

1.0 TITLE PAGE

Assessment Report:

Aeroquest Airborne Geophysics

Poplar Property

Lions Gate Metals Inc.

Mineral Titles Online Tenure Numbers: 591533 619907 591355 619923 619827 619904 619844
505707 507393 504763 505711 619883 619903 591528 591527 591529 619906 591340 591843 591344
591341 590000 505729 507383 591346 591758 591565 591747 591757 591760 591759 591756 591564
591749 591754 591538 591537 591536 591535 591534 591533 591532 591530 504728 506385 505714
590007 619924 619927 619926 619925 505717 504765 504732 513562 590006 591658 589035 589030
589025 591404 591417 591418 591423 591498 591343 589018 591405 591761 591347 591345 591342
591406 591408 591348 591782 591779 591832 591407 591409 532604 590495 590543 558157 563694
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590167 591516 591514 591755 591762 591791 591785 591519 572617 553746 588261 588267 591531
591526 591350 591338 591525 590015 619823 619824 619825 619826 591337 591339 591521 619905
648943 648944 648927 648925 648926 679423 678323 678283 678303 675684 675683

OMINECA MINING DIVISION

BRITISH COLUMBIA, CANADA

**Latitude 54^o North
Longitude 127^o East
NTS 1:50,000 map sheets
093L02, 093L03, 093E14 and 093E15**

Prepared for

**Lions Gate Metals Inc.
Suite 800 – 609 Granville Street
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By

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November 19, 2010
The effective date of the exploration data is December 4, 2009**

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3.0 INTRODUCTION

In November and December 2009 a detailed Helicopter-Borne AeroTEM System Electromagnetic and Magnetic Survey consisting of a total of 2,680 line km was performed at 200m line spacing over most of the claims held by Lions Gate Metals on the Poplar property. This survey was done by Aeroquest in order to locate untested porphyry style mineralization below glacial till cover.

This assessment report was prepared in order to satisfy assessment filing requirements by the Mines Branch of the Ministry of Energy and Mines, Government of B.C.

The Poplar deposit is a porphyry copper – molybdenum deposit located 750 metres north of Tagetochlain (Poplar) Lake at an elevation of approximately 900 metres. The deposit is associated with the Late Cretaceous Poplar stock. The Huckleberry Mine, located approximately 35 kilometres southwest of the Poplar Deposit, produces copper and molybdenum from a deposit of similar age and setting.

The property is underlain by andesitic volcanic rocks of the Cretaceous Kasalka Group. These rocks are in faulted contact to the northeast with calc-alkaline rocks of the Telkwa Formation of the Lower Jurassic Hazelton Group. The Kasalka Group rocks have been intruded by stock-like bodies attributed to the Lower Cretaceous Bulkley Plutonic suite. Outliers of the volcanic Eocene Ootsa Lake Group overlap the Kasalka and Bulkley Plutonic Rocks. Zones of alteration and sulphide mineralization associated with these intrusions have resulted in the formation of the Poplar porphyry copper – molybdenum deposit.

The exploration concept for historic, current and proposed exploration at Poplar has been to use the geophysical and geochemical characteristics common to porphyry copper deposits to develop targets for exploration.

The 2009 Airborne Geophysics program showed the potential for additional untested and under tested Porphyry style targets in other areas of the Poplar claims.

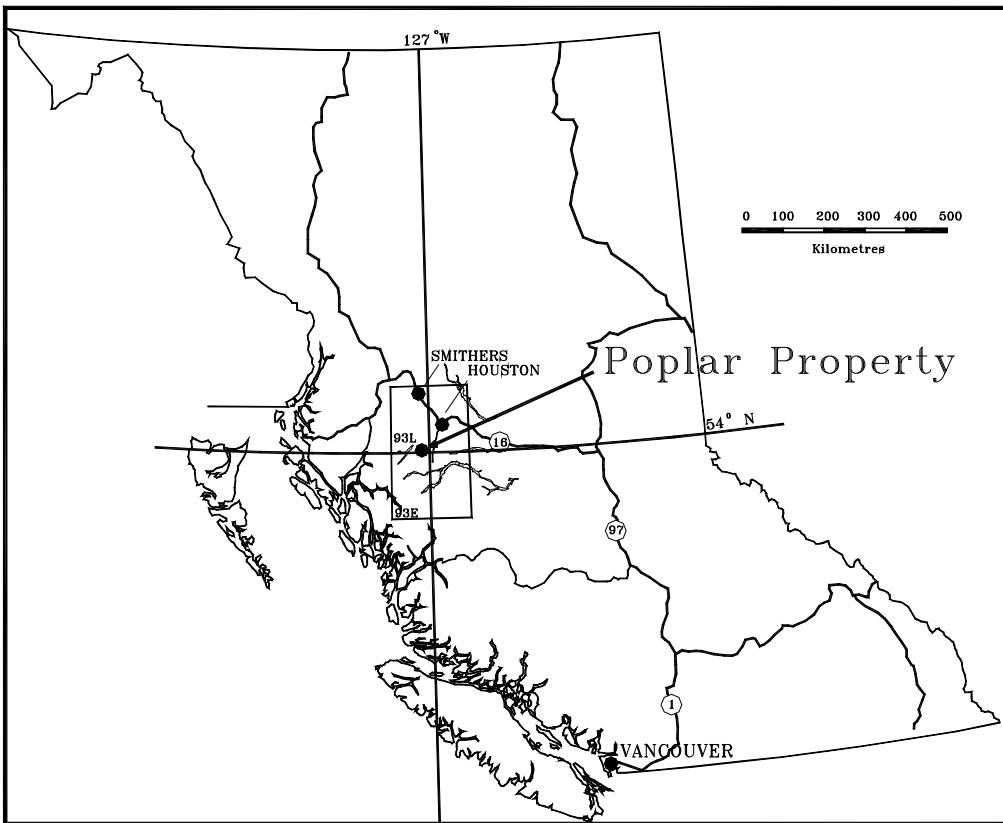


Figure 1. Location of the Poplar Property

4.0 PROPERTY DESCRIPTION AND LOCATION

The Poplar Mineral Property consists of 167 mineral tenures covering a surface area of 63,386 hectares. The claims are located in the Omineca Mining Division, Province of British Columbia, NTS map sheets 093L02, 093L03, 093L14 and 093L15.

The Poplar claims are in good standing until November 30th, 2010. Work described in this report occurred over the central body of the Lions Gate Claims that were held before November 27th 2009. Claims were acquired towards the end of the survey to cover areas that of interest that were located near the boundaries of the survey. Portions of some of these newly acquired claims were flown to close off the respective anomalies. 19 claims were acquired between November 2009 and January 2010, the Mineral Titles Online (MTO) tenure numbers for these claims are:

675683, 675684, 678283, 678303, 678323, 678343, 679383, 679386, 679387, 679388, 679403, 679404, 679423, 679424, 679443, 679444, 686883, 686903 and 697663.

Lions Gate Metals is the registered owner of the Poplar Property, and holds 100% of the rights to the claims. Lions Gate Metals interest in certain claims is subject to an Amended and Restated Property Option Agreement dated July 30, 2007 between Hathor Exploration Limited and Fortress Base Metals Corporation, a predecessor of Lions Gate Metals Inc. The agreement includes an Underlying Royalty of two per cent of the net smelter returns to the benefit of the estate of Mr. Frank Onucki, Mr. Mike Callaghan and Mr. Clyde Critchlow. The Company's interest in an additional 16 mineral claims for a total of 3902 hectares is also subject to an option agreement dated April 29, 2009 with Mr. John Bot. A further three mineral claims for a total of 266.5 hectares are subject to an option agreement dated May 25, 2009 with Ms. Patti Walker.

The Poplar Mineral Claims lie within an area in which Statements of Interest have been expressed by the Wet'suwet'en Nation and the Carrier Sekani Tribal Council.

The authors are not aware of any environmental liabilities to which the Poplar Mineral Claims may be subject. The District Inspector of the Ministry of Mines and Petroleum Resources in Smithers, British Columbia has requested that in the course of further work on the property, artesian water flowing from 2005 drill casings should be controlled.

Table 1. Summary of Mineral Tenures

Lions Gate Metals Ltd., Poplar Lake, British Columbia

Tenure Number	Claim Name	Area (HA)	Good To Date	Annual Work Due	Annual fees	Record Date	Map Number
591349	POPLAR	132.816	2010/nov/30	will lapse		2008/sep/13	093L
591835	POPLAR	76.047	2010/nov/30	will lapse		2008/sep/23	093E
591836	POPLAR	38.030	2010/nov/30	will lapse		2008/sep/23	093E
591837	POPLAR	19.023	2010/nov/30	will lapse		2008/sep/23	093E
679388	POPLAR	456.306	2011/dec/04	\$1,825.22	\$182.52	2009/dec/04	093E096
679403	POPLAR	456.447	2011/dec/04	\$1,825.79	\$182.58	2009/dec/04	093E096
679404	POPLAR	456.586	2011/dec/04	\$1,826.34	\$182.63	2009/dec/04	093E096
679423	POPLAR	437.375	2011/dec/04	\$1,749.50	\$174.95	2009/dec/04	093E096
679424	POPLAR	285.366	2011/dec/04	\$1,141.46	\$114.15	2009/dec/04	093E096

679443	POPLAR	228.374	2011/dec/04	\$913.49	\$91.35	2009/dec/04	093E096
679444	POPLAR	456.468	2011/dec/04	\$1,825.87	\$182.59	2009/dec/04	093E096
686883		454.924	2011/dec/17	\$1,819.70	\$181.97	2009/dec/17	093L015
686903	SCARLET3	303.193	2011/dec/17	\$1,212.77	\$121.28	2009/dec/17	093L015,016
697663	SCARLET 5	227.510	2012/jan/11	\$910.04	\$91.00	2010/jan/11	093L016
590000	POPLAR	75.993	2012/jan/31	\$607.94	\$30.40	2008/aug/15	093L
590006	POPLAR	171.169	2012/jan/31	\$1,369.35	\$68.47	2008/aug/15	093E
590007	POPLAR	456.036	2012/jan/31	\$3,648.29	\$182.41	2008/aug/15	093E
590015	POPLAR	455.676	2012/jan/31	\$3,645.41	\$182.27	2008/aug/15	093L
591337		227.728	2012/jan/31	\$1,821.82	\$91.09	2008/sep/13	093L
591338		455.414	2012/jan/31	\$3,643.31	\$182.17	2008/sep/13	093L
591339	POPLAR	208.700	2012/jan/31	\$1,669.60	\$83.48	2008/sep/13	093L
591340	POPLAR	455.896	2012/jan/31	\$3,647.17	\$182.36	2008/sep/13	093L
591341	POPLAR	436.956	2012/jan/31	\$3,495.65	\$174.78	2008/sep/13	093L
591342	POPLAR	456.150	2012/jan/31	\$3,649.20	\$182.46	2008/sep/13	093E
591343	POPLAR	475.263	2012/jan/31	\$3,802.10	\$190.11	2008/sep/13	093E
591344	POPLAR	455.920	2012/jan/31	\$3,647.36	\$182.37	2008/sep/13	093L
591345		456.254	2012/jan/31	\$3,650.03	\$182.50	2008/sep/13	093E
591346	POPLAR	456.126	2012/jan/31	\$3,649.01	\$182.45	2008/sep/13	093L
591347	POPLAR	456.239	2012/jan/31	\$3,649.91	\$182.50	2008/sep/13	093E
591348	POPLAR	456.396	2012/jan/31	\$3,651.17	\$182.56	2008/sep/13	093E
591351	POPLAR	341.470	2012/jan/31	\$2,731.76	\$136.59	2008/sep/13	093L
591352	POPLAR	417.337	2012/jan/31	\$3,338.70	\$166.93	2008/sep/13	093L
591353	POPLAR	455.451	2012/jan/31	\$3,643.61	\$182.18	2008/sep/13	093L
591404	POPLAR	456.586	2012/jan/31	\$3,652.69	\$182.63	2008/sep/15	093E
591405	POPLAR	475.474	2012/jan/31	\$3,803.79	\$190.19	2008/sep/15	093E
591406	POPLAR	475.512	2012/jan/31	\$3,804.10	\$190.20	2008/sep/15	093E
591407	POPLAR	19.015	2012/jan/31	\$152.12	\$7.61	2008/sep/15	093E
591408	POPLAR	475.589	2012/jan/31	\$3,804.71	\$190.24	2008/sep/15	093E
591409	POPLAR	475.748	2012/jan/31	\$3,805.98	\$190.30	2008/sep/15	093E
591417	POPLAR	475.836	2012/jan/31	\$3,806.69	\$190.33	2008/sep/15	093E
591418	POPLAR	418.726	2012/jan/31	\$3,349.81	\$167.49	2008/sep/15	093E
591419	POPLAR	475.961	2012/jan/31	\$3,807.69	\$190.38	2008/sep/15	093E
591422	POPLAR	476.065	2012/jan/31	\$3,808.52	\$190.43	2008/sep/15	093E
591503	POPLAR	457.226	2012/jan/31	\$3,657.81	\$182.89	2008/sep/17	093E
591513	POPLAR	228.555	2012/jan/31	\$1,828.44	\$91.42	2008/sep/17	093E
591514	POPLAR	476.198	2012/jan/31	\$3,809.58	\$190.48	2008/sep/17	093E
591515	POPLAR	38.111	2012/jan/31	\$304.89	\$15.24	2008/sep/17	093E
591516	POPLAR	476.201	2012/jan/31	\$3,809.61	\$190.48	2008/sep/17	093E
591518	POPLAR	476.344	2012/jan/31	\$3,810.75	\$190.54	2008/sep/17	093E
591519	POPLAR	476.252	2012/jan/31	\$3,810.02	\$190.50	2008/sep/17	093E
591520		438.265	2012/jan/31	\$3,506.12	\$175.31	2008/sep/17	093E
591521	POPLAR	303.490	2012/jan/31	\$2,427.92	\$121.40	2008/sep/17	093L
591526	POPLAR	455.272	2012/jan/31	\$3,642.18	\$182.11	2008/sep/17	093L
591528	POPLAR	455.468	2012/jan/31	\$3,643.74	\$182.19	2008/sep/17	093L
591529	POPLAR	455.451	2012/jan/31	\$3,643.61	\$182.18	2008/sep/17	093L
591530	POPLAR	455.282	2012/jan/31	\$3,642.26	\$182.11	2008/sep/17	093L

591532	POPLAR	436.237	2012/jan/31	\$3,489.90	\$174.49	2008/sep/17	093L
591534	POPLAR	474.174	2012/jan/31	\$3,793.39	\$189.67	2008/sep/17	093L
591535	POPLAR	474.196	2012/jan/31	\$3,793.57	\$189.68	2008/sep/17	093L
591536	POPLAR	474.414	2012/jan/31	\$3,795.31	\$189.77	2008/sep/17	093L
591537	POPLAR	474.411	2012/jan/31	\$3,795.29	\$189.76	2008/sep/17	093L
591538	POPLAR	455.422	2012/jan/31	\$3,643.38	\$182.17	2008/sep/17	093L
591564	POPLAR	474.649	2012/jan/31	\$3,797.19	\$189.86	2008/sep/18	093L
591565	POPLAR	455.643	2012/jan/31	\$3,645.14	\$182.26	2008/sep/18	093L
591747	POPLAR	474.643	2012/jan/31	\$3,797.14	\$189.86	2008/sep/22	093L
591749	POPLAR	474.791	2012/jan/31	\$3,798.33	\$189.92	2008/sep/22	093L
591754	POPLAR	475.026	2012/jan/31	\$3,800.21	\$190.01	2008/sep/22	093L
591755	POPLAR	437.240	2012/jan/31	\$3,497.92	\$174.90	2008/sep/22	093E
591756	POPLAR	474.883	2012/jan/31	\$3,799.06	\$189.95	2008/sep/22	093L
591757	POPLAR	474.875	2012/jan/31	\$3,799.00	\$189.95	2008/sep/22	093L
591758	POPLAR	455.910	2012/jan/31	\$3,647.28	\$182.36	2008/sep/22	093L
591759	POPLAR	475.116	2012/jan/31	\$3,800.93	\$190.05	2008/sep/22	093E
591760	POPLAR	475.103	2012/jan/31	\$3,800.82	\$190.04	2008/sep/22	093E
591761	POPLAR	475.191	2012/jan/31	\$3,801.53	\$190.08	2008/sep/22	093E
591763	POPLAR	474.852	2012/jan/31	\$3,798.82	\$189.94	2008/sep/22	093L
591764	POPLAR	455.821	2012/jan/31	\$3,646.57	\$182.33	2008/sep/22	093L
591768	POPLAR	474.907	2012/jan/31	\$3,799.26	\$189.96	2008/sep/22	093L
591771	POPLAR	418.050	2012/jan/31	\$3,344.40	\$167.22	2008/sep/22	093L
591774	POPLAR	266.060	2012/jan/31	\$2,128.48	\$106.42	2008/sep/22	093L
591791	P	418.420	2012/jan/31	\$3,347.36	\$167.37	2008/sep/22	093E
591832	POPLAR	475.646	2012/jan/31	\$3,805.17	\$190.26	2008/sep/23	093E
591833	POPLAR	475.691	2012/jan/31	\$3,805.53	\$190.28	2008/sep/23	093E
591834	POPLAR	38.036	2012/jan/31	\$304.29	\$15.21	2008/sep/23	093E
619823	POP1	455.641	2012/jan/31	\$1,822.56	\$182.26	2009/aug/16	093L006
619824	POP2	455.660	2012/jan/31	\$1,822.64	\$182.26	2009/aug/16	093L006
619843	POPLAR	455.650	2012/jan/31	\$1,822.60	\$182.26	2009/aug/16	093L005
619844	POP6	436.639	2012/jan/31	\$1,746.56	\$174.66	2009/aug/16	093L005
619883	POP7	474.759	2012/jan/31	\$1,899.04	\$189.90	2009/aug/16	093L005
619903	POP8	189.960	2012/jan/31	\$759.84	\$75.98	2009/aug/16	093L005
619904	POP9	18.983	2012/jan/31	\$75.93	\$7.59	2009/aug/16	093L005
619905	POPLAR	19.000	2012/jan/31	\$76.00	\$7.60	2009/aug/16	093L005
619906	POP10	227.816	2012/jan/31	\$911.26	\$91.13	2009/aug/16	093L005
619924	POPLAR	456.140	2012/jan/31	\$1,824.56	\$182.46	2009/aug/16	093L006
629284	POPLAR	152.120	2012/jan/31	\$608.48	\$60.85	2009/sep/06	093E096
648927	POPLAR	475.652	2012/jan/31	\$1,902.61	\$190.26	2009/oct/08	093E095
648943	POPLAR	475.688	2012/jan/31	\$1,902.75	\$190.28	2009/oct/08	093E094,095
678303	POPLAR	455.856	2012/jan/31	\$1,823.42	\$182.34	2009/dec/02	093L006,007
678323	POPLAR	455.9912	2012/jan/31	\$1,823.96	\$182.40	2009/dec/02	093L006,007
678343	POPLAR	456.1398	2012/jan/31	\$1,824.56	\$182.46	2009/dec/02	093L006,007
679383	POPLAR	455.792	2012/jan/31	\$1,823.17	\$182.32	2009/dec/04	093L007
679386	POPLAR	456.0696	2012/jan/31	\$1,824.28	\$182.43	2009/dec/04	093L007
679387	POPLAR	456.3087	2012/jan/31	\$1,825.23	\$182.52	2009/dec/04	093E096
504728	pop	475.051	2013/jan/31	\$3,800.41	\$190.02	2005/jan/24	093L006

504732	pop2	57.020	2013/jan/31	\$456.16	\$22.81	2005/jan/24	093L006
504763	Popular A	94.984	2013/jan/31	\$759.87	\$37.99	2005/jan/25	093L006
504765	Popular B	304.127	2013/jan/31	\$2,433.02	\$121.65	2005/jan/25	093E096,093L0 06
505707	Popular 5	379.887	2013/jan/31	\$3,039.10	\$151.95	2005/feb/03	093L006
505711	Popular 6	341.874	2013/jan/31	\$2,734.99	\$136.75	2005/feb/03	093L006
505714	Popular 7	380.076	2013/jan/31	\$3,040.61	\$152.03	2005/feb/03	093E096,093L0 06
505717	Popular 8	323.202	2013/jan/31	\$2,585.62	\$129.28	2005/feb/03	093E096
505729	Popular 9	304.002	2013/jan/31	\$2,432.02	\$121.60	2005/feb/03	093L006
506385		893.116	2013/jan/31	\$7,144.93	\$357.25	2005/feb/09	093E096,093L0 06
507383		342.064	2013/jan/31	\$2,736.51	\$136.83	2005/feb/17	093L006
507393		227.980	2013/jan/31	\$1,823.84	\$91.19	2005/feb/17	093L006
513562		76.035	2013/jan/31	\$608.28	\$30.41	2005/may/3 0	093L006
532604	DUAL	38.060	2013/jan/31	\$304.48	\$15.22	2006/apr/19	093E
553746	NADINA	76.170	2013/jan/31	\$609.36	\$30.47	2007/mar/06	093E
558157	VALLEY	38.070	2013/jan/31	\$304.56	\$15.23	2007/may/0 6	093E
563694	TROJAN	76.130	2013/jan/31	\$609.04	\$30.45	2007/jul/27	093E095
572617	NAD 1	323.720	2013/jan/31	\$2,589.76	\$129.49	2007/dec/28	093E
588261		152.320	2013/jan/31	\$1,218.56	\$60.93	2008/jul/15	093E
588267		95.200	2013/jan/31	\$761.60	\$38.08	2008/jul/15	093E
589018	POPLAR	380.280	2013/jan/31	\$3,042.24	\$152.11	2008/jul/29	093E
589025	POPLAR 2	399.420	2013/jan/31	\$3,195.36	\$159.77	2008/jul/29	093E
589030	POPLAR 3	76.100	2013/jan/31	\$608.80	\$30.44	2008/jul/29	093E
589035	POPLAR 4	209.290	2013/jan/31	\$1,674.32	\$83.72	2008/jul/29	093E
589036		38.040	2013/jan/31	\$304.32	\$15.22	2008/jul/29	093E
590167		323.810	2013/jan/31	\$2,590.48	\$129.52	2008/aug/19	093E
590495	TROY	114.190	2013/jan/31	\$913.52	\$45.68	2008/aug/28	093E095
590543	GATEWAY	76.130	2013/jan/31	\$609.04	\$30.45	2008/aug/29	093E095
591350	POPLAR	455.471	2013/jan/31	\$3,643.77	\$182.19	2008/sep/13	093L
591355	POPLAR	455.586	2013/jan/31	\$3,644.69	\$182.23	2008/sep/13	093L
591420	POPLAR	475.993	2013/jan/31	\$3,807.94	\$190.40	2008/sep/15	093E
591421	POPLAR	457.001	2013/jan/31	\$3,656.01	\$182.80	2008/sep/15	093E
591423	POPLAR	456.747	2013/jan/31	\$3,653.98	\$182.70	2008/sep/15	093E
591497	POPLAR	475.993	2013/jan/31	\$3,807.94	\$190.40	2008/sep/17	093E
591498	POPLAR	456.748	2013/jan/31	\$3,653.98	\$182.70	2008/sep/17	093E
591500	POPLAR	476.209	2013/jan/31	\$3,809.67	\$190.48	2008/sep/17	093E
591501	POPLAR	476.237	2013/jan/31	\$3,809.90	\$190.49	2008/sep/17	093E
591502	POPLAR	476.374	2013/jan/31	\$3,810.99	\$190.55	2008/sep/17	093E
591512	POPLAR	419.255	2013/jan/31	\$3,354.04	\$167.70	2008/sep/17	093E
591525	POPLAR	474.193	2013/jan/31	\$3,793.54	\$189.68	2008/sep/17	093L
591527		455.470	2013/jan/31	\$3,643.76	\$182.19	2008/sep/17	093L
591531	POPLAR	455.146	2013/jan/31	\$3,641.17	\$182.06	2008/sep/17	093L
591533	POPLAR	474.178	2013/jan/31	\$3,793.42	\$189.67	2008/sep/17	093L
591658	PPR	323.430	2013/jan/31	\$2,587.44	\$129.37	2008/sep/20	093E
591660	POP	476.000	2013/jan/31	\$3,808.00	\$190.40	2008/sep/20	093E
591661	POP 2	476.220	2013/jan/31	\$3,809.76	\$190.49	2008/sep/20	093E

591662	POP 3	476.230	2013/jan/31	\$3,809.84	\$190.49	2008/sep/20	093E
591762	POPLAR	475.347	2013/jan/31	\$3,802.78	\$190.14	2008/sep/22	093E
591779	POPLAR	475.323	2013/jan/31	\$3,802.58	\$190.13	2008/sep/22	093E
591782	POPLAR	475.434	2013/jan/31	\$3,803.47	\$190.17	2008/sep/22	093E
591785	POPLAR	456.469	2013/jan/31	\$3,651.75	\$182.59	2008/sep/22	093E
619825	POP3	455.673	2013/jan/31	\$3,645.38	\$182.27	2009/aug/16	093L006
619826	POP4	455.683	2013/jan/31	\$3,645.47	\$182.27	2009/aug/16	093L006
619827	POP5	455.694	2013/jan/31	\$3,645.56	\$182.28	2009/aug/16	093L005,006
619907	POPLAR	455.460	2013/jan/31	\$3,643.68	\$182.18	2009/aug/16	093L006
619923	POP11	455.592	2013/jan/31	\$3,644.74	\$182.24	2009/aug/16	093L006
619925	POP12	455.727	2013/jan/31	\$3,645.81	\$182.29	2009/aug/16	093L006
619926	POP13	455.861	2013/jan/31	\$3,646.89	\$182.34	2009/aug/16	093L006
619927	POPLAR	456.000	2013/jan/31	\$3,648.00	\$182.40	2009/aug/16	093L006
648925	POPLAR	476.540	2013/jan/31	\$3,812.32	\$190.62	2009/oct/08	093E086
648926	POPLAR	476.578	2013/jan/31	\$3,812.62	\$190.63	2009/oct/08	093E086
648944	POPLAR	475.675	2013/jan/31	\$3,805.40	\$190.27	2009/oct/08	093E095
675683	SCARLET1	455.0337	2013/jan/31	\$3,640.27	\$182.01	2009/nov/27	093L015,016
675684	SCARLET2	454.9009	2013/jan/31	\$3,639.21	\$181.96	2009/nov/27	093L015,016
678283	POPLAR	455.7212	2013/jan/31	\$3,645.77	\$182.29	2009/dec/02	093L006,007

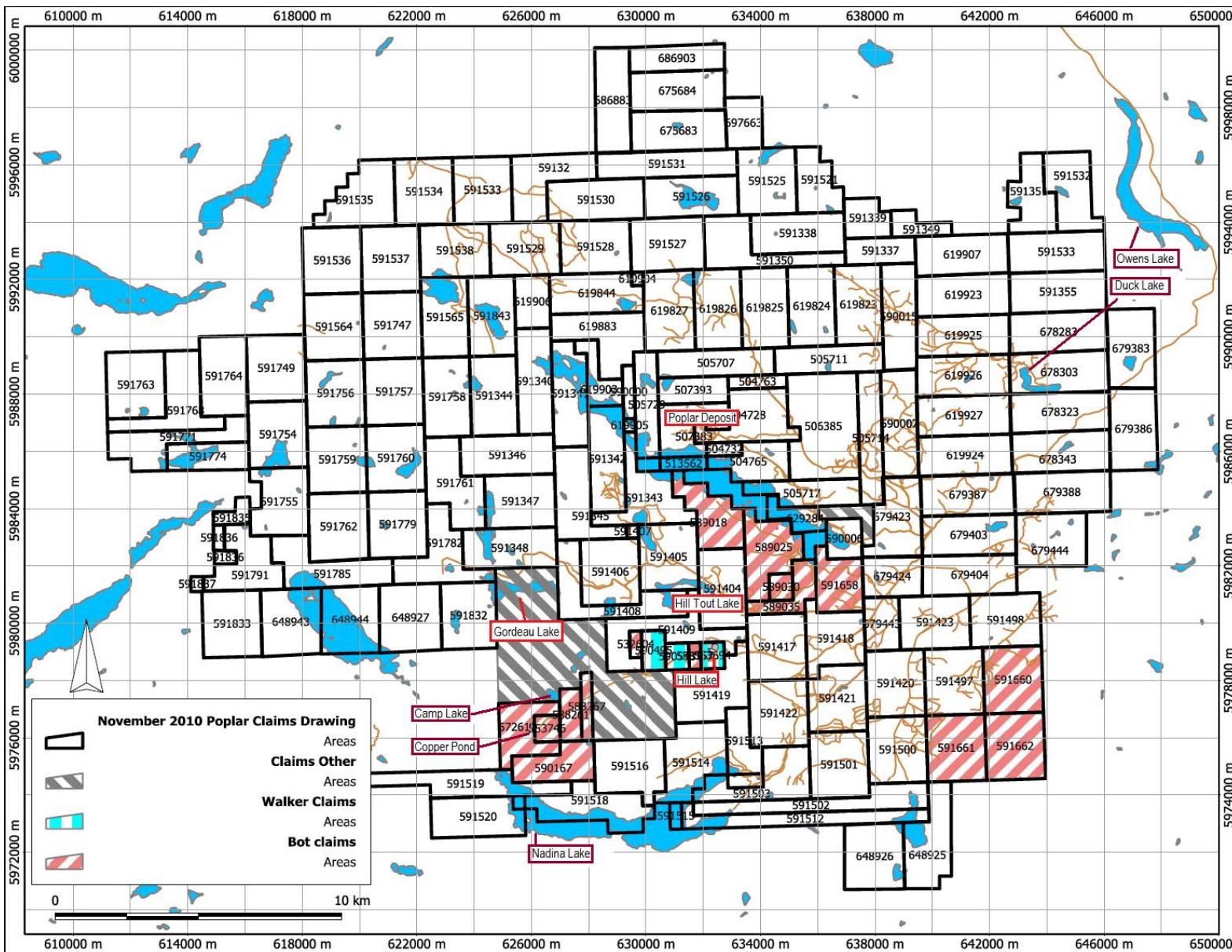


Figure 2. Location of Mineral Tenures owned by Lions Gate Minerals at Poplar Lake, British Columbia. Grey hatched areas represent Mineral Tenures owned by individuals unrelated to Lions Gate Minerals. Tenure locations as of November 19, 2010. Also shown is the location of the Poplar Deposit in relation to the property boundaries, lakes and forest service access roads and exploration trails.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Topography, elevation and vegetation

The property is located in the Tagetochlain (Poplar) Lake – Poplar Mountain district south of Houston, British Columbia. The district is located on the western margin of the Nechako Plateau physiographic region of central British Columbia. Relief is moderate on the property with a maximum difference in elevation of approximately 800 metres. The highest point on the property is the summit of Poplar Mountain, a local landmark, at approximately 1627 metres, with the lowest point at 825 metres on the shores of Poplar Lake.

Poplar Mountain drains to the south into Poplar Lake, thence by Poplar Creek into the Nadina River, and thence into the Fraser River system.

Ground cover is varied on the property. Open meadows used for grazing livestock are partially succeeded by open aspen parkland or scrub pine and spruce, which yield to sub-mature and mature stands of balsam fir at higher elevations.

5.2 Access to the Poplar Mineral Claims

The property is located approximately 60 kilometres south of the town of Houston in the Central Interior of British Columbia.

From Houston, road access to the deposit is approximately 90 km using a two-wheel drive vehicle in fair weather, and a four-wheel drive vehicle in poor weather. Road access is achieved by first travelling west from Houston on Highway 16 to the intersection with the Morice Forest Service Road; thence south 56.5 km on the Morice FSR and the Morice Owen FSR to the intersection with the Morice Nadina Forest Service Road. Travel is then south and west along the Morice Nadina FSR a further 19 kilometres to the Hill Tout Forest Service Road. The Hill Tout FSR is taken to the west for approximately 2.5 km to the intersection with the old Alcan Tahtsa access road. The Alcan Tahtsa Road is taken 1.3 kilometres north to the intersection with the Poplar Forest

Service Road, which is followed for approximately 8.6 kilometres west to the Main Zone of the Poplar property. The Poplar deposit is relatively central in the property.

5.3 *Local Infrastructure*

Houston, British Columbia is a major supply and industrial service centre for the mining and logging operations located in the area. Houston is serviced by the CNR transcontinental railway as well as by Highway 16, a major thoroughfare. Daily air service to Vancouver is available from the Smithers, B.C. airport, which is approximately 70 kilometres by road to the west of Houston. There is a municipal airstrip west of Houston for non-scheduled services, and helicopters may be hired locally. The town of Smithers, located approximately 65 km to the west is also a service centre for the mineral exploration industry, with diamond drilling contractors, air services, and professional exploration personnel.

5.4 *Climate and Operating Season*

Climate on the Poplar property is typical of the Central Interior, with short cool summers, and long relatively mild winters. Annual temperature variation in the region is approximately –25 to +25 degrees Celsius. Snowpack in the winter ranges from approximately 1 to 2 metres. Exploration activities may be undertaken year round, with provision for freeze-up in the fall and break-up in the spring, when activities may be curtailed.

5.5 *Other Resources*

Adequate supplies of surface and ground water for exploration and mining are available. Water use is subject to provincial and federal regulation. Land use for exploration and mining purposes is governed by the Mineral Tenure Act, the Mines Right of Way Act, the Mines Act and other applicable laws of the Province of British Columbia.

The claims are located on Crown Land. Other resource related tenures in the area consist of grazing leases on the open pastures around Poplar Lake. The Nadina Lake Lodge is located on Gordeau Bay in Nadina Lake and is the only privately held land known of by

the authors on the claims. A Forest Service public campsite is located on the northeast shore of Poplar Lake, and has repeated use by local First Nations. A set of spawning channels is located on the Nadina River near the outlet of Nadina Lake, approximately 12.5 kilometres south of the Poplar Deposit. The spawning channels service one of the Fraser River sockeye salmon runs.

The 138 KVA power line and the access road servicing the Huckleberry Mine are located approximately eleven kilometres west of the Poplar mineral claims.

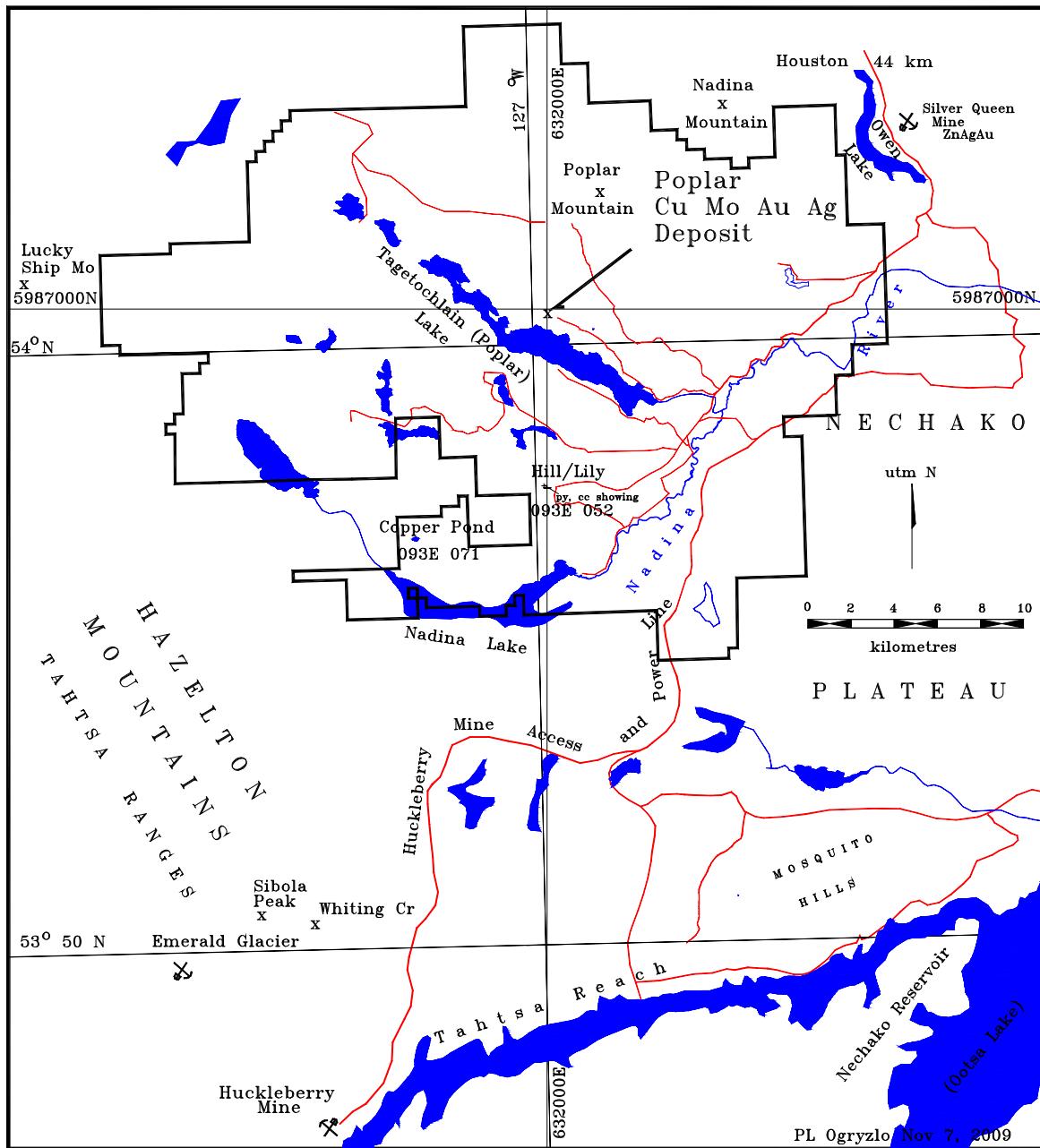


Figure 3. Poplar Lake Property Access with mineralized zone and surrounding mineral properties.

6.0 HISTORY

6.1 Exploration and Mining History of the western Nechako Plateau

In general, the western edge of the Nechako Plateau has been actively explored since the early part of the 20th century. The Emerald Glacier Mine (MINFILE 093E001) is located in the Whiting Creek drainage approximately 35 km SW of the Poplar Property Claim, and was one of the first mines developed in north central British Columbia. The mine intermittently exploited a high grade Ag-Pb-Zn vein between 1951 and 1968. Reported production was 2.6 million grams of Ag, 1,524 grams of gold, 1.7 tonnes of Cd, 9 tonnes of Cu, 766 tonnes of lead and 892 tonnes of Zn extracted from 8,293 tonnes of ore. The ore was produced from a series of en-echelon polymetallic quartz veins cutting feldspathic sandstone and lesser siltstone and tuffaceous shale near the contact with overlying andesitic volcanic rocks and breccia.

A major thrust of exploration occurred in the late 1960s and early 1970s. This work led to the development of the Silver Queen underground mine (MINFILE 093L002) at Owen Lake, approximately 18 km northeast of the Poplar property. Silver Queen produced approximately 438,790 ounces of silver, 3,157 ounces of gold and 11.1 million pounds of zinc with lesser credits for lead, copper and cadmium from approximately 200,000 tons of ore in 1972 and 1973.

Exploration during this period also led to the discovery of the Huckleberry Mine (MINFILE 093E 037), which was actively explored from 1963 to 1994. The mine is located on the north side of Tahtsa Reach approximately 42 km WSW of the Poplar property. Porphyry copper-molybdenum mineralization at Huckleberry is associated with an elliptical stock of the Late Cretaceous Bulkley Intrusions. Production began in 1997, and the mine was operating at a rate of 18,500 tonnes per day at the time of preparation of this report. The operation is a modern mine and mill industrial complex producing copper, molybdenum, silver and gold, and is well-serviced with road, power and water. Combined geological resources at the opening of the mine were 162 million tonnes

containing 0.47% Cu and 0.014 % Mo. The deposit has also produced 8,576 kilograms of silver and 253,460 grams of gold up to 2001.

The above information regarding production from the surrounding deposits has not been verified. The information is not necessarily indicative of the mineralization on the property that is the subject of this assessment report.

6.2 *Previous Exploration History on the Poplar Claim Group*

There has been considerable historic exploration on the Poplar group of claims which are currently held by Lions Gate Metals. Exploration began in 1969 and has sporadically continued to the present day. The areas of exploration will be grouped into four main areas for the purposes of this report. These areas will be referred to as the Eastern claims, the Southern Claims, the Northwestern claims and the Hamblin claims.

The eastern claims consist of the area between the western shores of Owens Lake to the eastern shore of Poplar Lake; this includes the Duck Lake area which is referred to the Red Pine area in other locations in this report. The southern claims consist of the area to the north of Nadina Lake along the road that runs on an approximate E-W orientation north of Nadina Lake. Areas discovered during this historic exploration include the Ida/Nadi area which encompasses the Copper Pond deposit & Camp Lake work, the area of the Thira-Dual-Con-Lily Showings, and the Hill showing. Overlapping programs in these areas were common as claims shifted owners and names. Little work has been recorded on the Northwestern claims which include all the claims in the Northwestern quadrant of the claim block. The Hamblin claims are not held by Lions Gate Metals but are surrounded by the LGM claim block. The main area of interest in the claim block is the Poplar Deposit which is located to the north of Poplar Lake. Considerable exploration has been done on this deposit from 1973-2009 but will not be described in this report. Historic work done on China Creek will not be described either as both have been described in depth in previous reports.

Eastern Claims:

1969 - Arcadia Exploration Ltd. performed Geochemical and Geophysical surveys in what was referred to as the Ark claims which were located to the west of Owen Lake, high anomalous silver results were returned from soil sampling. Further exploration was performed in the eastern part of the Poplar claims.

1970 - Summit Oils Ltd had a program of geochemistry, geology, and geophysics to the northeast of Duck Lake. Coinciding Copper and Zinc anomalies occurred over a fault which was suggested by the geophysics. Delbrook Mines Ltd. also ran an IP survey to the Northeast of Duck Lake in 1970 and positive undefined chargeability zones were located.

1977 - Gold River Mines Ltd & Dual Resources Ltd. performed an airborne magnetic survey over the Tagetochlain Lake properties which were to the immediate east of Poplar Lake, no new intrusives were located with the magnetic survey and anomalous geochemistry zones were encountered.

1978 – Gold River Mines & Enterprises Ltd. performed a soil geochemistry survey over the claims to the southeast of Poplar Lake which resulted in multiple small anomalous zones.

1979 – Artillery Resources had a seven drill hole program to the southwest of Duck Lake on the Nettie property, no mineralization was intercepted.

1980 – Sutherland Resources Ltd. performed a seismic survey and drilling to the southeast of Poplar Lake in the Bonnie property, no bedrock was intercepted.

1980 – Celebrity Mining Corp. performed an inconclusive geological and magnetometer and VLF-Electro-Magnetic survey on the Dilys group to the northeast edge of Poplar Lake

1983 – Noranda Exploration performed an EM and Magnetic Geophysics survey to the southwest of Nadina Mountain on the Hari, and Shawn Claims, anomalies were located on the Hari claims.

1983 - Noranda Exploration also performed an EM and Magnetic Geophysics survey on the south eastern flank of Nadina Mountain on the Vampire and Henk claims, anomalies were located on the Henk claim.

1984 – Noranda Exploration performed a follow up two drill hole program on the Henk & Vampire claims, no mineralization was encountered and the anomaly was determined to be a clay rich pocket of overburden.

Southern Claims:

1971 – Passport Mines performed a geochemistry survey on the Con group of claims to the south of Hill-Tout Lake and Jorax Ltd. performed a geochemistry survey to the northeast of Camp Lake in the Nadi area.

1972 – Quintana Minerals Corporation performed mapping, soil & rock sampling over the AFT & HT claims in the Lily area. Jorax performed IP & Resistivity surveys over the Nadi claims as well as an EM & Mag survey in the Copper Pond area.

1973 – Jorax Ltd. & Dome Exploration Ltd. performed additional geophysics as well as soil sampling around the Copper Pond and Camp Lake areas.

1973 – Dome Exploration Ltd. drilled 14 diamond drill holes over the Copper Pond area and two at Camp Lake. A zone roughly 120 by 275 metres with an average grade of 0.16% Cu was outlined at Copper Pond.

1974 – Quintana Minerals Corp. Performed an IP survey over the Lily & Hill Lake areas as well as a percussion drill program in the Hill Lake area.

1982 – Newmont Exploration of Canada Ltd. performed a Magnetic and IP survey over the Nadina Claims which were centered on Hill Lake.

1990 – Swift Minerals Ltd. Performed a 6 hole diamond drill program on the Hill property to the SW of Hill Lake where minor Cu (0.18% over 2m) was encountered. Also during this year, Placer Dome Inc. & Canadian Jorax Ltd. performed IP and stream sampling over the Thira claims which cover the old Nadi & Ida claims over the Camp Lake area. Results included 1135 ppb Au from a moss mat sample.

1994 – Cominco performed one line of IP & Resistivity on the Thira to the SE of Camp Lake. Soil sampling was also performed to the west of Hill Lake.

1995 – Cominco performed soil sampling and 8 percussion drill holes on the Thira Property from Hill Lake to Camp Lake, one hole returned 0.18% Cu over 67 metres.

1996 – Cominco performed a follow up diamond drill program on the Thira property.

2008 & 2009 - Lions Gate Metals performed minor prospecting and sampling along this lower road, strong alteration and minor elevated metals were returned

Western Claims:

1983 – Noranda Exploration Company Ltd. performed a geology, geochemistry and VLF-EM survey over the Bittern Claim located 4km to the north of the western shores of Poplar Lake. Areas of anomalous concentrations of Cu, Zn and Ag were revealed.

2009 – Lions Gate Metals Inc. performed a till sampling and prospecting program over many of the Poplar claim targeting areas of interest that were exposed during the Geoscience BC Quest West airborne survey.

Hamblin Claims:

1972 – A.F. Lubbers performed a geological & geochemical survey east of Newcombe Lake, near Gordeau Lake, no significant anomalies were found.

1993 - New Canamin Resources Ltd. performed a helicopter borne Magnetic, Electromagnetic, Radiometric and VLF survey near Gordeau Lake which showed a possible porphyry system covered by overburden.

