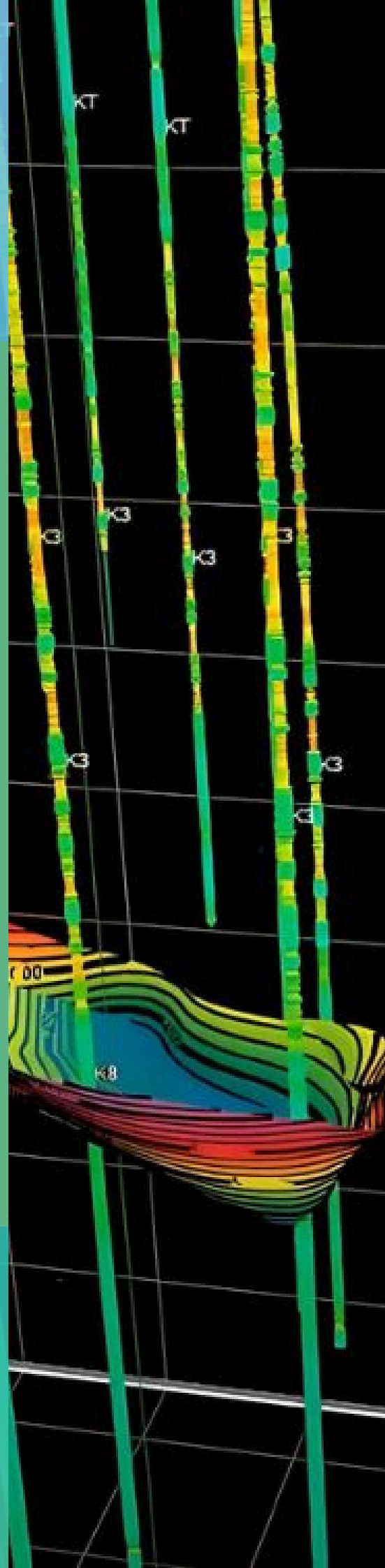


GVERSE
GeoGraphix
Potential to Production



GVERSE GEO+

Fully Integrated 3D
Interpretation



A COMPLETE GEOSCIENCE PLATFORM



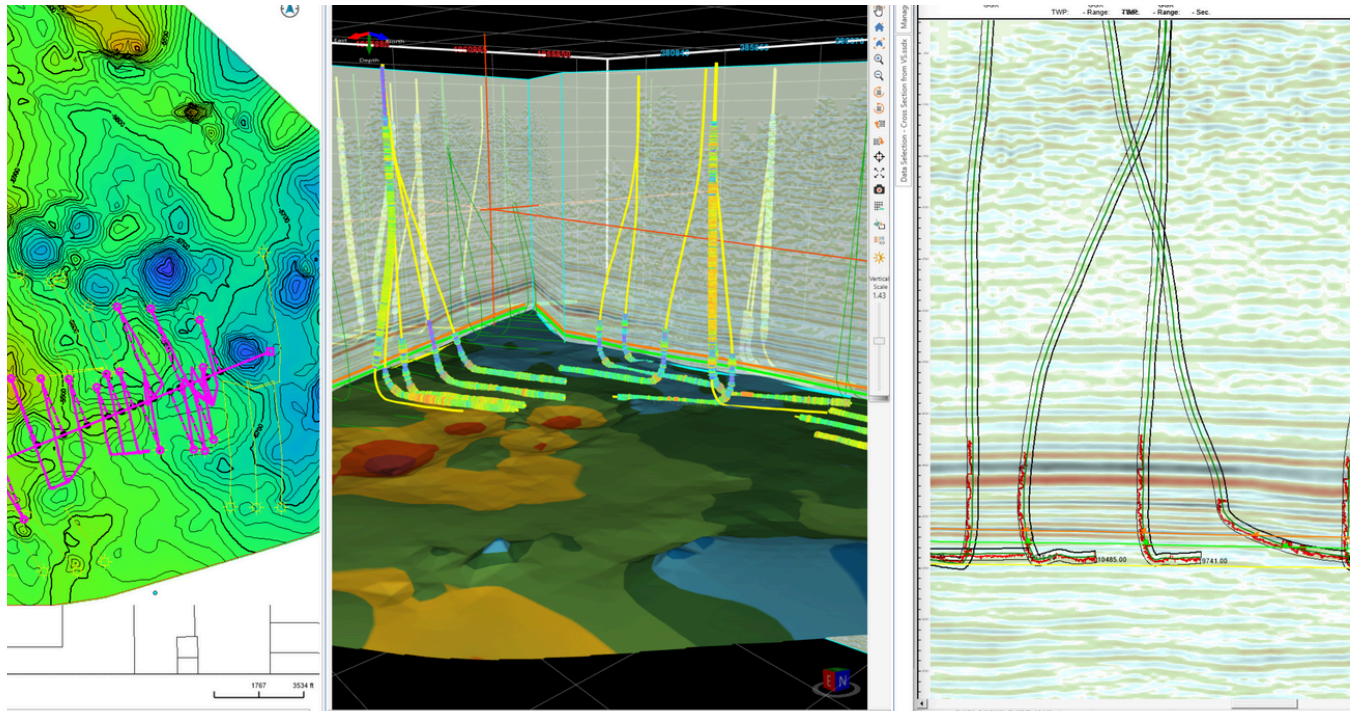
Streamline Exploration and Production Workflows

