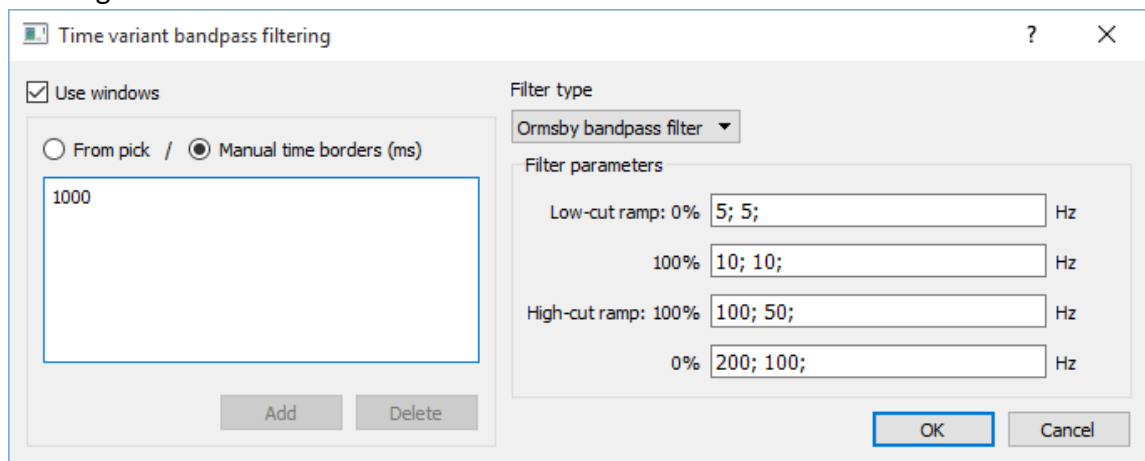# RadExPro 2015.3 release notes

The next release is ready-- meet **RadExPro 2015.3**!

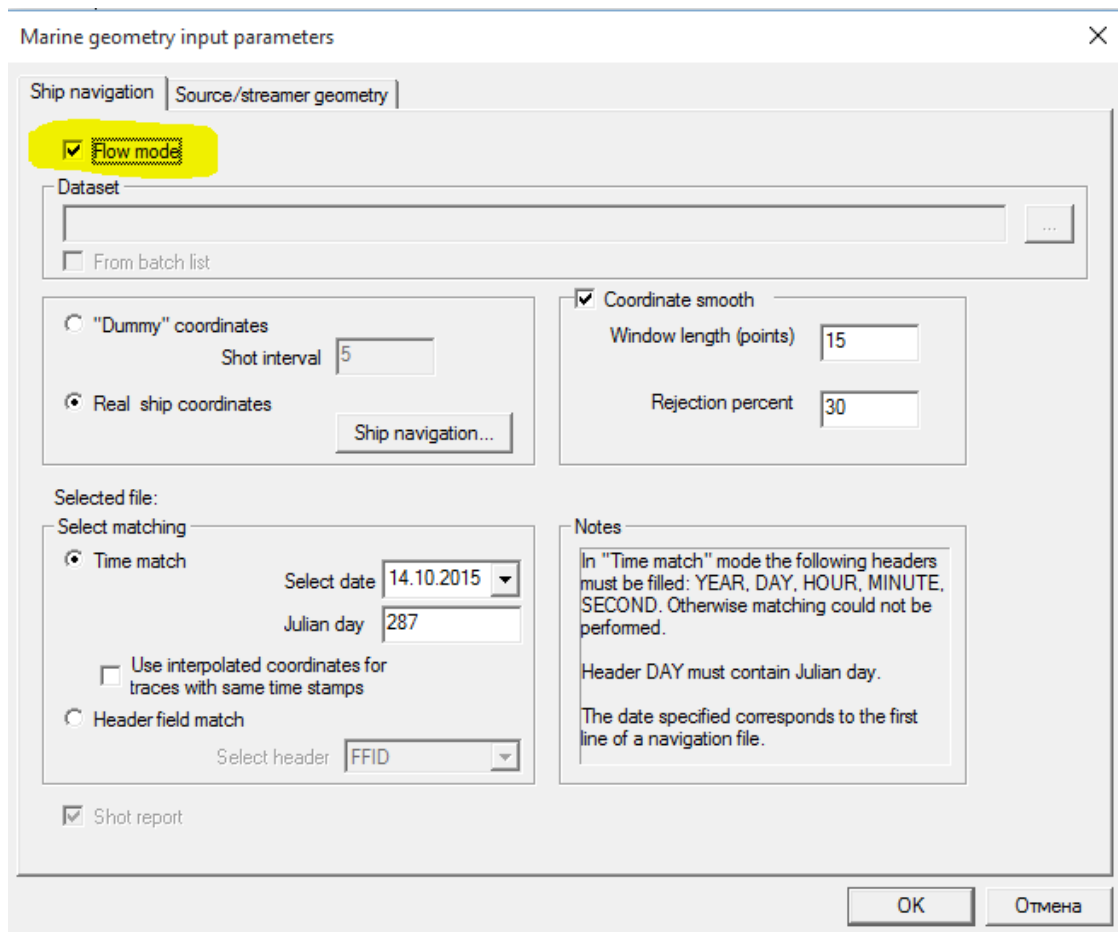Main improvements are as following:

- New **Time-Variant Bandpass Filtering** module was added to apply different frequency filtering to different time windows:
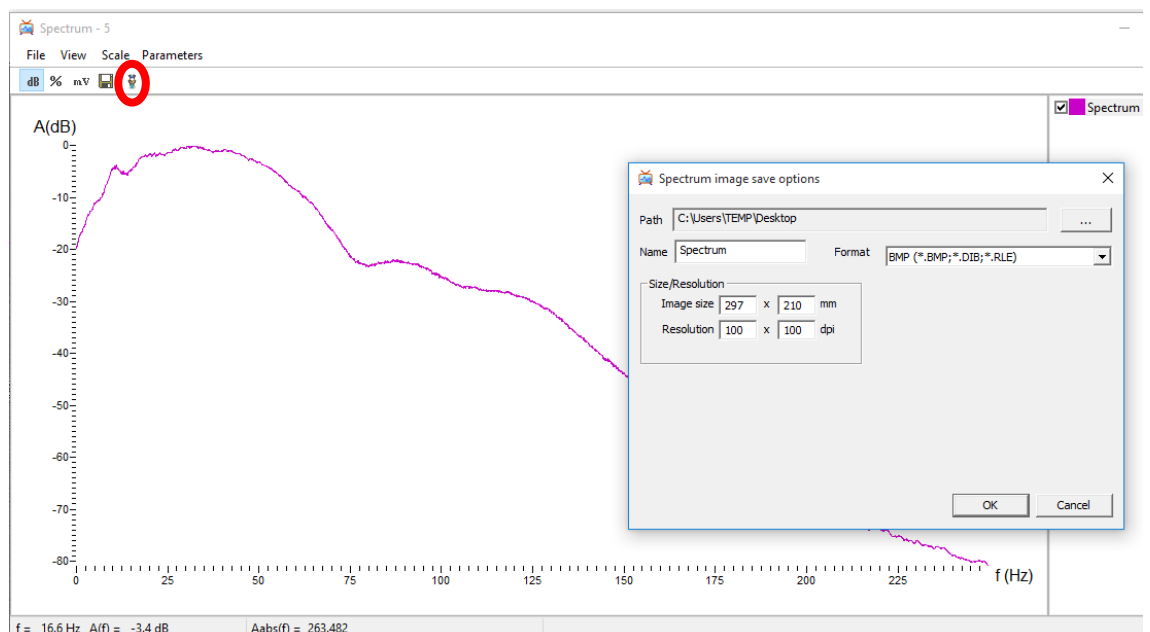

  The windows are defined by their borders, which can be either constant or represented by a pick. The set of available filter types is the same as in the original Bandpass Filtering module.

- New **Wavelet Extraction** module allows automatic extraction of the wavelet from the data based or either average amplitude spectrum or average ACF spectrum. The resulting wavelet is zero-phase.

- New **Kolmogoroff Spectral Factorization** module converts any wavelet to minimal phase, preserving its amplitude spectrum. Used together with **Wavelet Extraction** module it can help to generate automatically a suitable wavelet for signature deconvolution. Additional options include zeroing of short lags (for generating of de-bubbling filter) and anticasuality (for Ricker-complaint deconvolution) – for details, you may see [*Claerbout, J., and A. Guitton, 2014, Ricker-compliant deconvolution: Geophysical Prospecting, 63, 615–625, doi: 10.1111/1365-2478.12213.*]