1998 – B. Hamblin drilled 15 percussion drill holes on the Dual claims south of Gordeau Lake, none reached bedrock and no samples were taken.

1999 – B. Hamblin drilled 42 percussion drill holes along the roads around Gordeau Lake, none of the samples returned appreciable amounts of copper.

7.0 GEOLOGICAL SETTING

7.1 *Regional Geology*

The Whitesail and Smithers map areas (NTS 93E / 93L) straddle the boundary between the Coast tectonic belt and the Intermontane tectonic belt (MacIntyre et al., 1994, 2007). The Kitimat Ranges of the Coast Mountains lie to the west, with the Tahtsa Ranges of the Hazelton Mountains lying between the Interior Plateau and the Coast Mountains. Much of the map area is underlain by the Lower to Middle Jurassic Hazelton Group. The Hazelton group is comprised of folded and weakly metamorphosed to undeformed intermediate and basic volcanic rocks, as well as derived sedimentary rocks attributed to ancient island arc complexes of the Stikine Terrane. Mesozoic compressional tectonics resulting from the joining of the Stikine Terrane to continental North America were succeeded by Late Cretaceous and Tertiary extension and rifting. The Cretaceous Skeena Group is comprised of black marine shale and siltstone, with lesser sandstone and conglomerate. These rocks were deposited in successor marine basins as igneous activity waned.

Continental volcanic rocks of Upper Cretaceous to Eocene age occur in the Poplar Lake area as the Upper Cretaceous Kasalka and the Oligocene to Eocene Ootsa Lake groups.

The Eocene to Miocene Endako Lake Group is largely comprised of mafic volcanic rocks, and occurs as plateau basalts within the map area, as well as occupying the downdrop basin of the Ootsa Lake valley.

The Intermontane Belt has been the site of episodic plutonic activity from Late Triassic time onwards. The plutons are grouped according to age, and have varying associated metal concentrations. The oldest plutons on the map sheets are the feldspar phryic intrusions of the Late Cretaceous Bulkley Plutonic Suite. The Poplar Stock, with its associated haloes of mineralization and alteration has been ascribed to the Bulkley Plutonic Suite. These were succeeded by granodiorite intrusions of the Cretaceous Kasalka Plutonic Suite. The extensive outpourings of continental volcanic rocks in Eocene time have their equivalents in the porphyritic intrusions of the Eocene Nanika Plutonic Suite. Host rocks at Poplar Lake had been previous assigned to the Telkwa Formation of the Lower Jurassic Hazelton Group. These older rocks are now confined to a NNW trending block which forms highlands of Poplar Mountain.

Structurally, extensional tectonics have produced downdrop basins, which are filled with younger rocks of the Kasalka and Skeena Groups. MacIntyre (2007) has reassigned the volcanic rocks around the Poplar deposit to the Cretaceous Kasalka Group. The major faults which defined the fault blocks are generally oriented west-northwest, and northeast. The scarp of one of the NNW trending faults forms the steep western slope of the Poplar Mountain ridge.

The topography of the area has been extensively modified by Quaternary ice sheets of Wisconsinian age. Ice movements in the area were complex, with an apparent reversal in the direction of ice flow (Ferbey and Levson, 2001). At the Huckleberry mine, two dominant ice flow directions have been reported, namely 040-091 degrees and 236-265 degrees. Along the shores of Tahtsa Reach and Ootsa Lake, ice flow was topographically controlled and appears to have flowed parallel to the valleys. At lower elevation, Ferby and Levson (2001b) report that it is common to find WSW and ENE ice flow indicators at opposite ends of the same outcrop. At the onset of glaciation, ice flowed east from the

Coast Mountains directed by the major valleys. As glaciation advanced, an ice dome or ice divide formed in central British Columbia during the glacial maximum. Ice flowed west to southwest back over the adjoining peaks of the Coast Mountains.

As glaciation waned, the ice divide shifted to the west, and ice flow once again was to the ENE along the major valleys. These ice flow reversals will have an effect on any surface drift exploration in the region.

The region is exceptionally well mineralized, with a number of producers, past producers and partially developed deposits with drill indicated resources. The area has been and continues to be an important supplier of base and precious metals in the Province of British Columbia. The most important of these operations are the past producing Emerald Glacier Mine, the past producing Silver Queen Mine, and the Huckleberry Mine of Imperial Metals which is in production at the time of preparation of this report.

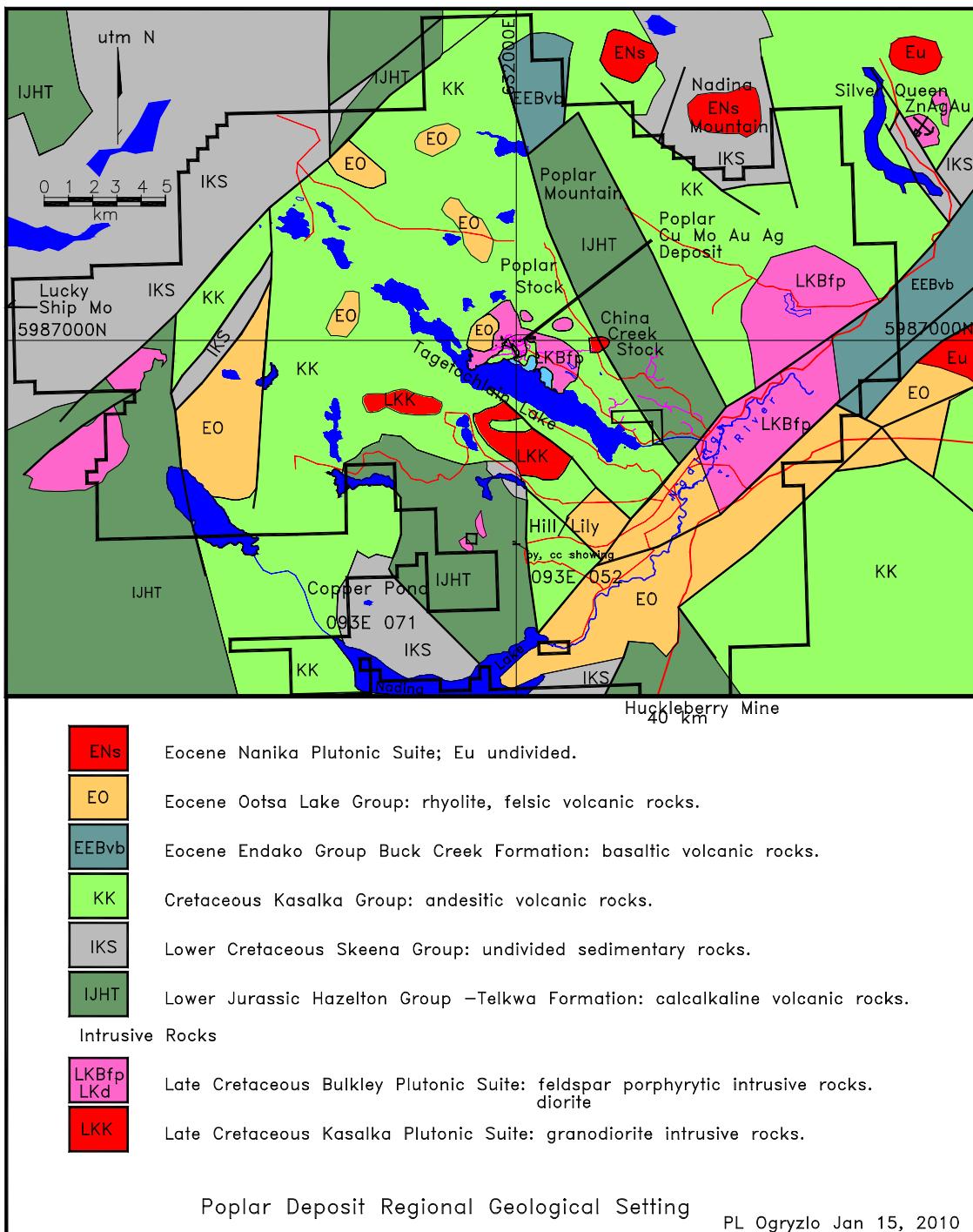


Figure 4. Regional Geological Setting Poplar Deposit. Geology after MacIntyre (2007), Mesard et al (1979) and property files.

Exploration in the area has also resulted in the development of a number of deposits with drill-indicated resources. The Whiting Creek stockwork Mo-Cu deposit (MINFILE 093E 112) is located eight kilometres north of the Huckleberry Mine. The Lucky Ship stockwork molybdenum deposit (MINFILE 093L053) is located 23 km west of the Poplar Property. The Lucky Ship deposit is under development at the time of preparation of this report.

8.0 MINERALIZATION

Copper and molybdenum mineralization is present at the Poplar porphyry deposit (Minfile 093L239). A total of 23,164 metres has been drilled in 105 holes since 1974.

Poplar has a published mineral resource of 236,000,000 tonnes at 0.37% copper equivalent grade using a 0.25% copper equivalent grade cut off.

China Creek is located to the east of the Poplar deposit and has minor copper and molybdenum mineralization. The area has been partially explored with Induced Polarization geophysical surveying and diamond drilling.

Sulphide mineralization has been identified on the Hill / Lily/Con/Thira Showing (MinFile 093E 097 & 093E 053). Sulphide minerals outcrop in a road cut on the Hill-Tout Forest Service Road approximately 2.7 km southeast of Hill-Tout Lake. The mineralization is on claims optioned from J. Bot and P. Walker. Historic drilling returned copper values of 0.18% over 2metres in the Hill area and 0.18% over 67metres in the Thira area.

Sulphide mineralization has also been identified at Copper Pond (MinFile 093E 071), approximately 1800 metres northeast of the western end of Nadina Lake. Sub-economic concentrations of copper and molybdenum were identified during the course of diamond drilling in 1973 with 0.16% Cu found in a zone with dimensions of approximately 120 metres by 275 metres. Approximately 2400 metres of diamond drilling guided by geochemical and induced polarization surveys were completed at Copper Pond. The mineralized zone lies on tenures under option from J. Bot.

9.0 EXPLORATION

9.1 Airborne Survey

In November 2009, Aeroquest Airborne Geophysics was contracted to perform a detailed Helicopter-Borne AeroTEM System Electromagnetic & Magnetic survey over the majority of the Poplar group of claims held by Lions Gate Metals. The Geoscience BC airborne geophysics survey which was flown by Aeroquest in 2008, showed promising

results over the Poplar claims. The detailed airborne survey was done to fulfill a recommendation from the 2009 Technical Report, map out the Geoscience BC anomalies in more detail and map out potential porphyry deposits covered by overburden, generating targets for further exploration. The detailed Lions Gate Metals survey occurred from November 16st to December 4th. A total of 2,680 line km was flown with 200m spacing at a 0°/180°flight direction orientation.

9.2 *Personnel*

The following personnel were involved in the 2009 Aeroquest programs.

Lorie Farrell	Project Geologist
Garry Thompson	Ground Support with LowProfile Ventures
Troy Will	Operations Project Manager with Aeroquest
Thomas Wade	Field Data Processor
Viktor Shevchenko	Field Operator
Doug Garrie	Data Interpretation and Reporting
Liz Johnson	Data Interpretation and Reporting

10.0 **INTERPRETATIONS AND CONCLUSIONS**

Multiple anomalies were identified by the detailed airborne survey. The more obvious priority targets consist of Pimpernel, Aspen, Red Pine, Copper Pond/Camp Lake, Willow and Birch. These targets were chosen by using the Bell Mine geophysics model. A detailed airborne survey was flown over the Bell mine as well as Huckleberry, Endako, Equity, Granisle and Morrison during the Geosciences BC Quest West survey in order to provide patterns to use when looking for undiscovered deposits over the rest of the surveyed areas. The Poplar area targets mentioned above have strong similarities in their geophysics signatures to the Bell mine pattern. Of these targets, minor historic anomalous geochemical results have been returned from the Red Pine area which is a relatively untested area, the Copper Pond anomaly has known mineralization from drilling but the Camp Lake anomaly located a few hundred metres to the east has been less explored. Willow has no recorded historic work but a soil sample from the LGM 2009 geochemistry program has returned with Au values of 136.3ppb Au and elevated gold and silver values were returned from the 2009 Geoscience BC till geochemistry program.

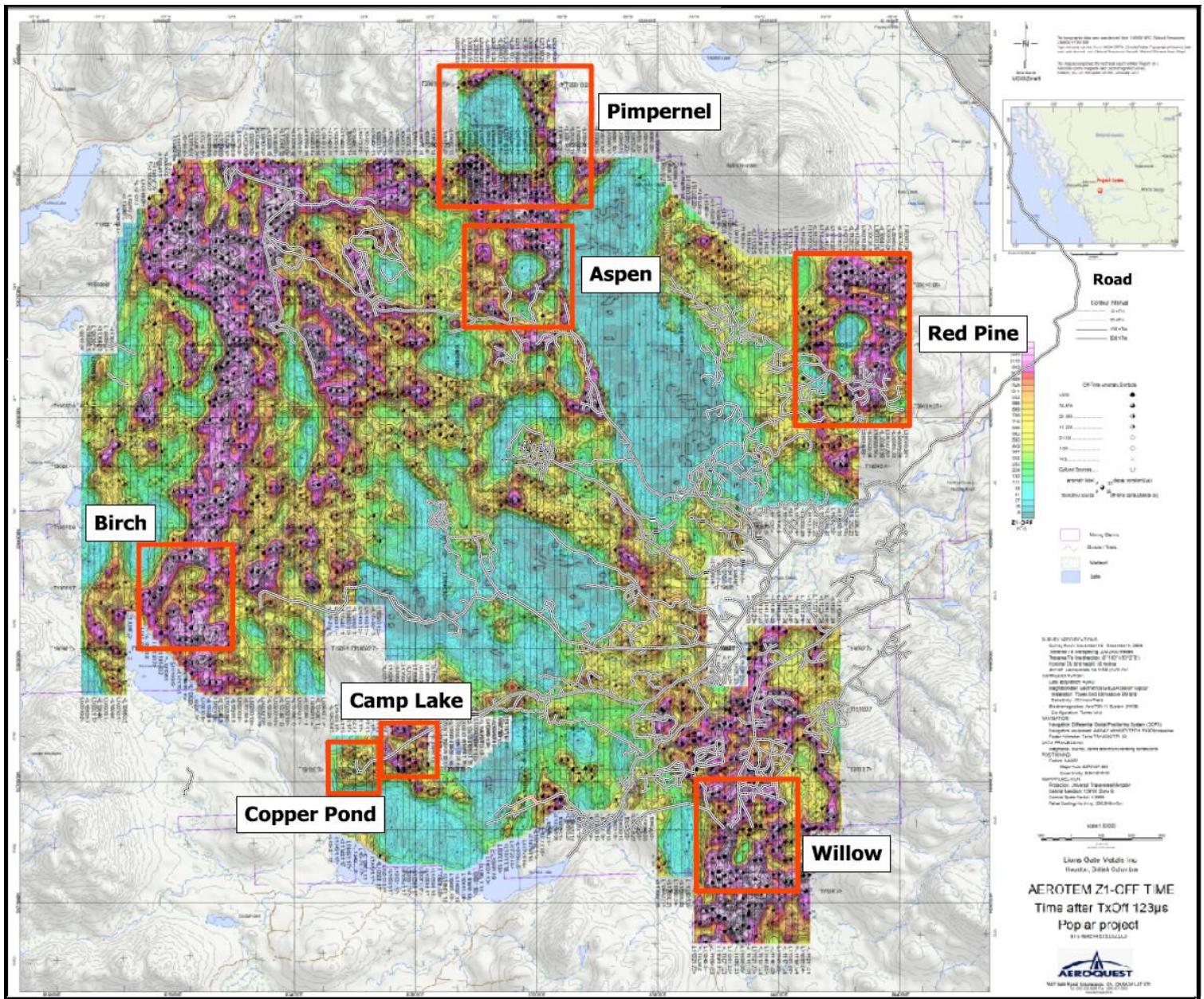


Figure 5. 2009 Aeroquest Priority Targets on the Poplar Property showing Z1_Off Time.

11.0 RECOMMENDATIONS

11.1 Proposed Work Programs

11.1.1 Geological Mapping and Ground Program

In light of the positive results of the Aeroquest Airborne survey over the Poplar claims, a ground survey consisting of geochemical sampling and geological mapping should be performed over these anomalous targets to confirm associated mineralization to provide guidance for diamond drilling. A large portion of the property is accessible by vehicle. Geographical Position System (GPS) survey control is adequate for mapping purposes.

Approximately 100 field days are proposed to collect data for plotting. Provision should be made for analysis of samples collected during the course of mapping. Further development of the targets generated during the course of follow up may be expected, but the scope of the program and the attendant costs will be addressed in view of the degree of exploration success.

11.1.2 Drill Program

The airborne survey over the Bell mine shows anomaly symbols classified using calculated off-time conductance, if these higher priority anomaly symbols were drilled, a considerable number would intercept ore grade mineralization. Similar anomalies are marked on the Poplar maps over the higher priority anomalous areas. If mineralization on the specific target areas is confirmed by the ground surveys these anomalous points can be drill ready targets.

11.1.3 Advanced Geophysics Processing

Target areas that have been pulled out of the Aeroquest survey are relatively obvious targets. Additional targets may be present and were not noticed in this initial review. These may be pulled out by having the data further analyzed and inverted by a specialized geophysics company.

Table 2. Poplar Lake Proposed Geochemistry & Mapping Budget

Task			Cost Per Unit	Cost \$CDN	
Target generation					
Follow up airborne					
Geological Mapping	1 persons	100 days	\$550/day	\$ 55,000	
Sampling	4 persons	100 days	\$250-400/day	\$ 100,000	
Analytical		2500 samples	\$21	\$ 52,500	
Support				\$ 72,500	
Subtotal				\$ 280,000	
Contingency				\$ 40,000	
Total Follow up				\$ 320,000	

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Appendix 1: Statement of Qualifications

Lorie Gayle Poulton Farrell B.Sc. Geology

4547 Whistler Road

Smithers B.C.

V0J 2N4

Cell 250-877-8394

Tel 250-847-2662

Email lorie_poulton@hotmail.com

I, Lorie Farrell, of Smithers, British Columbia, do hereby certify that:

1. I am a self-employed geologist and a co-owner of:
Farrell Exploration Services Inc.
4547 Whistler Road
Smithers, B.C. V0J 2N4
2. I graduated with a Bachelor of Science Degree in Geology from the University of Saskatchewan in Saskatoon, Saskatchewan in 2002.
3. I have worked as an exploration geologist for nine years since graduating. My relevant experience includes mapping, prospecting, core logging and overseeing diamond drill programs.
4. I supervised the 2009 Aeroquest Airborne survey on the Poplar project.

Dated this 15th day of November, 2010, Smithers BC

Lorie Farrell, B.Sc.

Appendix 2: Statement of Expenditures

Aeroquest Airborne Geophysics Survey

Wages and Fees:

Wages, Project Geologist 4.5 days @ \$577.50/day Nov 11th – Dec 4th \$2,589.75

Other Expenses:

Low Profile Exploration: November 11th -December 4th

Project support	6 hours @ \$36.75/hour	\$220.50
Mileage:	170km @ \$0.68/km	\$116.03

Aeroquest

Line Km Costs	2680 line kilometers @ \$123.90/km	
	November 16 th – December 4 th 2009	\$332,052.00

Mobilization	November 8 th - 14 th 2009	\$6,300.00
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Standby	5 days @ \$3,470.25 November 15 th – 28 th 2009	\$17,351.25
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10% overhead		\$35,862.95
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Total Expenses		\$394,492.48
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Appendix 3: Aeroquest's Report on a Helicopter-Borne AeroTEM System
Electromagnetic & Magnetic Survey

Report on a Helicopter-Borne AeroTEM System Electromagnetic & Magnetic Survey



Aeroquest Job # 10006

Poplar Project
Houston, B.C., Canada
NTS 093E14, E15, L02, L03

For

Lions Gate Metals Inc.

by



7687 Bath Road,
Mississauga, ON, L4T 3T1
Tel: (905) 672-9129
Fax: (905) 672-7083
www.aeroquest.ca

Report date: January 2010

Report on a Helicopter-Borne AeroTEM System Electromagnetic & Magnetic Survey

Aeroquest Job # 10006

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Houston, B.C., Canada
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LIST OF MAPS (1:50,000)

- TMI – Coloured Total Magnetic Intensity (TMI) with line contours and EM anomaly symbols.
- Z1-OFF– AeroTEM Z1 Off-time with line contours, and EM anomaly symbols.
- EM – AeroTEM off-time profiles Z5 – Z15, and EM anomaly symbols.
- DTM – Digital Terrain Model with line contours, and EM anomaly symbols.
- TAU – Decay Constant with line contours, and EM anomaly symbols.
- CVG – Calculated first Vertical Gradient with line contours, and EM anomaly symbols.

1. INTRODUCTION

This report describes a helicopter-borne geophysical survey carried out on behalf of Lions Gate Metals Inc. for Poplar Project, near Houston, B.C.

The principal geophysical sensor is Aeroquest's exclusive AeroTEM III (Mike) time domain helicopter electromagnetic system which is employed in conjunction with a high-sensitivity caesium vapour magnetometer. Ancillary equipment includes a real-time differential GPS navigation system, radar altimeter, video recorder, and a base station magnetometer. Full-waveform streaming EM data is recorded at 36,000 samples per second. The streaming data comprise the transmitted waveform, and the X component and Z component of the resultant field at the receivers.

The total survey coverage is 2767 line-km, of which 2680 line-km fell within the defined project area (Appendix 1). The survey was made up of one block, flown at 200 metre line spacing and at 0°/180° flight direction (Table 1). The survey flying described in this report took place from November 16th - December 4th, 2009. This report describes the survey logistics, the data processing, presentation, and provides the specifications of the survey.

2. SURVEY AREA

The Project area is located in central B.C. The survey consisted of one block, Poplar and was located approximately 49 kms southwest of Houston, B.C. The base of survey operations was at Houston, B.C.

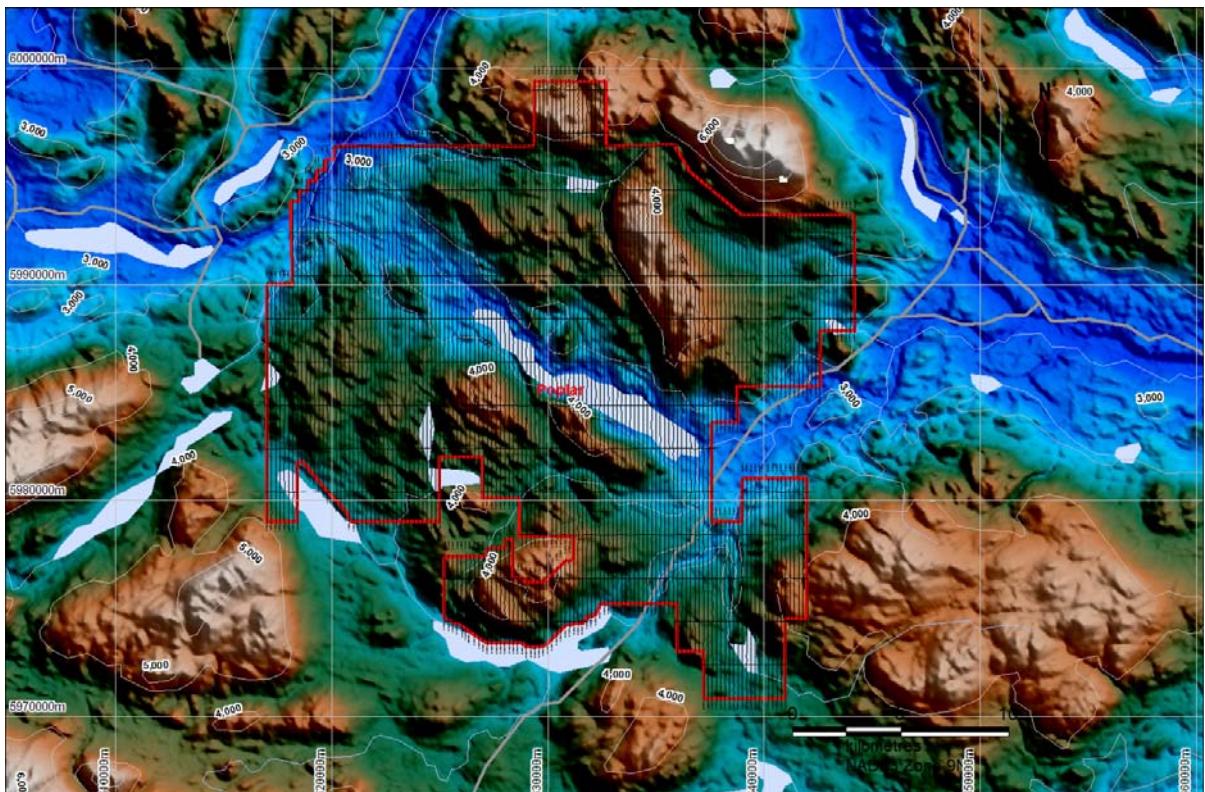


Figure 1. Poplar block with flight path, overlaid on shaded topography

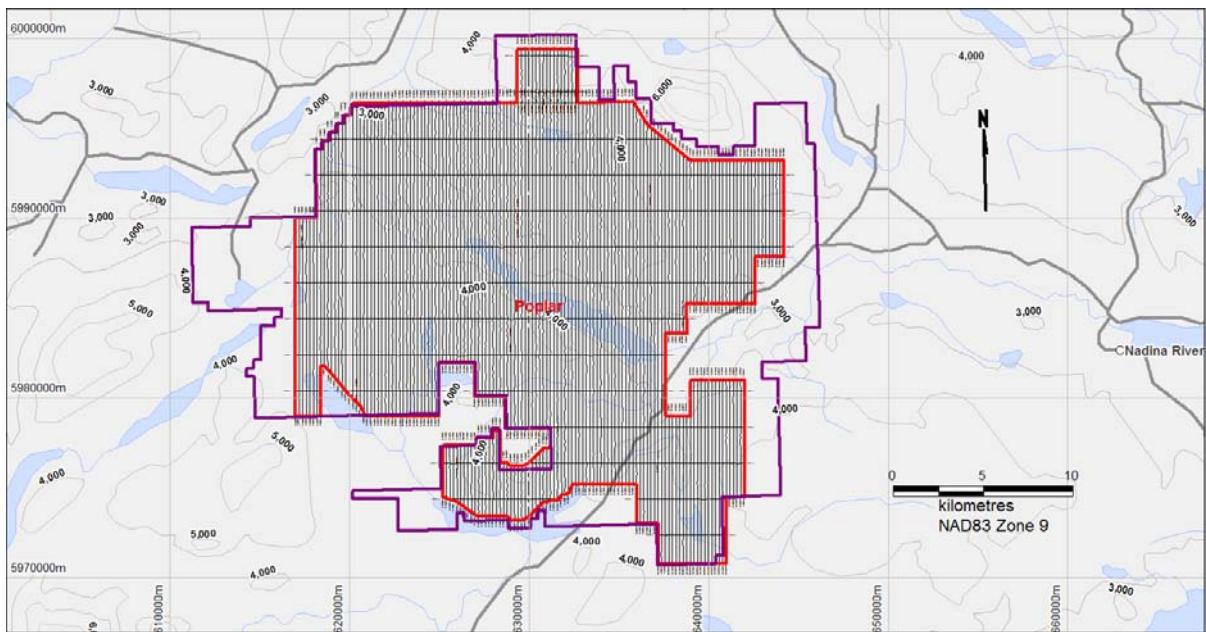


Figure 2. Poplar block(in red) with flight path and claims outline(in purple)

3. SURVEY SPECIFICATIONS AND PROCEDURES

The survey specifications are summarised in the following table:

Project Name	Line/Tie Spacing (metres)	Line Direction	Survey Coverage (line-km)	Date flown
Poplar Project	200/2000	0°/180°	2767	November 16 th - December 4 th , 2009

Table 1. Survey specifications summary

The survey coverage was calculated by summing the along-line distance of the survey lines and control (tie) lines as presented in the final Geosoft database. The survey was flown with a line spacing of 200 metres. The control (tie) lines were flown perpendicular to the survey lines with 2000 metres, tie line spacing.

The nominal EM bird terrain clearance is 30 metres, but can be higher in more rugged terrain due to safety considerations and the capabilities of the aircraft. The magnetometer sensor is mounted in a smaller bird connected to the tow rope 33 metres above the EM bird and 21 metres below the helicopter (Figure 4. The magnetometer bird (A) and AeroTEM III EM bird (B)). Nominal survey speed over relatively flat terrain is 75 km/hr and is generally lower in rougher terrain. Scan rates for ancillary data acquisition is 0.1 second for the magnetometer and altimeter, and 0.2 second for the GPS determined position. The EM data is acquired as a data stream at a sampling rate of 36,000 samples per second and is processed to generate final data at 10 samples per second. The 10 samples per second translate to a geophysical reading about every 1.5 to 2.5 metres along the flight path.

3.1. NAVIGATION

Navigation is carried out using a GPS receiver, an AGNAV2 system for navigation control, and an RMS DGR-33 data acquisition system which records the GPS coordinates. The x-y-z

position of the aircraft, as reported by the GPS, is recorded at 0.2 second intervals. The system has a published accuracy of less than 3 metres. A recent static ground test of the Mid-Tech WAAS GPS yielded a standard deviation in x and y of less than 0.6 metres and for z less than 1.5 metres over a two-hour period.

3.2. SYSTEM DRIFT

Unlike frequency domain electromagnetic systems, the AeroTEM III system has negligible drift due to thermal expansion. The operator is responsible for ensuring the instrument is properly warmed up prior to departure and that the instruments are operated properly throughout the flight. The operator maintains a detailed flight log during the survey noting the times of the flight and any unusual geophysical or topographic features. Each flight included at least two high elevation ‘background’ checks. During the high elevation checks, an internal 5 second wide calibration pulse in all EM channels was generated in order to ensure that the gain of the system remained constant and within specifications.

3.3. FIELD QA/QC PROCEDURES

On return of the pilot and operator to the base, usually after each flight, the AeroDAS streaming EM data are carried on removable hard drives and Flashcards, respectively and transferred to the data processing work station. At the end of each day, the base station magnetometer data on FlashCard is retrieved from the base station unit.

Data verification and quality control includes a comparison of the acquired GPS data with the flight plan; verification and conversion of the RMS data to an ASCII format XYZ data file; verification of the base station magnetometer data and conversion to ASCII format XYZ data; and loading, processing and conversion of the streaming EM data from the removable hard drive. All data is then merged to an ASCII XYZ format file which is then imported to an Oasis database for further QA/QC and for the production of preliminary EM, magnetic contour, and flight path maps.

Survey lines which show excessive deviation from the intended flight path are re-flown. Any line or portion of a line on which the data quality did not meet the contract specification was noted and reflown.

4. AIRCRAFT AND EQUIPMENT

4.1. AIRCRAFT

A Eurocopter (Aerospatiale) SA 315B - registration C-GLOV was used as survey platform. The helicopter was owned and operated by Hi-Wood Helicopters Ltd. Installation of the geophysical and ancillary equipment was carried out by Aeroquest Limited personnel in conjunction with a licensed aircraft. The survey aircraft was flown at a nominal terrain clearance of 275 ft (83metres).



Figure 3. Helicopter registration number C-GLOV

4.2. MAGNETOMETER

The AeroTEM III airborne survey system employs the Geometrics G-823A caesium vapour magnetometer sensor installed in a two metre towed bird airfoil attached to the main tow line, 21 metres below the helicopter (Figure 4). The sensitivity of the magnetometer is 0.001 NanoTesla at a 0.1 second sampling rate. The nominal ground clearance of the magnetometer bird is 51 metres (170 ft.). The magnetic data is recorded at 10 Hz by the ADAS.

4.3. ELECTROMAGNETIC SYSTEM

The electromagnetic system is an Aeroquest AeroTEM III time domain towed-bird system (Figure 4). The current AeroTEM III transmitter dipole moment is 183 kNIA. The AeroTEM bird is towed 53 metres (175 ft) below the helicopter. More technical details of the system may be found in Appendix 5.

The wave-form is triangular with a symmetric transmitter on-time pulse of 1.10 ms and a base frequency of 90 Hz (Figure 5). The current alternates polarity every on-time pulse. During every Tx on-off cycle (180 per second), 200 contiguous channels of raw X and Z component (and a transmitter current monitor, itx) of the received waveform are measured. Each channel width is 27.78 microseconds starting at the beginning of the transmitter pulse. This 200 channel data is referred to as the raw streaming data. The AeroTEM system has one

separate EM data recording stream, the newly designed AeroDAS system which records the full waveform (Figure 6).

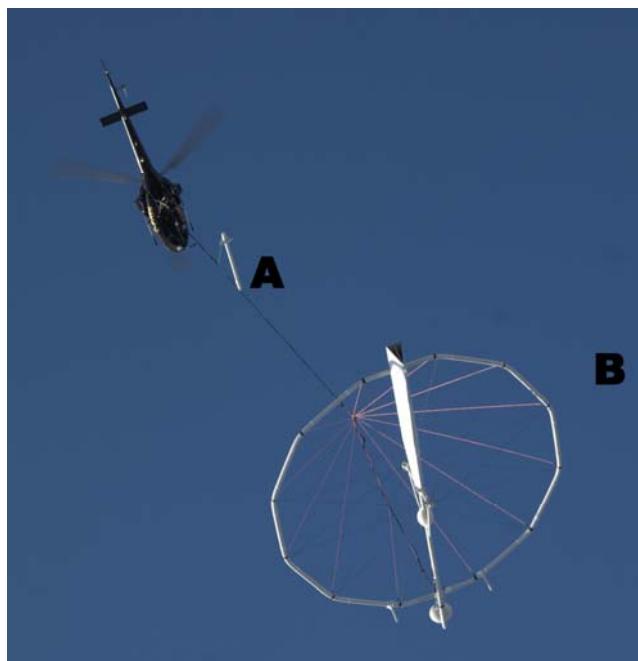


Figure 4. The magnetometer bird (A) and AeroTEM III EM bird (B)

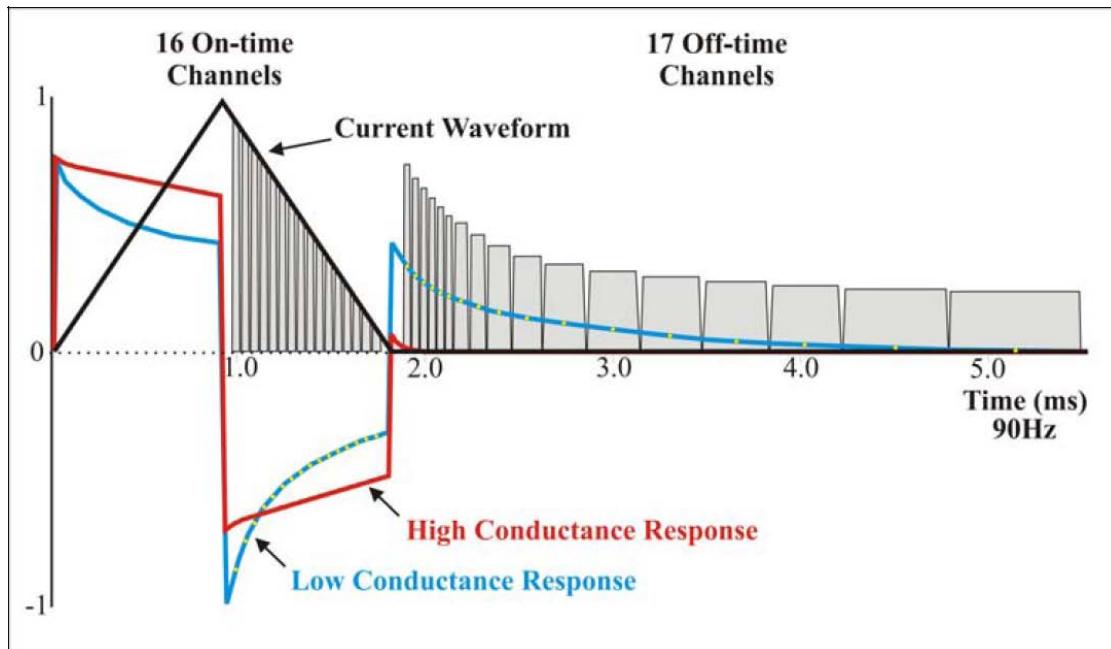


Figure 5. Schematic of Transmitter and Receiver waveforms

4.4. AERODAS ACQUISITION SYSTEM

The 200 channels of raw streaming data are recorded by the AeroDAS acquisition system (Figure 6) onto a removable hard drive. In addition the magnetic, altimeter and position data are also recorded in it, six channels of real time processed off-time EM decay in the Z direction and

one in the X direction can be viewed on a color monitor on board, these channels are derived by a binning, stacking and filtering procedure on the raw streaming data.

The primary use of the displayed EM data (Z1 to Z6, X1), magnetic and altimeter is to provide for real-time QA/QC on board.



Figure 6. AeroTEM III Instrument Rack

The streaming data are processed post-survey to yield 33 stacked and binned on-time and off-time channels at a 10 Hz sample rate. The timing of the final processed EM channels is described in the following table:

Average TxOn	-13.0321 us
Average TxSwitch	874.4530 us
Average TxOff	1696.1003 us
Average TxPeak	241.6359 A

Channel	Sample Range	Time Width (us)	Time Center (us)	Time After TxOn (us)
On1	5 - 5	27.8	125.0	138.0
On2	6 - 6	27.8	152.8	165.8
On3	7 - 7	27.8	180.6	193.6
On4	8 - 8	27.8	208.3	221.4
On5	9 - 9	27.8	236.1	249.1
On6	10 - 10	27.8	263.9	276.9
On7	11 - 11	27.8	291.7	304.7
On8	12 - 12	27.8	319.4	332.5
On9	13 - 13	27.8	347.2	360.3
On10	14 - 14	27.8	375.0	388.0
On11	15 - 15	27.8	402.8	415.8
On12	16 - 16	27.8	430.6	443.6
On13	17 - 17	27.8	458.3	471.4
On14	18 - 18	27.8	486.1	499.1
On15	19 - 19	27.8	513.9	526.9
On16	20 - 20	27.8	541.7	554.7

Channel	Sample Range	Time Width (us)	Time Center (us)	Time After TxOff (us)
Off0	65 - 65	27.8	1791.7	95.6
Off1	66 - 66	27.8	1819.4	123.3
Off2	67 - 67	27.8	1847.2	151.1
Off3	68 - 68	27.8	1875.0	178.9
Off4	69 - 69	27.8	1902.8	206.7
Off5	70 - 70	27.8	1930.6	234.5
Off6	71 - 73	83.3	1986.1	290.0
Off7	74 - 76	83.3	2069.4	373.3
Off8	77 - 79	83.3	2152.8	456.7

Off9	80 - 82	83.3	2236.1	540.0
Off10	83 - 87	138.9	2347.2	651.1
Off11	88 - 92	138.9	2486.1	790.0
Off12	93 - 99	194.4	2652.8	956.7
Off13	100 - 109	277.8	2888.9	1192.8
Off14	110 - 124	416.7	3236.1	1540.0
Off15	125 - 148	666.7	3777.8	2081.7
Off16	149 - 186	1055.6	4638.9	2942.8

4.5. MAGNETOMETER BASE STATION

The base magnetometer was a Geometrics G-859 caesium vapour magnetometer system with integrated GPS. Data logging and UTC time synchronisation was carried out within the magnetometer, with the GPS providing the timing signal. The data logging was configured to measure at 1.0 second intervals. Digital recording resolution was 0.001 nT. The sensor was placed on a tripod in an area of low magnetic gradient and free of cultural noise sources. A continuously updated display of the base station values was available for viewing and regularly monitored to ensure acceptable data quality and diurnal variation.

4.6. RADAR ALTIMETER

A Terra TRA 3500/TRI-30 radar altimeter is used to record terrain clearance. The antenna was mounted on the outside of the helicopter beneath the cockpit. Therefore, the recorded data reflect the height of the helicopter above the ground. The Terra altimeter has an altitude accuracy of +/- 1.5 metres.

4.7. VIDEO TRACKING AND RECORDING SYSTEM

A high resolution digital colour 8 mm video camera is used to record the helicopter ground flight path along the survey lines. The video is digitally annotated with GPS position and time and can be used to verify ground positioning information and cultural causes of anomalous geophysical responses.



Figure 7. Digital video camera typical mounting location.

4.8. GPS NAVIGATION SYSTEM

The navigation system consists of an Ag-Nav Incorporated AG-NAV2 GPS navigation system comprising a PC-based acquisition system, navigation software, a deviation indicator in front of the aircraft pilot to direct the flight, a full screen display with controls in front of

the operator, a Mid-Tech RX400p WAAS-enabled GPS receiver mounted on the instrument rack and an antenna mounted on the magnetometer bird. WAAS (Wide Area Augmentation System) consists of approximately 25 ground reference stations positioned across the United States that monitor GPS satellite data. Two master stations located on the east and west coasts collect data from the reference stations and create a GPS correction message. This correction accounts for GPS satellite orbit and clock drift plus signal delays caused by the atmosphere and ionosphere. The corrected differential message is then broadcast through one of two geostationary satellites, or satellites with a fixed position over the equator. The corrected position has a published accuracy of less than 3 metres.

Survey co-ordinates are set up prior to the survey and the information is fed into the airborne navigation system. The co-ordinate system employed in the survey design was WGS84 [World] using the UTM zone 9N projection. The real-time differentially corrected GPS positional data was recorded by the AeroDAS system in geodetic coordinates (latitude and longitude using WGS84) at 0.2 s intervals.

4.9. DIGITAL ACQUISITION SYSTEM

The AeroTEM received waveform sampled during on and off-time at 200 channels per decay, 180 times per second, was logged by the proprietary AeroDAS data acquisition system. The streaming data was recorded on a removable hard-drive and was later backed-up onto DVD-ROM from the field-processing computer.

5. PERSONNEL

The following Aeroquest personnel were involved in the project:

- Operations Project Manager: Troy Will
- Field Data Processor: Thomas Wade
- Field Operator: Viktor Shevchenko
- Data Interpretation and Reporting: Doug Garrie, Liz Johnson

The survey pilot, Ted Slavin, was employed directly by the helicopter operator – HiWood Helicopters Ltd.

6. DELIVERABLES

6.1. HARDCOPY DELIVERABLES

The report includes a set of three 1:50,000 maps and the following three geophysical data products are delivered:

- TMI – Coloured Total Magnetic Intensity (TMI) with line contours and EM anomaly symbols.
- Z1-OFF – AeroTEM Z1 Off-time with line contours, and EM anomaly symbols.
- EM – AeroTEM off-time profiles Z5 – Z15, and EM anomaly symbols.
- DTM – Digital Terrain Model with line contours, and EM anomaly symbols.
- TAU – Decay Constant with line contours, and EM anomaly symbols.
- CVG – Calculated first Vertical Gradient with line contours, and EM anomaly symbols.

The coordinate/projection system for the maps is NAD83 – UTM Zone 9N. For reference, the latitude and longitude in WGS84 are also noted on the maps.

All the maps show flight path trace, skeletal topography, and conductor picks represented by an anomaly symbol classified according to calculated off-time conductance. The anomaly symbol is accompanied by postings denoting the calculated off-time conductance, a thick or thin classification and an anomaly identifier label. The anomaly symbol legend and survey specifications are displayed on the left margin of the maps.

6.2. DIGITAL DELIVERABLES

6.2.1. Final Database of Survey Data (.GDB)

The geophysical profile data is archived digitally in a Geosoft GDB binary format database. A description of the contents of the individual channels in the database can be found in Appendix 2. A copy of this digital data is archived at the Aeroquest head office in Mississauga.

6.2.2. Geosoft Grid files (.GRD)

Levelled Grid products used to generate the geophysical map images. All grids have 40 m cell size.

- Total Magnetic Intensity from Mag sensor on the tow cable (Mag_Poplar_10-006.grd)
- AeroTEM Z Offtime Channel 1 (ZOFF1_Poplar_10-006.grd)
- Decay Constant -TAU (Tau_Poplar_10-006.grd)
- Digital Terrain Model (DTM_Poplar_10-006.grd)
- Calculated First Vertical Gradient (CVG_Poplar_10-006.grd)

6.2.3. Digital Versions of Final Maps (.MAP, .PDF)

Map files in Geosoft .map and Adobe PDF format.

6.2.4. Google Earth Files (.kmz)

Flight navigation lines, EM Anomalies and geophysical grids in Google earth kmz format.
Double click to view in Google Earth.

6.2.5. Free Viewing Software (.EXE)

- Geosoft Oasis Montaj Viewing Software
- Adobe Acrobat Reader
- Google Earth Viewer

6.2.6. Digital Copy of this Document (.PDF)

Adobe PDF format of this document.

7. DATA PROCESSING AND PRESENTATION

All in-field and post-field data processing was carried out using Aeroquest proprietary data processing software and Geosoft Oasis Montaj software. Maps were generated using 36-inch and 42-inch wide Hewlett Packard ink-jet plotters.

7.1. BASE MAP

The geophysical maps accompanying this report are based on positioning in the NAD83 datum. The survey geodetic GPS positions have been projected using the Universal Transverse Mercator projection in Zone 9 North. A summary of the map datum and projection specifications is given following:

- Ellipse: GRS 1980
- Ellipse major axis: 6378137m eccentricity: 0.081819191
- Datum: North American 1983 - Canada Mean
- Datum Shifts (x,y,z) : 0, 0, 0 metres
- Map Projection: Universal Transverse Mercator Zone 9 (Central Meridian 129°W)
- Central Scale Factor: 0.9996
- False Easting, Northing: 500,000m, 0m

For reference, the latitude and longitude in WGS84 are also noted on the maps.

The background vector topography was sourced from Natural Resources Canada 1:50000 National Topographic Data Base data and the background shading were derived from NASA Shuttle Radar Topography Mission (SRTM) 90 metre resolution DEM data.

