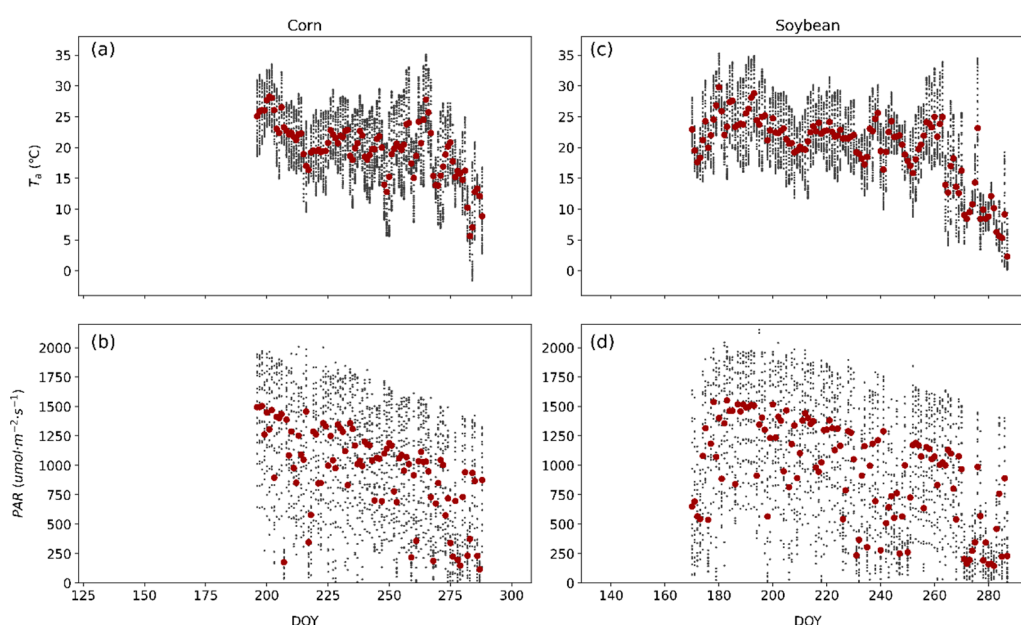
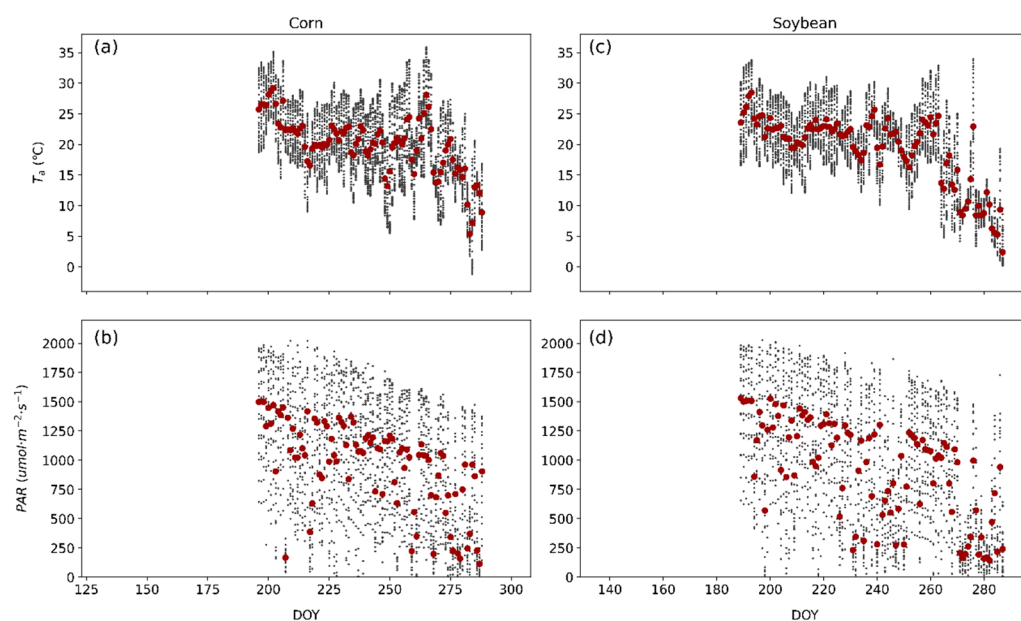


# Assessing the Potential for Photochemical Reflectance Index to Improve the Relationship between Solar-Induced Chlorophyll Fluorescence and Crop Gross Primary Productivity

