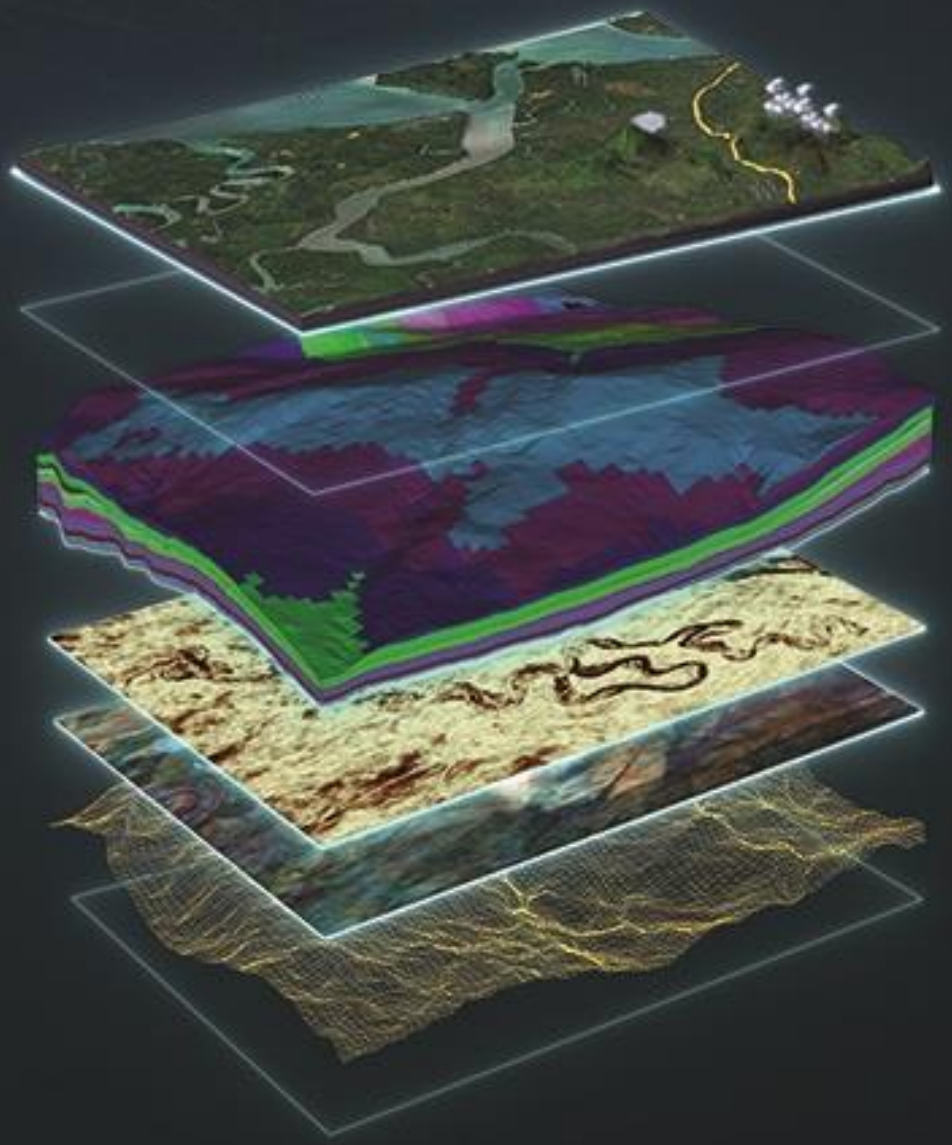
PALEOSCAN™ 2019

RELEASE NOTES



Global Seismic Interpretation Software

Eliis

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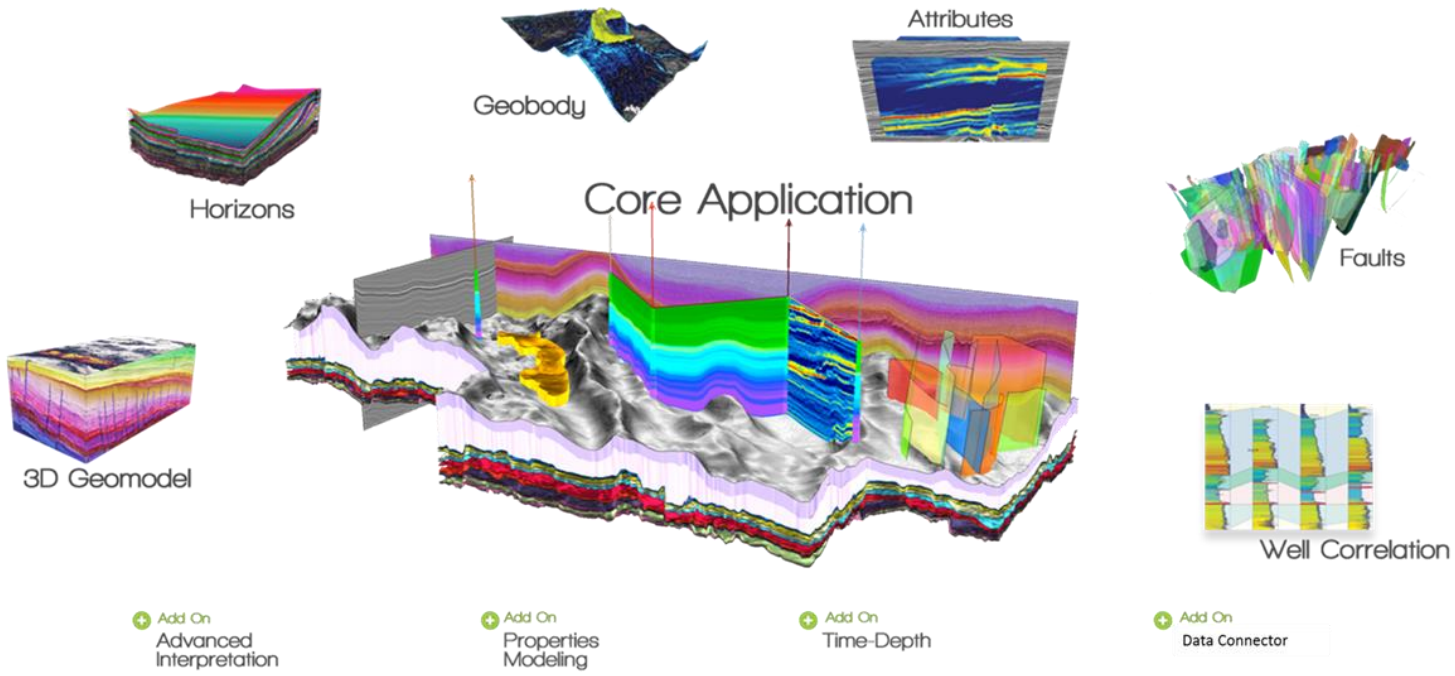
PaleoScan™ 2019

PaleoScan™ 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.

The 2019 version includes all updates counted in the last version and features new and improved tools for a better support of data constraints.

- **Automatic Fault Extraction**, now part of our Core application, has never given such a precise fault network.
- Upgraded Advanced Interpretation module with two awaited items, mainly our static **Geocellular model** and its reservoir properties gridding. Both, with **Stratigraphic terminations management** in sequences, will allow a better handling of geologic architectures.
- As a new Extension, **Python** code can now be executed directly from PaleoScan™ 2019, allowing you to tailor your software according to your needs.

This document lists all the new features, upgrades and corrections implemented in PaleoScan™ 2019. A detailed description of each tool can be found in the "New Features Guide" or on the web site (www.eliis.fr).



License

Feature	Description
License Manager	Error messages more explicit when the licensing tools must be updated.

Project

Feature	Description
Open project	Added information related to the PaleoScan project version
	Added information when a project is opened by another user.

Data Import

Feature	Description
Seg-y Import	Improved decimation option at the 2D and 3D Seg-y Import.
	Added Prefix to imported data for 2D and 3D Seg-y Import.
GeoCellular Grid Import	GeoCellular grid: ASCII grid files as GRDECL format.
Fault Import	Minimum Envelope Gridding method applied at the fault import with an automatic interpolation between sticks.

Data Export

Feature	Description