7.2. FLIGHT PATH & TERRAIN CLEARANCE

The position of the survey helicopter was directed by use of the Global Positioning System (GPS). Positions were updated five times per second (5 Hz) and expressed as WGS84 latitude and longitude calculated from the raw pseudo range derived from the C/A code signal. The instantaneous GPS flight path, after conversion to UTM co-ordinates, is drawn using linear interpolation between the x/y positions. The terrain clearance was maintained with reference to the radar altimeter. The raw Digital Terrain Model (DTM) was derived by taking the GPS survey elevation and subtracting the radar altimeter terrain clearance values. The calculated topography elevation values are relative and are not tied in to surveyed geodetic heights.

Each flight included at least two high elevation ‘background’ checks. These high elevation checks are to ensure that the gain of the system remained constant and within specifications.

7.3. ELECTROMAGNETIC DATA

The raw streaming data, sampled at a rate of 36,000 Hz (200 channels, 180 times per second) was reprocessed using a proprietary software algorithm developed and owned by Aeroquest Limited. Processing involves the compensation of the X and Z component data for the primary field waveform. Coefficients for this compensation for the system transient are determined and applied to the stream data. The stream data are then pre-filtered, stacked, binned to the 33 on and off-time channels and checked for the effectiveness of the compensation and stacking processes. The stacked data is then filtered, levelled and split up into the individual line segments. Further base level adjustments may be carried out at this

stage. The filtering of the stacked data is designed to remove or minimize high frequency noise that cannot be sourced from the geology.

The final field processing step was to merge the processed EM data with the other data sets into a Geosoft GDB file. The TS “time stamp” and EM Fiducial are used to synchronize the two datasets. The processed channels are merged into ‘array format; channels in the final Geosoft database as Zon, Zoff, Xon, and Xoff.

Apparent bedrock EM anomalies were interpreted with the aid of an auto-pick from positive peaks and troughs in the off-time Z channel responses correlated with X channel responses. The auto-picked anomalies were reviewed and edited by a geophysicist on a line by line basis to discriminate between thin and thick conductor types. Anomaly picks locations were migrated and removed as required. This process ensures the optimal representation of the conductor centres on the maps.

At each conductor pick, estimates of the off-time conductance have been generated based on a horizontal plate source model for those data points along the line where the response amplitude is sufficient to yield an acceptable estimate. Some of the EM anomaly picks do not display a Tau value; this is due to the inability to properly define the decay of the conductor usually because of low signal amplitudes. Each conductor pick was then classified according to a set of seven ranges of calculated off-time conductance values. For high conductance sources, the on-time conductance values may be used, since it provides a more accurate measure of high-conductance sources. Each symbol is also given an identification letter label, unique to each flight line. Conductor picks that did not yield an acceptable estimate of off-time conductance due to a low amplitude response were classified as a low conductance source. Please refer to the anomaly symbol legend located in the margin of the maps.

7.4. MAGNETIC DATA

Prior to any levelling the magnetic data was subjected to a lag correction of -0.1 seconds and a spike removal filter. The filtered aeromagnetic data were then corrected for diurnal variations using the magnetic base station and the intersections of the tie lines. No corrections for the regional reference field (IGRF) were applied. The corrected profile data were interpolated on to a grid using a bi-directional grid technique with a grid cell size of 40 metres. The final levelled grid provided the basis for threading the presented contours which have a minimum contour interval of 10 nT.

8. GENERAL COMMENTS

The survey was successful in mapping the magnetic and conductive properties of the geology throughout the survey area. Below is a brief interpretation of the results. For a detailed interpretation please contact Aeroquest Limited.

8.1. MAGNETIC RESPONSE

The magnetic data provide a high resolution map of the distribution of the magnetic mineral content of the survey area. This data can be used to interpret the location of geological contacts and other structural features such as faults and zones of magnetic alteration. The sources for anomalous magnetic responses are generally thought to be predominantly magnetite because of the relative abundance and strength of response (high magnetic susceptibility) of magnetite over other magnetic minerals such as pyrrhotite.

8.2. EM ANOMALIES

The EM anomalies on the maps are classified by conductance (as described earlier in the report) and also by the thickness of the source. A thin, vertically orientated source produces a double peak anomaly in the z-component response and a positive to negative crossover in the x-component response (Figure 8). For a vertically orientated thick source (say, greater than 10 metres), the response is a single peak in the z-component response and a negative to positive crossover in the x-component response (Figure 9). Because of these differing responses, the AeroTEM system provides discrimination of thin and thick sources and this distinction is indicated on the EM anomaly symbols (N = thin and K = thick). Where multiple, closely spaced conductive sources occur, or where the source has a shallow dip, it can be difficult to uniquely determine the type (thick vs. thin) of the source (Figure 10). In these cases both possible source types may be indicated by picking both thick and thin response styles. For shallow dipping conductors the ‘thin’ pick will be located over the edge of the source, whereas the ‘thick’ pick will fall over the downdip ‘heart’ of the anomaly.

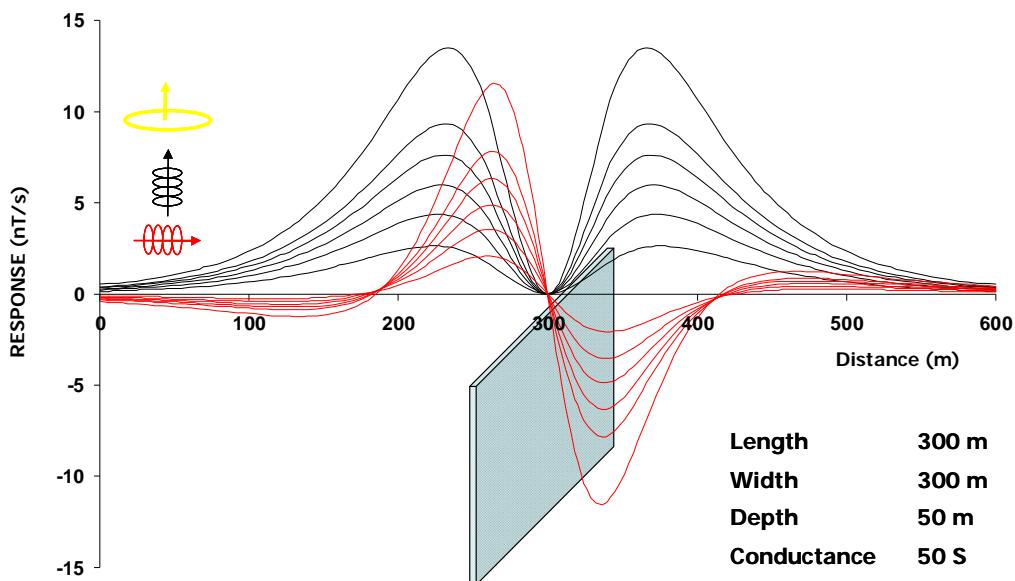


Figure 8. AeroTEM response to a ‘thin’ vertical conductor.

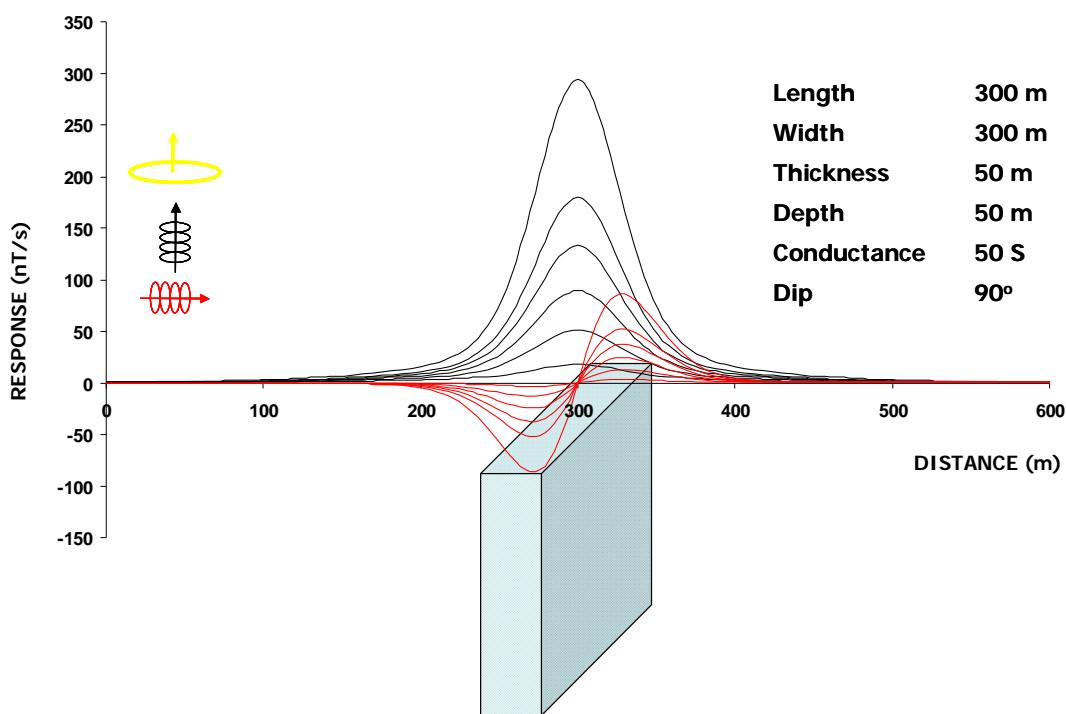


Figure 9. AeroTEM response for a 'thick' vertical conductor.

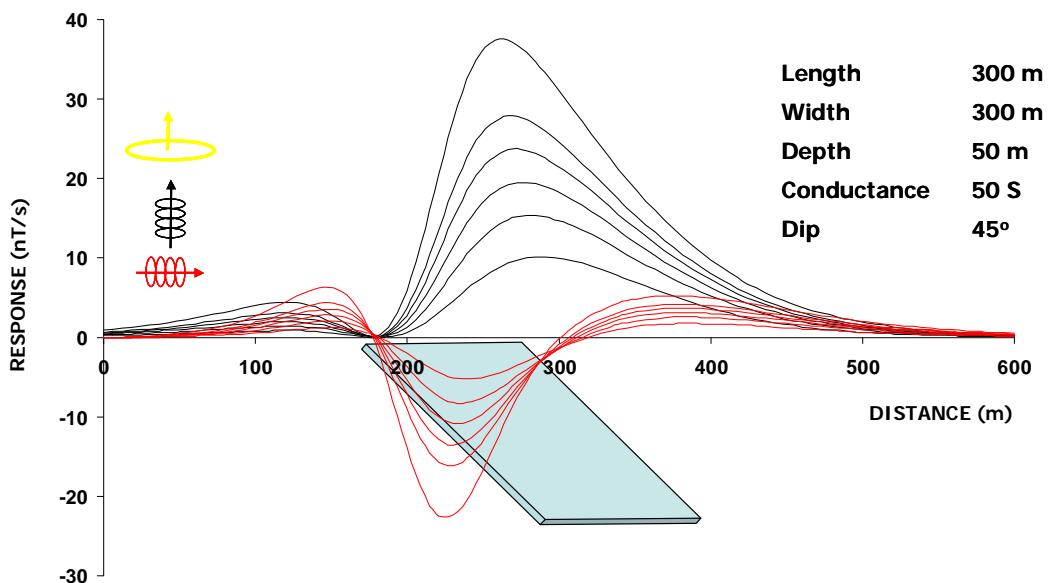


Figure 10. AeroTEM response over a 'thin' dipping conductor.



All cases should be considered when analyzing the interpreted picks and prioritizing for follow-up. Specific anomalous responses which remain as high priority should be subjected to numerical modeling prior to drill testing to determine the dip, depth and probable geometry of the source.

Respectfully submitted,



Douglas Garrie
Senior Geophysicist

APPENDIX 1: SURVEY BOUNDARIES

The following table presents the block boundaries. All geophysical data presented in this report have been windowed to 100m outside of these boundaries. X and Y positions are in metres: NAD83 UTM Zone 9N.

Poplar:

X	Y	X	Y
620200.00	5996400.00	627200.00	5977800.00
629366.84	5996397.33	628000.00	5977800.00
629362.11	5999393.62	628400.00	5978200.00
632722.45	5999393.62	628398.77	5976401.78
632722.45	5996397.33	628797.37	5976402.13
635800.00	5996500.00	628999.43	5976201.44
636600.00	5995200.00	629600.09	5976202.83
639000.00	5993200.00	629998.69	5976405.49
644200.00	5993200.00	630799.24	5977201.08
644200.00	5987850.00	631000.10	5977203.08
642600.00	5987850.00	631200.00	5977296.39
642600.00	5985253.37	631200.00	5978300.00
638744.00	5985246.00	628700.00	5978300.00
638800.00	5983600.01	628700.00	5980100.00
637600.00	5983600.01	627000.00	5980100.00
637600.00	5979000.00	627000.00	5982000.00
639000.00	5979000.00	625000.00	5982000.00
639000.00	5981000.00	625000.00	5979000.00
642000.00	5981000.00	620900.00	5979000.00
642000.00	5974500.00	620600.00	5979600.00
641000.00	5974500.00	619800.00	5980400.00
641000.00	5970800.00	618800.00	5981600.00
637200.00	5970800.00	618600.00	5981800.00
637200.00	5973000.00	618400.00	5981800.00
636000.00	5973000.00	618400.00	5979000.00
636000.00	5975200.01	617000.00	5979000.00
632400.00	5975200.01	617000.00	5990000.00
632200.00	5974700.00	618200.00	5990000.00
632000.00	5974600.00	618091.85	5993842.36
631800.00	5974600.00	618499.68	5993852.77
631600.00	5974300.00	618487.76	5994317.65
631200.00	5974300.00	618895.55	5994328.12
631000.00	5974200.00	618883.59	5994793.02
630800.00	5974200.00	619291.34	5994803.49
629998.69	5973405.49	619279.35	5995268.38
629600.09	5973202.83	619687.05	5995278.93
628999.43	5973201.44	619675.01	5995743.82
628797.37	5973402.13	620082.67	5995754.37
627200.00	5973400.00	620070.60	5996219.26
627000.00	5973500.00		
626000.00	5974200.00		
625200.00	5974500.00		
625200.00	5977400.00		
627200.00	5977400.00		

APPENDIX 2: DESCRIPTION OF DATABASE FIELDS

The GDB file is a Geosoft binary database. In the database, the Survey lines and Tie Lines are prefixed with an "L" for "Line" and "T" for "Tie".

COLUMN	UNITS	DESCRIPTOR
line		Line number
flight		Flight #
emfid		AERODAS Fiducial
utctime	hh:mm:ss.ss	UTC time
x	m	UTM Easting (NAD83, Zone 9)
y	m	UTM Northing (NAD83, Zone 9)
galt	m	GPS elevation of magnetometer bird
ralt	m	Helicopter radar altimeter (height above terrain)
bheight	m	Terrain clearance of EM bird
basemag	nT	Base station total magnetic intensity
magU	nT	Final levelled total magnetic intensity from upper magnetometer sensor (installed on the tail of the EM bird).
dtm	m	Digital Terrain Model
zon	nT/s	EM On-Time Z component Channels 1-16
zoff	nT/s	EM Off-Time Z component Channels 0-16
Xon	nT/s	EM On-Time X component Channels 1-16
Xoff	nT/s	EM Off-Time X component Channels 0-16
pwrline		powerline monitor data channel
Grade		Classification from 1-7 based on conductance of conductor pick
Anom_Labels		Letter label of conductor pick (Unique per flight line)
Off_Con	S	Off-time conductance at conductor pick
Off_Tau	μs	Off-time decay constant at conductor pick
Anom_ID		EM Anomaly response style (K= thick, N = thin)
Off_AllCon	S	Off-time conductance
Off_AllTau	μs	Off-time decay constant
TranOff	s	Transmitter turn off time
TranOn	s	Transmitter turn on time
TranPeak	A	Transmitter peak current
TranSwitch	s	Transmitter peak current time
Off_Pick		Anomaly pick channel
Culture		Culture with EM responses

APPENDIX 3: AEROTEM ANOMALY LISTING

Poplar:

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10010	A	N	7.7	277.7	2	21:01:20	55.9	617000.3	5988417.3
10010	B	K	0.1	35.0	2	21:04:06	39.3	616999.7	5983466.8
10010	C	K	2.1	143.5	2	21:05:00	41.9	617004.6	5981898.4
10020	A	K	11.1	333.2	1	19:06:42	61.9	617203.3	5980520.1
10020	B	K	13.8	371.8	1	19:07:16	47.5	617198.7	5981454.5
10020	C	K	10.3	320.6	1	19:10:33	63.5	617200.5	5987160.8
10020	D	K	16.8	409.8	1	19:11:04	53.3	617208.8	5988071.6
10020	E	K	6.2	248.3	1	19:11:31	60.3	617196.6	5988864.1
10030	A	K	5.8	241.3	1	18:56:31	60.8	617385.6	5989306.9
10030	A	K	16.7	408.4	1	18:59:36	35.9	617395.9	5988023.4
10030	B	K	8.7	294.5	1	19:00:14	63.4	617397.1	5986922.3
10030	C	K	3.4	183.4	1	19:00:46	50.5	617391.2	5985994.3
10030	D	N	4.1	203.5	1	19:01:20	51.9	617400.1	5984999.5
10030	E	K	4.0	199.8	1	19:02:51	52.7	617403.4	5982424.1
10030	F	K	34.8	590.1	1	19:03:33	51.8	617405.8	5981187.1
10030	G	N	34.8	590.1	1	19:04:02	57.6	617398.8	5980330.2
10040	A	K	6.1	247.4	1	18:49:14	54.7	617599.0	5979914.4
10040	B	K	45.8	676.5	1	18:49:44	46.8	617604.3	5980774.1
10040	C	K	31.6	561.7	1	18:50:21	47.8	617597.6	5981917.2
10040	D	K	14.1	375.2	1	18:50:39	44.1	617599.8	5982480.8
10040	E	N	16.9	411.4	1	18:52:43	63.1	617588.6	5985828.4
10040	F	K	16.9	411.4	1	18:53:14	54.6	617605.3	5986727.7
10040	G	N	16.9	411.4	1	18:53:57	43.4	617608.1	5987965.9
10050	A	K	6.2	249.6	1	18:41:51	62.1	617783.2	5989402.2
10050	B	K	9.4	305.7	1	18:42:42	39.9	617803.0	5987821.6
10050	C	K	11.8	342.9	1	18:43:20	42.9	617803.8	5986646.1
10050	D	N	8.2	286.4	1	18:43:47	58.1	617800.1	5985830.6
10050	E	K	3.3	181.0	1	18:45:27	57.5	617794.8	5982886.6
10050	F	N	3.3	181.0	1	18:45:44	41.9	617798.4	5982385.0
10050	G	K	31.3	559.0	1	18:46:07	44.0	617797.7	5981706.1
10050	H	K	52.8	726.4	1	18:46:44	50.7	617804.5	5980588.5
10050	I	K	33.6	579.5	1	18:47:09	55.2	617791.5	5979833.4
10050	J	N	33.6	579.5	1	18:47:24	60.0	617794.2	5979368.1
10060	A	N	10.7	327.4	1	18:34:46	63.2	618007.1	5979398.5
10060	B	N	15.4	392.6	1	18:34:55	54.3	617998.1	5979651.5
10060	C	K	24.9	499.0	1	18:35:18	48.0	618009.8	5980341.3
10060	D	K	31.2	558.4	1	18:35:58	45.8	617994.0	5981619.0
10060	E	K	28.6	535.1	1	18:36:26	58.7	618004.0	5982485.3
10060	F	K	10.1	317.0	1	18:36:42	49.4	617993.7	5983011.9
10060	G	K	12.6	355.1	1	18:38:49	46.4	618009.0	5986990.0
10060	H	K	43.0	656.1	1	18:39:09	57.0	617991.5	5987581.8



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10060	I	K	14.7	383.3	1	18:39:23	57.1	617989.4	5988014.6
10070	A	N	7.9	281.1	1	18:28:17	52.7	618201.5	5988231.3
10070	B	K	28.4	532.6	1	18:28:56	52.4	618198.7	5987109.5
10070	C	K	14.1	375.5	1	18:29:25	54.0	618199.1	5986337.8
10070	D	K	10.8	328.5	1	18:29:40	67.8	618195.2	5985918.3
10070	E	K	23.8	487.9	1	18:32:08	42.8	618197.1	5981513.2
10070	F	K	25.7	506.7	1	18:32:47	40.3	618206.5	5980269.2
10070	G	K	37.1	608.7	1	18:33:06	57.2	618203.4	5979682.2
10070	H	K	32.9	573.8	1	18:33:22	64.3	618210.5	5979172.9
10080	A	K	18.3	427.3	2	21:08:30	100.8	618407.4	5979299.5
10080	B	K	26.5	514.3	2	21:08:54	52.9	618406.6	5980202.0
10080	C	K	21.0	458.1	2	21:09:38	43.2	618389.9	5981576.4
10080	D	N	18.6	431.5	2	21:10:12	53.4	618394.0	5982565.5
10080	E	K	12.9	358.4	2	21:11:41	48.8	618411.6	5985238.3
10080	F	K	14.8	384.2	2	21:12:04	58.1	618401.7	5985807.3
10080	G	N	18.0	424.2	2	21:13:00	51.2	618410.1	5987354.1
10080	H	K	6.4	253.7	2	21:13:42	41.2	618400.2	5988539.1
10090	A	K	7.0	265.4	2	21:18:43	73.4	618603.9	5993621.1
10090	B	K	11.1	332.4	2	21:19:22	66.9	618597.4	5992519.4
10090	C	K	9.2	303.5	2	21:19:38	47.6	618599.6	5992079.7
10090	D	K	28.7	535.2	2	21:22:07	53.0	618602.0	5987719.1
10090	E	K	30.5	552.1	2	21:22:21	51.1	618594.7	5987353.0
10090	F	K	19.7	443.9	2	21:22:32	52.6	618595.8	5987042.8
10090	G	K	8.0	282.0	2	21:23:37	53.3	618597.9	5985309.4
10090	H	K	24.4	493.9	2	21:25:42	49.1	618598.4	5981776.2
10100	A	K	34.8	589.7	2	21:26:58	65.5	618812.0	5981639.9
10100	B	K	26.5	514.9	2	21:27:06	60.3	618821.2	5981796.1
10100	C	N	27.2	521.1	2	21:27:11	53.9	618825.3	5981896.7
10100	D	N	28.0	529.5	2	21:27:18	45.1	618795.6	5982055.9
10100	E	K	5.2	227.7	2	21:29:08	56.5	618793.9	5985197.3
10100	F	K	10.9	329.6	2	21:29:59	56.6	618806.7	5986718.2
10100	G	K	38.9	623.8	2	21:30:53	46.9	618809.2	5988289.8
10100	H	K	12.9	358.5	2	21:31:21	47.2	618801.4	5989046.5
10100	I	N	27.7	526.5	2	21:33:37	58.2	618795.1	5992871.9
10100	J	K	15.9	398.5	2	21:33:56	67.9	618792.2	5993395.4
10110	A	K	19.4	440.1	2	21:36:08	60.3	618990.3	5994241.1
10110	B	K	16.5	406.4	2	21:36:16	76.0	618981.1	5994048.9
10110	C	K	30.5	552.6	2	21:36:45	49.9	619006.7	5993383.7
10110	D	N	6.1	246.5	2	21:37:50	65.3	618989.0	5991728.0
10110	E	K	16.3	403.9	2	21:38:18	63.6	618998.3	5991051.8
10110	F	K	12.1	347.8	2	21:38:55	56.4	618994.7	5990058.1
10110	G	K	30.4	551.1	2	21:39:50	37.8	618994.4	5988541.8
10110	H	N	31.8	564.1	2	21:40:00	35.2	619002.4	5988268.0
10110	I	K	40.4	635.4	2	21:40:11	46.1	619011.7	5987954.5
10110	J	K	30.9	555.6	2	21:40:25	55.7	619001.6	5987616.4



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10110	K	N	10.8	328.7	2	21:40:58	51.1	618994.1	5986686.0
10110	L	K	0.9	95.7	2	21:41:55	46.7	618992.8	5985094.2
10110	M	K	20.1	448.6	2	21:43:36	51.5	618999.6	5982176.5
10120	A	K	25.2	501.7	2	21:45:35	52.2	619193.8	5981518.3
10120	B	K	21.6	464.7	2	21:45:49	48.5	619203.1	5981871.2
10120	C	K	35.6	596.5	2	21:46:03	54.7	619212.5	5982260.1
10120	D	K	19.0	435.7	2	21:48:59	47.7	619202.4	5987202.7
10120	E	K	39.5	628.5	2	21:49:25	50.3	619202.4	5987903.4
10120	F	K	8.0	282.4	2	21:51:20	61.0	619203.9	5991180.5
10120	G	N	48.2	694.6	2	21:52:24	59.8	619215.2	5992958.4
10120	H	K	43.4	658.9	2	21:52:35	50.7	619211.1	5993297.8
10120	I	K	30.0	547.4	2	21:53:00	69.4	619192.4	5994062.9
10120	J	K	29.8	545.6	2	21:53:18	59.4	619209.3	5994622.1
10120	K	K	34.5	587.6	2	21:53:30	59.4	619195.7	5994937.9
10120	L	K	65.9	811.5	2	21:53:48	82.2	619212.2	5995250.7
10130	A	K	73.2	855.6	2	21:55:32	48.3	619410.1	5994258.1
10130	B	K	74.0	860.4	2	21:56:04	34.1	619403.8	5993357.0
10130	C	K	44.0	663.7	2	21:56:36	65.3	619396.9	5992483.9
10130	D	N	44.0	663.7	2	21:57:29	58.0	619395.8	5991124.8
10130	E	K	41.2	641.9	2	21:58:40	48.0	619404.3	5988948.0
10130	F	K	22.1	470.4	2	21:59:10	39.4	619385.4	5988052.6
10130	G	K	11.9	345.3	2	21:59:45	53.0	619408.4	5987050.6
10130	H	K	7.2	269.0	2	22:00:25	49.8	619408.0	5985879.4
10130	I	K	35.1	592.3	2	22:02:39	55.3	619394.0	5982100.1
10130	J	K	27.8	527.1	2	22:03:09	48.6	619394.5	5981288.9
10140	A	K	54.9	740.7	2	22:04:39	54.0	619596.5	5980918.3
10140	B	K	35.1	592.3	2	22:05:30	48.7	619588.1	5982339.9
10140	C	K	14.9	385.5	2	22:07:42	53.3	619600.3	5985996.6
10140	D	K	24.0	490.1	2	22:08:13	50.2	619594.1	5986901.5
10140	E	K	19.2	438.4	2	22:08:43	52.6	619617.9	5987712.6
10140	F	K	52.1	721.6	2	22:09:28	61.6	619602.0	5988800.8
10140	G	K	24.0	490.2	2	22:09:51	57.4	619614.1	5989450.0
10140	H	K	33.4	578.3	2	22:10:08	62.9	619589.2	5989934.8
10140	I	K	12.2	348.9	2	22:11:08	45.6	619611.5	5991668.3
10140	J	N	56.2	749.9	2	22:11:52	61.1	619616.8	5992847.8
10140	K	K	63.1	794.2	2	22:12:23	48.3	619595.9	5993753.5
10140	L	N	63.1	794.2	2	22:12:38	63.7	619606.5	5994204.6
10140	M	K	91.7	957.7	2	22:13:02	84.6	619608.9	5994992.8
10140	N	K	66.8	817.2	2	22:13:25	49.1	619597.4	5995503.6
10150	A	N	35.9	599.5	6	18:06:16	46.3	619797.4	5981093.9
10150	B	K	36.5	604.3	6	18:06:33	48.6	619812.1	5981572.6
10150	C	K	27.3	522.0	6	18:07:28	44.0	619794.6	5983023.4
10150	D	K	22.3	472.1	6	18:07:40	39.6	619796.8	5983357.0
10150	E	K	9.7	310.6	6	18:08:54	65.7	619791.9	5985562.0
10150	F	K	11.9	345.2	6	18:09:24	44.0	619803.6	5986431.1



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10150	G	N	7.1	265.7	6	18:10:08	50.2	619801.1	5987682.5
10150	H	K	20.7	455.1	6	18:10:57	58.1	619806.2	5989138.5
10150	I	K	15.4	392.3	6	18:12:06	55.9	619802.1	5991383.2
10150	J	K	35.6	596.9	6	18:12:32	58.2	619804.4	5992198.3
10150	K	K	40.3	634.7	6	18:13:13	45.2	619803.1	5993356.7
10150	L	K	71.1	843.2	6	18:13:32	52.7	619794.2	5993949.9
10150	M	K	41.8	646.2	6	18:14:06	73.4	619796.5	5995126.5
10150	N	K	39.7	630.0	6	18:14:29	65.4	619798.1	5995836.9
10160	A	N	37.1	608.7	6	18:15:42	56.7	619997.2	5996052.1
10160	B	K	39.3	626.6	6	18:16:16	65.3	620003.2	5995303.8
10160	C	K	59.3	770.1	6	18:17:03	51.8	620002.5	5994216.4
10160	D	K	38.8	622.5	6	18:17:37	42.3	620006.1	5993439.0
10160	E	K	44.8	669.1	6	18:17:55	47.4	620003.4	5993004.4
10160	F	N	44.1	664.1	6	18:18:53	47.4	619998.5	5991779.9
10160	G	K	11.9	344.3	6	18:19:09	49.2	620003.8	5991439.5
10160	H	K	13.4	365.9	6	18:20:54	49.4	620008.1	5989066.7
10160	I	N	5.9	243.2	6	18:21:31	50.2	620000.7	5988225.2
10160	J	N	5.9	243.2	6	18:21:55	40.6	620009.7	5987649.0
10160	K	N	5.9	243.0	6	18:22:51	48.2	620003.9	5986293.0
10160	L	K	11.5	339.5	6	18:23:19	45.5	620007.6	5985554.7
10160	M	K	22.9	478.0	6	18:24:25	57.7	620007.9	5983996.9
10160	N	K	32.5	570.4	6	18:24:49	47.2	619998.1	5983395.7
10160	O	K	25.3	502.8	6	18:25:54	31.4	620006.3	5981621.9
10160	P	K	40.8	639.1	6	18:26:14	47.3	619994.2	5981030.3
10170	A	K	38.9	623.4	6	18:28:22	49.7	620210.1	5980705.8
10170	B	K	24.0	489.6	6	18:29:07	68.6	620205.0	5981969.6
10170	C	K	19.9	445.8	6	18:29:23	52.4	620200.5	5982436.0
10170	D	K	34.0	583.3	6	18:29:54	46.0	620197.7	5983402.5
10170	E	K	19.1	436.5	6	18:31:06	41.7	620200.2	5985543.6
10170	F	K	7.4	271.2	6	18:31:43	45.1	620203.9	5986666.3
10170	G	N	8.9	297.5	6	18:32:19	58.7	620194.3	5987807.7
10170	H	N	15.8	396.8	6	18:33:03	46.4	620198.2	5989169.8
10170	I	K	14.8	384.7	6	18:33:33	49.8	620208.2	5990202.6
10170	J	K	16.6	406.9	6	18:34:03	47.3	620199.7	5991202.6
10170	K	K	10.8	328.4	6	18:34:07	47.5	620193.1	5991314.0
10170	L	K	35.7	597.4	6	18:34:41	65.0	620215.2	5992339.4
10170	M	K	36.8	606.3	6	18:35:17	40.2	620198.1	5993453.3
10170	N	K	60.9	780.4	6	18:35:40	51.3	620212.3	5994245.2
10170	O	K	42.8	654.6	6	18:36:04	58.8	620201.9	5995046.8
10170	P	K	41.2	642.0	6	18:36:31	69.7	620186.2	5995967.2
10170	Q	K	45.0	670.5	6	18:36:46	75.9	620196.1	5996452.3
10180	A	K	42.2	649.2	6	18:38:51	48.9	620399.0	5995553.0
10180	B	K	52.7	726.1	6	18:39:34	37.2	620402.4	5994434.3
10180	C	K	37.9	615.4	6	18:40:05	37.5	620403.3	5993633.7
10180	D	K	33.9	582.2	6	18:40:29	40.5	620400.8	5993001.4



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10180	E	K	35.8	598.3	6	18:41:02	51.3	620400.7	5992140.1
10180	F	K	11.5	338.4	6	18:41:46	47.3	620400.9	5991136.0
10180	G	K	11.6	339.9	6	18:42:01	51.0	620409.9	5990779.8
10180	H	K	14.3	378.6	6	18:42:32	44.3	620405.6	5990049.7
10180	I	K	9.4	305.8	6	18:42:51	57.7	620405.1	5989579.9
10180	J	K	3.9	196.1	6	18:43:12	49.1	620402.6	5989106.6
10180	K	K	17.2	415.1	6	18:44:08	40.0	620403.8	5987773.3
10180	L	K	25.5	504.6	6	18:45:42	39.7	620402.3	5985582.9
10180	M	K	25.8	507.7	6	18:45:58	44.6	620399.5	5985150.1
10180	N	K	38.7	621.7	6	18:46:41	56.2	620403.9	5983996.1
10180	O	K	43.3	658.2	6	18:47:01	53.4	620394.7	5983429.9
10180	P	K	25.3	503.3	6	18:47:56	49.4	620410.4	5981831.9
10180	Q	K	41.5	643.9	6	18:48:38	49.9	620401.9	5980685.3
10180	A	K	39.2	625.8	6	18:51:28	50.1	620403.5	5979944.0
10190	A	K	41.4	643.7	7	20:46:40	45.2	620605.1	5979592.4
10190	B	K	30.4	550.9	7	20:46:52	45.3	620602.8	5979921.4
10190	C	K	39.9	632.0	7	20:47:16	54.0	620597.5	5980668.3
10190	D	K	42.8	654.4	7	20:47:29	55.8	620606.8	5981098.9
10190	E	K	47.4	688.6	7	20:47:47	51.2	620605.3	5981628.7
10190	F	K	15.3	390.5	7	20:48:15	48.8	620592.6	5982434.9
10190	G	K	44.4	666.6	7	20:48:53	50.4	620591.5	5983588.4
10190	H	K	34.7	589.0	7	20:49:10	51.6	620593.9	5984122.9
10190	I	K	19.5	441.0	7	20:49:21	44.5	620600.4	5984448.7
10190	J	K	40.9	639.9	7	20:49:53	49.5	620597.5	5985441.6
10190	K	K	36.8	606.3	7	20:50:15	51.7	620606.7	5986046.4
10190	L	K	30.5	552.5	7	20:51:06	48.2	620602.7	5987644.1
10190	M	K	4.6	213.2	7	20:51:56	49.2	620593.5	5989210.0
10190	N	K	10.5	323.3	7	20:52:20	49.7	620597.5	5989704.1
10190	O	K	13.8	372.0	7	20:52:35	36.0	620599.2	5990141.9
10190	P	K	19.6	442.5	7	20:52:59	54.1	620611.0	5990928.7
10190	Q	K	32.9	573.9	7	20:53:35	66.9	620599.5	5992127.9
10190	R	K	41.9	647.0	7	20:53:54	60.1	620603.2	5992681.8
10190	S	K	67.7	822.6	7	20:54:42	44.9	620594.2	5994137.0
10190	T	K	52.3	723.2	7	20:55:04	36.3	620599.8	5994901.5
10190	U	K	42.2	649.9	7	20:55:31	66.2	620605.0	5995817.0
10200	A	K	19.6	443.0	7	20:57:18	41.4	620801.5	5995887.4
10200	B	K	32.3	568.5	7	20:57:51	36.3	620799.3	5995014.2
10200	C	K	32.8	572.4	7	20:58:04	32.7	620795.8	5994668.8
10200	D	K	32.3	568.2	7	20:58:24	47.6	620800.8	5994107.2
10200	E	K	30.1	548.8	7	20:58:48	42.3	620800.8	5993435.1
10200	F	K	40.0	632.2	7	20:59:20	53.7	620796.7	5992584.6
10200	G	K	38.1	616.9	7	20:59:40	49.7	620800.2	5992052.1
10200	H	K	9.8	313.1	7	21:00:27	42.5	620795.9	5991105.4
10200	I	K	9.7	311.9	7	21:01:15	47.5	620803.6	5989907.8
10200	J	K	11.9	345.0	7	21:01:26	57.2	620800.4	5989629.5



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10200	K	K	14.5	380.2	7	21:01:37	56.7	620797.4	5989343.6
10200	L	K	23.7	486.4	7	21:02:43	49.0	620796.3	5987662.6
10200	M	K	25.1	500.8	7	21:02:57	41.5	620807.7	5987300.0
10200	N	K	22.0	469.3	7	21:03:46	48.2	620802.7	5986018.4
10200	O	K	35.4	594.7	7	21:04:01	49.0	620797.2	5985596.5
10200	P	K	37.9	615.9	7	21:04:20	56.5	620801.5	5985062.9
10200	Q	K	39.3	626.8	7	21:04:38	54.5	620795.4	5984546.5
10200	R	K	34.2	584.7	7	21:05:17	37.3	620807.6	5983398.4
10200	S	K	14.5	381.3	7	21:05:49	49.4	620800.9	5982462.8
10200	T	K	18.2	427.0	7	21:06:09	40.0	620801.4	5981874.2
10200	U	K	35.4	595.0	7	21:06:46	37.2	620800.3	5980723.8
10200	V	K	20.9	457.2	7	21:07:12	38.4	620803.8	5979932.8
10200	W	K	26.6	515.2	7	21:07:32	61.6	620803.6	5979337.7
10210	A	K	22.0	469.0	9	16:44:39	55.2	621005.5	5995377.4
10210	B	K	26.1	511.2	9	16:45:25	47.3	620999.9	5994210.5
10210	C	K	32.9	574.0	9	16:45:51	47.5	621004.4	5993540.4
10210	D	K	46.7	683.4	9	16:46:52	56.2	620997.4	5991967.3
10210	E	K	12.9	359.6	9	16:48:20	55.0	621003.5	5990022.7
10210	F	K	18.6	431.8	9	16:48:36	48.3	620998.5	5989655.4
10210	G	K	23.6	485.5	9	16:49:18	59.4	621002.0	5988678.5
10210	H	K	31.1	558.0	9	16:49:54	45.1	621001.7	5987851.0
10210	I	K	22.9	478.0	9	16:50:30	53.1	621001.8	5987051.6
10210	J	K	20.1	448.3	9	16:50:50	50.1	620999.2	5986557.0
10210	K	K	38.1	617.5	9	16:51:27	46.3	621001.4	5985633.2
10210	L	K	41.1	641.2	9	16:51:47	61.8	621003.2	5985106.4
10210	M	K	41.7	645.5	9	16:52:02	50.3	621001.9	5984746.2
10210	N	K	27.8	527.5	9	16:52:39	47.4	621005.3	5983790.2
10210	O	K	22.3	471.8	9	16:52:56	42.5	621000.2	5983333.0
10210	P	K	9.0	299.4	9	16:53:28	47.6	621001.6	5982445.6
10210	Q	K	15.9	399.0	9	16:53:47	48.7	621004.7	5981917.0
10210	R	K	20.3	450.3	9	16:54:15	46.5	621001.2	5981109.1
10210	S	K	30.9	555.5	9	16:54:28	55.8	620999.9	5980720.4
10210	T	K	19.7	443.6	9	16:54:49	48.3	620999.0	5980122.4
10210	U	K	20.5	452.2	9	16:55:17	55.5	621000.5	5979326.0
10220	A	K	24.4	493.4	9	16:56:43	49.8	621195.8	5979277.3
10220	B	N	25.5	504.9	9	16:57:01	48.0	621199.1	5979829.7
10220	C	K	27.3	522.3	9	16:57:08	37.9	621202.3	5980042.6
10220	D	K	12.5	352.9	9	16:58:27	45.6	621199.3	5982397.3
10220	E	K	22.0	469.2	9	16:58:48	51.7	621196.4	5983018.1
10220	F	K	38.7	622.2	9	16:59:18	40.2	621192.3	5983950.7
10220	G	K	47.3	687.8	9	16:59:45	54.2	621204.5	5984754.9
10220	H	K	41.3	642.9	9	17:01:32	55.1	621204.8	5987952.6
10220	I	K	25.2	501.5	9	17:01:51	59.6	621198.6	5988529.6
10220	J	N	17.7	420.5	9	17:02:52	45.8	621208.1	5990365.8
10220	K	K	46.7	683.6	9	17:03:45	68.5	621201.4	5991796.7



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10220	L	K	35.6	596.3	9	17:04:12	39.4	621205.7	5992532.9
10220	M	K	26.6	516.1	9	17:04:45	42.3	621204.3	5993486.1
10220	N	K	23.2	481.5	9	17:05:07	46.3	621193.4	5994171.0
10230	A	K	8.1	284.2	9	17:07:24	64.8	621397.8	5996419.9
10230	B	K	9.3	304.1	9	17:08:08	44.6	621398.1	5995237.3
10230	C	K	15.1	389.2	9	17:08:44	40.2	621395.1	5994279.0
10230	D	K	29.2	540.2	9	17:09:00	50.3	621397.4	5993836.7
10230	E	K	36.2	601.9	9	17:09:11	37.1	621394.3	5993524.8
10230	F	K	36.2	601.7	9	17:09:38	45.4	621400.8	5992807.3
10230	G	K	39.7	630.3	9	17:09:56	44.0	621396.5	5992291.7
10230	H	K	45.7	675.9	9	17:10:10	45.3	621397.5	5991939.5
10230	I	K	42.6	653.0	9	17:10:25	50.7	621403.7	5991537.7
10230	J	K	39.1	625.6	9	17:11:36	53.6	621391.8	5989639.5
10230	K	K	38.0	616.8	9	17:12:13	44.5	621393.6	5988637.4
10230	L	K	38.6	621.4	9	17:14:28	54.1	621397.9	5985295.8
10230	M	K	37.8	615.1	9	17:14:47	49.2	621404.2	5984815.2
10230	N	K	28.7	535.5	9	17:15:10	37.8	621402.0	5984240.1
10230	O	K	17.0	412.3	9	17:15:59	35.5	621398.7	5982898.1
10230	P	K	10.9	330.8	9	17:16:18	51.7	621392.8	5982336.3
10230	Q	K	11.5	339.1	9	17:16:30	50.7	621403.3	5981980.7
10230	R	K	17.0	412.3	9	17:17:07	36.9	621397.5	5980903.1
10230	S	K	17.7	420.2	9	17:17:39	56.1	621399.1	5979970.4
10230	T	K	20.6	454.1	9	17:18:04	42.9	621395.4	5979279.6
10230	U	K	23.4	483.6	9	17:18:16	56.0	621405.2	5978953.5
10240	A	K	19.4	440.0	9	17:19:26	49.4	621589.7	5979064.8
10240	B	K	16.4	404.7	9	17:19:57	52.2	621594.4	5979934.1
10240	C	K	14.9	385.5	9	17:20:22	39.7	621606.5	5980624.6
10240	D	K	10.1	317.9	9	17:20:40	39.1	621600.3	5981151.6
10240	E	K	16.3	404.1	9	17:21:11	50.2	621605.0	5982119.6
10240	F	K	18.9	434.4	9	17:21:41	37.8	621602.7	5983035.4
10240	G	K	16.6	407.0	9	17:21:57	43.5	621598.5	5983478.8
10240	H	K	28.8	536.3	9	17:22:09	45.3	621598.5	5983816.2
10240	I	K	40.9	639.8	9	17:22:27	48.6	621603.5	5984379.7
10240	J	K	35.6	596.4	9	17:22:52	47.0	621601.6	5985128.7
10240	K	K	43.2	657.2	9	17:23:36	54.9	621605.4	5986460.9
10240	L	K	43.9	662.8	9	17:23:50	51.5	621599.2	5986886.5
10240	M	K	39.7	630.4	9	17:24:24	59.3	621605.5	5987962.8
10240	N	K	37.1	609.1	9	17:24:49	47.5	621602.2	5988728.0
10240	O	K	42.3	650.1	9	17:25:07	59.8	621601.3	5989266.5
10240	P	K	37.5	612.0	9	17:25:21	42.3	621601.1	5989682.2
10240	Q	K	40.5	636.0	9	17:26:15	58.4	621598.2	5991052.3
10240	R	K	36.5	604.2	9	17:26:48	48.1	621604.9	5992036.6
10240	S	K	34.4	586.3	9	17:27:07	37.1	621600.5	5992620.1
10240	T	K	38.8	623.2	9	17:27:30	37.4	621599.3	5993296.4
10240	U	K	35.2	592.9	9	17:27:47	47.3	621608.7	5993840.2



