration of the portable spectrometer using the GSC 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 7*.

Table 7: Spectrometer system sensitivities, Breckenridge, QC

	Average counts at 60 m (cps)	Ground Concentrations	Sensitivities
Potassium	340.3	1.81%	187.9987 cps/%
Equivalent Uranium	31.7	1.27 ppm	24.9462 cps/ppm
Equivalent Thorium	78.8	7.60 ppm	10.3658 cps/ppm

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 on April 5, 2016 over the runway at Gatineau Airport, near Ottawa. Seven 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 Collins radar altimeter slope was 0.9953 and the intercept 1.5333 m. The laser altimeter slope was 0.9999 and the intercept was -0.5598 m. These results are within the expected accuracy of the altimeters. Please refer to *Figure 6* which illustrates the results of the altimeter test.

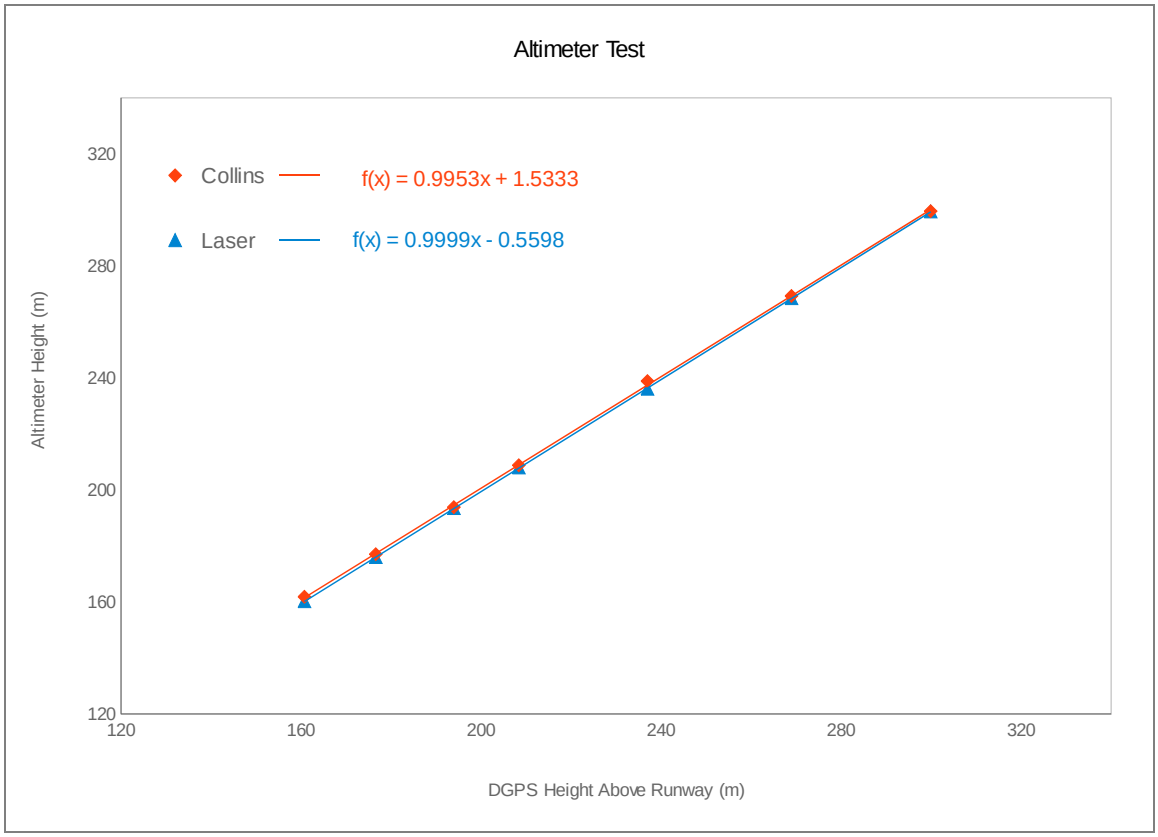


Figure 6: Altimeter test

7. A2 BLOCK SYSTEM TESTS

Magnetometer System Tests

Magnetometer Heading Test

A heading test was performed over the sea southwest of Waterford in southeast Ireland prior to the start of the Waterford Block survey on May 16, 2016. The heading test flight lines were pre-planned, and reference ground magnetic data were obtained through the use of the survey SGL reference station.

Heading errors are calculated as the difference in variation from the average between data acquired when flying in opposite directions. The results of the heading test are presented in *Table 8*. The test determined an average north-south heading error of 0.01 nT and an average east-west heading error of -0.08 nT for the tail magnetometer. The heading error remains consistent through the duration of the survey, and is fully corrected in the normal airborne magnetic data during processing.

Table 8: Tail magnetometer heading test

Aircraft type:	DHC6 Twin Otter
Registration:	C-GSGF
Field Location:	Republic of Ireland
Organization:	Sander Geophysics
Pilot:	Steve Gebhardt

Dir	Line #	Diurnally Corrected Mag	Variation From Average
1	N	-563.7	-0.10
2	S	-563.8	-0.18
3	E	-563.7	-0.06
4	W	-563.7	-0.07
5	N	-563.6	0.05
6	S	-563.5	0.10
7	E	-563.6	0.06
8	W	-563.4	0.22
	Avg	-563.6	
Average N-S Heading Error			0.015 nT
Average E-W Heading Error			-0.075 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 (+/-5°), rolls (+/-10°), and yaws (+/-5°), 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. A Compensation flight was performed on May 16, 2016 at high altitude over the sea to the southwest of Waterford and the calibration coefficients were used for the first survey flights in the A2 Block. After changing one of the aircraft generators, a new set of compensation calibration coefficients were determined on August 26, 2016 in an area approximately 30 km east of Galway. These coefficients were used for the rest of the survey. *Table 9* shows the compensation calibration tests performed for the tail magnetometer and the results. See *Figures 7* and *8* for an illustration of the compensated and uncompensated data acquired during the compensation calibration.

Table 9: Magnetic compensation calibration tests and results

Date	Flight	FOM (nT)	Used for Flights
May 16, 2016	9007	0.890	0001-0082
August 26, 2016	0082	0.873	0083-0115

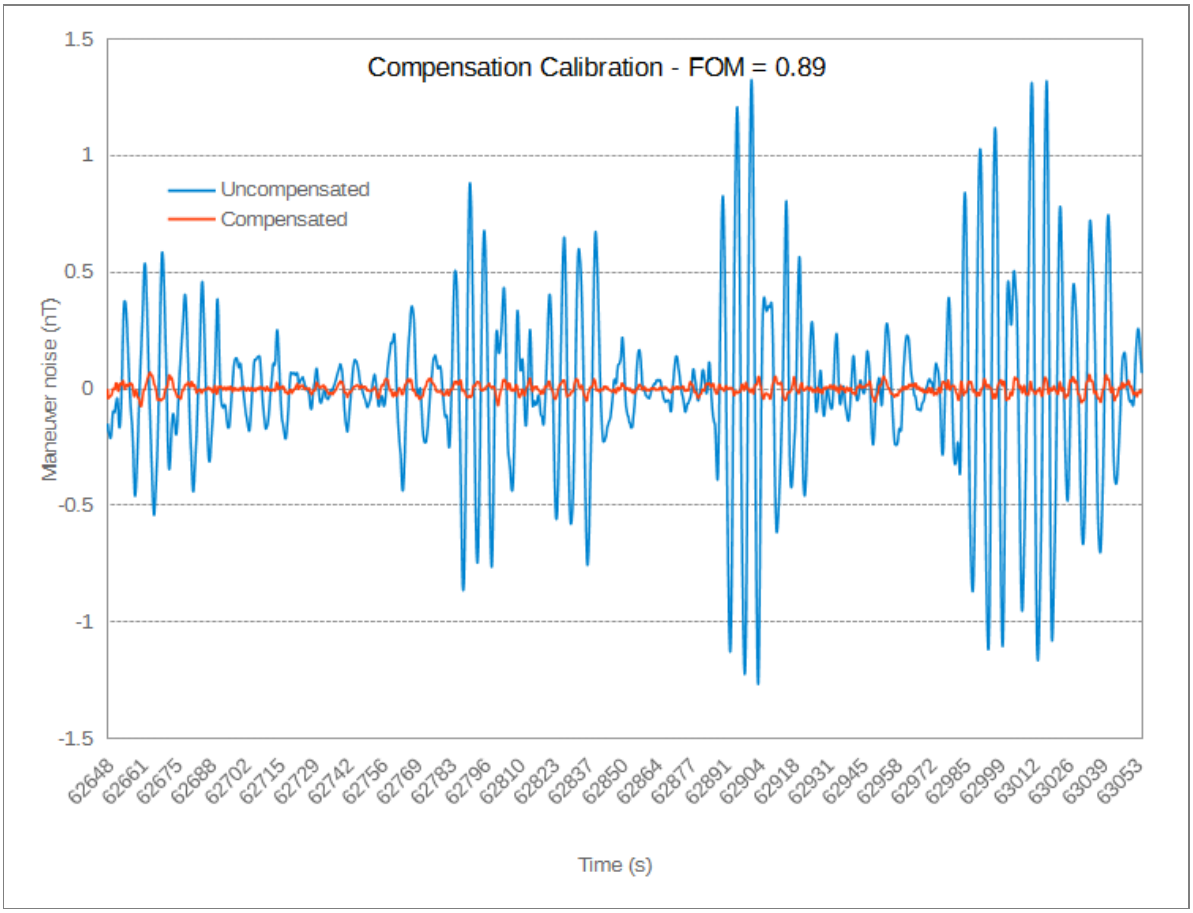


Figure 7: Compensation Calibration Test Results, May 16, 2016

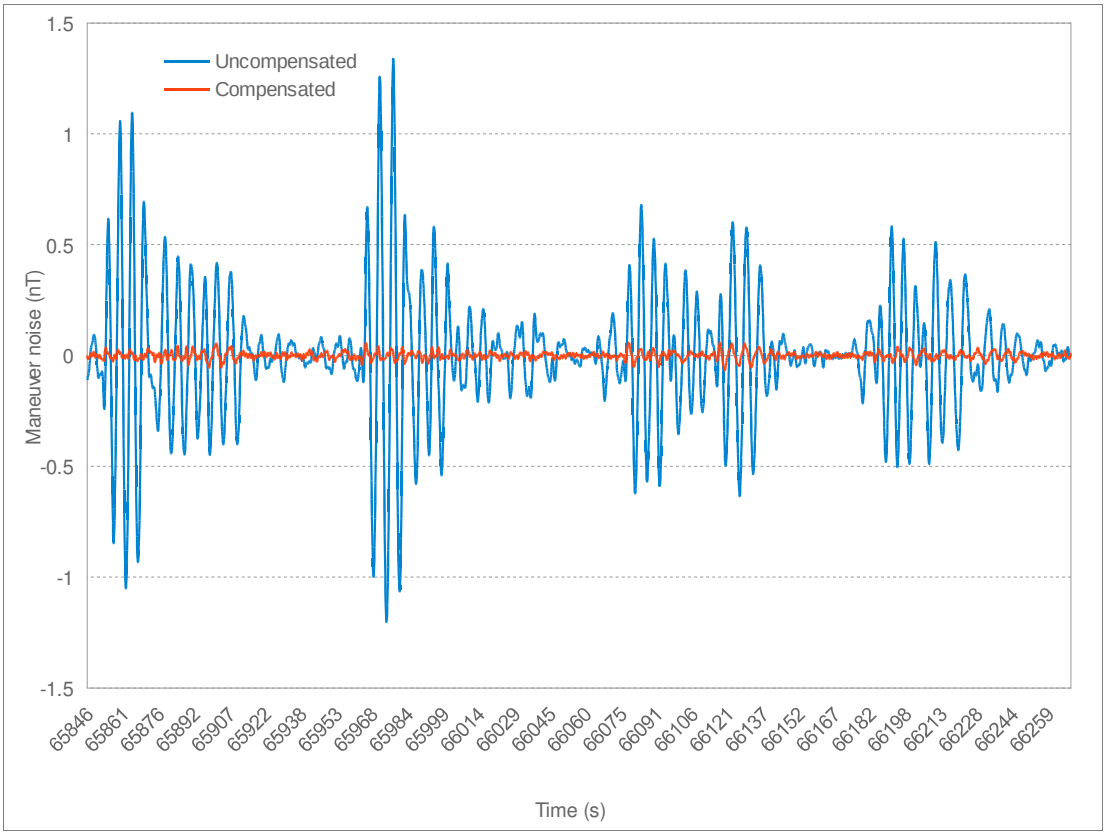


Figure 8: Compensation Calibration Test Results, August 26, 2016

Spectrometer System Tests

Cosmic and Aircraft Background

A cosmic and aircraft background test was performed for the spectrometer on May 16, 2016, over the sea southwest of Waterford in southeast Ireland. The test flight consisted of flying at heights of approximately 1500 m to 3500 m above sea level at 300 m and 150 m intervals, recording between 3 and 6.5 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 10* lists the computed cosmic and aircraft background coefficients. *Figure 9* shows the cosmic test results.

Table 10: Cosmic coefficients

	Cosmic Stripping Factor	Aircraft Background (cps)
Total	1.2501	13.9282
Potassium	0.0685	20.3222
Uranium	0.0557	-4.9112
Thorium	0.0680	-5.0069
Upward	0.0107	-1.1109

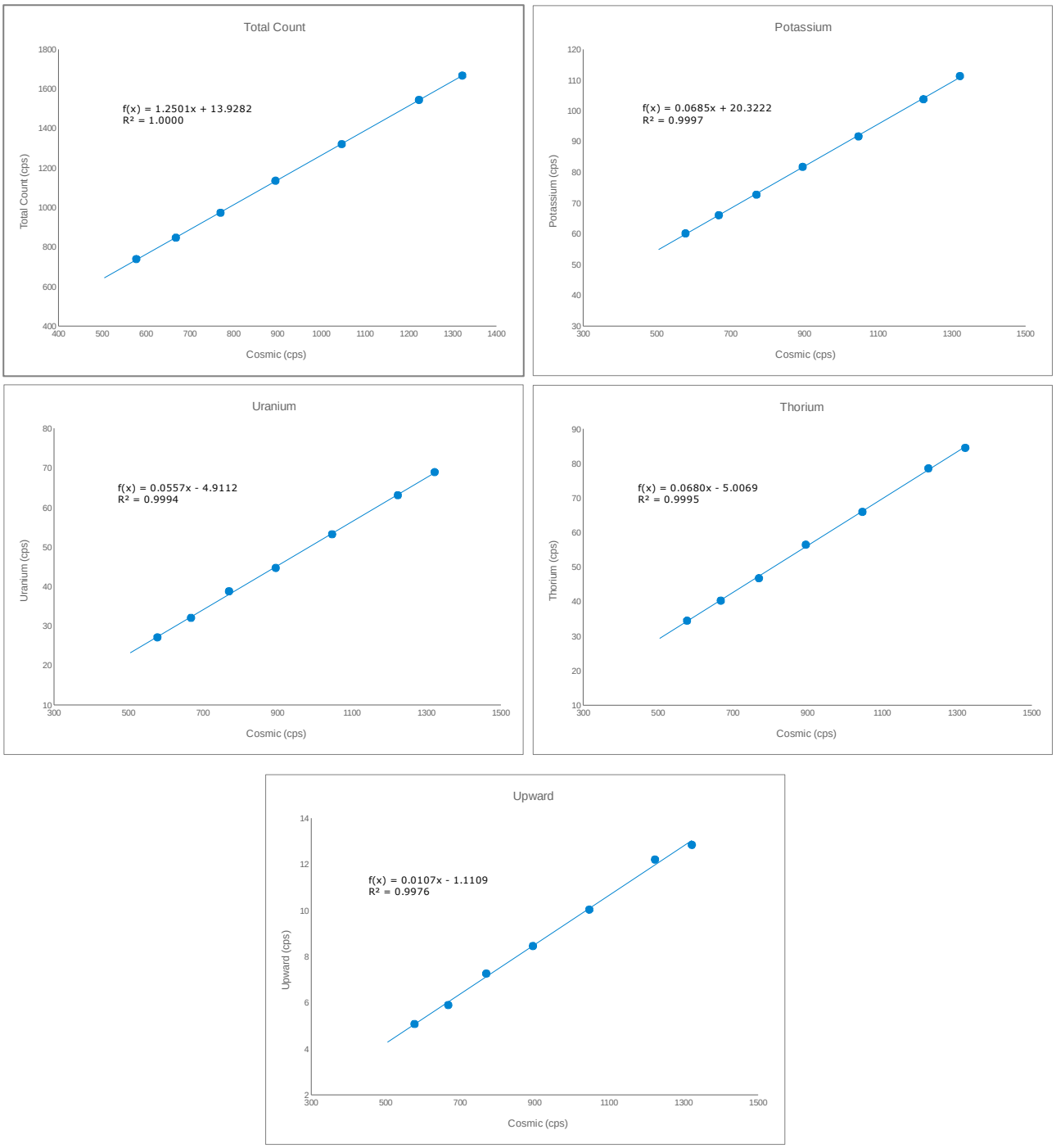


Figure 9: Cosmic test results

Radon Background Calibration

Radon background was monitored through the use of three upward looking detectors. 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 several over water test lines flown over the sea, south of the town of Tramore, Co. Waterford.

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 over water line flown. The coefficients determined for this survey are presented in *Table 11*. Linear regressions of these plots provide the radon coefficients to be used in the radiometric data processing are shown in *Figure 10.*

Table 11: Radon correction coefficients

	a	***b***
$I_r = a_I U_r + b_I$	16.8212	40.4862
$K_r = a_K U_r + b_K$	0.8313	6.2788
$T_r = a_T U_r + b_T$	0.0681	0.8433
$u_r = a_u U_r + b_u$	0.2536	0.0602

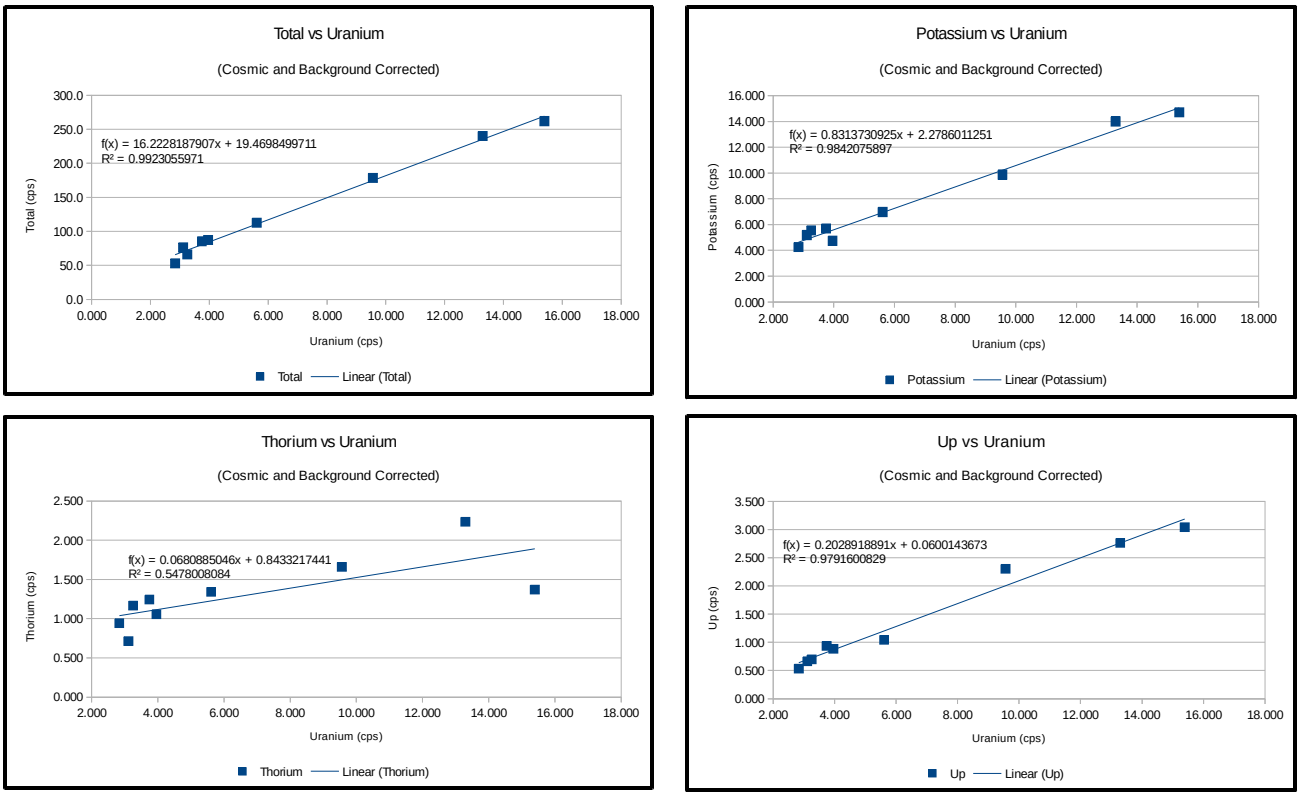


Figure 10: Radon test results

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 are determined from the full survey data set and those used for this project are listed in *Table 12*.

Table 12: Spectrometer ground component coefficients

a_1 (uranium)	a_2 (thorium)
0.034225	0.019581

Daily Source Tests

Thorium and uranium source tests were performed at the start and end of each production day. A source was positioned beneath each crystal pack. Data from the thorium, uranium, and background windows were recorded for 300 seconds during each test. Recorded data were dead-time and background corrected and statistics were compiled. Thorium source test results were within +/-2σ of the mean value, see *Figure 11* and *Figure 12*. The coherence of the data indicates that the system is operating correctly.

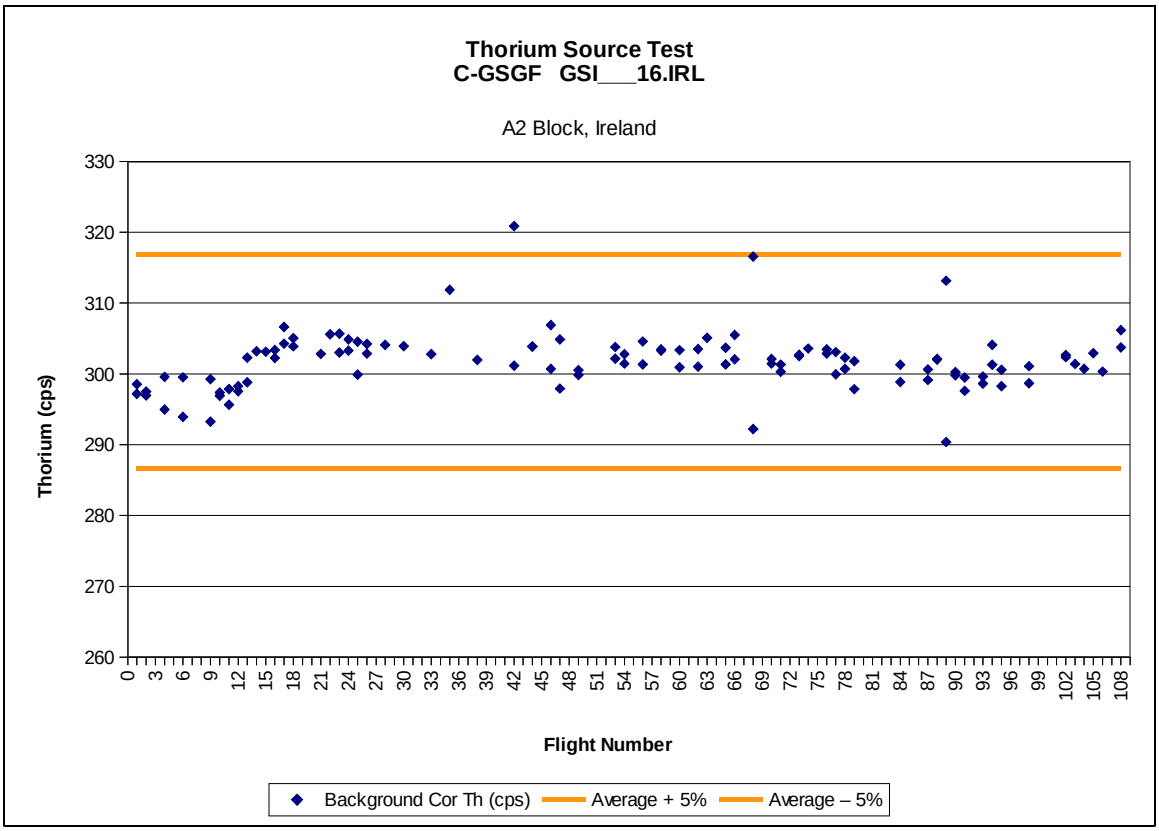


Figure 11: Thorium source test

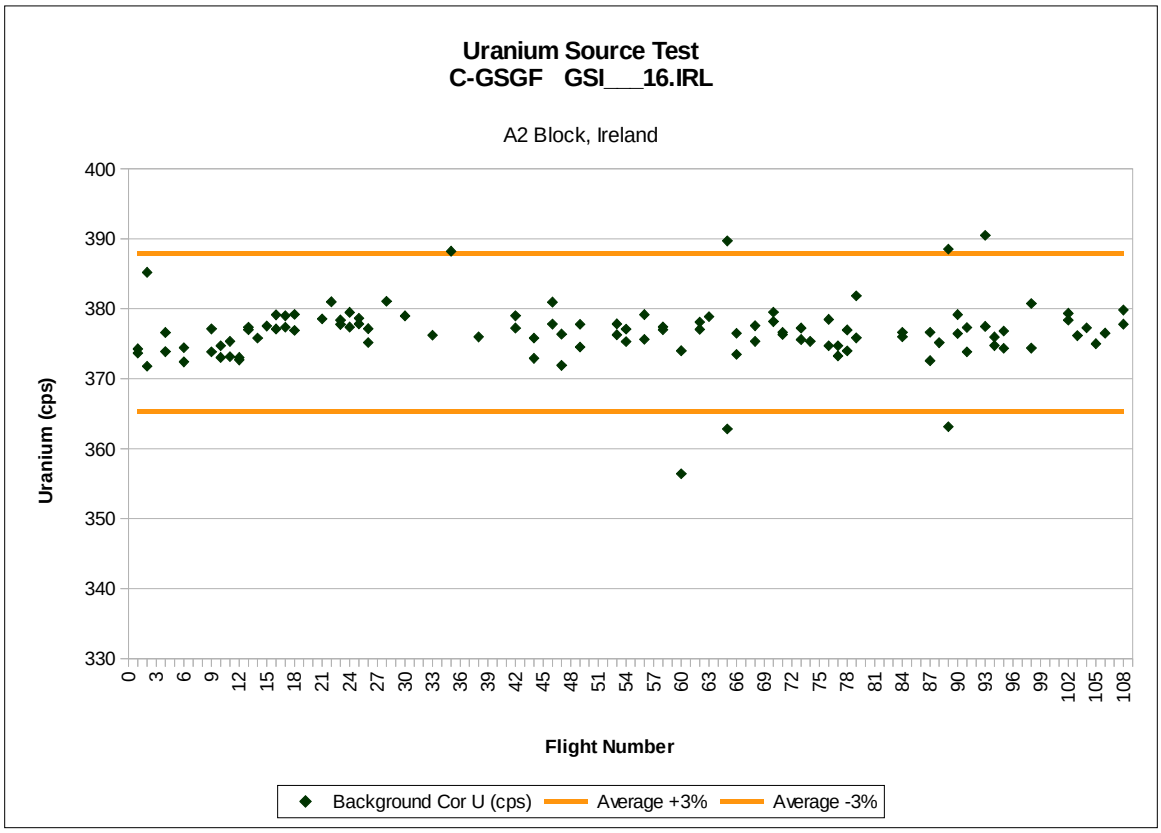


Figure 12: Uranium source test

Frequency-Domain Electromagnetic System Tests

EM System Orthogonality

Prior to each flight, the phase shift between the in-phase and quadrature parts of the EM response is verified and adjusted if required. For each frequency, two pulses of constant amplitude are artificially generated, the first being perfectly in-phase with the primary field, and the second being phase shifted by 90 degrees. Therefore, when the phase orthogonality is properly adjusted, no quadrature response should be observed during the first pulse, and no in-phrase response should be observed during the second. This test is usually performed at 300 m or more above the ground to avoid any EM response from the ground and to minimize cultural interference. The compensation of the primary field that enables EM data to be recorded with reference to an arbitrary zero-level low enough to ensure that the full range of the receiving device can be utilized, is also verified to ensure the system is functioning properly. The orthogonality check is also performed following the flight, while ferrying back to the base. An example of the orthogonality check is shown in *Figure 13*.

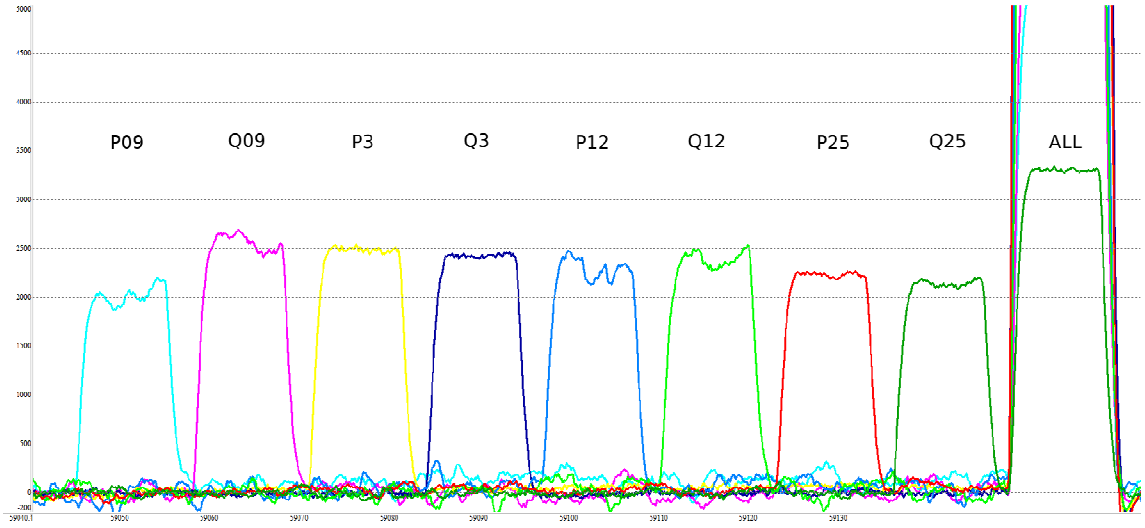


Figure 13: Orthogonality check

Each pulse represents the in-phase and quadrature response for each of the four frequencies in turn, followed by a single large pulse for all frequencies. For the first eight pulses, a well adjusted system will only show a response in the single channel expected, as illustrated here.

EM Over-Seawater Calibration

The frequency domain electromagnetic system was calibrated following procedures described by Hautaniemi *et al.* (2005) using the results from the previous survey flown in 2015. The test site at the time was chosen over Donegal Bay, in an area where water conductivity and temperature have been measured several times over the years, at every metre from surface to sea floor, by the Irish Marine Institute. The water depth reaches over 60 m, ensuring that the bottom sediments do not contribute to the EM response. Conductivity data from two different stations taken at three different years were analyzed, and proved conductivity profiles to be essentially consistent at the two stations and therefore can be assumed to be constant between them. The calibration line location (in red) and the two sampling stations (CE10003_056 and CE10003_057) are shown in *Figure 14*. The conductivity data was analyzed to estimate the conductivity variation with depth, see *Figure 15*. The conductivity change with respect to temperature was analyzed as well over three different years, see *Figure 16*.

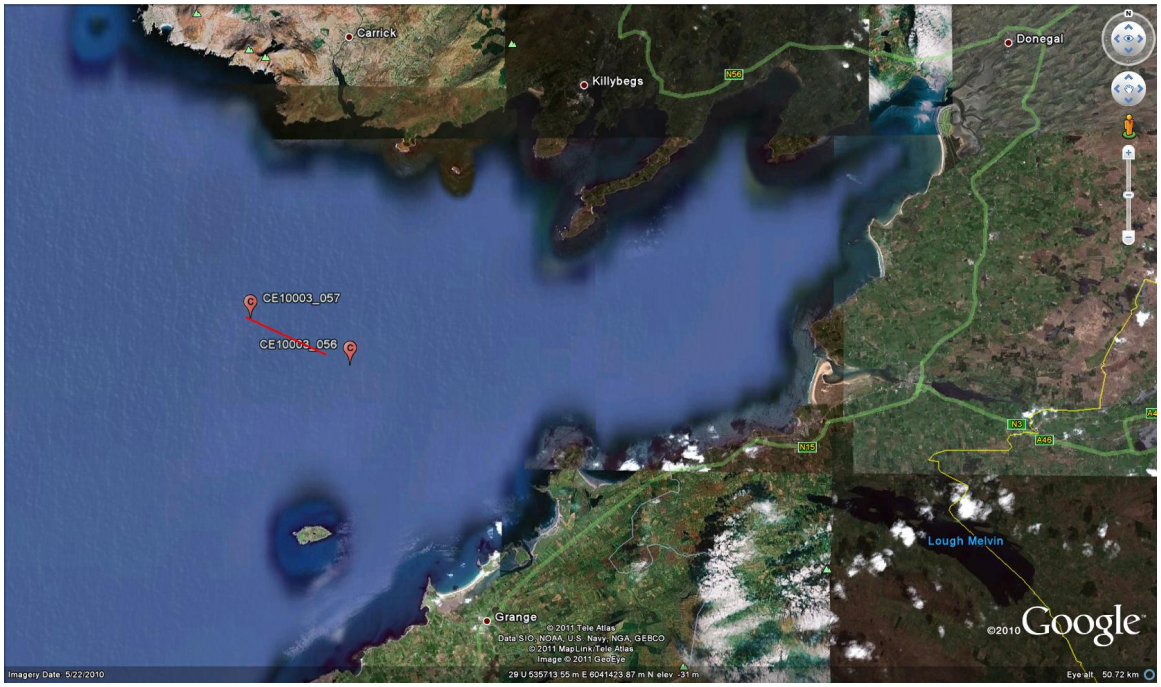


Figure 14: Seawater test line location

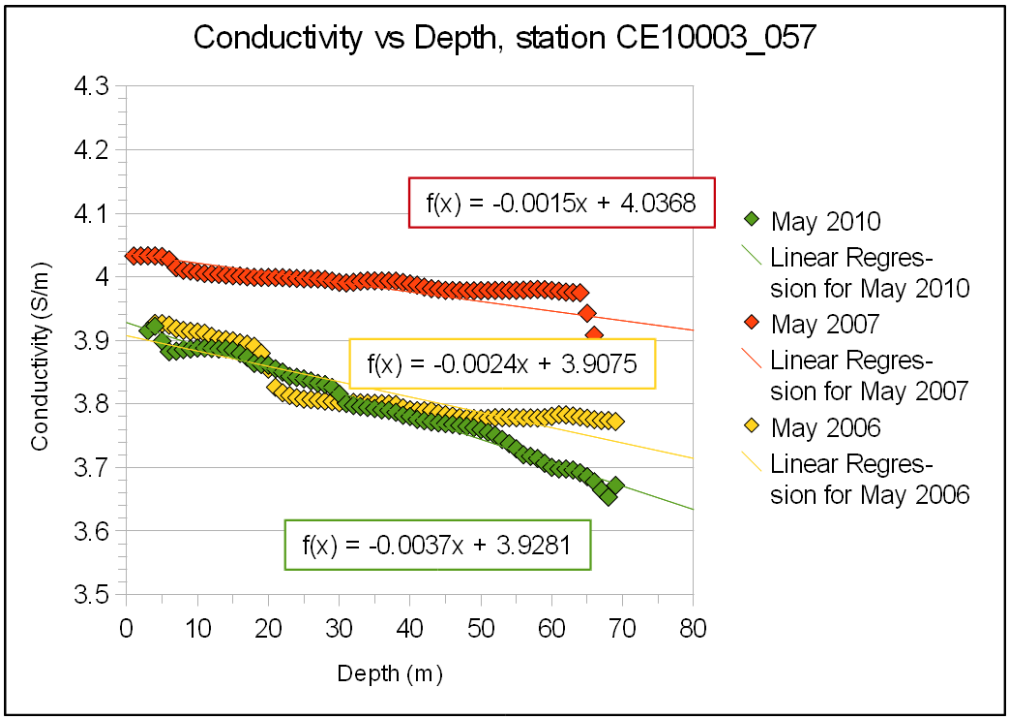


Figure 15: Conductivity variation with depth

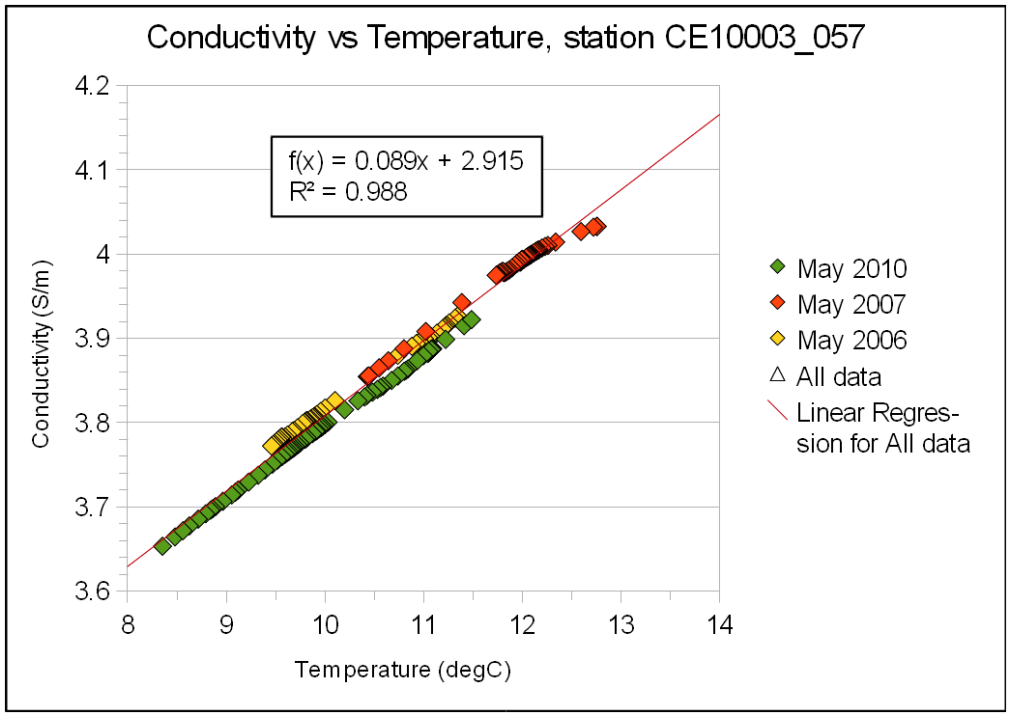


Figure 16: Conductivity variation with temperature

The 4.5 km long calibration line was flown on August 6, 2015 at several heights from 25 to 100 m. Surface water temperature measured on the same day the calibration flight took place (13.36 °C, published by the Irish Marine Institute) enabled the estimation of the water conductivity close to surface ([0.089 S/m°C* 13.36 °C] + 2.915 S/m = 4.10 S/m). Based on the average conductivity decrease with depth observed over the three years, it was possible to estimate the water conductivity at a depth of 30 m ([-0.0025 S/m^2 * 30 m] + 4.10 S/m = 4.03 S/m), and the average conductivity between the surface and a depth of 30 m at the calibration site (4.07 S/m). The skin depth of the induced current is inversely proportional to conductivity and signal frequency, and it is calculated that slight changes in conductivity below 30 m are negligible. This conductivity was used to create a single layer model (half-space), which was employed to calculate the EM response for each component of each frequency, for the range of altitudes covered during the calibration flight. The calculation was performed with the software Airbeo, developed by AMIRA. The results are shown in *Figure 17*.

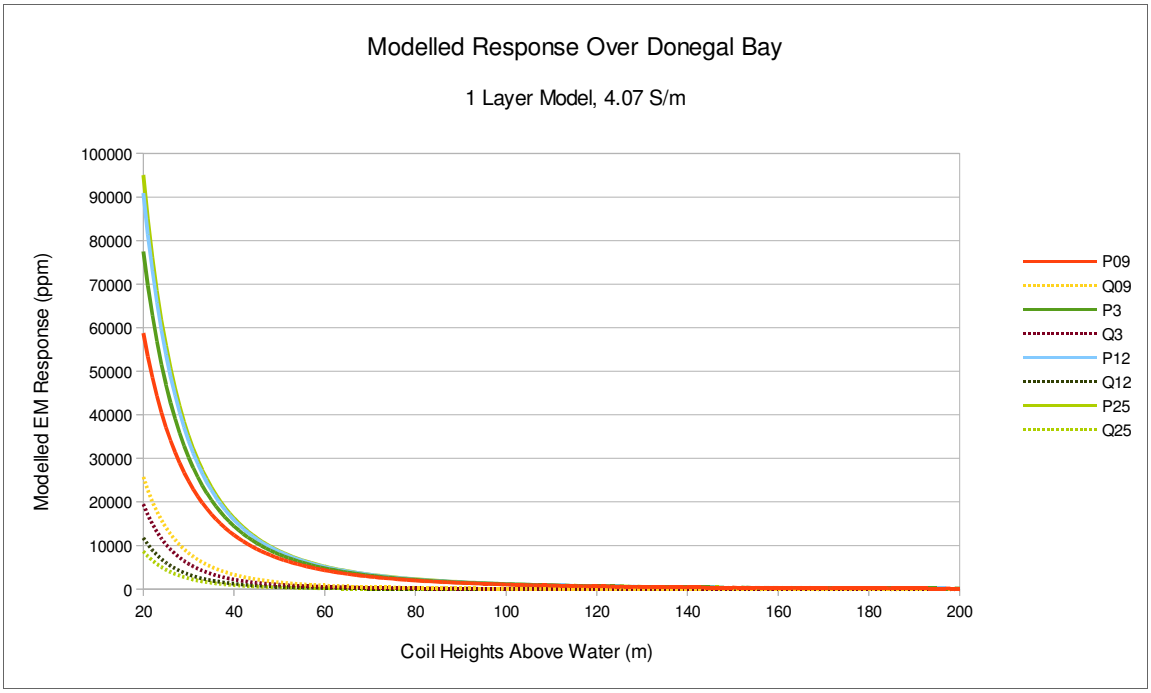


Figure 17: Modelled EM response vs. Coil height above water over Donegal Bay

This model shows how sensitive the EM response is with respect to separation distance between the system and the water. It is therefore important to use accurate clearance information to perform the calibration. The radar altimeter was properly calibrated over the Gatineau airport runway in Canada. Moreover, the altimeter data was corrected for the distance between the radar system and the EM coils. Given the wide footprint of the radar, the use of the strongest return when recording altitude, and the relatively low flying altitude, attitude corrections were deemed negligible. The EM data was also corrected for lag effects.

The receiver measured voltage (V units) recorded along the calibration line were plotted against the theoretical secondary to primary field coupling ratio (ppm units), and the calibration coefficients (ppm/V units) were obtained through a linear regression. In order to ensure that the measured in-phase data used for the calibration is indeed entirely in-phase, the in-phase/quadrature orthogonality was verified before and after the calibration flight and confirmed to be good.

The coefficients obtained for each frequency are summarized in *Table 13*. These coefficients were used for all flights to convert from Volts to ppm. The plots showing the fit obtained for the in-phase response at each frequency are presented in *Figures 18 to 21*. The quadrature coefficients are assumed to be the same at each frequency.

Table 13: Calculated conductivity coefficients for each frequency (ppm/volt)

Frequency	912 Hz	3005 Hz	11962 Hz	24510 Hz
Coefficient	5372	5784	7496	6122

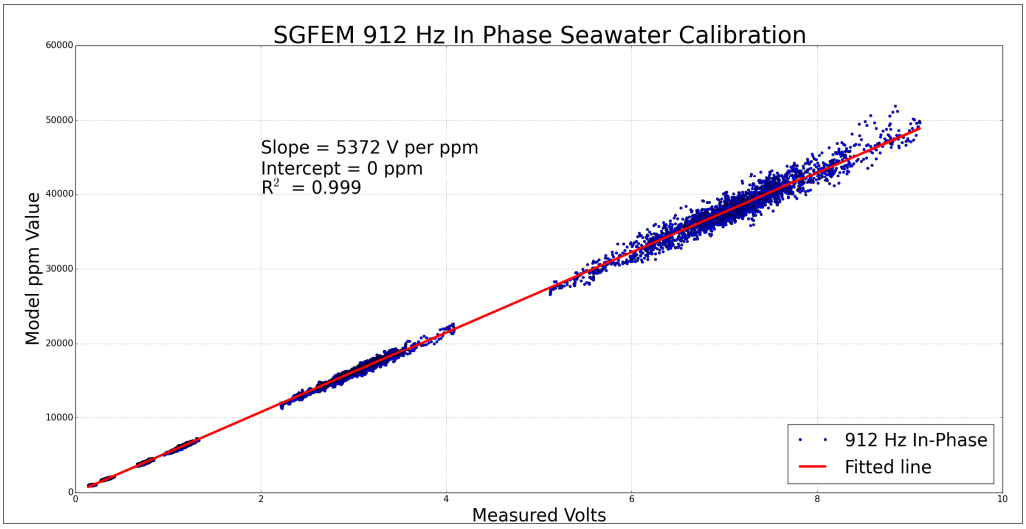


Figure 18: SGFEM 912 Hz In Phase Seawater Calibration

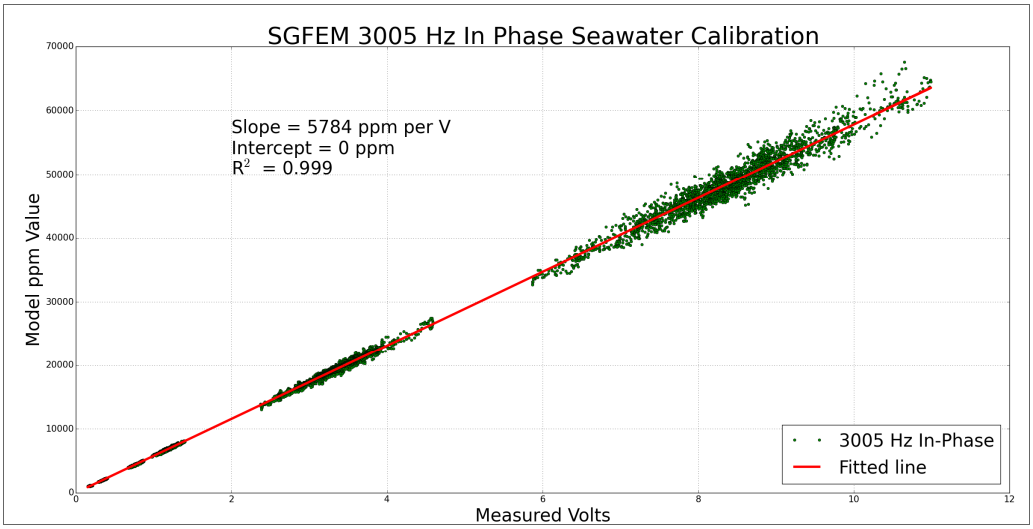


Figure 19: SGFEM 3005 Hz In Phase Seawater Calibration

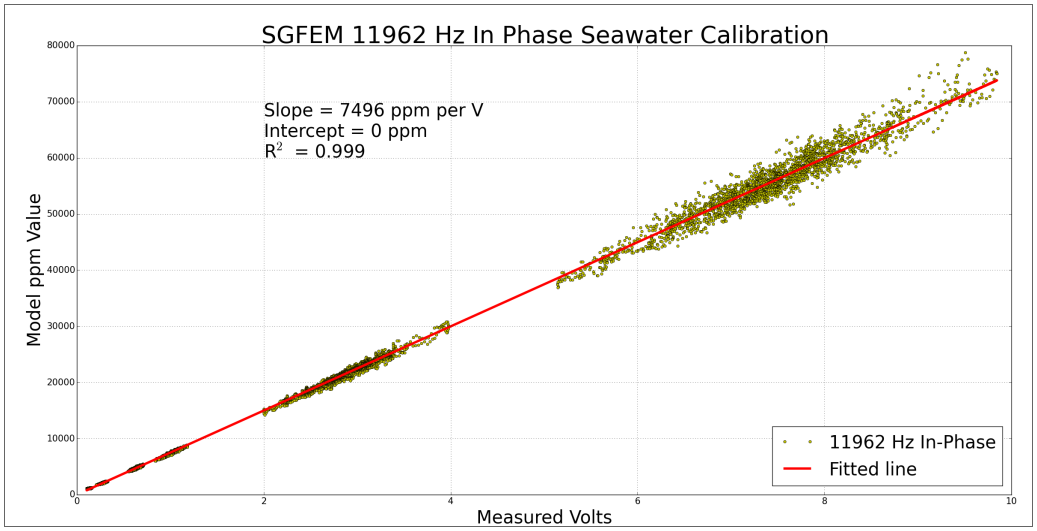


Figure 20: SGFEM 11962 Hz In Phase Seawater Calibration

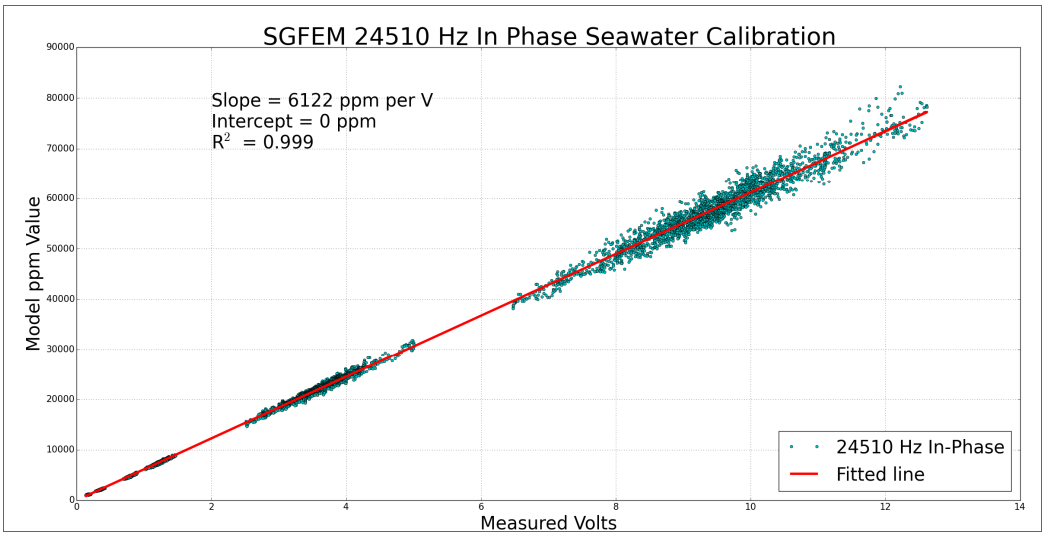


Figure 21: SGFEM 24510 Hz In Phase Seawater Calibration

EM Instrumentation Lag

The lag in the EM 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 EM coils and the GPS antenna. The static lag is known to be 0.70 s from the filters applied during signal processing. The dynamic lag is equal to the offset of the coils and GPS antenna along the long axis of the aircraft, known to be 2.888 m, divided by the flying speed. For this test the dynamic lag averaged 0.048 s, for a total lag of 0.748 s. The lag test was flown for the previous survey, on October 29th, 2015 in Ireland, over a farm compound near the town of Derrinturn Co. Kildare. The results are shown in *Figure 22*.

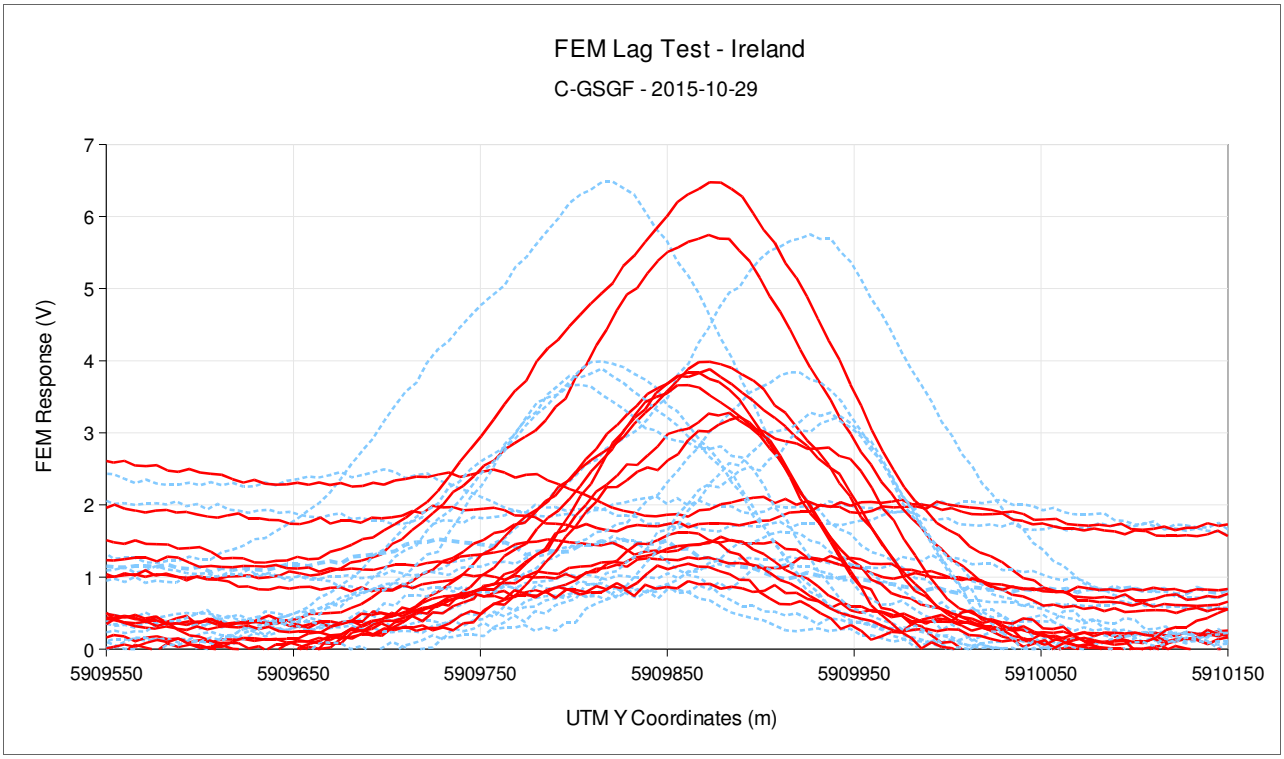


Figure 22: EM instrumentation lag test. The blue traces are the raw EM traces and the red traces are the lag corrected EM traces

EM Transmitter Noise

The effect of the FEM transmitter on the magnetic response was verified for the tail and wing sensors, while flying at high altitude (about 10,000 ft.). This was done by turning the EM transmitter OFF, then back ON. *Figure 23* and *Figure 24* show that the EM transmitter induces no effect on the magnetic signal from either sensor.

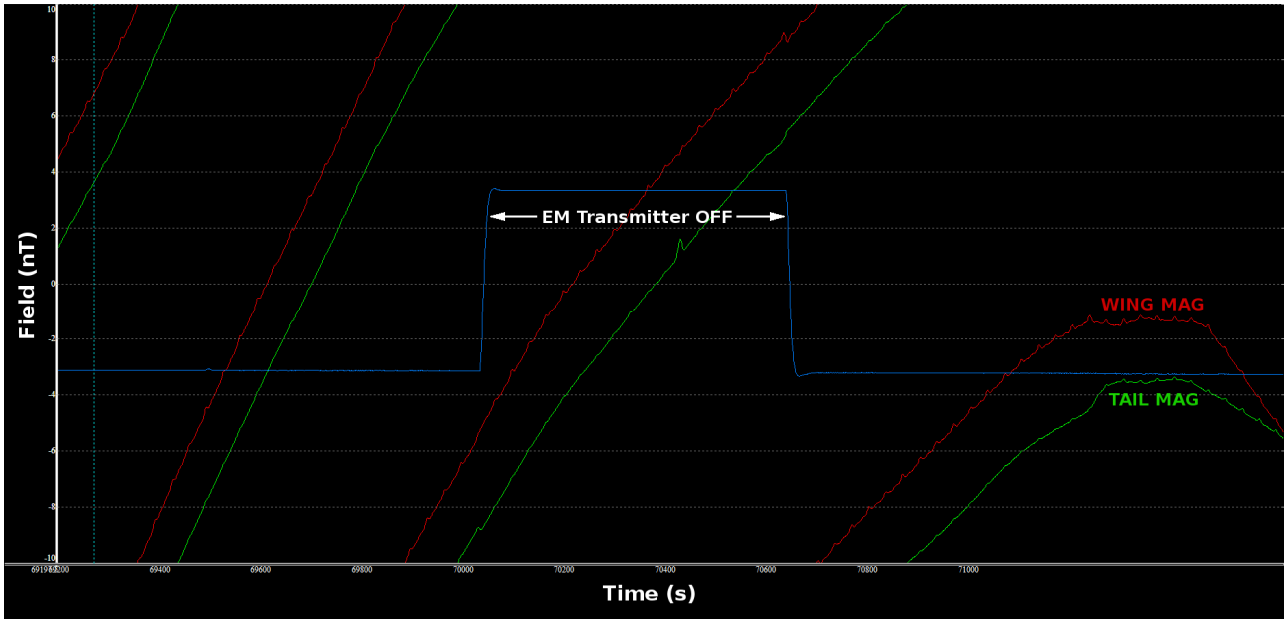


Figure 23: EM transmitter noise test, showing tail and wing magnetic sensor traces.

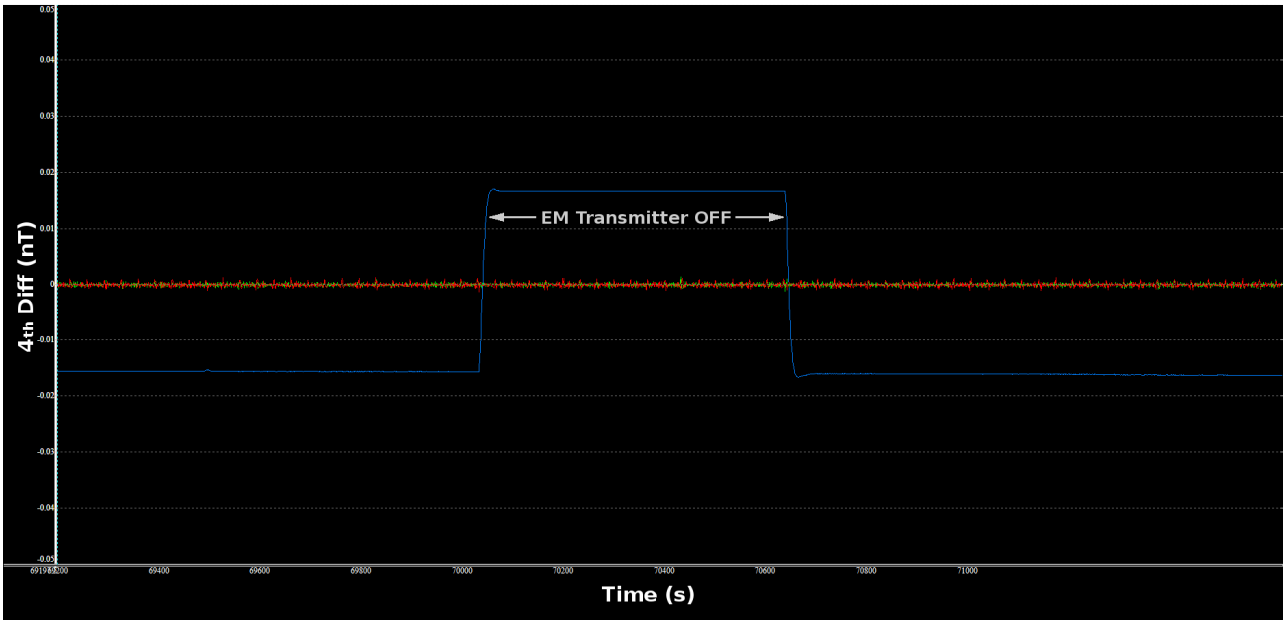


Figure 24: EM transmitter noise test, showing the 4th difference of the tail and wing magnetic sensor traces.

8. FIELD OPERATIONS

Flight operations for this project were performed from three different airports: Weston, Shannon and Galway. The survey required 115 production flights, from June 2, 2016 to October 13, 2016. Weekly reports are provided in *Appendix VI*.

The A2 Block survey commenced immediately after completion of the Waterford Block survey in southwest Ireland. The preferred base of operations was Galway Airport due to its proximity to the survey block, but initially fire-fighting arrangements were not in place. Therefore, initially the survey aircraft moved to Weston Airport close to Dublin on the 26th May 2016 for maintenance whilst the survey crew set up the field office in Oranmore approximetely10 km from Galway in anticipation of operating in the near future from Galway Airport. Reference stations were established at Galway Airport and in nearby Clarinbridge. Airborne operations commenced on 2nd June 2016 from Weston Airport because arrangements were still not in place to allow operations from Galway Airport, and this continued until 11th June (flights 0001 to 0011). Flight 0011 on the 11th June commenced at Weston Airport, but ended at Shannon Airport, which was closer to the survey block and the established field office. Operations continued out of Shannon Airport until the 16th July (flights 0012 to 0027). By this time, fire-fighting arrangements had been arranged at Galway Airport. Flight 0027 on the 16th July commenced at Shannon Airport but ended at Galway Airport, and all further airborne operations were conducted from Galway Airport.

Reference Stations

The two reference stations used for this project were installed. GND1 was located at the crew house yard in Aphouleen, Marce, Clarinbridge, Co. Galway. GND2 was located at Galway airport near the DME building south of the runway.

Picture 3: A view of the survey area

Triangulation using three reference stations from the International GPS Service (IGS) was used to differentially correct the GPS receiver locations. Data from IGS stations HERT (Hailsham, United Kingdom), FLRS (Santa Cruz das Flores, Portugal) and NYA1 (Ny-Alesund, Norway) recorded on days 154, 155 and 156 were used.

The position of the GPS antennas of the reference stations after differential correction is shown in *Table 14.*

Table 14: GPS Reference Station Location in the WGS-84 datum

Station	Latitude	Longitude	Elevation
GND1	N53°13'29.31326"	W08°56'54.49351"	63.6598 m
GND2	N53°17'58.13872"	W08°56'28.1690"	80.3453 m

Operational Issues

The weather provided the main challenge for airborne operations in the A2 Block. Rain, poor visibility and windy days caused various delays and flight cancelations. Scheduled maintenance was also performed on the aircraft during the survey. Operations were disrupted whilst fire-fighting arrangements were put in place at Galway Airport, so that initial survey flights were conducted first from Weston Airport and then from Shannon Airport, both some distance from the block. When operations from Galway Airport were finally commenced, fuel was not immediately available. Therefore the aircraft returned to Shannon to refuel after each flight, and back to Galway ready for the next day. This continued until a fuel supply was established at Galway Airport on 13th July, 2016. Reflights and partialed lines are listed in *Appendix IV*.

Field Personnel

The technical personnel of SGL that participated in field operations are given in *Table 15*.

Table 15: Field Personnel

Field Personnel	Name	Dates in Field
Operations Manager	Alex Pritchard	n/a
Field Crew Chief	Alison McCleary	May 30, 2016 – October 20, 2016
Data Processor	Diana Kuiper	May 30, 2016 – July 11, 2016
Data Processor	Cameron McKee	July 8, 2016 – October 5, 2016
Technician	Craig McMahon	May 30, 2016 – June 17, 2016
Lead Pilot	Steve Gebhardt	May 30, 2016 – October 20, 2016
Pilot	André Lafontaine	July 19, 2016 – September 19, 2016
Pilot	Charles Dicks	May 30, 2016 – October 15, 2016
Pilot	Jason Thomas	May 30, 2016 – June 30, 2016
Pilot	Jeff Tucker	September 18, 2016 – October 15, 2016
AME	Ian Boychuck	May 30, 2016 – July 4, 2016
AME	John Sevenhuysen	July 3, 2016 – September 2, 2016
AME	John Burnham	August 31, 2016 – October 15, 2016

9. 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, generating traces of all of the data channels, and creating preliminary data grids.

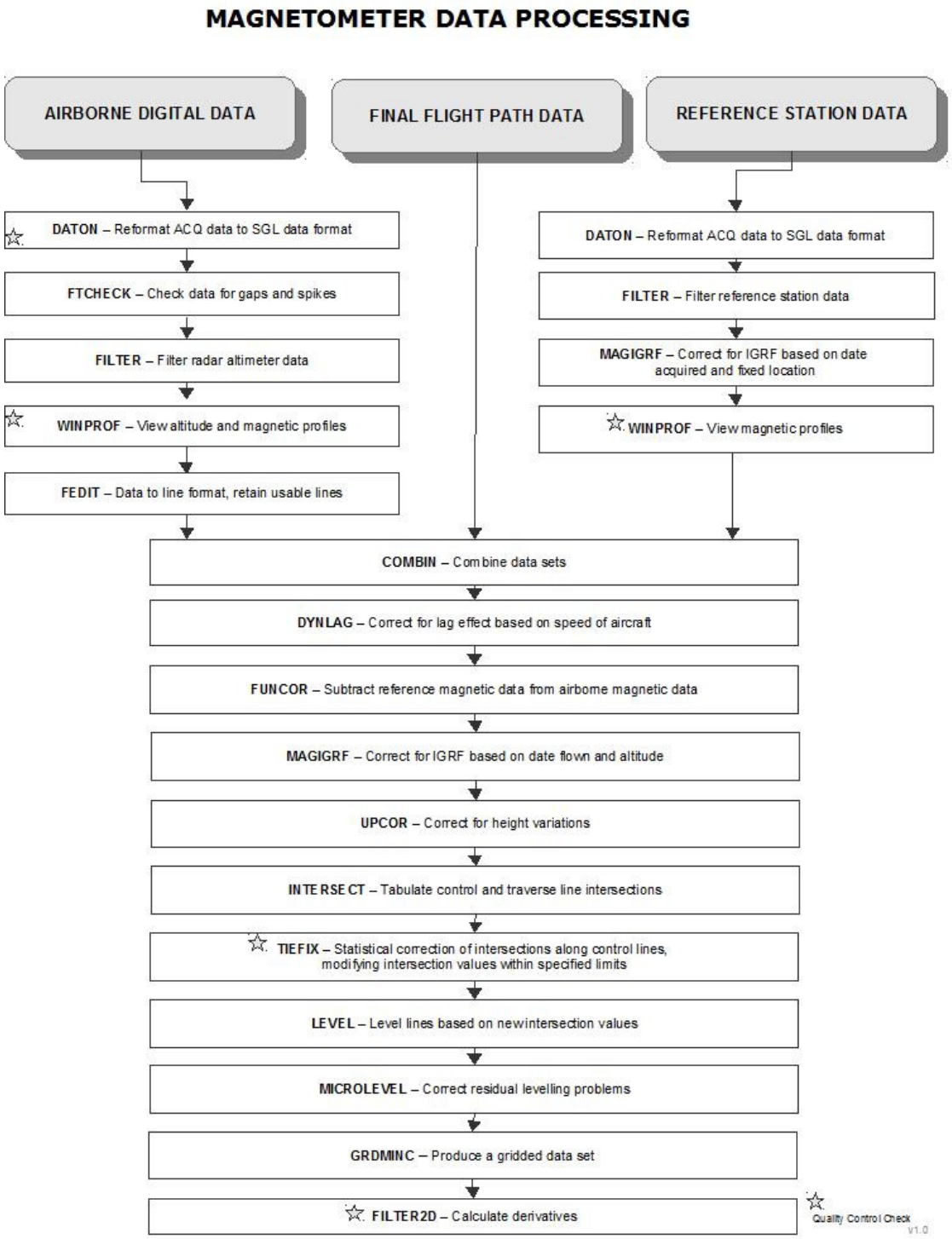


Figure 25: Magnetometer data processing flowchart

Magnetometer Data

A magnetic data flowchart is presented in *Figure 25*. 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. Although the data is not edited to remove the large number of cultured effects, one large spike due to infrastructure was removed at the north end of line 1125. A dynamic lag correction averaging 0.287 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.

The ground based reference magnetometer data were inspected for cultural interference and edited where necessary. All reference station magnetometer data were filtered using a 121-point low pass filter (see *Appendix VII*) 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 and the recorded date for each flight. The mean residual values of the reference stations calculated to be -167.030 nT for GND1 and -33.551 nT for GND2 were subtracted from the ground station data to remove any bias from the local anomalous field. A further small adjustment of +0.051 nT was applied to GND2 to remove the average bias between the two reference stations. Diurnal variations in the airborne magnetometer data were removed by subtracting the corrected reference station data. GND1 was used for all flights except 0002, 0004, 0021, 0054, 0060, 0068, 0071, 0076 and 0079, which used GND2.

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.

Height Correction

The survey was flown in radar guidance mode in order to stay as close to the target survey altitude of 60 m as much as possible. This approach was adopted in order to optimize the acquisition of frequency domain electromagnetic (FEM) data which is known to drop off in signal strength rapidly. Little reliable FEM data is acquired a heights of 200 to 250 m above ground depending on the signal frequency and the conductivity of the ground, and the lower the survey is flown, the higher the signal to noise ratio for all frequencies.

By adopting a flying strategy optimized for FEM data, drape flying was not possible, resulting in survey lines flown at different altitudes in adjacent lines and at intersections between traverse and control lines. Inevitably this results in differences in the spectral content of airborne magnetic data where the survey height above ground was inconsistent. At low altitudes, even relatively small differences in altitude may result in significant changes in spectral content of the magnetic data. Amplitude of magnetic signal drops off with height at an exponential rate proportional to the frequency of the signal, so that high frequency signal in particular changes rapidly with small changes in altitude close to the ground. Correcting for such changes using traditional levelling methods can be challenging since there is no way to properly extrapolate corrections from miss-ties at intersections due to altitude differences.

Therefore, there is an advantage to correcting the airborne data for height variation before attempting levelling.

In order to correct magnetic data for altitude variation, we first need to define a consistent surface that will be used as a reference height. This can be a surface of constant height with respect to the ellipsoid or a "virtual" drape surface. The drape surface approach has the advantage of retaining as much of the recorded signal content as possible whilst achieving consistency of height at intersections and smoothly varying heights between adjacent lines. The reference drape surface was made based on a grid of the height of the survey lines as actually flown. At intersections where traverse and control lines cross, the higher of the two is used. The resultant surface is then converted to a smooth drape using a climb rate of 500 feet/nMile. This ensures that the reference surface is always at or slightly higher than the altitude as flown so that all corrections for height can be achieved using a stable upward continuation operation.

To determine the height corrections, a preliminary version of the levelled data is created that uses heavy micro-levelling to temporarily account for the height differences. The preliminary levelled magnetic data is then upwardly continued by a range of distances up to the maximum separation between the survey altitude as flown and the reference surface. The mean separation is 15 m, up to a maximum of 655 m in the hills in the north of the survey block, with additional height corrections due to flying over towns. A profile based method was used to perform the latter because high frequency cultural effects in this survey block were not well sampled in the cross line direction. The height correction is then applied to the unlevelled data, and final levelling is then performed.

Levelling

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

$\Sigma |i - a|$ summed over all traverse lines
where, i = (individual intersection difference)
a = (average intersection difference for that traverse line)

Adjusted control lines were further corrected locally to minimize any residual differences. Traverse line levelling was carried out by a program that interpolates and extrapolates levelling values for each point based on the two closest levelling values. After traverse lines have been levelled, the control lines are matched to them. This ensures that all intersections tie perfectly and permits the use of all data in the final products.

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 magnetic anomaly and vertical derivative grids, plotting profiles of corrections along lines, and examining levelling statistics to check for steep correction gradients.

Micro-Levelling

Micro-levelling was applied to remove any residual diurnal and/or height related artifacts from the data. This was achieved by using directional filters to identify and remove artifacts that are long wavelength parallel to survey lines and short wavelength perpendicular to survey lines. A limit of +/-1.2 nT was set for micro-levelling corrections, with an additional micro-levelling of +/-2 nT applied to selected areas where high gradients combine with large height differences to cause strong local artifacts.

Gridding

The grid of the magnetic anomaly 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 magnetic data were created with 50 m grid cell size appropriate for survey lines spaced at 200 m. Images of fully processed data are provided in *Appendix XII*.

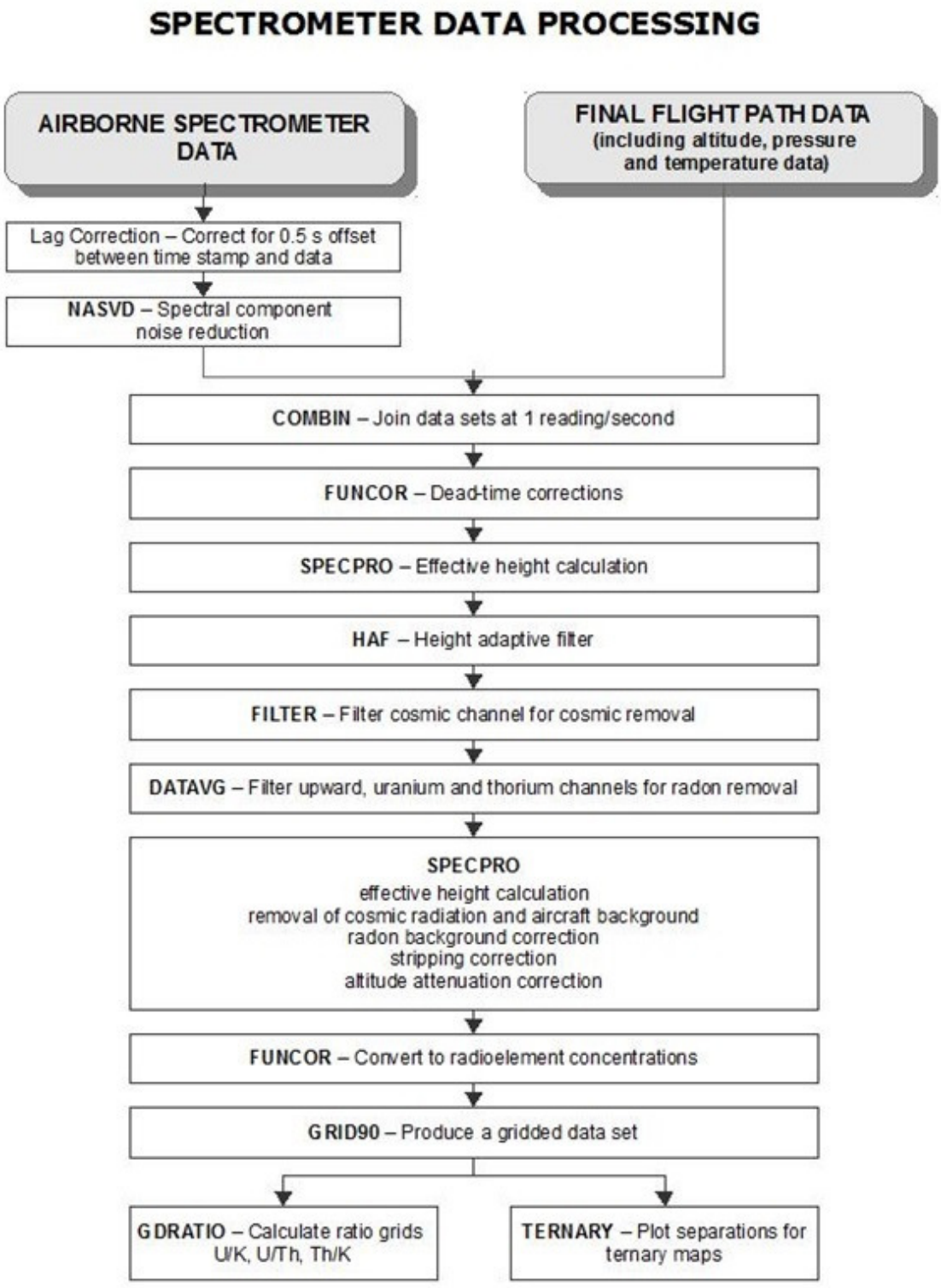


Figure 26 - Spectrometer data processing flowchart

Spectrometer Data

A spectrometer data compilation flowchart is presented in *Figure 26*.

A 0.5 second shift was applied to all data to correct for the time delay between detection and recording of the airborne data. The data were recorded at 1 Hz in asynchronous mode, and subsequently interpolated to 1 Hz synchronous data on the exact second.

Spectral Component Analysis

Raw 1024 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 4th Decennial International Conference on Mineral Exploration, 1997). Normalization with respect to the count rate is achieved by dividing each measured spectrum by the standard deviation 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 1024 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.

Components 0 to 5 plus component 37 and 38 were retained for the lower flown data (See *Appendix VIII*).

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*. Parameters are adjusted during processing through analysis of the corrections applied, and therefore may differ from those determined from calibration test flight data

Table 16: Spectrometer processing parameters

Spectrometer Processing Parameters		
Window	Cosmic Stripping Ratio (b)	Aircraft Background (a)
Total	1.2501	13.9282
Potassium	0.0685	20.3222
Uranium	0.0358	0.0000
Thorium	0.0508	0.5000
Upward	0.0063	0.0000
Radon Component	a	b
Total (I_r)	10.6696	26.2298
Potassium (K_r)	0.7662	1.4384
Thorium (T_r)	0.0531	0.4618
Up (u_r)	0.1913	0.0000
Ground Component	a_1	a_2
Up (u_g)	0.04230	0.01505
Stripping Ratios	Contribution on the Ground	Effective Height Adjustment (m^{-1})
α	0.2760	0.00049
β	0.4208	0.00065
γ	0.7702	0.00069
a	0.0442	
b	0.0004	
g	0.0009	
Attenuation Coefficients (m^{-1})		
Total	-0.006882	
Potassium	-0.008386	
Uranium	-0.007462	
Thorium	-0.006309	
Sensitivities		
Potassium	187.9987 cps/%	
Uranium	24.9462 cps/eU ppm	
Thorium	10.3658 cps/eTh ppm	

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

Calculation of effective height above ground level (AGL)

Clearances obtained by the subtracting the SRTM measurements from the aircraft DGPS altitude in conjunction with barometric altitudes were used to calculate the effective height. A frequency domain filter was used to filter the 10 Hz barometric altimeter data. The latter was then converted to equivalent pressure and used with the digitally recorded temperature to convert the clearance 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 clearance above ground in metres
T = the air temperature in degrees Celsius and
P = the barometric pressure in millibars.

Height adaptive filter

Adaptive filters were applied between 300 m and 400 m effective height to improve the signal-to-noise ratio for Potassium, Thorium, Uranium and Total Count. A moving average filter is applied to data and the degree of filtering applied increases gradually up to 400 m up to a maximum of a 9 point running average. Data collected at a terrain clearance greater than 500 m are often considered unreliable due to the low count rates and consequent low signal to noise ratio, but the maximum effective height for this survey was 484 m so the issue does not arise.

Removal of cosmic radiation and aircraft background radiation

A 67-point low pass filter (see *Appendix VII*) 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:

$$N = a + bC$$

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 199-point running average filter is applied to 1 Hz downward uranium, downward thorium and upward uranium count data for the purposes of the 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:

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

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

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

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,

α, β, and γ = the forward stripping ratios, and

a, b and g = the reverse stripping ratios.

α, β, and γ 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:

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

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,

μ = 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.

The northern part of the survey block encompasses some significant terrain. At high altitudes the gamma-ray data becomes too weak to correct for attenuation, but the effective height limit at which this occurs is to some extent dependent on the strength of the pre-attenuated signal from the ground. The limits listed in *Table 17* were placed on data based on inspection of the data. Channels of data with and without this limit applied are supplied, but the gridded data is limited only.

Table 17: Effective height limits applied

Gamma-Ray Source	high count rate effective height limit (m)	low count rate effective height limit (m)	definition of low count rate data (cps)
Total Count	450	250	<15
Potassium	550	300	<0.5
Uranium	425	250	<0.5
Thorium	550	300	<2.5

Correction for the effects of residual radon, terrain and changing conditions

Scaling corrections were applied to portions of lines to account for residual impact of radon, terrain and for changes in the ground conditions during the survey. First the upward count channel was scaled for some lines where it appears that the presence of radon beneath the aircraft was underestimated or overestimated, and the radon correction is adjusted accordingly. Then, before micro-levelling, parts of some lines were adjusted either by shifting or scaling the data to account for inconsistencies from line to line in different radio elements. Most of these adjustments were applied to data over water or in areas of high clearance above ground. See *Appendix IX* for a list of factors applied.

Micro-Levelling

Micro-levelling was applied to remove any residual artifacts probably due to radon from the total counts and uranium concentration. This was achieved by using directional filters to identify and remove artifacts that are long wavelength parallel to survey lines and short wavelength perpendicular to survey lines. A limit of +/-4 counts/s and +/-0.03 ppm was set for micro-levelling corrections of total counts and uranium concentration, respectively.

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}Bi for uranium, ^{208}Tl for thorium).

Data gridding

Grids of gamma ray data are provided that were generated in two different ways. The first method employs the minimum curvature algorithm as described for the magnetic data, the only difference being that all data values within a cell are averaged first before running the algorithm. This method preserves edges of bodies well, but also

emphasises the random noise that is an inherent characteristic of gamma ray data. The second method uses a cosine weighted moving average gridding algorithm that is considered appropriate for gridding gamma-ray data. The method generates a 2-dimensional grid, equally incremented in x and y, from randomly placed data points. Radiometric data for each cell are derived from a circular average within a radius of 305 m with a cosine weighting function that gives greatest weight to data located closest to the cell centre. The radiometric data were interpolated to a 50 m grid cell size appropriate for survey lines spaced at 200 m. Control line data that satisfies the effective height requirements have been included in the grids only where valid traverse line data does not exist. Images of fully processed data are provided in *Appendix XII*.

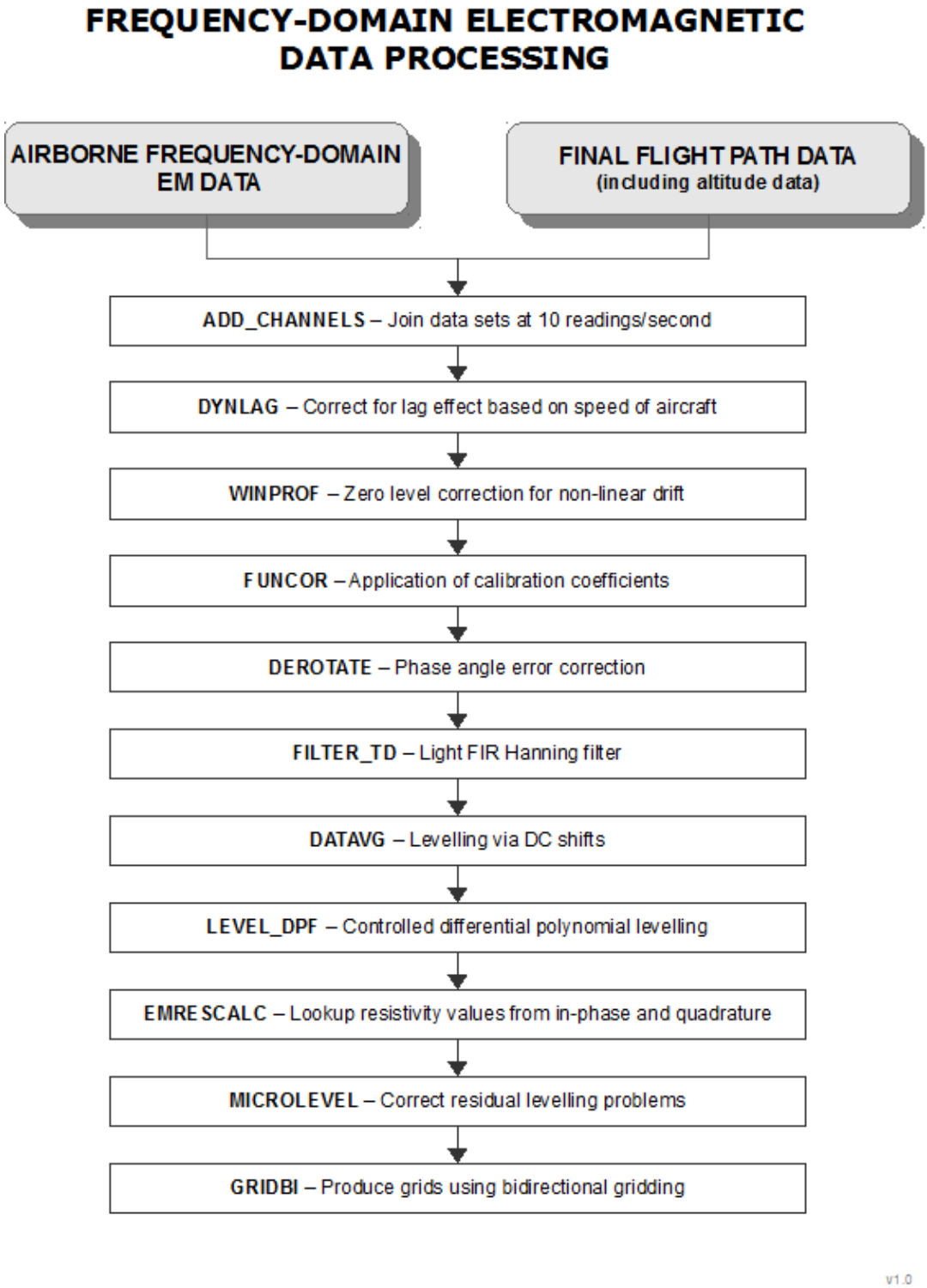


Figure 27: Frequency-domain electromagnetic data processing flowchart

Frequency-Domain Electromagnetic Data

A flowchart showing all the data processing steps can be found in *Figure 27.*

The airborne electromagnetic data were recorded in volts at 40 Hz, and down sampled to 10 Hz for processing. The data were recorded at four frequencies (912 Hz, 3005 Hz, 11962 Hz and 24510 Hz) each with two components, in-phase with the source pulse and out of phase "quadrature" each expressed as volts. The data were visually inspected for spikes and noise. Identification of cultural interference is assisted by the Power Line Monitor, and radio calls are detected and recorded in a flag channel that is 1 when a call is made, and 0 otherwise.

Lag

A +0.70 s static lag correction due to signal processing was applied to each data point. In addition a variable lag correction is applied that is a function of speed and the physical offset between the GPS antenna on the aircraft cabin and the electromagnetic pods as measured along the long axis of the aircraft, known to be 2.888 m. Therefore, the total lag applied is equal to (0.70 + (2.888/v)) s where v is the instantaneous velocity of the aircraft in m/s. The aircraft speed dependent lag is calculated using SGL's Dynlag software.

Interactive Single Flight, Zero Level Correction For Non-Linear Drift

The zero level of the system can drift, possibly due to variations in the temperature of the air outside and inside the aircraft, and of the instrument components. To correct for drift, SGL uses a method similar to that described by Leväniemi et. al (2009, Journal of Applied Geophysics, 67, 219-233). The data is often zero when the survey aircraft is more than 250 m above resistive ground, and we can use these regions to define a curve of corrections which brings the data to the correct level on a flight by flight basis. The start and end of the correction curve for each flight are set to coincide with the zero level calibration pulse procedure which is performed at approximately 350 m above ground before and after flying the survey lines. Intermediate points during production were determined when the aircraft ascended to flying heights of over 120m to 250 m above resistive ground, particularly when flying over obstacles or ferrying between sections of the survey block. The EM response data at the start, end and intermediate points are shifted until they are zero. Shifts between the known zero points are interpolated using an akima spline to define the full correction curve in between. A separate correction curve is required for the in-phase and quadrature data of each frequency and is subtracted from the observed data. The drift curve is centred on the noise envelope of the data, which varies between frequencies (see below), therefore when the base level is near zero some negative data will occur.

Conversion to PPM

Drift corrected data in volts are converted to parts per million (ppm) of the source signal using the calibration coefficients described in the section "EM Over Seawater Calibration" earlier in this report (see *Table 13*). The sea water calibration assumes a homogeneous half space which allows modelling in ppm, which when compared to the measured voltages allows calibration coefficients to be determined.

Derotation

The pre and post flight phase orthogonality test is used to verify that the in-phase and quadrature data are at 90° to each other (see "EM Source Orthogonality" earlier in this

report). If an in-phase response is detected in the quadrature signal for any frequency, or vice versa, for a given flight, a derotation correction is applied on a flight by flight basis, linearly interpolated between the pre- and post-flight calibration. The following formulae are applied to each component and frequency as necessary:

$$I' = I \cos \theta_i + Q \sin \theta_i$$

$$Q' = Q \cos \theta_q - I \sin \theta_q$$

where:

I = Observed in-phase signal,
I' = R=Derotated in-phase signal,
Q = Observed quadrature signal,
Q' = R=Derotated quadrature signal,
and
θ_i, θ_q = angle of rotation from orthogonality.

θ_i, and θ_q are determined experimentally until the rotation effect is removed from the orthogonality test data. The average of the rotations applied was approximately -0.7° with a standard deviation of 2.1°, the larger rotations were applied to the 25 kHz data.

Filtering

A 1 second (10 sample) Hanning FIR low pass filter is applied to each component and frequency of EM signal to reduce the high-frequency (out of the earth signal range) noise envelope.

Levelling

Data from each flight is split into lines for the purpose of levelling. Averages are calculated, first by flight and then by line (two pass approach) in order to determine zero order ("DC shift") corrections to each survey flight/line to bring them to a level with neighbouring flights/lines. Following the zero order corrections, differential polynomial levelling following the method of Beiki et. al (2010, Geophysics, Vol. 75, No. 1, L13-L23) is used as a third and last set of corrections. The algorithm is based on polynomial fitting of data points in 1D and 2D sliding windows. The levelling error is taken as the difference between 1D and 2D polynomial fitted data at the centre of the windows. Polynomials of order 1 were used along with a search radius of 600 metres for all components, and the long wavelength (>200s) correction for the line is applied to bring each line to the same zero base level. Manual adjustments to the line-by-line levelling are applied to render correctly levelled apparent resistivity.

