

# **Release Notes**

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# **OpenMind v1.0.419.0**

#### **Enhancements:**

OP-334 Link window cameras (viewport) together

OP-587 Import and export fault objects

OP-681 "Select" tools to be shown only when on "interpretation mode"

OP-764 Add support for seismic export in segy 32bits

OP-765 Add support to TRUSTED-HOST for when OpenMind is installed behind proxy server

OP-768 Remove Warnings WIX1076: files not copied to ALLUSERS

OP-771 Installs Geomind AS folder content on ProgramData and copy files during load, if not present

OP-772 Add C++ Redistributable to Bootstrapper installer

OP-774 Adjust test project after RegTie-BOK removal and OWT added to Templates

OP-775 Multiple upgrades on OpenMind code dependencies

OP-777 Add SUM as a Horizon attribute function

#### **Bugs fixed:**

OP-762 Petrel horizon points not being shown after imported on Survey

OP-766 Simple velocity model not possible without wells

OP-769 OpenMind not loading without Registry license key entry

OP-770 HostService exception may prevent OpenMind from load

OP-776 Cuda package failing to install in Parallels virtualized Windows machine

OP-778 Irap imported line does not show up after saving project

OP-781 Exception when generating Time-Depth Relation (TDR) without

Pseudo-TDR

# **OpenMind v1.0.326.0**

#### **Enhancements:**

OP-751 Add Angle Stack Conditioning ML model

OP-752 Add certificate so that installer is recognized by Windows

OP-757 Upgrade on installer version

OP-758 Update OWT log names on well Templates.xlsx

OP-748 Transition to new licensing system - better support to virtual machine environments

OP-704 Synthetic trace and impedance log does not appear consistently on seismic composite plane

OP-761 Fix Geotiff export issue

# **OpenMind v1.0.293.0**

#### **Enhancements:**

OP-741 Add CUDA runtime to installer

OP-747 Add TensorRT to installer

OP-749 Use standard RGB colors to well tops

#### **Bugs fixed:**

OP-703 Synthetic Reflection Coeff Log does not appear as discrete values

OP-745 Polarity issue when autotracking

OP-746 Templates.xlsx access problem

### **OpenMind v1.0.209.0**

#### **Enhancements:**

OP-520 Add support to "Undo" in well top editing

OP-698 Axes reversed when swapping viewpoint

OP-724 Well log import improvement

OP-732 Edit VOI in plane/map view

OP-734 "Max time in ms" disabled by default

OP-736 Show input cube mini-window for SpectralDecomp attribute

OP-738 Python installation behind proxy server

OP-744 Add license details on login pop-up when license is not activated

### Bugs fixed:

OP-705 Zooming in on 2d line view gives a black well ribbon

OP-739 Issue loading specific 2D line which was missing some CDPs

OP-706 Not possible to move well top when well trace is in front of the top

# **OpenMind v1.0.162.0**

#### **Enhancements:**

OP-34 Inform user of eventual newer stable versions

- OP-353 Composite seismic intersections
- OP-431 Seismic polarity visualization choice per seismic and project
- OP-640 Update installation of ML Python dependencies
- OP-670 Units support when importing well deviation .dev files
- OP-731 Load all traces into memory for VOI

- OP-668 Problem with reading .dev file
- OP-675 Extracted body: Does not appear correct in flatten mode.
- OP-707 Volumes should be calculated down to input contact
- OP-725 Issue on VOI when loading realized cropped volume
- OP-726 Missing Ruler (scale bar) icon
- OP-729 Fill in small holes not working as expected

### **OpenMind v1.0.139.0**

#### **Enhancements:**

- OP-712 Import multiple 2D lines with the same settings
- OP-715 Performance improvements while dragging planes
- OP-719 Added Isopach horizon attribute

#### **Bugs fixed:**

- OP-714 Problem loading 2D seismic files
- OP-716 Histogram gets "inverted"
- OP-717 OpenMind doesn't recognize well logs when opening project
- OP-718 OpenMind hangs after successive "Load all traces into memory"
- OP-721 Regression: Imported Spectral Decomp cube lacks color settings
- OP-722 Zmap format issue

### **OpenMind v1.0.116.0**

#### **Enhancements:**

- OP-609 Add support to Fault subfolders
- OP-689 User request: way to visualize/filter discrete property values in imported AVO classes volume
- OP-691 Introduce Create/Edit Composite Plane
- OP-692 Improve color support for polygons
- OP-708 Upgrade to .Net 8.0
- OP-710 Introduce "Clear memory" for all objects

