Poster #1-72

The Data Processing Pipelines and Synthesis Dataset Releases for AmeriFlux and FLUXNET

Gilberto Z. Pastorello[1*], Danielle S. Christianson[1], Housen Chu[2], You-Wei Cheah[1], Abdelrahman A. Elbashandy[1], Carlo Trotta[3], Eleonora Canfora[3], Dario Papale[3], Dennis Baldocchi[2], Deb A. Agarwal[1], and Margaret S. Torn[1]

[1]Lawrence Berkeley National Laboratory, Berkeley, CA
[2]University of California, Berkeley, Berkeley, CA
[3]University of Tuscia, Viterbo, Italy

Contact: gzpastorello@lbl.gov

BER Program: TES
Project: AmeriFlux Management Project
Project Website: https://ameriflux.lbl.gov

The new AmeriFlux BASE flux-data product and the FLUXNET2015 dataset, which includes data from 86 AmeriFlux sites, are being used extensively by the scientific community. We have seen a growing interest in these datasets, with increasing number of users registering with the AmeriFlux and FLUXNET web sites to be able to access the data. This trend also shows on the number of downloads of site data. This poster will show usage statistics for data products available directly at the AmeriFlux portal and as part of the FLUXNET2015 dataset. We will also describe the data-processing pipelines generating these data products, highlighting improvements in data quality control processes, decreased processing time, additional derived data products, and new coding efforts that are continuously making software more robust to execute. These improvements enable updates to these data products more consistently and in a timelier manner. The next iteration for the FLUXNET global datasets is scheduled for release in the summer of 2019, and we will be using these improved tools in our data-processing pipelines. We will make these software tools available to the community so that site teams and data users can run the same pipelines and reproduce processing results.