

Erosion Models: Will Humans Ever Live to Verify Them?

Tyler Munson

Recent developments of erosion models in conjunction with GIS software and personal computing power has led to a dramatic increase in our understanding of erosion and landscape evolution. With so much new software available to scientists, it would be nice to have a brief overview of the pros and cons of a few of the more renowned models. For example, some models focus primarily on fluvial geomorphology while others focus on soil loss due to certain crop rotations and tilling practices. These software packages also often rely on other commercial software for the presentation of data making it cumbersome to new time users. A brief review of several erosion models will be presented with a particular emphasis on where each is more useful than the next.

Biographical Sketch

Tyler Munson received his Bachelors of Science degree in Geology & Geophysics in 2003 from the University of Wisconsin – Madison. Upon graduation, he worked at the Wisconsin Geological and Natural History Survey as a Geotechnician's Assistant. This work was defined by participation with drilling, seismic, and well monitoring projects. He then became interested in hydrology while working for a private water-well drilling company in the Madison area and decided to return to school. Returning home, he enrolled in the Hydrology masters program at New Mexico Tech in the Fall of 2005, where he worked in a soil mechanics lab performing mostly hydrometer tests for the Molycorp project. Being mechanically oriented, Tyler hopes to spend part of his career designing and building equipment for the easier and more accurate collection of data related to the earth sciences.