

**DISPLAY VI - Residual Wavefield at one-way time**

This display shows data remaining after removal of up and downgoing wavefields and may show diffraction hyperbolae and fault plane reflections.

The data is filtered with the preliminary filter.

Most VSP data contains many other events in addition to the vertical upgoing and downgoing wavefields. Reflections from fault planes, diffraction energy from point diffractors near the borehole, mode-converted shear (SV) energy and residual tube wave energy are some of the possible events which will be revealed by this display. The interpretation of these types of events is difficult except for diffraction hyperbolae and some fault plane reflectors.

The method for calculation of the distance of diffraction points from the well is described in the Appendix contained in this report.