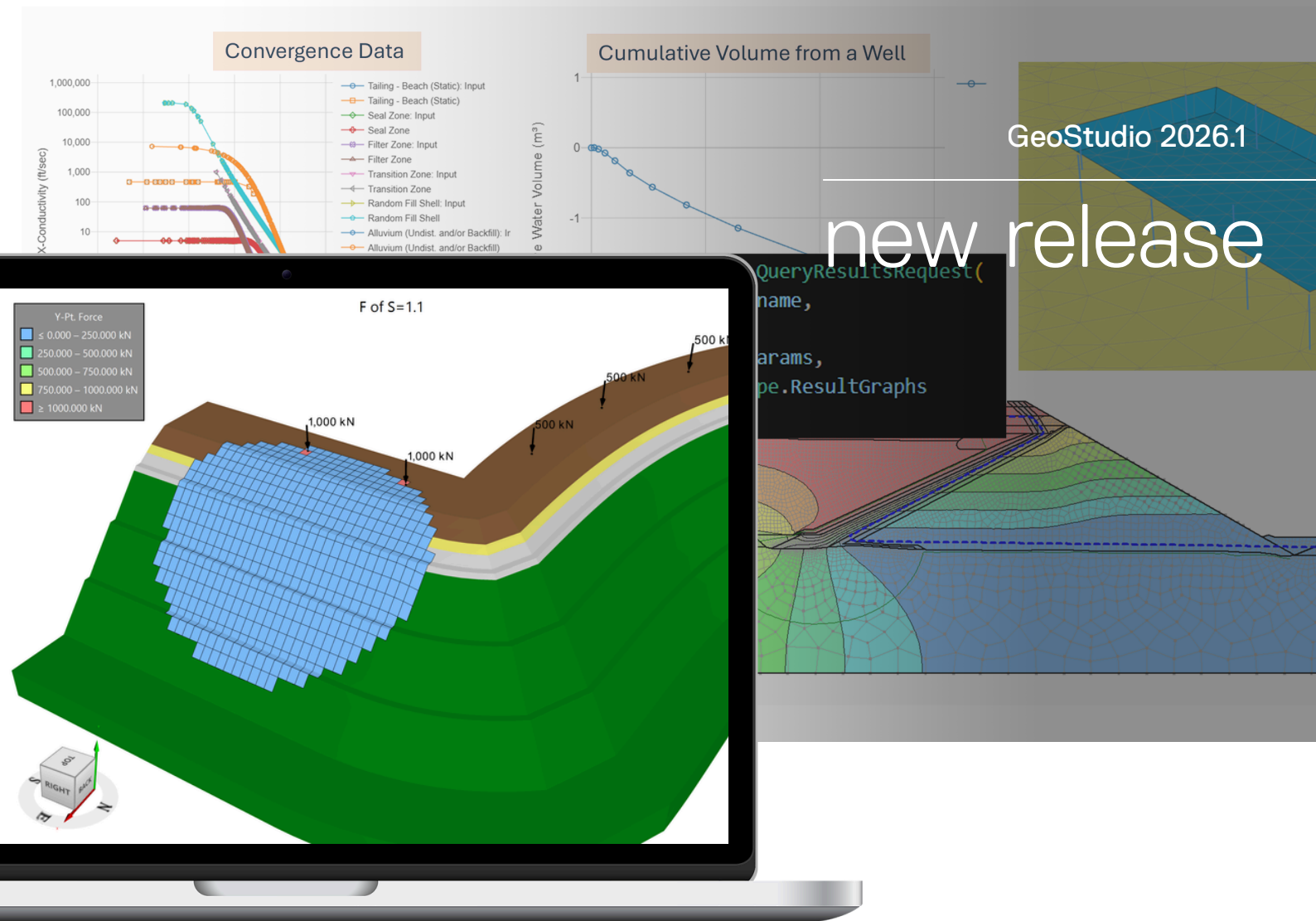




GeoStudio 2026.1

new release

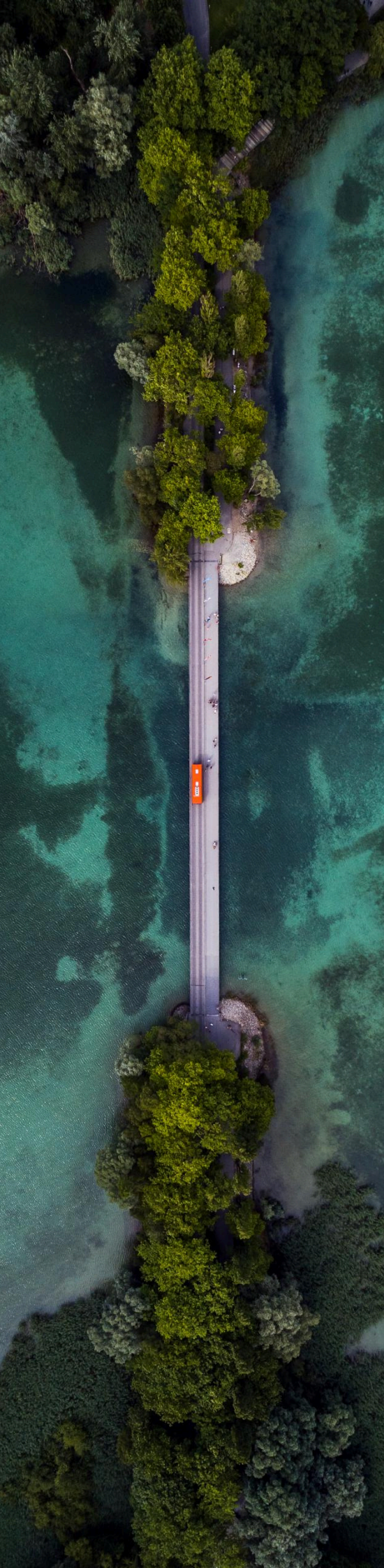
GeoStudio 2026.1 Release Notes

GeoStudio 2026.1 advances engineering productivity through a combination of usability improvements, performance enhancements, and expanded analysis capabilities.

