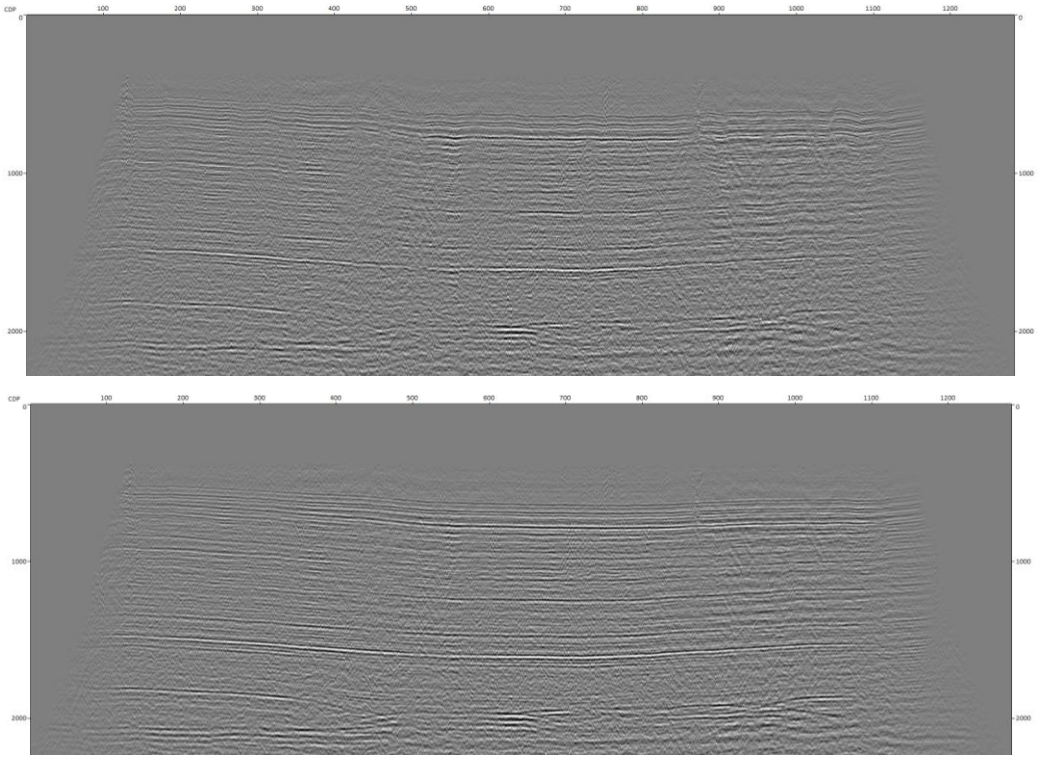
RadExPro 2026.1 release notes

We are excited to announce the next version of our software -- **RadExPro 2026.1** !

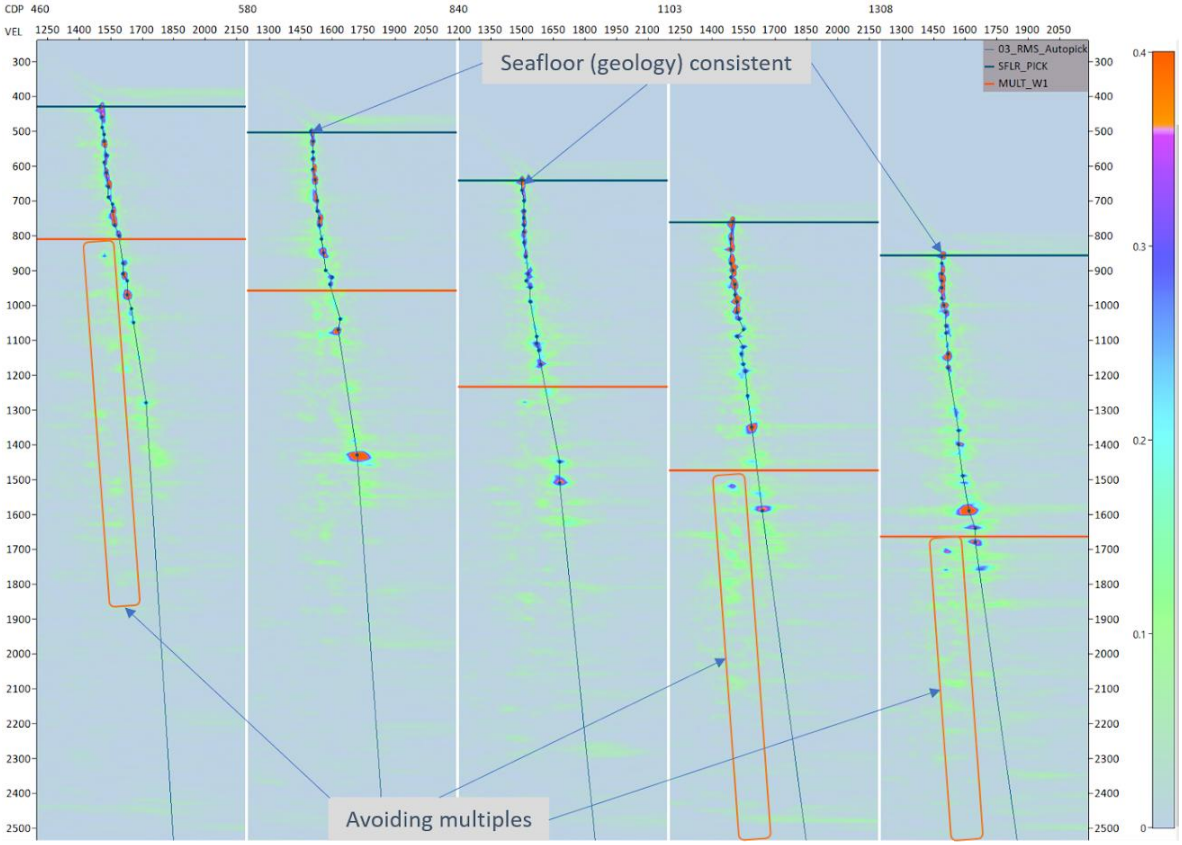
Here is the list of the key improvements:

- The new **Residual Statics*** standalone module estimates surface consistent residual statics on 2D datasets using robust statistics. The module inputs NMO-corrected seismic gathers and estimates the pilot stack with optional supergathering. Next, it applies a robust variation of Diminishing Residual Matrices (DRM) algorithm to the crosscorrelation-based shifts from pilot stack to come up with surface-consistent statics. There is an option for iterative pilot stack recalculation for further improvement of statics' accuracy.



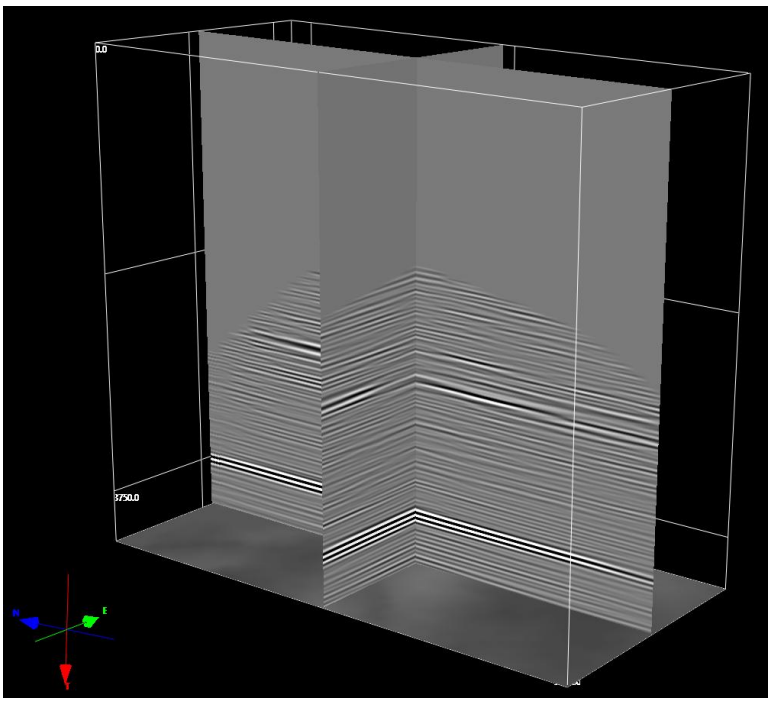
Stacks before and after Residual Statics (public Line 001 vibroseis dataset from Geofizyka Torun S.A, Poland)

- The new **Automatic Semblance Picking** module automatically picks velocity functions from semblance outputs generated by the **Semblance Compute** module. The module allows creating dense and consistent velocity functions and, in some scenarios, completely avoiding manual picking. The picking is performed along a guide function, which can be made horizon-consistent. The resulting velocity functions can now be displayed on top of the semblances in the **Seismic Display** module.



Automatically picked velocity functions plotted on top of the semblances in Seismic Display

- The new **3D Fast VSP Kirchhoff Depth Migration*** standalone module performs a 3D depth migration of VSP data with simplified travel time computation. It extends the 3D functionality of an older **2D-3D VSP Migration** module, adding a modern user interface, parallel computation, anisotropy and directivity correction for Distributed Acoustic Sensor (DAS) datasets. The module estimates the travel times in the subsurface with the anisotropic Alkhalifah-Tsvankin moveout model and conducts weighted summation along these travel times. The travel time computation approach places this migration in a space between the time and depth migration algorithms. Migration runs in parallel, so, for a moderate size of the survey, a 3D migration result can be obtained in minutes on a modern computer.



