



# UAV-MAG™\*

## The leader in Unmanned Geophysics Surveying



\*UAV assets and Trademark were purchased by Alta Vista Ventures in December, 2016  
Pioneer Aerial Surveys Ltd. is a wholly owned subsidiary of Alta Vista Ventures, CSE: UAV

# UAV-MAG™ An Industry Driven Survey Solution

- **UAV-MAG™ : 1/2 to 1/3 the cost of ground surveying**
- **UAV-MAG™ : Currently the *ONLY* proven and successful commercial system on the market globally.**
- **UAV-MAG™ : Ultra low noise, high quality airborne magnetic data**
- **UAV-MAG™ : Reduces fieldwork and aviation safety hazards common in conventional ground and airborne surveys**

# UAV-MAG™

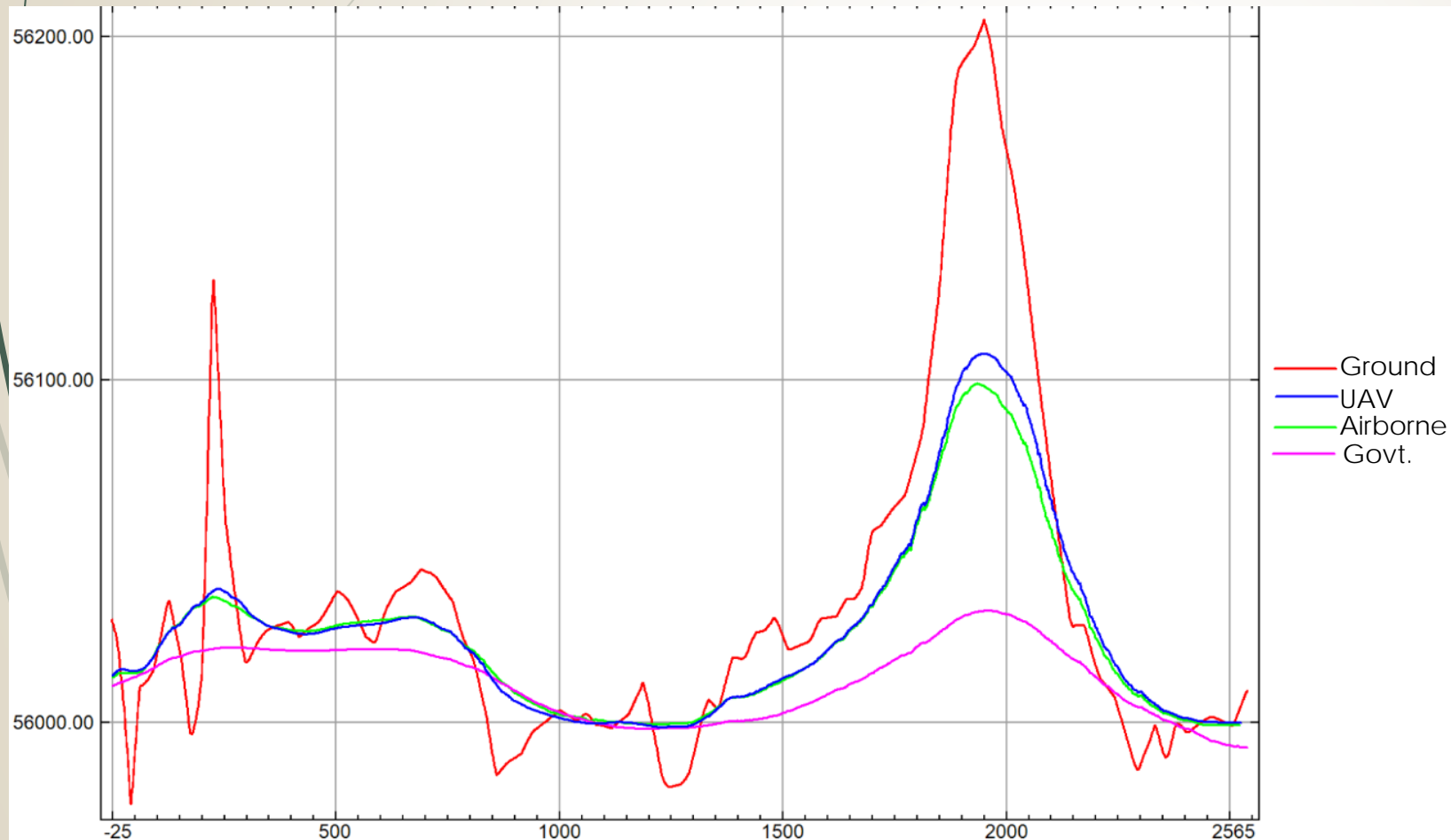
## A comparison to other survey types

UAV-MAG™ is the **best solution** (Cost, Safety & Efficiency) for 1-2000 line km surveys