This release introduces point loads in SLOPE3D for more realistic simulation of concentrated loading conditions and significant enhancements to the Python scripting API for improved workflow automation and data extraction.

Additionally, GeoStudio 2026.1 offers optimized performance and scalability of large 3D analyses, expanded industry reinforcement libraries, enhanced seismic slope stability workflows, and new tools for managing reference images and model components more efficiently.

Together, these improvements streamline engineering workflows and contribute to high-quality geotechnical solutions.



Contents

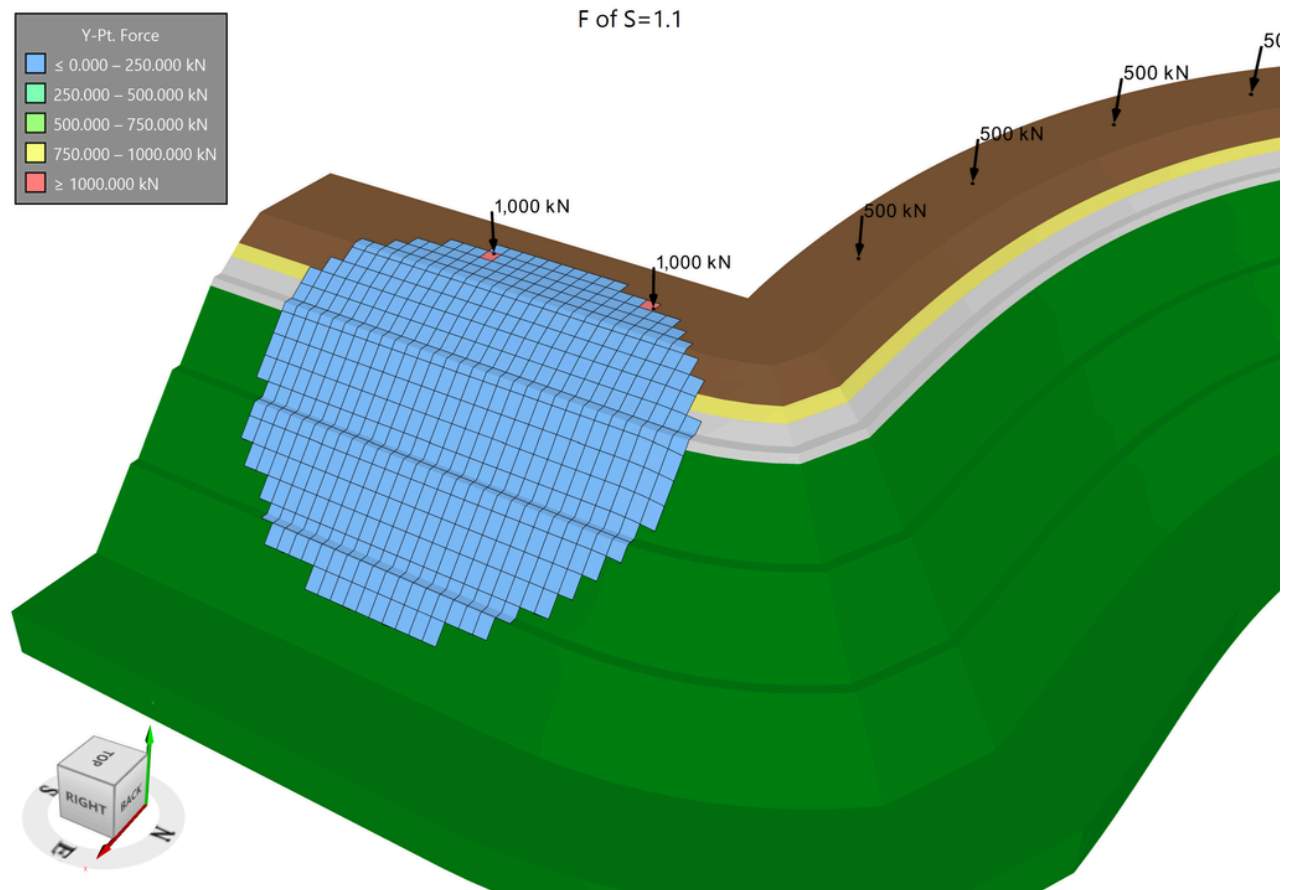
1. New and improved features in GeoStudio 2026.1	2
1.1. Points Loads in SLOPE3D	3
1.2. Enhanced Python Scripting API	4
1.3. Opacity and Background Control in Sketch Pictures	4
1.4. Expanded Context Menu Experience	5
1.5. GeoStudio 3D Performance Enhancements	5
1.6. Ace Geogrids Geosynthetics Reinforcement Library	6
1.7. Spectral Pseudo-Static Column Force Add-In	6
2. Tech Previews in GeoStudio 2026.1	7
2.1. Cloud Interoperability: PLAXIS & GeoStudio - Tech Preview	7
2.2. Cloud Interoperability: GeoStudio & Leapfrog - Tech Preview	7
2.3. Georeferencing in GeoStudio - Tech Preview	8
These features are released as a 'Tech Preview' under our Product Terms and primarily supports Evo-enabled workflows	
3. Bug fixes and changes	9
3.1. GeoStudio	9
3.2. GeoStudio 2D	10
3.3. GeoStudio 3D	11

New and improved features in GeoStudio 2026.1

Point Loads in SLOPE3D

GeoStudio now offers 3D point loads creation in SLOPE3D, enabling users to model concentrated forces acting on a slope surface or within the soil mass.