Our comprehensive **GVERSE GeoGraphix** solution integrates geological, geophysical, petrophysical, and data management tools allowing geoscience teams to collaborate and make rapid, accurate decisions.

GVERSE Geo+ is an integrated solution for subsurface geological and reservoir modeling, enabling informed decision-making for field and well planning. It combines geological, geophysical, petrophysical, GIS, and engineering data in one environment, supporting real-time 3D visualization of the evolving geomodel. This allows for a comprehensive analysis of the petroleum system, optimizing field development. Key features include surface conformance modeling, fault offset, channel geometries, and automatic fault polygon generation, alongside the creation of gross, net, and reservoir property maps. By integrating multiple data types, **GVERSE Geo+** delivers optimized solutions for field development.

Simplify Complexity, Maximize Insight with GVERSE Geo+

Streamline Decision-Making with an All-in-One Geoscience Toolkit with Fully Integrated 3D Interpretation.



Key Benefits

Real-Time Integrated Visualization of Results

GVERSE Geo+ provides an integrated real-time map view, cross section view, and 3D visualization of the developing geomodel. It integrates petrophysical, geophysical, drilling, and GIS data into the interpretation to observe the real-time effect of what-if scenarios on a developing geomodel.

Quick and Easy

As compared to traditional tools, **GVERSE Geo+** allows geoscientists to load, integrate, interpret, and display large datasets with minimum time and effort required.

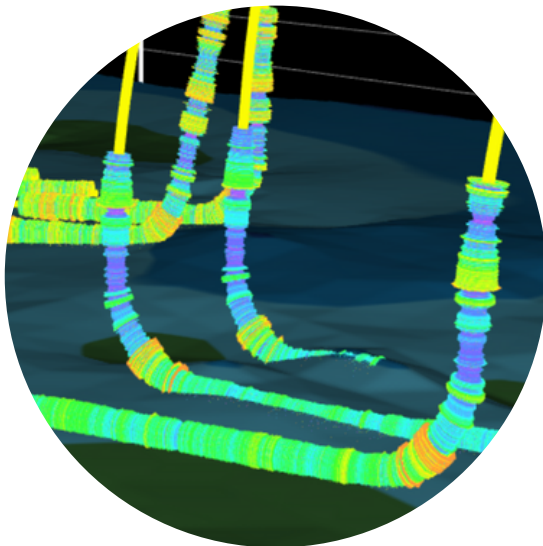
Flexibility

Features like the ability to Quick Pick surface tops and fault cuts on cross sections and the Map View, clip the 3D grid, develop fence diagrams, create modeling regions, and define well group annotations to offer.

