Environmental Sciences And CREATE Seminar Series

Cross-cutting networks for carbon-cycle monitoring

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Carbon dioxide monitoring networks (NCAR's RACCOON, Penn State's Ring2, Wisconsin's ChEAS) provide near real-time monitoring of the North American landscape. These collective stations make high-precision, high accuracy measurements of well-mixed CO₂ representing much larger footprints than eddy covariance towers. Over the past few decades CO₂ observations from these networks have been used to study large domain changes in the terrestrial biosphere. Recently environmental threats caused by known and unexpected agents (diseases, wildfires) have become a priority that has intensified interest in high-precision atmospheric CO₂ networks, which are one of few ways to monitor carbon-cycle effects at large domain scale.

This talk is a description of how these large-scale CO₂-monitoring networks function as well as a discussion of how a new study is quantifying the effects of disturbances on the carbon cycle in the U.S. Mountain West by fusing observations with back trajectory modeling.

All are welcome.
Thursday, October 3rd, 2013
1:15 – 2:05PM
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