

**Description:** Data used in this compilation were acquired from regional aeromagnetic surveys and high-resolution aeromagnetic surveys for the Geological Survey of Canada (GSC) and the U.S. Geological Survey (USGS). Apparent resistivities between survey blocks are a result of differing the spacing, flight altitude and equipment platform. Helicopter surveys were flown at a constant elevation and fixed wing aircraft surveys were flown at a nominal terrain clearance.

The high-resolution GSC surveys used in this compilation include:

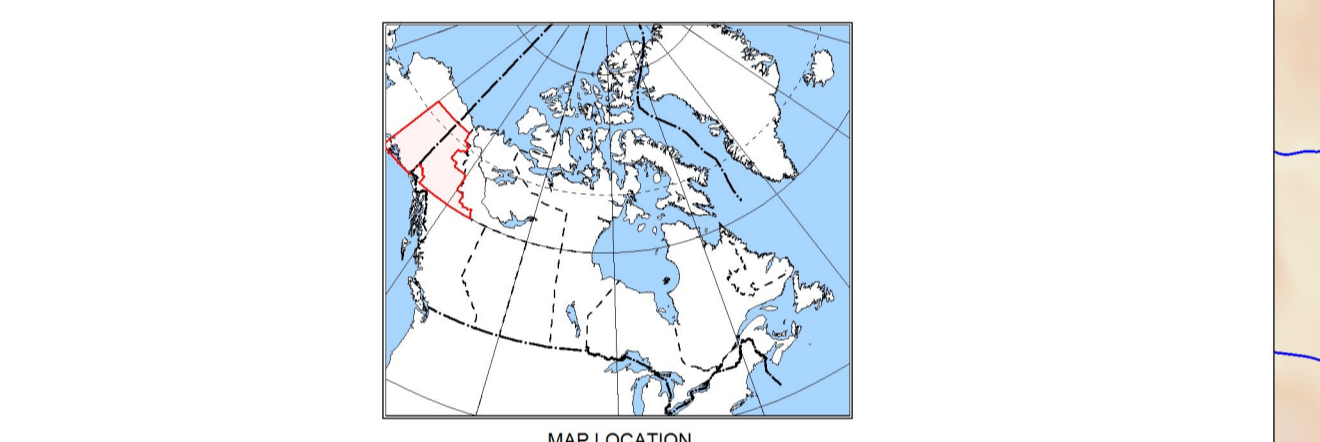
