RadExPro 2015.4

release notes

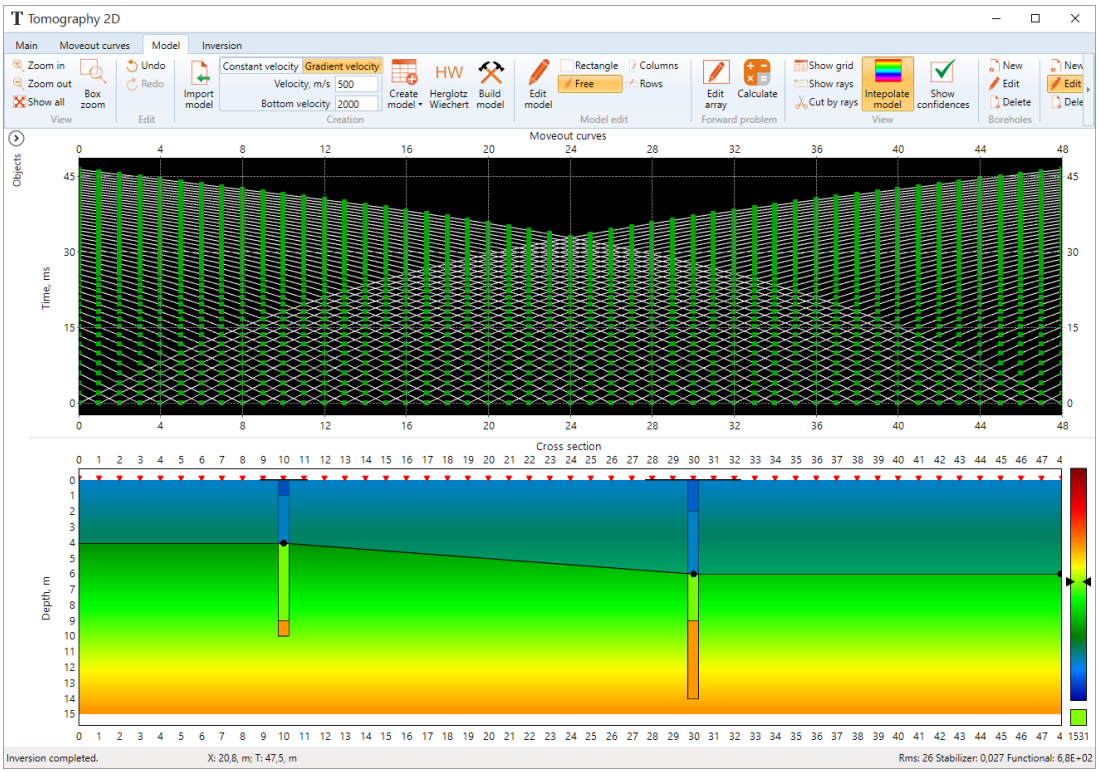
We wish you happy, successful and prosperous New Year 2016 and are most excited to introduce the last release of the year 2015: **RadExPro 2015.4** is ready now!

Here is a brief description of the novels:

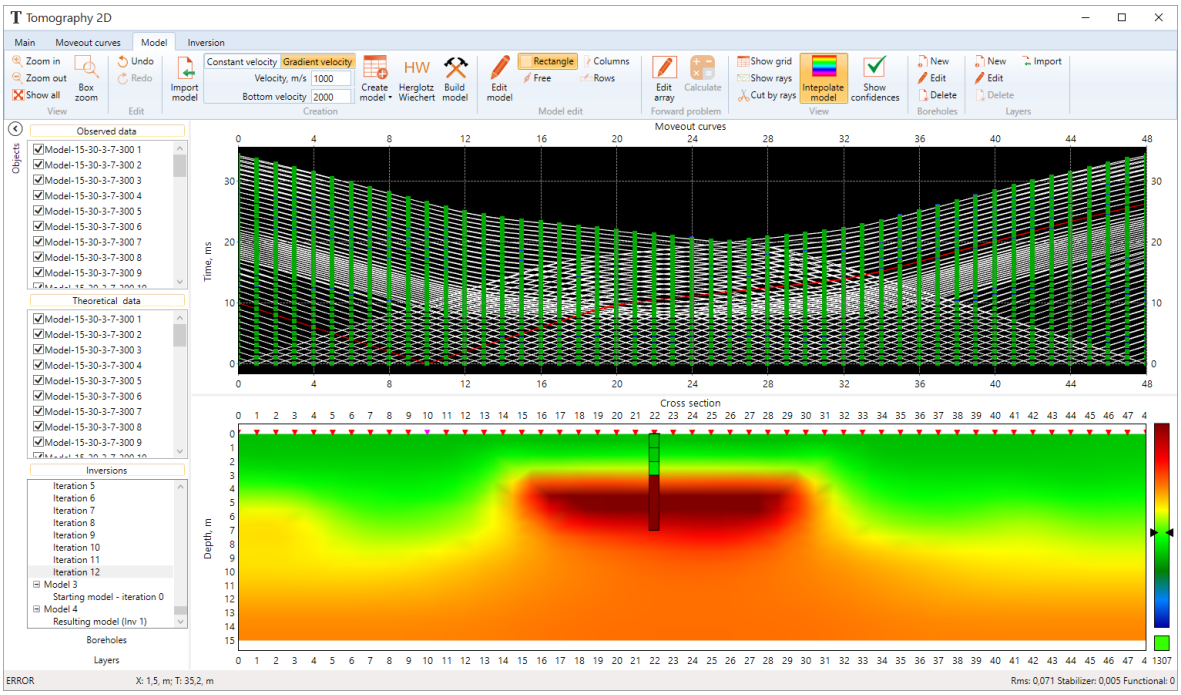
- New **Pre/Post-Stack Kirchhoff Time Migration** stand-alone module is now capable of migrating both 3D and 2D data either pre- or post-stack.

