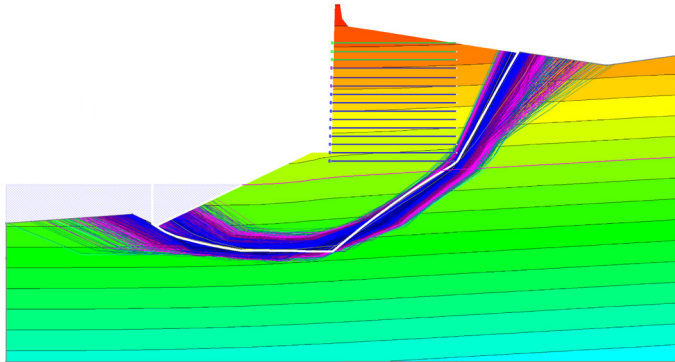
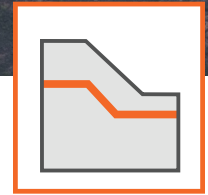


## 2D Limit Equilibrium Analysis of Slope Stability

# Slide2



Slope stability and seepage analysis results in Slide2

### What is Slide2?

Slide2 is a powerful, user-friendly, 2D limit equilibrium slope stability analysis program for all types of soil and rock slopes, embankments, earth dams, and retaining walls. Slide2 includes built-in finite element groundwater seepage analysis, probabilistic analysis, multi-scenario modeling, and support design.

### What's New in Slide2

- Faster sampling method, Response Surface, added for probabilistic analysis
- Improved Info Viewer, now called the Report Generator, lets user customize the look and feel of reports by adding images, comments, selecting sections to include, and customizing headers and footers; includes new PDF export option
- Batch printing option now available when using multi-scenario modelling feature
- Built in list of Common Geotextile Supports from popular manufacturers added

### Software Highlights

- Create and edit complex model geometry with ease
- Full finite element groundwater seepage analysis for steady state or transient conditions
- Probabilistic analysis allows assignment of statistical distributions to any input parameter, as well as advanced correlation of parameters
- Option to define the soil profile first and "cut out" the slope geometry afterwards
- Option to define the soil profile from borehole data
- Over a dozen material strength models for soil and rock (e.g., Anisotropic, Generalized Hoek-Brown, SHANSEP)
- Numerous support type options (e.g., tieback, soil nails, geotextiles, piles) including integration with RSPile
- Flexible geometry import options from various file formats, including .dxf, RS2, Slide3, and many more

Find more details: [rocscience.com/software/slide2](http://rocscience.com/software/slide2)

### Plans & Pricing

**Personal License:** Locked to one computer.

- Lease: **USD \$1,795/year**  
Leased annually. Includes Maintenance+.
- Perpetual: **USD \$3,795**  
Purchased outright. Includes 12 months of Maintenance+.

**Flexible License:** Installed on any number of machines. The license file sits on the server.

- Lease: **USD \$2,795/year**  
Leased annually. Includes Maintenance+.
- Perpetual: **USD \$5,495**  
Purchased outright. Includes 12 months of Maintenance+.

### Maintenance+

Maintenance+ is our enhanced maintenance and support services subscription, purchased annually at 20% of the license cost.

With Maintenance+ Continuous Software you get access to all feature releases, enhancements, and bug fixes throughout the year and as soon as they're available. You also have access to convenient License Services, the support of our experts, and exclusive learning offerings.

Contact us at [software@rocscience.com](mailto:software@rocscience.com)

## Analysis Methods

- Bishop Simplified
- Corps of Engineers #1
- Corps of Engineers #2
- GLE/Morgenstern-Price
- Janbu Corrected
- Janbu Simplified
- Lowe-Karafiath
- Ordinary/Fellenius
- Sarma Vertical & Non-vertical Slice
- Spencer

## Data Interpretation

- Annotation and dimensioning tool kit
- Contour groundwater results—total head, pore pressure, velocity, gradient
- Export image files
- Export to Excel
- Filter slip surfaces
- Interactive data tips
- Plot factor of safety along slope
- Plot results directly on slip surface
- Plot safety factor vs. time for transient analysis
- Plot slice data
- Plot slip surface data
- Print models at scale
- Support force diagrams
- Property viewer—contour material properties

## Finite Element Groundwater Seepage Analysis

- Constant or time-dependent boundary conditions
- Discharge sections
- Mapped meshing
- Multi-stage transient groundwater seepage
- One-click automatic meshing
- Saturated/unsaturated
- Show mesh quality
- Steady state seepage
- View groundwater and slope stability results simultaneously

## Loading

- Distributed loads
- Line loads
- Seismic loads

## Modeling

- Borehole entry
- CAD drawing tools
- .dxf import/export
- Geometry from soil profile
- Multi-scenario modeling
- One-click material assignment
- Weak layer boundary

## Pore Pressure Definition

- Calculate excess pore pressure using B-bar method
- Choose grid interpolation method
- Finite element groundwater seepage analysis
- Phreatic surfaces
- Piezometric lines
- Pore pressure grids—total head, pressure head, pore pressure
- Rapid drawdown analysis
- Ru coefficients

## Probabilistic Analysis

- Advanced correlation between input parameters
- Critical probabilistic surface
- Spatial variability analysis
- Distributions—Normal, Uniform, Triangular, Beta, Exponential, Lognormal, Gamma
- Equate material properties
- Histogram, cumulative, and scatter plots
- Monte Carlo, Latin Hypercube, or Response Surface simulation
- Probability of failure/Reliability index
- Sensitivity analysis
- Use any input parameters as random variables

## Rapid Drawdown Methods

- Army Corps Engineering 2-stage
- Duncan, Wright, Wong 3-stage
- Effective stress using B-bar
- Lowe and Karafiath

## Search Methods

- Auto-refine search
- Block search
- Cuckoo search
- Grid search
- Non-circular surface optimization
- Particle swarm

- Path search
- Simulated annealing
- Slope search

## Seismic Options

- Compute Kc critical acceleration
- Newmark displacement (rigid, coupled, de-coupled)
- Pseudo-static analysis
- Staged pseudo-static analysis

## Slip Surface Options

- Circular surfaces
- Composite surfaces
- Non-circular/Planar surfaces
- Tension cracks

## Support

- Active vs. passive anchors
- Back analysis (compute required support force for safety factor)
- Easily define/edit patterns
- End-anchored bolts
- Geotextiles
- Grouted tiebacks
- Piles and micropiles
- RSPile integration
- Soil nails
- User-defined support model

## Strength Models

- Anisotropic function
- Anisotropic linear
- Anisotropic strength
- Barton-Bandis
- Discrete function
- Drained-Undrained
- Generalized anisotropic
- Generalized Hoek-Brown
- Hoek-Brown
- Hyperbolic
- Infinite strength
- Mohr-Coulomb
- No strength (i.e., water)
- Power curve
- SHANSEP
- Shear/normal function
- Snowden modified anisotropic linear
- Tension cutoff
- Undrained ( $\Phi = 0$ )
- Unsaturated shear strength
- Vertical stress ratio