

PROPOSAL FOR FLUXNET SYNTHESIS PUBLICATION



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DATASET PROPOSED

LaThuile or Opened Access

TITLE OF PAPER AND OUTLINE

Evolution and variation of atmospheric carbon dioxide concentration over terrestrial ecosystems as derived from FLUXNET measurements

Carbon dioxide (CO₂) is the most important anthropogenic greenhouse gas contributing to global climate change. Understanding the temporal and spatial variations of CO₂ concentration over terrestrial ecosystems provides additional insight into global atmospheric variability of CO₂ concentration.

In this study, Using CO₂ concentration observations at several sites covering nine ecosystem types from the global-scale network of micrometeorological flux measurement (FLUXNET), we tend to present a comprehensive analysis of evolution and variation of atmospheric CO₂ concentration over terrestrial ecosystem (ACTE) for the period of 1997-2006. This study will contribute to a better understanding of short-term variability and long-term evolution of atmospheric CO₂ concentration over terrestrial ecosystems.

This manuscript with FLUXNET Free Fair-Use database has been finished and submitted to *Atmospheric Environment*. We now receive invaluable comments and suggestions from two reviewers. The editor suggested the manuscript need major revision. In order to improve the data representativeness, we sincerely hope we can obtain more CO₂ observations from FLUXNET.

PROPOSED SITES TO BE INVOLVED

All the available sites with CO₂ concentration measurement

PROPOSED RULES FOR CO-AUTHORSHIP

Our policy will be to provide co-authorship to those who made a significant contribution to the article. Those responsible for collecting and providing the data used in the proposed analyses will be acknowledged.