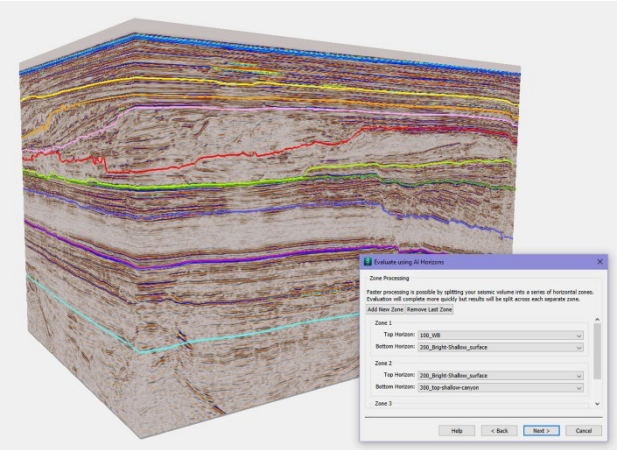
What's New

Zoning workflow for AI Horizons

For focused interpretation and for increased performance, AI Horizons processing can be confined to a stratigraphic layer delimited by horizons across the volume. For more control, view the processing queue and delete queued runs and access diagnostic pages for the AI Servers.



Visualisation

Obtain the perfect view of your data by editing the individual opacity blend layers for AI Horizon results. This includes the AI Horizon patches themselves, where it is possible to change the colour compression or template, or to change the opacity curves to focus on the information of greatest interest and extract the most relevant geological information.

We frequently want to look at the largest horizon patches and remove the smaller pieces to enable quicker and more efficient interpretation across the volume. The histogram for the opacity blend of AI Horizons can be edited to visually filter the size of the patches, whether small, intermediate or large.

We want to see the seismic amplitude response as we zoom into greater levels of detail, so now the AI horizon opacity blend results transition to transparency as the zoom level is increased, enabling focus whilst interpreting. When viewing results from greater distances we want to be able to see the AI Horizon patches to enable broader stratigraphic understanding and interpretation, so the results have the least transparency. This fade whilst zoom feature supports interpretation workflows keeping your focus on the data and not the setup.

Interpretation

The Horizon interpretation workflow has been improved to allow multiple horizon interpretations to be visualised onto slices and volumes at once, enhancing the ability to interpret correctly between stratigraphic units and improve the ability to interpret more than one horizon at once.

The option to 'View intersection only' is applied to the 3D scene where detailed interpretation picking is required, whereas the map window shows the full horizon

interpretation giving the full overview during that interpretation. This gives much more control without having to frequently change settings.

Image export

For improved image capture and export, the geoimage export window now allows zooming, rotation, and panning with exact export of the chosen view. This export update accommodates varying survey increments, non-square voxels, and any corner grid origins. A world file, in the form of a sidecar file, allows for direct loading into other software, and all file formats have consistent coordinates (.csv .arcgis, world file, .png, .bmp and .tif).

Key areas of updates in Geoteric 2024.1

- AI Horizons processing by stratigraphic zone
- Editable colour tables for the AI Horizons opacity blends layers
- AI Horizon patches transition to transparency with zoom-into detail
- AI Horizon opacity blend histogram enables patch filtering by size
- Horizon interpretation updates:
    - Multiple horizon interpretations can be visualised as overlays on slices
    - ‘View intersection only’ is applied to the 3D scene leaving the Map window with a full horizon interpretation
- World file export option for Geoimages and option for zoom level, pan and rotate for export
- Bulk fault surfaces to fault stick sets
- Updated diagnostics pages for AI Server connection and processing