Conversion to Resistivity

A look-up procedure employing the in-phase and quadrature data components at each frequency was used to calculate resistivity and an associated apparent height of the sensor over an assumed conductive homogeneous half-space. For a properly calibrated system over a conductive, uniform earth the apparent height will be exactly the altitude above the surface; for example, over sea water the apparent height will be the same as the height from the radar altimeter. Using the Airbeo program (http://www.electromag.com.au/csiro.php) the

ground was modelled as a homogeneous halfspace with constant rock properties. Heights of the look-up table are modelled from 16 m to 240 m below the surface at 2 m intervals, while the resistivity sampling was from 0.001 ohm-m to 79,432 ohm-m using a uniform logarithmic sampling interval of 20 points per decade. Nomograms that display the relationship between the phase, quadrature, resistivity and apparent height for the survey parameters as flown are shown in *Figure 28* to *Figure 31.*

When deriving resistivity, lower limits are placed on the in-phase and quadrature data so that spurious values are not derived from data that falls below the noise threshold. The minimum limits employed are as follows:

Frequency (Hz)	912		3005		11962		24510	
Component	In-Phase	Quadrature	In-Phase	Quadrature	In-Phase	Quadrature	In-Phase	Quadrature
Minimum (ppm)	20	50	30	30	30	30	30	30

In each case if the minimum limit is reached, the value is capped and the limited value employed in the calculation. Therefore if the limit is reached for both in-phase and quadrature for any given frequency, the resistivity is capped at a known minimum value. In addition, a maximum resistivity value set at half the frequency value is also set to avoid spuriously high values being derived. The resultant minimum and maximum values for each frequency are as follows:

Frequency (Hz)	912	3005	11962	24510
Minimum (ohm-m)	0.1	0.1	0.1	0.1
Maximum (ohm-m)	456	1503	5981	12255

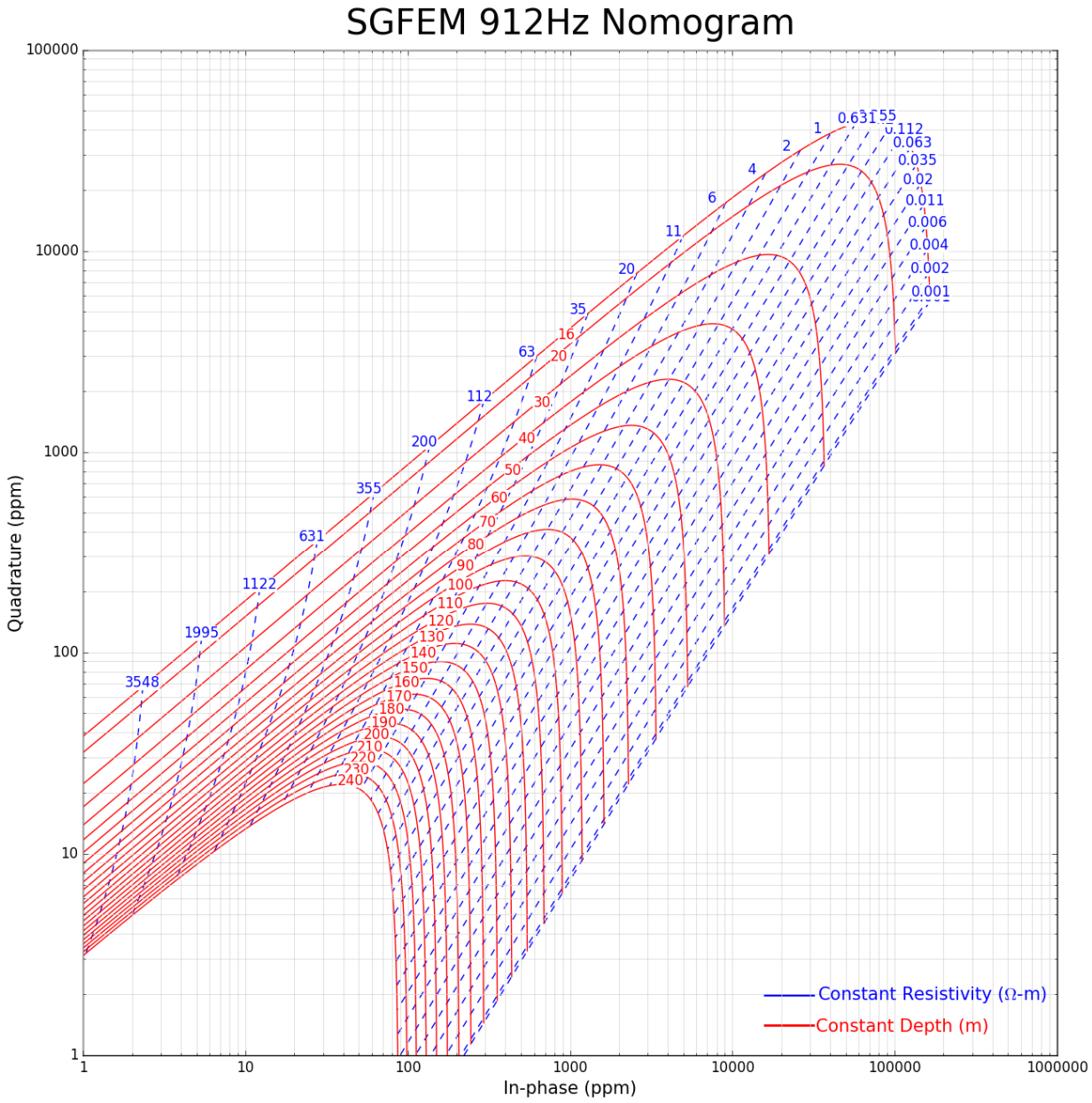


Figure 28: SGFEM 912Hz Nomogram

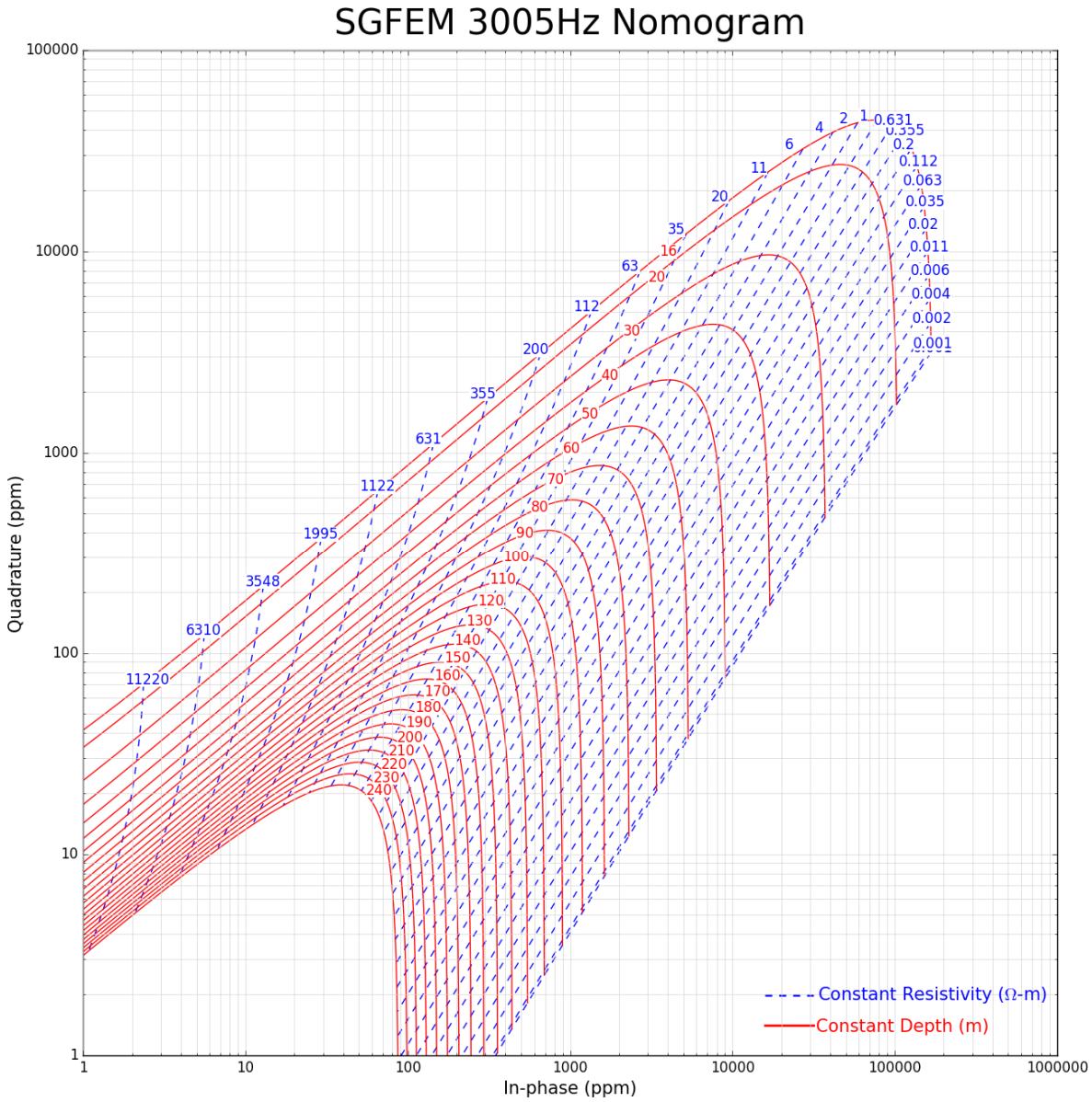


Figure 29: SGFEM 3005Hz Nomogram

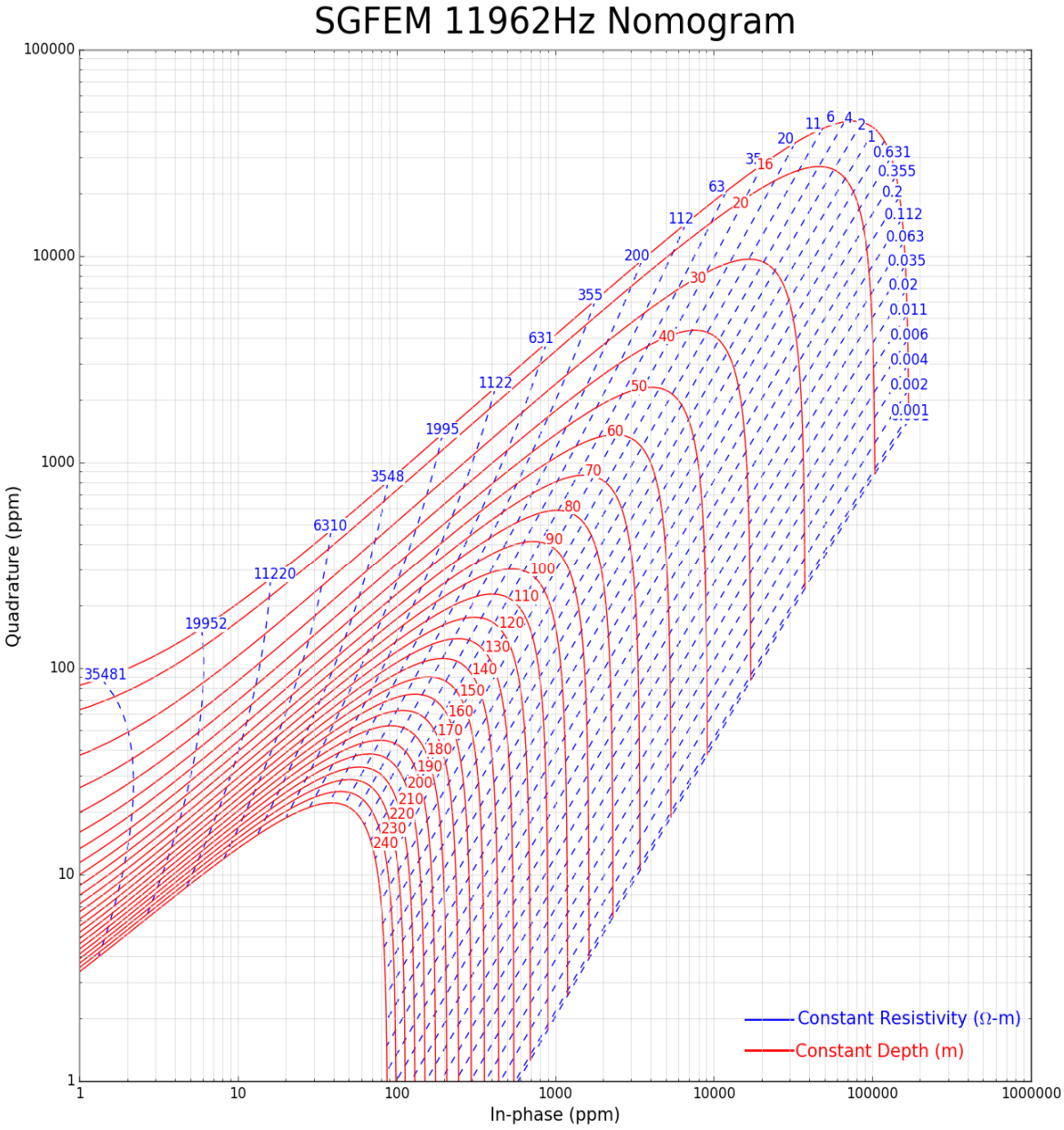


Figure 30: SGFEM 11962Hz Nomogram

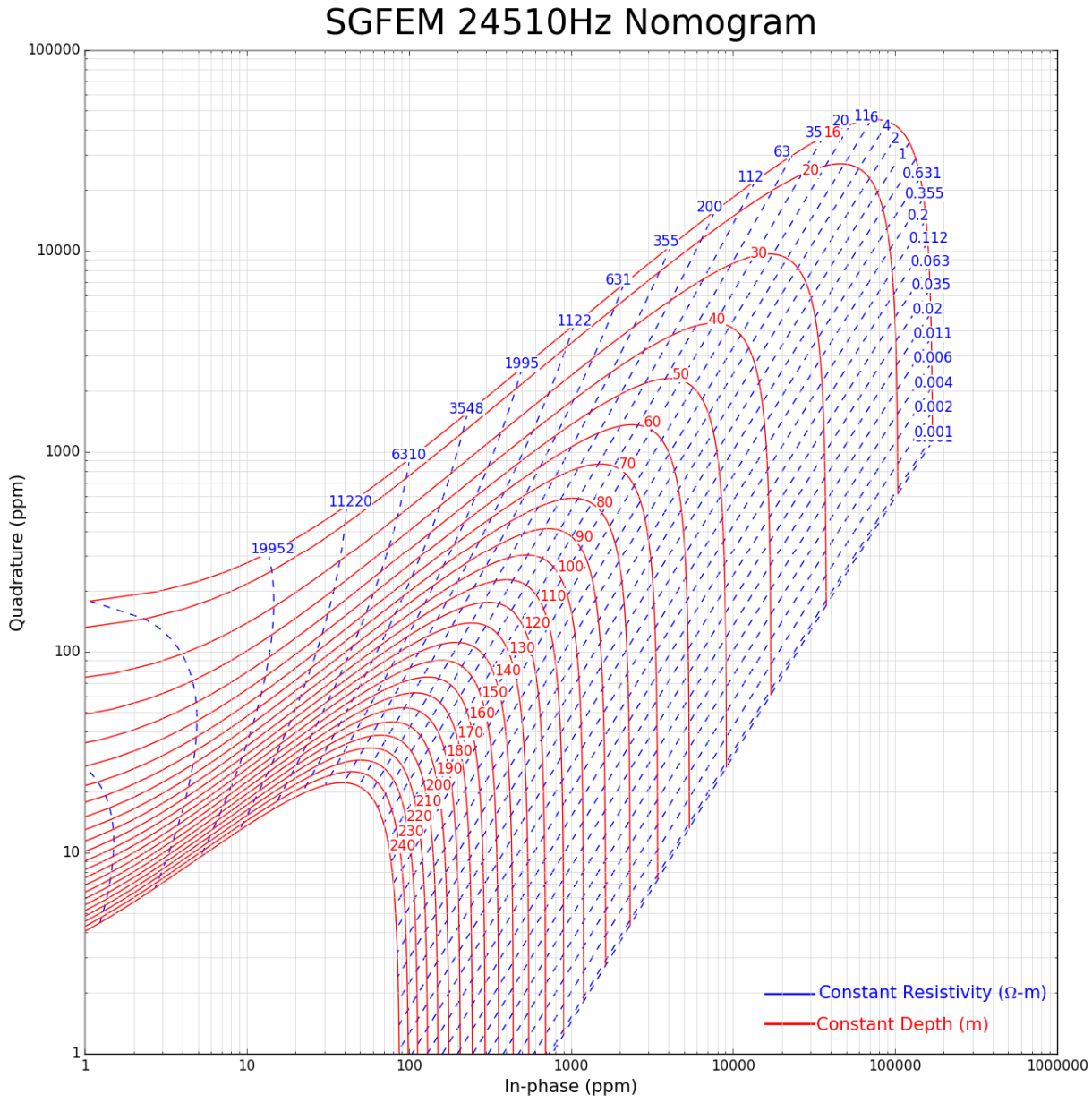


Figure 31: *SGFEM 24510Hz Nomogram*

Micro-levelling

For the purpose of micro-levelling, the log value of each resistivity is calculated. This approach is preferred because small changes in low resistivity values are as measurable and significant as large changes in large resistivity values. Micro-levelling was applied using the log grids to remove residual levelling errors from the gridded log of resistivity data. This was achieved by using a combined directional cosine filter and high pass Butterworth filter to identify and remove artifacts that are long wavelength parallel to survey lines and short wavelengths perpendicular to survey lines. A limit of +/-0.1 log (ohm-m) was set for all micro-levelling corrections. The cut-off wavelength of the directional Butterworth filter was chosen to be 800 metres for each frequency and component. The micro-levelling corrections are converted back to ohm-m and applied to the resistivity data.

Gridding

All grids were made using a bi-directional Akima spline gridding routine which is appropriate for the high range of EM data. The final grids of the electromagnetic data were created with 50 m grid cell size appropriate for survey lines spaced at 200 m. Images of fully processed data are provided in *Appendix XII*.

Conductivity Depth Images

The Conductivity Depth Image (CDI) used here is a type of apparent resistivity section first defined by Sengpiel (1988, Geophysical Prospecting v.36 p.446-459) then refined in Sengpiel and Siemon (1998, Exploration Geophysics v.9 p.133-141). The conductivity depth section is created by assigning "a centroid depth z* to the half-space resistivity ρ_a" (Sengpiel and Siemon, 1998).

The centroid depth $z^*_p = D_a - h_0 + p_a/2$

where:

D_a is the apparent height above ground in m (see above),
h_0 is the measured height above ground in m (eg. from laser or radar altimeter),
and
p_a is the skin depth = 503 √(resistivity (ohm-m)/frequency (Hz)).

At SGL we do not use the apparent depth term ($D_a - h_0$) in calculation of the centroid depth because in conditions where the measured altitude is affected by tree cover this will add an artificial error to the centroid depth. Also in conditions of near-surface conductivity the negative apparent depth ($D_a - h_0$) is not directly equivalent to the depth to the top of the layer. Therefore in our calculations, the centroid depth is simply equal to the skin depth divided by two as defined above.

A series of profiles are created for each resistivity and centroid depth along each survey line. In cases where the profiles cross, preference is given to the shallower profile derived from the

higher frequency which is considered to be more reliable. The resistivity is then linearly interpolated in the vertical direction between the profiles and the lowest resistivity profile value is projected for an additional depth equal to 25% of the depth of the lowest profile to create the full CDI.

Depth Slices

The final step is to extract resistivity at specific depths from the CDIs of each survey line and grid them using a bi-directional Akima spline gridding algorithm to provide maps of resistivity at specific depths, or so called "depth slices". Depth slices at 10m, 30m, 60m and 100m below the surface have been generated. The gridded data is micro-levelled to produce an even grid without line related artifacts.

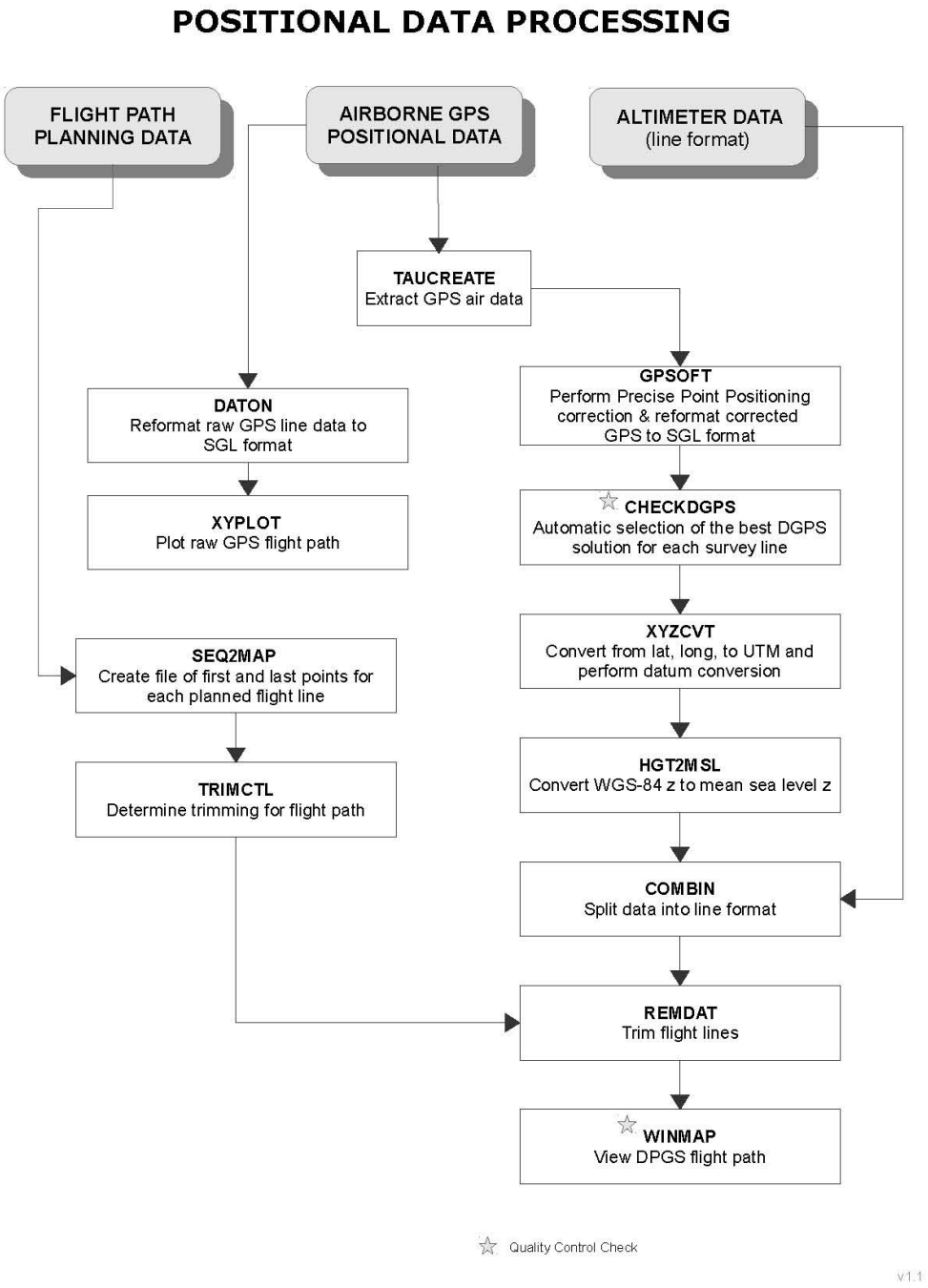


Figure 32: Positional data processing flowchart

Positional Data

A positional data flowchart is presented in *Figure 32.* A number of programs were executed for the compilation of navigation data in order to reformat and recalculate positions in differential mode. SGL's GPS data processing package, GPSoft, was used to calculate DGPS positions from raw 10 Hz range data obtained from the moving (airborne) and stationary (ground) receivers using combinations of L1 and L2 phase signal.

Accurate locations of the GPS antenna were determined through Precise Point Positioning (PPP) differential corrections using the algorithm developed by the National Research Council of 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. Please see *Table A* for ellipsoid parameters. Positions were calculated and delivered in the WGS-84 datum, UTM projection zone UTM29N. The delivered data are provided with x, y locations converted to the Irish National Grid (IRENET95 Datum, Irish Transverse Mercator projection). See *Tables B* and *C* for the ellipsoid parameters and the datum conversion parameters, and *Table D* for the projection parameters.

Table A: Ellipsoid parameters for WGS-84

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

Table B: Ellipsoid parameters for IRENET95

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

Table C: Datum conversion parameters from IRENET95 to WGS-84

x shift (m)	0
y shift (m)	0
z shift (m)	0
x rotation (rad)	0
y rotation (rad)	0
z rotation (rad)	0

Table D: Irish Transverse Mercator Projection Parameters

Central meridian	8° West
Latitude of origin	53.5° North
False northing (m)	750,000
False easting (m)	600,000
Scale factor	0.999820

Elevation data were recorded relative to the GRS-80 ellipsoid and transformed to mean sea level (MSL) using the Earth Gravitational Model 2008 (EGM2008).

Radar, Barometric, and Laser Altimeter Data

The terrain clearance measured by the Collins radar altimeter and the barometric altitude were recorded at 10 Hz. The barometric altimeter was recorded but was not used for altitude because of the availability of more accurate GPS altitudes. Barometric data is employed in the calculation of effective height when processing gamma ray data (see "Calculation of Effective height above ground level").

The Collins radar data records the first return within the footprint of its signal. The radar altimeter data were filtered to remove high-frequency noise using a 67-point low pass filter (see *Appendix VII*). The final data was plotted and inspected for quality. The calibration of the radar data was found to be inconsistent at higher altitudes and difficult to adjust, so it was set aside in favour of the laser altimeter data.

The laser altimeter was modified to record terrain clearances at 20 Hz, with a maximum recorded clearance of 338 m. Laser data was corrected for attitude using pitch, roll and azimuth data recorded by the Septentrio PolaRx2 GPS unit.

A clearance value was derived based on a combination of laser data as the primary altimeter, replaced by a height above ground value determined by subtracting Shuttle Radar Terrain Model (SRTM) data from the GPS height when more than 338 m above ground. A Terrain Model was derived from a combination of the clearance and the GPS altitude (effectively the SRTM at clearances greater than 338 m).

Temperature Data

Outside air temperature was recorded at 10 Hz and smoothed using a 199 point low pass filter.

10. FINAL PRODUCTS

Magnetic Line Data Format

A listing of the data channels delivered in ASCII format with a sampling rate of 10 Hz can be found in *Table 18*.

File Name: GSI___16.IRL_DVL1714_MAG1to5.xyz

Table 18: Magnetic line data channels and format

Title	Size	Units	Null	Description
LINE	08	-	-	Line number - LLLL.SR (L=line, S=segment, R=reflight)
FLIGHT	06	-	-	Flight number
DATE	10	-	-	Date YYYYMMDD
DAY	05	-	-	Day of year
TIME	10	s	-	Fiducial Seconds
ITM-X	11	m	*	X coordinate, IRENET95 ITM
ITM-Y	11	m	*	Y coordinate, IRENET95 ITM
UTM-X	12	m	*	X coordinate, WGS-84 UTM29N
UTM-Y	12	m	*	Y coordinate, WGS-84 UTM29N
UTM-Z	10	m	*	GPS Elevation above WGS-84 Ellipsoid
MSLHGT	10	m	*	GPS Elevation above Mean Sea Level
LAT	13	degree	*	Latitude, WGS-84
LONG	13	degree	*	Longitude, WGS-84
CLEAR	11	m	*	GPS Clearance above Terrain
LASER	11	m	*	Laser Altimeter Clearance above Terrain
DEM	11	m	*	Digital Elevation Model from SRTM (above WGS-84 Ellipsoid)
DICOR	11	nT	*	Diurnal Magnetic Field from reference station
IGRF	11	nT	*	IGRF Correction
MAG-uncomp	11	nT	*	Uncompensated Airborne Magnetic Field
MAG-comp	11	nT	*	Compensated Airborne Magnetic Field
MAG-DC	11	nT	*	Diurnally Corrected Airborne Magnetic Field
MAG-IGRF	11	nT	*	IGRF Corrected Airborne Magnetic Field
MAG-HC	11	nT	*	Height Corrected Airborne Magnetic Field
MAG-LEV	11	nT	*	Levelled Airborne Magnetic Field
MAG-MIC	11	nT	*	Microlevelled Airborne Magnetic Field

Radiometric Line Data Format

A listing of the data channels delivered in ASCII format with a sampling rate of 1 Hz can be found in Table 19.

File Name: GSI___16.IRL_DLV1712_Spec.xyz

Table 19: Radiometric line data channels and format

Title	Size	Units	Null	Description
LINE	08	-	-	Line number - LLLL.SR (L=line, S=segment, R=reflight)
FLIGHT	06	-	-	Flight Number
DATE	10	-	-	Date YYYYMMDD
DAY	05	-	-	Day of year
TIME	10	s	-	Fiducial Seconds
ITM-X	11	m	*	X coordinate, IRENET95 ITM
ITM-Y	11	m	*	Y coordinate, IRENET95 ITM
UTM-X	12	m	*	X coordinate, WGS-84 UTM29N
UTM-Y	12	m	*	Y coordinate, WGS-84 UTM29N
UTM-Z	10	m	*	GPS Elevation above WGS-84 Ellipsoid
MSLHGT	10	m	*	GPS Elevation above Mean Sea Level
LAT	13	degree	*	Latitude, WGS-84
LONG	13	degree	*	Longitude, WGS-84
LASER	11	m	*	Laser Altimeter Clearance above Terrain
CLEAR	11	m	*	Clearance above Terrain
BARO	11	m	*	Barometric Pressure Altitude
TEMP	11	msec	*	Temperature
E_HGT	11	m	*	Effective Height at Standard Temperature and Pressure
R_LIVE	08	counts/s	*	Gamma-ray spectrometer live time
R_COS	10	counts/s	*	Recorded Cosmic Count
R_UPU	10	counts/s	*	Recorded Up-Looking Uranium Count
R_TOT	10	counts/s	*	Recorded Total Count,de-lagged
R_POT	10	counts/s	*	Recorded Potassium Count,de-lagged
R_URA	10	counts/s	*	Recorded Uranium Count,de-lagged
R_THO	10	counts/s	*	Recorded Thorium Count,de-lagged
C_TOT_M	10	counts/s	*	Corrected Total Count, de-lagged, micro-levelled
C_POT	10	%	*	Corrected Potassium Concentration,de-lagged
C_URA_M	10	ppm	*	Corrected Uranium Concentration,de-lagged, micro-levelled
C_THO	10	ppm	*	Corrected Thorium Concentration,de-lagged

Title	Size	Units	Null	Description
CC_TOT_ML	10	counts/s	*	Corrected Total Count, de-lagged, micro-levelled and minimum limited to 0
C_POTL	10	%	*	Corrected Potassium Concentration, de-lagged and minimum limited to 0
CC_URA_ML	10	ppm	*	Corrected Uranium Concentration, de-lagged, micro-levelled and minimum limited to 0
C_THOL	10	ppm	*	Corrected Thorium Concentration, de-lagged and minimum limited to 0
C_TOT_UL	10	counts/s	*	Corrected Total Count, de-lagged, unlimited
C_POT_UL	10	%	*	Corrected Potassium Concentration, de-lagged, unlimited
C_URA_UL	10	ppm	*	Corrected Uranium Concentration, de-lagged, unlimited
C_THO_UL	10	ppm	*	Corrected Thorium Concentration, de-lagged, unlimited
E_DOSE	10	nGy/hr	*	Air absorbed dose rate
RUT	10	-	*	Uranium / Thorium Ratio
RUK	10	-ppm/%	*	Uranium / Potassium Ratio
RTK	10	ppm/%	*	Thorium / Potassium Ratio

Frequency-Domain Electromagnetic Line Data Format

A listing of the data channels delivered in ASCII format with a sampling rate of 10 Hz can be found in *Table 20*.

File Name: GSI___16.IRL_DVL1715_FEM1to4.xyz

Table 20: Frequency-domain electromagnetic line data channels and format

Title	Size	Units	Null	Description
LINE	08	-	-	Line number - LLLL.SR (L=line, S=segment, R=reflight)
FLIGHT	06	-	-	Flight number
DATE	10	-	-	Date YYYYMMDD
DAY	05	-	-	Day of year
TIME	11	s	-	Fiducial Seconds
ITM-X	13	m	*	X coordinate, IRENET95 ITM
ITM-Y	13	m	*	Y coordinate, IRENET95 ITM
UTM-X	13	m	*	X coordinate, WGS-84 UTM 29N
UTM-Y	13	m	*	Y coordinate, WGS-84 UTM 29N
WGSHGT	13	m	*	GPS Elevation (above WGS-84 Ellipsoid)
CLEARANCE	11	m	*	Clearance above Terrain
P09ppm	08	ppm	*	In-phase 912 Hz
Q09ppm	08	ppm	*	Quadrature 912 Hz
P3ppm	08	ppm	*	In-phase 3005 Hz

Title	Size	Units	Null	Description
Q3ppm	08	ppm	*	Quadrature 3005 Hz
P12ppm	08	ppm	*	In-phase 11962 Hz
Q12ppm	08	ppm	*	Quadrature 11962 Hz
P25ppm	08	ppm	*	In-phase 24510 Hz
Q25ppm	08	ppm	*	Quadrature 24510 Hz
P09filt	08	ppm	*	Filtered in-phase 912 Hz
Q09filt	08	ppm	*	Filtered quadrature 912 Hz
P3filt	08	ppm	*	Filtered in-phase 3005 Hz
Q3filt	08	ppm	*	Filtered quadrature 3005 Hz
P12filt	08	ppm	*	Filtered in-phase 11962 Hz
Q12filt	08	ppm	*	Filtered quadrature 11962 Hz
P25filt	08	ppm	*	Filtered in-phase 24510 Hz
Q25filt	08	ppm	*	Filtered quadrature 24510 Hz
P09lev	08	ppm	*	Levelled and filtered in-phase 912 Hz
Q09lev	08	ppm	*	Levelled and filtered quadrature 912 Hz
P3lev	08	ppm	*	Levelled and filtered in-phase 3005 Hz
Q3lev	08	ppm	*	Levelled and filtered quadrature 3005 Hz
P12lev	08	ppm	*	Levelled and filtered in-phase 11962 Hz
Q12lev	08	ppm	*	Levelled and filtered quadrature 11962 Hz
P25lev	08	ppm	*	Levelled and filtered in-phase 24510 Hz
Q25lev	08	ppm	*	Levelled and filtered quadrature 24510 Hz
Radio_Flag	09	ppm	*	Radio call flag
PLM_mV	10	mV	*	Power line monitor
Res09	10	ohm-m	*	Apparent resistivity, half-space model, 912 Hz
Res3	10	ohm-m	*	Apparent resistivity, half-space model, 3005 Hz
Res12	10	ohm-m	*	Apparent resistivity, half-space model, 11962 Hz
Res25	10	ohm-m	*	Apparent resistivity, half-space model, 24510 Hz
Res09_MLEV	10	ohm-m	*	Microlevelled apparent resistivity, half-space model, 912 Hz
Res3_MLEV	10	ohm-m	*	Microlevelled apparent resistivity, half-space model, 3005 Hz
Res12_MLEV	10	ohm-m	*	Microlevelled apparent resistivity, half-space model, 11962 Hz
Res25_MLEV	10	ohm-m	*	Microlevelled apparent resistivity, half-space model, 24510 Hz
Depth09	10	m	*	Centroid depth 912Hz
Depth3	10	m	*	Centroid depth 3005Hz
Depth12	10	m	*	Centroid depth 11962Hz
Depth25	10	m	*	Centroid depth 24510Hz

Title	Size	Units	Null	Description
ResSlice10	11	ohm-m	*	Resistivity depth slice at 10m
ResSlice30	11	ohm-m	*	Resistivity depth slice at 30m
ResSlice60	11	ohm-m	*	Resistivity depth slice at 60m
ResSlice100	11	ohm-m	*	Resistivity depth slice at 100m
ResSlice10_ML	11	ohm-m	*	Microlevelled resistivity depth slice at 10m
ResSlice30_ML	14	ohm-m	*	Microlevelled resistivity depth slice at 30m
ResSlice60_ML	14	ohm-m		Microlevelled resistivity depth slice at 60m
ResSlice100_ML	14	ohm-m	*	Microlevelled resistivity depth slice at 100m

Full Spectrum Spectrometer Line Data Format

A listing of the data channels delivered in ASCII format with a sampling rate of 10 Hz can be found in *Table 21*.

File Names: 1024DOWN.xyz, 1024UP.xyz

Table 21: Frequency-domain electromagnetic line data channels and format

Column	Title	Size	Units	Null	Description
01	TIME	9	s	-	Fiducial Seconds
02	LIVE	6	ms	-	Live time
03	S:0	6	counts	-	Spectrometer channel 1
04	S:1	6	counts	-	Spectrometer channel 2
.	.	.		.	.
.	.	.	.	.	.
.	.	.	.	.	.
1026	S:1024	6	counts	-	Spectrometer channel 1024

Digital Grids

The following are provided as digital grids:

Formats:	ASCII (.XYZ), Geosoft Binary (.GRD), Grid Exchange (.GXF)
Grid Cell Size:	50 m
Datum:	IRENET95
Projection:	Irish Transverse Mercator (ITM)

Table 22: Delivered digital grids

Grid File Name	Units	Description
MAG	nT	Magnetic Anomaly
FVM	nT/km	First Vertical Derivative of Magnetic Anomaly
Tot	counts/sec	Total counts
Pot	%	Potassium
Tho	ppm	Equivalent Thorium
Ura	ppm	Equivalent Uranium
P09	ppm	In-phase coupling ratio, 912 Hz, levelled
Q09	ppm	Quadrature coupling ratio, 912 Hz, levelled
P3	ppm	In-phase coupling ratio, 3005 Hz, levelled
Q3	ppm	Quadrature coupling ratio, 3005 Hz, levelled
P12	ppm	In-phase coupling ratio, 11962 Hz, levelled
Q12	ppm	Quadrature coupling ratio, 11962 Hz, levelled
P25	ppm	In-phase coupling ratio, 24510 Hz, levelled
Q25	ppm	Quadrature coupling ratio, 24510 Hz, levelled
Res09	ohm-m	Microlevelled apparent resistivity, half-space model, 912 Hz
Res3	ohm-m	Microlevelled apparent resistivity, half-space model, 3005 Hz
Res12	ohm-m	Microlevelled apparent resistivity, half-space model, 11962 Hz
Res25	ohm-m	Microlevelled apparent resistivity, half-space model, 24510 Hz
ResSlice10	ohm-m	Microlevelled resistivity depth slice at 10 m
ResSlice30	ohm-m	Microlevelled resistivity depth slice at 30 m
ResSlice60	ohm-m	Microlevelled resistivity depth slice at 60 m
ResSlice100	ohm-m	Microlevelled resistivity depth slice at 100 m

Digital Video

Please see *Appendix X* for Digital Video Inventory. Note that no video is available for the following survey lines: 1 survey line acquired on flight 0030 (loss of power to the acquisition system resulted in corrupted video), 1 survey line acquired on flight 0031 (loss of power to the acquisition system resulted in corrupted video), all 28 survey lines acquired on flight 0039 (failure to launch video recording), and 9 survey lines acquired on flight 0106 (failure to launch video recording).

SGL

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 more than 50 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.

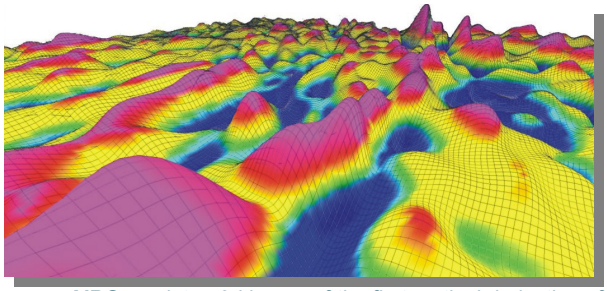
Facilities at the head office include a state of the art data processing department with an integrated digital cartographic department and a fully equipped electronics workshop for research, development and production of geophysical instruments. A Transport Canada Approved Maintenance Organization (AMO) 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 seventeen 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 three all composite Diamond DA42 Twin Stars, modified for gravity and horizontal magnetic gradient surveys, and 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.

SGL

Appendix II

Tellus A2 Block - PLANNED SURVEY LINES
WGS-84

SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
C0201.0	N53:05.74	W007:58.47	N53:06.43	W007:54.23	2.65	4.90
C0202.0	N53:05.75	W008:05.34	N53:07.47	W007:54.69	6.64	12.30
C0203.0	N53:05.75	W008:12.20	N53:08.51	W007:55.15	10.64	19.70
C0204.0	N53:05.72	W008:19.25	N53:09.55	W007:55.61	14.74	27.30
C0205.0	N53:05.70	W008:26.11	N53:10.59	W007:56.08	18.74	34.70
C0206.0	N53:05.68	W008:32.98	N53:11.64	W007:56.54	22.73	42.10
C0207.0	N53:05.66	W008:39.85	N53:12.68	W007:57.00	26.73	49.50
C0208.0	N53:05.63	W008:46.72	N53:13.72	W007:57.47	30.72	56.90
C0209.0	N53:05.56	W008:53.76	N53:14.76	W007:57.93	34.83	64.50
C0210.0	N53:05.66	W008:59.76	N53:15.80	W007:58.39	38.28	70.90
C0211.0	N53:06.70	W009:00.25	N53:16.85	W007:58.86	38.28	70.90
C0212.0	N53:07.73	W009:00.74	N53:17.89	W007:59.33	38.28	70.90
C0213.0	N53:08.77	W009:01.23	N53:16.32	W008:15.95	28.24	52.30
C0214.0	N53:09.81	W009:01.72	N53:17.36	W008:16.43	28.24	52.30
C0215.0	N53:10.85	W009:02.21	N53:18.40	W008:16.90	28.24	52.30
C0216.0	N53:11.88	W009:02.70	N53:19.44	W008:17.37	28.24	52.30
C0217.0	N53:12.92	W009:03.19	N53:20.48	W008:17.85	28.24	52.30
C0218.0	N53:13.96	W009:03.68	N53:21.52	W008:18.32	28.24	52.30
C0219.0	N53:12.24	W009:20.24	N53:22.56	W008:18.80	38.28	70.90
C0220.0	N53:13.28	W009:20.74	N53:23.60	W008:19.27	38.28	70.90
C0221.0	N53:12.33	W009:32.63	N53:24.64	W008:19.74	45.41	84.10
C0222.0	N53:13.37	W009:33.13	N53:25.68	W008:20.22	45.41	84.10
C0223.0	N53:11.70	W009:48.98	N53:26.72	W008:20.70	55.02	101.90
C0224.0	N53:12.73	W009:49.49	N53:27.76	W008:21.17	55.02	101.90
C0225.0	N53:13.77	W009:50.00	N53:28.80	W008:21.65	55.02	101.90
C0226.0	N53:14.80	W009:50.51	N53:29.84	W008:22.13	55.02	101.90
C0227.0	N53:15.84	W009:51.02	N53:30.88	W008:22.60	55.02	101.90
C0228.0	N53:16.87	W009:51.53	N53:31.93	W008:23.08	55.02	101.90
C0229.0	N53:16.52	W009:59.81	N53:32.97	W008:23.56	59.88	110.90
C0230.0	N53:17.56	W010:00.32	N53:34.01	W008:24.04	59.88	110.90
C0231.0	N53:18.59	W010:00.84	N53:35.05	W008:24.52	59.88	110.90
C0232.0	N53:19.62	W010:01.35	N53:36.09	W008:24.99	59.88	110.90
C0233.0	N53:20.66	W010:01.87	N53:37.13	W008:25.47	59.88	110.90
C0234.0	N53:21.69	W010:02.38	N53:38.17	W008:25.95	59.88	110.90
C0235.0	N53:22.72	W010:02.90	N53:39.21	W008:26.43	59.88	110.90
C0236.0	N53:22.15	W010:12.40	N53:40.25	W008:26.92	65.50	121.30
C0237.0	N53:23.18	W010:12.92	N53:41.29	W008:27.40	65.50	121.30
C0238.0	N53:24.21	W010:13.44	N53:42.33	W008:27.88	65.50	121.30
C0239.0	N53:25.24	W010:13.96	N53:43.37	W008:28.36	65.50	121.30
C0240.0	N53:26.28	W010:14.49	N53:40.68	W008:51.44	51.57	95.50
C0241.0	N53:28.27	W010:09.64	N53:41.72	W008:51.93	48.22	89.30
C0242.0	N53:29.31	W010:10.16	N53:42.76	W008:52.42	48.22	89.30
C0243.0	N53:30.34	W010:10.69	N53:43.80	W008:52.91	48.22	89.30
C0244.0	N53:30.44	W010:16.40	N53:44.83	W008:53.41	51.46	95.30
C0245.0	N53:31.47	W010:16.93	N53:45.87	W008:53.90	51.46	95.30
C0246.0	N53:32.50	W010:17.45	N53:46.91	W008:54.38	51.46	95.31
C0247.0	N53:33.53	W010:17.98	N53:47.95	W008:54.87	51.47	95.32
C0248.0	N53:34.57	W010:18.50	N53:48.99	W008:55.35	51.47	95.33
C0249.0	N53:35.60	W010:19.03	N53:37.42	W010:08.87	6.32	11.70
C0249.1	N53:39.75	W009:55.74	N53:50.03	W008:55.87	36.99	68.50
C0250.0	N53:36.63	W010:19.55	N53:38.45	W010:09.39	6.32	11.70
C0250.1	N53:40.79	W009:56.26	N53:51.06	W008:56.37	36.99	68.50
C0251.0	N53:37.66	W010:20.08	N53:39.49	W010:09.92	6.32	11.70
T2001.0	N53:22.09	W010:12.23	N53:26.38	W010:14.40	4.48	8.30
T2002.0	N53:22.12	W010:12.06	N53:26.41	W010:14.22	4.48	8.30
T2002.1	N53:30.38	W010:16.24	N53:37.77	W010:19.99	7.72	14.31
T2003.0	N53:22.15	W010:11.89	N53:26.44	W010:14.05	4.48	8.30

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SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2003.1	N53:30.41	W010:16.06	N53:37.80	W010:19.82	7.72	14.31
T2004.0	N53:22.18	W010:11.72	N53:26.47	W010:13.88	4.48	8.30
T2004.1	N53:30.45	W010:15.89	N53:37.83	W010:19.64	7.72	14.30
T2005.0	N53:22.22	W010:11.54	N53:26.50	W010:13.70	4.48	8.30
T2005.1	N53:30.48	W010:15.72	N53:37.86	W010:19.47	7.72	14.30
T2006.0	N53:22.25	W010:11.37	N53:26.53	W010:13.53	4.48	8.30
T2006.1	N53:30.51	W010:15.54	N53:37.89	W010:19.30	7.72	14.30
T2007.0	N53:22.28	W010:11.20	N53:26.56	W010:13.36	4.48	8.30
T2007.1	N53:30.54	W010:15.37	N53:37.92	W010:19.12	7.72	14.30
T2008.0	N53:22.31	W010:11.02	N53:26.59	W010:13.19	4.48	8.30
T2008.1	N53:30.57	W010:15.20	N53:37.95	W010:18.95	7.72	14.30
T2009.0	N53:22.34	W010:10.85	N53:26.63	W010:13.01	4.48	8.30
T2009.1	N53:30.60	W010:15.02	N53:37.98	W010:18.77	7.72	14.30
T2010.0	N53:22.37	W010:10.68	N53:26.66	W010:12.84	4.48	8.30
T2010.1	N53:30.63	W010:14.85	N53:38.01	W010:18.60	7.72	14.30
T2011.0	N53:22.40	W010:10.51	N53:26.69	W010:12.67	4.48	8.30
T2011.1	N53:30.66	W010:14.68	N53:38.05	W010:18.43	7.72	14.30
T2012.0	N53:22.43	W010:10.33	N53:26.72	W010:12.49	4.48	8.30
T2012.1	N53:30.69	W010:14.50	N53:38.08	W010:18.25	7.72	14.30
T2013.0	N53:22.46	W010:10.16	N53:26.75	W010:12.32	4.48	8.30
T2013.1	N53:30.73	W010:14.33	N53:38.11	W010:18.08	7.72	14.30
T2014.0	N53:22.50	W010:09.99	N53:26.78	W010:12.15	4.48	8.30
T2014.1	N53:30.76	W010:14.16	N53:38.14	W010:17.91	7.72	14.30
T2015.0	N53:22.53	W010:09.82	N53:26.81	W010:11.97	4.48	8.30
T2015.1	N53:30.79	W010:13.98	N53:38.17	W010:17.73	7.72	14.30
T2016.0	N53:22.56	W010:09.64	N53:26.84	W010:11.80	4.48	8.30
T2016.1	N53:30.82	W010:13.81	N53:38.20	W010:17.56	7.72	14.30
T2017.0	N53:22.59	W010:09.47	N53:26.87	W010:11.63	4.48	8.30
T2017.1	N53:30.85	W010:13.64	N53:38.23	W010:17.39	7.72	14.30
T2018.0	N53:22.62	W010:09.30	N53:26.91	W010:11.46	4.48	8.30
T2018.1	N53:30.88	W010:13.46	N53:38.26	W010:17.21	7.72	14.30
T2019.0	N53:22.65	W010:09.12	N53:26.94	W010:11.28	4.48	8.30
T2019.1	N53:30.91	W010:13.29	N53:38.30	W010:17.04	7.72	14.30
T2020.0	N53:22.68	W010:08.95	N53:26.97	W010:11.11	4.48	8.30
T2020.1	N53:30.94	W010:13.12	N53:38.33	W010:16.86	7.72	14.30
T2021.0	N53:22.71	W010:08.78	N53:27.00	W010:10.94	4.48	8.30
T2021.1	N53:30.98	W010:12.94	N53:38.36	W010:16.69	7.72	14.30
T2022.0	N53:22.74	W010:08.61	N53:27.03	W010:10.76	4.48	8.30
T2022.1	N53:31.01	W010:12.77	N53:38.39	W010:16.52	7.72	14.30
T2023.0	N53:22.77	W010:08.43	N53:27.06	W010:10.59	4.48	8.30
T2023.1	N53:31.04	W010:12.60	N53:38.42	W010:16.34	7.72	14.30
T2024.0	N53:22.81	W010:08.26	N53:27.09	W010:10.42	4.48	8.30
T2024.1	N53:31.07	W010:12.42	N53:38.45	W010:16.17	7.72	14.30
T2025.0	N53:22.84	W010:08.09	N53:27.12	W010:10.24	4.48	8.30
T2025.1	N53:31.10	W010:12.25	N53:38.48	W010:16.00	7.72	14.30
T2026.0	N53:22.87	W010:07.92	N53:27.15	W010:10.07	4.48	8.30
T2026.1	N53:31.13	W010:12.08	N53:38.51	W010:15.82	7.72	14.30
T2027.0	N53:22.90	W010:07.74	N53:27.19	W010:09.90	4.48	8.30
T2027.1	N53:31.16	W010:11.90	N53:38.54	W010:15.65	7.72	14.30
T2028.0	N53:22.93	W010:07.57	N53:27.22	W010:09.73	4.48	8.30
T2028.1	N53:31.19	W010:11.73	N53:38.58	W010:15.47	7.72	14.30
T2029.0	N53:22.96	W010:07.40	N53:27.25	W010:09.55	4.48	8.30
T2029.1	N53:31.22	W010:11.56	N53:38.61	W010:15.30	7.72	14.30
T2030.0	N53:22.99	W010:07.22	N53:27.28	W010:09.38	4.48	8.30
T2030.1	N53:31.26	W010:11.39	N53:38.64	W010:15.13	7.72	14.30
T2031.0	N53:23.02	W010:07.05	N53:27.31	W010:09.21	4.48	8.30
T2031.1	N53:31.29	W010:11.21	N53:38.67	W010:14.95	7.72	14.30

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SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2032.0	N53:23.05	W010:06.88	N53:38.70	W010:14.78	16.36	30.30
T2033.0	N53:23.08	W010:06.71	N53:38.73	W010:14.61	16.36	30.30
T2034.0	N53:23.12	W010:06.53	N53:38.76	W010:14.43	16.36	30.30
T2035.0	N53:23.15	W010:06.36	N53:38.79	W010:14.26	16.36	30.30
T2036.0	N53:23.18	W010:06.19	N53:38.83	W010:14.08	16.36	30.30
T2037.0	N53:23.21	W010:06.01	N53:38.86	W010:13.91	16.36	30.30
T2038.0	N53:23.24	W010:05.84	N53:38.89	W010:13.74	16.36	30.30
T2039.0	N53:23.27	W010:05.67	N53:38.92	W010:13.56	16.36	30.30
T2040.0	N53:23.30	W010:05.50	N53:38.95	W010:13.39	16.36	30.30
T2041.0	N53:23.33	W010:05.32	N53:38.98	W010:13.22	16.36	30.30
T2042.0	N53:23.36	W010:05.15	N53:39.01	W010:13.04	16.36	30.30
T2043.0	N53:23.39	W010:04.98	N53:39.04	W010:12.87	16.36	30.30
T2044.0	N53:23.42	W010:04.80	N53:39.07	W010:12.69	16.36	30.30
T2045.0	N53:23.46	W010:04.63	N53:39.11	W010:12.52	16.36	30.30
T2046.0	N53:23.49	W010:04.46	N53:39.14	W010:12.35	16.36	30.30
T2047.0	N53:23.52	W010:04.29	N53:39.17	W010:12.17	16.36	30.31
T2048.0	N53:23.55	W010:04.11	N53:39.20	W010:12.00	16.36	30.31
T2049.0	N53:23.58	W010:03.94	N53:39.23	W010:11.82	16.37	30.31
T2050.0	N53:23.61	W010:03.77	N53:39.26	W010:11.65	16.37	30.31
T2051.0	N53:23.64	W010:03.59	N53:39.29	W010:11.48	16.37	30.31
T2052.0	N53:23.67	W010:03.42	N53:39.32	W010:11.30	16.37	30.31
T2053.0	N53:16.46	W009:59.64	N53:39.35	W010:11.13	23.93	44.32
T2054.0	N53:16.50	W009:59.47	N53:39.39	W010:10.96	23.92	44.30
T2055.0	N53:16.53	W009:59.30	N53:39.42	W010:10.78	23.92	44.30
T2056.0	N53:16.56	W009:59.12	N53:39.45	W010:10.61	23.92	44.30
T2057.0	N53:16.59	W009:58.95	N53:39.48	W010:10.43	23.92	44.30
T2058.0	N53:16.62	W009:58.78	N53:39.51	W010:10.26	23.92	44.30
T2059.0	N53:16.65	W009:58.61	N53:39.54	W010:10.09	23.92	44.30
T2060.0	N53:16.68	W009:58.43	N53:36.47	W010:08.35	20.68	38.30
T2061.0	N53:16.72	W009:58.26	N53:36.50	W010:08.17	20.68	38.30
T2062.0	N53:16.75	W009:58.09	N53:36.54	W010:08.00	20.68	38.30
T2063.0	N53:16.78	W009:57.92	N53:36.57	W010:07.82	20.68	38.30
T2064.0	N53:16.81	W009:57.74	N53:36.60	W010:07.65	20.68	38.30
T2065.0	N53:16.84	W009:57.57	N53:36.63	W010:07.48	20.68	38.30
T2066.0	N53:16.87	W009:57.40	N53:36.66	W010:07.30	20.68	38.30
T2067.0	N53:16.90	W009:57.23	N53:36.69	W010:07.13	20.68	38.30
T2068.0	N53:16.93	W009:57.05	N53:36.72	W010:06.96	20.68	38.30
T2069.0	N53:16.96	W009:56.88	N53:36.75	W010:06.78	20.68	38.30
T2070.0	N53:16.99	W009:56.71	N53:36.78	W010:06.61	20.68	38.30
T2071.0	N53:17.02	W009:56.54	N53:36.81	W010:06.43	20.68	38.30
T2072.0	N53:17.05	W009:56.36	N53:36.85	W010:06.26	20.68	38.30
T2073.0	N53:17.08	W009:56.19	N53:36.88	W010:06.09	20.68	38.30
T2074.0	N53:17.11	W009:56.02	N53:36.91	W010:05.91	20.68	38.30
T2075.0	N53:17.15	W009:55.85	N53:36.94	W010:05.74	20.68	38.30
T2076.0	N53:17.18	W009:55.67	N53:36.97	W010:05.57	20.68	38.30
T2077.0	N53:17.21	W009:55.50	N53:37.00	W010:05.39	20.68	38.30
T2078.0	N53:17.24	W009:55.33	N53:37.03	W010:05.22	20.68	38.30
T2079.0	N53:17.27	W009:55.16	N53:37.06	W010:05.04	20.68	38.30
T2080.0	N53:17.30	W009:54.98	N53:37.09	W010:04.87	20.68	38.30
T2081.0	N53:17.33	W009:54.81	N53:37.12	W010:04.70	20.68	38.30
T2082.0	N53:17.36	W009:54.64	N53:37.15	W010:04.52	20.68	38.30
T2083.0	N53:17.39	W009:54.47	N53:37.19	W010:04.35	20.68	38.30
T2084.0	N53:17.42	W009:54.29	N53:37.22	W010:04.18	20.68	38.30
T2085.0	N53:17.45	W009:54.12	N53:37.25	W010:04.00	20.68	38.30
T2086.0	N53:17.48	W009:53.95	N53:37.28	W010:03.83	20.68	38.30
T2087.0	N53:17.51	W009:53.78	N53:37.31	W010:03.65	20.68	38.30
T2088.0	N53:17.54	W009:53.60	N53:37.34	W010:03.48	20.68	38.30

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SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2089.0	N53:17.58	W009:53.43	N53:37.37	W010:03.31	20.68	38.30
T2090.0	N53:17.61	W009:53.26	N53:37.40	W010:03.13	20.68	38.30
T2091.0	N53:17.64	W009:53.09	N53:37.43	W010:02.96	20.68	38.30
T2092.0	N53:17.67	W009:52.91	N53:37.46	W010:02.79	20.68	38.30
T2093.0	N53:17.70	W009:52.74	N53:37.49	W010:02.61	20.68	38.30
T2094.0	N53:17.73	W009:52.57	N53:37.53	W010:02.44	20.68	38.30
T2095.0	N53:17.76	W009:52.39	N53:37.56	W010:02.26	20.68	38.30
T2096.0	N53:17.79	W009:52.22	N53:37.59	W010:02.09	20.68	38.30
T2097.0	N53:17.82	W009:52.05	N53:37.62	W010:01.92	20.68	38.30
T2098.0	N53:11.64	W009:48.82	N53:37.65	W010:01.74	27.16	50.30
T2099.0	N53:11.68	W009:48.65	N53:37.68	W010:01.57	27.16	50.30
T2100.0	N53:11.71	W009:48.47	N53:37.71	W010:01.39	27.16	50.30
T2101.0	N53:11.74	W009:48.30	N53:37.74	W010:01.22	27.16	50.30
T2102.0	N53:11.77	W009:48.13	N53:37.77	W010:01.05	27.16	50.30
T2103.0	N53:11.80	W009:47.96	N53:37.80	W010:00.87	27.16	50.30
T2104.0	N53:11.83	W009:47.78	N53:37.83	W010:00.70	27.16	50.30
T2105.0	N53:11.86	W009:47.61	N53:37.87	W010:00.52	27.16	50.30
T2106.0	N53:11.89	W009:47.44	N53:37.90	W010:00.35	27.16	50.30
T2107.0	N53:11.92	W009:47.27	N53:37.93	W010:00.18	27.16	50.30
T2108.0	N53:11.95	W009:47.09	N53:37.96	W010:00.00	27.16	50.30
T2109.0	N53:11.98	W009:46.92	N53:37.99	W009:59.83	27.16	50.30
T2110.0	N53:12.01	W009:46.75	N53:38.02	W009:59.66	27.16	50.30
T2111.0	N53:12.04	W009:46.58	N53:38.05	W009:59.48	27.16	50.30
T2112.0	N53:12.07	W009:46.41	N53:38.08	W009:59.31	27.16	50.30
T2113.0	N53:12.10	W009:46.23	N53:38.11	W009:59.13	27.16	50.30
T2114.0	N53:12.13	W009:46.06	N53:38.14	W009:58.96	27.16	50.30
T2115.0	N53:12.16	W009:45.89	N53:38.17	W009:58.79	27.16	50.30
T2116.0	N53:12.19	W009:45.72	N53:38.20	W009:58.61	27.16	50.30
T2117.0	N53:12.22	W009:45.54	N53:38.23	W009:58.44	27.16	50.30
T2118.0	N53:12.25	W009:45.37	N53:38.27	W009:58.26	27.16	50.30
T2119.0	N53:12.29	W009:45.20	N53:38.30	W009:58.09	27.16	50.30
T2120.0	N53:12.32	W009:45.03	N53:38.33	W009:57.92	27.16	50.30
T2121.0	N53:12.35	W009:44.85	N53:38.36	W009:57.74	27.16	50.30
T2122.0	N53:12.38	W009:44.68	N53:38.39	W009:57.57	27.16	50.30
T2123.0	N53:12.41	W009:44.51	N53:38.42	W009:57.39	27.16	50.30
T2124.0	N53:12.44	W009:44.34	N53:38.45	W009:57.22	27.16	50.30
T2125.0	N53:12.47	W009:44.17	N53:38.48	W009:57.05	27.16	50.30
T2126.0	N53:12.50	W009:43.99	N53:38.51	W009:56.87	27.16	50.30
T2127.0	N53:12.53	W009:43.82	N53:38.54	W009:56.70	27.16	50.30
T2128.0	N53:12.56	W009:43.65	N53:38.57	W009:56.52	27.16	50.30
T2129.0	N53:12.59	W009:43.48	N53:38.60	W009:56.35	27.16	50.30
T2130.0	N53:12.62	W009:43.30	N53:38.63	W009:56.18	27.16	50.30
T2131.0	N53:12.65	W009:43.13	N53:38.67	W009:56.00	27.16	50.30
T2132.0	N53:12.68	W009:42.96	N53:38.70	W009:55.83	27.16	50.30
T2133.0	N53:12.71	W009:42.79	N53:38.73	W009:55.65	27.16	50.30
T2134.0	N53:12.74	W009:42.61	N53:38.76	W009:55.48	27.16	50.30
T2135.0	N53:12.77	W009:42.44	N53:38.79	W009:55.31	27.16	50.30
T2136.0	N53:12.80	W009:42.27	N53:40.89	W009:56.17	29.32	54.30
T2137.0	N53:12.83	W009:42.10	N53:40.92	W009:55.99	29.32	54.30
T2138.0	N53:12.86	W009:41.92	N53:40.95	W009:55.82	29.32	54.30
T2139.0	N53:12.89	W009:41.75	N53:40.98	W009:55.64	29.32	54.30
T2140.0	N53:12.92	W009:41.58	N53:41.01	W009:55.47	29.32	54.30
T2141.0	N53:12.95	W009:41.41	N53:41.04	W009:55.30	29.32	54.30
T2142.0	N53:12.98	W009:41.23	N53:41.07	W009:55.12	29.32	54.30
T2143.0	N53:13.02	W009:41.06	N53:41.10	W009:54.95	29.32	54.30
T2144.0	N53:13.05	W009:40.89	N53:41.13	W009:54.77	29.32	54.30
T2145.0	N53:13.08	W009:40.72	N53:41.16	W009:54.60	29.32	54.30

Tellus A2 Block - PLANNED SURVEY LINES
WGS-84

SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2146.0	N53:13.11	W009:40.54	N53:41.19	W009:54.43	29.32	54.30
T2147.0	N53:13.14	W009:40.37	N53:41.22	W009:54.25	29.32	54.30
T2148.0	N53:13.17	W009:40.20	N53:41.26	W009:54.08	29.32	54.30
T2149.0	N53:13.20	W009:40.03	N53:41.29	W009:53.90	29.32	54.30
T2150.0	N53:13.23	W009:39.85	N53:41.32	W009:53.73	29.32	54.30
T2151.0	N53:13.26	W009:39.68	N53:41.35	W009:53.55	29.32	54.30
T2152.0	N53:13.29	W009:39.51	N53:41.38	W009:53.38	29.32	54.30
T2153.0	N53:13.32	W009:39.34	N53:41.41	W009:53.21	29.32	54.30
T2154.0	N53:13.35	W009:39.16	N53:41.44	W009:53.03	29.32	54.30
T2155.0	N53:13.38	W009:38.99	N53:41.47	W009:52.86	29.32	54.30
T2156.0	N53:13.41	W009:38.82	N53:41.50	W009:52.68	29.32	54.30
T2157.0	N53:13.44	W009:38.65	N53:41.53	W009:52.51	29.32	54.30
T2158.0	N53:13.47	W009:38.47	N53:41.56	W009:52.33	29.32	54.30
T2159.0	N53:13.50	W009:38.30	N53:41.59	W009:52.16	29.32	54.30
T2160.0	N53:13.53	W009:38.13	N53:41.62	W009:51.99	29.32	54.30
T2161.0	N53:13.56	W009:37.96	N53:41.65	W009:51.81	29.32	54.30
T2162.0	N53:13.59	W009:37.78	N53:41.68	W009:51.64	29.32	54.30
T2163.0	N53:13.62	W009:37.61	N53:41.71	W009:51.46	29.32	54.30
T2164.0	N53:13.65	W009:37.44	N53:41.75	W009:51.29	29.32	54.30
T2165.0	N53:13.68	W009:37.27	N53:41.78	W009:51.11	29.32	54.30
T2166.0	N53:13.71	W009:37.09	N53:41.81	W009:50.94	29.32	54.30
T2167.0	N53:13.74	W009:36.92	N53:41.84	W009:50.77	29.32	54.30
T2168.0	N53:13.77	W009:36.75	N53:41.87	W009:50.59	29.32	54.30
T2169.0	N53:13.80	W009:36.58	N53:41.90	W009:50.42	29.32	54.30
T2170.0	N53:13.83	W009:36.40	N53:41.93	W009:50.24	29.32	54.30
T2171.0	N53:13.86	W009:36.23	N53:41.96	W009:50.07	29.32	54.30
T2172.0	N53:13.89	W009:36.06	N53:41.99	W009:49.89	29.32	54.30
T2173.0	N53:13.92	W009:35.89	N53:42.02	W009:49.72	29.32	54.30
T2174.0	N53:13.95	W009:35.71	N53:42.05	W009:49.55	29.32	54.30
T2175.0	N53:13.98	W009:35.54	N53:42.08	W009:49.37	29.32	54.30
T2176.0	N53:14.01	W009:35.37	N53:42.11	W009:49.20	29.32	54.30
T2177.0	N53:14.04	W009:35.20	N53:42.14	W009:49.02	29.32	54.30
T2178.0	N53:14.08	W009:35.02	N53:42.17	W009:48.85	29.32	54.30
T2179.0	N53:14.11	W009:34.85	N53:42.20	W009:48.67	29.32	54.30
T2180.0	N53:14.14	W009:34.68	N53:42.23	W009:48.50	29.32	54.30
T2181.0	N53:14.17	W009:34.51	N53:42.27	W009:48.33	29.32	54.30
T2182.0	N53:14.20	W009:34.33	N53:42.30	W009:48.15	29.32	54.30
T2183.0	N53:14.23	W009:34.16	N53:42.33	W009:47.98	29.32	54.30
T2184.0	N53:14.26	W009:33.99	N53:42.36	W009:47.80	29.32	54.30
T2185.0	N53:14.29	W009:33.82	N53:42.39	W009:47.63	29.32	54.30
T2186.0	N53:14.32	W009:33.64	N53:42.42	W009:47.45	29.32	54.30
T2187.0	N53:12.28	W009:32.47	N53:42.45	W009:47.28	31.48	58.30
T2188.0	N53:12.31	W009:32.29	N53:42.48	W009:47.11	31.48	58.30
T2189.0	N53:12.34	W009:32.12	N53:42.51	W009:46.93	31.48	58.30
T2190.0	N53:12.37	W009:31.95	N53:42.54	W009:46.76	31.48	58.30
T2191.0	N53:12.40	W009:31.78	N53:42.57	W009:46.58	31.48	58.30
T2192.0	N53:12.43	W009:31.60	N53:42.60	W009:46.41	31.48	58.30
T2193.0	N53:12.46	W009:31.43	N53:42.63	W009:46.23	31.48	58.30
T2194.0	N53:12.49	W009:31.26	N53:42.66	W009:46.06	31.48	58.30
T2195.0	N53:12.52	W009:31.08	N53:42.69	W009:45.88	31.48	58.30
T2196.0	N53:12.55	W009:30.91	N53:42.72	W009:45.71	31.48	58.30
T2197.0	N53:12.58	W009:30.74	N53:42.75	W009:45.54	31.48	58.30
T2198.0	N53:12.61	W009:30.57	N53:42.78	W009:45.36	31.48	58.30
T2199.0	N53:12.64	W009:30.39	N53:42.81	W009:45.19	31.48	58.30
T2200.0	N53:12.67	W009:30.22	N53:42.84	W009:45.01	31.48	58.30
T2201.0	N53:12.70	W009:30.05	N53:42.88	W009:44.84	31.48	58.30
T2202.0	N53:12.73	W009:29.88	N53:42.91	W009:44.66	31.48	58.30

Tellus A2 Block - PLANNED SURVEY LINES
WGS-84

SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2203.0	N53:12.76	W009:29.70	N53:42.94	W009:44.49	31.48	58.30
T2204.0	N53:12.79	W009:29.53	N53:42.97	W009:44.32	31.48	58.30
T2205.0	N53:12.82	W009:29.36	N53:43.00	W009:44.14	31.48	58.30
T2206.0	N53:12.85	W009:29.19	N53:43.03	W009:43.97	31.48	58.30
T2207.0	N53:12.88	W009:29.01	N53:43.06	W009:43.79	31.48	58.30
T2208.0	N53:12.91	W009:28.84	N53:43.09	W009:43.62	31.48	58.30
T2209.0	N53:12.94	W009:28.67	N53:43.12	W009:43.44	31.48	58.30
T2210.0	N53:12.97	W009:28.50	N53:43.15	W009:43.27	31.48	58.30
T2211.0	N53:13.00	W009:28.32	N53:43.18	W009:43.09	31.48	58.30
T2212.0	N53:13.03	W009:28.15	N53:43.21	W009:42.92	31.48	58.30
T2213.0	N53:13.06	W009:27.98	N53:43.24	W009:42.75	31.48	58.30
T2214.0	N53:13.09	W009:27.81	N53:43.27	W009:42.57	31.48	58.30
T2215.0	N53:13.12	W009:27.63	N53:43.30	W009:42.40	31.48	58.30
T2216.0	N53:13.15	W009:27.46	N53:43.33	W009:42.22	31.48	58.30
T2217.0	N53:13.18	W009:27.29	N53:43.36	W009:42.05	31.48	58.30
T2218.0	N53:13.21	W009:27.12	N53:43.39	W009:41.87	31.48	58.30
T2219.0	N53:13.24	W009:26.94	N53:43.42	W009:41.70	31.48	58.30
T2220.0	N53:13.27	W009:26.77	N53:43.45	W009:41.52	31.48	58.30
T2221.0	N53:13.30	W009:26.60	N53:43.48	W009:41.35	31.48	58.30
T2222.0	N53:13.33	W009:26.43	N53:43.51	W009:41.17	31.48	58.30
T2223.0	N53:13.36	W009:26.25	N53:43.54	W009:41.00	31.48	58.30
T2224.0	N53:13.39	W009:26.08	N53:43.57	W009:40.83	31.48	58.30
T2225.0	N53:13.42	W009:25.91	N53:43.61	W009:40.65	31.48	58.30
T2226.0	N53:13.45	W009:25.73	N53:43.64	W009:40.48	31.48	58.30
T2227.0	N53:13.48	W009:25.56	N53:43.67	W009:40.30	31.48	58.30
T2228.0	N53:13.51	W009:25.39	N53:43.70	W009:40.13	31.48	58.30
T2229.0	N53:13.54	W009:25.22	N53:43.73	W009:39.95	31.48	58.30
T2230.0	N53:13.57	W009:25.04	N53:43.76	W009:39.78	31.48	58.30
T2231.0	N53:13.60	W009:24.87	N53:43.79	W009:39.60	31.48	58.30
T2232.0	N53:13.63	W009:24.70	N53:43.82	W009:39.43	31.48	58.30
T2233.0	N53:13.66	W009:24.53	N53:43.85	W009:39.25	31.48	58.30
T2234.0	N53:13.69	W009:24.35	N53:43.88	W009:39.08	31.48	58.30
T2235.0	N53:13.72	W009:24.18	N53:43.91	W009:38.91	31.48	58.30
T2236.0	N53:13.75	W009:24.01	N53:43.94	W009:38.73	31.48	58.30
T2237.0	N53:13.78	W009:23.84	N53:43.97	W009:38.56	31.48	58.30
T2238.0	N53:13.81	W009:23.66	N53:44.00	W009:38.38	31.48	58.30
T2239.0	N53:13.84	W009:23.49	N53:44.03	W009:38.21	31.48	58.30
T2240.0	N53:13.87	W009:23.32	N53:44.06	W009:38.03	31.48	58.30
T2241.0	N53:13.90	W009:23.14	N53:44.09	W009:37.86	31.48	58.30
T2242.0	N53:13.93	W009:22.97	N53:44.12	W009:37.68	31.48	58.30
T2243.0	N53:13.96	W009:22.80	N53:44.15	W009:37.51	31.48	58.30
T2244.0	N53:13.99	W009:22.63	N53:44.18	W009:37.33	31.48	58.30
T2245.0	N53:14.02	W009:22.45	N53:44.21	W009:37.16	31.48	58.30
T2246.0	N53:14.05	W009:22.28	N53:44.24	W009:36.99	31.48	58.30
T2247.0	N53:14.08	W009:22.11	N53:44.27	W009:36.81	31.48	58.30
T2248.0	N53:14.11	W009:21.94	N53:44.30	W009:36.64	31.48	58.30
T2249.0	N53:14.14	W009:21.76	N53:44.33	W009:36.46	31.48	58.30
T2250.0	N53:14.17	W009:21.59	N53:44.36	W009:36.29	31.48	58.30
T2251.0	N53:14.20	W009:21.42	N53:44.39	W009:36.11	31.48	58.30
T2252.0	N53:14.23	W009:21.24	N53:44.42	W009:35.94	31.48	58.30
T2253.0	N53:12.13	W009:20.05	N53:44.45	W009:35.76	33.70	62.40
T2254.0	N53:12.18	W009:19.89	N53:44.48	W009:35.59	33.67	62.36
T2255.0	N53:12.21	W009:19.72	N53:44.51	W009:35.41	33.67	62.36
T2256.0	N53:12.24	W009:19.54	N53:44.54	W009:35.24	33.67	62.36
T2257.0	N53:12.27	W009:19.37	N53:44.57	W009:35.06	33.67	62.36
T2258.0	N53:12.30	W009:19.20	N53:44.60	W009:34.89	33.67	62.36
T2259.0	N53:12.33	W009:19.03	N53:44.63	W009:34.71	33.67	62.36

Tellus A2 Block - PLANNED SURVEY LINES
WGS-84

SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2260.0	N53:12.36	W009:18.85	N53:44.66	W009:34.54	33.67	62.36
T2261.0	N53:12.39	W009:18.68	N53:44.70	W009:34.37	33.67	62.36
T2262.0	N53:12.42	W009:18.51	N53:44.73	W009:34.19	33.67	62.36
T2263.0	N53:12.45	W009:18.33	N53:44.76	W009:34.02	33.67	62.36
T2264.0	N53:12.48	W009:18.16	N53:44.79	W009:33.84	33.67	62.36
T2265.0	N53:12.51	W009:17.99	N53:44.82	W009:33.67	33.67	62.36
T2266.0	N53:12.54	W009:17.82	N53:44.85	W009:33.49	33.67	62.36
T2267.0	N53:12.57	W009:17.64	N53:44.88	W009:33.32	33.67	62.36
T2268.0	N53:12.60	W009:17.47	N53:44.91	W009:33.14	33.67	62.36
T2269.0	N53:12.63	W009:17.30	N53:44.94	W009:32.97	33.67	62.36
T2270.0	N53:12.66	W009:17.13	N53:44.97	W009:32.79	33.67	62.36
T2271.0	N53:12.69	W009:16.95	N53:45.00	W009:32.62	33.67	62.36
T2272.0	N53:12.72	W009:16.78	N53:45.03	W009:32.44	33.67	62.36
T2273.0	N53:12.75	W009:16.61	N53:45.06	W009:32.27	33.67	62.36
T2274.0	N53:12.78	W009:16.44	N53:45.09	W009:32.09	33.67	62.36
T2275.0	N53:12.81	W009:16.26	N53:45.12	W009:31.92	33.67	62.36
T2276.0	N53:12.84	W009:16.09	N53:45.15	W009:31.74	33.67	62.36
T2277.0	N53:12.87	W009:15.92	N53:45.18	W009:31.57	33.67	62.36
T2278.0	N53:12.90	W009:15.74	N53:45.21	W009:31.40	33.67	62.36
T2279.0	N53:12.93	W009:15.57	N53:45.24	W009:31.22	33.67	62.36
T2280.0	N53:12.96	W009:15.40	N53:45.27	W009:31.05	33.67	62.36
T2281.0	N53:12.99	W009:15.23	N53:45.30	W009:30.87	33.67	62.36
T2282.0	N53:13.02	W009:15.05	N53:45.33	W009:30.70	33.67	62.36
T2283.0	N53:13.05	W009:14.88	N53:45.36	W009:30.52	33.67	62.36
T2284.0	N53:13.08	W009:14.71	N53:45.39	W009:30.35	33.67	62.36
T2285.0	N53:13.11	W009:14.54	N53:45.42	W009:30.17	33.67	62.36
T2286.0	N53:13.14	W009:14.36	N53:45.45	W009:30.00	33.67	62.36
T2287.0	N53:13.17	W009:14.19	N53:45.48	W009:29.82	33.67	62.36
T2288.0	N53:13.20	W009:14.02	N53:45.51	W009:29.65	33.67	62.36
T2289.0	N53:13.23	W009:13.84	N53:45.54	W009:29.47	33.67	62.36
T2290.0	N53:13.25	W009:13.67	N53:45.57	W009:29.30	33.67	62.36
T2291.0	N53:13.28	W009:13.50	N53:45.60	W009:29.12	33.67	62.36
T2292.0	N53:13.31	W009:13.33	N53:45.63	W009:28.95	33.67	62.36
T2293.0	N53:13.34	W009:13.15	N53:45.66	W009:28.77	33.67	62.36
T2294.0	N53:13.37	W009:12.98	N53:45.69	W009:28.60	33.67	62.36
T2295.0	N53:13.40	W009:12.81	N53:45.72	W009:28.42	33.67	62.36
T2296.0	N53:13.43	W009:12.63	N53:45.75	W009:28.25	33.67	62.36
T2297.0	N53:13.46	W009:12.46	N53:45.78	W009:28.07	33.67	62.36
T2298.0	N53:13.49	W009:12.29	N53:45.81	W009:27.90	33.67	62.36
T2299.0	N53:13.52	W009:12.12	N53:45.84	W009:27.72	33.67	62.36
T2300.0	N53:13.55	W009:11.94	N53:45.87	W009:27.55	33.67	62.36
T2301.0	N53:13.58	W009:11.77	N53:45.90	W009:27.38	33.67	62.36
T2302.0	N53:13.61	W009:11.60	N53:45.93	W009:27.20	33.67	62.36
T2303.0	N53:13.64	W009:11.42	N53:45.96	W009:27.03	33.67	62.36
T2304.0	N53:13.67	W009:11.25	N53:45.99	W009:26.85	33.67	62.36
T2305.0	N53:13.70	W009:11.08	N53:46.02	W009:26.68	33.67	62.36
T2306.0	N53:13.73	W009:10.91	N53:46.05	W009:26.50	33.67	62.36
T2307.0	N53:13.76	W009:10.73	N53:46.08	W009:26.33	33.67	62.36
T2308.0	N53:13.79	W009:10.56	N53:46.11	W009:26.15	33.67	62.36
T2309.0	N53:13.82	W009:10.39	N53:46.14	W009:25.98	33.67	62.36
T2310.0	N53:13.85	W009:10.22	N53:46.17	W009:25.80	33.67	62.36
T2311.0	N53:13.88	W009:10.04	N53:46.20	W009:25.63	33.67	62.36
T2312.0	N53:13.91	W009:09.87	N53:46.23	W009:25.45	33.67	62.36
T2313.0	N53:13.94	W009:09.70	N53:46.26	W009:25.28	33.67	62.36
T2314.0	N53:13.97	W009:09.52	N53:46.29	W009:25.10	33.67	62.36
T2315.0	N53:14.00	W009:09.35	N53:46.32	W009:24.93	33.67	62.36
T2316.0	N53:14.03	W009:09.18	N53:46.35	W009:24.75	33.67	62.36

Tellus A2 Block - PLANNED SURVEY LINES
WGS-84

SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2317.0	N53:14.06	W009:09.01	N53:46.38	W009:24.58	33.67	62.36
T2318.0	N53:14.09	W009:08.83	N53:46.41	W009:24.40	33.67	62.36
T2319.0	N53:14.11	W009:08.66	N53:46.44	W009:24.23	33.67	62.36
T2320.0	N53:14.14	W009:08.49	N53:46.47	W009:24.05	33.67	62.36
T2321.0	N53:14.17	W009:08.31	N53:46.50	W009:23.88	33.67	62.36
T2322.0	N53:14.20	W009:08.14	N53:46.53	W009:23.70	33.67	62.36
T2323.0	N53:14.23	W009:07.97	N53:46.56	W009:23.53	33.67	62.36
T2324.0	N53:14.26	W009:07.79	N53:46.59	W009:23.35	33.67	62.36
T2325.0	N53:14.29	W009:07.62	N53:46.62	W009:23.18	33.67	62.36
T2326.0	N53:14.32	W009:07.45	N53:46.65	W009:23.00	33.67	62.36
T2327.0	N53:14.35	W009:07.28	N53:46.68	W009:22.83	33.67	62.36
T2328.0	N53:14.38	W009:07.10	N53:46.71	W009:22.65	33.67	62.36
T2329.0	N53:14.41	W009:06.93	N53:46.74	W009:22.48	33.67	62.36
T2330.0	N53:14.44	W009:06.76	N53:46.77	W009:22.30	33.67	62.36
T2331.0	N53:14.47	W009:06.58	N53:46.80	W009:22.13	33.67	62.36
T2332.0	N53:14.50	W009:06.41	N53:46.83	W009:21.95	33.67	62.36
T2333.0	N53:14.53	W009:06.24	N53:46.86	W009:21.78	33.67	62.36
T2334.0	N53:14.56	W009:06.07	N53:46.89	W009:21.60	33.67	62.36
T2335.0	N53:14.59	W009:05.89	N53:46.92	W009:21.43	33.67	62.36
T2336.0	N53:14.62	W009:05.72	N53:46.95	W009:21.25	33.67	62.36
T2337.0	N53:14.65	W009:05.55	N53:46.98	W009:21.08	33.67	62.36
T2338.0	N53:14.68	W009:05.37	N53:47.01	W009:20.90	33.67	62.36
T2339.0	N53:14.71	W009:05.20	N53:47.04	W009:20.73	33.67	62.36
T2340.0	N53:14.74	W009:05.03	N53:47.07	W009:20.55	33.67	62.36
T2341.0	N53:14.76	W009:04.85	N53:47.10	W009:20.38	33.67	62.36
T2342.0	N53:14.79	W009:04.68	N53:47.13	W009:20.20	33.67	62.36
T2343.0	N53:14.82	W009:04.51	N53:47.16	W009:20.03	33.67	62.36
T2344.0	N53:14.85	W009:04.34	N53:47.19	W009:19.85	33.67	62.36
T2345.0	N53:14.88	W009:04.16	N53:47.22	W009:19.68	33.67	62.36
T2346.0	N53:05.57	W008:59.58	N53:47.25	W009:19.50	43.39	80.36
T2347.0	N53:05.63	W008:59.43	N53:47.28	W009:19.33	43.36	80.30
T2348.0	N53:05.66	W008:59.25	N53:47.31	W009:19.15	43.36	80.30
T2349.0	N53:05.69	W008:59.08	N53:47.34	W009:18.98	43.36	80.30
T2350.0	N53:05.72	W008:58.91	N53:47.37	W009:18.80	43.36	80.30
T2351.0	N53:05.75	W008:58.74	N53:47.40	W009:18.63	43.36	80.30
T2352.0	N53:05.78	W008:58.56	N53:47.43	W009:18.45	43.36	80.30
T2353.0	N53:05.81	W008:58.39	N53:47.46	W009:18.28	43.36	80.30
T2354.0	N53:05.84	W008:58.22	N53:47.49	W009:18.10	43.36	80.30
T2355.0	N53:05.87	W008:58.05	N53:47.52	W009:17.93	43.36	80.30
T2356.0	N53:05.90	W008:57.87	N53:47.55	W009:17.75	43.36	80.30
T2357.0	N53:05.92	W008:57.70	N53:47.58	W009:17.58	43.36	80.30
T2358.0	N53:05.95	W008:57.53	N53:47.60	W009:17.40	43.36	80.30
T2359.0	N53:05.98	W008:57.36	N53:47.63	W009:17.23	43.36	80.30
T2360.0	N53:06.01	W008:57.18	N53:47.66	W009:17.05	43.36	80.30
T2361.0	N53:06.04	W008:57.01	N53:47.69	W009:16.88	43.36	80.30
T2362.0	N53:06.07	W008:56.84	N53:47.72	W009:16.70	43.36	80.30
T2363.0	N53:06.07	W008:56.65	N53:47.75	W009:16.53	43.39	80.35
T2364.0	N53:06.07	W008:56.47	N53:47.78	W009:16.35	43.42	80.41
T2365.0	N53:06.08	W008:56.28	N53:47.81	W009:16.18	43.44	80.46
T2366.0	N53:06.08	W008:56.10	N53:47.84	W009:16.00	43.47	80.51
T2367.0	N53:06.08	W008:55.91	N53:47.87	W009:15.83	43.50	80.57
T2368.0	N53:06.08	W008:55.73	N53:47.90	W009:15.65	43.53	80.62
T2369.0	N53:06.08	W008:55.54	N53:47.93	W009:15.48	43.56	80.67
T2370.0	N53:06.08	W008:55.35	N53:47.96	W009:15.30	43.59	80.73
T2371.0	N53:06.08	W008:55.17	N53:47.99	W009:15.13	43.62	80.78
T2372.0	N53:06.09	W008:54.98	N53:48.02	W009:14.95	43.65	80.84
T2373.0	N53:06.09	W008:54.80	N53:48.05	W009:14.78	43.68	80.89

Tellus A2 Block - PLANNED SURVEY LINES
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SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2374.0	N53:06.09	W008:54.61	N53:48.08	W009:14.60	43.71	80.94
T2375.0	N53:06.09	W008:54.43	N53:48.11	W009:14.43	43.73	81.00
T2376.0	N53:06.09	W008:54.24	N53:48.14	W009:14.25	43.76	81.05
T2377.0	N53:06.09	W008:54.06	N53:48.17	W009:14.08	43.79	81.10
T2378.0	N53:05.50	W008:53.59	N53:48.20	W009:13.90	44.44	82.30
T2379.0	N53:05.53	W008:53.42	N53:48.23	W009:13.72	44.44	82.30
T2380.0	N53:05.56	W008:53.25	N53:48.26	W009:13.55	44.44	82.30
T2381.0	N53:05.59	W008:53.08	N53:48.29	W009:13.37	44.44	82.30
T2382.0	N53:05.62	W008:52.90	N53:48.32	W009:13.20	44.44	82.30
T2383.0	N53:05.65	W008:52.73	N53:48.35	W009:13.02	44.44	82.30
T2384.0	N53:05.68	W008:52.56	N53:48.38	W009:12.85	44.44	82.30
T2385.0	N53:05.71	W008:52.39	N53:48.41	W009:12.67	44.44	82.30
T2386.0	N53:05.73	W008:52.21	N53:48.44	W009:12.50	44.44	82.30
T2387.0	N53:05.76	W008:52.04	N53:48.47	W009:12.32	44.44	82.30
T2388.0	N53:05.79	W008:51.87	N53:48.50	W009:12.15	44.44	82.30
T2389.0	N53:05.82	W008:51.70	N53:48.53	W009:11.97	44.44	82.30
T2390.0	N53:05.85	W008:51.52	N53:48.56	W009:11.80	44.44	82.30
T2391.0	N53:05.88	W008:51.35	N53:48.59	W009:11.62	44.44	82.30
T2392.0	N53:05.91	W008:51.18	N53:48.62	W009:11.45	44.44	82.30
T2393.0	N53:05.94	W008:51.01	N53:48.64	W009:11.27	44.44	82.30
T2394.0	N53:05.97	W008:50.83	N53:48.67	W009:11.10	44.44	82.30
T2395.0	N53:06.00	W008:50.66	N53:48.70	W009:10.92	44.44	82.30
T2396.0	N53:06.03	W008:50.49	N53:48.73	W009:10.75	44.44	82.30
T2397.0	N53:06.06	W008:50.31	N53:48.76	W009:10.57	44.44	82.30
T2398.0	N53:06.08	W008:50.14	N53:48.79	W009:10.40	44.44	82.30
T2399.0	N53:06.11	W008:49.97	N53:48.82	W009:10.22	44.44	82.30
T2400.0	N53:06.12	W008:49.79	N53:48.85	W009:10.05	44.46	82.34
T2401.0	N53:06.12	W008:49.60	N53:48.88	W009:09.87	44.49	82.39
T2402.0	N53:06.12	W008:49.42	N53:48.91	W009:09.69	44.52	82.45
T2403.0	N53:06.13	W008:49.23	N53:48.94	W009:09.52	44.55	82.50
T2404.0	N53:06.13	W008:49.05	N53:48.97	W009:09.34	44.58	82.55
T2405.0	N53:06.13	W008:48.86	N53:49.00	W009:09.17	44.61	82.61
T2406.0	N53:06.13	W008:48.67	N53:49.03	W009:08.99	44.63	82.66
T2407.0	N53:06.13	W008:48.49	N53:49.06	W009:08.82	44.66	82.72
T2408.0	N53:06.13	W008:48.30	N53:49.09	W009:08.64	44.69	82.77
T2409.0	N53:06.13	W008:48.12	N53:49.12	W009:08.47	44.72	82.82
T2410.0	N53:06.13	W008:47.93	N53:49.15	W009:08.29	44.75	82.88
T2411.0	N53:06.14	W008:47.75	N53:49.18	W009:08.12	44.78	82.93
T2412.0	N53:06.14	W008:47.56	N53:49.21	W009:07.94	44.81	82.98
T2413.0	N53:06.14	W008:47.38	N53:49.24	W009:07.77	44.84	83.04
T2414.0	N53:06.14	W008:47.19	N53:49.27	W009:07.59	44.87	83.09
T2415.0	N53:06.14	W008:47.00	N53:49.30	W009:07.42	44.90	83.15
T2416.0	N53:05.57	W008:46.55	N53:49.33	W009:07.24	45.52	84.30
T2417.0	N53:05.60	W008:46.38	N53:49.36	W009:07.07	45.52	84.30
T2418.0	N53:05.63	W008:46.21	N53:49.38	W009:06.89	45.52	84.30
T2419.0	N53:05.66	W008:46.04	N53:49.41	W009:06.71	45.52	84.30
T2420.0	N53:05.69	W008:45.86	N53:49.44	W009:06.54	45.52	84.30
T2421.0	N53:05.71	W008:45.69	N53:49.47	W009:06.36	45.52	84.30
T2422.0	N53:05.74	W008:45.52	N53:49.50	W009:06.19	45.52	84.30
T2423.0	N53:05.77	W008:45.34	N53:49.53	W009:06.01	45.52	84.30
T2424.0	N53:05.80	W008:45.17	N53:49.56	W009:05.84	45.52	84.30
T2425.0	N53:05.83	W008:45.00	N53:49.59	W009:05.66	45.52	84.30
T2426.0	N53:05.86	W008:44.83	N53:49.62	W009:05.49	45.52	84.30
T2427.0	N53:05.89	W008:44.65	N53:49.65	W009:05.31	45.52	84.30
T2428.0	N53:05.92	W008:44.48	N53:49.68	W009:05.14	45.52	84.30
T2429.0	N53:05.95	W008:44.31	N53:49.71	W009:04.96	45.52	84.30
T2430.0	N53:05.98	W008:44.14	N53:49.74	W009:04.79	45.52	84.30

Tellus A2 Block - PLANNED SURVEY LINES
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SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2431.0	N53:06.00	W008:43.96	N53:49.77	W009:04.61	45.52	84.30
T2432.0	N53:06.03	W008:43.79	N53:49.80	W009:04.44	45.52	84.30
T2433.0	N53:06.06	W008:43.62	N53:49.83	W009:04.26	45.52	84.30
T2434.0	N53:06.09	W008:43.45	N53:49.86	W009:04.08	45.52	84.30
T2435.0	N53:06.12	W008:43.27	N53:49.89	W009:03.91	45.52	84.30
T2436.0	N53:06.15	W008:43.10	N53:49.92	W009:03.73	45.52	84.30
T2437.0	N53:06.16	W008:42.92	N53:49.94	W009:03.56	45.53	84.33
T2438.0	N53:06.16	W008:42.74	N53:49.97	W009:03.38	45.56	84.38
T2439.0	N53:06.17	W008:42.55	N53:50.00	W009:03.21	45.59	84.44
T2440.0	N53:06.17	W008:42.36	N53:50.03	W009:03.03	45.62	84.49
T2441.0	N53:06.17	W008:42.18	N53:50.06	W009:02.86	45.65	84.54
T2442.0	N53:06.17	W008:41.99	N53:50.09	W009:02.68	45.68	84.60
T2443.0	N53:06.17	W008:41.81	N53:50.12	W009:02.51	45.71	84.65
T2444.0	N53:06.17	W008:41.62	N53:50.15	W009:02.33	45.74	84.70
T2445.0	N53:06.17	W008:41.44	N53:50.18	W009:02.15	45.77	84.76
T2446.0	N53:06.17	W008:41.25	N53:50.21	W009:01.98	45.79	84.81
T2447.0	N53:06.17	W008:41.07	N53:50.24	W009:01.80	45.82	84.86
T2448.0	N53:06.18	W008:40.88	N53:50.27	W009:01.63	45.85	84.92
T2449.0	N53:06.18	W008:40.69	N53:50.30	W009:01.45	45.88	84.97
T2450.0	N53:06.18	W008:40.51	N53:50.33	W009:01.28	45.91	85.03
T2451.0	N53:06.18	W008:40.32	N53:50.36	W009:01.10	45.94	85.08
T2452.0	N53:06.18	W008:40.14	N53:50.39	W009:00.93	45.97	85.13
T2453.0	N53:05.60	W008:39.68	N53:50.42	W009:00.75	46.60	86.30
T2454.0	N53:05.63	W008:39.51	N53:50.45	W009:00.58	46.60	86.30
T2455.0	N53:05.66	W008:39.34	N53:50.47	W009:00.40	46.60	86.30
T2456.0	N53:05.69	W008:39.17	N53:50.50	W009:00.22	46.60	86.30
T2457.0	N53:05.72	W008:38.99	N53:50.53	W009:00.05	46.60	86.30
T2458.0	N53:05.75	W008:38.82	N53:50.56	W008:59.87	46.60	86.30
T2459.0	N53:05.77	W008:38.65	N53:50.59	W008:59.70	46.60	86.30
T2460.0	N53:05.80	W008:38.48	N53:50.62	W008:59.52	46.60	86.30
T2461.0	N53:05.83	W008:38.30	N53:50.65	W008:59.35	46.60	86.30
T2462.0	N53:05.86	W008:38.13	N53:50.68	W008:59.17	46.60	86.30
T2463.0	N53:05.89	W008:37.96	N53:50.71	W008:59.00	46.60	86.30
T2464.0	N53:05.92	W008:37.79	N53:50.74	W008:58.82	46.60	86.30
T2465.0	N53:05.95	W008:37.61	N53:50.77	W008:58.65	46.60	86.30
T2466.0	N53:05.98	W008:37.44	N53:50.80	W008:58.47	46.60	86.30
T2467.0	N53:06.01	W008:37.27	N53:50.83	W008:58.29	46.60	86.30
T2468.0	N53:06.03	W008:37.09	N53:50.86	W008:58.12	46.60	86.30
T2469.0	N53:06.06	W008:36.92	N53:50.89	W008:57.94	46.60	86.30
T2470.0	N53:06.09	W008:36.75	N53:50.91	W008:57.77	46.60	86.30
T2471.0	N53:06.12	W008:36.58	N53:50.94	W008:57.59	46.60	86.30
T2472.0	N53:06.15	W008:36.40	N53:50.97	W008:57.42	46.60	86.30
T2473.0	N53:06.18	W008:36.23	N53:51.00	W008:57.24	46.60	86.30
T2474.0	N53:06.20	W008:36.05	N53:51.03	W008:57.07	46.61	86.32
T2475.0	N53:06.20	W008:35.87	N53:51.06	W008:56.89	46.64	86.37
T2476.0	N53:06.20	W008:35.68	N53:51.09	W008:56.71	46.66	86.42
T2477.0	N53:06.20	W008:35.50	N53:51.12	W008:56.54	46.69	86.48
T2478.0	N53:06.20	W008:35.31	N53:39.73	W008:50.94	34.84	64.53
T2479.0	N53:06.20	W008:35.13	N53:39.76	W008:50.77	34.87	64.58
T2480.0	N53:06.20	W008:34.94	N53:39.79	W008:50.59	34.90	64.64
T2481.0	N53:06.21	W008:34.76	N53:39.82	W008:50.42	34.93	64.69
T2482.0	N53:06.21	W008:34.57	N53:39.84	W008:50.24	34.96	64.75
T2483.0	N53:06.21	W008:34.38	N53:39.87	W008:50.07	34.99	64.80
T2484.0	N53:06.21	W008:34.20	N53:39.90	W008:49.89	35.02	64.85
T2485.0	N53:06.21	W008:34.01	N53:39.93	W008:49.72	35.05	64.91
T2486.0	N53:06.21	W008:33.83	N53:39.96	W008:49.54	35.08	64.96
T2487.0	N53:06.21	W008:33.64	N53:39.99	W008:49.37	35.10	65.01

Tellus A2 Block - PLANNED SURVEY LINES
WGS-84

SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2488.0	N53:06.21	W008:33.46	N53:40.02	W008:49.19	35.13	65.07
T2489.0	N53:06.21	W008:33.27	N53:40.05	W008:49.02	35.16	65.12
T2490.0	N53:05.63	W008:32.82	N53:40.08	W008:48.84	35.80	66.30
T2491.0	N53:05.66	W008:32.64	N53:40.11	W008:48.67	35.80	66.30
T2492.0	N53:05.69	W008:32.47	N53:40.14	W008:48.49	35.80	66.30
T2493.0	N53:05.71	W008:32.30	N53:40.16	W008:48.32	35.80	66.30
T2494.0	N53:05.74	W008:32.13	N53:40.19	W008:48.14	35.80	66.30
T2495.0	N53:05.77	W008:31.95	N53:40.22	W008:47.97	35.80	66.30
T2496.0	N53:05.80	W008:31.78	N53:40.25	W008:47.79	35.80	66.30
T2497.0	N53:05.83	W008:31.61	N53:40.28	W008:47.62	35.80	66.30
T2498.0	N53:05.86	W008:31.43	N53:40.31	W008:47.44	35.80	66.30
T2499.0	N53:05.89	W008:31.26	N53:40.34	W008:47.27	35.80	66.30
T2500.0	N53:05.91	W008:31.09	N53:40.37	W008:47.09	35.80	66.30
T2501.0	N53:05.94	W008:30.92	N53:40.40	W008:46.92	35.80	66.30
T2502.0	N53:05.97	W008:30.74	N53:40.43	W008:46.74	35.80	66.30
T2503.0	N53:06.00	W008:30.57	N53:40.46	W008:46.57	35.80	66.30
T2504.0	N53:06.03	W008:30.40	N53:40.48	W008:46.39	35.80	66.30
T2505.0	N53:06.06	W008:30.23	N53:40.51	W008:46.22	35.80	66.30
T2506.0	N53:06.09	W008:30.05	N53:40.54	W008:46.04	35.80	66.30
T2507.0	N53:06.12	W008:29.88	N53:40.57	W008:45.87	35.80	66.30
T2508.0	N53:06.14	W008:29.71	N53:40.60	W008:45.69	35.80	66.30
T2509.0	N53:06.17	W008:29.53	N53:40.63	W008:45.52	35.80	66.30
T2510.0	N53:06.20	W008:29.36	N53:40.66	W008:45.34	35.80	66.30
T2511.0	N53:06.23	W008:29.19	N53:40.69	W008:45.17	35.80	66.30
T2512.0	N53:06.23	W008:29.00	N53:40.72	W008:44.99	35.83	66.36
T2513.0	N53:06.23	W008:28.82	N53:40.75	W008:44.82	35.86	66.41
T2514.0	N53:06.23	W008:28.63	N53:40.77	W008:44.64	35.89	66.46
T2515.0	N53:06.23	W008:28.45	N53:40.80	W008:44.47	35.92	66.52
T2516.0	N53:06.23	W008:28.26	N53:40.83	W008:44.29	35.95	66.57
T2517.0	N53:06.23	W008:28.07	N53:40.86	W008:44.12	35.97	66.63
T2518.0	N53:06.23	W008:27.89	N53:40.89	W008:43.94	36.00	66.68
T2519.0	N53:06.23	W008:27.70	N53:40.92	W008:43.77	36.03	66.73
T2520.0	N53:06.23	W008:27.52	N53:40.95	W008:43.59	36.06	66.79
T2521.0	N53:06.23	W008:27.33	N53:40.98	W008:43.42	36.09	66.84
T2522.0	N53:06.24	W008:27.15	N53:41.01	W008:43.24	36.12	66.89
T2523.0	N53:06.24	W008:26.96	N53:41.04	W008:43.07	36.15	66.95
T2524.0	N53:06.24	W008:26.78	N53:41.06	W008:42.89	36.18	67.00
T2525.0	N53:06.24	W008:26.59	N53:41.09	W008:42.72	36.21	67.06
T2526.0	N53:06.24	W008:26.40	N53:41.12	W008:42.54	36.24	67.11
T2527.0	N53:05.65	W008:25.95	N53:41.15	W008:42.37	36.88	68.30
T2528.0	N53:05.68	W008:25.78	N53:41.18	W008:42.19	36.88	68.30
T2529.0	N53:05.70	W008:25.60	N53:41.21	W008:42.02	36.88	68.30
T2530.0	N53:05.73	W008:25.43	N53:41.24	W008:41.84	36.88	68.30
T2531.0	N53:05.76	W008:25.26	N53:41.27	W008:41.67	36.88	68.30
T2532.0	N53:05.79	W008:25.08	N53:41.30	W008:41.49	36.88	68.30
T2533.0	N53:05.82	W008:24.91	N53:41.32	W008:41.32	36.88	68.30
T2534.0	N53:05.85	W008:24.74	N53:41.35	W008:41.14	36.88	68.30
T2535.0	N53:05.88	W008:24.57	N53:41.38	W008:40.97	36.88	68.30
T2536.0	N53:05.90	W008:24.39	N53:41.41	W008:40.79	36.88	68.30
T2537.0	N53:05.93	W008:24.22	N53:41.44	W008:40.62	36.88	68.30
T2538.0	N53:05.96	W008:24.05	N53:41.47	W008:40.44	36.88	68.30
T2539.0	N53:05.99	W008:23.87	N53:41.50	W008:40.27	36.88	68.30
T2540.0	N53:06.02	W008:23.70	N53:41.53	W008:40.09	36.88	68.30
T2541.0	N53:06.05	W008:23.53	N53:41.56	W008:39.92	36.88	68.30
T2542.0	N53:06.07	W008:23.36	N53:41.58	W008:39.74	36.88	68.30
T2543.0	N53:06.10	W008:23.18	N53:41.61	W008:39.57	36.88	68.30
T2544.0	N53:06.13	W008:23.01	N53:41.64	W008:39.39	36.88	68.30

