GridKnit
montaj Extension developed by Geosoft

The montaj™ GridKnit extension provides two advanced methods for rapidly and accurately merging virtually any pair of geophysical grids.

Airborne and ground geophysical compilations are an important tool for interpreting geology. Traditionally, accurate compilations are difficult to create due to grids with different survey parameters, noise levels, or uncertainties at the grid edges.

The Blending Method quickly merges grids via standard smoothing functions. The Suturing Method enables you to automatically or manually define a join path then applies a proprietary multi-frequency correction to eliminate differences between the grids along the path. This method is used for joining grids that have a narrow overlap area and relatively small anomalies. Suturing provides more accurate results and greater control than blending. “Postage stamp” stitching allows easy insertion of high-resolution grids into regional backgrounds.

Key Functionality:
- Automatic or interactive stitch selection. Automatic option runs via intelligent defaults,
- Blending or suturing method selection,
- Pre-processing: 0, 1st, 2nd and 3rd order trend removal and trend area specification (overlap, all, edge points or overlap edge points),
- Calculate the trend using overlapping edge points. This is in addition to the current “all points”, “overlapping points”, and “edge points” options,
- Pre-processing: Regional trend removal, with the “to a regional grid” method, trend removal operations are performed with respect to a regional grid. The maximum trend order may be specified, or adjusted automatically based on a fitting tolerance,
- Pre-processing: interpolation, maximum gap and output cell size specification,
- Suture and weighting options (ensures a smooth transition between grids),
- Stitch up to 10 grids together (or up to 20 using a script) in a single operation.

Use GridKnit to:
- Stitch up to 10 grids together (or up to 20 using a script) in a single operation,
- Remove static, slope, 2nd and 3rd order trends,
- Calculate the trend using “all points”, “overlapping points”, “edge points” and overlapping edge points,
- Perform regional trend removal. With the “to a regional grid” method, trend removal operations are performed with respect to a regional grid. The maximum trend order may be specified, or adjusted automatically based on a fitting tolerance,

*The montaj GridKnit extension requires Geosoft’s Oasis montaj.