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10240	V	K	18.0	424.0	9	17:28:09	41.5	621594.5	5994506.7
10240	W	K	18.7	432.3	9	17:29:05	46.7	621602.9	5996203.6
10250	A	K	30.6	553.2	9	17:35:14	39.0	621800.1	5996264.3
10250	B	K	28.5	533.8	9	17:35:26	42.3	621798.6	5995927.8
10250	C	K	41.9	647.0	9	17:36:35	47.6	621794.2	5994000.2
10250	D	K	42.1	648.9	9	17:36:56	49.0	621797.8	5993420.8
10250	E	K	42.3	650.1	9	17:37:07	36.6	621802.2	5993122.6
10250	F	K	42.3	650.3	9	17:37:24	39.2	621794.7	5992634.3
10250	G	K	42.1	649.1	9	17:38:01	49.8	621799.9	5991574.5
10250	H	K	41.6	645.2	9	17:38:30	49.1	621800.5	5990770.9
10250	I	K	39.1	625.0	9	17:38:54	37.4	621798.1	5990147.4
10250	J	K	37.6	612.9	9	17:39:05	45.8	621789.2	5989827.9
10250	K	K	51.3	716.4	9	17:39:28	55.3	621796.7	5989200.3
10250	L	K	42.8	654.5	9	17:39:44	38.0	621803.2	5988758.7
10250	M	K	43.9	662.7	9	17:40:39	44.1	621799.8	5987258.7
10250	N	K	41.4	643.7	9	17:41:42	47.9	621793.3	5985531.9
10250	O	K	39.2	625.8	9	17:41:49	41.0	621800.6	5985332.4
10250	P	K	42.8	654.6	9	17:42:05	49.9	621811.8	5984879.3
10250	Q	K	28.2	530.9	9	17:43:16	38.5	621798.5	5982859.5
10250	R	K	31.1	558.0	9	17:44:15	34.7	621802.6	5981107.0
10250	S	K	13.0	360.2	9	17:44:35	43.0	621799.1	5980506.2
10250	T	K	22.3	472.1	9	17:45:13	46.4	621794.5	5979403.9
10260	A	K	26.5	514.8	9	17:46:38	55.6	622001.2	5979021.9
10260	B	K	18.3	427.9	9	17:46:53	40.5	622005.4	5979377.7
10260	C	K	9.4	306.0	9	17:47:19	55.9	622005.9	5980071.6
10260	D	K	13.6	368.8	9	17:47:42	36.5	621999.1	5980733.1
10260	E	K	30.2	549.7	9	17:48:46	42.4	621996.1	5982697.5
10260	F	K	31.9	564.4	9	17:48:59	39.9	621998.1	5983111.2
10260	G	K	24.3	492.7	9	17:49:20	49.0	622006.0	5983645.5
10260	H	K	38.4	619.9	9	17:50:34	38.6	622001.6	5985840.9
10260	I	K	34.3	585.6	9	17:50:52	50.6	622003.7	5986415.9
10260	J	K	44.0	663.4	9	17:51:21	58.9	622001.4	5987255.3
10260	K	K	34.2	584.5	9	17:52:21	48.2	622002.6	5989051.9
10260	L	K	47.5	689.0	9	17:52:36	55.0	621994.6	5989485.9
10260	M	K	37.0	608.2	9	17:52:53	38.8	622004.7	5989998.5
10260	N	K	42.0	647.8	9	17:53:13	59.4	621998.6	5990607.5
10260	O	K	39.9	631.6	9	17:53:34	59.1	622003.8	5991276.6
10260	P	K	46.8	683.8	9	17:54:02	45.7	621999.7	5992161.4
10260	Q	K	46.1	679.1	9	17:54:17	35.3	621999.5	5992611.0
10260	R	K	49.0	699.9	9	17:54:30	47.8	622000.6	5993002.6
10260	S	K	38.7	622.2	9	17:54:58	41.6	622002.6	5993952.4
10260	T	K	37.6	613.4	9	17:56:03	39.3	621990.0	5996022.1
10270	A	K	44.4	666.4	9	17:57:15	45.2	622203.9	5996398.6
10270	B	K	48.1	693.7	9	17:57:28	45.1	622196.7	5996051.5
10270	C	K	20.4	452.1	9	17:57:56	57.0	622197.5	5995300.7



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10270	D	K	22.3	472.5	9	17:58:20	40.1	622191.0	5994701.9
10270	E	K	37.3	611.1	9	17:58:50	43.5	622196.8	5993896.2
10270	F	K	39.4	627.5	9	17:59:24	33.2	622190.6	5992980.7
10270	G	K	43.4	658.5	9	18:00:35	44.8	622196.0	5991070.5
10270	H	K	39.9	631.4	9	18:00:52	52.5	622198.1	5990584.4
10270	I	K	40.4	636.0	9	18:01:17	50.1	622197.6	5989865.1
10270	J	K	36.6	604.8	9	18:02:08	52.1	622203.7	5988358.3
10270	K	K	39.4	627.5	9	18:02:17	49.3	622201.9	5988093.3
10270	L	N	45.5	674.4	9	18:02:26	54.4	622200.4	5987808.4
10270	M	K	45.5	674.4	9	18:02:31	50.4	622203.7	5987660.2
10270	N	K	38.8	622.8	9	18:02:56	44.0	622195.2	5987058.8
10270	O	K	40.0	632.8	9	18:04:13	41.1	622203.1	5984876.1
10270	P	K	22.8	477.0	9	18:04:56	58.1	622204.8	5983738.4
10270	Q	K	30.0	548.0	9	18:05:34	51.4	622196.1	5982656.9
10270	R	K	8.3	288.4	9	18:07:04	57.4	622197.9	5979974.8
10270	S	K	13.1	361.5	9	18:07:27	46.2	622192.9	5979319.6
10280	A	K	16.9	411.0	9	18:08:42	51.9	622408.1	5979044.8
10280	B	K	10.7	327.8	9	18:08:54	40.7	622396.6	5979383.2
10280	C	K	33.8	581.3	9	18:10:11	61.9	622410.9	5981698.6
10280	D	K	29.4	542.5	9	18:11:55	49.8	622404.8	5984867.0
10280	E	K	36.9	607.2	9	18:12:23	49.9	622404.7	5985760.0
10280	F	K	21.9	468.2	9	18:13:05	51.8	622398.6	5987068.1
10280	G	K	46.9	684.9	9	18:13:27	59.2	622391.3	5987773.4
10280	H	K	48.9	699.0	9	18:13:58	48.5	622404.1	5988743.7
10280	I	K	38.8	623.1	9	18:14:23	46.1	622402.2	5989518.3
10280	J	K	32.1	566.2	9	18:14:48	47.3	622391.3	5990292.1
10280	K	K	35.1	592.5	9	18:14:57	40.1	622406.3	5990579.2
10280	L	K	52.5	724.4	9	18:15:23	54.8	622400.1	5991394.4
10280	M	K	51.4	717.0	9	18:15:40	57.7	622406.5	5991927.4
10280	N	K	51.6	718.3	9	18:16:09	44.7	622397.4	5992808.3
10280	O	K	36.7	605.7	9	18:16:42	49.9	622400.3	5993879.5
10280	P	K	16.2	403.0	9	18:17:06	35.9	622397.5	5994672.2
10280	Q	K	34.2	584.5	9	18:17:23	52.9	622406.5	5995216.1
10280	R	K	35.8	598.5	9	18:17:42	56.5	622389.2	5995827.4
10280	S	K	45.7	675.9	9	18:18:01	42.6	622401.7	5996430.5
10290	A	K	36.9	607.2	10	19:24:26	46.9	622601.6	5996449.9
10290	B	K	24.6	496.1	10	19:24:57	62.0	622589.7	5995647.7
10290	C	K	28.2	531.0	10	19:26:04	46.3	622595.2	5993696.6
10290	D	K	35.8	598.2	10	19:26:18	50.0	622600.2	5993281.7
10290	E	K	33.6	580.0	10	19:26:37	45.6	622595.7	5992730.3
10290	F	K	36.1	600.5	10	19:27:12	35.1	622608.1	5991665.3
10290	G	K	46.5	682.2	10	19:27:34	39.6	622596.3	5991052.5
10290	H	K	28.3	531.7	10	19:27:50	43.9	622600.0	5990593.1
10290	I	K	24.6	496.2	10	19:28:14	47.3	622599.3	5989886.6
10290	J	K	44.6	668.0	10	19:28:29	46.3	622604.1	5989417.1



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10290	K	K	30.2	549.9	10	19:28:54	44.6	622598.4	5988666.8
10290	L	K	32.5	569.7	10	19:30:03	47.6	622605.1	5986589.9
10290	M	K	37.3	610.3	10	19:30:21	45.7	622601.3	5986037.4
10290	N	K	40.9	639.6	10	19:30:48	44.9	622604.4	5985170.5
10290	O	K	45.9	677.1	10	19:31:17	59.9	622600.3	5984261.0
10290	P	K	42.1	649.1	10	19:32:03	45.1	622597.8	5982951.8
10290	Q	K	41.0	639.9	10	19:32:23	46.7	622603.1	5982381.9
10290	R	K	31.9	564.8	10	19:32:48	45.2	622596.6	5981670.1
10290	S	K	6.4	253.7	10	19:34:11	44.6	622592.7	5979311.0
10300	A	K	6.7	257.8	10	19:35:44	54.7	622812.4	5979319.8
10300	B	K	33.6	579.3	10	19:37:05	58.3	622818.1	5981623.0
10300	C	K	38.5	620.7	10	19:37:33	48.6	622805.7	5982494.5
10300	D	K	38.7	621.8	10	19:37:47	36.3	622798.4	5982949.7
10300	E	K	72.5	851.4	10	19:38:16	52.0	622804.9	5983735.7
10300	F	K	51.7	719.2	10	19:39:10	47.5	622796.5	5985410.9
10300	G	K	37.5	612.6	10	19:39:44	51.3	622810.9	5986503.6
10300	H	K	22.7	476.9	10	19:40:23	49.3	622797.7	5987730.1
10300	I	N	36.2	601.5	10	19:40:59	47.2	622810.4	5988883.0
10300	J	K	56.4	751.0	10	19:41:09	37.6	622798.0	5989232.2
10300	K	K	58.5	764.6	10	19:41:47	42.8	622801.3	5990533.8
10300	L	K	43.2	657.1	10	19:42:17	34.9	622797.1	5991393.8
10300	M	K	35.7	597.2	10	19:42:36	37.8	622797.8	5991965.7
10300	N	K	42.7	653.1	10	19:42:44	35.8	622800.8	5992214.3
10300	O	K	48.8	698.4	10	19:42:58	65.9	622799.6	5992668.1
10300	P	K	39.7	629.6	10	19:43:10	54.0	622807.2	5993057.5
10300	Q	K	41.0	639.9	10	19:43:21	54.0	622795.2	5993407.2
10300	R	K	44.4	666.1	10	19:43:34	52.5	622794.9	5993838.7
10300	S	K	36.6	604.7	10	19:44:03	47.9	622806.0	5994716.6
10300	T	K	38.4	619.7	10	19:44:46	52.8	622799.1	5996132.4
10310	A	K	42.0	648.3	10	19:45:55	57.2	622990.0	5996474.5
10310	B	K	38.4	619.6	10	19:46:16	49.9	623003.7	5995904.1
10310	C	K	37.1	609.3	10	19:46:48	43.6	622993.1	5994977.6
10310	D	K	42.5	651.8	10	19:47:31	50.1	622993.8	5993700.6
10310	E	K	54.4	737.4	10	19:48:07	63.2	622993.3	5992641.4
10310	F	K	65.0	806.0	10	19:48:23	54.9	622996.1	5992161.9
10310	G	K	69.6	834.4	10	19:48:42	39.4	623000.6	5991588.3
10310	H	K	59.7	772.3	10	19:49:00	49.9	623003.1	5991071.9
10310	I	K	50.2	708.3	10	19:49:33	41.7	622989.4	5990375.4
10310	J	K	51.1	714.5	10	19:50:05	44.4	623005.3	5989423.6
10310	K	K	25.6	505.6	10	19:51:32	46.6	623001.5	5986834.6
10310	L	K	22.4	473.7	10	19:51:44	49.2	622999.7	5986502.9
10310	M	K	30.4	551.1	10	19:52:11	52.6	623009.5	5985690.5
10310	N	K	37.2	609.6	10	19:52:28	48.4	622991.5	5985186.4
10310	O	K	43.6	660.4	10	19:52:59	43.5	622989.2	5984405.6
10310	P	K	96.4	981.9	10	19:53:31	42.1	622995.4	5983553.2



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10310	Q	K	40.2	634.3	10	19:53:55	40.6	622994.4	5982890.1
10310	R	K	23.2	481.2	10	19:54:29	44.4	623000.3	5981876.6
10310	S	K	29.9	546.4	10	19:54:50	49.3	622994.4	5981256.6
10320	A	K	23.9	489.2	10	20:04:56	53.7	623199.8	5981930.4
10320	B	K	38.9	623.5	10	20:05:31	39.4	623195.5	5983078.2
10320	C	K	37.7	613.9	10	20:05:49	60.1	623199.7	5983683.2
10320	D	K	33.0	574.5	10	20:06:22	61.1	623196.0	5984755.5
10320	E	K	29.0	538.9	10	20:06:51	50.1	623204.9	5985697.2
10320	F	K	11.0	332.1	10	20:07:32	51.7	623196.2	5987005.9
10320	G	K	8.8	296.4	10	20:07:50	60.1	623199.6	5987545.3
10320	H	K	3.7	192.8	10	20:08:05	57.7	623201.6	5988027.1
10320	I	K	30.0	547.2	10	20:08:44	34.6	623200.2	5989246.0
10320	J	K	35.3	594.0	10	20:09:00	50.1	623193.9	5989722.7
10320	K	K	40.5	636.1	10	20:09:18	40.5	623199.3	5990296.8
10320	L	K	30.0	547.5	10	20:09:56	41.3	623193.8	5991334.9
10320	M	K	33.8	581.4	10	20:10:08	36.8	623197.3	5991679.5
10320	N	K	42.8	654.5	10	20:10:24	59.2	623195.3	5992150.4
10320	O	K	34.3	585.3	10	20:11:02	36.5	623196.1	5993369.5
10320	P	K	33.6	579.7	10	20:11:24	37.1	623202.7	5994089.4
10320	Q	K	35.3	594.1	10	20:11:39	36.6	623203.0	5994621.5
10320	R	K	35.3	594.0	10	20:11:47	37.5	623194.1	5994887.1
10320	S	K	36.6	604.9	10	20:12:19	57.2	623197.1	5995938.2
10320	T	K	30.9	555.4	10	20:12:34	49.3	623194.3	5996406.9
10330	A	K	41.0	639.9	10	20:13:53	46.8	623389.6	5995698.3
10330	B	K	39.7	629.8	10	20:14:06	36.6	623393.3	5995343.0
10330	C	K	39.4	627.5	10	20:14:21	36.6	623401.4	5994921.7
10330	D	K	37.5	612.6	10	20:14:30	34.1	623395.2	5994628.0
10330	E	K	40.0	632.7	10	20:14:45	38.1	623396.7	5994198.6
10330	F	K	37.9	615.5	10	20:15:03	47.3	623399.4	5993676.0
10330	G	K	27.9	528.0	10	20:15:15	47.3	623397.5	5993274.2
10330	H	K	17.4	417.6	10	20:16:21	45.2	623388.0	5991307.0
10330	I	K	23.7	487.1	10	20:16:29	45.3	623398.2	5991039.7
10330	J	K	21.8	466.5	10	20:16:43	50.1	623406.8	5990718.4
10330	K	K	25.6	506.2	10	20:16:55	62.8	623399.2	5990417.2
10330	L	K	13.7	369.5	10	20:17:32	59.2	623401.3	5989305.1
10330	M	K	4.7	217.2	10	20:18:43	59.3	623408.3	5987156.8
10330	N	K	26.3	512.4	10	20:19:34	54.3	623397.2	5985697.6
10330	O	K	32.0	565.6	10	20:20:45	44.8	623397.3	5983677.3
10330	P	K	36.3	602.4	10	20:21:03	37.3	623398.0	5983159.9
10330	Q	K	13.0	361.0	10	20:22:18	50.0	623404.1	5981004.7
10330	R	K	12.8	357.0	10	20:23:25	54.0	623395.6	5978928.4
10340	A	K	11.8	344.0	10	20:28:55	54.7	623594.3	5980323.8
10340	B	K	15.2	389.7	10	20:29:15	44.9	623601.5	5980953.4
10340	C	K	12.8	357.7	10	20:29:49	47.0	623597.4	5982028.7
10340	D	K	25.7	506.8	10	20:30:41	50.8	623600.4	5983725.3



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10340	E	K	20.8	456.0	10	20:31:45	46.0	623596.2	5985727.8
10340	F	K	10.7	327.7	10	20:31:52	40.1	623598.4	5985964.8
10340	G	K	5.5	233.6	10	20:32:17	58.9	623597.5	5986756.2
10340	H	K	3.8	193.9	10	20:32:37	53.0	623599.5	5987385.6
10340	I	K	6.9	262.8	10	20:33:16	50.6	623600.8	5988620.4
10340	J	K	5.8	241.7	10	20:34:02	44.4	623604.8	5990084.5
10340	K	K	18.5	429.7	10	20:34:47	57.5	623588.2	5991188.9
10340	L	K	14.9	386.3	10	20:35:05	48.2	623587.0	5991682.6
10340	M	K	26.5	514.5	10	20:35:20	51.9	623600.4	5992127.4
10340	N	K	34.5	587.6	10	20:35:32	58.7	623600.4	5992495.7
10340	O	K	17.6	419.5	10	20:36:06	34.8	623601.3	5993592.2
10340	P	K	41.0	640.1	10	20:36:33	39.0	623603.7	5994424.2
10340	Q	K	39.5	628.5	10	20:36:52	36.6	623598.9	5995047.7
10340	R	K	32.4	568.9	10	20:37:26	47.5	623605.3	5996154.3
10350	A	K	35.0	591.6	10	20:38:47	46.4	623807.4	5995848.5
10350	B	K	33.5	578.7	10	20:38:56	44.2	623799.5	5995601.9
10350	C	K	59.1	768.6	10	20:39:23	44.5	623796.0	5994775.0
10350	D	K	33.1	574.9	10	20:39:32	36.2	623795.3	5994489.9
10350	E	K	25.0	500.0	10	20:40:39	63.0	623793.6	5992471.2
10350	F	K	40.9	639.1	10	20:41:01	63.2	623795.0	5991910.8
10350	G	K	8.2	286.8	10	20:44:33	57.0	623797.4	5985871.9
10350	H	K	12.1	348.0	10	20:44:45	41.6	623799.2	5985492.9
10350	I	K	12.1	348.3	10	20:45:25	48.7	623794.6	5984338.5
10350	J	K	27.0	519.2	10	20:45:54	54.0	623808.7	5983512.2
10350	K	K	16.9	410.7	10	20:47:02	46.3	623808.0	5981713.2
10350	L	K	16.7	408.4	10	20:47:35	56.3	623789.2	5980755.9
10360	A	K	10.3	320.1	10	20:50:19	49.6	623998.4	5980601.6
10360	B	K	19.8	444.9	10	20:50:55	55.4	624008.7	5981609.6
10360	C	K	27.7	526.0	10	20:51:54	55.5	624002.7	5983435.9
10360	D	K	32.0	565.6	10	20:52:11	56.0	623994.7	5983945.6
10360	E	K	18.6	431.1	10	20:52:24	43.8	623994.2	5984350.3
10360	F	K	14.8	385.0	10	20:52:46	34.3	624013.0	5985054.6
10360	G	K	7.7	277.3	10	20:53:09	49.6	623998.4	5985762.5
10360	H	K	5.3	230.0	10	20:54:29	43.4	624005.8	5988302.7
10360	I	N	3.8	195.1	10	20:55:31	53.5	624003.3	5990157.2
10360	J	K	21.2	460.3	10	20:56:26	59.5	624001.9	5991920.5
10360	K	K	23.0	479.7	10	20:56:42	54.8	624000.7	5992465.0
10360	L	K	7.7	278.1	10	20:57:00	52.7	623996.7	5993009.7
10360	M	K	10.1	318.0	10	20:57:08	45.7	623996.2	5993276.4
10360	N	K	38.9	623.5	10	20:57:33	55.2	624006.1	5994066.2
10360	O	K	31.2	558.1	10	20:57:59	43.9	624007.8	5994860.4
10360	P	K	26.8	518.0	10	20:58:31	44.9	624001.8	5995903.3
10370	A	K	21.9	467.6	11	21:46:05	38.9	624202.6	5996005.3
10370	B	K	18.9	434.8	11	21:46:27	47.1	624206.1	5995346.8
10370	C	K	27.8	526.8	11	21:47:04	62.4	624198.4	5994285.7



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10370	D	K	25.6	506.2	11	21:47:26	50.1	624201.0	5993622.1
10370	E	K	22.6	474.9	11	21:48:08	45.4	624199.6	5992371.4
10370	F	K	17.1	412.9	11	21:48:31	47.1	624200.7	5991782.0
10370	G	K	14.9	386.4	11	21:48:44	40.0	624197.1	5991385.5
10370	H	K	7.5	274.6	11	21:49:29	63.1	624194.1	5990177.0
10370	I	K	6.3	250.0	11	21:50:39	34.0	624194.3	5988207.8
10370	J	K	19.3	438.8	11	21:52:09	57.3	624195.7	5985654.8
10370	K	K	17.9	423.2	11	21:52:16	43.2	624197.3	5985430.5
10370	L	K	23.0	479.0	11	21:52:52	51.2	624204.2	5984404.0
10370	M	K	27.1	520.6	11	21:53:10	53.8	624201.9	5983898.8
10370	N	K	20.7	454.5	11	21:53:20	46.3	624199.6	5983596.4
10370	O	K	27.2	521.8	11	21:53:35	47.3	624196.9	5983161.9
10370	P	K	17.0	412.6	11	21:54:22	46.5	624194.6	5981821.9
10370	Q	K	13.9	373.1	11	21:55:12	44.2	624202.6	5980495.5
10380	A	K	7.6	276.4	11	21:58:15	54.3	624397.0	5980623.4
10380	B	N	11.5	338.4	11	21:59:20	34.7	624402.4	5982585.5
10380	C	K	24.8	497.7	11	21:59:34	36.7	624397.8	5983030.0
10380	D	K	17.7	420.6	11	22:00:04	47.2	624404.0	5983849.7
10380	E	K	21.4	462.8	11	22:00:21	48.9	624400.9	5984306.2
10380	F	K	11.2	334.1	11	22:00:56	54.2	624404.3	5985372.7
10380	G	K	3.9	196.2	11	22:02:29	47.8	624398.8	5988187.8
10380	H	K	18.1	425.3	11	22:03:27	54.1	624396.7	5989987.4
10380	I	K	12.4	352.3	11	22:03:53	39.3	624401.1	5990803.3
10380	J	K	17.1	413.5	11	22:04:28	40.8	624395.1	5991885.3
10380	K	K	18.7	432.2	11	22:04:39	51.9	624398.9	5992239.2
10380	L	K	26.7	517.0	11	22:05:26	45.1	624399.0	5993709.9
10380	M	K	28.2	531.0	11	22:05:40	55.7	624398.0	5994124.2
10380	N	K	28.7	535.7	11	22:06:16	48.5	624396.2	5995227.7
10380	O	K	22.4	473.4	11	22:06:39	61.0	624398.7	5995910.7
10390	A	K	16.5	405.9	11	22:08:29	79.4	624611.3	5995500.8
10390	B	K	19.1	436.5	11	22:08:54	41.7	624600.9	5994853.9
10390	C	K	25.4	504.1	11	22:09:54	47.7	624598.2	5993747.1
10390	D	K	41.0	640.5	11	22:10:10	56.6	624593.1	5993342.7
10390	E	K	21.2	460.2	11	22:10:53	44.7	624602.5	5992168.8
10390	F	K	24.6	496.1	11	22:11:06	40.9	624595.6	5991800.0
10390	G	K	33.4	578.3	11	22:11:54	40.3	624601.8	5990386.0
10390	H	K	25.1	501.4	11	22:12:15	45.1	624604.1	5989792.7
10390	I	K	11.8	342.8	11	22:14:22	47.2	624603.3	5986214.4
10390	J	K	16.1	401.1	11	22:14:37	46.7	624602.9	5985765.6
10390	K	K	13.2	362.9	11	22:14:56	44.8	624595.3	5985210.4
10390	L	K	17.3	416.5	11	22:15:42	29.8	624605.9	5983897.7
10390	M	K	9.1	301.8	11	22:16:33	35.5	624599.1	5982487.7
10400	A	K	22.9	478.9	11	22:20:15	46.1	624795.3	5980073.0
10400	B	K	9.1	301.2	11	22:20:22	40.8	624793.4	5980288.1
10400	C	K	23.6	486.2	11	22:21:32	49.7	624807.1	5982455.4



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10400	D	K	32.0	565.8	11	22:21:59	50.6	624800.6	5983299.2
10400	E	K	28.6	534.5	11	22:22:19	49.0	624803.6	5983922.9
10400	F	K	41.8	646.3	11	22:23:21	42.5	624795.7	5985812.5
10400	G	K	20.6	453.6	11	22:23:43	49.5	624797.2	5986485.4
10400	H	K	13.4	366.1	11	22:25:02	44.2	624792.7	5988848.0
10400	I	K	11.5	339.3	11	22:25:15	37.6	624798.6	5989259.0
10400	J	K	30.0	548.0	11	22:25:29	41.3	624790.9	5989673.8
10400	K	K	30.1	548.8	11	22:25:43	39.8	624803.8	5990113.1
10400	L	K	39.0	624.4	11	22:26:06	32.2	624791.6	5990829.2
10400	M	K	20.1	448.1	11	22:26:39	57.6	624814.1	5991848.9
10400	N	K	20.3	450.6	11	22:27:08	36.1	624799.0	5992738.8
10400	O	K	40.4	635.8	11	22:27:20	48.5	624802.2	5993087.8
10400	P	K	39.9	631.9	11	22:27:38	46.4	624797.6	5993626.5
10400	Q	K	36.2	601.6	11	22:27:43	46.1	624793.8	5993778.3
10400	R	K	34.4	586.6	11	22:28:31	54.8	624800.0	5994865.0
10400	S	K	19.3	438.8	11	22:28:42	45.2	624796.0	5995130.6
10400	T	K	7.6	275.4	11	22:29:00	60.5	624799.1	5995658.5
10410	A	K	4.8	219.3	11	22:36:01	49.3	624996.6	5995649.4
10410	B	K	5.0	222.9	11	22:36:13	41.0	624999.0	5995356.0
10410	C	K	17.5	417.9	11	22:36:30	36.2	624998.1	5994940.5
10410	D	K	39.9	631.9	11	22:37:37	51.4	624997.4	5993386.3
10410	E	K	23.5	485.1	11	22:37:59	49.0	625001.5	5992768.2
10410	F	K	24.0	489.7	11	22:38:40	52.9	624996.9	5991576.0
10410	G	K	22.4	473.3	11	22:39:32	30.7	624990.9	5990132.4
10410	H	K	25.4	503.5	11	22:39:50	55.1	624997.9	5989663.1
10410	I	K	30.0	547.5	11	22:40:02	48.3	624997.8	5989313.4
10410	J	K	21.5	463.9	11	22:40:13	50.3	625001.0	5988987.8
10410	K	K	14.2	376.6	11	22:41:08	51.3	624996.1	5987377.2
10410	L	K	26.0	509.8	11	22:41:39	47.5	624998.1	5986466.0
10410	M	K	26.4	513.8	11	22:41:57	52.7	625002.7	5985953.6
10410	N	K	28.0	528.8	11	22:42:21	56.5	625001.7	5985300.3
10410	O	K	15.6	394.7	11	22:44:50	49.6	624979.0	5980976.6
10420	A	K	17.5	418.8	11	22:48:13	55.4	625193.2	5982061.7
10420	B	K	16.6	406.9	11	22:48:34	46.4	625200.2	5982643.1
10420	C	K	28.4	532.6	11	22:48:51	49.7	625195.8	5983178.3
10420	D	K	26.6	515.5	11	22:49:17	50.1	625203.1	5983961.9
10420	E	K	30.8	554.9	11	22:49:42	50.9	625195.9	5984749.4
10420	F	K	28.5	534.0	11	22:49:58	48.4	625202.5	5985236.0
10420	G	K	34.1	583.6	11	22:50:16	53.1	625202.6	5985782.4
10420	H	K	35.5	595.7	11	22:50:25	51.5	625197.8	5986074.6
10420	I	K	31.6	562.2	11	22:50:49	57.0	625193.0	5986756.4
10420	J	K	39.0	624.1	11	22:51:11	54.7	625197.2	5987401.9
10420	K	K	13.5	367.9	11	22:51:28	49.5	625198.6	5987905.1
10420	L	K	23.6	485.6	11	22:51:53	51.6	625197.9	5988681.8
10420	M	K	37.3	610.6	11	22:52:01	49.9	625195.1	5988937.4

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10420	N	K	28.0	529.0	11	22:52:17	39.3	625203.0	5989459.6
10420	O	K	22.0	468.5	11	22:53:20	51.7	625202.4	5991431.3
10420	P	K	22.8	477.7	11	22:53:57	40.8	625200.3	5992610.8
10420	Q	K	25.9	508.8	11	22:54:17	46.7	625200.3	5993238.0
10420	R	K	8.8	296.2	11	22:55:20	47.5	625205.0	5995154.5
10430	A	N	3.5	188.2	11	22:57:04	67.4	625403.6	5996219.1
10430	B	K	5.1	225.8	11	22:57:53	44.7	625411.3	5995102.5
10430	C	K	28.0	529.5	11	22:58:29	54.1	625401.1	5994263.6
10430	D	K	24.8	497.5	11	22:59:18	51.0	625391.4	5992860.7
10430	E	K	13.5	367.8	11	22:59:29	35.6	625392.2	5992556.7
10430	F	K	15.0	386.9	11	22:59:40	37.6	625394.0	5992244.3
10430	G	K	33.2	576.0	11	23:00:08	56.0	625398.2	5991406.8
10430	H	K	30.3	550.4	11	23:00:21	52.5	625403.2	5991047.9
10430	I	K	30.7	554.1	11	23:00:43	48.2	625392.6	5990401.4
10430	J	K	23.6	485.3	11	23:01:08	43.9	625387.1	5989681.1
10430	K	K	34.7	589.4	11	23:01:34	51.0	625385.9	5988905.3
10430	L	K	14.1	374.8	11	23:02:15	45.7	625401.1	5987735.6
10430	M	K	26.5	514.7	11	23:02:30	47.9	625396.2	5987256.3
10430	N	K	19.5	441.7	11	23:03:20	45.3	625394.7	5985843.2
10430	O	K	23.4	483.7	11	23:04:00	52.0	625392.8	5984821.1
10430	P	K	17.8	421.9	11	23:04:19	48.2	625386.5	5984292.7
10430	Q	K	15.3	390.7	11	23:04:47	45.6	625393.2	5983552.6
10430	R	K	23.0	479.1	11	23:05:09	51.7	625400.8	5982932.0
10430	S	K	14.6	382.6	11	23:05:26	59.8	625397.7	5982446.2
10440	A	K	13.7	369.8	11	23:07:04	48.4	625597.5	5982571.6
10440	B	K	20.5	452.6	11	23:07:23	48.0	625596.4	5983107.5
10440	C	K	17.6	419.2	11	23:07:41	56.1	625598.7	5983638.7
10440	D	K	24.0	489.6	11	23:08:53	56.1	625608.1	5985553.6
10440	E	K	44.0	663.4	11	23:09:17	53.5	625593.7	5986293.8
10440	F	K	19.0	436.2	11	23:10:01	45.7	625595.6	5987590.7
10440	G	K	19.6	443.2	11	23:10:32	46.3	625594.1	5988518.7
10440	H	K	37.6	613.1	11	23:10:45	54.6	625594.8	5988898.9
10440	I	K	34.3	585.8	11	23:11:23	46.5	625592.6	5989938.6
10440	J	K	21.9	467.6	11	23:11:42	50.4	625594.2	5990493.4
10440	K	K	24.3	492.5	11	23:11:54	49.9	625601.8	5990872.8
10440	L	K	25.1	501.1	11	23:12:07	36.6	625590.3	5991247.0
10440	M	K	14.9	386.5	11	23:12:47	47.8	625595.2	5992396.4
10440	N	K	23.4	483.7	11	23:13:47	49.8	625594.3	5994269.8
10440	O	K	5.9	243.5	11	23:14:12	47.1	625598.2	5995044.1
10440	P	K	1.5	124.1	11	23:14:53	55.1	625605.2	5996188.0
10441	A	K	7.9	281.0	17	17:35:56	47.1	625599.4	5976245.5
10441	B	K	5.5	234.9	17	17:36:20	47.4	625592.8	5976878.6
10450	A	K	1.3	112.4	11	23:16:15	53.3	625807.3	5996131.7
10450	B	K	5.9	243.7	11	23:16:57	43.8	625797.1	5994970.1
10450	C	K	18.1	425.1	11	23:17:08	40.7	625801.6	5994624.8



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10450	D	K	27.6	525.3	11	23:17:26	51.3	625796.0	5994150.3
10450	E	K	24.5	495.3	11	23:17:50	51.7	625798.5	5993523.6
10450	F	K	20.5	452.2	11	23:18:00	41.1	625792.7	5993227.8
10450	G	K	24.9	498.7	11	23:18:36	36.9	625803.3	5992228.9
10450	H	K	15.2	389.8	11	23:19:14	38.4	625789.6	5991125.3
10450	I	K	30.3	550.3	11	23:19:26	53.8	625795.3	5990801.9
10450	J	K	27.0	519.8	11	23:19:55	41.0	625796.7	5989963.4
10450	K	K	27.0	519.4	11	23:20:29	48.2	625791.5	5989012.1
10450	L	K	23.0	479.9	11	23:20:47	42.9	625807.1	5988500.9
10450	M	K	26.4	513.8	11	23:21:23	59.2	625785.2	5987456.3
10450	N	K	24.8	497.9	11	23:22:07	59.2	625799.1	5986170.3
10450	O	K	14.5	380.2	11	23:22:36	50.7	625800.7	5985404.5
10450	P	K	19.9	446.3	11	23:22:58	46.2	625802.8	5984875.0
10450	Q	K	7.0	265.1	11	23:23:58	50.6	625799.8	5983196.2
10450	R	K	6.4	253.1	11	23:24:24	46.4	625795.2	5982509.9
10450	S	K	2.3	151.3	11	23:24:41	42.6	625800.4	5982056.7
10451	A	K	3.3	181.7	17	17:37:44	46.8	625803.4	5977004.8
10451	B	K	17.5	418.1	17	17:38:12	48.2	625797.4	5976253.9
10451	C	K	4.5	212.4	17	17:38:21	51.2	625808.6	5976012.5
10451	D	K	0.4	62.4	17	17:39:05	52.3	625805.6	5974929.0
10460	A	K	2.0	142.1	11	23:26:04	55.7	626000.0	5982520.5
10460	B	K	2.9	169.7	11	23:26:29	68.7	626001.3	5983186.1
10460	C	K	6.1	247.6	11	23:26:48	53.6	625990.2	5983734.1
10460	D	K	20.4	451.4	11	23:28:31	70.5	625995.0	5986329.3
10460	E	K	26.8	517.8	11	23:28:49	55.9	625992.4	5986792.3
10460	F	K	15.9	398.8	11	23:29:37	50.3	626006.6	5988149.4
10460	G	K	29.7	545.3	11	23:29:47	61.3	625991.2	5988429.0
10460	H	K	37.6	613.1	11	23:29:57	50.8	625993.0	5988761.8
10460	I	K	43.0	655.7	11	23:30:11	58.9	626006.4	5989169.7
10460	J	K	24.3	492.7	11	23:30:36	40.8	625993.1	5989878.5
10460	K	K	20.6	453.7	11	23:30:48	50.2	625992.6	5990214.5
10460	L	K	23.8	487.7	11	23:31:06	52.1	625996.2	5990776.7
10460	M	K	24.0	490.1	11	23:31:11	55.3	625997.9	5990933.1
10460	N	K	20.1	447.9	11	23:31:34	39.1	625989.2	5991651.0
10460	O	K	29.5	543.3	11	23:31:54	52.7	625999.2	5992251.7
10460	P	K	23.0	480.0	11	23:32:12	43.1	625988.7	5992850.9
10460	Q	K	20.9	457.3	11	23:32:23	40.3	625980.7	5993191.0
10460	R	K	25.1	501.1	11	23:33:03	57.0	625998.9	5994091.7
10460	S	K	28.7	535.7	11	23:33:16	42.9	625984.1	5994428.8
10460	T	K	10.7	326.4	11	23:33:32	36.0	625996.9	5994870.4
10460	U	N	4.2	204.3	11	23:33:58	52.6	626000.9	5995695.9
10461	A	K	16.2	402.7	17	17:44:03	49.7	626009.2	5976364.9
10461	B	K	8.9	298.3	17	17:44:24	49.4	625998.9	5976919.0
10470	A	K	3.8	194.4	12	17:12:36	49.6	626198.8	5996065.8
10470	B	K	13.7	369.6	12	17:13:17	42.4	626199.9	5994907.7



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10470	C	K	25.5	504.5	12	17:13:47	45.4	626200.4	5994150.4
10470	D	K	26.6	515.9	12	17:14:45	39.7	626197.9	5993107.1
10470	E	K	22.4	473.4	12	17:15:15	44.9	626204.0	5992297.6
10470	F	K	27.0	519.9	12	17:15:35	53.9	626200.9	5991735.2
10470	G	K	23.6	485.3	12	17:15:43	66.4	626202.5	5991504.3
10470	H	K	28.0	529.3	12	17:16:13	50.9	626205.2	5990635.9
10470	I	K	42.6	652.8	12	17:16:42	56.1	626198.1	5989808.7
10470	J	K	46.9	684.6	12	17:16:56	58.3	626202.2	5989379.1
10470	K	K	67.2	819.7	12	17:17:28	51.8	626197.4	5988454.5
10470	L	K	76.7	876.0	12	17:17:38	48.4	626202.9	5988186.0
10470	M	K	23.9	489.0	12	17:18:18	51.7	626201.0	5986932.0
10470	N	K	14.4	380.0	12	17:18:42	54.0	626202.0	5986289.0
10470	O	K	2.0	141.8	12	17:22:29	54.3	626194.4	5982708.5
10471	A	K	19.9	445.8	17	17:45:46	48.1	626198.7	5976814.7
10471	B	K	4.9	221.2	17	17:46:12	50.8	626202.8	5976035.9
10480	A	K	6.7	258.9	13	20:40:14	44.5	626400.3	5996244.4
10480	B	K	16.2	401.9	13	20:40:52	44.7	626401.1	5995217.8
10480	C	K	29.9	546.6	13	20:41:30	59.6	626397.2	5994148.7
10480	D	K	31.6	562.0	13	20:42:40	39.1	626398.2	5992477.0
10480	E	K	20.8	456.1	13	20:43:16	56.4	626391.3	5991374.1
10480	F	K	26.1	510.6	13	20:43:43	49.0	626403.5	5990582.3
10480	G	K	20.5	452.6	13	20:44:08	54.1	626395.1	5989831.8
10480	H	K	25.7	507.0	13	20:44:33	51.6	626405.7	5989090.4
10480	I	K	47.5	688.9	13	20:44:50	65.6	626401.5	5988581.8
10480	J	K	10.1	317.8	13	20:45:40	62.0	626397.0	5987134.5
10480	K	K	8.9	298.7	13	20:46:07	50.2	626400.6	5986365.8
10480	L	K	13.6	368.3	13	20:46:55	74.8	626400.7	5985449.9
10480	M	K	9.0	299.9	13	20:47:21	51.4	626403.4	5984697.4
10481	A	K	4.8	219.9	17	17:49:30	46.4	626381.3	5976161.4
10481	B	K	17.7	421.2	17	17:49:49	42.6	626404.3	5976712.4
10490	A	K	2.0	140.3	13	20:51:04	59.5	626598.0	5983290.7
10490	B	K	13.5	367.6	13	20:51:36	55.8	626604.1	5984083.6
10490	C	K	22.8	477.2	13	20:52:04	55.2	626603.3	5984788.6
10490	D	K	10.9	329.5	13	20:52:31	56.1	626599.5	5985492.3
10490	E	K	40.0	632.3	13	20:54:33	50.6	626601.2	5988702.8
10490	F	K	28.2	530.7	13	20:54:43	39.9	626605.4	5988981.7
10490	G	K	21.1	459.5	13	20:54:59	48.1	626592.8	5989385.3
10490	H	K	20.0	447.3	13	20:55:08	42.2	626598.9	5989649.3
10490	I	K	19.6	442.5	13	20:55:23	51.0	626603.1	5990038.0
10490	J	K	24.4	494.4	13	20:55:46	52.1	626600.2	5990693.7
10490	K	K	20.9	456.9	13	20:56:11	50.4	626604.0	5991456.9
10490	L	K	23.2	482.1	13	20:56:29	47.2	626595.2	5991981.0
10490	M	K	35.5	595.4	13	20:57:28	74.3	626599.3	5993639.7
10490	N	K	19.5	441.0	13	20:57:51	53.4	626595.1	5994157.2
10490	O	K	15.2	389.8	13	20:58:29	42.9	626605.9	5995199.4



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10490	P	K	12.3	351.0	13	20:59:06	44.5	626600.7	5996280.0
10491	A	K	18.8	434.0	17	17:51:30	45.8	626604.3	5976561.3
10491	B	K	13.1	362.3	17	17:51:39	43.4	626607.8	5976301.9
10500	A	K	18.3	427.5	13	21:00:18	59.7	626797.9	5996409.9
10500	B	K	24.9	498.8	13	21:00:27	55.4	626802.1	5996181.5
10500	C	K	21.9	468.2	13	21:00:47	77.4	626789.0	5995650.8
10500	D	K	18.8	433.7	13	21:01:05	51.4	626799.5	5995137.1
10500	E	K	23.4	483.6	13	21:01:48	49.2	626792.9	5993964.8
10500	F	K	29.5	542.8	13	21:03:19	40.9	626799.1	5991624.3
10500	G	K	22.5	474.6	13	21:03:57	56.2	626798.1	5990568.3
10500	H	K	20.3	450.9	13	21:04:16	48.6	626798.2	5990029.5
10500	I	K	18.8	433.0	13	21:04:34	49.2	626799.6	5989498.1
10500	J	K	41.1	641.4	13	21:05:00	50.0	626793.6	5988821.0
10500	K	K	9.2	303.5	13	21:05:44	53.4	626794.9	5987526.5
10500	L	N	5.2	227.5	13	21:06:46	53.1	626796.9	5985842.1
10500	M	N	21.7	466.2	13	21:08:18	70.8	626811.9	5983952.2
10500	N	N	1.1	106.1	13	21:08:56	60.3	626800.1	5983020.4
10501	A	K	21.2	460.7	17	17:53:52	76.6	626795.4	5973567.4
10501	B	K	14.6	382.1	17	17:55:32	53.6	626804.4	5976276.4
10501	C	K	11.6	341.0	17	17:56:11	42.2	626791.1	5977433.5
10510	A	K	2.2	147.9	13	21:13:59	56.8	627004.0	5983081.5
10510	B	K	9.9	314.3	13	21:15:09	48.7	627014.6	5984701.3
10510	C	K	13.1	361.4	13	21:16:46	50.1	627004.5	5987216.8
10510	D	K	18.5	430.5	13	21:17:02	58.3	627001.3	5987619.5
10510	E	K	36.9	607.2	13	21:17:47	40.3	626997.4	5988817.0
10510	F	K	30.2	549.9	13	21:18:00	37.3	627004.0	5989188.1
10510	G	K	14.9	386.5	13	21:18:17	52.1	626999.0	5989644.2
10510	H	K	22.8	477.8	13	21:18:39	47.0	626996.0	5990250.3
10510	I	K	39.1	625.2	13	21:19:27	59.8	626996.8	5991244.2
10510	J	K	35.9	599.4	13	21:19:41	40.7	627001.6	5991606.2
10510	K	K	19.8	444.8	13	21:22:05	56.1	626998.7	5995083.6
10510	L	K	33.6	579.9	13	21:22:30	52.5	627006.0	5995768.4
10510	M	K	29.8	545.6	13	21:22:53	51.5	627005.5	5996371.2
10511	A	K	5.9	243.0	17	17:57:10	45.1	627001.5	5977092.9
10511	B	K	7.4	271.2	17	17:57:16	43.6	626994.3	5976934.8
10511	C	K	6.8	260.0	17	17:57:47	42.8	627009.6	5976167.0
10511	D	K	18.5	429.7	17	17:59:26	61.3	626995.9	5973448.0
10520	A	K	29.5	542.8	13	21:23:55	49.0	627201.5	5996489.7
10520	B	K	31.9	564.5	13	21:24:21	49.8	627194.2	5995786.3
10520	C	K	32.6	571.0	13	21:24:39	52.0	627200.7	5995305.8
10520	D	K	13.3	364.1	13	21:25:18	42.4	627192.1	5994161.9
10520	E	K	14.8	384.8	13	21:25:33	44.0	627197.8	5993715.2
10520	F	K	36.1	600.5	13	21:27:07	55.4	627203.0	5991613.8
10520	G	K	28.9	537.4	13	21:27:29	56.4	627192.5	5991055.7
10520	H	K	39.9	631.8	13	21:27:44	57.0	627202.8	5990684.3



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10520	I	K	31.2	558.5	13	21:28:25	48.5	627191.0	5989487.4
10520	J	K	27.7	525.9	13	21:28:50	42.5	627202.7	5988767.9
10520	K	K	32.2	567.4	13	21:29:32	47.1	627190.4	5987617.1
10520	L	K	8.9	297.6	13	21:29:50	54.4	627199.3	5987092.0
10520	M	K	7.4	271.8	13	21:31:14	44.9	627205.2	5985205.2
10520	N	K	13.1	362.6	13	21:31:29	48.3	627199.5	5984812.0
10520	O	K	0.8	86.9	13	21:32:53	55.1	627196.7	5982962.3
10521	A	K	28.9	537.3	17	18:02:24	44.7	627197.9	5976866.4
10521	B	K	11.1	332.5	17	18:02:52	42.3	627199.8	5977594.6
10521	C	K	10.1	317.0	17	18:03:01	54.6	627195.3	5977836.3
10530	A	K	0.6	77.9	13	21:42:13	50.9	627399.9	5982904.3
10530	B	K	6.4	252.3	13	21:43:28	61.3	627405.6	5984897.8
10530	C	K	21.0	457.9	13	21:45:02	52.2	627407.3	5987076.0
10530	D	K	48.2	694.4	13	21:46:01	41.9	627404.7	5988708.5
10530	E	K	30.2	549.6	13	21:46:35	63.2	627419.6	5989654.4
10530	F	K	30.0	548.1	13	21:47:06	56.2	627397.3	5990532.1
10530	G	K	50.4	709.8	13	21:47:22	54.6	627391.9	5990948.2
10530	H	K	33.4	577.9	13	21:47:49	38.6	627406.8	5991647.0
10530	I	K	17.7	420.5	13	21:49:17	46.6	627403.1	5993595.6
10530	J	K	16.1	401.5	13	21:49:35	39.6	627403.4	5994144.4
10530	K	K	34.5	587.2	13	21:50:11	44.8	627401.8	5995207.5
10530	L	K	37.9	615.4	13	21:50:28	59.2	627399.2	5995685.2
10530	M	K	54.2	736.0	13	21:50:47	63.7	627395.4	5996097.4
10530	N	K	61.3	782.8	13	21:51:02	59.4	627406.9	5996418.6
10531	A	K	16.7	408.0	17	18:03:47	46.7	627391.3	5977740.3
10531	B	K	48.2	694.1	17	18:04:20	42.3	627408.9	5976804.6
10531	C	K	42.7	653.1	17	18:04:31	46.7	627402.8	5976479.8
10540	A	K	45.2	672.6	13	21:52:01	44.2	627589.8	5996343.5
10540	B	K	38.4	620.0	13	21:52:39	38.9	627596.6	5995475.3
10540	C	K	50.5	710.8	13	21:55:01	54.4	627589.3	5991592.9
10540	D	K	55.5	745.1	13	21:55:15	45.7	627594.6	5991204.6
10540	E	K	41.5	644.0	13	21:55:41	63.8	627601.2	5990430.4
10540	F	K	38.1	617.5	13	21:56:35	46.3	627591.9	5988874.1
10540	G	K	35.7	597.7	13	21:56:57	63.9	627599.7	5988261.5
10540	H	K	31.9	564.5	13	21:57:20	69.4	627603.6	5987517.4
10540	I	K	3.2	177.6	13	21:59:11	44.0	627594.6	5984762.1
10540	J	K	0.8	90.6	13	22:00:20	49.8	627600.8	5982907.1
10541	A	K	24.8	497.9	17	18:09:27	43.8	627602.0	5976434.8
10541	B	K	51.7	718.7	17	18:09:42	41.6	627602.6	5976828.2
10541	C	K	26.6	516.1	17	18:10:11	49.9	627604.5	5977703.9
10550	A	K	5.0	223.2	13	22:07:16	49.6	627808.1	5986484.0
10550	B	K	22.2	470.8	13	22:07:49	67.9	627799.2	5987385.1
10550	C	K	36.8	606.3	13	22:08:41	39.5	627801.8	5988867.0
10550	D	K	23.6	486.1	13	22:08:57	54.6	627804.0	5989340.5
10550	E	K	19.8	445.1	13	22:09:07	43.3	627808.4	5989642.7