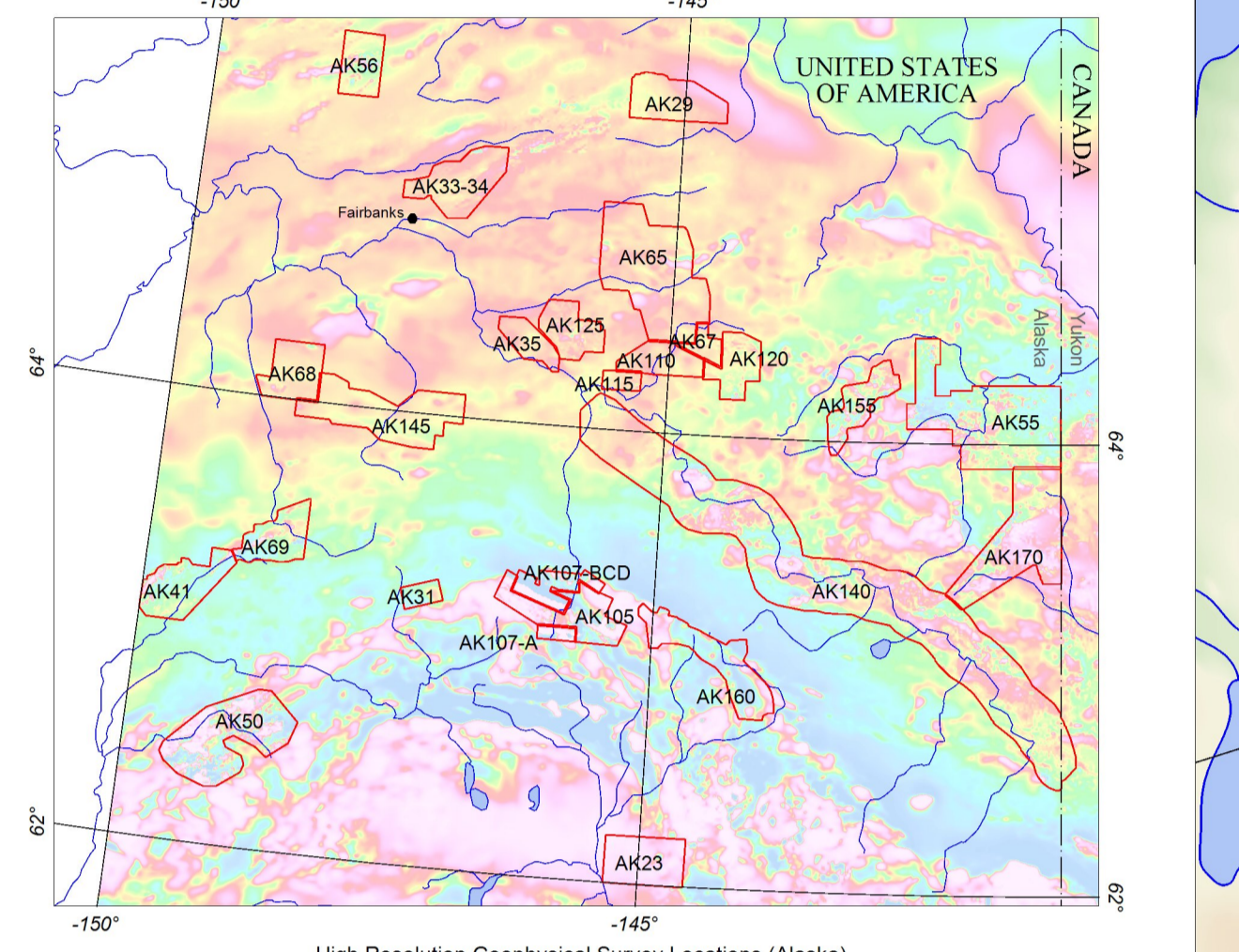
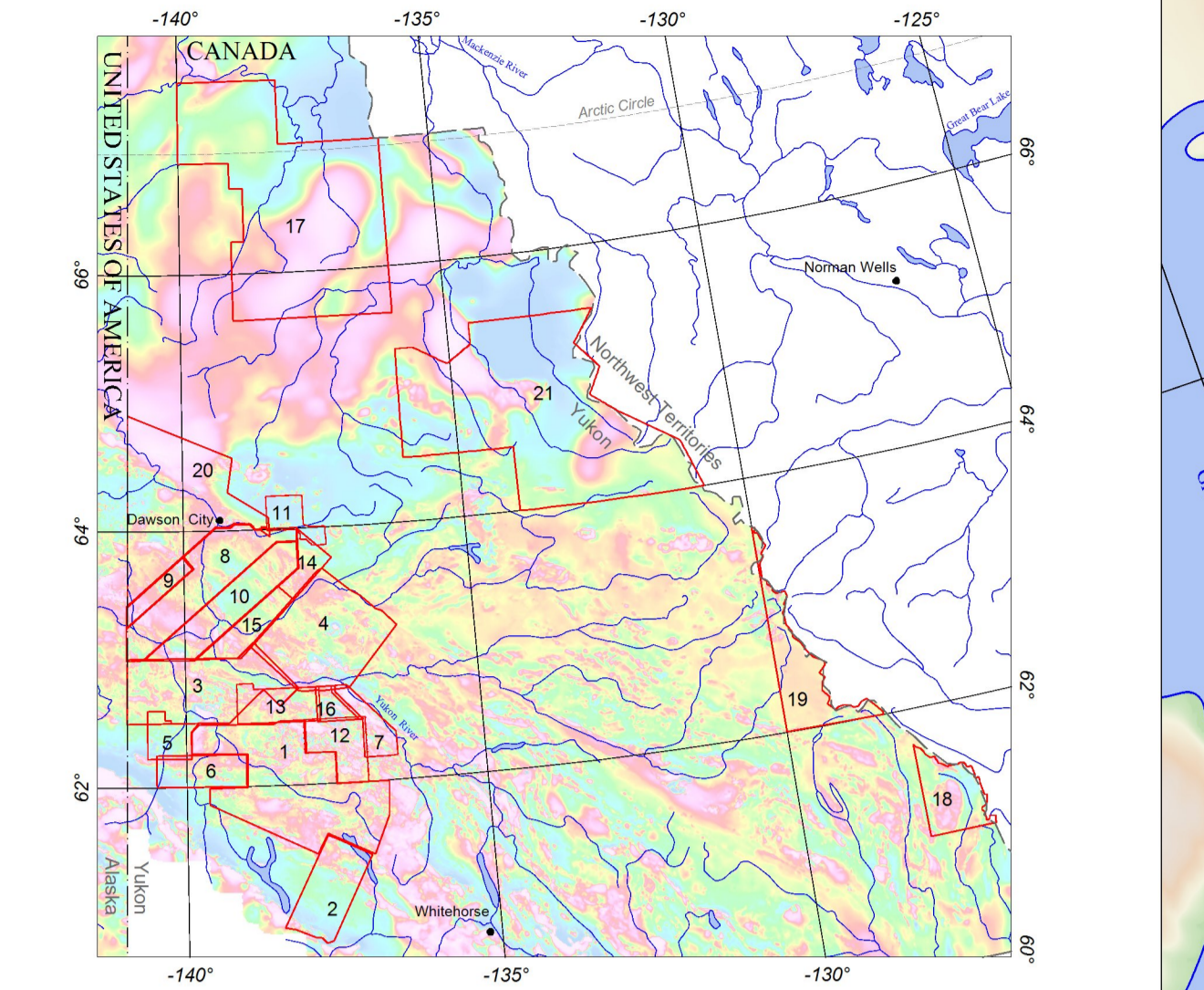
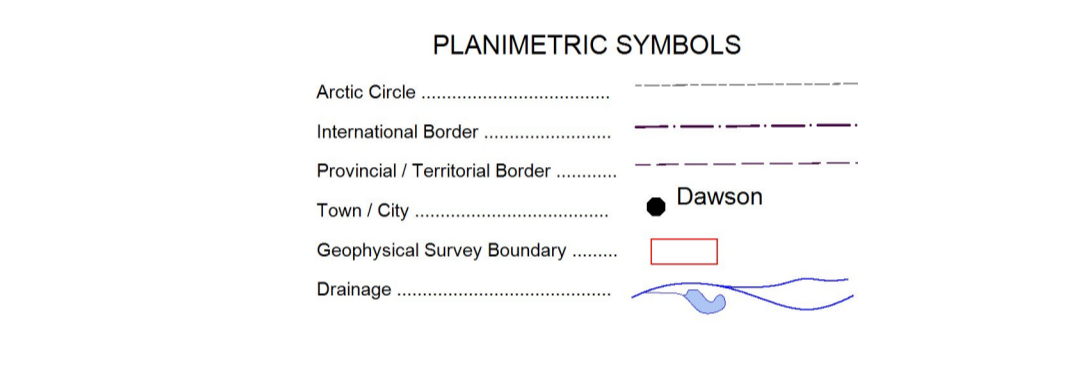
Survey	Year	Line Spacing	Height	Survey Type
1. Yukon River	2011	400 m	100 m	Fixed wing
2. Klondike	2010	400 m	100 m	Helicopter
3. Northern Stikton River	2009	400 m	100 m	Fixed wing
4. Klondike	2009	400 m	100 m	Fixed wing
5. Central Stikton River	2008	400 m	60 m	Fixed wing
6. Southern Stikton River	2008	400 m	120 m	Helicopter
7. Klondike	2001	500 m	100 m	Helicopter
8. Stewart River I	2000	500 m	100 m	Helicopter
9. Stewart River II	2001	500 m	100 m	Helicopter
10. Stewart River III	2001	500 m	100 m	Helicopter
11. Sawyer Creek	1997	250-500 m	100 m	Helicopter
12. Klondike	1994	500 m	100 m	Helicopter
13. Selkirk River	1993	500 m	100 m	Helicopter
14. Grongwee Creek Block A	2012	400 m	100 m	Helicopter
15. Grongwee Creek Block B	2012	400 m	100 m	Fixed wing
16. Wolverine Creek	2012	400 m	100 m	Fixed wing
17. Eagle Plains	2009	800 m	300 m	Fixed wing
18. Fish River	2009	800 m	300 m	Fixed wing
19. Little Nahanni	2010	800 m	300 m	Fixed wing
20. Dawson	2014	400 m	150 m	Fixed wing
21. Wenatchee Mountains	2008	800 m	250 m	Fixed wing