Tellus A2 Block - PLANNED SURVEY LINES
WGS-84

SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2545.0	N53:06.16	W008:22.84	N53:41.67	W008:39.22	36.88	68.30
T2546.0	N53:06.19	W008:22.66	N53:41.70	W008:39.04	36.88	68.30
T2547.0	N53:06.22	W008:22.49	N53:41.73	W008:38.87	36.88	68.30
T2548.0	N53:06.25	W008:22.32	N53:41.76	W008:38.69	36.88	68.30
T2549.0	N53:06.25	W008:22.14	N53:41.79	W008:38.52	36.90	68.34
T2550.0	N53:06.25	W008:21.95	N53:41.82	W008:38.34	36.93	68.40
T2551.0	N53:06.25	W008:21.76	N53:41.84	W008:38.17	36.96	68.45
T2552.0	N53:06.25	W008:21.58	N53:41.87	W008:37.99	36.99	68.51
T2553.0	N53:06.25	W008:21.39	N53:41.90	W008:37.82	37.02	68.56
T2554.0	N53:06.25	W008:21.21	N53:41.93	W008:37.64	37.05	68.61
T2555.0	N53:06.25	W008:21.02	N53:41.96	W008:37.47	37.08	68.67
T2556.0	N53:06.25	W008:20.84	N53:41.99	W008:37.29	37.11	68.72
T2557.0	N53:06.25	W008:20.65	N53:42.02	W008:37.12	37.14	68.77
T2558.0	N53:06.25	W008:20.47	N53:42.05	W008:36.94	37.16	68.83
T2559.0	N53:06.26	W008:20.28	N53:42.07	W008:36.77	37.19	68.88
T2560.0	N53:06.26	W008:20.09	N53:42.10	W008:36.59	37.22	68.94
T2561.0	N53:06.26	W008:19.91	N53:42.13	W008:36.41	37.25	68.99
T2562.0	N53:06.26	W008:19.72	N53:42.16	W008:36.24	37.28	69.04
T2563.0	N53:06.26	W008:19.54	N53:42.19	W008:36.06	37.31	69.10
T2564.0	N53:05.66	W008:19.08	N53:42.22	W008:35.89	37.96	70.30
T2565.0	N53:05.69	W008:18.91	N53:42.25	W008:35.71	37.96	70.30
T2566.0	N53:05.72	W008:18.73	N53:42.28	W008:35.54	37.96	70.30
T2567.0	N53:05.74	W008:18.56	N53:42.31	W008:35.36	37.96	70.30
T2568.0	N53:05.77	W008:18.39	N53:42.33	W008:35.19	37.96	70.30
T2569.0	N53:05.80	W008:18.22	N53:42.36	W008:35.01	37.96	70.30
T2570.0	N53:05.83	W008:18.04	N53:42.39	W008:34.84	37.96	70.30
T2571.0	N53:05.86	W008:17.87	N53:42.42	W008:34.66	37.96	70.30
T2572.0	N53:05.89	W008:17.70	N53:42.45	W008:34.49	37.96	70.30
T2573.0	N53:05.91	W008:17.52	N53:42.48	W008:34.31	37.96	70.30
T2574.0	N53:05.94	W008:17.35	N53:42.51	W008:34.14	37.96	70.30
T2575.0	N53:05.97	W008:17.18	N53:42.54	W008:33.96	37.96	70.30
T2576.0	N53:06.00	W008:17.01	N53:42.56	W008:33.79	37.96	70.30
T2577.0	N53:06.03	W008:16.83	N53:42.59	W008:33.61	37.96	70.30
T2578.0	N53:06.06	W008:16.66	N53:42.62	W008:33.44	37.96	70.30
T2579.0	N53:06.08	W008:16.49	N53:42.65	W008:33.26	37.96	70.30
T2580.0	N53:06.11	W008:16.31	N53:42.68	W008:33.09	37.96	70.30
T2581.0	N53:06.14	W008:16.14	N53:42.71	W008:32.91	37.96	70.30
T2582.0	N53:06.17	W008:15.97	N53:42.74	W008:32.74	37.96	70.30
T2583.0	N53:06.20	W008:15.80	N53:42.76	W008:32.56	37.96	70.30
T2584.0	N53:06.23	W008:15.62	N53:42.79	W008:32.38	37.96	70.30
T2585.0	N53:06.25	W008:15.45	N53:42.82	W008:32.21	37.96	70.30
T2586.0	N53:06.27	W008:15.27	N53:42.85	W008:32.03	37.98	70.33
T2587.0	N53:06.27	W008:15.08	N53:42.88	W008:31.86	38.01	70.39
T2588.0	N53:06.27	W008:14.90	N53:42.91	W008:31.68	38.03	70.44
T2589.0	N53:06.27	W008:14.71	N53:42.94	W008:31.51	38.06	70.49
T2590.0	N53:06.27	W008:14.53	N53:42.97	W008:31.33	38.09	70.55
T2591.0	N53:06.27	W008:14.34	N53:42.99	W008:31.16	38.12	70.60
T2592.0	N53:06.27	W008:14.16	N53:43.02	W008:30.98	38.15	70.65
T2593.0	N53:06.27	W008:13.97	N53:43.05	W008:30.81	38.18	70.71
T2594.0	N53:06.27	W008:13.78	N53:43.08	W008:30.63	38.21	70.76
T2595.0	N53:06.27	W008:13.60	N53:43.11	W008:30.46	38.24	70.82
T2596.0	N53:06.27	W008:13.41	N53:43.14	W008:30.28	38.27	70.87
T2597.0	N53:06.27	W008:13.23	N53:43.17	W008:30.11	38.30	70.92
T2598.0	N53:06.27	W008:13.04	N53:43.19	W008:29.93	38.32	70.98
T2599.0	N53:06.27	W008:12.86	N53:43.22	W008:29.76	38.35	71.03
T2600.0	N53:06.27	W008:12.67	N53:43.25	W008:29.58	38.38	71.08
T2601.0	N53:06.27	W008:12.48	N53:43.28	W008:29.40	38.41	71.14

Tellus A2 Block - PLANNED SURVEY LINES
WGS-84

SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2602.0	N53:05.69	W008:12.04	N53:43.31	W008:29.23	39.04	72.30
T2603.0	N53:05.72	W008:11.87	N53:43.34	W008:29.05	39.04	72.30
T2604.0	N53:05.75	W008:11.69	N53:43.37	W008:28.88	39.04	72.30
T2605.0	N53:05.78	W008:11.52	N53:43.40	W008:28.70	39.04	72.30
T2606.0	N53:05.81	W008:11.35	N53:43.42	W008:28.53	39.04	72.30
T2607.0	N53:05.83	W008:11.17	N53:15.36	W008:15.48	9.88	18.30
T2608.0	N53:05.86	W008:11.00	N53:15.39	W008:15.30	9.88	18.30
T2609.0	N53:05.89	W008:10.83	N53:15.42	W008:15.13	9.88	18.30
T2610.0	N53:05.92	W008:10.66	N53:15.45	W008:14.95	9.88	18.30
T2611.0	N53:05.95	W008:10.48	N53:15.47	W008:14.78	9.88	18.30
T2612.0	N53:05.98	W008:10.31	N53:15.50	W008:14.61	9.88	18.30
T2613.0	N53:06.00	W008:10.14	N53:15.53	W008:14.43	9.88	18.30
T2614.0	N53:06.03	W008:09.96	N53:15.56	W008:14.26	9.88	18.30
T2615.0	N53:06.06	W008:09.79	N53:15.59	W008:14.09	9.88	18.30
T2616.0	N53:06.09	W008:09.62	N53:15.61	W008:13.91	9.88	18.30
T2617.0	N53:06.12	W008:09.44	N53:15.64	W008:13.74	9.88	18.30
T2618.0	N53:06.14	W008:09.27	N53:15.67	W008:13.57	9.88	18.30
T2619.0	N53:06.17	W008:09.10	N53:15.70	W008:13.39	9.88	18.30
T2620.0	N53:06.20	W008:08.93	N53:15.73	W008:13.22	9.88	18.30
T2621.0	N53:06.23	W008:08.75	N53:15.76	W008:13.05	9.88	18.30
T2622.0	N53:06.26	W008:08.58	N53:15.78	W008:12.87	9.88	18.30
T2623.0	N53:06.27	W008:08.40	N53:15.81	W008:12.70	9.89	18.32
T2624.0	N53:06.27	W008:08.22	N53:15.84	W008:12.52	9.92	18.37
T2625.0	N53:06.28	W008:08.03	N53:15.87	W008:12.35	9.95	18.43
T2626.0	N53:06.28	W008:07.85	N53:15.90	W008:12.18	9.98	18.48
T2627.0	N53:06.28	W008:07.66	N53:15.93	W008:12.00	10.01	18.54
T2628.0	N53:06.28	W008:07.47	N53:15.95	W008:11.83	10.04	18.59
T2629.0	N53:06.28	W008:07.29	N53:15.98	W008:11.66	10.07	18.64
T2630.0	N53:06.28	W008:07.10	N53:16.01	W008:11.48	10.10	18.70
T2631.0	N53:06.28	W008:06.92	N53:16.04	W008:11.31	10.12	18.75
T2632.0	N53:06.28	W008:06.73	N53:16.07	W008:11.14	10.15	18.80
T2633.0	N53:06.28	W008:06.55	N53:16.09	W008:10.96	10.18	18.86
T2634.0	N53:06.28	W008:06.36	N53:16.12	W008:10.79	10.21	18.91
T2635.0	N53:06.28	W008:06.17	N53:16.15	W008:10.61	10.24	18.97
T2636.0	N53:06.28	W008:05.99	N53:16.18	W008:10.44	10.27	19.02
T2637.0	N53:06.28	W008:05.80	N53:16.21	W008:10.27	10.30	19.07
T2638.0	N53:06.28	W008:05.62	N53:16.24	W008:10.09	10.33	19.13
T2639.0	N53:05.69	W008:05.17	N53:16.26	W008:09.92	10.96	20.30
T2640.0	N53:05.72	W008:05.00	N53:16.29	W008:09.75	10.96	20.30
T2641.0	N53:05.75	W008:04.83	N53:16.32	W008:09.57	10.96	20.30
T2642.0	N53:05.78	W008:04.65	N53:16.35	W008:09.40	10.96	20.30
T2643.0	N53:05.81	W008:04.48	N53:16.38	W008:09.22	10.96	20.30
T2644.0	N53:05.83	W008:04.31	N53:16.40	W008:09.05	10.96	20.30
T2645.0	N53:05.86	W008:04.13	N53:16.43	W008:08.88	10.96	20.30
T2646.0	N53:05.89	W008:03.96	N53:16.46	W008:08.70	10.96	20.30
T2647.0	N53:05.92	W008:03.79	N53:16.49	W008:08.53	10.96	20.30
T2648.0	N53:05.95	W008:03.61	N53:16.52	W008:08.36	10.96	20.30
T2649.0	N53:05.97	W008:03.44	N53:16.54	W008:08.18	10.96	20.30
T2650.0	N53:06.00	W008:03.27	N53:16.57	W008:08.01	10.96	20.30
T2651.0	N53:06.03	W008:03.09	N53:16.60	W008:07.83	10.96	20.30
T2652.0	N53:06.06	W008:02.92	N53:16.63	W008:07.66	10.96	20.30
T2653.0	N53:06.09	W008:02.75	N53:16.66	W008:07.49	10.96	20.30
T2654.0	N53:06.11	W008:02.58	N53:16.69	W008:07.31	10.96	20.30
T2655.0	N53:06.14	W008:02.40	N53:16.71	W008:07.14	10.96	20.30
T2656.0	N53:06.17	W008:02.23	N53:16.74	W008:06.97	10.96	20.30
T2657.0	N53:06.20	W008:02.06	N53:16.77	W008:06.79	10.96	20.30
T2658.0	N53:06.23	W008:01.88	N53:16.80	W008:06.62	10.96	20.30

Tellus A2 Block - PLANNED SURVEY LINES
WGS-84

SEGMENT NO	START LAT	START LONG	END LAT	END LONG	LENGTH NM	LENGTH KM
T2659.0	N53:06.25	W008:01.71	N53:16.83	W008:06.44	10.96	20.30
T2660.0	N53:06.28	W008:01.54	N53:16.85	W008:06.27	10.97	20.31
T2661.0	N53:06.28	W008:01.35	N53:16.88	W008:06.10	10.99	20.36
T2662.0	N53:06.28	W008:01.16	N53:16.91	W008:05.92	11.02	20.42
T2663.0	N53:06.28	W008:00.98	N53:16.94	W008:05.75	11.05	20.47
T2664.0	N53:06.28	W008:00.79	N53:16.97	W008:05.58	11.08	20.52
T2665.0	N53:06.28	W008:00.61	N53:16.99	W008:05.40	11.11	20.58
T2666.0	N53:06.28	W008:00.42	N53:17.02	W008:05.23	11.14	20.63
T2667.0	N53:06.28	W008:00.24	N53:17.05	W008:05.05	11.17	20.68
T2668.0	N53:06.28	W008:00.05	N53:17.08	W008:04.88	11.20	20.74
T2669.0	N53:06.28	W007:59.86	N53:17.11	W008:04.71	11.23	20.79
T2670.0	N53:06.28	W007:59.68	N53:17.13	W008:04.53	11.26	20.85
T2671.0	N53:06.28	W007:59.49	N53:17.16	W008:04.36	11.28	20.90
T2672.0	N53:06.28	W007:59.31	N53:17.19	W008:04.19	11.31	20.95
T2673.0	N53:06.28	W007:59.12	N53:17.22	W008:04.01	11.34	21.01
T2674.0	N53:06.28	W007:58.94	N53:17.25	W008:03.84	11.37	21.06
T2675.0	N53:06.28	W007:58.75	N53:17.27	W008:03.66	11.40	21.11
T2676.0	N53:05.69	W007:58.30	N53:17.30	W008:03.49	12.04	22.30
T2677.0	N53:05.71	W007:58.13	N53:17.33	W008:03.32	12.04	22.30
T2678.0	N53:05.74	W007:57.96	N53:17.36	W008:03.14	12.04	22.30
T2679.0	N53:05.77	W007:57.78	N53:17.39	W008:02.97	12.04	22.30
T2680.0	N53:05.80	W007:57.61	N53:17.41	W008:02.79	12.04	22.30
T2681.0	N53:05.83	W007:57.44	N53:17.44	W008:02.62	12.04	22.30
T2682.0	N53:05.85	W007:57.26	N53:17.47	W008:02.45	12.04	22.30
T2683.0	N53:05.88	W007:57.09	N53:17.50	W008:02.27	12.04	22.30
T2684.0	N53:05.91	W007:56.92	N53:17.53	W008:02.10	12.04	22.30
T2685.0	N53:05.94	W007:56.75	N53:17.55	W008:01.93	12.04	22.30
T2686.0	N53:05.96	W007:56.57	N53:17.58	W008:01.75	12.04	22.30
T2687.0	N53:05.99	W007:56.40	N53:17.61	W008:01.58	12.04	22.30
T2688.0	N53:06.02	W007:56.23	N53:17.64	W008:01.40	12.04	22.30
T2689.0	N53:06.05	W007:56.05	N53:17.67	W008:01.23	12.04	22.30
T2690.0	N53:06.08	W007:55.88	N53:17.69	W008:01.06	12.04	22.30
T2691.0	N53:06.10	W007:55.71	N53:17.72	W008:00.88	12.04	22.30
T2692.0	N53:06.13	W007:55.53	N53:17.75	W008:00.71	12.04	22.30
T2693.0	N53:06.16	W007:55.36	N53:17.78	W008:00.53	12.04	22.30
T2694.0	N53:06.17	W007:55.18	N53:17.81	W008:00.36	12.05	22.32
T2695.0	N53:06.18	W007:55.00	N53:17.83	W008:00.19	12.08	22.37
T2696.0	N53:06.18	W007:54.81	N53:17.86	W008:00.01	12.11	22.43
T2697.0	N53:06.19	W007:54.63	N53:17.89	W007:59.84	12.12	22.45
T2698.0	N53:06.19	W007:54.44	N53:17.92	W007:59.66	12.16	22.51
T2699.0	N53:06.18	W007:54.26	N53:17.95	W007:59.49	12.19	22.58

Total control line length = 2177.84 nautical miles
= 4033.37 kilometers.

Total traverse line length = 21116.35 nautical miles
= 39107.48 kilometers.

Total length of all lines = 23294.20 nautical miles
= 43140.85 kilometers.

SGL

Appendix III

Tellus A2 Block – FLOWN LINES (FEM)
IRENET95, Irish Transverse Mercator

LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
201.00	30707.90	30788.40	601715.32	606444.10	705009.19	706277.74	6	157	2016
202.00	31028.00	31241.40	594043.97	605927.33	705035.35	708211.67	6	157	2016
203.00	31334.50	31661.50	586377.93	605403.24	705054.33	710152.34	6	157	2016
204.00	58970.40	59432.50	578515.74	604884.82	705025.06	712087.22	4	156	2016
205.00	58217.10	58787.40	570848.16	604366.37	705035.66	714017.55	4	156	2016
206.00	57413.40	58127.00	563192.89	603858.92	705038.12	715930.64	4	156	2016
207.00	34268.90	35078.30	555516.36	603334.49	705070.78	717878.96	13	167	2016
208.00	56150.80	57094.10	547851.46	602815.31	705083.97	719808.52	4	156	2016
209.00	54965.50	56053.00	539990.63	602300.55	705039.53	721739.72	4	156	2016
210.00	53586.20	54744.00	533294.71	601775.30	705321.27	723678.41	4	156	2016
211.00	52241.00	53498.00	532770.74	601258.48	707245.18	725606.71	4	156	2016
212.00	50879.40	52067.60	532254.61	600735.92	709202.35	727568.36	4	156	2016
213.00	47066.20	47935.50	531733.17	582260.57	711119.62	724664.17	53	204	2016
214.00	58116.20	59013.60	531222.86	581746.02	713050.23	726588.03	53	204	2016
215.00	57120.20	57986.80	530700.71	581224.28	714979.98	728531.60	53	204	2016
216.00	56092.40	57018.80	530179.54	580705.61	716917.93	730447.07	53	204	2016
217.00	55038.50	55889.40	529662.44	580189.82	718852.43	732392.17	53	204	2016
218.00	54033.10	54936.30	529148.02	579673.23	720782.71	734315.69	53	204	2016
219.00	52746.70	53925.60	510657.76	579150.23	717905.39	736247.07	53	204	2016
220.00	51413.80	52660.10	510142.51	578640.02	719828.60	738180.17	53	204	2016
221.00	49890.00	51286.40	496867.83	578115.21	718349.48	740123.66	53	204	2016
222.00	48268.20	49702.00	496350.29	577602.33	720295.80	742041.26	53	204	2016
223.00	47201.90	47780.60	545144.81	577085.49	735427.61	743976.16	54	209	2016
223.01	53721.00	54991.50	478637.70	545336.55	717604.19	735463.56	54	209	2016
224.00	45438.40	47107.10	478119.18	576559.30	719531.13	745913.80	54	209	2016
225.00	40372.80	42147.80	477595.24	576045.81	721472.48	747833.79	54	209	2016
226.00	65878.00	67537.60	477080.53	575523.84	723394.39	749766.02	54	209	2016
227.00	62653.50	64361.00	476564.60	575017.20	725321.97	751703.79	56	211	2016
228.00	49713.50	51447.90	476041.12	574497.54	727270.86	753633.45	56	211	2016
229.00	37904.70	38814.90	522499.30	573977.01	741766.77	755564.25	54	209	2016
229.01	62225.40	63182.50	466829.83	522707.79	726868.53	741836.43	58	212	2016
230.00	36915.20	37780.80	522602.67	573460.02	743883.68	757503.90	54	209	2016
230.01	63250.30	64228.30	466306.38	522788.84	728800.85	743913.45	58	212	2016
231.00	35699.50	36615.60	523392.58	572940.67	746159.94	759434.80	54	209	2016
231.01	64314.70	65307.30	465796.05	523627.72	730725.21	746225.88	58	212	2016
232.00	39109.50	40045.60	516559.86	572418.01	746402.41	761371.23	54	209	2016
232.01	39624.70	40418.50	465275.42	516675.69	732654.32	746429.74	60	213	2016
233.00	41840.00	43612.10	464764.87	571906.69	734598.91	763305.31	56	211	2016
234.00	39790.10	41737.50	464239.68	571381.70	736530.50	765249.49	56	211	2016
235.00	37813.50	39652.50	463719.88	570869.84	738465.08	767166.50	56	211	2016
236.00	35621.30	37719.00	453156.49	570356.93	737711.77	769103.44	56	211	2016
237.00	33547.00	35514.90	452636.46	569833.79	739643.35	771031.43	56	211	2016
238.00	32513.50	33462.50	514220.66	569320.92	758203.77	772963.62	56	211	2016
238.01	43909.80	44963.00	452123.80	514400.52	741565.28	758251.63	56	211	2016
239.00	31144.70	31963.70	521021.68	568802.51	762091.69	774879.02	56	211	2016
239.01	31424.60	32704.20	451601.24	521214.22	743504.62	762145.50	63	218	2016
240.00	30873.30	32409.00	451089.74	543356.54	745441.02	770147.42	84	241	2016
241.00	52627.00	52874.80	456555.77	471300.99	748976.80	752936.31	84	241	2016
241.01	40772.50	41229.60	471164.24	499088.09	752881.52	760359.99	105	275	2016
241.02	51409.40	52155.80	498979.07	542837.46	760326.85	772087.85	84	241	2016
242.00	49881.20	51297.10	456041.66	542310.23	750901.11	774018.22	84	241	2016
243.00	48256.90	49764.90	455514.49	541800.29	752849.47	775953.16	84	241	2016
244.00	41205.50	42677.90	449201.78	541282.97	753220.45	777882.53	84	241	2016
245.00	38884.10	40235.50	448692.04	529513.73	755142.06	776806.07	84	241	2016
245.01	40905.90	41095.00	529287.95	540764.91	776752.16	779808.11	84	241	2016
246.00	38358.40	38736.40	448166.86	471751.35	757084.58	763410.83	84	241	2016
246.01	41465.20	41949.00	471643.24	501508.19	763369.30	771368.35	105	275	2016
246.02	37223.40	37878.00	501415.80	540264.70	771338.14	781745.08	84	241	2016
247.00	36386.20	37087.00	498229.58	539755.71	772556.37	783682.62	84	241	2016
247.01	53171.90	53629.50	447652.04	473491.34	759009.16	765940.40	84	241	2016
247.03	56998.50	57461.60	473101.49	498615.17	765830.01	772668.18	108	283	2016
248.00	32747.60	33228.00	447140.26	474611.50	760936.85	768303.70	84	241	2016
248.01	34721.40	35777.00	474398.81	539246.67	768252.82	785617.78	84	241	2016
249.00	58220.30	58416.60	446616.59	457909.53	762879.25	765915.70	39	194	2016
249.10	33489.30	34625.50	472519.25	538697.75	769818.50	787540.30	84	241	2016
250.00	58527.30	58731.40	446099.58	457398.81	764817.38	767835.78	39	194	2016

Tellus A2 Block – FLOWN LINES (FEM)
IRENET95, Irish Transverse Mercator

LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
250.10	55662.50	56757.00	471997.04	538177.57	771746.34	789476.75	74	228	2016
251.00	58837.00	59027.10	445584.73	456878.25	766748.08	769766.68	39	194	2016
2001.00	42193.00	42341.30	451176.23	453325.52	737597.88	745615.44	13	167	2016
2002.00	42446.50	42562.10	451377.68	453530.71	737660.21	745663.90	13	167	2016
2002.10	57734.80	57966.00	445683.95	449383.46	753113.10	766931.88	39	194	2016
2003.00	42718.40	42865.00	451574.55	453718.75	737706.51	745715.41	13	167	2016
2003.10	57316.50	57590.00	445884.64	449581.65	753166.77	766981.75	39	194	2016
2004.00	42964.90	43082.40	451766.27	453918.79	737752.98	745767.34	13	167	2016
2004.10	56927.10	57147.10	446066.09	449774.06	753225.08	767030.17	39	194	2016
2005.00	43228.00	43372.00	451959.78	454105.16	737806.93	745826.49	13	167	2016
2005.10	56518.30	56789.50	446263.36	449965.98	753271.89	767087.28	39	194	2016
2006.00	43484.30	43598.80	452143.54	454302.55	737859.82	745866.94	13	167	2016
2006.10	56155.60	56377.00	446461.97	450163.92	753320.63	767131.55	39	194	2016
2007.00	53919.20	54082.90	452352.42	454497.55	737914.93	745925.94	39	194	2016
2007.10	55759.70	56011.90	446654.94	450353.09	753370.86	767186.82	39	194	2016
2008.00	53645.30	53775.80	452533.91	454683.54	737963.05	745976.36	39	194	2016
2008.10	55375.20	55613.10	446845.89	450537.29	753429.69	767236.09	39	194	2016
2009.00	53370.50	53506.00	452734.61	454882.50	738014.39	746030.28	39	194	2016
2009.10	54991.20	55236.90	447037.40	450738.33	753475.79	767292.07	39	194	2016
2010.00	53093.00	53222.80	452925.09	455071.02	738063.48	746076.72	39	194	2016
2010.10	54598.10	54822.80	447234.15	450934.07	753528.13	767341.11	39	194	2016
2011.00	52811.60	52953.40	453113.11	455263.40	738117.36	746134.73	39	194	2016
2011.10	54221.80	54471.30	447428.52	451117.80	753578.11	767393.00	39	194	2016
2012.00	52511.60	52640.00	453314.48	455455.49	738169.46	746186.89	39	194	2016
2012.10	50444.20	50684.90	447627.56	451316.67	753626.67	767445.97	39	194	2016
2013.00	52220.30	52376.10	453512.52	455653.97	738219.94	746234.75	39	194	2016
2013.10	50065.40	50320.00	447816.69	451515.18	753683.87	767492.02	39	194	2016
2014.00	51924.20	52053.00	453708.68	455848.43	738273.37	746288.96	39	194	2016
2014.10	40664.30	40894.90	447997.40	451702.66	753735.39	767546.21	38	194	2016
2015.00	51633.50	51789.60	453894.05	456039.33	738324.41	746339.32	39	194	2016
2015.10	40263.70	40516.00	448203.14	451894.95	753787.89	767591.66	38	194	2016
2016.00	51357.40	51487.30	454083.89	456232.64	738374.44	746388.93	39	194	2016
2016.10	39895.70	40120.80	448412.12	452098.61	753836.83	767655.34	38	194	2016
2017.00	51082.90	51223.60	454277.92	456420.97	738425.85	746435.64	39	194	2016
2017.10	39490.60	39756.40	448583.00	452284.10	753889.46	767703.98	38	194	2016
2018.00	50804.10	50942.00	454472.17	456618.09	738488.04	746491.90	39	194	2016
2018.10	39094.60	39320.10	448776.53	452486.88	753950.04	767752.25	38	194	2016
2019.00	61209.00	61349.80	454667.18	456814.38	738533.18	746549.48	54	209	2016
2019.10	38693.60	38944.60	448964.83	452677.97	753997.56	767802.20	38	194	2016
2020.00	60915.40	61062.50	454870.48	457005.66	738585.29	746598.05	54	209	2016
2020.10	38306.50	38543.00	449166.38	452862.29	754047.53	767861.87	38	194	2016
2021.00	60631.50	60773.00	455048.69	457197.14	738636.86	746647.61	54	209	2016
2021.10	37928.80	38167.40	449357.72	453057.85	754101.14	767911.35	38	194	2016
2022.00	60357.00	60505.00	455251.24	457396.10	738685.22	746702.82	54	209	2016
2022.10	37549.60	37788.90	449555.55	453248.44	754147.63	767962.47	38	194	2016
2023.00	60100.50	60242.00	455439.03	457579.35	738734.48	746756.11	54	209	2016
2023.10	37163.00	37407.80	449738.29	453444.19	754199.46	768014.67	38	194	2016
2024.00	59836.90	59978.80	455635.02	457775.31	738787.47	746805.80	54	209	2016
2024.10	36780.90	37019.40	449945.00	453640.81	754250.13	768063.44	38	194	2016
2025.00	59585.30	59723.60	455821.02	457966.19	738841.86	746852.96	54	209	2016
2025.10	36386.60	36650.90	450137.90	453832.15	754302.83	768118.21	38	194	2016
2026.00	59329.80	59472.90	456022.22	458165.15	738893.62	746908.53	54	209	2016
2026.10	35988.00	36226.00	450322.69	454021.14	754357.16	768164.03	38	194	2016
2027.00	59081.20	59219.40	456209.02	458362.40	738946.01	746958.56	54	209	2016
2027.10	35609.30	35854.00	450522.42	454219.16	754409.35	768217.81	38	194	2016
2028.00	58829.00	58973.00	456412.20	458556.98	738997.42	747011.07	54	209	2016
2028.10	35232.00	35471.30	450721.90	454408.42	754458.16	768268.36	38	194	2016
2029.00	58560.70	58699.50	456606.06	458748.05	739047.58	747060.06	54	209	2016
2029.10	34858.20	35107.00	450902.14	454610.64	754514.83	768314.87	38	194	2016
2030.00	58296.10	58439.50	456798.64	458943.76	739109.76	747116.97	54	209	2016
2030.10	34475.20	34703.10	451098.00	454787.32	754565.89	768372.67	38	194	2016
2031.00	58039.90	58186.30	456981.14	459132.05	739157.36	747170.82	54	209	2016
2031.10	34085.00	34323.90	451291.35	455000.69	754618.90	768427.56	38	194	2016
2032.00	57398.70	57938.10	451484.83	459328.42	739210.50	768479.74	54	209	2016
2033.00	56738.70	57256.30	451677.46	459522.15	739255.47	768533.38	54	209	2016
2034.00	56082.20	56597.90	451869.90	459717.43	739308.19	768580.01	54	209	2016

Tellus A2 Block – FLOWN LINES (FEM)
IRENET95, Irish Transverse Mercator

LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2035.00	55432.40	55916.80	452074.65	459900.90	739360.20	768641.05	54	209	2016
2036.00	42576.30	43087.80	452257.52	460096.41	739413.20	768686.06	54	209	2016
2037.00	43201.80	43711.80	452447.58	460294.77	739463.07	768737.69	54	209	2016
2038.00	43841.30	44374.40	452635.57	460484.97	739514.67	768790.38	54	209	2016
2039.00	44537.40	45036.00	452837.96	460680.49	739562.79	768841.18	54	209	2016
2040.00	61661.10	62172.90	453033.24	460864.21	739618.49	768894.90	54	209	2016
2041.00	62344.40	62883.30	453213.45	461072.02	739670.26	768944.67	54	209	2016
2042.00	63032.00	63538.00	453423.06	461254.74	739720.36	768993.92	54	209	2016
2043.00	63669.10	64205.10	453604.20	461456.80	739780.33	769049.03	54	209	2016
2044.00	64313.40	64833.50	453800.13	461639.06	739826.74	769100.01	54	209	2016
2045.00	64992.10	65526.10	453991.95	461841.43	739880.70	769153.62	54	209	2016
2046.00	36457.40	36983.90	454187.45	462039.00	739925.32	769201.36	60	213	2016
2047.00	35797.50	36289.80	454385.59	462225.13	739974.69	769252.84	60	213	2016
2048.00	35149.80	35652.40	454576.01	462428.94	740028.07	769309.76	60	213	2016
2049.00	34490.50	35000.40	454774.23	462611.85	740073.97	769361.90	60	213	2016
2050.00	33861.70	34380.50	454963.92	462825.96	740133.77	769414.47	60	213	2016
2051.00	61474.50	61985.10	455158.32	463006.55	740180.59	769458.43	58	212	2016
2052.00	60841.40	61356.90	455342.01	463190.41	740226.09	769508.85	58	212	2016
2053.00	59840.30	60556.50	455545.09	467013.97	726742.41	769565.04	58	212	2016
2054.00	58950.50	59694.60	455735.46	467192.62	726812.49	769610.42	58	212	2016
2055.00	58067.30	58806.60	455935.27	467395.77	726870.84	769668.52	58	212	2016
2056.00	57135.50	57918.00	456115.88	467584.72	726915.56	769712.56	58	212	2016
2057.00	56257.50	56966.30	456319.01	467781.67	726971.90	769771.14	58	212	2016
2058.00	55354.10	56117.10	456509.36	467973.44	727022.04	769816.81	58	212	2016
2059.00	54449.20	55185.50	456715.07	468167.15	727082.53	769878.69	58	212	2016
2060.00	53493.90	54175.60	458445.27	468358.41	727126.77	764128.63	58	212	2016
2061.00	52669.30	53289.00	458643.48	468557.96	727181.00	764184.06	58	212	2016
2062.00	51884.10	52535.60	458838.82	468748.58	727228.63	764231.77	58	212	2016
2063.00	61901.50	62513.50	459026.30	468940.81	727276.98	764281.62	56	211	2016
2064.00	61109.70	61769.00	459223.55	469137.43	727330.84	764339.62	56	211	2016
2065.00	60379.30	60956.00	459424.89	469332.62	727392.73	764387.51	56	211	2016
2066.00	59527.60	60258.50	459617.34	469518.44	727432.44	764439.34	56	211	2016
2067.00	58748.90	59342.50	459802.35	469710.10	727494.06	764491.79	56	211	2016
2068.00	57965.80	58628.50	459995.01	469902.80	727542.73	764537.17	56	211	2016
2069.00	57237.10	57827.80	460198.25	470103.28	727588.28	764600.17	56	211	2016
2070.00	56348.20	57129.80	460382.43	470294.23	727644.69	764646.14	56	211	2016
2071.00	55563.30	56163.50	460567.23	470483.56	727695.00	764698.13	56	211	2016
2072.00	54740.30	55416.40	460767.85	470684.23	727750.66	764751.20	56	211	2016
2073.00	53990.60	54583.80	460970.30	470876.88	727796.03	764806.87	56	211	2016
2074.00	53140.20	53855.60	461155.09	471063.40	727849.22	764854.75	56	211	2016
2075.00	52378.90	52984.00	461349.81	471259.92	727908.74	764903.41	56	211	2016
2076.00	51548.40	52242.00	461536.83	471462.55	727961.06	764954.39	56	211	2016
2077.00	37177.00	37806.90	461735.30	471653.87	728004.60	765006.35	60	213	2016
2078.00	37947.80	38590.30	461926.64	471842.22	728059.92	765061.56	60	213	2016
2079.00	38750.20	39381.50	462118.98	472039.17	728106.41	765107.78	60	213	2016
2080.00	33265.40	33913.30	462312.72	472219.29	728160.13	765165.07	63	218	2016
2081.00	31039.50	31790.40	462504.41	472415.12	728215.26	765217.43	68	222	2016
2082.00	56963.40	57640.30	462713.68	472610.87	728263.20	765274.78	74	228	2016
2083.00	40140.10	40852.00	462888.53	472801.12	728316.37	765318.55	13	167	2016
2084.00	59166.70	59759.00	463089.40	473003.48	728375.89	765372.21	39	194	2016
2085.00	32271.80	32882.40	463276.91	473189.34	728423.03	765427.09	42	196	2016
2086.00	34816.00	35440.50	463481.23	473388.69	728475.09	765471.72	42	196	2016
2087.00	37431.90	38044.90	463666.87	473583.51	728525.19	765529.36	42	196	2016
2088.00	39965.20	40570.50	463859.41	473751.38	728570.47	765580.47	42	196	2016
2089.00	35210.10	35803.00	464051.42	473955.40	728624.07	765628.70	49	201	2016
2090.00	37690.50	38288.60	464243.37	474157.25	728682.10	765677.21	49	201	2016
2091.00	40222.20	40820.90	464431.98	474352.51	728731.39	765732.70	49	201	2016
2092.00	42682.30	43280.60	464635.24	474545.46	728785.25	765780.44	49	201	2016
2093.00	45117.30	45718.90	464826.04	474732.16	728834.07	765841.15	49	201	2016
2094.00	57742.70	58338.30	465015.85	474926.44	728886.11	765889.58	74	228	2016
2095.00	31596.30	32175.20	465205.59	475126.99	728939.73	765940.29	79	237	2016
2096.00	32343.50	33009.80	465403.07	475320.24	728986.24	765992.92	79	237	2016
2097.00	33159.70	33750.50	465591.99	475511.77	729039.48	766039.76	79	237	2016
2098.00	33935.70	34806.00	465794.50	478808.52	717501.19	766094.89	79	237	2016
2099.00	34936.30	35709.50	465982.86	479007.50	717553.52	766139.12	79	237	2016
2100.00	35871.80	36733.60	466180.31	479198.01	717602.02	766201.29	79	237	2016

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2101.00	36865.00	37641.50	466369.48	479398.77	717658.19	766255.73	79	237	2016
2102.00	37793.90	38660.90	466562.18	479587.96	717700.40	766304.75	79	237	2016
2103.00	38805.80	39585.50	466766.42	479777.39	717756.27	766350.13	79	237	2016
2104.00	39734.60	40586.50	466957.74	479975.64	717810.43	766406.83	79	237	2016
2105.00	40729.70	41490.30	467144.66	480164.46	717865.42	766463.87	79	237	2016
2106.00	41659.00	42526.00	467337.66	480352.82	717913.78	766509.93	79	237	2016
2107.00	48025.70	48808.80	467542.76	480552.41	717970.99	766569.23	79	237	2016
2108.00	48960.40	49851.50	467722.90	480740.03	718014.20	766613.28	79	237	2016
2109.00	49999.60	50790.10	467929.26	480933.01	718066.90	766659.63	79	237	2016
2110.00	50939.00	51787.50	468108.61	481127.19	718113.58	766715.53	79	237	2016
2111.00	51923.00	52715.50	468308.43	481316.29	718169.69	766763.43	79	237	2016
2112.00	58487.80	59391.40	468497.58	481511.56	718221.26	766818.91	74	228	2016
2113.00	59523.20	60308.60	468691.91	481706.58	718275.47	766867.01	74	228	2016
2114.00	60477.60	61360.50	468881.03	481913.97	718324.68	766924.55	74	228	2016
2115.00	61486.20	62275.60	469084.01	482095.84	718376.28	766975.39	74	228	2016
2116.00	62411.70	63294.60	469267.30	482292.98	718436.64	767030.53	74	228	2016
2117.00	52847.80	53713.30	469453.70	482475.88	718474.90	767076.67	79	237	2016
2118.00	53860.30	54635.40	469658.53	482674.07	718533.94	767136.22	79	237	2016
2119.00	54792.50	55657.40	469846.76	482868.77	718585.87	767178.34	79	237	2016
2120.00	55809.40	56579.10	470049.04	483061.16	718635.75	767228.74	79	237	2016
2121.00	56712.80	57561.80	470246.20	483260.89	718689.87	767290.12	79	237	2016
2122.00	57703.70	58474.50	470433.50	483444.04	718742.94	767331.00	79	237	2016
2123.00	58632.60	59488.30	470621.01	483646.25	718789.65	767387.66	79	237	2016
2124.00	59657.40	60421.30	470823.74	483833.64	718842.97	767444.61	79	237	2016
2125.00	60568.80	61408.80	471008.84	484026.44	718893.57	767492.35	79	237	2016
2126.00	32803.00	33632.00	471186.10	484215.63	718947.54	767538.62	91	257	2016
2127.00	33774.20	34620.10	471399.17	484410.37	718999.07	767594.29	91	257	2016
2128.00	34461.60	35274.50	471588.91	484603.47	719057.91	767647.81	93	258	2016
2129.00	35425.40	36255.10	471784.65	484798.86	719103.74	767696.63	93	258	2016
2130.00	36395.70	37182.00	471975.90	484997.20	719159.06	767752.76	93	258	2016
2131.00	37349.40	38180.60	472167.14	485188.75	719208.90	767801.13	93	258	2016
2132.00	38310.30	39118.00	472371.67	485382.13	719262.87	767859.10	93	258	2016
2133.00	32184.00	32611.50	478799.21	485581.89	719314.48	744615.54	95	261	2016
2133.01	33032.80	33425.30	472554.51	478836.65	744526.49	767909.20	98	263	2016
2134.00	32845.10	33299.30	478985.95	485764.77	719363.46	744672.50	95	261	2016
2134.01	33562.10	33942.30	472765.75	479012.66	744581.41	767967.70	98	263	2016
2135.00	33447.20	33867.30	479197.04	485959.90	719411.75	744725.45	95	261	2016
2135.01	34173.80	34566.80	472948.07	479209.84	744634.37	768020.11	98	263	2016
2136.00	34063.60	34521.50	479377.85	486144.62	719465.90	744777.00	95	261	2016
2136.01	34765.10	35215.50	472095.68	479401.72	744689.36	771926.95	98	263	2016
2137.00	34648.90	35072.50	479562.46	486349.57	719519.65	744827.18	95	261	2016
2137.01	35424.90	35909.50	472297.53	479605.85	744736.72	771976.32	98	263	2016
2138.00	35290.50	35750.90	479760.00	486535.18	719569.84	744880.03	95	261	2016
2138.01	36046.20	36520.90	472486.10	479772.26	744787.64	772034.63	98	263	2016
2139.00	35887.10	36299.30	479953.07	486730.83	719623.79	744930.69	95	261	2016
2139.01	36744.60	37191.90	472681.39	479976.40	744842.56	772089.19	98	263	2016
2140.00	36527.90	36999.00	480152.42	486926.62	719673.80	744983.75	95	261	2016
2140.01	37359.80	37837.50	472871.83	480172.59	744898.97	772136.47	98	263	2016
2141.00	37140.10	37555.40	480336.01	487127.13	719726.57	745038.84	95	261	2016
2141.01	38067.90	38521.50	473082.00	480359.15	744944.59	772184.55	98	263	2016
2142.00	37785.50	38223.10	480533.19	487310.59	719782.20	745086.25	95	261	2016
2142.01	38666.30	39129.50	473261.47	480558.77	744992.53	772242.72	98	263	2016
2143.00	38365.80	38786.00	480728.12	487522.03	719832.24	745134.14	95	261	2016
2143.01	39352.00	39815.50	473453.44	480750.21	745046.26	772294.52	98	263	2016
2144.00	38959.40	39414.50	480907.08	487693.54	719879.00	745190.02	95	261	2016
2144.01	39988.00	40451.30	473645.74	480940.32	745099.66	772343.02	98	263	2016
2145.00	39557.20	39962.50	481116.40	487899.12	719936.42	745238.06	95	261	2016
2145.01	40662.80	41114.60	473850.08	481131.34	745150.15	772393.30	98	263	2016
2146.00	40214.00	40677.50	481299.63	488084.75	719988.99	745297.01	95	261	2016
2146.01	41253.50	41718.50	474028.59	481343.07	745208.41	772446.67	98	263	2016
2147.00	50558.80	50932.40	482007.85	488279.30	720035.64	743410.88	88	246	2016
2147.01	42003.20	42468.60	474231.65	482045.44	743323.00	772491.82	98	263	2016
2148.00	34880.60	35734.40	474415.89	488480.53	720085.88	772545.04	91	257	2016
2149.00	40804.50	41203.00	481888.07	488661.33	720139.82	745445.70	95	261	2016
2149.01	42625.60	43082.50	474607.97	481914.29	745354.81	772599.25	98	263	2016
2150.00	41416.80	41883.60	482077.04	488861.60	720196.61	745502.09	95	261	2016

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2150.01	43428.50	43873.60	474806.68	482128.88	745407.50	772647.38	98	263	2016
2151.00	42011.90	42422.60	482272.78	489053.59	720246.10	745549.12	95	261	2016
2151.01	44029.50	44471.90	474991.67	482301.08	745461.06	772702.24	98	263	2016
2152.00	44711.80	45193.00	475198.22	483004.94	743578.03	772749.53	98	263	2016
2152.01	50495.80	50888.40	482984.92	489252.82	720299.03	743673.38	98	263	2016
2153.00	45351.90	46219.50	475385.66	489440.61	720352.89	772804.87	98	263	2016
2154.00	51156.10	51635.50	475585.16	483389.50	743682.58	772860.00	98	263	2016
2154.01	45578.60	45999.50	483372.36	489629.29	720398.14	743775.62	102	270	2016
2155.00	51781.60	52274.00	475771.58	483581.74	743733.34	772912.66	98	263	2016
2155.01	46152.60	46533.40	483561.32	489830.56	720453.98	743828.42	102	270	2016
2156.00	42638.80	43135.90	482721.58	490010.72	720494.77	747745.80	95	261	2016
2156.01	54222.30	54634.10	475976.28	482752.94	747650.53	772963.34	98	263	2016
2157.00	43251.50	43649.90	483435.88	490208.60	720550.49	745865.87	95	261	2016
2157.01	54788.70	55251.80	476137.66	483459.71	745770.13	773009.98	98	263	2016
2158.00	43872.90	44350.50	483621.37	490399.19	720610.99	745919.11	95	261	2016
2158.01	55494.60	55944.30	476350.63	483657.12	745823.32	773070.01	98	263	2016
2159.00	44470.60	44882.50	483823.09	490595.76	720657.21	745957.66	95	261	2016
2159.01	56093.60	56568.80	476532.73	483849.98	745877.05	773113.32	98	263	2016
2160.00	45107.20	45571.00	484010.84	490788.38	720715.32	746020.94	95	261	2016
2160.01	56805.30	57245.60	476737.80	484032.11	745929.55	773165.41	98	263	2016
2161.00	49986.20	50421.50	483688.33	490993.07	720764.92	747997.50	95	261	2016
2161.01	49477.40	49928.10	476932.43	483720.09	747913.74	773221.33	102	270	2016
2162.00	50564.80	51132.90	483372.88	491180.91	720808.57	749988.08	95	261	2016
2162.01	50747.40	51154.60	477124.46	483383.66	749901.27	773276.00	102	270	2016
2163.00	51266.70	51874.00	480966.55	491370.32	720866.49	759694.69	95	261	2016
2163.01	51976.30	52208.40	477316.06	480995.45	759608.87	773322.46	102	270	2016
2164.00	52015.90	52759.10	481162.33	491556.76	720919.28	759756.00	95	261	2016
2164.01	52375.50	52585.00	477511.95	481182.43	759660.72	773380.23	102	270	2016
2165.00	52880.90	53501.60	481364.80	491755.26	720963.83	759799.17	95	261	2016
2165.01	52742.40	52968.50	477702.01	481370.99	759715.37	773429.42	102	270	2016
2166.00	53676.20	54388.80	481551.83	491955.79	721019.60	759856.83	95	261	2016
2166.01	53150.00	53362.80	477903.85	481566.05	759765.56	773482.22	102	270	2016
2167.00	54526.30	55143.00	481734.21	492142.23	721068.08	759907.47	95	261	2016
2167.01	54801.80	55031.50	478089.26	481762.73	759824.61	773529.90	102	270	2016
2168.00	55239.00	55974.40	481926.02	492337.13	721122.35	759958.15	95	261	2016
2168.01	55228.80	55442.30	478285.93	481966.14	759867.21	773588.53	102	270	2016
2169.00	56109.00	56738.30	482122.83	492524.72	721175.35	760009.47	95	261	2016
2169.01	55596.40	55828.40	478479.11	482148.35	759922.66	773634.98	102	270	2016
2170.00	56911.10	57629.90	482327.19	492726.60	721224.10	760063.02	95	261	2016
2170.01	56031.70	56244.10	478675.64	482342.30	759971.72	773680.57	102	270	2016
2171.00	57762.30	58387.30	481999.22	492908.55	721277.58	762050.95	95	261	2016
2171.01	56392.60	56595.10	478863.63	482012.06	761965.47	773743.70	102	270	2016
2172.00	33317.30	34255.50	479057.55	493104.77	721328.96	773792.14	93	258	2016
2173.00	58553.60	59346.30	482382.10	493305.58	721380.43	762150.97	95	261	2016
2173.01	56869.30	57056.30	479241.65	482408.58	762062.01	773844.26	102	270	2016
2174.00	59475.80	59986.10	485169.73	493495.01	721428.43	752532.72	95	261	2016
2174.01	53892.20	54274.80	479443.98	485189.61	752445.43	773899.31	106	275	2016
2175.00	60129.50	60702.40	485356.13	493695.19	721482.10	752591.27	95	261	2016
2175.01	54435.80	54761.50	479634.00	485383.16	752499.42	773948.17	106	275	2016
2176.00	60842.30	61337.00	485546.75	493877.19	721532.13	752635.21	95	261	2016
2176.01	55034.40	55428.60	479828.35	485576.01	752549.95	773992.63	106	275	2016
2177.00	61454.20	62026.50	485730.48	494080.86	721590.29	752699.29	95	261	2016
2177.01	55574.00	55907.40	480022.87	485761.16	752607.00	774051.03	106	275	2016
2178.00	62172.40	62688.00	485940.43	494269.84	721641.27	752744.61	95	261	2016
2178.01	56194.70	56570.80	480218.15	485960.08	752655.63	774105.02	106	275	2016
2179.00	62831.00	63375.10	486127.93	494462.14	721694.43	752798.89	95	261	2016
2179.01	56719.70	57045.60	480410.80	486154.58	752711.26	774150.43	106	275	2016
2180.00	33087.80	33584.40	487356.02	494661.37	721743.96	748988.63	90	251	2016
2180.01	57374.90	57845.40	480613.72	487395.20	748891.48	774211.91	106	275	2016
2181.00	33760.30	34235.80	487029.74	494849.62	721795.03	750975.04	90	251	2016
2181.01	43647.60	44004.80	480794.36	487052.30	750875.98	774251.24	105	275	2016
2182.00	34528.90	34932.50	489266.95	495043.89	721853.60	743428.69	90	251	2016
2182.03	57740.70	58291.50	480993.41	489365.55	743009.90	774308.11	108	283	2016
2183.00	63502.10	63947.50	487421.27	495231.85	721897.73	751070.26	95	261	2016
2183.01	43131.20	43518.40	481186.89	487439.74	750981.33	774363.78	105	275	2016
2184.00	64067.80	64579.60	487602.31	495432.12	721951.88	751126.68	95	261	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2184.01	57977.50	58340.00	481388.98	487628.64	751040.83	774412.27	106	275	2016
2185.00	47074.90	47980.40	481566.19	495624.32	721998.84	774465.06	102	270	2016
2186.00	37138.50	37616.50	489017.72	495813.39	722057.39	747365.49	90	251	2016
2186.01	53491.50	53960.40	481751.36	489062.82	747271.48	774514.37	102	270	2016
2187.00	36516.50	36953.40	489742.34	497052.47	718246.59	745485.02	90	251	2016
2187.01	54183.30	54639.40	481962.18	489771.22	745390.65	774570.46	102	270	2016
2188.00	35835.20	36369.00	489419.44	497239.86	718295.45	747470.55	90	251	2016
2188.01	51401.10	51816.00	482156.87	489448.75	747375.57	774626.72	102	270	2016
2189.00	35127.10	35592.60	489622.01	497430.85	718347.85	747518.77	90	251	2016
2189.01	50197.30	50618.40	482343.06	489641.86	747429.01	774670.88	102	270	2016
2190.00	48157.60	48660.40	489287.61	497620.35	718394.45	749506.62	102	270	2016
2190.01	48902.70	49282.50	482537.88	489313.74	749413.20	774717.48	102	270	2016
2191.00	57160.60	58159.00	482723.44	497822.42	718451.46	774776.41	102	270	2016
2192.00	37087.40	38060.50	482920.16	498007.46	718503.44	774826.77	103	274	2016
2193.00	38445.60	38907.80	490907.27	498207.15	718552.32	745796.50	103	274	2016
2193.01	39175.70	39624.00	483116.28	490936.46	745702.36	774871.42	103	274	2016
2194.00	35999.90	36524.00	490573.32	498394.90	718606.73	747783.41	91	257	2016
2194.01	58631.50	59085.00	483309.21	490603.92	747688.66	774930.50	106	275	2016
2195.00	31792.30	32398.50	488707.81	498594.59	718654.49	755563.91	93	258	2016
2195.01	59219.70	59516.40	483495.14	488733.05	755466.50	774977.14	106	275	2016
2196.00	32558.60	33148.30	488897.18	498791.62	718706.63	755616.18	93	258	2016
2196.01	59814.50	60157.00	483711.61	488918.06	755518.54	775041.21	106	275	2016
2197.00	34635.50	35543.00	483878.75	498975.73	718758.05	775084.51	103	274	2016
2198.00	35710.40	36117.00	492884.77	499172.40	718808.61	742268.49	103	274	2016
2198.01	36477.00	36612.50	489276.07	491391.28	747847.56	755770.21	103	274	2016
2198.04	57746.00	58040.50	484082.66	489322.14	755541.85	775141.18	115	287	2016
2198.05	57540.00	57636.00	491336.32	492958.04	742034.57	748048.42	115	287	2016
2199.01	54644.80	55650.00	484275.44	499373.73	718863.31	775191.76	108	283	2016
2200.00	36349.50	36825.30	492258.79	499549.31	718913.63	746159.43	105	275	2016
2200.03	59484.40	59972.00	484476.46	492286.85	746063.98	775241.83	115	287	2016
2201.00	44217.70	44663.50	492465.31	499748.53	718967.19	746211.05	105	275	2016
2201.02	58890.00	59345.40	484665.33	492485.81	746128.86	775295.49	115	287	2016
2202.00	44800.50	45300.80	492637.89	499929.98	719014.60	746261.81	105	275	2016
2202.02	58166.30	58684.00	484851.04	492678.12	746173.78	775344.91	115	287	2016
2203.00	45606.90	46051.80	492835.01	500137.40	719069.29	746309.49	105	275	2016
2203.02	56935.20	57416.50	485047.21	492870.93	746235.24	775398.03	115	287	2016
2204.00	46146.40	47100.80	485237.95	500331.03	719118.93	775445.47	49	201	2016
2205.00	43699.10	44670.00	485430.28	500522.34	719179.16	775498.46	49	201	2016
2206.00	41260.30	42233.60	485622.12	500719.69	719228.16	775552.37	49	201	2016
2207.00	38719.40	39738.90	485816.89	500908.02	719274.49	775600.12	49	201	2016
2208.00	36257.60	37243.00	486014.20	501104.32	719328.94	775659.19	49	201	2016
2209.00	41007.50	41989.00	486220.86	501301.83	719386.33	775708.98	42	196	2016
2210.00	33329.70	34300.80	486381.54	501489.41	719426.11	775754.90	42	196	2016
2211.00	35889.80	36898.00	486593.93	501679.93	719487.70	775810.04	42	196	2016
2212.00	38493.90	39494.50	486798.30	501873.55	719540.77	775866.36	42	196	2016
2213.00	29874.00	30320.50	494749.13	502071.05	719586.83	746925.08	89	248	2016
2213.02	56368.50	56835.50	486984.72	494820.57	746681.69	775917.70	115	287	2016
2214.00	30474.60	30904.50	495491.91	502262.75	719636.71	744939.08	89	248	2016
2214.02	55593.90	56148.50	487175.31	495512.32	744851.78	775967.80	115	287	2016
2215.00	31114.50	31539.70	495665.21	502454.61	719693.69	745001.04	89	248	2016
2215.02	54981.00	55459.50	487369.85	495697.47	744912.87	776019.97	115	287	2016
2216.00	31703.90	32108.50	495877.63	502649.20	719746.92	745044.51	89	248	2016
2216.01	60252.70	60742.50	487589.94	495890.18	744959.51	776074.92	106	275	2016
2217.00	32343.20	32770.90	496058.52	502841.94	719795.71	745103.19	89	248	2016
2217.01	39809.50	40291.80	487753.00	496089.55	745016.10	776121.49	105	275	2016
2218.00	32905.30	33331.50	496251.45	503038.98	719843.49	745155.02	89	248	2016
2218.01	53206.90	53752.50	487952.90	496288.13	745067.46	776171.98	98	263	2016
2219.00	33539.10	33963.10	496446.10	503228.92	719905.18	745209.04	89	248	2016
2219.01	52534.20	53055.10	488147.83	496473.81	745117.91	776222.59	98	263	2016
2220.00	34229.60	34593.40	497683.75	503420.61	719950.06	741393.42	89	248	2016
2220.01	62088.90	62621.10	488325.50	497699.07	741306.48	776272.04	91	257	2016
2221.00	34893.80	35322.90	496837.98	503615.29	720000.58	745312.69	89	248	2016
2221.01	61341.10	61895.30	488530.68	496868.83	745220.93	776331.30	91	257	2016
2222.00	35524.30	35948.80	497034.65	503810.03	720052.68	745366.86	89	248	2016
2222.01	60642.00	61131.30	488702.18	497049.96	745269.38	776374.75	91	257	2016
2223.00	36154.60	36575.80	497221.27	503992.68	720103.15	745417.28	89	248	2016

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2223.01	59964.80	60506.90	488910.95	497251.36	745324.63	776436.38	91	257	2016
2224.00	36727.60	37246.50	495865.44	504195.73	720158.99	751265.62	89	248	2016
2224.01	59298.10	59685.10	489109.37	495896.53	751176.95	776483.29	91	257	2016
2225.00	37458.10	37993.90	496068.72	504392.11	720205.74	751319.08	89	248	2016
2225.01	58689.90	59147.40	489297.51	496079.13	751226.23	776534.34	91	257	2016
2226.00	38131.80	38612.40	496821.15	504573.41	720259.97	749277.34	89	248	2016
2226.01	57994.00	58423.40	489492.83	496832.17	749183.01	776589.44	91	257	2016
2227.00	38865.30	39348.80	496984.65	504774.84	720312.64	749395.87	89	248	2016
2227.01	57382.40	57876.80	489694.84	497010.97	749296.67	776640.55	91	257	2016
2228.00	39644.90	40128.80	497178.26	504975.15	720370.40	749491.07	89	248	2016
2228.01	56646.60	57089.90	489884.46	497190.26	749395.40	776693.13	91	257	2016
2229.00	40366.90	40874.50	497354.69	505164.16	720413.94	749559.43	89	248	2016
2229.01	56008.10	56491.50	490080.57	497384.52	749465.56	776736.90	91	257	2016
2230.00	41016.40	41498.60	497545.23	505349.94	720470.94	749618.43	89	248	2016
2230.01	55306.90	55743.30	490252.22	497561.84	749530.23	776787.67	91	257	2016
2231.00	41724.40	42231.90	497734.71	505554.02	720520.37	749697.09	89	248	2016
2231.01	54735.20	55206.00	490466.29	497769.79	749603.71	776849.66	91	257	2016
2232.00	42390.90	42866.00	497937.35	505740.49	720572.69	749748.09	89	248	2016
2232.01	53991.20	54427.80	490667.68	497941.71	749655.81	776903.07	91	257	2016
2233.01	43202.10	44138.60	490830.16	505937.93	720626.02	776942.82	91	257	2016
2234.00	46577.10	47371.30	493135.17	506128.06	720673.31	769171.48	94	259	2016
2234.01	39557.50	39696.00	491038.83	493177.23	769083.06	776998.43	105	275	2016
2235.00	48416.00	48857.40	499544.71	506317.84	720722.83	746037.03	94	259	2016
2235.01	38254.30	38738.60	491228.24	499550.89	745949.97	777048.29	105	275	2016
2236.01	58635.90	59570.80	491429.85	506523.32	720779.09	777108.39	98	263	2016
2237.00	59686.40	60653.00	491608.13	506709.19	720832.03	777155.08	98	263	2016
2238.00	60801.40	61753.90	491814.02	506902.23	720885.91	777207.29	98	263	2016
2239.00	49858.50	50112.10	503422.32	507095.84	720939.39	734648.77	88	246	2016
2239.02	37401.80	38159.00	492015.18	503460.37	734557.11	777264.96	105	275	2016
2240.00	53413.50	53882.00	500004.76	507292.02	720987.67	748228.03	87	244	2016
2240.01	39508.90	39997.50	492206.13	500018.74	748134.22	777312.45	91	257	2016
2241.00	41082.60	42004.60	492390.69	507481.09	721041.13	777359.36	91	257	2016
2242.00	42154.10	43125.10	492587.45	507670.39	721085.15	777410.12	91	257	2016
2243.00	38406.30	39363.50	492781.43	507858.87	721137.12	777462.72	91	257	2016
2244.00	52758.90	53233.50	500257.31	508061.00	721199.62	750363.22	87	244	2016
2244.01	61808.60	62270.90	492974.82	500273.31	750275.70	777517.59	98	263	2016
2245.00	51991.60	52524.50	499925.93	508253.37	721244.31	752345.83	87	244	2016
2245.01	62645.40	63060.00	493171.13	499953.32	752256.79	777574.55	98	263	2016
2246.00	51325.00	51837.50	500113.93	508452.42	721305.80	752398.43	87	244	2016
2246.01	63203.60	63639.00	493365.11	500136.07	752319.30	777623.65	98	263	2016
2247.00	32392.20	33271.00	493542.46	508646.82	721352.57	777669.99	68	222	2016
2248.01	57546.90	58514.90	493741.29	508836.81	721400.52	777727.11	98	263	2016
2249.00	59162.10	60061.90	493946.33	509025.83	721450.47	777779.11	84	241	2016
2250.00	58003.40	58985.50	494139.70	509224.94	721507.68	777827.98	84	241	2016
2251.00	56919.50	57847.60	494326.93	509415.15	721558.99	777881.43	84	241	2016
2252.00	55781.00	56760.00	494518.25	509604.69	721606.94	777937.08	84	241	2016
2253.00	54687.30	55660.50	494721.28	510849.51	717746.05	777987.74	84	241	2016
2254.00	42547.60	43571.00	494906.49	511045.12	717788.38	778032.58	78	235	2016
2255.00	41381.70	42400.00	495104.24	511243.90	717840.23	778088.36	78	235	2016
2256.00	40183.30	41201.30	495296.97	511432.62	717891.56	778139.50	78	235	2016
2257.00	39073.20	40039.00	495488.35	511631.53	717950.49	778191.17	78	235	2016
2258.00	37659.90	38679.50	495676.48	511826.42	717994.66	778240.34	78	235	2016
2259.00	54176.00	54844.10	501088.41	512004.03	718046.51	758873.47	87	244	2016
2259.01	49175.90	49506.60	495880.16	501105.72	758781.60	778290.36	91	257	2016
2260.00	54982.50	55594.60	502822.34	512201.22	718102.27	753123.28	87	244	2016
2260.01	49659.30	50072.60	496070.61	502830.13	753039.52	778348.35	91	257	2016
2261.00	37216.70	38210.80	496273.44	512395.19	718150.77	778405.82	91	257	2016
2262.00	58636.20	59139.30	504761.25	512588.41	718199.40	747431.74	87	244	2016
2262.01	50415.00	50954.80	496455.25	504778.29	747342.20	778454.92	91	257	2016
2263.00	57969.20	58454.80	504958.69	512788.41	718254.46	747487.44	87	244	2016
2263.01	51132.30	51640.50	496651.00	504974.24	747395.86	778504.10	91	257	2016
2264.00	57349.40	57837.60	505148.66	512980.57	718310.10	747539.76	87	244	2016
2264.01	51853.30	52414.10	496839.25	505166.13	747444.42	778551.01	91	257	2016
2265.00	55904.40	56542.50	502755.99	513170.93	718363.46	757254.14	87	244	2016
2265.01	52573.10	52933.00	497024.98	502770.15	757160.30	778601.53	91	257	2016
2266.00	56689.50	57199.30	505538.28	513354.63	718408.45	747639.80	87	244	2016

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2266.01	53278.70	53826.80	497227.09	505564.18	747547.42	778660.67	91	257	2016
2267.00	49638.00	50802.50	497414.57	513547.15	718459.56	778714.34	68	222	2016
2268.00	44219.70	45165.50	497616.53	513744.17	718517.18	778757.19	68	222	2016
2269.00	42981.40	44101.10	497801.41	513946.45	718565.14	778807.66	68	222	2016
2270.00	41867.40	42822.60	497996.19	514134.48	718623.33	778866.17	68	222	2016
2271.00	40592.60	41736.30	498191.90	514334.38	718665.75	778917.92	68	222	2016
2272.00	39476.80	40438.50	498379.72	514522.01	718718.17	778962.25	68	222	2016
2273.00	38226.90	39351.00	498577.42	514720.78	718774.47	779023.51	68	222	2016
2274.00	50655.50	51111.60	507606.03	514901.88	718820.84	746115.78	63	218	2016
2274.01	63812.00	64367.40	498779.70	507625.79	746028.52	779075.52	63	218	2016
2275.00	44085.50	45148.50	498971.78	515115.34	718882.16	779126.67	63	218	2016
2276.00	42936.90	43950.60	499158.12	515296.13	718927.60	779168.48	63	218	2016
2277.00	41705.90	42773.40	499361.11	515487.65	718974.21	779230.99	63	218	2016
2278.00	40515.20	41567.00	499548.43	515682.05	719028.67	779277.42	63	218	2016
2279.00	39344.50	40372.10	499755.50	515869.30	719086.21	779333.17	63	218	2016
2280.00	38183.50	39208.90	499922.66	516067.21	719132.05	779382.24	63	218	2016
2281.00	34634.20	35673.30	500123.39	516261.22	719185.17	779431.02	63	218	2016
2282.00	35808.70	36863.90	500315.92	516451.92	719236.84	779484.90	63	218	2016
2283.00	37009.50	38040.00	500516.88	516642.27	719283.98	779535.29	63	218	2016
2284.00	33488.80	34620.60	500702.18	516845.44	719339.49	779583.97	68	222	2016
2285.00	34762.20	35727.40	500896.73	517031.50	719389.26	779640.75	68	222	2016
2286.00	35902.70	37049.00	501093.73	517224.88	719440.99	779686.96	68	222	2016
2287.00	37159.40	38112.00	501279.47	517424.28	719504.06	779741.24	68	222	2016
2288.00	41548.10	42349.00	506152.63	517617.33	719547.53	762306.27	66	221	2016
2288.01	62811.60	63075.00	501487.97	506189.56	762224.21	779800.67	66	221	2016
2289.00	40451.20	41391.80	501685.07	517822.53	719601.71	779848.41	66	221	2016
2290.00	39149.10	40288.80	501860.01	517998.09	719652.35	779898.85	66	221	2016
2291.00	37978.40	38942.00	502057.15	518197.80	719704.72	779949.51	66	221	2016
2292.00	36677.40	37840.00	502254.35	518387.30	719756.55	780002.41	66	221	2016
2293.00	35541.80	36513.50	502456.99	518584.18	719804.38	780057.67	66	221	2016
2294.00	34233.00	35374.00	502628.63	518772.94	719855.28	780101.25	66	221	2016
2295.00	33058.80	34049.30	502833.55	518964.91	719909.80	780160.07	66	221	2016
2296.00	31758.10	32904.10	503018.73	519158.60	719965.67	780207.86	66	221	2016
2297.00	39761.10	40866.40	503215.08	519359.72	720014.61	780256.93	65	219	2016
2298.00	38661.20	39619.90	503401.69	519543.61	720066.47	780312.43	65	219	2016
2299.00	37361.80	38490.10	503601.70	519739.60	720119.26	780364.33	65	219	2016
2300.00	36229.20	37191.00	503804.68	519953.77	720175.92	780417.12	65	219	2016
2301.00	34990.60	36093.80	503991.60	520124.24	720222.01	780468.73	65	219	2016
2302.00	54198.50	55308.60	504191.96	520319.14	720280.73	780522.36	63	218	2016
2303.00	53046.30	54068.00	504379.31	520519.20	720329.98	780565.88	63	218	2016
2304.00	51764.90	52873.00	504557.36	520714.91	720380.61	780623.56	63	218	2016
2305.00	51903.50	52914.80	504767.46	520898.09	720428.75	780674.31	60	213	2016
2306.00	50727.60	51764.80	504957.14	521092.29	720484.30	780729.35	60	213	2016
2307.00	44442.30	45469.60	505164.24	521281.40	720532.54	780780.21	60	213	2016
2308.00	43282.40	44298.30	505341.35	521479.08	720586.70	780832.15	60	213	2016
2309.00	42122.30	43133.90	505540.54	521674.25	720631.47	780880.14	60	213	2016
2310.00	40916.40	41968.50	505726.93	521876.89	720692.94	780928.47	60	213	2016
2311.00	43637.70	44708.00	505989.67	522056.41	720738.26	781006.34	74	228	2016
2312.00	50553.60	51650.00	506119.09	522257.01	720797.50	781038.49	74	228	2016
2313.00	52846.40	53940.00	506304.73	522445.77	720841.26	781091.68	74	228	2016
2314.00	54081.20	55019.00	506493.73	522623.19	720895.93	781138.34	74	228	2016
2315.00	32969.00	33683.80	512404.99	522830.46	720946.67	759839.47	76	229	2016
2315.01	59893.40	60274.00	506700.65	512443.42	759745.99	781196.07	77	231	2016
2316.00	45767.60	46801.90	506887.57	523030.70	721003.12	781249.56	71	226	2016
2317.00	45026.30	45636.30	513833.67	523216.34	721050.46	756132.54	71	226	2016
2317.01	46953.60	47360.90	507091.07	513857.37	755988.43	781299.61	71	226	2016
2318.00	44128.20	44750.00	513512.25	523407.88	721101.28	758045.49	71	226	2016
2318.01	38634.00	39068.60	507284.41	513534.47	757973.06	781351.26	73	227	2016
2319.00	37807.60	38405.30	507467.65	516864.07	746312.50	781401.43	71	226	2016
2319.01	56092.10	56507.60	516778.16	523602.22	721154.33	746656.70	108	283	2016
2320.00	36613.80	37665.80	507661.87	523807.19	721207.37	781454.72	71	226	2016
2321.00	35419.50	36446.40	507864.17	523988.71	721253.72	781505.33	71	226	2016
2322.00	34216.70	35269.40	508054.25	524187.20	721312.09	781558.02	71	226	2016
2323.00	49448.00	50414.40	508243.56	524382.67	721364.24	781609.28	74	228	2016
2324.00	51767.80	52717.80	508440.75	524570.45	721414.59	781664.79	74	228	2016
2325.00	42589.70	43519.50	508633.49	524791.06	721469.39	781707.24	74	228	2016

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2326.00	41402.70	42458.30	508825.61	524959.73	721513.82	781764.60	74	228	2016
2327.00	40288.60	41235.90	509007.35	525149.27	721571.39	781813.31	74	228	2016
2328.00	39040.80	40159.00	509210.84	525344.70	721626.20	781868.76	74	228	2016
2329.00	37925.10	38882.30	509397.91	525534.22	721668.14	781920.08	74	228	2016
2330.00	36716.20	37783.90	509599.53	525727.57	721719.29	781966.94	74	228	2016
2331.00	35593.20	36559.50	509781.56	525911.80	721774.16	782014.75	74	228	2016
2332.00	34360.10	35438.00	509982.90	526121.08	721825.11	782072.75	74	228	2016
2333.00	31956.70	33047.80	510182.12	526310.53	721873.48	782125.82	74	228	2016
2334.00	33221.60	34194.90	510365.88	526498.29	721927.48	782180.90	74	228	2016
2335.00	30839.20	31806.20	510558.20	526696.70	721984.39	782229.01	74	228	2016
2336.00	63163.30	64200.00	510756.36	526893.56	722031.88	782281.85	71	226	2016
2337.00	38943.10	39751.30	514601.60	527084.87	722084.73	768711.23	71	226	2016
2337.01	42584.90	42830.80	510948.37	514616.04	768618.86	782335.67	71	226	2016
2338.00	40104.20	40895.00	514784.16	527276.63	722139.68	768759.60	71	226	2016
2338.01	42279.20	42504.50	511145.81	514815.76	768676.47	782384.45	71	226	2016
2339.00	41046.00	42129.80	511326.96	527475.41	722190.88	782434.08	71	226	2016
2340.00	42940.20	43977.00	511528.17	527661.17	722243.84	782489.34	71	226	2016
2341.00	43904.90	44959.80	511726.24	527862.18	722290.78	782540.71	78	235	2016
2342.00	45103.60	46100.50	511911.27	528044.75	722342.77	782591.47	78	235	2016
2343.00	46236.40	47290.50	512112.01	528242.84	722402.98	782647.11	78	235	2016
2344.00	47423.40	48436.50	512297.58	528430.70	722449.29	782689.13	78	235	2016
2345.00	58776.80	59765.00	512488.49	528624.76	722497.45	782746.10	77	231	2016
2346.00	57132.70	58477.50	512686.53	533485.38	705163.61	782800.66	77	231	2016
2347.00	55696.80	56983.10	512876.01	533659.89	705269.72	782843.91	77	231	2016
2348.00	54215.60	55568.00	513071.50	533852.04	705315.86	782899.39	77	231	2016
2349.00	52734.50	54070.50	513262.19	534057.47	705372.39	782956.45	77	231	2016
2350.00	51196.60	52591.10	513461.00	534234.81	705430.60	783002.20	77	231	2016
2351.00	49724.10	51058.90	513647.87	534437.18	705480.40	783055.10	77	231	2016
2352.00	48209.10	49579.30	513847.17	534631.77	705527.39	783106.30	77	231	2016
2353.00	46718.50	48056.90	514040.02	534837.45	705585.86	783162.79	77	231	2016
2354.00	39665.40	41048.40	514229.91	535021.30	705628.97	783208.14	73	227	2016
2355.00	37126.90	38458.00	514430.60	535202.64	705678.07	783259.84	73	227	2016
2356.00	35577.10	36951.40	514629.17	535403.63	705730.97	783318.48	73	227	2016
2357.00	34068.90	35413.30	514811.24	535598.66	705789.02	783364.96	73	227	2016
2358.00	32523.70	33931.00	515013.69	535784.37	705838.93	783418.82	73	227	2016
2359.00	67794.30	69157.30	515210.17	535981.94	705892.55	783477.51	70	223	2016
2360.00	66284.70	67667.50	515393.68	536169.72	705941.05	783525.48	70	223	2016
2361.00	64805.10	66139.50	515594.69	536371.91	705995.24	783575.52	70	223	2016
2362.00	63317.70	64658.50	515777.58	536560.00	706047.13	783620.06	70	223	2016
2363.00	61836.80	63165.00	515974.39	536770.02	706055.03	783679.93	70	223	2016
2364.00	60360.50	61701.50	516159.57	536974.84	706051.60	783727.11	70	223	2016
2365.00	58889.30	60235.00	516361.97	537178.78	706052.21	783784.11	70	223	2016
2366.00	57354.20	58715.10	516549.73	537384.89	706045.37	783827.75	70	223	2016
2367.00	63323.60	64562.40	516743.17	537593.80	706047.19	783887.92	68	222	2016
2368.00	61757.20	63218.40	516943.18	537803.04	706046.52	783939.61	68	222	2016
2369.00	63643.70	64927.30	517138.35	538000.03	706041.12	783993.48	66	221	2016
2370.00	60337.40	61580.80	517323.77	538213.77	706044.24	784042.20	68	222	2016
2371.00	58726.10	60221.90	517516.67	538427.86	706047.43	784094.63	68	222	2016
2372.00	57307.90	58563.50	517710.55	538629.68	706053.58	784140.94	68	222	2016
2373.00	55683.30	57175.00	517904.49	538840.62	706045.84	784198.00	68	222	2016
2374.00	60701.40	62138.90	518090.72	539045.27	706044.21	784245.83	66	221	2016
2375.00	59194.80	60468.00	518296.52	539252.81	706042.60	784297.84	66	221	2016
2376.00	42942.50	44204.00	518455.52	539457.77	706042.61	784339.19	66	221	2016
2377.00	55789.20	57186.50	518670.44	539665.26	706046.68	784405.17	63	218	2016
2378.00	57324.80	58781.60	518859.11	540164.51	704945.63	784449.10	63	218	2016
2379.00	58915.20	60314.60	519062.19	540362.78	704991.10	784502.81	63	218	2016
2380.00	60471.80	61899.30	519260.58	540555.62	705043.14	784560.27	63	218	2016
2381.00	62022.80	63414.60	519444.95	540740.17	705099.59	784605.22	63	218	2016
2382.00	33388.40	34672.30	519642.29	540943.00	705148.84	784664.73	65	219	2016
2383.00	41429.40	42697.80	519834.13	541138.84	705204.72	784713.91	65	219	2016
2384.00	42841.20	44271.50	520027.92	541329.45	705254.26	784766.75	65	219	2016
2385.00	54290.20	55582.30	520224.04	541517.90	705298.53	784815.08	68	222	2016
2386.00	52648.40	54154.50	520418.66	541723.72	705357.47	784865.73	68	222	2016
2387.00	51203.60	52495.80	520605.65	541907.90	705406.74	784921.07	68	222	2016
2388.00	44390.70	45626.40	520802.53	542063.47	705447.75	784977.05	65	219	2016
2389.00	45783.50	47204.50	520998.62	542295.21	705515.53	785027.53	65	219	2016

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2390.00	51333.40	52844.80	521187.39	542486.60	705564.59	785078.93	66	221	2016
2391.00	52984.20	54311.50	521373.44	542691.72	705619.58	785124.80	66	221	2016
2392.00	54495.70	55976.50	521580.88	542880.14	705666.61	785179.10	66	221	2016
2393.00	56117.30	57400.60	521771.82	543070.48	705721.89	785232.08	66	221	2016
2394.00	57584.00	59050.50	521960.98	543255.55	705766.17	785278.79	66	221	2016
2395.00	59606.40	60909.50	522159.35	543452.90	705819.07	785335.73	62	217	2016
2396.00	57984.00	59490.90	522340.81	543651.01	705876.96	785383.92	62	217	2016
2397.00	56547.70	57881.60	522539.36	543838.98	705926.86	785434.01	62	217	2016
2398.00	55033.10	56440.50	522735.81	544036.82	705978.18	785485.31	62	217	2016
2399.00	53554.30	54885.80	522929.49	544232.02	706030.18	785542.93	62	217	2016
2400.00	52003.50	53461.40	523121.58	544427.92	706040.40	785595.85	62	217	2016
2401.00	50508.60	51837.90	523309.36	544639.93	706040.50	785644.55	62	217	2016
2402.00	48951.50	50332.40	523508.74	544848.09	706041.28	785699.37	62	217	2016
2403.00	64373.90	65764.80	523704.98	545061.20	706042.25	785746.41	49	201	2016
2404.00	62830.90	64249.60	523891.14	545256.14	706047.64	785799.14	49	201	2016
2405.00	61372.50	62696.50	524086.57	545459.57	706038.49	785845.81	49	201	2016
2406.00	59856.50	61231.80	524276.82	545671.54	706035.77	785901.29	49	201	2016
2407.00	58369.10	59685.60	524465.91	545884.61	706044.78	785946.59	49	201	2016
2408.00	56839.60	58231.80	524665.93	546086.98	706042.24	786006.46	49	201	2016
2409.00	55379.70	56699.00	524860.09	546311.42	706043.30	786051.46	49	201	2016
2410.00	53837.60	55236.90	525056.48	546497.60	706037.62	786110.85	49	201	2016
2411.00	52367.60	53694.40	525244.93	546700.66	706043.16	786165.17	49	201	2016
2412.00	70597.20	71951.60	525452.86	546924.09	706038.37	786217.56	47	200	2016
2413.00	69086.30	70478.10	525633.70	547128.07	706042.52	786263.55	47	200	2016
2414.00	48071.50	49551.80	525833.52	547335.52	706039.77	786319.85	47	200	2016
2415.00	49672.00	51036.40	526022.16	547534.86	706040.39	786369.49	47	200	2016
2416.00	46570.20	47932.50	526212.79	548030.63	704976.35	786419.92	47	200	2016
2417.00	40172.60	40575.60	541958.57	548225.84	705025.83	728397.29	46	199	2016
2417.01	54152.50	55201.00	526412.69	541983.07	728311.90	786477.84	47	200	2016
2418.00	44886.30	46389.00	526606.76	548422.07	705082.01	786523.83	47	200	2016
2419.00	59834.90	61284.10	526779.28	548601.09	705127.88	786565.77	47	200	2016
2420.00	61409.00	62796.40	526981.02	548808.35	705185.69	786627.22	47	200	2016
2421.00	62961.00	64390.80	527182.75	548976.82	705233.88	786680.26	47	200	2016
2422.00	64525.60	65918.30	527375.39	549189.36	705288.29	786734.06	47	200	2016
2423.00	66063.60	67498.30	527563.80	549371.40	705336.74	786777.63	47	200	2016
2424.00	67636.20	68980.30	527757.60	549574.45	705397.47	786835.96	47	200	2016
2425.00	52682.30	54032.60	527955.66	549777.14	705445.36	786885.32	47	200	2016
2426.00	51107.80	52551.00	528143.31	549969.34	705502.47	786936.56	47	200	2016
2427.00	43432.40	44812.00	528341.44	550157.09	705549.00	786994.86	47	200	2016
2428.00	41789.80	43281.50	528536.10	550355.00	705600.87	787039.84	47	200	2016
2429.00	38710.80	40083.40	528726.68	550542.03	705648.24	787094.99	46	199	2016
2430.00	60262.00	61715.80	528930.21	550742.89	705699.32	787146.04	44	198	2016
2431.00	58741.30	60128.50	529108.60	550937.14	705754.30	787199.34	44	198	2016
2432.00	57187.00	58621.30	529316.83	551122.89	705804.19	787250.66	44	198	2016
2433.00	55642.20	57051.00	529494.83	551310.83	705854.51	787294.94	44	198	2016
2434.00	54047.20	55487.00	529698.26	551507.31	705915.26	787357.66	44	198	2016
2435.00	52505.70	53911.00	529878.66	551689.89	705961.66	787407.57	44	198	2016
2436.00	50906.50	52360.30	530080.79	551896.15	706011.12	787454.97	44	198	2016
2437.00	49369.80	50786.90	530265.03	552098.82	706036.54	787509.75	44	198	2016
2438.00	41319.50	42720.40	530450.43	552306.80	706034.80	787553.45	44	198	2016
2439.00	39787.10	41206.00	530663.58	552507.47	706035.01	787612.26	44	198	2016
2440.00	38214.60	39658.40	530882.16	552711.83	706031.94	787677.50	44	198	2016
2441.00	30963.10	32390.00	531043.58	552923.88	706035.50	787720.59	46	199	2016
2442.00	32525.70	33924.00	531237.41	553129.80	706041.68	787769.85	46	199	2016
2443.00	34052.80	35488.90	531433.49	553340.54	706037.23	787817.61	46	199	2016
2444.00	35610.40	37007.90	531629.13	553546.85	706034.98	787871.36	46	199	2016
2445.00	37137.90	38577.00	531817.80	553749.73	706039.68	787916.64	46	199	2016
2446.00	41512.60	42904.80	532006.00	553963.23	706040.03	787974.22	35	190	2016
2447.00	39914.00	41370.50	532194.58	554159.67	706029.82	788022.06	35	190	2016
2448.00	43033.40	44496.80	532405.02	554376.12	706032.26	788081.30	35	190	2016
2449.00	44645.30	46010.50	532590.55	554581.74	706032.68	788122.37	35	190	2016
2450.00	46144.30	47577.80	532792.19	554786.97	706032.36	788180.73	35	190	2016
2451.00	47734.50	49086.00	532977.03	555000.54	706038.23	788231.40	35	190	2016
2452.00	49186.90	50657.10	533182.61	555208.08	706043.52	788288.89	35	190	2016
2453.00	33928.20	35170.00	533362.27	552047.06	718582.36	788338.81	44	198	2016
2453.01	43612.80	43846.60	552022.37	555703.92	704965.01	718664.16	44	198	2016