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10550	F	K	27.8	527.6	13	22:09:37	51.3	627808.8	5990466.4
10550	G	K	23.6	485.2	13	22:09:55	46.0	627801.8	5990989.3
10550	H	K	19.1	437.5	13	22:10:12	50.8	627790.2	5991523.4
10550	I	K	6.3	250.5	13	22:11:12	42.2	627800.7	5993213.2
10550	J	K	18.9	434.4	13	22:12:19	38.8	627808.7	5995295.2
10550	K	K	35.4	594.7	13	22:12:42	47.8	627807.0	5996011.7
10551	A	K	38.6	620.9	17	18:11:04	49.0	627796.2	5977894.0
10551	B	K	22.4	472.9	17	18:11:18	43.5	627807.7	5977527.5
10551	C	K	32.0	565.4	17	18:11:39	41.3	627792.1	5976972.4
10551	D	K	46.2	680.0	17	18:11:46	50.6	627797.6	5976762.2
10551	E	K	49.1	701.0	17	18:11:56	46.0	627801.8	5976497.8
10551	F	K	37.0	607.9	17	18:12:10	51.3	627808.3	5976094.0
10560	A	K	23.8	487.4	14	23:07:46	43.7	627983.8	5996064.2
10560	B	K	32.3	567.9	14	23:07:52	42.2	627978.9	5995917.4
10560	C	K	23.9	488.6	14	23:08:18	45.3	628001.4	5995286.5
10560	D	K	24.7	497.0	14	23:10:42	56.2	627995.6	5991537.1
10560	E	K	32.7	572.0	14	23:11:22	55.9	628000.1	5990476.8
10560	F	K	22.7	476.9	14	23:12:09	57.5	627999.7	5989165.8
10560	G	K	24.3	492.7	14	23:12:25	41.9	628003.9	5988730.0
10560	H	K	24.4	493.7	14	23:13:07	43.7	628009.1	5987500.3
10560	I	K	16.5	406.2	14	23:13:46	50.0	627995.3	5986452.7
10560	J	K	9.4	306.0	14	23:13:56	47.4	628003.0	5986141.4
10560	K	K	1.3	115.1	14	23:16:12	49.9	627997.3	5982924.6
10561	A	K	2.6	159.7	17	18:17:12	48.8	628007.3	5975709.9
10561	B	K	6.8	260.3	17	18:17:19	36.9	628005.7	5975874.8
10561	C	K	56.3	750.0	17	18:17:48	46.0	628000.8	5976645.3
10561	D	K	27.7	526.3	17	18:18:04	53.3	628005.4	5977071.6
10561	E	K	33.1	575.1	17	18:18:19	46.2	627995.0	5977496.0
10570	A	K	5.2	227.4	14	23:22:49	48.7	628203.5	5986019.5
10570	B	K	22.9	478.9	14	23:23:24	54.8	628210.3	5986974.5
10570	C	K	20.8	455.6	14	23:23:41	54.7	628201.2	5987460.3
10570	D	K	19.5	441.1	14	23:24:19	54.8	628209.9	5988574.7
10570	E	K	21.7	465.7	14	23:24:33	56.3	628193.3	5988971.5
10570	F	K	31.7	563.3	14	23:25:34	49.0	628209.9	5990515.8
10570	G	K	27.9	528.2	14	23:26:10	48.7	628202.5	5991484.7
10570	H	K	7.0	265.3	14	23:27:10	42.6	628196.5	5993040.1
10570	I	K	24.9	499.4	14	23:28:57	45.4	628199.1	5995748.7
10571	A	K	11.6	340.8	17	18:19:54	37.2	628197.5	5977649.9
10571	B	K	18.8	433.0	17	18:20:10	42.5	628201.8	5977227.9
10571	C	K	22.9	478.8	17	18:20:25	37.2	628205.7	5976886.8
10571	D	K	18.2	426.5	17	18:21:04	48.4	628198.4	5975755.0
10580	A	K	53.9	734.4	14	23:31:21	49.1	628399.2	5995689.5
10580	B	K	11.6	340.0	14	23:32:22	48.2	628396.7	5994220.0
10580	C	K	29.5	543.1	14	23:33:45	47.7	628399.3	5991986.1
10580	D	K	25.6	506.3	14	23:34:00	50.5	628396.6	5991609.0



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10580	E	K	73.0	854.5	14	23:34:23	55.0	628405.5	5990972.5
10580	F	K	50.7	712.1	14	23:34:37	51.9	628404.3	5990572.9
10580	G	K	23.4	483.5	14	23:35:45	54.8	628392.7	5988974.0
10580	H	K	20.3	450.4	14	23:36:01	47.9	628401.5	5988516.8
10580	I	K	35.0	591.3	14	23:36:40	57.9	628396.9	5987559.5
10580	J	K	6.6	256.4	14	23:37:41	44.3	628400.5	5985914.9
10581	A	K	10.5	323.4	17	18:24:58	45.6	628391.8	5975681.6
10581	B	K	20.7	454.4	17	18:25:34	39.9	628406.1	5976573.5
10581	C	K	19.3	438.8	17	18:26:00	56.6	628396.6	5977226.3
10581	D	K	9.3	305.1	17	18:26:14	50.6	628401.8	5977626.1
10590	A	K	3.1	177.3	14	23:45:58	43.1	628604.4	5985798.1
10590	B	K	27.2	521.8	14	23:47:10	50.1	628612.0	5987721.9
10590	C	K	21.9	468.3	14	23:47:44	51.0	628600.0	5988667.5
10590	D	K	26.1	510.5	14	23:47:51	62.5	628600.8	5988862.1
10590	E	K	24.9	499.0	14	23:48:56	54.9	628598.6	5990527.4
10590	F	K	24.9	499.0	14	23:49:34	40.0	628599.3	5991675.1
10590	G	K	14.6	381.8	14	23:49:47	48.9	628595.4	5992014.5
10590	H	N	42.2	649.4	14	23:51:36	45.3	628591.9	5995264.4
10590	I	K	42.2	649.4	14	23:52:01	51.6	628590.8	5995893.6
10591	A	K	1.5	123.3	18	19:50:57	52.6	628599.1	5975608.8
10591	B	K	3.1	174.8	18	19:51:00	50.5	628604.8	5975689.5
10600	A	K	9.5	307.5	12	17:28:01	57.7	628795.4	5979467.7
10600	B	K	5.3	229.0	12	17:28:11	58.2	628797.9	5979771.9
10600	C	K	6.2	248.0	12	17:32:02	40.0	628800.4	5985499.8
10600	D	K	30.0	547.3	12	17:33:14	39.1	628791.5	5987472.3
10600	E	K	31.6	562.0	12	17:33:25	48.9	628797.9	5987767.9
10600	F	K	28.6	534.9	12	17:34:05	64.0	628797.1	5988779.1
10600	G	K	28.8	536.2	12	17:34:25	54.2	628801.6	5989327.0
10600	H	N	29.5	543.4	12	17:35:46	44.7	628805.1	5991307.8
10600	I	N	10.3	320.2	12	17:36:18	50.9	628799.9	5992153.5
10600	J	K	2.3	150.8	12	17:37:24	48.7	628801.2	5994125.2
10600	K	K	12.7	356.7	12	17:38:03	43.6	628797.4	5995265.2
10600	L	K	23.1	480.5	12	17:38:26	46.5	628797.1	5995866.5
10601	A	K	2.9	169.4	18	19:52:54	47.2	628791.6	5975714.4
10610	A	K	34.5	587.4	12	17:44:54	46.4	628991.4	5995852.6
10610	B	K	3.4	184.4	12	17:46:48	55.1	628998.8	5992790.0
10610	C	K	8.4	289.3	12	17:47:55	51.0	629001.0	5990898.5
10610	D	K	26.6	516.1	12	17:49:16	56.2	629000.5	5989114.1
10610	E	K	35.8	598.3	12	17:50:00	62.9	629004.5	5988013.2
10610	F	K	37.2	609.8	12	17:50:23	50.5	628999.2	5987374.1
10610	G	K	14.4	379.1	12	17:51:28	50.7	628997.1	5985747.0
10610	H	K	7.5	273.4	12	17:51:47	42.3	629001.4	5985236.2
10610	I	N	2.5	156.5	12	17:52:22	37.8	629004.7	5984272.9
10610	A	K	5.4	232.0	12	17:58:56	46.9	629004.6	5979297.3
10610	B	K	16.1	400.8	12	17:59:21	45.1	628999.2	5978566.9



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10620	A	K	15.1	388.0	12	18:01:10	45.3	629203.5	5978450.6
10620	B	K	16.2	401.8	12	18:01:27	56.9	629198.8	5978882.9
10620	C	K	7.4	272.3	12	18:01:42	54.8	629208.2	5979295.5
10620	D	K	40.7	637.6	12	18:06:48	39.7	629199.9	5987429.3
10620	E	K	38.4	619.6	12	18:07:03	56.2	629200.4	5987758.8
10620	F	K	21.5	463.2	12	18:07:57	48.6	629193.4	5988608.1
10620	G	K	29.7	545.1	12	18:08:12	50.8	629194.1	5988974.5
10620	H	K	39.4	627.6	12	18:08:22	57.0	629195.0	5989225.3
10620	I	K	13.9	372.6	12	18:10:26	40.4	629201.6	5991148.9
10620	J	K	11.0	332.3	12	18:10:54	39.3	629203.3	5991850.8
10620	K	K	33.2	576.4	12	18:13:06	58.8	629202.2	5995270.5
10620	L	K	43.1	656.5	12	18:13:29	46.8	629186.1	5995816.9
10620	M	K	54.4	737.6	12	18:13:43	56.1	629201.6	5996224.3
10621	A	K	14.6	381.6	18	19:58:43	48.8	629193.8	5976030.0
10621	B	K	15.4	392.6	18	19:59:07	46.2	629199.3	5975534.8
10630	A	K	43.2	656.9	12	18:22:22	51.4	629398.7	5996163.8
10630	B	K	19.2	437.9	12	18:23:08	57.3	629397.4	5995069.8
10630	C	K	4.5	211.9	12	18:24:52	50.8	629396.7	5992043.3
10630	D	K	7.4	271.7	12	18:25:25	40.8	629397.8	5991108.0
10630	A	K	3.6	188.6	12	18:33:44	49.1	629394.2	5989178.0
10630	B	K	3.5	186.5	12	18:34:58	62.5	629398.5	5987636.6
10630	C	K	1.4	116.0	12	18:37:30	52.7	629400.7	5983855.7
10630	D	K	2.5	157.9	12	18:40:09	44.9	629391.0	5979238.5
10630	E	K	9.0	300.7	12	18:40:44	49.3	629396.4	5978240.3
10631	A	K	5.4	233.0	18	20:02:57	47.8	629406.5	5975435.7
10640	A	K	78.0	883.1	14	23:54:13	60.8	629597.2	5996304.9
10640	B	K	88.9	942.8	14	23:54:21	59.3	629604.4	5996101.3
10640	C	K	47.4	688.6	14	23:54:56	55.2	629599.5	5995155.2
10640	D	K	10.6	326.2	14	23:55:46	53.6	629599.9	5993748.0
10640	E	K	18.3	427.2	14	23:56:12	46.7	629596.6	5993001.7
10640	F	K	17.6	419.7	14	23:56:32	58.7	629604.0	5992404.0
10640	G	K	18.8	434.0	14	23:56:50	51.2	629597.9	5992012.0
10640	H	K	8.8	296.3	14	23:57:14	43.6	629603.0	5991334.2
10640	I	K	10.8	328.4	14	23:57:22	50.5	629611.4	5991095.3
10640	J	K	16.6	407.6	14	23:58:39	57.9	629595.7	5989178.5
10640	K	K	18.2	427.1	14	23:58:58	66.0	629599.8	5988758.4
10640	L	K	18.8	433.0	14	23:59:53	64.4	629601.6	5987384.1
10640	M	K	26.7	516.2	14	0:00:11	61.1	629589.7	5986970.8
10640	N	K	8.8	296.9	14	0:00:45	51.3	629587.1	5986094.4
10640	O	N	8.5	291.4	14	0:02:13	55.3	629604.5	5983824.2
10640	P	K	11.7	341.3	14	0:05:05	51.0	629600.4	5978972.9
10640	Q	K	9.8	313.2	14	0:05:29	42.2	629596.1	5978284.2
10641	A	N	3.8	195.0	18	20:05:28	45.3	629596.0	5975433.4
10650	A	K	10.7	327.2	14	0:07:07	49.2	629797.7	5978940.7
10650	B	K	2.0	141.5	14	0:09:54	44.0	629804.9	5983821.2



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10650	C	K	12.6	354.5	14	0:11:23	40.7	629807.1	5986173.4
10650	D	K	6.4	252.2	14	0:11:51	58.1	629799.5	5986981.7
10650	E	K	6.5	255.2	14	0:12:39	54.3	629809.6	5988325.0
10650	F	K	5.0	222.9	14	0:13:16	41.4	629790.8	5989164.9
10650	G	K	10.8	329.0	14	0:14:42	38.4	629798.2	5991401.5
10650	H	K	10.9	330.1	14	0:15:27	51.0	629808.3	5992433.8
10650	I	K	11.7	341.6	14	0:15:48	49.2	629808.3	5992991.7
10650	J	K	12.7	356.9	14	0:16:19	47.4	629795.7	5993846.8
10650	K	K	8.5	290.7	14	0:16:47	46.5	629807.7	5994644.0
10650	L	K	47.6	690.1	14	0:17:04	54.8	629804.9	5995088.0
10650	M	K	55.7	746.0	14	0:17:48	45.4	629808.0	5996325.4
10651	A	K	17.4	417.4	18	20:09:16	44.2	629798.9	5975439.1
10660	A	K	83.7	914.9	15	16:46:49	46.9	629993.5	5996231.1
10660	B	K	76.9	876.9	15	16:47:05	51.6	629993.9	5995826.0
10660	C	K	41.0	640.2	15	16:47:30	44.2	630002.3	5995138.4
10660	D	N	11.7	342.5	15	16:48:33	46.1	629997.9	5993299.0
10660	E	K	11.6	341.1	15	16:49:09	55.0	629996.4	5992272.8
10660	F	K	5.4	231.6	15	16:51:29	51.4	629996.7	5988517.0
10660	G	K	2.0	141.3	15	16:52:07	65.6	630000.8	5987407.5
10660	H	K	5.1	226.7	15	16:52:43	44.0	629995.7	5986310.8
10660	I	K	2.4	155.0	15	16:54:34	46.4	630002.2	5983913.5
10660	J	K	13.0	360.0	15	16:57:43	48.7	629997.4	5978741.2
10670	A	K	11.0	331.3	15	16:59:06	63.3	630198.2	5978474.0
10670	B	K	1.5	124.1	15	17:00:58	51.9	630199.7	5981561.3
10670	C	K	15.2	389.3	15	17:03:13	59.1	630195.9	5985037.4
10670	D	K	8.5	291.8	15	17:04:04	55.0	630199.6	5986453.5
10670	E	K	6.9	263.1	15	17:04:45	59.3	630195.6	5987737.5
10670	F	K	11.8	343.6	15	17:05:14	44.4	630185.8	5988588.6
10670	G	K	10.9	329.5	15	17:05:50	49.6	630174.9	5989371.1
10670	H	K	24.5	494.7	15	17:07:11	51.8	630198.8	5991628.2
10670	I	K	27.4	523.1	15	17:07:29	54.1	630193.0	5992103.3
10670	J	K	18.1	424.8	15	17:08:07	36.9	630189.0	5993241.7
10670	K	K	19.9	445.7	15	17:08:20	50.1	630188.6	5993627.4
10670	L	K	38.0	616.1	15	17:08:56	44.9	630194.7	5994674.2
10670	M	K	42.6	652.7	15	17:09:02	41.4	630194.9	5994833.8
10670	N	K	74.4	862.7	15	17:09:50	45.3	630201.4	5996236.7
10680	A	K	86.0	927.3	15	17:11:43	52.8	630396.6	5996056.5
10680	B	K	83.2	911.9	15	17:11:55	50.3	630394.1	5995753.0
10680	C	K	45.7	676.2	15	17:12:08	54.1	630412.8	5995380.2
10680	D	K	23.7	486.4	15	17:12:44	55.8	630393.4	5994303.8
10680	E	K	13.7	369.5	15	17:13:55	46.5	630393.5	5992207.6
10680	F	K	31.3	559.3	15	17:14:15	42.5	630394.0	5991659.8
10680	G	K	8.8	296.4	15	17:15:04	61.8	630396.2	5990477.1
10680	H	K	5.5	234.6	15	17:15:30	53.3	630386.8	5989752.7
10680	I	K	5.5	235.0	15	17:15:44	42.1	630383.3	5989373.1



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10680	J	K	9.3	304.7	15	17:16:16	46.3	630398.9	5988597.0
10680	K	K	5.8	241.2	15	17:16:33	40.8	630395.8	5988155.8
10680	L	K	16.8	410.3	15	17:18:28	67.6	630396.2	5984963.8
10680	M	K	1.4	119.1	15	17:19:40	54.8	630398.0	5984056.3
10680	N	K	2.2	149.1	15	17:19:50	42.9	630400.5	5983821.3
10680	O	K	2.6	162.4	15	17:21:31	49.9	630412.0	5981609.4
10680	P	K	2.6	161.5	15	17:23:44	50.0	630386.9	5978719.6
10680	Q	K	9.5	308.8	15	17:23:55	55.5	630394.4	5978447.8
10690	A	K	9.8	312.3	15	17:25:23	62.5	630598.0	5978744.5
10690	B	K	2.1	144.2	15	17:26:50	46.9	630611.0	5980852.2
10690	C	K	0.8	87.1	15	17:27:33	50.4	630597.0	5981961.8
10690	D	K	16.7	408.2	15	17:29:44	90.4	630588.1	5984910.4
10690	E	K	4.6	213.5	15	17:31:55	46.5	630601.9	5988206.2
10690	F	K	6.2	248.3	15	17:32:11	45.7	630598.3	5988644.7
10690	G	K	6.0	244.5	15	17:32:56	42.8	630584.4	5989937.3
10690	H	K	10.5	324.3	15	17:33:09	53.1	630598.5	5990350.1
10690	I	K	27.5	524.6	15	17:34:01	40.4	630603.9	5991466.0
10690	J	K	13.1	362.5	15	17:34:34	43.7	630601.9	5992412.4
10690	K	K	30.1	548.1	15	17:35:41	57.5	630606.2	5994513.2
10690	L	K	36.6	605.0	15	17:36:12	52.4	630600.6	5995459.4
10700	A	K	34.6	588.5	15	17:43:43	51.4	630800.7	5995925.8
10700	B	K	27.9	528.6	15	17:44:05	51.4	630790.1	5995327.9
10700	C	K	24.3	492.4	15	17:44:34	56.0	630796.9	5994479.6
10700	D	K	12.0	346.1	15	17:45:23	55.2	630796.3	5993006.0
10700	E	K	9.5	308.4	15	17:45:32	40.3	630799.7	5992727.1
10700	F	K	28.4	532.9	15	17:46:15	54.7	630793.0	5991438.8
10700	G	K	12.0	346.9	15	17:46:53	50.0	630793.7	5990395.6
10700	H	K	8.0	282.7	15	17:47:07	34.8	630796.3	5990026.2
10700	I	K	6.9	262.2	15	17:48:01	43.3	630791.6	5988445.3
10700	J	K	13.8	371.0	15	17:50:08	37.3	630795.2	5985534.9
10700	K	K	27.2	521.8	15	17:50:21	55.5	630798.1	5985123.6
10700	L	K	0.3	53.4	15	17:53:16	49.6	630785.5	5981825.7
10700	M	K	3.5	187.8	15	17:53:37	46.3	630789.5	5981198.8
10700	N	K	18.1	425.6	15	17:55:09	54.6	630795.0	5978683.3
10710	A	K	6.3	250.7	15	17:56:35	49.7	631000.4	5978449.0
10710	B	K	5.1	225.2	15	17:57:00	44.9	630991.1	5979108.8
10710	C	K	5.6	237.3	15	17:58:15	49.6	631003.2	5981339.1
10710	D	K	26.4	513.3	15	18:00:52	55.9	630984.1	5985255.6
10710	E	N	8.4	289.8	15	18:02:43	41.6	631001.2	5988554.6
10710	F	K	7.3	269.5	15	18:03:01	46.4	630995.6	5989069.0
10710	G	N	8.2	285.9	15	18:03:29	48.6	630996.6	5989946.9
10710	H	K	23.6	485.9	15	18:04:09	65.1	631001.6	5991197.1
10710	I	K	11.8	343.0	15	18:04:35	50.5	630992.7	5992040.8
10710	J	K	9.4	306.8	15	18:05:10	51.5	631009.0	5993187.8
10710	K	K	21.6	464.4	15	18:05:31	44.8	630997.8	5993868.2

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10710	L	K	21.3	461.9	15	18:05:50	40.8	631009.5	5994455.4
10710	M	K	35.7	597.5	15	18:06:18	49.5	631005.3	5995308.9
10710	N	K	38.3	618.6	15	18:06:39	58.4	630994.2	5995920.4
10711	A	K	3.8	193.9	18	20:26:28	49.3	631015.7	5974380.2
10711	B	K	1.2	109.4	18	20:26:46	53.5	631014.3	5974941.5
10720	A	K	25.6	505.7	15	18:09:08	46.2	631199.6	5995917.7
10720	B	K	34.0	583.2	15	18:09:19	49.6	631204.9	5995665.1
10720	C	K	30.7	553.8	15	18:09:48	42.0	631197.2	5994868.4
10720	D	K	34.5	587.1	15	18:10:09	59.0	631191.0	5994203.8
10720	E	K	33.2	575.7	15	18:10:21	47.3	631192.9	5993857.2
10720	F	K	4.5	212.4	15	18:11:25	49.3	631197.2	5992047.1
10720	G	K	20.9	456.7	15	18:12:04	47.2	631187.6	5990944.2
10720	H	K	5.4	231.5	15	18:13:19	59.1	631192.4	5988920.7
10720	I	K	25.4	504.2	15	18:15:23	36.0	631192.2	5985272.4
10720	J	K	2.5	158.0	15	18:19:56	35.1	631204.8	5979130.7
10720	K	K	16.4	405.1	15	18:20:16	44.2	631199.9	5978580.0
10720	L	K	2.3	151.2	15	18:22:43	57.4	631201.0	5974925.7
10730	A	K	38.3	619.0	15	18:24:26	43.7	631396.9	5974969.1
10730	B	K	46.3	680.1	15	18:24:39	36.0	631406.5	5975380.2
10730	C	K	18.6	431.5	15	18:25:31	55.8	631386.3	5976880.4
10730	D	K	5.4	232.7	15	18:26:20	42.2	631397.2	5978628.3
10730	E	K	10.7	327.6	15	18:26:33	54.1	631400.1	5979070.6
10730	F	K	35.3	594.2	15	18:30:15	40.6	631403.9	5985278.0
10730	G	K	10.7	327.3	15	18:30:40	48.2	631387.6	5986098.9
10730	H	K	3.5	188.1	15	18:30:53	43.7	631380.1	5986519.3
10730	I	K	5.8	240.4	15	18:32:08	49.4	631408.9	5989059.9
10730	J	K	20.8	456.2	15	18:32:56	57.2	631394.0	5990615.5
10730	K	K	7.5	274.3	15	18:33:39	46.6	631412.1	5992063.5
10730	L	K	32.1	566.8	15	18:35:12	39.1	631394.4	5994602.9
10730	M	K	33.0	574.0	15	18:35:32	37.7	631403.0	5995193.2
10730	N	K	31.5	560.8	15	18:35:57	44.3	631389.8	5995859.1
10740	A	K	24.6	495.9	16	19:37:51	41.9	631599.6	5995980.0
10740	B	K	39.5	628.7	16	19:38:09	51.2	631603.7	5995517.3
10740	C	K	28.5	534.1	16	19:38:32	36.9	631593.4	5994774.3
10740	D	K	39.1	625.5	16	19:38:53	45.0	631603.4	5994099.8
10740	E	K	36.7	605.5	16	19:39:08	50.7	631604.2	5993618.8
10740	F	K	7.8	280.1	16	19:40:11	54.2	631587.1	5992118.1
10740	G	K	26.3	512.7	16	19:40:53	49.0	631603.6	5990992.2
10740	H	K	36.2	601.4	16	19:41:06	45.1	631593.6	5990613.8
10740	I	K	9.3	305.4	16	19:41:34	62.0	631597.9	5989801.9
10740	J	K	12.9	359.4	16	19:41:59	45.1	631599.7	5988997.4
10740	K	K	5.5	234.3	16	19:43:03	50.6	631594.0	5987081.9
10740	L	K	2.3	151.2	16	19:43:21	50.0	631586.9	5986556.3
10740	M	K	13.7	370.6	16	19:43:38	46.3	631589.1	5986034.2
10740	N	K	24.9	498.6	16	19:44:13	49.4	631599.2	5984962.8



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10740	O	K	1.6	126.4	16	19:47:18	47.6	631594.4	5981454.5
10740	A	K	10.1	318.2	16	19:51:47	66.0	631598.3	5976173.5
10750	A	K	3.4	185.5	16	19:57:24	70.2	631798.8	5978827.9
10750	B	K	1.6	125.7	16	19:59:03	53.8	631795.7	5981359.0
10750	C	K	23.1	480.2	16	20:01:45	57.8	631785.6	5984862.2
10750	D	K	23.9	489.1	16	20:02:16	52.1	631800.9	5985890.8
10750	E	N	6.6	257.0	16	20:02:38	37.3	631802.5	5986581.3
10750	F	K	2.0	140.3	16	20:03:04	40.6	631789.5	5987351.5
10750	G	K	4.9	222.3	16	20:03:56	39.0	631808.0	5988996.7
10750	H	K	11.1	333.6	16	20:04:42	54.9	631802.5	5990302.9
10750	I	K	19.5	441.7	16	20:05:02	49.7	631793.2	5990930.0
10750	J	K	8.9	297.5	16	20:05:38	36.0	631793.4	5992050.9
10750	K	K	21.5	463.6	16	20:06:34	63.3	631807.8	5993631.7
10750	L	K	36.2	601.2	16	20:06:48	46.7	631805.3	5994016.9
10750	M	K	37.2	610.3	16	20:07:19	38.7	631813.4	5994829.6
10750	N	K	42.8	654.2	16	20:07:40	49.2	631804.9	5995417.9
10760	A	K	36.8	606.3	17	17:01:29	71.9	631989.1	5996097.4
10760	B	K	61.6	784.9	17	17:01:36	59.8	631989.0	5995927.4
10760	C	K	64.2	801.2	17	17:01:58	46.9	631998.9	5995409.9
10760	D	K	61.8	786.0	17	17:02:06	49.5	631999.3	5995170.5
10760	E	K	45.2	672.2	17	17:02:24	47.9	631997.7	5994671.6
10760	F	K	48.6	697.1	17	17:02:40	41.8	632001.7	5994230.5
10760	G	K	38.3	619.0	17	17:02:49	40.1	631994.2	5993978.0
10760	H	K	36.7	605.6	17	17:03:01	47.6	632006.2	5993657.7
10760	I	K	9.3	305.0	17	17:03:57	42.0	632006.8	5992352.2
10760	J	K	17.8	421.7	17	17:05:06	48.3	631999.5	5990422.7
10760	K	K	12.8	358.2	17	17:05:58	55.1	631994.6	5989079.8
10760	L	K	3.0	172.2	17	17:06:56	49.9	631994.6	5987437.3
10760	M	K	7.2	268.8	17	17:07:20	53.3	632002.8	5986730.9
10760	N	K	16.6	407.3	17	17:07:50	54.3	631996.2	5985843.6
10760	O	K	23.4	483.5	17	17:08:22	48.8	631997.4	5984810.8
10760	P	K	3.9	196.7	17	17:12:38	51.6	631999.5	5978794.0
10770	A	K	44.6	667.5	18	19:32:35	57.9	632204.7	5996213.7
10770	B	K	62.8	792.3	18	19:32:44	52.6	632200.0	5996021.1
10770	C	K	61.6	784.7	18	19:33:09	38.8	632201.2	5995410.6
10770	D	K	36.8	607.0	18	19:33:33	40.9	632209.6	5994739.4
10770	E	K	72.1	849.3	18	19:34:14	53.4	632200.2	5993657.6
10770	F	K	22.3	472.5	18	19:35:09	41.6	632204.3	5992359.0
10770	G	K	190.8	1381.4	18	19:35:47	53.5	632196.6	5991379.2
10770	H	K	23.2	481.1	18	19:36:20	44.8	632195.5	5990459.0
10770	I	K	39.1	625.2	18	19:37:14	57.9	632213.5	5989115.7
10770	J	K	15.2	390.2	18	19:38:17	55.5	632208.4	5987368.4
10770	K	K	16.9	410.9	18	19:38:23	63.8	632204.9	5987178.8
10770	L	K	34.4	586.4	18	19:39:12	51.4	632192.0	5985668.3
10770	M	K	30.4	551.6	18	19:39:42	47.4	632205.2	5984680.3



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10770	N	K	8.6	293.0	18	19:45:23	53.4	632201.5	5976609.9
10770	O	K	28.8	537.0	18	19:45:49	52.3	632198.2	5975844.8
10770	P	K	50.2	708.4	18	19:46:00	41.2	632203.1	5975520.2
10770	Q	K	22.2	470.7	18	19:46:17	55.9	632204.6	5975013.6
10780	A	K	27.6	525.5	21	19:52:03	52.1	632398.5	5996373.7
10780	B	K	42.1	648.6	21	19:52:32	46.9	632394.9	5995609.7
10780	C	K	31.8	564.1	21	19:52:42	53.0	632397.7	5995330.5
10780	D	K	32.6	571.2	21	19:53:06	37.9	632389.1	5994627.5
10780	E	K	38.6	621.5	21	19:53:22	48.5	632396.4	5994210.6
10780	F	K	36.6	604.9	21	19:53:40	49.8	632394.8	5993807.6
10780	G	K	34.3	585.9	21	19:53:55	46.2	632396.3	5993455.6
10780	H	K	8.3	287.8	21	19:54:33	44.0	632392.5	5992564.8
10780	I	K	22.3	472.1	21	19:55:40	41.9	632395.2	5991009.9
10780	J	K	16.1	401.5	21	19:56:06	40.3	632397.2	5990369.4
10780	K	K	39.5	628.7	21	19:56:18	52.7	632405.8	5990069.0
10780	L	K	23.1	480.2	21	19:56:38	48.3	632393.4	5989622.4
10780	M	N	3.5	187.2	21	19:57:44	44.8	632396.8	5987931.0
10780	N	K	24.1	490.6	21	19:59:05	48.8	632399.3	5985557.3
10780	O	K	25.6	505.7	21	19:59:32	45.8	632398.1	5984724.4
10780	P	K	21.8	466.6	21	20:04:07	48.6	632400.1	5978168.7
10780	Q	K	37.4	611.2	21	20:05:25	52.5	632395.9	5975863.2
10780	R	K	99.1	995.4	21	20:05:37	62.0	632397.8	5975501.9
10780	S	K	95.4	976.5	21	20:05:51	56.4	632404.5	5975149.1
10790	A	K	67.2	819.9	21	20:06:42	68.9	632629.1	5975120.7
10790	B	K	117.6	1084.3	21	20:06:58	54.4	632604.8	5975441.3
10790	C	K	78.3	884.8	21	20:07:09	46.5	632598.4	5975721.4
10790	D	K	14.9	385.9	21	20:08:37	57.2	632600.1	5978238.0
10790	E	K	18.5	430.0	21	20:12:22	54.5	632597.8	5984686.3
10790	F	K	24.5	495.2	21	20:13:32	38.9	632600.7	5986744.7
10790	G	N	8.4	290.1	21	20:14:11	44.8	632607.5	5987917.0
10790	H	K	5.4	231.8	21	20:14:49	48.1	632598.5	5989072.1
10790	I	K	23.4	483.2	21	20:15:44	51.0	632601.1	5990604.1
10790	J	N	23.4	483.2	21	20:15:52	48.7	632605.4	5990824.6
10790	K	K	6.5	255.4	21	20:16:58	44.4	632599.5	5992856.6
10790	L	K	23.7	487.0	21	20:17:14	54.8	632601.8	5993379.2
10790	M	K	35.7	597.7	21	20:19:08	43.2	632597.9	5996560.5
10800	A	K	44.2	664.8	21	20:25:14	59.5	632801.2	5994958.1
10800	B	K	17.9	422.8	21	20:25:31	50.8	632791.0	5994415.1
10800	C	K	11.4	337.4	21	20:25:58	43.6	632800.2	5993669.9
10800	D	K	9.1	302.3	21	20:26:11	53.8	632803.6	5993334.0
10800	E	K	5.1	226.7	21	20:26:22	49.7	632791.6	5993070.5
10800	F	K	1.6	124.8	21	20:27:05	48.9	632794.2	5992112.1
10800	G	N	26.0	509.5	21	20:27:36	45.9	632799.1	5991417.2
10800	H	K	5.1	225.4	21	20:29:38	54.1	632807.0	5988732.4
10800	I	K	9.0	299.6	21	20:30:54	45.1	632796.9	5986811.6



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10800	J	K	8.9	298.2	21	20:31:01	49.1	632789.1	5986604.6
10800	K	K	11.5	339.3	21	20:31:38	36.1	632792.7	5985674.7
10800	L	K	2.8	167.3	21	20:32:59	52.6	632789.5	5983576.6
10800	M	K	8.2	285.6	21	20:35:09	48.7	632792.6	5980801.3
10800	N	K	6.0	244.4	21	20:36:14	48.5	632791.2	5979121.6
10800	O	K	22.2	471.4	21	20:36:51	56.5	632802.0	5978120.8
10800	P	K	13.6	368.2	21	20:37:13	44.6	632796.4	5977482.3
10800	Q	K	29.0	538.1	21	20:37:41	54.5	632797.3	5976718.8
10800	R	N	99.8	999.2	21	20:38:31	55.6	632794.8	5975414.2
10810	A	K	27.5	524.1	21	20:40:32	55.9	632998.4	5976730.9
10810	B	K	5.4	232.5	21	20:41:13	37.4	632998.3	5977889.9
10810	C	K	20.2	449.6	21	20:41:31	63.0	632991.2	5978422.7
10810	D	K	4.2	205.5	21	20:41:57	54.1	632998.4	5979195.5
10810	E	K	46.4	681.5	21	20:45:22	45.8	632996.0	5984562.9
10810	F	K	29.2	540.3	21	20:45:29	47.0	632992.7	5984793.0
10810	G	K	14.2	376.4	21	20:45:56	54.8	632999.7	5985650.7
10810	H	K	9.4	306.5	21	20:46:32	42.8	632990.5	5986703.3
10810	I	K	6.0	244.5	21	20:46:42	53.4	632997.3	5986983.9
10810	J	K	12.5	353.6	21	20:47:27	48.8	633004.6	5988253.9
10810	K	K	11.3	335.6	21	20:47:37	40.5	632988.8	5988521.3
10810	L	K	11.6	340.7	21	20:49:38	58.6	633011.2	5991220.6
10810	M	K	4.4	209.3	21	20:49:51	53.7	632998.8	5991629.0
10810	N	K	16.1	401.1	21	20:51:45	40.4	632990.3	5994848.8
10820	A	K	102.0	1010.0	19	23:31:40	46.4	633209.0	5976407.0
10820	B	N	5.4	232.4	19	23:32:28	37.7	633202.4	5977766.3
10820	C	K	5.8	240.0	19	23:33:19	51.1	633204.3	5979387.3
10820	D	K	21.6	465.0	19	23:37:00	62.3	633215.3	5985059.4
10820	E	K	7.6	274.8	19	23:38:11	54.6	633209.6	5987141.1
10820	F	K	13.1	361.6	19	23:38:37	52.2	633205.1	5987896.7
10820	G	K	19.3	439.7	19	23:38:52	45.8	633207.7	5988359.6
10820	H	K	9.9	314.5	19	23:40:30	50.1	633214.0	5990855.2
10820	I	K	9.8	313.7	19	23:42:53	52.2	633202.6	5995185.4
10820	J	K	32.8	572.3	19	23:43:39	57.6	633201.3	5996573.5
10830	A	K	30.8	554.6	19	23:16:32	52.9	633387.7	5996118.7
10830	B	K	9.1	301.3	19	23:16:59	47.8	633385.2	5995376.0
10830	C	K	2.9	170.0	19	23:20:22	45.4	633409.3	5990563.6
10830	D	K	24.3	492.4	19	23:21:40	41.4	633402.2	5988352.8
10830	E	K	10.3	320.3	19	23:23:27	52.4	633400.3	5985368.2
10830	F	K	17.6	419.8	19	23:24:20	64.1	633407.0	5983914.1
10830	G	N	9.5	309.0	19	23:26:26	46.0	633396.0	5980976.2
10830	H	K	8.5	292.0	19	23:27:26	44.3	633405.0	5979347.0
10830	I	N	7.8	279.7	19	23:28:26	38.6	633399.6	5977680.0
10830	J	K	53.5	731.5	19	23:29:18	40.7	633399.1	5976289.2
10830	K	K	50.2	708.5	19	23:29:28	40.5	633399.6	5976018.1
10840	A	K	57.9	760.7	19	23:03:24	51.1	633602.8	5976427.0



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10840	B	K	3.9	196.6	19	23:04:31	57.1	633604.9	5978449.0
10840	C	K	9.8	313.0	19	23:05:01	47.7	633600.3	5979396.9
10840	D	K	17.7	420.7	19	23:05:30	50.6	633608.6	5980352.4
10840	E	K	13.0	360.2	19	23:07:46	46.6	633605.4	5984016.4
10840	F	K	12.0	345.8	19	23:08:13	40.2	633602.7	5984794.5
10840	G	K	10.8	328.7	19	23:08:49	56.0	633607.1	5985718.3
10840	H	K	14.4	380.0	19	23:09:42	51.6	633597.7	5987177.2
10840	I	K	39.3	627.2	19	23:10:33	47.8	633602.1	5988535.3
10840	J	K	34.3	585.7	19	23:10:44	44.4	633596.5	5988834.0
10840	K	K	9.2	303.6	19	23:11:25	46.3	633602.6	5989999.6
10840	L	K	12.1	347.3	19	23:14:40	64.0	633596.4	5995549.9
10850	A	K	49.0	700.2	19	22:44:18	48.1	633795.9	5996151.3
10850	B	K	5.4	232.7	19	22:44:40	65.6	633802.8	5995589.5
10850	C	K	7.6	274.8	19	22:48:43	35.9	633802.6	5989598.4
10850	D	K	29.4	542.3	19	22:49:12	43.4	633797.9	5988607.2
10850	E	K	36.3	602.5	19	22:49:23	42.1	633802.3	5988268.1
10850	F	K	12.5	352.9	19	22:50:48	55.3	633797.4	5985813.5
10850	G	K	5.9	242.4	19	22:51:47	32.9	633807.2	5983971.7
10850	H	K	8.7	295.4	19	22:54:08	42.8	633801.5	5980346.3
10850	I	N	37.4	611.9	19	22:54:40	38.7	633799.8	5979482.6
10850	J	K	10.0	315.5	19	22:56:26	46.6	633793.7	5976462.2
10850	K	K	23.0	480.0	19	22:56:37	50.5	633806.0	5976157.1
10860	A	N	9.5	307.4	19	22:31:16	44.0	634002.6	5975237.7
10860	B	K	9.5	307.4	19	22:31:50	50.4	634014.9	5976459.6
10860	C	K	38.5	620.2	19	22:33:16	46.9	634001.3	5979441.3
10860	D	K	7.9	280.5	19	22:33:40	54.6	633999.4	5980296.5
10860	E	K	4.4	210.0	19	22:35:44	39.8	634007.3	5983887.6
10860	F	N	5.5	235.0	19	22:36:16	59.7	634000.7	5984954.0
10860	G	K	8.6	293.5	19	22:36:48	61.4	634007.3	5985776.7
10860	H	K	4.5	210.9	19	22:37:09	52.0	634001.6	5986308.2
10860	I	K	27.5	524.2	19	22:38:25	34.2	634003.1	5988477.8
10860	J	K	16.0	400.5	19	22:38:39	42.9	634001.8	5988896.6
10860	K	K	19.5	441.3	19	22:42:48	65.8	633997.1	5996217.5
10870	A	K	9.4	306.9	19	22:16:59	45.4	634202.1	5996262.2
10870	B	K	1.4	118.1	19	22:22:21	44.0	634195.2	5988804.8
10870	C	K	4.3	206.5	19	22:22:30	42.8	634196.5	5988527.0
10870	D	K	13.2	362.6	19	22:22:44	47.2	634195.3	5988106.0
10870	E	K	17.0	411.8	19	22:23:55	55.6	634201.2	5986121.0
10870	F	K	16.5	406.6	19	22:24:14	74.3	634203.9	5985643.0
10870	G	K	14.7	383.8	19	22:24:45	50.1	634201.5	5984778.6
10870	H	N	14.7	383.8	19	22:25:13	48.8	634190.7	5983811.0
10870	I	K	5.0	223.0	19	22:27:28	52.8	634200.4	5980187.7
10870	J	K	9.7	311.0	19	22:27:58	51.0	634196.4	5979338.7
10870	K	K	0.9	93.9	19	22:28:58	48.1	634196.3	5977614.8
10880	A	K	7.2	268.1	18	21:10:30	45.4	634403.4	5979262.5



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10880	B	K	11.2	333.9	18	21:11:09	47.8	634412.7	5980513.5
10880	C	K	8.9	298.7	18	21:12:36	40.5	634402.3	5982848.3
10880	D	K	7.0	265.0	18	21:13:36	49.4	634394.6	5984673.2
10880	E	K	8.0	282.4	18	21:13:50	57.8	634403.1	5985099.3
10880	F	K	7.7	277.2	18	21:14:07	73.9	634402.5	5985506.7
10880	G	K	6.7	258.6	18	21:14:28	55.8	634398.2	5986017.6
10880	H	K	1.6	125.6	18	21:15:22	45.5	634402.5	5987601.4
10880	I	K	4.4	209.3	18	21:20:32	59.8	634395.0	5996443.0
10890	A	N	2.0	139.7	18	20:59:54	45.8	634595.1	5987827.3
10890	B	K	6.2	249.5	18	21:00:47	49.9	634603.7	5986273.0
10890	C	K	12.3	350.6	18	21:01:23	48.5	634594.3	5985251.9
10890	D	N	14.8	384.2	18	21:01:53	70.0	634598.9	5984467.8
10890	E	K	36.3	602.7	18	21:02:18	53.3	634595.4	5983658.6
10890	F	K	13.3	364.5	18	21:02:32	55.0	634588.8	5983217.0
10890	G	K	9.3	304.5	18	21:03:59	59.1	634595.8	5980984.0
10890	H	K	9.0	299.3	18	21:04:21	54.9	634594.6	5980391.1
10890	I	K	17.9	422.6	18	21:05:06	56.4	634599.8	5979171.1
10890	J	N	12.9	358.9	18	21:07:28	47.4	634604.6	5975384.4
10900	A	K	10.9	329.3	18	20:42:06	47.2	634803.9	5979137.3
10900	B	K	7.1	266.5	18	20:42:55	38.9	634804.7	5980570.8
10900	C	K	7.2	268.2	18	20:43:07	53.9	634801.2	5980923.6
10900	D	K	7.4	271.2	18	20:44:16	40.9	634802.8	5982654.3
10900	E	K	12.4	352.0	18	20:44:31	37.2	634804.8	5983074.6
10900	F	K	10.7	326.6	18	20:44:46	46.3	634792.9	5983529.8
10900	G	K	14.9	385.8	18	20:45:08	38.4	634810.2	5984172.2
10900	H	K	8.0	282.1	18	20:45:44	41.3	634802.8	5985253.0
10910	A	K	10.9	330.7	20	17:04:53	39.0	634998.1	5984257.9
10910	B	K	19.1	436.9	20	17:05:20	42.9	634997.1	5983381.3
10910	C	N	13.2	363.3	20	17:05:51	48.7	634999.8	5982509.4
10910	D	K	11.4	337.4	20	17:07:04	41.4	635003.0	5980649.9
10910	E	K	9.2	302.5	20	17:07:59	51.4	635001.6	5979178.2
10910	F	K	5.9	242.6	20	17:09:59	55.8	635001.0	5975775.7
10920	A	K	6.2	249.6	20	17:11:46	70.8	635206.5	5975802.1
10920	B	K	3.5	186.3	20	17:12:54	47.8	635195.8	5977834.0
10920	C	K	7.9	280.9	20	17:14:00	48.1	635195.8	5980038.1
10920	D	K	10.0	315.6	20	17:14:15	37.6	635200.7	5980560.2
10920	E	K	8.5	290.7	20	17:15:10	54.0	635191.5	5982112.2
10920	F	N	8.5	290.7	20	17:15:14	52.5	635196.4	5982230.2
10920	G	K	9.1	301.7	20	17:15:47	36.2	635199.0	5983246.3
10920	H	K	6.5	255.8	20	17:16:27	49.0	635198.4	5984555.0
10920	I	K	0.4	62.7	20	17:21:32	70.4	635198.7	5993568.3
10930	A	K	37.3	610.6	20	17:29:00	52.6	635402.4	5995952.3
10930	B	K	2.1	143.9	20	17:30:42	57.1	635404.2	5993110.4
10930	C	K	12.2	349.1	20	17:37:01	41.6	635394.3	5983107.2
10930	D	N	12.2	349.1	20	17:37:03	41.9	635392.9	5983046.2