Key Features

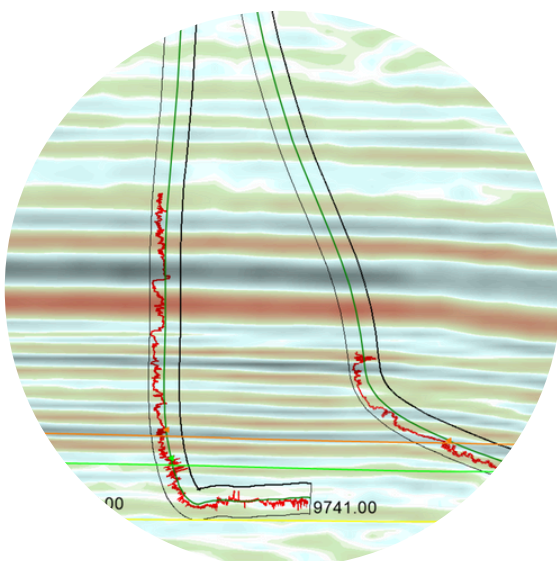
Integration

Observe the multi-disciplinary relationships in your geomodel with tightly integrated and synchronous Map, Cross Section and 3D views. **GVERSE Geo+** is designed for the geoscientists who work on integrated data sets that include geological, petrophysical, geophysical, drilling, and GIS data. It includes an integrated map, cross section, and 3D view of the geomodel which enables you to work in 2D or 3D views simultaneously. Use the GeoSurface Model tool to efficiently source and generate surfaces and faults and model complex geometries such as unconformities, channels, and subcrop maps, conformance relationships among surfaces, and fault offset and automatic fault polygon generation on all the views of **GVERSE Geo+**.



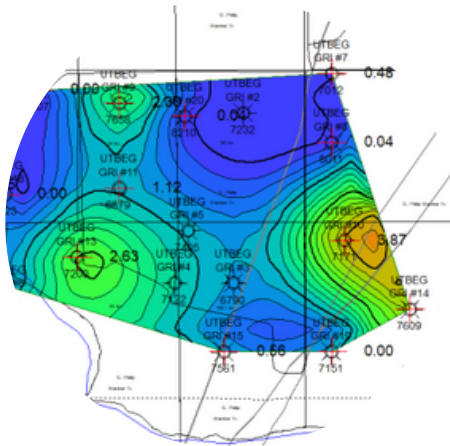
Integration with GVERSE Petrophysics

Considering the importance of petrophysics in understanding the reservoir, the application facilitates the representation of petrophysical properties (i.e. porosity, saturation, and geomechanics, etc.) based on **GVERSE Petrophysics** models. These petrophysical modeling results can be displayed on the fence diagrams as curves to better understand the character of the reservoir or on presentation templates on the cross section view.



Integration with GVERSE Geophysics

Incorporate your seismic interpretation into your geomodel with dynamically depth converted horizons, faults, and seismic backdrops on cross sections and fence diagrams. Update the velocity model with interpreted interwell points from your smartSTRAT geosteered well for the most up-to-date depth conversion possible.

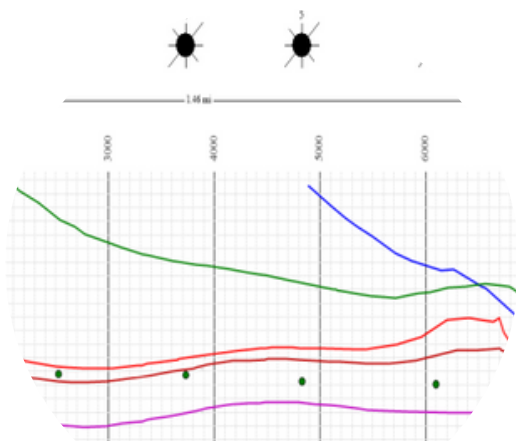


Integration with ZoneManager

Attribute data stored in **ZoneManager** zones can be accessed to automatically generate property maps in Map View. This feature enables **GVERSE Geo+** to have access to data from any source that is stored in **ZoneManager** for full integration across multiple domains.

