TECHCO

SUMMIG
KIRCHHOFF TIME MIGRATION

SUMMIG is a Kirchhoff time migration. The main features of this program are:

- 2D or 3D data may be migrated.
- Handles pre-stack or post-stack data.
- Optional migration operator anti-aliasing.
- Migration performed to selected locations.
- Can produce stack or common offset gathers on output.
- Can perform multiple migrations at various percentages of the velocity field. Percentage stacks are output for velocity analysis.
- Uses multiple processes for parallel network execution.

SUMMIG is a production migration program, designed to interface smoothly into any of the popular seismic processing systems. It allows easy specification of data ranges for migration and can selectively migrate to a limited range of output CDP locations for velocity analysis. In addition to this **SUMMIG** can migrate to common offset planes**,** allowing the user to perform velocity analysis on migrated gathers.

SUMMIG is a Kirchhoff pre-stack time migration and a natural consequence of this is long runtimes. Relentless effort has been expended on making **SUMMIG** perform its calculations rapidly and accurately. The algorithm has been tuned and parallelized to allow results to be obtained as quickly as possible.

SUMMIG allows the optional use of anti-aliasing filters to remove the noise generated by the Kirchhoff summation operator. The filter lengths may be scaled by a percentage. This allows the user to reduce the amount of filtering being performed if he suspects that the frequency content of the data is being unnecessarily reduced.

SUMMIG will migrate from irregular topography allowing accurate focussing of data shot over mountainous or rugged terrain.

SUMMIG can run in parallel on network of computers. The program transparently handles differences in machine architecture and has been ported to Linux, Alpha-Linux, Solaris, Irix and True64 Unix. It has been optimized for performance on Unix clusters.

SUMMIG can perform amplitude balancing on the input gathers as a means of compensating for uneven fold distribution as a function of offset and space. This has the effect of reducing the geometry footprint and also can produce migrated gathers whose amplitudes are more suited for AVO analysis.

For further information, please contact:

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