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10930	E	K	18.9	434.4	20	17:37:28	49.4	635399.4	5982274.6
10930	F	K	17.5	417.8	20	17:38:22	50.8	635392.4	5981051.6
10930	G	K	13.8	371.5	20	17:38:58	44.8	635402.8	5980090.8
10930	H	K	12.2	349.6	20	17:39:23	31.3	635396.7	5979411.9
10930	I	K	6.9	263.1	20	17:40:24	46.7	635396.5	5977770.4
10930	J	K	13.7	369.7	20	17:41:44	44.8	635391.3	5975575.8
10940	A	K	10.5	323.7	20	17:43:33	62.2	635605.3	5976258.8
10940	B	K	9.7	310.8	20	17:44:19	44.8	635598.2	5977807.9
10940	C	K	10.0	315.7	20	17:45:05	47.7	635605.4	5979433.6
10940	D	K	13.4	366.0	20	17:45:25	43.1	635592.1	5980114.5
10940	E	K	12.8	357.1	20	17:46:16	68.7	635601.7	5981740.7
10940	F	K	10.0	316.3	20	17:46:58	35.9	635599.3	5983000.9
10940	G	K	2.0	142.7	20	17:52:51	46.1	635599.8	5993115.9
10950	A	K	6.0	244.7	20	17:58:00	57.1	635807.4	5993124.2
10950	B	K	13.2	363.3	20	18:04:31	46.7	635800.6	5982874.1
10950	C	K	25.7	507.0	20	18:04:54	47.7	635794.7	5982180.2
10950	D	K	14.0	374.5	20	18:06:02	38.6	635801.3	5980341.7
10950	E	K	12.2	348.9	20	18:06:46	34.0	635802.5	5979162.4
10950	F	K	16.6	407.5	20	18:07:03	39.4	635798.5	5978721.1
10950	G	K	17.2	414.2	20	18:07:33	39.6	635795.3	5977905.0
10950	H	K	6.8	261.2	20	18:08:36	51.0	635795.1	5976242.4
10950	I	K	8.6	293.2	20	18:09:11	44.9	635803.6	5975260.8
10960	A	K	27.1	520.8	20	18:14:29	64.5	635995.5	5973179.1
10960	B	K	25.7	507.3	20	18:14:38	56.1	635999.9	5973469.6
10960	C	K	19.0	436.2	20	18:16:51	38.9	636000.6	5977668.5
10960	D	K	28.8	536.3	20	18:17:06	44.3	635994.5	5978188.0
10960	E	K	11.1	332.7	20	18:18:21	56.3	636007.9	5980771.7
10960	F	K	11.4	337.7	20	18:19:34	41.2	635999.2	5983000.4
10960	G	K	8.1	283.9	20	18:25:17	65.0	636007.2	5992764.5
10960	H	K	4.8	218.9	20	18:25:44	50.9	636008.3	5993497.8
10970	A	K	7.1	267.0	21	20:56:31	48.7	636203.0	5994856.7
10970	B	K	6.1	246.0	21	20:56:36	47.0	636199.0	5994720.0
10970	C	K	3.0	171.9	21	20:57:16	56.6	636205.6	5993582.5
10970	D	K	5.9	243.8	21	20:58:26	41.4	636200.1	5992004.8
10970	E	K	1.4	116.6	21	20:58:41	43.4	636197.8	5991773.9
10970	F	K	0.2	47.6	21	20:59:15	55.3	636202.2	5991069.9
10970	G	K	8.5	291.5	21	21:04:48	41.0	636194.6	5983135.2
10970	H	K	20.2	449.7	21	21:05:16	43.1	636190.8	5982377.2
10970	I	K	27.3	522.4	21	21:05:31	42.6	636186.8	5982006.5
10970	J	K	13.8	370.9	21	21:06:21	60.1	636193.8	5980704.8
10970	K	K	15.0	386.7	21	21:07:12	43.8	636202.1	5979438.1
10970	L	K	51.2	715.6	21	21:07:59	37.4	636190.7	5978331.6
10970	M	K	35.9	599.1	21	21:08:47	70.0	636199.5	5977109.3
10970	N	K	39.2	626.4	21	21:11:22	38.4	636201.1	5973308.9
10980	A	K	1.3	113.5	21	21:18:58	55.0	636392.4	5975410.8



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
10980	B	K	30.6	553.5	21	21:19:38	62.6	636402.8	5976830.5
10980	C	K	75.7	870.0	21	21:20:16	43.2	636392.5	5978077.0
10980	D	K	43.2	657.2	21	21:20:34	54.7	636404.4	5978651.8
10980	E	K	23.6	485.3	21	21:20:54	53.4	636396.4	5979294.0
10980	F	K	10.0	315.5	21	21:22:04	66.4	636408.8	5981407.9
10980	G	K	13.4	365.8	21	21:22:19	59.5	636411.9	5981868.0
10980	H	K	15.4	391.8	21	21:22:58	43.2	636404.6	5983121.3
10980	I	K	0.2	47.1	21	21:24:03	48.7	636392.6	5985150.4
10980	J	K	4.0	199.6	21	21:28:20	52.9	636402.4	5990998.3
10980	K	K	24.0	489.3	21	21:30:01	44.0	636397.7	5993290.8
10980	L	K	1.7	129.2	21	21:30:25	46.7	636404.8	5994019.1
10980	M	K	32.1	566.9	21	21:30:53	50.7	636388.5	5994886.5
10980	N	K	7.2	267.6	21	21:31:06	57.1	636385.8	5995248.5
10990	A	K	17.2	414.1	24	21:58:36	54.5	636601.4	5995304.2
10990	B	K	22.4	473.1	24	21:58:46	65.5	636605.7	5995069.0
10990	C	K	1.8	133.2	24	21:59:15	56.7	636579.3	5994271.0
10990	D	K	3.6	189.7	24	21:59:36	56.4	636612.4	5993653.6
10990	E	K	23.6	485.8	24	21:59:49	62.7	636605.1	5993253.7
10990	F	K	16.4	405.0	24	22:00:09	50.0	636597.7	5992664.6
10990	G	K	3.2	179.9	24	22:01:19	69.5	636590.1	5990982.1
10990	H	K	6.1	246.2	24	22:05:31	50.6	636599.8	5983817.8
10990	I	K	9.0	299.2	24	22:06:00	37.4	636601.9	5982966.2
10990	J	K	10.5	323.8	24	22:06:38	41.9	636603.2	5981842.6
10990	K	K	27.8	526.8	24	22:08:04	52.8	636604.0	5979186.1
10990	L	K	54.6	739.0	24	22:08:45	55.5	636595.8	5977896.1
10990	M	K	83.2	912.0	24	22:09:04	77.8	636600.0	5977310.3
10990	N	K	38.0	616.8	24	22:09:33	43.5	636594.5	5976446.7
11000	A	K	59.1	768.5	23	20:30:09	54.2	636794.7	5976473.4
11000	B	K	69.2	831.6	23	20:30:34	59.8	636803.5	5977253.5
11000	C	K	47.9	692.1	23	20:30:49	54.7	636799.0	5977758.7
11000	D	K	21.2	460.7	23	20:31:14	64.5	636800.5	5978593.5
11000	E	K	25.0	499.6	23	20:31:33	50.9	636809.3	5979200.4
11000	F	K	15.1	388.6	23	20:31:47	70.0	636805.9	5979662.4
11000	G	K	14.7	383.7	23	20:32:34	52.4	636806.0	5981207.6
11000	H	K	17.1	413.4	23	20:32:48	55.2	636802.6	5981621.3
11000	I	K	10.0	316.8	23	20:34:01	60.4	636817.8	5983929.8
11001	A	K	8.4	290.4	24	21:55:55	47.0	636803.8	5992085.0
11001	B	K	8.1	285.3	24	21:56:45	59.6	636798.3	5993598.3
11001	C	K	2.2	147.1	24	21:57:16	50.6	636817.5	5994508.0
11010	A	K	2.5	157.0	23	18:48:45	60.1	636999.1	5994107.9
11010	B	K	10.8	327.9	23	18:48:59	53.1	637000.8	5993733.8
11010	C	N	18.9	434.6	23	18:49:36	48.3	636996.6	5992755.0
11010	D	K	11.1	333.2	23	18:50:06	46.0	636998.6	5991906.4
11010	E	K	3.5	186.7	23	18:54:30	58.6	636999.2	5984928.5
11010	F	K	6.3	251.4	23	18:55:05	66.5	636999.6	5983905.4



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
11010	G	K	13.4	365.8	23	18:56:24	61.7	637002.0	5981569.2
11010	H	K	9.6	309.5	23	18:56:53	43.0	636996.0	5980698.4
11010	I	K	22.7	476.5	23	18:57:50	57.9	637001.3	5978969.2
11010	J	N	46.5	682.2	23	18:58:39	51.8	636999.6	5977529.8
11010	K	K	44.3	665.5	23	18:59:00	53.6	637001.1	5976962.3
11010	L	K	38.3	618.9	23	18:59:29	54.0	636995.4	5976190.9
11020	A	K	1.4	116.7	22	17:28:07	57.5	637200.0	5994217.6
11020	B	K	12.4	352.5	22	17:28:22	58.2	637202.4	5993837.1
11020	C	K	10.3	321.5	22	17:29:38	49.5	637196.6	5991733.1
11020	D	K	8.0	283.3	22	17:34:51	57.7	637202.9	5983437.0
11020	E	K	8.6	293.2	22	17:35:51	45.8	637200.4	5981670.1
11020	F	K	14.2	377.2	22	17:36:11	57.8	637194.5	5981087.9
11020	G	K	13.3	364.0	22	17:36:26	41.8	637198.8	5980664.6
11020	H	N	22.6	475.5	22	17:37:30	60.5	637201.8	5978956.7
11020	I	K	27.5	523.9	22	17:37:54	46.4	637196.7	5978369.0
11020	J	K	47.8	691.5	22	17:38:23	59.5	637199.5	5977624.1
11020	K	K	99.8	998.9	22	17:38:35	62.1	637195.9	5977343.8
11020	L	K	65.5	809.1	22	17:38:54	48.0	637193.2	5976904.8
11021	A	K	42.7	653.6	23	19:05:04	52.4	637193.1	5976003.6
11021	B	K	16.1	401.5	23	19:05:15	46.2	637203.5	5975700.8
11021	C	K	8.5	290.6	23	19:07:20	63.9	637223.8	5972034.0
11021	D	K	14.4	379.1	23	19:07:46	53.5	637214.8	5971335.2
11030	A	N	23.2	481.7	8	23:35:05	39.1	637401.0	5970870.9
11030	B	K	38.7	621.9	8	23:35:21	57.9	637386.1	5971337.1
11030	C	K	31.2	558.6	8	23:35:35	53.9	637403.6	5971770.6
11030	D	K	13.6	368.3	8	23:36:27	47.7	637400.4	5973352.5
11030	E	K	32.5	569.8	8	23:37:41	47.9	637404.3	5975832.3
11030	F	K	70.1	837.0	8	23:38:14	39.6	637397.5	5976962.4
11030	G	K	85.9	926.8	8	23:38:31	65.6	637397.1	5977452.4
11030	H	K	28.5	533.5	8	23:39:02	53.1	637397.5	5978380.4
11030	I	K	29.5	543.3	8	23:39:13	52.9	637395.5	5978714.2
11030	J	K	16.2	402.1	8	23:40:20	39.2	637396.7	5980735.0
11030	K	K	25.7	506.9	8	23:40:36	46.9	637398.3	5981214.0
11030	L	K	7.0	265.3	8	23:41:54	50.0	637396.2	5983513.6
11030	M	K	6.5	254.7	8	23:42:37	46.5	637387.8	5984778.3
11030	N	K	3.4	185.5	8	23:42:59	37.7	637397.7	5985384.6
11030	O	K	26.7	516.2	8	23:47:35	51.8	637405.0	5993425.8
11030	P	K	18.7	432.2	8	23:47:50	51.7	637394.4	5993862.4
11040	A	K	25.5	504.7	8	23:20:01	53.7	637597.4	5993868.6
11040	B	K	31.3	559.6	8	23:20:23	43.7	637593.0	5993324.2
11040	C	K	21.3	461.1	8	23:21:23	40.3	637598.5	5991789.3
11040	D	K	5.2	227.2	8	23:21:50	45.7	637602.7	5991006.7
11040	E	K	6.1	246.6	8	23:25:35	52.8	637586.3	5984797.6
11040	F	K	11.3	336.4	8	23:27:30	49.1	637588.4	5981472.8
11040	G	K	14.3	378.4	8	23:27:43	39.4	637592.0	5981092.7



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
11040	H	K	25.1	501.3	8	23:28:30	38.5	637587.2	5979746.0
11040	I	K	21.5	463.4	8	23:28:43	51.7	637590.7	5979373.2
11040	J	K	32.3	568.1	8	23:29:32	61.3	637595.4	5978038.2
11040	K	K	44.6	668.1	8	23:29:55	71.2	637596.0	5977383.9
11040	L	K	60.4	777.2	8	23:30:11	33.6	637599.0	5977015.2
11040	M	K	62.0	787.2	8	23:30:19	36.9	637602.3	5976819.9
11040	N	K	59.1	768.9	8	23:30:59	37.3	637604.8	5975744.1
11040	O	K	17.9	423.1	8	23:31:10	39.1	637601.4	5975464.7
11040	P	N	12.5	353.0	8	23:32:08	35.9	637599.0	5973830.8
11040	Q	K	12.5	353.0	8	23:32:28	42.9	637595.3	5973269.5
11040	R	K	58.2	762.7	8	23:33:20	52.2	637603.5	5971751.7
11040	S	K	19.4	440.3	8	23:33:31	51.7	637598.3	5971431.9
11040	T	K	65.6	809.6	8	23:33:55	39.5	637593.4	5970731.8
11050	A	K	7.0	264.3	8	23:13:21	43.9	637793.2	5984693.1
11050	B	K	4.7	217.6	8	23:14:03	45.5	637809.3	5985760.3
11050	C	K	4.6	215.4	8	23:16:48	91.1	637797.6	5990910.2
11050	D	K	40.8	638.6	8	23:18:02	54.6	637796.9	5993202.3
11050	E	K	13.4	365.5	8	23:18:24	59.9	637793.8	5993935.8
11051	A	K	109.5	1046.5	23	19:09:51	68.9	637798.1	5971452.5
11051	B	K	68.1	825.5	23	19:10:02	56.7	637801.8	5971799.4
11051	C	K	60.2	775.9	23	19:10:32	53.4	637802.7	5972670.4
11051	D	K	56.8	753.5	23	19:10:42	52.7	637803.2	5972987.6
11051	E	K	47.2	686.7	23	19:10:57	51.9	637796.6	5973475.0
11051	F	K	18.2	426.1	23	19:11:15	47.4	637798.0	5974065.2
11051	G	K	15.7	395.7	23	19:11:28	67.3	637799.2	5974482.3
11051	H	K	12.6	355.2	23	19:11:42	60.8	637803.6	5974955.9
11051	I	K	40.2	634.3	23	19:12:03	48.2	637800.8	5975608.1
11051	J	K	46.1	679.2	23	19:12:30	44.0	637793.2	5976446.7
11051	K	K	58.9	767.6	23	19:12:47	46.9	637792.2	5977000.9
11051	L	K	38.0	616.3	23	19:12:56	62.3	637794.2	5977265.7
11051	M	K	40.5	636.0	23	19:13:12	68.1	637799.9	5977767.8
11051	N	K	9.8	313.8	23	19:13:46	48.6	637801.9	5978750.6
11060	A	K	22.2	471.4	8	23:05:48	52.6	637995.0	5993515.0
11060	B	K	41.0	639.9	8	23:06:05	54.0	637994.7	5993066.1
11061	A	K	34.8	589.6	23	19:15:44	53.5	638001.9	5977854.9
11061	B	K	65.9	811.5	23	19:16:05	42.1	637996.9	5977249.6
11061	C	K	66.4	815.0	23	19:16:12	43.3	638003.7	5977037.9
11061	D	K	42.0	648.3	23	19:16:58	48.6	637999.8	5975662.2
11061	E	K	31.9	564.7	23	19:17:15	41.5	638000.4	5975160.7
11061	F	K	41.2	642.0	23	19:17:37	52.4	638004.0	5974507.6
11061	G	K	42.4	650.8	23	19:17:50	53.9	638005.6	5974131.3
11061	H	K	91.3	955.3	23	19:18:13	50.1	638002.4	5973493.7
11061	I	K	72.4	850.9	23	19:18:29	46.1	637997.9	5973034.2
11061	J	K	72.8	853.2	23	19:18:38	48.8	638001.8	5972778.5
11061	K	K	69.5	833.7	23	19:18:49	47.3	638004.1	5972464.1



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
11061	L	K	61.9	787.0	23	19:19:20	48.0	638003.4	5971563.2
11070	A	K	6.7	258.2	8	22:58:56	46.7	638199.6	5984245.8
11070	B	K	1.9	135.9	8	23:02:32	39.5	638200.0	5990333.6
11070	C	K	15.7	396.6	8	23:03:24	47.1	638196.5	5991972.1
11070	D	K	21.1	459.2	8	23:03:44	44.1	638197.5	5992608.1
11070	E	K	28.4	533.2	8	23:03:57	50.7	638201.3	5993002.8
11070	F	K	26.9	519.1	8	23:04:05	48.9	638194.1	5993262.5
11070	G	K	29.6	544.1	8	23:04:22	56.6	638194.2	5993791.8
11071	A	K	80.5	897.5	23	19:21:03	47.2	638203.1	5971077.0
11071	B	K	65.1	806.8	23	19:21:17	55.1	638198.1	5971489.5
11071	C	K	44.5	667.2	23	19:21:33	40.3	638199.2	5971967.5
11071	D	K	55.9	747.5	23	19:21:53	61.4	638198.1	5972588.1
11071	E	K	37.6	613.1	23	19:22:03	54.5	638200.0	5972918.2
11071	F	K	59.6	772.3	23	19:22:23	52.9	638199.9	5973536.3
11071	G	K	178.9	1337.3	23	19:22:43	54.9	638203.6	5974154.7
11071	H	K	39.0	624.2	23	19:22:58	52.8	638197.3	5974636.1
11071	I	N	35.6	596.3	23	19:23:10	49.1	638202.3	5975028.3
11071	J	K	37.6	613.2	23	19:23:24	54.2	638194.5	5975490.9
11071	K	K	41.1	640.9	23	19:23:54	67.7	638199.3	5976455.2
11071	L	K	48.6	697.2	23	19:24:17	48.4	638201.2	5977185.5
11071	M	K	39.2	625.8	23	19:24:41	46.8	638193.1	5977930.5
11071	N	K	28.8	537.1	23	19:24:55	85.1	638202.3	5978377.9
11071	O	K	11.6	339.9	23	19:25:09	63.8	638201.1	5978755.1
11080	A	K	20.3	450.5	8	22:51:46	50.6	638388.7	5992965.1
11080	B	K	19.5	441.1	8	22:52:04	55.8	638399.0	5992509.9
11080	C	K	5.9	242.4	8	22:52:49	43.9	638396.3	5991338.4
11080	D	K	4.4	209.5	8	22:56:39	52.1	638393.3	5984920.7
11080	E	K	6.9	261.8	8	22:57:18	50.1	638401.9	5983834.5
11081	A	K	23.8	487.5	23	19:26:26	74.3	638395.4	5978652.4
11081	B	K	35.3	594.1	23	19:26:38	69.9	638394.7	5978304.2
11081	C	K	52.5	724.4	23	19:26:54	56.1	638403.5	5977869.0
11081	D	K	32.8	572.9	23	19:27:13	56.8	638407.5	5977318.3
11081	E	K	43.3	658.1	23	19:27:32	89.0	638404.2	5976758.5
11081	F	K	37.7	614.3	23	19:27:56	66.0	638404.7	5976117.5
11081	G	K	41.1	641.3	23	19:28:22	54.2	638405.1	5975380.1
11081	H	K	49.4	702.8	23	19:28:55	54.7	638400.4	5974469.8
11081	I	K	28.0	528.8	23	19:29:13	48.1	638404.1	5973973.8
11081	J	K	42.3	650.6	23	19:29:48	53.7	638400.9	5973029.7
11081	K	K	40.9	639.5	23	19:30:01	49.4	638396.0	5972680.8
11081	L	K	42.0	648.1	23	19:30:11	56.9	638399.2	5972406.4
11081	M	K	32.1	566.3	23	19:30:31	41.6	638403.8	5971882.3
11081	N	K	56.0	748.2	23	19:30:57	42.3	638399.7	5971149.0
11090	A	K	10.3	321.2	8	22:42:28	50.6	638604.7	5984092.3
11090	A	K	6.3	251.4	8	22:44:40	47.6	638611.5	5984409.1
11090	B	K	4.0	200.7	8	22:44:54	49.9	638586.2	5984706.0



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
11090	C	K	1.6	128.1	8	22:47:45	51.1	638603.3	5989197.5
11090	D	N	2.9	169.9	8	22:48:58	36.7	638603.6	5991503.0
11090	E	K	16.6	407.2	8	22:49:32	45.1	638594.3	5992570.3
11090	F	K	14.3	378.4	8	22:49:47	50.6	638593.1	5993022.5
11091	A	K	72.0	848.7	23	19:32:00	62.4	638603.5	5970730.7
11091	B	K	59.2	769.6	23	19:32:14	39.3	638605.2	5971128.6
11091	C	K	35.4	594.8	23	19:32:41	42.6	638585.5	5971966.3
11091	D	K	85.0	921.9	23	19:33:07	57.4	638601.1	5972795.6
11091	E	K	45.0	670.9	23	19:33:16	51.9	638597.3	5973082.2
11091	F	K	48.5	696.4	23	19:34:00	49.3	638600.1	5974349.4
11091	G	K	28.9	537.8	23	19:34:54	40.0	638599.2	5976018.7
11091	H	K	35.3	594.0	23	19:35:17	47.9	638596.0	5976769.1
11091	I	K	40.1	633.0	23	19:35:30	85.0	638599.4	5977160.5
11091	J	K	40.8	638.7	23	19:35:47	75.6	638602.2	5977644.1
11091	K	K	69.7	834.7	23	19:36:06	77.7	638596.0	5978203.0
11091	L	K	69.7	835.0	23	19:36:24	49.8	638603.3	5978669.7
11100	A	K	9.7	312.0	8	22:35:31	46.4	638790.8	5992139.9
11100	B	K	2.7	163.2	8	22:40:37	54.8	638796.2	5984599.1
11100	C	K	10.6	325.4	8	22:41:05	55.9	638778.7	5983881.0
11101	A	K	57.5	758.5	23	19:37:48	42.3	638794.5	5978576.8
11101	B	K	37.4	611.3	23	19:38:26	76.7	638794.6	5977514.3
11101	C	K	33.8	581.0	23	19:38:50	42.5	638804.4	5976838.5
11101	D	K	60.8	780.0	23	19:39:18	44.5	638808.5	5976065.5
11101	E	K	31.1	557.9	23	19:39:50	40.9	638807.3	5975103.6
11101	F	K	85.0	922.2	23	19:40:00	44.2	638804.5	5974804.9
11101	G	K	47.7	691.0	23	19:40:14	55.3	638797.2	5974429.0
11101	H	N	66.8	817.3	23	19:41:11	51.9	638810.0	5972995.2
11101	I	K	29.2	539.9	23	19:41:42	36.9	638795.2	5972157.3
11101	J	K	28.6	534.6	23	19:42:03	41.3	638805.3	5971571.5
11101	K	K	33.9	582.3	23	19:42:14	41.5	638803.4	5971262.6
11101	L	K	55.9	747.7	23	19:42:31	45.0	638800.4	5970759.9
11110	A	N	11.2	334.1	6	17:37:04	57.0	638985.9	5992148.1
11110	B	K	5.3	229.9	6	17:39:13	57.6	638997.6	5988957.6
11110	C	K	1.4	119.4	6	17:40:13	39.1	638999.6	5987410.3
11110	D	K	1.1	103.8	6	17:40:33	45.6	639002.5	5986916.3
11111	A	K	41.0	640.2	23	19:46:58	49.6	638995.6	5971209.4
11111	B	K	77.6	880.9	23	19:47:11	51.1	638994.0	5971617.6
11111	C	K	37.1	608.9	23	19:47:14	45.6	638994.6	5971705.0
11111	D	K	38.9	623.4	23	19:47:21	42.1	638997.1	5971927.2
11111	E	K	45.4	673.9	23	19:48:37	54.7	638996.7	5974257.0
11111	F	K	35.1	592.7	23	19:49:00	54.5	638993.9	5974919.0
11111	G	K	41.8	646.7	23	19:49:15	45.1	638996.3	5975368.1
11111	H	K	70.8	841.6	23	19:49:33	43.0	638994.6	5975935.1
11111	I	K	92.5	961.8	23	19:49:47	52.0	639000.8	5976398.4
11111	J	K	63.7	798.3	23	19:50:34	43.0	638998.5	5977858.5

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
11111	K	K	86.8	931.4	23	19:50:59	48.7	638997.0	5978661.8
11111	L	K	80.1	895.2	23	19:51:29	47.8	639001.8	5979616.3
11111	M	K	51.4	716.9	23	19:51:43	84.8	639001.5	5980065.3
11111	N	K	33.7	580.5	23	19:51:53	75.4	639001.4	5980354.4
11120	A	N	1.0	99.0	5	23:23:06	64.4	639204.0	5985938.0
11120	B	K	1.0	99.0	5	23:23:43	43.2	639210.0	5986835.6
11120	C	N	9.4	307.2	5	23:26:29	32.9	639183.8	5991371.7
11120	D	K	9.4	307.2	5	23:26:59	51.7	639192.4	5992173.5
11121	A	K	36.2	601.8	23	19:53:29	59.6	639200.1	5980576.6
11121	B	K	42.9	655.2	23	19:53:46	58.0	639207.5	5980041.4
11121	C	K	46.5	681.6	23	19:54:00	45.7	639199.9	5979646.4
11121	D	N	87.8	937.2	23	19:54:20	51.2	639204.0	5979071.8
11121	E	K	125.9	1122.0	23	19:54:31	52.4	639197.7	5978769.3
11121	F	K	29.6	544.1	23	19:55:00	44.7	639200.9	5977898.7
11121	G	N	45.9	677.8	23	19:55:32	45.3	639204.9	5976915.6
11121	H	K	45.9	677.8	23	19:55:50	43.0	639201.7	5976412.7
11121	I	K	85.9	926.6	23	19:56:07	48.0	639202.1	5975954.3
11121	J	K	78.8	887.9	23	19:56:11	48.7	639206.1	5975824.0
11121	K	K	59.9	774.2	23	19:56:54	56.0	639207.2	5974551.3
11121	L	K	55.5	745.0	23	19:57:38	51.4	639204.6	5973411.1
11121	M	N	43.2	657.2	23	19:58:01	42.6	639194.8	5972795.6
11121	N	K	43.2	657.2	23	19:58:15	39.5	639192.2	5972409.2
11121	O	K	34.1	583.7	23	19:58:32	43.3	639196.1	5971930.0
11121	P	K	25.4	504.1	23	19:59:07	52.2	639199.6	5970907.7
11130	A	K	8.9	297.9	5	23:18:01	45.6	639398.8	5990874.1
11130	B	K	3.5	187.1	5	23:19:32	47.8	639391.8	5988038.5
11130	C	K	0.9	92.7	5	23:20:10	33.2	639395.2	5986779.1
11131	A	K	26.4	514.0	23	20:00:43	54.7	639403.4	5971925.5
11131	B	K	33.4	577.9	23	20:00:54	48.5	639395.6	5972289.2
11131	C	K	58.6	765.6	23	20:01:30	43.0	639399.4	5973430.0
11131	D	K	48.1	693.5	23	20:01:43	42.5	639400.7	5973824.5
11131	E	K	50.1	707.5	23	20:02:06	50.3	639395.0	5974538.2
11131	F	K	35.0	591.3	23	20:02:23	52.7	639395.6	5974987.0
11131	G	N	40.6	637.3	23	20:02:58	39.5	639404.3	5975994.8
11131	H	K	40.6	637.3	23	20:03:13	49.1	639398.9	5976448.5
11131	I	K	83.0	910.9	23	20:03:59	46.8	639398.3	5977818.2
11131	J	K	79.0	888.8	23	20:04:06	40.8	639398.2	5978057.8
11131	K	K	64.6	803.8	23	20:04:27	49.4	639399.9	5978731.1
11131	L	K	45.3	672.7	23	20:05:09	44.5	639398.1	5980024.0
11131	M	K	43.3	658.1	23	20:05:20	58.4	639395.8	5980376.8
11131	N	N	43.3	658.1	23	20:05:24	64.3	639396.5	5980483.8
11131	O	K	40.7	638.1	23	20:05:30	65.5	639401.6	5980675.0
11140	A	K	1.1	106.6	5	23:10:59	45.2	639606.3	5985595.1
11140	B	K	1.1	106.4	5	23:11:27	38.2	639600.5	5986394.8
11140	C	K	3.3	182.1	5	23:12:25	35.7	639596.3	5988021.2



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
11140	D	K	9.3	304.3	5	23:14:04	46.3	639593.5	5990953.1
11140	E	K	9.1	301.4	5	23:14:45	48.4	639595.7	5992132.6
11141	A	K	59.1	768.9	23	20:06:50	56.0	639601.0	5980511.7
11141	B	K	25.6	506.4	23	20:07:14	40.6	639600.2	5979857.1
11141	C	K	37.5	612.4	23	20:07:33	56.0	639595.2	5979322.1
11141	D	K	32.8	572.5	23	20:07:48	39.8	639596.3	5978925.0
11141	E	K	34.1	584.1	23	20:07:57	45.7	639596.6	5978658.4
11141	F	K	56.1	748.8	23	20:08:13	44.8	639603.7	5978247.4
11141	G	K	92.7	962.9	23	20:08:42	67.7	639601.6	5977427.6
11141	H	K	35.0	591.4	23	20:09:15	41.8	639602.6	5976478.5
11141	I	K	35.2	593.1	23	20:09:20	41.7	639602.7	5976343.4
11141	J	K	36.1	601.0	23	20:09:51	47.3	639600.4	5975425.6
11141	K	K	52.4	723.9	23	20:10:11	65.9	639594.0	5974976.6
11141	L	K	39.4	627.3	23	20:10:44	64.5	639600.1	5974055.1
11141	M	K	67.3	820.2	23	20:11:33	40.1	639595.6	5972555.5
11141	N	K	23.0	479.7	23	20:12:17	59.9	639594.8	5971291.9
11150	A	K	7.0	264.0	5	23:06:55	46.9	639801.0	5989808.1
11150	B	K	6.2	248.3	5	23:07:21	55.0	639811.2	5989057.7
11150	C	K	5.1	225.4	5	23:08:02	41.9	639783.9	5987718.5
11150	D	K	3.5	186.4	5	23:08:29	49.9	639797.1	5986869.9
11151	A	K	11.2	334.5	23	20:13:48	54.1	639801.9	5971351.2
11151	B	K	36.2	601.7	23	20:14:02	57.4	639799.0	5971766.8
11151	C	K	35.8	598.2	23	20:14:22	47.3	639797.9	5972406.0
11151	D	K	81.8	904.7	23	20:14:39	70.2	639804.4	5972935.3
11151	E	K	53.0	728.0	23	20:15:03	48.5	639794.5	5973729.6
11151	F	K	63.8	798.6	23	20:15:19	49.7	639802.1	5974201.8
11151	G	K	45.9	677.4	23	20:15:28	41.3	639802.6	5974490.1
11151	H	K	41.9	647.5	23	20:15:50	56.8	639789.2	5975117.0
11151	I	K	39.5	628.7	23	20:16:05	45.5	639799.3	5975575.4
11151	J	K	59.7	772.5	23	20:16:31	38.6	639801.7	5976371.0
11151	K	K	83.1	911.8	23	20:17:26	58.5	639792.9	5978019.6
11151	L	K	30.3	550.0	23	20:17:54	34.3	639801.7	5978857.6
11151	M	K	48.7	697.5	23	20:18:48	48.4	639800.1	5980495.4
11151	N	K	82.2	906.5	23	20:19:07	58.6	639801.6	5981063.1
11160	A	K	5.6	235.6	5	22:59:57	54.2	640001.1	5986853.0
11160	B	K	11.9	344.5	5	23:00:55	47.6	639996.6	5988567.7
11160	C	K	6.9	263.4	5	23:01:36	39.3	640004.1	5989730.0
11160	D	K	9.3	305.1	5	23:02:18	41.6	639998.4	5991055.5
11160	E	K	13.7	369.6	5	23:02:49	51.1	639991.1	5991936.0
11161	A	K	89.0	943.3	23	20:19:49	63.6	639990.4	5981069.9
11161	B	K	29.1	539.7	23	20:21:06	42.9	640000.5	5978944.7
11161	C	K	32.7	571.5	23	20:21:19	43.0	640007.2	5978551.4
11161	D	K	89.2	944.4	23	20:21:52	68.1	639997.0	5977638.6
11161	E	K	101.0	1005.2	23	20:22:02	60.7	640004.7	5977341.5
11161	F	K	47.9	692.3	23	20:23:10	47.6	640001.3	5975285.9



Job # 10006

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
11161	G	K	35.0	591.9	23	20:23:39	51.2	640001.5	5974447.9
11161	H	K	66.4	814.6	23	20:23:59	42.9	640002.8	5973832.4
11161	I	K	77.6	881.2	23	20:24:28	48.6	639994.7	5972939.3
11161	J	K	39.5	628.2	23	20:24:46	57.3	639986.3	5972357.3
11161	K	K	32.2	567.5	23	20:24:54	51.5	639991.8	5972117.5
11170	A	K	9.6	310.2	5	22:55:00	34.8	640194.5	5989764.3
11170	B	K	7.0	264.4	5	22:56:20	52.9	640195.7	5987277.5
11171	A	K	6.7	258.2	24	22:16:53	43.1	640209.2	5970860.7
11171	B	K	37.0	608.0	24	22:17:39	59.1	640205.2	5972333.8
11171	C	K	36.3	602.8	24	22:17:50	50.2	640205.6	5972705.7
11171	D	K	58.5	764.6	24	22:18:12	49.0	640198.3	5973409.5
11171	E	K	41.1	640.9	24	22:18:33	58.6	640201.0	5974032.0
11171	F	K	57.9	761.0	24	22:18:48	57.2	640197.9	5974539.4
11171	G	K	36.2	601.7	24	22:19:11	50.1	640196.6	5975275.3
11171	H	K	99.8	998.8	24	22:20:12	44.1	640205.2	5977228.5
11171	I	K	80.4	896.6	24	22:20:31	49.8	640195.3	5977877.9
11171	J	K	30.7	553.7	24	22:20:49	50.1	640198.0	5978438.2
11171	K	K	16.9	411.2	24	22:21:04	40.3	640201.5	5978890.2
11171	L	K	38.7	621.7	24	22:22:12	44.8	640204.2	5980962.9
11180	A	K	8.5	291.7	5	22:47:49	46.2	640400.0	5986756.5
11180	B	K	5.4	232.7	5	22:48:07	41.4	640402.2	5987244.3
11180	C	K	9.1	301.5	5	22:48:41	39.9	640402.5	5988197.6
11181	A	K	19.6	442.9	24	22:24:26	43.1	640401.7	5978901.8
11181	B	K	30.4	551.0	24	22:24:47	43.5	640401.9	5978280.4
11181	C	K	89.2	944.4	24	22:25:23	49.7	640403.2	5977175.9
11181	D	K	55.1	742.4	24	22:26:48	55.1	640397.9	5974632.6
11181	E	K	65.6	810.1	24	22:27:11	52.5	640406.3	5974011.6
11181	F	K	58.2	763.1	24	22:27:31	35.6	640405.3	5973437.0
11181	G	K	63.7	797.8	24	22:27:57	45.7	640402.9	5972698.0
11181	H	K	28.2	530.7	24	22:28:33	52.7	640407.6	5971600.6
11181	I	K	13.2	363.7	24	22:28:45	45.0	640406.3	5971245.4
11181	J	K	6.9	262.7	24	22:28:59	38.1	640399.2	5970830.3
11191	A	K	29.5	543.3	24	22:30:35	52.0	640599.1	5972115.4
11191	B	K	72.8	853.3	24	22:30:57	47.7	640602.8	5972817.3
11191	C	K	55.3	743.7	24	22:32:05	78.6	640610.3	5974675.9
11191	D	K	110.5	1051.2	24	22:33:37	77.5	640601.8	5977372.6
11191	E	K	26.2	512.1	24	22:34:08	46.7	640591.5	5978262.4
11191	F	K	24.5	495.3	24	22:34:24	42.7	640598.8	5978774.6
11192	A	K	42.7	653.2	24	21:46:56	54.6	640601.1	5991470.4
11192	B	K	44.9	669.9	24	21:47:11	52.6	640607.3	5991043.0
11192	C	K	39.6	629.1	24	21:47:39	63.4	640601.8	5990212.3
11192	D	K	12.7	355.8	24	21:48:03	38.9	640606.2	5989455.5
11192	E	K	21.3	460.9	24	21:48:44	40.6	640601.1	5988109.4
11192	F	K	9.2	303.5	24	21:49:18	44.8	640600.7	5987056.9
11201	A	K	15.1	388.8	24	22:39:51	55.9	640793.9	5978608.1



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
11201	B	K	22.8	477.7	24	22:40:09	46.4	640803.0	5978058.1
11201	C	K	53.0	727.7	24	22:40:28	76.7	640801.8	5977525.5
11201	D	K	14.6	381.8	24	22:41:28	59.4	640795.8	5976022.8
11201	E	K	38.0	616.8	24	22:42:19	48.2	640794.7	5974532.2
11201	F	K	49.0	699.7	24	22:42:50	61.7	640796.5	5973642.5
11201	G	K	67.5	821.7	24	22:43:09	51.6	640805.7	5973192.8
11201	H	K	61.3	782.9	24	22:43:21	44.7	640799.8	5972898.6
11201	I	K	24.6	495.9	24	22:43:54	48.3	640799.2	5971944.7
11201	J	K	12.4	351.5	24	22:44:23	38.4	640804.6	5971105.7
11202	A	K	43.2	657.4	24	21:41:38	41.3	640796.4	5987097.4
11202	B	K	151.4	1230.4	24	21:42:45	40.9	640795.3	5989301.1
11202	C	K	92.9	963.7	24	21:43:14	55.5	640794.8	5990261.4
11202	D	K	47.5	689.4	24	21:43:40	50.5	640797.1	5991100.6
11202	E	K	73.6	857.7	24	21:43:57	59.2	640800.8	5991633.3
11211	A	K	18.8	433.8	24	22:46:01	52.6	640989.7	5971659.7
11211	B	K	70.2	837.9	24	22:46:40	51.2	640997.4	5972928.8
11211	C	K	51.7	719.0	24	22:47:16	55.3	640993.2	5973909.9
11211	D	K	94.1	970.2	24	22:47:34	55.0	640991.8	5974415.4
11211	E	K	63.5	796.8	24	22:49:19	54.7	640998.9	5977438.2
11211	F	K	38.9	623.9	24	22:49:30	60.3	640986.7	5977719.6
11211	G	K	28.7	535.6	24	22:50:49	43.3	641003.1	5980084.3
11212	A	K	52.7	726.2	24	21:36:18	54.6	640998.1	5991497.2
11212	B	K	59.4	770.8	24	21:36:31	52.3	641001.2	5991140.4
11212	C	K	68.6	828.2	24	21:36:43	41.2	641006.4	5990773.9
11212	D	K	106.1	1030.0	24	21:36:59	50.6	641004.2	5990308.3
11212	E	K	59.2	769.7	24	21:38:09	60.7	640998.4	5988203.2
11212	F	K	59.0	768.3	24	21:38:42	40.2	641003.6	5987146.7
11212	G	K	*	*	24	21:39:07	65.5	640991.4	5986332.5
11221	A	K	41.7	645.3	24	22:52:09	63.7	641206.4	5981089.2
11221	B	K	15.7	396.7	24	22:52:39	41.3	641192.2	5980316.0
11221	C	K	24.9	499.2	24	22:52:52	37.9	641200.9	5979937.2
11221	D	K	31.4	560.0	24	22:53:22	65.0	641204.4	5978975.4
11221	E	K	32.7	571.4	24	22:54:19	45.6	641200.4	5977256.9
11221	F	K	88.2	939.2	24	22:54:56	58.0	641201.5	5976407.8
11221	G	K	52.1	721.9	24	22:56:00	48.0	641198.6	5974494.0
11222	A	K	3.2	180.0	22	18:31:16	46.3	641199.4	5986011.9
11222	B	K	6.7	259.4	22	18:31:26	58.8	641198.3	5986282.2
11222	C	K	16.9	410.6	22	18:31:54	51.7	641197.0	5987116.9
11222	D	K	31.1	557.7	22	18:32:20	53.2	641212.6	5987933.3
11222	E	K	22.5	474.6	22	18:32:29	50.8	641209.9	5988212.3
11222	F	K	8.9	298.1	22	18:33:17	73.1	641199.2	5989771.2
11222	G	K	42.9	654.6	22	18:33:40	48.2	641202.5	5990434.0
11222	H	K	32.3	568.0	22	18:33:53	51.5	641199.5	5990795.8
11222	I	K	34.3	585.3	22	18:34:06	46.4	641196.7	5991161.9
11222	J	N	13.2	362.8	22	18:34:42	53.8	641194.9	5992216.5



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
11231	A	K	51.8	719.7	24	22:56:49	45.5	641402.5	5974462.4
11231	B	K	48.5	696.5	24	22:57:14	40.3	641410.7	5975132.0
11231	C	K	68.7	828.9	24	22:58:00	51.4	641394.3	5976545.7
11231	D	K	31.3	559.3	24	22:58:10	62.6	641394.8	5976862.2
11231	E	K	26.6	515.3	24	22:59:36	38.2	641399.7	5979437.0
11231	F	K	34.0	582.8	24	22:59:50	50.5	641388.4	5979840.9
11231	G	K	283.7	1684.4	24	23:00:24	59.6	641401.2	5980901.1
11231	H	K	46.3	680.4	24	23:00:29	58.9	641400.2	5981035.8
11232	A	K	15.9	398.9	22	18:25:34	60.8	641400.1	5992330.8
11232	B	K	46.7	683.6	22	18:25:54	62.8	641402.5	5991795.5
11232	C	K	61.7	785.3	22	18:26:27	57.7	641406.7	5990930.8
11232	D	K	81.7	903.6	22	18:26:44	46.2	641399.1	5990454.9
11232	E	K	30.4	551.2	22	18:27:08	54.3	641402.1	5989772.7
11232	F	K	35.1	592.0	22	18:27:55	52.3	641399.5	5988480.3
11232	G	K	22.6	475.1	22	18:28:19	37.2	641402.6	5987867.6
11232	H	K	23.2	482.0	22	18:28:26	41.9	641405.6	5987682.2
11232	I	K	32.5	570.0	22	18:28:49	49.7	641394.7	5987061.0
11232	J	K	6.7	258.4	22	18:29:32	53.5	641397.2	5985876.2
11241	A	K	95.0	974.5	24	23:01:14	65.9	641596.3	5980907.5
11241	B	K	15.6	395.0	24	23:02:14	50.4	641606.6	5979081.6
11241	C	K	16.3	403.4	24	23:03:23	42.4	641605.1	5977014.0
11241	D	K	78.9	888.5	24	23:03:58	53.2	641605.1	5975960.3
11241	E	K	45.1	671.7	24	23:04:27	38.3	641602.6	5975066.8
11241	F	K	39.7	630.4	24	23:04:37	35.8	641598.6	5974752.4
11242	A	K	23.0	479.6	22	18:15:00	57.8	641609.7	5986730.7
11242	B	K	25.6	505.8	22	18:15:12	63.5	641615.7	5987093.4
11242	C	K	26.0	509.4	22	18:15:22	64.3	641615.7	5987390.9
11242	D	K	26.9	518.1	22	18:15:37	46.2	641615.1	5987772.4
11242	E	K	15.2	389.2	22	18:16:04	63.1	641597.3	5988578.5
11242	F	K	5.8	240.4	22	18:16:37	43.6	641595.6	5989527.8
11242	G	K	16.9	411.3	22	18:16:52	56.6	641606.3	5989971.7
11242	H	K	23.9	488.3	22	18:17:04	44.7	641604.5	5990304.2
11242	I	K	32.0	565.4	22	18:17:29	51.7	641593.8	5991019.0
11242	J	K	17.4	417.6	22	18:18:09	52.8	641595.0	5992148.6
11242	K	K	20.1	448.2	22	18:18:31	63.3	641605.0	5992749.5
11251	A	K	43.7	661.4	24	23:05:48	37.9	641797.1	5974845.2
11251	B	K	38.8	622.9	24	23:06:14	53.7	641803.9	5975675.5
11251	C	K	6.6	256.9	24	23:06:50	64.5	641799.2	5976835.1
11251	D	K	7.8	279.3	24	23:08:02	48.2	641795.9	5979029.5
11252	A	K	39.7	630.3	22	18:08:54	50.5	641799.9	5992763.3
11252	B	K	35.7	597.3	22	18:09:10	54.8	641799.3	5992324.0
11252	C	K	26.3	513.2	22	18:09:44	59.1	641803.4	5991298.6
11252	D	K	8.5	291.4	22	18:10:50	55.2	641805.3	5989304.7
11252	E	K	19.6	442.4	22	18:11:07	50.3	641801.0	5988797.3
11252	F	N	18.8	433.1	22	18:11:42	47.8	641806.3	5987826.9

Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
11252	G	K	47.4	688.4	22	18:12:09	67.3	641797.1	5987063.2
11252	H	K	34.7	588.6	22	18:12:31	54.4	641800.4	5986493.0
19130	A	K	22.0	468.6	7	21:35:08	72.5	641982.7	5975979.4
11261	B	K	5.4	231.3	7	21:36:49	51.8	642001.1	5979058.8
11261	C	K	12.9	358.5	7	21:37:46	55.0	641989.1	5980794.9
11262	A	K	30.3	550.2	22	18:03:39	56.6	641998.6	5986476.9
11262	B	N	25.2	502.3	22	18:04:00	49.6	641998.7	5987118.7
11262	C	K	13.3	364.2	22	18:04:09	54.8	642000.1	5987355.8
11262	D	K	10.6	325.5	22	18:04:34	49.1	642004.8	5987935.8
11262	E	N	22.9	478.9	22	18:05:01	44.1	642001.1	5988662.1
11262	F	K	15.5	394.1	22	18:05:20	61.6	641996.6	5989184.7
11262	G	K	0.8	88.2	22	18:05:55	51.0	642007.1	5990192.5
11262	H	K	15.8	397.1	22	18:06:38	57.1	642002.9	5991505.7
11262	I	K	37.4	611.8	22	18:07:00	56.0	641997.1	5992190.9
11262	J	K	43.3	658.1	22	18:07:16	51.2	642006.5	5992692.2
11262	K	K	74.1	861.0	22	18:07:31	60.7	642013.4	5993138.1
11272	A	K	71.9	847.7	22	17:57:12	55.4	642194.6	5993131.9
11272	B	K	65.4	808.4	22	17:57:23	63.7	642196.1	5992806.8
11272	C	K	50.7	712.1	22	17:57:33	56.1	642198.8	5992527.0
11272	D	K	33.8	581.0	22	17:57:46	45.1	642196.7	5992129.4
11272	E	K	24.6	496.3	22	17:58:03	53.8	642200.8	5991625.2
11272	F	K	20.3	450.1	22	17:59:33	51.8	642204.0	5989023.9
11272	G	K	37.0	608.3	22	17:59:42	45.9	642209.7	5988771.5
11272	H	K	17.9	422.6	22	18:00:35	57.6	642204.4	5987393.2
11272	I	K	42.1	648.5	22	18:00:58	50.0	642198.1	5986782.9
11272	J	K	37.0	608.5	22	18:01:11	51.7	642202.6	5986426.6
11272	K	K	22.5	474.4	22	18:01:30	56.3	642203.9	5985906.6
11282	A	K	19.2	438.6	22	17:51:26	58.7	642400.4	5985694.1
11282	B	K	19.0	436.0	22	17:52:16	54.0	642400.9	5986844.3
11282	C	K	14.7	383.9	22	17:52:31	55.2	642397.9	5987190.7
11282	D	K	20.2	449.2	22	17:52:59	46.7	642401.0	5988000.0
11282	E	K	34.2	584.4	22	17:53:25	34.5	642391.9	5988719.4
11282	F	K	17.6	420.0	22	17:53:35	42.0	642391.7	5989004.1
11282	G	K	4.8	217.9	22	17:54:08	46.0	642401.6	5989929.8
11282	H	K	8.4	290.4	22	17:55:08	57.3	642397.8	5991613.1
11282	I	K	44.8	669.2	22	17:55:21	58.4	642398.1	5992011.4
11282	J	K	61.4	783.8	22	17:55:48	58.7	642397.0	5992832.2
11290	A	K	13.2	363.9	24	23:11:35	54.4	642589.6	5985224.7
11290	B	K	31.9	564.5	24	23:11:59	55.5	642582.6	5985945.0
11290	C	K	19.6	443.0	24	23:12:35	55.3	642593.6	5986988.4
11290	D	K	26.4	513.6	24	23:13:34	47.0	642581.2	5988835.2
11290	E	K	15.8	397.5	24	23:13:56	52.8	642580.1	5989549.1
11290	F	K	7.2	268.3	24	23:14:59	58.1	642583.6	5991607.5
11290	G	K	43.4	658.4	24	23:15:13	65.5	642598.8	5992056.5
11290	H	K	35.5	595.4	24	23:15:26	58.2	642594.2	5992495.7



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
11290	I	K	35.6	596.8	24	23:15:35	58.0	642599.4	5992765.8
20010	A	K	61.3	782.7	25	19:56:19	68.2	629410.5	5998912.6
20010	B	K	48.8	698.8	25	19:58:42	55.5	629414.0	5996339.0
20020	A	K	58.8	767.1	25	19:59:36	55.1	629597.9	5996346.4
20020	B	K	58.7	766.1	25	19:59:56	59.2	629600.3	5996800.5
20020	C	K	58.5	764.7	25	20:01:33	66.1	629590.0	5999054.9
20030	A	K	49.8	705.9	25	20:02:56	57.3	629798.5	5999108.1
20030	B	K	0.3	56.4	25	20:04:08	49.7	629797.3	5997981.7
20030	C	K	53.1	728.9	25	20:05:34	37.7	629792.1	5996381.6
20040	A	K	67.9	824.2	25	20:06:37	52.7	630004.3	5996431.0
20040	B	K	45.2	672.5	25	20:06:47	51.3	630008.1	5996660.7
20040	C	K	30.3	550.1	25	20:08:42	65.6	629982.8	5999114.1
20050	A	K	24.5	495.3	25	20:09:58	65.1	630192.1	5999171.8
20050	B	K	66.3	814.0	25	20:12:46	65.4	630200.8	5996356.6
20060	A	K	36.9	607.2	25	20:13:34	66.2	630397.6	5996359.8
20060	B	K	13.7	370.6	25	20:13:49	64.5	630393.3	5996629.6
20060	C	K	20.5	452.4	25	20:16:09	67.7	630395.0	5999342.3
20080	A	K	29.5	542.8	25	20:23:31	51.1	630811.1	5999410.5
20100	A	K	37.6	613.3	25	20:30:38	58.3	631193.6	5999431.2
20110	A	K	36.7	606.1	25	20:31:34	57.0	631403.5	5999222.9
20120	A	K	9.7	312.1	25	20:36:01	55.8	631593.2	5998239.5
20120	B	K	12.8	357.7	25	20:36:16	51.7	631592.6	5998634.6
20130	A	K	61.6	784.8	25	20:38:35	59.0	631795.6	5998467.0
20130	B	K	33.0	574.5	25	20:38:47	42.9	631812.5	5998166.5
20140	A	K	37.0	607.9	25	20:41:44	48.4	632002.4	5997728.7
20140	B	K	74.1	861.0	25	20:41:56	45.1	632004.9	5998052.4
20140	C	K	84.2	917.8	25	20:42:16	77.4	631999.7	5998753.8
20150	A	K	53.1	728.7	25	20:43:43	56.3	632200.9	5999118.9
20150	B	K	73.4	856.9	25	20:43:55	58.7	632194.4	5998882.1
20150	C	K	80.1	895.0	25	20:44:35	48.3	632198.0	5997929.0
20160	A	K	21.6	464.2	25	20:46:52	52.0	632413.0	5997095.5
20160	B	K	28.8	536.2	25	20:47:05	51.0	632414.3	5997433.0
20160	C	K	28.3	531.7	25	20:47:40	50.7	632407.5	5998311.7
20160	D	K	25.7	506.6	25	20:47:54	49.6	632402.9	5998788.7
20160	E	K	15.9	398.2	25	20:48:03	58.3	632396.9	5999059.3
20170	A	K	38.8	622.5	25	20:50:48	64.2	632592.7	5997372.4
20170	B	K	20.5	452.6	25	20:51:04	51.3	632596.5	5997001.5
20170	C	K	20.8	455.7	25	20:51:23	48.4	632601.1	5996577.3
30020	A	K	65.9	812.0	26	18:51:18	53.7	642791.3	5992785.6
30020	B	K	32.2	567.5	26	18:51:31	50.4	642787.0	5992485.9
30020	C	K	39.8	630.5	26	18:51:51	50.9	642801.1	5992009.8
30020	D	K	19.3	439.7	26	18:52:09	66.2	642801.3	5991543.6
30020	E	K	16.0	400.6	26	18:53:01	52.3	642796.6	5990214.2
30020	F	K	16.4	404.7	26	18:54:14	52.0	642803.8	5988356.0
30030	A	K	10.6	325.7	26	18:55:45	51.7	643002.7	5988320.1



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
30030	B	K	81.4	902.0	26	18:56:22	44.2	642996.6	5989464.7
30030	C	K	28.2	530.9	26	18:56:54	47.0	642998.9	5990390.7
30030	D	K	14.8	384.4	26	18:57:29	56.0	643002.5	5991338.9
30030	E	K	42.2	649.4	26	18:57:48	51.4	643009.0	5991805.2
30030	F	K	66.0	812.7	26	18:58:30	55.4	642999.6	5992926.4
30040	A	K	38.3	618.7	26	18:59:55	58.5	643188.1	5992722.0
30040	B	K	32.3	567.9	26	19:00:11	51.5	643195.1	5992318.8
30040	C	K	33.4	577.6	26	19:00:26	52.6	643191.2	5991905.1
30040	D	K	40.4	635.2	26	19:00:39	57.4	643198.1	5991533.2
30040	E	K	19.8	445.4	26	19:00:59	53.8	643197.0	5990972.4
30040	F	K	76.2	872.7	26	19:01:46	50.5	643194.0	5989711.5
30040	G	K	9.1	300.8	26	19:02:23	44.5	643203.1	5988720.8
30050	A	K	10.5	323.8	26	19:04:35	53.3	643395.7	5988176.8
30050	B	K	34.6	588.0	26	19:05:33	54.4	643397.5	5989724.2
30050	C	K	41.0	640.4	26	19:05:49	51.7	643398.3	5990177.6
30050	D	K	37.6	613.3	26	19:06:18	51.2	643410.7	5990903.9
30050	E	K	28.3	532.2	26	19:06:43	44.0	643401.8	5991485.5
30050	F	K	27.8	526.9	26	19:07:17	53.3	643402.8	5992279.1
30050	G	K	40.6	637.4	26	19:07:38	53.6	643399.9	5992783.1
30050	H	K	56.2	749.5	26	19:07:53	49.1	643402.4	5993084.3
30060	A	K	26.2	511.6	26	19:08:51	49.6	643614.8	5993270.7
30060	B	K	38.2	618.4	26	19:09:15	61.1	643595.8	5992575.1
30060	C	K	30.9	555.4	26	19:09:26	59.2	643603.4	5992264.0
30060	D	K	29.2	540.0	26	19:09:44	69.4	643601.0	5991697.6
30060	E	K	37.1	609.2	26	19:10:13	56.1	643598.8	5990827.1
30060	F	K	29.0	538.5	26	19:10:32	49.2	643594.6	5990258.8
30060	G	K	14.7	383.3	26	19:10:54	57.6	643595.7	5989587.0
30060	H	K	6.9	263.4	26	19:11:18	52.1	643597.8	5988853.6
30060	I	K	11.7	341.6	26	19:11:50	95.3	643604.5	5987935.7
30070	A	K	6.4	252.1	26	19:14:05	48.1	643800.1	5989541.0
30070	B	K	14.7	383.7	26	19:14:41	44.5	643804.4	5990310.3
30070	C	K	43.8	662.0	26	19:15:02	42.3	643802.9	5990771.0
30070	D	K	20.2	448.9	26	19:15:51	55.0	643793.2	5991910.4
30070	E	K	33.8	581.1	26	19:16:02	50.4	643793.6	5992161.2
30070	F	K	32.3	568.2	26	19:16:24	57.4	643795.0	5992667.7
30080	A	K	3.3	181.5	25	21:18:08	54.5	643999.7	5989300.6
30080	B	K	18.7	432.8	25	21:18:52	44.0	643999.5	5990712.7
30080	C	K	13.3	364.2	25	21:19:10	53.4	644012.5	5991233.5
30080	D	K	15.2	389.8	25	21:19:34	50.4	644001.8	5991930.9
30080	E	K	27.1	520.1	25	21:20:01	51.9	643989.7	5992720.8
30080	F	K	22.4	473.3	25	21:20:21	57.8	643998.4	5993276.1
30090	A	K	43.3	657.7	26	19:19:22	81.7	644195.6	5993208.8
30090	B	K	42.5	651.9	26	19:19:40	51.5	644185.1	5992672.9
30090	C	K	40.5	636.1	26	19:20:00	51.8	644182.2	5992073.7
30090	D	K	16.2	402.5	26	19:20:25	73.7	644187.6	5991280.8



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
30090	E	K	24.0	490.2	26	19:20:43	63.2	644191.4	5990751.3
30090	F	K	1.8	133.6	26	19:21:39	50.4	644181.0	5989171.6
30090	G	K	6.6	256.1	26	19:22:19	56.5	644197.9	5988110.7
19010	A	K	11.8	343.6	4	20:47:14	48.0	634232.9	5996400.6
19010	B	K	43.4	658.6	4	20:47:32	42.9	633799.6	5996401.2
19010	C	K	43.7	661.0	4	20:47:47	51.5	633428.5	5996394.0
19010	D	K	31.5	561.2	4	20:48:18	49.7	632446.5	5996402.9
19010	E	K	65.4	808.9	4	20:49:52	53.8	629755.5	5996393.6
19010	F	K	34.8	590.1	4	20:51:06	57.5	627301.6	5996400.8
19010	G	K	21.7	466.0	4	20:51:21	50.7	626802.3	5996394.6
19010	H	K	21.7	465.4	4	20:52:33	64.7	624525.9	5996398.3
19010	I	K	25.0	499.6	4	20:52:53	58.3	623936.5	5996389.5
19010	J	K	34.5	587.0	4	20:53:07	50.1	623445.2	5996417.7
19010	K	K	38.6	621.0	4	20:53:33	54.0	622597.2	5996396.3
19010	L	K	40.5	636.0	4	20:53:52	51.6	621988.2	5996395.5
19020	A	K	55.5	745.1	4	20:58:41	46.1	619940.3	5994407.6
19020	B	K	56.3	750.2	4	20:59:00	45.0	620440.3	5994406.0
19020	C	K	16.7	409.0	4	20:59:39	48.1	621492.7	5994399.9
19020	D	K	19.0	436.0	4	21:00:14	57.1	622470.3	5994399.7
19020	E	K	41.8	646.6	4	21:00:40	47.9	623215.6	5994403.6
19020	F	K	23.0	479.2	4	21:01:18	62.9	624271.2	5994404.6
19020	G	K	14.0	374.2	4	21:02:27	50.9	626021.7	5994399.2
19020	H	K	14.2	376.8	4	21:03:10	57.8	627189.6	5994393.9
19020	I	K	23.5	485.1	4	21:05:04	56.9	630341.1	5994395.2
19020	J	K	21.3	462.0	4	21:05:26	44.1	630965.6	5994396.0
19020	K	K	29.6	543.7	4	21:05:36	41.8	631244.0	5994401.5
19020	L	K	49.3	702.4	4	21:05:53	55.3	631720.4	5994399.4
19020	M	K	41.7	645.5	4	21:06:11	43.8	632181.6	5994401.8
19020	N	K	39.8	630.9	4	21:06:26	53.8	632535.9	5994409.9
19020	O	K	3.9	197.2	4	21:09:49	50.5	636551.9	5994404.1
19020	P	K	1.3	113.8	4	21:10:17	56.4	637340.5	5994397.9
19030	A	K	45.6	675.2	2	20:37:34	55.5	642554.8	5992397.2
19030	B	K	43.3	657.9	2	20:37:49	52.3	642155.8	5992403.5
19030	C	K	17.4	416.6	2	20:39:56	49.8	638296.7	5992412.8
19030	D	N	8.0	282.5	2	20:40:45	58.4	636890.3	5992399.6
19030	E	K	1.7	129.7	2	20:44:36	52.9	632688.6	5992397.9
19030	F	K	10.3	320.4	2	20:44:55	48.5	632183.8	5992422.6
19030	G	K	6.9	261.7	2	20:45:51	41.6	630782.7	5992408.4
19030	H	K	19.0	435.7	2	20:46:11	54.5	630305.9	5992407.1
19030	I	K	17.3	415.6	2	20:46:28	47.8	629838.5	5992396.5
19030	J	K	37.5	612.0	2	20:48:52	46.4	626466.9	5992409.2
19030	K	K	46.0	677.9	2	20:49:02	54.3	626209.9	5992391.5
19030	L	K	21.7	465.3	2	20:50:07	52.0	624304.4	5992402.9
19030	M	K	35.6	596.6	2	20:50:30	53.0	623655.8	5992401.6
19030	N	K	43.1	656.2	2	20:51:38	47.6	621729.1	5992404.2



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Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
19030	O	K	44.3	665.7	2	20:51:52	50.4	621298.0	5992397.4
19030	P	K	97.0	984.8	2	20:52:31	57.7	620150.8	5992398.0
19030	Q	K	51.5	717.3	2	20:52:40	61.4	619884.4	5992397.3
19030	R	K	51.1	714.5	2	20:53:01	67.1	619336.4	5992400.1
19040	A	K	27.6	525.5	1	19:14:52	49.0	619522.9	5990399.7
19040	B	K	12.1	347.1	1	19:15:36	55.0	620597.0	5990391.3
19040	C	K	15.0	387.2	1	19:15:58	53.2	621153.8	5990408.6
19040	A	K	17.3	416.1	1	19:18:40	61.0	621843.9	5990388.0
19040	B	N	19.9	445.6	1	19:18:58	59.7	622194.0	5990402.8
19040	C	N	24.6	495.6	1	19:20:35	68.0	624418.9	5990410.8
19040	D	K	19.6	442.5	1	19:21:17	56.4	625456.2	5990400.3
19040	E	K	19.6	442.4	1	19:21:44	56.5	626140.2	5990393.7
19040	F	K	29.4	542.2	1	19:22:48	56.9	627892.8	5990398.9
19040	G	K	9.8	312.7	1	19:24:42	47.3	630578.3	5990388.3
19040	H	K	14.4	379.3	1	19:25:38	49.6	632033.0	5990394.1
19040	I	K	8.7	295.2	1	19:25:52	42.4	632383.6	5990390.2
19040	J	K	5.4	233.2	1	19:26:34	48.6	633491.3	5990401.2
19040	K	K	21.2	459.9	1	19:31:38	50.7	640905.0	5990405.9
19040	L	K	80.2	895.7	1	19:31:51	46.8	641291.9	5990399.9
19050	A	K	33.6	580.0	4	21:16:38	58.6	642150.2	5988406.9
19050	B	K	22.4	472.7	4	21:17:07	66.1	641195.0	5988417.5
19050	C	K	6.6	257.4	4	21:17:31	47.1	640377.2	5988397.8
19050	D	K	31.9	564.7	4	21:20:43	49.9	633974.9	5988400.4
19050	E	K	113.0	1063.2	4	21:20:53	55.7	633607.6	5988398.7
19050	F	K	25.1	500.6	4	21:21:04	68.8	633162.6	5988400.7
19050	G	K	3.6	190.9	4	21:22:17	42.7	630747.5	5988409.3
19050	H	K	6.7	258.6	4	21:22:42	42.1	629986.8	5988399.0
19050	I	K	44.2	664.6	4	21:23:56	54.4	628154.8	5988386.9
19050	J	K	27.6	525.6	4	21:25:23	51.4	625244.0	5988398.1
19050	K	K	10.5	324.0	4	21:25:59	50.2	623993.5	5988402.3
19050	L	K	14.7	383.8	4	21:26:21	54.1	623249.3	5988398.9
19050	M	K	38.6	621.3	4	21:26:52	54.2	622186.0	5988399.5
19050	N	K	51.0	714.1	4	21:27:18	52.6	621353.5	5988393.9
19050	O	K	8.8	296.1	4	21:27:58	53.8	619979.6	5988404.0
19050	P	K	30.5	552.3	4	21:28:28	45.5	618930.5	5988403.7
19050	Q	K	11.2	334.9	4	21:28:50	68.7	618176.8	5988394.8
19050	R	K	9.9	315.0	4	21:29:22	66.6	616996.7	5988402.1
19060	A	K	3.8	195.6	4	21:31:55	43.0	617643.3	5986395.9
19060	B	K	10.2	318.5	4	21:32:05	39.5	617887.9	5986400.5
19060	C	K	8.9	298.3	4	21:32:47	52.4	618913.1	5986398.6
19060	D	K	7.9	281.5	4	21:33:14	54.9	619634.4	5986403.4
19060	E	K	10.0	315.5	4	21:33:26	50.4	619990.9	5986402.6
19060	F	K	39.8	630.6	4	21:34:22	50.0	621572.2	5986391.3
19060	G	K	19.4	440.2	4	21:35:19	56.7	623170.6	5986406.8
19060	H	K	16.5	406.3	4	21:36:16	62.0	624666.0	5986396.3



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
19060	I	K	32.6	571.2	4	21:36:38	57.6	625325.5	5986402.3
19060	J	K	17.3	416.0	4	21:37:11	47.0	626134.0	5986397.7
19060	K	K	2.8	167.4	4	21:37:39	54.3	626909.3	5986394.1
19060	L	K	14.2	376.6	4	21:38:18	57.6	627891.9	5986402.2
19060	M	K	14.4	379.7	4	21:39:43	47.5	629956.2	5986403.2
19060	N	K	5.7	238.7	4	21:40:42	54.5	631476.6	5986399.9
19060	O	K	9.8	312.8	4	21:41:08	50.6	632238.3	5986400.4
19060	P	K	10.3	321.2	4	21:41:28	61.2	632812.5	5986405.8
19060	Q	K	9.3	305.5	4	21:42:21	46.7	634122.8	5986394.0
19060	R	K	3.8	194.2	4	21:42:45	43.8	634626.2	5986400.5
19060	S	K	0.2	48.1	4	21:45:46	55.1	637334.6	5986401.3
19060	T	K	0.7	82.1	4	21:47:11	42.4	639543.4	5986397.2
19060	U	K	27.8	527.2	4	21:48:42	49.7	642045.4	5986400.6
19070	A	K	7.2	268.0	6	17:46:33	56.3	635094.3	5984402.1
19070	B	N	14.0	374.7	6	17:50:08	59.3	629657.2	5984396.9
19070	C	K	14.0	374.7	6	17:53:31	64.8	625523.9	5984404.0
19070	D	K	24.3	493.4	6	17:54:11	53.7	624506.8	5984393.6
19070	E	K	11.6	340.6	6	17:54:38	47.6	623809.4	5984406.9
19070	F	K	43.9	662.9	6	17:56:17	46.7	621326.0	5984402.6
19070	G	K	41.6	644.8	6	17:56:43	48.9	620642.7	5984399.0
19070	H	K	4.2	204.9	6	17:58:25	47.8	618078.5	5984400.2
19080	A	K	15.4	392.5	7	20:03:20	43.2	635463.4	5982399.7
19080	B	K	0.6	77.3	7	20:07:04	46.8	629118.2	5982397.3
19080	C	K	1.5	122.7	7	20:08:50	62.3	625958.3	5982388.6
19080	D	K	11.6	340.8	7	20:09:06	60.7	625395.1	5982403.2
19080	E	K	21.8	466.5	7	20:09:32	49.6	624609.1	5982402.9
19080	F	K	35.3	594.4	7	20:10:35	49.4	622643.5	5982389.0
19080	G	K	11.3	336.0	7	20:11:21	42.0	621177.2	5982406.9
19080	H	K	31.3	559.3	7	20:12:11	53.5	619599.0	5982398.8
19090	A	K	9.2	303.0	7	20:16:00	58.4	617165.9	5980408.2
19090	B	K	25.4	503.6	7	20:16:27	53.8	617920.8	5980402.8
19090	A	K	40.7	637.9	7	20:17:39	41.6	620129.0	5980398.7
19090	B	K	37.3	611.1	7	20:18:00	52.5	620758.9	5980403.2
19090	C	K	17.8	421.4	7	20:18:32	45.5	621724.6	5980405.4
19090	D	K	13.8	371.8	7	20:19:30	53.7	623466.5	5980402.4
19090	A	K	0.5	70.9	7	20:22:26	41.7	628786.1	5980401.3
19090	B	K	7.0	264.1	7	20:25:55	44.7	634964.2	5980411.9
19090	C	K	13.8	371.3	7	20:26:24	41.2	635912.8	5980404.8
19090	D	K	9.2	302.5	7	20:27:06	51.8	637225.3	5980411.8
19090	A	K	57.6	758.8	7	20:28:32	46.1	639726.0	5980394.4
19090	B	K	32.9	573.7	7	20:29:22	43.2	641178.7	5980401.1
19100	A	K	20.1	448.8	7	20:34:06	37.9	640488.1	5978405.6
19100	B	K	35.8	598.2	7	20:34:16	36.4	640216.2	5978400.5
19100	C	K	32.1	566.8	7	20:34:39	37.1	639514.6	5978406.0
19100	D	K	69.9	836.2	7	20:34:59	36.5	638915.7	5978402.7



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
19100	E	K	38.8	623.2	7	20:35:20	72.9	638346.5	5978395.1
19100	F	K	17.4	417.2	7	20:35:54	49.4	637400.9	5978408.3
19100	G	K	43.6	660.1	7	20:36:14	53.2	636822.7	5978401.3
19100	H	K	31.1	557.9	7	20:36:37	48.0	636109.6	5978407.4
19100	I	K	3.6	188.4	7	20:39:36	46.8	631065.8	5978396.3
19100	J	K	2.9	169.3	7	20:39:57	54.6	630428.1	5978403.7
19100	K	N	4.5	211.7	7	20:40:17	44.9	629817.6	5978392.7
19100	L	K	6.2	249.3	7	20:40:37	35.0	629178.0	5978415.5
19110	A	K	6.1	247.5	7	21:11:48	52.4	625635.5	5976392.0
19110	B	K	6.2	249.5	7	21:12:11	46.9	626289.1	5976400.8
19110	C	K	15.6	394.7	7	21:12:35	46.6	626855.0	5976402.4
19110	D	K	48.3	695.0	7	21:12:57	59.2	627420.0	5976393.1
19110	E	K	26.0	510.1	7	21:13:03	54.6	627605.3	5976395.5
19110	F	K	32.6	570.9	7	21:13:20	37.5	628095.0	5976402.8
19110	A	K	3.0	174.0	7	21:15:38	61.5	631651.2	5976401.4
19110	B	K	12.3	350.2	7	21:15:58	57.0	632210.2	5976397.9
19110	C	K	40.6	637.1	7	21:16:33	50.1	633200.7	5976410.1
19110	D	K	35.7	597.4	7	21:16:53	48.8	633789.5	5976406.1
19110	E	K	34.9	590.7	7	21:18:33	39.1	636635.1	5976404.4
19110	F	K	35.8	598.4	7	21:18:40	48.6	636846.7	5976405.5
19110	G	K	124.5	1115.8	7	21:18:55	48.9	637275.7	5976402.2
19110	H	K	46.5	681.5	7	21:19:12	37.9	637755.7	5976405.5
19110	I	K	43.5	659.5	7	21:19:24	56.4	638079.7	5976397.7
19110	J	K	42.8	654.5	7	21:20:02	37.7	639179.3	5976413.5
19110	K	K	20.0	446.9	7	21:20:17	41.6	639634.6	5976410.8
19110	L	N	35.5	595.4	7	21:20:52	50.7	640457.1	5976414.1
19110	M	K	34.3	585.7	7	21:21:34	62.7	641438.6	5976406.8
19120	A	K	44.8	669.0	7	21:24:35	57.2	641122.2	5974436.7
19120	B	K	37.4	611.7	7	21:24:54	77.0	640907.6	5974411.9
19120	C	K	37.2	610.2	7	21:25:44	42.9	639972.5	5974398.0
19120	D	K	53.6	731.8	7	21:26:15	55.7	639028.6	5974410.5
19121	A	K	5.7	238.0	17	17:20:45	59.7	631012.8	5974399.5
19121	B	K	1.2	111.4	17	17:23:45	51.0	626555.6	5974414.4
19121	C	K	3.0	172.3	17	17:24:00	50.0	626156.4	5974409.4
19130	A	K	12.6	354.5	7	21:30:51	51.8	637511.3	5972395.3
19130	B	K	67.5	821.8	7	21:31:16	46.3	638140.1	5972406.5
19130	C	K	59.7	772.6	7	21:31:36	40.0	638712.4	5972397.3
19130	D	K	51.8	719.6	7	21:31:52	40.2	639200.7	5972401.9
19130	E	K	65.7	810.3	7	21:32:06	34.7	639630.8	5972398.0
19130	F	K	37.6	613.1	7	21:32:31	51.3	640350.1	5972409.7
19130	G	K	40.5	636.4	7	21:32:49	45.6	640876.6	5972403.9
29010	A	K	33.1	574.9	25	20:57:53	67.1	629547.2	5999004.8
29010	B	K	19.1	437.1	25	20:58:12	62.7	630052.7	5999005.0
29010	C	K	30.6	553.5	25	20:59:16	61.7	631545.9	5999014.6
29010	D	K	31.6	561.8	25	20:59:31	69.2	631778.8	5999025.3



Line	Anom	ID	Cond (S)	Tau (μs)	Flight #	UTC Time	Bird height (m)	Easting (m)	Northing (m)
29010	E	K	25.0	500.4	25	20:59:54	58.3	632264.0	5998996.8
29010	F	K	16.0	399.3	25	21:00:15	71.9	632814.6	5998995.9
29020	A	K	20.6	454.3	25	20:53:38	54.9	632489.2	5997017.6
29020	B	K	6.8	260.5	25	20:53:57	57.9	632068.1	5997005.4
29020	C	K	9.0	300.7	25	20:55:41	56.3	629958.2	5997009.8
29020	D	K	22.6	474.9	25	20:56:05	56.2	629393.0	5997007.6
39010	A	K	18.7	432.0	25	21:08:39	48.3	643015.7	5992397.5
39010	B	K	29.1	539.4	25	21:08:57	50.2	643486.0	5992394.7
39010	C	K	20.2	449.0	25	21:09:19	49.1	644073.4	5992395.7
39020	A	K	7.1	266.4	25	21:11:31	50.6	643912.7	5990408.7
39020	B	K	33.6	579.7	25	21:11:47	45.0	643555.5	5990408.3
39020	C	K	17.3	416.1	25	21:12:11	54.4	642957.6	5990399.6
39030	A	K	14.3	377.6	25	21:14:27	48.6	642780.5	5988387.2
39030	B	K	5.4	232.8	25	21:14:41	49.7	643162.3	5988387.2

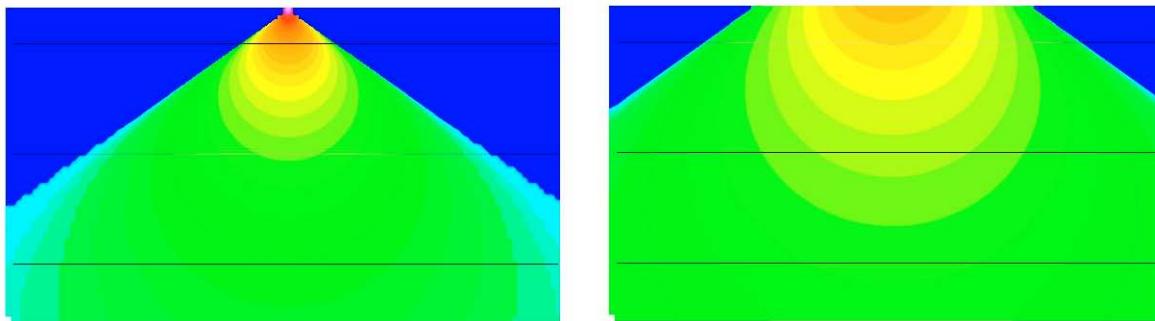
APPENDIX 4: AEROTEM DESIGN CONSIDERATIONS

Helicopter-borne EM systems offer an advantage that cannot be matched from a fixed-wing platform. The ability to fly at slower speed and collect data

3a with high spatial resolution, and with great accuracy, means the helicopter EM systems provide more detail than any other EM configuration, airborne or ground-based. Spatial resolution is especially important in areas of complex geology and in the search for discrete conductors. With the advent of helicopter-borne high-moment time domain EM systems the fixed wing platforms are losing their *only* advantage – depth penetration.

Advantage 1 – Spatial Resolution

The AeroTEM system is specifically designed to have a small footprint. This is accomplished through the use of concentric transmitter-receiver coils and a relatively small diameter transmitter coil (5 m). The result is a highly focused exploration footprint, which allows for more accurate “mapping” of discrete conductors. Consider the transmitter primary field images shown in Figure 1, for AeroTEM versus a fixed-wing transmitter.



The footprint of AeroTEM at the earth's surface is roughly 50m on either side of transmitter

The footprint of a fixed-wing system is roughly 150 m on either side of the transmitter

Figure 1. A comparison of the footprint between AeroTEM and a fixed-wing system, highlights the greater resolution that is achievable with a transmitter located closer to the earth's surface. The AeroTEM footprint is one third that of a fixed-wing system and is symmetric, while the fixed-wing system has even lower spatial resolution along the flight line because of the separated transmitter and receiver configuration.

At first glance one may want to believe that a transmitter footprint that is distributed more evenly over a larger area is of benefit in mineral exploration. In fact, the opposite is true; by energizing a larger surface area, the ability to energize and detect discrete conductors is reduced. Consider, for example, a comparison between AeroTEM and a fixed-wing system over the Mesamax Deposit (1,450,000 tonnes of 2.1% Ni, 2.7% Cu, 5.2 g/t Pt/Pd). In a test survey over three flight lines spaced 100 m apart, AeroTEM detected the Deposit on all three flight lines. The fixed-wing system detected the Deposit only on two flight lines. In exploration programs that seek to expand the flight line spacing in an effort to reduce the cost of the airborne survey, discrete conductors such as the Mesamax Deposit can go undetected. The argument often put forward in favour of using fixed-wing systems is that because of their larger footprint, the flight line spacing can indeed be widened. Many fixed-wing surveys are flown at 200 m or 400 m. Much of the survey work performed by Aeroquest has been to survey in areas that were previously flown at these wider line spacings. One of the reasons for AeroTEM's impressive discovery record has been the strategy of flying closely spaced lines and finding all the discrete near-surface conductors. These higher resolution surveys are being flown within existing mining camps, areas that improve the chances of discovery.

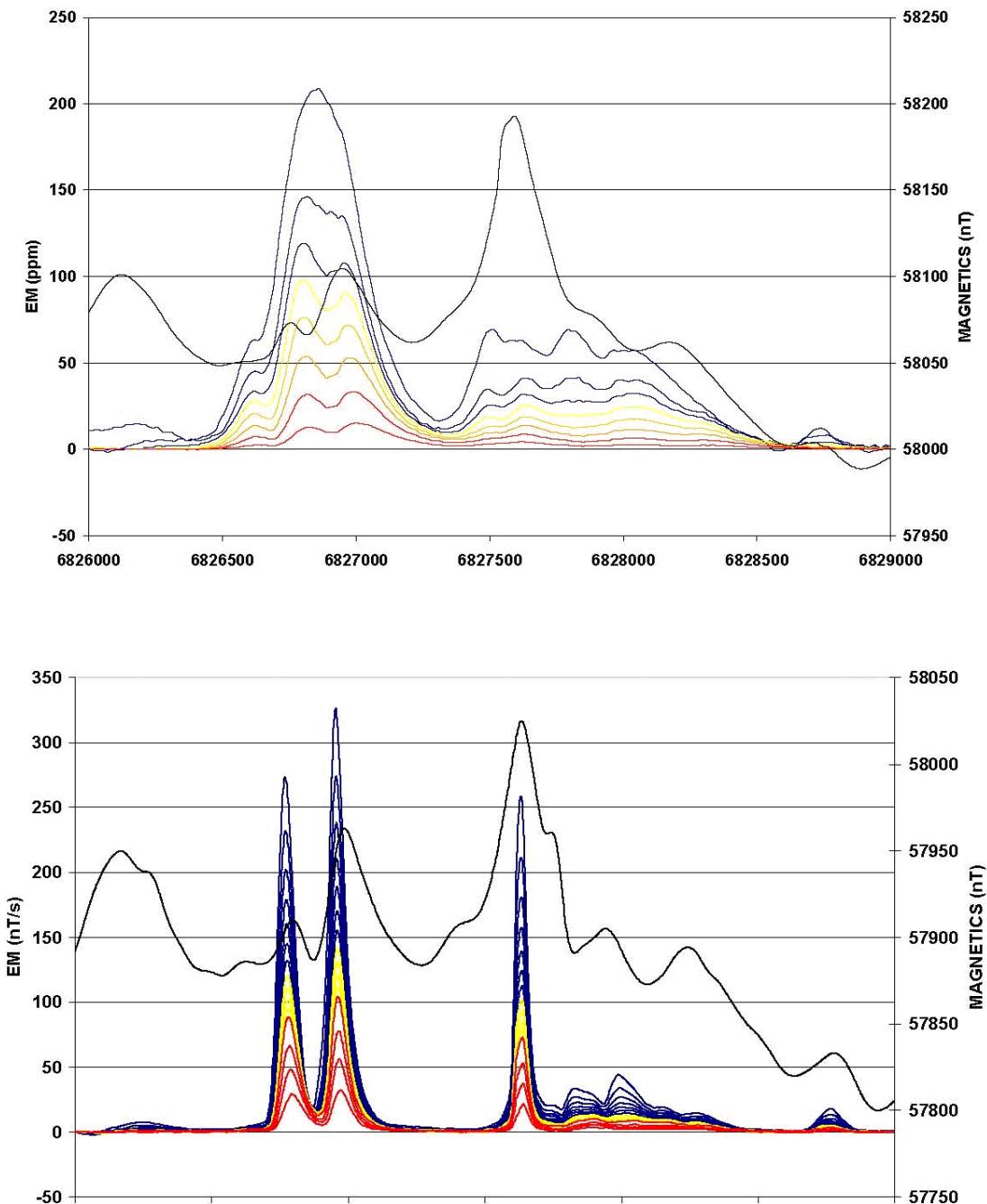


Figure 2. Fixed-wing (upper) and AeroTEM (lower) comparison over the eastern limit of the Mesamax Deposit, a Ni-Cu-PGE zone located in the Raglan nickel belt and owned by Canadian Royalties. Both systems detected the Deposit further to the west where it is closer to surface.

The small footprint of AeroTEM combined with the high signal to noise ratio (S/N) makes the system more suitable to surveying in areas where local infrastructure produces electromagnetic noise, such as power lines and railways. In 2002 Aeroquest flew four exploration properties in the Sudbury Basin that were under option by FNX Mining Company Inc. from Inco Limited. One such property, the Victoria Property, contained three major power line corridors.

The resulting AeroTEM survey identified all the known zones of Ni-Cu-PGE mineralization, and detected a response between two of the major power line corridors but in an area of favourable geology. Three boreholes were drilled to test the anomaly, and all three intersected sulphide. The third borehole encountered 1.3% Ni, 6.7% Cu, and 13.3 g/t TPMs over 42.3 ft. The mineralization was subsequently named the Powerline Deposit.

The success of AeroTEM in Sudbury highlights the advantage of having a system with a small footprint, but also one with a high S/N. This latter advantage is achieved through a combination of a high-moment (high signal) transmitter and a rigid geometry (low noise). Figure 3 shows the Powerline Deposit response and the response from the power line corridor at full scale. The width of power line response is less than 75 m.

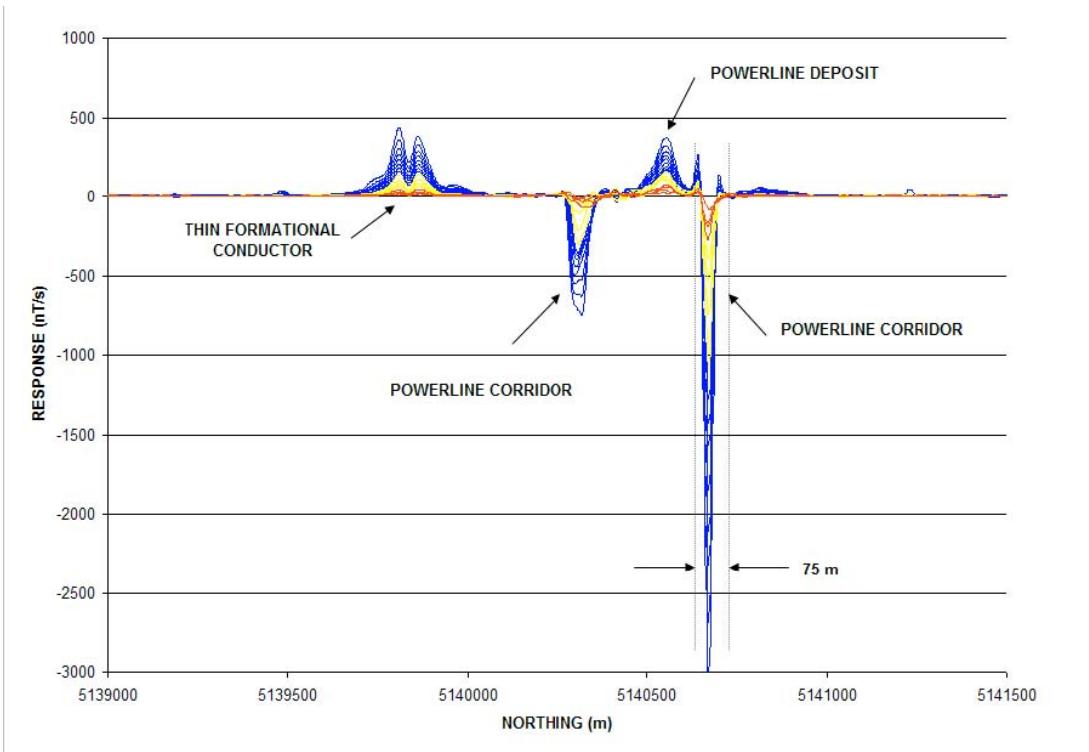


Figure 3. The Powerline Deposit is located between two major power line corridors, which make EM surveying problematic. Despite the strong response from the power line, the anomaly from the Deposit is clearly detected. Note the thin formation conductor located to the south. The only way to distinguish this response from that of two closely spaced conductors is by interpreting the X-axis coil response.

Advantage 2 – Conductance Discrimination

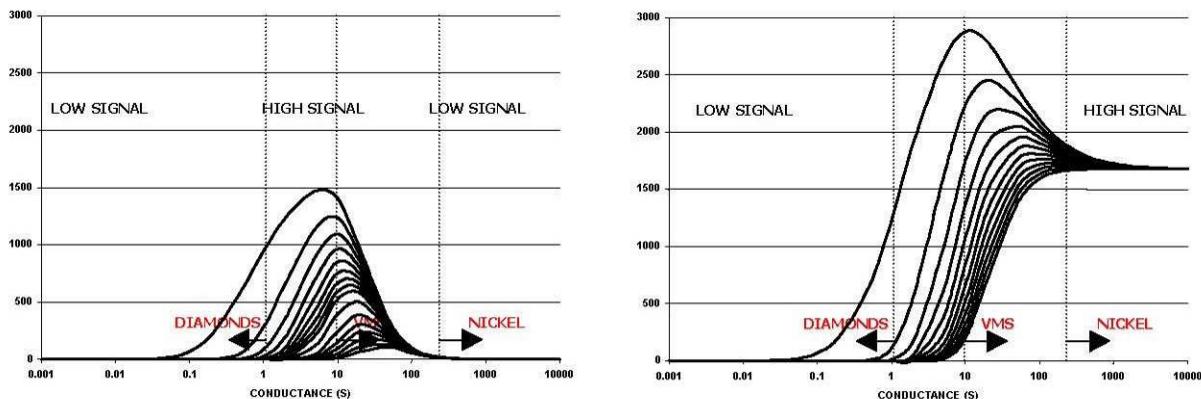
The AeroTEM system features full waveform recording and as such is able to measure the on-time response due to high conductance targets. Due to the processing method (primary field removal), there is attenuation of the response with increasing conductance, but the AeroTEM on-time measurement is still superior to systems that rely on lower base frequencies to detect high conductance targets, but do not measure in the on-time.

The peak response of a conductive target to an EM system is a function of the target conductance and the EM system base frequency. For time domain EM systems that measure only in the off-time, there is a drop in the peak response of a target as the base frequency is lowered for all conductance values below the peak system response. For example, the AeroTEM peak response occurs for a 10 S conductor in the early off-time and 100 S in the late off-time for a 150 Hz base frequency. Because base frequency and conductance form a linear relationship when considering the peak response of any EM system, a drop in base frequency of 50% will double the conductance at which an EM system shows its peak response. If the base frequency were lowered from 150 Hz to 30 Hz there would be a fivefold increase in conductance at which the peak response of an EM occurred.

However, in the search for highly conductive targets, such as pyrrhotite-related Ni-Cu-PGM deposits, a fivefold increase in conductance range is a high price to pay because the signal level to lower conductance targets is reduced by the same factor of five. For this reason, EM systems that operate with low base frequencies are not suitable for general exploration unless the target conductance is more than 100 S, or the target is covered by conductive overburden.

Despite the excellent progress that has been made in modeling software over the past two decades, there has been little work done on determining the optimum form of an EM system for mineral exploration. For example, the optimum configuration in terms of geometry, base frequency and so remain unknown. Many geophysicists would argue that there is no single ideal configuration, and that each system has its advantages and disadvantages. We disagree.

When it comes to detecting and discriminating high-conductance targets, it is necessary to measure the pure in phase response of the target conductor. This measurement requires that the measured primary field from the transmitter be subtracted from the total measured response such that the secondary field from the target conductor can be determined. Because this secondary field is in-phase with the transmitter primary field, it must be made while the transmitter is turned on and the transmitter current is changing. The transmitted primary field is several orders of magnitude larger than the secondary field. AeroTEM uses a bucking coil to reduce the primary field at the receiver coils. The only practical way of removing the primary field is to maintain a rigid geometry between the transmitter, bucking and receiver coils. This is the main design consideration of the AeroTEM airframe and it is the only time domain airborne system to have this configuration.



