# RadExPro 2016.4 release notes

We wish you happy and successful New Year 2017

and are most pleased to announce the latest RadExPro of this year – **RadExPro 2016.4** !

The main novels are as following:

- With the brand-new **Horizon Manipulation** module, now you can make a number of useful operations with your horizons, stored either in picks or in trace headers. You can transfer them from picks to headers and another way around, combine several of horizons into one, interpolate and extrapolate them using a reference dataset either within ensembles or/and in X-Y space. Extrapolation within ensembles would follow the slopes of the pick at the edges making it most convenient for defining various mutings.
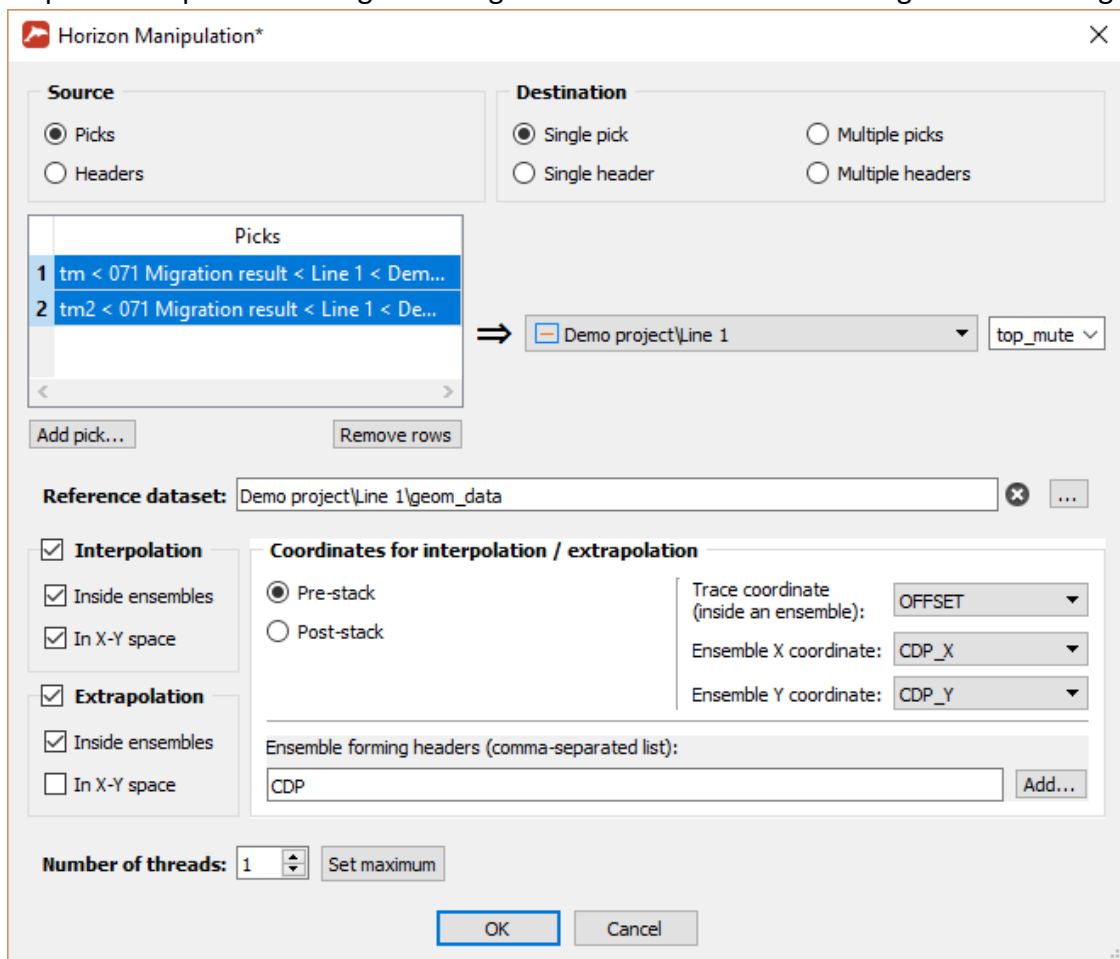
- ***Surgical muting*** option have been added to **Trace Editing** module. The muting area will be the overlap of the *Horizon* and *Second Horizon* as defined at the appropriate tabs of the parameter dialog.
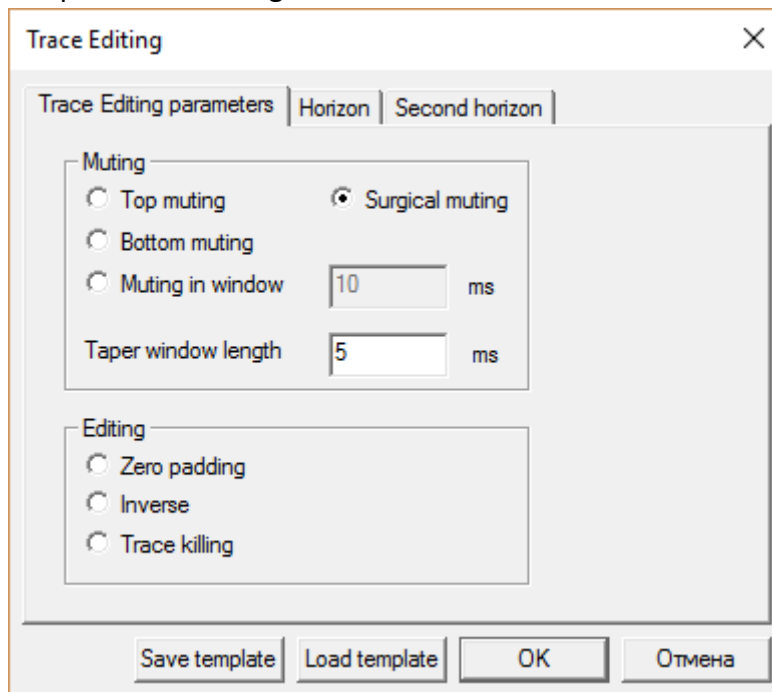
- **Amplitude Correction** module has been improved. Now it includes *Time raised to power* option, with the power being any positive value.

