

AmeriFlux Carbon Flux Data System

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The AmeriFlux network brings together independently managed field sites, measuring concentrations and fluxes of carbon, water, and energy across the Americas. The data are processed into fluxes, quality controlled, and sent to the AmeriFlux network for publication. The data management team is working to harmonize data and metadata formats, perform QA/QC, and build data processing pipelines in collaboration with the European ICOS and other regional networks. The main goal of the effort is to enhance data synthesis, land model evaluation, and other multi site data applications.

The data team has recently standardized the data and metadata formats that are incorporated in new releases of standardized sets of flux-data products (featuring gap-filling, GPP/respiration partitioning, and uncertainty assessments products). Changes to variables reflect new developments in flux data collection and were designed to better support data/metadata sharing. These changes are also a milestone in terms of international harmonization and represent a crucial step to facilitate global use of eddy covariance data that are acquired under different regional networks. We are generating derived and value-added data products from data but putting data through a series of quality checks and post-processing steps. A concentration in the last year and for the future will be development and improvement of this processing pipeline. New releases of standardized sets of flux data products (featuring gap-filling, GPP/respiration partitioning, and uncertainty assessments products) have been produced for the first time since the LaThuile dataset in 2007., and released as FLUXNET2015. We have also made significant changes to the BADM (Biological, Ancillary, and Disturbance Metadata) protocols, to facilitate data reporting and site search.