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2454.00	35294.60	36558.60	533557.87	552760.37	716706.27	788386.80	44	198	2016
2454.01	43280.00	43480.10	552729.68	555880.84	705011.63	716795.23	44	198	2016
2455.00	36904.50	38141.90	533741.37	552439.20	718684.34	788441.30	44	198	2016
2455.01	42834.70	43077.90	552407.27	556089.45	705067.24	718774.54	44	198	2016
2456.00	48556.50	50096.90	533938.54	556274.10	705112.96	788491.46	42	196	2016
2457.00	54773.10	56060.40	534140.63	553859.05	714924.55	788546.58	31	187	2016
2457.01	38583.80	38751.90	553822.73	556466.85	705167.26	715015.77	33	189	2016
2458.00	53172.40	54651.10	534332.30	556654.29	705221.09	788589.97	31	187	2016
2459.00	32424.60	33642.00	534519.60	553214.82	718892.95	788645.08	44	198	2016
2459.01	43954.80	44186.00	553183.15	556861.80	705273.00	718983.62	44	198	2016
2460.00	37508.40	38091.90	547675.18	557050.83	705324.91	740290.86	33	189	2016
2460.01	47604.70	48436.00	534714.86	547705.83	740201.59	788691.09	42	196	2016
2461.00	35816.30	37357.30	534913.81	557235.01	705371.00	788749.26	33	189	2016
2462.00	34257.80	35673.40	535104.59	557424.94	705426.23	788802.60	33	189	2016
2463.00	32558.10	34098.50	535297.43	557626.74	705474.20	788852.82	33	189	2016
2464.00	51524.80	52978.00	535486.16	557797.97	705530.36	788905.78	31	187	2016
2465.00	49938.20	51411.80	535684.89	558007.86	705578.04	788958.65	31	187	2016
2466.00	41181.50	42615.90	535885.35	558208.53	705633.11	789012.35	30	187	2016
2467.00	39642.30	41056.50	536070.59	558404.71	705685.86	789065.26	30	187	2016
2468.00	38043.00	39489.00	536268.50	558594.73	705741.16	789112.57	30	187	2016
2469.00	36501.60	37914.50	536450.22	558788.25	705789.61	789165.64	30	187	2016
2470.00	34892.00	36348.00	536668.16	558984.57	705848.48	789222.74	30	187	2016
2471.00	33332.00	34763.00	536840.74	559185.63	705896.65	789261.78	30	187	2016
2472.00	31760.00	33183.00	537036.71	559378.13	705947.27	789323.85	30	187	2016
2473.00	44012.70	45476.00	537240.26	559561.14	706000.68	789368.76	28	185	2016
2474.00	42401.00	43877.90	537420.11	559755.07	706034.89	789423.07	28	185	2016
2475.00	40799.90	42235.40	537633.19	559967.49	706034.02	789482.01	28	185	2016
2476.00	39185.10	40682.40	537795.13	560172.71	706034.63	789527.75	28	185	2016
2477.00	37587.50	39038.60	537996.35	560379.38	706039.91	789575.06	28	185	2016
2478.00	35769.10	36887.10	543896.22	560594.19	706034.29	768371.44	28	185	2016
2479.00	34512.80	35591.10	544085.54	560806.80	706040.11	768423.20	28	185	2016
2480.00	63025.20	64026.50	544278.22	561006.97	706042.61	768477.57	26	181	2016
2481.00	61797.60	62909.10	544467.11	561206.95	706029.22	768523.31	26	181	2016
2482.00	60637.00	61672.00	544656.78	561419.33	706032.13	768581.90	26	181	2016
2483.00	59398.80	60503.00	544853.72	561604.97	706028.16	768635.42	26	181	2016
2484.00	58245.80	59256.60	545068.68	561832.38	706036.21	768687.82	26	181	2016
2485.00	57029.50	58145.10	545236.32	562044.77	706033.25	768727.83	26	181	2016
2486.00	55856.20	56877.90	545442.69	562249.74	706032.96	768790.05	26	181	2016
2487.00	54597.90	55734.50	545624.26	562464.85	706035.75	768836.45	26	181	2016
2488.00	53414.90	54446.00	545824.87	562662.72	706028.31	768887.44	26	181	2016
2489.00	52157.30	53282.30	546013.77	562855.59	706025.01	768943.18	26	181	2016
2490.00	67902.30	69055.80	546201.35	563366.40	704946.60	768993.75	25	180	2016
2491.00	66678.60	67779.00	546400.05	563562.03	704997.92	769045.65	25	180	2016
2492.00	65437.30	66549.50	546592.51	563749.37	705047.16	769094.97	25	180	2016
2493.00	64137.30	65265.90	546791.41	563948.81	705101.46	769151.07	25	180	2016
2494.00	62884.80	63978.10	546977.23	564138.99	705153.41	769199.24	25	180	2016
2495.00	61570.60	62743.40	547180.98	564325.06	705201.64	769256.26	25	180	2016
2496.00	60297.30	61431.40	547358.49	564521.93	705256.13	769301.91	25	180	2016
2497.00	58999.30	60151.50	547558.23	564716.16	705309.76	769358.08	25	180	2016
2498.00	57752.10	58853.80	547752.10	564912.78	705355.73	769409.67	25	180	2016
2499.00	56440.10	57599.90	547942.54	565103.72	705407.70	769464.34	25	180	2016
2500.00	63163.30	64256.00	548138.66	565299.77	705459.32	769514.83	24	179	2016
2501.00	61924.60	63016.00	548338.37	565497.12	705515.21	769563.68	24	179	2016
2502.00	60727.50	61809.30	548525.32	565683.26	705562.39	769613.47	24	179	2016
2503.00	59478.40	60593.50	548716.67	565880.02	705616.47	769667.65	24	179	2016
2504.00	58264.70	59350.50	548917.77	566075.92	705670.61	769722.63	24	179	2016
2505.00	56987.90	58100.80	549103.37	566270.22	705724.95	769771.40	24	179	2016
2506.00	55749.50	56846.50	549290.33	566452.19	705770.57	769819.46	24	179	2016
2507.00	54474.00	55587.60	549492.76	566662.30	705830.75	769873.14	24	179	2016
2508.00	32913.80	33741.30	549670.79	562685.06	721448.71	769922.61	23	179	2016
2508.01	54070.60	54339.50	562650.12	566848.86	705878.57	721518.31	24	179	2016
2509.00	31923.80	32811.60	549884.53	563917.54	717625.44	769977.76	23	179	2016
2509.01	53600.40	53803.10	563883.27	567036.89	705925.60	717703.74	24	179	2016
2510.00	66354.60	67437.60	550077.27	567238.63	705984.37	770029.56	22	177	2016
2511.00	65123.50	66212.50	550257.54	567427.37	706027.05	770084.55	22	177	2016
2512.00	63922.80	65016.50	550464.10	567642.89	706026.81	770135.82	22	177	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2513.00	62663.70	63788.60	550646.40	567841.12	706030.17	770178.21	22	177	2016
2514.00	61405.20	62524.50	550849.17	568044.51	706024.04	770236.64	22	177	2016
2515.00	60138.70	61255.50	551039.91	568251.36	706030.54	770291.98	22	177	2016
2516.00	58642.30	59708.80	551236.24	568465.14	706029.42	770340.62	22	177	2016
2517.00	57321.50	58486.80	551427.98	568678.97	706030.01	770395.64	22	177	2016
2518.00	56076.10	57160.10	551618.63	568882.72	706034.97	770445.79	22	177	2016
2519.00	54783.70	55940.90	551806.51	569092.58	706029.55	770498.83	22	177	2016
2520.00	48179.80	49219.50	552005.64	569280.34	706021.61	770544.21	21	177	2016
2521.00	46916.20	48063.50	552194.87	569503.10	706029.87	770600.57	21	177	2016
2522.00	45726.90	46746.40	552409.08	569717.26	706026.63	770652.21	21	177	2016
2523.00	44407.60	45602.00	552586.35	569914.74	706031.84	770701.63	21	177	2016
2524.00	43175.80	44212.50	552781.43	570117.42	706030.42	770758.11	21	177	2016
2525.00	39558.80	40747.80	552974.36	570326.08	706028.58	770808.96	21	177	2016
2526.00	38782.30	39407.00	559923.38	570539.66	706024.41	745638.48	21	177	2016
2526.01	40867.30	41283.00	553178.03	559943.42	745550.11	770863.17	21	177	2016
2527.00	37818.40	38592.60	559595.54	571031.03	704926.15	747620.44	21	177	2016
2527.01	41554.20	41991.80	553359.21	559618.69	747532.31	770914.74	21	177	2016
2528.00	36927.80	37661.50	559271.45	571226.21	704976.64	749611.26	21	177	2016
2528.01	42099.70	42467.40	553542.71	559290.78	749520.46	770958.64	21	177	2016
2529.00	35827.40	36664.60	559461.80	571423.23	705033.57	749656.80	21	177	2016
2529.01	42676.90	43071.30	553739.87	559485.80	749571.73	771015.84	21	177	2016
2530.00	39321.60	40462.00	553935.92	571615.53	705081.32	771060.59	18	170	2016
2531.00	38045.20	39202.00	554133.77	571817.71	705139.62	771112.81	18	170	2016
2532.00	36748.50	37889.40	554323.72	571999.46	705183.62	771167.43	18	170	2016
2533.00	35474.70	36625.00	554508.90	572194.58	705239.74	771218.79	18	170	2016
2534.00	34226.40	35341.50	554716.74	572391.65	705293.73	771273.06	18	170	2016
2535.00	32914.10	34088.30	554895.33	572583.71	705344.12	771324.50	18	170	2016
2536.00	30913.30	32221.20	555092.03	572777.23	705392.22	771373.88	14	168	2016
2537.00	32376.00	33411.40	555268.79	572978.56	705442.74	771422.18	14	168	2016
2538.00	33561.40	34860.00	555475.70	573154.41	705492.88	771475.70	14	168	2016
2539.00	36110.80	37310.60	555668.44	573358.43	705549.27	771525.61	13	167	2016
2540.00	37421.20	38423.00	555856.55	573544.18	705608.37	771580.02	13	167	2016
2541.00	34991.90	36010.00	556051.91	573747.03	705665.22	771628.11	14	168	2016
2542.00	36160.60	37448.40	556255.35	573923.30	705700.79	771690.33	14	168	2016
2543.00	37576.70	38593.80	556445.45	574137.56	705759.88	771739.59	14	168	2016
2544.00	38736.30	40010.60	556645.09	574313.33	705808.82	771787.14	14	168	2016
2545.00	42362.20	43505.60	556823.22	574506.53	705860.20	771838.09	12	164	2016
2546.00	43655.70	44830.90	557027.84	574704.34	705911.82	771892.92	12	164	2016
2547.00	40113.90	41128.60	557217.71	574904.39	705971.85	771945.96	14	168	2016
2548.00	48835.50	50173.50	557407.06	575081.90	706014.28	771996.43	15	168	2016
2549.00	50266.40	51299.80	557599.04	575300.79	706018.12	772047.04	15	168	2016
2550.00	51454.80	52729.30	557790.36	575506.07	706022.77	772097.86	15	168	2016
2551.00	52862.10	53893.60	557984.98	575706.89	706028.96	772145.49	15	168	2016
2552.00	54014.70	55332.30	558178.90	575904.02	706020.51	772203.01	15	168	2016
2553.00	55445.40	56477.80	558397.26	576136.26	706025.99	772254.78	15	168	2016
2554.00	56646.30	57957.30	558569.88	576319.93	706021.54	772308.37	15	168	2016
2555.00	58091.10	59152.50	558766.32	576548.99	706026.57	772361.86	15	168	2016
2556.00	59297.20	60594.30	558950.32	576730.51	706022.30	772413.27	15	168	2016
2557.01	49203.60	50341.10	559153.13	576953.93	706025.34	772465.17	78	235	2016
2558.00	32997.90	34047.50	559343.49	577161.37	706025.83	772508.49	16	169	2016
2559.00	44852.80	46008.50	559529.72	577373.91	706024.13	772566.32	11	163	2016
2560.00	46144.30	47326.90	559725.17	577571.19	706017.73	772615.33	11	163	2016
2561.00	47463.90	48626.50	559925.47	577764.32	706017.68	772668.31	11	163	2016
2562.00	48758.50	49953.40	560111.94	577997.03	706019.79	772717.20	11	163	2016
2563.00	50095.40	51260.00	560311.11	578186.02	706017.45	772770.70	11	163	2016
2564.00	51384.40	52595.00	560501.01	578710.52	704915.47	772824.08	11	163	2016
2565.00	41024.50	42245.00	560700.34	578891.88	704960.13	772874.15	12	164	2016
2566.00	44937.80	46127.50	560893.47	579077.77	705020.43	772931.16	12	164	2016
2567.00	34189.40	35430.50	561086.38	579283.53	705065.69	772983.51	16	169	2016
2568.00	48753.20	49912.50	561283.89	579465.18	705115.27	773027.33	10	161	2016
2569.00	47415.70	48606.10	561471.29	579663.90	705172.44	773083.34	10	161	2016
2570.00	46133.50	47299.90	561661.58	579864.02	705227.48	773137.03	10	161	2016
2571.00	44767.50	45988.50	561862.13	580059.91	705284.54	773189.05	10	161	2016
2572.00	43470.20	44647.30	562044.61	580255.74	705331.36	773235.48	10	161	2016
2573.00	58181.10	59342.00	562251.73	580438.71	705371.99	773286.74	6	157	2016
2574.00	56731.70	58060.50	562436.99	580634.12	705427.87	773342.73	6	157	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2575.00	55395.40	56560.50	562640.29	580831.15	705480.31	773379.21	6	157	2016
2576.00	53910.70	55250.50	562818.36	581017.39	705534.03	773440.51	6	157	2016
2577.00	52613.30	53763.90	563015.49	581213.06	705585.21	773495.47	6	157	2016
2578.00	31817.60	32971.00	563211.27	581410.56	705639.47	773550.14	6	157	2016
2579.00	33119.70	34380.00	563416.12	581598.54	705684.57	773604.71	6	157	2016
2580.00	34503.30	35650.90	563599.53	581792.62	705738.94	773655.94	6	157	2016
2581.00	35787.50	37079.00	563784.59	581986.08	705794.88	773704.47	6	157	2016
2582.00	37197.30	38339.00	563987.05	582173.03	705840.95	773749.02	6	157	2016
2583.00	38479.60	39748.80	564172.40	582382.47	705896.87	773808.31	6	157	2016
2584.00	39871.40	41033.50	564364.30	582556.49	705947.03	773858.58	6	157	2016
2585.00	51204.50	52538.60	564561.76	582753.23	706001.95	773908.06	6	157	2016
2586.00	49899.00	51049.50	564759.26	582957.46	706017.72	773957.20	6	157	2016
2587.00	53622.60	54814.50	564948.95	583161.47	706014.53	774014.49	9	160	2016
2588.00	54942.40	56127.90	565144.73	583374.39	706019.77	774068.61	9	160	2016
2589.00	56274.00	57499.60	565335.00	583580.33	706021.21	774114.01	9	160	2016
2590.00	57641.30	58844.60	565517.93	583781.98	706022.62	774167.28	9	160	2016
2591.00	58968.70	60159.10	565723.11	583991.51	706018.18	774216.65	9	160	2016
2592.00	60293.80	61513.60	565921.59	584205.83	706024.41	774272.89	9	160	2016
2593.00	61638.40	62856.00	566107.46	584404.84	706019.77	774326.93	9	160	2016
2594.00	35568.80	36640.40	566317.10	584608.74	706013.82	774384.33	16	169	2016
2595.00	36756.80	38001.00	566490.74	584813.56	706013.93	774433.01	16	169	2016
2596.00	38144.90	39235.50	566694.51	585027.01	706018.19	774485.12	16	169	2016
2597.00	49179.10	50455.00	566882.39	585232.46	706013.98	774528.96	17	169	2016
2598.00	50572.10	51709.50	567060.52	585445.63	706022.29	774581.68	17	169	2016
2599.00	51859.40	53109.10	567274.78	585644.88	706014.08	774634.27	17	169	2016
2600.00	53221.30	54303.50	567453.75	585862.65	706021.91	774683.09	17	169	2016
2601.00	54479.00	55752.30	567643.79	586063.34	706016.15	774740.16	17	169	2016
2602.00	55865.40	56984.00	567849.79	586560.38	704945.51	774785.73	17	169	2016
2603.00	57151.40	58449.00	568038.95	586753.79	704996.97	774837.75	17	169	2016
2604.00	58551.10	59657.90	568240.03	586954.30	705052.95	774892.91	17	169	2016
2605.00	30029.10	31268.00	568429.91	587141.70	705099.81	774940.96	18	170	2016
2606.00	31398.90	32596.20	568622.37	587330.20	705157.51	774992.24	18	170	2016
2607.00	39380.00	39709.00	582781.28	587535.87	705207.73	722875.84	16	169	2016
2608.00	39808.90	40102.90	582990.15	587726.98	705255.18	722929.08	16	169	2016
2609.00	40244.00	40570.50	583186.03	587907.03	705305.07	722982.18	16	169	2016
2610.00	40665.20	40954.00	583360.35	588116.11	705367.25	723031.78	16	169	2016
2611.00	41103.30	41439.80	583554.17	588285.73	705406.67	723081.67	16	169	2016
2612.00	41586.90	41871.50	583734.83	588492.16	705459.53	723134.29	16	169	2016
2613.00	41988.80	42321.50	583940.63	588683.96	705515.71	723185.21	16	169	2016
2614.00	50138.20	50458.30	584143.69	588875.84	705564.46	723245.69	4	156	2016
2615.00	49706.20	50023.10	584328.12	589065.53	705622.74	723290.57	4	156	2016
2616.00	49253.70	49579.60	584528.56	589260.87	705670.47	723340.47	4	156	2016
2617.00	48827.80	49140.50	584718.74	589449.47	705716.73	723394.33	4	156	2016
2618.00	39676.40	39997.90	584914.76	589663.07	705777.46	723451.03	4	156	2016
2619.00	39232.60	39554.50	585113.88	589841.44	705832.29	723503.24	4	156	2016
2620.00	38786.70	39117.50	585305.64	590032.22	705874.33	723558.25	4	156	2016
2621.00	38345.80	38662.50	585500.20	590233.81	705934.96	723602.01	4	156	2016
2622.00	37880.90	38205.80	585688.38	590430.50	705983.65	723655.72	4	156	2016
2623.00	37451.90	37772.00	585888.96	590626.30	706011.57	723709.60	4	156	2016
2624.00	37018.10	37346.50	586080.38	590830.23	706014.09	723753.21	4	156	2016
2625.00	36553.80	36877.00	586268.56	591041.60	706016.65	723811.48	4	156	2016
2626.00	36088.40	36411.10	586461.81	591251.14	706017.20	723854.02	4	156	2016
2627.00	35630.40	35947.30	586662.93	591451.51	706009.76	723915.49	4	156	2016
2628.00	35205.40	35529.40	586842.37	591674.94	706014.74	723963.29	4	156	2016
2629.00	34746.00	35077.60	587050.36	591861.97	706012.88	724020.32	4	156	2016
2630.00	34272.90	34597.00	587239.83	592073.58	706010.95	724064.89	4	156	2016
2631.00	33818.70	34143.40	587437.17	592277.59	706006.14	724122.48	4	156	2016
2632.00	33380.40	33708.50	587620.26	592492.03	706016.01	724170.33	4	156	2016
2633.00	32916.20	33248.00	587822.77	592693.88	706015.08	724224.67	4	156	2016
2634.00	32445.00	32764.50	588012.15	592904.83	706011.00	724274.80	4	156	2016
2635.00	31984.10	32307.70	588214.57	593104.65	706009.28	724330.60	4	156	2016
2636.00	31514.30	31846.00	588395.69	593333.28	706020.50	724378.99	4	156	2016
2637.00	31046.90	31384.20	588580.00	593518.82	706012.45	724427.05	4	156	2016
2638.00	57364.00	57669.00	588780.42	593728.36	706012.22	724476.21	2	155	2016
2639.00	56851.20	57206.50	588987.98	594218.75	704926.58	724534.83	2	155	2016
2640.00	56409.30	56739.60	589173.74	594419.53	704979.90	724582.93	2	155	2016

Tellus A2 Block – FLOWN LINES (FEM)
IRENET95, Irish Transverse Mercator

LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2641.00	55937.30	56277.50	589366.69	594604.77	705025.37	724640.07	2	155	2016
2642.00	55483.50	55804.60	589556.96	594809.70	705086.73	724681.19	2	155	2016
2643.00	55013.80	55362.40	589751.81	595010.74	705139.53	724740.70	2	155	2016
2644.00	54582.10	54909.50	589939.90	595190.23	705184.79	724794.82	2	155	2016
2645.00	54095.90	54434.00	590131.74	595386.21	705239.35	724840.44	2	155	2016
2646.00	53644.20	53966.10	590335.19	595574.33	705292.23	724894.87	2	155	2016
2647.00	53194.00	53542.00	590524.23	595764.91	705343.88	724945.44	2	155	2016
2648.00	52755.80	53078.50	590711.27	595965.42	705394.08	724992.19	2	155	2016
2649.00	52280.40	52625.00	590918.97	596155.16	705440.73	725052.69	2	155	2016
2650.00	51824.60	52168.00	591103.19	596358.11	705499.20	725102.60	2	155	2016
2651.00	51340.90	51696.90	591288.27	596536.73	705541.67	725152.64	2	155	2016
2652.00	50867.60	51205.60	591487.06	596737.62	705600.58	725204.27	2	155	2016
2653.00	50377.90	50728.00	591679.19	596930.78	705659.08	725257.54	2	155	2016
2654.00	49901.90	50233.10	591871.98	597126.51	705709.86	725305.24	2	155	2016
2655.00	49412.40	49751.60	592075.80	597318.55	705761.49	725364.38	2	155	2016
2656.00	48944.80	49275.30	592251.73	597503.12	705809.04	725414.73	2	155	2016
2657.00	48463.40	48802.80	592461.42	597708.25	705860.08	725473.04	2	155	2016
2658.00	48019.40	48350.50	592643.92	597897.42	705914.09	725519.88	2	155	2016
2659.00	47506.80	47867.30	592834.47	598088.82	705966.14	725571.64	2	155	2016
2660.00	40120.70	40463.40	593030.61	598280.06	706006.79	725621.03	2	155	2016
2661.00	39629.10	39979.10	593219.15	598491.22	706014.18	725676.32	2	155	2016
2662.00	39159.60	39496.00	593415.32	598692.13	706006.27	725724.33	2	155	2016
2663.00	38673.40	39029.40	593614.34	598901.54	706004.64	725778.77	2	155	2016
2664.00	38225.80	38569.50	593807.94	599109.59	706009.22	725820.80	2	155	2016
2665.00	37749.30	38096.00	593997.68	599319.64	706004.60	725880.29	2	155	2016
2666.00	37307.50	37640.60	594192.30	599533.02	706009.03	725925.38	2	155	2016
2667.00	36823.80	37167.30	594381.01	599737.50	706005.24	725979.72	2	155	2016
2668.00	36357.60	36691.10	594585.39	599943.83	706009.24	726034.06	2	155	2016
2669.00	35876.90	36223.30	594773.37	600151.77	706004.98	726087.34	2	155	2016
2670.00	35382.10	35732.10	594966.67	600348.75	706004.74	726137.42	2	155	2016
2671.00	34916.90	35275.40	595154.92	600566.59	706002.32	726191.10	2	155	2016
2672.00	34429.40	34789.30	595352.37	600763.76	706004.84	726245.62	2	155	2016
2673.00	33947.30	34303.00	595551.12	600981.29	706007.19	726296.32	2	155	2016
2674.00	33460.50	33820.00	595746.03	601181.00	706007.32	726345.30	2	155	2016
2675.00	32955.50	33309.90	595933.24	601393.30	706007.66	726399.18	2	155	2016
2676.00	32439.90	32807.00	596132.60	601892.83	704910.95	726444.95	2	155	2016
2677.00	31897.50	32276.20	596315.24	602086.27	704965.16	726501.13	2	155	2016
2678.00	31400.50	31785.00	596505.59	602278.72	705016.99	726552.59	2	155	2016
2679.00	60767.80	61156.90	596698.94	602474.23	705067.30	726603.70	1	154	2016
2680.00	60258.90	60621.00	596891.91	602658.75	705125.07	726658.20	1	154	2016
2681.00	59765.00	60148.10	597088.61	602853.65	705171.72	726702.77	1	154	2016
2682.00	59218.80	59601.50	597283.91	603052.92	705224.87	726760.04	1	154	2016
2683.00	58687.10	59069.80	597474.74	603236.42	705271.11	726813.97	1	154	2016
2684.00	58158.60	58523.30	597678.49	603445.41	705325.88	726864.47	1	154	2016
2685.00	57663.30	58042.80	597858.99	603628.88	705380.84	726915.14	1	154	2016
2686.00	57123.20	57499.40	598056.00	603823.46	705428.01	726967.71	1	154	2016
2687.00	56590.40	56984.40	598253.41	604010.17	705480.38	727021.29	1	154	2016
2688.00	56079.70	56443.40	598446.59	604211.96	705530.15	727073.05	1	154	2016
2689.00	55559.60	55947.00	598637.51	604396.16	705582.32	727118.53	1	154	2016
2690.00	55032.70	55404.80	598828.31	604602.04	705635.22	727171.83	1	154	2016
2691.00	54510.50	54898.90	599017.84	604778.53	705682.19	727226.88	1	154	2016
2692.00	53983.00	54350.00	599223.14	604985.47	705737.56	727277.01	1	154	2016
2693.00	53480.20	53851.10	599412.58	605174.66	705793.80	727323.79	1	154	2016
2694.00	52938.40	53309.50	599595.25	605372.60	705823.53	727379.43	1	154	2016
2695.00	52409.40	52810.50	599789.97	605580.93	705828.38	727431.16	1	154	2016
2696.00	51847.70	52237.40	599982.10	605784.18	705820.97	727483.97	1	154	2016
2697.00	51320.20	51703.30	600183.74	605987.24	705853.57	727539.88	1	154	2016
2698.00	50744.80	51121.00	600373.02	606196.93	705847.80	727591.33	1	154	2016
2699.00	50196.40	50575.90	600568.85	606410.50	705834.32	727640.72	1	154	2016

Tellus A2 Block - FLOWN LINES (Magnetic)
IRENET95, Irish Transverse Mercator

LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
201.00	30708.00	30788.40	601715.32	606438.39	705009.19	706276.23	6	157	2016
202.00	31028.00	31241.30	594043.97	605921.58	705035.35	708210.06	6	157	2016
203.00	31334.50	31661.50	586377.93	605403.24	705054.33	710152.34	6	157	2016
204.00	58970.50	59432.60	578521.46	604890.23	705026.68	712088.79	4	156	2016
205.00	58217.00	58787.30	570853.56	604371.99	705037.09	714019.26	4	156	2016
206.00	57413.30	58126.90	563186.85	603853.23	705036.43	715929.25	4	156	2016
207.00	34268.90	35078.30	555516.36	603334.49	705070.78	717878.96	13	167	2016
208.00	56150.80	57094.10	547851.46	602815.31	705083.97	719808.52	4	156	2016
209.00	54965.50	56053.00	539990.63	602300.55	705039.53	721739.72	4	156	2016
210.00	53586.10	54744.10	533289.26	601781.19	705319.78	723679.99	4	156	2016
211.00	52241.00	53498.10	532770.74	601264.22	707245.18	725608.18	4	156	2016
212.00	50879.20	52067.60	532254.61	600747.17	709202.35	727574.57	4	156	2016
213.00	47066.20	47935.50	531733.17	582260.57	711119.62	724664.17	53	204	2016
214.00	58116.20	59013.70	531217.47	581746.02	713048.62	726588.03	53	204	2016
215.00	57120.20	57986.80	530700.71	581224.28	714979.98	728531.60	53	204	2016
216.00	56092.40	57018.80	530179.54	580705.61	716917.93	730447.07	53	204	2016
217.00	55038.50	55889.40	529662.44	580189.82	718852.43	732392.17	53	204	2016
218.00	54033.10	54936.30	529148.02	579673.23	720782.71	734315.69	53	204	2016
219.00	52746.70	53925.70	510657.76	579155.53	717905.39	736248.55	53	204	2016
220.00	51413.90	52660.20	510136.69	578634.92	719827.06	738178.95	53	204	2016
221.00	49890.00	51286.40	496867.83	578115.21	718349.48	740123.66	53	204	2016
222.00	48268.20	49702.00	496350.29	577602.33	720295.80	742041.26	53	204	2016
223.00	47201.90	47846.40	541533.39	577085.49	734452.93	743976.16	54	209	2016
223.01	53791.40	54991.60	478632.02	541626.33	717602.71	734478.99	54	209	2016
224.00	45438.30	47107.20	478112.58	576565.13	719529.59	745915.30	54	209	2016
225.00	40372.80	42147.80	477595.24	576045.81	721472.48	747833.79	54	209	2016
226.00	65878.00	67537.70	477080.53	575529.75	723394.39	749767.60	54	209	2016
227.00	62653.40	64360.90	476558.52	575011.75	725320.31	751702.24	56	211	2016
228.00	49713.60	51447.90	476041.12	574491.88	727270.86	753631.79	56	211	2016
229.00	37904.70	38899.50	517748.20	573977.01	740509.34	755564.25	54	209	2016
229.01	62225.40	63096.50	466829.83	517845.56	726868.53	740535.37	58	212	2016
230.00	36853.10	37780.80	518969.73	573460.02	742911.76	757503.90	54	209	2016
230.01	63313.60	64228.20	466312.24	519060.34	728802.39	742932.92	58	212	2016
231.00	35699.50	36752.80	516524.01	572940.67	744316.93	759434.80	54	209	2016
231.01	64314.70	65179.50	465796.05	516614.02	730725.21	744354.59	58	212	2016
232.00	39055.40	40045.70	513490.79	572424.07	745579.62	761372.81	54	209	2016
232.01	39624.70	40366.50	465275.42	513585.10	732654.32	745606.05	60	213	2016
233.00	41840.00	43612.20	464758.97	571906.69	734597.32	763305.31	56	211	2016
234.00	39790.10	41737.60	464239.68	571387.41	736530.50	765251.07	56	211	2016
235.00	37813.50	39652.50	463719.88	570869.84	738465.08	767166.50	56	211	2016
236.00	35621.30	37719.00	453156.49	570356.93	737711.77	769103.44	56	211	2016
237.00	33547.00	35514.90	452636.46	569833.79	739643.35	771031.43	56	211	2016
238.00	32424.80	33462.50	509222.36	569320.92	756866.57	772963.62	56	211	2016
238.01	43909.70	44879.70	452117.07	509317.02	741563.87	756888.86	56	211	2016
239.00	31144.70	32238.80	505035.87	568802.51	757817.48	774879.02	56	211	2016
239.01	31729.50	32704.20	451601.24	505128.26	743504.62	757828.83	63	218	2016
240.00	30873.30	32409.10	451083.74	543356.54	745439.33	770147.42	84	241	2016
241.00	52627.90	52874.80	456555.77	471243.69	748976.80	752921.09	84	241	2016
241.01	40772.70	41229.80	471151.95	499074.89	752878.53	760356.51	105	275	2016
241.02	51409.40	52155.80	498979.07	542837.46	760326.85	772087.85	84	241	2016
242.00	49881.20	51297.30	456041.66	542322.32	750901.11	774021.38	84	241	2016
243.00	48256.80	49764.80	455520.08	541806.08	752850.92	775954.62	84	241	2016
244.00	41205.50	42677.80	449208.35	541282.97	753222.25	777882.53	84	241	2016
245.00	38884.00	40246.90	448686.24	530237.40	755140.51	776995.16	84	241	2016
245.01	40920.00	41095.10	530145.10	540771.04	776967.37	779809.75	84	241	2016
246.00	38358.50	38736.30	448173.46	471745.09	757086.33	763409.19	84	241	2016
246.01	41465.30	41948.90	471649.27	501501.48	763371.05	771366.69	105	275	2016
246.02	37223.40	37878.10	501410.61	540264.70	771336.84	781745.08	84	241	2016
247.00	36319.00	37087.00	493939.39	539755.71	771407.78	783682.62	84	241	2016
247.01	53171.90	53657.30	447652.04	475091.91	759009.16	766364.08	84	241	2016
247.03	57084.60	57425.50	474997.66	494033.37	766333.55	771428.91	108	283	2016
248.00	32747.50	33171.50	447133.81	471479.63	760935.10	767465.58	84	241	2016
248.01	34721.40	35827.60	471387.26	539246.67	767438.89	785617.78	84	241	2016
249.00	58220.30	58416.70	446616.59	457915.31	762879.25	765917.25	39	194	2016
249.10	33489.20	34625.50	472513.23	538697.75	769816.98	787540.30	84	241	2016
250.00	58527.30	58731.40	446099.58	457398.81	764817.38	767835.78	39	194	2016

Tellus A2 Block - FLOWN LINES (Magnetic)
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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
250.10	55662.40	56757.00	471997.04	538183.80	771746.34	789478.28	74	228	2016
251.00	58837.00	59027.20	445584.73	456884.07	766748.08	769768.23	39	194	2016
2001.00	42193.00	42341.30	451176.23	453325.52	737597.88	745615.44	13	167	2016
2002.00	42446.50	42562.20	451377.68	453532.61	737653.36	745663.90	13	167	2016
2002.10	57734.80	57966.00	445683.95	449383.46	753113.10	766931.88	39	194	2016
2003.00	42718.30	42865.00	451574.55	453720.16	737701.06	745715.41	13	167	2016
2003.10	57316.40	57590.00	445884.64	449582.99	753161.75	766981.75	39	194	2016
2004.00	42964.90	43082.40	451766.27	453918.79	737752.98	745767.34	13	167	2016
2004.10	56927.00	57147.20	446063.65	449775.68	753218.72	767036.27	39	194	2016
2005.00	43228.00	43371.90	451961.15	454105.16	737806.93	745820.91	13	167	2016
2005.10	56518.20	56789.50	446263.36	449967.28	753266.78	767087.28	39	194	2016
2006.00	43484.20	43598.80	452141.76	454302.55	737859.82	745873.77	13	167	2016
2006.10	56155.50	56377.00	446460.42	450163.92	753320.63	767137.81	39	194	2016
2007.00	53919.10	54082.90	452352.42	454498.95	737910.08	745925.94	39	194	2016
2007.10	55759.70	56011.90	446654.94	450353.09	753370.86	767186.82	39	194	2016
2008.00	53645.30	53775.80	452533.91	454683.54	737963.05	745976.36	39	194	2016
2008.10	55375.20	55613.20	446845.89	450538.88	753423.87	767236.09	39	194	2016
2009.00	53370.50	53506.00	452734.61	454882.50	738014.39	746030.28	39	194	2016
2009.10	54991.20	55236.80	447038.87	450738.33	753475.79	767286.42	39	194	2016
2010.00	53092.90	53222.80	452923.38	455071.02	738063.48	746082.98	39	194	2016
2010.10	54598.10	54822.80	447234.15	450934.07	753528.13	767341.11	39	194	2016
2011.00	52811.60	52953.40	453113.11	455263.40	738117.36	746134.73	39	194	2016
2011.10	54221.80	54471.30	447428.52	451117.80	753578.11	767393.00	39	194	2016
2012.00	52511.70	52640.00	453316.27	455455.49	738169.46	746180.69	39	194	2016
2012.10	50444.30	50684.80	447629.16	451315.15	753632.53	767439.90	39	194	2016
2013.00	52220.30	52376.10	453512.52	455653.97	738219.94	746234.75	39	194	2016
2013.10	50065.40	50320.10	447815.28	451515.18	753683.87	767497.47	39	194	2016
2014.00	51924.20	52053.00	453708.68	455848.43	738273.37	746288.96	39	194	2016
2014.10	40664.30	40894.90	447997.40	451702.66	753735.39	767546.21	38	194	2016
2015.00	51633.50	51789.60	453894.05	456039.33	738324.41	746339.32	39	194	2016
2015.10	40263.70	40516.10	448201.59	451894.95	753787.89	767597.39	38	194	2016
2016.00	51357.40	51487.30	454083.89	456232.64	738374.44	746388.93	39	194	2016
2016.10	39895.80	40120.80	448413.81	452098.61	753836.83	767649.32	38	194	2016
2017.00	51082.90	51223.70	454276.39	456420.97	738425.85	746441.37	39	194	2016
2017.10	39490.60	39756.40	448583.00	452284.10	753889.46	767703.98	38	194	2016
2018.00	50804.10	50942.10	454472.17	456619.61	738482.12	746491.90	39	194	2016
2018.10	39094.60	39320.30	448776.53	452490.29	753938.06	767752.25	38	194	2016
2019.00	61209.00	61349.80	454667.18	456814.38	738533.18	746549.48	54	209	2016
2019.10	38693.50	38944.70	448963.30	452679.48	753991.91	767807.63	38	194	2016
2020.00	60915.40	61062.50	454870.48	457005.66	738585.29	746598.05	54	209	2016
2020.10	38306.60	38543.00	449167.98	452862.29	754047.53	767855.89	38	194	2016
2021.00	60631.50	60773.00	455048.69	457197.14	738636.86	746647.61	54	209	2016
2021.10	37928.70	38167.40	449357.72	453059.44	754095.27	767911.35	38	194	2016
2022.00	60357.00	60505.00	455251.24	457396.10	738685.22	746702.82	54	209	2016
2022.10	37549.60	37788.90	449555.55	453248.44	754147.63	767962.47	38	194	2016
2023.00	60100.60	60241.90	455440.56	457577.72	738740.53	746750.41	54	209	2016
2023.10	37163.00	37407.80	449738.29	453444.19	754199.46	768014.67	38	194	2016
2024.00	59836.90	59978.80	455635.02	457775.31	738787.47	746805.80	54	209	2016
2024.10	36780.90	37019.40	449945.00	453640.81	754250.13	768063.44	38	194	2016
2025.00	59585.30	59723.70	455819.47	457966.19	738841.86	746858.87	54	209	2016
2025.10	36386.60	36650.90	450137.90	453832.15	754302.83	768118.21	38	194	2016
2026.00	59329.80	59472.90	456022.22	458165.15	738893.62	746908.53	54	209	2016
2026.10	35987.90	36226.00	450321.05	454021.14	754357.16	768169.91	38	194	2016
2027.00	59081.20	59219.40	456209.02	458362.40	738946.01	746958.56	54	209	2016
2027.10	35609.20	35854.00	450522.42	454220.64	754403.80	768217.81	38	194	2016
2028.00	58829.00	58973.00	456412.20	458556.98	738997.42	747011.07	54	209	2016
2028.10	35231.90	35471.30	450720.09	454408.42	754458.16	768274.63	38	194	2016
2029.00	58560.70	58699.60	456604.51	458748.05	739047.58	747065.89	54	209	2016
2029.10	34858.10	35107.20	450899.05	454612.11	754509.34	768326.22	38	194	2016
2030.00	58296.10	58439.70	456798.64	458946.75	739098.33	747116.97	54	209	2016
2030.10	34475.20	34703.10	451098.00	454787.32	754565.89	768372.67	38	194	2016
2031.00	58039.80	58186.20	456982.60	459133.46	739151.76	747165.31	54	209	2016
2031.10	34084.90	34323.90	451291.35	455002.41	754613.19	768427.56	38	194	2016
2032.00	57398.70	57938.20	451484.83	459329.90	739205.04	768479.74	54	209	2016
2033.00	56738.70	57256.30	451677.46	459522.15	739255.47	768533.38	54	209	2016
2034.00	56082.20	56597.90	451869.90	459717.43	739308.19	768580.01	54	209	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2035.00	55432.40	55916.70	452076.25	459900.90	739360.20	768635.38	54	209	2016
2036.00	42576.30	43087.80	452257.52	460096.41	739413.20	768686.06	54	209	2016
2037.00	43201.80	43711.80	452447.58	460294.77	739463.07	768737.69	54	209	2016
2038.00	43841.30	44374.40	452635.57	460484.97	739514.67	768790.38	54	209	2016
2039.00	44537.40	45035.90	452837.96	460678.95	739568.78	768841.18	54	209	2016
2040.00	61661.10	62172.90	453033.24	460864.21	739618.49	768894.90	54	209	2016
2041.00	62344.40	62883.30	453213.45	461072.02	739670.26	768944.67	54	209	2016
2042.00	63032.00	63538.00	453423.06	461254.74	739720.36	768993.92	54	209	2016
2043.00	63669.10	64205.20	453604.20	461458.32	739774.67	769049.03	54	209	2016
2044.00	64313.40	64833.50	453800.13	461639.06	739826.74	769100.01	54	209	2016
2045.00	64992.10	65526.20	453991.95	461842.95	739875.16	769153.62	54	209	2016
2046.00	36457.40	36983.90	454187.45	462039.00	739925.32	769201.36	60	213	2016
2047.00	35797.50	36289.80	454385.59	462225.13	739974.69	769252.84	60	213	2016
2048.00	35149.80	35652.40	454576.01	462428.94	740028.07	769309.76	60	213	2016
2049.00	34490.60	35000.40	454775.91	462611.85	740073.97	769355.94	60	213	2016
2050.00	33861.50	34380.40	454965.36	462828.83	740123.18	769408.90	60	213	2016
2051.00	61474.40	61985.20	455156.73	463008.06	740174.85	769464.58	58	212	2016
2052.00	60841.40	61357.00	455340.50	463190.41	740226.09	769514.49	58	212	2016
2053.00	59840.30	60556.40	455545.09	467012.40	726748.33	769565.04	58	212	2016
2054.00	58950.50	59694.70	455733.87	467192.62	726812.49	769616.15	58	212	2016
2055.00	58067.30	58806.70	455935.27	467397.33	726864.99	769668.52	58	212	2016
2056.00	57135.60	57918.20	456112.85	467583.13	726921.18	769723.44	58	212	2016
2057.00	56257.50	56966.30	456319.01	467781.67	726971.90	769771.14	58	212	2016
2058.00	55354.10	56117.20	456507.72	467973.44	727022.04	769822.66	58	212	2016
2059.00	54449.20	55185.70	456715.07	468170.09	727071.18	769878.69	58	212	2016
2060.00	53493.90	54175.60	458445.27	468358.41	727126.77	764128.63	58	212	2016
2061.00	52669.30	53289.10	458643.48	468559.62	727175.04	764184.06	58	212	2016
2062.00	51884.10	52535.60	458838.82	468748.58	727228.63	764231.77	58	212	2016
2063.00	61901.40	62513.40	459024.68	468939.19	727282.95	764287.77	56	211	2016
2064.00	61109.70	61769.00	459223.55	469137.43	727330.84	764339.62	56	211	2016
2065.00	60379.30	60956.10	459424.89	469334.27	727386.29	764387.51	56	211	2016
2066.00	59527.70	60258.50	459617.34	469517.20	727437.31	764439.34	56	211	2016
2067.00	58748.90	59342.60	459802.35	469711.79	727487.65	764491.79	56	211	2016
2068.00	57965.70	58628.60	459993.45	469904.31	727537.26	764542.98	56	211	2016
2069.00	57237.20	57827.70	460199.88	470101.53	727594.67	764593.69	56	211	2016
2070.00	56348.20	57129.80	460382.43	470294.23	727644.69	764646.14	56	211	2016
2071.00	55563.30	56163.50	460567.23	470483.56	727695.00	764698.13	56	211	2016
2072.00	54740.20	55416.40	460767.85	470685.68	727745.15	764751.20	56	211	2016
2073.00	53990.70	54583.70	460971.90	470875.24	727802.24	764800.43	56	211	2016
2074.00	53140.20	53855.60	461155.09	471063.40	727849.22	764854.75	56	211	2016
2075.00	52378.80	52984.10	461348.19	471261.55	727902.41	764909.57	56	211	2016
2076.00	51548.30	52242.10	461535.38	471464.00	727956.13	764959.97	56	211	2016
2077.00	37176.90	37806.90	461733.69	471653.87	728004.60	765012.31	60	213	2016
2078.00	37947.80	38590.30	461926.64	471842.22	728059.92	765061.56	60	213	2016
2079.00	38750.10	39381.50	462117.26	472039.17	728106.41	765113.72	60	213	2016
2080.00	33265.40	33913.30	462312.72	472219.29	728160.13	765165.07	63	218	2016
2081.00	31039.50	31790.40	462504.41	472415.12	728215.26	765217.43	68	222	2016
2082.00	56963.50	57640.30	462715.36	472610.87	728263.20	765268.90	74	228	2016
2083.00	40140.10	40852.00	462888.53	472801.12	728316.37	765318.55	13	167	2016
2084.00	59166.70	59759.10	463089.40	473005.02	728369.86	765372.21	39	194	2016
2085.00	32271.80	32882.30	463278.68	473189.34	728423.03	765420.84	42	196	2016
2086.00	34816.00	35440.60	463479.85	473388.69	728475.09	765477.45	42	196	2016
2087.00	37431.90	38044.90	463666.87	473583.51	728525.19	765529.36	42	196	2016
2088.00	39965.30	40570.50	463859.41	473750.05	728577.05	765580.47	42	196	2016
2089.00	35210.20	35803.00	464051.42	473953.75	728630.48	765628.70	49	201	2016
2090.00	37690.40	38288.70	464241.87	474158.87	728675.99	765683.04	49	201	2016
2091.00	40222.20	40820.90	464431.98	474352.51	728731.39	765732.70	49	201	2016
2092.00	42682.30	43280.70	464633.77	474545.46	728785.25	765786.15	49	201	2016
2093.00	45117.30	45718.90	464826.04	474732.16	728834.07	765841.15	49	201	2016
2094.00	57742.70	58338.30	465015.85	474926.44	728886.11	765889.58	74	228	2016
2095.00	31596.30	32175.20	465205.59	475126.99	728939.73	765940.29	79	237	2016
2096.00	32343.50	33009.70	465403.07	475318.70	728991.99	765992.92	79	237	2016
2097.00	33159.70	33750.60	465590.25	475511.77	729039.48	766046.62	79	237	2016
2098.00	33935.60	34806.10	465793.17	478810.14	717495.70	766099.76	79	237	2016
2099.00	34936.20	35709.70	465979.11	479009.17	717546.94	766152.13	79	237	2016
2100.00	35871.80	36733.60	466180.31	479198.01	717602.02	766201.29	79	237	2016

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2101.00	36864.90	37641.40	466371.25	479400.45	717651.70	766249.26	79	237	2016
2102.00	37793.90	38660.80	466562.18	479586.48	717706.14	766304.75	79	237	2016
2103.00	38805.80	39585.60	466764.83	479777.39	717756.27	766356.24	79	237	2016
2104.00	39734.60	40586.50	466957.74	479975.64	717810.43	766406.83	79	237	2016
2105.00	40729.60	41490.20	467146.28	480166.15	717859.25	766457.41	79	237	2016
2106.00	41659.00	42526.00	467337.66	480352.82	717913.78	766509.93	79	237	2016
2107.00	48025.60	48808.70	467544.44	480554.26	717964.20	766563.03	79	237	2016
2108.00	48960.40	49851.50	467722.90	480740.03	718014.20	766613.28	79	237	2016
2109.00	49999.60	50790.20	467927.54	480933.01	718066.90	766665.90	79	237	2016
2110.00	50938.90	51787.40	468107.19	481125.64	718119.43	766720.83	79	237	2016
2111.00	51923.00	52715.60	468306.81	481316.29	718169.69	766769.57	79	237	2016
2112.00	58487.70	59391.40	468496.28	481511.56	718221.26	766823.60	74	228	2016
2113.00	59523.20	60308.70	468690.32	481706.58	718275.47	766873.52	74	228	2016
2114.00	60477.60	61360.50	468881.03	481913.97	718324.68	766924.55	74	228	2016
2115.00	61486.20	62275.60	469084.01	482095.84	718376.28	766975.39	74	228	2016
2116.00	62411.70	63294.70	469267.30	482294.53	718431.29	767030.53	74	228	2016
2117.00	52847.70	53713.20	469452.04	482474.42	718480.40	767082.83	79	237	2016
2118.00	53860.30	54635.30	469660.27	482674.07	718533.94	767129.92	79	237	2016
2119.00	54792.40	55657.40	469845.28	482868.77	718585.87	767184.10	79	237	2016
2120.00	55809.40	56579.20	470047.48	483061.16	718635.75	767234.81	79	237	2016
2121.00	56712.80	57561.80	470246.20	483260.89	718689.87	767290.12	79	237	2016
2122.00	57703.70	58474.60	470431.87	483444.04	718742.94	767337.32	79	237	2016
2123.00	58632.50	59488.20	470619.52	483644.72	718795.72	767393.08	79	237	2016
2124.00	59657.40	60421.30	470823.74	483833.64	718842.97	767444.61	79	237	2016
2125.00	60568.80	61408.80	471008.84	484026.44	718893.57	767492.35	79	237	2016
2126.00	32802.90	33632.00	471184.22	484215.63	718947.54	767544.74	91	257	2016
2127.00	33774.20	34620.20	471397.63	484410.37	718999.07	767600.21	91	257	2016
2128.00	34461.60	35274.60	471588.91	484604.98	719052.02	767647.81	93	258	2016
2129.00	35425.40	36255.20	471783.04	484798.86	719103.74	767702.82	93	258	2016
2130.00	36395.70	37182.10	471975.90	484998.87	719152.62	767752.76	93	258	2016
2131.00	37349.40	38180.70	472165.68	485188.75	719208.90	767806.43	93	258	2016
2132.00	38310.30	39118.10	472371.67	485383.72	719256.69	767859.10	93	258	2016
2133.00	32183.90	32611.70	478796.00	485583.69	719308.10	744627.39	95	261	2016
2133.01	33032.90	33425.30	472554.51	478834.98	744532.21	767909.20	98	263	2016
2134.00	32845.20	33299.30	478987.36	485764.77	719363.46	744667.06	95	261	2016
2134.01	33562.20	33942.40	472767.43	479014.31	744575.29	767961.29	98	263	2016
2135.00	33447.20	33867.30	479197.04	485959.90	719411.75	744725.45	95	261	2016
2135.01	34173.70	34566.70	472949.65	479211.54	744628.23	768014.27	98	263	2016
2136.00	34063.60	34521.50	479377.85	486144.62	719465.90	744777.00	95	261	2016
2136.01	34765.10	35215.60	472095.68	479403.15	744683.96	771926.95	98	263	2016
2137.00	34648.90	35072.50	479562.46	486349.57	719519.65	744827.18	95	261	2016
2137.01	35424.80	35909.60	472295.97	479607.35	744731.20	771981.82	98	263	2016
2138.00	35290.50	35750.90	479760.00	486535.18	719569.84	744880.03	95	261	2016
2138.01	36046.20	36520.90	472486.10	479772.26	744787.64	772034.63	98	263	2016
2139.00	35887.10	36299.20	479954.69	486730.83	719623.79	744924.25	95	261	2016
2139.01	36744.40	37191.80	472682.88	479979.38	744831.51	772083.14	98	263	2016
2140.00	36528.00	36999.00	480153.96	486926.62	719673.80	744978.32	95	261	2016
2140.01	37359.80	37837.70	472871.83	480175.78	744886.92	772136.47	98	263	2016
2141.00	37140.10	37555.40	480336.01	487127.13	719726.57	745038.84	95	261	2016
2141.01	38067.90	38521.60	473080.48	480359.15	744944.59	772190.42	98	263	2016
2142.00	37785.50	38223.20	480533.19	487312.15	719776.24	745086.25	95	261	2016
2142.01	38666.30	39129.50	473261.47	480558.77	744992.53	772242.72	98	263	2016
2143.00	38365.70	38786.10	480726.34	487523.92	719826.19	745140.35	95	261	2016
2143.01	39352.00	39815.40	473454.84	480750.21	745046.26	772288.73	98	263	2016
2144.00	38959.40	39414.50	480907.08	487693.54	719879.00	745190.02	95	261	2016
2144.01	39988.00	40451.40	473645.74	480942.09	745093.15	772343.02	98	263	2016
2145.00	39557.10	39962.50	481116.40	487900.82	719930.61	745238.06	95	261	2016
2145.01	40662.70	41114.60	473850.08	481132.93	745144.34	772393.30	98	263	2016
2146.00	40214.00	40677.60	481299.63	488086.16	719983.35	745297.01	95	261	2016
2146.01	41253.50	41718.60	474028.59	481344.80	745202.08	772446.67	98	263	2016
2147.00	50558.80	50932.40	482007.85	488279.30	720035.64	743410.88	88	246	2016
2147.01	42003.10	42468.70	474229.92	482047.09	743317.07	772498.18	98	263	2016
2148.00	34880.50	35734.40	474414.16	488480.53	720085.88	772551.19	91	257	2016
2149.00	40804.50	41203.10	481886.29	488661.33	720139.82	745452.14	95	261	2016
2149.01	42625.50	43082.50	474606.47	481914.29	745354.81	772604.70	98	263	2016
2150.00	41416.80	41883.70	482077.04	488863.16	720190.74	745502.09	95	261	2016

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2150.01	43428.50	43873.70	474805.07	482128.88	745407.50	772653.58	98	263	2016
2151.00	42011.90	42422.70	482270.99	489053.59	720246.10	745555.31	95	261	2016
2151.01	44029.40	44471.90	474990.09	482301.08	745461.06	772708.08	98	263	2016
2152.00	44711.80	45193.10	475196.67	483004.94	743578.03	772755.40	98	263	2016
2152.01	50495.70	50888.40	482984.92	489254.44	720293.17	743673.38	98	263	2016
2153.00	45351.80	46219.60	475384.13	489442.23	720346.94	772810.93	98	263	2016
2154.00	51189.00	51635.50	475585.16	482893.08	745611.13	772860.00	98	263	2016
2154.01	45543.80	45999.50	482854.51	489629.29	720398.14	745708.23	102	270	2016
2155.00	51781.60	52240.20	475771.58	483065.39	745663.68	772912.66	98	263	2016
2155.01	46152.50	46564.20	483044.68	489832.34	720447.52	745756.17	102	270	2016
2156.00	42638.80	43135.80	482721.58	490008.98	720500.69	747745.80	95	261	2016
2156.01	54222.30	54634.10	475976.28	482752.94	747650.53	772963.34	98	263	2016
2157.00	43251.50	43679.30	482925.40	490208.60	720550.49	747788.08	95	261	2016
2157.01	54788.60	55217.60	476136.05	482936.78	747695.28	773015.75	98	263	2016
2158.00	43837.60	44350.60	483111.56	490400.67	720605.40	747848.13	95	261	2016
2158.01	55526.40	55944.30	476350.63	483135.32	747753.95	773070.01	98	263	2016
2159.00	44470.60	44912.80	483298.80	490595.76	720657.21	747894.77	95	261	2016
2159.01	56093.50	56536.50	476531.14	483329.68	747802.38	773119.06	98	263	2016
2160.00	45069.50	45571.10	483493.49	490789.89	720709.75	747950.71	95	261	2016
2160.01	56835.60	57245.70	476736.13	483529.91	747859.57	773171.63	98	263	2016
2161.00	49986.10	50421.70	483684.94	490994.88	720758.55	748010.16	95	261	2016
2161.01	49477.40	49928.10	476932.43	483720.09	747913.74	773221.33	102	270	2016
2162.00	50601.60	51132.80	483879.71	491179.38	720813.95	748058.55	95	261	2016
2162.01	50747.40	51185.50	477124.46	483907.12	747963.18	773276.00	102	270	2016
2163.00	51266.70	51874.00	480966.55	491370.32	720866.49	759694.69	95	261	2016
2163.01	51976.20	52208.50	477314.67	480997.09	759603.11	773328.02	102	270	2016
2164.00	52015.90	52759.20	481162.33	491558.08	720913.78	759756.00	95	261	2016
2164.01	52375.50	52585.00	477511.95	481182.43	759660.72	773380.23	102	270	2016
2165.00	52881.00	53501.70	481363.15	491753.57	720970.49	759805.55	95	261	2016
2165.01	52742.40	52968.50	477702.01	481370.99	759715.37	773429.42	102	270	2016
2166.00	53676.20	54388.80	481551.83	491955.79	721019.60	759856.83	95	261	2016
2166.01	53149.90	53362.80	477903.85	481567.75	759758.93	773482.22	102	270	2016
2167.00	54526.30	55143.00	481734.21	492142.23	721068.08	759907.47	95	261	2016
2167.01	54801.70	55031.70	478087.69	481766.07	759812.62	773536.08	102	270	2016
2168.00	55239.00	55974.40	481926.02	492337.13	721122.35	759958.15	95	261	2016
2168.01	55228.70	55442.30	478285.93	481967.82	759860.91	773588.53	102	270	2016
2169.00	56109.00	56738.30	482122.83	492524.72	721175.35	760009.47	95	261	2016
2169.01	55596.40	55828.50	478479.11	482150.01	759916.29	773634.98	102	270	2016
2170.00	56911.00	57629.90	482325.84	492726.60	721224.10	760068.09	95	261	2016
2170.01	56031.70	56244.20	478673.92	482342.30	759971.72	773687.07	102	270	2016
2171.00	57762.30	58358.00	482517.77	492908.55	721277.58	760116.83	95	261	2016
2171.01	56392.60	56625.90	478863.63	482532.83	760024.98	773743.70	102	270	2016
2172.00	33317.30	34255.50	479057.55	493104.77	721328.96	773792.14	93	258	2016
2173.00	58593.30	59346.30	482893.33	493305.58	721380.43	760223.80	95	261	2016
2173.01	56838.00	57056.30	479241.65	482922.22	760126.62	773844.26	102	270	2016
2174.00	59475.90	59986.20	485168.01	493493.39	721435.19	752539.30	95	261	2016
2174.01	53892.20	54274.80	479443.98	485189.61	752445.43	773899.31	106	275	2016
2175.00	60129.60	60702.40	485357.65	493695.19	721482.10	752585.67	95	261	2016
2175.01	54435.80	54761.60	479634.00	485385.01	752492.85	773948.17	106	275	2016
2176.00	60842.40	61337.00	485546.75	493875.29	721538.67	752635.21	95	261	2016
2176.01	55034.30	55428.70	479826.97	485577.48	752544.70	773998.15	106	275	2016
2177.00	61454.30	62026.50	485732.00	494080.86	721590.29	752693.39	95	261	2016
2177.01	55574.00	55907.50	480022.87	485763.01	752600.68	774051.03	106	275	2016
2178.00	62172.40	62688.10	485938.88	494269.84	721641.27	752750.87	95	261	2016
2178.01	56194.60	56570.80	480218.15	485961.37	752650.97	774105.02	106	275	2016
2179.00	62867.70	63375.10	486647.74	494462.14	721694.43	750867.01	95	261	2016
2179.01	56719.60	57075.20	480409.02	486678.53	750771.11	774157.16	106	275	2016
2180.00	33125.20	33584.40	487876.10	494661.37	721743.96	747057.60	90	251	2016
2180.01	57333.00	57845.30	480615.11	487899.34	746960.50	774206.44	106	275	2016
2181.00	33760.30	34205.60	487565.67	494849.62	721795.03	749034.96	90	251	2016
2181.01	43647.50	44034.30	480792.51	487576.67	748943.64	774257.69	105	275	2016
2182.00	34495.80	34932.60	488785.34	495045.33	721848.29	745221.11	90	251	2016
2182.03	57740.70	58256.10	480993.41	488817.57	745129.31	774308.11	108	283	2016
2183.00	63502.10	63947.60	487419.53	495231.85	721897.73	751076.93	95	261	2016
2183.01	43131.20	43518.40	481186.89	487439.74	750981.33	774363.78	105	275	2016
2184.00	64067.90	64579.60	487604.22	495432.12	721951.88	751120.21	95	261	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2184.01	57977.50	58340.20	481388.98	487632.06	751028.50	774412.27	106	275	2016
2185.00	47074.90	47980.30	481566.19	495622.74	722004.61	774465.06	102	270	2016
2186.00	37174.50	37616.60	489560.16	495814.75	722052.13	745431.26	90	251	2016
2186.01	53491.40	53992.70	481749.77	489570.81	745336.10	774520.27	102	270	2016
2187.00	36516.40	36953.40	489742.34	497054.09	718239.92	745485.02	90	251	2016
2187.01	54183.30	54639.40	481962.18	489771.22	745390.65	774570.46	102	270	2016
2188.00	35835.30	36369.10	489420.92	497241.27	718290.00	747464.92	90	251	2016
2188.01	51401.00	51815.90	482158.77	489450.47	747369.47	774619.81	102	270	2016
2189.00	35127.10	35560.60	490139.08	497430.85	718347.85	745586.05	90	251	2016
2189.01	50165.10	50618.40	482343.06	490158.75	745495.35	774670.88	102	270	2016
2190.00	48157.60	48660.30	489289.28	497620.35	718394.45	749500.40	102	270	2016
2190.01	48902.60	49282.60	482535.94	489315.49	749407.13	774724.38	102	270	2016
2191.00	57160.60	58159.10	482723.44	497823.84	718445.85	774776.41	102	270	2016
2192.00	37087.40	38060.60	482920.16	498008.86	718498.20	774826.77	103	274	2016
2193.00	38445.60	38941.60	490388.51	498207.15	718552.32	747721.32	103	274	2016
2193.01	39208.30	39624.10	483114.42	490413.72	747624.91	774877.88	103	274	2016
2194.00	35999.80	36485.30	491102.92	498396.51	718600.69	745832.89	91	257	2016
2194.01	58595.00	59085.00	483309.21	491125.33	745740.34	774930.50	106	275	2016
2195.00	31792.30	32370.60	489230.56	498594.59	718654.49	753632.66	93	258	2016
2195.01	59219.60	59547.50	483493.34	489247.73	753536.62	774983.68	106	275	2016
2196.00	32590.50	33148.30	489412.61	498791.62	718706.63	753682.63	93	258	2016
2196.01	59779.50	60156.90	483713.27	489439.95	753584.92	775035.56	106	275	2016
2197.00	34635.50	35543.00	483878.75	498975.73	718758.05	775084.51	103	274	2016
2198.00	35710.40	36180.90	491871.51	499172.40	718808.61	746051.23	103	274	2016
2198.03	58459.30	58918.80	484082.48	491898.45	745959.05	775138.08	108	283	2016
2199.00	35727.80	36178.20	492065.42	499368.93	718861.83	746099.98	105	275	2016
2199.01	54644.80	55134.10	484275.44	492087.11	746010.83	775191.76	108	283	2016
2200.00	36349.50	36825.30	492258.79	499549.31	718913.63	746159.43	105	275	2016
2200.03	59484.40	59972.00	484476.46	492286.85	746063.98	775241.83	115	287	2016
2201.00	44217.70	44663.50	492465.31	499748.53	718967.19	746211.05	105	275	2016
2201.02	58889.80	59345.40	484665.33	492489.22	746116.56	775295.49	115	287	2016
2202.00	44800.60	45300.70	492639.32	499928.56	719020.01	746256.42	105	275	2016
2202.02	58166.30	58684.20	484851.04	492681.38	746161.92	775344.91	115	287	2016
2203.00	45606.80	46051.80	492833.46	500137.40	719069.29	746315.70	105	275	2016
2203.02	56935.20	57416.80	485047.21	492875.93	746216.32	775398.03	115	287	2016
2204.00	46146.30	47100.80	485236.34	500331.03	719118.93	775451.55	49	201	2016
2205.00	43699.10	44670.10	485430.28	500524.03	719172.73	775498.46	49	201	2016
2206.00	41260.30	42233.60	485622.12	500719.69	719228.16	775552.37	49	201	2016
2207.00	38719.30	39738.90	485815.28	500908.02	719274.49	775605.62	49	201	2016
2208.00	36257.60	37243.00	486014.20	501104.32	719328.94	775659.19	49	201	2016
2209.00	41007.50	41989.10	486220.86	501303.38	719380.48	775708.98	42	196	2016
2210.00	33329.60	34300.70	486380.05	501488.05	719431.27	775760.71	42	196	2016
2211.00	35889.80	36898.10	486593.93	501681.25	719482.40	775810.04	42	196	2016
2212.00	38494.00	39494.60	486800.14	501875.07	719535.12	775860.61	42	196	2016
2213.00	29875.50	30320.50	494776.70	502071.05	719586.83	746828.00	89	248	2016
2213.02	56369.30	56835.40	486986.37	494805.60	746733.15	775911.37	115	287	2016
2214.00	30474.60	30904.70	495488.37	502262.75	719636.71	744951.61	89	248	2016
2214.02	55593.90	56148.40	487175.31	495510.62	744857.66	775967.80	115	287	2016
2215.00	31114.50	31539.70	495665.21	502454.61	719693.69	745001.04	89	248	2016
2215.02	54980.90	55459.50	487369.85	495699.22	744906.12	776019.97	115	287	2016
2216.00	31703.80	32108.70	495874.23	502650.76	719741.02	745057.21	89	248	2016
2216.01	60252.80	60742.50	487591.02	495890.18	744959.51	776068.33	106	275	2016
2217.00	32343.20	32770.90	496058.52	502841.94	719795.71	745103.19	89	248	2016
2217.01	39809.50	40291.90	487753.00	496091.17	745009.72	776121.49	105	275	2016
2218.00	32905.30	33331.40	496253.12	503038.98	719843.49	745148.96	89	248	2016
2218.01	53206.90	53752.70	487952.90	496290.94	745057.51	776171.98	98	263	2016
2219.00	33539.20	33963.20	496447.67	503230.55	719898.79	745203.06	89	248	2016
2219.01	52534.10	53055.10	488147.83	496475.38	745112.06	776222.59	98	263	2016
2220.00	34229.60	34658.60	496650.27	503420.61	719950.06	745255.92	89	248	2016
2220.01	62088.80	62559.50	488323.64	496666.94	745160.84	776278.56	91	257	2016
2221.00	34893.80	35322.90	496837.98	503615.29	720000.58	745312.69	89	248	2016
2221.01	61341.00	61895.30	488530.68	496870.10	745215.84	776331.30	91	257	2016
2222.00	35524.30	35948.60	497037.81	503810.03	720052.68	745354.96	89	248	2016
2222.01	60641.90	61131.40	488700.19	497051.65	745263.21	776381.32	91	257	2016
2223.00	36154.60	36575.80	497221.27	503992.68	720103.15	745417.28	89	248	2016
2223.01	59964.80	60506.80	488912.47	497251.36	745324.63	776430.76	91	257	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2224.00	36727.60	37246.50	495865.44	504195.73	720158.99	751265.62	89	248	2016
2224.01	59298.10	59685.20	489109.37	495898.24	751170.75	776483.29	91	257	2016
2225.00	37458.10	37993.90	496068.72	504392.11	720205.74	751319.08	89	248	2016
2225.01	58689.80	59147.40	489297.51	496080.51	751221.17	776534.34	91	257	2016
2226.00	38131.80	38582.40	497300.55	504573.41	720259.97	747501.63	89	248	2016
2226.01	57994.00	58451.90	489492.83	497296.69	747406.78	776589.44	91	257	2016
2227.00	38895.80	39348.80	497477.92	504774.84	720312.64	747555.66	89	248	2016
2227.01	57348.30	57876.80	489694.84	497506.98	747462.02	776640.55	91	257	2016
2228.00	39644.80	40097.90	497680.24	504976.74	720364.19	747601.01	89	248	2016
2228.01	56646.60	57120.30	489884.46	497690.88	747507.57	776693.13	91	257	2016
2229.00	40400.90	40874.50	497858.06	505164.16	720413.94	747659.42	89	248	2016
2229.01	55972.80	56491.60	490079.08	497890.03	747563.90	776742.48	91	257	2016
2230.00	41016.40	41465.00	498063.40	505349.94	720470.94	747711.37	89	248	2016
2230.01	55306.80	55771.30	490250.52	498074.24	747618.82	776794.22	91	257	2016
2231.00	41760.30	42231.90	498254.64	505554.02	720520.37	747750.70	89	248	2016
2231.01	54699.40	55205.90	490467.81	498279.74	747658.31	776843.89	91	257	2016
2232.00	42390.90	42830.10	498442.13	505740.49	720572.69	747814.65	89	248	2016
2232.01	53991.30	54457.50	490669.38	498461.40	747719.28	776896.77	91	257	2016
2233.01	43202.00	44138.70	490828.24	505939.36	720620.59	776948.66	91	257	2016
2234.00	46577.10	47371.40	493133.50	506128.06	720673.31	769177.32	94	259	2016
2234.01	39557.50	39696.10	491037.44	493177.23	769083.06	777003.82	105	275	2016
2235.00	48556.50	48857.30	501610.43	506316.29	720728.39	738306.59	94	259	2016
2235.01	38254.20	38864.50	491225.64	501637.26	738213.54	777054.65	105	275	2016
2236.01	58635.90	59570.80	491429.85	506523.32	720779.09	777108.39	98	263	2016
2237.00	59686.40	60653.00	491608.13	506709.19	720832.03	777155.08	98	263	2016
2238.00	60801.30	61753.90	491814.02	506903.60	720880.26	777207.29	98	263	2016
2239.00	49641.50	50112.20	500317.15	507097.52	720933.48	746243.24	88	246	2016
2239.01	40334.10	40864.90	492006.20	500337.21	746148.05	777261.29	91	257	2016
2240.00	53413.50	53848.40	500508.46	507292.02	720987.67	746293.15	87	244	2016
2240.01	39508.90	40031.10	492206.13	500533.18	746200.43	777312.45	91	257	2016
2241.00	41082.50	42004.70	492389.02	507482.62	721035.30	777365.41	91	257	2016
2242.00	42154.20	43125.20	492585.74	507668.79	721090.98	777416.01	91	257	2016
2243.00	38406.40	39363.60	492779.81	507857.37	721143.03	777468.96	91	257	2016
2244.00	52789.30	53233.60	500767.43	508062.66	721193.94	748432.50	87	244	2016
2244.01	61808.60	62302.70	492974.82	500787.38	748334.82	777517.59	98	263	2016
2245.00	51991.60	52489.00	500437.15	508253.37	721244.31	750426.43	87	244	2016
2245.01	62612.30	63059.90	493172.69	500476.02	750330.60	777568.74	98	263	2016
2246.00	51355.30	51837.60	500628.47	508454.20	721299.18	750466.45	87	244	2016
2246.01	63203.60	63670.40	493365.11	500652.53	750369.21	777623.65	98	263	2016
2247.00	32392.10	33271.10	493540.50	508648.58	721346.02	777676.51	68	222	2016
2248.01	57546.90	58514.90	493741.29	508836.81	721400.52	777727.11	98	263	2016
2249.00	59162.10	60061.90	493946.33	509025.83	721450.47	777779.11	84	241	2016
2250.00	58003.30	58985.50	494139.70	509226.60	721501.63	777827.98	84	241	2016
2251.00	56919.50	57847.70	494326.93	509416.69	721553.29	777881.43	84	241	2016
2252.00	55781.00	56759.90	494519.86	509604.69	721606.94	777931.07	84	241	2016
2253.00	54687.30	55661.40	494721.28	510864.05	717693.07	777987.74	84	241	2016
2254.00	42547.60	43571.10	494904.72	511045.12	717788.38	778038.56	78	235	2016
2255.00	41381.70	42400.00	495104.24	511243.90	717840.23	778088.36	78	235	2016
2256.00	40183.30	41201.30	495296.97	511432.62	717891.56	778139.50	78	235	2016
2257.00	39073.20	40039.10	495488.35	511633.20	717944.20	778191.17	78	235	2016
2258.00	37659.90	38679.60	495674.87	511826.42	717994.66	778246.58	78	235	2016
2259.00	54209.90	54844.10	501581.83	512004.03	718046.51	756941.81	87	244	2016
2259.01	49142.80	49506.70	495878.58	501626.73	756849.45	778296.01	91	257	2016
2260.00	54982.40	55560.10	503338.33	512202.75	718095.99	751190.72	87	244	2016
2260.01	49659.30	50104.70	496070.61	503357.00	751093.93	778348.35	91	257	2016
2261.00	37216.80	38210.80	496275.25	512395.19	718150.77	778399.20	91	257	2016
2262.00	58636.10	59139.30	504759.72	512588.41	718199.40	747437.20	87	244	2016
2262.01	50415.00	50954.70	496456.78	504778.29	747342.20	778449.38	91	257	2016
2263.00	57969.20	58454.80	504958.69	512788.41	718254.46	747487.44	87	244	2016
2263.01	51132.30	51640.60	496651.00	504975.72	747390.43	778504.10	91	257	2016
2264.00	57349.50	57837.70	505150.16	512982.28	718303.88	747534.09	87	244	2016
2264.01	51853.20	52414.20	496837.86	505167.47	747439.44	778556.58	91	257	2016
2265.00	55904.60	56542.60	502759.38	513172.57	718357.34	757241.75	87	244	2016
2265.01	52573.00	52933.20	497023.25	502773.28	757148.12	778607.92	91	257	2016
2266.00	56689.50	57199.20	505539.68	513354.63	718408.45	747634.33	87	244	2016
2266.01	53278.50	53826.80	497227.09	505567.00	747536.69	778660.67	91	257	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2267.00	49638.00	50802.40	497415.90	513547.15	718459.56	778709.28	68	222	2016
2268.00	44219.60	45165.60	497614.78	513745.79	718511.39	778763.62	68	222	2016
2269.00	42981.40	44101.20	497799.94	513946.45	718565.14	778813.28	68	222	2016
2270.00	41867.40	42822.70	497996.19	514136.19	718616.86	778866.17	68	222	2016
2271.00	40592.60	41736.30	498191.90	514334.38	718665.75	778917.92	68	222	2016
2272.00	39476.70	40438.50	498378.19	514522.01	718718.17	778968.38	68	222	2016
2273.00	38226.80	39351.00	498577.42	514722.37	718768.82	779023.51	68	222	2016
2274.00	50655.50	51143.50	507074.25	514901.88	718820.84	748057.03	63	218	2016
2274.01	63812.10	64332.10	498781.21	507109.87	747961.45	779069.53	63	218	2016
2275.00	44085.60	45148.60	498973.46	515116.85	718876.57	779120.66	63	218	2016
2276.00	42936.90	43950.70	499156.57	515296.13	718927.60	779174.18	63	218	2016
2277.00	41706.00	42773.30	499362.57	515486.24	718979.73	779225.67	63	218	2016
2278.00	40515.20	41567.00	499548.43	515682.05	719028.67	779277.42	63	218	2016
2279.00	39344.50	40372.20	499755.50	515870.65	719080.76	779333.17	63	218	2016
2280.00	38183.50	39208.90	499922.66	516067.21	719132.05	779382.24	63	218	2016
2281.00	34634.10	35673.30	500122.10	516261.22	719185.17	779436.24	63	218	2016
2282.00	35808.70	36863.90	500315.92	516451.92	719236.84	779484.90	63	218	2016
2283.00	37009.40	38039.90	500515.56	516640.89	719289.53	779540.70	63	218	2016
2284.00	33488.80	34620.70	500700.75	516845.44	719339.49	779589.42	68	222	2016
2285.00	34762.20	35727.30	500896.73	517029.95	719395.49	779640.75	68	222	2016
2286.00	35902.80	37049.10	501092.43	517223.50	719446.41	779692.36	68	222	2016
2287.00	37159.30	38112.10	501277.44	517425.96	719497.91	779748.23	68	222	2016
2288.00	41548.10	42386.00	505651.53	517617.33	719547.53	764241.26	66	221	2016
2288.01	62811.70	63044.90	501489.69	505672.62	764144.91	779793.99	66	221	2016
2289.00	40451.20	41391.80	501685.07	517822.53	719601.71	779848.41	66	221	2016
2290.00	39149.10	40288.80	501860.01	517998.09	719652.35	779898.85	66	221	2016
2291.00	37978.40	38942.00	502057.15	518197.80	719704.72	779949.51	66	221	2016
2292.00	36677.40	37840.00	502254.35	518387.30	719756.55	780002.41	66	221	2016
2293.00	35541.80	36513.50	502456.99	518584.18	719804.38	780057.67	66	221	2016
2294.00	34233.10	35374.10	502627.14	518771.33	719861.12	780106.64	66	221	2016
2295.00	33058.80	34049.30	502833.55	518964.91	719909.80	780160.07	66	221	2016
2296.00	31758.00	32904.20	503017.42	519159.87	719960.62	780213.25	66	221	2016
2297.00	39761.00	40866.40	503213.73	519359.72	720014.61	780262.43	65	219	2016
2298.00	38661.20	39619.90	503401.69	519543.61	720066.47	780312.43	65	219	2016
2299.00	37361.80	38490.10	503601.70	519739.60	720119.26	780364.33	65	219	2016
2300.00	36229.10	37191.00	503804.68	519955.76	720169.28	780417.12	65	219	2016
2301.00	34990.60	36093.80	503991.60	520124.24	720222.01	780468.73	65	219	2016
2302.00	54198.50	55308.70	504191.96	520320.72	720275.20	780522.36	63	218	2016
2303.00	53046.20	54068.10	504377.71	520520.88	720323.95	780571.65	63	218	2016
2304.00	51764.90	52873.10	504557.36	520716.43	720375.02	780623.56	63	218	2016
2305.00	51903.50	52914.80	504767.46	520898.09	720428.75	780674.31	60	213	2016
2306.00	50727.50	51764.80	504957.14	521093.84	720478.53	780729.35	60	213	2016
2307.00	44442.30	45469.60	505164.24	521281.40	720532.54	780780.21	60	213	2016
2308.00	43282.40	44298.30	505341.35	521479.08	720586.70	780832.15	60	213	2016
2309.00	42122.20	43133.80	505538.87	521672.62	720637.61	780886.12	60	213	2016
2310.00	40916.30	41968.60	505725.44	521878.62	720687.13	780934.20	60	213	2016
2311.00	43638.00	44708.00	505989.67	522056.41	720738.26	780987.50	74	228	2016
2312.00	50553.60	51650.10	506119.09	522258.41	720791.97	781038.49	74	228	2016
2313.00	52846.40	53940.00	506304.73	522445.77	720841.26	781091.68	74	228	2016
2314.00	54081.20	55019.10	506492.04	522623.19	720895.93	781144.71	74	228	2016
2315.00	32826.20	33683.80	510338.24	522830.46	720946.67	767575.94	76	229	2016
2315.01	59893.40	60139.30	506700.65	510366.86	767478.96	781196.07	77	231	2016
2316.00	45767.50	46801.80	506889.42	523032.31	720997.43	781243.80	71	226	2016
2317.00	44961.50	45636.30	512805.12	523216.34	721050.46	759944.63	71	226	2016
2317.01	46953.60	47296.70	507091.07	512826.27	759849.26	781299.61	71	226	2016
2318.00	44128.20	44812.60	512467.55	523407.88	721101.28	761927.35	71	226	2016
2318.01	38634.00	38996.20	507284.41	512505.18	761832.96	781351.26	73	227	2016
2319.00	37807.60	38814.30	507467.65	523608.65	721151.45	781401.43	71	226	2016
2320.00	36613.80	37665.80	507661.87	523807.19	721207.37	781454.72	71	226	2016
2321.00	35419.50	36446.30	507864.17	523987.18	721259.36	781505.33	71	226	2016
2322.00	34216.70	35269.40	508054.25	524187.20	721312.09	781558.02	71	226	2016
2323.00	49448.00	50414.40	508243.56	524382.67	721364.24	781609.28	74	228	2016
2324.00	51767.80	52717.70	508442.65	524570.45	721414.59	781658.35	74	228	2016
2325.00	42589.60	43519.60	508631.76	524793.25	721461.96	781713.55	74	228	2016
2326.00	41402.70	42458.30	508825.61	524959.73	721513.82	781764.60	74	228	2016
2327.00	40288.60	41235.90	509007.35	525149.27	721571.39	781813.31	74	228	2016

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2328.00	39040.80	40159.10	509210.84	525346.14	721620.93	781868.76	74	228	2016
2329.00	37925.20	38882.30	509397.91	525532.34	721674.38	781920.08	74	228	2016
2330.00	36716.10	37783.80	509598.05	525725.96	721725.11	781972.48	74	228	2016
2331.00	35593.20	36559.60	509779.97	525911.80	721774.16	782020.95	74	228	2016
2332.00	34360.10	35438.00	509982.90	526121.08	721825.11	782072.75	74	228	2016
2333.00	31956.70	33047.70	510182.12	526309.26	721878.93	782125.82	74	228	2016
2334.00	33221.70	34194.80	510367.55	526496.66	721933.82	782174.67	74	228	2016
2335.00	30839.20	31806.20	510558.20	526696.70	721984.39	782229.01	74	228	2016
2336.00	63163.30	64200.00	510756.36	526893.56	722031.88	782281.85	71	226	2016
2337.00	38943.10	39818.30	513560.98	527084.87	722084.73	772573.78	71	226	2016
2337.01	42650.90	42830.80	510948.37	513584.65	772482.56	782335.67	71	226	2016
2338.00	40037.70	40895.00	513760.55	527276.63	722139.68	772622.38	71	226	2016
2338.01	42279.20	42440.00	511145.81	513782.98	772529.93	782384.45	71	226	2016
2339.00	41046.00	42129.90	511325.51	527475.41	722190.88	782439.45	71	226	2016
2340.00	42940.20	43977.00	511528.17	527661.17	722243.84	782489.34	71	226	2016
2341.00	43904.90	44959.80	511726.24	527862.18	722290.78	782540.71	78	235	2016
2342.00	45103.60	46100.50	511911.27	528044.75	722342.77	782591.47	78	235	2016
2343.00	46236.50	47290.60	512113.66	528244.37	722397.07	782640.96	78	235	2016
2344.00	47423.40	48436.60	512295.99	528430.70	722449.29	782694.93	78	235	2016
2345.00	58776.90	59765.00	512488.49	528623.18	722503.75	782746.10	77	231	2016
2346.00	57132.70	58477.60	512686.53	533486.90	705158.28	782800.66	77	231	2016
2347.00	55696.80	56983.20	512874.48	533659.89	705269.72	782849.92	77	231	2016
2348.00	54215.50	55567.90	513069.98	533850.50	705321.35	782904.93	77	231	2016
2349.00	52734.50	54070.50	513262.19	534057.47	705372.39	782956.45	77	231	2016
2350.00	51196.50	52591.20	513459.44	534236.35	705424.90	783008.27	77	231	2016
2351.00	49724.00	51058.90	513647.87	534438.86	705474.10	783055.10	77	231	2016
2352.00	48209.10	49579.30	513847.17	534631.77	705527.39	783106.30	77	231	2016
2353.00	46718.40	48056.90	514040.02	534839.57	705578.84	783162.79	77	231	2016
2354.00	39665.30	41048.40	514228.28	535021.30	705628.97	783213.87	73	227	2016
2355.00	37127.00	38458.10	514429.16	535201.00	705684.61	783265.75	73	227	2016
2356.00	35577.10	36951.30	514629.17	535402.11	705736.63	783318.48	73	227	2016
2357.00	34068.90	35413.40	514809.52	535598.66	705789.02	783370.96	73	227	2016
2358.00	32523.70	33931.00	515013.69	535784.37	705838.93	783418.82	73	227	2016
2359.00	67794.40	69157.40	515211.78	535983.15	705887.07	783471.29	70	223	2016
2360.00	66284.70	67667.50	515393.68	536169.72	705941.05	783525.48	70	223	2016
2361.00	64805.10	66139.50	515594.69	536371.91	705995.24	783575.52	70	223	2016
2362.00	63317.70	64658.60	515776.11	536560.00	706047.13	783625.81	70	223	2016
2363.00	61836.80	63165.10	515974.39	536771.64	706049.27	783679.93	70	223	2016
2364.00	60360.40	61701.60	516158.08	536976.57	706045.46	783732.45	70	223	2016
2365.00	58889.30	60235.10	516361.97	537180.28	706046.24	783784.11	70	223	2016
2366.00	57354.20	58715.20	516548.13	537384.89	706045.37	783833.33	70	223	2016
2367.00	63323.60	64562.40	516743.17	537593.80	706047.19	783887.92	68	222	2016
2368.00	61757.20	63218.40	516943.18	537803.04	706046.52	783939.61	68	222	2016
2369.00	63643.80	64927.20	517140.08	537998.37	706047.05	783987.53	66	221	2016
2370.00	60337.40	61580.80	517323.77	538213.77	706044.24	784042.20	68	222	2016
2371.00	58726.10	60221.90	517516.67	538427.86	706047.43	784094.63	68	222	2016
2372.00	57307.80	58563.60	517708.76	538631.34	706047.28	784147.15	68	222	2016
2373.00	55683.30	57175.00	517904.49	538840.62	706045.84	784198.00	68	222	2016
2374.00	60701.40	62138.90	518090.72	539045.27	706044.21	784245.83	66	221	2016
2375.00	59194.80	60468.00	518296.52	539252.81	706042.60	784297.84	66	221	2016
2376.00	42942.30	44204.00	518451.75	539457.77	706042.61	784351.95	66	221	2016
2377.00	55789.20	57186.50	518670.44	539665.26	706046.68	784405.17	63	218	2016
2378.00	57324.70	58781.70	518857.65	540166.10	704940.36	784454.47	63	218	2016
2379.00	58915.20	60314.70	519060.58	540362.78	704991.10	784508.88	63	218	2016
2380.00	60471.80	61899.30	519260.58	540555.62	705043.14	784560.27	63	218	2016
2381.00	62022.80	63414.70	519443.52	540740.17	705099.59	784610.86	63	218	2016
2382.00	33388.40	34672.30	519642.29	540943.00	705148.84	784664.73	65	219	2016
2383.00	41429.30	42697.80	519834.13	541140.65	705198.23	784713.91	65	219	2016
2384.00	42841.20	44271.50	520027.92	541329.45	705254.26	784766.75	65	219	2016
2385.00	54290.20	55582.20	520224.04	541516.43	705304.22	784815.08	68	222	2016
2386.00	52648.30	54154.60	520417.16	541725.06	705352.36	784871.05	68	222	2016
2387.00	51203.60	52495.80	520605.65	541907.90	705406.74	784921.07	68	222	2016
2388.00	44390.90	45626.30	520804.21	542059.63	705462.02	784970.55	65	219	2016
2389.00	45783.60	47204.60	521000.07	542296.75	705510.05	785022.24	65	219	2016
2390.00	51333.40	52844.80	521187.39	542486.60	705564.59	785078.93	66	221	2016
2391.00	52984.20	54311.60	521373.44	542693.25	705613.51	785124.80	66	221	2016

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2392.00	54495.70	55976.50	521580.88	542880.14	705666.61	785179.10	66	221	2016
2393.00	56117.30	57400.70	521771.82	543072.15	705715.67	785232.08	66	221	2016
2394.00	57584.10	59050.60	521959.40	543254.10	705771.26	785284.34	66	221	2016
2395.00	59606.40	60909.50	522159.35	543452.90	705819.07	785335.73	62	217	2016
2396.00	57983.90	59490.90	522340.81	543652.91	705871.48	785383.92	62	217	2016
2397.00	56547.60	57881.60	522537.66	543838.98	705926.86	785440.84	62	217	2016
2398.00	55033.10	56440.60	522734.28	544036.82	705978.18	785491.17	62	217	2016
2399.00	53554.30	54885.80	522929.49	544232.02	706030.18	785542.93	62	217	2016
2400.00	52003.50	53461.40	523121.58	544427.92	706040.40	785595.85	62	217	2016
2401.00	50508.60	51837.90	523309.36	544639.93	706040.50	785644.55	62	217	2016
2402.00	48951.50	50332.40	523508.74	544848.09	706041.28	785699.37	62	217	2016
2403.00	64373.90	65764.90	523703.48	545061.20	706042.25	785751.75	49	201	2016
2404.00	62830.90	64249.70	523891.14	545257.54	706042.12	785799.14	49	201	2016
2405.00	61372.50	62696.60	524085.05	545459.57	706038.49	785851.45	49	201	2016
2406.00	59856.40	61231.70	524275.50	545669.91	706041.75	785906.54	49	201	2016
2407.00	58369.10	59685.70	524464.30	545884.61	706044.78	785952.99	49	201	2016
2408.00	56839.60	58231.80	524665.93	546086.98	706042.24	786006.46	49	201	2016
2409.00	55379.70	56699.10	524858.32	546311.42	706043.30	786057.48	49	201	2016
2410.00	53837.60	55236.80	525056.48	546496.18	706042.96	786110.85	49	201	2016
2411.00	52367.60	53694.40	525244.93	546700.66	706043.16	786165.17	49	201	2016
2412.00	70597.30	71951.60	525454.46	546924.09	706038.37	786211.44	47	200	2016
2413.00	69086.30	70478.10	525633.70	547128.07	706042.52	786263.55	47	200	2016
2414.00	48071.50	49551.80	525833.52	547335.52	706039.77	786319.85	47	200	2016
2415.00	49672.00	51036.40	526022.16	547534.86	706040.39	786369.49	47	200	2016
2416.00	46570.20	47932.50	526212.79	548030.63	704976.35	786419.92	47	200	2016
2417.00	40172.60	40608.80	541444.98	548225.84	705025.83	730332.25	46	199	2016
2417.01	54152.60	55166.10	526413.99	541471.02	730234.67	786472.76	47	200	2016
2418.00	44886.30	46389.00	526606.76	548422.07	705082.01	786523.83	47	200	2016
2419.00	59835.00	61284.30	526775.77	548599.50	705133.49	786577.94	47	200	2016
2420.00	61409.00	62796.40	526981.02	548808.35	705185.69	786627.22	47	200	2016
2421.00	62961.00	64390.80	527182.75	548976.82	705233.88	786680.26	47	200	2016
2422.00	64525.60	65918.30	527375.39	549189.36	705288.29	786734.06	47	200	2016
2423.00	66063.60	67498.40	527562.12	549371.40	705336.74	786783.50	47	200	2016
2424.00	67636.20	68980.40	527757.60	549575.99	705391.77	786835.96	47	200	2016
2425.00	52682.30	54032.60	527955.66	549777.14	705445.36	786885.32	47	200	2016
2426.00	51107.70	52551.10	528141.56	549970.78	705496.85	786941.71	47	200	2016
2427.00	43432.30	44811.90	528343.07	550158.36	705543.57	786988.81	47	200	2016
2428.00	41789.70	43281.60	528534.66	550356.57	705595.18	787044.88	47	200	2016
2429.00	38710.80	40083.40	528726.68	550542.03	705648.24	787094.99	46	199	2016
2430.00	60262.00	61715.80	528930.21	550742.89	705699.32	787146.04	44	198	2016
2431.00	58741.30	60128.50	529108.60	550937.14	705754.30	787199.34	44	198	2016
2432.00	57187.00	58621.30	529316.83	551122.89	705804.19	787250.66	44	198	2016
2433.00	55642.20	57051.10	529493.53	551310.83	705854.51	787300.13	44	198	2016
2434.00	54047.30	55487.10	529700.11	551509.06	705909.24	787351.75	44	198	2016
2435.00	52505.70	53911.00	529878.66	551689.89	705961.66	787407.57	44	198	2016
2436.00	50906.50	52360.30	530080.79	551896.15	706011.12	787454.97	44	198	2016
2437.00	49369.80	50786.90	530265.03	552098.82	706036.54	787509.75	44	198	2016
2438.00	41319.40	42720.40	530449.80	552306.80	706034.80	787559.91	44	198	2016
2439.00	39787.10	41206.00	530663.58	552507.47	706035.01	787612.26	44	198	2016
2440.00	38214.90	39658.30	530882.16	552710.11	706038.28	787659.62	44	198	2016
2441.00	30963.10	32389.90	531045.22	552923.88	706035.50	787714.31	46	199	2016
2442.00	32525.80	33924.10	531239.08	553131.56	706034.98	787763.91	46	199	2016
2443.00	34052.80	35488.90	531433.49	553340.54	706037.23	787817.61	46	199	2016
2444.00	35610.40	37007.90	531629.13	553546.85	706034.98	787871.36	46	199	2016
2445.00	37137.90	38577.10	531816.26	553749.73	706039.68	787922.51	46	199	2016
2446.00	41512.50	42904.80	532006.00	553964.93	706033.53	787974.22	35	190	2016
2447.00	39913.90	41370.40	532192.85	554157.88	706035.52	788027.95	35	190	2016
2448.00	43033.50	44496.70	532406.53	554374.72	706037.58	788075.44	35	190	2016
2449.00	44645.40	46010.60	532588.86	554580.03	706039.24	788128.36	35	190	2016
2450.00	46144.30	47577.80	532792.19	554786.97	706032.36	788180.73	35	190	2016
2451.00	47734.40	49086.00	532977.03	555002.15	706032.30	788231.40	35	190	2016
2452.00	49187.00	50657.20	533184.03	555209.47	706037.37	788282.93	35	190	2016
2453.00	33894.10	35170.00	533362.27	552555.57	716647.32	788338.81	44	198	2016
2453.01	43612.70	43813.70	552535.54	555705.66	704958.48	716741.07	44	198	2016
2454.00	35294.60	36558.70	533557.87	552761.97	716700.54	788386.80	44	198	2016
2454.01	43280.00	43480.10	552729.68	555880.84	705011.63	716795.23	44	198	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2455.00	36869.90	38141.90	533741.37	552953.33	716749.79	788441.30	44	198	2016
2455.01	42834.60	43042.10	552926.26	556090.60	705061.24	716845.32	44	198	2016
2456.00	48556.50	50096.90	533938.54	556274.10	705112.96	788491.46	42	196	2016
2457.00	54773.20	56129.50	534142.16	554889.30	711059.45	788540.50	31	187	2016
2457.01	38653.70	38751.90	554858.15	556466.85	705167.26	711149.99	33	189	2016
2458.00	53172.40	54651.20	534330.94	556654.29	705221.09	788595.55	31	187	2016
2459.00	32424.60	33676.20	534519.60	553730.95	716956.56	788645.08	44	198	2016
2459.01	43989.50	44186.00	553702.71	556861.80	705273.00	717051.50	44	198	2016
2460.00	37508.40	38058.70	548204.58	557050.83	705324.91	738358.58	33	189	2016
2460.01	47573.30	48436.10	534713.48	548223.91	738262.00	788696.77	42	196	2016
2461.00	35816.30	37357.30	534913.81	557235.01	705371.00	788749.26	33	189	2016
2462.00	34257.80	35673.40	535104.59	557424.94	705426.23	788802.60	33	189	2016
2463.00	32558.10	34098.40	535297.43	557625.45	705479.16	788852.82	33	189	2016
2464.00	51524.80	52978.00	535486.16	557797.97	705530.36	788905.78	31	187	2016
2465.00	49938.30	51411.80	535684.89	558006.45	705583.82	788958.65	31	187	2016
2466.00	41181.60	42615.90	535886.94	558208.53	705633.11	789006.45	30	187	2016
2467.00	39642.30	41056.40	536072.09	558404.71	705685.86	789059.27	30	187	2016
2468.00	38043.00	39489.10	536268.50	558596.28	705735.77	789112.57	30	187	2016
2469.00	36501.60	37914.50	536450.22	558788.25	705789.61	789165.64	30	187	2016
2470.00	34892.10	36348.20	536669.71	558987.42	705838.40	789216.61	30	187	2016
2471.00	33331.90	34763.10	536839.12	559187.22	705890.78	789267.74	30	187	2016
2472.00	31760.10	33183.10	537038.26	559379.43	705942.01	789317.62	30	187	2016
2473.00	44012.60	45476.10	537238.85	559562.74	705995.18	789374.55	28	185	2016
2474.00	42401.00	43877.90	537420.11	559755.07	706034.89	789423.07	28	185	2016
2475.00	40800.00	42235.40	537635.05	559967.49	706034.02	789475.43	28	185	2016
2476.00	39185.10	40682.40	537795.13	560172.71	706034.63	789527.75	28	185	2016
2477.00	37587.40	39038.70	537995.07	560380.82	706034.48	789580.89	28	185	2016
2478.00	35769.10	36887.10	543896.22	560594.19	706034.29	768371.44	28	185	2016
2479.00	34512.80	35591.30	544085.54	560809.23	706029.87	768423.20	28	185	2016
2480.00	63025.20	64026.70	544278.22	561010.39	706029.69	768477.57	26	181	2016
2481.00	61797.60	62909.20	544465.60	561206.95	706029.22	768529.16	26	181	2016
2482.00	60637.00	61672.00	544656.78	561419.33	706032.13	768581.90	26	181	2016
2483.00	59398.80	60502.90	544855.26	561604.97	706028.16	768629.44	26	181	2016
2484.00	58245.90	59256.70	545070.08	561833.95	706030.51	768682.06	26	181	2016
2485.00	57029.50	58145.20	545235.00	562044.77	706033.25	768733.37	26	181	2016
2486.00	55856.20	56877.90	545442.69	562249.74	706032.96	768790.05	26	181	2016
2487.00	54597.80	55734.60	545622.73	562466.36	706030.53	768842.24	26	181	2016
2488.00	53414.80	54446.00	545823.27	562662.72	706028.31	768893.27	26	181	2016
2489.00	52157.40	53282.30	546013.77	562854.34	706030.42	768943.18	26	181	2016
2490.00	67902.30	69055.90	546201.35	563368.26	704940.58	768993.75	25	180	2016
2491.00	66678.60	67779.00	546400.05	563562.03	704997.92	769045.65	25	180	2016
2492.00	65437.20	66549.50	546591.05	563749.37	705047.16	769100.54	25	180	2016
2493.00	64137.30	65265.90	546791.41	563948.81	705101.46	769151.07	25	180	2016
2494.00	62884.80	63978.10	546977.23	564138.99	705153.41	769199.24	25	180	2016
2495.00	61570.60	62743.40	547180.98	564325.06	705201.64	769256.26	25	180	2016
2496.00	60297.20	61431.40	547356.85	564521.93	705256.13	769307.81	25	180	2016
2497.00	58999.20	60151.50	547558.23	564717.91	705303.76	769358.08	25	180	2016
2498.00	57752.10	58853.80	547752.10	564912.78	705355.73	769409.67	25	180	2016
2499.00	56440.10	57599.80	547943.83	565103.72	705407.70	769458.84	25	180	2016
2500.00	63163.30	64256.00	548138.66	565299.77	705459.32	769514.83	24	179	2016
2501.00	61924.50	63016.00	548338.37	565498.55	705509.75	769563.68	24	179	2016
2502.00	60727.50	61809.30	548525.32	565683.26	705562.39	769613.47	24	179	2016
2503.00	59478.40	60593.50	548716.67	565880.02	705616.47	769667.65	24	179	2016
2504.00	58264.80	59350.50	548919.28	566075.92	705670.61	769716.56	24	179	2016
2505.00	56987.80	58100.80	549103.37	566271.83	705719.13	769771.40	24	179	2016
2506.00	55749.40	56846.50	549288.54	566452.19	705770.57	769825.36	24	179	2016
2507.00	54473.90	55587.60	549492.76	566663.86	705824.88	769873.14	24	179	2016
2508.00	32913.70	33741.70	549669.47	562691.01	721424.87	769928.47	23	179	2016
2508.01	54070.60	54339.60	562650.12	566850.63	705872.06	721518.31	24	179	2016
2509.00	31923.60	32811.60	549884.53	563920.92	717612.75	769977.76	23	179	2016
2509.01	53600.40	53803.10	563883.27	567036.89	705925.60	717703.74	24	179	2016
2510.00	66354.60	67437.70	550077.27	567240.07	705978.57	770029.56	22	177	2016
2511.00	65123.50	66212.50	550257.54	567427.37	706027.05	770084.55	22	177	2016
2512.00	63922.90	65016.50	550465.59	567642.89	706026.81	770129.17	22	177	2016
2513.00	62663.60	63788.70	550644.81	567842.54	706024.64	770184.04	22	177	2016
2514.00	61405.20	62524.40	550849.17	568042.85	706029.97	770236.64	22	177	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2515.00	60138.60	61255.40	551041.26	568253.02	706024.47	770286.09	22	177	2016
2516.00	58642.30	59708.80	551236.24	568465.14	706029.42	770340.62	22	177	2016
2517.00	57321.40	58486.70	551429.54	568680.45	706024.57	770389.72	22	177	2016
2518.00	56076.10	57160.20	551618.63	568884.33	706029.07	770445.79	22	177	2016
2519.00	54783.60	55940.90	551806.51	569094.11	706023.74	770498.83	22	177	2016
2520.00	48179.80	49219.40	552005.64	569278.74	706027.56	770544.21	21	177	2016
2521.00	46916.10	48063.50	552194.87	569505.06	706024.20	770600.57	21	177	2016
2522.00	45726.90	46746.40	552409.08	569717.26	706026.63	770652.21	21	177	2016
2523.00	44407.50	45602.00	552586.35	569916.29	706026.52	770701.63	21	177	2016
2524.00	43175.90	44212.60	552783.07	570118.93	706024.25	770751.79	21	177	2016
2525.00	39558.70	40747.70	552975.76	570327.43	706023.37	770803.37	21	177	2016
2526.00	38782.30	39407.00	559923.38	570539.66	706024.41	745638.48	21	177	2016
2526.01	40867.40	41283.00	553179.61	559943.42	745550.11	770857.02	21	177	2016
2527.00	37818.40	38592.70	559594.01	571031.03	704926.15	747625.80	21	177	2016
2527.01	41554.20	41991.70	553360.78	559618.69	747532.31	770909.08	21	177	2016
2528.00	36927.80	37661.50	559271.45	571226.21	704976.64	749611.26	21	177	2016
2528.01	42099.70	42467.50	553542.71	559292.30	749514.33	770958.64	21	177	2016
2529.00	35827.30	36664.70	559460.41	571424.45	705028.55	749662.21	21	177	2016
2529.01	42676.80	43071.30	553739.87	559487.13	749566.58	771015.84	21	177	2016
2530.00	39321.50	40462.00	553934.27	571615.53	705081.32	771066.72	18	170	2016
2531.00	38045.10	39202.10	554132.23	571819.24	705133.82	771118.52	18	170	2016
2532.00	36748.50	37889.40	554323.72	571999.46	705183.62	771167.43	18	170	2016
2533.00	35474.60	36625.00	554508.90	572196.10	705234.16	771218.79	18	170	2016
2534.00	34226.40	35341.60	554716.74	572393.23	705287.83	771273.06	18	170	2016
2535.00	32914.00	34088.30	554895.33	572585.32	705338.41	771324.50	18	170	2016
2536.00	30913.30	32221.20	555092.03	572777.23	705392.22	771373.88	14	168	2016
2537.00	32375.90	33411.40	555267.24	572978.56	705442.74	771428.31	14	168	2016
2538.00	33561.50	34860.10	555474.44	573152.91	705498.07	771480.71	14	168	2016
2539.00	36110.80	37310.70	555666.90	573358.43	705549.27	771531.34	13	167	2016
2540.00	37421.20	38423.10	555856.55	573546.02	705601.54	771580.02	13	167	2016
2541.00	34991.80	36010.20	556050.29	573750.67	705651.88	771634.42	14	168	2016
2542.00	36160.60	37448.30	556256.73	573923.30	705700.79	771685.11	14	168	2016
2543.00	37576.70	38593.90	556445.45	574139.24	705753.82	771739.59	14	168	2016
2544.00	38736.30	40010.70	556643.72	574313.33	705808.82	771792.21	14	168	2016
2545.00	42362.20	43505.60	556823.22	574506.53	705860.20	771838.09	12	164	2016
2546.00	43655.70	44830.90	557027.84	574704.34	705911.82	771892.92	12	164	2016
2547.00	40113.90	41128.70	557217.71	574906.10	705965.39	771945.96	14	168	2016
2548.00	48835.50	50173.50	557407.06	575081.90	706014.28	771996.43	15	168	2016
2549.00	50266.40	51299.70	557599.04	575299.25	706024.35	772047.04	15	168	2016
2550.00	51454.80	52729.40	557789.02	575506.07	706022.77	772103.18	15	168	2016
2551.00	52862.00	53893.70	557983.24	575708.47	706022.77	772151.97	15	168	2016
2552.00	54014.70	55332.30	558178.90	575904.02	706020.51	772203.01	15	168	2016
2553.00	55445.40	56477.90	558397.26	576138.06	706019.78	772254.78	15	168	2016
2554.00	56646.30	57957.30	558569.88	576319.93	706021.54	772308.37	15	168	2016
2555.00	58091.20	59152.60	558768.00	576550.49	706020.73	772355.48	15	168	2016
2556.00	59297.20	60594.20	558951.69	576730.51	706022.30	772407.83	15	168	2016
2557.00	31605.90	32856.80	559157.98	576955.49	706018.95	772462.57	16	169	2016
2558.00	32997.80	34047.60	559341.82	577163.06	706019.45	772514.83	16	169	2016
2559.00	44852.70	46008.50	559529.72	577375.48	706018.35	772566.32	11	163	2016
2560.00	46144.30	47326.80	559725.17	577569.62	706023.29	772615.33	11	163	2016
2561.00	47464.00	48626.50	559925.47	577762.87	706023.65	772668.31	11	163	2016
2562.00	48758.40	49953.40	560110.48	577997.03	706019.79	772722.41	11	163	2016
2563.00	50095.50	51260.00	560311.11	578184.46	706023.76	772770.70	11	163	2016
2564.00	51384.40	52595.10	560501.01	578711.91	704909.81	772824.08	11	163	2016
2565.00	41024.50	42245.10	560698.80	578891.88	704960.13	772879.49	12	164	2016
2566.00	44937.90	46127.60	560895.17	579079.34	705014.52	772924.83	12	164	2016
2567.00	34189.40	35430.40	561087.91	579283.53	705065.69	772977.95	16	169	2016
2568.00	48753.20	49912.60	561282.27	579465.18	705115.27	773033.15	10	161	2016
2569.00	47415.70	48606.20	561471.29	579665.59	705166.23	773083.34	10	161	2016
2570.00	46133.40	47299.90	561661.58	579865.63	705221.41	773137.03	10	161	2016
2571.00	44767.50	45988.70	561862.13	580062.80	705273.37	773189.05	10	161	2016
2572.00	43470.10	44647.40	562043.10	580257.06	705325.34	773241.25	10	161	2016
2573.00	58181.20	59342.10	562250.18	580436.88	705378.20	773292.68	6	157	2016
2574.00	56731.70	58060.50	562436.99	580634.12	705427.87	773342.73	6	157	2016
2575.00	55395.40	56560.70	562637.26	580831.15	705480.31	773391.09	6	157	2016
2576.00	53910.60	55250.60	562817.04	581018.67	705529.10	773445.47	6	157	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2577.00	52613.30	53763.90	563015.49	581213.06	705585.21	773495.47	6	157	2016
2578.00	31817.50	32971.00	563211.27	581412.13	705633.54	773550.14	6	157	2016
2579.00	33119.80	34380.00	563417.46	581598.54	705684.57	773599.09	6	157	2016
2580.00	34503.30	35650.80	563601.10	581792.62	705738.94	773650.06	6	157	2016
2581.00	35787.50	37079.10	563784.59	581987.39	705789.76	773704.47	6	157	2016
2582.00	37197.30	38339.10	563985.46	582173.03	705840.95	773755.09	6	157	2016
2583.00	38479.60	39748.90	564172.40	582384.01	705891.20	773808.31	6	157	2016
2584.00	39871.40	41033.50	564364.30	582556.49	705947.03	773858.58	6	157	2016
2585.00	51204.40	52538.70	564560.37	582754.73	705996.54	773913.14	6	157	2016
2586.00	49899.00	51049.60	564757.76	582957.46	706017.72	773962.84	6	157	2016
2587.00	53622.60	54814.50	564948.95	583161.47	706014.53	774014.49	9	160	2016
2588.00	54942.40	56127.90	565144.73	583374.39	706019.77	774068.61	9	160	2016
2589.00	56273.90	57499.70	565333.36	583581.74	706015.97	774119.99	9	160	2016
2590.00	57641.20	58844.70	565516.28	583783.52	706016.76	774173.04	9	160	2016
2591.00	58968.70	60159.20	565721.63	583991.51	706018.18	774222.15	9	160	2016
2592.00	60293.80	61513.70	565921.59	584207.37	706018.66	774272.89	9	160	2016
2593.00	61638.30	62856.00	566107.46	584405.87	706014.49	774326.93	9	160	2016
2594.00	35568.90	36640.30	566318.96	584607.23	706020.16	774377.00	16	169	2016
2595.00	36756.90	38000.90	566492.37	584812.15	706019.27	774426.96	16	169	2016
2596.00	38145.00	39235.50	566696.27	585027.01	706018.19	774478.77	16	169	2016
2597.00	49179.10	50455.10	566880.94	585232.46	706013.98	774534.49	17	169	2016
2598.00	50572.10	51709.60	567060.52	585447.33	706016.15	774581.68	17	169	2016
2599.00	51859.40	53109.10	567274.78	585644.88	706014.08	774634.27	17	169	2016
2600.00	53221.20	54303.60	567452.03	585864.32	706015.37	774689.48	17	169	2016
2601.00	54479.00	55752.30	567643.79	586063.34	706016.15	774740.16	17	169	2016
2602.00	55865.30	56984.00	567848.01	586560.38	704945.51	774791.95	17	169	2016
2603.00	57151.40	58449.10	568037.63	586753.79	704996.97	774842.70	17	169	2016
2604.00	58551.10	59658.00	568240.03	586956.07	705046.36	774892.91	17	169	2016
2605.00	30029.10	31268.10	568428.41	587141.70	705099.81	774946.61	18	170	2016
2606.00	31398.80	32596.30	568620.66	587331.81	705151.62	774998.74	18	170	2016
2607.00	39379.90	39709.10	582779.90	587537.30	705202.49	722881.21	16	169	2016
2608.00	39808.90	40102.90	582990.15	587726.98	705255.18	722929.08	16	169	2016
2609.00	40244.00	40570.50	583186.03	587907.03	705305.07	722982.18	16	169	2016
2610.00	40665.20	40954.10	583360.35	588117.71	705361.05	723031.78	16	169	2016
2611.00	41103.40	41439.90	583552.83	588284.29	705411.89	723086.66	16	169	2016
2612.00	41586.80	41871.40	583731.79	588490.44	705465.63	723139.87	16	169	2016
2613.00	41988.80	42321.60	583939.23	588683.96	705515.71	723190.80	16	169	2016
2614.00	50138.20	50458.20	584145.18	588875.84	705564.46	723240.06	4	156	2016
2615.00	49706.20	50023.20	584328.12	589066.97	705617.70	723290.57	4	156	2016
2616.00	49253.70	49579.70	584527.06	589260.87	705670.47	723346.15	4	156	2016
2617.00	48827.80	49140.40	584718.74	589447.92	705722.44	723394.33	4	156	2016
2618.00	39676.30	39997.80	584916.36	589664.21	705772.71	723445.28	4	156	2016
2619.00	39232.70	39554.60	585115.50	589842.92	705826.88	723497.79	4	156	2016
2620.00	38786.80	39117.40	585307.23	590031.01	705879.32	723552.50	4	156	2016
2621.00	38345.80	38662.60	585500.20	590235.31	705929.64	723602.01	4	156	2016
2622.00	37880.80	38205.80	585688.38	590431.88	705978.48	723655.72	4	156	2016
2623.00	37452.00	37772.00	585890.42	590626.30	706011.57	723703.99	4	156	2016
2624.00	37018.10	37346.60	586078.78	590830.23	706014.09	723759.04	4	156	2016
2625.00	36553.80	36877.10	586268.56	591043.05	706011.14	723811.48	4	156	2016
2626.00	36088.30	36411.20	586460.29	591252.76	706011.41	723859.56	4	156	2016
2627.00	35630.40	35947.30	586662.93	591451.51	706009.76	723915.49	4	156	2016
2628.00	35205.40	35529.40	586842.37	591674.94	706014.74	723963.29	4	156	2016
2629.00	34746.10	35077.60	587051.74	591861.97	706012.88	724015.14	4	156	2016
2630.00	34272.90	34597.10	587238.33	592073.58	706010.95	724070.43	4	156	2016
2631.00	33818.70	34143.30	587437.17	592276.04	706011.75	724122.48	4	156	2016
2632.00	33380.30	33708.50	587620.26	592493.58	706010.46	724170.33	4	156	2016
2633.00	32916.20	33248.10	587822.77	592695.33	706009.33	724224.67	4	156	2016
2634.00	32445.00	32764.50	588012.15	592904.83	706011.00	724274.80	4	156	2016
2635.00	31984.20	32307.70	588216.13	593104.65	706009.28	724324.63	4	156	2016
2636.00	31514.10	31846.00	588395.69	593336.26	706009.34	724378.99	4	156	2016
2637.00	31046.80	31384.20	588578.48	593518.82	706012.45	724432.62	4	156	2016
2638.00	57364.00	57669.10	588778.81	593728.36	706012.22	724482.42	2	155	2016
2639.00	56851.20	57206.50	588987.98	594218.75	704926.58	724534.83	2	155	2016
2640.00	56409.30	56739.70	589172.30	594419.53	704979.90	724588.70	2	155	2016
2641.00	55937.30	56277.40	589366.69	594603.15	705031.16	724640.07	2	155	2016
2642.00	55483.50	55804.70	589555.15	594809.70	705086.73	724687.90	2	155	2016

