

# AGU PUBLICATIONS

*Global Biogeochemical Cycles*

Supporting Information for

## **Understanding Interactions between Terrestrial Water and Carbon Cycles Using Integrated SMAP Soil Moisture and OCO-2 SIF Observations and Land Surface Models**

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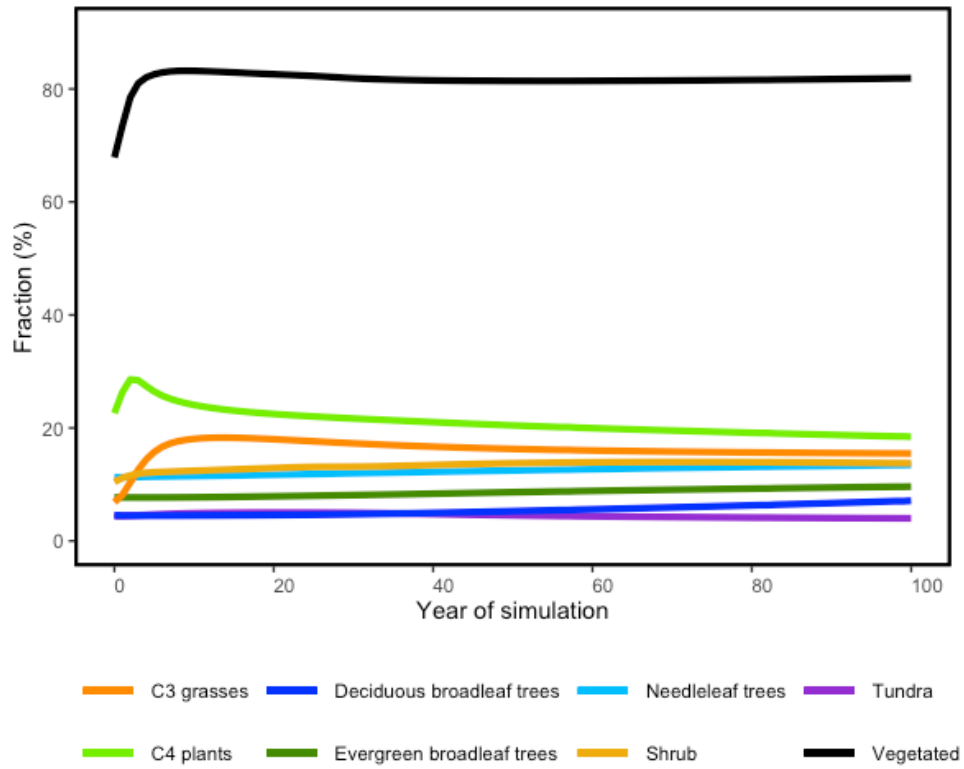
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### **Contents of this file**

