

# GRID TOOLS FOR ARCVIEW 3.X

TOOLS FOR ANALYZING, DISPLAYING, CLIPPING AND COMBINING GRIDS

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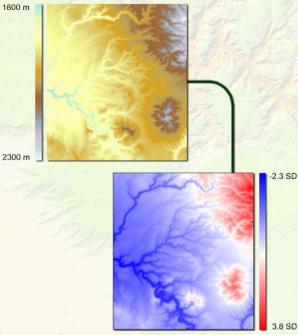
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## Advanced Neighborhood Statistics

Options for several neighborhood statistics and multiple neighborhood types



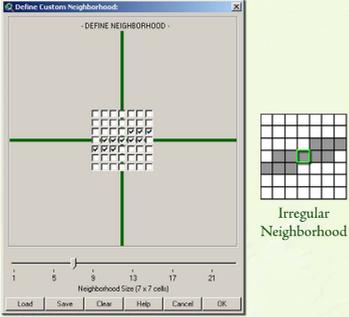
Includes a tool to standardize grids, such that each cell value represents the number of standard deviations away from the grid mean



Numerous General Grid Statistics

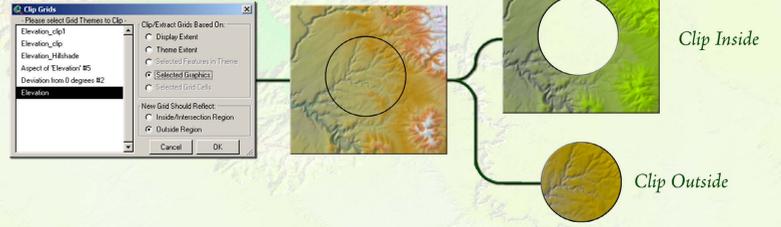


Includes a tool to define custom neighborhoods

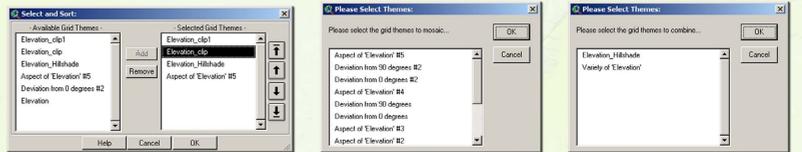


## Clip and Combine Grids

Clip grids according to a variety of criteria



Combine grids via Merge, Mosaic or combining attribute tables



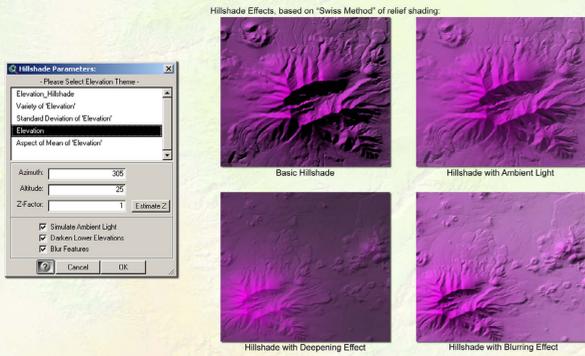
The "Merge" function allows you to select and sort your grids. Grids on top take precedence over grids below.

The "Mosaic" function attempts to edge-match adjacent grids.

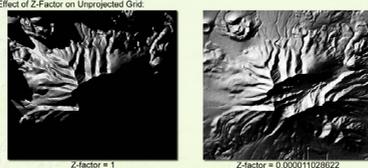
The "Combine" function combines attribute tables, and therefore is only valid for integer grids. This function adds fields to the attribute table.

## Advanced Surface Analysis

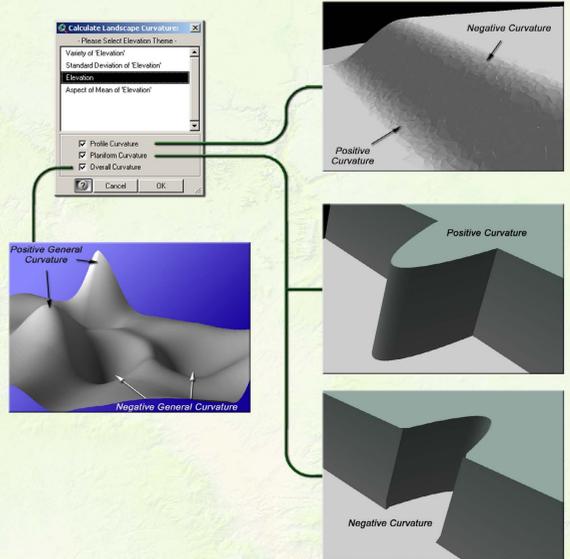
### Advanced Hillshade Functions



Includes a tool to estimate and adjust the Z-factor, producing accurate hillshades on unprojected grids