This enhancement aligns with similar capabilities in 2D and significantly expands the analytical flexibility of SLOPE3D. By allowing users to simulate localized loads such as those from foundations, equipment, or structural elements, this feature provides a better representation of real conditions for slope stability assessments.

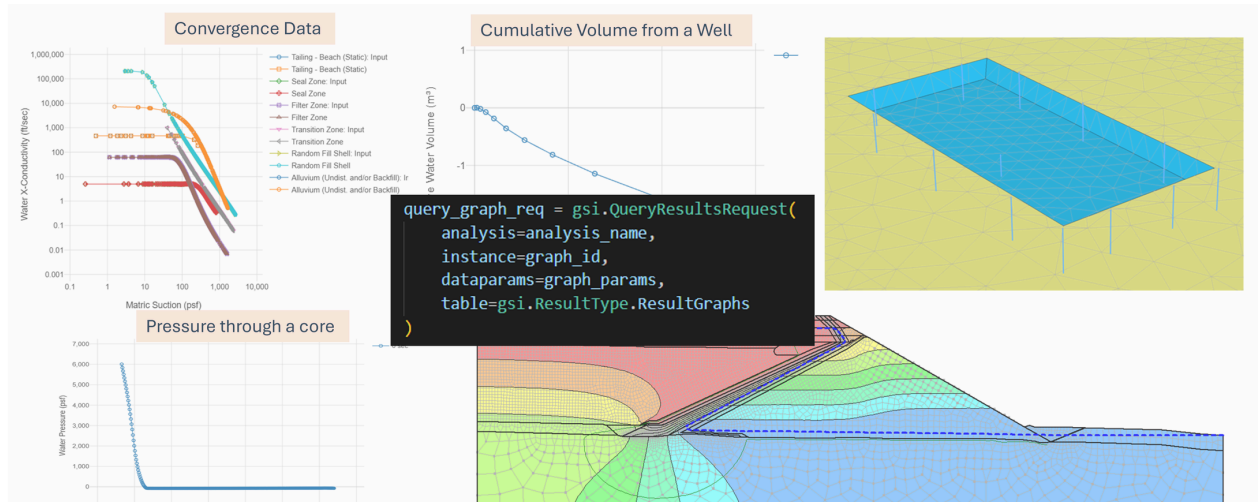


Enhanced Python Scripting API

GeoStudio brings significant upgrades to the Python scripting API, providing users with more control and efficiency in automating workflows.

New capabilities include accessing cached graph results directly from the file, streamlining data extraction from analyses. Performance improvements reduce solve times when the solver is triggered via a script. Expanded documentation, along with additional example scripts, makes it easier than ever to get started.

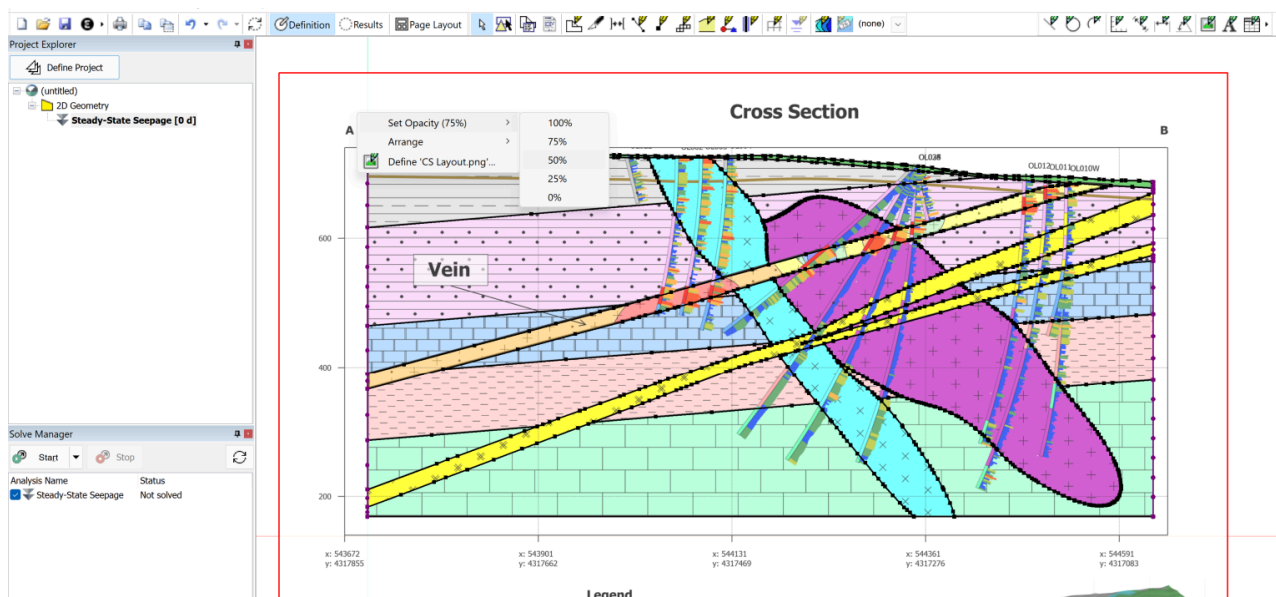
These enhancements reflect our ongoing commitment to usability, extensibility, and empowering advanced users with robust, scriptable access to GeoStudio.



Opacity and Background Control in Sketch Pictures

GeoStudio users can now improve the visibility and usability of imported reference images by removing white backgrounds and adjusting image opacity within Sketch Pictures.

