



GeoTeric 2017.1 What's New?

All the new features

Contact Information

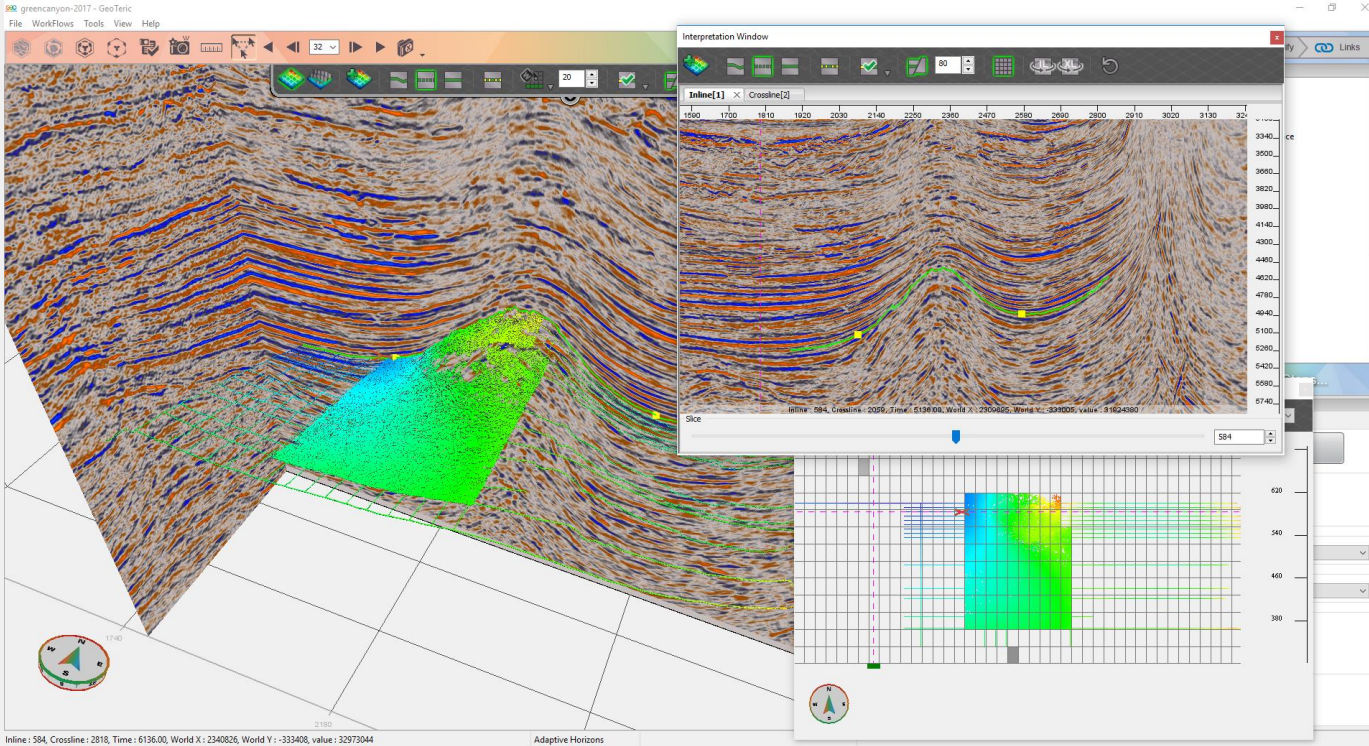
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 Julia.Frick@GeoTeric.com

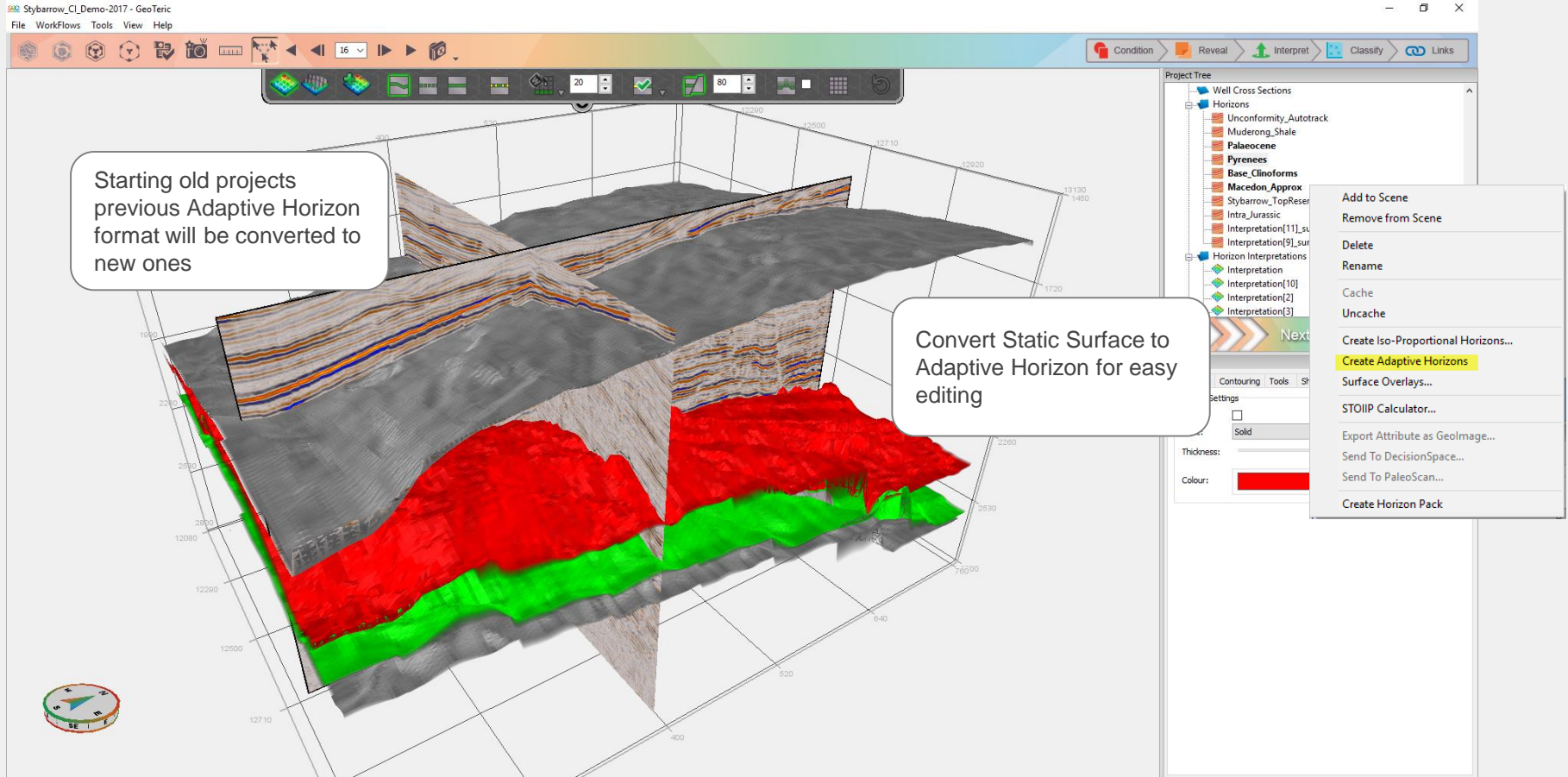
www.GeoTeric.com

Adaptive Horizons

An intuitive and fast way to interpret horizons



Adaptive Horizons



Starting old projects previous Adaptive Horizon format will be converted to new ones

Convert Static Surface to Adaptive Horizon for easy editing

Project Tree

- Well Cross Sections
- Horizons
 - Unconformity_Autotrack
 - Muderong_Shale
 - Paleocene
 - Pyrenees
 - Base_Cliniforms
 - Macedon_Approx
 - Stybarrow_TopReser
 - Intra_Jurassic
 - Interpretation[11]_su
 - Interpretation[9]_sur
- Horizon Interpretations
 - Interpretation
 - Interpretation[10]
 - Interpretation[2]
 - Interpretation[3]