Now, with either *Time raised to power* or *Exponential correction* you can use *Normalization* option: when on, it will normalize each trace to preserve original amplitudes either at a defined constant time or along a specified horizon. Additionally, with these options you can define *Maximum application time* to prevent lowermost noisy parts of the traces to become over-amplified.

- We have added a brand-new **Spherical Divergence Correction** module for appropriate correcting of trace amplitudes for spherical divergence using RMS velocity function, which can be either defined manually or taken from the database (e.g. created earlier by *Interactive Velocity Analysis*). The resulting trace amplitudes can be normalized to preserve original amplitudes either at a constant time or along a pre-defined horizon.
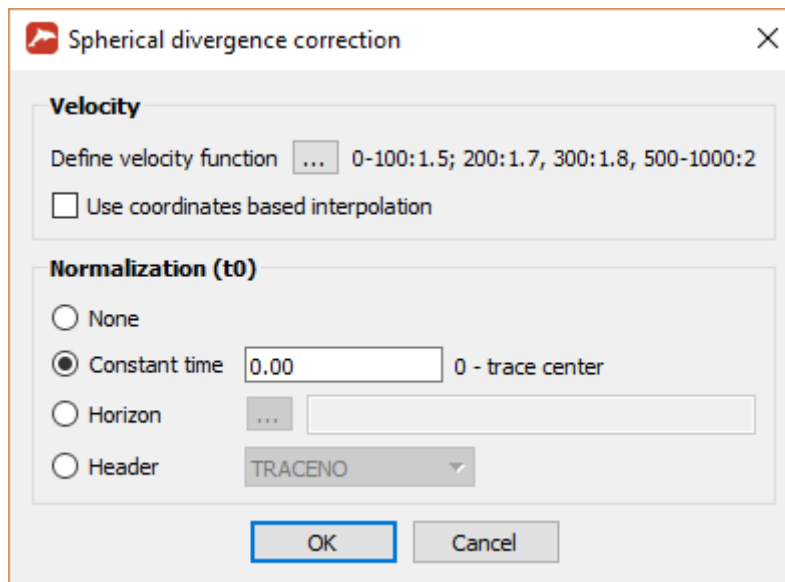
- Now you can **edit picks in a spreadsheet table**. Right-click on a pick in the *Database Navigator* panel and in the pop-up menu select *Edit…* You can edit pick values, change headers, edit color and line style. The result can be either applied to the same pick or saved to a new pick object.
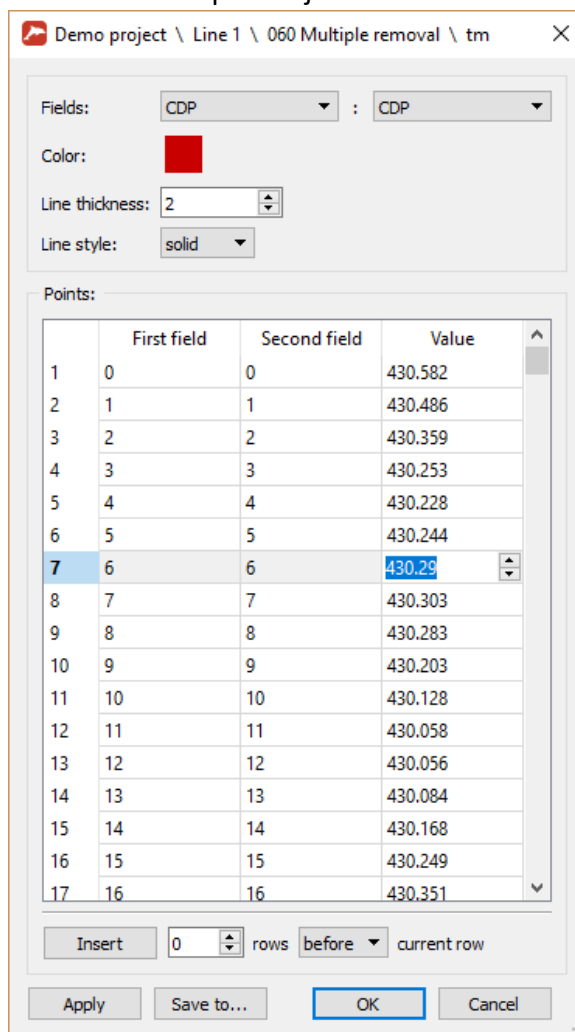
- You can use a brand-new **Find/Replace NaN** module to identify occasional bad samples (not-a-numbers) in your data. The positions (trace and sample numbers) of found NaNs are be reported to a log file. Optionally, you may also replace bad samples with zeroes.

