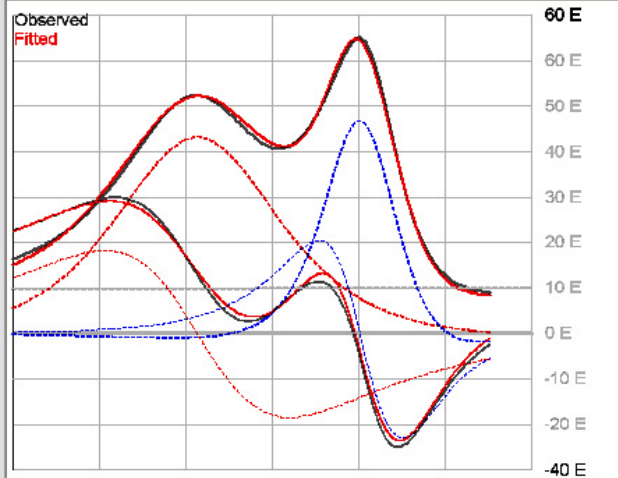


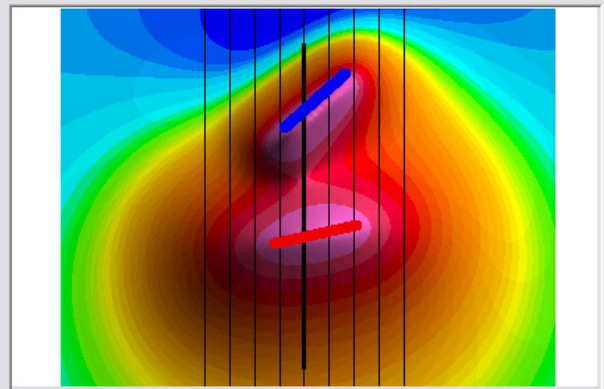
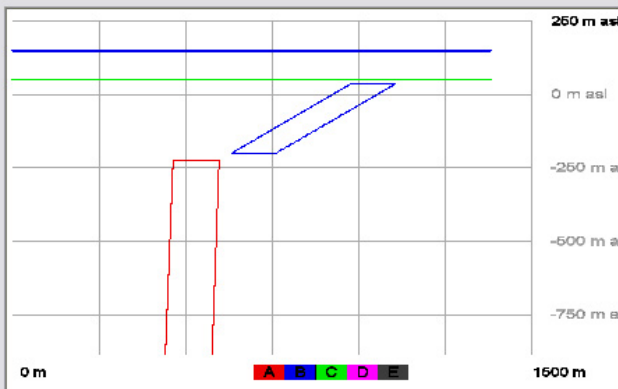


Multi-Model: A New Approach to Gravity Gradiometry Modelling

Scott Hogg & Associates Ltd.
 Geophysical Services
 85 Curlew Drive, Suite 104
 Toronto, Canada, M3A 2P8
 www:shageophysics.com
 Tel: (416) 444-8245 Fax: (416) 444-4409



	Model A	Model B	Model C	Model D	Model E
UTM X (m)	2042.50	2039.50			
UTM Y (m)	1998.69	2533.99			
Baseline (E)	-0.05	-0.05			
Slope (E/m)	0.00	0.00			
Density (mg/cc)	2660.92	894.04			
Depth (m)	-222.88	35.68			
Width (m)	131.47	95.70			
Length (m)	337.76	327.37			
Thickness (m)	677.21	236.91			
Dip Angle (°)	91.80	137.49			
Offset (m)	4.19	62.49			
Model A					
Baseline Gzy	-0.0532				
Slope Gzy	0.0001				



Model : 1 Line: 0e
 G2zz.grd



Gravity Gradient
 MultiModel
 ShaGeophysics.com

Few tools are available to model isolated density anomalies measured by airborne gravity gradiometers. The **Multi-Model** approach uses the measured G_{zz} plus the G_{zx} or G_{zy} profiles and allows the inclusion of adjacent bodies and their anomalies to be included in a single analysis scenario. All of the bodies individual model parameters can be optimized simultaneously in combination. The process is simple, efficient and flexible.

- Start with a map image of G_z , G_{zz} or other grid of your choice.
- Interactively define the density axes of the bodies of interest.
- Point to a crossing flight line in the profile database and highlight the section to be modelled.
- Select the axes of interest to compose the modelling scenario.
- Activate from 1 to 5 bodies and control the inversion of a single body or a multi-body combination.
- If desired, include G_{zx} or G_{zy} profiles to further constrain the fit.
- The quality of fit, and the influence of each body, is visually displayed.

Illustrated above is the result of a combined optimization of 2 density bodies. The inversion has included both the measured G_{zz} and G_{zy} profiles. This graphic image is generated to visually record the modelling result. As well, all of the body parameters are saved in a master project database. The contents of the table can be plotted on a map in a variety of numeric and symbolic formats.