- **Marine Geometry Input** module can now be used not only as a stand-alone routine, but also as a part of a conventional flow. Just switch on Flow mode checkbox for that:
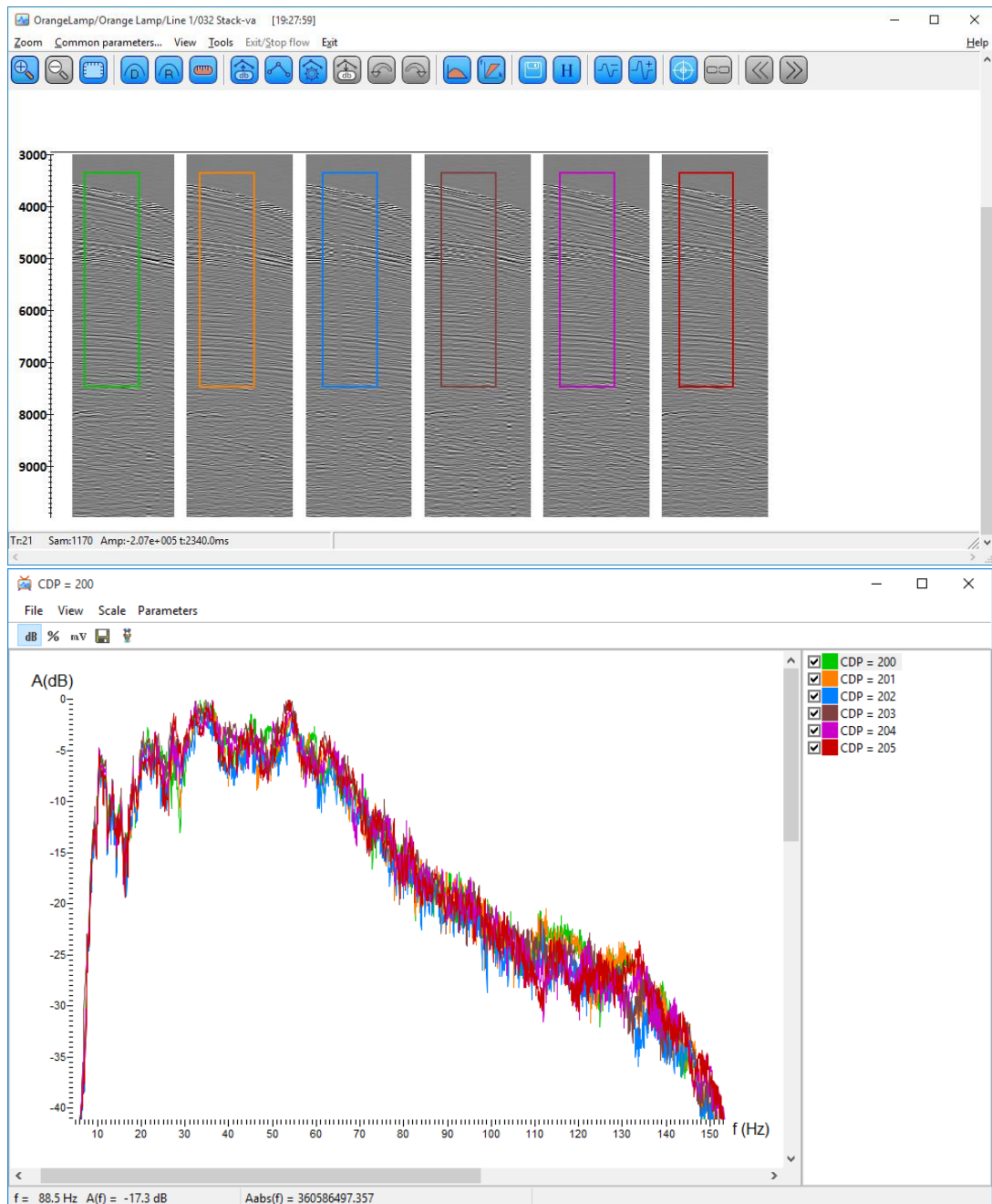
- A group of new modules – **Ensemble Split, Ensemble Split Undo** and **Ensemble Redefine** – is designed to make RadExPro flows even more flexible. Using these modules, you can change ensemble definitions on the fly inside the flow.