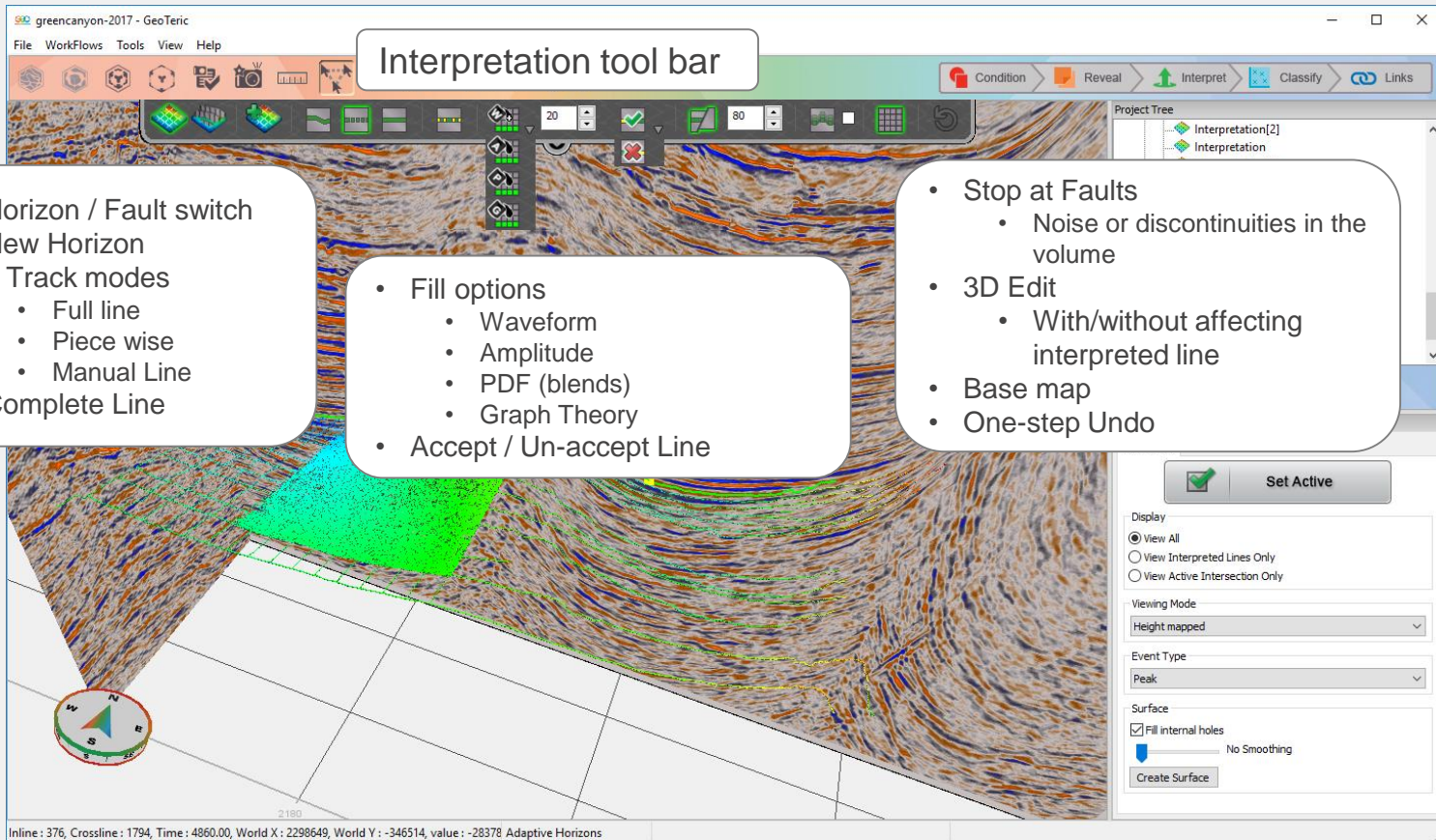
Context Menu:

- Add to Scene
- Remove from Scene
- Delete
- Rename
- Cache
- Uncache
- Create Iso-Proportional Horizons...
- Create Adaptive Horizons**
- Surface Overlays...
- STOIIP Calculator...
- Export Attribute as Geolmage...
- Send To DecisionSpace...
- Send To PaleoScan...
- Create Horizon Pack

Adaptive Horizons

CMY_FaultIn

Adaptive Horizons



greencanyon-2017 - GeoTeriC

File WorkFlows Tools View Help

Interpretation tool bar

Condition Reveal Interpret Classify Links

Project Tree

- Interpretation[2]
- Interpretation

- Horizon / Fault switch
- New Horizon
- 3 Track modes
 - Full line
 - Piece wise
 - Manual Line
- Complete Line

- Fill options
 - Waveform
 - Amplitude
 - PDF (blends)
 - Graph Theory
- Accept / Un-accept Line

- Stop at Faults
 - Noise or discontinuities in the volume
- 3D Edit
 - With/without affecting interpreted line
- Base map
- One-step Undo

Set Active

Display

- View All
- View Interpreted Lines Only
- View Active Intersection Only

Viewing Mode

Height mapped

Event Type

Peak

Surface

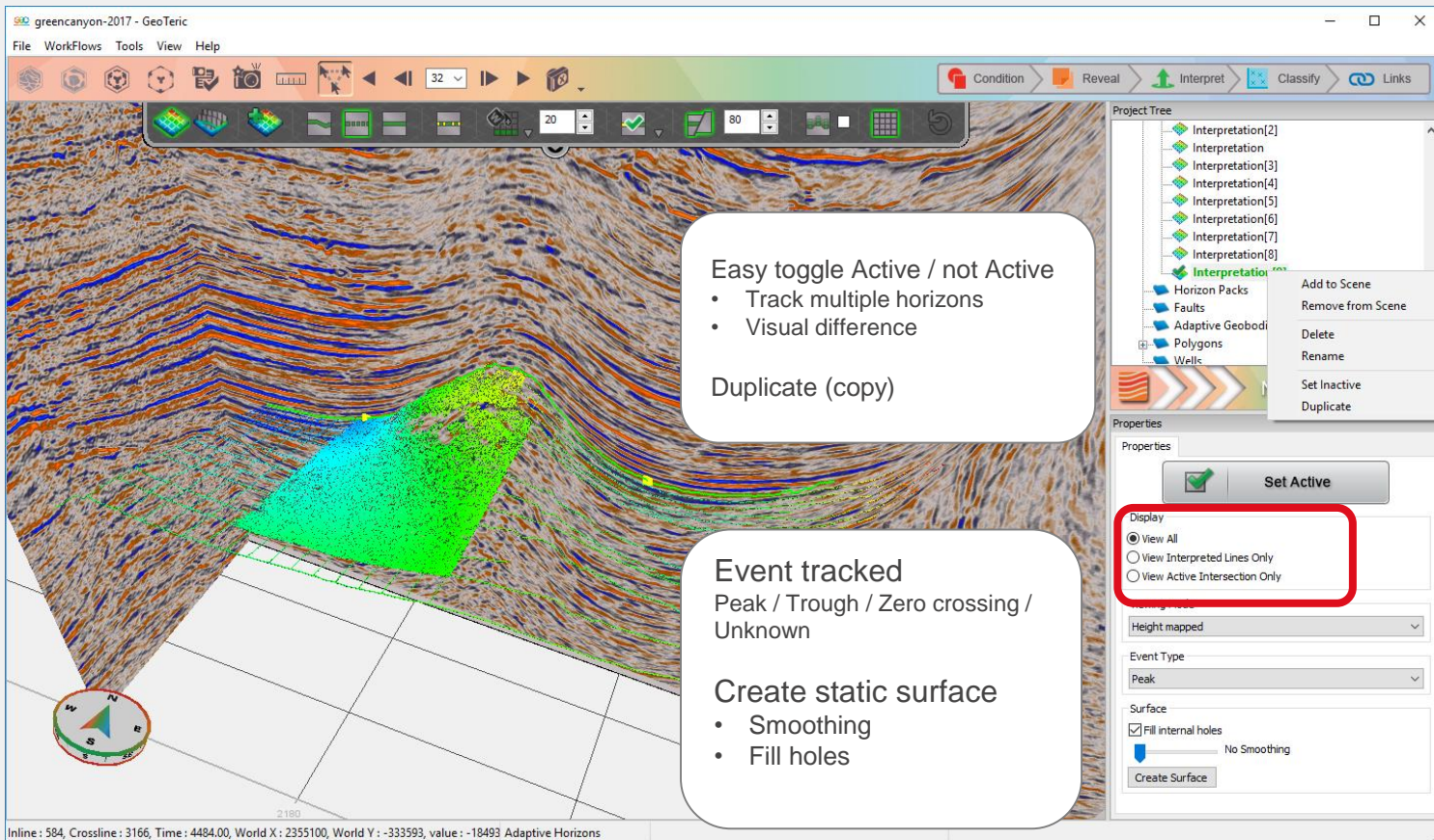
- Fill internal holes
- No Smoothing

Create Surface

2180

Inline : 376, Crossline : 1794, Time : 4860.00, World X : 2298649, World Y : -346514, value : -28378 Adaptive Horizons

Adaptive Horizons



greencanyon-2017 - GeoTeriC

File WorkFlows Tools View Help

Condition Reveal Interpret Classify Links

Project Tree

- Interpretation[2]
- Interpretation
- Interpretation[3]
- Interpretation[4]
- Interpretation[5]
- Interpretation[6]
- Interpretation[7]
- Interpretation[8]
- Interpretation[9]
- Horizon Packs
- Faults
- Adaptive Geobodies
- Polylines
- Wells

Properties

Properties

Set Active

Display

- View All
- View Interpreted Lines Only
- View Active Intersection Only

Height mapped

Event Type

Peak

Surface

Fill internal holes

No Smoothing

Create Surface

2180

Inline : 584, Crossline : 3166, Time : 4484.00, World X : 2355100, World Y : -333593, value : -18493 Adaptive Horizons

Easy toggle Active / not Active

- Track multiple horizons
- Visual difference

Duplicate (copy)

