# PROPOSAL FOR FLUXNET SYNTHESIS PUBLICATION

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**Collaborators needing access to data:** Jana Kolassa (postdoc)

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## DATASET PROPOSED

LaThuile or Opened Access

## TITLE OF PAPER AND OUTLINE

*A global estimate evapotranspiration and gross primary production based on a synergy of remote sensing products*

In this paper we will use the synergy obtained from multiple sensors (microwave active, infrared, visible, precipitation) to retrieve surface heat and carbon exchanges at the land surface at the monthly and daily time scales. This dataset will complement a new daily and monthly soil moisture product that we have developed internally (to be submitted to HESS by the end of the year). The results of the algorithm will be compared with in situ observations obtained from the FLUXNET dataset spinning a wide number of climates and biomes. We would like to make this product available to the public on the PI website: [www.gentine.com](http://www.gentine.com) along with the soil moisture dataset.

## PROPOSED SITES TO BE INVOLVED

We would like to use most available sites that are located in regions with representative biomes so that the footprint seen by the flux tower would be representative of the remote sensing based satellite. Ideally we would need at least 4-5 years of data per site so that we could validate the model in "climatological" conditions (e.g. to avoid substantial impact by El Niño).

## PROPOSED RULES FOR CO-AUTHORSHIP

We will send the manuscript to the FLUXNET site contributors prior to submission to ask whether the contributors feel that they would like to be co-authors. We typically use the internal Columbia procedure for co-authorship, which is that a coauthor needs to participate in two ways to the paper (e.g. data sharing + contribution to the writing of the manuscript/data analysis…).