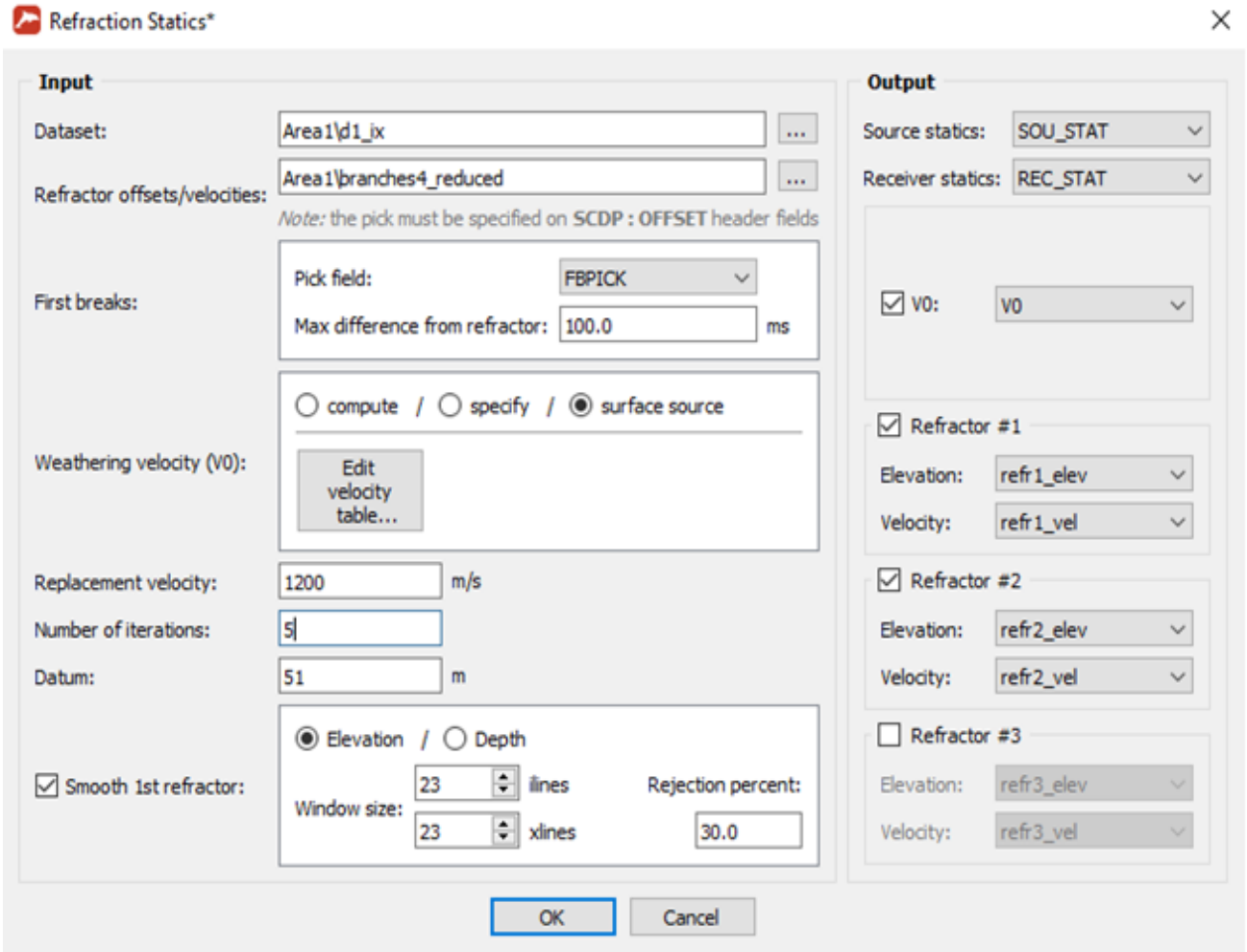
RadExPro 2018.4 release notes

We wish you Happy and Prosperous New Year!

