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Supplement of

Carbon exchange in an Amazon forest: from hours to years

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Supplemental Tables and Figures: Table S1 and Figures S1-S3.

Model Parameters							hourly	monthly
a_0	a_1	a_2	a_3	k_{CI}	k_{VPD}	k_{pheno}	R^2	R^2
9.43	-1.32	-79.1	3778	1.34	1.72	0.132	0.83	0.59
(9.30, 9.56)	(-1.49, -1.15)	(-81.3, -76.9)	(3613, 3937)	(1.30, 1.38)	(1.69, 1.74)	(0.128, 0.135)		

Table S1. Model parameter values (95% confidence intervals in parentheses) and R^2 fit. Parameters have the following units: a_0 , a_1 , and a_2 : $\mu\text{mol-CO}_2 \text{ m}^{-2} \text{ s}^{-1}$; a_3 : $\mu\text{mol-photons m}^{-2} \text{ s}^{-1}$; k_{VPD} : 10^{-4} Pa^{-1} ; k_{pheno} and k_{CI} : unitless.

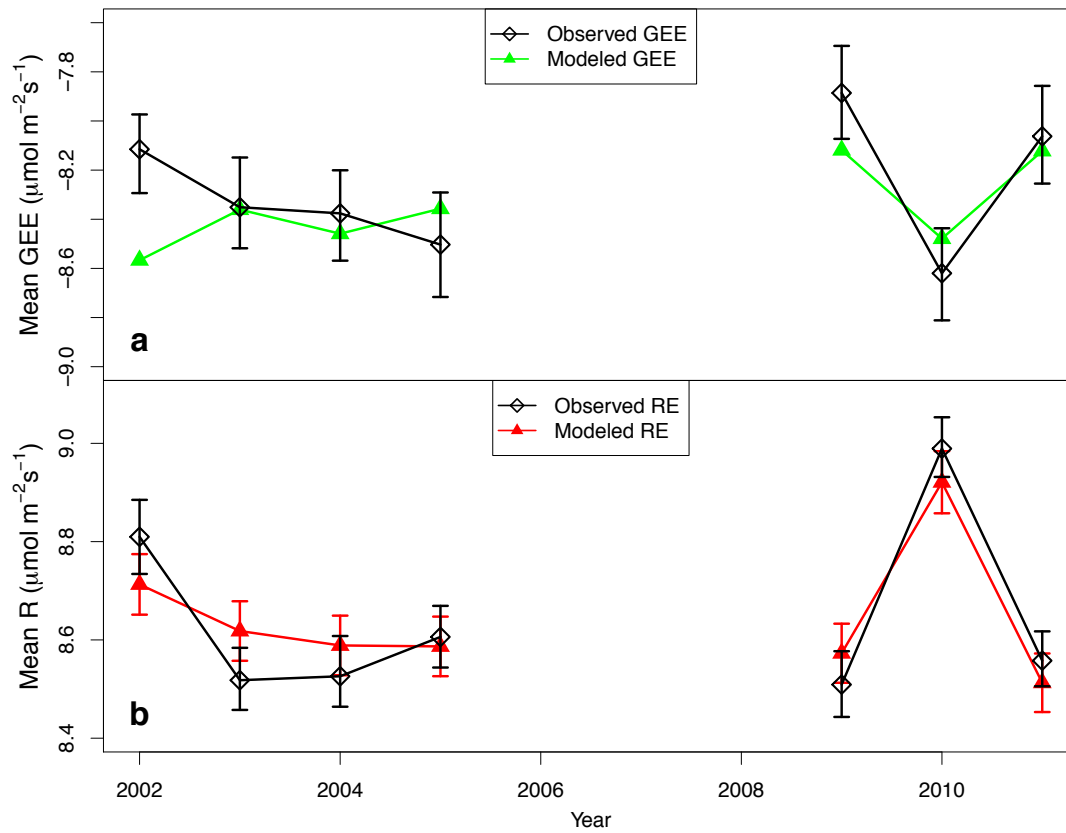


Figure S1. (a) Annual average partitioned GEE (black diamonds) and annual average modeled GEE (green triangles). (b) Annual average RE (observed nighttime NEE) (black diamonds) and annual average modeled RE (red triangles).

