

# RadExPro 2012.3 release notes

We are happy to let you know that the next version of our seismic software, RadExPro 2012.3, is ready now for release.

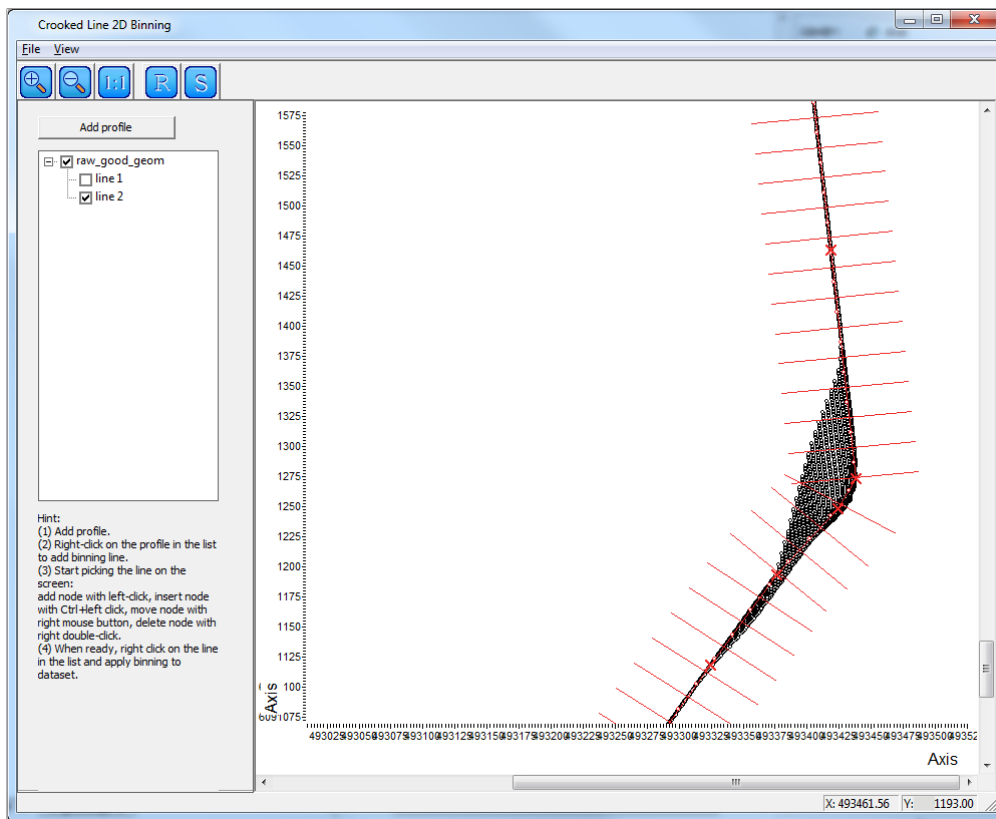
- We have added a new trace header field, **SOU\_IND**, for a shot index at one and the same source location. Now, if several shots with different FFIDs were made at one source point, the **Near-Surface Geometry Input** module will assign one and the same **SOURCE** value to all of them, and will sequentially increment **SOU\_IND** value for each individual shot at the same location.
- We have improved the way how the software forms ensembles of seismic traces. You are not limited anymore with only one primary sorting key – now you can explicitly specify the number of trace header fields that will be used to define ensembles in the **Trace Input** module.



