

Number of Design Gates : 2

Design Gates in msec.

Gate 1 300 to 3000

Gate 2 2500 to 4300

Application Gates in msec.

Gate 1 0 to 2500

Gate 2 3000 to 5000

3.18 WAVE EQUATION MIGRATION [KIRCHHOFF METHOD]

Seismic stack sections are representations of complex wave fields. Migration is the process which is used to simplify this representation. In general the fundamental effects of migration are :

- a) Lateral displacement of dipping events to their correct locations
- b) Collapsing of diffraction patterns to their associated point source origins
- c) Reconstruction of buried foci
- d) Improvement of major and minor fault delineations
- e) Signal-to-noise improvements for coherent events in areas where most of the noise consists of diffraction arrivals

Input parameters to the program are;

1. R.M.S. stacking velocity field. This field can be dip corrected and/or modified by a user input percentage.
2. Sub-surface trace interval.

The input to the migration routine comprised the final stack. The migration velocities used were determined after a series of tests. The migration was performed using 90 percent smoothed stacking velocities.

3.19 TIME VARIANT FILTER

Application of a time variant filter will remove unwanted noise that lies outside the frequency range of the desired reflection