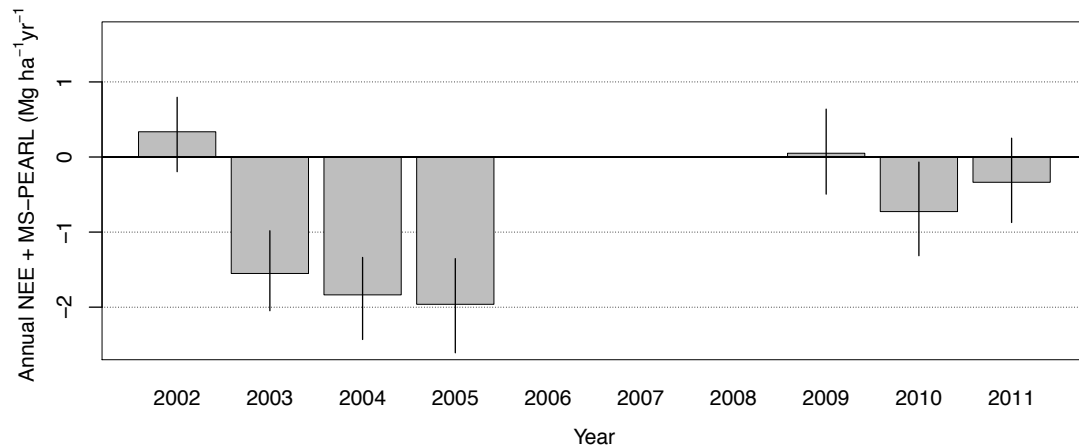


Figure S2. Annual NEE adjusted by alternative bias correction from Hayek et al. (2018).

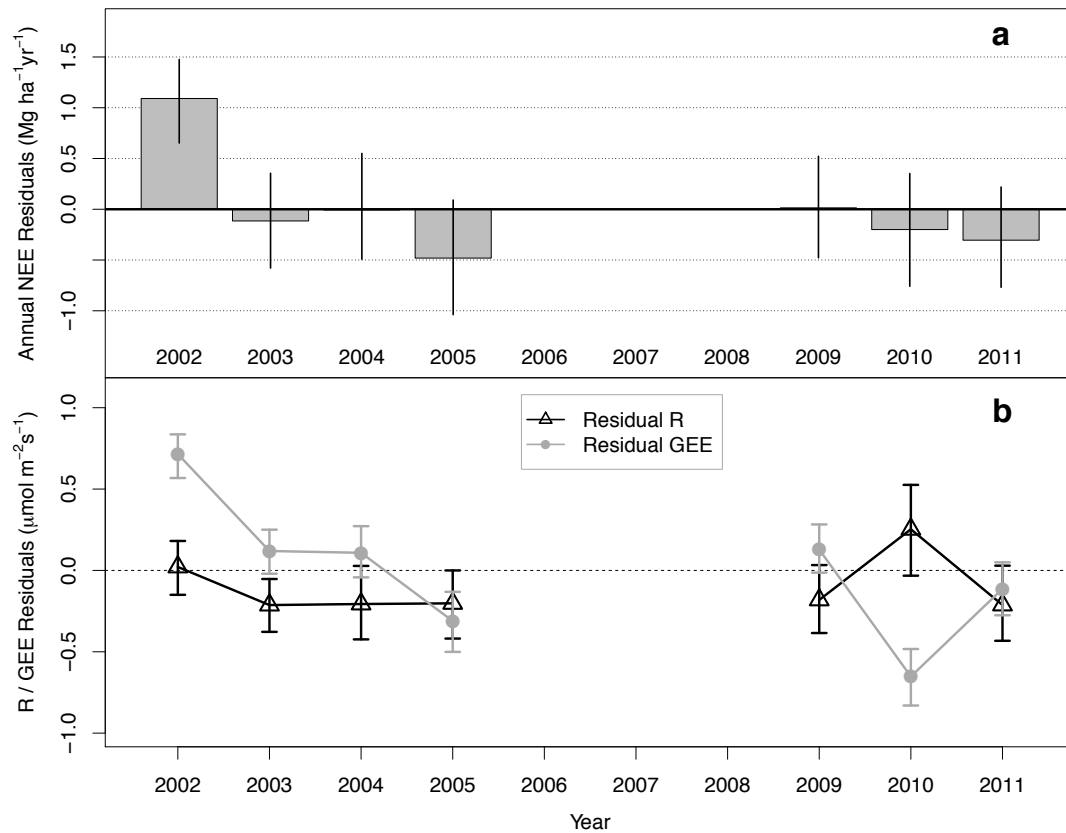


Figure S3. (a) Annually summed model residuals from the higher-parameter light-and-moisture NEE model derived from Wu et al. (2017). Error bars are 95% bootstrapped confidence intervals. Annual residual NEE in 2002 is statistically different from 0 within random NEE measurement error; all other years are not. (b) Residuals of model representation of partitioned GEE (gray circles) and RE (black triangles) of the higher-parameter light-and-moisture derived from Wu et al. (2016b).