Seg-y Export	Added decimation option at the 3D Seg-y Export.
GeoCellular Grid Export	GeoCellular grid: ASCII grid file as GRDECL format

Viewers

Feature	Description
2D Viewer	New property related to the axis display in 2D viewers in order to lighten axis information (Scale: axis values without the lines).
	Viewer property: H/V ration improved with decimal values to better manage Depth data.

General Tools

Feature	Description
Polylines	New Polyline picking mode: Straight polyline.
	New option to save polyline from 3D Object intersection.
Shortcut	New shortcut “Escape” to switch between the two latest mouse modes.
Test Space Disk	Test space disk performed on main PaleoScan™ tools to check the free space before launching computations.

2D Lines

Feature	Description
2D Line Conditioning	A new tool used to manage 2D Lines: - Vertical cropping, - Spatial splitting.

Attributes

Feature	Description
Attribute List	Attribute list now sorted in Alphabetic order.
Elimination Attributes	Previous “Truncation” and “Truncation 3D” attributes renamed **Elimination** and **Elimination 3D** respectively.
AFE Attributes	New Fault Plane Attribute, part of the Automatic Fault Extraction workflow.
	New Fault Thinning Attribute, part of the Automatic Fault Extraction workflow.
Basic Attribute	New Polarity Attribute.
Frequency Decomposition	Morlet wavelet added in the Frequency Decomposition tool
Band Pass Attribute	Morlet wavelet added in the parameters of Band Pass attribute computation.
Coloured Inversion	New parameters available to define the percentage of deviation from the a priori model and to activate the low-pass filtering.
Deterministic Inversion	New tool to create an absolute acoustic impedance volume from a seismic volume. Two algorithms available: model-based and recursive methods.
Synthetic Wavelet Creation	Synthetic wavelet creation tool duplicated into the Attribute module.

