

PaleoScan[™] 2018 Release Notes

Global Seismic Interpretation Software

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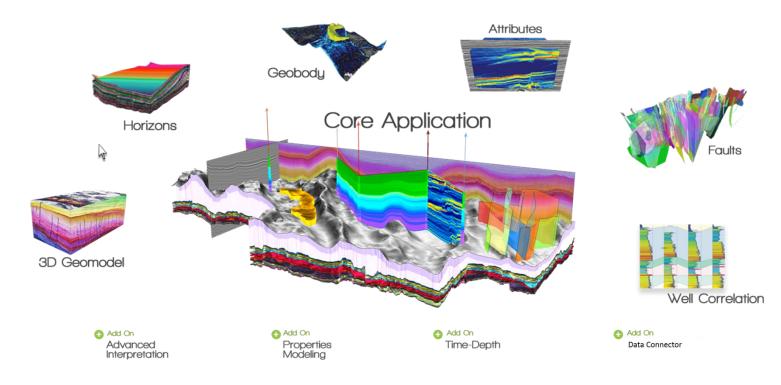
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PaleoScan[™] 2018

PaleoScan[™] 2018 is a new generation of 3D seismic interpretation software, where geoscientists build a geological model while interpreting seismic volumes. With this new release, Eliis continues to innovate in seismic interpretation and brings more tools to interpret larger seismic datasets, with added speed and precision.

This document lists all the new features, upgrades and corrections implemented in PaleoScan^M 2018. A detailed description of each tool can be found in the "New Features Guide" or on the web site (<u>www.eliis.fr</u>).

The 2018 version brings more options to complete the workflow from exploration to reservoir characterization, with various new tools: complete 2D interpretation workflow, velocity modeling, cross plots from logs, coordinates reference system management...



Project

Feature	Description
Project CRS	Add the possibility to assign a Coordinate Reference System (CRS) to a project at creation time.
Project Properties	Add a window that enables viewing project properties whose the project CRS. This window is available in the File menu.

Data Import/Export

Feature	Description
Data Import	Import multiple SEG-Y files at the same time.
	Can specify SRD of imported SEG-Y.
	Can specify the CRS of any imported data.
	Import Well heads as shapefile.
	Import 2D Horizons.
	Import Faults in GOCAD format.
	Import shapefile lines & points.
	Import CRS as .prj files.
Data Export	Export multiple SEG-Y files at the same time.
	Export 2D Lines as SEG-Y files.
	Export 2D Horizons.
	Export 2D Faults.
	Export 3D Polylines.
	Export 2D Multi-Z.

Volume

Feature	Description
Volume Extraction	Z values and Horizon can be mixed while defining vertical limits of the volume extraction.

Unit/CRS Correction

Feature	Description
Unit/CRS Editor	New tool name: previously called "Unit Correction Tool".
	Can manage CRS of all objects of the project.
	New objects handled.
Coordinate Reference System (CRS)	CRS can be assigned to project.
	CRS can be assigned to all objects in database.
	Can create custom CRS in proj4 or WKT format.
	Can convert objects into project CRS.

Volume Editing

Feature	Description
Coordinates Editor	New name: previously called "Survey Editor".
	Can edit survey coordinates (IL and XL) of volumes.
	Can edit SRD value of volumes.
2D Line SRD Editor	Add a window to edit the SRD of a 2D Line.

General Tools

Feature	Description
Polylines	New 3D Polyline objects.
	Can edit multi-Polyline objects.
Settings	New settings: - Added ability to disable CRS engine, - Added ability to manage settings for 2D objects.

Viewers

Feature	Description
2D Viewer	Double right mouse click inside a viewer to open the context menu.
	New property: Real-Time Smoothing.
	New property to manage the horizontal/vertical ratio of the viewer display: H/V.
	New object property: SRD value.
3D Viewer	New property to manage the horizontal/vertical ratio of the 3D viewer display: H/V.

Attributes

Feature	Description
2D Attributes	Possibility to apply attributes on 2D Lines from a dedicated window or from the viewer.
Instantaneous Attributes	New attribute: phase shift.
Structural Attributes	New attribute: Structure Oriented Smooth.

2D Lines

Feature	Description
Arbitrary Line along Wells	Updated interface.
	New search Optimum Trajectory option.
2D Line Set	Possibility to create a 2D Line Set from several 2D Lines.
	Added an interactive window to navigate through the different lines of a 2D Line Set.
	Possibility to normalize the amplitudes of all Lines inside a 2D Line Set.
	Possibility to extract 2D Lines from a 2D Line Set.
	Possibility to save the extraction area corresponding to the survey of a 2D Line Set.

Model-Grid

Feature	Description
2D Model Grid	Added ability to create a 2D Model-Grid from a 2D Line Set.
	Added ability to add a 2D Line to an existing 2D Model-Grid.
	Added an interactive window to navigate through the different Lines of a 2D Model-Grid.
	Added ability to disconnect all links between Lines.
	Added ability to disconnect one Line.
Horizon Tracking	New mouse mode to track Horizons on mouse over. Shortcut: B.
Data Mapping	Added ability to map data on 3D Model-Grid patches while horizon editing.
	Added ability to transfer Model-Grid data from a project to another one using the Data Exchange tool.
Real-time Preview	New preview quality: Marked Only.
2D Model	Added ability to compute a 2D Model from a 2D Model-Grid.

