

Intrepid Gravity Tool performs the following functions – field data reductions, loop analysis, terrain corrections, datum conversions, gravity transforms, auto de-correlation, noise filtering, applicable for land, sea and air use and supporting most common gravity meters. Alternately, a gravity library is available for use in Real Time OEM products.

Geodetic Applications, Continental scale surveys and groups of surveys can be accommodated. A thorough treatment of height and elevation is guaranteed.

**Support for Real time OEM Applications**

**Function 1: – Tie Ins**

Tie into absolute values in port or at the airport, the operator has the facility to enter a one or more tie in values to convert meter reading units to absolute gravity.

**Function 2: – EOTVOS**

Real time calculation EOTVOS correction. This factor is applied to the observed gravity.

**Function 3: – Earth Tide**

The Earth tide correction using Longman’s formula is applied to the observed gravity.

**Function 4: – Theoretical**

Theoretical gravity can be calculated and is used to compute Free Air Anomaly.

**Function 5: – Navigational Filtering**

Some filters may be applied in calculating the velocity and heading/bearing

of the ship for the purposes of calculating the EOTVOS correction.

This quantity is often subject to a lot of noise in the signal.

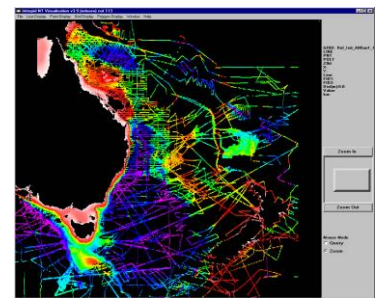
**Function 6: – Spatial Datum, Projection & Gravitational Datum**

There is capacity to use a range of gravitational datum and also spatial projections and datums.

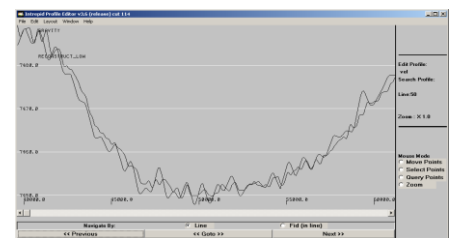
Gravity Meters supported include Scintrex, L&R, ZLS, Bell Geoscience.



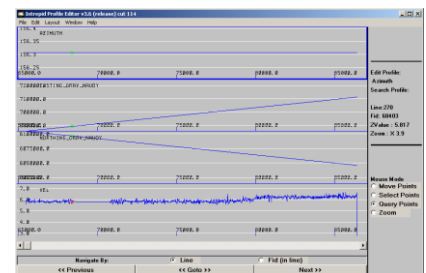
*Gravity Tensor Meter.*



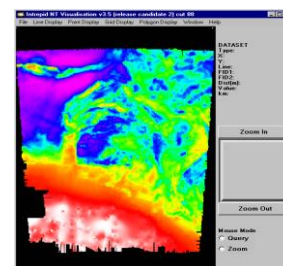
*Levelling Offshore Australia*



*Reconstructed Gravity= Spring Tension + k\* Beam Velocity + Cross Coupling*



*Preparing for EOTVOS*



*South Australian Bouguer.*