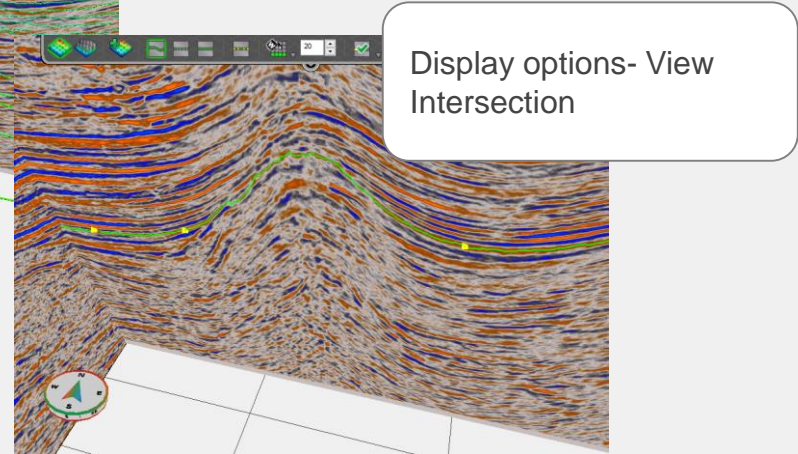
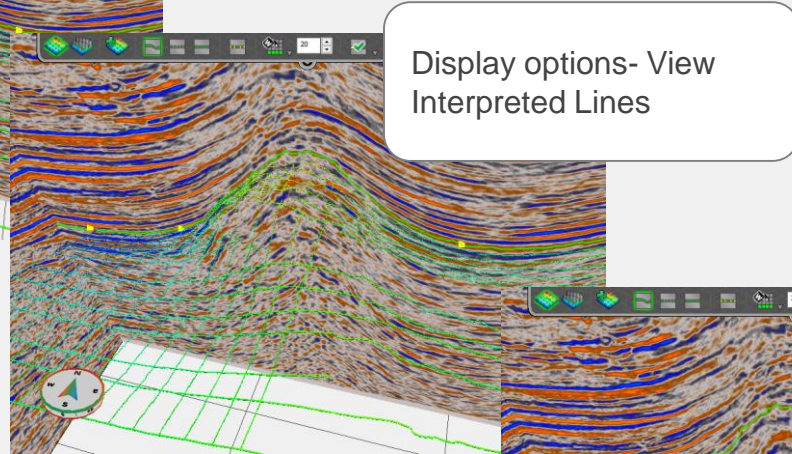
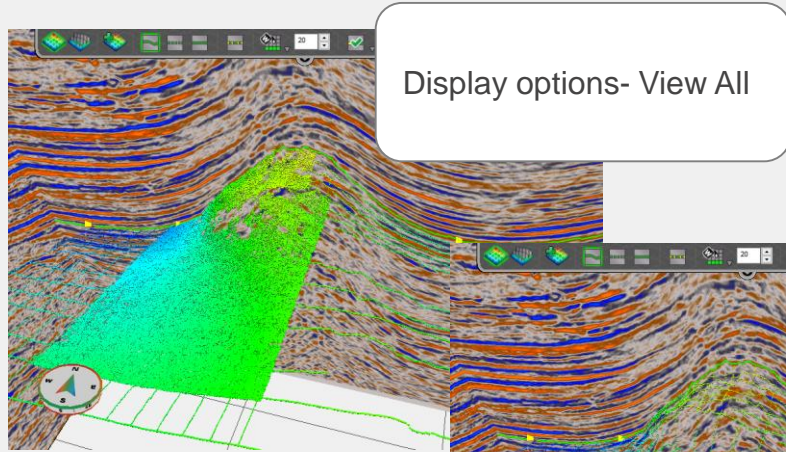
Event tracked

Peak / Trough / Zero crossing / Unknown

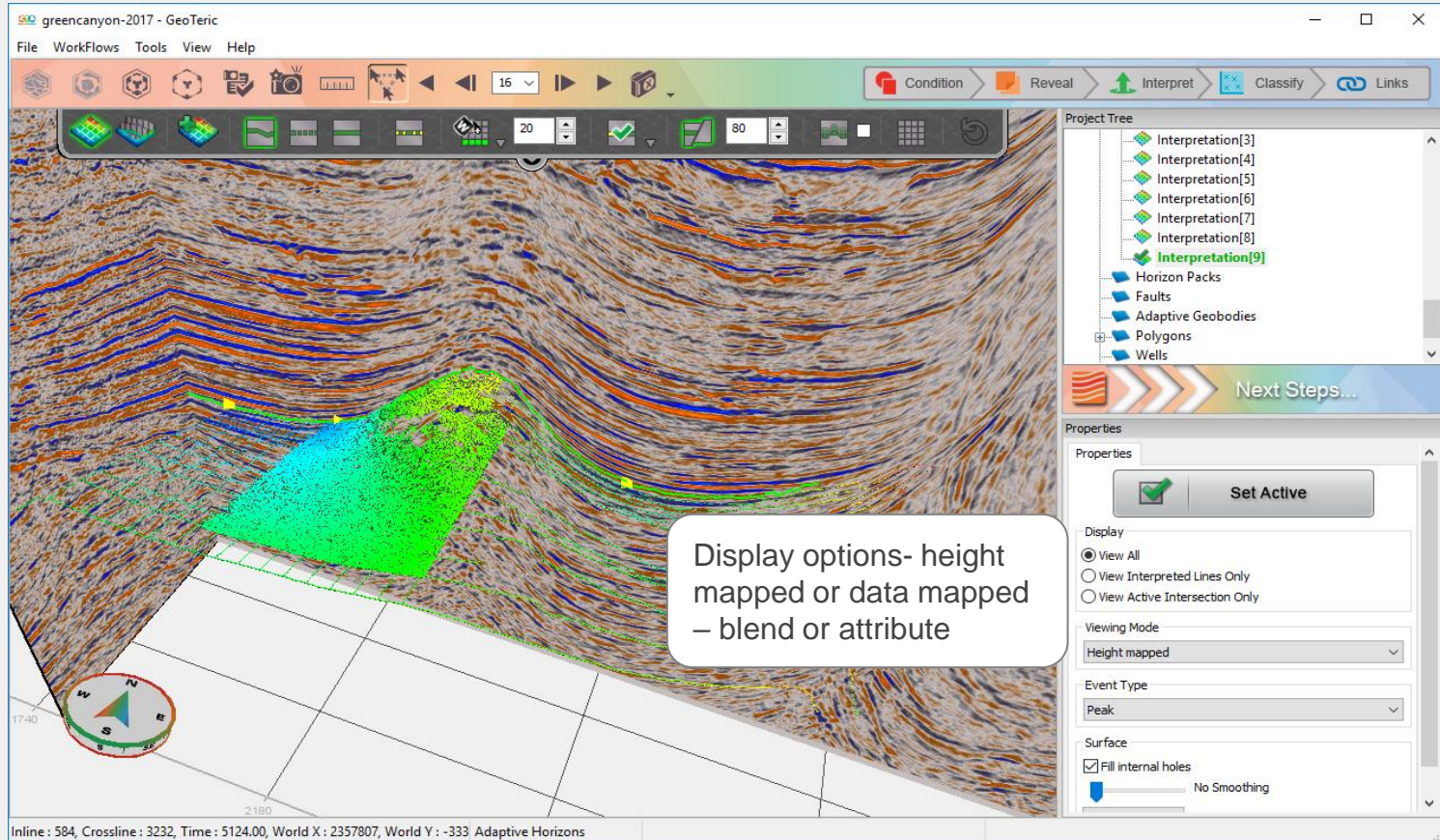
Create static surface

- Smoothing
- Fill holes

Adaptive Horizons – Display options



Adaptive Horizons



The screenshot displays the GeoTeriC software interface for a project named 'greencanyon-2017'. The main window shows a 3D geological model with various horizons. A callout box in the center of the model contains the text: "Display options- height mapped or data mapped – blend or attribute".