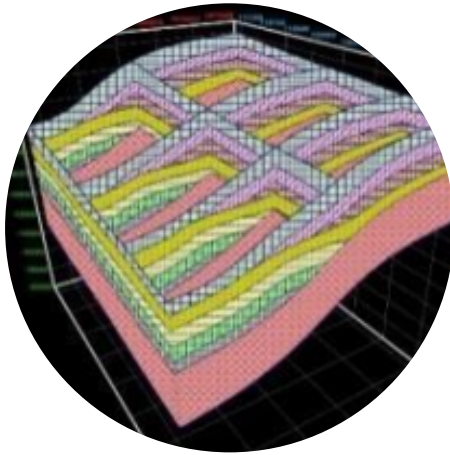
On-the-Fly Subsurface Modeling

Observe the multi-disciplinary relationships in your geomodel with tightly integrated and synchronous Map, Cross Section and 3D views. **GVERSE Geo+** is designed for the geoscientists who work on integrated data sets that include geological, petrophysical, geophysical, drilling, and GIS data. It includes an integrated map, cross section, and 3D view of the geomodel which enables you to work in 2D or 3D views simultaneously. Use the GeoSurface Model tool to efficiently source and generate surfaces and faults and model complex geometries such as unconformities, channels, and subcrop maps, conformance relationships among surfaces, and fault offset and automatic fault polygon generation on all the views of **GVERSE Geo+**.



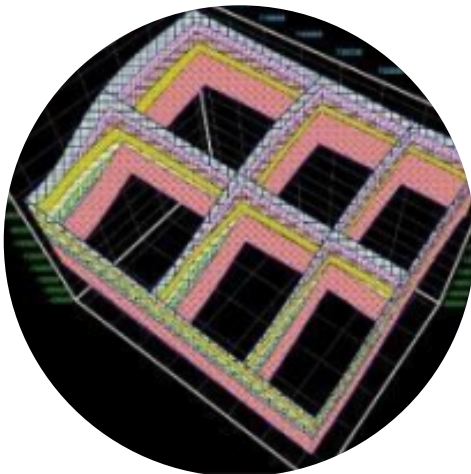
Block Diagrams

GVERSE Geo+ allows you to create block diagrams or gun sight sections that show intersection point of horizontal wellbore with the line of section as it drills through the target formations. In block diagrams, the line of section is laid perpendicular to the wellbore path and in the cross section view they show penetration point of the horizontal wellbore drilling inside the target horizon. This helps the drillers in planning inside the drilling section unit as distances between wells can be shown in the block diagram.



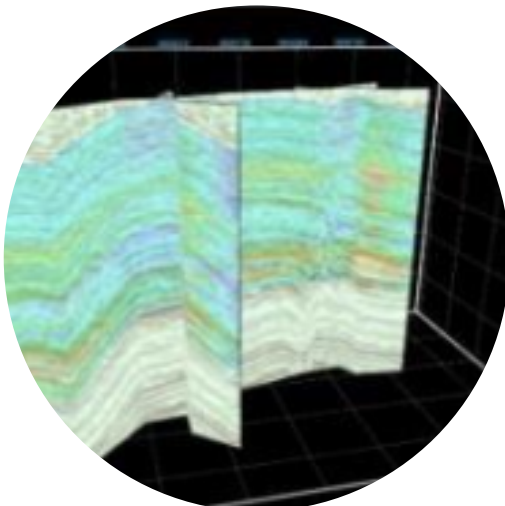
Fence Diagram

Facilitate a better understanding of the reservoir by creating fence diagrams of the open cross sections. This feature assists in analyzing and representing litho-stratigraphic relationships, pinchouts and truncations of units, unconformities, structural and stratigraphic traps within the reservoir.



Co-Blending

Validate the reservoir behavior by co-blending seismic attributes against interpolated curve properties, lateral lithofacies variation, and related structural geometries on cross sections and fence diagrams.



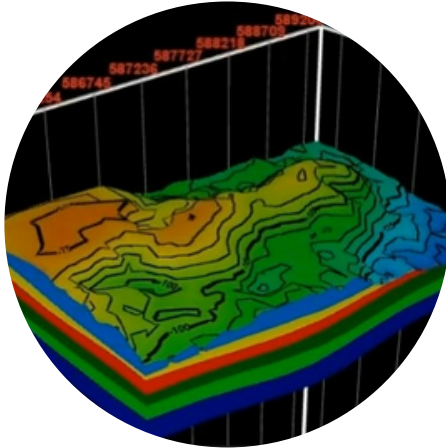
Interpolation

Advance your understanding of the reservoir by analyzing different geological sections and identify lithofacies, stratigraphic sequences, and depositional trends from the logs. **GVERSE Geo+** interpolation helps you understand the interplay between lithofacies and depositional or structural trends

User Interface and Experience

Clipping Planes

In a complex geomodel, clipping can play a significant role in examining the relationships among surfaces and faults. Using the **GVERSE Geo+** clipping tool, you can easily clip planes vertically or horizontally to keep a specific portion of the scene's geometry in focus and analyze the trajectory of wells as they are drilled through geomodel surfaces.