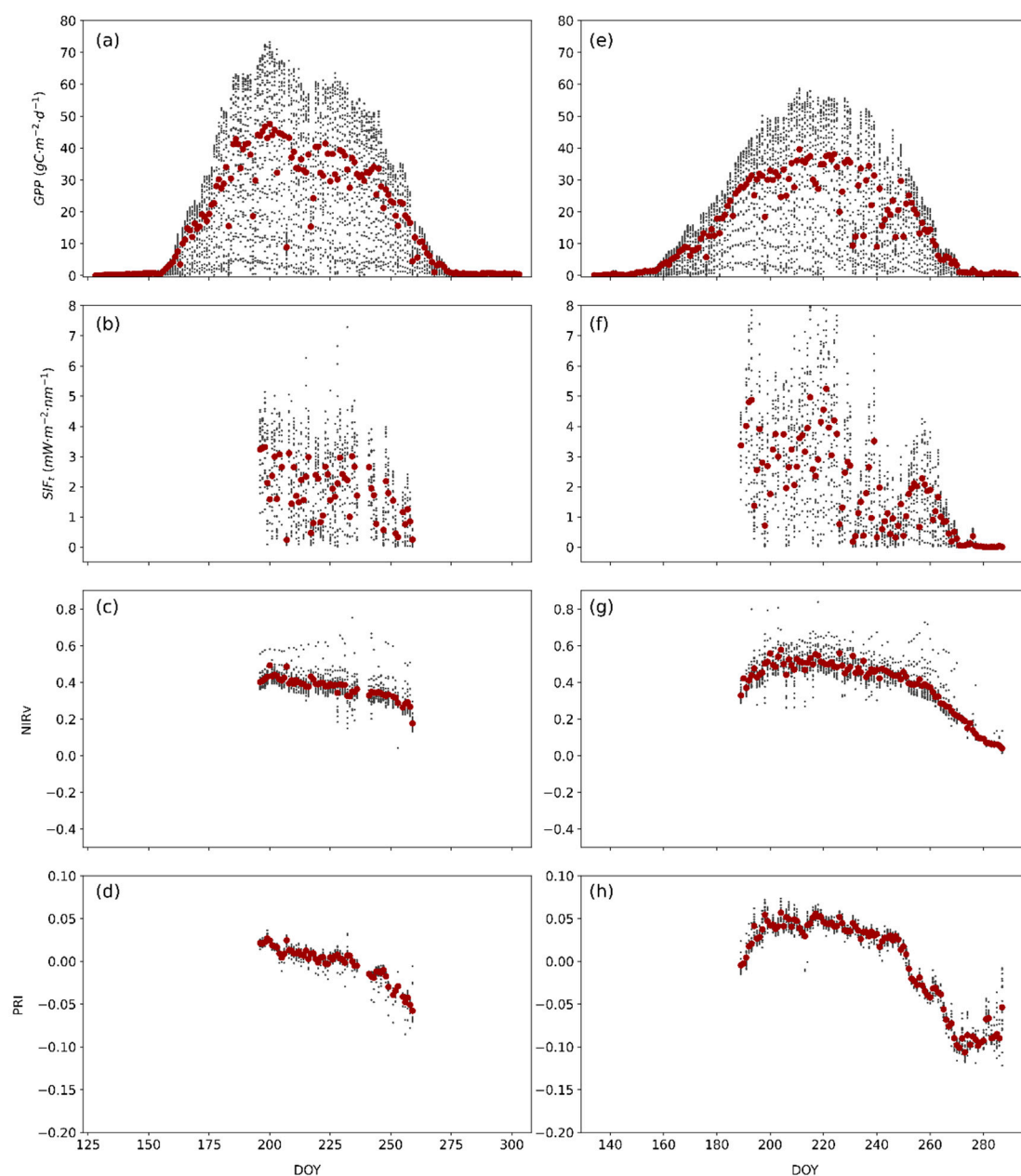
Jidai Chen, Lizhou Huang, Qinwen Zuo and Jiasong Shi



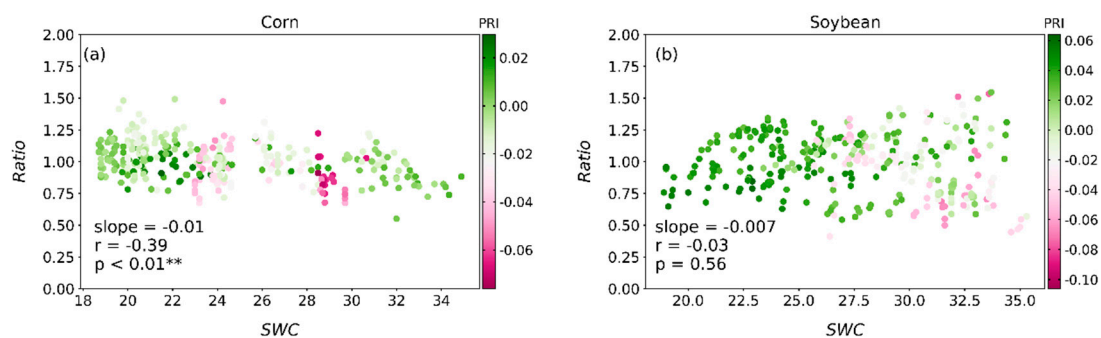
**Figure S1.** Seasonal variations of  $T_a$  and PAR for corn and soybean at US-Ne2 site. The black scatters represent half-hourly data, while the red ones indicate the daily-averaged data.



**Figure S2.** Seasonal variations of  $T_a$  and PAR for corn and soybean at US-Ne3 site. The black scatters represent half-hourly data, while the red ones indicate the daily-averaged data.



**Figure S3.** Seasonal variations of GPP, SIF, NIRv and PRI for corn and soybean at US-Ne3 site. The black scatters represent half-hourly data, while the red ones indicate the daily-averaged data.



**Figure S4.** Relationship between the ratio of  $GPP_{meas}$  to  $GPP_{meas}$  and the soil water content (SWC, %) based on the validated dataset. (a) and (b) represent the relationship between the ratio to SWC for corn and soybean, respectively at half-hourly timescales. The colorbar indicates the magnitude of PRI.