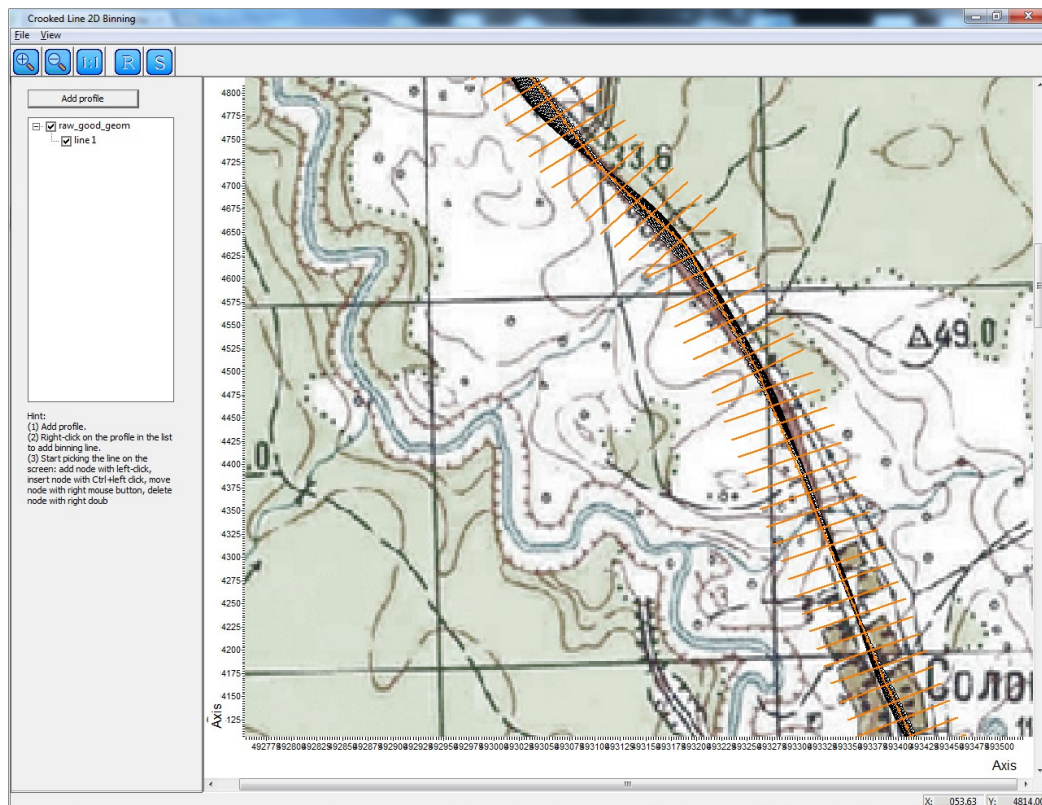
This makes life much easier if you need to stack several shots at one and the same source point for each channel. Simply, sort the data by **SOURCE:CHAN:SOU\_IND** and set 2 as the number of Ensemble Fields. With this, all traces from each channel at one and the same **SOURCE** location will input the flow as an individual gather, sorted within the gather by shot index. Now they are just ready to be stacked by the Ensemble Stack module.

- One more improvement in the **Trace Input**, may be a minor one but preventing from annoying mistyping errors: now, when you add a new header field into the Sort Field list, a new \* or :\* is added to the end of the selection string automatically.
- Want to use true coordinates with your 2D seismic reflection survey? A new stand-alone

module for **Crooked Line 2D Binning** was added into the software.