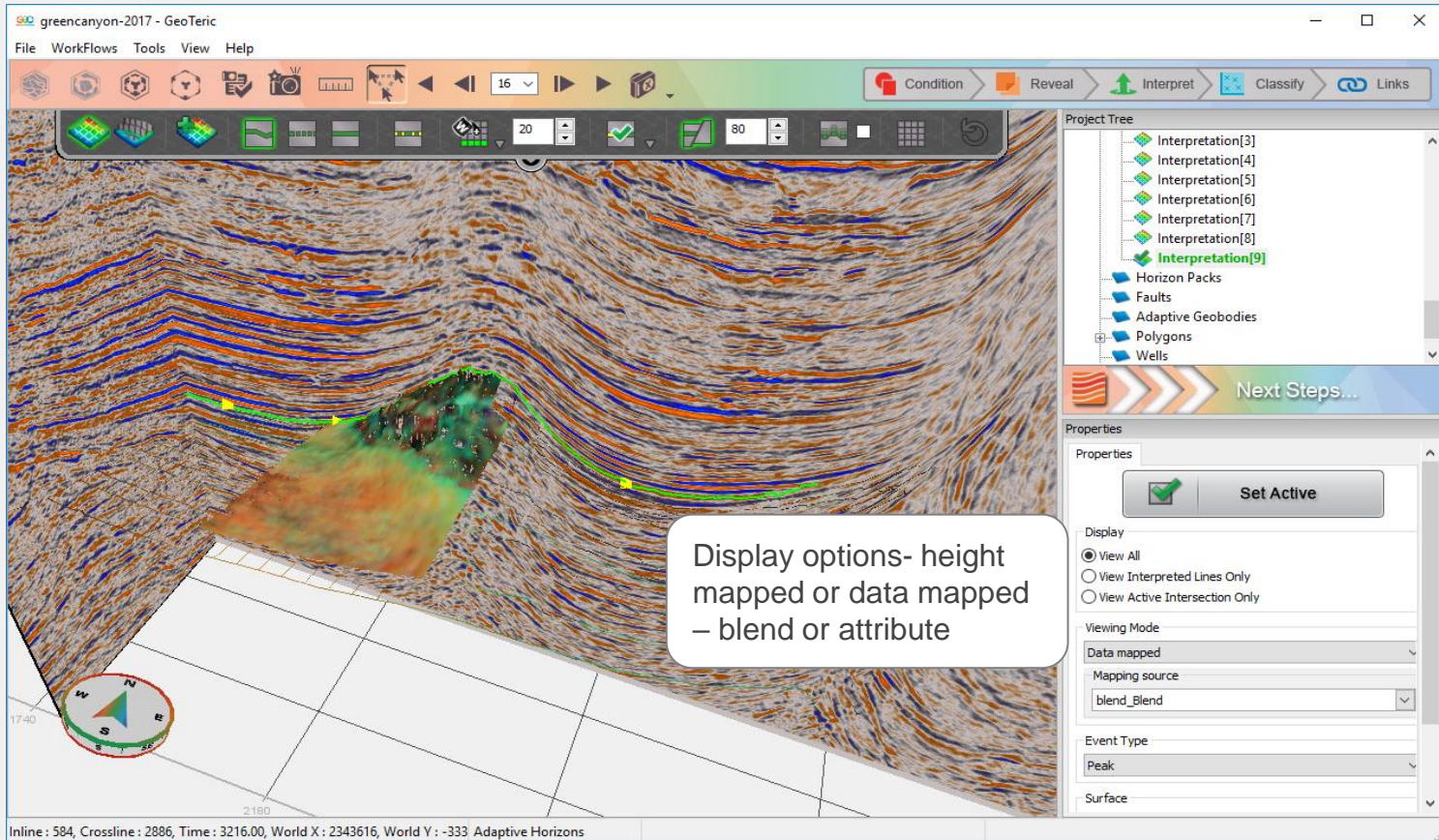
The interface includes a menu bar (File, WorkFlows, Tools, View, Help), a toolbar with navigation and processing tools, and a Project Tree on the right. The Project Tree lists several interpretation layers (Interpretation[3] through Interpretation[9]), with Interpretation[9] currently selected. Other categories in the tree include Horizon Packs, Faults, Adaptive Geobodies, Polygons, and Wells.

The Properties panel on the right shows the following settings for the selected interpretation:

- Properties:** A 'Set Active' button with a green checkmark icon.
- Display:** Radio buttons for 'View All' (selected), 'View Interpreted Lines Only', and 'View Active Intersection Only'.
- Viewing Mode:** A dropdown menu set to 'Height mapped'.
- Event Type:** A dropdown menu set to 'Peak'.
- Surface:** A checked box for 'Fill internal holes' and a 'No Smoothing' option.

The status bar at the bottom of the window displays the following coordinates: Inline : 584, Crossline : 3232, Time : 5124.00, World X : 2357807, World Y : -333 Adaptive Horizons.

Adaptive Horizons



greencanyon-2017 - GeoTeric

File WorkFlows Tools View Help

Condition Reveal Interpret Classify Links

Project Tree

- Interpretation[3]
- Interpretation[4]
- Interpretation[5]
- Interpretation[6]
- Interpretation[7]
- Interpretation[8]
- Interpretation[9]**
- Horizon Packs
- Faults
- Adaptive Geobodies
- Polygons
- Wells

Next Steps...

Properties

Properties

Set Active

Display

- View All
- View Interpreted Lines Only
- View Active Intersection Only

Viewing Mode

Data mapped

Mapping source

blend_Blend

Event Type

Peak

Surface

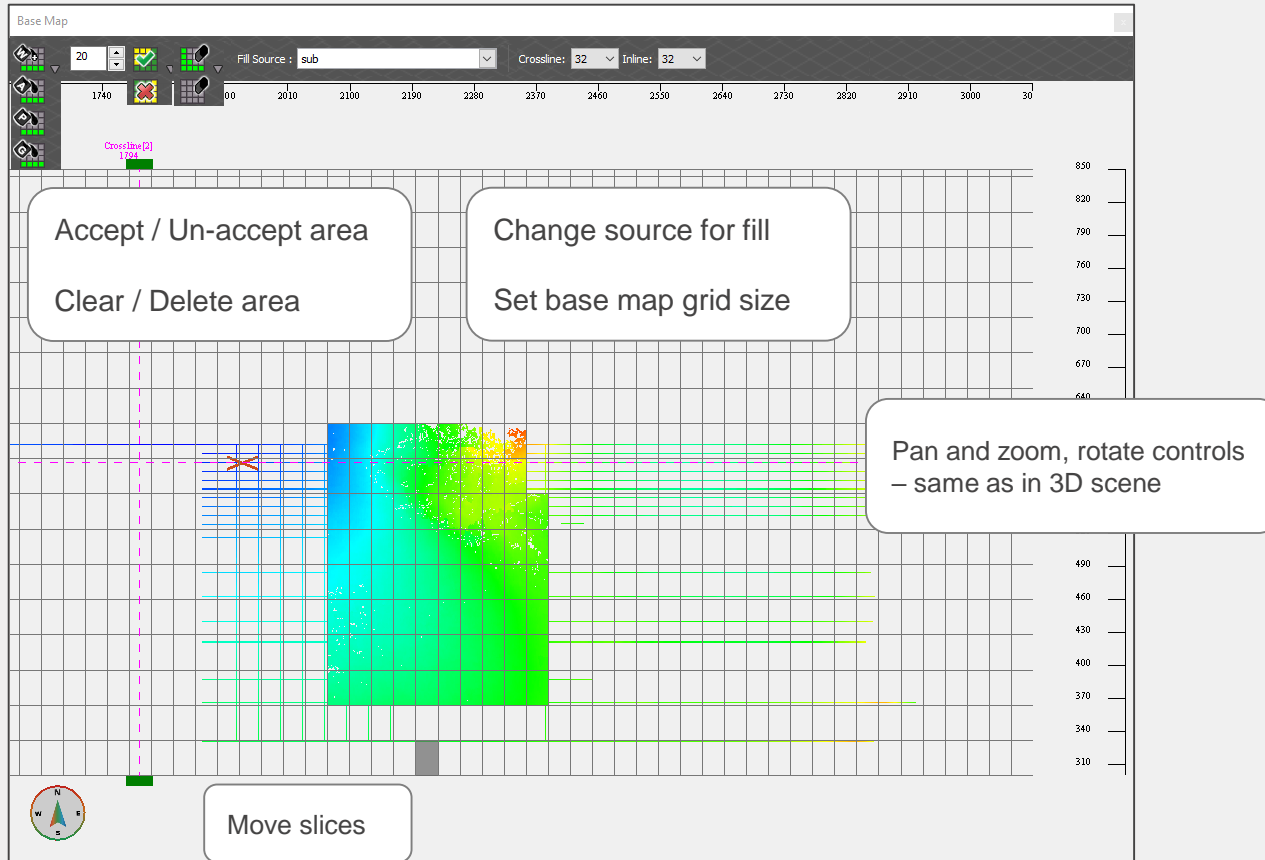
Inline : 584, Crossline : 2886, Time : 3216.00, World X : 2343616, World Y : -333 Adaptive Horizons