with the latest **RadExPro** version -- **RadExPro 2018.4 !**

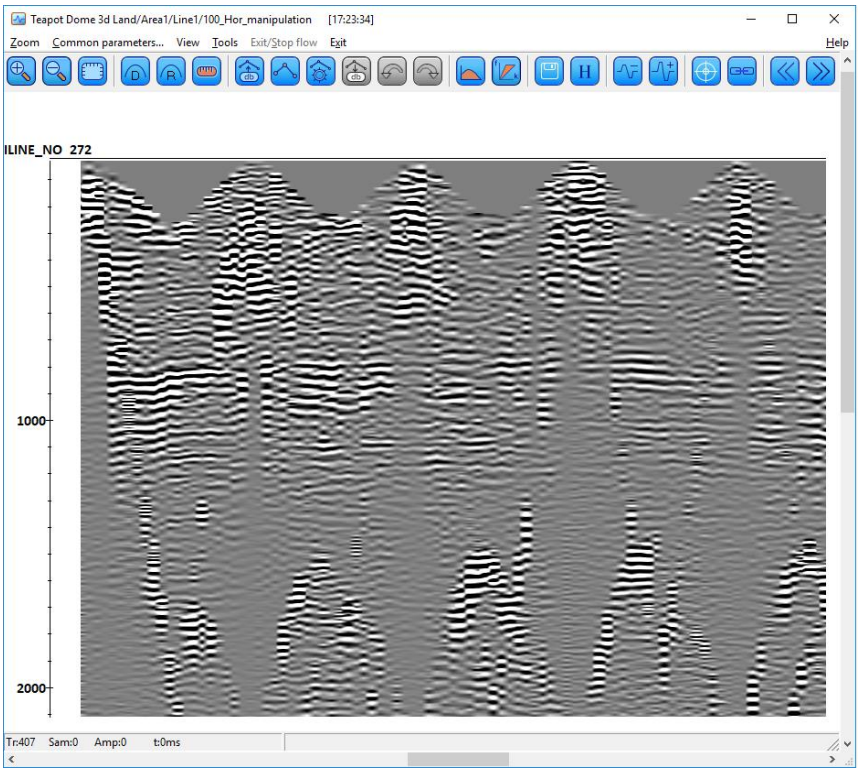
The main novel of this release is the brand new module for **Refraction Statics** calculation. The module inputs a pre-stack dataset with the first break pick in a trace header (e.g. FBPICK) and another pick with refractor branches.



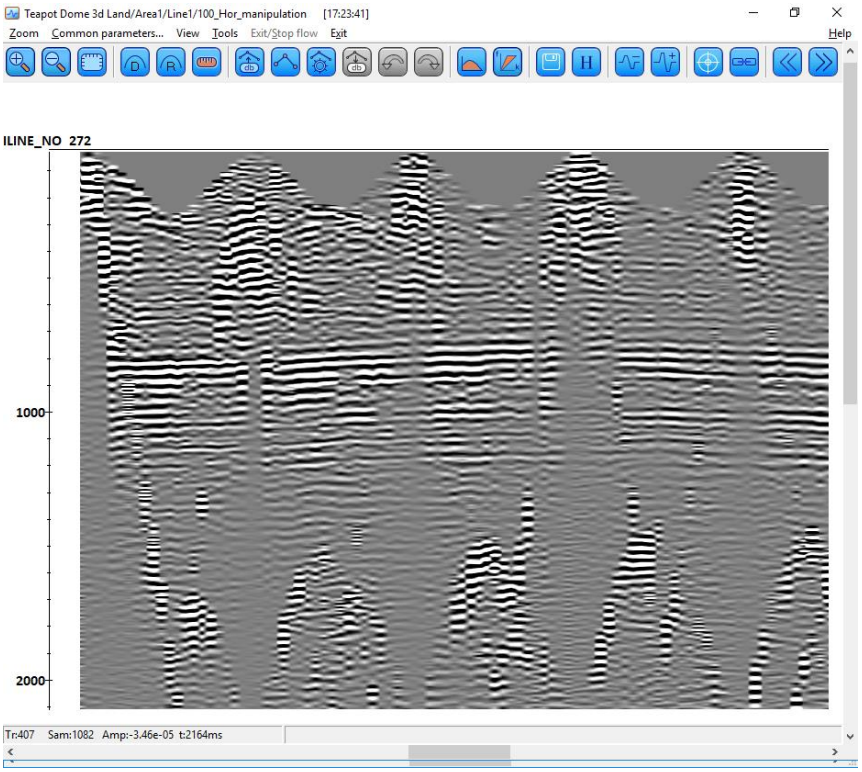
The main outputs are static shifts calculated for each source and receiver point, which can be applied to the traces using Apply Statics module.