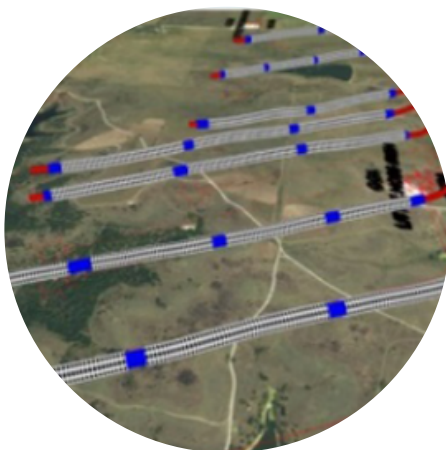


Completion and Perforation Postings

Display completion stages and perforation clusters along the wellbore path in 3D View to identify the productive zones of the targeted formations.

Opening XSection Cross Sections in GVERSE Geo+

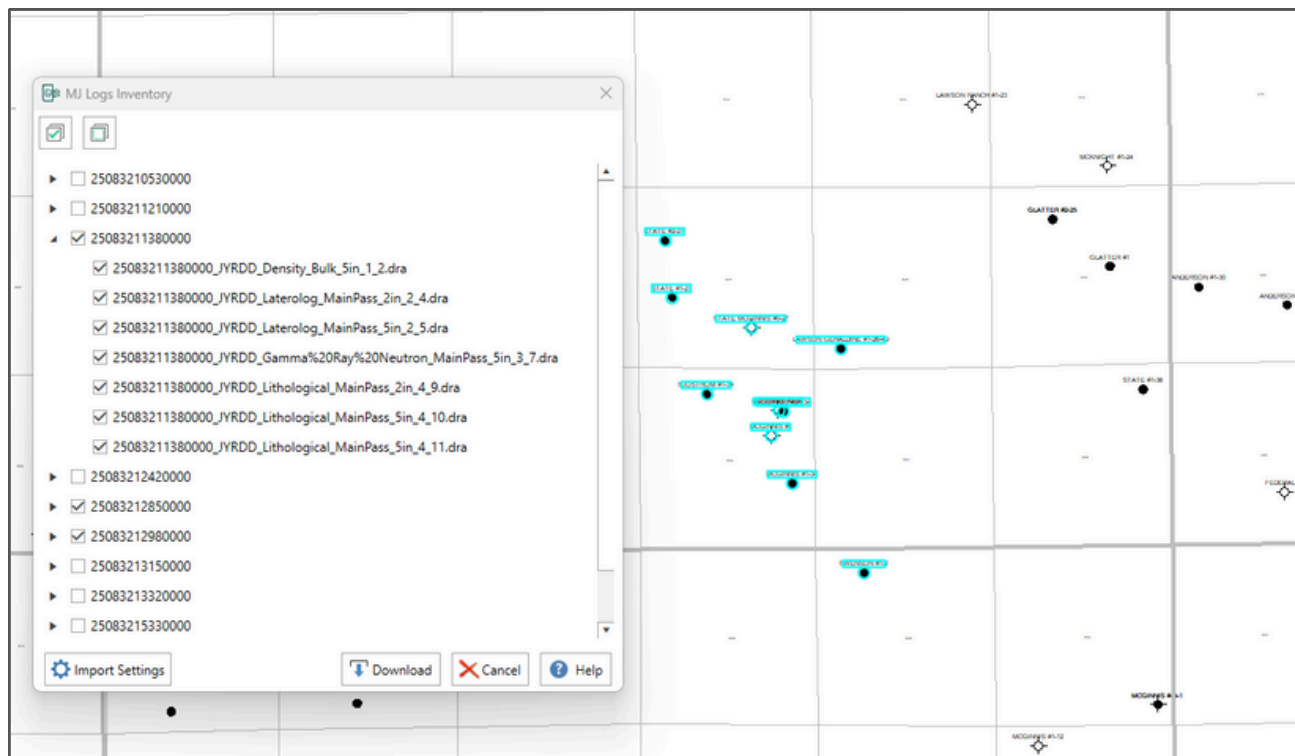
XSection cross sections within the AOI of the active interpretation can be migrated into the **GVERSE Geo+** interpretation to integrate legacy cross section work with the new interpretation. This import feature validates the data in the **XSection** cross section and matches the stratigraphic column, surfaces, faults, and the cross section name in the migrated cross section.



