

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



**Initial coordinators:** \_\_\_\_\_  
**Collaborators needing access to data:** \_\_\_\_\_

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### TITLE OF PAPER AND OUTLINE

**TITLE: Satellite-based modeling of gross primary production of grasslands and croplands: Vegetation Photosynthesis Model (VPM)**

#### Description

We aim to evaluate the satellite-based Vegetation Photosynthesis Model (VPM) across all the grasslands and cropland sites in the Opened Access dataset and to report the site inter-comparison results to peer-reviewed scientific journal. We will use both climate and flux data measured in the flux tower sites, and MODIS data at a 500 m spatial resolution to calculate GPP ( $GPP_{vpm}$ ). We will compare VPM-predicted GPP results with the estimated GPP obtained from the FLUXNET dataset ( $GPP_{ec}$ ). This study will help the scale-up of the  $CO_2$  flux measurements and model improvements, which will lead to provide more accurate GPP estimates of grassland and croplands.

### PROPOSED SITES TO BE INVOLVED

All the grassland and cropland sites in the dataset.

### PROPOSED RULES FOR CO-AUTHORSHIP

We will contact the data provider and/or site principal investigator for their recommendation on whom to be invited for co-authorship. The co-author(s) are requested to participate in the discussion on the VPM simulation results and the comparison between the  $GPP_{vpm}$  and  $GPP_{ec}$  data. For those site investigators who do not contribute to the result analysis, discussion and writing, we will list their names in the Acknowledgement section of the manuscript.