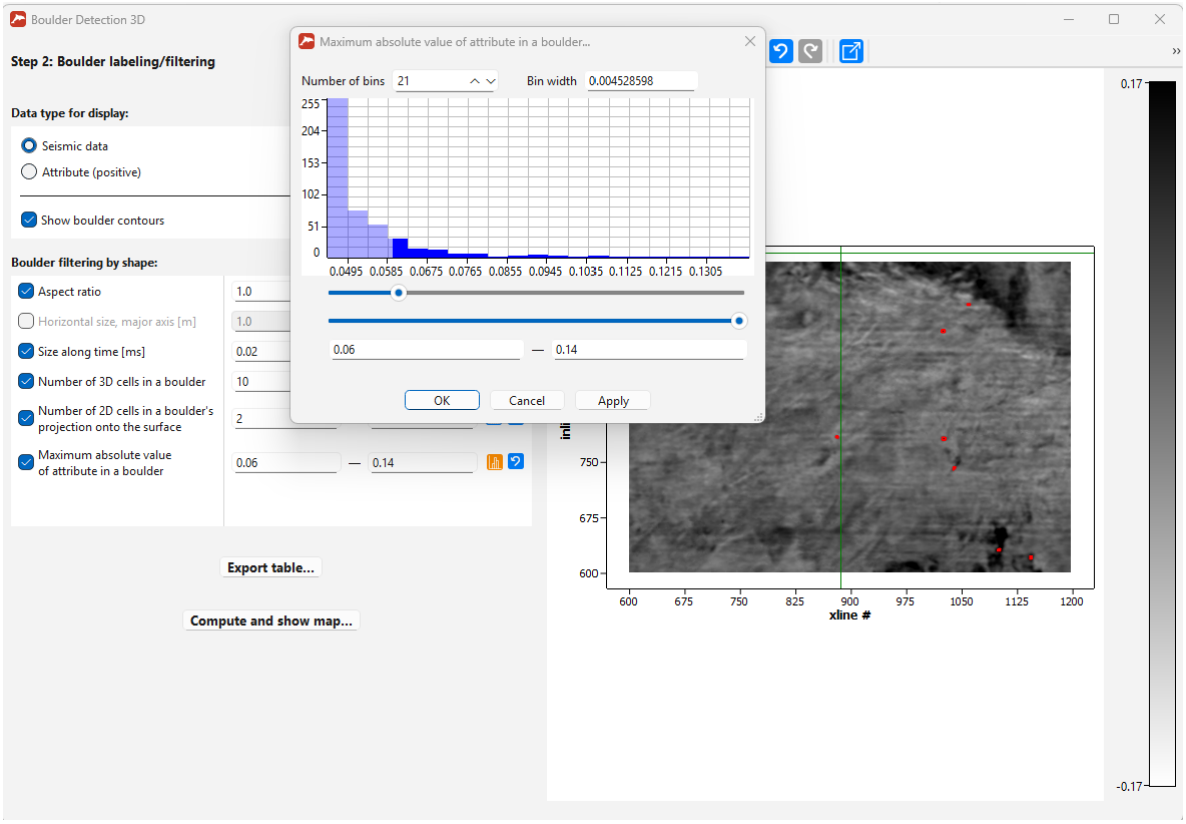
3D Fast VSP Kirchhoff Depth Migration result of the public 3D DAS-VSP data from the Groß Schönebeck site (Martuganova et al., 2022)

Martuganova, E., Stiller, M., Norden, B., Henninges, J., & Krawczyk, C. M. (2022). 3D DAS-VSP data from the Groß Schönebeck site, Germany, February 2017. GFZ Data Services. https://doi.org/10.5880/GFZ.4.8.2022.014

- We added parallelization to the **Semblance Compute** module, which now supports multithreaded computation.

- In the **Boulder Detection 3D/2D** modules, the threshold parameter can now be either *normalized* (always ranging from 0 to 1) or *not normalized* (using the actual range of the boulder probability attribute magnitudes). In the second step, we added another attribute that can be used to filter false positives—the *maximum absolute value of the attribute within a boulder*. In

addition, filter parameters for all attributes can now be selected using a histogram.



- We have transitioned a couple of modules to the new universal parameter style. These modules now offer full support for replicas and include standard export/import functionality. The affected modules are as follows:
  - **Semblance Compute**
  - **Text Output**

The following issues were fixed:

- The software does not make a difference between a 0 value and no value in a trace header field, as a result trace headers containing only zeros are considered as not assigned and cannot be saved -- **FIXED!**
- Wavelet Processor occasionally crashes the software -- **FIXED!**
- Seismic Display и QC Viewer - Fit to screen command also affects the header plot scales -- **FIXED!**
- Incorrect interpolation of interval velocities in the Velocity Table -> Trace Transfer module -- **FIXED!**
- Forward and backward Radon Transforms change the number of traces -- **FIXED!**

- NMO/NMI modify velocity check box does not work -- **FIXED!**

As always, if your licenses are under maintenance, feel free to contact us at support@radexpro.com to receive your complimentary update.