	Ground Mag	UAV-MAG™	Airborne Mag
Mob cost	Mid	<b>low</b>	high
Standby cost	Low	<b>low</b>	high
Weather tolerance	Med	<b>High</b>	low
Operating hours	Daylight only	<b>day and night</b>	daylight only
Daily amount (Km)	10 - 13	<b>Up to 140 line km</b>	1000+
Cost per line km	High \$	<b>Low \$</b>	Low \$
Optimal job size	less than 100 line km	<b>0 - 2,000 line km</b>	greater than 1-2,000 line km

# Data Quality Comparison

## UAV-MAG vs Ground, Regional and Airborne Surveys



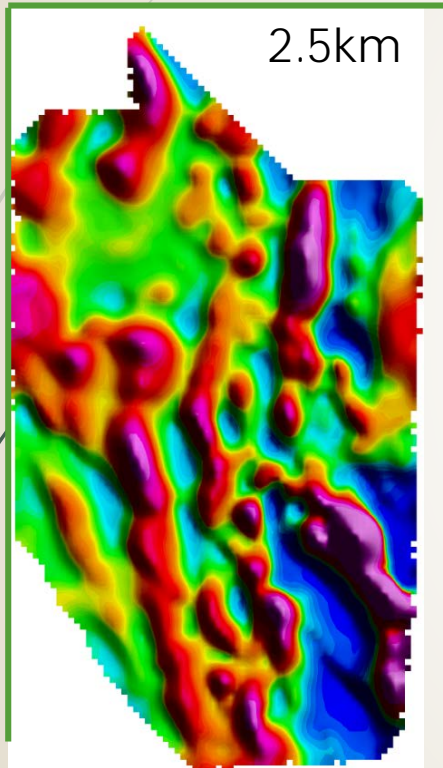
Survey results comparing four different types of magnetic surveys over the SAME line on the SAME anomaly:

- UAV-MAG and Airborne (GeoTech) were flown at the same elevation.
- UAV-MAG™ provided higher resolution ground sampling (1m) than comparable airborne (3-5m).
- Result: UAV-MAG Data is **High Quality, Low Noise**, and comparable to industry standards