- New **Travel-Time Tomography** module provides an intuitive interactive tool for recovering of 2D velocity model from the first-arrival travel-time curves.

  You can use Herglotz-Wiechert inversion for automatic generation of the initial model or define it using interactive layers and boreholes. Of course, you can also edit the model grid manually.



Tomography itself is based on the known Occam inversion, however with some important modification. Beside velocity, each cell of the grid has *confidence* that takes values from 0 to 1. Use this parameter to specify how confident you are in any particular part of the initial model. For instance, near the borehole you are pretty sure about velocities – why not to tell the software explicitly that you don't want the algorithm to change them too much?

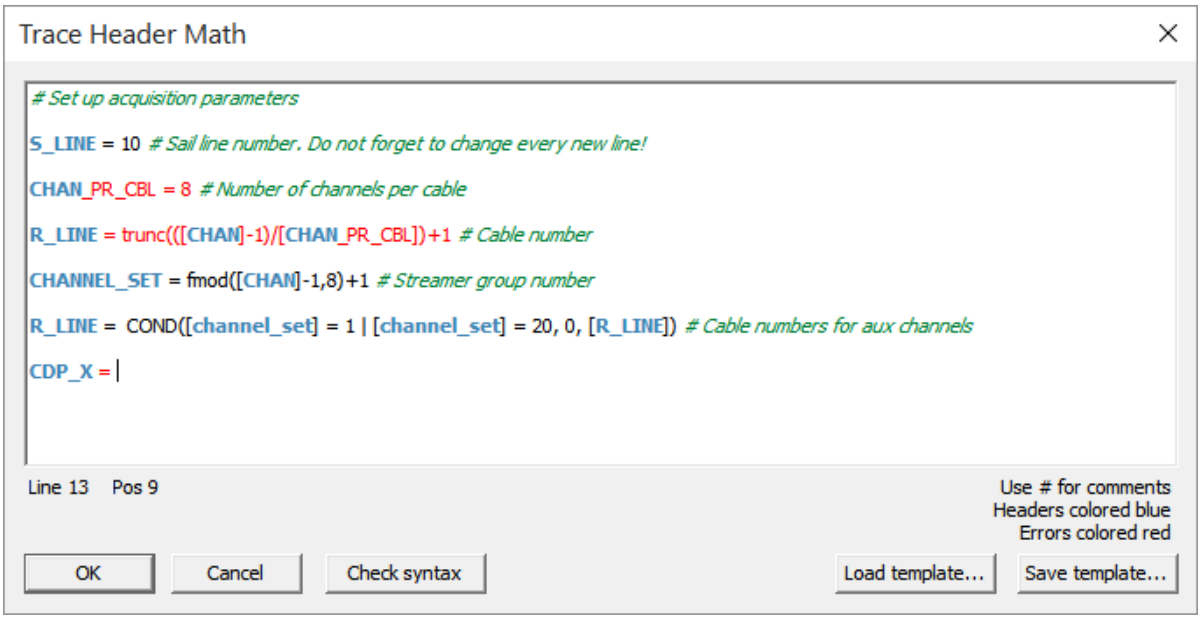


Something went wrong while tomography is calculated and you are unhappy with the ongoing values? You can pause the calculation at any iteration, change any parameters (and even the current model!) and continue. You can also scroll back through the iterations, use the result of any of them as a new initial model and start the whole process again with modified parameters.

The tomography module is included into all software configurations, including **Start**.

- New **Derive Match Filter** module generates a shaping filter operator to match one dataset to another one. The derived operator then can be applied to a dataset to be modified using the **Custom Impulse Trace Transforms** module.

- Upgraded **Trace Header Math** now highlights incorrect expressions (e.g. unknown headers, functions with wrong arguments, incomplete expressions etc.) with red. Known headers are highlighted blue. It also allows comments (starting with #) to save some explanations together with the formulas.



- **Tides Import** module now can operate in batch mode and the date can be taken directly from the imported text file. Having this implemented, now you can load tides statics to a batch of files acquired throughout several days fully automatically.

- In **Custom Impulse Trace Transform** module, time-zero position of the filter operator can now be specified explicitly. Additionally, a bug appearing when specified time window exceeded the trace length was fixed: now the module doesn't write trash amplitude values to the last sample of each trace anymore, as it used to do in such a situation.

- **SEG-D Input** module can now read files with different DT and number of samples per trace in different channel sets. To utilize this new functionality, switch on *Allow different DT and NUMSMP* option in the module dialog. You may also wish to switch on *Suppress warnings* checkbox, unless you wish to see a message box with the warning each time DT on trace length changes.

  *IMPORTANT: It is still impossible to process the data with different DT and NUMSMP correctly in one flow. After such a data is input by **SEG-D Input** and output into a dataset by **Trace Output**, make sure that all subsequent flows reading from this dataset do actually input **only one channel set per flow**.*

- In **Screen Display** module, a bug that caused crashes upon import of a previously exported pick has been fixed.

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

Our office will be closed for the Russian Orthodox Christmas holidays on December 30. We will be back to work on January 11, 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 2016!

Your RadExPro development team:

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