Release Highlights

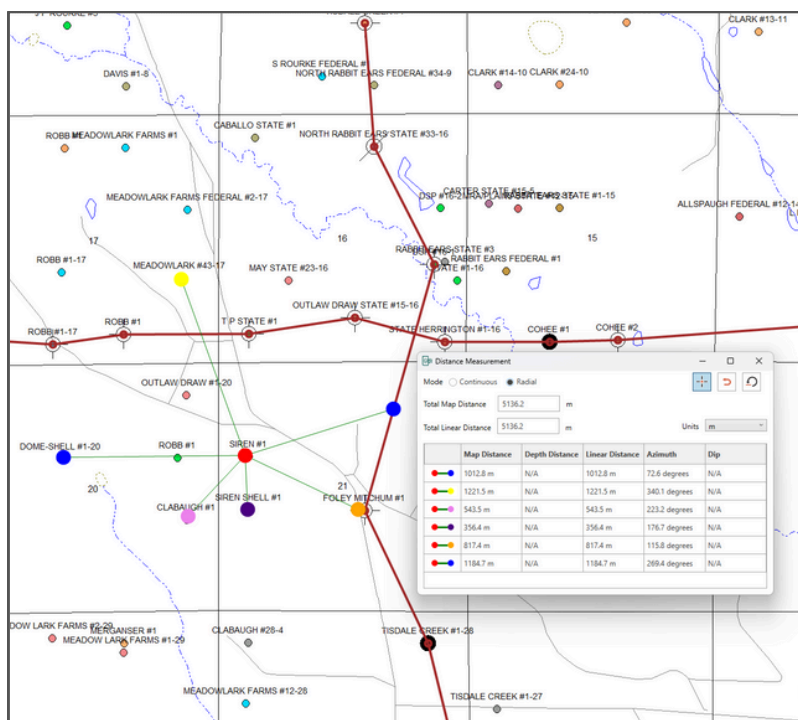
Download Raster Logs Directly from MJ Logs

Use your MJ Logs username to access all entitled data. Select wells directly on the **GV**VERSE Geo+ map and view available logs. Import registered raster logs and images directly to your project.



Do More with the Map

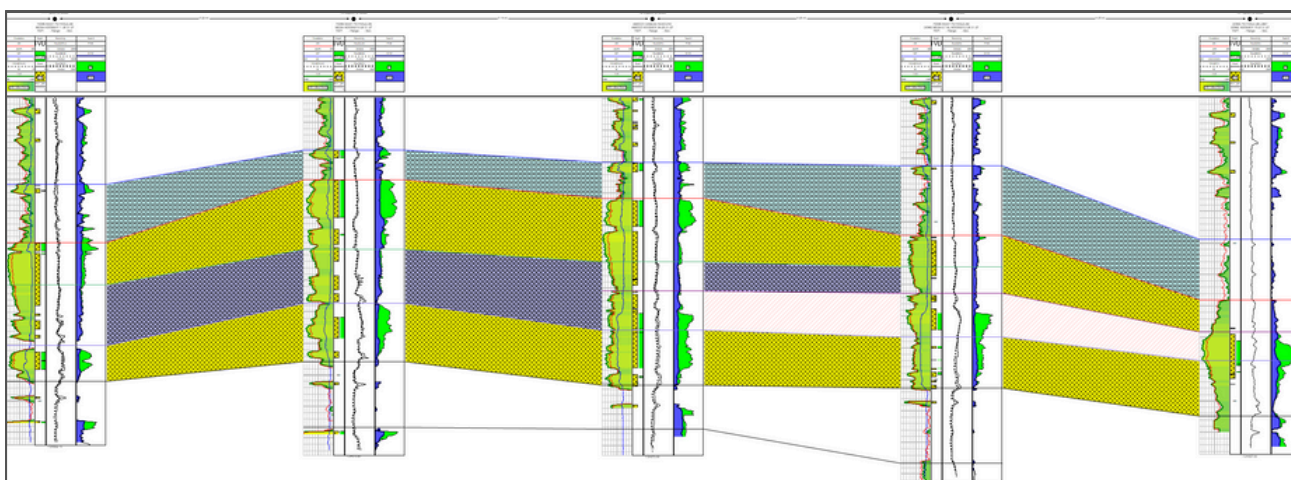
Crop the **GV**VERSE Geo+ map to an AOI or custom extents to focus only on the area of study. Measure distances and azimuths between successive points or from a single point. Get more done, faster with an updated UI for easier interaction with objects on the map and the overall application.