Display options- height mapped or data mapped – blend or attribute

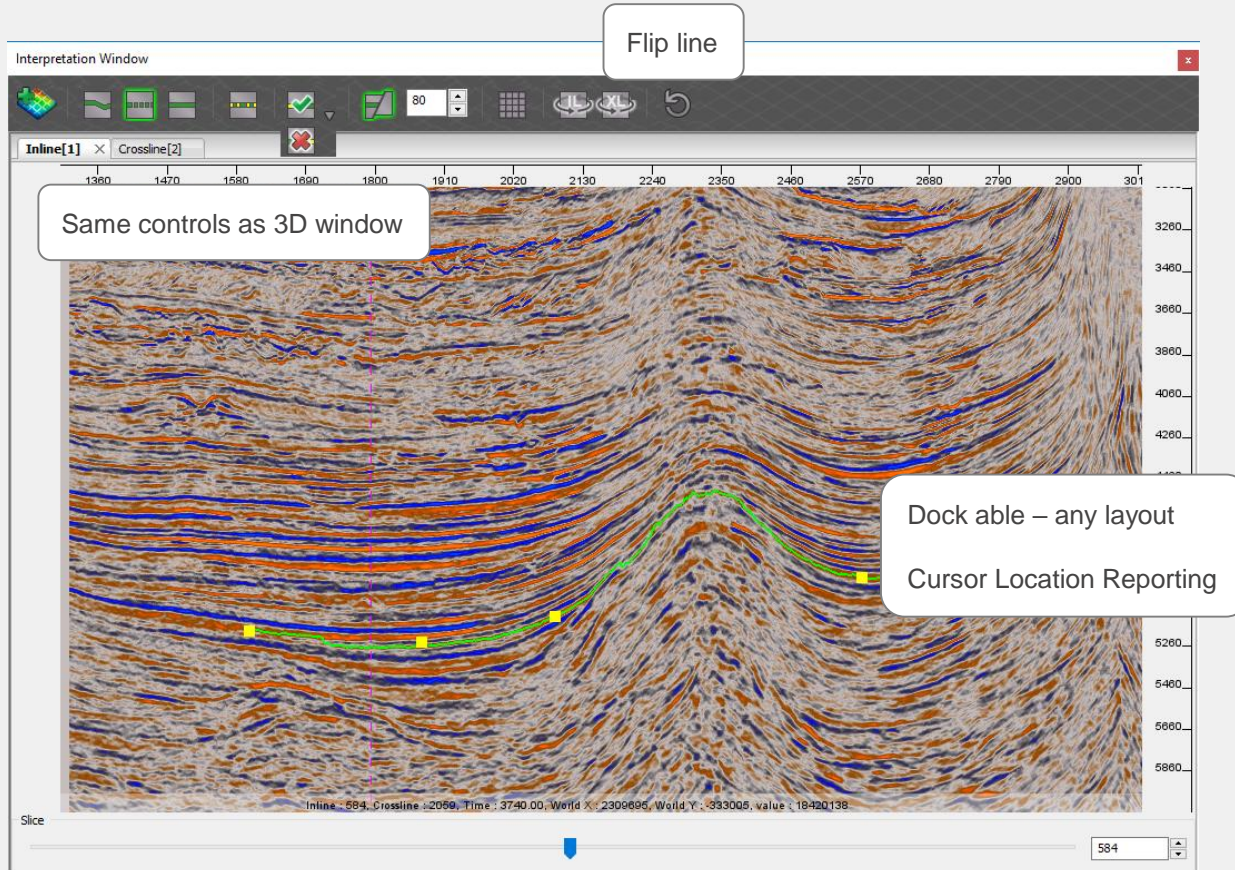
Adaptive Horizons : Base map

Fill options –
same as 3D

- Waveform
- Amplitude
- PDF
- Graph theory

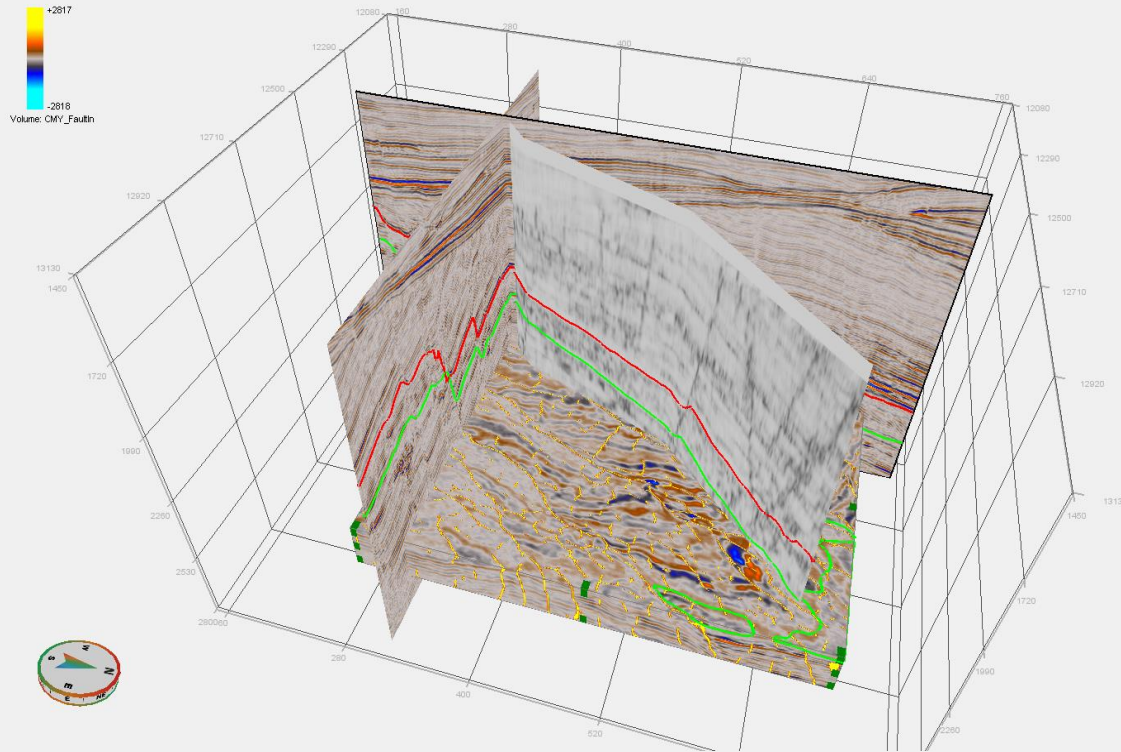


Adaptive Horizons : 2D Interpretation window



Adaptive Interpretation Platform

Ensuring a smooth and enjoyable interpretation experience



Adaptive Interpretation platform



+2817

Linked Cursor

- 3D
- 2D Interpretation
- Base map

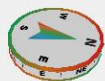
Easy slice manipulation with
play back controls

Mouse wheel
Keyboard shortcut: Ctrl +Arrow Up / Down

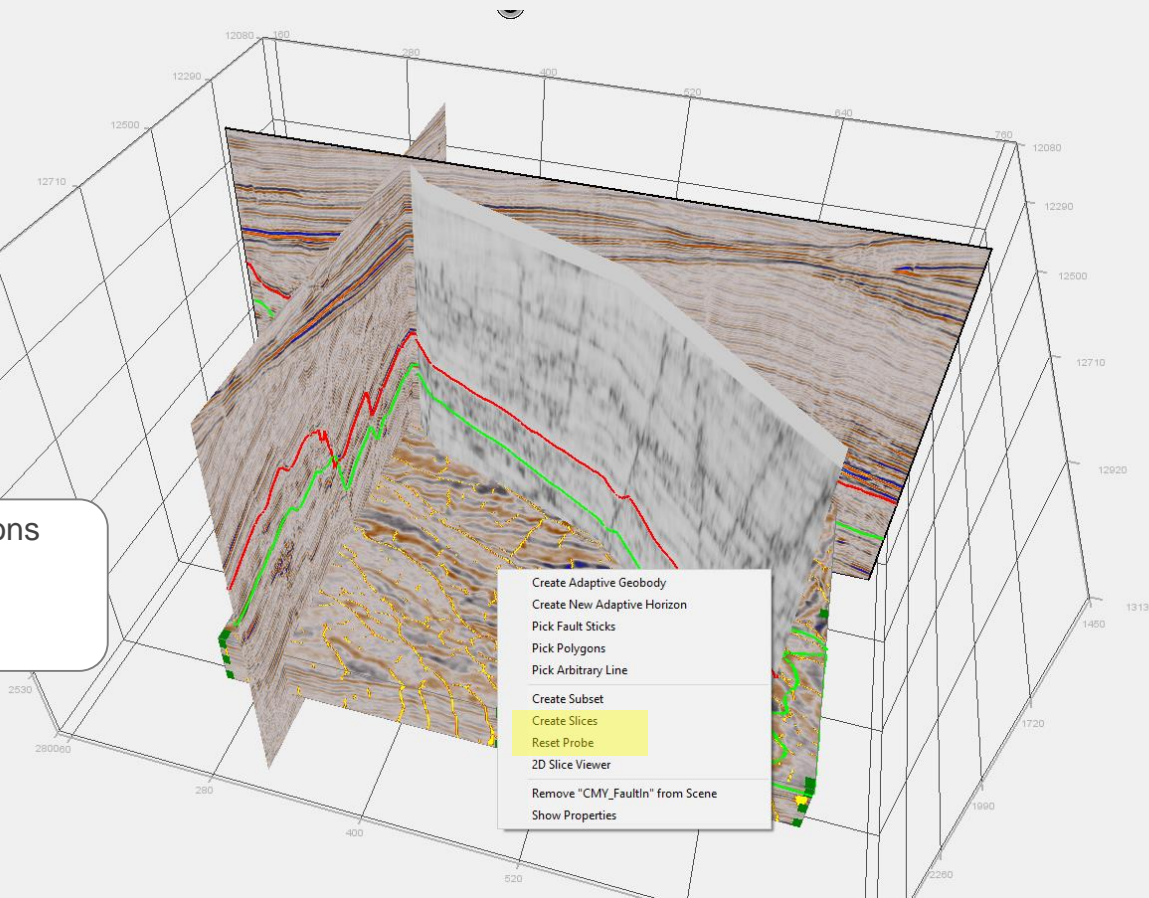
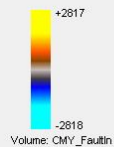
Automatic save session -
re-starts where you left it