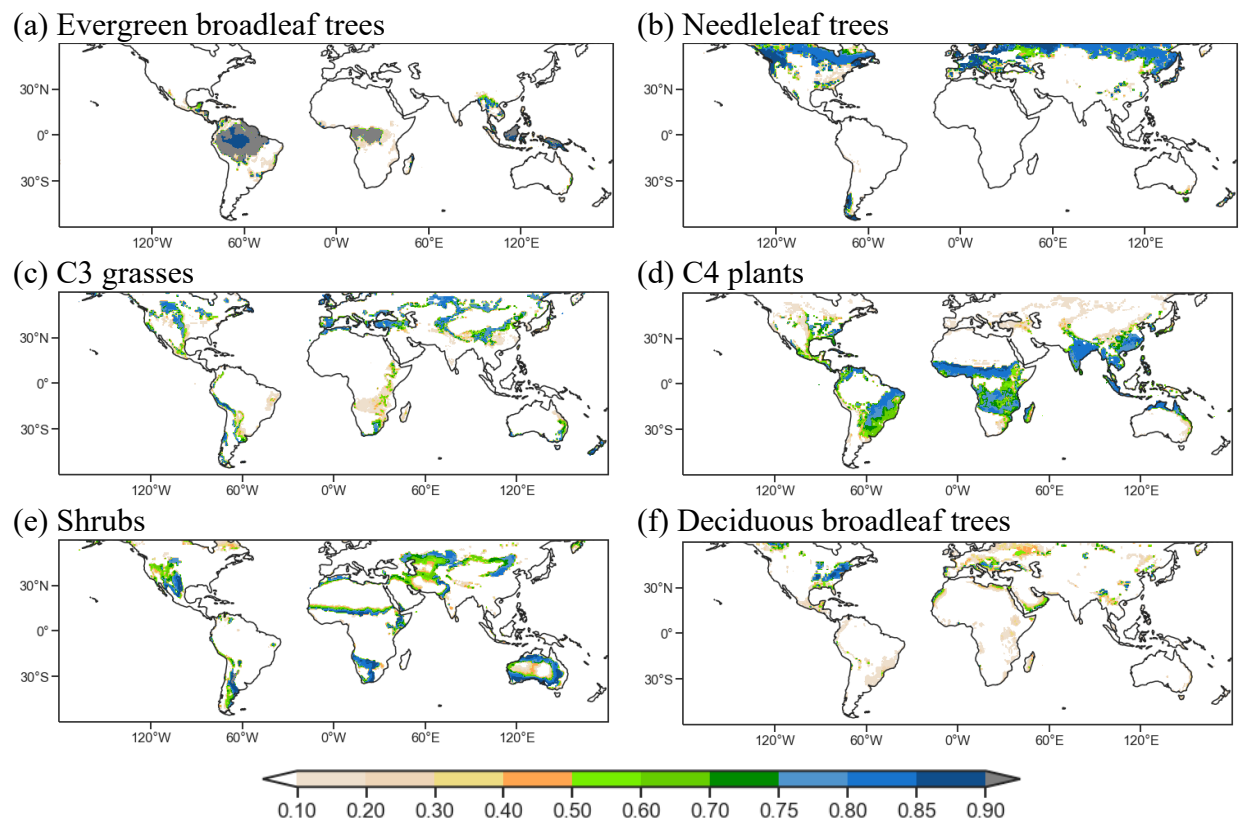
Figures S1 to S3

### **Introduction**

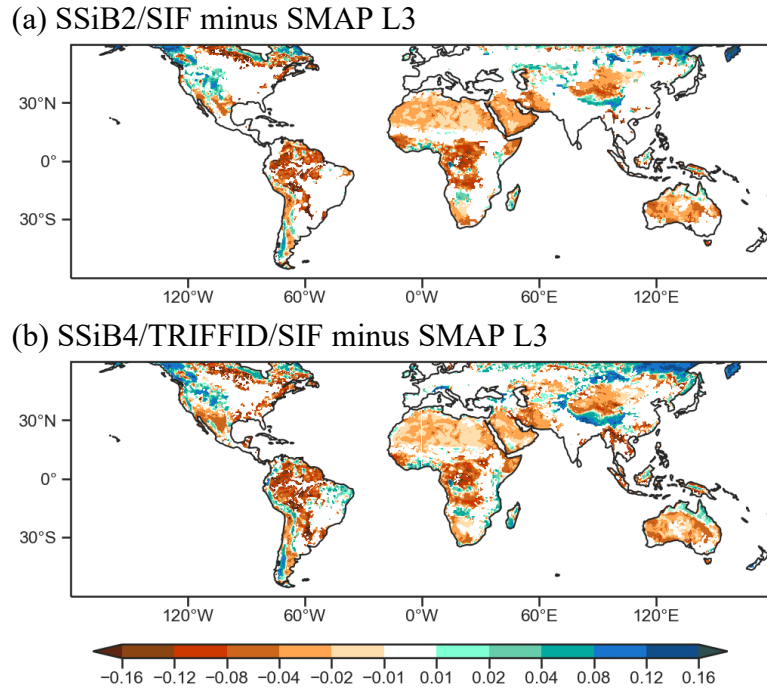
This supporting information provides the ancillary figures mentioned in the article.



**Figure S1.** Fractional coverage of each plant functional type (PFT) in the equilibrium experiment in SSiB4/TRIFFID/SIF.



**Figure S2.** 2015-2019 averaged vegetation fractional coverage (Frac) distribution for (a) Evergreen broadleaf trees, (b) Needleleaf trees, (c) C<sub>3</sub> grasses, (d) C<sub>4</sub> plants, (e) Shrubs, and (f) Deciduous broadleaf trees in SSiB4/TRIFFID/SIF.



**Figure S3.** Global differences of soil moisture between simulations in (a) SSiB2/SIF, (b) SSiB4/TRIFFID/SIF and Soil Moisture Active Passive enhanced Level 3 (SMAP L3) data, units:  $\text{m}^3/\text{m}^3$ .