Release Highlights

Do More with Cross Sections

Show and post distances from entities on culture layers, hide tracks with no curves, add background images, set custom datum values, and more. An enhanced measurement tool to measure distances, azimuths and dips. Interpolate virtual UDE curves between wells. Many usability enhancements for even more efficient workflows.



Performance and Other Improvements

Work faster with performance improvements ranging from selecting wells to add to a cross section to configuring the geomodel for detailed structural analysis. Multiselect wells for bulk actions, redesigned menus and dialogs for easier access and more control.

Triton 2024 Features List

Release	Features
2024.2	<ul style="list-style-type: none"> • Use your MJ Logs username to access all entitled data. Select wells directly on the GVERSE Geo+ map and view available logs. • Import registered raster logs and images directly to your project. <p>Experience significant performance boost for GVERSE Geo+ & GVERSE XSection when:</p> <ul style="list-style-type: none"> • Loading interpretations and well data. • Toggling real-time modeling on or off. • Rendering cross sections with large UDE-based log templates. • Working with maps, 3D view and cross sections. • Interacting with other GeoGraphix modules like WellBase, GeoAtlas and ZoneManager.
2024.1	<ul style="list-style-type: none"> • Support for layer stacks on the GVERSE Geo+ map. • Crop GVERSE Geo+ map to an AOI or custom extents. • Measure distances and azimuths from a single point or between successive points on the map and cross sections. Measure dip on cross sections. • Show intersections of the line of section with culture layer entities on cross sections. • Interpolate virtual UDE output curves between wells on cross sections. • Hide tracks with no curve data on cross sections. • Add background images to cross sections. • Set a custom zero value on the vertical axis with custom datums for cross sections. • Access document library for wells directly from cross sections. • Post remarks from the formation table on cross sections. • Control precision of depth postings on cross sections. • Control font settings for distance postings on block diagrams. • Add or remove multiple wells from the map to the active or any open cross section. • Hide the line of section of the active cross section on the map. <p>Performance improvements:</p> <ul style="list-style-type: none"> • Eliminated delay when selecting wells to build cross sections in large projects. • Faster model configuration in large projects with many surfaces. • Faster loading of cross sections with complex log templates. <p>Other enhancements for more efficient workflows:</p> <ul style="list-style-type: none"> • Redesigned map display order panel for easier access and more control. • Enabled multiselect in the well list on cross sections for bulk actions. • More organized ribbon menus. • Updated UI for Wells/Logs tab. • Set default display settings for XY points on cross sections. • Access well group display settings from 2D data panel.

Technical Specifications

The following sections list the system requirements for the GVERSE Geo+:

Hardware

- System: 8 GB (16+ GB recommended)
- Graphics Card: 2 GB (4 GB recommended)
- DirectX 11 capable hardware

Note: We recommend using the latest video drivers and Microsoft updates for your system.

Software

The software that must be installed on the system running the application are as follows:

- GVERSE® GeoGraphix 2024.2
- License Management Tool 2024.1 for GVERSE® Geo+ license
- Microsoft DirectX End-User Runtime

Operating System

To run the application, you need one of the following operating systems installed on your system:

- Windows® 10 Professional x64
- Windows® 10 Enterprise x64
- Windows® 11 Professional x64
- Windows® 11 Enterprise x64

Note: *It is recommended to use the latest Microsoft® service packs and security patches*

Licenses

The following licenses are required to run the application:

- GVERSE® GeoGraphix license version 2024.2
- GVERSE® Geo+ license version 2024.2
- License Management Tool version 2024.1