Geoteric is supported on Windows 10 and Windows 11

Geoteric 2024.1 Fixed Issues

Ticket	Content
430	Fault sick export automatically applies the .ascii file name extension without the need to manually add one
512	Geoimage export has no white boarder when grid axis and best fit options are selected. View rotation is supported. When rotating away from the grid axis and best fit, areas outside of the seismic are represented by white space
4641	Geoimage export is correct if the seismic survey origin is not lower left. This is most often the case for rotated seismic when axes could be flipped
4647	Geoimage export no longer has scaling issues when seismic surveys which have non-unity increments (example 1x2 or 4x1)
4649	Geoimage .tif files now have the same resolution as other file export options and no longer show limitations to 999x999
4951	The geoimage export supports user chosen view, be it zoomed, panned, or rotated, instead of only the survey extent
5194	The 'Export Attribute as Geoimage' option from an iso-proportional surface created with attributes will correctly launch the geoimage exporter interface instead of giving an error
5198	During the process to create iso-proportional slices when choosing to export attributes as a Geoimage, the cursor no longer shows a spinning busy icon
5201	The export of .bmp or .png geoimages are longer incorrectly stretched with non-unity seismic increment surveys or non-square seismic voxels
5335	A fault stick file will import both a surface and sticks if possible. If a surface can not be created (example one fault stick) then only fault sticks will be imported.
6467	Changing between different volumes and interpretation modes during Horizon interpretation is supported without a crash
9618	Deleting an AI Horizon opacity volume from the project now deletes all associated volumes from the project data folder. This issue could have unknowingly led to increased project sizes
12140	The AI Server Proxy could lose track of the AI Horizons service resulting in an error, if the AI Horizons service failed to start within a timeout period (20 seconds)
13020	The Volume ROI and Extents dialog UI no longer automatically continue to move the volume walls when only clicking once on the up and down arrows with the intention to move the walls one voxel
13135	Output from AI Services are now logged as 'information' in the AI Proxy logs whereas previously they were logged incorrectly as 'fail' errors
13910	The AI Horizon process does not save the unmatched volumes into the data file of the project when not requested during the process set-up
14201	The surface colour table template now correctly labels the depth/time to the colour in the 3D scene
14202	A compressed colour range of a volume mapped to a horizon will be saved and reapplied when reopening a project
14376	Fixed crashes when picking horizons and AI Horizons with colour-mapped blends on slices
14391	Running AI Horizons without a fault volume processes without errors for optimisation levels 2-4
14392	Pressing Esc when picking horizons in the 3D scene now stops the horizon interpretation, switches to hand movement mode which allows movement of the scene, and pressing Esc again switches to pointer mode enabling a continuation of the horizon picking

14393	The inline and crossline dialog UI no longer automatically continue to move slices in the scene when only clicking once on the up and down arrows with the intention to move the walls one voxel.
15356 & 13012	When extracting the largest number of horizons from an AI Horizon opacity volume, this functionality does not require the volume to be visualized in the 3D scene. The option is available from the volume in the project tree
19612	Fixed a crash when using the search field in the project tree
15458	No longer causes a crash associated with deleting an opacity blend. This is specific to moving a slice in scene on which the opacity blend had been displayed
15497	The volume render option for an opacity volume did not work, leaving the volume still showing its volume faces, and caused the colour map to be changed
16244	Horizons with colour blends mapped onto them, shown in the 3D Scene with their associated colour table template now show the name or the colour blend used as well as the horizon name on that template
17472	Geoimage export formats .csv and .arcgis are now consistent with the World Files export format and are geographically correct according to all the issues fixed listed in this table (survey rotation, survey increments, voxel sizes, axis and origins)
17480	Support enabled for Floating Point Radix point character integer as a comma for AI Horizon processing. Decimal with locale set as comma could impact certain regions when running AI Horizons resulting in error messages
17481	HSB and CMY blends shown in the 3D window now correctly give the HSB and CMY labels when selecting voxels in the scene and viewing the information bar
19612	The search field in the Project Tree can be cleared of content without a crash
19706	The colour table templates in the 3D scene do not reverse or change their positions when re-loading a project
22585	Improved diagnostic pages for AI Servers: For AI Horizons <GEOTERIC_AI_PROXY_URL>:<GEOTERIC_AI_PROXY_PORT>/html/diagnostics For AI Faults <GEOTERIC_AI_PROXY_URL>:<GEOTERIC_AI_PROXY_PORT>/ai-faults-service/html/diagnostics