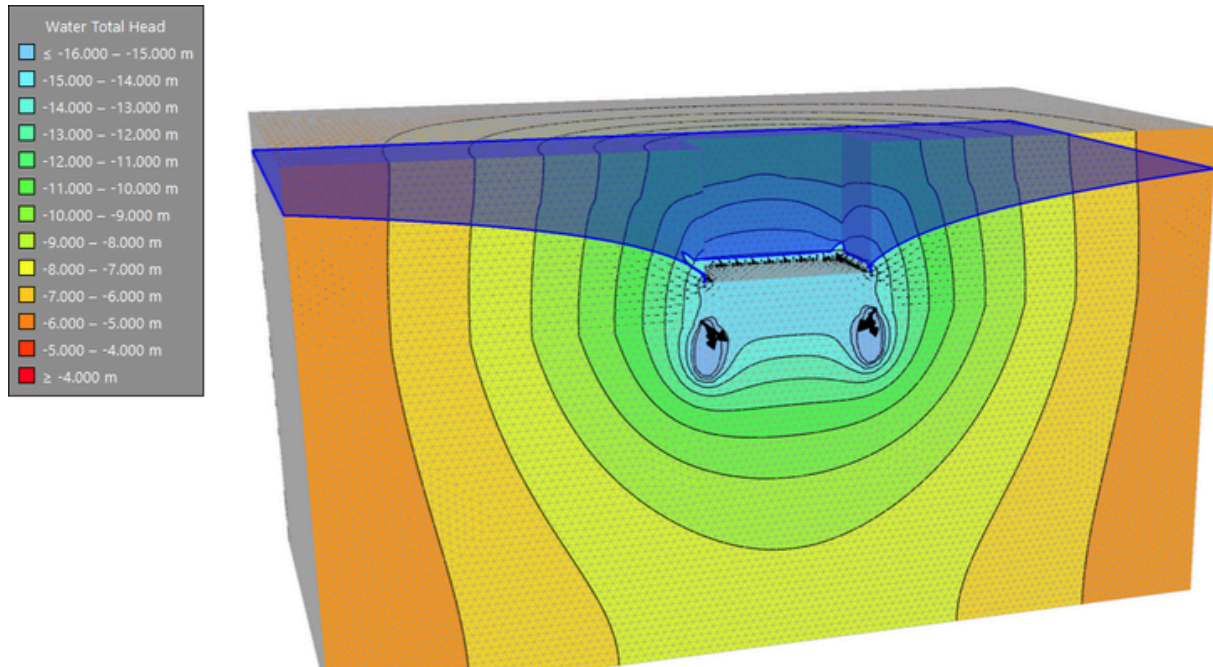
These enhancements make it easier to work with scanned cross-sections, sketches, and drawings by reducing visual obstruction from image backgrounds and allowing better visualization of the underlying model geometry. This results in a more efficient and intuitive geometry creation and editing workflow.



GeoStudio 3D Performance Enhancements

As part of our ongoing performance improvement efforts for large 3D analyses, this release introduces targeted optimizations that reduce memory consumption, improve solver efficiency, and enhance overall responsiveness when working with complex models.

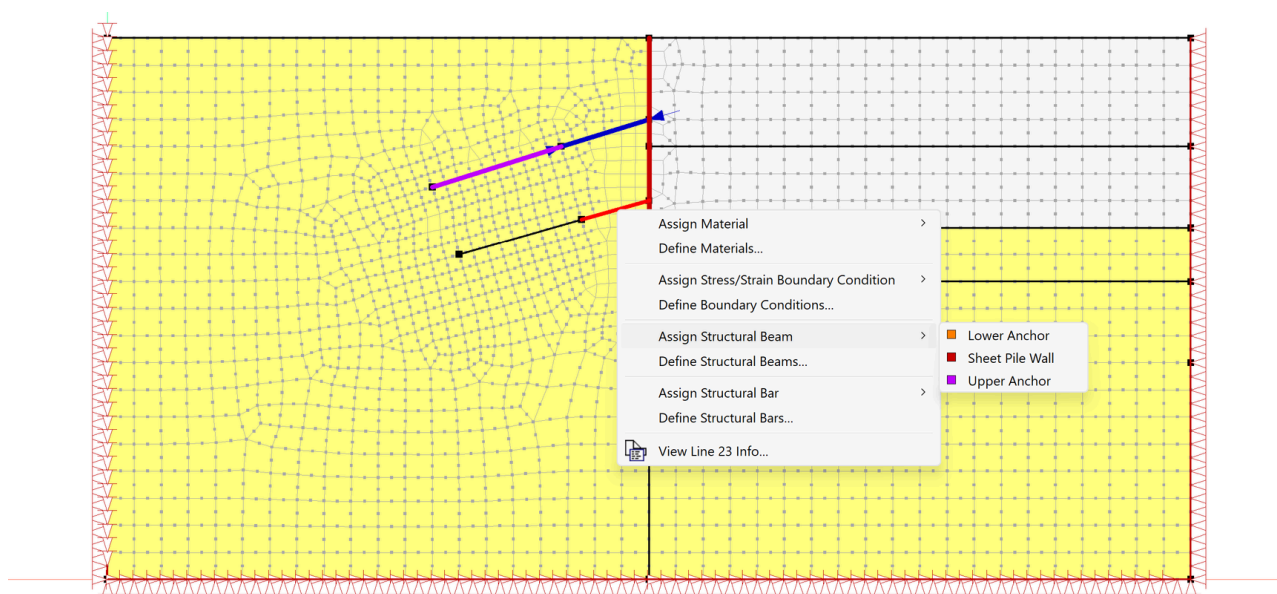
Users analysing large 3D models can benefit from more stable execution, fewer memory-related interruptions, faster interaction with results, and improved scalability, enabling GeoStudio to handle increasingly large and detailed models with greater reliability and efficiency.



