PROPOSAL FOR FLUXNET SYNTHESIS PUBLICATION

Initial coordinators:: Taejin Park

Collaborators needing access to data: Taejin Park

Affiliations: Boston University

DATASET PROPOSED

Opened Access

TITLE OF PAPER AND OUTLINE

Contribution of Phenological and physiological Variations in Northern Vegetation Productivity Changes over last three decades

Plant phenology and maximum photosynthetic state determine spatiotemporal variation of gross primary productivity (GPP). Recent warming induced impacts accelerate shifts on phenology and physiological status over Northern vegetated land. Thus, understanding and quantifying these changes are very important. Here, we propose to investigate 1) how vegetation phenology and physiological status are evolved and 2) how such components (phenology and physiological status) contribute on inter-annual variation of GPP during last three decades. We plan to utilize both long-term remotely sensed (GIMMS NDVI3g) and field measured (FLUXNET) phenology and productivity datasets in continental and regional scales. From this investigation, we will show spatial and temporal patterns of changes in phenology and maximum photosynthetic status and quantify their contributions in GPP characterization.

PROPOSED SITES TO BE INVOLVED

All sites containing at least 1 full year of flux (including GPP) and meteorological data maybe considered for this analysis.

PROPOSED RULES FOR CO-AUTHORSHIP

Co-authorship will be given PIs who 1) make significant intellectual contributions, AND 2) participate in writing, AND 3) require co-authorship.