



Dip scans are built by stacking together series of moveout scans from consecutive depth points along linear planes of dip which are automatically incremented within a specified dip aperture designed to cover the expected range of dips on the seismic section. Dip apertures for each processing time gate were determined from near trace gather sections. The number of consecutive moveout scans stacked to form a dip scan is termed the SMASH rate and may also vary with the time gates.

- o Interpretation of Moveout/Dip Scans to detect valid events with time, amplitude and moveout, and dip information -

The automatic interpretation is based on the fact that any coherent event on the gather record will stack at the optimum moveout value to a maximum (or minimum for negative values) in the two-dimensional time moveout plane of the scan. When stacking again takes place along the dip plane, which most approximates the true geological time-dip, maximum dip scan response will be achieved. The dip scan domain is a three-dimensional one in which every coherent event from the input gather records will be represented by a maximum or minimum at that time, moveout and dip which correctly describes the original seismic event.