



GeoStudio

The modelling software for geo-engineers and earth scientists.

GeoStudio is an integrated software suite for modelling slope stability, ground deformation, and heat and mass transfer in soil and rock.



SLOPE/W

Stability analysis of soil and rock slopes



SEEP/W + SEEP3D

Groundwater flow analysis in saturated / unsaturated porous media in 1D, 2D or 3D



SIGMA/W

Stress and deformation analysis or strength reduction stability of soil, rock, and structures



QUAKE/W

Analysis of earthquake liquefaction and dynamic loading



TEMP/W + TEMP3D

Heat transfer and phase change analysis in porous media in 1D, 2D or 3D



AIR/W

Air transfer analysis in mine waste and other porous media



CTRAN/W

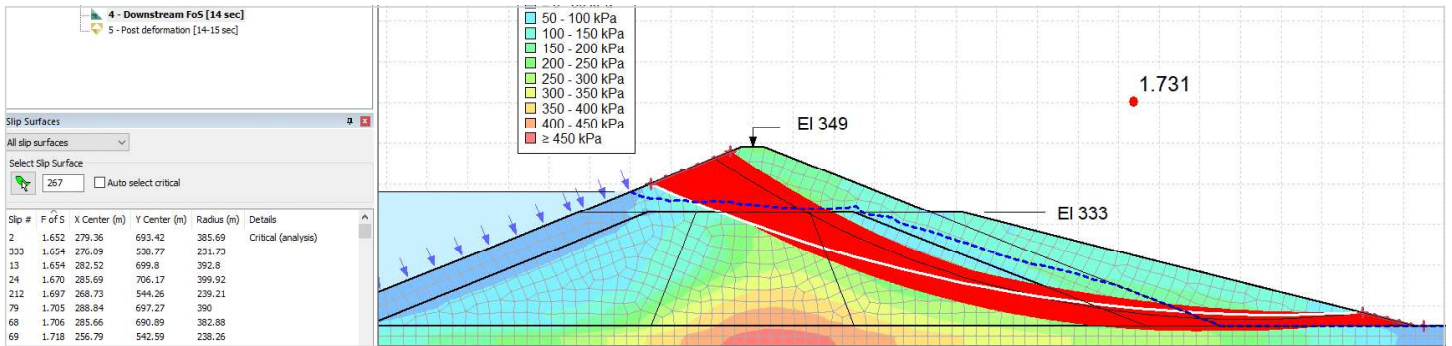
Solute and gas transport analysis in porous media



BUILD3D

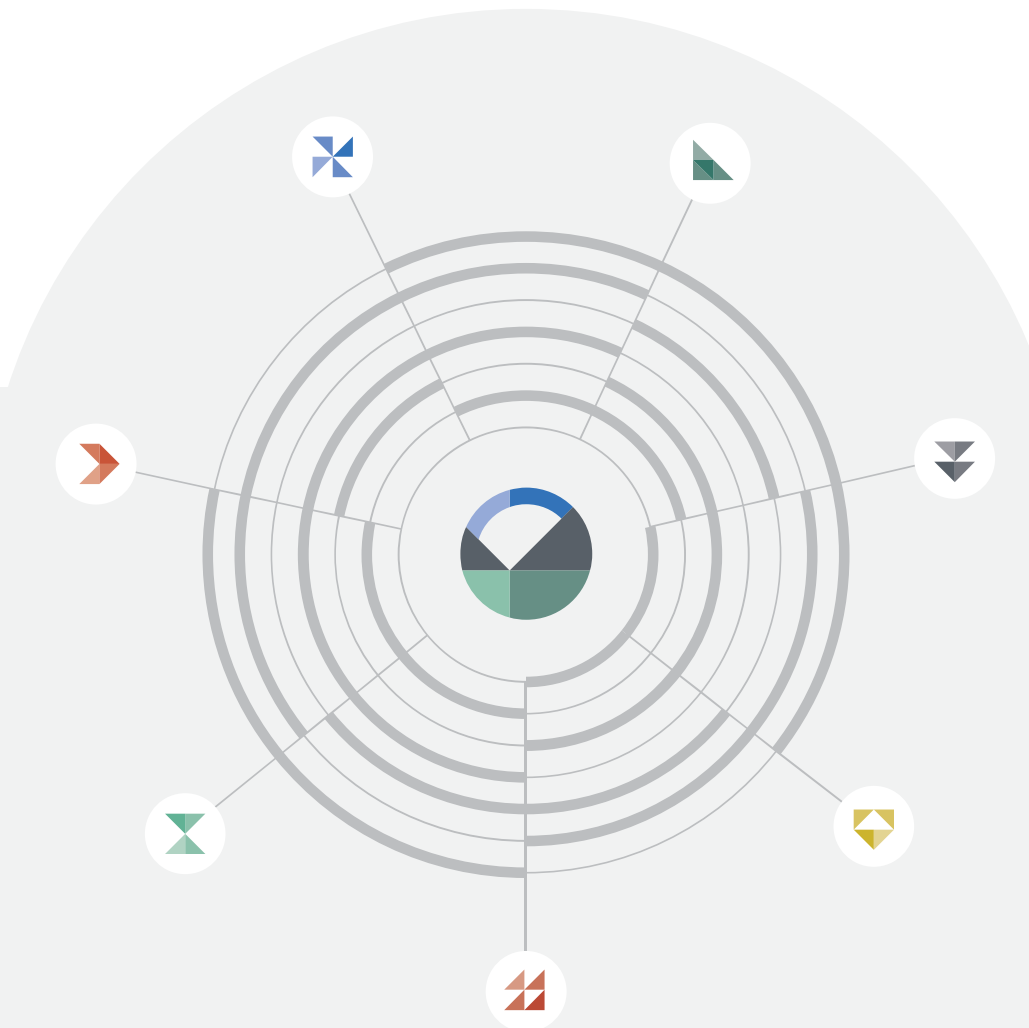
Geometry creation tool for complex 3D domains