Expanded Context Menu Experience

Enhanced context menus bring commonly used actions closer to users' workflows by providing direct access to relevant commands.

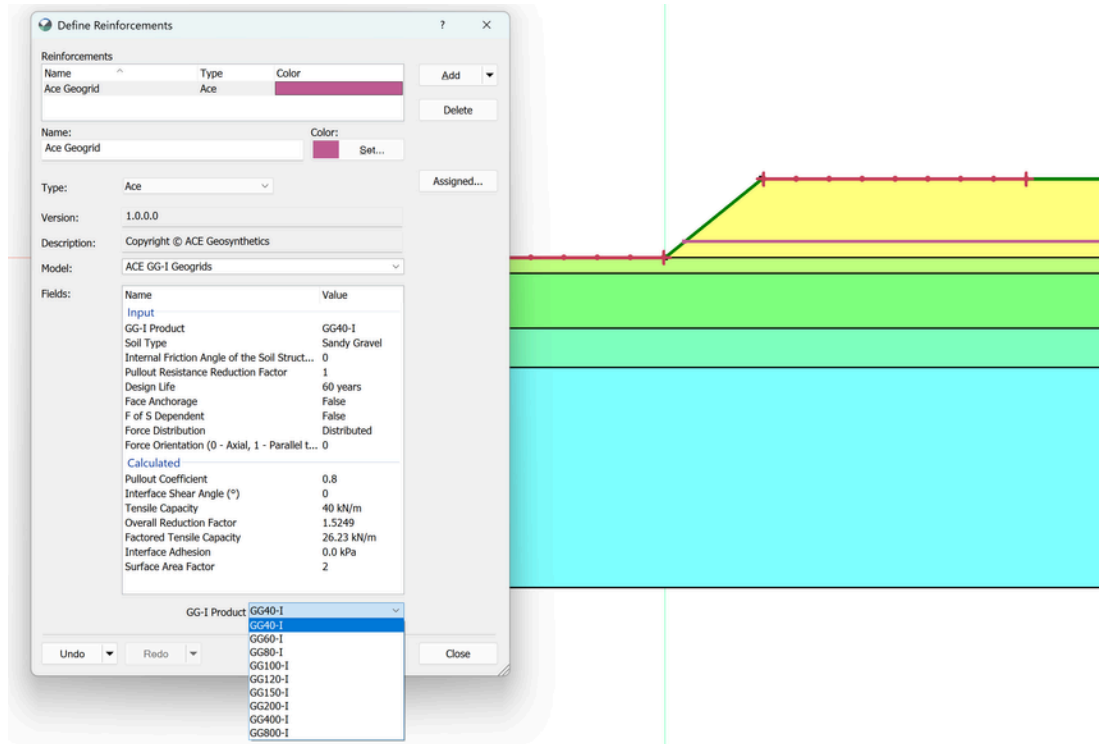
By reducing menu navigation and clicks, users can more efficiently adjust Sketch Picture properties, manage structural elements, assign boundary conditions to lines and points, and access object information directly from the modelling workspace.



Ace Geogrids Geosynthetics Reinforcement Library

GeoStudio users can now directly access Ace Geosynthetics reinforcement properties within Slope/W, reducing manual data entry and helping ensure reinforcement parameters are applied consistently and accurately with manufacture specifications.

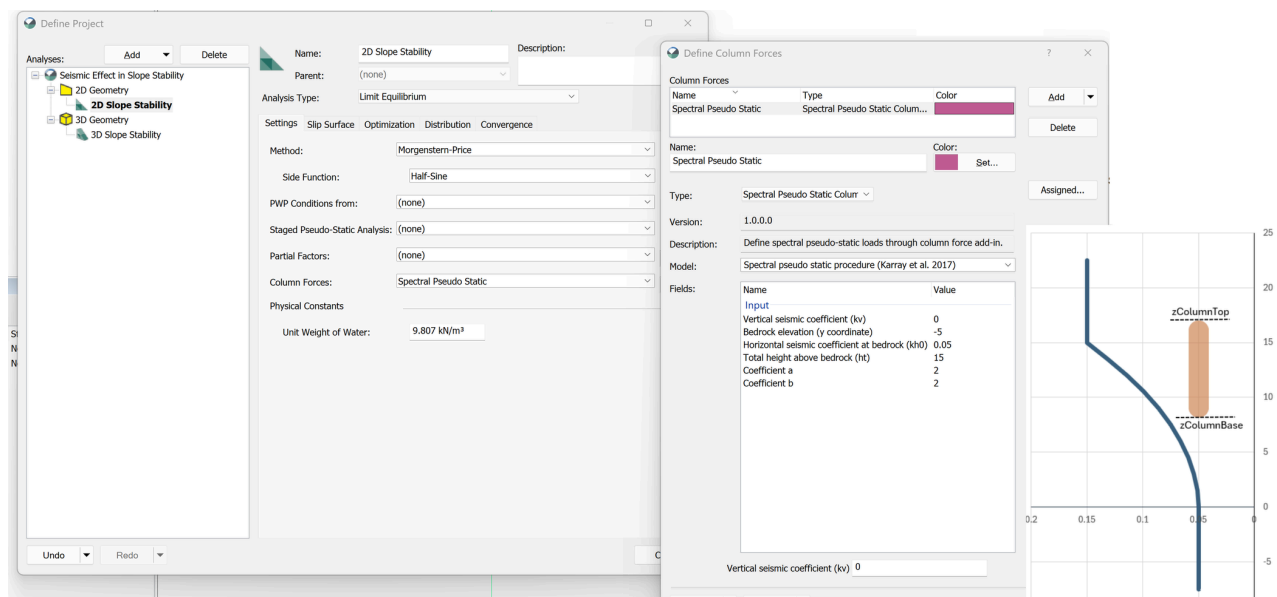
This streamlined workflow saves time during model setup and makes it easier to incorporate manufacturer-specific geogrid products into engineering workflows.



