

IN31B-1007: Experiences Developing a Collaborative Data Sharing Portal for FLUXNET

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Environmental scientists studying regional and global scale problems need to be able to access and analyze diverse datasets from a variety of sources. Most of this data is collected locally by individual investigators in support of their own science goals. When these investigators share data to enable regional and global studies, they face many challenges on the path to making the data useable. For the last 3 years we have been working with the FLUXNET collaboration which has gathered a heterogeneous synthesis dataset of carbon, water, and energy fluxes as well as meteorology and biometric ecosystem information. The dataset is the result of contributions by over 120 investigators working at over 260 sites around the world. In this presentation we will describe our system which is supporting metadata collection, data provenance tracking, data curation, collaborative interaction, data contributor participation in data analysis, data fair use rules, data harmonization, and tracking of data usage in publications. The fluxdata.org site is currently supporting over 70 international paper writing teams who are using fluxdata.org in conducting global and regional carbon flux studies using the FLUXNET synthesis dataset.