Product integration increases modelling capability



- ✓ Improve PWP definition in SLOPE/W with SEEP/W or SEEP3D finite element results.
- ✓ Use SIGMA/W finite element results in SLOPE/W for stress-based stability analyses.
- ✓ Couple SIGMA/W and SEEP/W to simultaneously model stress and PWP response for consolidation analysis.
- ✓ Establish initial stress and PWP conditions in SEEP/W or SIGMA/W for dynamic QUAKE/W analyses.
- ✓ Use QUAKE/W results in a Newmark SLOPE/W analysis to determine cumulative displacement.
- ✓ Redistribute QUAKE/W earthquake stresses in SIGMA/W to reveal settlement, and use final stress conditions in SLOPE/W to assess stability.
- ✓ Evaluate forced convective heat transfer in TEMP/W using AIR/W air flow or SEEP/W water flow results. Use SEEP3D results to assess forced convection in TEMP3D.
- ✓ Combine SEEP/W with TEMP/W and/or CTRAN/W, or SEEP3D with TEMP3D, to simulate density-dependent fluid flow.
- ✓ Use SEEP/W groundwater flow results in CTRAN/W to model advection-dispersive solute transport.

Combine multiple physics into a single analysis



Find solutions to geo-engineering problems



Dams and
Levees



Reinforced Walls
and Slopes



Excavation and
Open Pit Mines



Roads, Bridges and
Embankments



Environmental
Protection



Groundwater



Ground Freezing
and Climate Change



Earthquake
Deformations



Vadose Zone
Hydrology



DRAW GEOMETRY OR IMPORT CAD FILES

GeoStudio provides many tools to define the model domain including coordinate import, copy-paste, length and angle feedback, region merge and split, and DWG/DXF file import. BUILD3D is an add-on providing intuitive 3D geometry creation tools including sketch, plane, extrude, sweep, cut, and merge.



SOLVE MULTIPLE ANALYSES SIMULTANEOUSLY

GeoStudio runs each analysis solver in parallel, allowing multiple analyses to be solved efficiently on computers with modern, multi-core processors.



INTERPRET RESULTS WITH VISUALIZATION & GRAPHING

GeoStudio provides powerful visualization tools, including graphing, contour plots, isolines or isosurfaces, animations, interactive data queries and data exports to spreadsheets for further analysis.



PROFESSIONAL TECHNICAL SUPPORT | PRODUCT UPDATES
COMPREHENSIVE DOCUMENTATION | HUNDREDS OF EXAMPLE PROBLEMS
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GEOSLOPE develops GeoStudio, the leading suite of geo-engineering software used in over 100 countries for the last 40 years. Join thousands of practising engineers, scientists, regulators, professors and students, and start using GeoStudio today.

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