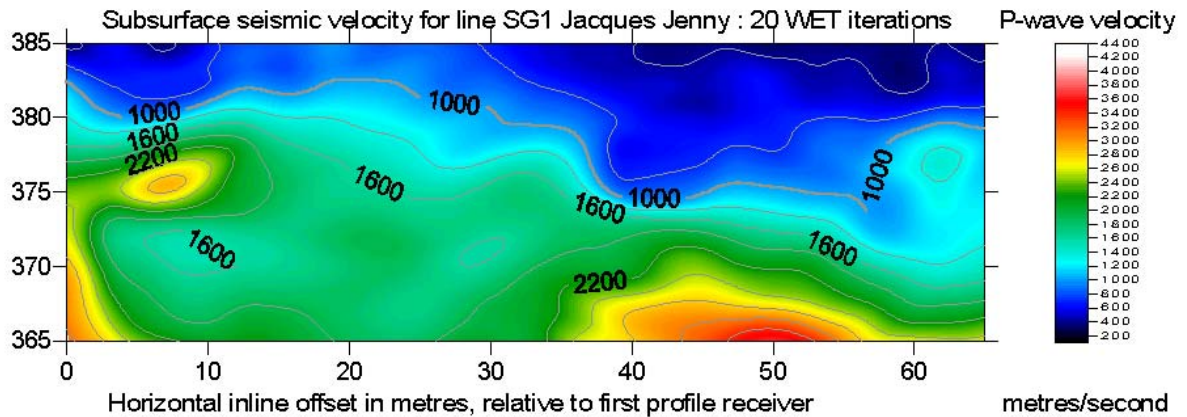


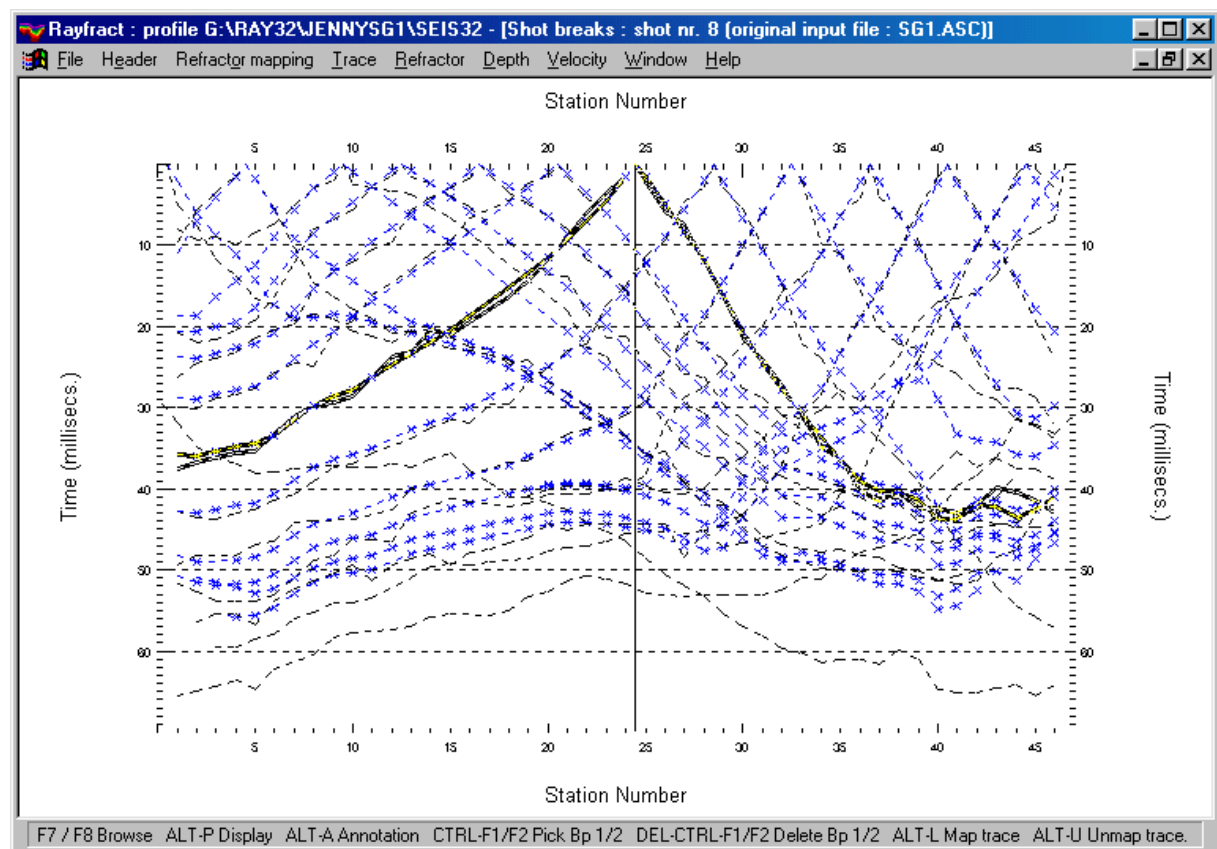
Processing of line SG1 as sent by Jacques Jenny on February 20<sup>th</sup> 2003, with Rayfract™ Delta-t-V and subsequent WET tomography, 20 iterations :

The original input data is available in the form of a W\_GeoSoft WinSism .xyz spreadsheet file in the archive

<http://rayfract.com/samples/JENNYSG1.ZIP> .

