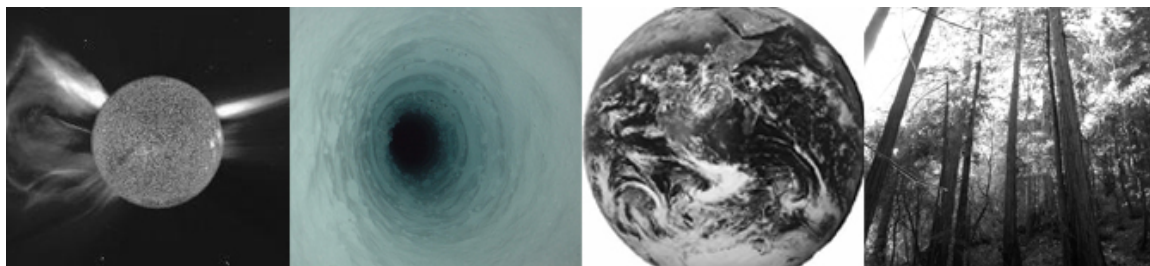


# Environmental Sciences And **CREATE** Seminar Series

---



## Cross-cutting networks for carbon-cycle monitoring

**Dr. Bjorn Brooks**  
Dept. of Earth Science, StFX

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 CO<sub>2</sub> representing much larger footprints than eddy covariance towers. Over the past few decades CO<sub>2</sub> 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 CO<sub>2</sub> 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 CO<sub>2</sub>-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 3<sup>rd</sup>**, 2013  
1:15 – 2:05PM  
Physical Sciences Centre 2045