

Poster #1-51

The FACE-MDS Dataset

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Predictive understanding of the future terrestrial carbon sink remains elusive and terrestrial ecosystem responses to increasing CO₂ are a large contributor to uncertainty in this understanding. The FACE Model Data Synthesis (FACE-MDS) project has been working for close to the past 10 years to synthesize data from FACE experiments and an ensemble of terrestrial ecosystem models to help improve our predictive understanding of the future terrestrial carbon sink. In Phase 1 of the FACE-MDS (2008-2012) the FACE experiments at Duke University and Oak Ridge National Laboratory were analyzed. In Phase 2 (2012-2016) three more FACE sites, Rhinelander, Wyoming PHACE, and the Nevada desert FACE, as well as the Florida scrub oak Open Top Chamber experiment were brought into the synthesis. While some of the data (meteorological and model) were made publicly available from Phase 1, the ecosystem response data and Phase 2 data were not. This presentation coincides with the release of the full dataset from the FACE-MDS project. The dataset includes data from all six sites and is broken out into three different datasets: 1) meteorological data; 2) model output data, as well as protocol and site parameterization data; and 3) ecosystem response data. We aim to release the FACE-MDS dataset on the ESS-DIVE by the time of the ESS PI Meeting. This presentation will show some of the key features of the dataset.