Responses to editor's comments point by point

MS No.: essd-2025-64

Title: Remote sensing of young leaf photosynthetic capacity in tropical and subtropical evergreen broadleaved forests

Author(s): Xueqin Yang et al.

Comment of Topical Editor:

Topical editor decision: Publish subject to minor revisions (review by editor)

Public justification (visible to the public if the article is accepted and published): Congratulations! Your manuscript has been accepted for publication, pending minor revisions. Please note that Table 1 has some formatting issues that need to be addressed.

Response: *Thanks for your valuable time in handling our manuscript and for your careful review. As per the journal's "Figures and Tables" submission guidelines, we have revised the formatting in* ***Table 1*** *accordingly.*

Table 1. Data sources for mapping the $V_{c,max25}$ of young leaves across tropical and subtropical evergreen broadleaved forests

Data name (Abbr.)	Source	Usage	Spatial resolution	Temporal resolution	Temporal coverage
Temperature (T_{mean})	ERA5-Land	Calculate the K_C, K_0, Γ*, and R_d for A_n	0.1°×0.1°	Monthly	2001.1-2018.12
Shortwave solar radiation (SW)	BESS	Calculate the J_e for A_n	0.05°×0.05°	Monthly	2001.1-2018.12
Vapor pressure deficit (VPD)	ERA5-Land	Calculate the C_i for A_n	0.1°×0.1°	Monthly	2001.1-2018.12
Sun induced chlorophyll fluorescence (RTSIF)	TROPOMI SIF	RTSIF-derived GPP	0.05°×0.05°	Monthly	2001.1-2018.12
Gross primary production retrieved from OCO-2 Solar induced chlorophyll fluorescence (GOSIF)	GOSIF	GOSIF-derived GPP	0.05°×0.05°	Monthly	2001.1-2018.12
Gross primary production from eddy covariance flux tower measurements (FLUXCOM)	FLUXCOM	FLUXCOM GPP	0.5°×0.5°	Monthly	2001.1-2013.12
Leaf-age-dependent leaf area index (Lad-LAI)	Yang et al., 2023	Dissolved $V_{c,max25}$ from GOSIF-derived GPP	0.25°×0.25°	Monthly	2001.1-2018.12