Here is an example of how it works:

Brute stack, elevation statics:

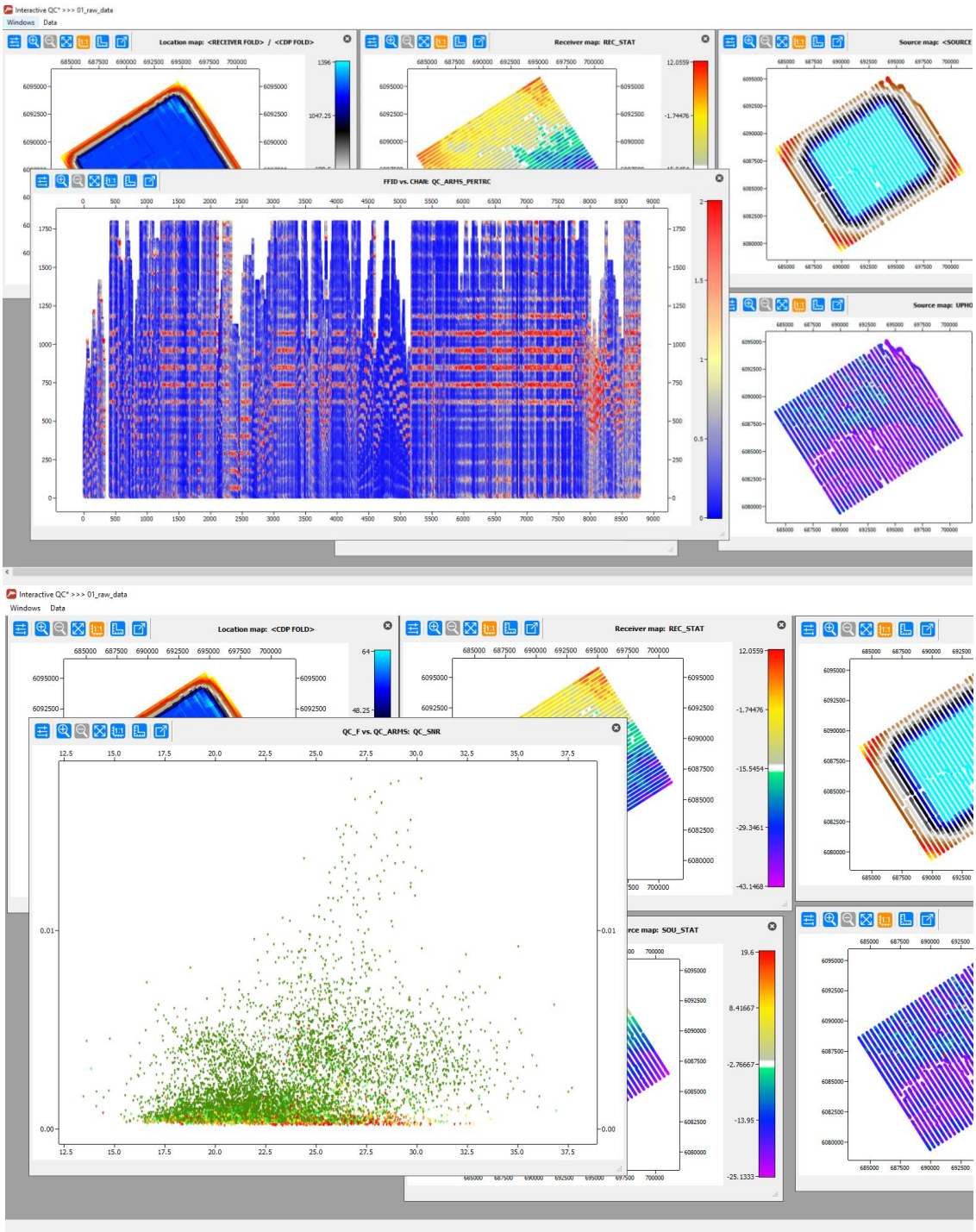


The same with refraction statics applied before stacking:

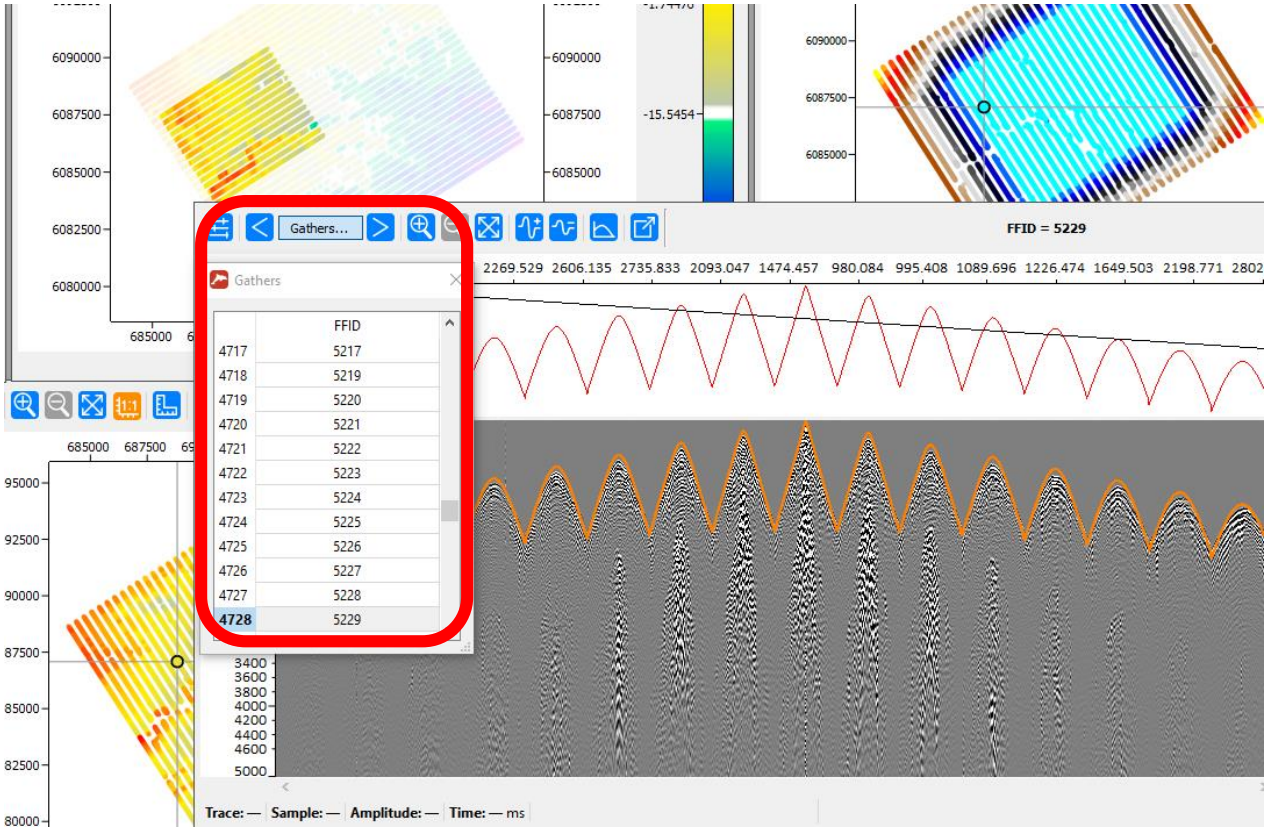


Other improvements are as following:

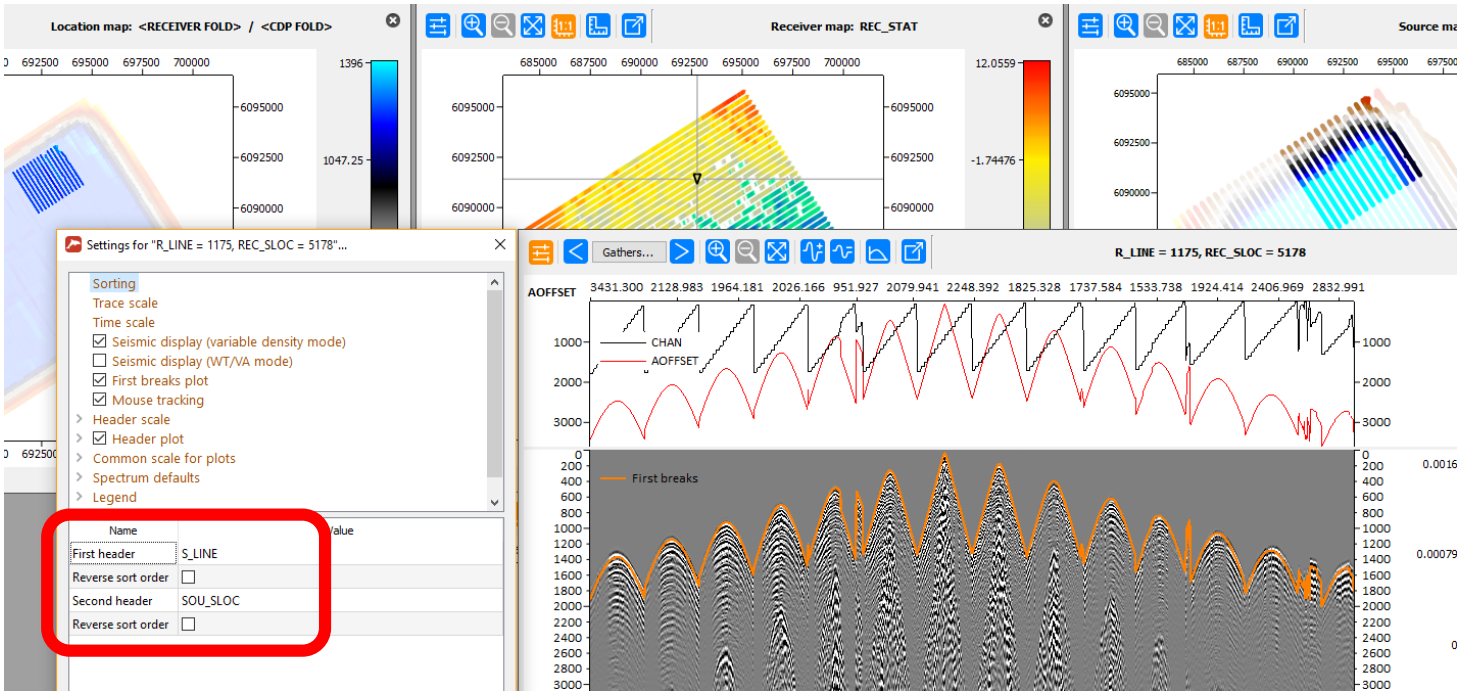
- We keep on improving functionality of the **Interactive QC** module, adding new features:
    - Now, beside the maps, you can create a crossplot, displaying one attribute vs. another one, color-coded by another header value. Now you can display here trace RMS amplitude plot in FFID vs. CHAN space or analyze interdependencies of various attributes:



