

## PROPOSAL FOR FLUXNET SYNTHESIS PUBLICATION



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### DATASET PROPOSED

**LaThuile or Opened Access: Open Access data is requested.**

### TITLE OF PAPER AND OUTLINE

**TITLE: Carbon Fluxes Influencing Factors Mining Methods Based on Shuffled Frog-Leaping Algorithm Attribute Reduction**

Description: Finding the main factors of affecting carbon flux is the key of knowing the law of the carbon cycle. As ecological factors that closely related to carbon flux have many uncertainties and lots of redundant information, so that attribute reduction becomes difficulty. A fuzzy rough set theory which is base on Shuffled Frog-Leaping Algorithm has advantages of dealing effectively with complex issues and dealing with continuous attributes, and is used in reduction of carbon flux data attributes. Experimental results show that using attribute having been reduced by fuzzy rough set to establish the carbon flux prediction model based on BP network has higher prediction accuracy, and this method can increase in reduction efficiency substantially, while keeping the amount of information effectively.

### PROPOSED SITES TO BE INVOLVED

List of sites or criteria. Duke Forest, Willow Creek, Bartlett Forest, Kendall Day, Vaira Ranch, AMF USOho, AMF\_USRo1, Mead Nebraska, Mead\_Nebraska

### 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.

NB: add the CV of the proposers