Model-Grid

Feature	Description
2D Model-Grid	Decimation option added to the 2D Model-Grid computation tool.
3D Geo-Model	Marked Only Geo-Model: new method to compute 3D Geo-Model based on the Marked Horizons.
Model-Grid Horizon Editing	Changed label related to the *Horizon Clear* option in the Model-Grid Toolbar by *Horizon Validation*.
Horizon Constraint	The option *Respect Locked Horizons* now activated by default.
Model-Grid Constraint	Info text added to inform about the prevalence of the interpretations used as constraints.

Horizon / Horizon Stack

Feature	Description
Horizon Truncation	New option used to truncate a horizon according to another one.
Horizon Contouring	Horizon Contouring option computed on the data mapped on the horizon.
Isochore Map	Added information into the Isochore Mapping tool, related to the expected Isochore units.

Structural Interpretation

Feature	Description
Automatic Fault Extraction (AFE)	New tool to automatically extract 3D faults from a seismic volume based on the Fault Plane and Fault thinning attributes computation.
Fault Viewer	Fault viewer related to the Fault picking is now identified as a specific Fault Viewer.
Fault Sets in Project Browser	Improved display of Fault Set in the Project Browser: displayed as tree with name of faults.
Fault Saving	New option to save Faults contained in an Extraction Area.
Remove Hidden Faults	New option to remove the hidden faults from 3D.

Well/Log Management

Feature	Description
Well QC Table	Possibility to export the QC Table from the Well QC Table tool.
Composite Log Creation	New output logs added to the Composite Log Creation tool: - Young modulus, - Poisson's ratio.

Geobody - Layers

Feature	Description
Geobody Polygons	New option to save geobody polygons at the Geobody creation.
	New option to extract polygons from Geobody.
Geobody Classification	Two kinds of surface information in the Geobody Classification tool: - Projected Surface, - Total Surface.
Geobody/Layer Splitting	Improved Geobody/Layer Splitting tool with min and max values.

Advanced Interpretation

Feature	Description
Truncation Option	New Truncation option to manage stratigraphic terminations into PaleoScan™ Stratigraphic Sequences: - Truncation applied on sequence boundaries, - Top Truncation option, - Bottom Truncation option.
	Truncations preserved to generate Strati outputs: - Horizons from Strati, - Horizon Stack from Strati, - Geomodel From Strati, - Layers from Strati, - Geobodies from Strati, - Isochore from Strati.
	Truncation management in Wheeler display.
Strati Viewer	Included Map View into the Strati viewer to visualize: - Sequence boundaries in map view, - Sequence isochore in map view, - Truncated sequence boundaries with associated polylines.
Sequence Layering	New option to manage sub-layering for each layer of a PaleoScan™ sequence.
	Different methods of sub-layering: - Isoproportional, - Parallel to the top boundary, - Parallel to the bottom boundary.

Geomodel from Sequence	Possibility to generate a Geo-Model from stratigraphic sequence, based on the picked sequences and model types: - Isoproportional, - Parallel to the top boundary, - Parallel to the bottom boundary, - RGT Model.

GeoCellular Grid

Feature	Description
GeoCellular Grid	New module to generate GeoCellular Grid based on the PaleoScan™ sequences: - Fault integration into Cellular grid, - Sub-Layering management, - Property mapping, - Geocellular grid displayed in 3D according to I, J, K axes, - GeoCellular Grid Extraction, - Unit and CRS management, - GRDECL export format.

Property Modeling

Feature	Description
Interpolation Method	New option to avoid propagating log data inside a layer.

Seismic Well-Tie

Feature	Description
Log Display	New option using Log Template to customize the log display in the Well-Tie tool.

Velocity Modeling

Feature	Description
Velocity Type	New velocity type available for a layer: Linear from Bottom.

Python

Feature	Description
Python	Python API in PaleoScan™: - Available as an add-on module, - Execute Python code in PaleoScan™, - Create custom seismic attributes in Python language, - Create custom user interfaces and tools, - Use existing Python libraries such as SciPy and numpy.
Python Plugins	Create custom Python plugins.
	Import/export Python plugins.

Licensing

PaleoScan™ 2019 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 form.

Eliis provides you a free 30-day temporary license to evaluate PaleoScan™ 2019. 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™ 2019 when the projects are being loaded.

Backward compatibility:
Projects created with PaleoScan™ 2019 can also be opened with previous versions (2018 or 2017). 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 minimum requirements equivalent to the below mentioned items:

- CPU: 6-Core
- RAM: 16 GB
- Operating System: Windows® 7, 8 or 10 (64-bit)
- Graphic card: 512 MB NVIDIA® / ATI® graphic card
- IDE devices: Hard disk with fast rotational speed (> 7200 rpm)