# UAV-MAG: Case Examples

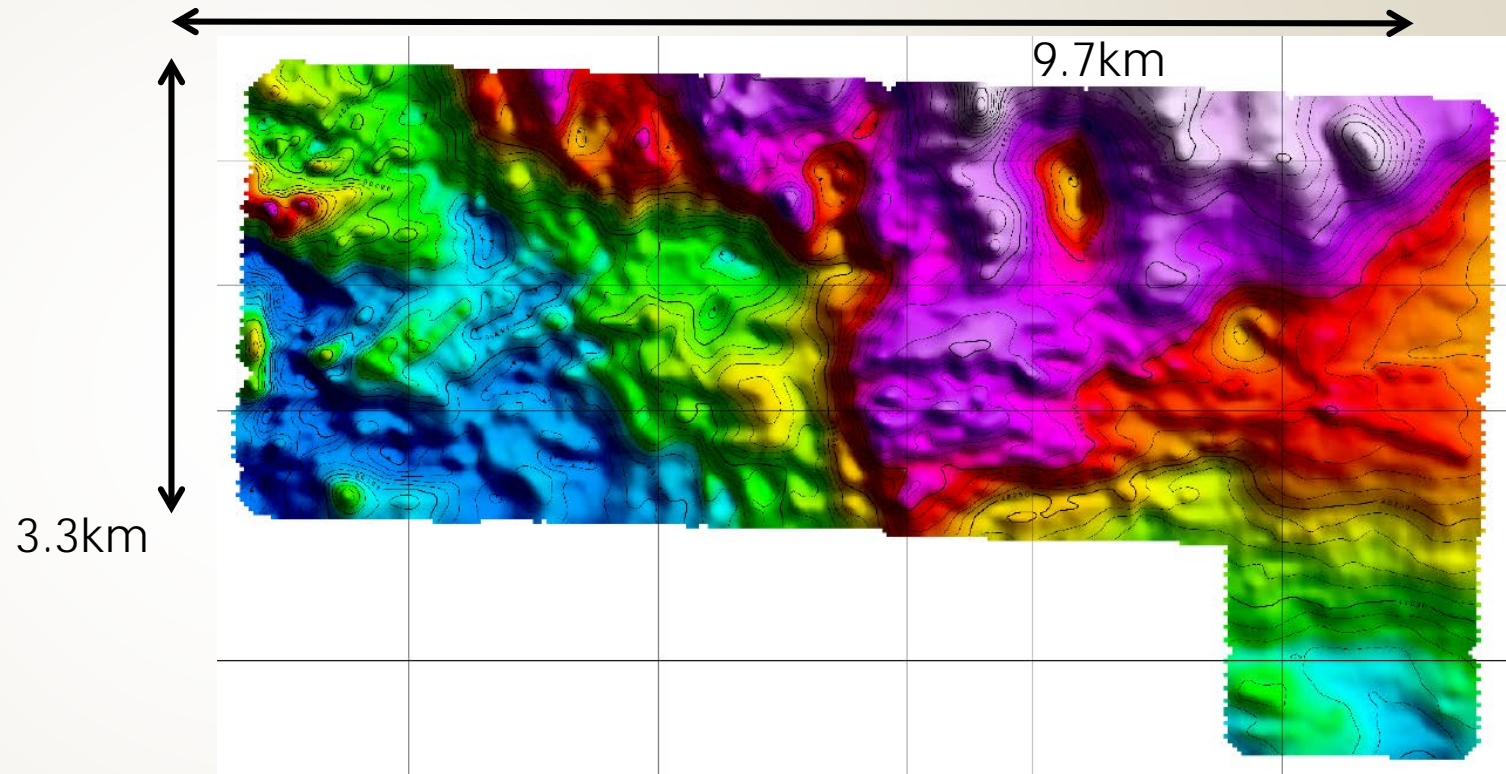
## Lithium Pegmatites



1VD RTP

200 line km. 40m line spacing, 50m AGL  
3 flight days

## Copper Porphyry

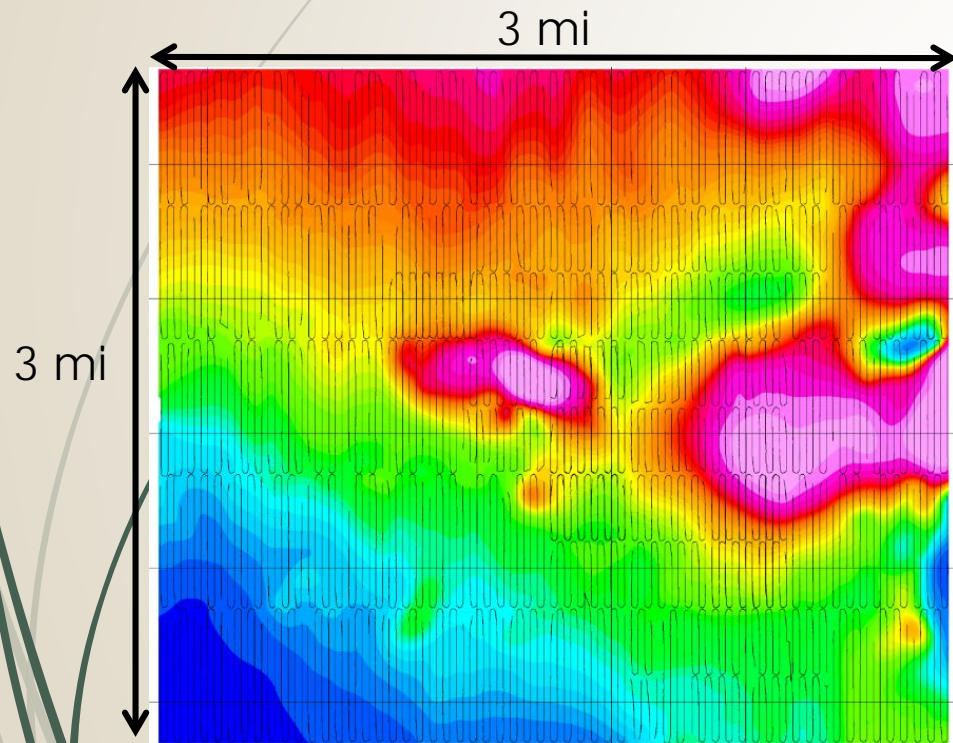


Total Field RTP

377 line km. 50m line spacing, 50m AGL  
6 flight days

# UAV-MAG: Case Examples

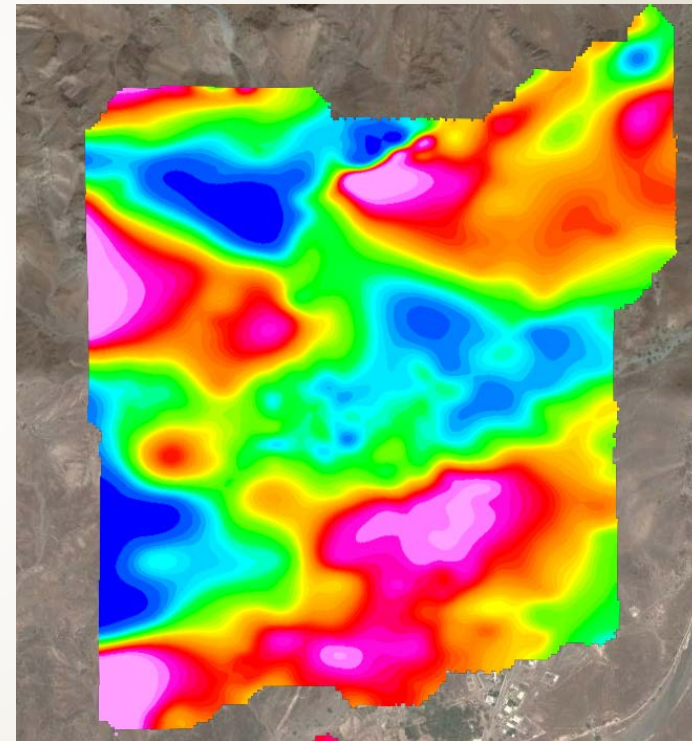
## Kimberlite & Lamprophyre



Total Field RTP

650 line km. 50m line spacing, 50m AGL  
10 flight days

## Oxide copper



1st Vertical Derivative RTE

70 line km. 50m line spacing, 50m AGL  
1 flight day



# UAV-MAG™ *Multi-Elevation Surveys*

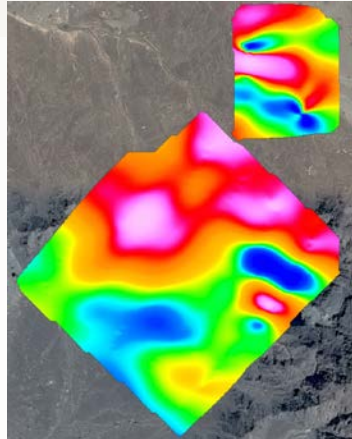
## ***What is it?***

Survey flights flown over the same target at two different elevations

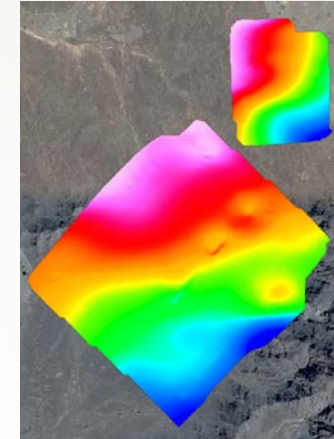
## ***Why do it?***

Increase anomaly resolution considerably over single elevation surveys