Tellus A2 Block - FLOWN LINES (Magnetic)
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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2643.00	55013.80	55362.50	589751.81	595012.23	705133.96	724740.70	2	155	2016
2644.00	54582.20	54909.50	589939.90	595188.60	705190.63	724794.82	2	155	2016
2645.00	54095.80	54434.00	590130.28	595386.21	705239.35	724846.18	2	155	2016
2646.00	53644.20	53966.10	590335.19	595574.33	705292.23	724894.87	2	155	2016
2647.00	53193.90	53542.00	590522.75	595764.91	705343.88	724950.99	2	155	2016
2648.00	52755.80	53078.60	590709.55	595965.42	705394.08	724998.82	2	155	2016
2649.00	52280.40	52624.90	590918.97	596153.65	705446.56	725052.69	2	155	2016
2650.00	51824.60	52168.00	591103.19	596358.11	705499.20	725102.60	2	155	2016
2651.00	51340.80	51696.70	591286.72	596534.57	705552.49	725158.10	2	155	2016
2652.00	50867.60	51205.70	591485.35	596737.62	705600.58	725210.42	2	155	2016
2653.00	50377.90	50728.10	591679.19	596932.34	705653.43	725257.54	2	155	2016
2654.00	49901.80	50233.20	591870.52	597128.26	705703.45	725310.77	2	155	2016
2655.00	49412.40	49751.70	592075.80	597319.99	705756.13	725364.38	2	155	2016
2656.00	48944.80	49275.30	592251.73	597503.12	705809.04	725414.73	2	155	2016
2657.00	48463.50	48802.80	592462.77	597708.25	705860.08	725467.42	2	155	2016
2658.00	48019.40	48350.50	592643.92	597897.42	705914.09	725519.88	2	155	2016
2659.00	47506.80	47867.30	592834.47	598088.82	705966.14	725571.64	2	155	2016
2660.00	40120.70	40463.40	593030.61	598280.06	706006.79	725621.03	2	155	2016
2661.00	39629.10	39979.20	593219.15	598492.62	706008.36	725676.32	2	155	2016
2662.00	39159.60	39496.00	593415.32	598692.13	706006.27	725724.33	2	155	2016
2663.00	38673.40	39029.30	593614.34	598900.14	706009.80	725778.77	2	155	2016
2664.00	38225.80	38569.60	593806.30	599109.59	706009.22	725826.79	2	155	2016
2665.00	37749.30	38095.90	593997.68	599318.10	706010.08	725880.29	2	155	2016
2666.00	37307.50	37640.70	594190.76	599533.02	706009.03	725931.45	2	155	2016
2667.00	36823.70	37167.30	594379.51	599737.50	706005.24	725985.68	2	155	2016
2668.00	36357.60	36691.10	594585.39	599943.83	706009.24	726034.06	2	155	2016
2669.00	35876.90	36223.30	594773.37	600151.77	706004.98	726087.34	2	155	2016
2670.00	35382.10	35732.10	594966.67	600348.75	706004.74	726137.42	2	155	2016
2671.00	34916.90	35275.30	595154.92	600565.26	706007.43	726191.10	2	155	2016
2672.00	34429.40	34789.30	595352.37	600763.76	706004.84	726245.62	2	155	2016
2673.00	33947.30	34303.00	595551.12	600981.29	706007.19	726296.32	2	155	2016
2674.00	33460.50	33820.00	595746.03	601181.00	706007.32	726345.30	2	155	2016
2675.00	32955.50	33309.90	595933.24	601393.30	706007.66	726399.18	2	155	2016
2676.00	32439.90	32807.10	596131.19	601892.83	704910.95	726451.03	2	155	2016
2677.00	31897.50	32276.20	596315.24	602086.27	704965.16	726501.13	2	155	2016
2678.00	31400.50	31785.00	596505.59	602278.72	705016.99	726552.59	2	155	2016
2679.00	60767.80	61156.90	596698.94	602474.23	705067.30	726603.70	1	154	2016
2680.00	60258.90	60621.10	596891.91	602660.39	705119.21	726658.20	1	154	2016
2681.00	59765.00	60148.20	597087.13	602853.65	705171.72	726708.43	1	154	2016
2682.00	59218.80	59601.50	597283.91	603052.92	705224.87	726760.04	1	154	2016
2683.00	58687.20	59069.80	597474.74	603234.90	705276.61	726813.97	1	154	2016
2684.00	58158.60	58523.30	597678.49	603445.41	705325.88	726864.47	1	154	2016
2685.00	57663.30	58042.80	597858.99	603628.88	705380.84	726915.14	1	154	2016
2686.00	57123.20	57499.40	598056.00	603823.46	705428.01	726967.71	1	154	2016
2687.00	56590.40	56984.40	598253.41	604010.17	705480.38	727021.29	1	154	2016
2688.00	56079.70	56443.30	598446.59	604210.33	705535.99	727073.05	1	154	2016
2689.00	55559.70	55947.10	598636.07	604394.54	705588.43	727124.07	1	154	2016
2690.00	55032.60	55404.80	598826.81	604602.04	705635.22	727177.27	1	154	2016
2691.00	54510.60	54898.90	599017.84	604776.92	705687.98	727226.88	1	154	2016
2692.00	53983.00	54349.90	599223.14	604983.75	705743.54	727277.01	1	154	2016
2693.00	53480.20	53851.20	599410.95	605174.66	705793.80	727329.44	1	154	2016
2694.00	52938.40	53309.60	599595.25	605374.16	705817.46	727379.43	1	154	2016
2695.00	52409.40	52810.60	599788.42	605580.93	705828.38	727436.29	1	154	2016
2696.00	51847.70	52237.30	599982.10	605782.72	705826.19	727483.97	1	154	2016
2697.00	51320.20	51703.30	600183.74	605987.24	705853.57	727539.88	1	154	2016
2698.00	50744.80	51121.10	600373.02	606198.35	705842.03	727591.33	1	154	2016
2699.00	50196.40	50575.90	600568.85	606410.50	705834.32	727640.72	1	154	2016

Tellus A2 Block – FLOWN LINES (Spectrometer)
IRENET95, Irish Transverse Mercator

LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
201.00	30708.00	30788.00	601737.35	606438.06	705014.95	706276.16	6	157	2016
202.00	31028.00	31241.00	594043.69	605903.99	705035.28	708205.13	6	157	2016
203.00	31335.00	31661.00	586401.98	605372.33	705060.45	710143.88	6	157	2016
204.00	58971.00	59432.00	578549.13	604856.74	705034.39	712079.04	4	156	2016
205.00	58217.00	58787.00	570868.83	604370.99	705041.04	714019.08	4	156	2016
206.00	57414.00	58126.00	563227.97	603801.22	705047.93	715916.78	4	156	2016
207.00	34269.00	35078.00	555522.56	603316.96	705071.79	717874.09	13	167	2016
208.00	56151.00	57094.00	547856.34	602801.62	705085.18	719805.17	4	156	2016
209.00	54966.00	56053.00	540017.29	602299.59	705046.36	721739.50	4	156	2016
210.00	53587.00	54744.00	533293.64	601727.42	705320.90	723665.72	4	156	2016
211.00	52241.00	53498.00	532769.93	601257.72	707245.02	725606.49	4	156	2016
212.00	50880.00	52067.00	532286.36	600700.60	709210.96	727549.83	4	156	2016
213.00	47067.00	47935.00	531785.15	582231.73	711132.75	724656.39	53	204	2016
214.00	58117.00	59013.00	531255.03	581707.14	713059.63	726577.46	53	204	2016
215.00	57121.00	57986.00	530747.93	581180.20	714992.79	728519.65	53	204	2016
216.00	56093.00	57018.00	530221.48	580674.48	716929.16	730438.42	53	204	2016
217.00	55039.00	55889.00	529691.01	580167.05	718859.63	732385.69	53	204	2016
218.00	54034.00	54936.00	529164.09	579624.39	720786.44	734302.93	53	204	2016
219.00	52747.00	53925.00	510676.78	579118.30	717910.75	736237.80	53	204	2016
220.00	51414.00	52660.00	510148.35	578629.76	719829.66	738177.21	53	204	2016
221.00	49890.00	51286.00	496867.93	578092.11	718348.99	740117.20	53	204	2016
222.00	48269.00	49702.00	496350.38	577557.15	720295.30	742028.84	53	204	2016
223.00	47202.00	47846.00	541555.61	577079.90	734458.64	743974.23	54	209	2016
223.01	53792.00	54991.00	478666.00	541595.22	717611.25	734470.33	54	209	2016
224.00	45439.00	47107.00	478158.77	576553.57	719540.10	745911.88	54	209	2016
225.00	40373.00	42147.00	477637.07	576034.79	721483.06	747830.51	54	209	2016
226.00	65878.00	67537.00	477080.62	575488.30	723394.38	749756.14	54	209	2016
227.00	62654.00	64360.00	476595.05	574962.56	725330.37	751688.24	56	211	2016
228.00	49714.00	51447.00	476090.85	574468.77	727284.10	753624.75	56	211	2016
229.00	37905.00	38899.00	517778.03	573958.74	740516.82	755559.32	54	209	2016
229.01	62226.00	63096.00	466868.28	517817.03	726879.19	740528.26	58	212	2016
230.00	36854.00	37780.00	519021.72	573414.43	742925.76	757491.18	54	209	2016
230.01	63314.00	64228.00	466323.88	519037.63	728805.42	742926.56	58	212	2016
231.00	35700.00	36752.00	516563.79	572914.72	744327.18	759427.46	54	209	2016
231.01	64315.00	65179.00	465814.34	516583.85	730730.33	744346.17	58	212	2016
232.00	39056.00	40045.00	513527.42	572381.40	745587.73	761361.36	54	209	2016
232.01	39625.00	40366.00	465296.01	513555.24	732660.26	745598.23	60	213	2016
233.00	41840.00	43612.00	464770.29	571906.11	734600.26	763305.02	56	211	2016
234.00	39791.00	41737.00	464287.82	571352.68	736542.91	765241.21	56	211	2016
235.00	37814.00	39652.00	463746.49	570840.63	738472.01	767158.41	56	211	2016
236.00	35622.00	37719.00	453196.92	570356.37	737722.02	769103.13	56	211	2016
237.00	33547.00	35514.00	452689.81	569833.22	739657.11	771031.34	56	211	2016
238.00	32425.00	33462.00	509233.00	569291.56	756869.44	772955.62	56	211	2016
238.01	43910.00	44879.00	452136.75	509271.83	741567.96	756877.12	56	211	2016
239.00	31145.00	32238.00	505085.84	568782.99	757829.65	774873.94	56	211	2016
239.01	31730.00	32704.00	451611.64	505102.28	743507.51	757821.54	63	218	2016
240.00	30874.00	32409.00	451089.32	543315.69	745440.67	770136.57	84	241	2016
241.00	52628.00	52874.00	456601.87	471237.08	748988.57	752919.02	84	241	2016
241.01	40773.00	41229.00	471201.06	499054.93	752890.02	760350.85	105	275	2016
241.02	51410.00	52155.00	499025.02	542799.92	760337.86	772076.33	84	241	2016
242.00	49882.00	51297.00	456089.57	542303.98	750913.50	774016.28	84	241	2016
243.00	48257.00	49764.00	455564.55	541794.30	752862.02	775951.30	84	241	2016
244.00	41206.00	42677.00	449260.50	541249.97	753236.21	777873.14	84	241	2016
245.00	38884.00	40246.00	448685.89	530179.53	755139.99	776980.05	84	241	2016
245.01	40920.00	41095.00	530144.60	540764.39	776966.91	779807.72	84	241	2016
246.00	38359.00	38736.00	448192.97	471713.42	757091.11	763400.56	84	241	2016
246.01	41466.00	41948.00	471691.41	501441.18	763382.76	771350.87	105	275	2016
246.02	37224.00	37878.00	501415.51	540227.35	771337.55	781734.14	84	241	2016
247.00	36319.00	37087.00	493939.06	539755.34	771407.42	783682.15	84	241	2016
247.01	53172.00	53657.00	447657.65	475074.31	759010.41	766359.15	84	241	2016
247.03	57085.00	57425.00	475023.42	494011.22	766339.83	771422.87	108	283	2016
248.00	32748.00	33171.00	447165.53	471449.91	760943.67	767457.76	84	241	2016
248.01	34722.00	35827.00	471421.93	539209.20	767448.58	785608.03	84	241	2016
249.00	58221.00	58416.00	446659.94	457874.57	762890.28	765905.96	39	194	2016
249.10	33490.00	34625.00	472561.04	538670.38	769828.91	787532.28	84	241	2016
250.00	58528.00	58731.00	446122.01	457360.36	764823.17	767824.56	39	194	2016

Tellus A2 Block – FLOWN LINES (Spectrometer)
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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
250.10	55663.00	56757.00	471996.88	538146.18	771745.94	789468.59	74	228	2016
251.00	58837.00	59027.00	445584.38	456872.14	766747.76	769764.83	39	194	2016
2001.00	42193.00	42341.00	451180.68	453325.67	737597.29	745598.62	13	167	2016
2002.00	42447.00	42562.00	451387.51	453528.99	737666.44	745627.43	13	167	2016
2002.10	57735.00	57966.00	445686.94	449383.28	753112.87	766919.27	39	194	2016
2003.00	42719.00	42865.00	451574.75	453710.28	737738.56	745714.76	13	167	2016
2003.10	57317.00	57590.00	445884.19	449574.40	753191.43	766981.47	39	194	2016
2004.00	42965.00	43082.00	451768.35	453911.56	737779.65	745759.87	13	167	2016
2004.10	56927.00	57147.00	446063.16	449771.99	753231.22	767036.01	39	194	2016
2005.00	43228.00	43371.00	451973.70	454105.31	737806.30	745770.12	13	167	2016
2005.10	56519.00	56789.00	446270.31	449956.36	753307.37	767061.60	39	194	2016
2006.00	43485.00	43598.00	452156.52	454287.69	737915.27	745818.69	13	167	2016
2006.10	56156.00	56377.00	446467.81	450163.45	753320.41	767106.34	39	194	2016
2007.00	53920.00	54082.00	452363.34	454486.10	737953.43	745880.84	39	194	2016
2007.10	55760.00	56011.00	446667.64	450348.52	753387.22	767137.15	39	194	2016
2008.00	53646.00	53775.00	452544.41	454670.73	738011.95	745931.49	39	194	2016
2008.10	55376.00	55613.00	446858.76	450535.30	753435.32	767187.69	39	194	2016
2009.00	53371.00	53506.00	452734.35	454874.34	738043.40	746030.11	39	194	2016
2009.10	54992.00	55236.00	447050.28	450726.36	753519.67	767241.00	39	194	2016
2010.00	53093.00	53222.00	452924.92	455057.29	738113.49	746076.57	39	194	2016
2010.10	54599.00	54822.00	447248.13	450921.26	753577.61	767285.90	39	194	2016
2011.00	52812.00	52953.00	453118.76	455257.26	738139.39	746111.87	39	194	2016
2011.10	54222.00	54471.00	447432.49	451114.38	753588.92	767376.53	39	194	2016
2012.00	52512.00	52640.00	453321.43	455455.28	738169.32	746161.92	39	194	2016
2012.10	50445.00	50684.00	447640.42	451303.04	753679.10	767397.20	39	194	2016
2013.00	52221.00	52376.00	453513.73	455644.79	738256.01	746229.34	39	194	2016
2013.10	50066.00	50320.00	447816.75	451506.25	753716.51	767491.89	39	194	2016
2014.00	51925.00	52053.00	453721.57	455848.42	738273.22	746239.23	39	194	2016
2014.10	40665.00	40894.00	448009.20	451687.71	753790.36	767503.30	38	194	2016
2015.00	51634.00	51789.00	453902.40	456032.44	738349.98	746308.35	39	194	2016
2015.10	40264.00	40516.00	448202.93	451890.58	753803.48	767591.41	38	194	2016
2016.00	51358.00	51487.00	454093.93	456227.99	738392.75	746350.00	39	194	2016
2016.10	39896.00	40120.00	448416.78	452085.45	753887.13	767636.92	38	194	2016
2017.00	51083.00	51223.00	454287.25	456419.49	738431.30	746401.04	39	194	2016
2017.10	39491.00	39756.00	448588.11	452278.33	753909.76	767682.04	38	194	2016
2018.00	50805.00	50942.00	454486.52	456618.18	738487.89	746439.33	39	194	2016
2018.10	39095.00	39320.00	448783.60	452484.96	753955.65	767726.94	38	194	2016
2019.00	61209.00	61349.00	454680.11	456814.26	738532.87	746504.34	54	209	2016
2019.10	38694.00	38944.00	448973.93	452671.71	754019.80	767769.32	38	194	2016
2020.00	60916.00	61062.00	454879.18	456998.35	738611.95	746565.18	54	209	2016
2020.10	38307.00	38543.00	449174.15	452862.06	754047.17	767831.57	38	194	2016
2021.00	60632.00	60773.00	455048.55	457189.30	738664.96	746647.21	54	209	2016
2021.10	37929.00	38167.00	449363.85	453054.36	754112.58	767888.00	38	194	2016
2022.00	60357.00	60505.00	455251.05	457395.93	738684.85	746702.44	54	209	2016
2022.10	37550.00	37788.00	449561.76	453232.56	754200.39	767938.53	38	194	2016
2023.00	60101.00	60241.00	455454.20	457571.17	738764.34	746698.66	54	209	2016
2023.10	37163.00	37407.00	449750.06	453443.93	754199.12	767969.38	38	194	2016
2024.00	59837.00	59978.00	455636.23	457762.84	738832.65	746799.76	54	209	2016
2024.10	36781.00	37019.00	449946.32	453633.92	754273.02	768057.46	38	194	2016
2025.00	59586.00	59723.00	455830.21	457954.78	738884.23	746817.22	54	209	2016
2025.10	36387.00	36650.00	450150.27	453826.22	754323.17	768069.70	38	194	2016
2026.00	59330.00	59472.00	456024.97	458151.60	738944.46	746896.94	54	209	2016
2026.10	35988.00	36226.00	450322.45	454020.89	754356.95	768163.82	38	194	2016
2027.00	59082.00	59219.00	456215.51	458349.37	738992.69	746934.84	54	209	2016
2027.10	35610.00	35854.00	450522.16	454208.54	754448.03	768217.60	38	194	2016
2028.00	58829.00	58973.00	456412.03	458556.84	738997.05	747010.70	54	209	2016
2028.10	35232.00	35471.00	450721.57	454403.25	754474.74	768268.12	38	194	2016
2029.00	58561.00	58699.00	456613.78	458743.01	739064.44	747030.63	54	209	2016
2029.10	34859.00	35107.00	450901.91	454598.32	754558.54	768314.65	38	194	2016
2030.00	58297.00	58439.00	456811.05	458936.18	739137.98	747066.23	54	209	2016
2030.10	34476.00	34703.00	451108.83	454785.43	754571.71	768325.91	38	194	2016
2031.00	58040.00	58186.00	456985.36	459130.51	739162.69	747153.98	54	209	2016
2031.10	34085.00	34323.00	451305.64	455000.34	754618.67	768374.77	38	194	2016
2032.00	57399.00	57938.00	451489.20	459326.82	739215.70	768462.76	54	209	2016
2033.00	56739.00	57256.00	451681.87	459517.90	739272.19	768515.83	54	209	2016
2034.00	56083.00	56597.00	451882.01	459704.33	739358.33	768533.16	54	209	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2035.00	55433.00	55916.00	452087.30	459890.57	739396.69	768595.21	54	209	2016
2036.00	42577.00	43087.00	452269.50	460085.80	739452.45	768641.68	54	209	2016
2037.00	43202.00	43711.00	452450.80	460282.07	739508.52	768724.93	54	209	2016
2038.00	43842.00	44374.00	452641.59	460474.22	739553.03	768767.33	54	209	2016
2039.00	44538.00	45035.00	452847.85	460665.06	739622.23	768802.73	54	209	2016
2040.00	61662.00	62172.00	453047.03	460849.65	739670.20	768842.74	54	209	2016
2041.00	62345.00	62883.00	453222.77	461067.88	739686.98	768909.66	54	209	2016
2042.00	63032.00	63538.00	453423.21	461255.12	739720.39	768994.07	54	209	2016
2043.00	63670.00	64205.00	453617.52	461455.39	739786.10	768998.36	54	209	2016
2044.00	64314.00	64833.00	453807.79	461630.03	739863.66	769071.25	54	209	2016
2045.00	64993.00	65526.00	454003.84	461839.97	739886.22	769103.42	54	209	2016
2046.00	36458.00	36983.00	454201.94	462030.37	739959.35	769147.94	60	213	2016
2047.00	35798.00	36289.00	454393.18	462212.14	740020.76	769223.49	60	213	2016
2048.00	35150.00	35652.00	454581.77	462425.82	740039.15	769285.65	60	213	2016
2049.00	34491.00	35000.00	454782.41	462605.92	740096.59	769331.83	60	213	2016
2050.00	33862.00	34380.00	454970.97	462821.55	740149.45	769386.40	60	213	2016
2051.00	61475.00	61985.00	455166.48	463005.28	740186.56	769427.68	58	212	2016
2052.00	60842.00	61357.00	455340.65	463181.42	740259.50	769514.37	58	212	2016
2053.00	59841.00	60556.00	455556.40	467005.90	726771.60	769522.09	58	212	2016
2054.00	58951.00	59694.00	455744.93	467184.64	726839.38	769575.66	58	212	2016
2055.00	58068.00	58806.00	455945.70	467386.30	726905.56	769625.59	58	212	2016
2056.00	57136.00	57918.00	456115.73	467576.62	726943.16	769712.10	58	212	2016
2057.00	56258.00	56966.00	456327.12	467776.49	726989.53	769740.95	58	212	2016
2058.00	55355.00	56117.00	456510.89	467958.83	727072.44	769810.49	58	212	2016
2059.00	54450.00	55185.00	456727.44	468159.64	727110.34	769826.03	58	212	2016
2060.00	53494.00	54175.00	458453.78	468356.71	727132.07	764096.96	58	212	2016
2061.00	52670.00	53289.00	458654.66	468557.71	727180.45	764140.90	58	212	2016
2062.00	51885.00	52535.00	458847.72	468734.98	727277.97	764197.81	58	212	2016
2063.00	61902.00	62513.00	459034.27	468932.82	727306.92	764251.21	56	211	2016
2064.00	61110.00	61769.00	459223.29	469132.06	727348.16	764339.76	56	211	2016
2065.00	60380.00	60956.00	459436.72	469332.36	727392.33	764340.68	56	211	2016
2066.00	59528.00	60258.00	459624.06	469513.26	727451.42	764412.33	56	211	2016
2067.00	58749.00	59342.00	459803.79	469701.43	727525.62	764485.08	56	211	2016
2068.00	57966.00	58628.00	460002.63	469899.63	727553.20	764507.72	56	211	2016
2069.00	57238.00	57827.00	460212.81	470089.04	727638.84	764541.55	56	211	2016
2070.00	56349.00	57129.00	460392.54	470283.90	727681.24	764606.10	56	211	2016
2071.00	55564.00	56163.00	460578.20	470475.56	727725.31	764654.80	56	211	2016
2072.00	54741.00	55416.00	460773.51	470673.74	727788.63	764729.35	56	211	2016
2073.00	53991.00	54583.00	460976.46	470863.55	727845.11	764780.57	56	211	2016
2074.00	53141.00	53855.00	461163.02	471052.97	727888.02	764823.43	56	211	2016
2075.00	52379.00	52984.00	461351.19	471259.72	727908.18	764896.72	56	211	2016
2076.00	51549.00	52242.00	461536.65	471453.52	727990.23	764953.90	56	211	2016
2077.00	37177.00	37806.00	461735.15	471639.53	728056.20	765006.13	60	213	2016
2078.00	37948.00	38590.00	461931.06	471839.16	728070.94	765044.00	60	213	2016
2079.00	38751.00	39381.00	462132.68	472030.46	728135.55	765060.03	60	213	2016
2080.00	33266.00	33913.00	462317.16	472209.59	728195.39	765147.87	63	218	2016
2081.00	31040.00	31790.00	462509.73	472408.54	728240.93	765196.90	68	222	2016
2082.00	56964.00	57640.00	462723.51	472606.42	728279.57	765239.15	74	228	2016
2083.00	40141.00	40852.00	462888.54	472788.75	728362.86	765318.00	13	167	2016
2084.00	59167.00	59759.00	463093.62	473003.13	728375.59	765354.36	39	194	2016
2085.00	32272.00	32882.00	463283.38	473185.81	728435.07	765402.08	42	196	2016
2086.00	34816.00	35440.00	463487.86	473388.33	728474.91	765442.80	42	196	2016
2087.00	37432.00	38044.00	463681.27	473581.67	728531.11	765476.11	42	196	2016
2088.00	39966.00	40570.00	463867.10	473740.22	728622.59	765550.06	42	196	2016
2089.00	35211.00	35803.00	464050.98	473940.35	728681.56	765628.54	49	201	2016
2090.00	37691.00	38288.00	464251.98	474148.68	728712.39	765642.03	49	201	2016
2091.00	40223.00	40820.00	464444.81	474340.11	728779.17	765681.61	49	201	2016
2092.00	42683.00	43280.00	464643.83	474533.99	728827.64	765745.80	49	201	2016
2093.00	45118.00	45718.00	464839.42	474720.60	728876.82	765789.69	49	201	2016
2094.00	57743.00	58338.00	465021.08	474921.41	728904.51	765870.32	74	228	2016
2095.00	31597.00	32175.00	465208.56	475113.11	728984.64	765927.38	79	237	2016
2096.00	32344.00	33009.00	465409.38	475307.19	729031.99	765965.79	79	237	2016
2097.00	33160.00	33750.00	465600.02	475505.53	729059.10	766005.23	79	237	2016
2098.00	33936.00	34806.00	465797.71	478807.86	717500.91	766080.01	79	237	2016
2099.00	34937.00	35709.00	465991.62	478994.90	717599.35	766106.35	79	237	2016
2100.00	35872.00	36733.00	466182.52	479188.45	717635.90	766190.58	79	237	2016

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2101.00	36865.00	37641.00	466377.72	479398.09	717657.95	766223.09	79	237	2016
2102.00	37794.00	38660.00	466563.00	479574.00	717751.58	766299.05	79	237	2016
2103.00	38806.00	39585.00	466773.76	479773.47	717768.25	766318.97	79	237	2016
2104.00	39735.00	40586.00	466963.04	479967.36	717839.38	766384.01	79	237	2016
2105.00	40730.00	41490.00	467148.92	480158.71	717883.41	766444.12	79	237	2016
2106.00	41659.00	42526.00	467337.06	480352.10	717913.37	766509.54	79	237	2016
2107.00	48026.00	48808.00	467555.88	480546.47	717990.84	766519.03	79	237	2016
2108.00	48961.00	49851.00	467730.83	480732.10	718042.30	766581.32	79	237	2016
2109.00	50000.00	50790.00	467930.67	480926.27	718092.28	766652.93	79	237	2016
2110.00	50939.00	51787.00	468108.28	481119.26	718142.42	766715.10	79	237	2016
2111.00	51923.00	52715.00	468316.47	481316.05	718169.24	766732.34	79	237	2016
2112.00	58488.00	59391.00	468499.97	481506.49	718241.67	766809.21	74	228	2016
2113.00	59524.00	60308.00	468701.24	481693.25	718325.37	766827.68	74	228	2016
2114.00	60478.00	61360.00	468886.79	481906.15	718350.94	766903.41	74	228	2016
2115.00	61487.00	62275.00	469094.40	482082.31	718425.51	766935.90	74	228	2016
2116.00	62412.00	63294.00	469271.73	482283.56	718468.47	767013.35	74	228	2016
2117.00	52848.00	53713.00	469456.83	482471.30	718490.96	767063.91	79	237	2016
2118.00	53861.00	54635.00	469665.32	482662.39	718577.27	767110.66	79	237	2016
2119.00	54793.00	55657.00	469853.99	482861.82	718609.52	767149.13	79	237	2016
2120.00	55810.00	56579.00	470050.37	483051.21	718672.45	767222.30	79	237	2016
2121.00	56713.00	57561.00	470249.25	483248.17	718735.90	767277.60	79	237	2016
2122.00	57704.00	58474.00	470441.39	483439.04	718760.82	767299.11	79	237	2016
2123.00	58633.00	59488.00	470626.70	483641.37	718807.46	767365.55	79	237	2016
2124.00	59658.00	60421.00	470828.22	483824.01	718880.11	767426.14	79	237	2016
2125.00	60569.00	61408.00	471011.20	484013.63	718942.49	767481.05	79	237	2016
2126.00	32803.00	33632.00	471186.25	484215.63	718947.02	767538.18	91	257	2016
2127.00	33775.00	34620.00	471400.73	484397.24	719048.57	767587.89	91	257	2016
2128.00	34462.00	35274.00	471595.47	484595.74	719086.90	767623.47	93	258	2016
2129.00	35426.00	36255.00	471786.17	484789.88	719136.90	767690.04	93	258	2016
2130.00	36396.00	37182.00	471981.07	484996.98	719158.69	767732.77	93	258	2016
2131.00	37350.00	38180.00	472175.63	485180.04	719242.48	767768.86	93	258	2016
2132.00	38311.00	39118.00	472383.14	485381.88	719262.45	767813.20	93	258	2016
2133.00	32184.00	32611.00	478807.35	485581.98	719314.15	744585.59	95	261	2016
2133.01	33033.00	33425.00	472559.17	478833.04	744537.51	767891.14	98	263	2016
2134.00	32846.00	33299.00	478999.03	485760.42	719380.48	744623.05	95	261	2016
2134.01	33563.00	33942.00	472780.38	479007.41	744599.19	767909.49	98	263	2016
2135.00	33448.00	33867.00	479202.41	485947.05	719460.29	744706.46	95	261	2016
2135.01	34174.00	34566.00	472960.40	479206.10	744646.15	767972.91	98	263	2016
2136.00	34064.00	34521.00	479383.22	486137.47	719492.35	744756.21	95	261	2016
2136.01	34766.00	35215.00	472110.50	479394.24	744715.81	771870.82	98	263	2016
2137.00	34649.00	35072.00	479571.28	486347.89	719525.45	744793.93	95	261	2016
2137.01	35425.00	35909.00	472305.04	479603.96	744741.76	771948.40	98	263	2016
2138.00	35291.00	35750.00	479766.42	486521.76	719622.90	744854.95	95	261	2016
2138.01	36047.00	36520.00	472497.51	479757.23	744842.20	771990.05	98	263	2016
2139.00	35888.00	36299.00	479958.00	486716.59	719680.75	744911.15	95	261	2016
2139.01	36745.00	37191.00	472694.55	479970.27	744864.37	772034.28	98	263	2016
2140.00	36528.00	36999.00	480153.81	486926.22	719673.46	744978.03	95	261	2016
2140.01	37360.00	37837.00	472874.53	480164.47	744928.71	772124.84	98	263	2016
2141.00	37141.00	37555.00	480342.86	487112.64	719780.24	745013.24	95	261	2016
2141.01	38068.00	38521.00	473089.21	480357.43	744949.94	772154.74	98	263	2016
2142.00	37786.00	38223.00	480539.65	487308.80	719787.82	745061.06	95	261	2016
2142.01	38667.00	39129.00	473272.73	480550.72	745021.32	772201.60	98	263	2016
2143.00	38366.00	38786.00	480727.98	487517.99	719843.99	745133.86	95	261	2016
2143.01	39352.00	39815.00	473460.21	480750.03	745045.82	772265.00	98	263	2016
2144.00	38960.00	39414.00	480915.60	487685.76	719906.43	745159.06	95	261	2016
2144.01	39988.00	40451.00	473645.63	480934.89	745118.75	772342.49	98	263	2016
2145.00	39558.00	39962.00	481126.46	487885.48	719982.42	745203.88	95	261	2016
2145.01	40663.00	41114.00	473858.50	481128.01	745161.37	772359.44	98	263	2016
2146.00	40214.00	40677.00	481300.47	488077.99	720017.06	745296.41	95	261	2016
2146.01	41254.00	41718.00	474035.40	481334.34	745239.61	772419.87	98	263	2016
2147.00	50559.00	50932.00	482013.92	488275.30	720047.48	743384.40	88	246	2016
2147.01	42004.00	42468.00	474241.91	482032.14	743370.05	772452.96	98	263	2016
2148.00	34881.00	35734.00	474422.77	488474.54	720109.19	772519.99	91	257	2016
2149.00	40805.00	41203.00	481888.39	488653.08	720170.58	745445.78	95	261	2016
2149.01	42626.00	43082.00	474613.85	481905.76	745385.56	772577.03	98	263	2016
2150.00	41417.00	41883.00	482080.46	488852.59	720231.60	745491.33	95	261	2016

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2150.01	43429.00	43873.00	474815.92	482119.49	745434.19	772610.28	98	263	2016
2151.00	42012.00	42422.00	482283.85	489052.00	720252.40	745511.77	95	261	2016
2151.01	44030.00	44471.00	474999.37	482286.45	745514.50	772672.55	98	263	2016
2152.00	44712.00	45193.00	475198.00	483001.24	743589.72	772748.92	98	263	2016
2152.01	50496.00	50888.00	482990.87	489249.35	720310.50	743649.71	98	263	2016
2153.00	45352.00	46219.00	475387.04	489432.25	720382.26	772798.22	98	263	2016
2154.00	51189.00	51635.00	475592.49	482892.82	745610.76	772830.17	98	263	2016
2154.01	45544.00	45999.00	482856.36	489620.82	720426.28	745697.12	102	270	2016
2155.00	51782.00	52240.00	475778.07	483061.90	745675.07	772887.86	98	263	2016
2155.01	46153.00	46564.00	483047.48	489822.83	720479.32	745743.46	102	270	2016
2156.00	42639.00	43135.00	482724.67	489995.31	720548.09	747734.89	95	261	2016
2156.01	54223.00	54634.00	475977.73	482742.04	747690.51	772957.37	98	263	2016
2157.00	43252.00	43679.00	482930.89	490199.13	720584.46	747767.97	95	261	2016
2157.01	54789.00	55217.00	476142.32	482926.86	747729.96	772992.32	98	263	2016
2158.00	43838.00	44350.00	483117.19	490391.75	720638.90	747825.13	95	261	2016
2158.01	55527.00	55944.00	476355.10	483124.63	747790.79	773050.59	98	263	2016
2159.00	44471.00	44912.00	483312.31	490589.05	720683.66	747842.27	95	261	2016
2159.01	56094.00	56536.00	476538.92	483321.40	747830.67	773090.00	98	263	2016
2160.00	45070.00	45571.00	483500.10	490788.42	720715.29	747924.47	95	261	2016
2160.01	56836.00	57245.00	476747.73	483522.89	747884.49	773127.71	98	263	2016
2161.00	49987.00	50421.00	483696.62	490978.30	720815.81	747965.37	95	261	2016
2161.01	49478.00	49928.00	476940.49	483717.98	747918.49	773186.78	102	270	2016
2162.00	50602.00	51132.00	483885.33	491166.63	720856.80	748037.30	95	261	2016
2162.01	50748.00	51185.00	477133.45	483897.66	747994.90	773239.44	102	270	2016
2163.00	51267.00	51874.00	480966.34	491364.17	720886.35	759694.46	95	261	2016
2163.01	51977.00	52208.00	477325.42	480988.81	759631.50	773283.02	102	270	2016
2164.00	52016.00	52759.00	481163.54	491555.19	720924.54	759750.26	95	261	2016
2164.01	52376.00	52585.00	477511.96	481172.91	759693.29	773379.83	102	270	2016
2165.00	52881.00	53501.00	481374.26	491753.33	720970.23	759760.63	95	261	2016
2165.01	52743.00	52968.00	477712.51	481362.67	759745.50	773391.32	102	270	2016
2166.00	53677.00	54388.00	481563.21	491943.17	721062.33	759812.96	95	261	2016
2166.01	53150.00	53362.00	477916.82	481566.07	759765.32	773433.26	102	270	2016
2167.00	54527.00	55143.00	481733.98	492129.74	721114.86	759907.17	95	261	2016
2167.01	54802.00	55031.00	478092.38	481754.31	759854.34	773517.20	102	270	2016
2168.00	55239.00	55974.00	481925.77	492331.03	721143.88	759957.77	95	261	2016
2168.01	55229.00	55442.00	478291.15	481962.69	759879.51	773568.93	102	270	2016
2169.00	56109.00	56738.00	482127.61	492524.43	721175.00	759989.13	95	261	2016
2169.01	55597.00	55828.00	478487.87	482141.41	759947.75	773600.19	102	270	2016
2170.00	56911.00	57629.00	482325.51	492714.15	721273.35	760067.68	95	261	2016
2170.01	56032.00	56244.00	478677.08	482336.89	759990.43	773673.71	102	270	2016
2171.00	57763.00	58358.00	482517.40	492894.96	721325.73	760116.46	95	261	2016
2171.01	56393.00	56625.00	478870.27	482516.82	760080.91	773718.93	102	270	2016
2172.00	33318.00	34255.00	479064.71	493094.79	721367.02	773765.01	93	258	2016
2173.00	58594.00	59346.00	482902.77	493300.36	721397.16	760189.34	95	261	2016
2173.01	56838.00	57056.00	479246.54	482921.94	760126.28	773825.10	102	270	2016
2174.00	59476.00	59986.00	485170.97	493491.33	721441.58	752525.79	95	261	2016
2174.01	53893.00	54274.00	479455.20	485177.31	752489.00	773855.41	106	275	2016
2175.00	60130.00	60702.00	485363.33	493688.43	721504.50	752563.09	95	261	2016
2175.01	54436.00	54761.00	479636.65	485373.60	752531.99	773934.69	106	275	2016
2176.00	60843.00	61337.00	485546.26	493863.42	721577.48	752634.89	95	261	2016
2176.01	55035.00	55428.00	479836.35	485566.83	752581.22	773959.17	106	275	2016
2177.00	61455.00	62026.00	485742.24	494073.04	721617.36	752651.73	95	261	2016
2177.01	55574.00	55907.00	480022.68	485753.63	752631.95	774050.53	106	275	2016
2178.00	62173.00	62688.00	485939.87	494258.56	721679.08	752744.26	95	261	2016
2178.01	56195.00	56570.00	480230.14	485956.11	752669.29	774058.12	106	275	2016
2179.00	62868.00	63375.00	486651.26	494460.11	721700.06	750851.19	95	261	2016
2179.01	56720.00	57075.00	480416.02	486674.83	750783.82	774129.85	106	275	2016
2180.00	33126.00	33584.00	487886.88	494655.28	721765.71	747015.56	90	251	2016
2180.01	57333.00	57845.00	480619.06	487899.15	746960.06	774189.56	106	275	2016
2181.00	33761.00	34205.00	487576.29	494837.60	721838.90	748995.41	90	251	2016
2181.01	43648.00	44034.00	480801.69	487571.62	748963.14	774225.13	105	275	2016
2182.00	34496.00	34932.00	488787.93	495036.64	721880.03	745210.25	90	251	2016
2182.03	57741.00	58256.00	480998.06	488815.88	745134.73	774290.57	108	283	2016
2183.00	63503.00	63947.00	487429.57	495215.00	721955.49	751036.52	95	261	2016
2183.01	43132.00	43518.00	481193.63	487427.78	751027.22	774338.70	105	275	2016
2184.00	64068.00	64579.00	487605.69	495422.88	721985.04	751113.49	95	261	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2184.01	57978.00	58340.00	481396.96	487628.43	751040.39	774378.55	106	275	2016
2185.00	47075.00	47980.00	481567.03	495617.30	722021.44	774458.64	102	270	2016
2186.00	37175.00	37616.00	489567.51	495806.46	722083.43	745404.09	90	251	2016
2186.01	53492.00	53992.00	481759.30	489559.49	745377.39	774484.68	102	270	2016
2187.00	36517.00	36953.00	489748.26	497044.14	718279.72	745460.62	90	251	2016
2187.01	54184.00	54639.00	481969.20	489759.61	745434.17	774544.27	102	270	2016
2188.00	35836.00	36369.00	489431.31	497239.78	718295.16	747425.21	90	251	2016
2188.01	51401.00	51815.00	482175.21	489449.90	747368.91	774556.97	102	270	2016
2189.00	35128.00	35560.00	490148.00	497415.65	718405.79	745550.15	90	251	2016
2189.01	50166.00	50618.00	482349.60	490142.90	745550.83	774644.54	102	270	2016
2190.00	48158.00	48660.00	489293.66	497612.27	718420.02	749481.23	102	270	2016
2190.01	48903.00	49282.00	482547.04	489307.87	749430.94	774682.41	102	270	2016
2191.00	57161.00	58159.00	482728.61	497821.97	718451.17	774754.12	102	270	2016
2192.00	37088.00	38060.00	482930.52	498000.24	718529.23	774791.53	103	274	2016
2193.00	38446.00	38941.00	490397.56	498200.50	718576.23	747685.75	103	274	2016
2193.01	39209.00	39624.00	483115.98	490402.34	747667.11	774871.01	103	274	2016
2194.00	36000.00	36485.00	491106.97	498393.29	718612.35	745817.67	91	257	2016
2194.01	58595.00	59085.00	483308.99	491125.11	745739.91	774930.05	106	275	2016
2195.00	31793.00	32370.00	489240.76	498583.26	718694.93	753591.09	93	258	2016
2195.01	59220.00	59547.00	483500.32	489239.34	753567.85	774957.13	106	275	2016
2196.00	32591.00	33148.00	489420.65	498786.21	718725.68	753651.24	93	258	2016
2196.01	59780.00	60156.00	483727.77	489431.99	753612.23	774984.10	106	275	2016
2197.00	34636.00	35543.00	483889.10	498975.65	718757.66	775052.00	103	274	2016
2198.00	35711.00	36180.00	491887.97	499161.98	718844.17	745996.48	103	274	2016
2198.03	58460.00	58918.00	484094.65	491886.62	746000.59	775088.94	108	283	2016
2199.00	35728.00	36178.00	492068.41	499365.47	718873.48	746087.18	105	275	2016
2199.01	54645.00	55134.00	484278.46	492085.62	746016.17	775179.89	108	283	2016
2200.00	36350.00	36825.00	492262.26	499541.87	718941.96	746143.28	105	275	2016
2200.03	59485.00	59972.00	484486.29	492287.07	746063.69	775205.16	115	287	2016
2201.00	44218.00	44663.00	492469.57	499740.22	718998.70	746191.47	105	275	2016
2201.02	58890.00	59345.00	484672.21	492485.81	746128.65	775269.82	115	287	2016
2202.00	44801.00	45300.00	492649.25	499922.80	719041.28	746218.41	105	275	2016
2202.02	58167.00	58684.00	484861.12	492678.19	746173.57	775307.40	115	287	2016
2203.00	45607.00	46051.00	492836.57	500122.74	719121.90	746303.01	105	275	2016
2203.02	56936.00	57416.00	485058.88	492862.55	746266.03	775353.43	115	287	2016
2204.00	46147.00	47100.00	485247.32	500317.17	719170.23	775408.69	49	201	2016
2205.00	43700.00	44670.00	485445.75	500522.01	719178.74	775444.32	49	201	2016
2206.00	41261.00	42233.00	485633.95	500710.14	719263.21	775509.67	49	201	2016
2207.00	38720.00	39738.00	485826.18	500892.54	719329.90	775566.90	49	201	2016
2208.00	36258.00	37243.00	486020.22	501103.86	719328.76	775634.31	49	201	2016
2209.00	41008.00	41989.00	486228.54	501301.57	719386.15	775678.61	42	196	2016
2210.00	33330.00	34300.00	486386.78	501478.52	719467.07	775736.66	42	196	2016
2211.00	35890.00	36898.00	486597.13	501679.80	719487.38	775797.29	42	196	2016
2212.00	38494.00	39494.00	486799.72	501865.67	719568.93	775860.43	42	196	2016
2213.00	29876.00	30320.00	494785.74	502062.56	719616.85	746794.53	89	248	2016
2213.02	56370.00	56835.00	486992.99	494792.41	746777.36	775885.29	115	287	2016
2214.00	30475.00	30904.00	495500.53	502256.41	719658.55	744907.09	89	248	2016
2214.02	55594.00	56148.00	487176.62	495503.76	744880.26	775962.00	115	287	2016
2215.00	31115.00	31539.00	495673.30	502442.97	719735.00	744970.70	89	248	2016
2215.02	54981.00	55459.00	487378.07	495697.33	744912.01	775987.96	115	287	2016
2216.00	31704.00	32108.00	495886.12	502647.66	719752.04	745012.04	89	248	2016
2216.01	60253.00	60742.00	487592.96	495881.36	744991.11	776054.72	106	275	2016
2217.00	32344.00	32770.00	496071.16	502827.35	719849.08	745054.31	89	248	2016
2217.01	39810.00	40291.00	487759.76	496076.30	745066.64	776092.95	105	275	2016
2218.00	32906.00	33331.00	496259.97	503028.42	719883.78	745123.95	89	248	2016
2218.01	53207.00	53752.00	487954.12	496280.80	745091.99	776165.78	98	263	2016
2219.00	33540.00	33963.00	496460.38	503227.41	719910.72	745154.39	89	248	2016
2219.01	52535.00	53055.00	488149.24	496461.09	745164.42	776216.41	98	263	2016
2220.00	34230.00	34658.00	496660.16	503413.81	719973.73	745218.96	89	248	2016
2220.01	62089.00	62559.00	488327.15	496657.79	745193.48	776265.00	91	257	2016
2221.00	34894.00	35322.00	496841.26	503601.77	720053.00	745300.77	89	248	2016
2221.01	61341.00	61895.00	488534.64	496869.81	745215.42	776314.04	91	257	2016
2222.00	35525.00	35948.00	497047.18	503799.12	720094.71	745318.69	89	248	2016
2222.01	60642.00	61131.00	488702.01	497044.58	745287.47	776374.20	91	257	2016
2223.00	36155.00	36575.00	497227.20	503979.83	720151.02	745394.03	89	248	2016
2223.01	59965.00	60506.00	488924.68	497248.26	745334.31	776385.14	91	257	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2224.00	36728.00	37246.00	495875.23	504189.08	720182.30	751233.62	89	248	2016
2224.01	59299.00	59685.00	489126.93	495894.49	751182.83	776424.34	91	257	2016
2225.00	37459.00	37993.00	496082.88	504377.77	720257.00	751264.72	89	248	2016
2225.01	58690.00	59147.00	489303.48	496077.51	751230.90	776512.44	91	257	2016
2226.00	38132.00	38582.00	497306.02	504570.00	720271.62	747477.43	89	248	2016
2226.01	57994.00	58451.00	489492.56	497280.61	747463.92	776589.05	91	257	2016
2227.00	38896.00	39348.00	497480.58	504761.54	720362.57	747543.56	89	248	2016
2227.01	57349.00	57876.00	489704.75	497496.66	747500.23	776601.08	91	257	2016
2228.00	39645.00	40097.00	497692.70	504972.89	720376.28	747544.00	89	248	2016
2228.01	56647.00	57120.00	489890.62	497686.04	747525.44	776667.22	91	257	2016
2229.00	40401.00	40874.00	497859.05	505155.72	720443.59	747653.44	89	248	2016
2229.01	55973.00	56491.00	490087.78	497886.86	747574.89	776708.57	91	257	2016
2230.00	41017.00	41465.00	498062.92	505339.77	720505.93	747711.07	89	248	2016
2230.01	55307.00	55771.00	490253.84	498068.55	747638.84	776780.80	91	257	2016
2231.00	41761.00	42231.00	498264.81	505538.92	720573.87	747712.09	89	248	2016
2231.01	54700.00	55205.00	490481.27	498271.59	747689.34	776791.84	91	257	2016
2232.00	42391.00	42830.00	498443.26	505738.28	720578.78	747808.16	89	248	2016
2232.01	53992.00	54457.00	490681.02	498452.41	747751.99	776852.42	91	257	2016
2233.01	43202.00	44138.00	490827.94	505929.03	720658.33	776948.56	91	257	2016
2234.00	46578.00	47371.00	493140.13	506113.61	720725.95	769153.75	94	259	2016
2234.01	39558.00	39696.00	491038.46	493168.24	769112.48	776998.09	105	275	2016
2235.00	48557.00	48857.00	501618.25	506311.64	720744.88	738275.02	94	259	2016
2235.01	38255.00	38864.00	491245.46	501627.84	738247.18	777003.33	105	275	2016
2236.01	58636.00	59570.00	491441.64	506521.46	720784.48	777061.84	98	263	2016
2237.00	59687.00	60653.00	491619.76	506708.60	720831.69	777117.10	98	263	2016
2238.00	60802.00	61753.00	491828.99	506893.47	720919.50	777155.23	98	263	2016
2239.00	49642.00	50112.00	500323.13	507093.42	720944.88	746216.82	88	246	2016
2239.01	40335.00	40864.00	492020.08	500322.79	746201.27	777207.84	91	257	2016
2240.00	53414.00	53848.00	500514.90	507283.49	721018.16	746270.18	87	244	2016
2240.01	39509.00	40031.00	492207.59	500531.60	746205.33	777305.97	91	257	2016
2241.00	41083.00	42004.00	492397.85	507471.33	721076.23	777334.61	91	257	2016
2242.00	42155.00	43125.00	492588.76	507655.43	721137.70	777404.13	91	257	2016
2243.00	38407.00	39363.00	492789.56	507848.37	721178.22	777431.20	91	257	2016
2244.00	52790.00	53233.00	500779.43	508052.39	721227.75	748388.50	87	244	2016
2244.01	61809.00	62302.00	492982.75	500775.83	748376.49	777492.11	98	263	2016
2245.00	51992.00	52489.00	500436.88	508246.45	721267.63	750426.02	87	244	2016
2245.01	62613.00	63059.00	493186.34	500465.65	750370.13	777516.16	98	263	2016
2246.00	51356.00	51837.00	500641.19	508443.09	721338.48	750419.88	87	244	2016
2246.01	63204.00	63670.00	493371.62	500645.51	750394.44	777598.28	98	263	2016
2247.00	32393.00	33271.00	493558.02	508646.62	721352.30	777617.72	68	222	2016
2248.01	57547.00	58514.00	493742.44	508822.92	721454.16	777720.90	98	263	2016
2249.00	59163.00	60061.00	493962.33	509011.28	721503.96	777719.93	84	241	2016
2250.00	58004.00	58985.00	494147.15	509214.70	721543.68	777798.31	84	241	2016
2251.00	56920.00	57847.00	494336.70	509405.73	721592.88	777848.15	84	241	2016
2252.00	55781.00	56759.00	494534.19	509604.42	721606.76	777876.67	84	241	2016
2253.00	54688.00	55661.00	494733.25	510857.34	717716.37	777939.89	84	241	2016
2254.00	42548.00	43571.00	494906.00	511038.51	717811.38	778032.01	78	235	2016
2255.00	41382.00	42400.00	495108.64	511243.28	717839.66	778069.66	78	235	2016
2256.00	40184.00	41201.00	495301.24	511420.61	717934.34	778120.51	78	235	2016
2257.00	39074.00	40039.00	495501.66	511630.94	717949.82	778139.98	78	235	2016
2258.00	37660.00	38679.00	495684.11	511824.10	717999.81	778208.57	78	235	2016
2259.00	54210.00	54844.00	501583.03	512002.19	718052.18	756936.00	87	244	2016
2259.01	49143.00	49506.00	495889.62	501623.31	756861.38	778255.77	91	257	2016
2260.00	54983.00	55560.00	503339.71	512193.12	718133.38	751184.92	87	244	2016
2260.01	49660.00	50104.00	496084.10	503345.79	751135.72	778301.03	91	257	2016
2261.00	37217.00	38210.00	496278.78	512383.27	718195.90	778385.57	91	257	2016
2262.00	58637.00	59139.00	504773.31	512583.70	718216.22	747387.57	87	244	2016
2262.01	50415.00	50954.00	496467.52	504778.22	747341.43	778410.20	91	257	2016
2263.00	57970.00	58454.00	504970.12	512775.11	718303.10	747441.27	87	244	2016
2263.01	51133.00	51640.00	496662.14	504967.03	747422.51	778461.29	91	257	2016
2264.00	57350.00	57837.00	505157.36	512970.07	718347.23	747505.42	87	244	2016
2264.01	51854.00	52414.00	496840.73	505156.92	747478.95	778545.08	91	257	2016
2265.00	55905.00	56542.00	502765.95	513162.43	718393.80	757216.66	87	244	2016
2265.01	52573.00	52933.00	497023.32	502770.15	757159.99	778607.61	91	257	2016
2266.00	56690.00	57199.00	505542.19	513345.79	718440.01	747623.09	87	244	2016
2266.01	53279.00	53826.00	497238.05	505559.89	747563.31	778616.95	91	257	2016

Tellus A2 Block – FLOWN LINES (Spectrometer)
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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2267.00	49638.00	50802.00	497420.90	513546.94	718459.22	778688.68	68	222	2016
2268.00	44220.00	45165.00	497621.67	513736.00	718545.68	778737.41	68	222	2016
2269.00	42982.00	44101.00	497802.72	513938.11	718596.40	778801.55	68	222	2016
2270.00	41868.00	42822.00	498006.80	514124.12	718661.63	778828.02	68	222	2016
2271.00	40593.00	41736.00	498195.28	514328.99	718686.80	778902.66	68	222	2016
2272.00	39477.00	40438.00	498382.75	514514.30	718746.13	778949.56	68	222	2016
2273.00	38227.00	39351.00	498577.24	514719.06	718779.78	779023.10	68	222	2016
2274.00	50656.00	51143.00	507082.92	514892.97	718852.92	748025.66	63	218	2016
2274.01	63813.00	64332.00	498794.78	507108.12	747966.89	779015.20	63	218	2016
2275.00	44086.00	45148.00	498979.60	515107.25	718909.60	779096.17	63	218	2016
2276.00	42937.00	43950.00	499166.86	515293.97	718933.81	779133.66	63	218	2016
2277.00	41706.00	42773.00	499362.07	515481.45	718996.07	779225.36	63	218	2016
2278.00	40516.00	41567.00	499547.91	515668.14	719078.66	779277.22	63	218	2016
2279.00	39345.00	40372.00	499762.32	515867.48	719091.43	779304.52	63	218	2016
2280.00	38184.00	39208.00	499936.37	516058.57	719162.43	779330.35	63	218	2016
2281.00	34635.00	35673.00	500133.20	516256.38	719201.57	779389.44	63	218	2016
2282.00	35809.00	36863.00	500328.51	516446.88	719254.95	779435.79	63	218	2016
2283.00	37010.00	38039.00	500523.04	516628.07	719339.37	779508.00	63	218	2016
2284.00	33489.00	34620.00	500710.75	516842.52	719349.83	779550.95	68	222	2016
2285.00	34763.00	35727.00	500909.99	517025.29	719413.82	779589.18	68	222	2016
2286.00	35903.00	37049.00	501093.64	517220.64	719456.98	779686.64	68	222	2016
2287.00	37160.00	38112.00	501291.63	517424.07	719503.70	779699.29	68	222	2016
2288.00	41549.00	42386.00	505651.33	517604.76	719594.79	764240.87	66	221	2016
2288.01	62812.00	63044.00	501494.72	505657.48	764203.22	779773.66	66	221	2016
2289.00	40452.00	41391.00	501700.20	517808.40	719652.87	779797.97	66	221	2016
2290.00	39150.00	40288.00	501870.50	517984.45	719701.52	779857.02	66	221	2016
2291.00	37979.00	38942.00	502068.37	518197.53	719704.36	779911.77	66	221	2016
2292.00	36678.00	37840.00	502253.99	518377.71	719793.02	780002.03	66	221	2016
2293.00	35542.00	36513.00	502460.51	518576.19	719835.56	780044.48	66	221	2016
2294.00	34234.00	35374.00	502628.37	518756.78	719913.38	780101.02	66	221	2016
2295.00	33059.00	34049.00	502836.60	518959.87	719927.68	780147.64	66	221	2016
2296.00	31758.00	32904.00	503019.81	519159.66	719960.35	780202.19	66	221	2016
2297.00	39761.00	40866.00	503213.36	519353.73	720035.31	780262.12	65	219	2016
2298.00	38662.00	39619.00	503416.66	519528.94	720120.12	780254.48	65	219	2016
2299.00	37362.00	38490.00	503604.09	519737.81	720124.19	780353.12	65	219	2016
2300.00	36230.00	37191.00	503804.33	519937.48	720228.72	780416.77	65	219	2016
2301.00	34991.00	36093.00	503997.01	520112.93	720262.03	780446.08	65	219	2016
2302.00	54199.00	55308.00	504199.31	520309.68	720313.77	780494.56	63	218	2016
2303.00	53047.00	54068.00	504379.06	520507.09	720371.84	780565.58	63	218	2016
2304.00	51765.00	52873.00	504558.81	520714.62	720380.36	780617.38	63	218	2016
2305.00	51904.00	52914.00	504775.09	520885.47	720476.18	780642.86	60	213	2016
2306.00	50728.00	51764.00	504969.11	521085.94	720507.10	780681.52	60	213	2016
2307.00	44443.00	45469.00	505177.06	521272.26	720566.02	780734.45	60	213	2016
2308.00	43283.00	44298.00	505345.61	521469.27	720623.13	780813.51	60	213	2016
2309.00	42123.00	43133.00	505551.99	521659.49	720686.30	780838.22	60	213	2016
2310.00	40917.00	41968.00	505734.36	521866.32	720727.70	780899.56	60	213	2016
2311.00	43638.00	44708.00	505990.48	522056.32	720737.89	780987.16	74	228	2016
2312.00	50554.00	51650.00	506124.71	522256.77	720797.19	781014.11	74	228	2016
2313.00	52847.00	53940.00	506313.04	522445.56	720840.92	781060.94	74	228	2016
2314.00	54082.00	55019.00	506493.47	522609.32	720951.05	781137.90	74	228	2016
2315.00	32827.00	33683.00	510349.30	522819.47	720987.86	767531.70	76	229	2016
2315.01	59894.00	60139.00	506708.04	510361.73	767495.91	781164.98	77	231	2016
2316.00	45768.00	46801.00	506903.46	523023.85	721025.52	781197.24	71	226	2016
2317.00	44962.00	45636.00	512813.19	523211.34	721067.62	759914.21	71	226	2016
2317.01	46954.00	47296.00	507097.47	512814.72	759889.75	781272.66	71	226	2016
2318.00	44129.00	44812.00	512477.14	523393.78	721150.53	761889.17	71	226	2016
2318.01	38634.00	38996.00	507283.88	512501.80	761842.42	781350.66	73	227	2016
2319.00	37808.00	38814.00	507473.73	523603.55	721169.28	781377.27	71	226	2016
2320.00	36614.00	37665.00	507673.84	523803.49	721219.26	781408.57	71	226	2016
2321.00	35420.00	36446.00	507872.03	523982.17	721276.01	781473.97	71	226	2016
2322.00	34217.00	35269.00	508060.19	524181.74	721329.85	781535.12	71	226	2016
2323.00	49448.00	50414.00	508250.42	524382.49	721363.88	781582.43	74	228	2016
2324.00	51768.00	52717.00	508455.66	524566.79	721427.40	781612.99	74	228	2016
2325.00	42590.00	43519.00	508641.83	524784.31	721491.29	781675.26	74	228	2016
2326.00	41403.00	42458.00	508829.21	524954.89	721530.03	781747.45	74	228	2016
2327.00	40289.00	41235.00	509021.85	525142.38	721598.06	781754.72	74	228	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2328.00	39041.00	40159.00	509213.57	525344.62	721625.90	781857.38	74	228	2016
2329.00	37926.00	38882.00	509402.58	525517.38	721723.97	781900.72	74	228	2016
2330.00	36717.00	37783.00	509611.67	525713.12	721771.44	781921.59	74	228	2016
2331.00	35594.00	36559.00	509789.77	525898.86	721823.27	781982.76	74	228	2016
2332.00	34361.00	35438.00	509996.17	526120.81	721824.16	782022.62	74	228	2016
2333.00	31957.00	33047.00	510186.47	526299.79	721915.73	782107.43	74	228	2016
2334.00	33222.00	34194.00	510380.68	526491.28	721951.47	782123.78	74	228	2016
2335.00	30840.00	31806.00	510561.11	526682.29	722032.68	782214.80	74	228	2016
2336.00	63164.00	64200.00	510766.89	526893.57	722031.63	782242.05	71	226	2016
2337.00	38944.00	39818.00	513565.15	527071.47	722131.93	772556.21	71	226	2016
2337.01	42651.00	42830.00	510960.03	513582.98	772487.72	782290.29	71	226	2016
2338.00	40038.00	40895.00	513764.84	527276.63	722139.35	772604.68	71	226	2016
2338.01	42280.00	42440.00	511158.98	513782.77	772529.51	782332.65	71	226	2016
2339.00	41046.00	42129.00	511338.53	527475.33	722190.44	782390.66	71	226	2016
2340.00	42941.00	43977.00	511541.18	527660.61	722243.45	782437.80	71	226	2016
2341.00	43905.00	44959.00	511727.34	527848.93	722335.78	782534.08	78	235	2016
2342.00	45104.00	46100.00	511918.75	528037.06	722368.79	782561.44	78	235	2016
2343.00	46237.00	47290.00	512121.39	528234.98	722431.77	782609.51	78	235	2016
2344.00	47424.00	48436.00	512305.30	528420.12	722485.96	782659.49	78	235	2016
2345.00	58777.00	59765.00	512488.37	528621.42	722509.78	782745.89	77	231	2016
2346.00	57133.00	58477.00	512691.00	533477.57	705189.96	782782.36	77	231	2016
2347.00	55697.00	56983.00	512877.39	533656.07	705282.34	782837.58	77	231	2016
2348.00	54216.00	55567.00	513077.44	533836.91	705370.25	782876.98	77	231	2016
2349.00	52735.00	54070.00	513269.72	534048.53	705402.78	782926.60	77	231	2016
2350.00	51197.00	52591.00	513467.18	534233.18	705435.95	782977.63	77	231	2016
2351.00	49724.00	51058.00	513660.84	534438.77	705473.75	783004.12	77	231	2016
2352.00	48210.00	49579.00	513861.00	534627.13	705542.51	783052.63	77	231	2016
2353.00	46719.00	48056.00	514054.79	534826.79	705620.62	783109.87	77	231	2016
2354.00	39666.00	41048.00	514238.92	535014.66	705650.19	783173.06	73	227	2016
2355.00	37127.00	38458.00	514429.95	535200.38	705684.03	783259.26	73	227	2016
2356.00	35578.00	36951.00	514644.53	535396.86	705753.01	783260.51	73	227	2016
2357.00	34069.00	35413.00	514815.73	535596.44	705794.33	783346.21	73	227	2016
2358.00	32524.00	33931.00	515017.74	535783.66	705838.15	783399.85	73	227	2016
2359.00	67795.00	69157.00	515220.95	535978.08	705908.67	783433.60	70	223	2016
2360.00	66285.00	67667.00	515400.78	536165.74	705957.99	783497.08	70	223	2016
2361.00	64806.00	66139.00	515609.60	536363.72	706024.42	783521.85	70	223	2016
2362.00	63318.00	64658.00	515785.14	536555.82	706063.34	783590.73	70	223	2016
2363.00	61837.00	63165.00	515977.87	536770.28	706054.47	783667.17	70	223	2016
2364.00	60361.00	61701.00	516167.39	536966.35	706081.68	783699.83	70	223	2016
2365.00	58890.00	60235.00	516372.66	537178.92	706051.54	783744.07	70	223	2016
2366.00	57355.00	58715.00	516551.35	537372.68	706085.59	783821.57	70	223	2016
2367.00	63324.00	64562.00	516750.14	537586.79	706072.63	783862.28	68	222	2016
2368.00	61758.00	63218.00	516949.23	537791.75	706089.33	783917.74	68	222	2016
2369.00	63644.00	64927.00	517143.30	537995.09	706058.78	783975.45	66	221	2016
2370.00	60338.00	61580.00	517334.86	538200.12	706094.18	784004.47	68	222	2016
2371.00	58727.00	60221.00	517530.01	538414.83	706094.03	784044.92	68	222	2016
2372.00	57308.00	58563.00	517712.05	538621.26	706084.86	784134.31	68	222	2016
2373.00	55684.00	57175.00	517904.25	538831.02	706083.50	784197.58	68	222	2016
2374.00	60702.00	62138.00	518103.18	539035.09	706077.58	784194.11	66	221	2016
2375.00	59195.00	60468.00	518299.68	539252.57	706042.41	784284.77	66	221	2016
2376.00	42943.00	44204.00	518465.10	539457.46	706042.07	784306.92	66	221	2016
2377.00	55790.00	57186.00	518677.75	539652.96	706093.87	784376.78	63	218	2016
2378.00	57325.00	58781.00	518861.95	540154.82	704976.79	784438.03	63	218	2016
2379.00	58916.00	60314.00	519071.89	540349.51	705040.81	784466.35	63	218	2016
2380.00	60472.00	61899.00	519263.96	540551.50	705058.82	784548.91	63	218	2016
2381.00	62023.00	63414.00	519453.46	540736.72	705111.47	784571.26	63	218	2016
2382.00	33389.00	34672.00	519647.06	540931.48	705186.59	784646.25	65	219	2016
2383.00	41430.00	42697.00	519846.94	541127.57	705243.34	784664.67	65	219	2016
2384.00	42842.00	44271.00	520039.34	541322.06	705281.88	784720.52	65	219	2016
2385.00	54291.00	55582.00	520236.56	541513.27	705315.24	784765.01	68	222	2016
2386.00	52649.00	54154.00	520425.84	541715.06	705387.49	784838.95	68	222	2016
2387.00	51204.00	52495.00	520612.34	541895.46	705454.49	784895.16	68	222	2016
2388.00	44391.00	45626.00	520808.92	542057.64	705468.72	784950.56	65	219	2016
2389.00	45784.00	47204.00	521005.63	542287.10	705542.72	785000.58	65	219	2016
2390.00	51334.00	52844.00	521199.77	542478.38	705595.08	785034.76	66	221	2016
2391.00	52985.00	54311.00	521386.56	542683.73	705649.66	785077.34	66	221	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2392.00	54496.00	55976.00	521587.68	542875.52	705682.73	785152.40	66	221	2016
2393.00	56118.00	57400.00	521782.51	543060.42	705758.98	785187.88	66	221	2016
2394.00	57585.00	59050.00	521968.74	543241.28	705816.70	785250.77	66	221	2016
2395.00	59607.00	60909.00	522168.05	543445.60	705848.33	785297.29	62	217	2016
2396.00	57984.00	59490.00	522354.36	543651.23	705876.68	785332.63	62	217	2016
2397.00	56548.00	57881.00	522544.38	543830.22	705961.61	785413.13	62	217	2016
2398.00	55034.00	56440.00	522743.31	544023.31	706026.30	785455.55	62	217	2016
2399.00	53555.00	54885.00	522940.42	544218.64	706079.19	785500.41	62	217	2016
2400.00	52004.00	53461.00	523127.76	544421.06	706066.89	785573.18	62	217	2016
2401.00	50509.00	51837.00	523315.87	544625.29	706092.34	785619.44	62	217	2016
2402.00	48952.00	50332.00	523514.10	544840.29	706067.94	785676.13	62	217	2016
2403.00	64374.00	65764.00	523716.52	545059.09	706048.25	785703.35	49	201	2016
2404.00	62831.00	64249.00	523892.53	545247.61	706080.50	785792.89	49	201	2016
2405.00	61373.00	62696.00	524094.00	545450.71	706070.69	785817.09	49	201	2016
2406.00	59857.00	61231.00	524283.29	545658.48	706083.28	785874.68	49	201	2016
2407.00	58370.00	59685.00	524475.46	545867.87	706102.74	785907.82	49	201	2016
2408.00	56840.00	58231.00	524671.05	546074.67	706088.38	785985.49	49	201	2016
2409.00	55380.00	56699.00	524859.91	546305.93	706062.42	786051.09	49	201	2016
2410.00	53838.00	55236.00	525062.50	546484.76	706085.51	786087.18	49	201	2016
2411.00	52368.00	53694.00	525250.93	546693.78	706067.26	786140.55	49	201	2016
2412.00	70598.00	71951.00	525465.29	546913.99	706074.94	786168.47	47	200	2016
2413.00	69087.00	70478.00	525634.98	547117.21	706083.73	786257.46	47	200	2016
2414.00	48072.00	49551.00	525840.49	547323.71	706086.21	786292.88	47	200	2016
2415.00	49672.00	51036.00	526028.75	547534.59	706039.93	786343.01	47	200	2016
2416.00	46571.00	47932.00	526220.28	548017.87	705024.78	786387.64	47	200	2016
2417.00	40173.00	40608.00	541457.18	548218.80	705050.54	730285.04	46	199	2016
2417.01	54153.00	55166.00	526418.97	541469.51	730239.89	786452.13	47	200	2016
2418.00	44887.00	46389.00	526616.78	548421.65	705081.70	786486.57	47	200	2016
2419.00	59835.00	61284.00	526780.82	548599.33	705133.25	786559.42	47	200	2016
2420.00	61409.00	62796.00	526980.91	548801.69	705209.37	786626.92	47	200	2016
2421.00	62961.00	64390.00	527195.28	548976.66	705233.57	786631.78	47	200	2016
2422.00	64526.00	65918.00	527380.82	549184.15	705307.06	786713.69	47	200	2016
2423.00	66064.00	67498.00	527568.54	549364.73	705360.45	786759.90	47	200	2016
2424.00	67637.00	68980.00	527768.51	549569.50	705414.38	786791.95	47	200	2016
2425.00	52683.00	54032.00	527964.68	549765.76	705483.42	786848.40	47	200	2016
2426.00	51108.00	52551.00	528146.63	549969.05	705502.11	786925.85	47	200	2016
2427.00	43433.00	44811.00	528357.36	550149.07	705581.34	786934.40	47	200	2016
2428.00	41790.00	43281.00	528538.48	550346.48	705628.82	787029.46	47	200	2016
2429.00	38711.00	40083.00	528729.49	550536.23	705670.01	787083.04	46	199	2016
2430.00	60262.00	61715.00	528929.91	550731.08	705743.81	787145.81	44	198	2016
2431.00	58742.00	60128.00	529115.34	550925.89	705793.41	787172.63	44	198	2016
2432.00	57187.00	58621.00	529316.62	551117.43	705822.25	787250.39	44	198	2016
2433.00	55643.00	57051.00	529494.64	551298.92	705899.43	787294.78	44	198	2016
2434.00	54048.00	55487.00	529712.60	551507.06	705914.86	787309.97	44	198	2016
2435.00	52506.00	53911.00	529878.41	551685.03	705979.16	787407.19	44	198	2016
2436.00	50907.00	52360.00	530090.23	551891.03	706028.05	787424.97	44	198	2016
2437.00	49370.00	50786.00	530276.17	552095.64	706047.39	787462.27	44	198	2016
2438.00	41320.00	42720.00	530454.24	552299.35	706059.12	787520.93	44	198	2016
2439.00	39788.00	41206.00	530663.09	552491.90	706090.47	787611.85	44	198	2016
2440.00	38215.00	39658.00	530883.12	552704.65	706057.02	787653.23	44	198	2016
2441.00	30964.00	32389.00	531060.64	552909.92	706089.77	787657.49	46	199	2016
2442.00	32526.00	33924.00	531242.39	553129.73	706041.10	787751.48	46	199	2016
2443.00	34053.00	35488.00	531448.11	553337.97	706049.83	787763.06	46	199	2016
2444.00	35611.00	37007.00	531638.22	553532.59	706087.71	787833.96	46	199	2016
2445.00	37138.00	38577.00	531817.60	553747.48	706045.63	787916.24	46	199	2016
2446.00	41513.00	42904.00	532019.02	553956.26	706066.08	787924.54	35	190	2016
2447.00	39914.00	41370.00	532194.65	554150.71	706058.60	788021.99	35	190	2016
2448.00	43034.00	44496.00	532413.74	554364.76	706074.80	788045.95	35	190	2016
2449.00	44646.00	46010.00	532598.62	554569.54	706078.32	788092.41	35	190	2016
2450.00	46145.00	47577.00	532802.20	554775.14	706079.07	788138.99	35	190	2016
2451.00	47735.00	49086.00	532976.72	554992.18	706067.84	788231.28	35	190	2016
2452.00	49187.00	50657.00	533183.81	555206.44	706049.42	788282.86	35	190	2016
2453.00	33895.00	35170.00	533362.00	552542.89	716695.79	788338.50	44	198	2016
2453.01	43613.00	43813.00	552545.70	555699.93	704977.73	716700.25	44	198	2016
2454.00	35295.00	36558.00	533563.69	552750.52	716740.29	788363.39	44	198	2016
2454.01	43280.00	43480.00	552729.18	555878.84	705016.96	716794.91	44	198	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2455.00	36870.00	38141.00	533754.56	552951.59	716754.99	788391.60	44	198	2016
2455.01	42835.00	43042.00	552927.15	556085.21	705084.83	716839.62	44	198	2016
2456.00	48557.00	50096.00	533945.78	556261.62	705163.92	788462.60	42	196	2016
2457.00	54774.00	56129.00	534153.65	554881.22	711089.06	788491.40	31	187	2016
2457.01	38654.00	38751.00	554863.22	556452.66	705219.53	711131.36	33	189	2016
2458.00	53173.00	54651.00	534333.24	556644.44	705258.11	788584.06	31	187	2016
2459.00	32425.00	33676.00	534525.50	553727.56	716967.24	788622.43	44	198	2016
2459.01	43990.00	44186.00	553709.91	556861.22	705272.69	717023.28	44	198	2016
2460.00	37509.00	38058.00	548216.23	557040.06	705364.25	738315.15	33	189	2016
2460.01	47574.00	48436.00	534714.59	548212.56	738304.04	788690.81	42	196	2016
2461.00	35817.00	37357.00	534924.37	557230.35	705386.91	788711.38	33	189	2016
2462.00	34258.00	35673.00	535110.93	557421.67	705438.01	788778.30	33	189	2016
2463.00	32559.00	34098.00	535308.87	557619.96	705499.01	788804.44	33	189	2016
2464.00	51525.00	52978.00	535488.71	557797.44	705530.05	788893.95	31	187	2016
2465.00	49939.00	51411.00	535696.65	557996.10	705624.44	788913.10	31	187	2016
2466.00	41182.00	42615.00	535892.95	558193.07	705685.22	788982.67	30	187	2016
2467.00	39643.00	41056.00	536077.83	558393.34	705725.39	789035.15	30	187	2016
2468.00	38043.00	39489.00	536268.09	558594.57	705740.77	789112.54	30	187	2016
2469.00	36502.00	37914.00	536457.44	558781.58	705813.08	789136.44	30	187	2016
2470.00	34893.00	36348.00	536682.55	558984.30	705848.27	789161.62	30	187	2016
2471.00	33332.00	34763.00	536840.47	559185.40	705896.38	789261.53	30	187	2016
2472.00	31761.00	33183.00	537052.04	559377.86	705947.00	789261.38	30	187	2016
2473.00	44013.00	45476.00	537244.00	559560.64	706000.43	789351.07	28	185	2016
2474.00	42401.00	43877.00	537434.10	559754.54	706034.81	789371.90	28	185	2016
2475.00	40800.00	42235.00	537634.77	559960.89	706056.37	789475.05	28	185	2016
2476.00	39186.00	40682.00	537801.23	560158.12	706087.56	789504.19	28	185	2016
2477.00	37588.00	39038.00	538003.36	560370.44	706071.93	789545.42	28	185	2016
2478.00	35770.00	36887.00	543897.75	560579.54	706084.05	768365.52	28	185	2016
2479.00	34513.00	35591.00	544088.60	560805.54	706044.83	768410.91	28	185	2016
2480.00	63026.00	64026.00	544293.00	560997.72	706074.50	768427.26	26	181	2016
2481.00	61798.00	62909.00	544467.89	561200.42	706049.70	768517.00	26	181	2016
2482.00	60637.00	61672.00	544656.01	561418.41	706031.93	768581.62	26	181	2016
2483.00	59399.00	60502.00	544868.37	561601.03	706039.10	768575.57	26	181	2016
2484.00	58246.00	59256.00	545070.71	561822.22	706070.07	768676.07	26	181	2016
2485.00	57030.00	58145.00	545236.95	562036.38	706063.16	768722.03	26	181	2016
2486.00	55857.00	56877.00	545454.08	562233.24	706088.68	768738.70	26	181	2016
2487.00	54598.00	55734.00	545631.18	562462.62	706040.60	768807.15	26	181	2016
2488.00	53415.00	54446.00	545825.77	562661.99	706027.91	768881.13	26	181	2016
2489.00	52158.00	53282.00	546017.72	562846.20	706062.20	768925.63	26	181	2016
2490.00	67903.00	69055.00	546213.22	563351.44	704994.73	768949.76	25	180	2016
2491.00	66679.00	67779.00	546399.86	563555.57	705020.68	769045.40	25	180	2016
2492.00	65438.00	66549.00	546602.26	563739.98	705077.22	769055.67	25	180	2016
2493.00	64138.00	65265.00	546805.92	563939.33	705138.98	769095.94	25	180	2016
2494.00	62885.00	63978.00	546980.58	564137.11	705159.12	769186.93	25	180	2016
2495.00	61571.00	62743.00	547187.44	564317.18	705222.74	769232.40	25	180	2016
2496.00	60298.00	61431.00	547369.64	564515.23	705280.11	769260.12	25	180	2016
2497.00	59000.00	60151.00	547565.84	564703.59	705351.00	769328.89	25	180	2016
2498.00	57753.00	58853.00	547766.79	564899.90	705402.93	769355.48	25	180	2016
2499.00	56441.00	57599.00	547953.87	565088.22	705456.61	769414.28	25	180	2016
2500.00	63164.00	64256.00	548149.59	565299.34	705459.07	769473.39	24	179	2016
2501.00	61925.00	63016.00	548337.92	565491.06	705536.79	769563.35	24	179	2016
2502.00	60728.00	61809.00	548533.28	565677.92	705581.40	769582.67	24	179	2016
2503.00	59479.00	60593.00	548723.58	565871.56	705650.50	769639.02	24	179	2016
2504.00	58265.00	59350.00	548921.84	566067.31	705701.86	769704.15	24	179	2016
2505.00	56988.00	58100.00	549115.67	566268.17	705730.46	769722.64	24	179	2016
2506.00	55750.00	56846.00	549298.99	566443.88	705802.52	769789.61	24	179	2016
2507.00	54474.00	55587.00	549502.78	566661.73	705830.43	769837.27	24	179	2016
2508.00	32914.00	33741.00	549673.56	562680.69	721466.33	769910.59	23	179	2016
2508.01	54071.00	54339.00	562655.34	566839.46	705910.95	721494.81	24	179	2016
2509.00	31924.00	32811.00	549894.01	563914.22	717637.71	769941.67	23	179	2016
2509.01	53601.00	53803.00	563884.44	567030.61	705959.70	717697.47	24	179	2016
2510.00	66355.00	67437.00	550082.83	567229.56	706018.94	770003.94	22	177	2016
2511.00	65124.00	66212.00	550265.97	567419.89	706055.71	770052.38	22	177	2016
2512.00	63923.00	65016.00	550466.49	567634.07	706057.60	770122.31	22	177	2016
2513.00	62664.00	63788.00	550655.33	567836.15	706046.62	770143.03	22	177	2016
2514.00	61406.00	62524.00	550860.07	568035.57	706053.57	770190.25	22	177	2016

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LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2515.00	60139.00	61255.00	551046.10	568245.72	706048.72	770262.34	22	177	2016
2516.00	58643.00	59708.00	551247.36	568451.74	706075.79	770297.67	22	177	2016
2517.00	57322.00	58486.00	551439.84	568670.97	706057.08	770348.04	22	177	2016
2518.00	56077.00	57160.00	551634.26	568880.52	706040.78	770388.87	22	177	2016
2519.00	54784.00	55940.00	551820.11	569087.51	706046.70	770446.51	22	177	2016
2520.00	48180.00	49219.00	552008.73	569272.13	706050.86	770531.33	21	177	2016
2521.00	46917.00	48063.00	552202.52	569486.86	706074.83	770571.65	21	177	2016
2522.00	45727.00	46746.00	552410.25	569709.93	706051.31	770646.00	21	177	2016
2523.00	44408.00	45602.00	552585.95	569908.14	706053.76	770701.32	21	177	2016
2524.00	43176.00	44212.00	552784.29	570109.57	706061.13	770745.40	21	177	2016
2525.00	39559.00	40747.00	552985.19	570322.81	706038.75	770763.72	21	177	2016
2526.00	38783.00	39407.00	559934.56	570539.16	706024.34	745594.76	21	177	2016
2526.01	40868.00	41283.00	553188.62	559943.11	745549.93	770819.53	21	177	2016
2527.00	37819.00	38592.00	559604.29	571021.94	704958.04	747588.17	21	177	2016
2527.01	41555.00	41991.00	553371.45	559607.13	747573.99	770868.87	21	177	2016
2528.00	36928.00	37661.00	559274.35	571218.56	705005.07	749598.98	21	177	2016
2528.01	42100.00	42467.00	553547.72	559284.49	749544.74	770939.41	21	177	2016
2529.00	35828.00	36664.00	559469.90	571415.66	705063.96	749624.21	21	177	2016
2529.01	42677.00	43071.00	553743.73	559484.14	749576.59	771000.34	21	177	2016
2530.00	39322.00	40462.00	553942.48	571615.48	705081.04	771035.60	18	170	2016
2531.00	38046.00	39202.00	554133.70	571805.55	705185.72	771112.47	18	170	2016
2532.00	36749.00	37889.00	554332.11	571993.15	705206.66	771136.53	18	170	2016
2533.00	35475.00	36625.00	554509.16	572190.38	705256.36	771218.72	18	170	2016
2534.00	34227.00	35341.00	554727.22	572384.00	705323.18	771237.62	18	170	2016
2535.00	32914.00	34088.00	554900.53	572585.68	705338.20	771307.34	18	170	2016
2536.00	30914.00	32221.00	555093.74	572766.50	705429.01	771363.75	14	168	2016
2537.00	32376.00	33411.00	555268.10	572970.25	705469.46	771421.66	14	168	2016
2538.00	33562.00	34860.00	555475.12	573144.67	705523.46	771475.02	14	168	2016
2539.00	36111.00	37310.00	555677.42	573355.41	705559.79	771490.60	13	167	2016
2540.00	37422.00	38423.00	555872.93	573544.10	705607.96	771525.18	13	167	2016
2541.00	34992.00	36010.00	556052.89	573746.38	705664.56	771621.16	14	168	2016
2542.00	36161.00	37448.00	556260.50	573916.60	705722.55	771668.87	14	168	2016
2543.00	37577.00	38593.00	556449.96	574123.69	705808.12	771719.37	14	168	2016
2544.00	38737.00	40010.00	556653.25	574303.19	705846.85	771756.17	14	168	2016
2545.00	42363.00	43505.00	556838.55	574497.48	705893.30	771786.41	12	164	2016
2546.00	43656.00	44830.00	557040.22	574699.59	705928.28	771842.65	12	164	2016
2547.00	40114.00	41128.00	557219.30	574893.87	706010.09	771938.53	14	168	2016
2548.00	48836.00	50173.00	557413.21	575075.60	706039.30	771971.90	15	168	2016
2549.00	50267.00	51299.00	557610.32	575288.89	706066.83	772007.00	15	168	2016
2550.00	51455.00	52729.00	557794.70	575503.40	706032.63	772080.73	15	168	2016
2551.00	52862.00	53893.00	557983.65	575697.92	706064.94	772150.80	15	168	2016
2552.00	54015.00	55332.00	558183.43	575900.64	706033.85	772186.39	15	168	2016
2553.00	55446.00	56477.00	558407.01	576122.13	706074.97	772217.80	15	168	2016
2554.00	56647.00	57957.00	558574.79	576310.11	706059.66	772292.84	15	168	2016
2555.00	58092.00	59152.00	558782.18	576542.01	706055.45	772304.06	15	168	2016
2556.00	59298.00	60594.00	558955.13	576718.74	706063.83	772396.57	15	168	2016
2557.00	31606.00	32856.00	559168.96	576953.56	706023.78	772419.28	16	169	2016
2558.00	32998.00	34047.00	559344.83	577152.58	706057.36	772501.68	16	169	2016
2559.00	44853.00	46008.00	559538.01	577371.56	706035.52	772537.94	11	163	2016
2560.00	46145.00	47326.00	559735.41	577557.55	706067.77	772578.52	11	163	2016
2561.00	47464.00	48626.00	559933.35	577763.40	706023.82	772640.23	11	163	2016
2562.00	48759.00	49953.00	560119.69	577991.56	706041.82	772691.18	11	163	2016
2563.00	50096.00	51260.00	560311.36	578176.98	706055.08	772770.53	11	163	2016
2564.00	51385.00	52595.00	560510.44	578710.59	704915.20	772789.73	11	163	2016
2565.00	41025.00	42245.00	560700.13	578884.11	704985.75	772873.92	12	164	2016
2566.00	44938.00	46127.00	560896.46	579069.52	705049.82	772918.34	12	164	2016
2567.00	34190.00	35430.00	561093.79	579274.55	705094.98	772955.23	16	169	2016
2568.00	48754.00	49912.00	561291.21	579452.42	705162.96	772998.04	10	161	2016
2569.00	47416.00	48606.00	561474.34	579661.42	705178.32	773068.09	10	161	2016
2570.00	46134.00	47299.00	561674.03	579854.97	705257.60	773083.02	10	161	2016
2571.00	44768.00	45988.00	561868.12	580051.74	705312.31	773162.84	10	161	2016
2572.00	43471.00	44647.00	562048.05	580244.02	705379.63	773218.37	10	161	2016
2573.00	58182.00	59342.00	562251.41	580422.15	705427.31	773286.43	6	157	2016
2574.00	56732.00	58060.00	562441.06	580626.51	705452.91	773326.87	6	157	2016
2575.00	55396.00	56560.00	562647.73	580820.87	705515.53	773349.16	6	157	2016
2576.00	53911.00	55250.00	562821.91	581010.66	705558.41	773425.47	6	157	2016