New improved
grid

Extended Surface Overlays



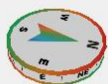
Adaptive Interpretation platform



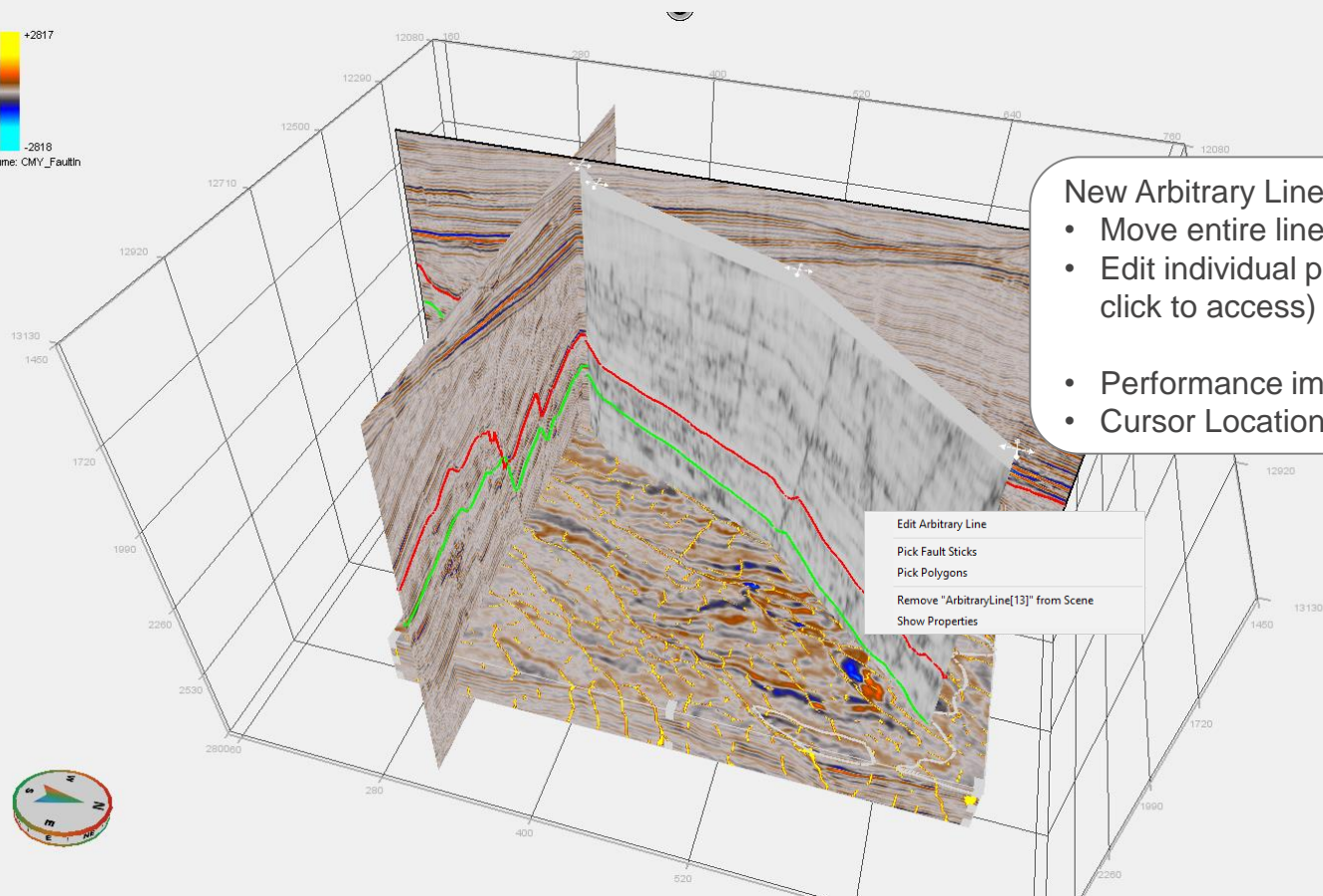
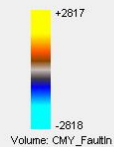
New right-click options
for volume:

- Create Slices
- Reset Probe

- Create Adaptive Geobody
- Create New Adaptive Horizon
- Pick Fault Sticks
- Pick Polygons
- Pick Arbitrary Line
- Create Subset
- Create Slices
- Reset Probe
- 2D Slice Viewer
- Remove "CMY_Faultin" from Scene
- Show Properties



Adaptive Interpretation platform

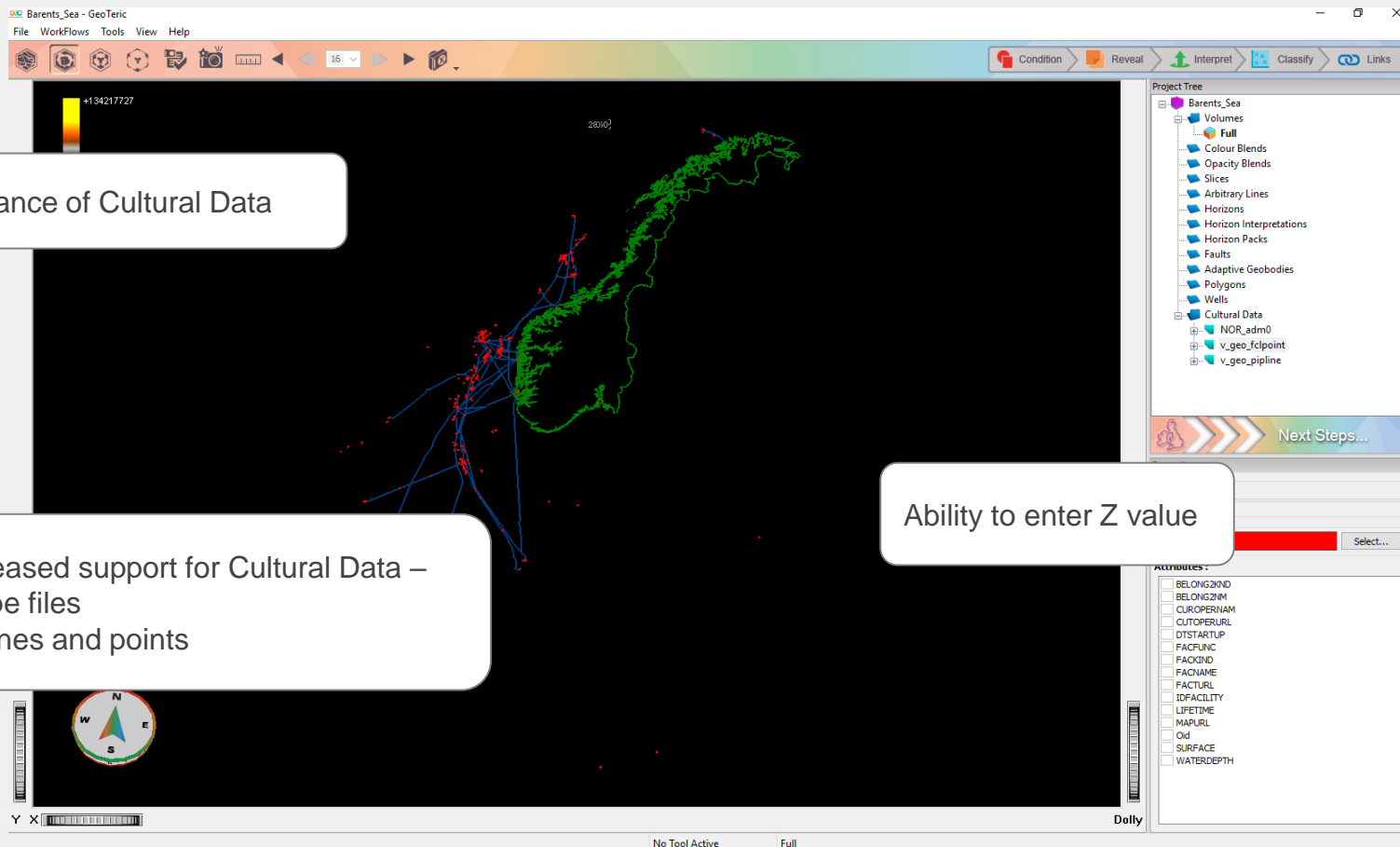


New Arbitrary Line options

- Move entire line
- Edit individual points (right-click to access)
- Performance improvements
- Cursor Location Reporting

- Edit Arbitrary Line
- Pick Fault Sticks
- Pick Polygons
- Remove "ArbitraryLine[13]" from Scene
- Show Properties

Adaptive Interpretation Platform



Performance of Cultural Data

Ability to enter Z value

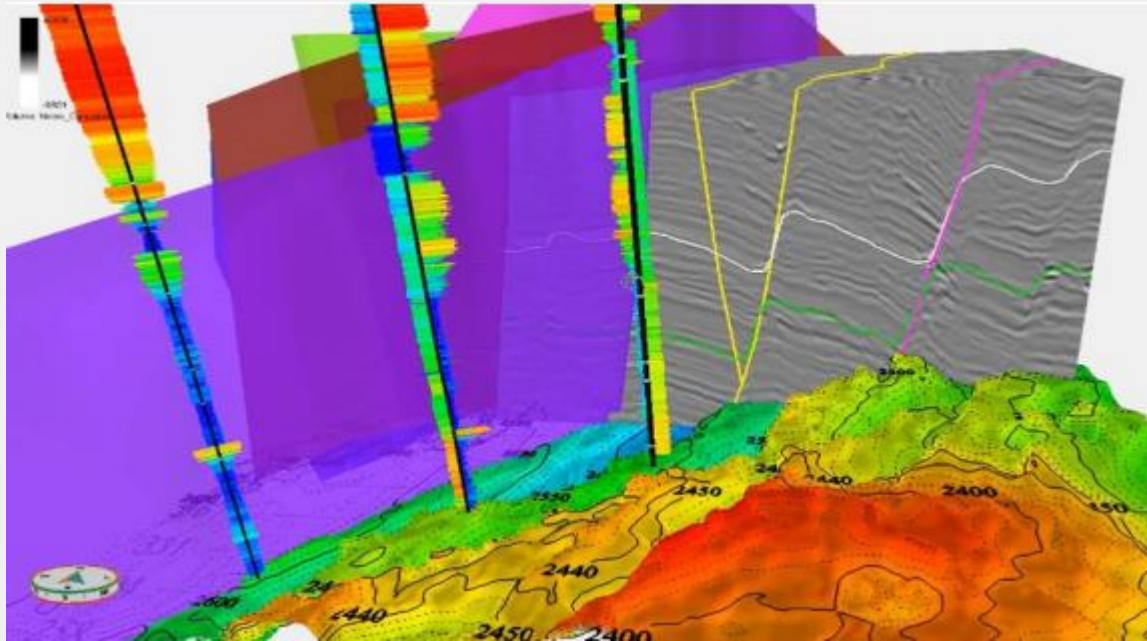
Increased support for Cultural Data – shape files

- Lines and points

- ATTRIBUTES :
- BELONG2ND
 - BELONG2M
 - CUROPERNAM
 - CUTOPEURL
 - DTSTARTUP
 - FACFLVC
 - FACIND
 - FACNAME
 - FACTURL
 - IDFACILITY
 - LIFETIME
 - MAPURL
 - Oid
 - SURFACE
 - WATERDEPTH

Well correlation and Well ties

Enabling well log
interpretation and seismic
to well ties for more
accurate seismic
interpretation.



