PROPOSAL FOR FLUXNET SYNTHESIS PUBLICATION FOR OPENED FLUXNET-LA-THUILE DATA SET

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Collaborators needing access to data:

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TITLE OF PAPER AND OUTLINE

TITLE: A direct estimation of the maximum light use efficiency based on FLUXNET data set and VPM model

Description:

In most of current PEM -based models, maximal LUE was assumed as a constant with large contrives, e.g. for DBF, LUE ranges from 0.146 to 0.528 g C /mol PAR (Connolly 2009; Wang 2010). A direct estimation of ecosystem LUE could reduce uncertainty of GPP estimates. A comparison between ε_0 derived from FLUXNET data and ε_0 used in previous PEM models within global multiple type of vegetation is needed, which is likely to shed new insight on the uncertainty of PEM models.

This study uses vegetation photosynthesis model (VPM) to estimate ε_0 inversely. The objectives of this work were a) to derive a maximum annual estimated ε_0 for various ecosystem type and b) to explicitly conduct a parameters' uncertainty analysis for ε_0 and c) to characterize the spatial and temporal variability of GPP and validate the GPP estimates by EC data.

PROPOSED SITES TO BE INVOLVED

All the vegetation sites in the dataset.

PROPOSED RULES FOR CO-AUTHORSHIP

Who you will invite for coauthorship and what is requested to be qualified as coauthor

A coauthor should contribute and be responsible for the process of the research and the quality of this paper. For data contributors who do not contribute to the result analysis, discussion and writing, we will list their names in the acknowledgements.

NB: add the CV of the proposers

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