

SEISMOGRAPH SERVICE

A Raytheon Company

Transposed Deconvolved Upgoing Wavefield

The transposition of the deconvolved, upgoing data ensures that all primary reflections appear at true times and depths along the left (or right) hand edge of the display enabling easier comparison with the seismic section.

The transposed display is obtained by producing a number of output traces (typically 24) from a number of corridor scans of the deconvolved upgoing wavefield as illustrated in Figure 2.

Each trace is composed of a series of small windows, one from each input trace, taken along the slope of the first arrival curve.

The first scan on each trace is from the first arrival time to the time of the first arrival on the next (deeper) trace. Second and subsequent corridors are composed of a series of windows parallel to the first arrival curve. The number of corridors is the same as the number of output traces requested. The last window for trace 1 extends to the end of data on the deepest input trace; for output trace 2 extends to the end of data on next deepest input trace and so on. Trace 1 can be positioned at either the left or right edge of the display and both versions are always presented.

Changes of dip, indicated by changes of ΔT from trace to trace on an event on the deconvolved upgoing wavefield display are retained visually on this display, but the amount of ΔT between traces is altered slightly; any dip calculations should be made from the deconvolved upgoing wavefield only.