- Now, in the seismic display window of the **Interactive QC** module you can navigate through seismic gathers one by one using the list of all available gathers, or simply by clicking the arrow buttons on the window toolbar:



- Now you can use up to 2 headers to resort seismic gather in the seismic display window of the **Interactive QC.** The figure below shows a common receiver gather sorted by S_LINE and SOU_SLOC:

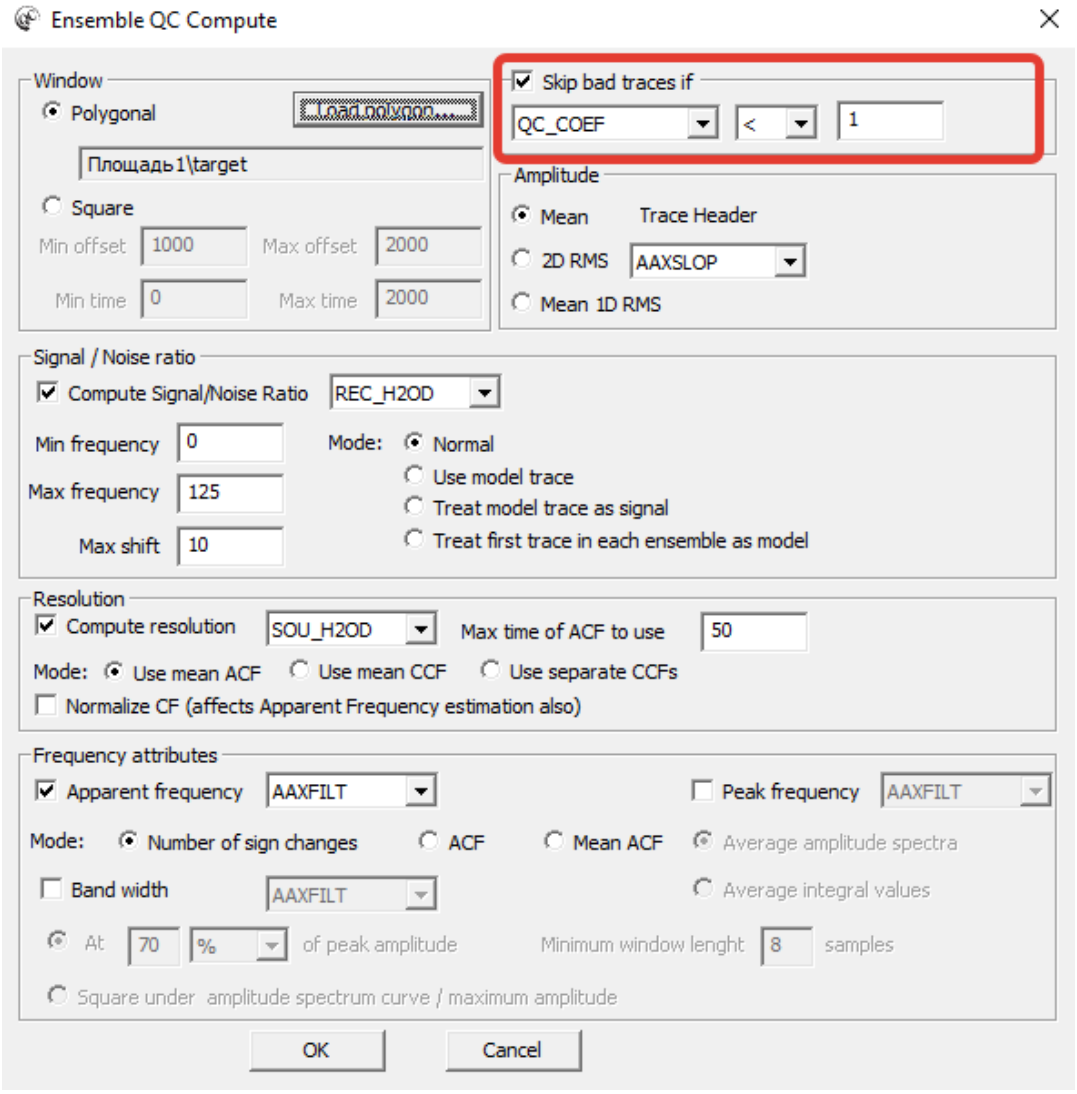


- We have improved WT/VA display in the seismic display window of the **Interactive QC**, so it looks similar now to that of the Screen Display.
- We have added scrolling hot-keys to the seismic display window of the **Interactive QC**, the same as in Screen Display: *left*/*right* arrow keys for one-step scroll, *Shift+left/right* – for one page scroll, *Ctrl+left/right* – scroll to next/previous gather.

- In the **Seismic Display** module, we have also improved WT/VA display, so it looks similar now to that of the Screen Display. Gain and bias are also made similar to those of Screen Display.

- In the **Seismic Display** module, we have added scrolling hot-keys: *left*/*right* arrow keys for one-step scroll, *Shift+left/right* – for one page scroll.

- In the **Ensembe QC** module, when evaluating QC attributes for a whole gather, now you can skip individual traces that were previously identified as bad ones, for them not to affect the result.