- Results from **combining 20m & 60m surveys**
- High resolution: <50cm ground sampling
- A field test with UAV-MAG™  
**Results that reveal sharp anomalies coincident with known mineralization**



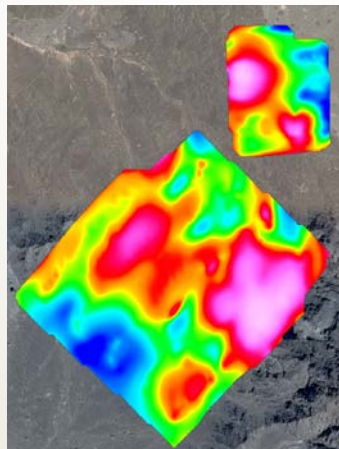
*20m Total Field RTE*



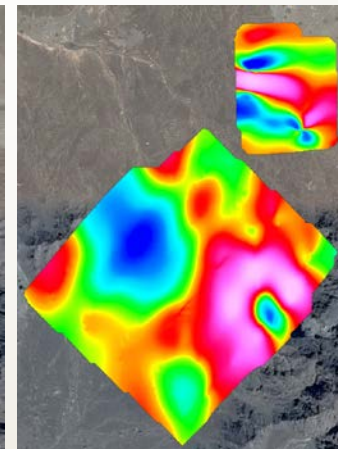
*60m Total Field RTE*

2 surveys over the same area  
 - 20 m AGL  
 & 60 m AGL

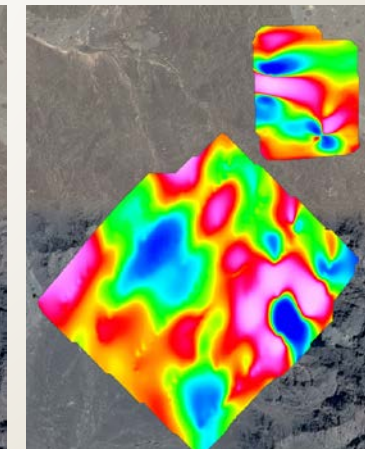
Results are combined to better define anomalies



Analytical Signal



Total Field



Vertical Derivative

UAV-MAG™

# An Industry Driven Survey Solution

**For more information & to arrange a survey:**

**Contact:**

**Pioneer Aerial Surveys Ltd.**

**Vancouver, Regina, Toronto**

**Michael Burns**

**p. 1-306-715-6802**

**[Michael.burns@pioneerexploration.ca](mailto:Michael.burns@pioneerexploration.ca)**

**[www.pioneeraerialsurveys.com](http://www.pioneeraerialsurveys.com)**

