# **COMPLETE SOLUTION** FOR **NEAR-SURFACE** SEISMIC PROCESSING





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RadExPro provides a complete data processing solution for most common near-surface seismic methods: reflection, refraction, tomography, MASW, and even engineering VSP - all in one comprehensive package. With very flexible user interface and a complete set of state-of-the-art processing algorithms, RadExPro does not limit you either on trace or channel count, nor the

record length. It runs on Windows and is quite easy to learn and to use.

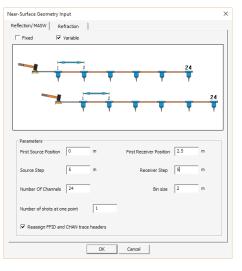


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#### SEISMIC REFLECTION

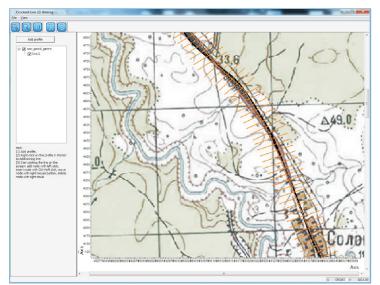
and affordable solution for either impulsive or vibroseis and 2D filters, amplitude corrections, deconvolutions data processing, Por S-waves, 2D or 3D.

Use intuitive geometry assignment tools for basic straightline acquisition settings.

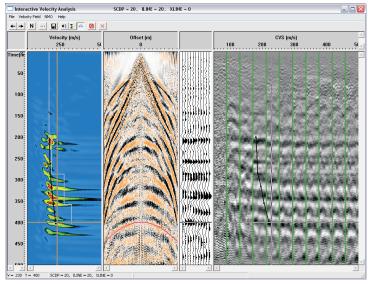


For more complicated survey designes you can load true positioning from SPS-files or ASCII tables.

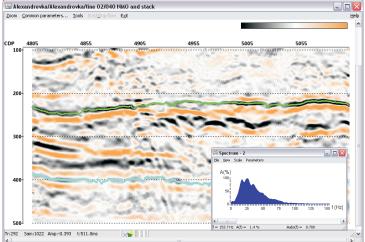
Correctly process the data acquired along arbitraryshaped lines using interactive crooked-line CDP binning:



Are you looking for in-depth processing of the near- The software includes a comprehensive set of surface seismic reflection data? RadExPro is a capable processing algorithms, including various frequency and spectrum whitening, FX and FXY predictive denoising, static corrections, interactive velocity analysis, NMO-correction, regularization, pre-stack and post-stack migrations and much more...



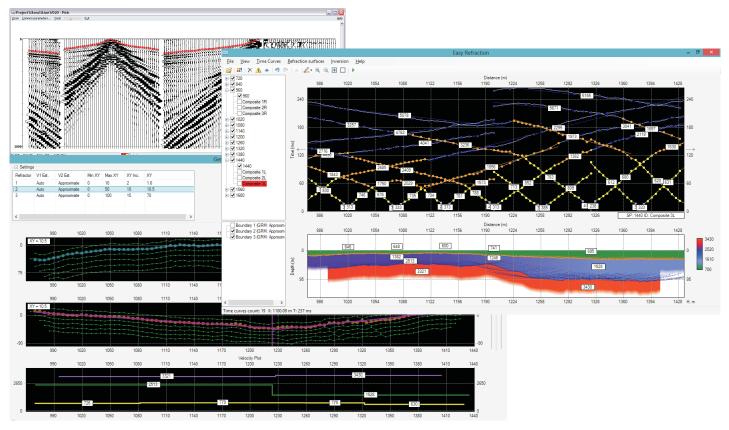
The data display module supports all types of display and easily synchronizes scale, position, and gain between several windows for convenient comparison of processing results.



#### SEISMIC REFRACTION

Pick first breaks for all shots in one panel and load them The module implements automated plus/minus (also at once to the Easy Refraction module for quick and easy refraction processing.

known as CRM) and GRM inversions. The resulting layered model can be exported in ASCII or DXF.



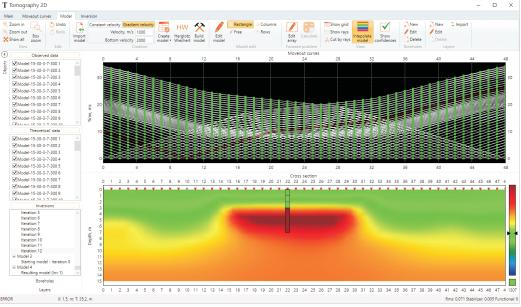
### FIRST-ARRIVAL TRAVEL TIME TOMOGRAPHY

Travel-Time Tomography module provides an intuitive borehole you are pretty sure about velocities – why interactive tool for recovering of 2D velocity model from the first-arrival travel-time curves.

The algorithm is based on the known Occam inversion, You can pause the calculation at any iteration, change however with some important modification. Beside velocity, each cell of the grid has confidence. Use this parameter to specify how confident you are in any particular part of the initial model. For instance, near a model and start the whole process again with modified

not to tell the software explicitly that you don't want the inverion to change them too much?

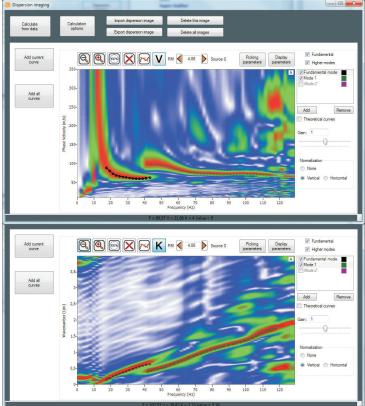
any parameters (even the current model!) and continue. You can also scroll back through the iterations, use the result of any of them as a new initial parameters.



#### SURFACE WAVE (MASW)

A dedicated module for Multichannel Analysis of fundamental mode only, and then use the result as the Surface Wave (MASW) available in the RadExPro for easy and competent evaluation of S-wave velocities of the subsurface – with exceptionally user-friendly interface!

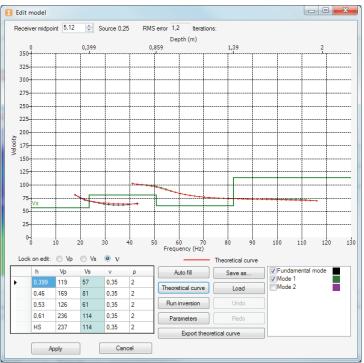
Calculate dispersion images for each seismic gather in both FV and FK domains independently. Pick dispersion curves of the fundamental and higher modes in any of the domains. Convenient semiauthomatic picking algorithm will help you making quick and accurate dispersion curve extraction.



You don't need to save each curve individually – when you are ready with all picks just click Add all curves button to send all of them to the inversion. Then you can always switch any of them on or off through the MASW Manager dialog.

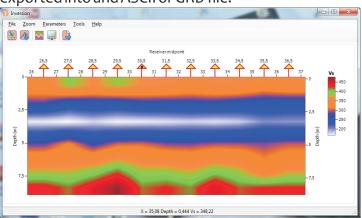
You can jointly invert dispersion curves extracted for all modes, or specify any combination of the modes for the inversion. For instance, you may wish to invert the

initial model for joint inversion. Feel free to experiment and see what works better in your case.



You can invert all dispersion curves automatically with a single mouse click, or work thoroughly with each curve one by one with your complete control of everything. You can also use the inversion result of one midpoint as the initial model for automatic inversion of the others.

The resulting Vs model can be displayed on the screen, exported into and ASCII or GRD file.



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