

## **Intensively managed clays in the critical zone**

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Over a decade of critical zone research suggests that landscape evolution is controlled by processes ranging from tectonic forces to solar energy inputs and biologic activity. In particular human practices such as fertilization, tilling, deforestation, and plant cover selection are now seen as an important driving function in the evolution of the critical zone. These processes are driven and controlled by the clay mineral assemblages that reside in the shallow and deep subsurface. This session aims to bring together clay scientists with a cross section of ecologists, geochemists, hydrologists, and geophysicists to elucidate the role of clay minerals in the architecture of the critical zone. We especially invite scientists who are working in multiple disciplines addressing common processes and willing to share data are encouraged to participate. The session will be linked to a short field trip to Intensively Managed Landscape Critical Zone Observatory, which is part of the National Science Foundation network of observatories designed to study the Earth's surface where water, atmosphere, ecosystems, and clay minerals interact. [criticalzone.org](http://criticalzone.org)