- In **Screen Display** module, now when *Ensemble boundaries* option is on *pick smoothing will work within individual ensembles only*. When the option is off, smoothing behavior will remain as it used to be – a pick will be smoothed as a whole, through all the ensembles.

- In **Time Variant Band Pass Filter**, **Wavefield Subtraction** and **Zero-Offset Demultiple** modules, now you can use either picks or trace headers for window definition.

- **MaxPower Autostatics** module behavior has been changed as following:

    o Now you can define a horizon either with a pick or a header in both 2D and 3D modes
    o In 3D mode, horizons are neither interpolated nor extrapolated. When statics are calculated for a horizon, a trace is taken into evaluation only if a horizon has a picked node exactly at this particulate trace.
    o In 2D mode, behavior is the same with the only difference that interpolation (but not extrapolation!) can be allowed as an option.

    Generally, it is advised that you use *Horizon Manipulation* module for appropriate interpolation and extrapolation of horizons prior to input them for statics calculation.

- Now **you can make more than one auto-saved copy of the project database** – set autosave parameters through the *Options/DB autosave* menu of the main window.
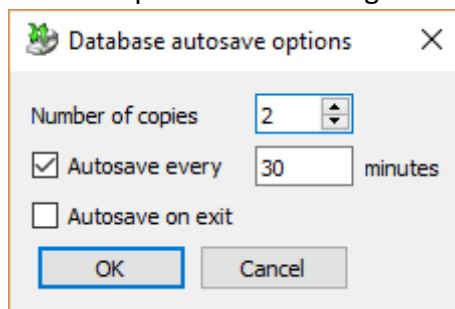
    For instance, with the parameters as shown above, the first auto-saved DB copy will be created in 30 minutes. In another 30 minutes, the second copy will be created. Then, in the following 30 minutes, a new auto-saved DB copy will overwrite the first (eldest) one. It is recommended that you use at least 2 auto-saved copies here, to make sure that in case of a very unlikely (though still possible) situation of project corruption you are able to safely recover most of your work.

- A number of small issues were fixed: **Non-Stationary Predictive Deconvolution** now preserves tapering value and uses it properly, **Apply Statics** now makes appropriate 'relative to time' correction with the picks the same way as with the headers, **Profile Interpolation** can now use negative spatial increments and display scales correctly even

with very big numbers, **3D Gazer** can now load bitmap images correctly from any format supported at the particular machine, etc.

As usual, if you are on maintenance, please contact us at support@radexpro.ru and get your update for free.

PLEASE NOTE: *Our office will be closed for the Russian Orthodox Christmas holidays until January 9, Monday. Meanwhile, we will be checking our emails seldom so some delays in correspondence may occur.*

Wishing you once again happy and prosperous New Year 2017!

Your RadExPro development team:

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