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2577.00	52614.00	53763.00	563029.30	581201.57	705630.98	773444.80	6	157	2016
2578.00	31818.00	32971.00	563211.07	581404.06	705663.05	773549.95	6	157	2016
2579.00	33120.00	34380.00	563419.91	581598.30	705684.39	773587.63	6	157	2016
2580.00	34504.00	35650.00	563613.27	581781.01	705780.21	773602.68	6	157	2016
2581.00	35788.00	37079.00	563791.94	581985.73	705794.79	773676.71	6	157	2016
2582.00	37198.00	38339.00	563986.63	582161.41	705882.74	773748.85	6	157	2016
2583.00	38480.00	39748.00	564177.97	582369.45	705942.05	773787.07	6	157	2016
2584.00	39872.00	41033.00	564371.86	582545.40	705985.81	773829.55	6	157	2016
2585.00	51205.00	52538.00	564568.46	582744.05	706034.12	773882.26	6	157	2016
2586.00	49899.00	51049.00	564766.52	582957.17	706017.45	773928.62	6	157	2016
2587.00	53623.00	54814.00	564956.24	583155.98	706035.38	773986.13	9	160	2016
2588.00	54943.00	56127.00	565153.54	583360.61	706070.95	774033.94	9	160	2016
2589.00	56274.00	57499.00	565344.57	583580.04	706021.06	774077.93	9	160	2016
2590.00	57642.00	58844.00	565529.33	583772.35	706057.59	774126.70	9	160	2016
2591.00	58969.00	60159.00	565724.39	583986.31	706035.62	774211.00	9	160	2016
2592.00	60294.00	61513.00	565924.42	584196.17	706058.76	774261.47	9	160	2016
2593.00	61639.00	62856.00	566107.17	584397.93	706051.32	774326.75	9	160	2016
2594.00	35569.00	36640.00	566320.45	584602.35	706038.73	774369.24	16	169	2016
2595.00	36757.00	38000.00	566506.91	584810.43	706024.32	774371.97	16	169	2016
2596.00	38145.00	39235.00	566696.11	585019.34	706046.57	774478.37	16	169	2016
2597.00	49180.00	50455.00	566882.58	585219.15	706063.25	774528.53	17	169	2016
2598.00	50573.00	51709.00	567075.46	585437.52	706052.41	774525.53	17	169	2016
2599.00	51860.00	53109.00	567276.55	585634.43	706047.85	774628.24	17	169	2016
2600.00	53222.00	54303.00	567466.24	585854.53	706054.13	774637.99	17	169	2016
2601.00	54479.00	55752.00	567648.72	586063.61	706015.74	774724.74	17	169	2016
2602.00	55866.00	56984.00	567860.50	586560.61	704945.23	774748.01	17	169	2016
2603.00	57152.00	58449.00	568039.18	586744.18	705030.53	774837.57	17	169	2016
2604.00	58552.00	59658.00	568256.49	586956.31	705046.18	774833.07	17	169	2016
2605.00	30030.00	31268.00	568430.39	587128.43	705152.70	774940.59	18	170	2016
2606.00	31399.00	32596.00	568624.59	587327.32	705169.05	774985.43	18	170	2016
2607.00	39380.00	39709.00	582781.00	587535.64	705207.38	722875.36	16	169	2016
2608.00	39809.00	40102.00	582991.21	587711.95	705308.22	722922.43	16	169	2016
2609.00	40244.00	40570.00	583193.29	587907.12	705304.60	722954.35	16	169	2016
2610.00	40666.00	40954.00	583373.15	588115.89	705366.93	722980.02	16	169	2016
2611.00	41104.00	41439.00	583564.59	588275.39	705443.27	723041.59	16	169	2016
2612.00	41587.00	41871.00	583737.30	588483.29	705489.72	723128.30	16	169	2016
2613.00	41989.00	42321.00	583947.45	588681.20	705524.44	723157.28	16	169	2016
2614.00	50139.00	50458.00	584147.31	588865.22	705604.65	723228.66	4	156	2016
2615.00	49707.00	50023.00	584339.96	589063.30	705627.48	723246.65	4	156	2016
2616.00	49254.00	49579.00	584536.69	589256.07	705685.34	723306.00	4	156	2016
2617.00	48828.00	49140.00	584720.87	589440.86	705745.01	723382.61	4	156	2016
2618.00	39677.00	39997.00	584928.27	589655.28	705805.79	723399.24	4	156	2016
2619.00	39233.00	39554.00	585119.45	589833.16	705859.04	723481.23	4	156	2016
2620.00	38787.00	39117.00	585312.66	590027.70	705889.26	723529.35	4	156	2016
2621.00	38346.00	38662.00	585502.27	590225.45	705961.60	723590.91	4	156	2016
2622.00	37881.00	38205.00	585700.26	590428.49	705988.98	723610.39	4	156	2016
2623.00	37452.00	37772.00	585889.71	590625.62	706011.75	723704.04	4	156	2016
2624.00	37019.00	37346.00	586087.70	590817.01	706061.23	723723.93	4	156	2016
2625.00	36554.00	36877.00	586270.94	591040.87	706016.81	723800.49	4	156	2016
2626.00	36089.00	36411.00	586462.59	591240.71	706052.17	723848.64	4	156	2016
2627.00	35631.00	35947.00	586671.38	591446.07	706026.65	723882.43	4	156	2016
2628.00	35206.00	35529.00	586847.57	591665.20	706047.75	723940.60	4	156	2016
2629.00	34747.00	35077.00	587063.57	591851.56	706048.02	723968.48	4	156	2016
2630.00	34273.00	34597.00	587239.27	592071.41	706016.93	724064.95	4	156	2016
2631.00	33819.00	34143.00	587440.95	592270.88	706028.66	724106.27	4	156	2016
2632.00	33381.00	33708.00	587627.10	592482.38	706049.31	724142.03	4	156	2016
2633.00	32917.00	33248.00	587834.31	592693.41	706015.08	724180.13	4	156	2016
2634.00	32445.00	32764.00	588019.27	592904.42	706010.97	724246.56	4	156	2016
2635.00	31985.00	32307.00	588228.11	593093.39	706048.89	724276.90	4	156	2016
2636.00	31515.00	31846.00	588395.29	593322.39	706059.41	724378.91	4	156	2016
2637.00	31047.00	31384.00	588581.17	593515.62	706023.59	724421.39	4	156	2016
2638.00	57364.00	57669.00	588779.69	593727.54	706011.98	724475.69	2	155	2016
2639.00	56852.00	57206.00	588998.92	594210.67	704953.49	724490.68	2	155	2016
2640.00	56410.00	56739.00	589181.51	594408.26	705022.47	724548.03	2	155	2016
2641.00	55938.00	56277.00	589377.07	594595.92	705054.27	724600.17	2	155	2016
2642.00	55484.00	55804.00	589567.04	594801.10	705116.33	724640.78	2	155	2016

Tellus A2 Block – FLOWN LINES (Spectrometer)
IRENET95, Irish Transverse Mercator

LINE	TIME	TIME	MIN X	MAX X	MIN Y	MAX Y	FLIGHT	DAY	YEAR
2643.00	55014.00	55362.00	589753.78	595003.89	705161.48	724730.05	2	155	2016
2644.00	54583.00	54909.00	589946.45	595174.63	705236.95	724765.39	2	155	2016
2645.00	54096.00	54434.00	590132.29	595385.34	705239.13	724834.50	2	155	2016
2646.00	53645.00	53966.00	590335.86	595558.72	705341.23	724888.32	2	155	2016
2647.00	53194.00	53542.00	590523.21	595763.97	705343.64	724945.14	2	155	2016
2648.00	52756.00	53078.00	590718.85	595961.17	705405.13	724958.76	2	155	2016
2649.00	52281.00	52624.00	590926.43	596139.02	705498.46	725022.02	2	155	2016
2650.00	51825.00	52168.00	591102.37	596351.18	705521.62	725102.48	2	155	2016
2651.00	51341.00	51696.00	591289.05	596526.08	705590.34	725146.95	2	155	2016
2652.00	50868.00	51205.00	591496.56	596730.22	705624.05	725167.21	2	155	2016
2653.00	50378.00	50728.00	591679.94	596929.98	705658.84	725251.39	2	155	2016
2654.00	49902.00	50233.00	591872.67	597123.99	705716.10	725299.52	2	155	2016
2655.00	49413.00	49751.00	592084.51	597309.01	705793.44	725328.52	2	155	2016
2656.00	48945.00	49275.00	592255.64	597499.04	705821.32	725397.37	2	155	2016
2657.00	48464.00	48802.00	592468.52	597695.35	705905.36	725439.20	2	155	2016
2658.00	48020.00	48350.00	592650.99	597886.86	705949.48	725489.28	2	155	2016
2659.00	47507.00	47867.00	592836.73	598083.57	705982.92	725560.28	2	155	2016
2660.00	40121.00	40463.00	593036.40	598274.19	706024.56	725597.24	2	155	2016
2661.00	39630.00	39979.00	593233.46	598489.05	706019.81	725623.70	2	155	2016
2662.00	39160.00	39496.00	593414.63	598684.81	706028.90	725724.24	2	155	2016
2663.00	38674.00	39029.00	593623.42	598895.26	706025.18	725744.96	2	155	2016
2664.00	38226.00	38569.00	593815.28	599105.89	706020.05	725790.70	2	155	2016
2665.00	37750.00	38095.00	594008.50	599303.39	706059.19	725840.73	2	155	2016
2666.00	37308.00	37640.00	594200.86	599523.65	706039.33	725888.67	2	155	2016
2667.00	36824.00	37167.00	594383.45	599732.29	706022.61	725967.81	2	155	2016
2668.00	36358.00	36691.00	594586.26	599936.45	706033.64	726028.21	2	155	2016
2669.00	35877.00	36223.00	594774.25	600146.61	706022.09	726081.56	2	155	2016
2670.00	35383.00	35732.00	594967.60	600335.44	706053.75	726131.66	2	155	2016
2671.00	34917.00	35275.00	595155.82	600560.64	706022.62	726185.66	2	155	2016
2672.00	34430.00	34789.00	595356.50	600754.38	706038.96	726228.32	2	155	2016
2673.00	33948.00	34303.00	595561.21	600980.79	706007.07	726255.19	2	155	2016
2674.00	33461.00	33820.00	595745.45	601173.18	706035.34	726345.18	2	155	2016
2675.00	32956.00	33309.00	595940.19	601378.80	706059.46	726370.61	2	155	2016
2676.00	32440.00	32807.00	596132.05	601890.81	704916.26	726444.78	2	155	2016
2677.00	31898.00	32276.00	596322.32	602082.72	704976.16	726472.82	2	155	2016
2678.00	31401.00	31785.00	596505.01	602271.18	705043.54	726552.40	2	155	2016
2679.00	60768.00	61156.00	596713.27	602470.93	705078.40	726553.00	1	154	2016
2680.00	60259.00	60621.00	596893.17	602658.34	705124.82	726651.79	1	154	2016
2681.00	59765.00	60148.00	597089.72	602853.25	705171.44	726696.83	1	154	2016
2682.00	59219.00	59601.00	597286.92	603044.95	705252.06	726747.73	1	154	2016
2683.00	58688.00	59069.00	597487.59	603222.35	705320.40	726767.72	1	154	2016
2684.00	58159.00	58523.00	597683.90	603440.07	705342.94	726839.51	1	154	2016
2685.00	57664.00	58042.00	597870.80	603617.87	705420.44	726870.02	1	154	2016
2686.00	57124.00	57499.00	598069.13	603817.16	705450.91	726920.23	1	154	2016
2687.00	56591.00	56984.00	598259.23	604000.65	705514.26	726999.26	1	154	2016
2688.00	56080.00	56443.00	598450.69	604205.02	705553.29	727054.95	1	154	2016
2689.00	55560.00	55947.00	598637.09	604389.17	705606.60	727118.41	1	154	2016
2690.00	55033.00	55404.00	598832.45	604589.33	705682.54	727155.46	1	154	2016
2691.00	54511.00	54898.00	599031.07	604770.02	705710.69	727178.51	1	154	2016
2692.00	53983.00	54349.00	599222.74	604967.80	705797.17	727276.87	1	154	2016
2693.00	53481.00	53851.00	599413.94	605162.78	705838.93	727317.96	1	154	2016
2694.00	52939.00	53309.00	599603.66	605364.40	705853.64	727343.34	1	154	2016
2695.00	52410.00	52810.00	599797.43	605571.86	705862.05	727405.43	1	154	2016
2696.00	51848.00	52237.00	599986.64	605778.02	705841.72	727466.44	1	154	2016
2697.00	51321.00	51703.00	600187.78	605973.95	705899.77	727523.47	1	154	2016
2698.00	50745.00	51121.00	600375.69	606196.68	705847.59	727579.82	1	154	2016
2699.00	50197.00	50575.00	600582.35	606400.65	705869.02	727588.17	1	154	2016

SGL

Appendix IV

Reflights

Original Flight		Re-Flights		
Line	Flight	Line	Flight	Reason
223.00	0054	223.01	0055	Partial due to logistics
229.00	0054	229.01	0059	Partial due to fog
230.00	0054	230.01	0059	Partial due to fog
231.00	0054	231.01	0059	Partial due to fog
232.00	0054	232.01	0060	Partial due to fog
238.00	0056	238.01	0056	Partial due to fog
239.00	0056	239.01	0063	Partial due to fog
241.00	0084	241.01	0105	Excessive height over mountains
245.00	0084	245.01	0084	Partial due to air traffic control
246.00	0084	246.01	0105	Excessive height over mountains
247.00	0084	247.01	0085	Partial due to clouds
247.01	0085	247.02	0108	Partial due to clouds
247.02	0108	247.03	0108	FEM issues
248.00	0084	248.01	0084	Partial due to clouds
2133.00	0095	2133.01	0098	Partial due to low ceiling
2134.00	0095	2134.01	0098	Partial due to low ceiling
2135.00	0095	2135.01	0098	Partial due to low ceiling
2136.00	0095	2136.01	0098	Partial due to low ceiling
2137.00	0095	2137.01	0098	Partial due to low ceiling
2138.00	0095	2138.01	0098	Partial due to low ceiling
2139.00	0095	2139.01	0098	Partial due to low ceiling
2140.00	0095	2140.01	0098	Partial due to low ceiling
2141.00	0095	2141.01	0098	Partial due to low ceiling
2142.00	0095	2142.01	0098	Partial due to low ceiling
2143.00	0095	2143.01	0098	Partial due to low ceiling
2144.00	0095	2144.01	0098	Partial due to low ceiling
2145.00	0095	2145.01	0098	Partial due to low ceiling
2146.00	0095	2146.01	0098	Partial due to low ceiling
2147.00	0088	2147.01	0098	Partial due to low ceiling and strong winds
2149.00	0095	2149.01	0098	Partial due to low ceiling
2150.00	0095	2150.01	0098	Partial due to low ceiling
2151.00	0095	2151.01	0098	Partial due to low ceiling
2152.00	0098	2152.01	0099	Partial due to logistics
2154.00	0099	2154.01	0102	Partial due to logistics
2155.00	0099	2155.01	0102	Partial due to logistics
2156.00	0095	2156.01	0099	Partial due to low ceiling

Original Flight		Re-Flights		
Line	Flight	Line	Flight	Reason
2157.00	0095	2157.01	0099	Partial due to low ceiling
2158.00	0095	2158.01	0099	Partial due to low ceiling
2159.00	0095	2159.01	0099	Partial due to low ceiling
2160.00	0095	2160.01	0099	Partial due to low ceiling
2161.00	0095	2161.01	0102	Partial due to low ceiling
2162.00	0095	2162.01	0102	Partial due to low ceiling
2163.00	0095	2163.01	0102	Partial due to low ceiling
2164.00	0095	2164.01	0102	Partial due to low ceiling
2165.00	0095	2165.01	0102	Partial due to low ceiling
2166.00	0095	2166.01	0102	Partial due to low ceiling
2167.00	0095	2167.01	0102	Partial due to low ceiling
2168.00	0095	2168.01	0102	Partial due to low ceiling
2169.00	0095	2169.01	0102	Partial due to low ceiling
2170.00	0095	2170.01	0102	Partial due to low ceiling
2171.00	0095	2171.01	0102	Partial due to low ceiling
2173.00	0095	2173.01	0102	Partial due to low ceiling
2174.00	0095	2174.01	0106	Partial due to low ceiling
2175.00	0095	2175.01	0106	Partial due to low ceiling
2176.00	0095	2176.01	0106	Partial due to low ceiling
2177.00	0095	2177.01	0106	Partial due to low ceiling
2178.00	0095	2178.01	0106	Partial due to low ceiling
2179.00	0095	2179.01	0106	Partial due to low ceiling
2180.00	0090	2180.01	0106	Partial due to low ceiling
2181.00	0090	2181.01	0105	Partial due to low ceiling
2182.00	0090	2182.01	0105	Partial due to low ceiling
2182.01	0105	2182.02	0108	FEM issues
2182.02	0108	2182.03	0108	FEM issues
2183.00	0095	2183.01	0105	Partial due to low ceiling
2184.00	0095	2184.01	0106	Partial due to low ceiling
2186.00	0090	2186.01	0102	Partial due to low ceiling
2187.00	0090	2187.01	0102	Partial due to low ceiling
2188.00	0090	2188.01	0102	Partial due to low ceiling
2189.00	0090	2189.01	0102	Partial due to low ceiling
2190.00	0102	2190.01	0102	Partial due to logistics
2193.00	0103	2193.01	0103	Partial due to logistics
2194.00	0091	2194.01	0106	Partial due to fog
2195.00	0093	2195.01	0106	Partial due to low ceiling
2196.00	0093	2196.01	0106	Partial due to low ceiling

Original Flight		Re-Flights		
Line	Flight	Line	Flight	Reason
2197.00	0103	2197.01	0103	Partial due to logistics
2198.00	0103	2198.01	0103	Partial due to logistics
2198.01	0103	2198.02	0108	Partial due to low ceilings and heavy rainFEM issues
2198.02	0108	2198.03	0108	FEM issues
2198.03	0108	2198.04	0115	FEM issues
2199.00	0105	2199.01	0108	Partial due to fog
2200.00	0105	2200.01	0108	Partial due to fog
2200.01	0108	2200.02	0108	FEM issues
2200.02	0108	2200.03	0115	FEM issues
2201.00	0105	2201.01	0108	Partial due to fog
2201.01	0108	2201.02	0115	FEM issues
2202.00	0105	2202.01	0108	Partial due to fog
2202.01	0108	2202.02	0115	FEM issues
2203.00	0105	2203.01	0108	Partial due to fog
2203.01	0108	2203.02	0115	FEM issues
2213.00	0089	2213.01	0108	Partial due to low ceiling
2213.01	0108	2213.02	0115	FEM issues
2214.00	0089	2214.01	0108	Partial due to low ceiling
2214.01	0108	2214.02	0115	FEM issues
2215.00	0089	2215.01	0108	Partial due to low ceiling
2215.01	0108	2215.02	0115	FEM issues
2216.00	0089	2216.01	0106	Partial due to low ceiling
2217.00	0089	2217.01	0105	Partial due to low ceiling
2218.00	0089	2218.01	0099	Partial due to low ceiling
2219.00	0089	2219.01	0099	Partial due to low ceiling
2220.00	0089	2220.01	0092	Partial due to low ceiling
2221.00	0089	2221.01	0092	Partial due to low ceiling
2222.00	0089	2222.01	0092	Partial due to low ceiling
2223.00	0089	2223.01	0092	Partial due to low ceiling
2224.00	0089	2224.01	0092	Partial due to low ceiling
2225.00	0089	2225.01	0092	Partial due to low ceiling
2226.00	0089	2226.01	0092	Partial due to low ceiling
2227.00	0089	2227.01	0092	Partial due to low ceiling
2228.00	0089	2228.01	0092	Partial due to low ceiling
2229.00	0089	2229.01	0092	Partial due to low ceiling
2230.00	0089	2230.01	0092	Partial due to low ceiling
2231.00	0089	2231.01	0092	Partial due to low ceiling

Original Flight		Re-Flights		
Line	Flight	Line	Flight	Reason
2232.00	0089	2232.01	0092	Partial due to low ceiling
2233.00	0090	2233.01	0091	Partial due to low ceiling
2234.00	0094	2234.01	0105	Partial due to fog
2235.00	0094	2235.01	0105	Partial due to fog
2236.00	0094	2236.01	0099	Partial due to fog
2239.00	0088	2239.01	0091	Partial due to low ceiling and strong winds
2239.01	0091	2239.02	0105	FEM issues
2240.00	0087	2240.01	0091	Partial due to low ceiling and strong winds
2244.00	0087	2244.01	0099	Partial due to low ceiling and strong winds
2245.00	0087	2245.01	0099	Partial due to low ceiling and strong winds
2246.00	0087	2246.01	0099	Partial due to low ceiling and strong winds
2248.00	0087	2248.01	0099	Partial due to low ceiling and strong winds
2259.00	0087	2259.01	0092	Partial due to low ceiling and strong winds
2260.00	0087	2260.01	0092	Partial due to low ceiling and strong winds
2262.00	0087	2262.01	0092	Partial due to low ceiling and strong winds
2263.00	0087	2263.01	0092	Partial due to low ceiling and strong winds
2264.00	0087	2264.01	0092	Partial due to low ceiling and strong winds
2265.00	0087	2265.01	0092	Partial due to low ceiling and strong winds
2266.00	0087	2266.01	0092	Partial due to low ceiling and strong winds
2274.00	0064	2274.01	0064	Partial due to rain
2288.00	0066	2288.01	0067	Partial due to rain
2315.00	0076	2315.01	0077	Partial due to fog.
2317.00	0071	2317.01	0071	Partial due to rain
2318.00	0071	2318.01	0073	Partial due to rain
2319.00	0071	2319.01	0108	FEM issues
2337.00	0071	2337.01	0071	Partial due to rain
2338.00	0071	2338.01	0071	Partial due to rain
2457.00	0031	2457.01	0033	Partial due to logistics
2460.00	0033	2460.01	0043	Partial due to rain
2508.00	0023	2508.01	0024	Partial due to rain
2509.00	0023	2509.01	0024	Partial due to rain
2526.00	0021	2526.01	0021	Partial due to fog
2527.00	0021	2527.01	0021	Partial due to fog
2528.00	0021	2528.01	0021	Partial due to fog
2529.00	0021	2529.01	0021	Partial due to fog
2557.00	0016	2557.01	0078	FEM issues

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Appendix V

Equipment List

Part	Serial No.	Description	Manufacturer
Aircraft C-GSGF	DHC-6-642	Twin Otter Series 300, DE HAVILLAND (SGF)	DE HAVILLAND
Barometric Sensor	1347373	HONEYWELL MODEL TJE ABSOLUTE PRESSURE SENSOR	HONEYWELL
Collins Rad Alt	7497	860F-1 Radio Altimeter	Collins
Data acquisition computer	CDAC-20	CPCI Data Acquisition computer	SGL
EM Computer	SGFEM-CI-01	Frequency EM Control Interface	SGL
Fluxgate Magnetometer	487	model TFM100G2-1E	Billingsley Magnetics
GPS Antenna	NZT07260011	Model 702L, w OMNISTAR, L1/L2 Kinematic GPS Antenna	Novatel
GPS Antenna	NAE10170022	Model 702-GG, L1/L2 Kinematic GPS Antenna	Novatel
GPS Receiver	4101	Septentrio Dual frequency multi ant. GPS/SBAS receiver	Novatel
Laser Profilometer	9996756	LD90-31K-HiP, 11-28VDC laser rangefinder.	Septentrio
Magnetometer Sensor	75543-C2461	model G-822A	Riegl
Magnetometer Sensor	75129-C057	model G-822A	Geometrics
Magnetometer Sensor	75231-C020	model G-822A	Geometrics
Magnetometer Sensor	75230-C365	model G-822A	Geometrics
Magnetometer Sensor	75368-C1576	model G-822A	Geometrics
SGRef Station	M-SGREF-59	CPCI ground station – 28Vdc input	SGL
SGRef Station	M-SGREF-62	CPCI ground station – 28Vdc input	SGL
Spectrometer detector	5557	RSX-5	Radiation Solutions
Spectrometer detector	5444	RSX-5	Radiation Solutions
Spectrometer detector	5632	RSX-5	Radiation Solutions
Spectrometer detector	5558	RSX-5	Radiation Solutions

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Appendix VI

SANDER GEOPHYSICS AIRBORNE GEOPHYSICAL SURVEY

260 Hunt Club Road, Ottawa, ON K1V 1C1 Canada Tel: +1 613-521-9626 Fax: +1 613-521-0215 www.sgl.com

SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	3217.4	**Total km Flown to Date**	3217.4
Total Remaining (km)	39923.6	**km Reflown This Week**	0.0
Percent Complete (%)	7.5	**Flight Time This Week (h)**	28.9
Prod km/Day This Week	459.6	**Prod km/Flt Hour This Week**	111.3

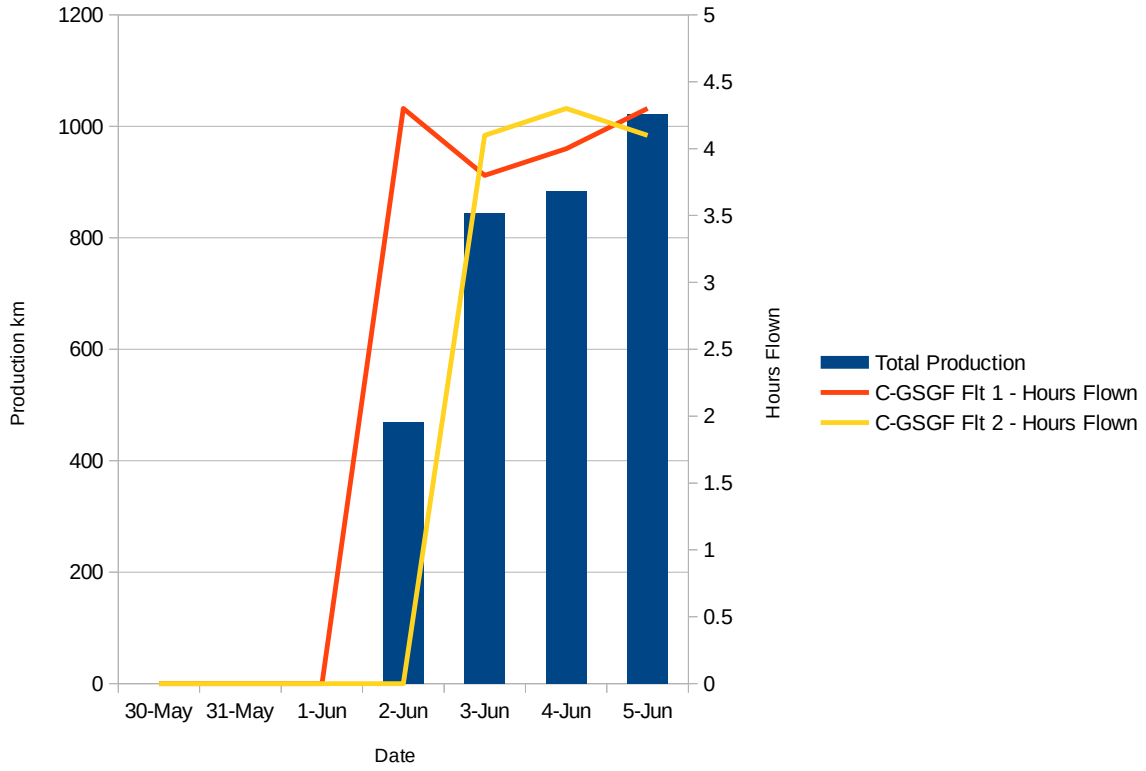
WEEKLY PRODUCTION

Week 1		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**28.9**	**111.0**	**0.0**	**3217.4**	**0.0**
30-May	**Monday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Full sun, high of 22C.		**Remarks**	Waterford block reflights completed. Ground station built at Galway Airport.			
Geomag	unsettled						
31-May	**Tuesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Full sun, high of 22C.		**Remarks**	Plan to move aircraft from Weston to Galway halted by Galway City/County Councils. Meeting set for next day. Only 2 pilots remain in Weston with aircraft, remaining crew in Galway.			
Geomag	unsettled						
1-Jun	**Wednesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Full sun, high of 23C.		**Remarks**	Meeting with councils goes well. Working on formal agreement. Safety meeting with all crew present.			
Geomag	unsettled						
2-Jun	**Thursday**		**4.3**	**21.0**	**0.0**	**469.2**	**0.0**
	C-GSGF Flt 1	1	4.3	21.0	0.0	469.2	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Full sun, high of 23C.		**Remarks**	Aircrew and technician in Weston. Aircraft readied for survey from Weston, first production flight in A2 block completed.			
Geomag	unsettled						
3-Jun	**Friday**		**7.9**	**41.0**	**0.0**	**843.7**	**0.0**
	C-GSGF Flt 1	2	3.8	19.0	0.0	398.3	0.0
	C-GSGF Flt 2	3	4.1	22.0	0.0	445.4	0.0
Weather	Full sun, high of 23C.		**Remarks**	Two full production flights.			
Geomag	quiet						
4-Jun	**Saturday**		**8.3**	**32.0**	**0.0**	**883.4**	**0.0**
	C-GSGF Flt 1	4	4.0	20.0	0.0	372.0	0.0
	C-GSGF Flt 2	5	4.3	12.0	0.0	511.4	0.0
Weather	Fog in am, full sun, high of 23C.		**Remarks**	Two full production flights.			
Geomag	quiet						
5-Jun	**Sunday**		**8.4**	**17.0**	**0.0**	**1021.1**	**0.0**
	C-GSGF Flt 1	6	4.3	10.0	0.0	529.0	0.0
	C-GSGF Flt 2	7	4.1	7.0	0.0	492.1	0.0
Weather	Partly sunny, high of 21C.		**Remarks**	Two full production flights.			
Geomag	active						
Comments	An excellent start to the block. Production commences from Weston Airport while an operating agreement to work out of the Galway Airport is sorted. Pilots and technician in Dublin, geophyicists and AME in Galway. One of the most remarkable weather weeks in Ireland the crew has seen, hopefully it will stay this way all summer.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	45
Steve Gebhardt	Lead Pilot			ON SITE	7	45
Ian Boychuck	AME			ON SITE	7	39
Craig McMahon	Technician			ON SITE	7	39
Charles Dicks	Pilot			ON SITE	7	37
Jason Thomas	Pilot			ON SITE	7	37
Diana Kuiper	Geophysicist			ON SITE	7	36

HSE Statistics	This Week	Project Totals
SGL Person Hours	367.5	367.5
Inductions	0	0
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting	1	1
Tellus Complaints		0

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



SANDER GEOPHYSICS AIRBORNE GEOPHYSICAL SURVEY

260 Hunt Club Road, Ottawa, ON K1V 1C1 Canada Tel: +1 613-521-9626 Fax: +1 613-521-0215 www.sgl.com

SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	1537.8	**Total km Flown to Date**	4755.2
Total Remaining (km)	38385.8	**km Reflown This Week**	0.0
Percent Complete (%)	11.0	**Flight Time This Week (h)**	14.0
Prod km/Day This Week	219.7	**Prod km/Flt Hour This Week**	109.8

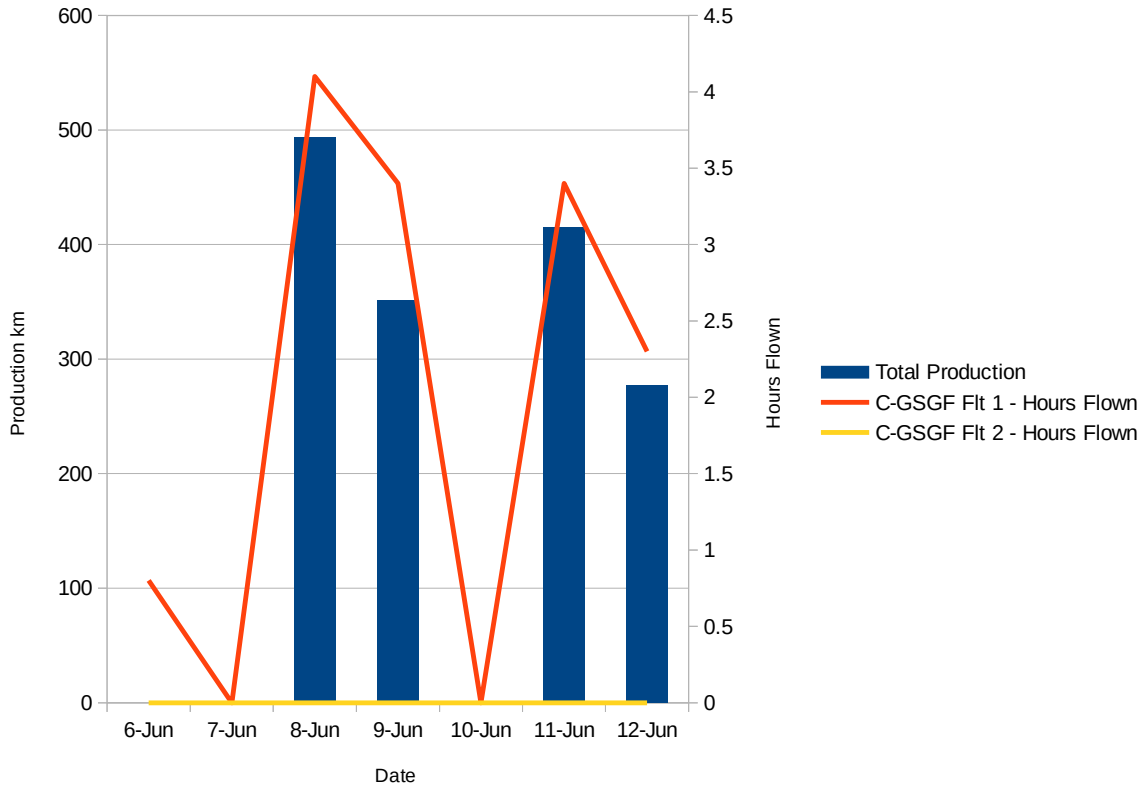
WEEKLY PRODUCTION

Week 2		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**14.0**	**22.0**	**0.0**	**1537.8**	**0.0**
6-Jun	**Monday**		**0.8**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	8	0.8	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain and fog, partly sunny, high of 22.		**Remarks**	Poor visibility caused flight to be aborted. Rain followed with heavy thunderstorms between Dublin and Galway, no second flight was permitted.			
Geomag	quiet						
7-Jun	**Tuesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain and fog, partly sunny, high of 23.		**Remarks**	No flight due to poor weather in Dublin.			
Geomag	quiet						
8-Jun	**Wednesday**		**4.1**	**7.0**	**0.0**	**493.8**	**0.0**
	C-GSGF Flt 1	9	4.1	7.0	0.0	493.8	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny, high of 26C.		**Remarks**	Fog in Dublin delayed flight. Full production flight completed at end of day.			
Geomag	unsettled						
9-Jun	**Thursday**		**3.4**	**5.0**	**0.0**	**351.5**	**0.0**
	C-GSGF Flt 1	10	3.4	5.0	0.0	351.5	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny with rain showers, high of 23C.		**Remarks**	Fog in Dublin delayed flight. Flight shortened due to fog.			
Geomag	unsettled						
10-Jun	**Friday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain all day, high of 19C.		**Remarks**	Rain all day, flight canceled due to weather.			
Geomag	quiet						
11-Jun	**Saturday**		**3.4**	**6.0**	**0.0**	**415.3**	**0.0**
	C-GSGF Flt 1	11	3.4	6.0	0.0	415.3	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny with rain showers, high of 19C.		**Remarks**	Rain in Dublin delayed flight. Flight shortened due to rain. Aircraft landed in Shannon, will survey from there until Galway Airport agreement in place.			
Geomag	quiet						
12-Jun	**Sunday**		**2.3**	**4.0**	**0.0**	**277.2**	**0.0**
	C-GSGF Flt 1	12	2.3	4.0	0.0	277.2	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast with rain showers, high of 19C.		**Remarks**	Flight aborted due to rain.			
Geomag	quiet						
Comments	Poor weather allowed for only one flight a day. Crew and aircraft moved from Weston to Shannon to shorten ferry to block. Galway agreement still a work in progress.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	52
Steve Gebhardt	Lead Pilot			ON SITE	7	52
Ian Boychuck	AME			ON SITE	7	46
Craig McMahon	Technician			ON SITE	7	46
Charles Dicks	Pilot			ON SITE	7	44
Jason Thomas	Pilot			ON SITE	7	44
Diana Kuiper	Geophysicist			ON SITE	7	43

HSE Statistics	This Week	Project Totals
SGL Person Hours	367.5	735
Inductions		0
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		1
Tellus Complaints		0

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



SANDER GEOPHYSICS AIRBORNE GEOPHYSICAL SURVEY

260 Hunt Club Road, Ottawa, ON K1V 1C1 Canada Tel: +1 613-521-9626 Fax: +1 613-521-0215 www.sgl.com

SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	3112.2	**Total km Flown to Date**	7867.4
Total Remaining (km)	35273.6	**km Reflown This Week**	0.0
Percent Complete (%)	18.2	**Flight Time This Week (h)**	24.1
Prod km/Day This Week	444.6	**Prod km/Flt Hour This Week**	129.1

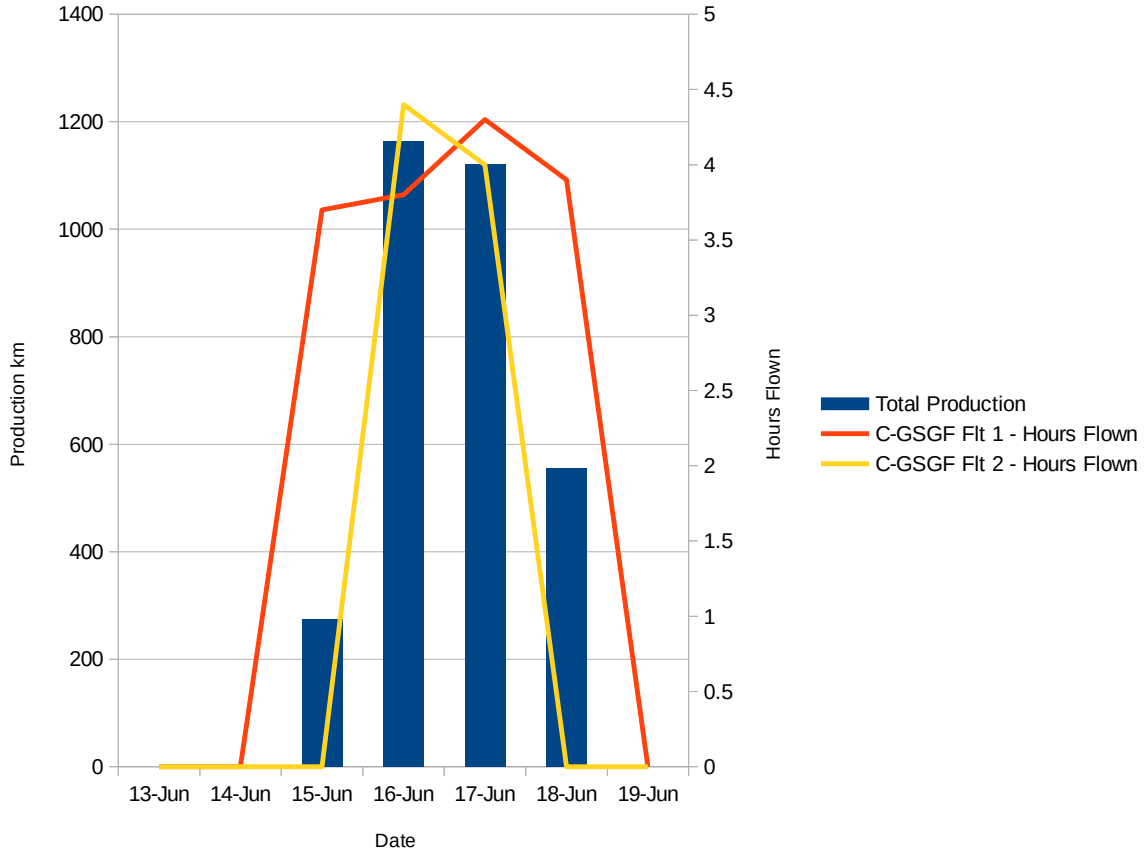
WEEKLY PRODUCTION

Week 3		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**24.1**	**56.0**	**0.0**	**3112.2**	**0.0**
13-Jun	**Monday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain showers, high of 17C.		**Remarks**	Flight planned, cancelled due to rain.			
Geomag	unsettled						
14-Jun	**Tuesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain showers, high of 17C.		**Remarks**	Flight planned, cancelled due to rain.			
Geomag	unsettled						
15-Jun	**Wednesday**		**3.7**	**10.0**	**0.0**	**274.2**	**0.0**
	C-GSGF Flt 1	13	3.7	10.0	0.0	274.2	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain showers and windy, high of 19C.		**Remarks**	Flight worked around rain and wind.			
Geomag	unsettled						
16-Jun	**Thursday**		**8.2**	**17.0**	**0.0**	**1163.0**	**0.0**
	C-GSGF Flt 1	14	3.8	8.0	0.0	546.4	0.0
	C-GSGF Flt 2	15	4.4	9.0	0.0	616.6	0.0
Weather	Overcast and windy, high of 17C.		**Remarks**	Two full production flights.			
Geomag	quiet						
17-Jun	**Friday**		**8.3**	**21.0**	**0.0**	**1120.6**	**0.0**
	C-GSGF Flt 1	16	4.3	13.0	0.0	548.5	0.0
	C-GSGF Flt 2	17	4.0	8.0	0.0	572.1	0.0
Weather	Partly sunny, high of 16.		**Remarks**	Two full production flights. Craig completes field rotation.			
Geomag	quiet						
18-Jun	**Saturday**		**3.9**	**8.0**	**0.0**	**554.4**	**0.0**
	C-GSGF Flt 1	18	3.9	8.0	0.0	554.4	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast in am, heavy rain in pm, high of 17C.		**Remarks**	One full production flight. Second flight canceled due to heavy rain.			
Geomag	quiet						
19-Jun	**Sunday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain all day followed by strong winds, high of 17C.		**Remarks**	Flight planned, cancelled due to rain.			
Geomag	quiet						
Comments	Logistics at Shannon Airport working smoothly. Looking forward to having plane at Galway Airport. A good week of production in Ireland.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	59
Steve Gebhardt	Lead Pilot			ON SITE	7	59
Ian Boychuck	AME			ON SITE	7	53
Craig McMahon	Technician		17-Jun-16	ON SITE	5	51
Charles Dicks	Pilot			ON SITE	7	51
Jason Thomas	Pilot			ON SITE	7	51
Diana Kuiper	Geophysicist			ON SITE	7	50

HSE Statistics	This Week	Project Totals
SGL Person Hours	352.5	1087.5
Inductions		0
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		1
Tellus Complaints		0

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	1338.5	**Total km Flown to Date**	9205.9
Total Remaining (km)	33935.1	**km Reflown This Week**	0.0
Percent Complete (%)	21.3	**Flight Time This Week (h)**	11.3
Prod km/Day This Week	191.2	**Prod km/Flt Hour This Week**	118.5

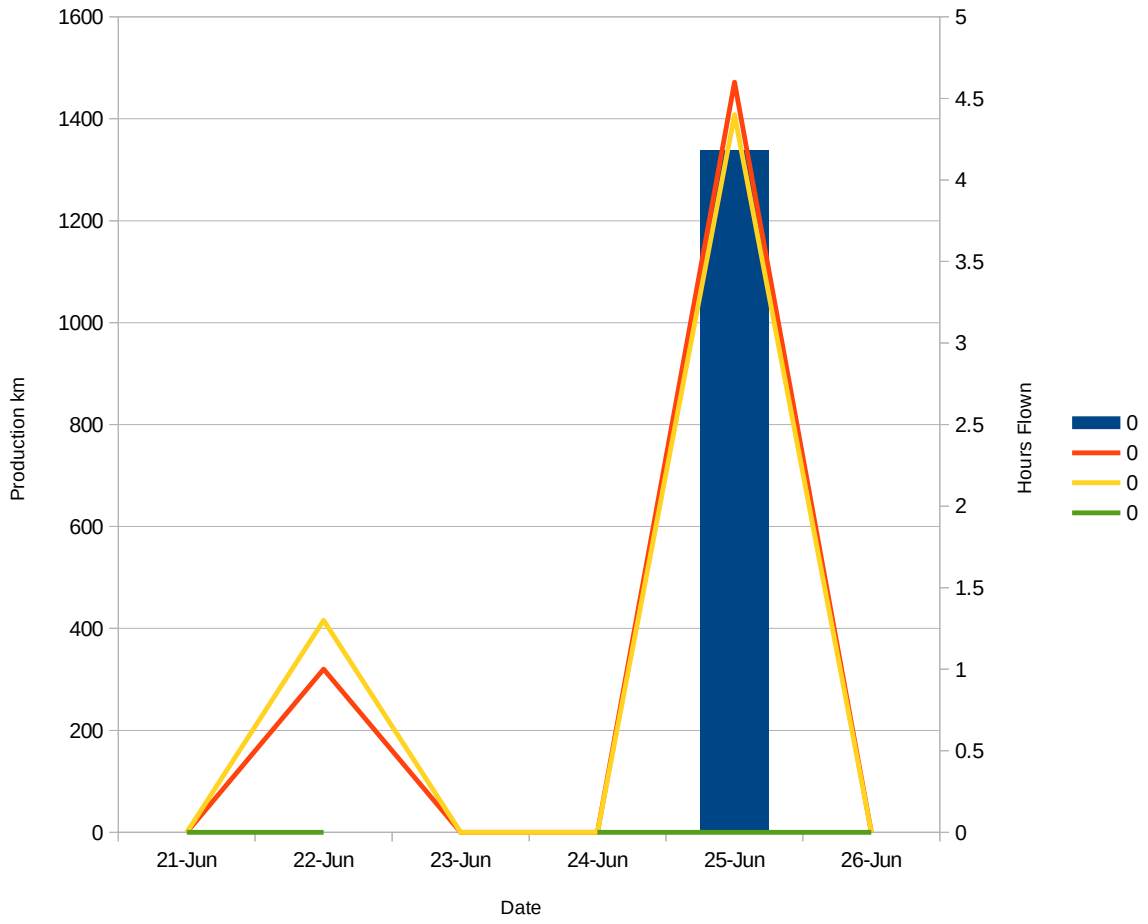
WEEKLY PRODUCTION

Week 4		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**11.3**	**20.0**	**0.0**	**1338.5**	**0.0**
20-Jun	**Monday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain showers throughout the day, high of 16C.		**Remarks**	Flight planned, cancelled due to rain.			
Geomag	quiet						
21-Jun	**Tuesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain showers throughout the day, high of 18C.		**Remarks**	Flight planned, cancelled due to rain.			
Geomag	quiet						
22-Jun	**Wednesday**		**2.3**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	19	1.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2	20	1.3	0.0	0.0	0.0	0.0
Weather	Partly sunny, high of 18C.		**Remarks**	First flight aborted due to laser failure. Laser back online. Second flight aborted due to temporary airspace restriction surface to 5000 feet Co Galway and Mayo, Joe Biden lands in Knock and tour Co Mayo.			
Geomag	quiet						
23-Jun	**Thursday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain showers throughout the day, high of 17C.		**Remarks**	Flight planned, cancelled due to rain. Maintenance started in afternoon, taking advantage of weather day.			
Geomag	quiet						
24-Jun	**Friday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain showers throughout the day, high of 17C.		**Remarks**	Maintenance completed in morning. Afternoon flight planned, cancelled due to rain. Diana and Alison spend the day with GSI in Co Galway and Co Mayo exploring the vast geology.			
Geomag	quiet						
25-Jun	**Saturday**		**9.0**	**20.0**	**0.0**	**1338.5**	**0.0**
	C-GSGF Flt 1	21	4.6	10.0	0.0	673.5	0.0
	C-GSGF Flt 2	22	4.4	10.0	0.0	665.0	0.0
Weather	Overcast, high of 17C.		**Remarks**	Two full production flights. A record set for most number of lkm flown by the Twin Otter in one day for Tellus.			
Geomag	quiet						
26-Jun	**Sunday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain, mist, fog, poor visibility, high of 17C.		**Remarks**	Flight planned, cancelled due to rain. Maintenance carried out in the morning.			
Geomag	quiet						
Comments	The weather was not favourable this week. An excellent day on Saturday saved the week with record breaking production.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	66
Steve Gebhardt	Lead Pilot			ON SITE	7	66
Ian Boychuck	AME			ON SITE	7	60
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	58
Jason Thomas	Pilot			ON SITE	7	58
Diana Kuiper	Geophysicist			ON SITE	7	57

HSE Statistics	This Week	Project Totals
SGL Person Hours	315	1402.5
Inductions		0
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		1
Tellus Complaints		0

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



SANDER GEOPHYSICS AIRBORNE GEOPHYSICAL SURVEY

260 Hunt Club Road, Ottawa, ON K1V 1C1 Canada Tel: +1 613-521-9626 Fax: +1 613-521-0215 www.sgl.com

SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	2535.8	**Total km Flown to Date**	11741.7
Total Remaining (km)	31399.3	**km Reflown This Week**	0.0
Percent Complete (%)	27.2	**Flight Time This Week (h)**	14.9
Prod km/Day This Week	362.3	**Prod km/Flt Hour This Week**	170.2

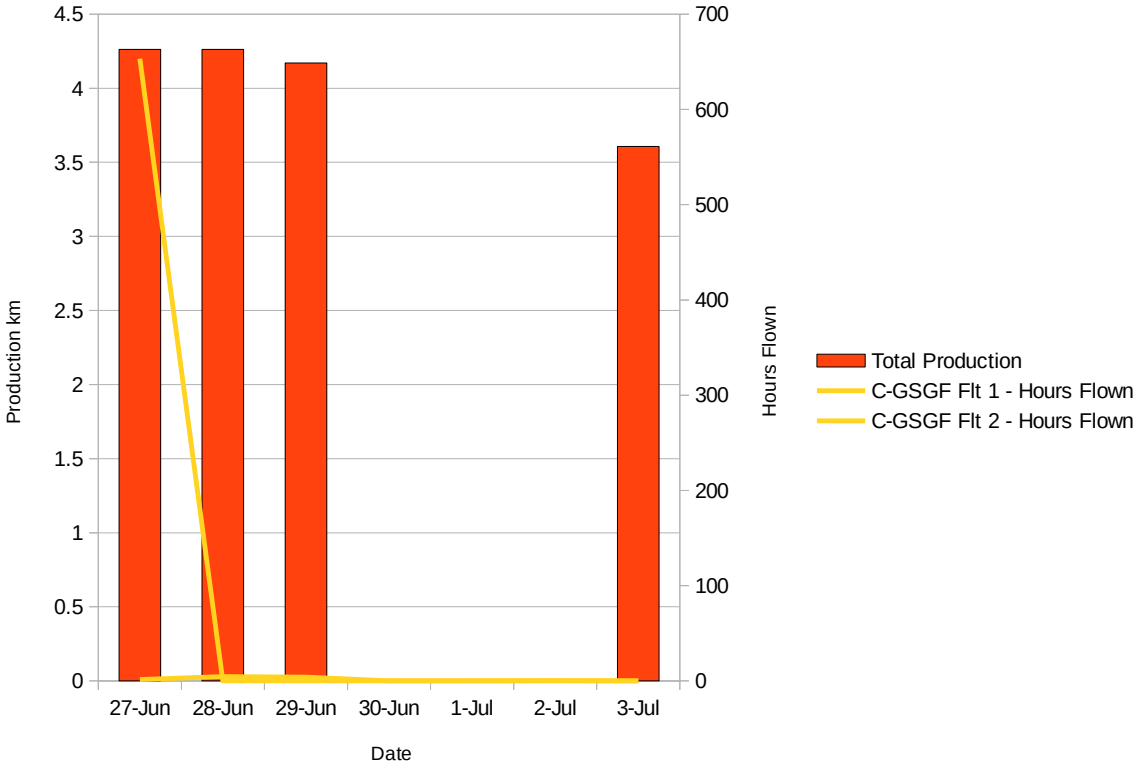
WEEKLY PRODUCTION

Week 5		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**14.9**	**37.0**	**0.0**	**2535.8**	**0.0**
27-Jun	**Monday**		**5.8**	**10.0**	**0.0**	**663.0**	**0.0**
	C-GSGF Flt 1	23	1.6	1.6	0.0	104.4	0.0
	C-GSGF Flt 2	24	4.2	8.4	0.0	558.6	0.0
Weather	Rain in am, partly sunny with high winds in pm, high of 17C.		**Remarks**	First flight aborted due to rain, including thunder and lightening. Late afternoon full production flight completed.			
Geomag	quiet						
28-Jun	**Tuesday**		**4.5**	**10.0**	**0.0**	**663.0**	**0.0**
	C-GSGF Flt 1	25	4.5	10.0	0.0	663.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain all am, partly sunny and windy in pm, high of 16C.		**Remarks**	One production flight in late afternoon.			
Geomag	quiet						
29-Jun	**Wednesday**		**4.1**	**10.0**	**0.0**	**648.8**	**0.0**
	C-GSGF Flt 1	26	4.1	10.0	0.0	648.8	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain all am, sunny and windy in pm, high of 17C.		**Remarks**	Maintenance in the morning. One production flight in late afternoon.			
Geomag	quiet						
30-Jun	**Thursday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain all day, high of 14C.		**Remarks**	Flight planned, cancelled due to rain.			
Geomag	quiet						
1-Jul	**Friday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain all day, high of 15C.		**Remarks**	Flight planned, cancelled due to rain. Agreement between SGL and Galway City/County Coucils to operate at Galway Airport.			
Geomag	quiet						
2-Jul	**Saturday**		**0.5**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	27	0.5	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain in am, strong winds in pm, high of 16C.		**Remarks**	Aircraft moved from Shannon to Galway. No production flight was possible due to weather.			
Geomag	quiet						
3-Jul	**Sunday**		**0.0**	**7.0**	**0.0**	**561.0**	**0.0**
	C-GSGF Flt 1	28	0.0	7.0	0.0	561.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Mostly sunny, high of 18C.		**Remarks**	One full production flight. Fuelled in Shannon after flight.			
Geomag	quiet						
Comments	A good week in Ireland. The crew past the 25% mark and we signed an agreement with Galway City/County Councils to operate from the Galway Airport. The plane was moved to Galway on Saturday. Fueling is still taking place in Shannon until fuel is delivered to Galway Airport.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	73
Steve Gebhardt	Lead Pilot			ON SITE	7	73
Ian Boychuck	AME			ON SITE	7	67
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	65
Jason Thomas	Pilot		30-Jun-16	ON SITE	4	62
Diana Kuiper	Geophysicist			ON SITE	7	64
John Sevenhuysen	AME	3-Jul-16		ON SITE	1	1
Cameron McKee	Geophysicist				0	0
Andre Lafontaine	Pilot				0	0

HSE Statistics	This Week	Project Totals
SGL Person Hours	300	1702.5
Inductions	1	1
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		1
Tellus Complaints		0

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	1837.2	**Total km Flown to Date**	13578.9
Total Remaining (km)	29562.1	**km Reflown This Week**	0.0
Percent Complete (%)	31.5	**Flight Time This Week (h)**	15.1
Prod km/Day This Week	262.5	**Prod km/Flt Hour This Week**	121.7

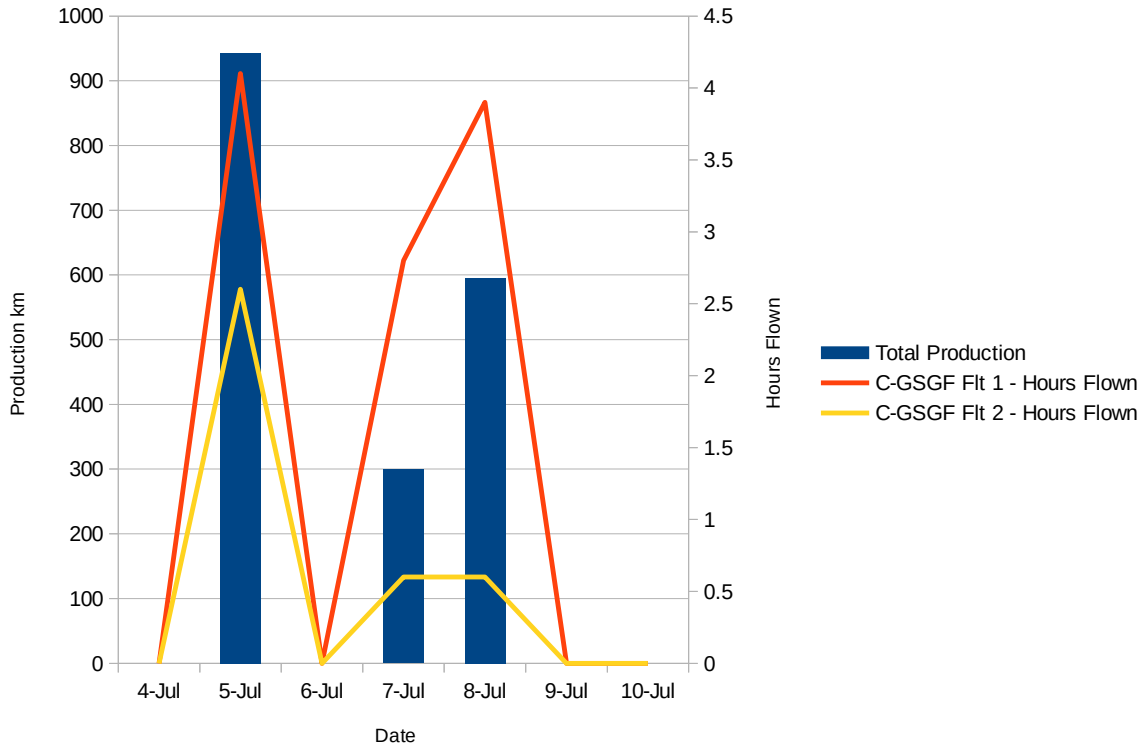
WEEKLY PRODUCTION

Week 6		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**15.1**	**21.4**	**0.0**	**1837.2**	**0.0**
4-Jul	**Monday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain, high of 18C.		**Remarks**	Flight planned, cancelled due to rain. Ian Boychuck, departs crew.			
Geomag	quiet						
5-Jul	**Tuesday**		**7.2**	**10.9**	**0.0**	**943.2**	**0.0**
	C-GSGF Flt 1	30	4.1	7.0	0.0	604.1	0.0
	C-GSGF Flt 2	31	2.6	3.9	0.0	339.1	0.0
	C-GSGF Flt 3	32	0.5	0.0	0.0	0.0	0.0
Weather	Sunny, high of 18C.		**Remarks**	Full production flight in am. Second flight aborted due to technical difficulties.			
Geomag	micropulsations						
6-Jul	**Wednesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain in waves, high of 19C.		**Remarks**	Flight planned, cancelled due to rain.			
Geomag	quiet						
7-Jul	**Thursday**		**3.4**	**3.5**	**0.0**	**299.2**	**0.0**
	C-GSGF Flt 1	33	2.8	3.5	0.0	299.2	0.0
	C-GSGF Flt 2	34	0.6	0.0	0.0	0.0	0.0
Weather	Rain and sun, high of 22C.		**Remarks**	Morning flight aborted due to rain. Second flight not possible due to rain.			
Geomag	quiet						
8-Jul	**Friday**		**4.5**	**7.0**	**0.0**	**594.8**	**0.0**
	C-GSGF Flt 1	35	3.9	7.0	0.0	594.8	0.0
	C-GSGF Flt 2	36	0.6	0.0	0.0	0.0	0.0
Weather	Partly sunny, rain in pm high of 19C.		**Remarks**	Full production flight. Cameron McKee, geophysicist, arrives in Galway.			
Geomag	quiet						
9-Jul	**Saturday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain, clear late evening, high of 21C.		**Remarks**	Safety meeting, all crew present. No flight due to weather.			
Geomag	quiet						
10-Jul	**Sunday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale, high of 16C.		**Remarks**	Flight planned, cancelled due to rain.			
Geomag	quiet						
Comments	An average week in Ireland with weather being the hurtle to overcome. Crew change completed. Fuel at the Galway airport expected to be delivered next week.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	80
Steve Gebhardt	Lead Pilot			ON SITE	7	80
Ian Boychuck	AME		4-Jul-16	ON SITE	1	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	72
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist			ON SITE	7	71
John Sevenhuysen	AME			ON SITE	7	8
Cameron McKee	Geophysicist	8-Jul-16		ON SITE	3	3
Andre Lafontaine	Pilot				0	0

HSE Statistics	This Week	Project Totals
SGL Person Hours	292.5	1995
Inductions	1	2
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting	1	2
Tellus Complaints	1	1

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	2933.5	**Total km Flown to Date**	16512.4
Total Remaining (km)	26628.6	**km Reflown This Week**	0.0
Percent Complete (%)	38.3	**Flight Time This Week (h)**	26.5
Prod km/Day This Week	419.1	**Prod km/Flt Hour This Week**	110.8

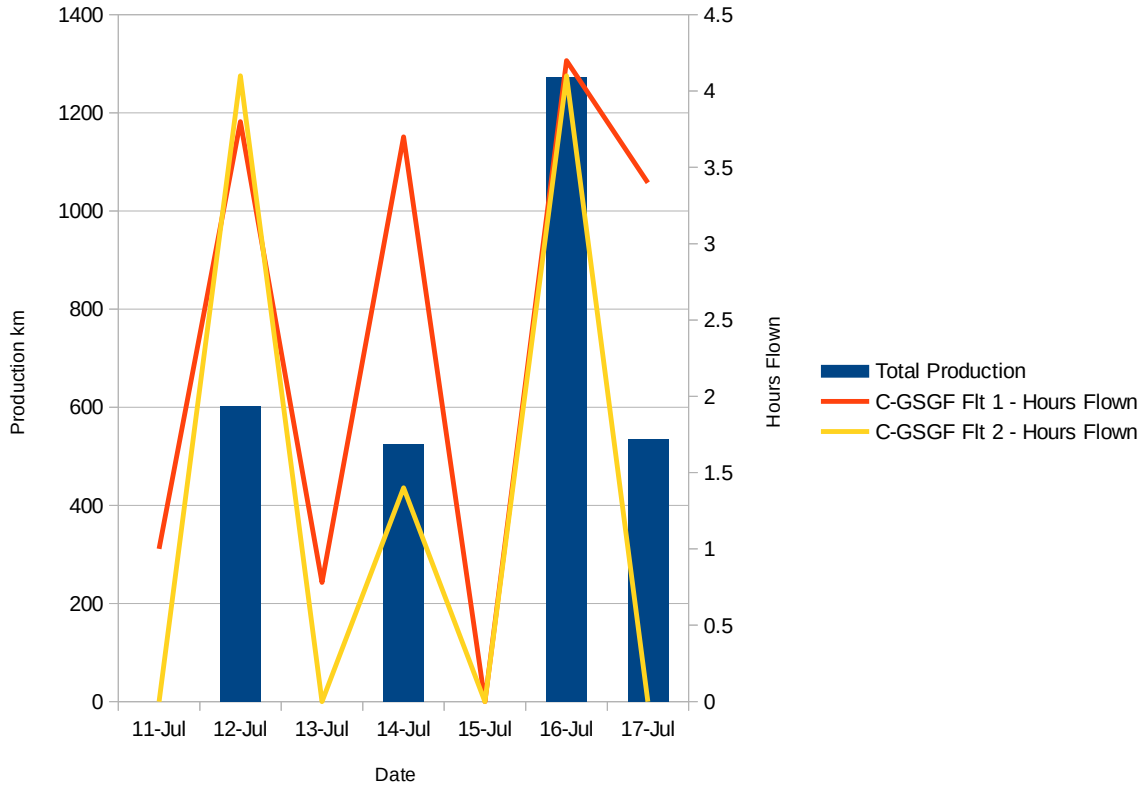
WEEKLY PRODUCTION

Week 7		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**26.5**	**76.9**	**0.0**	**2933.5**	**0.0**
11-Jul	**Monday**		**1.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	37	1.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast, rain, fog, high of 16C.		**Remarks**	Flight aborted due to poor visibility. Weather deteriorated during the day. Diana departs crew.			
Geomag	quiet						
12-Jul	**Tuesday**		**7.9**	**46.0**	**0.0**	**602.0**	**0.0**
	C-GSGF Flt 1	38	3.8	18.0	0.0	257.4	0.0
	C-GSGF Flt 2	39	4.1	28.0	0.0	344.6	0.0
	C-GSGF Flt 3	40	0.6	0.0	0.0	0.0	0.0
Weather	Showers all day, fog in east, high of 17C.		**Remarks**	Two full production flights.			
Geomag	unsettled						
13-Jul	**Wednesday**		**0.8**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	41	0.8	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Showers all day, fog in east, high of 17C.		**Remarks**	Flight aborted due to poor visibility and rain.			
Geomag	quiet						
14-Jul	**Thursday**		**5.1**	**9.6**	**0.0**	**524.8**	**0.0**
	C-GSGF Flt 1	42	3.7	8.0	0.0	386.4	0.0
	C-GSGF Flt 2	43	1.4	1.6	0.0	138.4	0.0
Weather	Sunny in am, rain in pm, high of 17C.		**Remarks**	Full production flight in morning, covered highest elevation in west. Second flight aborted due to rain.			
Geomag	quiet						
15-Jul	**Friday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain and fog, high of 22C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
16-Jul	**Saturday**		**8.3**	**15.0**	**0.0**	**1272.9**	**0.0**
	C-GSGF Flt 1	44	4.2	7.0	0.0	598.5	0.0
	C-GSGF Flt 2	45	4.1	8.0	0.0	674.4	0.0
Weather	Light rain and fog becomes overcast, high of 18C.		**Remarks**	Two full production flights.			
Geomag	unsettled						
17-Jul	**Sunday**		**3.4**	**6.3**	**0.0**	**533.8**	**0.0**
	C-GSGF Flt 1	46	3.4	6.3	0.0	533.8	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast becomes fog, high of 20C.		**Remarks**	Flight aborted due to wall of fog coming off Atlantic. Fog extensive and never lifts. Maintenance on aircraft in afternoon.			
Geomag	quiet						
Comments	Excellent week of production, 3rd best week so far. First full flight in the mountains went very well.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	87
Steve Gebhardt	Lead Pilot			ON SITE	7	87
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	79
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist		11-Jul-16	ON SITE	1	72
John Sevenhuysen	AME			ON SITE	7	15
Cameron McKee	Geophysicist			ON SITE	7	10
Andre Lafontaine	Pilot				0	0

HSE Statistics	This Week	Project Totals
SGL Person Hours	270	2265
Inductions	0	2
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting	0	2
Tellus Complaints	1	2

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	3253.1	**Total km Flown to Date**	19765.5
Total Remaining (km)	23375.5	**km Reflown This Week**	0.0
Percent Complete (%)	45.8	**Flight Time This Week (h)**	24.3
Prod km/Day This Week	464.7	**Prod km/Flt Hour This Week**	133.9

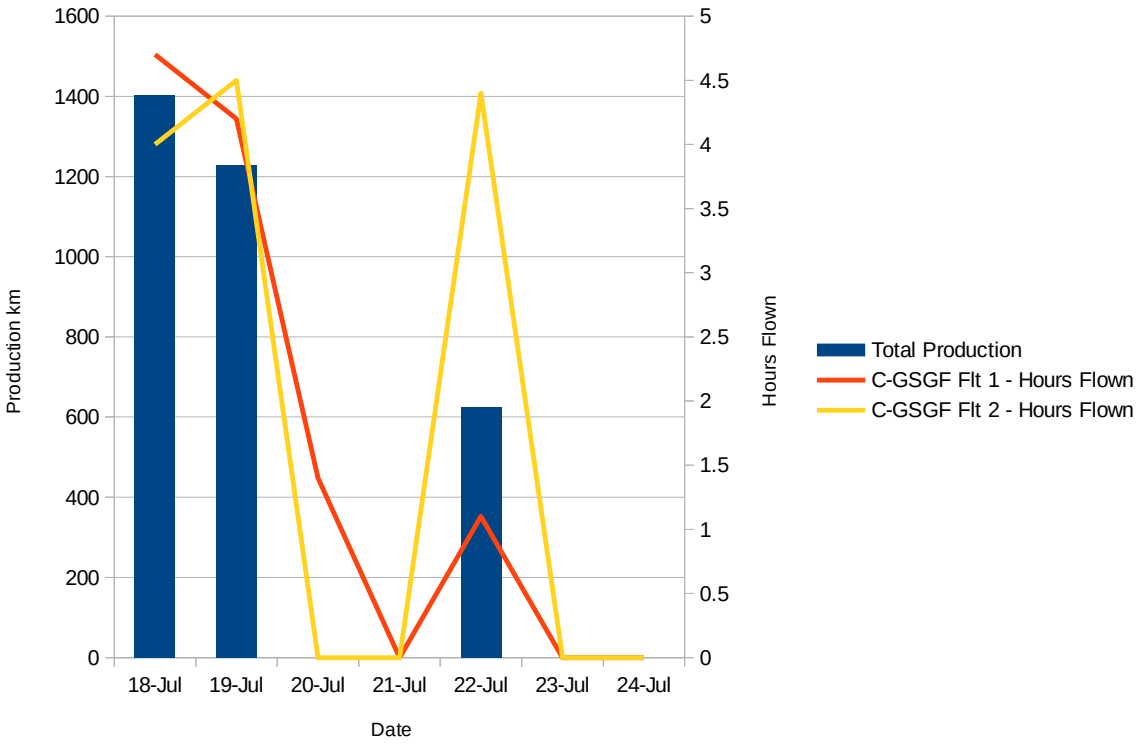
WEEKLY PRODUCTION

Week 8		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**24.3**	**45.7**	**0.0**	**3253.1**	**0.0**
18-Jul	**Monday**		**8.7**	**16.7**	**0.0**	**1401.9**	**0.0**
	C-GSGF Flt 1	47	4.7	8.7	0.0	730.1	0.0
	C-GSGF Flt 2	48	4.0	8.0	0.0	671.8	0.0
Weather	Fog becomes full sun, high of 26C.		**Remarks**	A late start, two full production flights. Again, a record set for most number of lkm flown by the Twin Otter in one day for Tellus.			
Geomag	micropulsations						
19-Jul	**Tuesday**		**8.7**	**19.0**	**0.0**	**1227.4**	**0.0**
	C-GSGF Flt 1	49	4.2	10.0	0.0	483.0	0.0
	C-GSGF Flt 2	50	4.5	9.0	0.0	744.4	0.0
Weather	Sunny, high of 29C.		**Remarks**	Two full production flights. Andre Lafontaine, pilot, arrives in Galway.			
Geomag	micropulsations						
20-Jul	**Wednesday**		**1.4**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	51	1.4	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast, poor visibility, rain, high of 19C.		**Remarks**	Flight training. Too much rain for production.			
Geomag	quiet						
21-Jul	**Thursday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast, rain, high of 21C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
22-Jul	**Friday**		**5.5**	**10.0**	**0.0**	**623.8**	**0.0**
	C-GSGF Flt 1	52	1.1	0.0	0.0	0.0	0.0
	C-GSGF Flt 2	53	4.4	10.0	0.0	623.8	0.0
Weather	Overcast, rain, high of 18C.		**Remarks**	Flight training completed in the morning. Full production flight delayed until the afternoon.			
Geomag	quiet						
23-Jul	**Saturday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast, rain, high of 19C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
24-Jul	**Sunday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast, lots of rain, high of 18C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
Comments	Happy 60th Anniversary SGL. Our best week to date. Started out with record breaking temperatures, ended in a lot of rain. Next week is Galway Races so will be flying away from the city.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	94
Steve Gebhardt	Lead Pilot			ON SITE	7	94
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	86
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME			ON SITE	7	22
Cameron McKee	Geophysicist			ON SITE	7	17
Andre Lafontaine	Pilot	19-Jul-16		ON SITE	6	6

HSE Statistics	This Week	Project Totals
SGL Person Hours	307.5	2572.5
Inductions	1	3
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		2
Tellus Complaints	1	3

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



SANDER GEOPHYSICS AIRBORNE GEOPHYSICAL SURVEY

260 Hunt Club Road, Ottawa, ON K1V 1C1 Canada Tel: +1 613-521-9626 Fax: +1 613-521-0215 www.sgl.com

SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	4012.2	**Total km Flown to Date**	23777.7
Total Remaining (km)	19363.3	**km Reflown This Week**	0.0
Percent Complete (%)	55.1	**Flight Time This Week (h)**	31.6
Prod km/Day This Week	573.2	**Prod km/Flt Hour This Week**	127.0

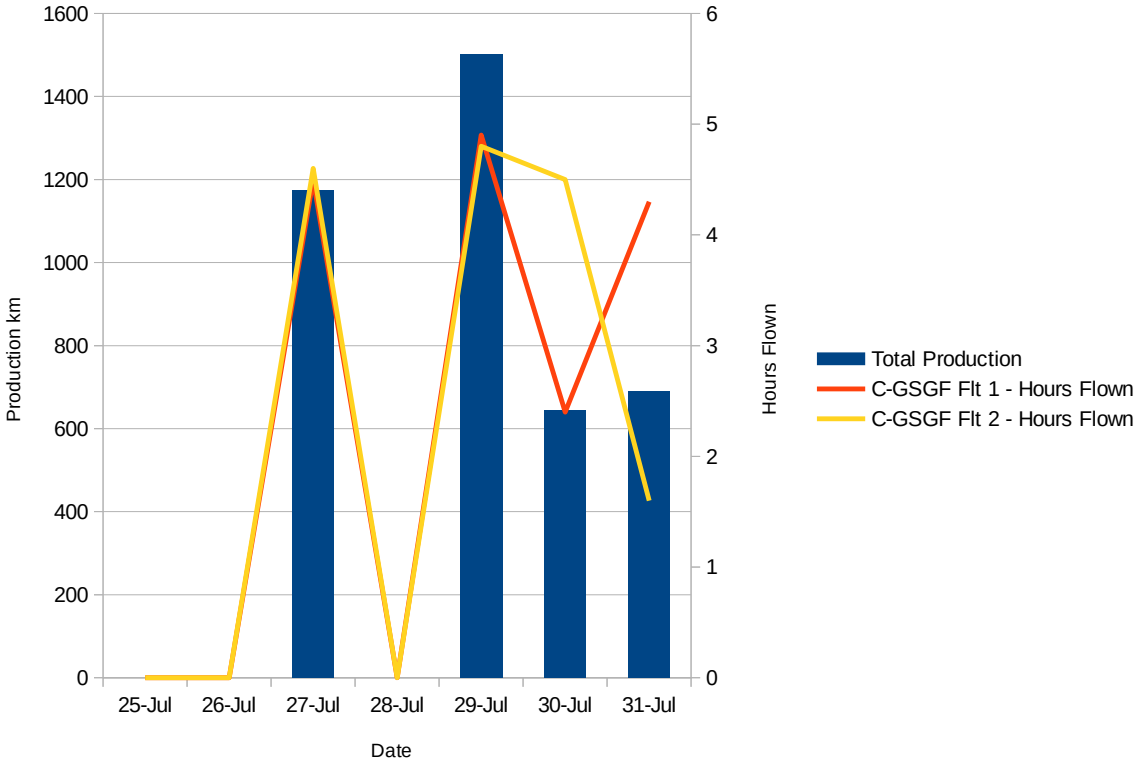
WEEKLY PRODUCTION

Week 9		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**31.6**	**83.5**	**0.0**	**4012.2**	**0.0**
25-Jul	**Monday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain and fog, high of 16C.		**Remarks**	No flight, poor visibility all day.			
Geomag	quiet						
26-Jul	**Tuesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain and fog, high of 18C.		**Remarks**	No flight, poor visibility all day.			
Geomag	quiet						
27-Jul	**Wednesday**		**9.1**	**33.1**	**0.0**	**1174.1**	**0.0**
	C-GSGF Flt 1	54	4.5	8.5	0.0	596.2	0.0
	C-GSGF Flt 2	55	4.6	24.6	0.0	577.9	0.0
Weather	Overcast and rain, partly sunny in pm high of 18C.		**Remarks**	Two full production flights following short weather delay in the morning.			
Geomag	micropulsations						
28-Jul	**Thursday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast, rain and fog, high of 18C.		**Remarks**	No flight, poor visibility all day.			
Geomag	unsettled						
29-Jul	**Friday**		**9.7**	**22.5**	**0.0**	**1502.7**	**0.0**
	C-GSGF Flt 1	56	4.9	6.5	0.0	762.7	0.0
	C-GSGF Flt 2	57	4.8	16.0	0.0	740.0	0.0
Weather	Mostly sunny, high of 19C.		**Remarks**	Two full production flights. Official launch data of Waterford Block data by GSI.			
Geomag	unsettled						
30-Jul	**Saturday**		**6.9**	**13.5**	**0.0**	**645.0**	**0.0**
	C-GSGF Flt 1	58	2.4	0.0	0.0	0.0	0.0
	C-GSGF Flt 2	59	4.5	13.5	0.0	645.0	0.0
Weather	Overcast and rain, high of 18C.		**Remarks**	Morning flight aborted due to weather, was an attempt at the Bundoran test line. Full production flight in the afternoon.			
Geomag	unsettled						
31-Jul	**Sunday**		**5.9**	**14.4**	**0.0**	**690.4**	**0.0**
	C-GSGF Flt 1	60	4.3	12.4	0.0	565.7	0.0
	C-GSGF Flt 2	61	1.6	2.0	0.0	124.7	0.0
Weather	Overcast and heavy rain showers, high of 17C.		**Remarks**	Full production flight in morning, working around rain. Second flight aborted due to rain.			
Geomag	unsettled						
Comments	Our best week so far. Weather very poor at the start of the week but we managed to work around it. Galway Races were on all week. Waterford Block data released to the public by GSI.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	101
Steve Gebhardt	Lead Pilot			ON SITE	7	101
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	93
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME			ON SITE	7	29
Cameron McKee	Geophysicist			ON SITE	7	24
Andre Lafontaine	Pilot			ON SITE	7	13

HSE Statistics	This Week	Project Totals
SGL Person Hours	315	2887.5
Inductions	0	3
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		2
Tellus Complaints	0	3

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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260 Hunt Club Road, Ottawa, ON K1V 1C1 Canada Tel: +1 613-521-9626 Fax: +1 613-521-0215 www.sgl.com

SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	2696.4	**Total km Flown to Date**	26474.1
Total Remaining (km)	16666.9	**km Reflown This Week**	0.0
Percent Complete (%)	61.4	**Flight Time This Week (h)**	13.6
Prod km/Day This Week	385.2	**Prod km/Flt Hour This Week**	198.3

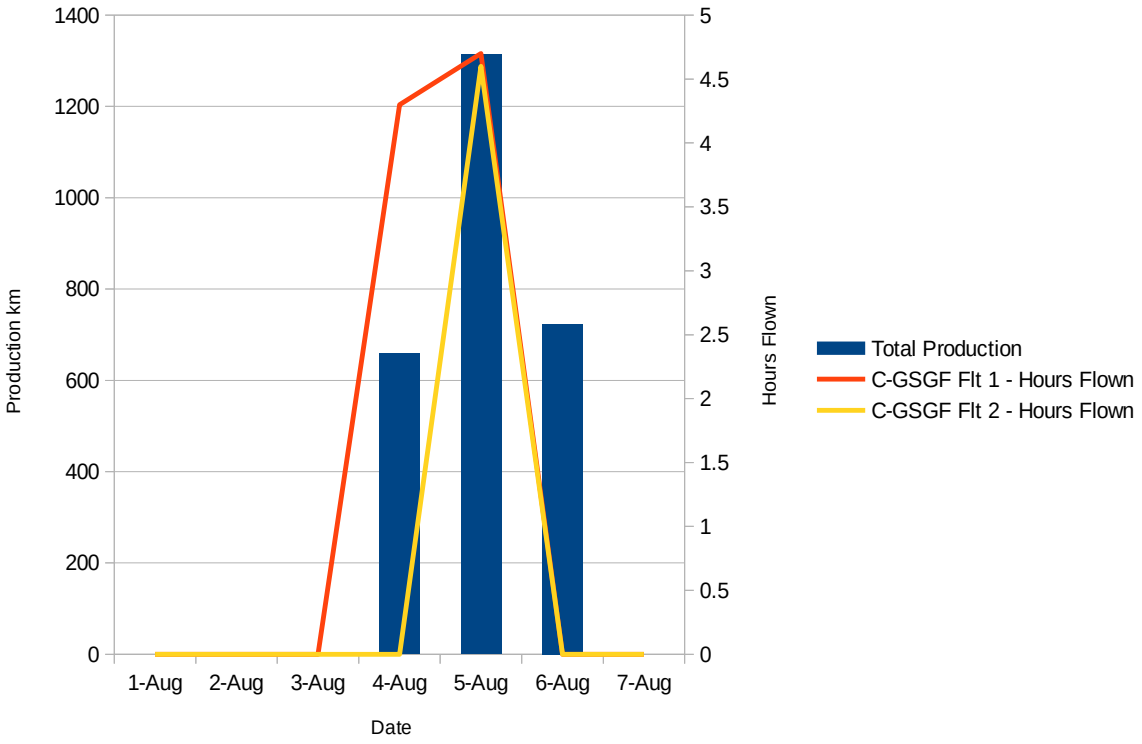
WEEKLY PRODUCTION

Week 10		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**13.6**	**37.5**	**0.0**	**2696.4**	**0.0**
1-Aug	**Monday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain and fog all day, high of 17C.		**Remarks**	No flight due to poor visibility.			
Geomag	unsettled						
2-Aug	**Tuesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain and fog all day, high of 19C.		**Remarks**	No flight due to poor visibility.			
Geomag	unsettled						
3-Aug	**Wednesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale, high of 16C.		**Remarks**	No flight due to poor visibility and strong winds.			
Geomag	unsettled						
4-Aug	**Thursday**		**4.3**	**8.0**	**0.0**	**658.7**	**0.0**
	C-GSGF Flt 1	62	4.3	8.0	0.0	658.7	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast and windy, heavy rain showers high of 19C.		**Remarks**	Flight delayed due to weather. Full production flight in the afternoon.			
Geomag	unsettled						
5-Aug	**Friday**		**9.3**	**19.5**	**0.0**	**1314.4**	**0.0**
	C-GSGF Flt 1	63	4.7	10.5	0.0	654.7	0.0
	C-GSGF Flt 2	64	4.6	9.0	0.0	659.7	0.0
Weather	Overcast and rain, high of 19C.		**Remarks**	Two full production flights.			
Geomag	unsettled						
6-Aug	**Saturday**		**0.0**	**10.0**	**0.0**	**723.3**	**0.0**
	C-GSGF Flt 1	65	0.0	10.0	0.0	723.3	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny becomes overcast and stormy, gale, high of 23C.		**Remarks**	One full production flight before the storm.			
Geomag	unsettled						
7-Aug	**Sunday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale with rain, high of 20C.		**Remarks**	No flight due to strong winds.			
Geomag	unsettled						
Comments	Weather made production difficult this week. Managed some low lying terrain. Approximately 30% of the remaining lines are in relatively flat terrain, the rest requires a calm day with a high ceiling.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	108
Steve Gebhardt	Lead Pilot			ON SITE	7	108
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	100
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME			ON SITE	7	36
Cameron McKee	Geophysicist			ON SITE	7	31
Andre Lafontaine	Pilot			ON SITE	7	20

HSE Statistics	This Week	Project Totals
SGL Person Hours	315	3202.5
Inductions	0	3
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		2
Tellus Complaints	0	3

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	4603.1	**Total km Flown to Date**	31077.2
Total Remaining (km)	12063.8	**km Reflown This Week**	0.0
Percent Complete (%)	72.0	**Flight Time This Week (h)**	35.3
Prod km/Day This Week	657.6	**Prod km/Flt Hour This Week**	130.4

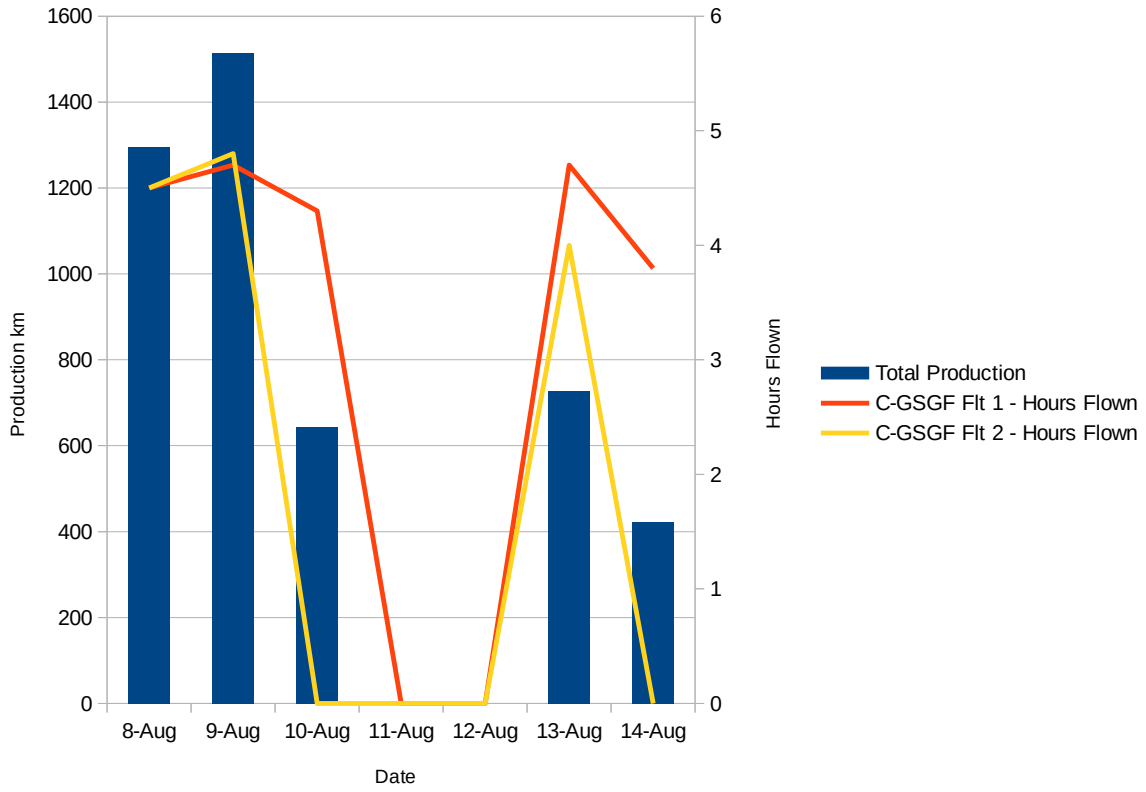
WEEKLY PRODUCTION

Week 11		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**35.3**	**59.7**	**0.0**	**4603.1**	**0.0**
8-Aug	**Monday**		**9.0**	**18.0**	**0.0**	**1296.4**	**0.0**
	C-GSGF Flt 1	66	4.5	10.0	0.0	642.3	0.0
	C-GSGF Flt 2	67	4.5	8.0	0.0	654.1	0.0
Weather	Partly sunny, rain showers, high of 18C.		**Remarks**	Two full production flights.			
Geomag	unsettled						
9-Aug	**Tuesday**		**9.5**	**22.0**	**0.0**	**1513.9**	**0.0**
	C-GSGF Flt 1	68	4.7	12.0	0.0	720.2	0.0
	C-GSGF Flt 2	69	4.8	10.0	0.0	793.7	0.0
Weather	Partly sunny, windy, high of 17C.		**Remarks**	Two full production flights.			
Geomag	unsettled						
10-Aug	**Wednesday**		**4.3**	**8.0**	**0.0**	**642.9**	**0.0**
	C-GSGF Flt 1	70	4.3	8.0	0.0	642.9	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast, heavy rain, mist, followed by partly sunny, high of 17C.		**Remarks**	Full production flight in late afternoon following poor weather all day. Maintenance performed during day. Safety meeting in the morning.			
Geomag	quiet						
11-Aug	**Thursday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast and mist, high of 17C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
12-Aug	**Friday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Strong winds followed by heavy rain, high of 19C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
13-Aug	**Saturday**		**8.7**	**11.7**	**0.0**	**728.3**	**0.0**
	C-GSGF Flt 1	71	4.7	10.7	0.0	665.9	0.0
	C-GSGF Flt 2	72	4.0	1.0	0.0	62.4	0.0
Weather	Overcast with rain and mist in mountains, high of 18C.		**Remarks**	One full production flight followed by a test flight. The Bundoran (client) test line and FEM calibration (conductivity) test completed.			
Geomag	quiet						
14-Aug	**Sunday**		**3.8**	**0.0**	**0.0**	**421.6**	**0.0**
	C-GSGF Flt 1	73	3.8	0.0	0.0	421.6	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast with low ceilings in mountains, high of 18C.		**Remarks**	One production flight. Due to Connemara Pony Show production was limited to one small area of relatively flat terrain, the remaining lines were unreachable in the mountains. Maintenance of aircraft completed in the afternoon.			
Geomag	quiet						
Comments	An excellent week, our best so far. We are quickly running out of flat terrain, only 15% of remaining lines are flyable when the ceiling is low. Hoping for the typical Irish weather to give us a break in the next week or two.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	115
Steve Gebhardt	Lead Pilot			ON SITE	7	115
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	107
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME			ON SITE	7	43
Cameron McKee	Geophysicist			ON SITE	7	38
Andre Lafontaine	Pilot			ON SITE	7	27

HSE Statistics	This Week	Project Totals
SGL Person Hours	315	3517.5
Inductions	0	3
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting	1	3
Tellus Complaints	0	4

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	2223.9	**Total km Flown to Date**	33301.1
Total Remaining (km)	9839.9	**km Reflown This Week**	0.0
Percent Complete (%)	77.2	**Flight Time This Week (h)**	15.7
Prod km/Day This Week	317.7	**Prod km/Flt Hour This Week**	141.6

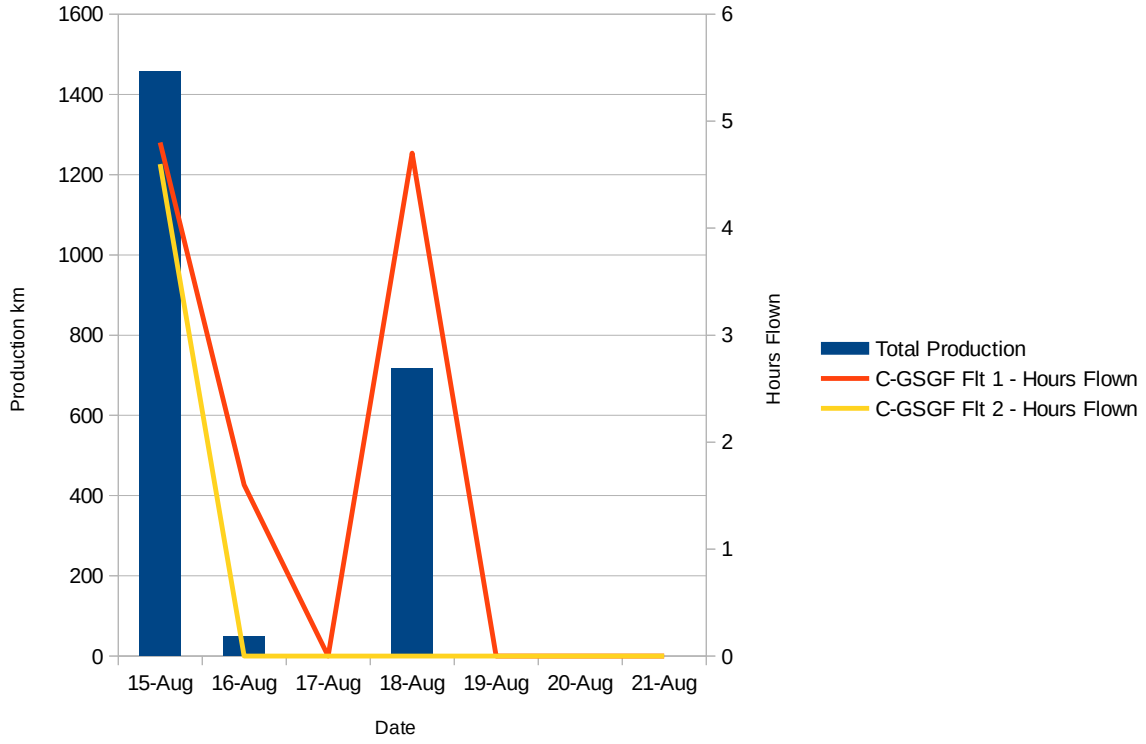
WEEKLY PRODUCTION

Week 12		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**15.7**	**35.0**	**0.0**	**2223.9**	**0.0**
15-Aug	**Monday**		**9.4**	**25.0**	**0.0**	**1456.7**	**0.0**
	C-GSGF Flt 1	74	4.8	12.0	0.0	748.3	0.0
	C-GSGF Flt 2	75	4.6	13.0	0.0	708.4	0.0
Weather	Sunny and windy, high of 24C.		**Remarks**	Two full production flights.			
Geomag	quiet						
16-Aug	**Tuesday**		**1.6**	**0.8**	**0.0**	**50.3**	**0.0**
	C-GSGF Flt 1	76	1.6	0.8	0.0	50.3	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Bright and sunny, very strong winds, high of 25C.		**Remarks**	Flight aborted due to strong winds. No second flight possible. Maintenance performed in afternoon.			
Geomag	quiet						
17-Aug	**Wednesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain all day followed by fog, high of 18C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
18-Aug	**Thursday**		**4.7**	**9.2**	**0.0**	**716.9**	**0.0**
	C-GSGF Flt 1	77	4.7	9.2	0.0	716.9	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Thick fog in am, overcast with mist in pm, high of 20C.		**Remarks**	One full production flight once fog cleared.			
Geomag	quiet						
19-Aug	**Friday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale, high of 19C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
20-Aug	**Saturday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale continues with heavy rain, high of 18C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
21-Aug	**Sunday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Strong winds with fog, mist and rain, high of 19C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
Comments	An average week for production. Gale force winds and heavy rain at the end of the week hampered production. Outlook for weather next week is more promising. Only 4 flat terrain lines remain.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	122
Steve Gebhardt	Lead Pilot			ON SITE	7	122
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	114
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME			ON SITE	7	50
Cameron McKee	Geophysicist			ON SITE	7	45
Andre Lafontaine	Pilot			ON SITE	7	34

HSE Statistics	This Week	Project Totals
SGL Person Hours	315	3832.5
Inductions	0	3
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting	0	3
Tellus Complaints	1	5

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



SANDER GEOPHYSICS AIRBORNE GEOPHYSICAL SURVEY

260 Hunt Club Road, Ottawa, ON K1V 1C1 Canada Tel: +1 613-521-9626 Fax: +1 613-521-0215 www.sgl.com

SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	3017.6	**Total km Flown to Date**	36318.7
Total Remaining (km)	6822.3	**km Reflown This Week**	68.8
Percent Complete (%)	84.2	**Flight Time This Week (h)**	25.4
Prod km/Day This Week	431.1	**Prod km/Flt Hour This Week**	118.8

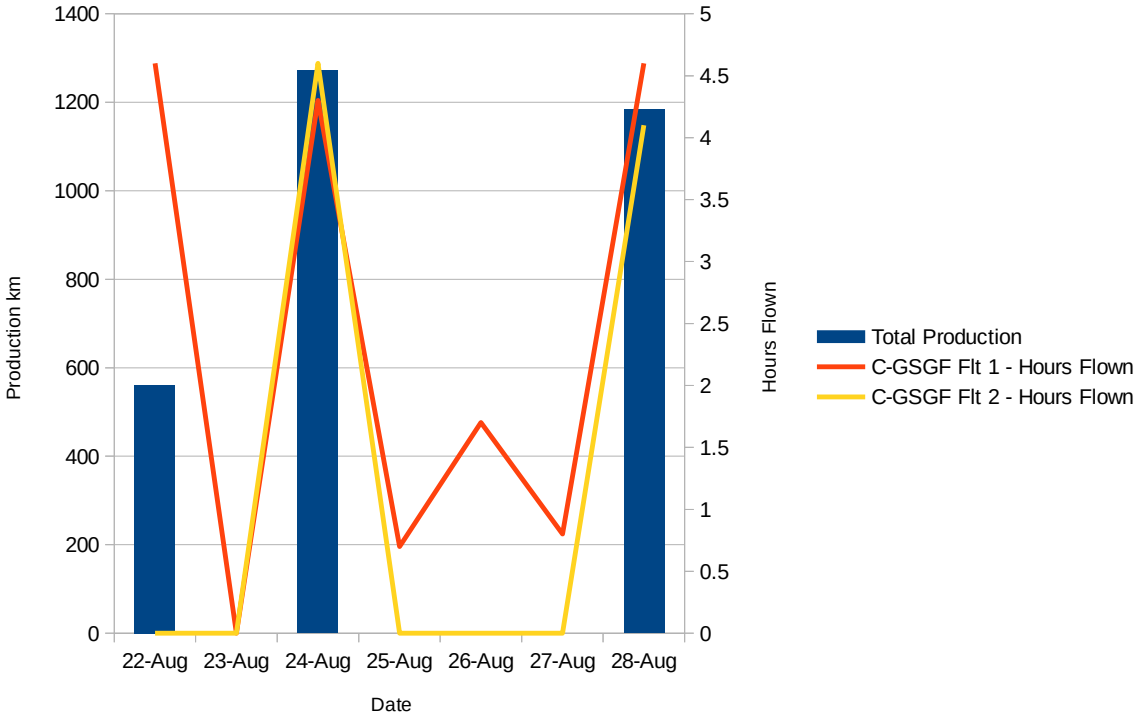
WEEKLY PRODUCTION

Week 13		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**25.4**	**49.8**	**1.0**	**3017.6**	**68.8**
22-Aug	**Monday**		**4.6**	**9.0**	**1.0**	**561.2**	**68.8**
	C-GSGF Flt 1	78	4.6	9.0	1.0	561.2	68.8
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Fog becomes partly sunny with strong winds, high of 20C.		**Remarks**	One full production flight. Second flight not possible to strong winds.			
Geomag	quiet						
23-Aug	**Tuesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny, high of 18C.		**Remarks**	No flight due to low ceilings in mountains.			
Geomag	unsettled						
24-Aug	**Wednesday**		**8.9**	**26.0**	**0.0**	**1271.8**	**0.0**
	C-GSGF Flt 1	79	4.3	12.0	0.0	567.6	0.0
	C-GSGF Flt 2	80	4.6	14.0	0.0	704.2	0.0
Weather	Partly sunny, high of 20C.		**Remarks**	Two full production flights.			
Geomag	unsettled						
25-Aug	**Thursday**		**0.7**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	81	0.7	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny, low ceiling in moutnains, high of 21C.		**Remarks**	Flight aborted due to low ceilings in mountains.			
Geomag	quiet						
26-Aug	**Friday**		**1.7**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	82	1.7	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny, low ceiling in moutnains, high of 19C.		**Remarks**	Flight aborted due to low ceilings in mountains. Magnetic compensation completed.			
Geomag	quiet						
27-Aug	**Saturday**		**0.8**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	83	0.8	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast, heavy rain showers, high of 20C.		**Remarks**	Flight aborted due to heavy rain.			
Geomag	quiet						
28-Aug	**Sunday**		**8.7**	**14.8**	**0.0**	**1184.6**	**0.0**
	C-GSGF Flt 1	84	4.6	6.5	0.0	592.7	0.0
	C-GSGF Flt 2	85	4.1	8.3	0.0	591.9	0.0
Weather	Partly sunny, high of 21C.		**Remarks**	Two full production flights.			
Geomag	micropulsations						
Comments	Weather in the mountains caused delays in production this week.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	129
Steve Gebhardt	Lead Pilot			ON SITE	7	129
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	121
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME			ON SITE	7	57
Cameron McKee	Geophysicist			ON SITE	7	52
Andre Lafontaine	Pilot			ON SITE	7	41