Well Marker Correlation

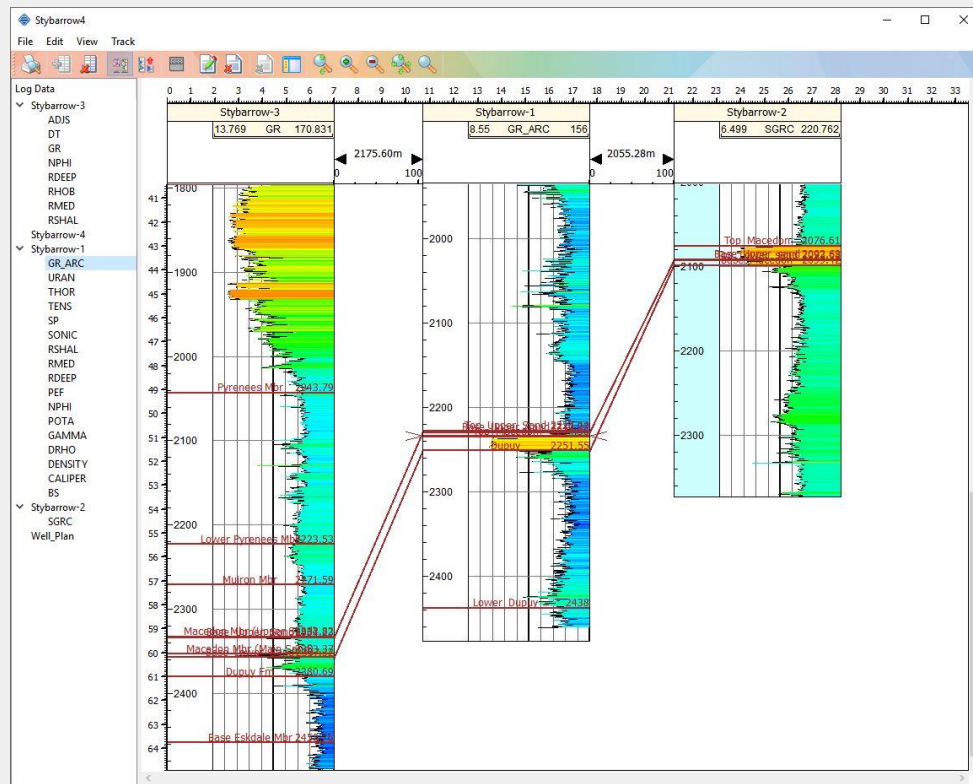
Multi well and log display

Correlate your markers

Assign lithologies

Synchronised 3D and 2D edit of markers (tops)

Scaled plotting



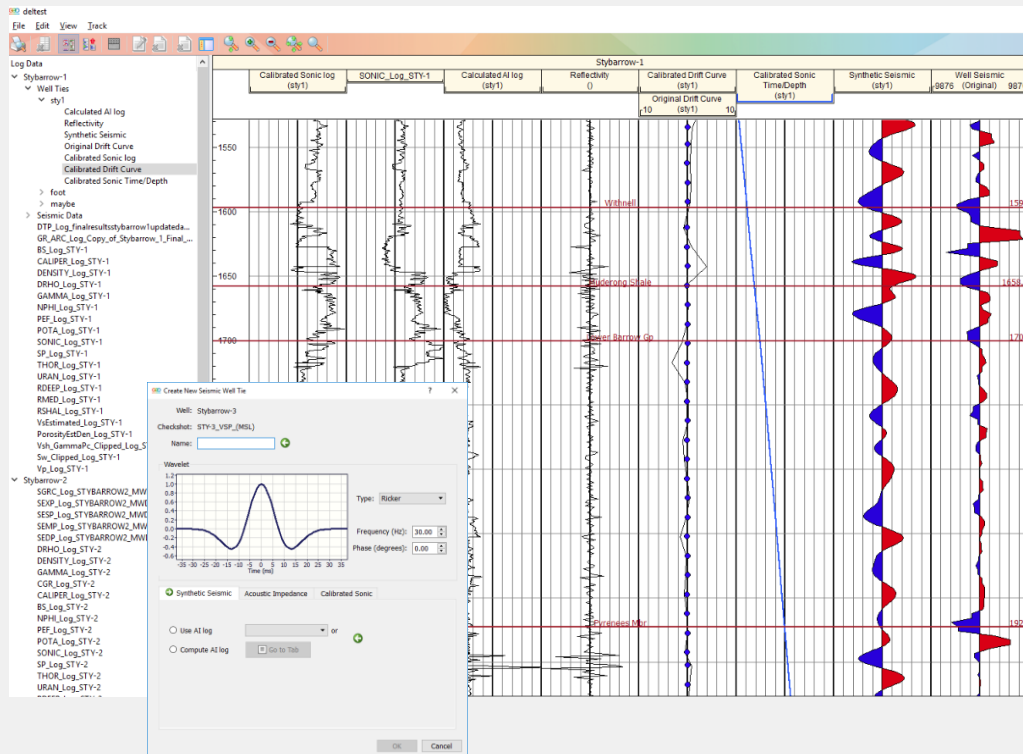
Seismic- Well tie

Sonic Calibration

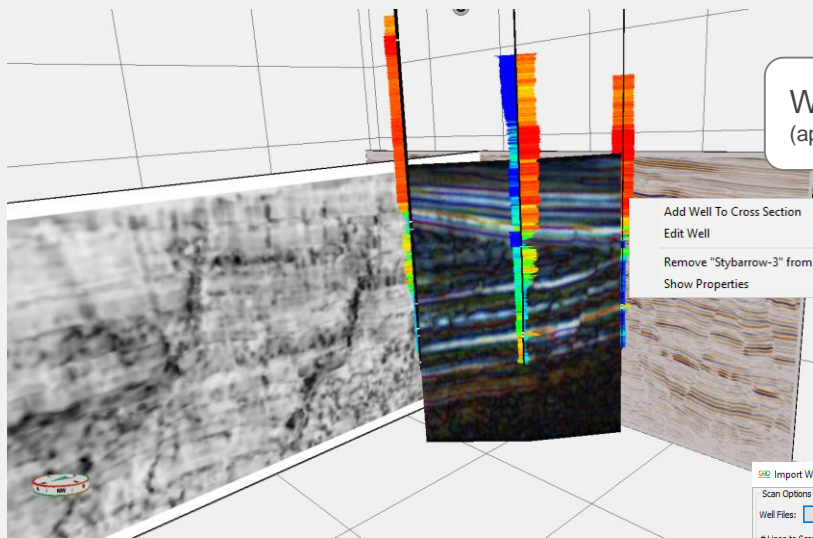
Synthetic seismic

Single or multipoint stretch and squeeze

User defined Ricker wavelet



Wells



Well Cross Section
(appears under Arb Lines in 2017.1)

- Add Well To Cross Section
- Edit Well
- Remove "Stybarrow-3" from Scene
- Show Properties

Multiple marker import

Import Well Marker from Text File

Scan Options

Well Files:

Lines to Scan: 30 Tokenize Based on: All White Chars

Result of ASCII Scan

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4									
5									
6									

Import Settings

Marker Position:

Type and units:

Next Steps...

Properties

-
-
-
-
-
-

Select Import Well Data and browse to the folder which contains your well data. Well paths, checkshots and logs will be loaded.

Well paths will be matched automatically to checkshots and logs will be matched automatically to wells.

Currently supported formats: Petrel well data

3rd party links

Integration is key to all workflows



DecisionSpace

*PaleoScan is a mark by Eliis
Petrel is a mark by Schlumberger
DecisionSpace is a mark by Landmark*

3rd Party Links

Link for Petrel

Compatible with Petrel 2015 & 2016

- Extended CRS handling when transferring wells, faults and polygons
- Improved depth to time unit conversion between GeoTeriC and Petrel
- Scale defaults to Auto Scale

Fixed issues with:

- no volumes appearing in link window
- z values of a blend was altered during transfer
- Previously names with @ in threw an error. This has been resolved and the @ symbol is supported as a valid character.



