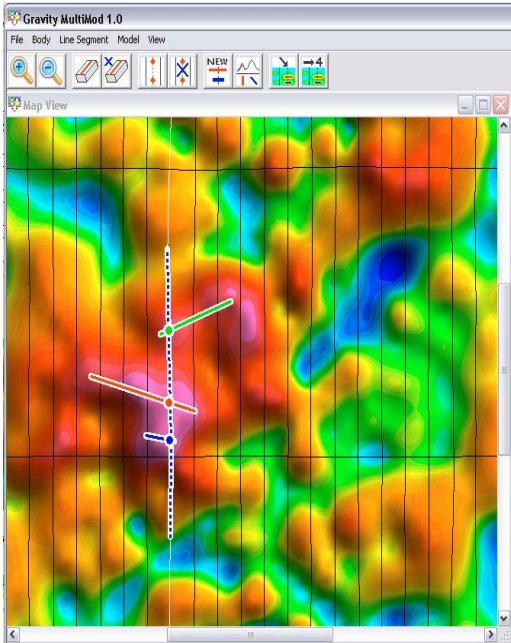


Multi-Model: Gravity Gradient Example
Bell Geospace Air-FTG
Heath Steele N.B.

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 85 Curlew Drive, Suite 104
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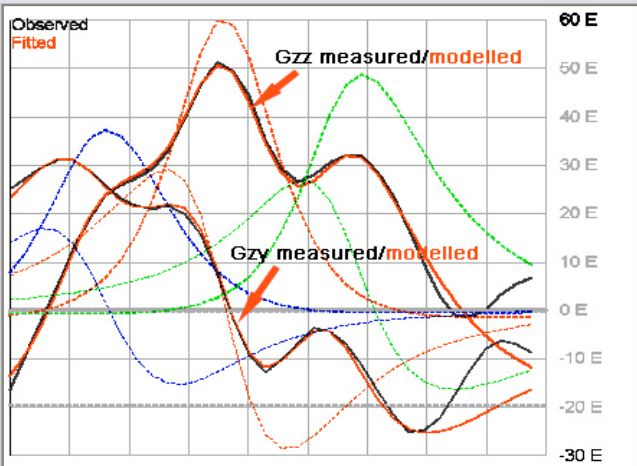


Gravity Multi-Mod lets you discover the possible geologic source of anomalies mapped by airborne gravity gradiometers.

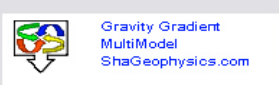
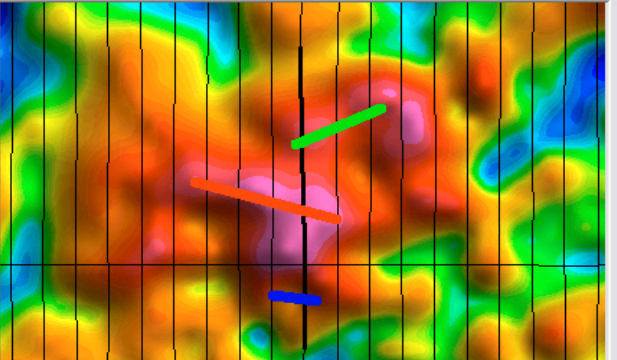
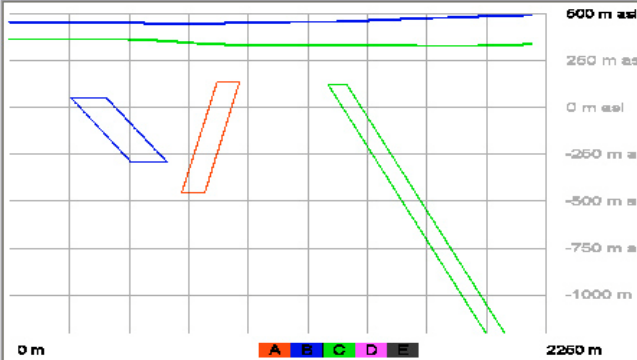
The example presented is from a Bell Geospace Air-FTG survey over the Heath Steele area of New Brunswick. The data was provided by the New Brunswick Department of Natural Resources. The nominal flight line spacing was 200 m. and the full gravity tensor was recorded. This example uses both the Gzz and Gzy tensor component profiles.

The Multi-Mod map view, shown on the left, presents the Gzz grid as a background image. In this window the user defines the axes of one or more density anomalies and a section of flight line that crosses them. This combination of 1 to 5 bodies and a crossing profile is the model scenario illustrated below. The option to fit Gzz in combination with Gzy is has been selected.

This inversion presents the form, depth and density contrast of 3 bodies that would provide a good fit to the observed profiles of Gzz and Gzy. This is a possible but not a unique explanation for the gravity profiles. The user may fix parameters such as width and density to find a solution that best accommodates known geological constraints.



	Model A	Model B	Model C	Model D	Model E
UTM X (m)	718644.75	718823.12	719093.56		
UTM Y (m)	5244600.00	5243954.50	5245090.50		
Baseline (E)	-19.57	-19.57	-19.57		
Slope (E/m)	0.00	0.00	0.00		
Density (mg/cc)	2688.11	3743.50	3740.19		
Depth (m)	139.82	51.54	122.04		
Width (m)	91.30	148.25	72.77		
Length (m)	904.02	266.12	567.26		
Thickness (m)	588.45	341.81	1602.24		
Dip Angle (°)	103.40	53.95	65.41		
Offset (m)	-1.07	-334.95	-37.63		
Model A					
Baseline Gzy	-0.3909				
Slope Gzy	0.0000				



Heath Steele Area
New Brunswick
Bell Geospace Air-FTG Survey

Model : 5 Line: 1601
HS_Tzz_TC_270.grd