OP-678 Extent of attribute maps exceed the actual extent of original seismic when the "Mix with" and "Overlay by" is turned on

OP-685 Copy visual settings to same folder problem

OP-686 Issue when training 3D UNet for AI horizon interpretation

OP-688 Exception when importing shapefile

OP-690 Unload all traces does not free memory instantaneously

OP-699 Different color bars being presented, depending on seismic format

OP-701 Flickering seismic lines when moving plane

OP-702 Well data in in old project does not appear

OP-709 Issue loading saved project

OP-713 Curtain option not working, after introduction of Composite plane

### OpenMind v1.0.34.0

#### **Enhancements:**

OP-523 New coordinate system library

OP-652 Adjust z-level of imported geotiff images

OP-656 Add comments to Variance attribute

OP-661 Clean-up repeated horizon tracking AI methods

OP-665 New Make Surface tool

OP-667 Improvements on reconnecting missing seismic and geotiff files

#### **Bugs fixed:**

OP-662 Color bar not appearing when loading specific zgy file

OP-664 Reading Formation Tops failed

OP-671 Horizons seem to be linked somehow

OP-672 Loading project with 2D lines cause error

OP-674 Fix editing 2D Line Plane Node

# OpenMind v1.0.0.0

#### Tasks:

OP-207 Well import with multiple wells

OP-412 Al image-based fault interpretation - research task

OP-419 Creating "seed cube" as starting point for fault interpretation

OP-420 Adaptation FloatImage3D for fault interpretation

OP-421 Implementation of convolutional neural network for fault learning and inferencing

OP-437 Use mini window to display the seismic spectrum

- OP-498 Load, visualize, and interpret seismic 2D segy files
- OP-514 Upgrade OpenMind to .NET 7
- OP-519 Show which TDR is active
- **OP-524 Implement Variance Attribute**
- OP-525 Add frequency spectrum to mini-window
- OP-528 Introduce Velocity mini window
- OP-532 Introduce Velocity Model
- OP-538 Export polygons
- **OP-539 Introduce Volume Models**
- OP-540 Volume calculations improvements
- OP-544 Added "exclude well" to Velocity model
- OP-545 Contour/contact line for Volume model
- OP-547 Calculate Acoustic Impedance (AI)
- OP-549 Collapse all / expand individual folders and objects
- OP-551 Calculate vertical P-P reflectivity from Acoustic Impedance
- OP-552 Convolve reflectivity with wavelet
- OP-569 Make "Restore Default Layout" not to divide in two vertical blocks
- OP-585 Add missing CRS code for Australia
- OP-563 Change "Add Context" to "Add Culture Data"
- OP-565 Move "Project settings" to top menu of OpenMind
- OP-566 Change "Operations" to "Workflow"
- OP-567 Change "Logs" to "System log"
- OP-570 Make "Optional fields" in the well heads import dialog collapsable
- OP-583 Seismic file appears locked for OpenMind
- OP-593 Segy importer improvements and optimization
- OP-594 Makes well heads the only format available when importing wells on new projects
- OP-595 Update "Load data.." text showed on new projects
- OP-596 Allows scaling of well tops symbol and labels separately
- OP-597 Improve deleting multiple objects simultaneously
- OP-598 Improve usability for CRS selection on import
- OP-603 LAS individual file importer
- OP-604 New "Body Extraction" tool added to OpenMind workflow
- OP-605 Add support to multiple kelly bushing keywords when loading LAS file
- OP-606 "Drag and drop" accepted OpenMind file formats from Windows
- Explorer directly into "Data Explorer"
- OP-613 Export geotiffs
- OP-616 Improvements and fixes on LAS importer
- OP-617 New "flat" icons added
- OP-621 ZGY file open in Petrel cannot be opened in OpenMind
- OP-623 Improvements on LAS file reader
- OP-625 Improvements on wells and well top picking
- OP-628 Improve collapsible segy import preview window
- OP-631 Window gets focus from hovering over

- OP-633 Horizon looks discontinuous in "Lock camera to plane" view
- OP-634 Generate Time-Depth Relation without well tops
- OP-637 New convergent gridder horizon fill type
- OP-638 Introduce Surface calculator
- OP-641 Re-using settings when creating new fault object
- OP-642 Introduce Make Synthetic Trace log on the Well Tie Workflow
- OP-644 Display synthetic trace
- OP-649 Introduce Trace Calculator seismic attribute type
- OP-650 Enhancements on Make Synthetic Trace log
- OP-653 New Well log projection in plane command