- Quick save image was added to the amplitude spectrum window in the **Screen Display** module – now you can save current spectrum as an image of predefined size to a predefined folder by one click of a tool-bar button.
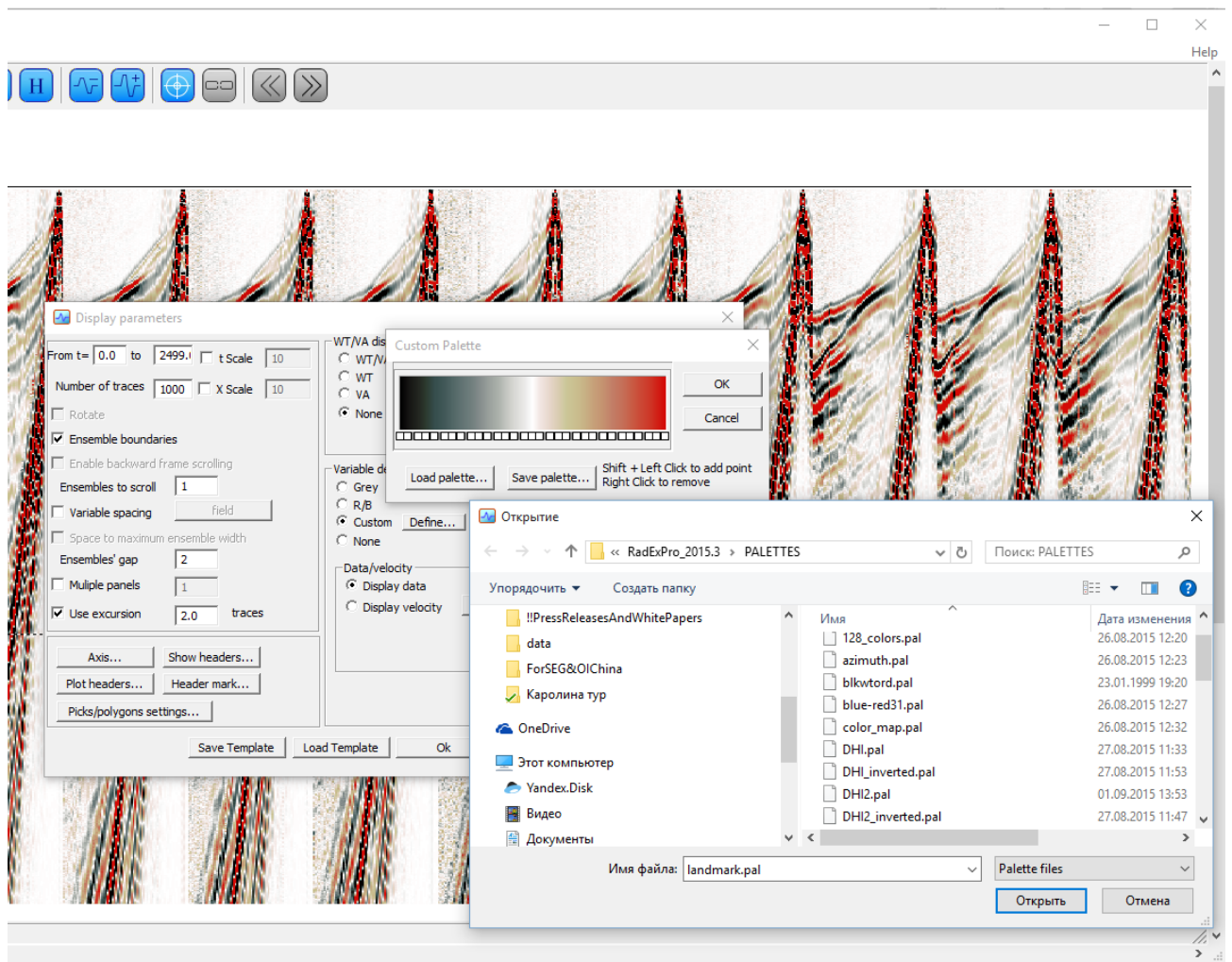
- Another improvement in the **Screen Display**'s spectrum is the new multiselect facility. Now, while selecting a data window for spectrum calculation you can keep Ctrl key pressed to display the amplitude spectra of all ensembles on the current frame at once:

(This option works only when 'Ensemble boundaries' check box is switched on in the Screen Display parameter dialog).

- A number of new fancy color pallets were added to the installation! Check them on in the PALETTES subfolder of the program folder.

- New **Ensemble Sliding Summation** module allows for averaging of the data of each trace through several ensembles in a sliding window. For instance, you can use this module to calculate average spectrum of each channel through the on-going shots.

- Now you can manually specify required tapering lengths in the **Bandpass** and **Butterworth Filtering** modules. The tapering parts of indicated length (in % of trace length) will be added both in front of the head and after the tail of each trace before filtering is applied.

- **Resort** module now supports Batch mode.

- **Profile Interpolation** module have been optimized for speed and some memory issues were fixed.

- Concurrent parallel execution of several flows was significantly improved in terms of both speed and stability.

- Batch mode bug that caused occasionally deletion of the input files was fixed.

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