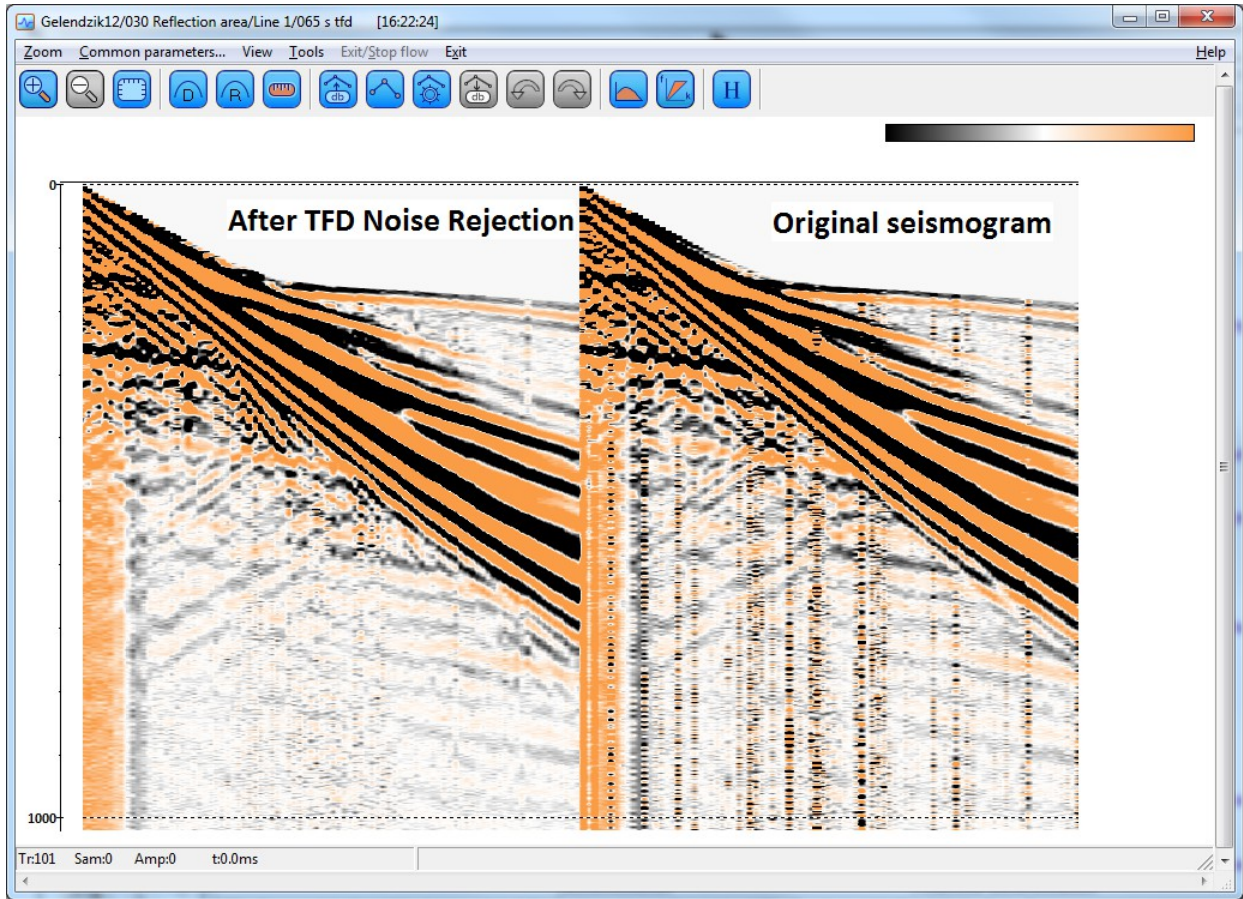
After you have assigned correct source and receiver coordinates (SOU\_X, SOU\_Y, REC\_X, REC\_Y) to your dataset, use this module to pick interactively a crooked binning line (auto-picking is not yet implemented but is in the plan for the future), set bin size and swath range, and finally apply your binning to the dataset. For your convenience, before picking the line you can load a survey area map as the background.