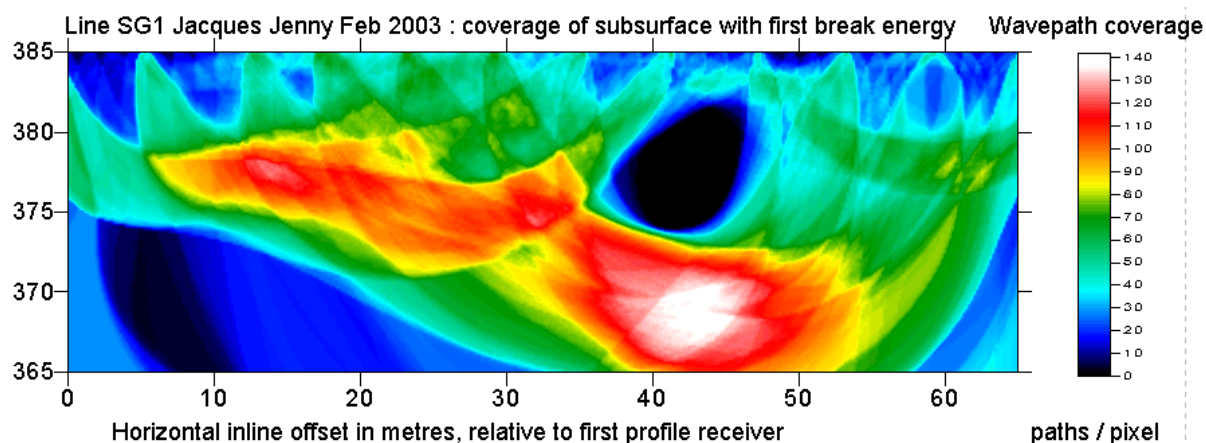


The fit between picked (black) and modeled (blue) traveltimes, as obtained by forward modelling wave propagation over above tomogram, looks as follows :

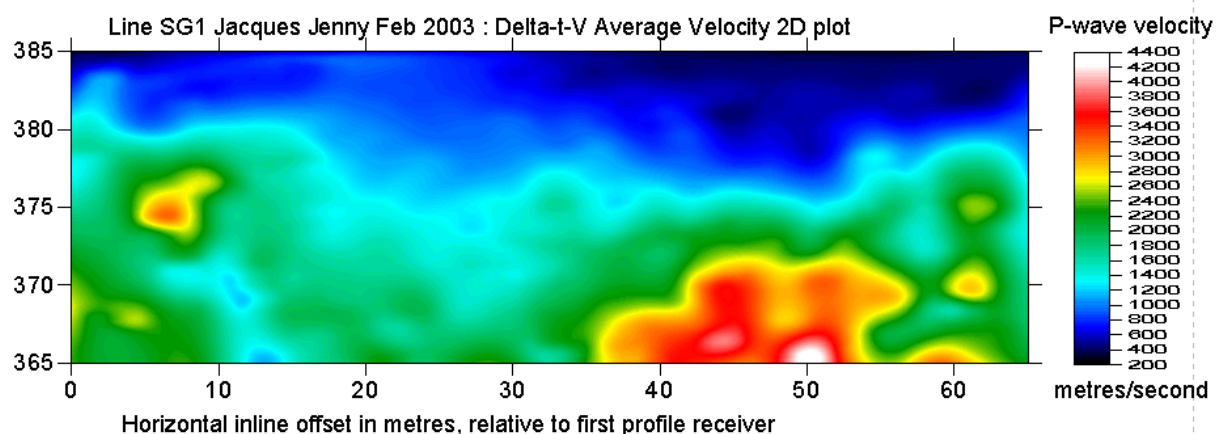


First break picking between station nrs. 30 to 45 does seem a bit inconsistent. But see below.

On the next page, we show the coverage of the subsurface with seismic first break energy for above tomogram. Areas of higher coverage correspond to areas of higher reliability of the resulting tomogram; see above.



Above irregular travelttime curves (mainly between station nrs. 30 to 45) may indicate a highly inhomogeneous subsurface velocity structure and related geology. Conventional ray based and even wavepath based tomography processing typically fails in such situations, where velocity varies to a large degree on a scale significantly below one wavelength. Below we show an alternative interpretation, obtained directly from our Delta-t-V method (based on the output file AVRVELO.CSV, i.e. with option Delta-t-V|Delta-t-V Settings|Prefer Average over minimum interface velocity enabled). This method has a unique ability to image local velocity anomalies.



For another interpretation of above data set, confirmed with drilling, please see bottom of page

<http://www.geo2x.com/refraction.htm> . The shot shown on the right obviously belongs to the same profile.

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