- OP-513 Error when using AI horizon interpretation
- OP-521 Generate Time-Depth Relation ignores water depth at well
- OP-529 Wrong tooltip on Save project
- OP-531 Well tops label visualization issue
- OP-533 "View from" button occasionally shown wrongly
- OP-541 Issue when loading seismic on new projects
- OP-543 OpenMind crashes when clicking on volume directory output selector
- OP-571 No error message when loading of seismic with different geometries on the same survey
- OP-575 Information text not visible
- OP-584 Crash when importing segy from Australia with specific parameters
- OP-591 "Volume of interest" settings lacks vertical control
- OP-592 Error loading small segy file
- OP-608 Selecting the Fault Probability cube from the Explorer tab using the blue arrow in front of the input field under Auto Tracking Settings, does not work.
- OP-610 Horizon visualization problem
- OP-611 Well tops are not shown when visualized
- OP-614 Not possible to draw polygon in Time domain
- OP-615 CRS not properly recognized when importing shapefile
- OP-619 A Petrel zgy file can not be read by OpenMind
- OP-620 Error when loading Horizon points with values separated by tab
- OP-622 Wrong horizon visualization
- OP-624 CRS not being recognized when loading well heads file
- OP-626 Cubes realized inside VOI do not react correctly to horizon flattening
- OP-627 Seismic plane does display correctly for huge cubes
- OP-629 Timeslice below VOI behaves strange
- OP-630 Freepoints always visible
- OP-635 Error when loading Open Zgy file
- OP-636 Dock panels resizing issue (non-precise movement)
- OP-648 Fault probability model need active cube

### OpenMind v0.1.2645.0

#### Tasks:

- OP-55 Add signing to OpenMind installer
- OP-236 Read log values at picked location
- OP-264 Import data from Avary
- OP-279 Read Petrel .crsmeta.xml coordinate information
- OP-337 Seismic attribute calculator I
- OP-342 Generic points import on Interpretation folder
- OP-390 Adds support to NAD27 in coordinate reference system
- OP-434 Create new Well tie workflow
- OP-439 Introduce Seismic Spectral Decomposition
- OP-444 Using the Volume of Interest in the Realize operation
- OP-445 Crop volume: export to honor VOI boundaries
- OP-446 Include Python on OpenMind installation
- OP-455 Enabling different cube sizes on the same survey
- OP-459 Update Bundle installer to run with code signing certificate
- OP-467 Allow Overlay/Mix/Curtain visual options to be used simultaneously
- OP-468 Add support to logarithm well log visualization and color bar
- OP-474 Introduce new Seismic Attributes: Instantaneous Frequency,

Derivative, Integration.

- OP-475 Make horizons honor vertical VOI range, when VOI is active
- OP-479 Introduce tiles for timeslices
- OP-485 Introduce Enhance Local Contrast operation
- OP-488 Draw simple polygon
- OP-501 Lock Camera to Plane
- OP-507 Create new plane option, when in "Locked plane" mode
- OP-509 Color updates on spectral decomposition attribute
- OP-510 Shapefile improvements when used with "View all"
- OP-503 Add instrumentation to OpenMind
- OP-515 Improvements on color blending
- **OP-516 Enhancements on Mini Window**

#### Bugs fixed:

- OP-373 Too many icons are highlighted as active
- OP-379 Active Operations do not reflect workflow
- OP-381 Interpreting free points: Line on seismic section should be visible
- OP-448 Split window function is not stored when the project is saved.
- OP-458 Deleted window reappears after saving project
- OP-468 Add support to logarithm well log visualization and color bar

OP-499 Issue with visualizing segy seismic file (Lime Petroleum)

### OpenMind v0.1.0.2503

#### Tasks:

OP-364 Zoom by scroll wheel works opposite way OP-378 Update references in OpenMind-Python-Tool

#### Bugs fixed:

OP-259 North arrow disappears in Orthographic view

OP-262 "Rerun selected seed point"

OP-368 "Blue circle" does not indicate "action needed"

OP-374 Wells in time domain hanging under a black surface, not inside a black cube

## OpenMind v0.1.0.2500

#### Tasks:

OP-299: Show line number in preview

OP-372: Only surfaces from autotracked seed points can be displayed with amplitudes. This should not be our end product. Up for discussion

#### Bugs fixed:

OP-193: Wrong file names on Installer

OP-375: Fault points are not included in the surface before you increase the Max bay width. You need to keep increasing it!