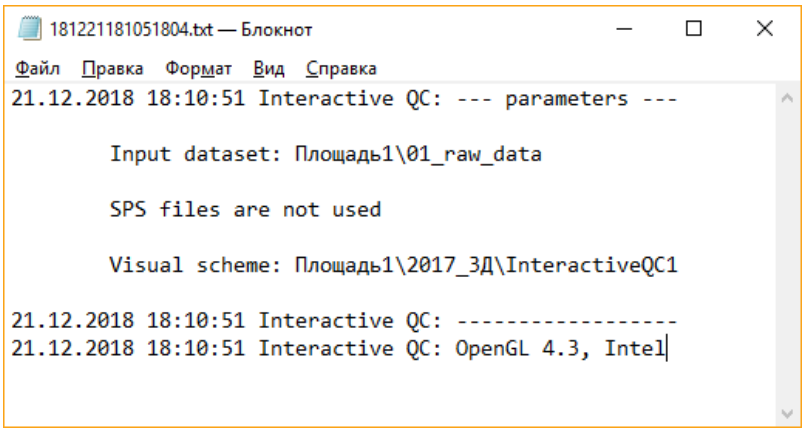
- In the **Trace Header Math** module, we have added a new function:

  rand(N) – returns a random value within the ranger of [1, N]

- The **Ensemble Redefine** module can now work with 3 header fields – one for new ensemble definition and 2 sorting keys within ensemble.

- A brand new **Trace Derivative** module calculates a derivative of each trace.

- We have added date to **log file records:**



- Some **bugs were fixed**:
  - Underperformance of NMO/NMI module when run in more than 1 thread **– FIXED!**
  - Problems when number of lines in one area exceeds 248 **– FIXED!**
  - SharpSeis stability issues **– FIXED!**
  - Velocity interpolation artifacts in case of complicated velocity functions **– FIXED!**
  - Artefacts in Predictive Deconvolution results when trace length close to a power of 2 (e.g. close but not equal to 512, 1024, etc.) **– FIXED!**
  - Parallelization of Horizon Manipulation module did not work **– FIXED!**

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

Please, note that in early January we are closed for Orthodox Christmas holidays until 9 January 2019. We wish you Happy Holidays and all the best for the New Year 2019!

Yours,

RadExPro Team:
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