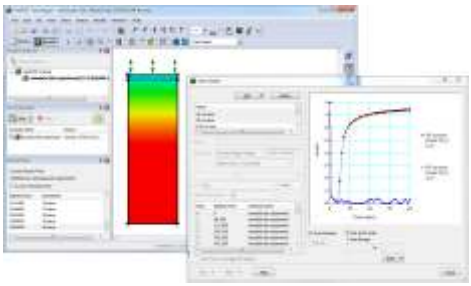
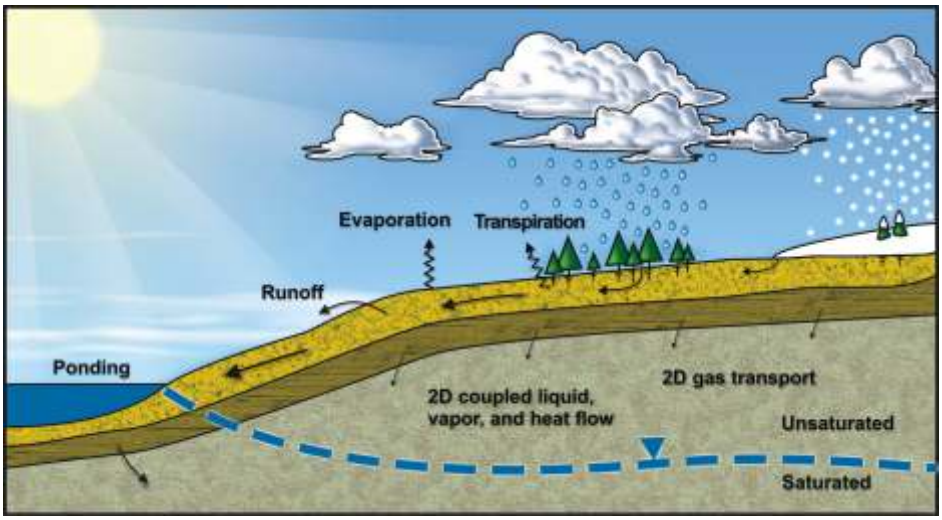
VADOSE/W™ Basic

Vadose zone and soil cover analysis.



Affordable Analysis

VADOSE/W Basic puts the power in your hands to solve complex 1D vadose zone and soil cover analyses accurately and confidently at the low price of $995. VADOSE/W Basic is licensed for engineering consulting use.



Moisture flux at the ground surface significantly impacts flux in the unsaturated vadose zone

Typical Applications

Using VADOSE/W Basic, you can analyze 1D flux boundary problems such as:

- Design and performance monitoring of single or multi-layered soil covers over mine and municipal waste facilities
- Development of climate controlled pore-water pressure distributions on natural or man-made slopes for use in stability analyses
- Determining infiltration, evaporation and transpiration rates resulting from agriculture, irrigation projects, or natural systems
- Predicting oxygen or radon gas diffusion and decay through the vadose zone
- plus many more!

Limited Features:

- Maximum 500 elements in a 1D column
- Number of Regions: 10
- Number of Materials: 10

Environmental impact on soil conditions

Understanding unsaturated soil mechanics is now critical for geotechnical engineers performing slope stability analyses, designing soil covers for mine or municipal waste facilities, or determining the effect of agricultural or irrigation projects on groundwater flow. Environmental conditions at the ground surface, such as precipitation, evaporation and transpiration, have been increasingly recognized as having a significant impact on soil behaviour in the unsaturated or vadose zone. In fact, “unsaturated soil mechanics may have more to do with the ground surface moisture flux conditions than it has to do with the thickness of the unsaturated soil zone” (D.G. Fredlund, Geotechnical News, Dec. 2001). So how can you determine the impact of environmental conditions on the unsaturated zone? VADOSE/W provides a solution to this problem.

Comprehensive and Powerful

VADOSE/W is a finite element CAD software product for analyzing flow from the environment, across the ground surface, through the unsaturated vadose zone and into the local groundwater regime. Its comprehensive formulation allows you to analyze both simple and complex problems. For example, you can perform a simple analysis of ground infiltration due to rainfall, or you can build a sophisticated model that considers snow melt and root transpiration, as well as surface evaporation, runoff, ponding, and gas diffusion. VADOSE/W can be applied to the analysis and design of geotechnical, mining, hydrogeological, agricultural, and civil engineering projects.

GeoStudio®

One Model. One Tool. Many Analyses.

Requirements

- Microsoft® Windows® 7, Windows Vista®, or Windows® XP with Service Pack 3
- Intel® Pentium® 4 or better, or AMD Opteron™ or Athlon™ 64 or better (GeoStudio is optimized for multi-core Intel processors)
- 100 MB hard disk space
- 1024x768 screen resolution
- Microsoft® .NET 4.0 is required for Add-Ins
- An Internet connection is required to activate or renew a license

Common Features

Learn to use every one of the products in the shared GeoStudio environment quickly, thanks to its common look and feel

- Define and modify the problem geometry with an intuitive CAD interface
- Interactively specify material properties and boundary conditions
- Use general data-point functions for material properties
- Enhance a drawing by sketching lines and adding text labels that automatically update as parameter values change
- Import background pictures from other applications
- View results as contours, x-y plots, vectors, or tables of data that can be exported to other applications
- Find assistance using context-sensitive Online Help and in-depth engineering manuals

GeoStudio Integration

Additional examples of using analysis results from one product in another:

- VADOSE/W pore-water pressures can be used in a CTRAN/W contaminant transport analysis

Join a growing network

By acquiring GEO-SLOPE software, you are joining a group located in more than 100 countries, including practicing engineers, university professors, regulators, researchers and students. You can be assured that we will support and continue to enhance the software's engineering capabilities, making it even more powerful and easy to use.

Get help when you need it

When you need assistance with your model, we have helpful services available. Attend one of our workshops, or communicate directly with our experienced numerical modeling professionals. We'll help you to create better models and to gain confidence in your results.

Try out VADOSE/W now!

Experience VADOSE/W for yourself today! Simply visit www.geo-slope.com/downloads to download the free evaluation software.

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