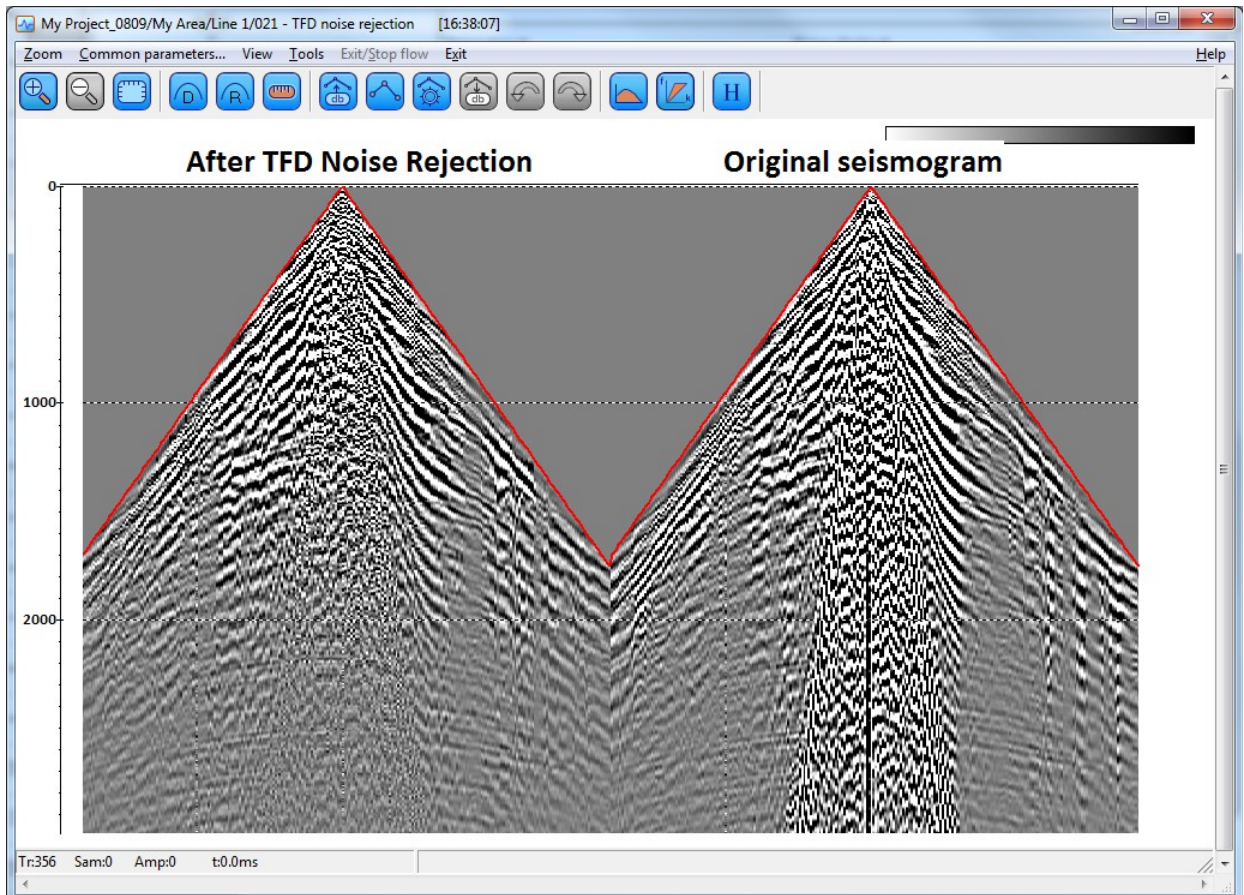
For each trace the module will calculate and assign OFFSET, CDP coordinates and number (CDP\_X, CDP\_Y, CDP) as well as the resulting fold (TR\_FOLD). Optionally, receiver to source azimuth can also be calculated and saved.

- For offshore applications, we have added a dedicated module called **Dropped/Missed Shot Correction** fixing seismic data synchronization problems with the navigation files after some dropped or/and missed shots.
- Two different modules for eliminating localized frequency-dependent noises were added: **TFD Noise Rejection** (Time-Frequency Domain Noise Rejection) and **FDNAT** (Frequency Dependent Noise Attenuation). These modules are useful for removing narrow-band noise bursts:





For deep seismic data with the full range of offsets the same modules can also be used for ground-roll attenuation:



- **SEG-D Input** module was enhanced by enabling reading big files (over 4Gb). Another improvement in the module is an extended support of the FairField Nodal version of SEG-D format.
- **Resort** module for quick resorting of big data volumes was made compatible with the processing queues.
- A dedicated module (**Power of Trace**) was added to raise trace samples to an arbitrary power, optionally with original sign preservation.
- Inversion of the dispersion curves in the **MASW** module was significantly accelerated by parallelization.
- Some bugs were fixed, including not-a-number velocity values in the **Time/Depth Conversion** module when Use average velocities option was selected, F-K spectrum display problems on some machines under Windows Aero interface, and more.

As usual, we encourage our customers with active maintenance to contact us at [support@radepro.ru](mailto:support@radepro.ru) and receive the update for free.