HSE Statistics	This Week	Project Totals
SGL Person Hours	315	4147.5
Inductions	0	3
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		3
Tellus Complaints	0	5

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	996.4	**Total km Flown to Date**	37315.1
Total Remaining (km)	5825.9	**km Reflown This Week**	0.0
Percent Complete (%)	86.5	**Flight Time This Week (h)**	10.5
Prod km/Day This Week	142.3	**Prod km/Flt Hour This Week**	94.9

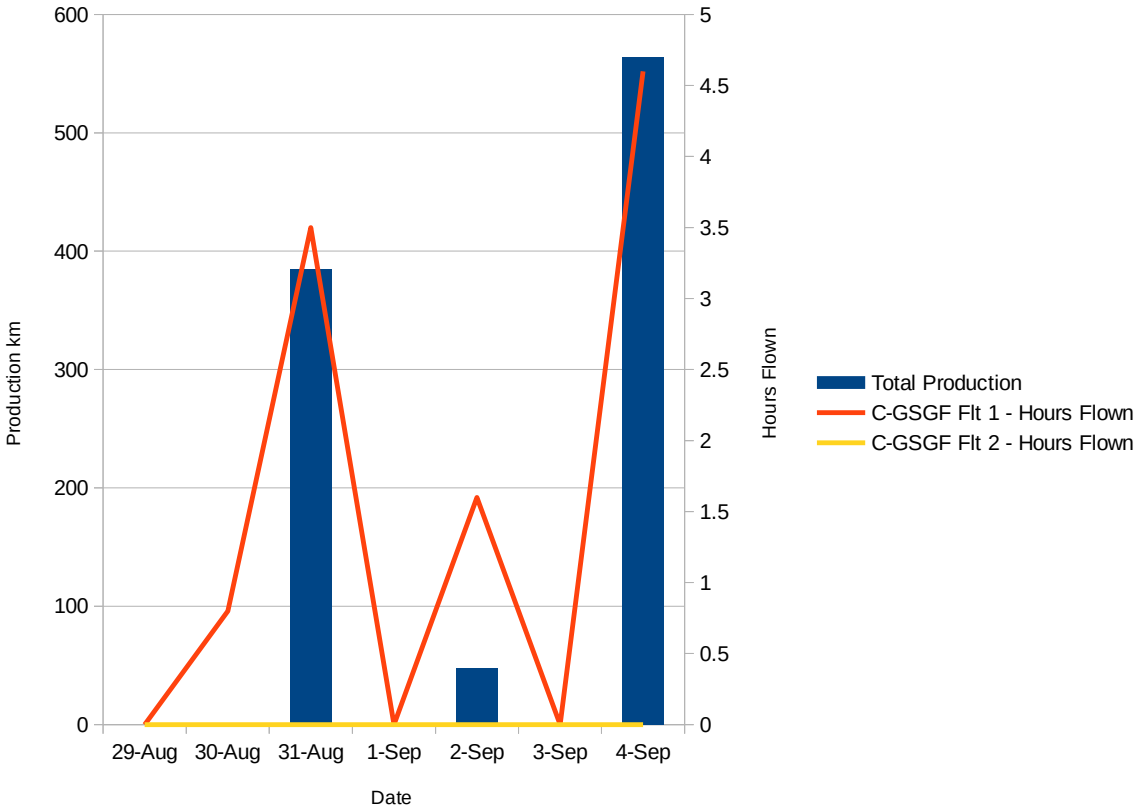
WEEKLY PRODUCTION

Week 14		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**10.5**	**16.9**	**0.0**	**996.4**	**0.0**
29-Aug	**Monday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny, low ceiling in mountains, high of 19C.		**Remarks**	No flight due to cloud cover over mountains.			
Geomag	quiet						
30-Aug	**Tuesday**		**0.8**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	86	0.8	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast, heavy rain in late afternoon, high of 21C.		**Remarks**	Flight aborted due to cloud cover over mountains.			
Geomag	quiet						
31-Aug	**Wednesday**		**3.5**	**6.4**	**0.0**	**385.0**	**0.0**
	C-GSGF Flt 1	87	3.5	6.4	0.0	385.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast with rain and strong winds, high of 17C.		**Remarks**	One production flight near end of day.			
Geomag	micropulsations						
1-Sep	**Thursday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain all day, high of 18C.		**Remarks**	No flight due to rain and poor visibility.			
Geomag	unsettled						
2-Sep	**Friday**		**1.6**	**0.8**	**0.0**	**47.4**	**0.0**
	C-GSGF Flt 1	88	1.6	0.8	0.0	47.4	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny, fog and poor visibility in mountains, windy, high of 19C.		**Remarks**	Flight aborted due to poor visibility and strong winds.			
Geomag	unsettled						
3-Sep	**Saturday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain all day, heavy at times, high of 20C.		**Remarks**	No flight due to rain.			
Geomag	unsettled						
4-Sep	**Sunday**		**4.6**	**9.7**	**0.0**	**564.0**	**0.0**
	C-GSGF Flt 1	89	4.6	9.7	0.0	564.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny, rain in afternoon, high of 18C.		**Remarks**	Full production flight. No second flight due to rain.			
Geomag	unsettled						
Comments	The weather almost halted production this week. The forecast remains mixed for the coming week. All lines flown were partials, unable to fly in the mountains.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	136
Steve Gebhardt	Lead Pilot			ON SITE	7	136
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	128
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME		2-Sep-16	ON SITE	5	62
Cameron McKee	Geophysicist			ON SITE	7	59
Andre Lafontaine	Pilot			ON SITE	7	48
John Burnham	AME	31-Aug-16		ON SITE	5	5
Jeff Tucker	Pilot					

HSE Statistics	This Week	Project Totals
SGL Person Hours	337.5	4485
Inductions	1	4
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		3
Tellus Complaints	0	5

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	205.6	**Total km Flown to Date**	37520.7
Total Remaining (km)	5620.3	**km Reflown This Week**	0.0
Percent Complete (%)	87.0	**Flight Time This Week (h)**	2.6
Prod km/Day This Week	29.4	**Prod km/Flt Hour This Week**	79.1

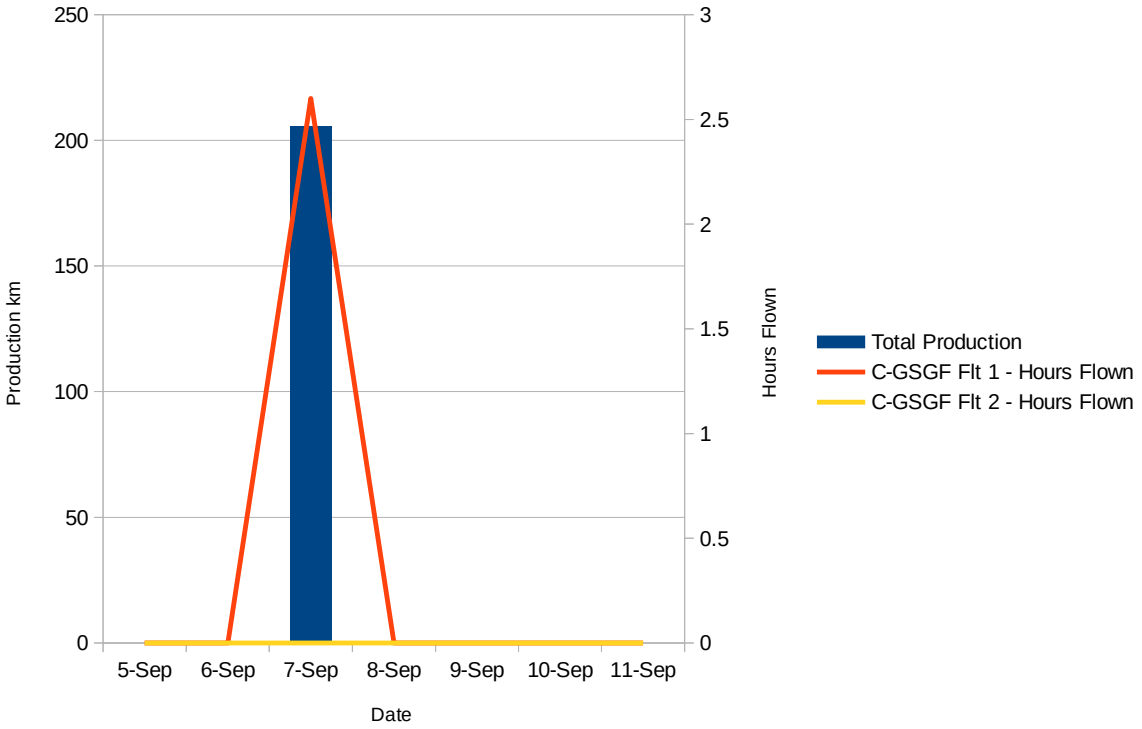
WEEKLY PRODUCTION

Week 15		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**2.6**	**3.7**	**0.0**	**205.6**	**0.0**
5-Sep	**Monday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Fog and rain, high of 23C.		**Remarks**	No flight due to poor visibility and rain.			
Geomag	unsettled						
6-Sep	**Tuesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Fog and rain, high of 23C.		**Remarks**	No flight due to poor visibility and rain.			
Geomag	micropulsations						
7-Sep	**Wednesday**		**2.6**	**3.7**	**0.0**	**205.6**	**0.0**
	C-GSGF Flt 1	90	2.6	3.7	0.0	205.6	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Fog and low ceilings, high of 20C.		**Remarks**	Flight aborted due to poor visibility and rain.			
Geomag	micropulsations						
8-Sep	**Thursday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale and heavy rain showers, high of 17C.		**Remarks**	No flight due to strong winds and rain.			
Geomag	micropulsations						
9-Sep	**Friday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Strong gale and heavy rain, high of 17C.		**Remarks**	No flight due to strong winds and rain. Discovered C-GSGF brake line leak, parts ordered, aircraft AOG.			
Geomag	quiet						
10-Sep	**Saturday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny, rain showers, high of 16C.		**Remarks**	No flight due to aircraft AOG. Low ceiling in mountains. Parts for aircraft sourced at Weston, will receive by end of day.			
Geomag	quiet						
11-Sep	**Sunday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Very strong gale, overcast with rain in pm, high of 18C.		**Remarks**	Maintenance on aircraft completed in am. No flight in pm due to strong winds.			
Geomag	quiet						
Comments	An unproductive week due to weather. Next week is looking more promising.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	143
Steve Gebhardt	Lead Pilot			ON SITE	7	143
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	135
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME				0	62
Cameron McKee	Geophysicist			ON SITE	7	66
Andre Lafontaine	Pilot			ON SITE	7	55
John Burnham	AME			ON SITE	7	12
Jeff Tucker	Pilot					

HSE Statistics	This Week	Project Totals
SGL Person Hours	315	4800
Inductions	0	4
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		3
Tellus Complaints	1	6

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	2861.7	**Total km Flown to Date**	40382.4
Total Remaining (km)	2758.6	**km Reflown This Week**	16.2
Percent Complete (%)	93.6	**Flight Time This Week (h)**	24.1
Prod km/Day This Week	408.8	**Prod km/Flt Hour This Week**	118.7

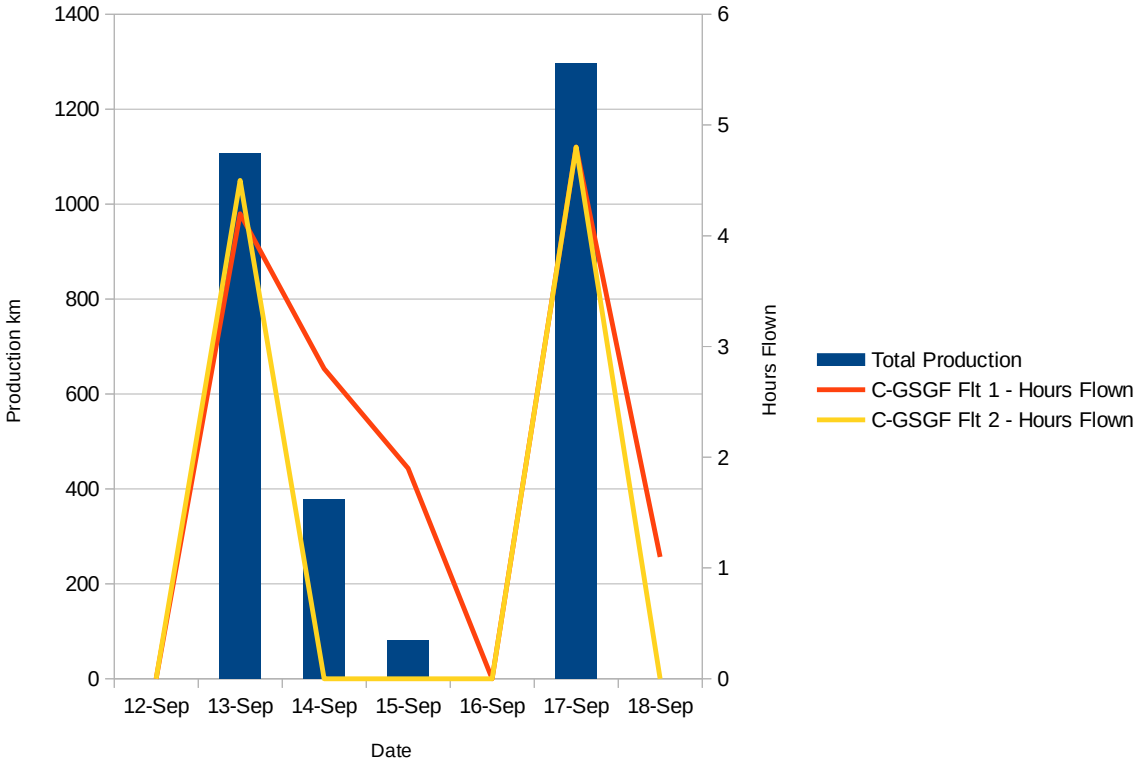
WEEKLY PRODUCTION

Week 16		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**24.1**	**51.6**	**0.3**	**2861.7**	**16.2**
12-Sep	**Monday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain and fog, high of 19C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
13-Sep	**Tuesday**		**8.7**	**19.0**	**0.3**	**1106.5**	**16.2**
	C-GSGF Flt 1	91	4.2	9.3	0.3	526.7	16.2
	C-GSGF Flt 2	92	4.5	9.7	0.0	579.8	0.0
Weather	Fog in am, sunny, high of 18C.		**Remarks**	Two full production flights.			
Geomag	quiet						
14-Sep	**Wednesday**		**2.8**	**7.2**	**0.0**	**378.2**	**0.0**
	C-GSGF Flt 1	93	2.8	7.2	0.0	378.2	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Sunny, becomes fog and rain, high of 14C.		**Remarks**	Flight aborted due to heavy rain and fog.			
Geomag	micropulsations						
15-Sep	**Thursday**		**1.9**	**1.4**	**0.0**	**80.6**	**0.0**
	C-GSGF Flt 1	94	1.9	1.4	0.0	80.6	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Fog all day, sunny breaks, high of 18C.		**Remarks**	Flight aborted due to fog, rain and poor visibility.			
Geomag	quiet						
16-Sep	**Friday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Fog to partly sunny, low ceilings, high of 16C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
17-Sep	**Saturday**		**9.6**	**24.0**	**0.0**	**1296.4**	**0.0**
	C-GSGF Flt 1	95	4.8	10.9	0.0	586.4	0.0
	C-GSGF Flt 2	96	4.8	13.1	0.0	710.0	0.0
Weather	Overcast, high of 17C.		**Remarks**	Two full production flights.			
Geomag	quiet						
18-Sep	**Sunday**		**1.1**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	97	1.1	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain and fog, partly sunny late pm, high of 17C.		**Remarks**	Mid afternoon flight aborted due to fog, rain and poor visibility. Jeff Tucker, pilot, arrives in Galway.			
Geomag	quiet						
Comments	A better week. Good production, even a double flight day in the mountains. Only 18 full lines remain, all the rest of the lkm are partials in the mountains of Connemara.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	150
Steve Gebhardt	Lead Pilot			ON SITE	7	150
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	142
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME				0	62
Cameron McKee	Geophysicist			ON SITE	7	73
Andre Lafontaine	Pilot			ON SITE	7	62
John Burnham	AME			ON SITE	7	19
Jeff Tucker	Pilot	18-Sep-16		ON SITE	1	1

HSE Statistics	This Week	Project Totals
SGL Person Hours	322.5	5122.5
Inductions	1	5
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting	0	3
Tellus Complaints	0	6

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



SANDER GEOPHYSICS AIRBORNE GEOPHYSICAL SURVEY

260 Hunt Club Road, Ottawa, ON K1V 1C1 Canada Tel: +1 613-521-9626 Fax: +1 613-521-0215 www.sgl.com

SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	1128.6	**Total km Flown to Date**	41514.0
Total Remaining (km)	1627.0	**km Reflown This Week**	46.4
Percent Complete (%)	96.2	**Flight Time This Week (h)**	11.8
Prod km/Day This Week	161.2	**Prod km/Flt Hour This Week**	95.6

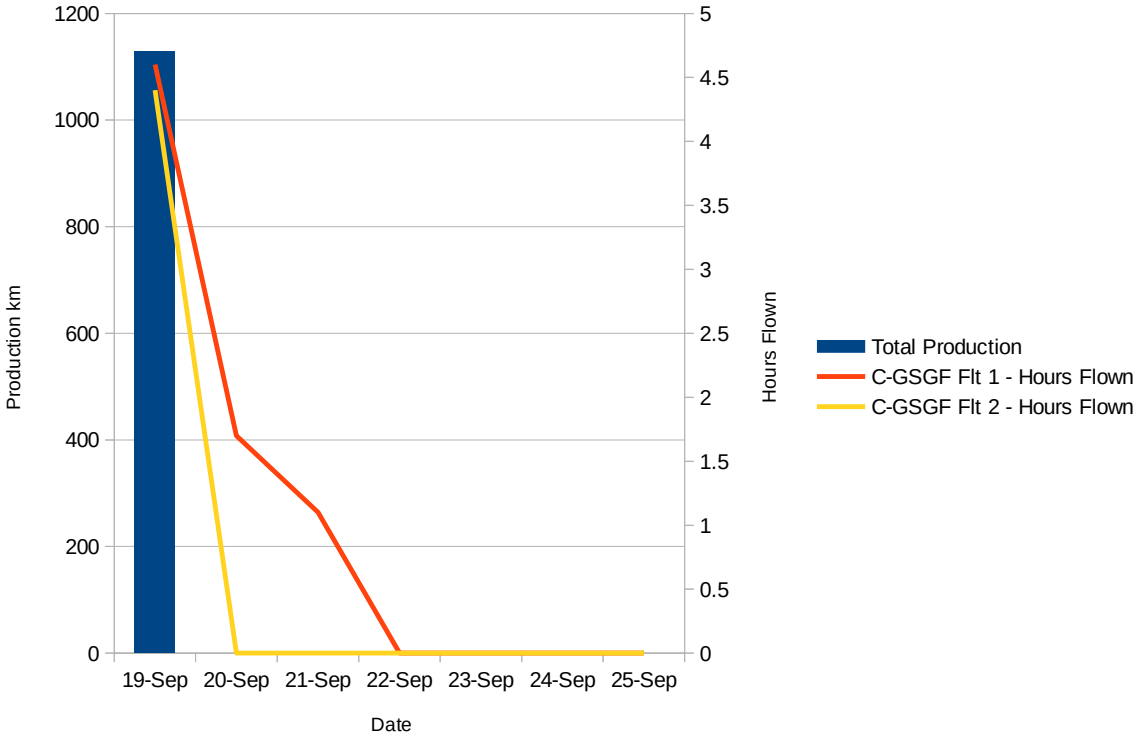
WEEKLY PRODUCTION

Week 17		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**11.8**	**20.5**	**0.8**	**1128.6**	**46.4**
19-Sep	**Monday**		**9.0**	**20.5**	**0.8**	**1128.6**	**46.4**
	C-GSGF Flt 1	98	4.6	10.8	0.0	580.3	0.0
	C-GSGF Flt 2	99	4.4	9.7	0.8	548.3	46.4
Weather	Overcast, high of 15C.		**Remarks**	Two full production flights. Andre returns to Canada.			
Geomag	quiet						
20-Sep	**Tuesday**		**1.7**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	100	1.7	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast, fog, mist, rain, high of 17C.		**Remarks**	No production flight due to weather. Short training flight near Galway airport.			
Geomag	quiet						
21-Sep	**Wednesday**		**1.1**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	101	1.1	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast, rain, fog, high of 15C.		**Remarks**	No flight due to weather. Short training flight near Galway airport.			
Geomag	quiet						
22-Sep	**Thursday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale and rain, high of 16C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
23-Sep	**Friday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale and rain, high of 16C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
24-Sep	**Saturday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain and gale, high of 17C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
25-Sep	**Sunday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Regular storms w/heavy rain and gale wind, high of 15C.		**Remarks**	No flight due to weather.			
Geomag	quiet						
Comments	4 flights remain, 3 for production and 1 for the Bundoran client test line. Weather this week not good, hopefully a couple of good days next week will allow for the completion of A2 block.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	157
Steve Gebhardt	Lead Pilot			ON SITE	7	157
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	149
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME				0	62
Cameron McKee	Geophysicist			ON SITE	7	80
Andre Lafontaine	Pilot		19-Sep-16	ON SITE	1	63
John Burnham	AME			ON SITE	7	26
Jeff Tucker	Pilot			ON SITE	7	8

HSE Statistics	This Week	Project Totals
SGL Person Hours	322.5	5445
Inductions	0	5
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		3
Tellus Complaints	0	6

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	1346.8	**Total km Flown to Date**	42860.8
Total Remaining (km)	280.2	**km Reflown This Week**	91.9
Percent Complete (%)	99.4	**Flight Time This Week (h)**	17.8
Prod km/Day This Week	192.4	**Prod km/Flt Hour This Week**	75.7

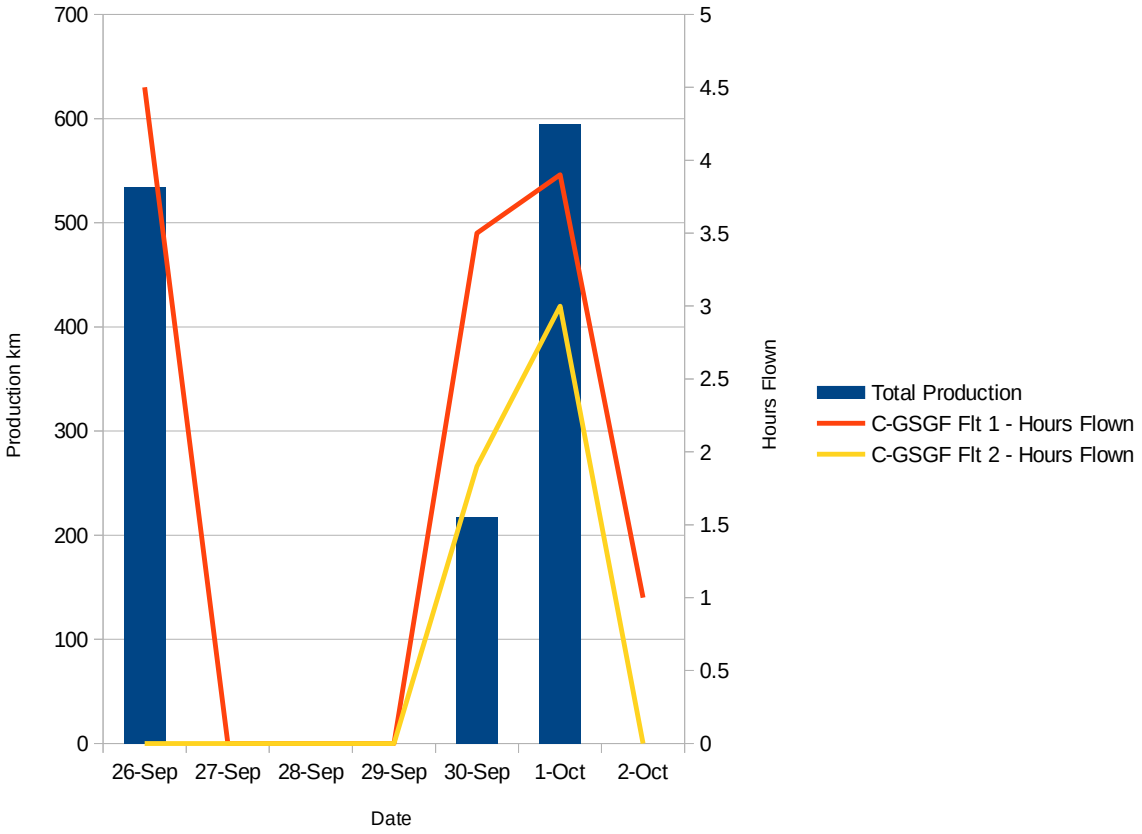
WEEKLY PRODUCTION

Week 18		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**17.8**	**23.9**	**1.2**	**1346.8**	**91.9**
26-Sep	**Monday**		**4.5**	**9.6**	**0.0**	**534.7**	**0.0**
	C-GSGF Flt 1	102	4.5	9.6	0.0	534.7	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Fog in am becomes partly sunny, calm, high of 17C.		**Remarks**	Full production flight once cloud lifted.			
Geomag	quiet						
27-Sep	**Tuesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale and hazy, high of 17C.		**Remarks**	No flight due to poor visibility and strong winds.			
Geomag	quiet						
28-Sep	**Wednesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale and heavy rain, high of 19C.		**Remarks**	No flight due to strong winds.			
Geomag	quiet						
29-Sep	**Thursday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Strong gale and partly sunny, high of 15C.		**Remarks**	No flight due to strong winds.			
Geomag	quiet						
30-Sep	**Friday**		**5.4**	**3.7**	**0.0**	**217.3**	**0.0**
	C-GSGF Flt 1	103	3.5	3.7	0.0	217.3	0.0
	C-GSGF Flt 2	104	1.9	0.0	0.0	0.0	0.0
Weather	Calm, partly sunny with thunder showers, high of 13C.		**Remarks**	Short production followed by Bundoran test line.			
Geomag	micropulsations						
1-Oct	**Saturday**		**6.9**	**10.6**	**1.2**	**594.8**	**91.9**
	C-GSGF Flt 1	105	3.9	5.3	1.2	301.6	91.9
	C-GSGF Flt 2	106	3.0	5.3	0.0	293.2	0.0
Weather	Partly sunny with thunder showers, high of 15C.		**Remarks**	Two production flights.			
Geomag	micropulsations						
2-Oct	**Sunday**		**1.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	107	1.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy fog, blue skies, gale, high of 15C.		**Remarks**	Short flight, no production due to thick wall of fog shrouding mountains, gale winds follow so second flight not possible.			
Geomag	quiet						
Comments	Most of the remainder of our lines were completed this week. The hardest of the lines are done so one more clear weather day will see the completion of A2 block. Weather looks good at end of week.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	164
Steve Gebhardt	Lead Pilot			ON SITE	7	164
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	156
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME				0	62
Cameron McKee	Geophysicist			ON SITE	7	87
Andre Lafontaine	Pilot				0	63
John Burnham	AME			ON SITE	7	33
Jeff Tucker	Pilot			ON SITE	7	15

HSE Statistics	This Week	Project Totals
SGL Person Hours	315	5760
Inductions	0	5
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		3
Tellus Complaints	0	6

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	280.2	**Total km Flown to Date**	43141.0
Total Remaining (km)	0.0	**km Reflown This Week**	206.4
Percent Complete (%)	100.0	**Flight Time This Week (h)**	4.3
Prod km/Day This Week	40.0	**Prod km/Flt Hour This Week**	65.2

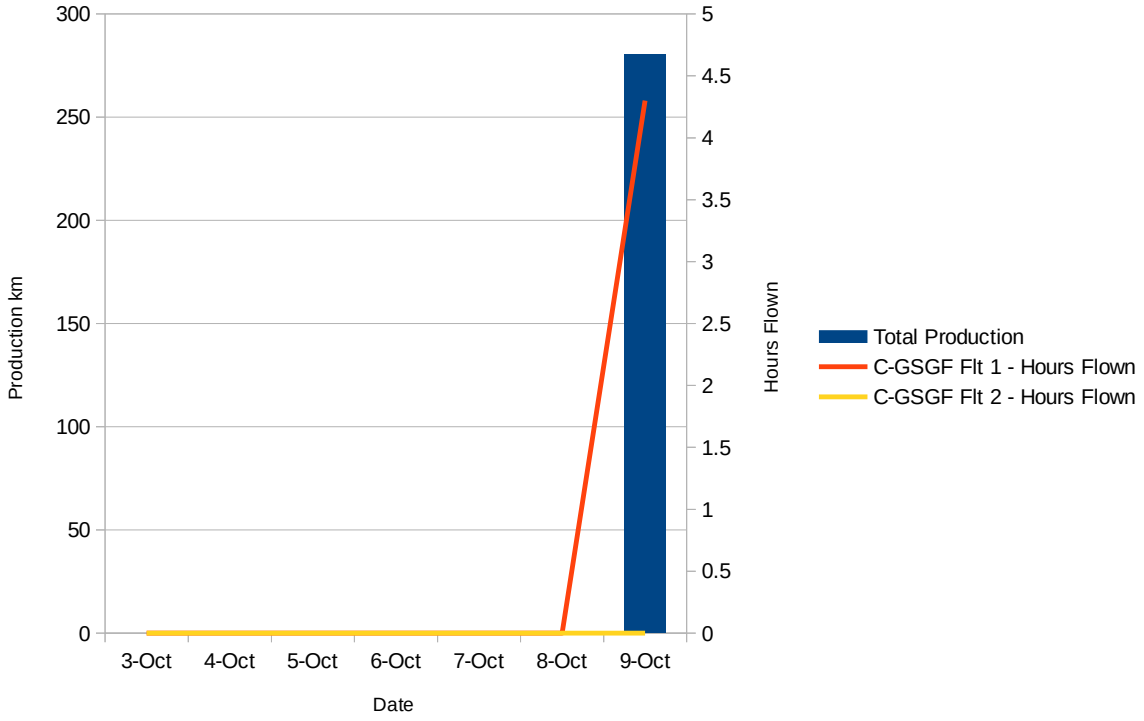
WEEKLY PRODUCTION

Week 19		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**4.3**	**4.7**	**3.5**	**280.2**	**206.4**
3-Oct	**Monday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale, high of 17C.		**Remarks**	No flight due to strong winds and low ceilings.			
Geomag	quiet						
4-Oct	**Tuesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain all day, high of 16C.		**Remarks**	No flight due to heavy rain.			
Geomag	quiet						
5-Oct	**Wednesday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Fog and gale, high of 18C.		**Remarks**	No flight due to strong winds.			
Geomag	quiet						
6-Oct	**Thursday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale and low ceilings, high of 15C.		**Remarks**	No flight due to strong winds and low ceilings.			
Geomag	quiet						
7-Oct	**Friday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Gale and fog, high of 16C.		**Remarks**	No flight due to strong winds.			
Geomag	quiet						
8-Oct	**Saturday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Rain and fog all day, high of 17C.		**Remarks**	No flight due to heavy rain.			
Geomag	quiet						
9-Oct	**Sunday**		**4.3**	**4.7**	**3.5**	**280.2**	**206.4**
	C-GSGF Flt 1	108	4.3	4.7	3.5	280.2	206.4
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Fog and haze, high of 16C.		**Remarks**	Flight completed near end of the day. Unfortunately technical difficulties resulted in reflight of lines.			
Geomag	quiet						
Comments	Weather did not cooperate this week. Only reflights remain to be completed.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	171
Steve Gebhardt	Lead Pilot			ON SITE	7	171
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot			ON SITE	7	163
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME				0	62
Cameron McKee	Geophysicist			ON SITE	7	94
Andre Lafontaine	Pilot				0	63
John Burnham	AME			ON SITE	7	40
Jeff Tucker	Pilot			ON SITE	7	22

HSE Statistics	This Week	Project Totals
SGL Person Hours	315	6075
Inductions	0	5
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		3
Tellus Complaints	0	6

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



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SURVEY DETAILS			
Survey Name	Tellus - A2 Block	**Client Name**	Geological Survey of Ireland
Survey Location	Galway, Ireland	**Contact Name**	Jim Hodgson
Project Code	GSI___16.IRL	**Contact Phone**	+353 1678 2742
Total km	43141	**Client Address**	Beggar's Bush, Haddington Road, Dublin 4, Ireland
Line Spacing	200 m by 2000 m		
Survey Type	MAG/SPEC/FEM	**Email**	jim.hodgson@gsi.ie / tellus@gsi.ie

SURVEY PRODUCTION SUMMARY			
Production This Week (km)	0.0	**Total km Flown to Date**	43141.0
Total Remaining (km)	0.0	**km Reflown This Week**	244.8
Percent Complete (%)	100.0	**Flight Time This Week (h)**	6.5
Prod km/Day This Week	0.0	**Prod km/Flt Hour This Week**	0.0

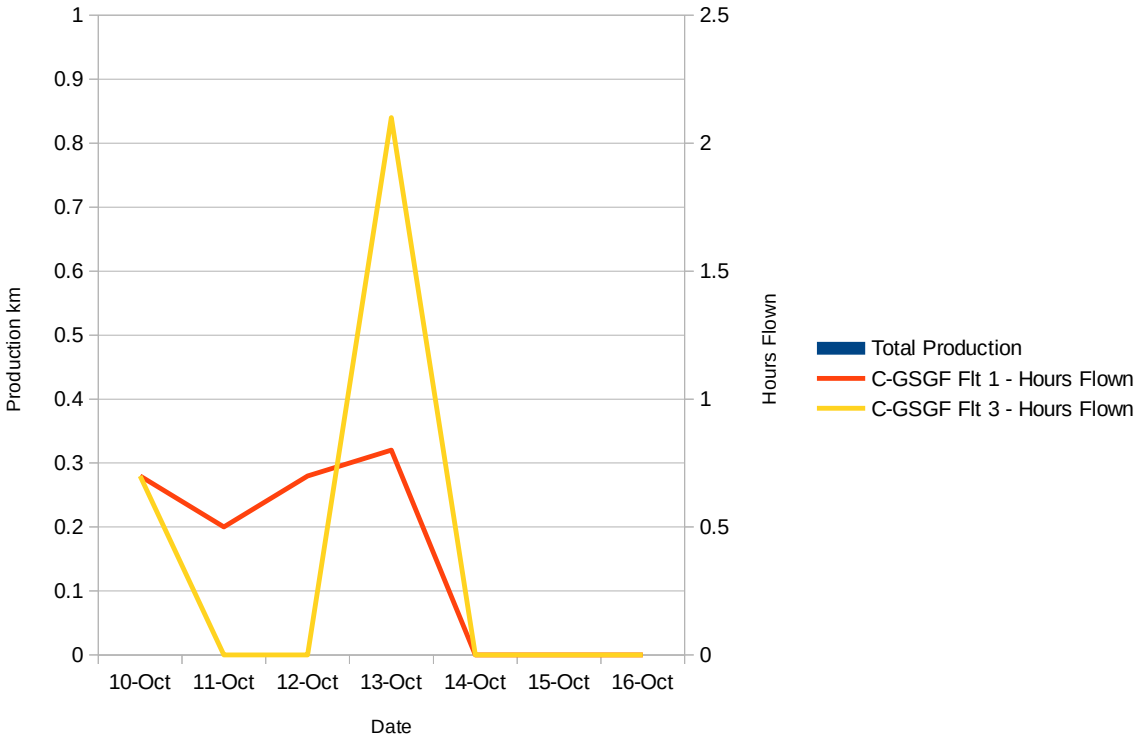
WEEKLY PRODUCTION

Week 20		Flight No.	Flight Time	No. of Lines Flown	No. Reflight Lines Flown	Production (km)	Reflown (km)
TOTALS			**6.5**	**0.0**	**4.2**	**0.0**	**244.8**
10-Oct	**Monday**		**2.4**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	109	0.7	0.0	0.0	0.0	0.0
	C-GSGF Flt 2	110	1.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 3	111	0.7	0.0	0.0	0.0	0.0
Weather	Fog becomes partly sunny, high of 15C.		**Remarks**	Two survey flight attempts, both aborted due to fog which never lifts out of mountains.			
Geomag	quiet						
11-Oct	**Tuesday**		**0.5**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	112	0.5	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Fog, overcast and gale, high of		**Remarks**	Flight aborted due to strong winds.			
Geomag	quiet						
12-Oct	**Wednesday**		**0.7**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1	113	0.7	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Fog, partly sunny, high of 15C.		**Remarks**	Flight aborted due to fog in mountains.			
Geomag	quiet						
13-Oct	**Thursday**		**2.9**	**0.0**	**4.2**	**0.0**	**244.8**
	C-GSGF Flt 1	114	0.8	0.0	0.0	0.0	0.0
	C-GSGF Flt 2	115	2.1	0.0	4.2	0.0	244.8
Weather	Fog, partly sunny, high of 14C.		**Remarks**	First flight aborted due to fog in mountains. Second flight completes reflights. A2 block is complete.			
Geomag	unsettled						
14-Oct	**Friday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Overcast with rain showers, high of 12C.		**Remarks**	Demobilization commences. Final mag/spec field data delivered, FEM will be delivered on Monday.			
Geomag	active						
15-Oct	**Saturday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Partly sunny, high of 14C.		**Remarks**	Aircraft moves to Weston for preparation of departure from Ireland.			
Geomag	quiet						
16-Oct	**Sunday**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	C-GSGF Flt 1		0.0	0.0	0.0	0.0	0.0
	C-GSGF Flt 2		0.0	0.0	0.0	0.0	0.0
Weather	Heavy rain all day, high of 13C.		**Remarks**	Demobilization continues.			
Geomag	active						
Comments	This week saw the end of the 2016 Tellus project. Many thanks to all that helped make this year successful and ahead of schedule. Special thanks to the GSI team for their continued daily PR work and support.						
Signed	Alison McCleary						

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**
Alison McCleary	Crew Chief			ON SITE	7	178
Steve Gebhardt	Lead Pilot			ON SITE	7	178
Ian Boychuck	AME				0	68
Craig McMahon	Technician				0	51
Charles Dicks	Pilot		15-Oct-16	ON SITE	6	169
Jason Thomas	Pilot				0	62
Diana Kuiper	Geophysicist				0	72
John Sevenhuysen	AME				0	62
Cameron McKee	Geophysicist				0	90
Andre Lafontaine	Pilot				0	63
John Burnham	AME		15-Oct-16	ON SITE	6	46
Jeff Tucker	Pilot		15-Oct-16	ON SITE	6	28

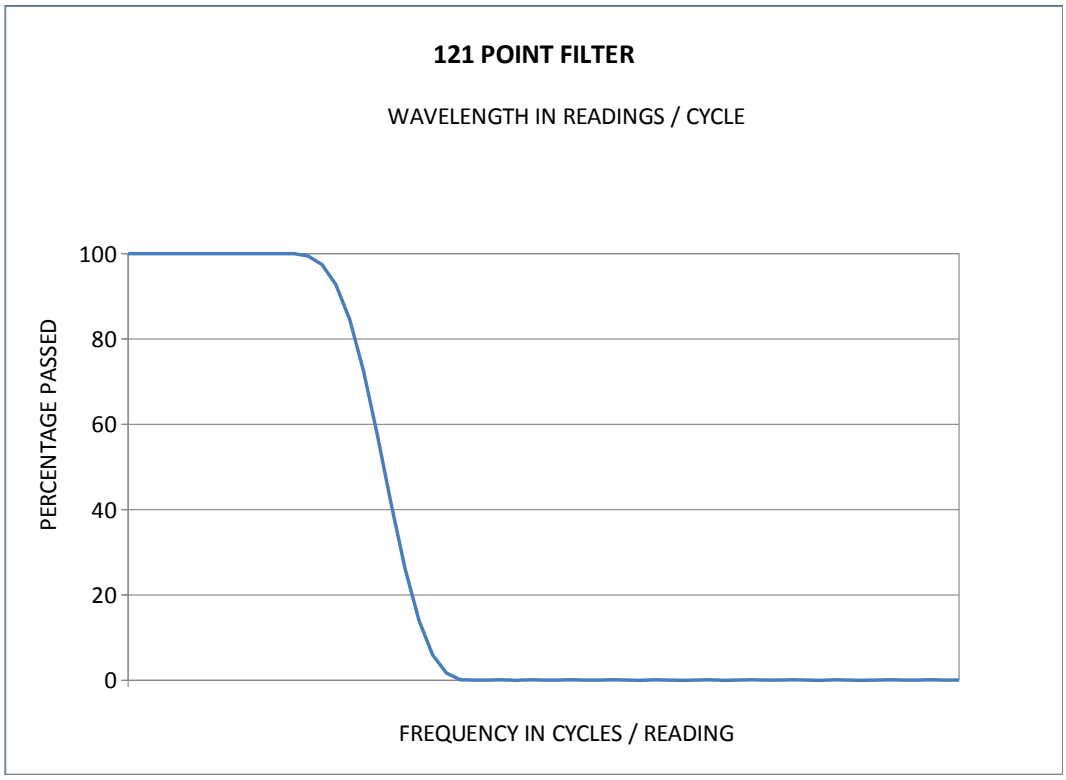
HSE Statistics	This Week	Project Totals
SGL Person Hours	240	6285
Inductions	0	5
Near Miss		0
First Aid Case (FAC)		0
Medical Treatment Case (MTC)		0
Restricted Work Case (RWC)		0
Lost Time Injuries (LTI)		0
Safety Meeting		3
Tellus Complaints	0	6

WEEKLY PRODUCTION KILOMETRES AND HOURS FLOWN



SGL

Appendix VII


121 POINT FILTER
WAVELENGTH IN READINGS / CYCLE
PERCENTAGE PASSED
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80
60
40
20
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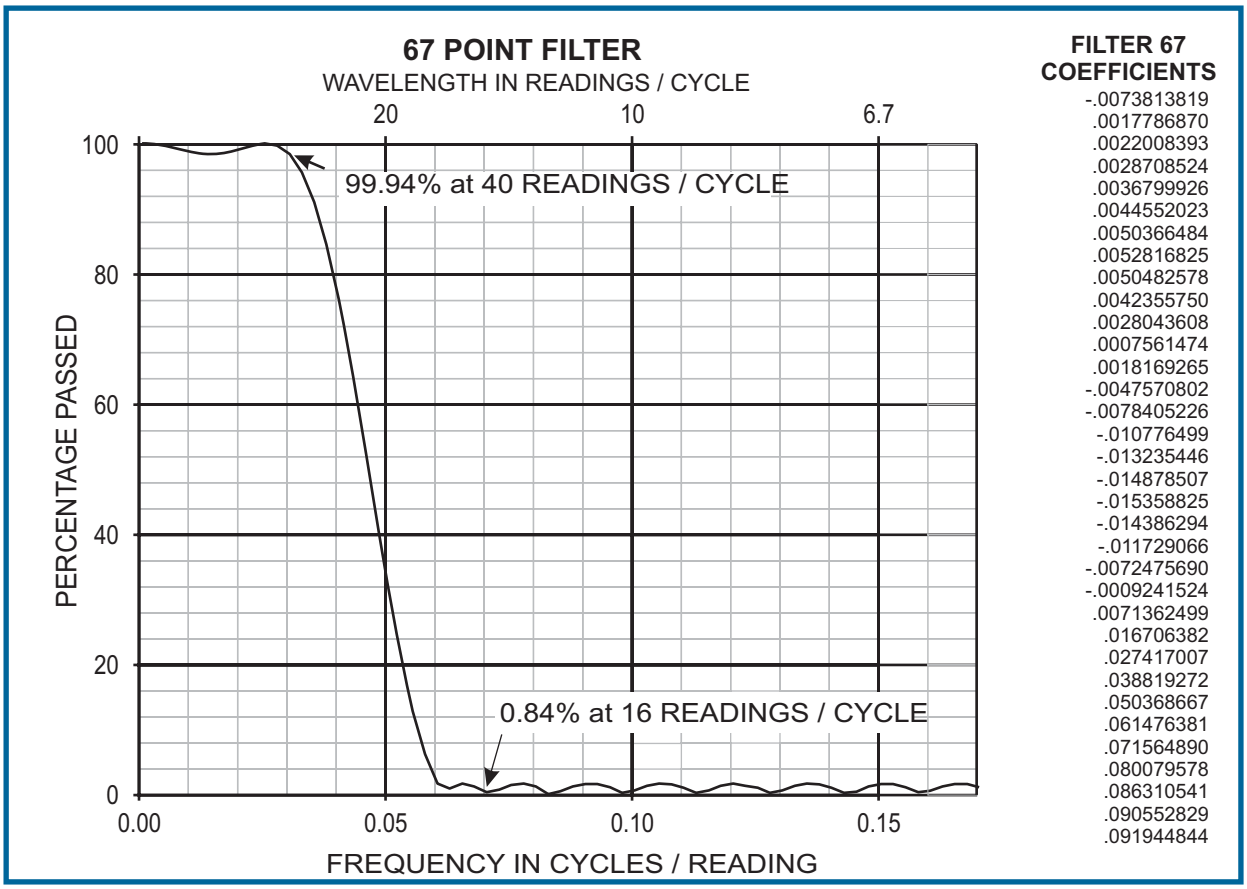
FREQUENCY IN CYCLES / READING



FILTER 67 COEFFICIENTS

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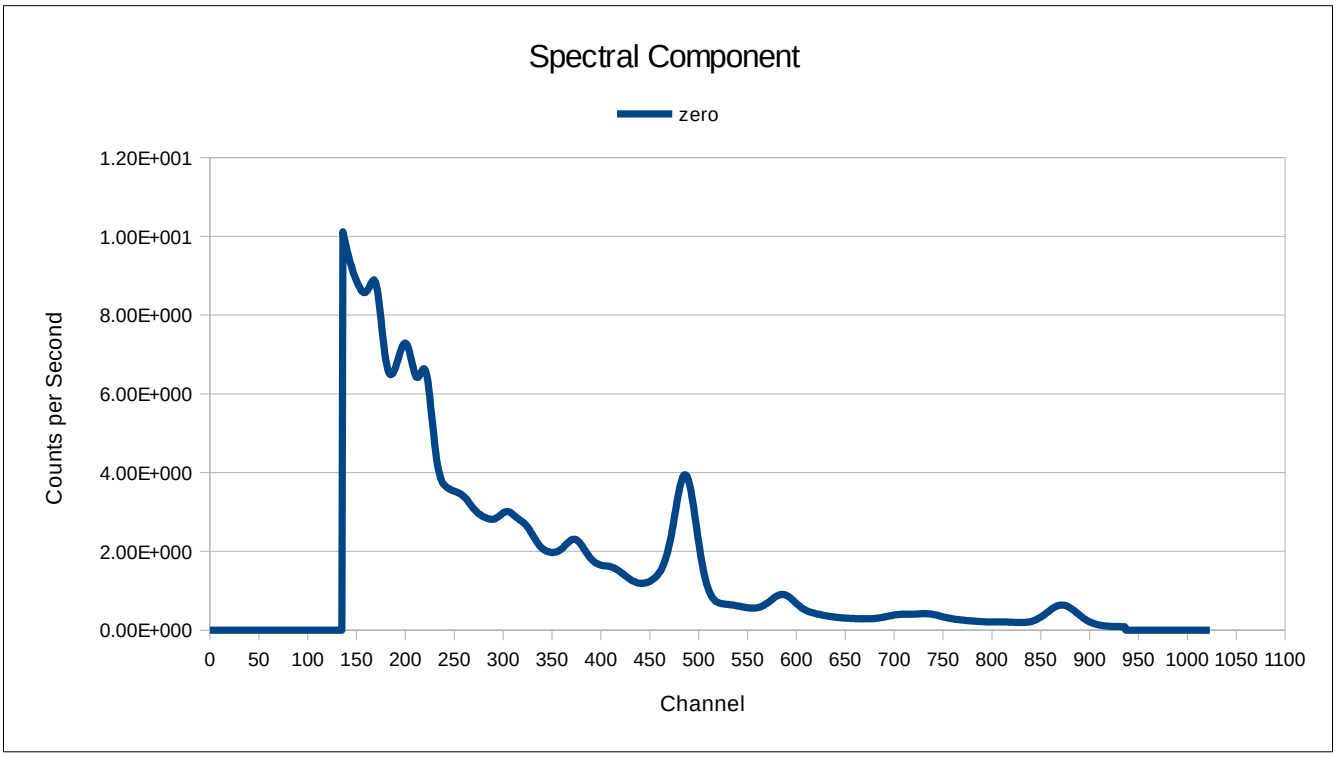
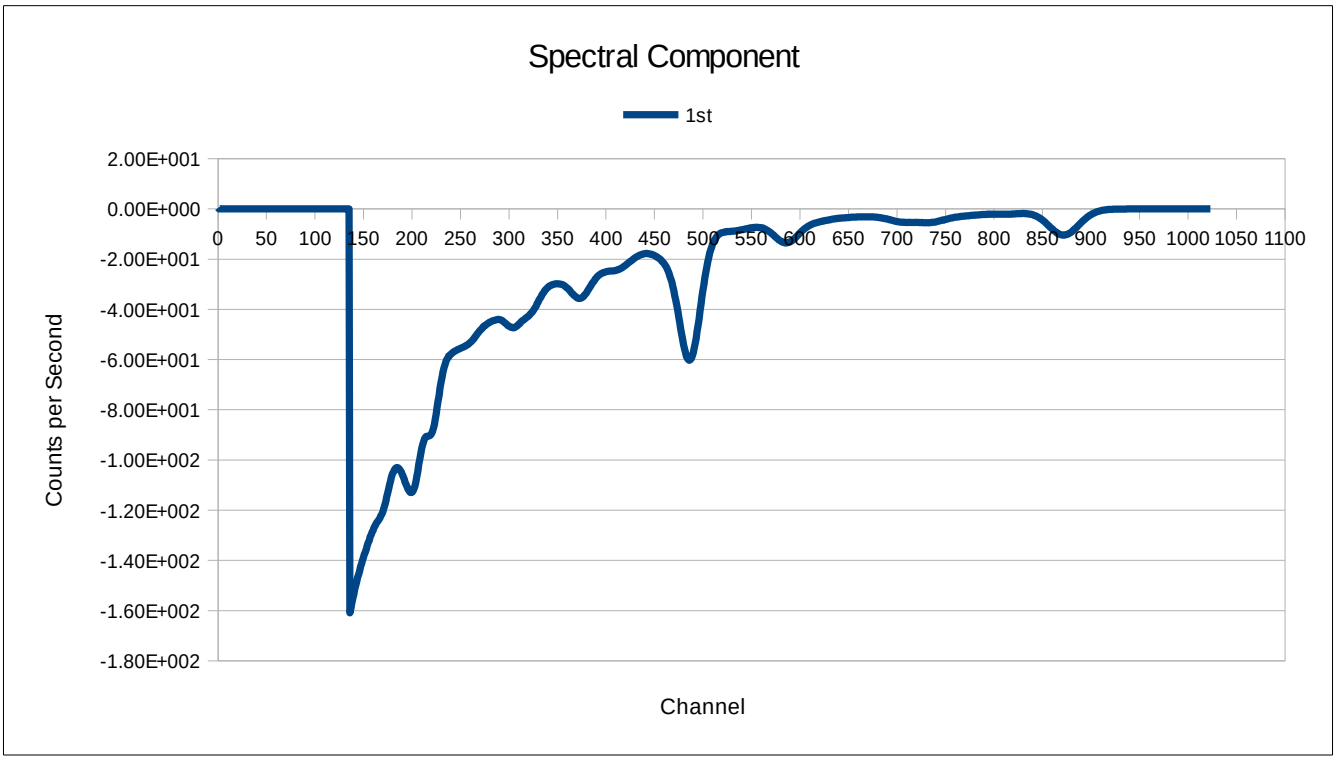
SGL

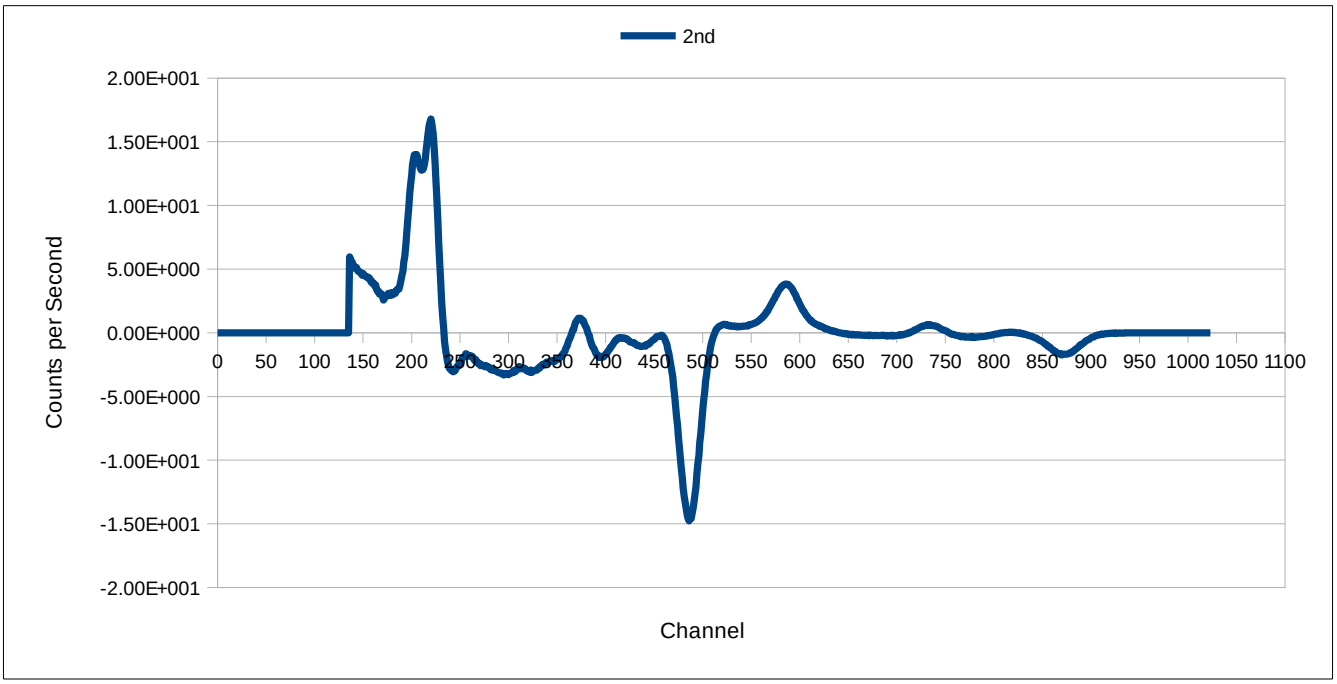
Appendix VIII

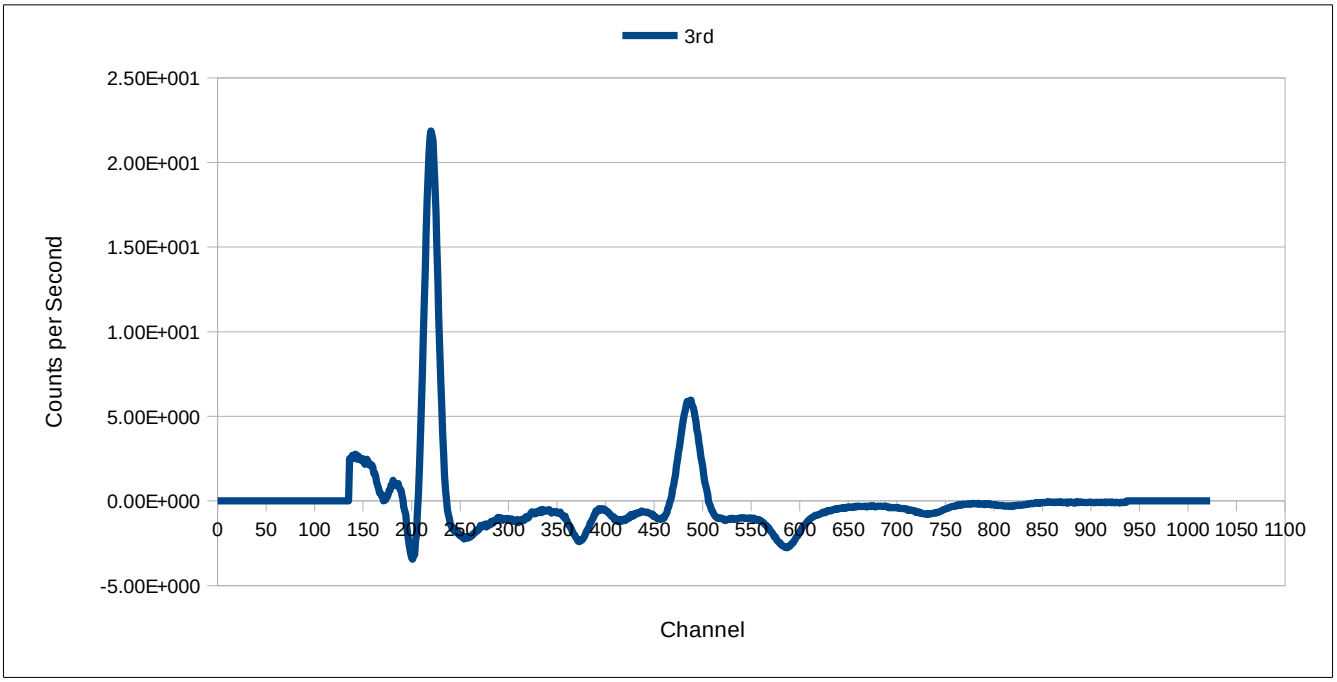
Spectral Components



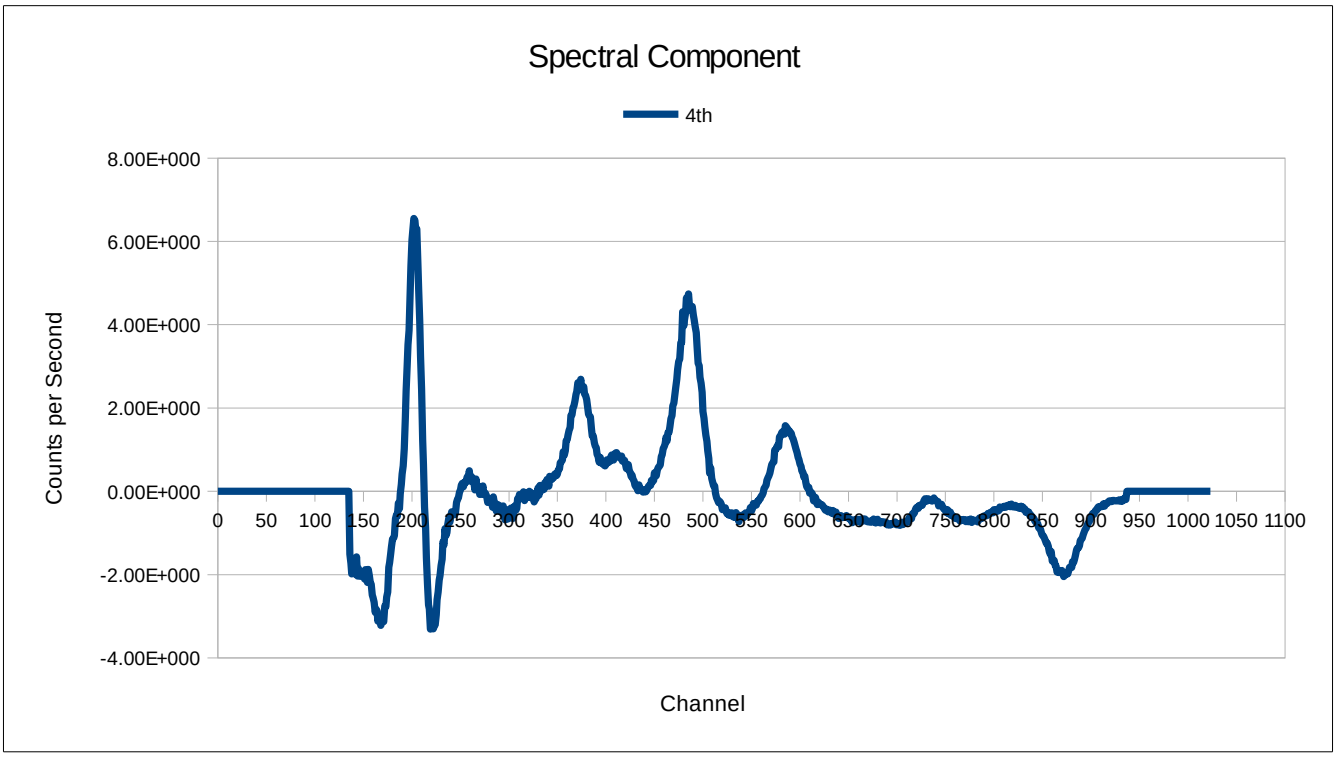


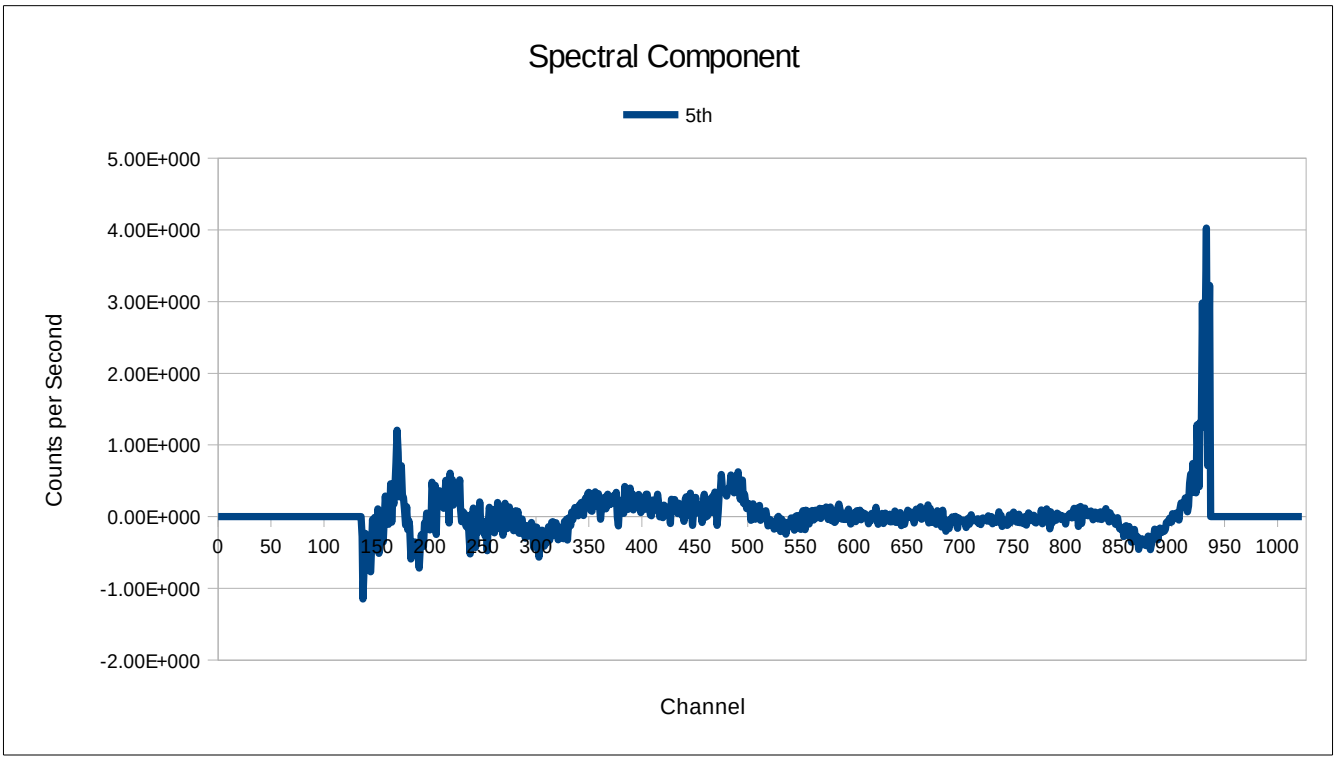
Spectral Components



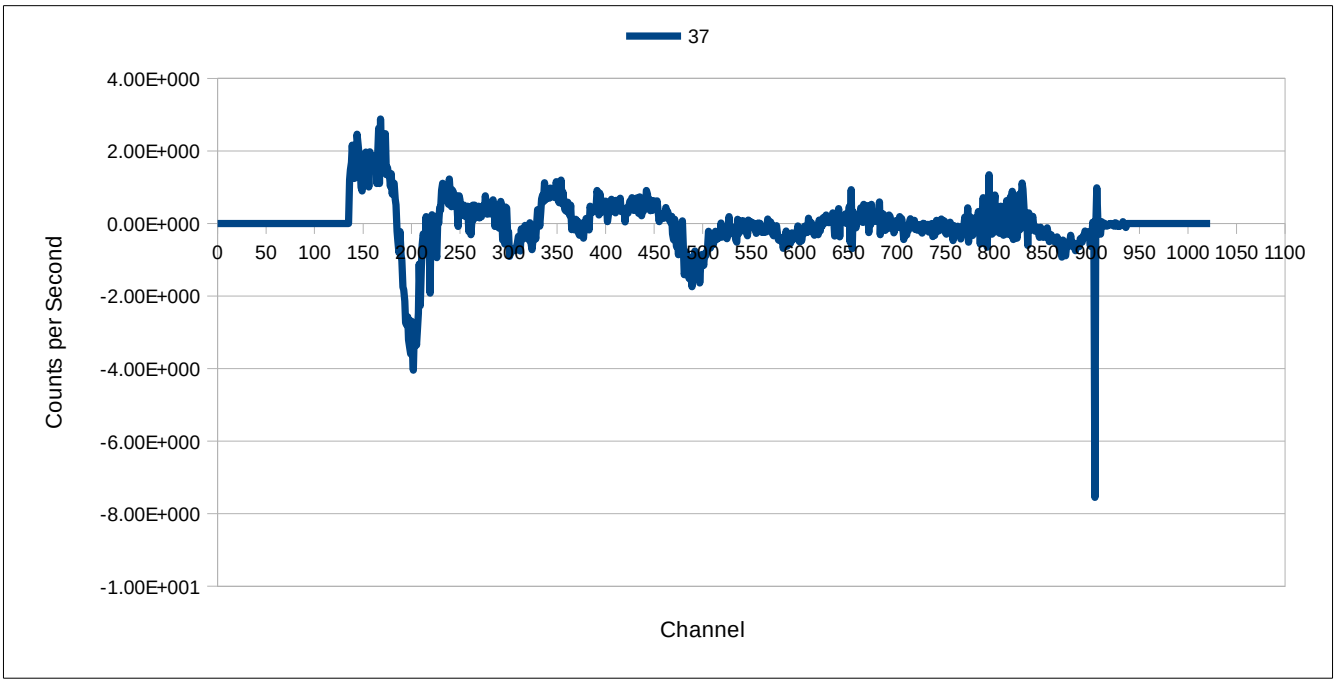


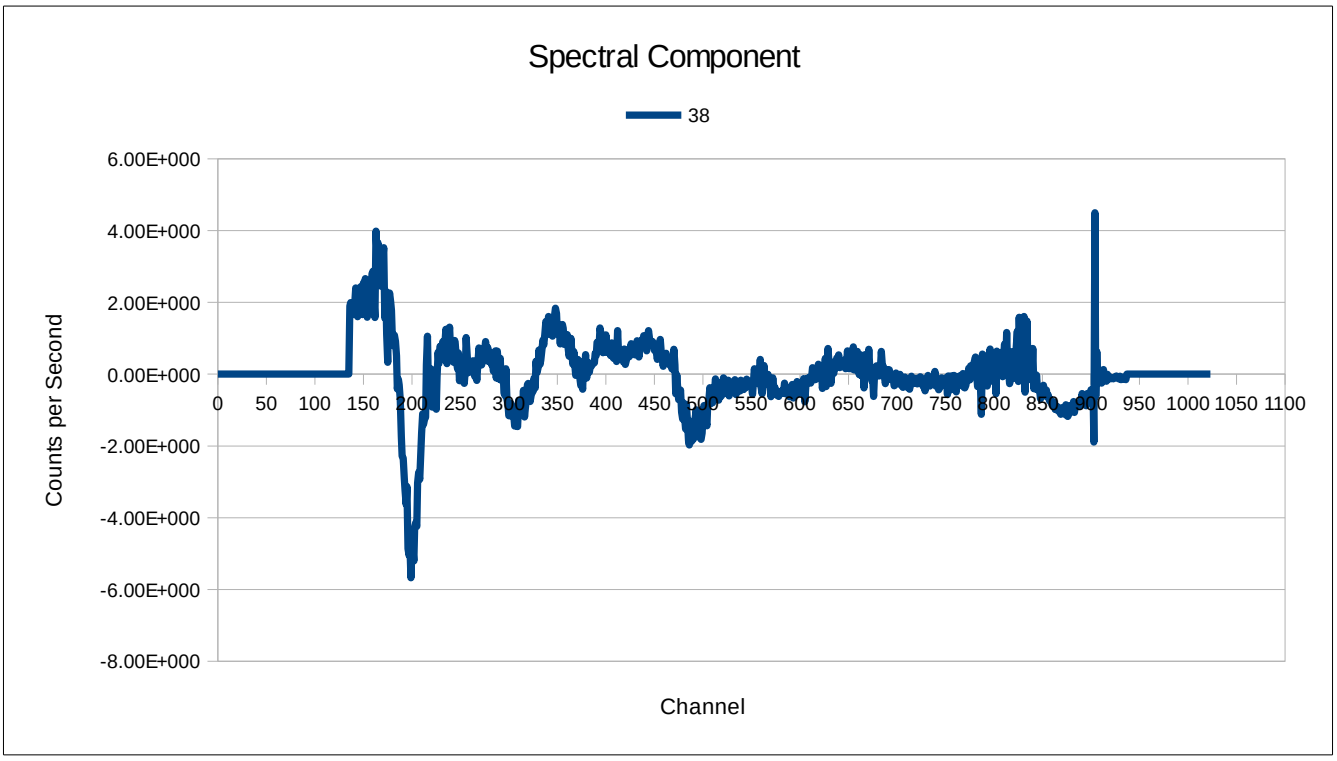
Spectral Components





Spectral Components





SGL

Appendix IX

Radiometric Data Adjustments

Adjustments to Upward Count

Line Number	Scale Factor
2018.10	1.10
2051.00	1.10
2052.00	1.10
2053.00	1.10
2054.00	1.10
2055.00	1.10
2056.00	1.10
2057.00	1.10
2058.00	1.10
2059.00	1.10
2060.00	1.10
2061.00	1.10
2062.00	1.10
2089.00	0.93
2090.00	0.93
2091.00	0.93
2092.00	0.93
2093.00	0.93
2095.00	1.05
2096.00	1.05
2097.00	1.05
2098.00	1.05
2099.00	1.05
2100.00	1.05
2101.00	1.05
2102.00	1.05
2103.00	1.05
2104.00	1.05
2105.00	1.05
2106.00	1.05
2107.00	1.05
2108.00	1.05
2109.00	1.05
2110.00	1.05
2111.00	1.05
2112.00	0.97
2113.00	0.97
2114.00	0.97
2115.00	0.97
2116.00	0.97
2192.00	0.95
2193.00	0.95
2194.00	0.95
2195.00	0.95
2196.00	0.95
2197.00	0.95
2198.00	0.95
2199.00	0.95
2200.00	0.95
2201.00	0.95
2202.00	0.95
2203.00	0.95

Radiometric Data Adjustments

Shifts applied to corrected data

Line Number	Time Range (seconds)	Shift (cps) Total Counts	Potassium Counts	Uranium Counts	Thorium Counts
2001.00	00000.00-99999.99	-20	0	0	0
2002.00	00000.00-99999.99	-20	0	0	0
2003.00	00000.00-99999.99	-20	0	0	0
2004.00	00000.00-99999.99	-20	0	0	0
2005.00	00000.00-99999.99	-20	0	0	0
2006.00	00000.00-99999.99	-20	0	0	0
2011.10	00000.00-99999.99	10	0	0	0
2046.00	00000.00-99999.99	15	0	0	0
2047.00	00000.00-99999.99	15	0	0	0
2048.00	00000.00-99999.99	15	0	0	0
2051.00	00000.00-99999.99	-20	-3	0	-1
2052.00	00000.00-99999.99	-20	-3	0	-1
2053.00	00000.00-99999.99	-20	-3	0	-1
2054.00	00000.00-99999.99	-20	-3	0	-1
2055.00	00000.00-99999.99	-20	-3	0	-1
2056.00	00000.00-99999.99	-20	-3	0	-1
2057.00	00000.00-99999.99	-20	-3	0	-1
2058.00	00000.00-99999.99	-20	-3	0	-1
2059.00	00000.00-99999.99	-20	-3	0	-1
2060.00	00000.00-99999.99	-05	-3	0	-1
2061.00	00000.00-99999.99	-25	-3	0	-1
2062.00	00000.00-99999.99	-25	-3	0	-1
2064.00	00000.00-99999.99	-15	0	0	0
2066.00	00000.00-99999.99	20	0	0	0
2067.00	00000.00-99999.99	05	0	0	0
2068.00	00000.00-99999.99	05	0	0	0
2069.00	00000.00-99999.99	05	0	0	0
2070.00	00000.00-99999.99	20	0	0	0
2071.00	00000.00-99999.99	05	0	0	0
2072.00	00000.00-99999.99	05	0	0	0
2073.00	00000.00-99999.99	05	0	0	0
2074.00	00000.00-99999.99	05	0	0	0
2075.00	52890.00-99999.99	15	0	0	0
2076.00	00000.00-51750.00	25	0	0	0
2077.00	00000.00-99999.99	05	0	0	0
2080.00	33506.00-33600.00	0	0	5	0
2083.00	40373.00-40441.00	0	0	5	0
2089.00	00000.00-99999.99	-40	0	0	0
2090.00	00000.00-99999.99	-40	0	0	0
2091.00	00000.00-99999.99	-40	0	0	0
2092.00	00000.00-99999.99	-40	0	0	0
2093.00	00000.00-99999.99	-40	0	0	0
2096.00	32452.00-32484.00	0	0	10	0
2098.00	34114.00-34185.00	0	0	5	0
2100.00	36046.00-36136.00	0	0	5	0
2104.00	39921.00-39989.00	0	0	5	0
2112.00	00000.00-99999.99	-20	0	0	0
2113.00	00000.00-99999.99	-20	0	0	0
2114.00	00000.00-99999.99	-30	0	0	0
2115.00	00000.00-99999.99	-20	0	0	0
2116.00	00000.00-99999.99	-10	0	0	0
2128.00	34540.00-34594.00	0	0	5	0
2183.00	63879.00-63912.00	0	0	5	0
2184.00	64109.00-64145.00	0	0	5	0
2185.00	47514.00-47555.00	0	0	5	0

Radiometric Data Adjustments

Line Number	Time Range (seconds)	Shift (cps)			
		Total Counts	Potassium Counts	Uranium Counts	Thorium Counts
2195.00	32173.00-32213.00	0	0	5	0
2196.00	32687.00-32735.00	0	0	5	0
2262.01	50757.00-50842.00	0	0	10	0
2269.00	43916.00-43982.00	0	0	10	0
2272.00	39570.00-39617.00	0	0	5	0
2312.00	50607.00-50654.00	0	0	5	0

Scaling applied to corrected data

Line Number	Time Range (seconds)	Scale Factors			
		Total	Potassium	Uranium	Thorium
2165.01	52821.00-52823.00	1.20	1.50	1.00	1.00
2166.01	53286.00-53294.00	0.80	0.50	1.00	1.00
2167.01	54874.00-54881.00	1.20	1.50	1.00	1.00
2168.01	55372.00-55382.00	0.70	0.30	1.00	1.00
2169.01	55676.00-55684.00	1.20	1.50	1.00	1.00
2170.01	56175.00-56186.00	0.70	0.30	1.00	1.00
2171.01	56470.00-56475.00	1.20	1.50	1.00	1.00
2172.00	34175.00-34182.00	1.00	0.70	1.00	1.00
2182.03	58166.00-58221.00	1.00	1.00	0.40	1.00
2206.00	41727.00-41770.00	1.00	1.00	0.60	1.00
2208.00	36564.00-36654.00	1.00	1.00	0.60	1.00
2228.01	56672.00-56731.00	1.00	1.00	0.60	1.00
2230.01	55333.00-55390.00	1.00	1.00	1.40	1.00
2253.00	54857.00-54905.00	1.10	1.00	1.00	1.00
2255.00	41559.00-41615.00	1.10	1.00	1.00	1.00
2257.00	39221.00-39295.00	1.00	1.00	0.65	1.00
2263.01	51234.00-51308.00	1.00	1.00	0.65	1.00
2269.00	43919.00-43983.00	1.00	1.00	1.20	1.00
2271.00	41557.00-41619.00	1.00	1.00	0.75	1.00
2274.01	63905.00-63958.00	1.00	1.00	0.50	1.00
2452.00	49800.00-49847.00	1.10	1.00	1.00	1.00
2456.00	49210.00-49273.00	0.90	1.00	1.00	1.00
2461.00	36880.00-36916.00	0.95	1.00	0.85	1.00

Appendix X

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
201.00	0006	30697.00	30799.00	C0201.0B_0006_DI
202.00	0006	31017.00	31252.00	C0202.0F_0006_DI
203.00	0006	31324.00	31672.00	C0203.0B_0006_DI
204.00	0004	58960.00	59443.00	C0204.0F_0004_DI
205.00	0004	58207.00	58798.00	C0205.0B_0004_DI
206.00	0004	57403.00	58138.00	C0206.0F_0004_DI
207.00	0013	34258.00	35089.00	C0207.0F_0013_DI
208.00	0004	56140.00	57105.00	C0208.0B_0004_DI
209.00	0004	54955.00	56064.00	C0209.0F_0004_DI
210.00	0004	53576.00	54755.00	C0210.0B_0004_DI
211.00	0004	52230.00	53509.00	C0211.0F_0004_DI
212.00	0004	50869.00	52078.00	C0212.0B_0004_DI
213.00	0053	47056.00	47946.00	C0213.0B_0052_DI + C0213.0F_0052_2_DI
214.00	0053	58106.00	59024.00	C0214.0B_0052_DI
215.00	0053	57110.00	57997.00	C0215.0F_0052_DI
216.00	0053	56082.00	57029.00	C0216.0B_0052_DI
217.00	0053	55028.00	55900.00	C0217.0F_0052_5_DI
218.00	0053	54023.00	54947.00	C0218.0B_0052_DI
219.00	0053	52736.00	53936.00	C0219.0F_0052_DI
220.00	0053	51403.00	52671.00	C0220.0B_0052_DI
221.00	0053	49879.00	51297.00	C0221.0F_0052_DI
222.00	0053	48258.00	49713.00	C0222.0B_0052_DI
223.00	0054	47191.00	48032.00	C0223.0B_0054_DI
223.01	0054	53555.00	55002.00	C0223.0B_0054_1_DI + C0223.0B_0054_2_DI
224.00	0054	45428.00	47118.00	C0224.0F_0054_DI
225.00	0054	40362.00	42158.00	C0225.0B_0054_DI
226.00	0054	65867.00	67548.00	C0226.0F_0054_DI
227.00	0056	62643.00	64371.00	C0227.0F_0056_DI + C0227.0F_0056_1_DI
228.00	0056	49703.00	51458.00	C0228.0B_0056_DI
229.00	0054	37894.00	38919.00	C0229.0B_0054_DI
229.01	0058	62215.00	63194.00	C0229.0F_0058_DI
230.00	0054	36812.00	37791.00	C0230.0F_0054_DI
230.01	0058	63232.00	64239.00	C0230.0B_0058_DI
231.00	0054	35689.00	36781.00	C0231.0B_0054_DI
231.01	0058	64304.00	65329.00	C0231.0F_0058_DI
232.00	0054	39025.00	40056.00	C0232.0F_0054_DI
232.01	0060	39614.00	40431.00	C0232.0B_0060_DI + C0232.0F_0060_DI
233.00	0056	41829.00	43623.00	C0233.0B_0056_DI
234.00	0056	39780.00	41748.00	C0234.0F_0056_DI
235.00	0056	37803.00	39663.00	C0235.0B_0056_DI
236.00	0056	35611.00	37729.00	C0236.0F_0056_DI
237.00	0056	33536.00	35525.00	C0237.0B_0056_DI
238.00	0056	32316.00	33473.00	C0238.0F_0056_DI
238.01	0056	43899.00	44983.00	C0238.0F_0056_1
239.00	0056	31134.00	32266.00	C0239.0B_0056_DI
239.01	0063	31375.00	32715.00	C0239.0B_0063_DI
240.00	0084	30863.00	32420.00	C0240.0B_0084_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
241.00	0084	52507.00	52885.00	C0241.0B_0084_DI
241.01	0105	40744.00	41247.00	C0241.0B_0105_DI
241.02	0084	51399.00	52506.00	C0241.0B_0084_DI
242.00	0084	49871.00	51308.00	C0242.0F_0084_DI
243.00	0084	48246.00	49775.00	C0243.0B_0084_1_DI
244.00	0084	41195.00	42688.00	C0244.0B_0084_DI + C0244.0B_0084_1_DI
245.00	0084	38874.00	40311.00	C0245.0F_0084_DI
245.01	0084	40836.00	41106.00	C0245.0F_0084_DI
246.00	0084	38086.00	38747.00	C0246.0B_0084_DI
246.01	0105	41424.00	41983.00	C0246.0F_0105_DI
246.02	0084	37213.00	38085.00	C0246.0B_0084_DI
247.00	0084	36286.00	37098.00	C0247.0F_0084_DI
247.01	0084	53161.00	53677.00	C0247.0F_0084_1_DI
247.02	0108	48717.00	49134.00	C0247.0F_0108_DI
247.03	0108	56963.00	57473.00	C0247.0B_0108_1_DI
248.00	0084	32737.00	33262.00	C0248.0F_0084_DI
248.01	0084	34711.00	35885.00	C0248.0B_0084_1_DI
249.00	0039	58210.00	58427.00	Unavailable
249.10	0084	33479.00	34636.00	C0249.1F_0084_DI
250.00	0039	58517.00	58742.00	Unavailable
250.10	0074	55652.00	56768.00	C0250.1B_0074_DI
251.00	0039	58826.00	59038.00	Unavailable
2001.00	0013	42182.00	42352.00	T2001.0F_0013_DI
2002.00	0013	42436.00	42573.00	T2002.0B_0013_DI
2002.10	0039	57724.00	57977.00	Unavailable
2003.00	0013	42708.00	42876.00	T2003.0F_0013_DI
2003.10	0039	57306.00	57601.00	Unavailable
2004.00	0013	42954.00	43093.00	T2004.0B_0013_DI
2004.10	0039	56917.00	57158.00	Unavailable
2005.00	0013	43217.00	43383.00	T2005.0F_0013_DI
2005.10	0039	56508.00	56800.00	Unavailable
2006.00	0013	43474.00	43609.00	T2006.0B_0013_DI
2006.10	0039	56145.00	56388.00	Unavailable
2007.00	0039	53909.00	54093.00	Unavailable
2007.10	0039	55749.00	56022.00	Unavailable
2008.00	0039	53635.00	53786.00	Unavailable
2008.10	0039	55365.00	55624.00	Unavailable
2009.00	0039	53360.00	53517.00	Unavailable
2009.10	0039	54981.00	55247.00	Unavailable
2010.00	0039	53082.00	53233.00	Unavailable
2010.10	0039	54588.00	54833.00	Unavailable
2011.00	0039	52801.00	52964.00	Unavailable
2011.10	0039	54211.00	54482.00	Unavailable
2012.00	0039	52501.00	52651.00	Unavailable
2012.10	0039	50434.00	50695.00	Unavailable
2013.00	0039	52210.00	52387.00	Unavailable
2013.10	0039	50055.00	50331.00	Unavailable