### 3 Measures of Landscape Curvature

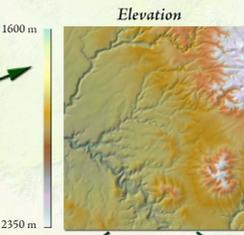


### Advanced Aspect Functions

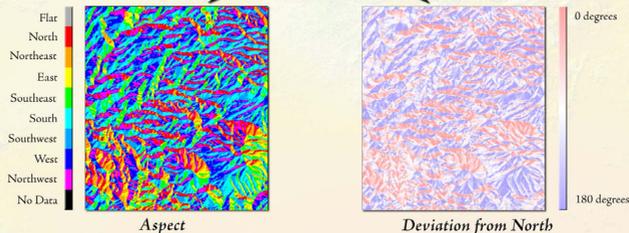
Includes a tool to estimate and adjust the general aspect, based on distortion caused by projection



Includes a tool to define aspect in terms of how much the landscape deviates from any direction



Includes tool to create a summary graphic illustrating the general aspect

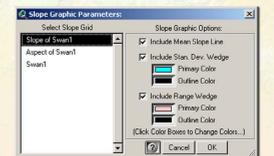


### Slope, in both Percent and Degrees

Includes a tool to estimate and adjust the Z-factor, producing accurate slopes on unprojected grids

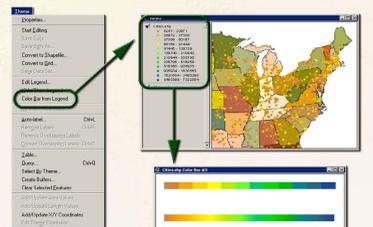


Includes tool to create a summary graphic illustrating the general slope

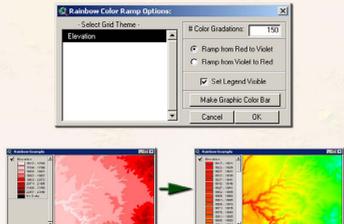


## Advanced Legend Functions

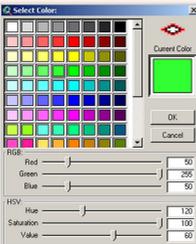
Generate Color Bars of any grid or feature theme legend, to add to layouts or printed maps



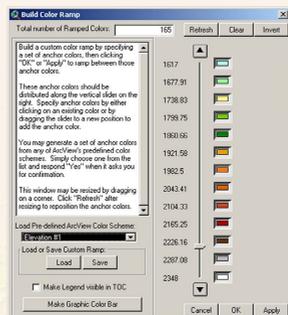
Generate Rainbow Legends



Sophisticated Color Tool



Build complex legends and ramp among all colors



References from Manual:

Batschelet, E. 1981. *Circular Statistics in Biology*. Academic Press Inc. (London) Ltd. 371 pp. See especially Chapter 2.

Beers, T. W., P. E. Dress, and L. C. Wensel. 1966. Aspect transformation in site productivity research. *Journal of Forestry* 64:691-692.

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Fisher, N.I. 1993. *Statistical Analysis of Circular Data*. Cambridge University Press. 277 pp. See especially Chapter 2.

Jenness, J. S. 2006. *Some Thoughts on Analyzing Topographic Habitat Characteristics*. Originally published in the June 2005 issue of *Remotely Wild* (newsletter of the GIS, Remote Sensing, and Telemetry Working Group of The Wildlife Society). Available at [http://www.jennessent.com/downloads/topographic\\_analysis\\_online.pdf](http://www.jennessent.com/downloads/topographic_analysis_online.pdf).

Mardia, K.V. & Jupp, P.E. 2000. *Directional Statistics*. John Wiley & Sons, Ltd. 427 pp. See especially Chapter 2.

Trimble, G. R. Jr., and S. Weitzman. 1956. Site index studies of upland oaks in the northern Appalachians. *Forest Science* 2:162-173.

Wikipedia. 2006. Haversine Formula: [http://en.wikipedia.org/wiki/Haversine\\_formula](http://en.wikipedia.org/wiki/Haversine_formula)