Spectral Pseudo-Static Column Force Add-In

The Column Force Add-In has been extended to support the Spectral Pseudo-Static procedure for seismic slope stability analysis.

Unlike traditional pseudo-static methods that apply a single constant seismic coefficient, the Spectral Pseudo-Static approach uses a depth-dependent seismic coefficient to better represent seismic loading, resulting in factor of safety calculations and failure surface predictions that more closely align with full dynamic analyses.

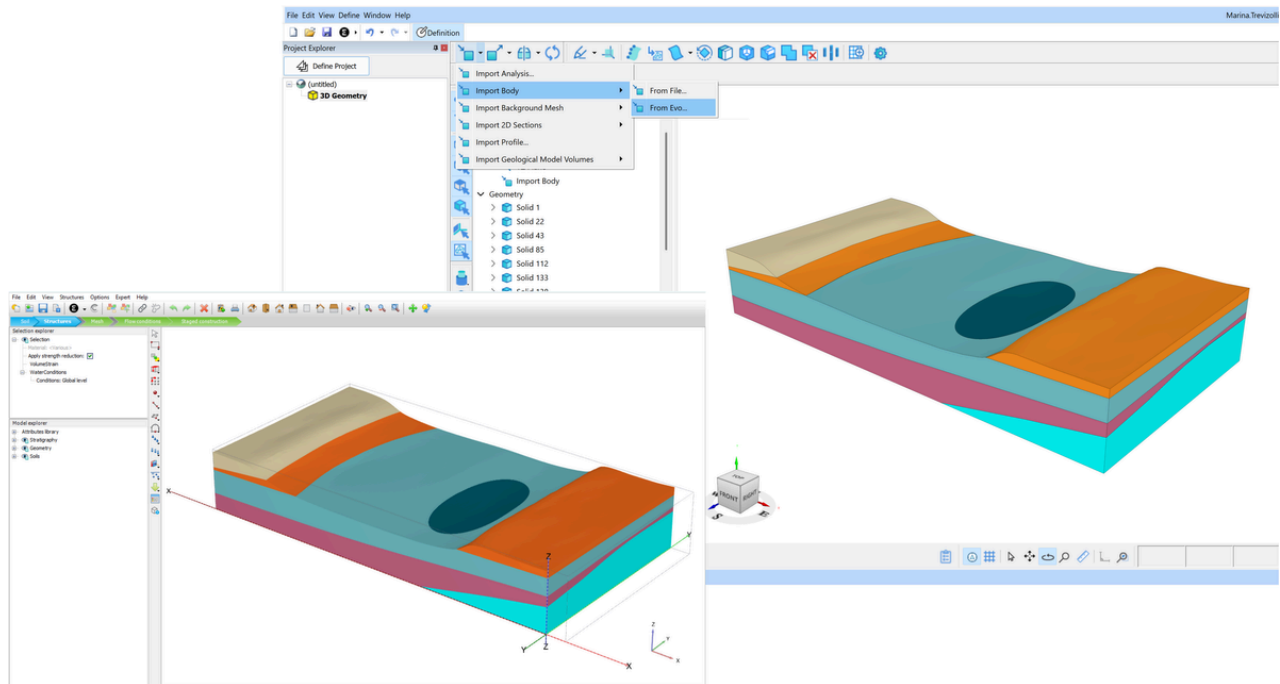


Tech Previews in GeoStudio 2026.1

Cloud Interoperability: PLAXIS & GeoStudio - Tech Preview

This feature is released as a 'Tech Preview' under our Product Terms and requires access to Seequent Evo.

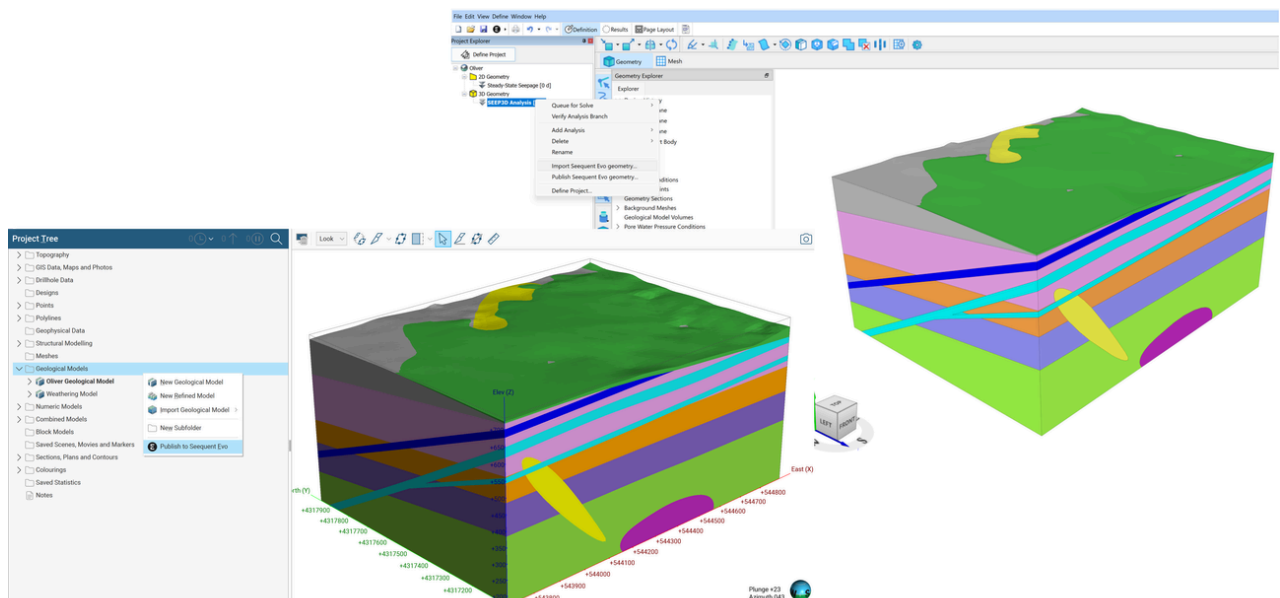
Sequent Evo enables cloud-based interoperability between PLAXIS and GeoStudio, allowing teams to share 2D and 3D geometry with material name and colours. By reducing manual data recreation and improving consistency across geotechnical models, engineers can streamline workflows, enhance collaboration, and work more efficiently within a connected digital ecosystem.



