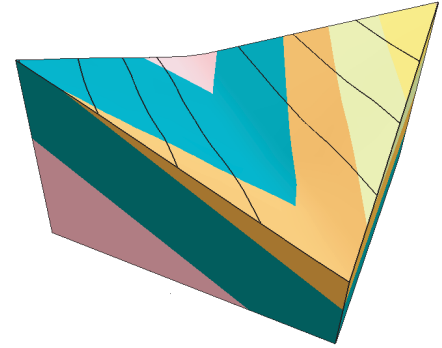# Visible Geology

By Rowan Cockett

Visualization

Geology is a highly visual science, and many disciplines require spatial awareness and manipulation. For example, interpreting cross-sections, geologic maps, or plotting data on a stereonet all require various levels of spatial abilities.

Visible Geology is a web-based program that allows students to be introduced to many geologic concepts and spatial skills in a virtual environment.

Geologic Beds

Program

Visible Geology provides a three-dimensional environment where students can create and interrogate their own geologic block models.
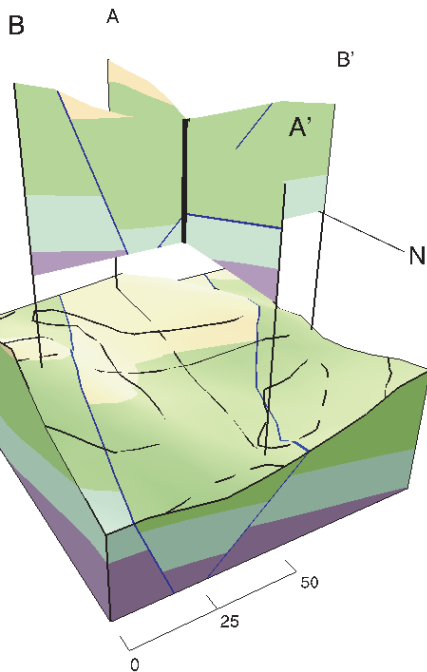
Interactivity
The student is in control of all aspects of the program: from the topography to all of the geologic features and then viewing the results dynamically.
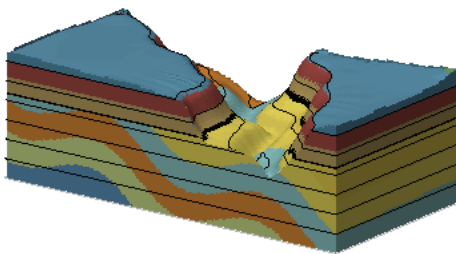
Simplicity
Keep the focus on learning geology and away from learning the technology.
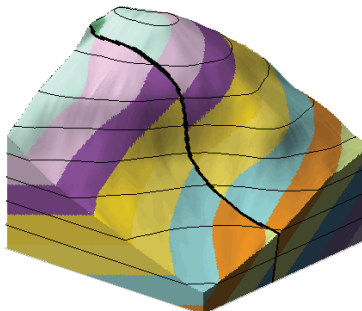
Integration
Easily extend paper based labs and learning assesments with an online modelling component.
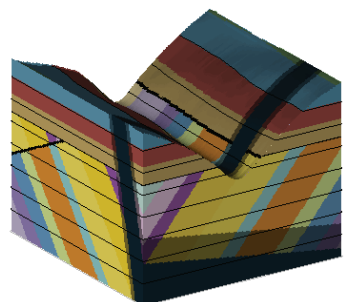

