

# GeoThrust V4.0 Release Notes

(Release Build Date: December 30, 2019)

*GeoThrust Version 4.0 has the following new features and improvements from Version 3.4:*

## **GEOM**

Added option to plot linear velocity overlay over the shot record for geometry QC  
Added hotkey "X" to flag all traces in displayed shot to be killed  
Added hotkeys PageUp/PageDown for navigation through shot records  
Added a flag at the nearest offset trace in seismic display to aid in geometry QC  
Added option to Export items from database and/or Import them back in to geometry database  
Added option to Shift Segy Traces up or down (for time breaks or to perform mute at bottom of section) (to create new or overwrite current segy file)  
Added option to Import Ascii File data in to GEOM database (ie. import a column-based text file with xps information)  
Add function to manually create XPS files with fixed or relative spreads  
Added option to interpolate survey coordinates when only a subset is provided  
Added option to shift coordinates in the inline direction (to create shot coordinates at the half-station for example)  
Added option to view color bar on Map, and adjust colors

## **PICKER**

Improved tool to Edit Picks from Stacking Traces (from Shot and Receiver Stacks)  
Allow user to select Shot or Shot/Receiver Option when saving a new subset Segy from SR Map

## **PREP**

**BINFLEX:** modified to allow fold scaling with a limit  
**EBCDIC:** new module to populate EBCDIC header  
**HDR\_CONSTANT:** new module to set a constant value to the trace header  
**HDRMATH:** added option to apply header math to a subset of the data  
**KFILTER:** new module to filter noise in the wavenumber domain  
**MUTEINSIDE/MUTEOUTSIDE:** added a parameter to turn off the mute prediction  
**MUTEOUTSIDE:** added option to use external mute file  
**SHOTEDIT:** added option to specify Ascii file containing list of shots or receivers to edit  
**TIMEMATCH:** new module to perform time shift analysis required to tie multiple surveys  
**TOPO\_IN\_TIME:** new module to convert the topography or other layer to 2-way time

Added icon to allow to display amplitude spectra over specified window  
Added utility to Export mute times to an Ascii File

## **VIEWM**

Added four options when building a new 3D grid model (Velocity, Density, Scientific, and Amplitude)

## **STATS**

Added option to Import Statics in to SEGY Header

## **RMSVEL**

Improved options and functionality of 3D Horizon Mode Picking; this allows the geophysicist to perform velocity analysis for 3D volumes in both X and Y dimensions simultaneously; added options to overlay segy image, extract strands from 3D layers, input 2 segy files (inline and xline direction), more options for importing ascii files; added ability to interpolate velocity between two layers

Added new function to smooth the 3D mdlx model file

## **PSTM**

Added option for OVT Migration

## **VELMOD**

Added "Model Information" button  
New tool to convert Interval Velocity to RMS  
Added beta-version of 3D -1D VDCUBE for velocity model building

## **RAYTRA**

Added "Raytracing Surface Sampling Factor"

## **PSDM**

Added "Raytracing Surface Sampling Factor" (2D)

## OTHER

GeoTomo is proud to announce new technology integration partnerships with Z-Terra, HSB Geophysical and Seisnetics. Z-Terra partnership brings advanced depth imaging applications that complement GeoThrust capabilities. HSB Geophysical, led by Dr. Fred Hilterman, brings well logs and seismic closer together with TIPS – A Toolkit for Integrating Petrophysics to Seismic. Seisnetics offers a unique approach to facies mapping to enhance petroleum systems knowledge and reservoir definition through leading edge artificial intelligence (AI)-driven reservoir interpretation services. For more information on our technology integration partnerships and products, please contact us at [info@geotomo.com](mailto:info@geotomo.com).