Cloud Interoperability: GeoStudio & Leapfrog - Tech Preview

This feature is released as a 'Tech Preview' under our Product Terms and requires access to Seequent Evo.

GeoStudio and Leapfrog are now connected through Seequent Evo, enabling geological model volumes, surfaces, discontinuities, piezometric surfaces, and cross sections to be shared seamlessly between applications. This cloud-based workflow reduces manual data transfer, improves consistency between geological and geotechnical models, and helps teams collaborate more effectively using a common source of truth.

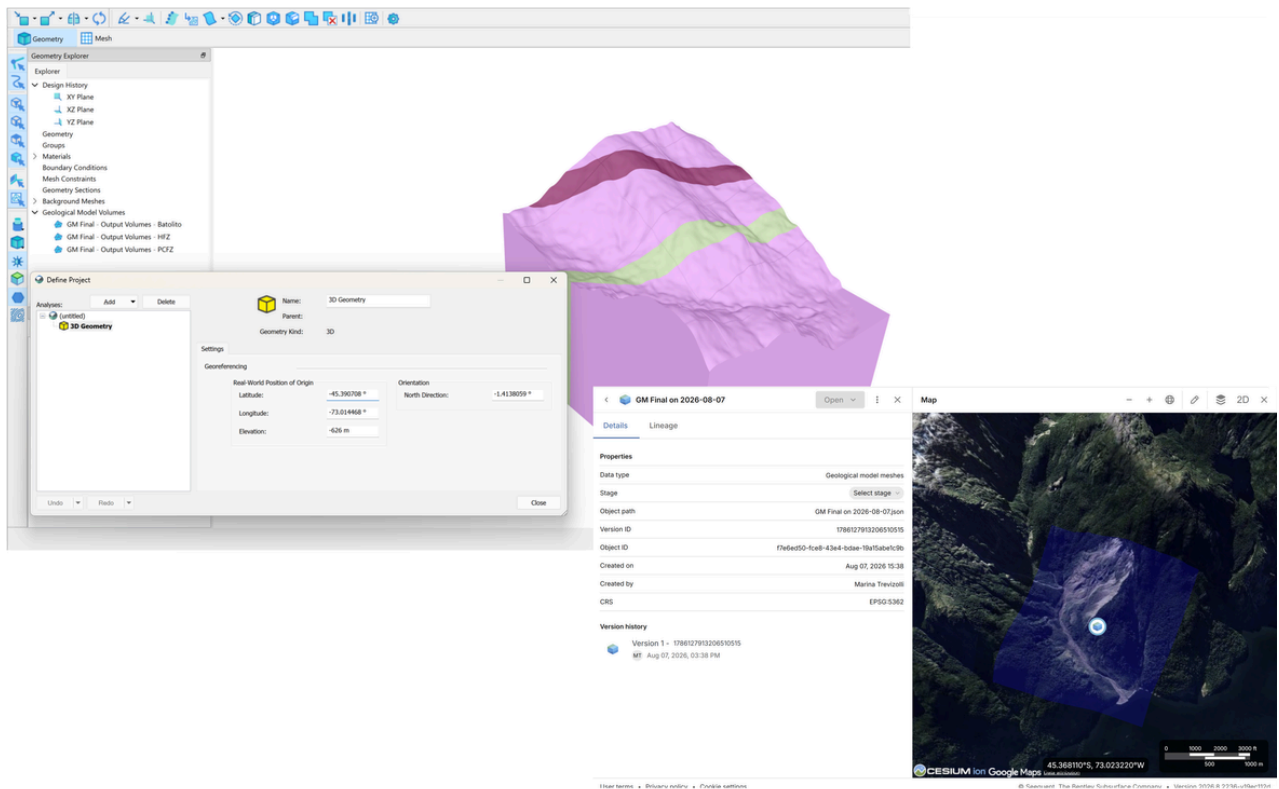


Georeferencing in GeoStudio - Tech Preview

This feature is released as a 'Tech Preview' under our Product Terms and primarily supports Evo-enabled workflows.

GeoStudio now allows users to define the real-world location and orientation of a 3D model while continuing to perform analyses in local coordinates for optimal numerical accuracy.

This enables seamless participation in geospatially referenced workflows and improves alignment with data shared through Seequent Evo, helping teams maintain both model accuracy and real-world positioning without complex coordinate transformations.