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2014.00	0039	51914.00	52064.00	Unavailable
2014.10	0038	40654.00	40905.00	T2014.1B_0037_DI
2015.00	0039	51623.00	51800.00	Unavailable
2015.10	0038	40253.00	40527.00	T2015.1F_0037_DI
2016.00	0039	51347.00	51498.00	Unavailable
2016.10	0038	39885.00	40131.00	T2016.1B_0037_DI
2017.00	0039	51072.00	51234.00	Unavailable
2017.10	0038	39480.00	39767.00	T2017.1F_0037_1_DI
2018.00	0039	50794.00	50953.00	Unavailable
2018.10	0038	39084.00	39331.00	T2018.1B_0037_DI
2019.00	0054	61198.00	61360.00	T2019.0F_0054_DI
2019.10	0038	38683.00	38955.00	T2019.1F_0037_DI
2020.00	0054	60905.00	61073.00	T2020.0B_0054_DI
2020.10	0038	38296.00	38554.00	T2020.1B_0037_DI
2021.00	0054	60621.00	60784.00	T2021.0F_0054_DI
2021.10	0038	37918.00	38178.00	T2021.1F_0037_DI
2022.00	0054	60346.00	60516.00	T2022.0B_0054_DI
2022.10	0038	37539.00	37799.00	T2022.1B_0037_DI
2023.00	0054	60090.00	60253.00	T2023.0F_0054_DI
2023.10	0038	37152.00	37418.00	T2023.1F_0037_DI
2024.00	0054	59826.00	59989.00	T2024.0B_0054_DI
2024.10	0038	36770.00	37030.00	T2024.1B_0037_DI
2025.00	0054	59575.00	59734.00	T2025.0F_0054_DI
2025.10	0038	36376.00	36661.00	T2025.1F_0037_DI
2026.00	0054	59319.00	59483.00	T2026.0B_0054_DI
2026.10	0038	35977.00	36237.00	T2026.1B_0037_DI
2027.00	0054	59071.00	59230.00	T2027.0F_0054_DI
2027.10	0038	35599.00	35865.00	T2027.1F_0037_DI
2028.00	0054	58818.00	58984.00	T2028.0B_0054_DI
2028.10	0038	35221.00	35482.00	T2028.1B_0037_DI
2029.00	0054	58550.00	58710.00	T2029.0F_0054_DI
2029.10	0038	34848.00	35118.00	T2029.1F_0037_DI
2030.00	0054	58286.00	58450.00	T2030.0B_0054_DI
2030.10	0038	34465.00	34714.00	T2030.1B_0037_DI
2031.00	0054	58029.00	58197.00	T2031.0F_0054_DI
2031.10	0038	34074.00	34334.00	T2031.1F_0037_DI
2032.00	0054	57388.00	57949.00	T2032.0B_0054_DI
2033.00	0054	56728.00	57267.00	T2033.0F_0054_DI
2034.00	0054	56072.00	56608.00	T2034.0B_0054_DI
2035.00	0054	55422.00	55927.00	T2035.0F_0054_DI
2036.00	0054	42566.00	43098.00	T2036.0F_0054_DI
2037.00	0054	43191.00	43722.00	T2037.0B_0054_DI
2038.00	0054	43831.00	44385.00	T2038.0F_0054_DI
2039.00	0054	44527.00	45047.00	T2039.0B_0054_DI
2040.00	0054	61651.00	62183.00	T2040.0F_0054_DI
2041.00	0054	62334.00	62894.00	T2041.0B_0054_DI
2042.00	0054	63021.00	63549.00	T2042.0F_0054_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2043.00	0054	63659.00	64216.00	T2043.0B_0054_DI
2044.00	0054	64303.00	64844.00	T2044.0F_0054_DI
2045.00	0054	64982.00	65537.00	T2045.0B_0054_DI
2046.00	0060	36447.00	36994.00	T2046.0F_0060_DI
2047.00	0060	35787.00	36300.00	T2047.0B_0060_DI
2048.00	0060	35139.00	35663.00	T2048.0F_0060_DI
2049.00	0060	34480.00	35011.00	T2049.0B_0060_DI
2050.00	0060	33851.00	34391.00	T2050.0F_0060_DI
2051.00	0058	61464.00	61996.00	T2051.0B_0058_DI
2052.00	0058	60831.00	61367.00	T2052.0F_0058_DI
2053.00	0058	59830.00	60567.00	T2053.0B_0058_DI
2054.00	0058	58940.00	59705.00	T2054.0F_0058_DI
2055.00	0058	58057.00	58817.00	T2055.0B_0058_DI
2056.00	0058	57125.00	57929.00	T2056.0F_0058_DI
2057.00	0058	56247.00	56977.00	T2057.0B_0058_DI
2058.00	0058	55344.00	56128.00	T2058.0F_0058_DI
2059.00	0058	54439.00	55196.00	T2059.0F_0058_DI + T2059.0B_0058_DI
2060.00	0058	53483.00	54186.00	T2060.0F_0058_DI
2061.00	0058	52659.00	53300.00	T2061.0B_0058_DI
2062.00	0058	51874.00	52546.00	T2062.0F_0058_DI
2063.00	0056	61891.00	62524.00	T2063.0B_0056_DI
2064.00	0056	61099.00	61780.00	T2064.0F_0056_DI
2065.00	0056	60369.00	60967.00	T2065.0B_0056_DI
2066.00	0056	59517.00	60269.00	T2066.0F_0056_DI
2067.00	0056	58738.00	59353.00	T2067.0B_0056_DI
2068.00	0056	57955.00	58639.00	T2068.0F_0056_DI
2069.00	0056	57227.00	57838.00	T2069.0B_0056_DI
2070.00	0056	56338.00	57140.00	T2070.0F_0056_DI
2071.00	0056	55553.00	56174.00	T2071.0B_0056_DI
2072.00	0056	54730.00	55427.00	T2072.0F_0056_DI
2073.00	0056	53980.00	54594.00	T2073.0B_0056_DI
2074.00	0056	53130.00	53866.00	T2074.0F_0056_DI
2075.00	0056	52368.00	52995.00	T2075.0B_0056_DI
2076.00	0056	51538.00	52253.00	T2076.0F_0056_DI
2077.00	0060	37166.00	37817.00	T2077.0B_0060_DI
2078.00	0060	37937.00	38601.00	T2078.0F_0060_DI
2079.00	0060	38740.00	39392.00	T2079.0B_0060_DI
2080.00	0063	33255.00	33924.00	T2080.0F_0063_DI
2081.00	0068	31029.00	31801.00	T2081.0F_0068_DI
2082.00	0074	56953.00	57651.00	T2082.0B_0074_DI
2083.00	0013	40130.00	40863.00	T2083.0F_0013_DI
2084.00	0039	59156.00	59770.00	Unavailable
2085.00	0042	32261.00	32893.00	T2085.0F_0042_DI
2086.00	0042	34805.00	35451.00	T2086.0F_0042_DI
2087.00	0042	37421.00	38055.00	T2087.0F_0042_DI
2088.00	0042	39955.00	40581.00	T2088.0F_0042_DI
2089.00	0049	35200.00	35814.00	T2089.0F_0049_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2090.00	0049	37680.00	38299.00	T2090.0F_0049_DI
2091.00	0049	40212.00	40831.00	T2091.0F_0049_DI
2092.00	0049	42672.00	43291.00	T2092.0F_0049_DI
2093.00	0049	45107.00	45729.00	T2093.0F_0049_DI
2094.00	0074	57732.00	58349.00	T2094.0F_0074_DI
2095.00	0079	31586.00	32186.00	T2095.0F_0079_DI
2096.00	0079	32333.00	33020.00	T2096.0B_0079_DI
2097.00	0079	33149.00	33761.00	T2097.0F_0079_DI
2098.00	0079	33925.00	34817.00	T2098.0B_0079_DI
2099.00	0079	34926.00	35720.00	T2099.0F_0079_DI
2100.00	0079	35861.00	36744.00	T2100.0B_0079_DI
2101.00	0079	36854.00	37652.00	T2101.0F_0079_DI
2102.00	0079	37783.00	38671.00	T2102.0B_0079_DI
2103.00	0079	38795.00	39596.00	T2103.0F_0079_DI
2104.00	0079	39724.00	40597.00	T2104.0B_0079_DI
2105.00	0079	40719.00	41501.00	T2105.0F_0079_DI
2106.00	0079	41648.00	42537.00	T2106.0B_0079_DI
2107.00	0079	48015.00	48819.00	T2107.0F_0079_DI
2108.00	0079	48950.00	49862.00	T2108.0B_0079_DI
2109.00	0079	49989.00	50801.00	T2109.0F_0079_DI
2110.00	0079	50928.00	51798.00	T2110.0B_0079_DI
2111.00	0079	51912.00	52726.00	T2111.0F_0079_DI
2112.00	0074	58477.00	59402.00	T2112.0B_0074_DI
2113.00	0074	59513.00	60319.00	T2113.0F_0074_DI
2114.00	0074	60467.00	61371.00	T2114.0B_0074_DI
2115.00	0074	61476.00	62286.00	T2115.0F_0074_DI
2116.00	0074	62401.00	63305.00	T2116.0B_0074_DI
2117.00	0079	52837.00	53724.00	T2117.0B_0079_DI
2118.00	0079	53850.00	54646.00	T2118.0F_0079_DI
2119.00	0079	54782.00	55668.00	T2119.0B_0079_DI
2120.00	0079	55799.00	56590.00	T2120.0F_0079_DI
2121.00	0079	56702.00	57572.00	T2121.0B_0079_DI
2122.00	0079	57693.00	58485.00	T2122.0F_0079_DI
2123.00	0079	58622.00	59499.00	T2123.0B_0079_DI
2124.00	0079	59647.00	60432.00	T2124.0F_0079_DI
2125.00	0079	60558.00	61419.00	T2125.0B_0079_DI
2126.00	0091	32792.00	33643.00	T2126.0B_0091_DI
2127.00	0091	33764.00	34631.00	T2127.0F_0091_DI
2128.00	0093	34451.00	35285.00	T2128.0B_0093_DI
2129.00	0093	35415.00	36266.00	T2129.0F_0093_DI
2130.00	0093	36385.00	37193.00	T2130.0B_0093_DI
2131.00	0093	37339.00	38191.00	T2131.0F_0093_DI
2132.00	0093	38300.00	39129.00	T2132.0B_0093_DI
2133.00	0095	32173.00	32671.00	T2133.0F_0095_DI
2133.01	0098	32986.00	33436.00	T2133.0F_0098_DI
2134.00	0095	32777.00	33310.00	T2134.0B_0095_DI
2134.01	0098	33552.00	33987.00	T2134.0B_0098_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2135.00	0095	33437.00	33916.00	T2135.0F_0095_DI
2135.01	0098	34075.00	34577.00	T2135.0F_0098_DI
2136.00	0095	33999.00	34532.00	T2136.0B_0095_DI
2136.01	0098	34755.00	35264.00	T2136.0B_0098_DI
2137.00	0095	34638.00	35123.00	T2137.0F_0095_DI
2137.01	0098	35342.00	35920.00	T2137.0F_0098_DI
2138.00	0095	35225.00	35761.00	T2138.0B_0095_DI
2138.01	0098	36036.00	36572.00	T2138.0B_0098_DI
2139.00	0095	35877.00	36351.00	T2139.0F_0095_DI
2139.01	0098	36654.00	37202.00	T2139.0F_0098_DI
2140.00	0095	36466.00	37010.00	T2140.0B_0095_DI
2140.01	0098	37349.00	37893.00	T2140.0B_0098_DI
2141.00	0095	37130.00	37607.00	T2141.0F_0095_DI
2141.01	0098	37971.00	38532.00	T2141.0F_0098_DI
2142.00	0095	37712.00	38234.00	T2142.0B_0095_DI
2142.01	0098	38656.00	39176.00	T2142.0B_0098_DI
2143.00	0095	38355.00	38837.00	T2143.0F_0095_DI
2143.01	0098	39263.00	39826.00	T2143.0F_0098_DI
2144.00	0095	38908.00	39425.00	T2144.0B_0095_DI
2144.01	0098	39977.00	40495.00	T2144.0B_0098_DI
2145.00	0095	39547.00	40011.00	T2145.0F_0095_DI
2145.01	0098	40576.00	41125.00	T2145.0F_0098_DI
2146.00	0095	40136.00	40688.00	T2146.0B_0095_DI
2146.01	0098	41243.00	41776.00	T2146.0B_0098_DI
2147.00	0088	50548.00	50974.00	T2147.0F_0088_DI
2147.01	0098	41917.00	42479.00	T2147.0F_0098_DI
2148.00	0091	34870.00	35745.00	T2148.0B_0091_DI
2149.00	0095	40794.00	41254.00	T2149.0F_0095_DI
2149.01	0098	42615.00	43170.00	T2149.0F_0098_DI + T2149.0B_0098_DI
2150.00	0095	41357.00	41894.00	T2150.0B_0095_DI
2150.01	0098	43289.00	43884.00	T2150.0F_0098_DI
2151.00	0095	42001.00	42474.00	T2151.0F_0095_DI
2151.01	0098	44019.00	44548.00	T2151.0B_0098_DI
2152.00	0098	44624.00	45204.00	T2152.0F_0098_DI
2152.01	0098	50485.00	50967.00	T2152.0F_0098_1_DI
2153.00	0098	45341.00	46230.00	T2153.0B_0098_DI
2154.00	0098	51110.00	51646.00	T2154.0F_0098_DI + T2154.0F_0098_2_DI
2154.01	0102	45488.00	46010.00	T2154.0F_0102_DI + T2154.0B_0102_DI
2155.00	0098	51771.00	52289.00	T2155.0B_0098_DI
2155.01	0102	46142.00	46614.00	T2155.0F_0102_DI
2156.00	0095	42597.00	43146.00	T2156.0B_0095_DI
2156.01	0098	54125.00	54645.00	T2156.0F_0098_DI
2157.00	0095	43241.00	43695.00	T2157.0F_0095_DI
2157.01	0098	54778.00	55322.00	T2157.0B_0098_DI
2158.00	0095	43801.00	44361.00	T2158.0B_0095_DI
2158.01	0098	55397.00	55955.00	T2158.0F_0098_DI
2159.00	0095	44460.00	44932.00	T2159.0F_0095_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2159.01	0098	56083.00	56620.00	T2159.0B_0098_DI
2160.00	0095	45023.00	45582.00	T2160.0B_0095_DI
2160.01	0098	56708.00	57256.00	T2160.0F_0098_DI
2161.00	0095	49976.00	50447.00	T2161.0F_0095_DI
2161.01	0102	49467.00	49984.00	T2161.0B_0102_DI
2162.00	0095	50543.00	51143.00	T2162.0B_0095_DI
2162.01	0102	50737.00	51227.00	T2162.0B_0102_DI
2163.00	0095	51256.00	51894.00	T2163.0F_0095_DI
2163.01	0102	51966.00	52264.00	T2163.0B_0102_DI
2164.00	0095	51978.00	52770.00	T2164.0B_0095_DI
2164.01	0102	52303.00	52596.00	T2164.0F_0102_DI
2165.00	0095	52870.00	53522.00	T2165.0F_0095_DI
2165.01	0102	52732.00	53023.00	T2165.0B_0102_DI
2166.00	0095	53633.00	54399.00	T2166.0B_0095_DI
2166.01	0102	53077.00	53373.00	T2166.0F_0102_DI
2167.00	0095	54516.00	55163.00	T2167.0F_0095_DI
2167.01	0102	54791.00	55076.00	T2167.0B_0102_DI
2168.00	0095	55212.00	55985.00	T2168.0B_0095_DI
2168.01	0102	55151.00	55453.00	T2168.0F_0102_DI
2169.00	0095	56098.00	56751.00	T2169.0F_0095_DI
2169.01	0102	55586.00	55871.00	T2169.0B_0102_DI
2170.00	0095	56857.00	57640.00	T2170.0B_0095_DI
2170.01	0102	55960.00	56255.00	T2170.0F_0102_DI
2171.00	0095	57752.00	58410.00	T2171.0F_0095_DI
2171.01	0102	56382.00	56675.00	T2171.0B_0102_DI
2172.00	0093	33307.00	34266.00	T2172.0F_0093_DI
2173.00	0095	58527.00	59357.00	T2173.0B_0095_DI
2173.01	0102	56768.00	57067.00	T2173.0F_0102_DI
2174.00	0095	59465.00	59997.00	T2174.0F_0095_DI
2174.01	0106	53732.00	54285.00	T2174.0F_0106_DI + T2174.0F_0106_1_DI
2175.00	0095	60081.00	60713.00	T2175.0B_0095_DI
2175.01	0106	54425.00	54810.00	Unavailable
2176.00	0095	60832.00	61350.00	T2176.0F_0095_DI
2176.01	0106	54922.00	55439.00	Unavailable
2177.00	0095	61423.00	62037.00	T2177.0B_0095_DI
2177.01	0106	55563.00	55967.00	Unavailable
2178.00	0095	62162.00	62704.00	T2178.0F_0095_DI
2178.01	0106	56073.00	56581.00	Unavailable
2179.00	0095	62801.00	63386.00	T2179.0B_0095_DI
2179.01	0106	56709.00	57167.00	Unavailable
2180.00	0090	33070.00	33595.00	T2180.0B_0090_DI
2180.01	0106	57255.00	57856.00	Unavailable
2181.00	0090	33750.00	34263.00	T2181.0F_0090_DI
2181.01	0105	43637.00	44094.00	T2181.0B_0105_DI
2182.00	0090	34430.00	34943.00	T2182.0B_0090_DI
2182.01	0105	42434.00	42935.00	T2182.0B_0105_DI
2182.02	0108	47945.00	48477.00	T2182.0F_0108_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2182.03	0108	57730.00	58321.00	T2182.0B_0108_1_DI
2183.00	0095	63492.00	63970.00	T2183.0F_0095_DI
2183.01	0105	42992.00	43529.00	T2183.0F_0105_DI
2184.00	0095	64039.00	64590.00	T2184.0B_0095_DI
2184.01	0106	57967.00	58429.00	Unavailable
2185.00	0102	47064.00	47991.00	T2185.0B_0102_DI
2186.00	0090	37118.00	37627.00	T2186.0B_0090_DI
2186.01	0102	53481.00	54041.00	T2186.0B_0102_DI
2187.00	0090	36506.00	36982.00	T2187.0F_0090_DI
2187.01	0102	54110.00	54650.00	T2187.0F_0102_DI
2188.00	0090	35786.00	36380.00	T2188.0B_0090_DI
2188.01	0102	51343.00	51827.00	T2188.0F_0102_DI
2189.00	0090	35117.00	35619.00	T2189.0F_0090_DI
2189.01	0102	50114.00	50629.00	T2189.0F_0102_DI
2190.00	0102	48147.00	48683.00	T2190.0F_0102_DI
2190.01	0102	48828.00	49293.00	T2190.0F_0102_DI
2191.00	0102	57150.00	58170.00	T2191.0B_0102_DI
2192.00	0103	37077.00	38071.00	T2192.0B_0103_DI
2193.00	0103	38435.00	38961.00	T2193.0F_0103_DI (Partial due to logistics)
2193.01	0103	39105.00	39635.00	T2193.0F_0103_DI (Partial due to logistics)
2194.00	0091	35989.00	36559.00	T2194.0B_0091_DI + T2194.0F_0091_DI
2194.01	0106	58519.00	59096.00	T2194.0B_0106_DI
2195.00	0093	31782.00	32416.00	T2195.0F_0093_DI
2195.01	0106	59209.00	59598.00	Unavailable
2196.00	0093	32520.00	33159.00	T2196.0B_0093_DI
2196.01	0106	59684.00	60168.00	Unavailable
2197.00	0103	34625.00	35554.00	T2197.0B_0103_DI
2198.00	0103	35700.00	36203.00	T2198.0F_0103_DI (Partial due to logistics)
2198.01	0103	36355.00	36732.00	T2198.0F_0103_DI (Partial due to logistics)
2198.02	0108	49382.00	49912.00	T2198.0B_0108_DI
2198.03	0108	58386.00	58929.00	T2198.0F_0108_DI
2198.04	0115	57516.00	58051.00	T2198.0F_0115_DI
2199.00	0105	35695.00	36189.00	T2199.0B_0105_DI
2199.01	0108	54634.00	55661.00	T2199.0B_0108_DI
2200.00	0105	36339.00	36847.00	T2200.0F_0105_1
2200.01	0108	49992.00	50546.00	T2200.0F_0108_DI
2200.02	0108	59051.00	59584.00	T2200.0B_0108_DI
2200.03	0115	59474.00	60032.00	T2200.0B_0115_DI
2201.00	0105	44188.00	44674.00	T2201.0B_0105_1_DI
2201.01	0108	50668.00	51247.00	T2201.0B_0108_DI
2201.02	0115	58807.00	59356.00	T2201.0F_0115_DI
2202.00	0105	44790.00	45321.00	T2202.0F_0105_DI
2202.01	0108	51325.00	51890.00	T2202.0F_0108_DI
2202.02	0115	58156.00	58735.00	T2202.0B_0115_DI
2203.00	0105	45579.00	46062.00	T2203.0B_0105_DI
2203.01	0108	52006.00	52540.00	T2203.0B_0108_DI
2203.02	0115	56925.00	57465.00	T2203.0B_0115_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2204.00	0049	46136.00	47111.00	T2204.0B_0049_DI
2205.00	0049	43689.00	44681.00	T2205.0B_0049_DI
2206.00	0049	41250.00	42244.00	T2206.0B_0049_DI
2207.00	0049	38709.00	39749.00	T2207.0B_0049_DI
2208.00	0049	36247.00	37254.00	T2208.0B_0049_DI
2209.00	0042	40997.00	42000.00	T2209.0B_0042_DI
2210.00	0042	33319.00	34311.00	T2210.0B_0042_DI
2211.00	0042	35879.00	36909.00	T2211.0B_0042_DI
2212.00	0042	38483.00	39505.00	T2212.0B_0042_DI
2213.00	0089	29814.00	30331.00	T2213.0B_0089_DI
2213.01	0108	52584.00	53151.00	T2213.0F_0108_DI
2213.02	0115	56247.00	56846.00	T2213.0F_0115_DI
2214.00	0089	30464.00	30941.00	T2214.0F_0089_DI
2214.01	0108	53263.00	53867.00	T2214.0B_0108_DI
2214.02	0115	55583.00	56218.00	T2214.0B_0115_DI
2215.00	0089	31068.00	31550.00	T2215.0B_0089_DI
2215.01	0108	53946.00	54537.00	T2215.0F_0108_DI
2215.02	0115	54860.00	55470.00	T2215.0F_0115_DI
2216.00	0089	31693.00	32151.00	T2216.0F_0089_DI
2216.01	0106	60242.00	60818.00	T2216.0B_0106_DI
2217.00	0089	32306.00	32781.00	T2217.0B_0089_DI
2217.01	0105	39799.00	40378.00	T2217.0B_0105_DI
2218.00	0089	32895.00	33373.00	T2218.0F_0089_DI
2218.01	0098	53196.00	53853.00	T2218.0B_0098_DI
2219.00	0089	33490.00	33974.00	T2219.0B_0089_DI
2219.01	0098	52497.00	53066.00	T2219.0F_0098_DI
2220.00	0089	34219.00	34699.00	T2220.0F_0089_DI
2220.01	0091	62078.00	62671.00	T2220.0B_0091_DI
2221.00	0089	34850.00	35333.00	T2221.0B_0089_DI
2221.01	0091	61262.00	61906.00	T2221.0F_0091_DI
2222.00	0089	35514.00	35991.00	T2222.0F_0089_DI
2222.01	0091	60631.00	61190.00	T2222.0B_0091_DI
2223.00	0089	36109.00	36586.00	T2223.0B_0089_DI
2223.01	0091	59883.00	60517.00	T2223.0F_0091_DI
2224.00	0089	36717.00	37308.00	T2224.0F_0089_DI
2224.01	0091	59288.00	59793.00	T2224.0B_0091_DI
2225.00	0089	37408.00	38004.00	T2225.0B_0089_DI
2225.01	0091	58558.00	59158.00	T2225.0F_0091_DI
2226.00	0089	38121.00	38660.00	T2226.0F_0089_DI
2226.01	0091	57983.00	58465.00	T2226.0B_0091_DI
2227.00	0089	38817.00	39359.00	T2227.0B_0089_DI
2227.01	0091	57255.00	57887.00	T2227.0F_0091_DI
2228.00	0089	39634.00	40167.00	T2228.0F_0089_DI
2228.01	0091	56636.00	57171.00	T2228.0B_0091_DI
2229.00	0089	40338.00	40885.00	T2229.0B_0089_DI
2229.01	0091	55904.00	56502.00	T2229.0F_0091_DI
2230.00	0089	41006.00	41526.00	T2230.0F_0089_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2230.01	0091	55296.00	55814.00	T2230.0B_0091_DI
2231.00	0089	41687.00	42242.00	T2231.0B_0089_DI
2231.01	0091	54600.00	55217.00	T2231.0F_0091_DI
2232.00	0089	42380.00	42902.00	T2232.0F_0089_DI
2232.01	0091	53981.00	54503.00	T2232.0B_0091_DI
2233.00	0090	32433.00	32726.00	T2233.0F_0090_DI
2233.01	0091	43192.00	44149.00	T2233.0B_0091_DI
2234.00	0094	46567.00	47397.00	T2234.0F_0094_DI
2234.01	0105	39016.00	39707.00	T2234.0F_0105_DI
2235.00	0094	48384.00	48868.00	T2235.0B_0094_DI
2235.01	0105	38244.00	38911.00	T2235.0B_0105_DI
2236.00	0094	49478.00	49733.00	T2236.0F_0094_DI
2236.01	0098	58625.00	59581.00	T2236.0F_0098_DI
2237.00	0098	59676.00	60664.00	T2237.0B_0098_DI
2238.00	0098	60791.00	61764.00	T2238.0F_0098_DI
2239.00	0088	49592.00	50123.00	T2239.0F_0088_DI + T2239.0B_0088_DI
2239.01	0091	40205.00	40875.00	T2239.0F_0091_DI
2239.02	0105	37354.00	38170.00	T2239.0F_0105_DI
2240.00	0087	53403.00	53914.00	T2240.0F_0086_1_DI
2240.01	0091	39498.00	40126.00	T2240.0B_0091_DI
2241.00	0091	41072.00	42015.00	T2241.0B_0091_DI
2242.00	0091	42144.00	43136.00	T2242.0F_0091_DI
2243.00	0091	38396.00	39374.00	T2243.0F_0091_DI
2244.00	0087	52720.00	53244.00	T2244.0B_0086_DI
2244.01	0098	61798.00	62362.00	T2244.0B_0098_DI
2245.00	0087	51981.00	52550.00	T2245.0F_0086_DI
2245.01	0098	62460.00	63071.00	T2245.0F_0098_DI
2246.00	0087	51301.00	51848.00	T2246.0B_0086_DI
2246.01	0098	63193.00	63748.00	T2246.0B_0098_DI
2247.00	0068	32382.00	33282.00	T2247.0B_0068_DI
2248.00	0087	50453.00	51089.00	T2248.0B_0086_DI + T2248.0F_0086_1_DI
2248.01	0098	57536.00	58525.00	T2248.0B_0098_1_DI
2249.00	0084	59152.00	60072.00	T2249.0B_0084_DI
2250.00	0084	57993.00	58996.00	T2250.0F_0084_DI
2251.00	0084	56909.00	57858.00	T2251.0B_0084_DI
2252.00	0084	55770.00	56771.00	T2252.0F_0084_DI
2253.00	0084	54677.00	55672.00	T2253.0B_0084_DI
2254.00	0078	42537.00	43582.00	T2254.0F_0078_DI
2255.00	0078	41371.00	42411.00	T2255.0B_0078_DI
2256.00	0078	40173.00	41212.00	T2256.0F_0078_DI
2257.00	0078	39063.00	40050.00	T2257.0B_0078_DI
2258.00	0078	37649.00	38690.00	T2258.0F_0078_DI
2259.00	0087	54138.00	54855.00	T2259.0B_0086_DI
2259.01	0091	48970.00	49517.00	T2259.0F_0091_DI
2260.00	0087	54972.00	55618.00	T2260.0F_0086_DI
2260.01	0091	49649.00	50202.00	T2260.0B_0091_DI
2261.00	0091	37206.00	38221.00	T2261.0B_0091_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2262.00	0087	58585.00	59150.00	T2262.0B_0086_DI
2262.01	0091	50306.00	50965.00	T2262.0F_0091_DI
2263.00	0087	57959.00	58499.00	T2263.0F_0086_DI
2263.01	0091	51122.00	51694.00	T2263.0B_0091_DI
2264.00	0087	57281.00	57848.00	T2264.0B_0086_DI
2264.01	0091	51764.00	52425.00	T2264.0F_0091_DI
2265.00	0087	55848.00	56553.00	T2265.0B_0086_DI
2265.01	0091	52563.00	53126.00	T2265.0B_0091_DI
2266.00	0087	56679.00	57249.00	T2266.0F_0086_DI
2266.01	0091	53218.00	53837.00	T2266.0F_0091_DI
2267.00	0068	49627.00	50813.00	T2267.0F_0068_DI
2268.00	0068	44209.00	45176.00	T2268.0B_0068_DI
2269.00	0068	42971.00	44112.00	T2269.0F_0068_DI
2270.00	0068	41857.00	42833.00	T2270.0B_0068_DI
2271.00	0068	40582.00	41747.00	T2271.0F_0068_DI
2272.00	0068	39466.00	40449.00	T2272.0B_0068_DI
2273.00	0068	38216.00	39362.00	T2273.0F_0068_DI
2274.00	0063	50645.00	51197.00	T2274.0F_0063_DI
2274.01	0063	63801.00	64404.00	T2274.0B_0063_DI
2275.00	0063	44075.00	45159.00	T2275.0B_0063_DI
2276.00	0063	42926.00	43961.00	T2276.0F_0063_DI
2277.00	0063	41695.00	42784.00	T2277.0B_0063_DI
2278.00	0063	40505.00	41578.00	T2278.0F_0063_DI
2279.00	0063	39334.00	40383.00	T2279.0B_0063_DI
2280.00	0063	38173.00	39219.00	T2280.0F_0063_DI
2281.00	0063	34624.00	35684.00	T2281.0B_0063_DI
2282.00	0063	35798.00	36874.00	T2282.0F_0063_DI
2283.00	0063	36999.00	38051.00	T2283.0B_0063_DI
2284.00	0068	33478.00	34631.00	T2284.0F_0068_DI
2285.00	0068	34752.00	35738.00	T2285.0B_0068_DI
2286.00	0068	35892.00	37060.00	T2286.0F_0068_DI
2287.00	0068	37149.00	38123.00	T2287.0B_0068_DI
2288.00	0066	41538.00	42592.00	T2288.0F_0066_DI
2288.01	0066	62801.00	63090.00	T2288.0B_0066_DI
2289.00	0066	40441.00	41402.00	T2289.0B_0066_DI
2290.00	0066	39139.00	40299.00	T2290.0F_0066_DI
2291.00	0066	37968.00	38953.00	T2291.0B_0066_DI
2292.00	0066	36667.00	37851.00	T2292.0F_0066_DI
2293.00	0066	35531.00	36524.00	T2293.0B_0066_DI
2294.00	0066	34222.00	35385.00	T2294.0F_0066_DI
2295.00	0066	33048.00	34060.00	T2295.0B_0066_DI
2296.00	0066	31748.00	32915.00	T2296.0F_0066_DI
2297.00	0065	39751.00	40877.00	T2297.0B_0064_DI
2298.00	0065	38651.00	39630.00	T2298.0F_0064_DI + T2298.0F_0064_1_DI
2299.00	0065	37351.00	38501.00	T2299.0B_0064_DI
2300.00	0065	36219.00	37202.00	T2300.0F_0064_DI
2301.00	0065	34980.00	36104.00	T2301.0B_0064_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2302.00	0063	54188.00	55319.00	T2302.0B_0063_DI
2303.00	0063	53036.00	54079.00	T2303.0F_0063_DI
2304.00	0063	51754.00	52884.00	T2304.0B_0063_DI
2305.00	0060	51893.00	52925.00	T2305.0B_0060_DI
2306.00	0060	50717.00	51775.00	T2306.0F_0060_DI
2307.00	0060	44432.00	45480.00	T2307.0B_0060_DI
2308.00	0060	43272.00	44309.00	T2308.0F_0060_DI
2309.00	0060	42112.00	43144.00	T2309.0B_0060_DI
2310.00	0060	40906.00	41979.00	T2310.0F_0060_DI
2311.00	0074	43627.00	44719.00	T2311.0B_0074_DI
2312.00	0074	50543.00	51661.00	T2312.0B_0074_DI
2313.00	0074	52836.00	53951.00	T2313.0B_0074_DI
2314.00	0074	54071.00	55030.00	T2314.0F_0074_DI
2315.00	0076	32739.00	33694.00	T2315.0B_0076_DI
2315.01	0077	59883.00	60296.00	T2315.0B_0077_DI
2316.00	0071	45757.00	46812.00	T2316.0F_0071_DI
2317.00	0071	44914.00	45647.00	T2317.0B_0071_DI + T2317.0B_0071_1_DI
2317.01	0071	46943.00	47397.00	T2317.0B_0071_2_DI
2318.00	0071	44118.00	44858.00	T2318.0F_0071_DI + T2318.0B_0071_DI
2318.01	0073	38623.00	39097.00	T2318.0B_0073_DI + T2318.0F_0073_DI
2319.00	0071	37797.00	38825.00	T2319.0B_0071_DI
2319.01	0108	56082.00	56532.00	T2319.0F_0108_DI + T2319.0F_0108_1_DI
2320.00	0071	36603.00	37676.00	T2320.0F_0071_DI
2321.00	0071	35409.00	36457.00	T2321.0B_0071_DI
2322.00	0071	34206.00	35280.00	T2322.0F_0071_DI
2323.00	0074	49437.00	50425.00	T2323.0F_0074_1_DI
2324.00	0074	51757.00	52728.00	T2324.0F_0074_DI
2325.00	0074	42579.00	43530.00	T2325.0F_0074_DI
2326.00	0074	41392.00	42469.00	T2326.0B_0074_DI
2327.00	0074	40278.00	41246.00	T2327.0F_0074_DI
2328.00	0074	39030.00	40170.00	T2328.0B_0074_DI
2329.00	0074	37915.00	38893.00	T2329.0F_0074_DI
2330.00	0074	36706.00	37794.00	T2330.0B_0074_DI
2331.00	0074	35583.00	36570.00	T2331.0F_0074_DI
2332.00	0074	34350.00	35449.00	T2332.0B_0074_DI
2333.00	0074	31946.00	33058.00	T2333.0B_0074_DI
2334.00	0074	33211.00	34205.00	T2334.0F_0074_1_DI
2335.00	0074	30829.00	31817.00	T2335.0F_0074_DI
2336.00	0071	63153.00	64211.00	T2336.0B_0071_DI
2337.00	0071	38933.00	39904.00	T2337.0F_0071_DI
2337.01	0071	42561.00	42841.00	T2337.0F_0071_1_DI
2338.00	0071	39976.00	40906.00	T2338.0B_0071_DI
2338.01	0071	42269.00	42519.00	T2338.0B_0071_1_DI
2339.00	0071	41035.00	42140.00	T2339.0F_0071_1_DI
2340.00	0071	42930.00	43988.00	T2340.0B_0071_DI
2341.00	0078	43894.00	44970.00	T2341.0B_0078_DI
2342.00	0078	45093.00	46111.00	T2342.0F_0078_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2343.00	0078	46226.00	47301.00	T2343.0B_0078_DI
2344.00	0078	47413.00	48447.00	T2344.0F_0078_DI
2345.00	0077	58766.00	59776.00	T2345.0F_0077_DI
2346.00	0077	57122.00	58488.00	T2346.0B_0077_DI
2347.00	0077	55686.00	56994.00	T2347.0F_0077_DI
2348.00	0077	54205.00	55579.00	T2348.0B_0077_DI
2349.00	0077	52724.00	54081.00	T2349.0F_0077_DI
2350.00	0077	51186.00	52602.00	T2350.0B_0077_DI
2351.00	0077	49714.00	51069.00	T2351.0F_0077_DI
2352.00	0077	48199.00	49590.00	T2352.0B_0077_DI
2353.00	0077	46708.00	48067.00	T2353.0F_0077_DI
2354.00	0073	39655.00	41059.00	T2354.0B_0073_DI + T2354.0B_0073_1_DI
2355.00	0073	37116.00	38469.00	T2355.0F_0073_DI
2356.00	0073	35567.00	36962.00	T2356.0B_0073_DI
2357.00	0073	34058.00	35424.00	T2357.0F_0073_DI
2358.00	0073	32513.00	33942.00	T2358.0B_0073_DI
2359.00	0070	67784.00	69168.00	T2359.0B_0070_DI
2360.00	0070	66274.00	67678.00	T2360.0F_0070_DI
2361.00	0070	64795.00	66150.00	T2361.0B_0070_DI
2362.00	0070	63307.00	64669.00	T2362.0F_0070_DI
2363.00	0070	61826.00	63176.00	T2363.0B_0070_DI
2364.00	0070	60350.00	61712.00	T2364.0F_0070_DI
2365.00	0070	58879.00	60246.00	T2365.0B_0070_DI
2366.00	0070	57344.00	58726.00	T2366.0F_0070_DI
2367.00	0068	63313.00	64573.00	T2367.0B_0068_DI
2368.00	0068	61747.00	63229.00	T2368.0F_0068_DI
2369.00	0066	63633.00	64938.00	T2369.0B_0066_DI
2370.00	0068	60327.00	61591.00	T2370.0B_0068_DI
2371.00	0068	58716.00	60232.00	T2371.0F_0068_DI
2372.00	0068	57297.00	58574.00	T2372.0B_0068_DI
2373.00	0068	55673.00	57186.00	T2373.0F_0068_DI
2374.00	0066	60691.00	62149.00	T2374.0F_0066_DI
2375.00	0066	59184.00	60479.00	T2375.0B_0066_DI
2376.00	0066	42932.00	44214.00	T2376.0B_0066_DI
2377.00	0063	55779.00	57197.00	T2377.0F_0063_DI
2378.00	0063	57314.00	58792.00	T2378.0B_0063_DI
2379.00	0063	58905.00	60325.00	T2379.0F_0063_DI
2380.00	0063	60461.00	61910.00	T2380.0B_0063_DI
2381.00	0063	62012.00	63425.00	T2381.0F_0063_DI
2382.00	0065	33378.00	34683.00	T2382.0F_0064_DI
2383.00	0065	41419.00	42708.00	T2383.0F_0064_DI
2384.00	0065	42831.00	44282.00	T2384.0B_0064_DI
2385.00	0068	54280.00	55593.00	T2385.0B_0068_DI
2386.00	0068	52638.00	54165.00	T2386.0F_0068_DI
2387.00	0068	51193.00	52506.00	T2387.0B_0068_DI
2388.00	0065	44380.00	45637.00	T2388.0F_0064_DI
2389.00	0065	45773.00	47215.00	T2389.0B_0064_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2390.00	0066	51323.00	52855.00	T2390.0F_0066_DI
2391.00	0066	52974.00	54322.00	T2391.0B_0066_DI
2392.00	0066	54485.00	55987.00	T2392.0F_0066_DI
2393.00	0066	56107.00	57411.00	T2393.0B_0066_DI
2394.00	0066	57573.00	59061.00	T2394.0F_0066_DI
2395.00	0062	59596.00	60920.00	T2395.0B_0062_DI
2396.00	0062	57973.00	59501.00	T2396.0F_0062_DI
2397.00	0062	56537.00	57892.00	T2397.0B_0062_DI
2398.00	0062	55023.00	56451.00	T2398.0F_0062_DI
2399.00	0062	53544.00	54896.00	T2399.0B_0062_DI
2400.00	0062	51993.00	53472.00	T2400.0F_0062_DI
2401.00	0062	50498.00	51848.00	T2401.0B_0062_DI
2402.00	0062	48941.00	50343.00	T2402.0F_0062_DI
2403.00	0049	64363.00	65775.00	T2403.0F_0049_DI
2404.00	0049	62820.00	64260.00	T2404.0B_0049_DI
2405.00	0049	61362.00	62707.00	T2405.0F_0049_DI
2406.00	0049	59846.00	61242.00	T2406.0B_0049_DI
2407.00	0049	58359.00	59696.00	T2407.0F_0049_DI
2408.00	0049	56829.00	58242.00	T2408.0B_0049_DI
2409.00	0049	55369.00	56710.00	T2409.0F_0049_DI
2410.00	0049	53827.00	55247.00	T2410.0B_0049_DI
2411.00	0049	52357.00	53705.00	T2411.0F_0049_DI
2412.00	0047	70587.00	71962.00	T2412.0B_0047_DI
2413.00	0047	69076.00	70489.00	T2413.0F_0047_DI
2414.00	0047	48061.00	49562.00	T2414.0B_0047_DI
2415.00	0047	49661.00	51047.00	T2415.0F_0047_DI
2416.00	0047	46560.00	47943.00	T2416.0F_0047_DI
2417.00	0046	40162.00	40644.00	T2417.0F_0046_DI
2417.01	0047	54142.00	55290.00	T2417.0F_0047_DI + T2417.0B_0047_1_DI
2418.00	0047	44876.00	46400.00	T2418.0B_0047_DI
2419.00	0047	59824.00	61295.00	T2419.0F_0047_DI
2420.00	0047	61398.00	62807.00	T2420.0B_0047_DI
2421.00	0047	62950.00	64401.00	T2421.0F_0047_DI
2422.00	0047	64515.00	65929.00	T2422.0B_0047_DI
2423.00	0047	66053.00	67509.00	T2423.0F_0047_DI
2424.00	0047	67626.00	68991.00	T2424.0B_0047_DI
2425.00	0047	52672.00	54043.00	T2425.0F_0047_DI
2426.00	0047	51097.00	52562.00	T2426.0B_0047_DI
2427.00	0047	43422.00	44823.00	T2427.0F_0047_DI
2428.00	0047	41779.00	43292.00	T2428.0B_0047_DI
2429.00	0046	38700.00	40094.00	T2429.0B_0046_DI
2430.00	0044	60251.00	61726.00	T2430.0B_0044_DI
2431.00	0044	58731.00	60139.00	T2431.0F_0044_DI
2432.00	0044	57176.00	58632.00	T2432.0B_0044_DI
2433.00	0044	55632.00	57062.00	T2433.0F_0044_DI
2434.00	0044	54037.00	55498.00	T2434.0B_0044_DI
2435.00	0044	52495.00	53922.00	T2435.0F_0044_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2436.00	0044	50896.00	52371.00	T2436.0B_0044_DI
2437.00	0044	49359.00	50797.00	T2437.0F_0044_DI
2438.00	0044	41309.00	42731.00	T2438.0B_0044_DI
2439.00	0044	39777.00	41217.00	T2439.0F_0044_DI
2440.00	0044	38204.00	39669.00	T2440.0B_0044_DI
2441.00	0046	30953.00	32401.00	T2441.0F_0046_DI
2442.00	0046	32515.00	33935.00	T2442.0B_0046_DI
2443.00	0046	34042.00	35499.00	T2443.0F_0046_DI
2444.00	0046	35600.00	37018.00	T2444.0B_0046_DI
2445.00	0046	37127.00	38588.00	T2445.0F_0046_DI
2446.00	0035	41502.00	42915.00	T2446.0F_0035_DI
2447.00	0035	39903.00	41381.00	T2447.0B_0035_DI
2448.00	0035	43023.00	44507.00	T2448.0B_0035_DI
2449.00	0035	44635.00	46021.00	T2449.0F_0035_DI
2450.00	0035	46134.00	47588.00	T2450.0B_0035_DI
2451.00	0035	47724.00	49097.00	T2451.0F_0035_DI
2452.00	0035	49176.00	50668.00	T2452.0B_0035_DI
2453.00	0044	33840.00	35181.00	T2453.0F_0044_DI
2453.01	0044	43602.00	43867.00	T2453.0F_0044_1_DI
2454.00	0044	35284.00	36678.00	T2454.0B_0044_DI
2454.01	0044	43190.00	43491.00	T2454.0B_0044_1_DI
2455.00	0044	36770.00	38152.00	T2455.0F_0044_DI
2455.01	0044	42824.00	43112.00	T2455.0F_0044_1_DI
2456.00	0042	48546.00	50107.00	T2456.0B_0042_DI
2457.00	0031	54763.00	56185.00	Unavailable
2457.01	0033	38138.00	38762.00	T2457.0B_0033_DI
2458.00	0031	53162.00	54662.00	T2458.0F_031_DI
2459.00	0044	32414.00	33731.00	T2459.0B_0044_DI
2459.01	0044	43909.00	44197.00	T2459.0B_0044_1_DI
2460.00	0033	37498.00	38112.00	T2460.0F_0033_DI
2460.01	0042	47262.00	48447.00	T2460.0F_0042_DI
2461.00	0033	35806.00	37368.00	T2461.0B_0033_DI
2462.00	0033	34247.00	35684.00	T2462.0F_0033_DI
2463.00	0033	32548.00	34109.00	T2463.0B_0033_DI
2464.00	0031	51514.00	52989.00	T2464.0B_031_DI
2465.00	0031	49928.00	51422.00	T2465.0F_031_DI
2466.00	0030	41171.00	42626.00	Unavailable
2467.00	0030	39632.00	41067.00	T2467.0F_0030_DI
2468.00	0030	38032.00	39500.00	T2468.0B_0030_DI
2469.00	0030	36491.00	37925.00	T2469.0F_0030_DI
2470.00	0030	34881.00	36359.00	T2470.0B_0030_DI
2471.00	0030	33321.00	34774.00	T2471.0F_0030_DI
2472.00	0030	31750.00	33194.00	T2472.0B_0030_DI
2473.00	0028	44002.00	45487.00	T2473.0B_0028_DI
2474.00	0028	42390.00	43888.00	T2474.0F_0028_DI
2475.00	0028	40789.00	42246.00	T2475.0B_0028_DI
2476.00	0028	39175.00	40693.00	T2476.0F_0028_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2477.00	0028	37577.00	39049.00	T2477.0B_0028_DI
2478.00	0028	35759.00	36898.00	T2478.0F_0028_DI
2479.00	0028	34502.00	35602.00	T2479.0B_0028_DI
2480.00	0026	63015.00	64037.00	T2480.0B_0026_DI
2481.00	0026	61787.00	62920.00	T2481.0F_0026_DI
2482.00	0026	60626.00	61683.00	T2482.0B_0026_DI
2483.00	0026	59388.00	60514.00	T2483.0F_0026_DI
2484.00	0026	58235.00	59267.00	T2484.0B_0026_DI
2485.00	0026	57019.00	58156.00	T2485.0F_0026_DI
2486.00	0026	55846.00	56888.00	T2486.0B_0026_DI
2487.00	0026	54587.00	55745.00	T2487.0F_0026_DI
2488.00	0026	53404.00	54457.00	T2488.0B_0026_DI
2489.00	0026	52147.00	53293.00	T2489.0F_0026_DI
2490.00	0025	67892.00	69066.00	T2490.0B_0025_DI
2491.00	0025	66668.00	67790.00	T2491.0F_0025_DI
2492.00	0025	65427.00	66560.00	T2492.0B_0025_DI
2493.00	0025	64127.00	65276.00	T2493.0F_0025_DI
2494.00	0025	62874.00	63989.00	T2494.0B_0025_DI
2495.00	0025	61560.00	62754.00	T2495.0F_0025_DI
2496.00	0025	60287.00	61442.00	T2496.0B_0025_DI
2497.00	0025	58989.00	60162.00	T2497.0F_0025_DI
2498.00	0025	57742.00	58864.00	T2498.0B_0025_DI
2499.00	0025	56430.00	57610.00	T2499.0F_0025_DI + T2499.0F_0025_1_DI
2500.00	0024	63153.00	64267.00	T2500.0B_0024_DI
2501.00	0024	61914.00	63027.00	T2501.0F_0024_DI
2502.00	0024	60717.00	61820.00	T2502.0B_0024_DI
2503.00	0024	59468.00	60604.00	T2503.0F_0024_DI
2504.00	0024	58254.00	59361.00	T2504.0B_0024_DI
2505.00	0024	56977.00	58111.00	T2505.0F_0024_DI
2506.00	0024	55739.00	56857.00	T2506.0B_0024_DI
2507.00	0024	54463.00	55598.00	T2507.0F_0024_DI
2508.00	0023	32903.00	33774.00	T2508.0B_0023_DI
2508.01	0024	53991.00	54350.00	T2508.0B_0024_DI
2509.00	0023	31887.00	32822.00	T2509.0F_0023_DI + T2509.0F_0023_1_DI
2509.01	0024	53590.00	53865.00	T2509.0F_0024_DI
2510.00	0022	66344.00	67448.00	T2510.0B_0022_DI
2511.00	0022	65113.00	66223.00	T2511.0F_0022_DI
2512.00	0022	63912.00	65027.00	T2512.0B_0022_DI
2513.00	0022	62653.00	63799.00	T2513.0F_0022_DI
2514.00	0022	61395.00	62535.00	T2514.0B_0022_DI
2515.00	0022	60128.00	61266.00	T2515.0F_0022_DI
2516.00	0022	58632.00	59719.00	T2516.0B_0022_DI
2517.00	0022	57311.00	58497.00	T2517.0F_0022_DI
2518.00	0022	56066.00	57171.00	T2518.0B_0022_DI
2519.00	0022	54773.00	55951.00	T2519.0F_0022_DI
2520.00	0021	48169.00	49230.00	T2520.0B_0021_DI
2521.00	0021	46906.00	48074.00	T2521.0F_0021_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2522.00	0021	45716.00	46757.00	T2522.0B_0021_DI
2523.00	0021	44397.00	45613.00	T2523.0F_0021_DI
2524.00	0021	43165.00	44223.00	T2524.0B_0021_DI
2525.00	0021	39548.00	40758.00	T2525.0F_0021_DI
2526.00	0021	38697.00	39418.00	T2526.0B_0021_DI
2526.01	0021	40857.00	41348.00	T2526.0B_0021_1_DI
2527.00	0021	37808.00	38648.00	T2527.0F_0021_DI
2527.01	0021	41421.00	42002.00	T2527.0F_0021_1_DI
2528.00	0021	36831.00	37672.00	T2528.0B_0021_DI
2528.01	0021	42089.00	42552.00	T2528.0B_0021_1_DI
2529.00	0021	35817.00	36751.00	T2529.0F_0021_1_DI
2529.01	0021	42616.00	43082.00	T2529.0F_0021_2_DI
2530.00	0018	39311.00	40473.00	T2530.0B_0018_DI
2531.00	0018	38035.00	39213.00	T2531.0F_0018_DI
2532.00	0018	36738.00	37900.00	T2532.0B_0018_DI
2533.00	0018	35464.00	36636.00	T2533.0F_0018_DI
2534.00	0018	34216.00	35352.00	T2534.0B_0018_DI
2535.00	0018	32904.00	34099.00	T2535.0F_0018_DI
2536.00	0014	30903.00	32232.00	T2536.0F_0014_DI + T2536.0F_0014_1_DI
2537.00	0014	32365.00	33422.00	T2537.0B_0014_DI
2538.00	0014	33551.00	34871.00	T2538.0F_0014_DI
2539.00	0013	36100.00	37321.00	T2539.0F_0013_DI
2540.00	0013	37411.00	38434.00	T2540.0B_0013_DI + T2540.0F_0013_1_DI
2541.00	0014	34981.00	36021.00	T2541.0B_0014_DI
2542.00	0014	36150.00	37459.00	T2542.0F_0014_DI
2543.00	0014	37566.00	38604.00	T2543.0B_0014_DI
2544.00	0014	38726.00	40021.00	T2544.0F_0014_DI
2545.00	0012	42352.00	43516.00	T2545.0B_0012_DI
2546.00	0012	43645.00	44841.00	T2546.0F_0012_DI
2547.00	0014	40103.00	41139.00	T2547.0B_0014_DI
2548.00	0015	48825.00	50184.00	T2548.0F_0015_DI
2549.00	0015	50256.00	51310.00	T2549.0B_0015_DI
2550.00	0015	51444.00	52740.00	T2550.0F_0015_DI
2551.00	0015	52852.00	53904.00	T2551.0B_0015_DI
2552.00	0015	54004.00	55343.00	T2552.0F_0015_1_DI
2553.00	0015	55435.00	56488.00	T2553.0B_0015_DI
2554.00	0015	56636.00	57968.00	T2554.0F_0015_DI
2555.00	0015	58081.00	59163.00	T2555.0B_0015_DI
2556.00	0015	59287.00	60605.00	T2556.0F_0015_DI
2557.00	0016	31595.00	32867.00	T2557.0F_0016_DI
2557.01	0078	49193.00	50352.00	T2557.0B_0078_DI
2558.00	0016	32987.00	34058.00	T2558.0B_0016_DI
2559.00	0011	44842.00	46019.00	T2559.0F_0011_DI + T2559.0F_0011_1_DI
2560.00	0011	46134.00	47337.00	T2560.0B_0011_DI
2561.00	0011	47453.00	48637.00	T2561.0F_0011_DI
2562.00	0011	48748.00	49964.00	T2562.0F_0011_DI + T2562.0B_0011_DI
2563.00	0011	50085.00	51271.00	T2563.0F_0011_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2564.00	0011	51374.00	52606.00	T2564.0B_0011_DI
2565.00	0012	41014.00	42256.00	T2565.0F_0012_DI + T2565.0F_0012_1_DI
2566.00	0012	44927.00	46138.00	T2566.0B_0012_DI
2567.00	0016	34179.00	35441.00	T2567.0F_0016_DI
2568.00	0010	48743.00	49923.00	T2568.0F_0010_DI + T2568.0F_0010_1_DI
2569.00	0010	47405.00	48617.00	T2569.0B_0010_DI
2570.00	0010	46123.00	47310.00	T2570.0F_0010_DI
2571.00	0010	44757.00	45999.00	T2571.0B_0010_DI
2572.00	0010	43460.00	44658.00	T2572.0F_0010_DI
2573.00	0006	58171.00	59353.00	T2573.0F_0006_DI
2574.00	0006	56721.00	58071.00	T2574.0B_0006_2_DI
2575.00	0006	55385.00	56568.00	T2575.0F_0006_DI + T2575.0B_0006_3_DI
2576.00	0006	53900.00	55261.00	T2576.0B_0006_DI
2577.00	0006	52603.00	53774.00	T2577.0F_0006_1_DI + T2577.0B_0006_DI
2578.00	0006	31807.00	32982.00	T2578.0F_0006_DI
2579.00	0006	33109.00	34391.00	T2579.0B_0006_DI
2580.00	0006	34493.00	35661.00	2580.0F_0006_DI
2581.00	0006	35777.00	37090.00	T2581.0B_0006_DI
2582.00	0006	37187.00	38350.00	T2582.0F_0006_DI
2583.00	0006	38469.00	39759.00	T2583.0B_0006_DI
2584.00	0006	39861.00	41044.00	T2584.0F_0006_DI + T2584.0F_0006_1_DI
2585.00	0006	51194.00	52549.00	T2585.0B_0006_DI + T2585.0B_0006_1_DI
2586.00	0006	49888.00	51060.00	T2586.0B_0006_DI + T2586.0F_0006_DI
2587.00	0009	53612.00	54825.00	T2587.0F_0009_DI
2588.00	0009	54932.00	56138.00	T2588.0B_0009_DI
2589.00	0009	56263.00	57510.00	T2589.0F_0009_DI
2590.00	0009	57631.00	58855.00	T2590.0B_0009_DI
2591.00	0009	58958.00	60170.00	T2591.0F_0009_DI
2592.00	0009	60283.00	61524.00	T2592.0B_0009_DI
2593.00	0009	61628.00	62867.00	T2593.0F_0009_DI
2594.00	0016	35558.00	36651.00	T2594.0B_0016_DI
2595.00	0016	36746.00	38012.00	T2595.0F_0016_DI
2596.00	0016	38134.00	39246.00	T2596.0B_0016_DI
2597.00	0017	49169.00	50466.00	T2597.0F_0017_DI
2598.00	0017	50562.00	51720.00	T2598.0B_0017_DI
2599.00	0017	51849.00	53120.00	T2599.0F_0017_DI
2600.00	0017	53211.00	54314.00	T2600.0B_0017_DI
2601.00	0017	54468.00	55763.00	T2601.0F_0017_DI
2602.00	0017	55855.00	56995.00	T2602.0B_0017_DI
2603.00	0017	57141.00	58460.00	T2603.0F_0017_DI
2604.00	0017	58541.00	59668.00	T2604.0B_0017_DI
2605.00	0018	30019.00	31279.00	T2605.0F_0018_DI
2606.00	0018	31388.00	32607.00	T2606.0B_0018_DI
2607.00	0016	39369.00	39720.00	T2607.0F_0016_DI
2608.00	0016	39798.00	40113.00	T2608.0B_0016_DI
2609.00	0016	40233.00	40581.00	T2609.0F_0016_DI
2610.00	0016	40655.00	40965.00	T2610.0B_0016_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2611.00	0016	41093.00	41450.00	T2611.0F_0016_DI
2612.00	0016	41576.00	41882.00	T2612.0B_0016_DI
2613.00	0016	41978.00	42332.00	T2613.0F_0016_DI
2614.00	0004	50128.00	50469.00	T2614.0F_0004_DI
2615.00	0004	49696.00	50034.00	T2615.0B_0004_DI
2616.00	0004	49243.00	49590.00	T2616.0F_0004_DI
2617.00	0004	48817.00	49151.00	T2617.0B_0004_DI
2618.00	0004	39666.00	40008.00	T2618.0F_0004_DI
2619.00	0004	39222.00	39565.00	T2619.0B_0004_DI
2620.00	0004	38776.00	39128.00	T2620.0F_0004_DI
2621.00	0004	38335.00	38673.00	T2621.0B_0004_DI
2622.00	0004	37870.00	38216.00	T2622.0F_0004_DI
2623.00	0004	37441.00	37783.00	T2623.0B_0004_DI
2624.00	0004	37008.00	37357.00	T2624.0F_0004_DI
2625.00	0004	36543.00	36888.00	T2625.0B_0004_DI
2626.00	0004	36078.00	36422.00	T2626.0F_0004_DI
2627.00	0004	35620.00	35958.00	T2627.0B_0004_DI
2628.00	0004	35195.00	35540.00	T2628.0F_0004_DI
2629.00	0004	34735.00	35088.00	T2629.0B_0004_DI
2630.00	0004	34262.00	34608.00	T2630.0F_0004_DI
2631.00	0004	33808.00	34154.00	T2631.0B_0004_DI
2632.00	0004	33370.00	33719.00	T2632.0F_0004_DI
2633.00	0004	32906.00	33259.00	T2633.0B_0004_DI
2634.00	0004	32434.00	32775.00	T2634.0F_0004_DI
2635.00	0004	31974.00	32318.00	T2635.0B_0004_DI
2636.00	0004	31504.00	31857.00	T2636.0F_0004_DI
2637.00	0004	31036.00	31395.00	T2637.0B_0004_DI
2638.00	0002	57353.00	57680.00	T2638.0F_0002_DI
2639.00	0002	56841.00	57217.00	T2639.0B_0002_DI
2640.00	0002	56399.00	56750.00	T2640.0F_0002_DI
2641.00	0002	55927.00	56288.00	T2641.0B_0002_DI
2642.00	0002	55473.00	55815.00	T2642.0F_0002_DI
2643.00	0002	55003.00	55373.00	T2643.0B_0002_DI
2644.00	0002	54572.00	54920.00	T2644.0F_0002_DI
2645.00	0002	54085.00	54445.00	T2645.0B_0002_DI
2646.00	0002	53634.00	53977.00	T2646.0F_0002_DI
2647.00	0002	53183.00	53553.00	T2647.0B_0002_DI
2648.00	0002	52745.00	53089.00	T2648.0F_0002_DI
2649.00	0002	52270.00	52636.00	T2649.0B_0002_DI
2650.00	0002	51814.00	52179.00	T2650.0F_0002_DI
2651.00	0002	51330.00	51707.00	T2651.0B_0002_DI
2652.00	0002	50857.00	51216.00	T2652.0F_0002_DI
2653.00	0002	50367.00	50739.00	T2653.0B_0002_DI
2654.00	0002	49891.00	50244.00	T2654.0F_0002_DI
2655.00	0002	49402.00	49762.00	T2655.0B_0002_DI
2656.00	0002	48934.00	49286.00	T2656.0F_0002_DI
2657.00	0002	48453.00	48813.00	T2657.0B_0002_DI

Digital Video Inventory

Flight Line	Flight	Data Time Start	Data Time End	Video Filename (.avi)
2658.00	0002	48009.00	48361.00	T2658.0F_0002_DI
2659.00	0002	47496.00	47878.00	T2659.0F_0002_DI + T2659.0B_0002_DI
2660.00	0002	40110.00	40474.00	T2660.0F_0002_DI
2661.00	0002	39619.00	39990.00	T2661.0B_0002_DI
2662.00	0002	39149.00	39507.00	T2662.0F_0002_DI
2663.00	0002	38663.00	39040.00	T2663.0B_0002_DI
2664.00	0002	38215.00	38580.00	T2664.0F_0002_DI
2665.00	0002	37739.00	38107.00	T2665.0B_0002_DI
2666.00	0002	37297.00	37651.00	T2666.0F_0002_DI
2667.00	0002	36813.00	37178.00	T2667.0B_0002_DI
2668.00	0002	36347.00	36702.00	T2668.0F_0002_DI
2669.00	0002	35866.00	36234.00	T2669.0B_0002_DI
2670.00	0002	35372.00	35743.00	T2670.0F_0002_DI
2671.00	0002	34906.00	35286.00	T2671.0B_0002_DI
2672.00	0002	34419.00	34800.00	T2672.0F_0002_DI
2673.00	0002	33937.00	34314.00	T2673.0B_0002_DI
2674.00	0002	33450.00	33831.00	T2674.0F_0002_DI
2675.00	0002	32945.00	33320.00	T2675.0B_0002_DI
2676.00	0002	32429.00	32818.00	T2676.0F_0002_DI
2677.00	0002	31887.00	32287.00	T2677.0B_0002_DI
2678.00	0002	31390.00	31796.00	T2678.0F_0002_DI
2679.00	0001	60757.00	61167.00	T2679.0F_0001_DI
2680.00	0001	60248.00	60632.00	T2680.0B_0001_DI
2681.00	0001	59754.00	60159.00	T2681.0F_0001_DI
2682.00	0001	59208.00	59612.00	T2682.0B_0001_DI
2683.00	0001	58677.00	59080.00	T2683.0F_0001_DI
2684.00	0001	58148.00	58534.00	T2684.0B_0001_DI
2685.00	0001	57653.00	58053.00	T2685.0F_0001_DI
2686.00	0001	57113.00	57510.00	T2686.0B_0001_DI
2687.00	0001	56580.00	56995.00	T2687.0F_0001_DI
2688.00	0001	56069.00	56454.00	T2688.0B_0001_DI
2689.00	0001	55549.00	55958.00	T2689.0F_0001_DI
2690.00	0001	55022.00	55415.00	T2690.0B_0001_DI
2691.00	0001	54500.00	54909.00	T2691.0F_0001_DI
2692.00	0001	53972.00	54361.00	T2692.0B_0001_DI
2693.00	0001	53470.00	53862.00	T2693.0F_0001_DI
2694.00	0001	52928.00	53320.00	T2694.0B_0001_DI
2695.00	0001	52399.00	52821.00	T2695.0F_0001_DI
2696.00	0001	51837.00	52248.00	T2696.0B_0001_DI
2697.00	0001	51310.00	51714.00	T2697.0F_0001_DI
2698.00	0001	50734.00	51132.00	T2698.0B_0001_DI
2699.00	0001	50186.00	50586.00	T2699.0F_0001_DI

SGL

Appendix XI

GEOPHYSICAL SURVEY AIRCRAFT

de Havilland DHC-6 Twin Otter

Registration	C-GSGF
Serial #	642

The de Havilland DHC-6 Twin Otter is an all metal, high wing, twin-engine, short takeoff and landing (STOL) aircraft. The Twin Otter is powered by two Pratt & Whitney Canada PT6A-27 engines. These engines drive a constant speed, fully feathering, reversible propeller. The PT6 turbine engines provide ample power for climbing over steep terrain, working at altitudes up to 7,000 m and can withstand frequent rapid power changes. The aircraft is highly maneuverable, rugged in design and can be flown at speeds from 80 to 160 knots. The low stall speeds and abundant available power make the Twin Otter a safe and effective aircraft for surveys requiring drape flying over rough topography, low air speeds or flights at high altitude. The aircraft has fixed gear, extendable flaps and manually adjustable trim tabs on the primary controls for the roll and pitch axes and full rudder trim for the yaw axis. The aircraft is equipped with full de-icing equipment and sufficient avionics for instrument flying including a flight control system. Supplementary fuel can be added for transoceanic flight. The Twin Otter is certified for IFR flights in known icing conditions.

GEOPHYSICAL SURVEYING

The SGL Twin Otter is fully equipped for airborne magnetic, gravity, radiometric and frequency-domain EM surveys. EM fields are measured with the SGL frequency-domain EM system (**SGFEM**). The four-frequency EM transmitter is located in the right wingtip EM pod, and the receiver is located in the left wingtip EM pod. The magnetic field is measured by up to two sensors allowing for horizontal gradient with one sensor in the composite nose stinger and one in the left wingtip EM pod. Gravity surveys are performed using SGL's state-of-the-art **AIRGrav** system. The Twin Otter can carry up to 63 litres of detector crystals for gamma-ray spectrometer surveys.

DE HAVILLAND DHC-6 TWIN OTTER SPECIFICATIONS

Crew Capacity:
- 2 pilots, 1 operator (optional)

Fuselage:
- semi-monocoque

Wings:
- strut braced, high wing
- outboard ailerons and trim tab, full span flaps

Tail:
- conventional stabilizers
- elevator and rudder with trim tabs

Power Plant:
- Pratt & Whitney Canada PT6A-27, 680 shp, free-turbine gas engine, overhaul 3,600 hours
- three-blade, fully-feathering, constant-speed, reversible propeller, overhaul 3,000 hours or 5 years

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

Dimensions:

Wing span	65 ft	19.8 m
Exterior length	51 ft 9 in	15.8 m
Exterior height	19 ft 6 in	5.94 m
Interior usable length	18 ft 5 in	5.61 m
Interior usable width	4 ft 4 in	1.32 m
Interior height	4 ft 11 in	1.5 m
Usable fuel capacity	385 US gal	1,455 l

Weights:

Empty	8,100 lb	3,674 kg
Maximum take-off	12,500 lb	5,670 kg

Performance (2,000 ft ASL, standard day, maximum take-off weight, 1,900 rpm, 1,375 ft-lb tq):

Range, maximum range power (plus reserve)	920 nm	1,704 km
Cruise speed at maximum range power	170 kt	315 km/h
Fuel flow at maximum range power	50 US gal/h	189 l/h
Stall airspeed, landing configuration	58 kt	107 km/h
Service ceiling	25,000 ft	7,620 m
Minimum required runway length	2,500 ft	762 m
Rate of climb	1,600 ft/min	488 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

SGFEM, frequency-domain EM

AIRGrav, SGL airborne gravimeter

Magnetic total field

Horizontal magnetic gradient

Gamma-ray spectrometer, up to 63 litres (3,840 in^3) of detector crystals

SGMethane, methane gas sensing

Additional Features:
- Nose stinger, 1.8 m long, 23 cm in diameter, capable of housing a 5.5 kg sensor
- HF radio
- Video camera mount with 23 cm diameter glass covered opening in the belly of the aircraft
- Two instrument racks, standard 48 cm (19 in) width
- Radar altimeter, 0-750 m
- Electrical power capacity, 28 VDC at 200 amp
- Static inverters, 115 VAC - 400 Hz, 110 VAC - 60 Hz
- GPS receiver and antenna

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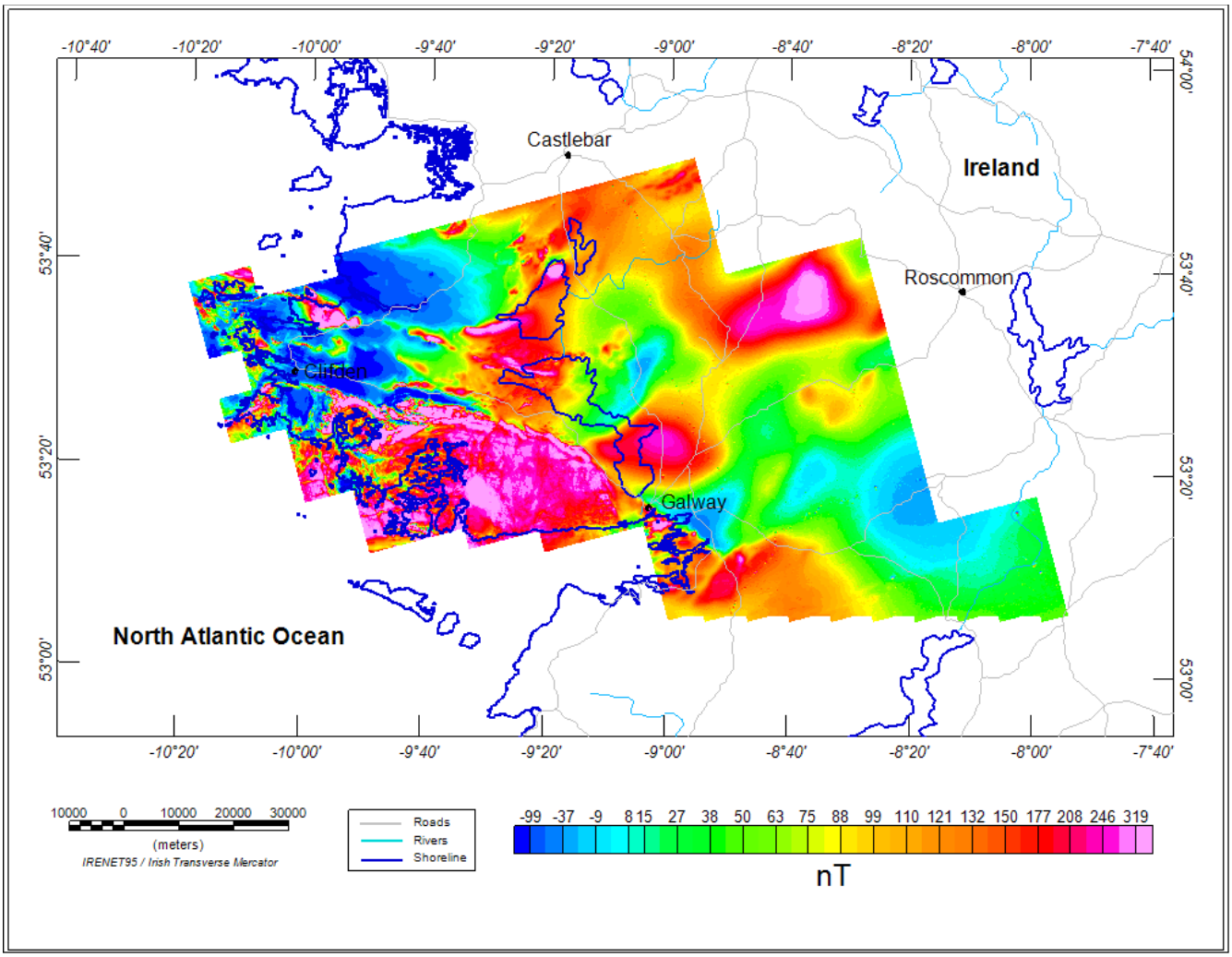
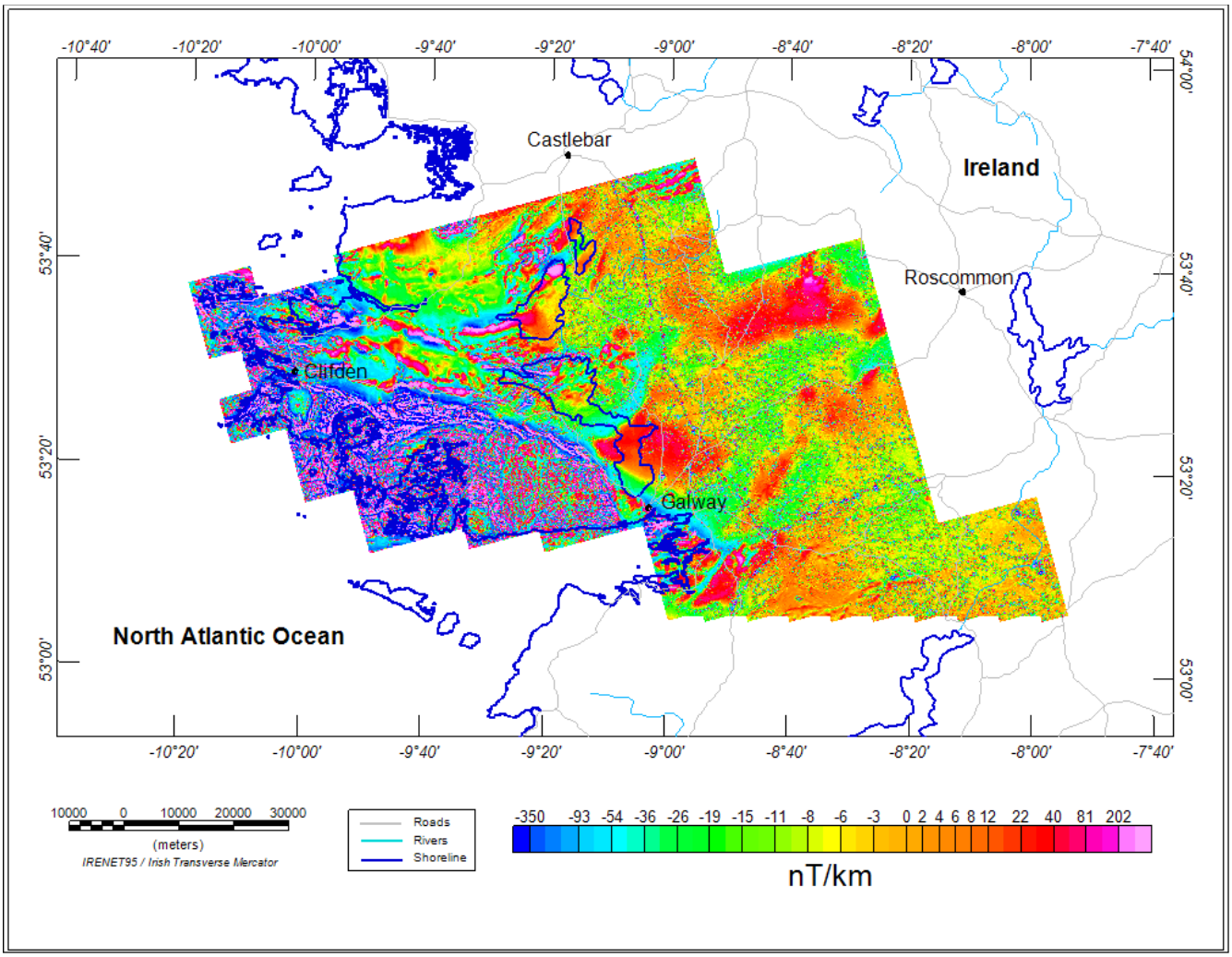
Appendix XII

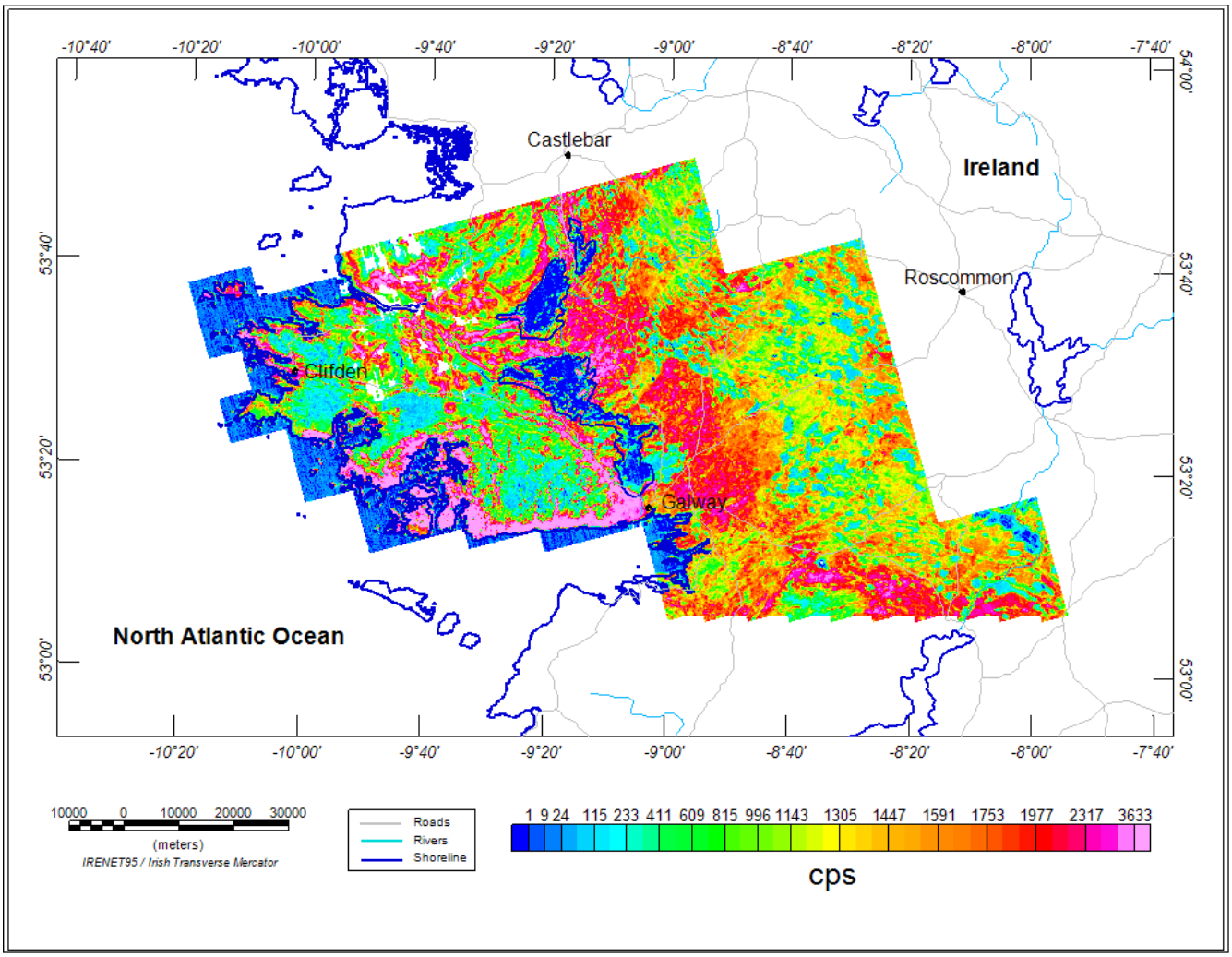
Magnetic Anomaly



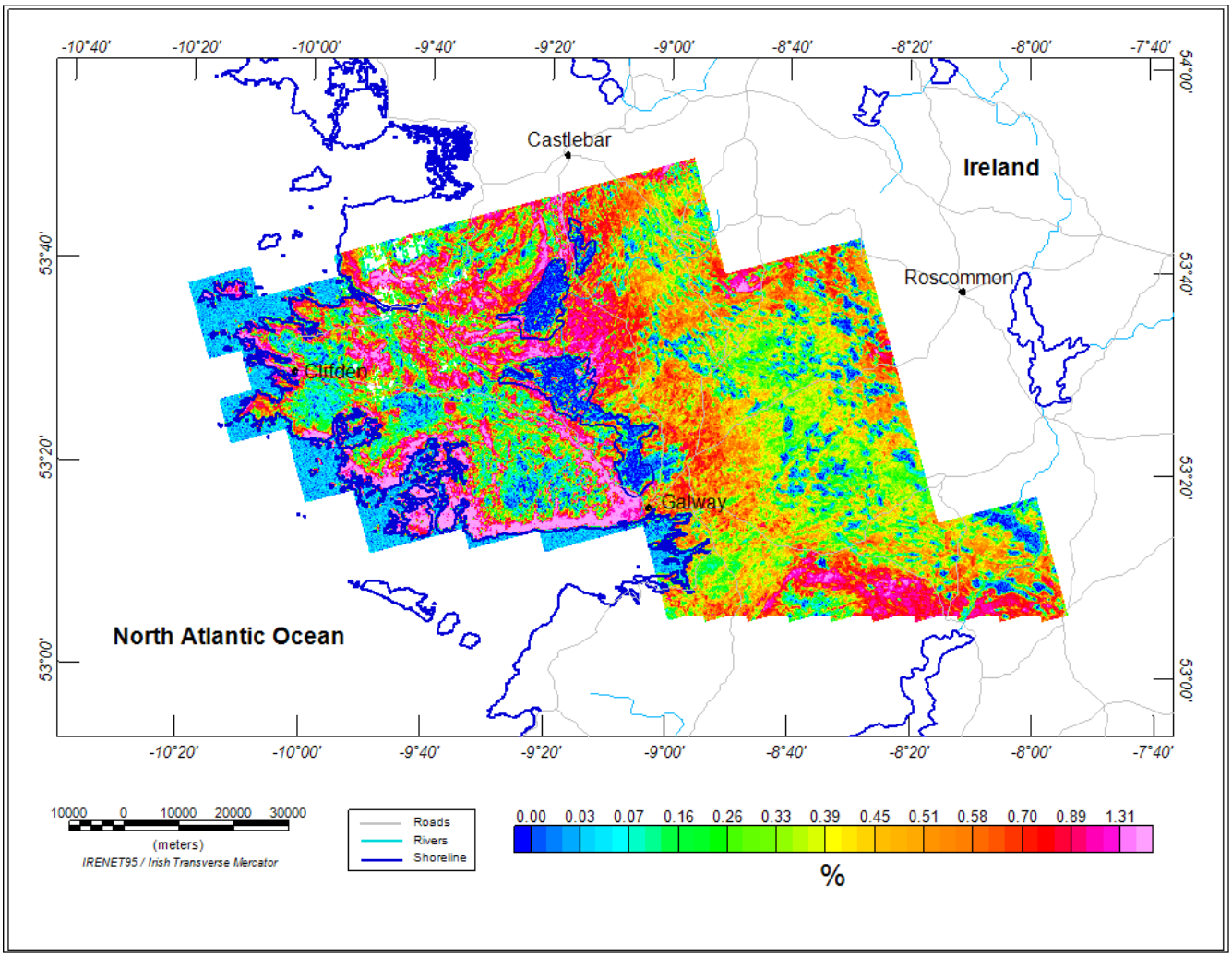
First Vertical Derivative of Magnetic Anomaly



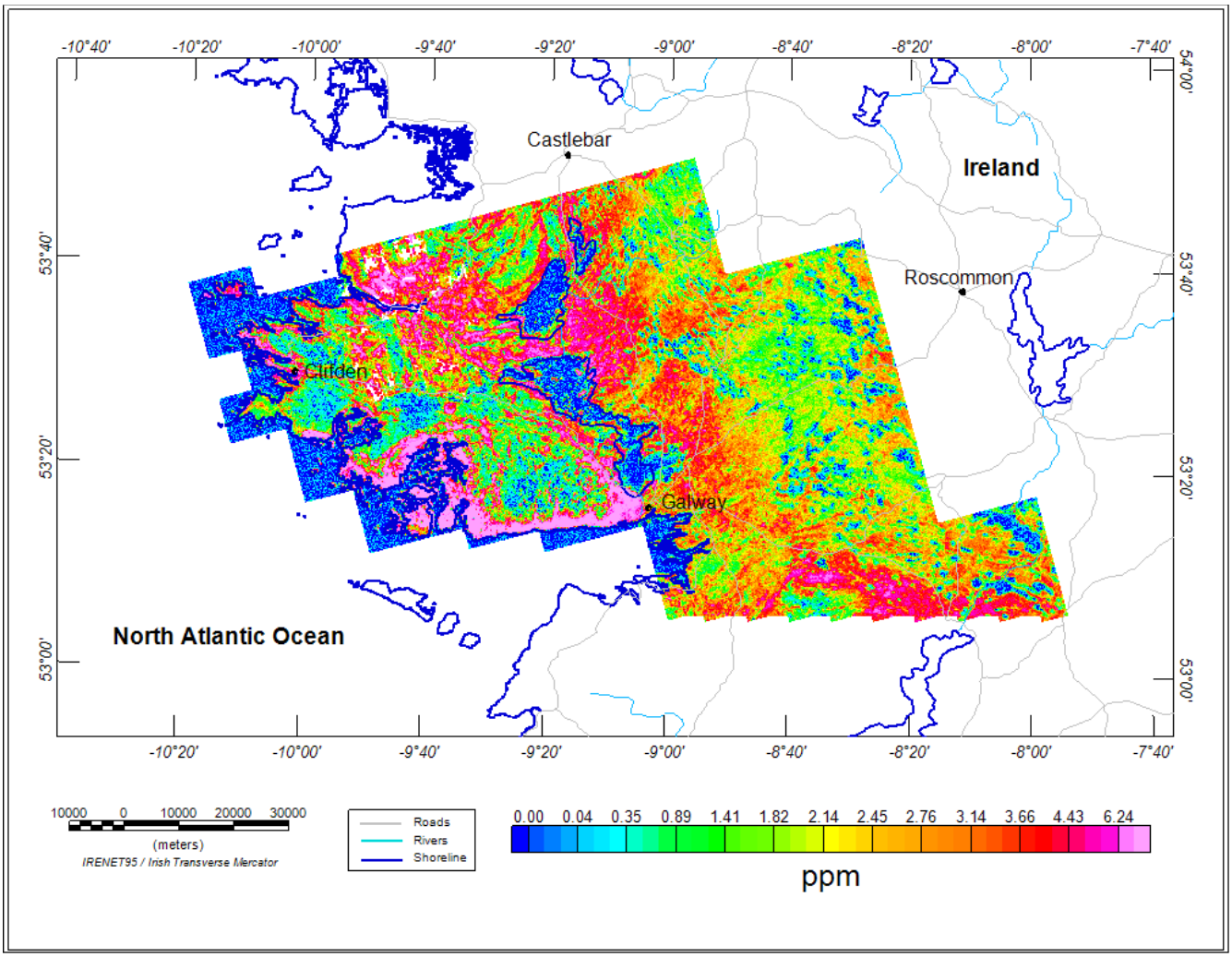
Total Counts



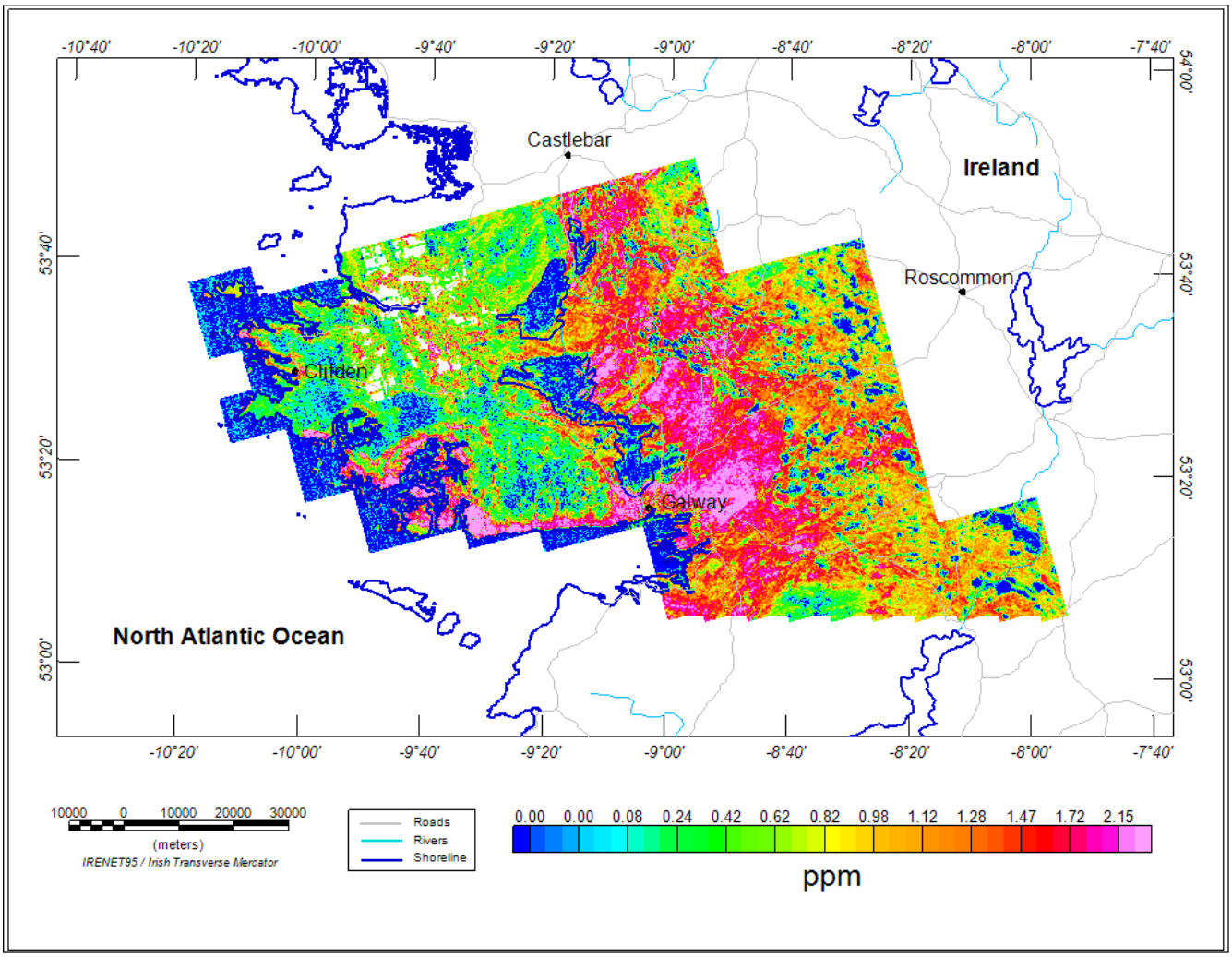
Potassium


-10°40'
-10°20'
-10°00'
-9°40'
-9°20'
-9°00'
-8°40'
-8°20'
-8°00'
-7°40'
54°00'
53°40'
53°20'
53°00'
Castlebar
Ireland
Roscommon
Clifden
Galway
North Atlantic Ocean
10000 0 10000 20000 30000
(meters)
IRENET95 / Irish Transverse Mercator
Roads
Rivers
Shoreline
0.00 0.03 0.07 0.16 0.26 0.33 0.39 0.45 0.51 0.58 0.70 0.89 1.31
%

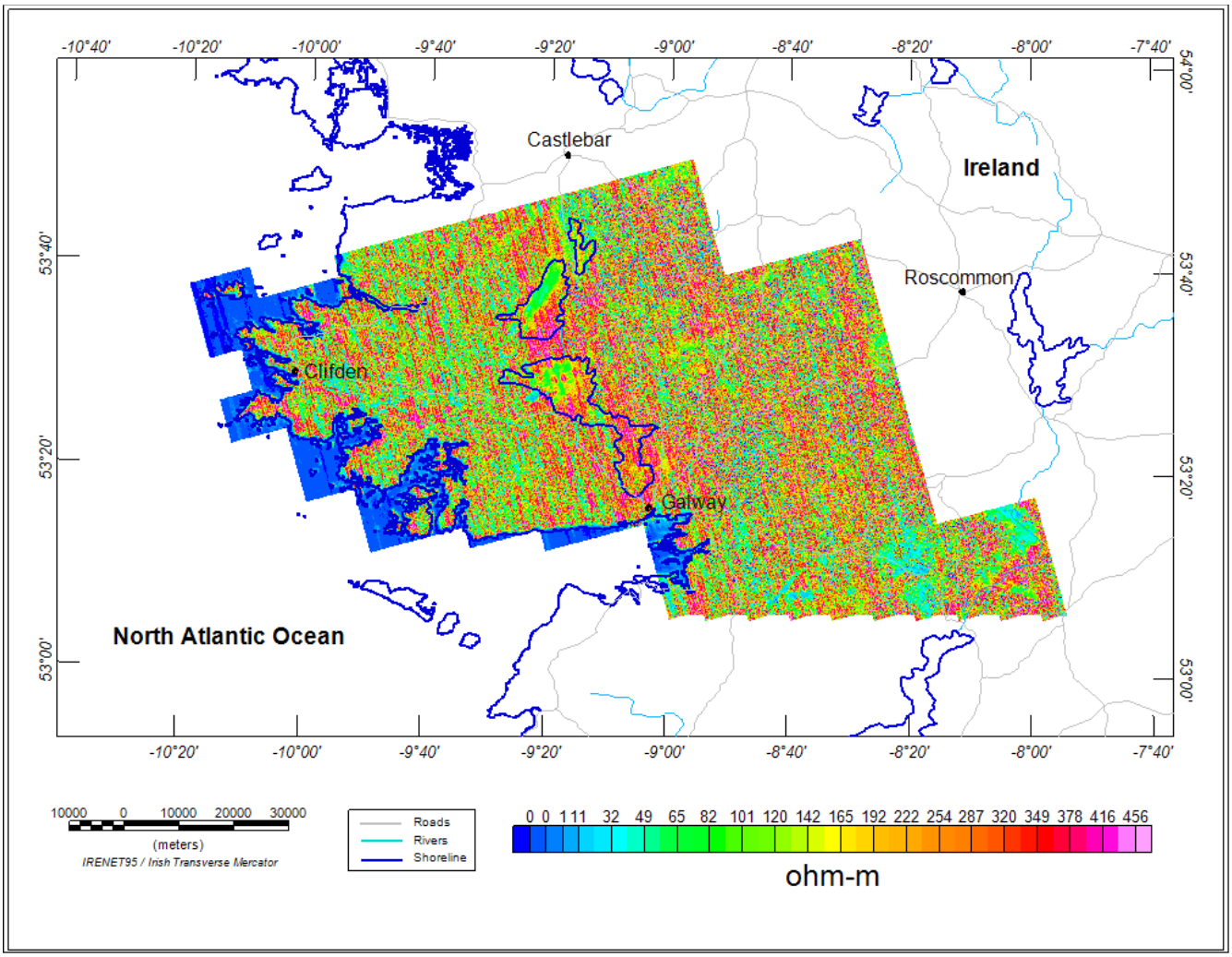
Equivalent Thorium



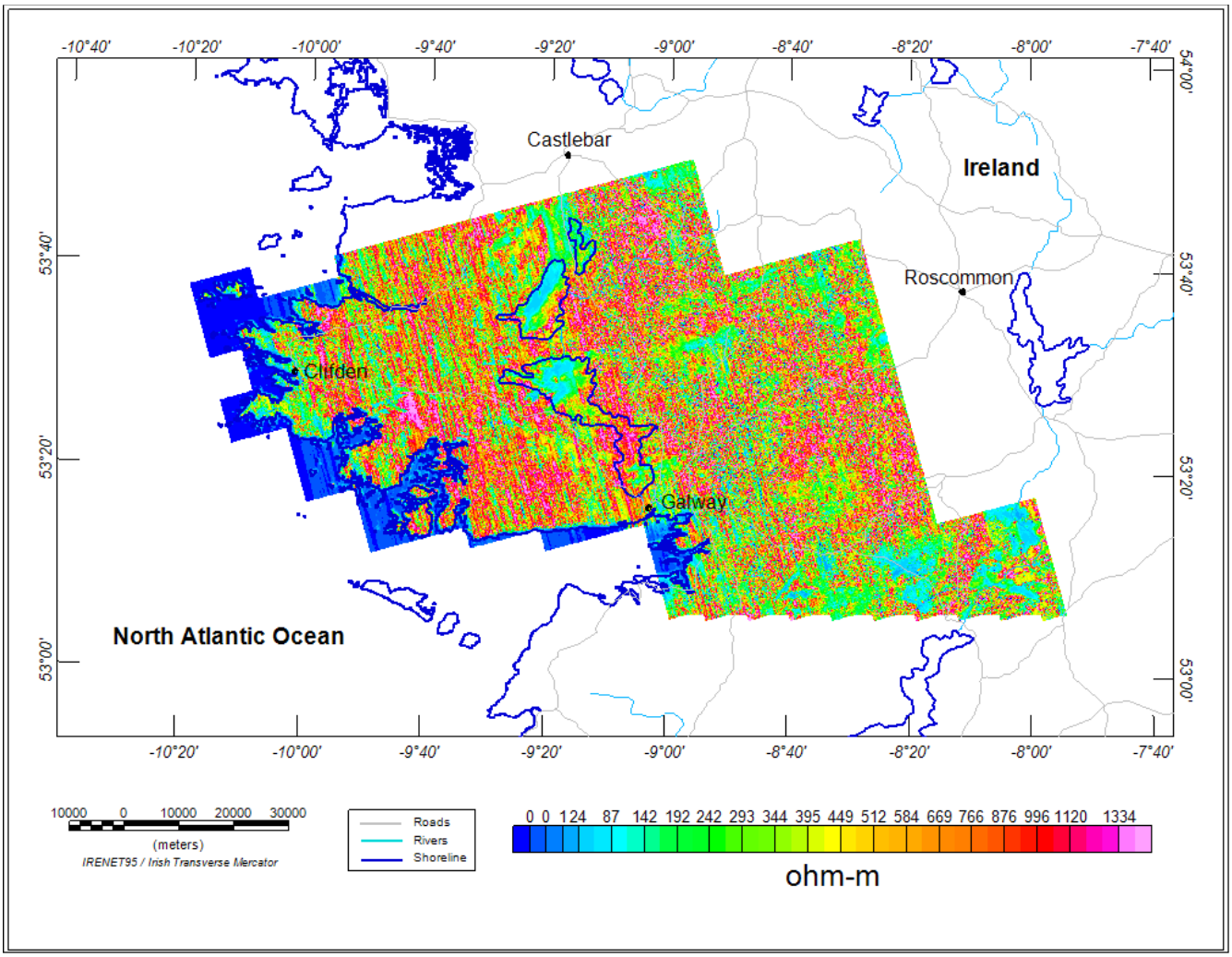
Equivalent Uranium



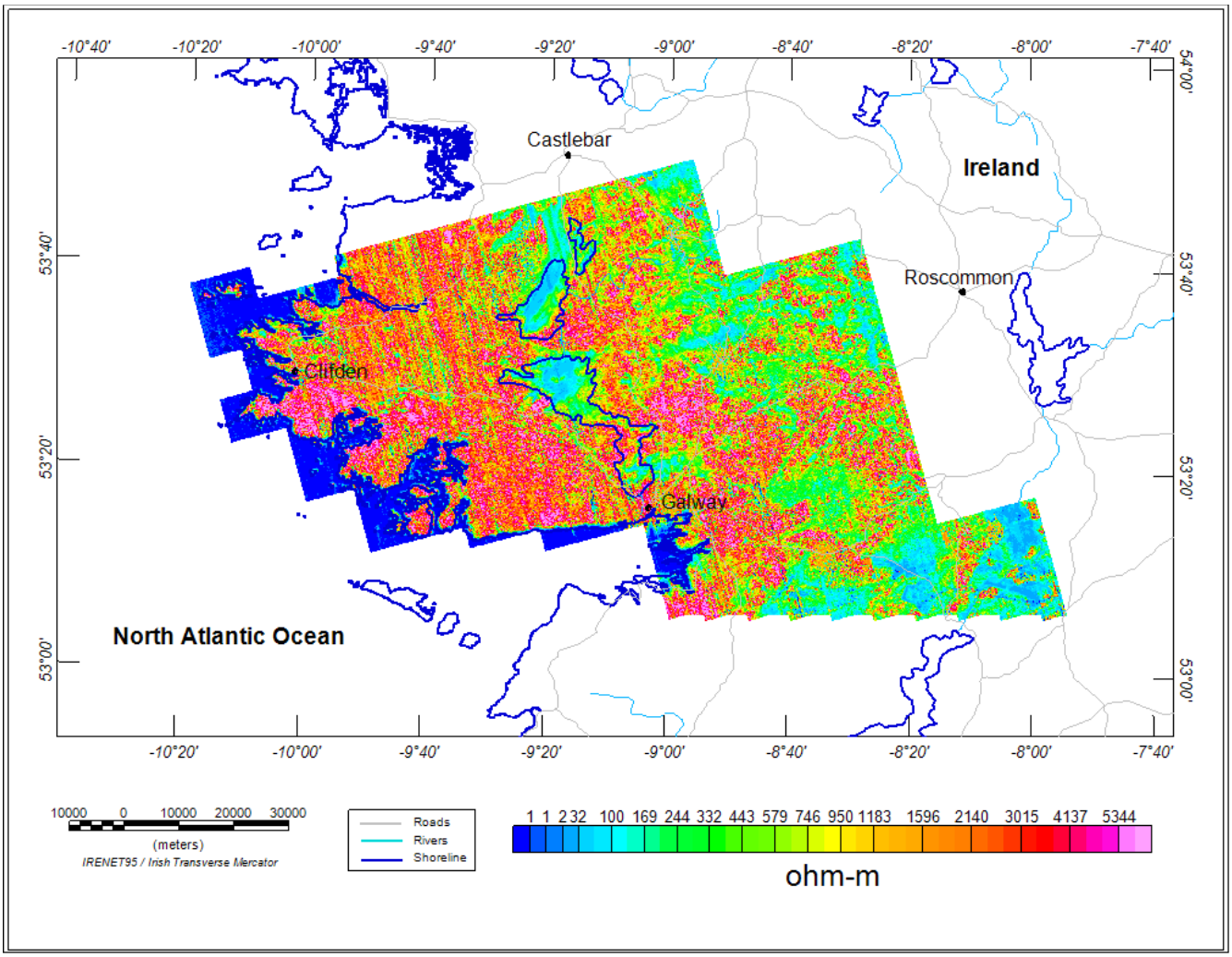
Microlevelled apparent resistivity, half-space model, 912 Hz



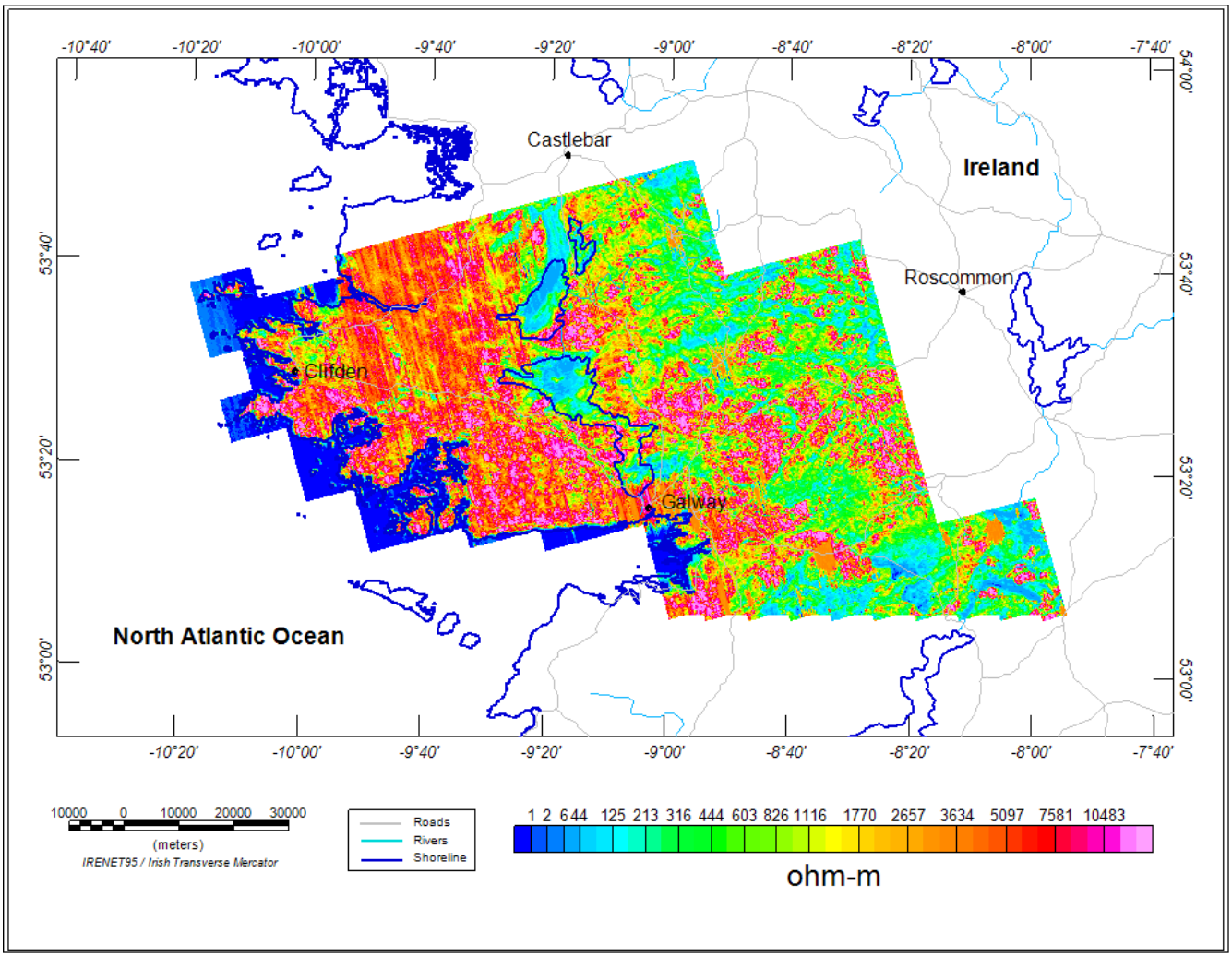
Microlevelled apparent resistivity, half-space model, 3005 Hz



Microlevelled apparent resistivity, half-space model, 11962 Hz



Microlevelled apparent resistivity, half-space model, 24510 Hz



Digital Terrain Model