3rd Party Links

Link for DSG

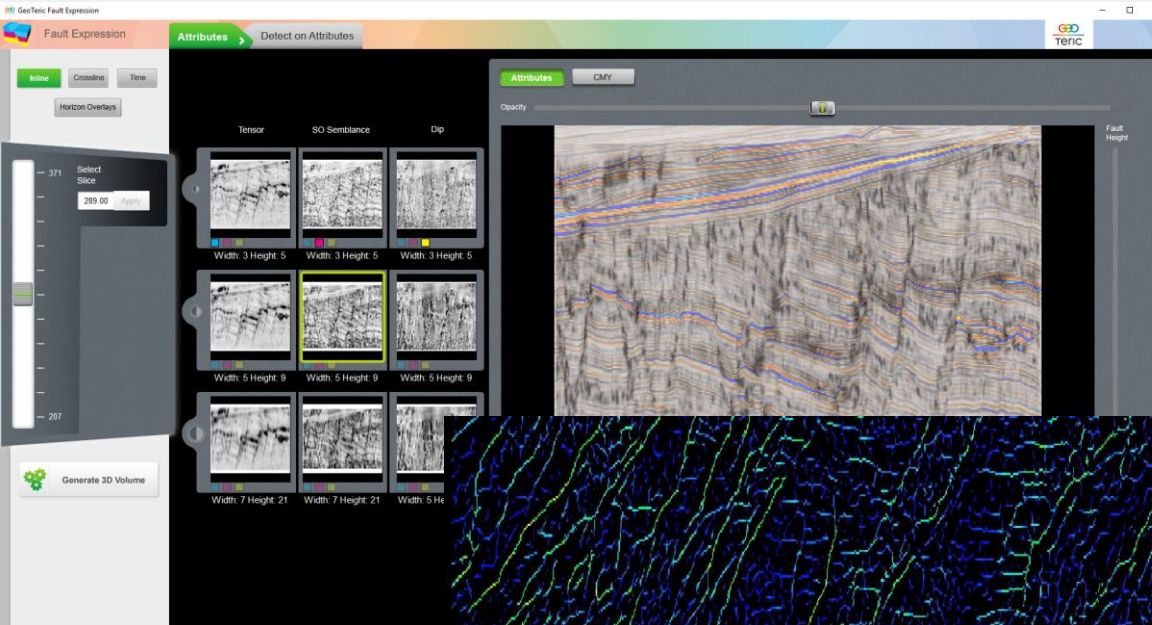
- Compatible with DSG 10.ep2, ep3 and ep4
- Certified by Landmark for 10.ep3

Link for PaleoScan

- Previously, floating point data transferred could end up with invalid data range. This has been resolved.

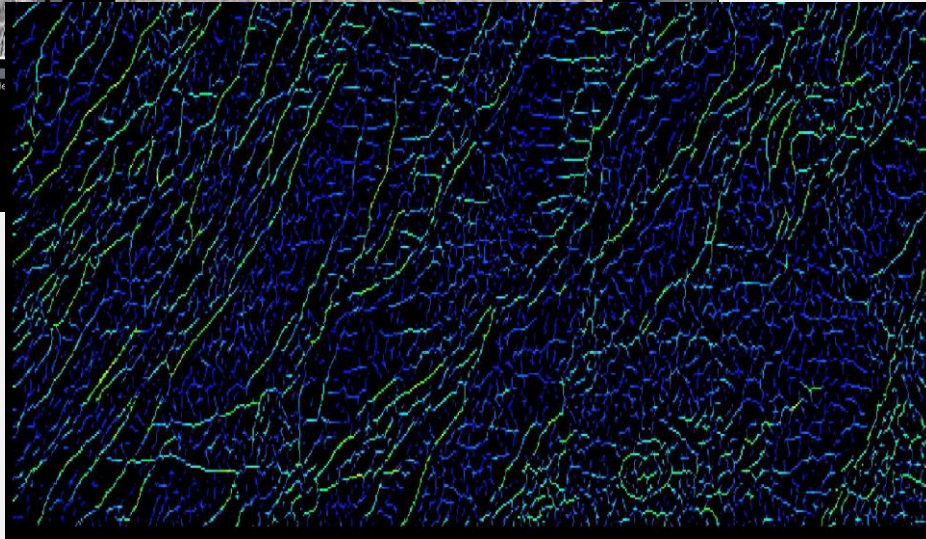


DecisionSpace



Fault Detect and more...

Other enhancements and extensions to GeoTeric

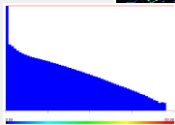
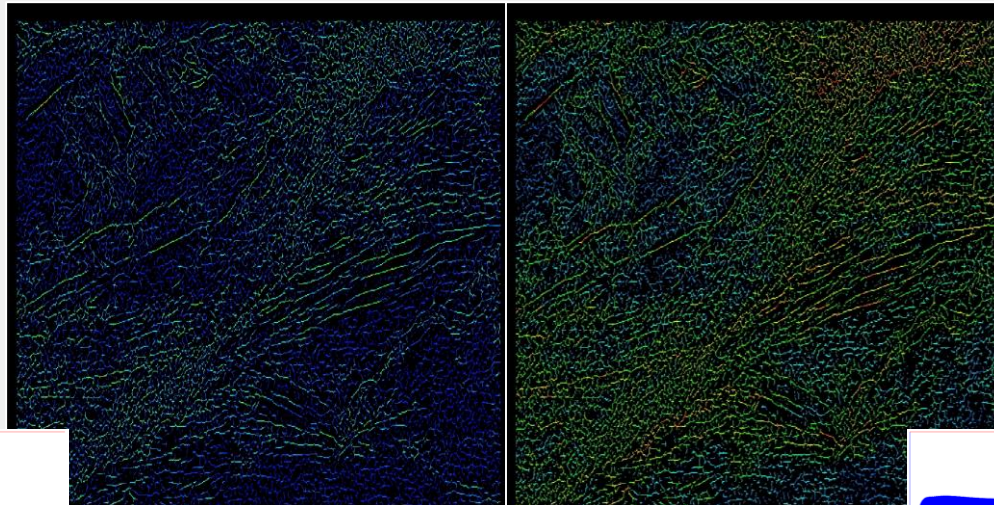
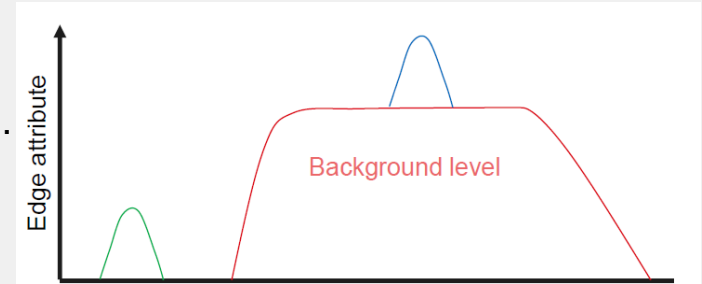


Fault Detect

Introduced an improved Fault Detect algorithm.

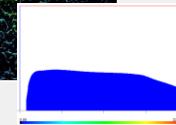
Result value has a direct relationship to the fault confidence level.

16 and 32bit data gives same result



New

Old

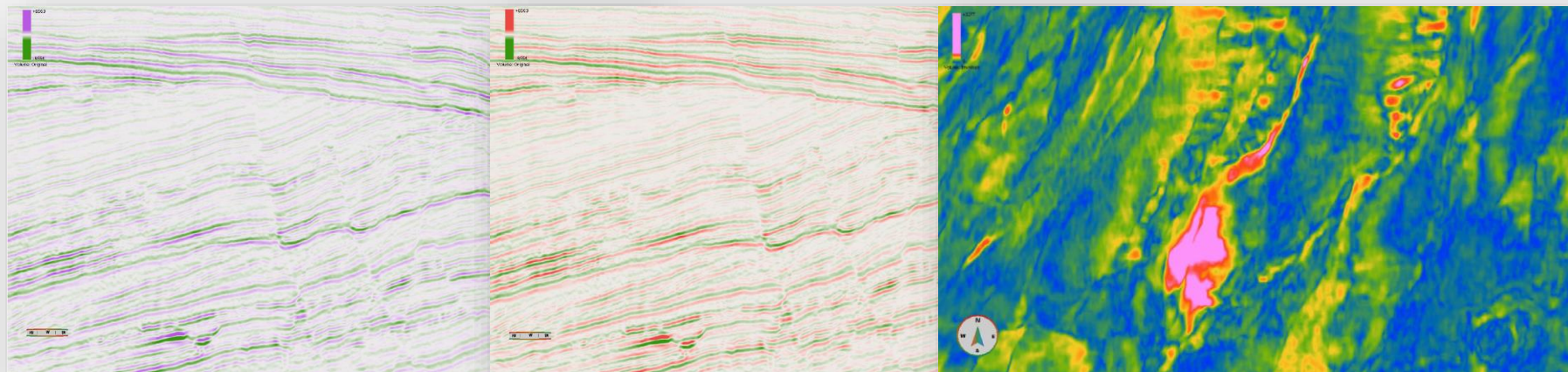


Other

Expression tools now warns the user if a GPU is not enabled / accessible.

License management: reduced grace period to 3 hours.

New Perceptually Uniform (PU) colour maps (based on [Peter Kovesi's](#) work)



PU GreenWhitePurple

PU GreenWhiteRed

PU Spectrum

GeoTeric 2017.1

Any questions – please let us know!

GeoTeric®

Cognitive Interpretation

www.GeoTeric.com