Bug Fixes and Changes

GeoStudio

Bug fixes

- A probabilistic analysis with Latin Hypercube sampling could lead to a crash in some scenarios.
- Viewing or graphing results with substantial amounts of data was slow due to a performance regression.
- Copying a graph image to the clipboard always displayed the X- and Y-axis labels in scientific notation, regardless of the formatting shown in the graph dialog.
- Resolved an issue where function graph previews displayed incorrect axis labels when multiple graphs with different axes were selected. Axis labeling now matches Results graph behavior, showing shared axes only or indicating undefined axes when none are shared.
- Fixed an issue where high-precision Y-axis values could cause the vertical axis label to overlap horizontal tick labels, reducing readability.
- Fixed an intermittent issue where opening functions linked to a Land-Climate Interaction (LCI) boundary condition could cause GeoStudio to hang, crash, or display an unexpected error.
- Fixed an issue that could cause GeoStudio to crash while editing D10 and D60 inputs in the VWC estimation dialog.
- Resolved an issue where a spurious validation error could appear when pasting materials between files, despite all material data being transferred successfully.
- Cancelling the license sign-in after installing and launching GeoStudio could cause a crash.
- The Software Downloads page did not list Japanese as an available language.
- Improved the reliability of the Solve All Analyses workflow, addressing an intermittent issue that could cause the kernel to terminate unexpectedly during optimization when solving multiple analyses simultaneously.
- An out-of-date message was not displayed in the Solve Manager when material parameters were edited.
- Resolved a solver stability issue that could occur when particle tracking was used, resulting in analysis failure with an unexpected error.
- Resolved a post-processing issue that could prevent contours and graphs from displaying for very large timestep counts, even though the underlying results data existed.
- Spatial functions were not updated after editing points.
- The contours generated for a spatial function in Define and Results were subtly different.
- Using linear interpolation for a spatial function could produce incorrect results under certain conditions.
- Fixed Shell Extensions in GeoStudio files (.gsz) for Thumbnail previews in Windows File Explorer if available, some .gsz file contents can show up in Window Explorer's search.
- Resolved a solver stability issue that could occur when the volumetric water content was set to zero in material model specifications, resulting in an analysis failure with an unexpected error.

Changes

- Enhanced file security by disallowing external resources linked through raw UNC network paths. Network resources are still supported but should be mapped as drives or symlinks.
- The hydraulic conductivity estimation methods, Van Genuchten and Fredlund-Xing, were improved by: a) ignoring the effects of compressibility on the volumetric water content for pore-water pressure greater than the air entry value, b) not inserting the point (0, K_{sat}), c) accessing the inputs a , n , and m if the volumetric water content function was estimated using these methods, and, d) exposing the minimum suction in the user-interface. The estimated functions now more closely match the closed form expressions.
- To improve transparency on calculations, hydraulic conductivity functions no longer implicitly adjust values at $x=0$; these points are now always visible and editable. Values at 0 will no longer be permitted for this type of function.

Bug fixes

- Fixed an issue where the manufacturer reinforcement product dropdown did not always respond, preventing product selection changes.
- Corrected the display of unit weight for the impenetrable material model to ensure it is visible and properly reported.
- The removal of an impervious barrier from a line could cause the solver to crash.
- Graph results for structural bar elements were not displayed.
- Importing a WMF picture file could cause a crash.
- Manufacturer reinforcement settings incorrectly allow a non-zero Force Orientation value when using the Distributed Force distribution option.
- Fixed an issue where certain relative humidity definitions used with Land-Climate Interaction (LCI) boundary conditions could cause analyses to fail without a clear error message.
- Fixed an issue where temperature-difference inputs for thermosyphon boundary conditions could be incorrectly validated as absolute temperatures after switching units, leading to invalid warning messages.
- Reinforcement and sketch objects appeared offset in exported images from Results view.
- The mesh was not updated when the geometry was modified via the scripting API.
- Changes to a boundary condition value via the scripting API were not committed to the GeoStudio project.
- Fixed an issue where certain 1D analyses could fail with an “Unexpected termination” error when solving, requiring users to modify material functions as a workaround.
- Improved the stability of slope stability optimization analyses, addressing a crash that could occur when working with seepage parent analyses with extensive saved results.
- Fixed an issue when a slope analysis may interpolate initial condition values incorrectly because a slope stability analysis was solved after a mesh change without also solving any analysis used for initial conditions.
- Fixed a convergence problem that occasionally occurred with the hyperbolic constitutive model in a stress-strain analysis.

Changes

- Removed unsupported .DGN and .DWT file references from Sketch Pictures import options and updated the online help accordingly.
- Added support for retrieving analysis information through the GeoStudio Scripting API, simplifying automation workflows and reducing the need to extract details from project file XML.
- Improved validation for the NorSand material model to prevent invalid state-dilatancy conditions from producing solver instability or incorrect results during Load-Deformation analyses.
- The Scripting API now allows numeric parameters set with `struct_value` to omit the Units field. Values default to the analysis unit system, making scripts simpler and ensuring consistent behavior for both dimensioned and dimensionless inputs.

Bug fixes

- Disabling multiple GeoStudio 3D context menus or dragging menus off-screen could leave the UI in a bad state. Menu visibility and docking behavior have been improved, so controls remain discoverable and recoverable.
- Resolved a performance issue that could cause significant delays when importing 3D design geometry, particularly during shape validation and Boolean intersection operations.
- Fixed a crash that could occur when deleting the geometry source of a background mesh used in 3D analysis.
- Fixed an issue where adding multiple 3D geometries to a GeoStudio project could cause the application to hang.
- Files with 3D geometry containing obsolete functionality displayed a warning on open that did not clear after saving.
- Models with complex edges no longer freeze when drawing 3D sketches or Entry and Exit.
- Fixed an issue where Column Force remained disabled in the Define menu of a 3D stability analysis.

Changes

- Relocated Create Location from the Mesh view to the 3D Results view.
- Refreshed the 3D Location icon to better reflect its graphing and location visualization purpose.
- Introduced a dedicated Task Manager button with tooltip support and status indicators for in-progress, warning, and error states