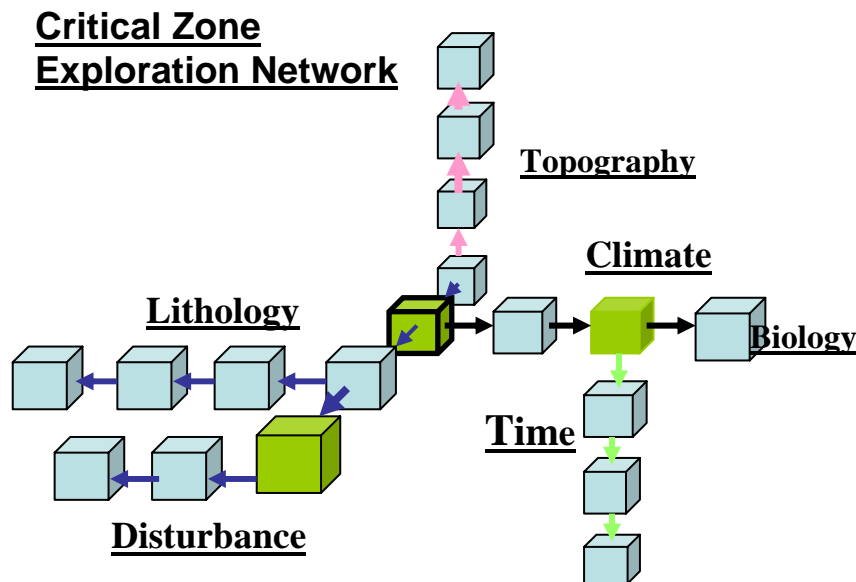




CRITICAL ZONE EXPLORATION NETWORK

Request for Proposals

The Critical Zone (CZ), defined to encompass all fluid, mineral, gaseous, and biotic components from the outer envelope of vegetation to the lower limits of groundwater, supports all life on Earth. However, without a targeted initiative to understand the feedbacks controlling mass and energy exchanges in the CZ, individual research efforts lack the comprehensiveness needed to develop a process-level understanding of the CZ, including its response to climatic, tectonic, and anthropogenic forcing. The *Critical Zone Exploration Network (CZEN)* is a network of people, sites, tools, and ideas to investigate these processes, proposed by a consortium of geoscientists, microbiologists, ecologists, soil scientists, and engineers (Weathering System Science Consortium, <http://www.wssc.psu.edu/index.html>). The CZEN will include field sites arrayed along environmental gradients (see figure) that take advantage of variations in one external forcing factor such as soil age while holding other variables such as climate constant.



All researchers are invited to propose site(s) that can form the initial framework of the CZEN. Proposals should describe how the component helps to initiate CZEN, and should include an interdisciplinary team of scientists; outreach and education components will be especially welcomed. Each proposing group should plan a poster for the NSF-sponsored workshop on "Frontiers in Exploration of the Critical Zone", Oct 24-26, 2005 at the University of Delaware (<http://ag.udel.edu/plsc/Conference/index.htm>), and a short oral presentation for Oct 26th. Some of the proposals (**from U.S. Scientists only**) may be chosen to receive NSF support through WSSC (c. \$5-10,000) to develop the components for a community proposal to NSF. More information about this competition will be posted at <http://www.wssc.psu.edu/index.html>. All researchers proposing sites should send a 1 page abstract to Tim White (tswwhite@essc.psu.edu) by Oct 1, 2005.