IN31B-1007: EXPERIENCES DEVELOPING A COLLABORATIVE DATA SHARING PORTAL FOR FLUXNET

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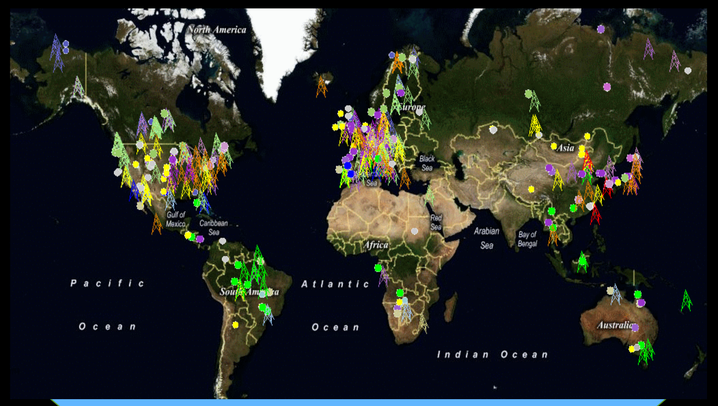
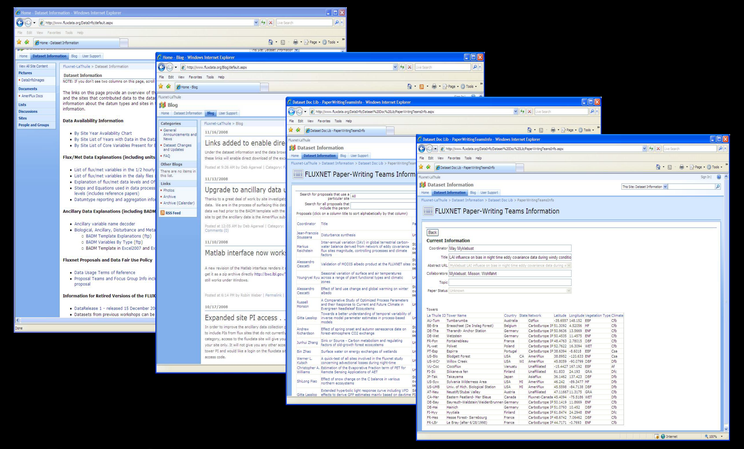
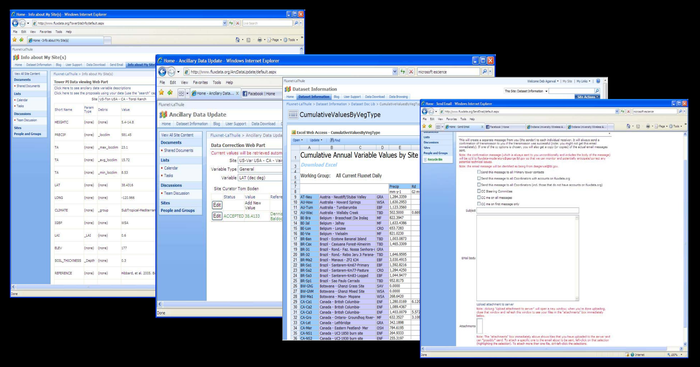
Abstract

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.

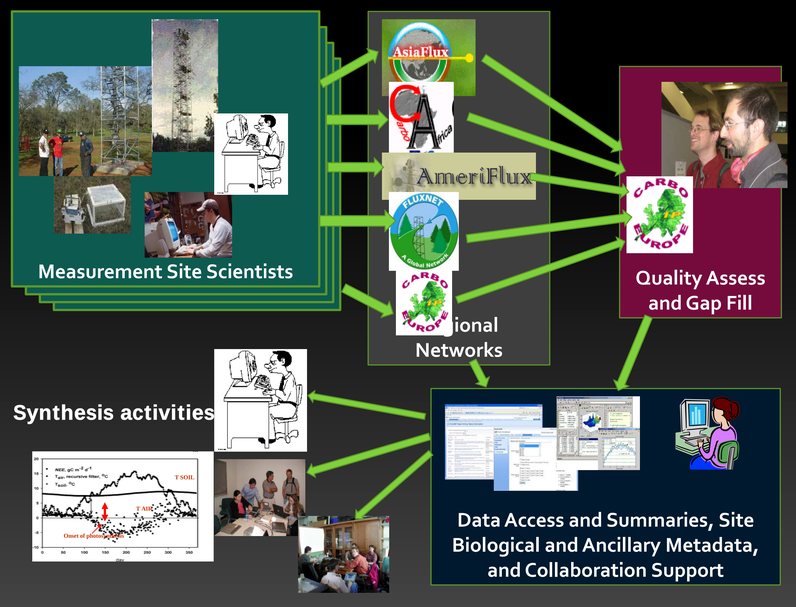




Fluxdata Collaboration Portal Public Views: blog, synthesis activities information, and dataset information



Fluxdata Collaboration Portal Measurement Site Scientist Views: site information, data update, and e-mail users



FLUXNET Data Archiving, Processing, Access, and Synthesis Steps

The FLUXNET dataset is now available via three different data sharing policies.

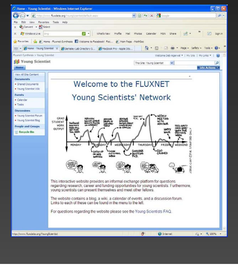
lathuile, is the traditional policy where the dataset is available only to FLUXNET data providers through approved proposals.

opened, the data is available to non-data providers with an approved proposal.

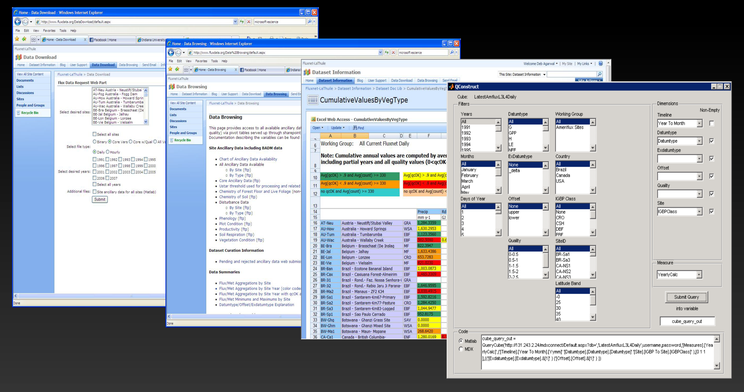
free fair-use, the data is publicly available for use with appropriate notifications and citations.

For more information about the datasets and the sharing policies, see www.fluxdata.org.

Each user account on the fluxdata site is associated with the authorized data access policies. The tabs on the site provide a customized view according to the access privileges of the individual.



Young scientists also have their own private area at fluxdata.org that provides a wiki, blog, and forums. Details on how to join the young scientist group can be found at fluxdata.org.



Fluxdata Collaboration Portal Synthesis Team Views: download data, e-mail measurement site scientists, extensive dataset details, data access via Matlab and excel

Microsoft® Research

University of Virginia Engineering

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