### OpenMind v0.1.0.2481

#### Main updates:

- New version of Python Tool (v0.0.5.dev3), supporting interpretation and horizon objects
  - <a href="https://test.pypi.org/project/OpenMind-Python-Tool/0.0.5.dev3/">https://test.pypi.org/project/OpenMind-Python-Tool/0.0.5.dev3/</a>
- It is recommendable to upgrade to the latest stable Python version (3.10.X), and latest version of other dependencies as well (grpcio, protobuf, etc.)
- Revamping on internal messaging system
- Optimizations on Al auto-tracking
- Adds filtering on shapefiles containing multiple shapes

- Bug fixes on free points
- Other small fixes and improvements

#### List of tasks:

OP-184: Python Tool: add support to Horizons

OP-260: Delete seed points

OP-319: Fault planes are filled. Should be gaps.

OP-324: Lines are breached

#### Bugs fixed:

OP-287: Interpreting using seed points fail

OP-310: Too many active elements

OP-323: Manual interpretation x-line cylinders too high

## **OpenMind v0.1.0.2465**

#### List of tasks:

OP-183: CRS library upgrades

### **Bugs fixed:**

OP-321: Error message when clicking "Ctrl+A" on fault points

OP-325: Missing New 3D Window menu button OP-328: Error when training Al interpretation

## OpenMind v0.1.0.2461, with Python Tool v0.0.5.dev2

#### List of tasks delivered:

OP-231: Update project after changing Templates.xlsx

OP-235: Install Color Maps folder on user AppData

OP-242: Workflow improvements around interpreting previously interpreted seed points

OP-269: Select multiple seed points with Ctrl-click

OP-320: Enables using fault probability cube as input to autotracker

#### **Bugs fixed:**

OP-265: Making surface from horizon fails

OP-309: Erasing seed points with x-circle - crashed

# OpenMind v0.1.0.2455

#### <u>List of tasks delivered:</u>

OP-91: Magnify from center

OP-300: Use comma as a separator in Generic points

#### **Bugs fixed:**

OP-252: Autotrack Resolution Issue

OP-253: Autotrack avoid seed points

OP-256: Hourglass blocking Horizon tracking from seed points

OP-284: Seed point Visualization

OP-294: Multiple 3D windows issue

OP-297: Cryptic error message when autotracking

OP-306: Error message when interpreting near undefined areas

OP-308: Old bug is back. Dots remain after surface delete.

OP-309: Flatten horizon gives error message

### OpenMind v0.1.0.2451

#### List of tasks delivered:

OP-209: Introduce "Make surface from horizon" operation

OP-210: Autotracking extensions (review over buttons functionality)

OP-288: Review over FileShare option when opening zgy file

OP-305: Introduce "free points" for manually extending horizon interpretation

#### **Bugs fixed:**

OP-240: Crash on import of KingdomExport.sgy

OP-249: Generic points fails with XYZ format

OP-277: The volume is rotating in north south direction, but not in east-west

direction

OP-283: Dozens of Error pop-ups when opening project saved with

Al-interpreted horizon

OP-286: ZGY Import fails from external disk (Lundin T drive)

OP-290: Shapefile does not appear after saving project

OP-291: Error loading project saved with Geotiff images

OP-302: Storing a zgy file from a segy file in OpenMind gives an error

message

# OpenMind v0.1.0.2422

#### List of tasks delivered:

OP-208: Investigate Blueback Avary API

OP-276: Extend support to new shapefile type not yet supported

OP-282: Change order for seismic import format

#### **Bugs fixed:**

OP-266: Autotracker makes yellow line interpretation without filling surface

OP-281: Horizon Visual settings missing when opening saved project

OP-285: Missing Global well logs top icon

# **Document history**

Date	Details	Editor - Title
2022-11-19	Initiated document	Flávio Ivan - CTO
2023-03-31	Updates for version 0.1.2645.0	Flávio Ivan - CTO
2023-10-12	Updates for version 1.0.0.0	Flávio Ivan - CTO
2023-12-16	Updates for version 1.0.34.0	Flávio Ivan - CTO
2024-02-08	Updates for version 1.0.116.0	Flávio Ivan - CTO
2024-03-06	Updates for version 1.0.139.0	Flávio Ivan - CTO
2024-04-03	Updates for version 1.0.162.0	Flávio Ivan - CTO
2024-05-29	Updates for version 1.0.209.0	Flávio Ivan - CTO
2024-08-06	Updates for version 1.0.299.0	Flávio Ivan - CTO
2024-09-10	Updates for version 1.0.326.0	Flávio Ivan - CTO
2024-12-04	Updates for version 1.0.419.0	Flávio Ivan - CTO