RadExPro 2025.2 release notes

We are happy to announce the next version of our software -- **RadExPro 2025.2**!

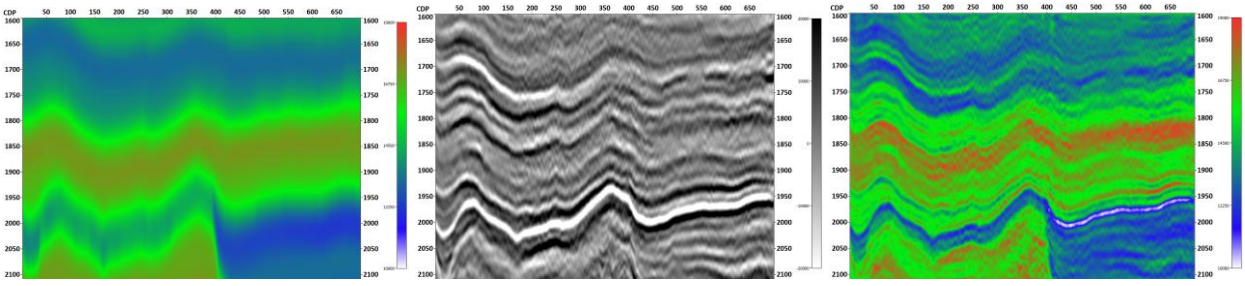
Here is the list of the key new features and improvements:

- New module **Model-Based Inversion** estimates acoustic impedance (AI) from post-stack seismic data and low-frequency model (LFM). The algorithm uses an iterative optimization approach designed to satisfy two criteria:

  - Minimize the residual between synthetic and real seismic data
  - Minimize the residual between inverted and low-frequency models

  The reflection coefficients are assumed to be of low amplitude, which enables the use of a linear forward operator. The inversion objective function is based on the L2 norm.

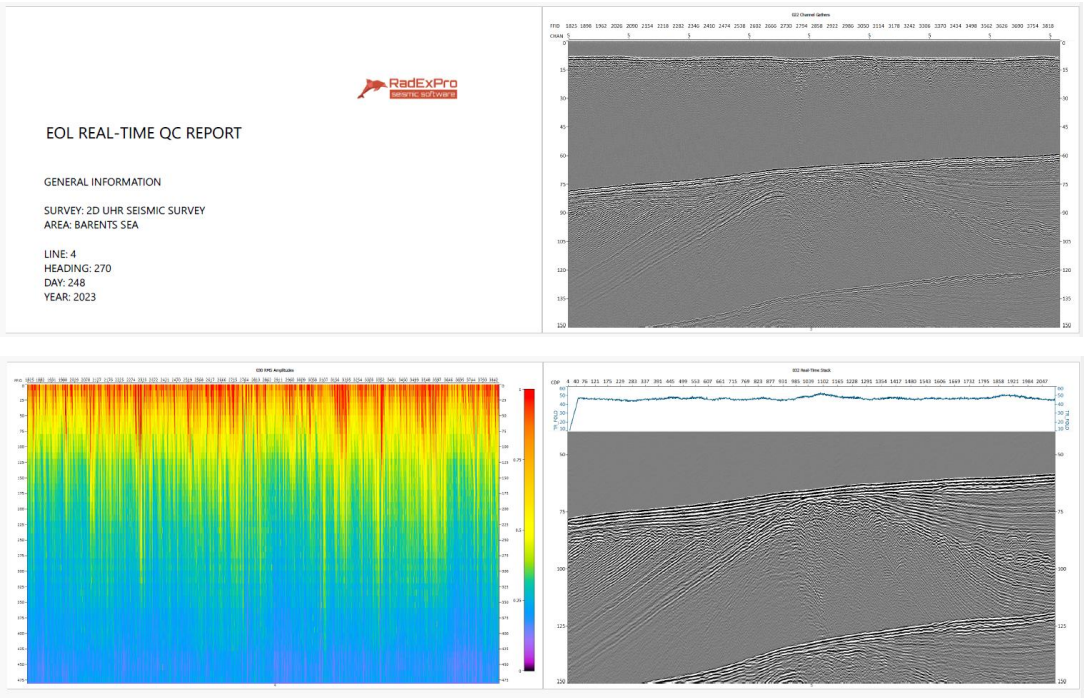
  The input must consist of paired seismic and LFM traces: the first trace should be from the seismic dataset, the second from the LFM dataset, and so on. The algorithm operates trace by trace — each output AI trace is calculated independently based on its corresponding seismic and LFM input traces. A predefined wavelet is used to link the AI and seismic data.



Model-Based Inversion, from left to right: input LFM, input seismic section, output inversed AI.

- Improved **3D Regularization** module now supports execution on GPU or simultaneously on both CPU and GPU, accelerating computation.

- In the Real-Time configuration of RadExPro, you can now automatically generate an **End-of-Line (EOL) report** in PDF format during real-time QC of marine seismic acquisition. The report content and parameters are configured in the **Parallel Launcher** module. To generate the report at the end of a line, simply click the **EOL Report** button in any open window of the **QC Viewer** module.



An extract of an auto-generated EOL Report

- New module **Empty Dataset** operates exactly as the Empty Dataset command of the Database Navigator – now you can empty a dataset directly from a processing flow.

- New **Offset Binning** module simplifies the generation of offset bins.

- In the **Screen Display** module, you can now use the Ctrl+B hotkey for the 'Bind all windows together' command.

- In the **Screen Display** module, the status bar now shows the input dataset name by default.

- We have transitioned several 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:

Clone Traces
Midpoints Calculation
Dataset Import
Dataset Export
Ensemble Redefine
Find/Replace NaN
2D Flex Binning
Load Text Trace
Burst Noise Removal
Compute Fold

The following issues were fixed:

- Q-Filtering crashes in the framed mode when using a horizon -- **FIXED!**
- TVBPF crashes in the framed mode when using a horizon -- **FIXED!**
- Import UKOOA P1-90 fails to assign coordinates if GUN_ID is empty -- **FIXED!**
- 2D VSP/Crosswell Depth Migration – error in the projection of coordinates onto the 2D grid line -- **FIXED!**
- F-K Amplitude Power in by-ensemble mode affects the first ensemble only -- **FIXED!**
- SEG-2 Input crashes if the flow is run sequentially for the second time -- **FIXED!**
- PSTKM input/output buffer sizes are limited by 5 digits -- **FIXED!**
- Easy Refraction – topography does not affect horizons in DXF export -- **FIXED!**
- Easy Refraction – on some monitors in DPI Aware display mode the displayed marker size is not equal to the actual size of the selection area -- **FIXED!**

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