All high resolution GSC surveys are statistically leveled to the regional data. The Wolverine Creek, Grongwee Creek Block B, Northern Stikton River, Klondike, Stewart River I and Stewart River II surveys were processed along profiles defined by a digital elevation model, the altitudes along the profiles were corrected, and a terrain correction was applied. The terrain correction was applied to the magnetic field computed by digital topographic maps at lower terrain clearances. To reduce the attenuation effect, a Taylor series expansion (Pilkington and Thurston, 2001) was applied to approximate the magnetic field at a terrain clearance of 100 m.

The high resolution USGS surveys used in this compilation include:

Number	Survey Name	Year	Spacing (m)	Height (ft)
AK23	Eastern Copper River	1982	0.25 mi.	150' AG
AK29	Circle Mining District	1993	0.25 mi.	150' AG
AK31	Yukon River	1993	0.25 mi.	150' AG
AK33-34	Fairbanks 1M West and East	1994	0.25 mi.	150' AG
AK35	Richardson Mining District	1994	0.25 mi.	150' AG
AK41	Chitina Mining District	1996	0.25 mi.	150' AG
AK50	Iron Creek	1997	0.25 mi.	150' AG
AK55	Fortymile District	1998	0.25 mi.	150' AG
AK56	Lanopogon District	1998	0.25 mi.	150' AG
AK65	Sakha River Pogo	1999-2000	0.25 mi.	150' AG
AK67	Sakha River Pogo Extension	2000	0.25 mi.	150' AG
AK68	Liberty Hill	2001	0.25 mi.	150' AG
AK69	Broad Pass	2002	0.25 mi.	150' AG
AK105	S. Delta	2002	0.25 mi.	150' AG
AK107A	Nikolai	1995	0.125 mi.	150' AG
AK107B/C	Delta River	1995	0.25 mi.	150' AG
AK110	Coopertown	2004	0.25 mi.	150' AG
AK115	Lisuan	2005	0.25 mi.	150' AG
AK120	Black Mountain	2005	0.25 mi.	150' AG
AK125	East Richardson	2005	0.25 mi.	150' AG
AK130	AK Highway Corridor	2005-2006	0.25 mi.	150' AG
AK135	Barrowfield	2006-2007	0.25 mi.	150' AG
AK155	Wentworth Fortymile	2007	0.25 mi.	150' AG
AK160	State Cr Slana River	2008-2009	0.25 mi.	180' AG
AK170	Ladue	2010	0.25 mi.	150' AG

References: Pilkington, M. and Thurston, J. B., 2001. Draping corrections for aeromagnetic data: line versus grid-based approaches. *Exploration Geophysics*, v. 32, no. 2, p.95-101.



GEOLOGICAL SURVEY OF CANADA OPEN FILE 7862 (REVISED)  
**ALASKA AND YUKON MAGNETIC COMPILATION**  
**RESIDUAL TOTAL MAGNETIC FIELD**

Scale 1:1 120 000

0 1000 2000 3000 (Meters)

AK620-07862-01  
 Legend: Geophysical Compilation  
 Open File 7862 (revised)  
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 Digital topographic data provided by Geomatics Canada, Natural Resources Canada and USA USGS.

**OPEN FILE DOSSIER PUBLIC 7862 (revised)**  
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2017

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