# RadExPro 2023.1 release notes

We are happy to announce the first **RadExPro** of the year -- **RadExPro 2023.1** !

Here is the list of novelties:

- New **Structural Smoothing** module estimates the dominant dip in the seismic data and smooths the data along this dip. It can estimate the dips and conduct smoothing in one pass, or just estimate and output the dips. The module can be used to solve various tasks such as noise removal or diffraction separation. There is an option for smoothing non-seismic data (such as velocities) along the dips estimated from seismic.
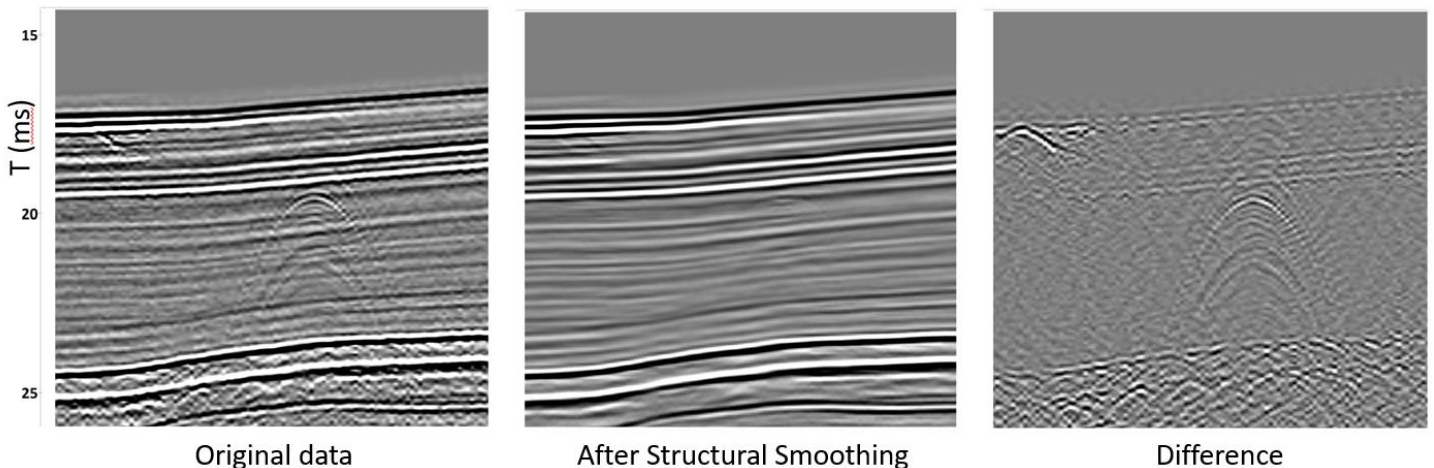

Original data   After Structural Smoothing   Difference

- New **PZ Calibration** module allows you to calibrate dual-component hydrophone and geophone data before summation, which is commonly used to suppress ghost waves in this type of data. The module computes amplitude and phase corrections and can either apply them to the data right away or save to trace headers for further processing and application.
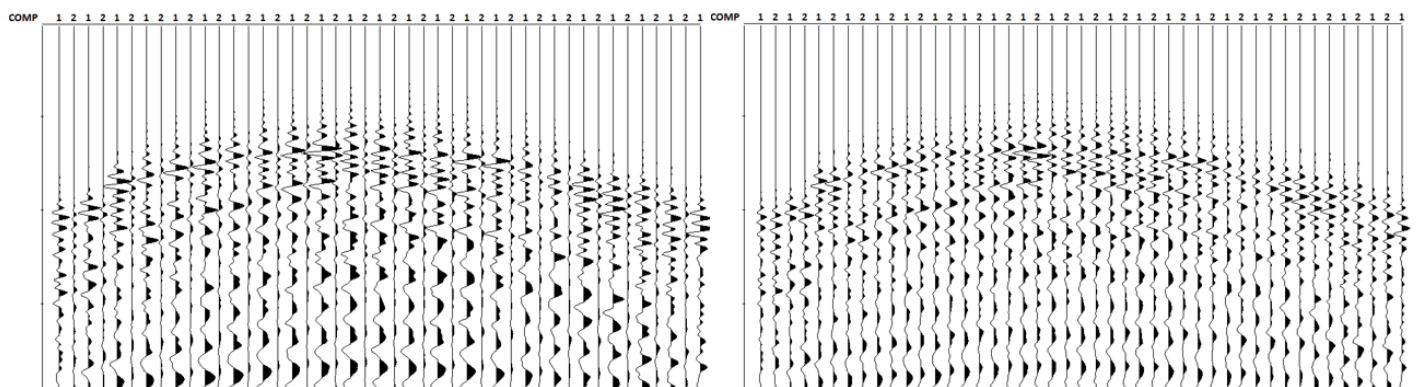
Original dual-component data   After PZ Calibration

After the calibration, you can use **Trace Math** module (*Trace/Trace* mode*, Add Traces* operation) to actually perform the summation of the calibrated P and Z components.

- New **Data Slicer** data can slice continuous recording data into separate shots according to the specified shooting times. The module is intended to work with the data loaded into the flow by any data input routine, so the new data slicing facility supports any of the input formats available in the software (SEG-D, SEG-Y, DAS formats…).

- New **ASN OptoDAS Input** module supports input of the DAS data acquired with the OptoDAS interrogator by ALCATEL SUBMARINE NETWORKS.

- We converted the following modules to the new universal parameter style, with full support of replicas and standard export/import facility:
    - **Header QC**
    - **2-D Spatial Filtering**
    - **Wavelet Processor**
    - **Interactive Grid Setup**
    - **First Breaks Picking**
    - **Sparse Radon Filter**
    - **Sparse F-K Interpolation**
    - **Sparse F-K Filter**
    - **Stolt F-K Migration**
    - **Swell Filter**
    - **VelocityTable ->Trace Transfer**

- The following issue was fixed:
    - Interactive QC – not all images are saved on Save All Images menu command -- **FIXED!**
    - Time-Variant F-K filter parameters do not save horizons defined by constant numbers -- **FIXED!**
    - Interactive QC crashes frequently when creating a new cross-plot -- **FIXED!**

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