The off-time AeroTEM response for the 16 channel configuration.

The on-time response assuming 100% removal of the measured primary field.

Figure 4. The off-time and on-time response nomogram of AeroTEM for a base frequency of 150 Hz. The on-time response is much stronger for higher conductance targets and this is why on-time measurements are more important than lower frequencies when considering high conductance targets in a resistive environment.

Advantage 3 – Multiple Receiver Coils

AeroTEM employs two receiver coil orientations. The Z-axis coil is oriented parallel to the transmitter coil and both are horizontal to the ground. This is known as a maximum coupled configuration and is optimal for detection. The X-axis coil is oriented at right angles to the transmitter coil and is oriented along the line-of-flight. This is known as a minimum coupled configuration, and provides information on conductor orientation and thickness. These two coil configurations combined provide important information on the position, orientation, depth, and thickness of a conductor that cannot be matched by the traditional geometries of the HEM or fixed-wing systems. The responses are free from a system geometric effect and can be easily compared to model type curves in most cases. In other words, AeroTEM data is very easy to interpret. Consider, for example, the following modeled profile:

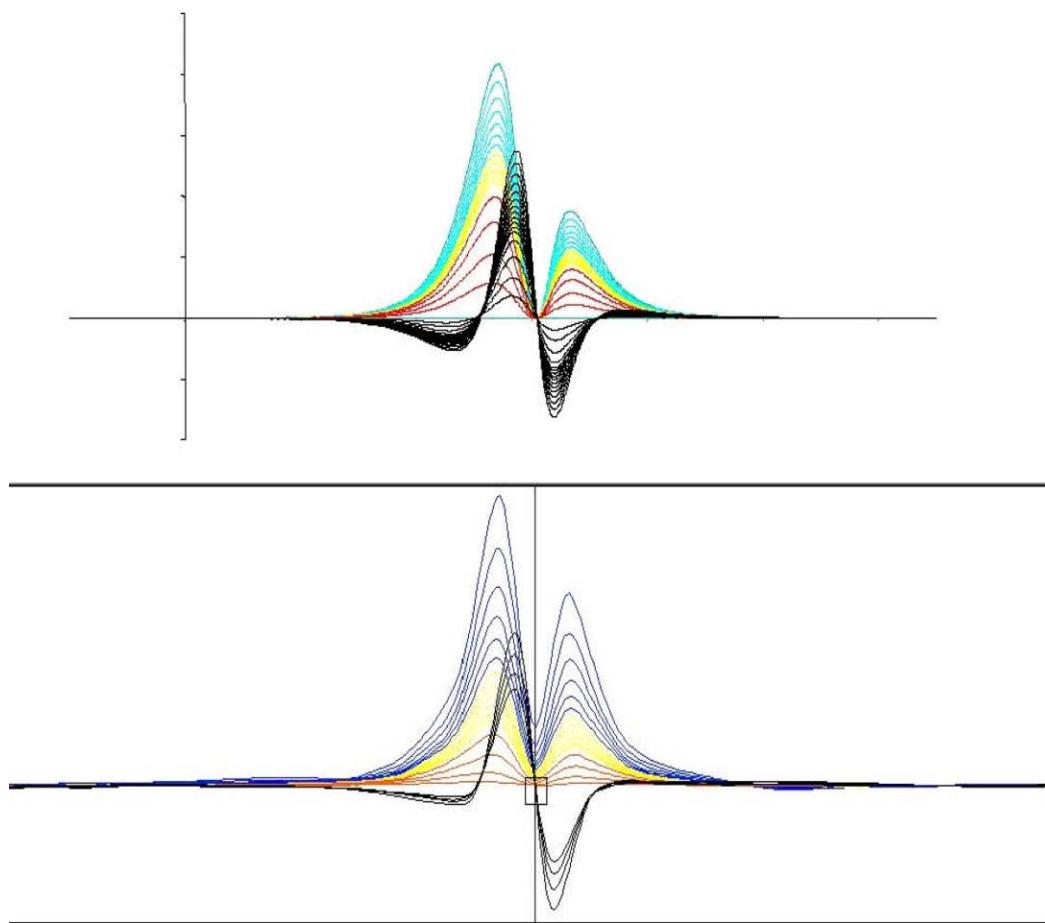


Figure 5. Measured (lower) and modeled (upper) AeroTEM responses are compared for a thin steeply dipping conductor. The response is characterized by two peaks in the Z-axis coil, and a cross-over in the X-axis coil that is centered between the two Z-axis peaks. The conductor dips toward the higher amplitude Z-axis peak. Using the X-axis cross-over is the only way of differentiating the Z-axis response from being two closely spaced conductors.

HEM versus AeroTEM

Traditional helicopter EM systems operate in the frequency domain and benefit from the fact that they use narrowband as opposed to wide-band transmitters. Thus all of the energy from the transmitter is concentrated in a few discrete frequencies. This allows the systems to achieve excellent depth penetration (up to 100 m) from a transmitter of modest power. The Aeroquest Impulse system is one implementation of this technology.

The AeroTEM system uses a wide-band transmitter and delivers more power over a wide frequency range. This frequency range is then captured into 16 time channels, the early channels containing the high frequency information and the late time channels containing the low frequency information down to the system base frequency. Because frequency domain HEM systems employ two coil configurations (coplanar and coaxial) there are only a maximum of three comparable frequencies per configuration, compared to 16 AeroTEM off-time and 12 AeroTEM on-time channels.

Figure 6 shows a comparison between the Dighem HEM system (900 Hz and 7200 Hz coplanar) and AeroTEM (Z-axis) from surveys flown in Raglan, in search of highly conductive Ni-Cu-PGM sulphide. In general, the AeroTEM peaks are sharper and better defined, in part due to the greater S/N ratio of the AeroTEM system over HEM, and also due to the modestly filtered AeroTEM data compared to HEM. The base levels are also better defined in the AeroTEM data. AeroTEM filtering is limited to spike removal and a 5-point smoothing filter. Clients are also given copies of the raw, unfiltered data.

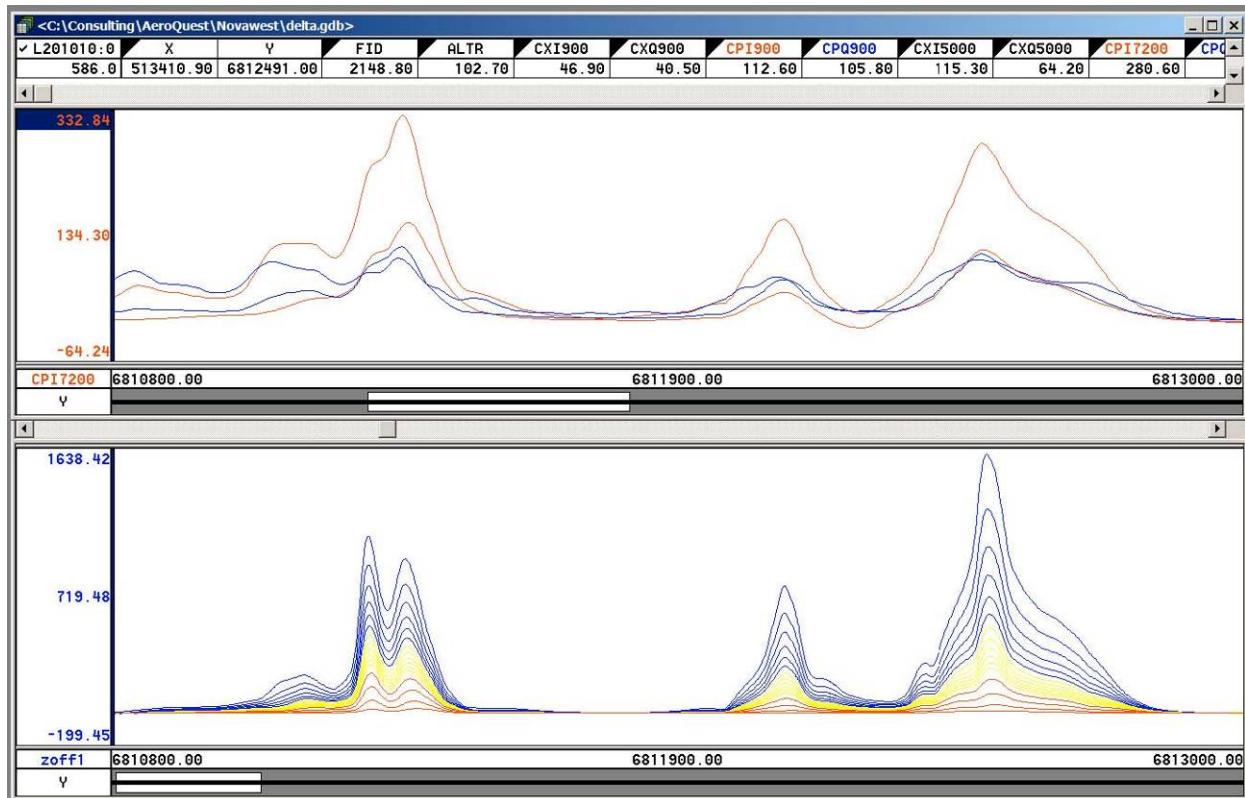


Figure 6. Comparison between Dighem HEM (upper) and AeroTEM (lower) surveys flown in the Raglan area. The AeroTEM responses appear to be more discrete, suggesting that the data is not as heavily filtered as the HEM data. The S/N advantage of AeroTEM over HEM is about 5:1.

Aeroquest Limited is grateful to the following companies for permission to publish some of the data from their respective surveys: Wolfden Resources, FNX Mining Company Inc, Canadian Royalties, Nova West Resources, Aurogin Resources, Spectrem Air. Permission does not imply an endorsement of the AeroTEM system by these companies.

APPENDIX 5: AEROTEM INSTRUMENTATION SPECIFICATION SHEET

AEROTEM Helicopter Electromagnetic System

System Characteristics

- Transmitter: Triangular Pulse Shape Base Frequency 90 Hz
- Tx On Time – 1,833 (90 Hz) μ s
- Tx Off Time – 3,667 (90 Hz) μ s
- Loop Diameter - 10 m
- Peak Current - 455 A
- Peak Moment – 183,131 NIA
- Typical Z Axis Noise at Survey Speed = 5 nT/s peak to peak
- Sling Weight: 1000 lb
- Length of Tow Cable: 53 m
- Bird Survey Height: 30 m nominal

Receiver

- Two Axis Receiver Coils (x, z) positioned inside the transmitter loop
- Selectable Time Delay to start of first channel 21.3 , 42.7, or 64.0 ms

Display & Acquisition

- AERODAS Digital recording at 120 samples per decay curve at a maximum of 300 curves per second (27.778 μ s channel width)
- RMS Channel Widths: 52.9,132.3, 158.7, 158.7, 317.5, 634.9 μ s
- Recording & Display Rate = 10 readings per second.
- On-board display - six channels Z-component and 1 X-component

System Considerations

Comparing a fixed-wing time domain transmitter with a typical moment of 500,000 NIA flying at an altitude of 120 m with a Helicopter TDEM at 30 m, notwithstanding the substantial moment loss in the airframe of the fixed wing, the same penetration by the lower flying helicopter system would only require a sixty-fourth of the moment. Clearly the AeroTEM system with nearly 183.131 NIA has more than sufficient moment. The airframe of the fixed wing presents a response to the towed bird, which requires dynamic compensation. This problem is non-existent for AeroTEM since transmitter and receiver positions are fixed. The AeroTEM system is completely portable, and can be assembled at the survey site within half a day.



APPENDIX 6: STATEMENT OF QUALIFICATION

I, Douglas G Garrie do hereby certify that:

I am a graduate of York University and hold a BSc in Earth Science - Geophysics (1990).

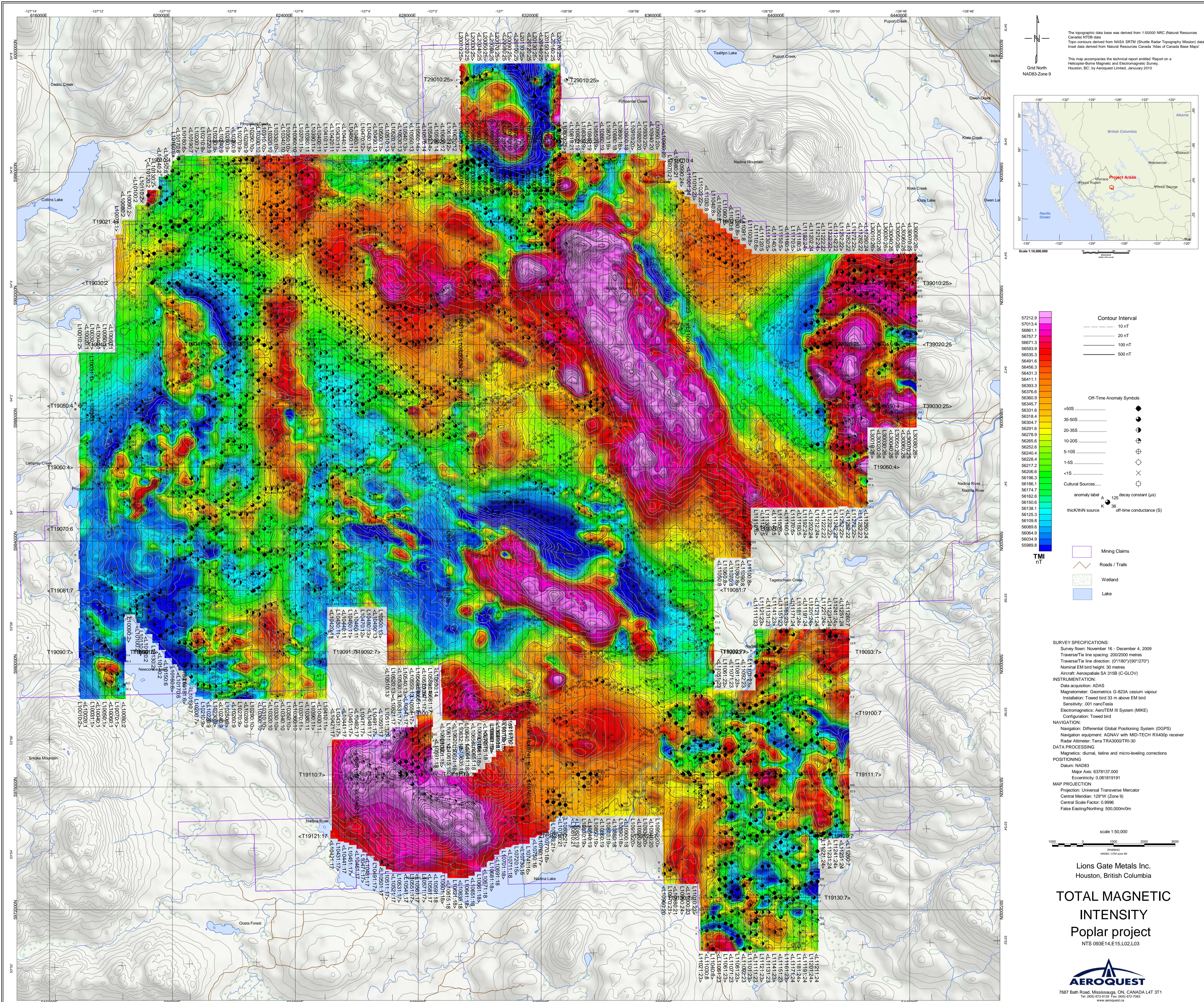
I am a member of the Association of Professional Geoscientists of Ontario.

I have been working in the airborne geophysical industry since 1990.

I am currently employed by Aeroquest Surveys, Mississauga, Ontario.

Dated at Mississauga, Ontario this the 8th day of February, 2010

Appendix 4: 2009 Aeroquest Poplar Maps



The topographic data base was derived from 1:50000 NRC (Natural Resources Canada) NTDB data
 Topo contours derived from NASA SRTM (Shuttle Radar Topography Mission) data
 Inset data derived from Natural Resources Canada 'Atlas of Canada Base Maps'

This map accompanies the technical report entitled Report on a
 Helicopter-Borne Magnetic and Electromagnetic Survey,
 Houston, BC, by Aeroquest Limited, January 2010



Contour Interval

2966

2452

2133

1895

1689

1509

1348

1211

1092

966

889

798

710

630

562

500

443

387

332

282

234

182

131

89

61

37

18

8

Off-Time Anomaly Symbols

>50S ●

35-50S ●

20-35S ●

10-20S ●

5-10S ●

1-5S ●

<1S ●

Cultural Sources....

anomaly label A decay constant (μ s)

thickKthN source K off-time conductance (S)

Z1-OFF nT/s

Mining Claims

Roads / Trails

Wetland

Lake

SURVEY SPECIFICATIONS:

Survey flown: November 16 - December 4, 2009

Traverse/Tie line spacing: 200/2000 metres

Traverse/Tie line direction: (0°/180°)/90°/270°

Nominal EM bird height: 30 metres

Aircraft: Aerospatale SA 315B (C-GLOV)

INSTRUMENTATION:

Data acquisition: ADAS

Magnetometer: Geometrics G-823A cesium vapour

Installation: Towed bird 33 m above EM bird

Sensitivity: .001 nanoTesla

Electromagnetics: AeroTEM III System (MIKE)

Configuration: Towed bird

NAVIGATION:

Newly developed Differential Global Positioning System (DGPS)

Navigation equipment: AGNAV with MID-TECH RX400p receiver

Radar Altimeter: Terra TRA3000/TRI-30

DATA PROCESSING:

Magnetic, diurnal, tiltline and micro-leveling corrections

POSITIONING:

Datum: NAD83

Major Axis: 6378137.000

Eccentricity: 0.081819191

MAP PROJECTION:

Projection: Universal Transverse Mercator

Central Meridian: 129°W (Zone 9)

Central Scale Factor: 0.9996

False Easting/Northing: 500.000/m⁰m

scale 1:50,000

1000 0 1000 2000 3000 (meters)

HAZARD 0.1M zone W

Lions Gate Metals Inc.
 Houston, British Columbia

AEROTEM Z1-OFF TIME

Time after TxOff 123μs

Poplar project

NTS 093E14.E15,L02,L03

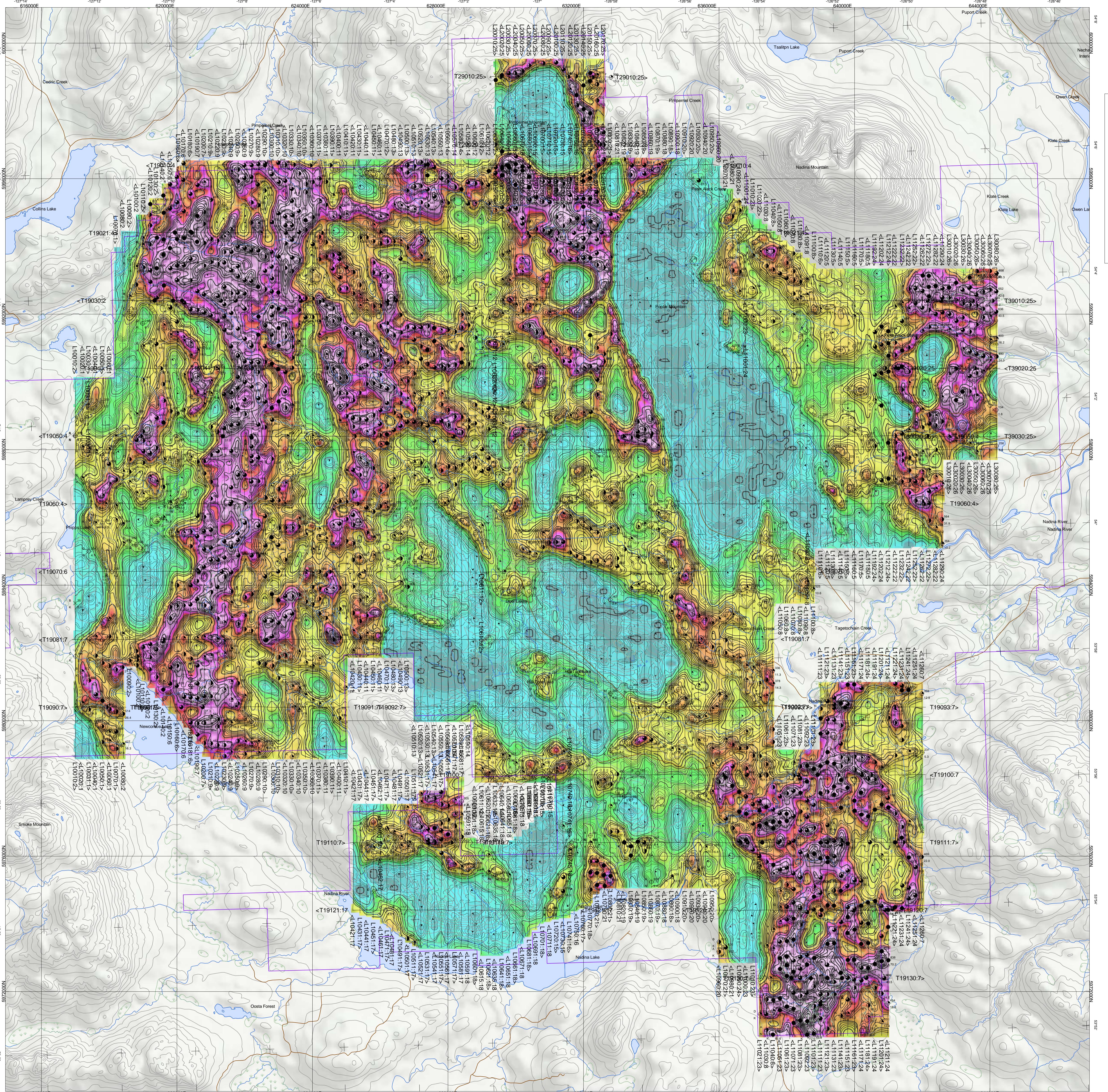
7687 Bath Road, Mississauga, ON CANADA L4T 3T1

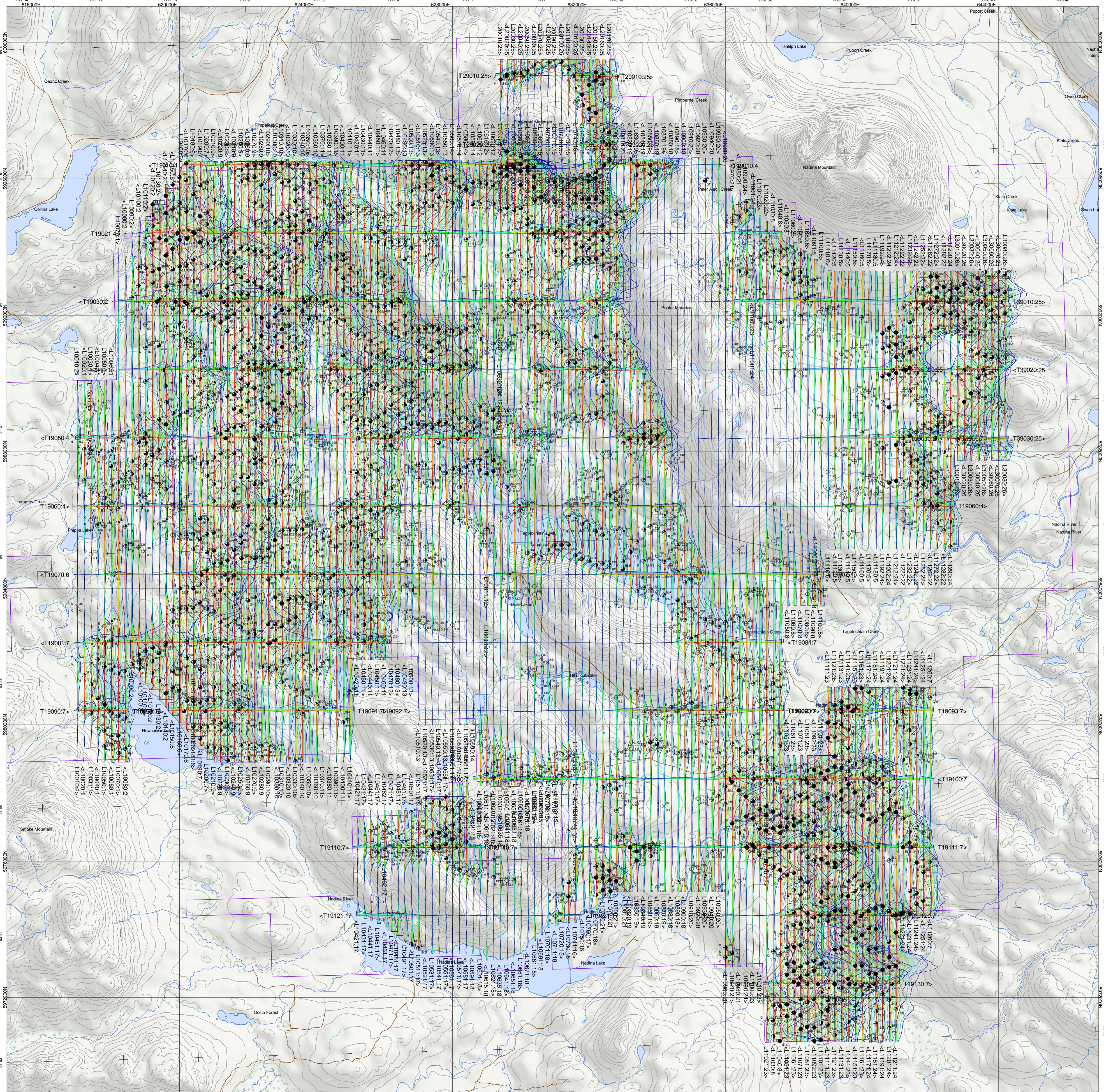
Tel: 905-672-9129 Fax: 905-672-7083

www.aeroquest.ca

January 2010

Z1-OFF





The topographic data base was derived from 1:50000 NRC (Natural Resources Canada) NTDB data.
Topo contours derived from NASA SRTM (Shuttle Radar Topography Mission) data
Inset data derived from Natural Resources Canada's Atlas of Canada Base Maps

This map accompanies the technical report entitled Report on a Helicopter-Borne Magnetic and Electromagnetic Survey, Houston, BC; by Aeroquest Limited, January 2010



AeroTEM Profiles

positive excursion to top and right, 1mm=100nT/s

- Z5 Off-Time Channel 235 µs
- Z6 Off-Time Channel 300 µs
- Z7 Off-Time Channel 373 µs
- Z8 Off-Time Channel 457 µs
- Z9 Off-Time Channel 540 µs
- Z10 Off-Time Channel 651 µs
- Z11 Off-Time Channel 790 µs
- Z12 Off-Time Channel 957 µs
- Z13 Off-Time Channel 1193 µs
- Z14 Off-Time Channel 1540 µs
- Z15 Off-Time Channel 2082 µs

Off-Time Anomaly Symbols

- >50S
- 35-50S
- 20-35S
- 10-20S
- 5-10S
- 1-5S
- <1S
- Cultural Sources
- anomaly label A
- decay constant (µs)
- thick/thin source K
- off-time conductance (S)

Mining Claims

-

Roads / Trails

-

Wetland

-

Lake

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Central Scale Factor: 0.9996

False Easting/Northing: 500.000m/0m

scale 1:50,000

1000 0 1000 2000 3000 (meters)

NAE83 0.000 0.000 0.000

Lions Gate Metals Inc.

Houston, British Columbia

AEROTEM OFF-TIME PROFILES

Poplar project

NTS 093E14.E15,L02,L03



7687 Bath Road, Mississauga, ON, CANADA L4T 3T1

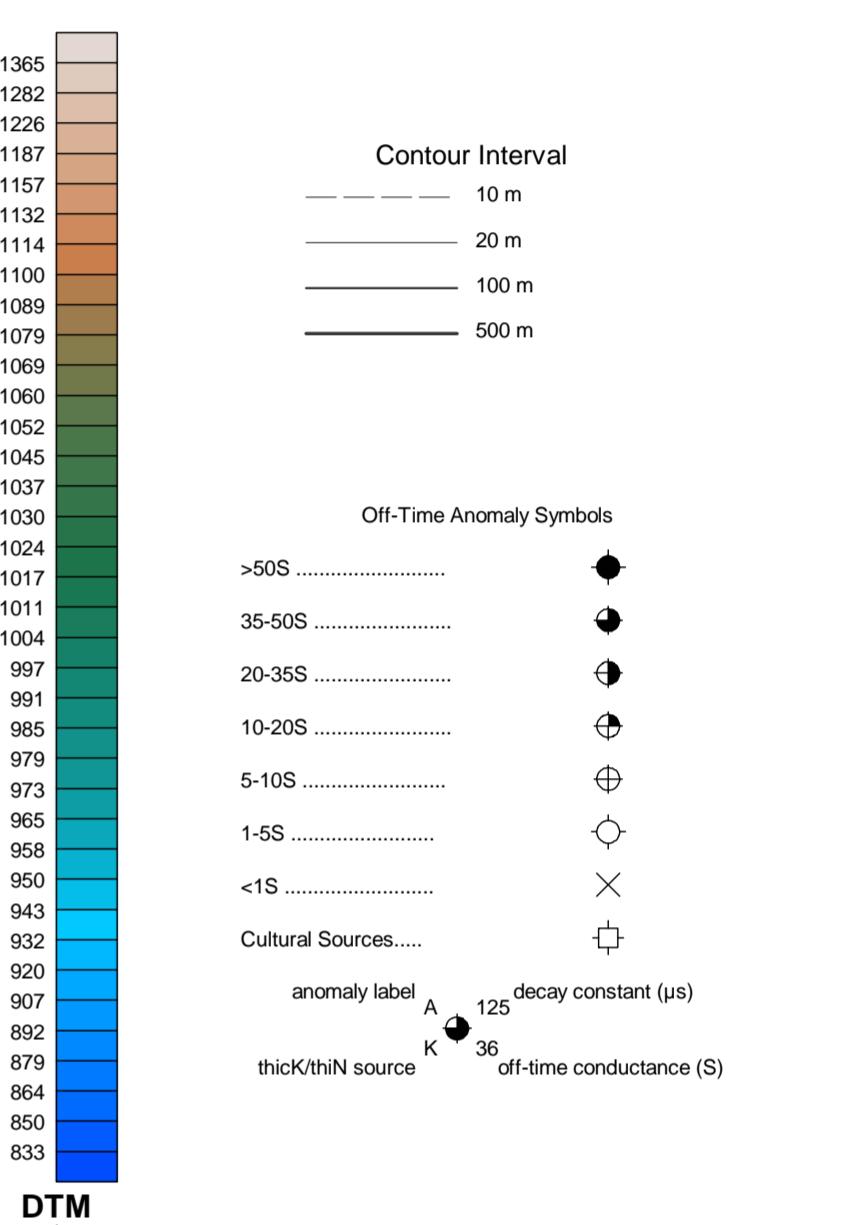
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January 2010

The topographic data base was derived from 1:50000 NRC (Natural Resources Canada) NTDB data.
Topo contours derived from NASA SRTM (Shuttle Radar Topography Mission) data
Inset data derived from Natural Resources Canada's Atlas of Canada Base Maps' data

This map accompanies the technical report entitled Report on a Helicopter-Borne Magnetic and Electromagnetic Survey, Houston, BC; by Aeroquest Limited, January 2010



SURVEY SPECIFICATIONS:

Survey flown: November 16 - December 4, 2009
Traverse/Tie line spacing: 200/200 metres
Traverse/Tie line direction: (0°/180°/270°)

Nominal EM bird height: 30 metres
Aircraft: Aerospatiale SA 315B (C-GLOW)

INSTRUMENTATION:

Data acquisition: ADAS
Magnetometer: Geometrics G-823A cesium vapour
Installation: Towed bird 33 m above EM bird

Sensitivity: 0.001 nanoTesla
Electromagnetics: AeroTEM III System (MIKE)
Configuration: Towed bird

NAVIGATION:

Navigation: Differential Global Positioning System (DGPS)

Navigation equipment: AGNAV with MID-TECH RX400p receiver
Radio Altimeter: Terra TRA3000/TRI-30

DATA PROCESSING:

Magnetic, diurnal, telline and micro-leveling corrections

POSITIONING:

Datum: NAD83
Major Axis: 6378137.000
Eccentricity: 0.081819191

MAP PROJECTION:

Projection: Universal Transverse Mercator
Central Meridian: 129°W (Zone 9)
Central Scale Factor: 0.9996
False Easting/Northing: 500.000m/0m

scale 1:50,000
1000 0 1000 2000 3000
(meters)
NAD83 / UTM 9W / M

Lions Gate Metals Inc.
Houston, British Columbia

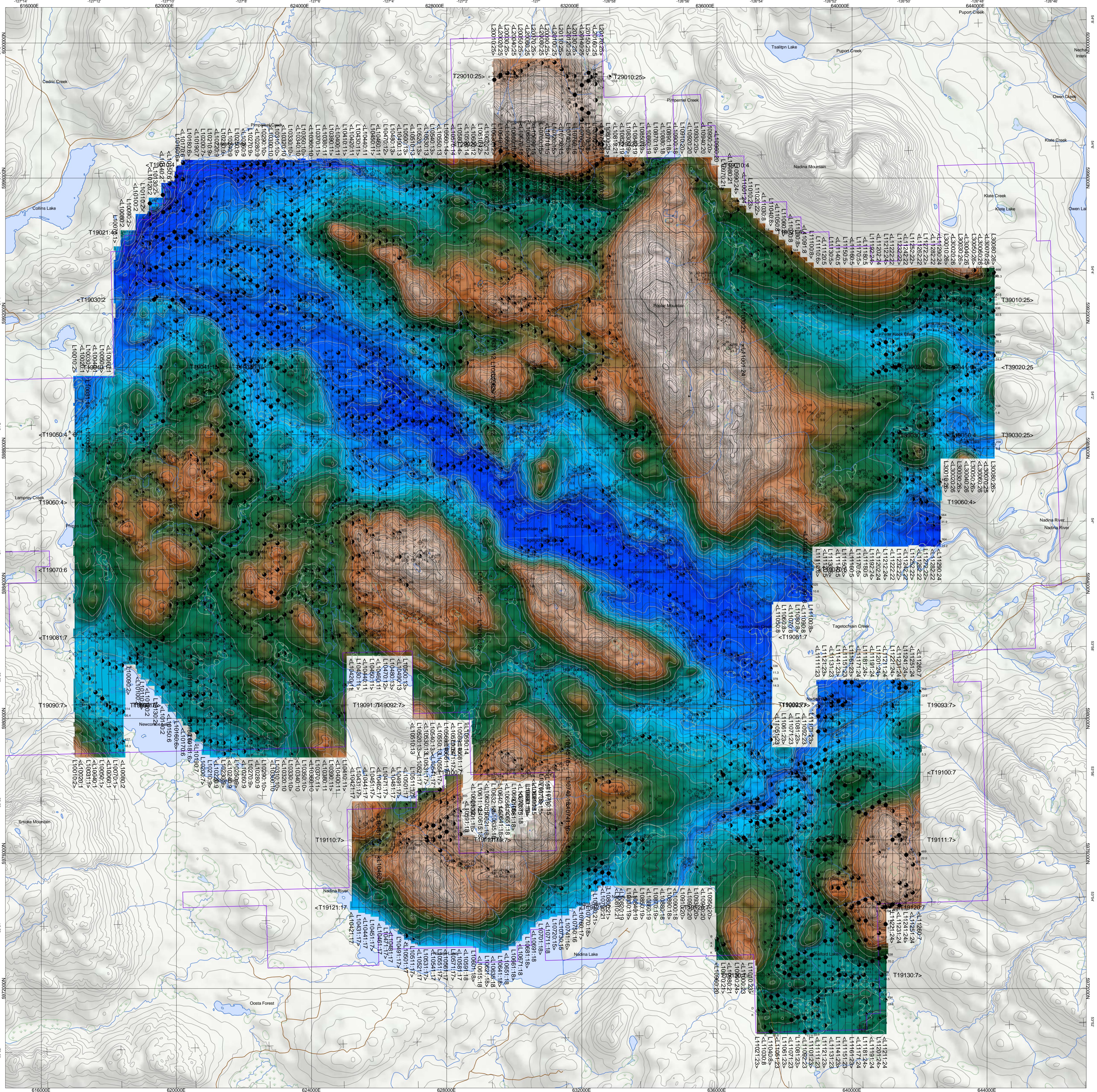
**DIGITAL TERRAIN
MODEL
Poplar project**
NTS 093E14,E15,L02,L03



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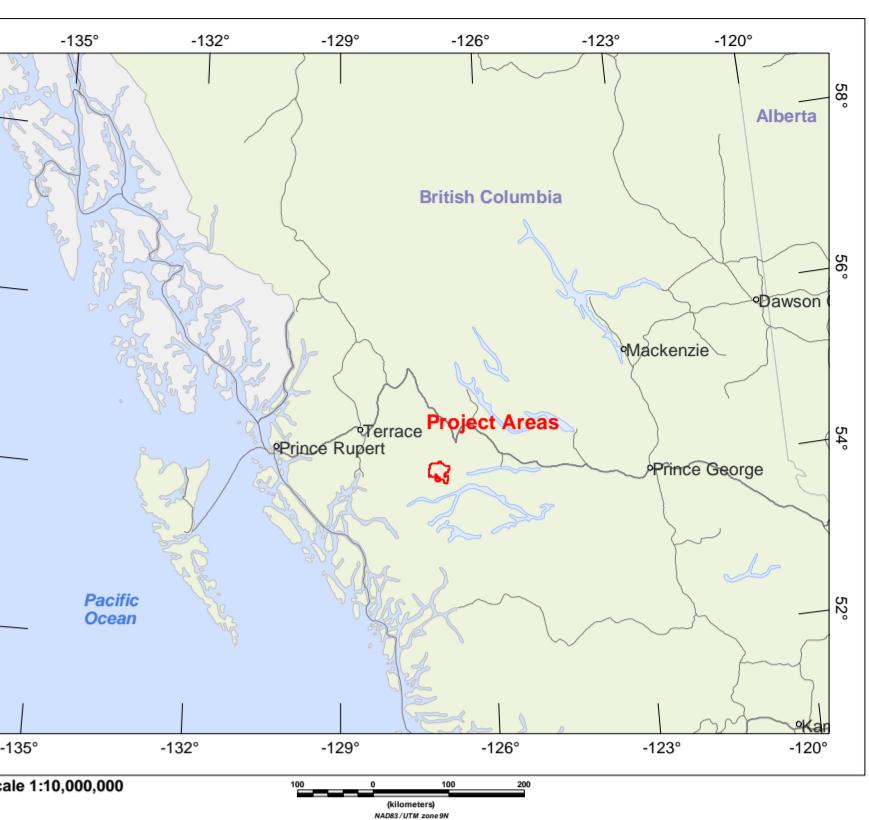
January 2010

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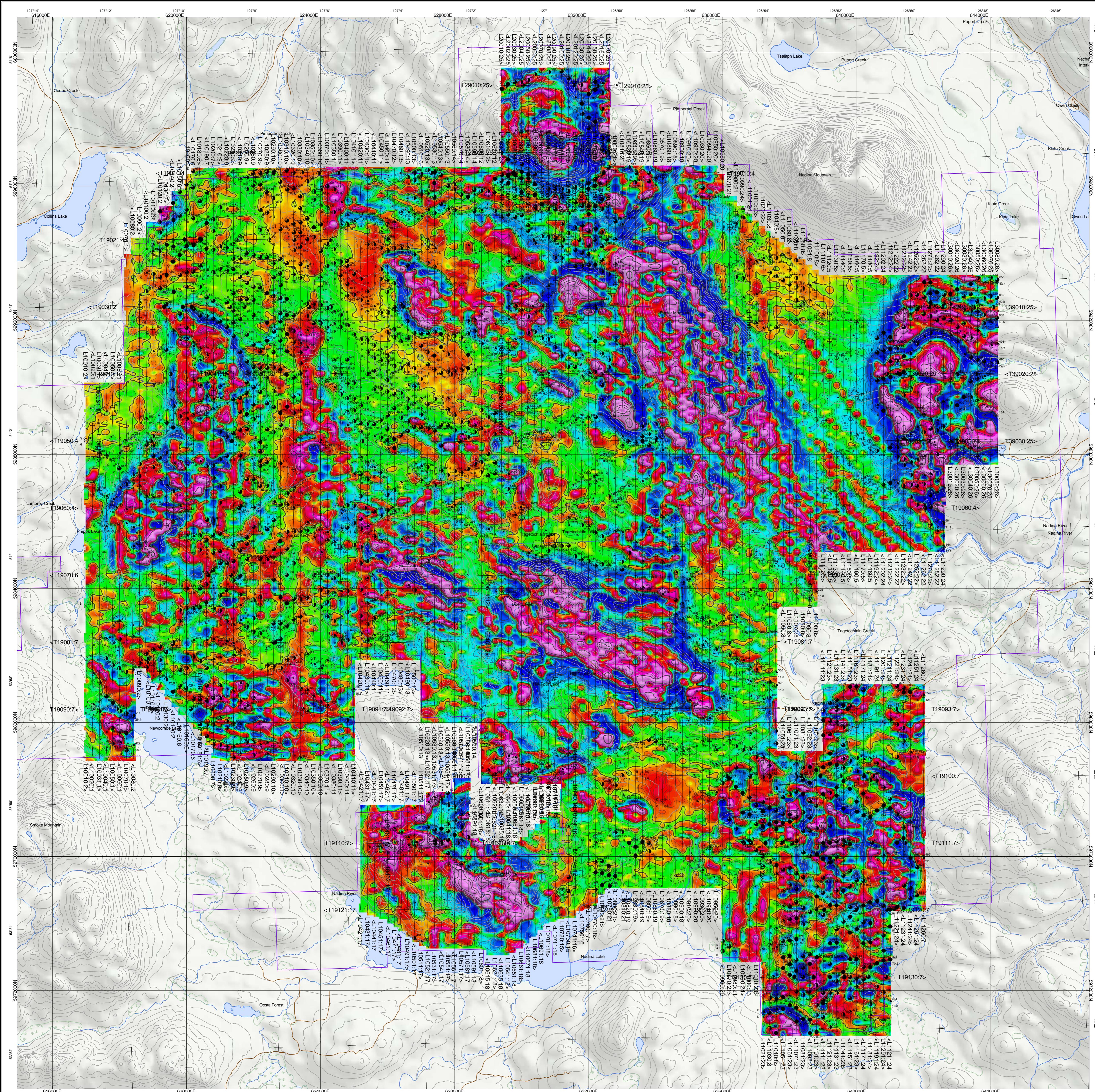
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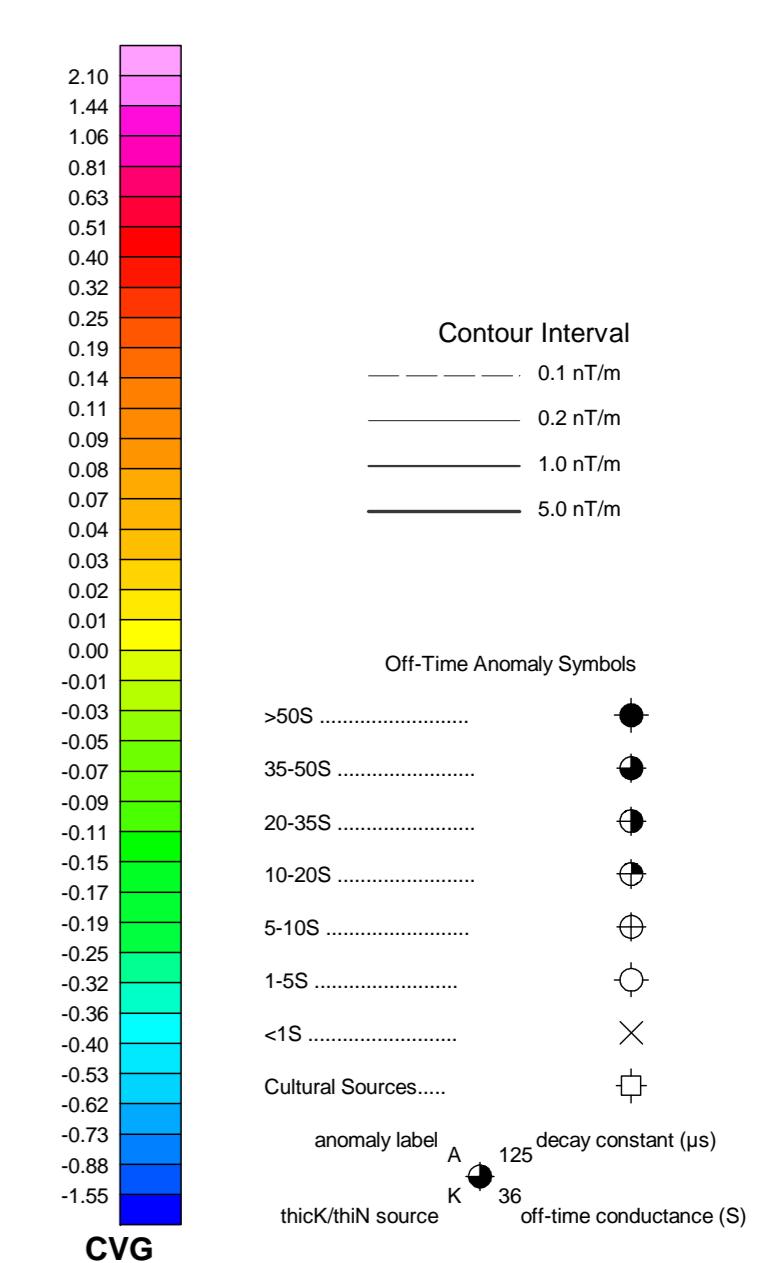
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Topo contours derived from NASA SRTM (Shuttle Radar Topography Mission) data
Inset data derived from Natural Resources Canada's *Atlas of Canada Base Maps*
This map represents the technical report entitled *Report on a Helicopter-borne Magnetic and Electromagnetic Survey*,
Houston, BC, by Aeroquest Limited, January 2010



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1000 9 1000 2000 3000
(meters)
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Houston, British Columbia

CALCULATED FIRST VERTICAL GRADIENT

Poplar project
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