Horizon Stack / Horizon

Feature	Description
2D Horizon Stack	Added ability to create a 2D Horizon Stack from a 2D Model.
	Added ability to save the extraction area corresponding to the survey of a 2D Horizon Stack.
2D Horizon Stack Interpolation	Added ability to interpolate a 2D Horizon Stack to obtain a 3D Horizon Stack.
Manual Picking	Added ability to pick 2D Horizons.
	New picking modes: - Best Correlation Tracking, - Optimum Path Tracking.
	Horizon picking validation to finish the editing and save the horizon.
	Threshold parameter in viewer during Best Correlation Tracking mode to adjust the behavior of the tracking.
	Redo option available. Shortcut: Ctrl + Y.
Interpolation and Propagation	New button on the bottom left corner of the horizon viewer window to repeat the last applied interpolation or propagation.
	Added ability to restrict the area of interpolation or propagation.
	Added ability to interpolate data.
	New interpolation methods: - Inverse distance, - Kriging.
2D Horizon	Added ability to convert a 2D Horizon into 3D Horizon.
Isoline	Added ability to display and save isolines on Horizon and Horizon Stack.
3D Geo-Model From Horizons	Possibility to use a 3D Horizon Stack as input of the iso-proportional model computation.
2D Geo-Model From Horizons	New option to generate iso-proportional 2D model by using 2D Horizons or 2D Horizon Stack.
Gross Rock Volume	Possibility to generate a Gross Rock Volume table from a Horizon.

Structural Interpretation

Feature	Description
Faults	Preview of the extrapolation of the currently picked fault is visible to guide the interpretation.
	New property to show or hide the picking intersection on 2D viewers.
	New property to show the extrapolation of the currently picked fault preview.
	Possibility to select all faults with the same CRS.
	Emergency save: automatically save the current fault set periodically. Can be parametrized from the Settings.
Fault Viewer	New property: Real-Time Smoothing.

Well/Log Management

Feature	Description
CRS	Possibility to manage CRS of Wells Data.

Multi-Z

Feature	Description
2D Multi-Z	Possibility to pick 2D Multi-Z.

Advanced Interpretation

Feature	Description
2D Line Stratigraphic Viewer	Stratigraphic sequence picking based on a 2D Model.

Color Blending

Feature	Description
Indexed Color Saving	 Possibility to save RGB objects as indexed color objects for : Volumes, 2D Lines, Horizons, Horizon Stacks.

Velocity Modeling

Feature	Description
Velocity Modeling	Presented as an independent module, previously combined with Time/Depth module.
Velocity Computation	 Possibility to compute different velocities: Average velocity, RMS velocity, Dix velocity.
Depth Conversion	Move Depth Stretching tool into Velocity Modeling module.
	New option name: previously "Depth Stretching".

Cross-Plot

Feature	Description
Workflow	Possibility to apply function(s) on Cross-Plot computation.
	Possibility to use Area of Interest for Retro-mapping.
	New automatic classification option using 2D machine learning methods: Self-Organizing Map (SOM) and K-Mean.
	New regression curves: linear, logarithmic, exponential, power, polynomial.
Cross Plot Saving	Possibility to save regressions.
Cross Plot from Log	Possibility to create and save Cross-Plot from Logs.

OpenWorks® Data Link

Feature	Description
Dedicated Window	Possibility to open the OpenWorks® Data Link window from the File menu.
Data Transfer	 Possibility to transfer data between PaleoScan[™] and OpenWorks®: Volumes, Faults, Horizons, Wells, Markers.

Licensing

PaleoScan[™] 2018 can be downloaded from the Eliis web site. A personal user account is required. If you do not have a login and password to access the Eliis extranet, you can apply for one by completing this <u>form</u>.

Eliis provides you a free 30-day temporary license to evaluate PaleoScan[™] 2018. The temporary license will give you full access to the software with all add-on modules.

Project Compatibility

The PaleoScan[™] platform is compatible with all PaleoScan[™] projects.

Forward compatibility:

Projects saved with previous versions of PaleoScan[™] can be updated to PaleoScan[™] 2018 when the projects are being loaded.

Backward compatibility:

Projects created with PaleoScan[™] 2018 can also be opened with previous versions (2017 or 2016). However, some new object properties might not be readable by earlier versions.

Hardware Requirements

PaleoScan[™] is a Microsoft Windows[®] stand-alone software, running on PC equipped with a 64-bit processor with the requirements equivalent to the below mentioned items:

- CPU : 4-Core
- RAM : 16 Gb
- Operating system: 7, 8 or 10 (64-bit)
- Graphics card: 512 MB NVIDIA[®] / ATI[®] graphic card
- IDE devices: Hard disk with fast rotational speed (> 7200 rpm)