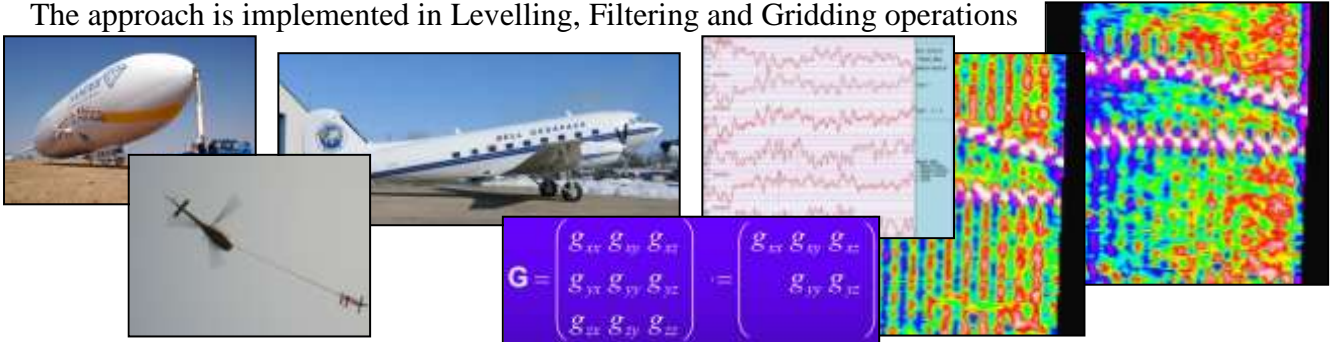


Workshop: Gradient (Tensor & Vector) Processing

Intrepid Geophysics is at the forefront of developing techniques in the signal processing of full tensor and gradient data sets for both gravity and magnetics. We apply the underlying *physical and mathematical properties of the tensor* to correctly interpolate between tensor readings and achieve superior data processing results.

- Using Intrepid's Tensor Spherical Interpolation Technology, the eigenvalues together with the associated quaternion of the tensor can be used for the interpolation and filtering processes, correctly accounting for both the magnitudes and the angular variation of the tensor.
- This form the basis for Quality Control of vector and full tensor surveys
- The approach is implemented in Levelling, Filtering and Gridding operations



$$G = \begin{pmatrix} g_{xx} & g_{xy} & g_{xz} \\ g_{yx} & g_{yy} & g_{yz} \\ g_{zx} & g_{zy} & g_{zz} \end{pmatrix} = \begin{pmatrix} g_{xx} & g_{xy} & g_{xz} \\ & g_{yy} & \\ & & g_{zz} \end{pmatrix}$$

Presented by Dr. Desmond FitzGerald from Intrepid Geophysics, this course provides participants with an introduction to an quality control, gridding and filtering of vector and full tensor datasets.

You will learn to assess the quality of a tensor survey, interpret tensor data and optimise the signal content through linear differential de-noising [MITRE] and other methods. The course will cover aspects of the design of tensor instruments, and what signals can be recovered if potential gradients are measured. You will examine the five independent components of a tensor, and learn many ways to transform tensor data for examining the signal. A 30 day evaluation licence will be provided at the end of the course, allowing companies to further evaluate the application of Intrepid Tensor Processing on their own project datasets.

Where: The Royal Swazi Spa, Swaziland (SAGA: www.sagaonline.co.za/2009Conference/index.htm
Main Road, Mbabane

When: Tuesday, September 15, 2009

Time: 8:30 to 17:00

Cost: R1,000

Bring your laptop computer!

Contact: RCA Conference Organiser: events@rca.co.za

SAGA2009_TensorProcessing_Workshop_Swaziland_September2009_FLYER (2).doc

For more information ...