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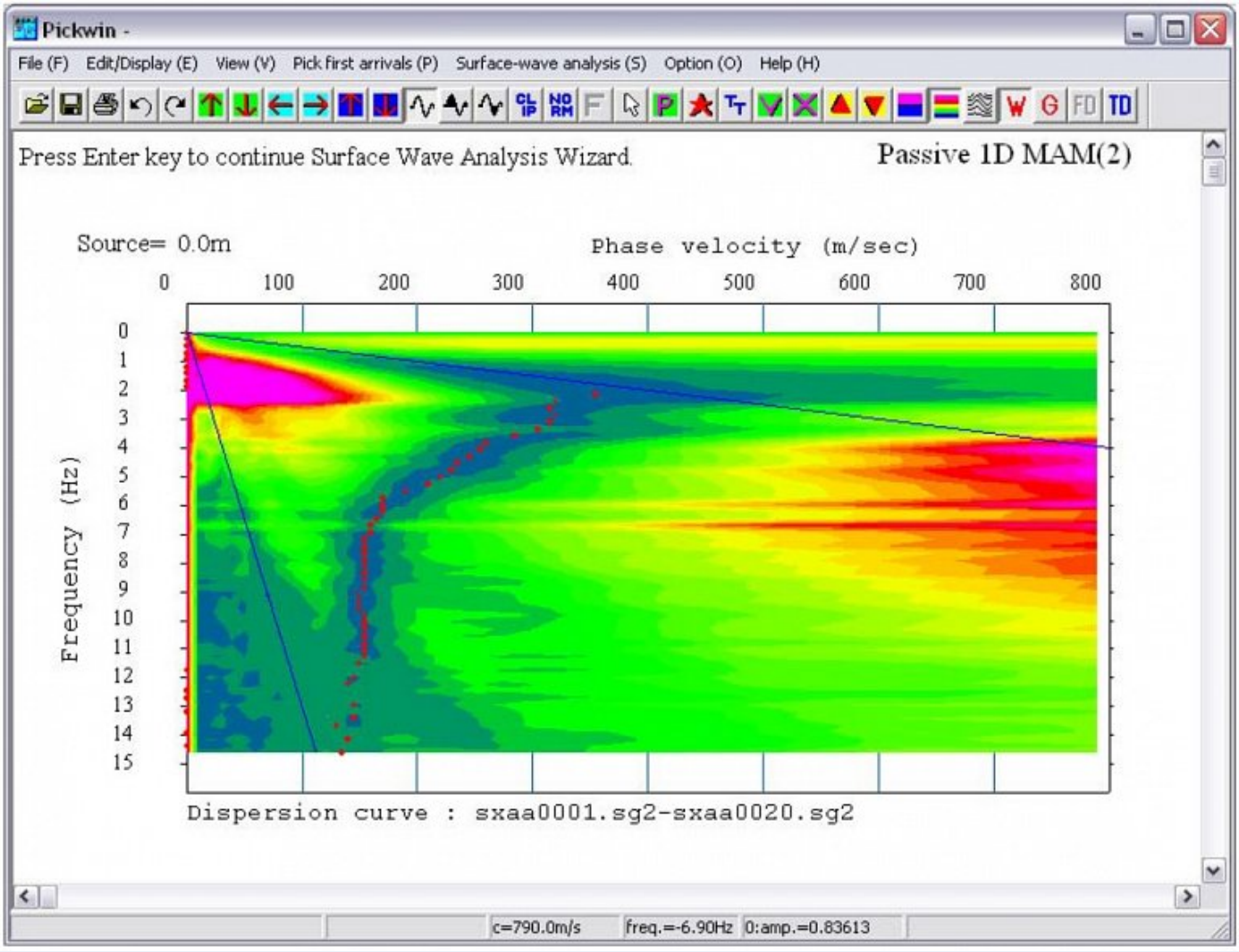
SeisImager SW Data Sheet

SeisImagerSW is a robust and comprehensive processing package for determination of shear-wave velocity (Vs) through analysis of active source and passive source (microtremors) surface waves. Surface waves are easy to record and loaded with information about the structural composition of the subsurface. Multi Channel Analyses of Surface waves was introduced at the start of the 21st central and has subsequently become a staple methodology for UBC/IBC Vs30/Vs100 site classification and stratigraphic investigation.

SeisImagerSW includes both active source and passive source data analysis capability in an easy to use package. Higher frequency data from a sledgehammer source can be combined with lower frequency data from microtremors to produce one high-resolution plot of S-wave velocity. Alternatively, 2D active source profiles can be processed and inverted from either rolling through a fixed spread, or adoption of a lanstreamer.

The wizard-driven processing package steps users through each stage sequentially and offers tool tips for each parameter.



MAM frequency Vs phase velocity dispersion curve. Image Courtesy of Geometrics.

SeisImagerSW also allows the user to build models and examine the effects of velocity variations. Borehole data such

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as P-wave velocities and blow counts (N-values) can also be correlated.

SeisImagerSW Standard Features

- Calculates phase velocity and automatically picks dispersion curve.
- Performs inversion to iteratively seek 1D S-wave velocity (Vs) curve or 2D Vs cross-section.
- Allows active and passive source dispersion curves to be combined for a high-resolution result over all depths sampled.
- Flexible geometry options suit a wide range of site configurations and conditions.
- Analysis based on robust methods: frequency domain tau-p, CMP cross-correlation for active source Multi-channel Analysis of Surface Waves (MASW); Spatial Autocorrelation (SPAC) for passive source Microtremor Array Measurements (MAM)
- Includes editing and QC functions, and velocity modelling

SeisImagerSW Pro

SeisImagerSW Pro provides all the functionality of the standard licence but also includes High Mode analyses tools, and H/V ratio joint inversion with traditional MASW and SPAC datasets.

SeisImagerSW Standard or Pro can be supplied as a standalone processing package or as a module to SeisImager2D or SeisImagerDH.

Technical Specifications

Operating System (OS):	Windows XP to Windows 10.
RAM Memory:	Minimum 1Gb.
Protection:	Activation code. Provided via email.
Options:	SeisImgerDH is available as an additional module or stand alone software package.

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