Cross Sections

Unconformities

Faults

Geologic Histories

Visible Geology

By Rowan Cockett

Features

Visible Geology allows students to add geologic beds to a blank model. Students can then add folds, faults, dikes, unconformities, tilting events, domes, and basins. Custom erosional events can be overlaid on the geology to explore outcrop patterns. To interogate the model furthar add cross-sections, boreholes, and strike and dip measurements, as well as view all the data on an interactive 3D stereonet.
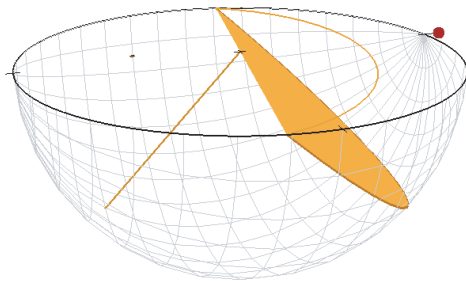
Geologic Folds
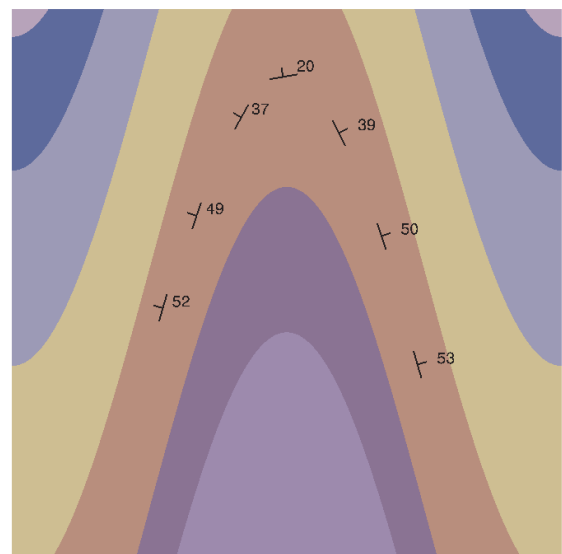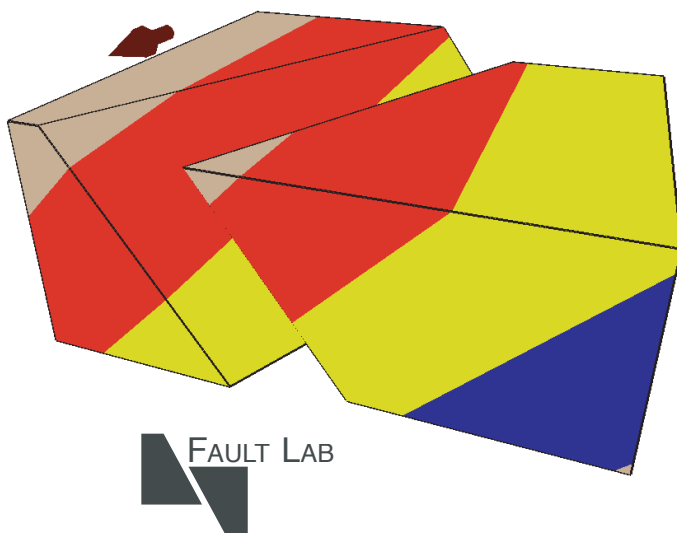
Interactive 3D Stereonet
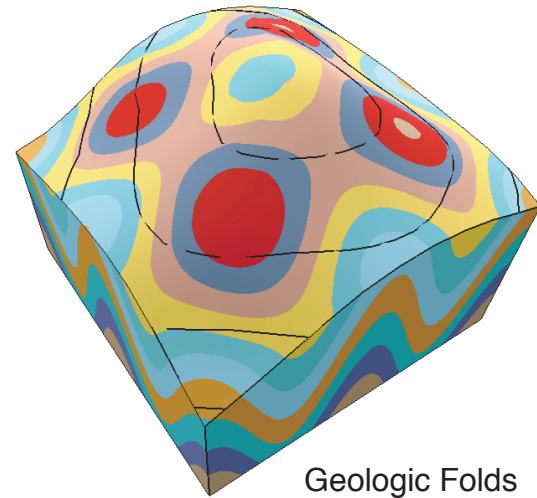
Assignments

Visible Geology hosts a growing list of assignments, ideas for activities, and premade models. These assignments allow for students to be engaged in three dimensional thinking while learning geologic concepts.

- Geologic Time
- Contours and Topography
- Apparent Dip and Thickness
- Rule of V's
- Fold Classification
- Fault Visualization
- Polyphase Folding
- Stereonet Visualization

Fault Lab

Strike and Dip Measurements