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*Supplement of*

**Assessing impacts of selective logging on water, energy, and carbon budgets and ecosystem dynamics in Amazon forests using the Functionally Assembled Terrestrial Ecosystem Simulator**

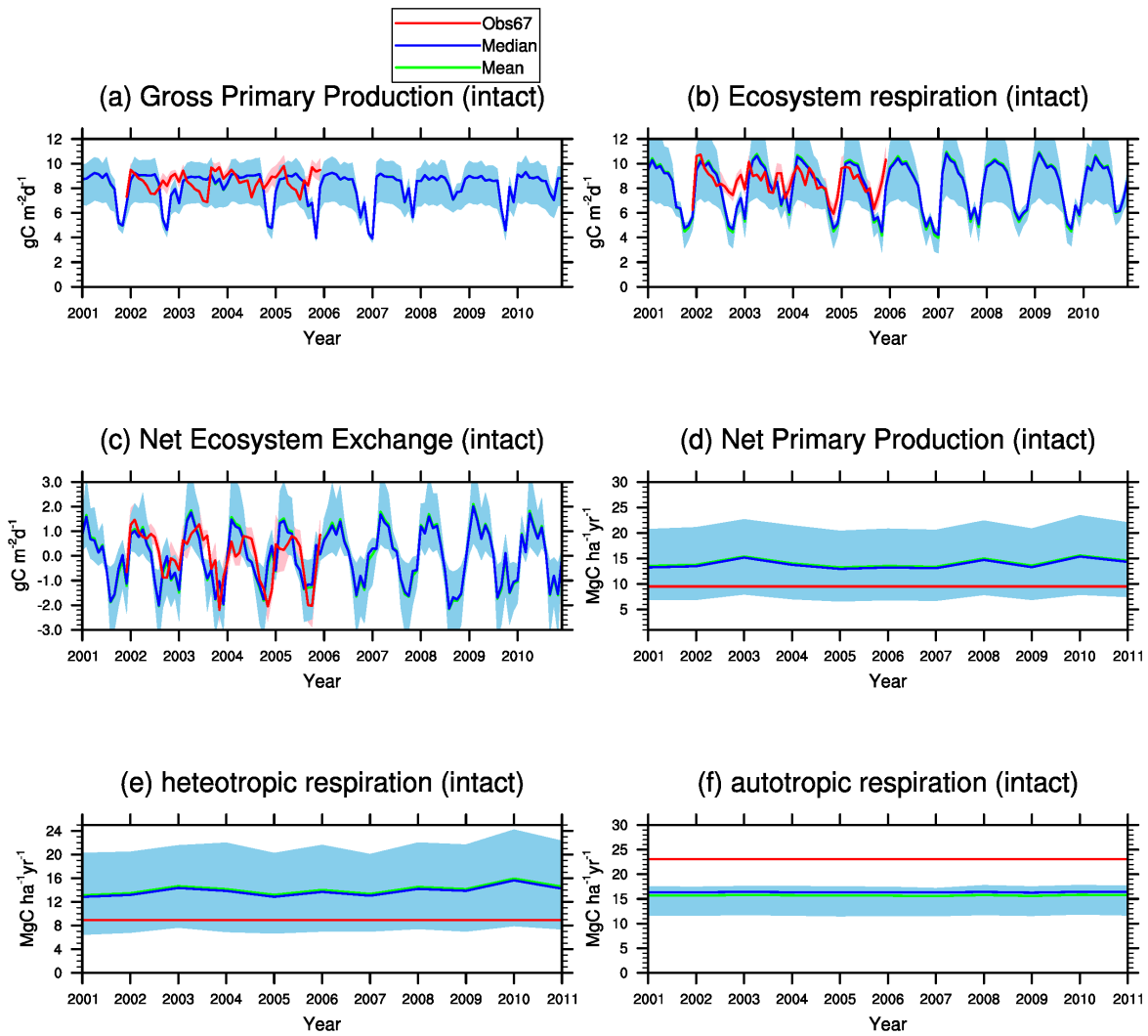
**Maoyi Huang et al.**

*Correspondence to:* Maoyi Huang (maoyi.huang@pnnl.gov)

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Experiment number	SLA <sub>0</sub>		V <sub>cmax</sub> at 25 °C		Leaf C:N	
	Early PFT	Late PFT	Early PFT	Late PFT	Early PFT	Late PFT
<b>1-10</b>	0.01-0.02, Δ=0.001	SLA <sub>0_early</sub> - 0.001	52	50	20	40
<b>11-20</b>	0.01-0.02, Δ=0.001	SLA <sub>0_early</sub> - 0.001	58	50	20	40
<b>21-30</b>	0.013	0.012	52-62, Δ=1	V <sub>cmax_early</sub> -2	20	40
<b>31-40</b>	0.013	0.012	58-68, Δ=1	V <sub>cmax_early</sub> -8	20	40
<b>41-50</b>	0.01-0.02, Δ=0.001	SLA <sub>0_early</sub> - 0.0025	58	50	20	40
<b>51-60</b>	0.01-0.035, Δ=0.025	SLA <sub>0_early</sub> - 0.001	65	50	20	40
<b>61-70</b>	0.01-0.035, Δ=0.025	SLA <sub>0_early</sub> - 0.001	65	50	20	30

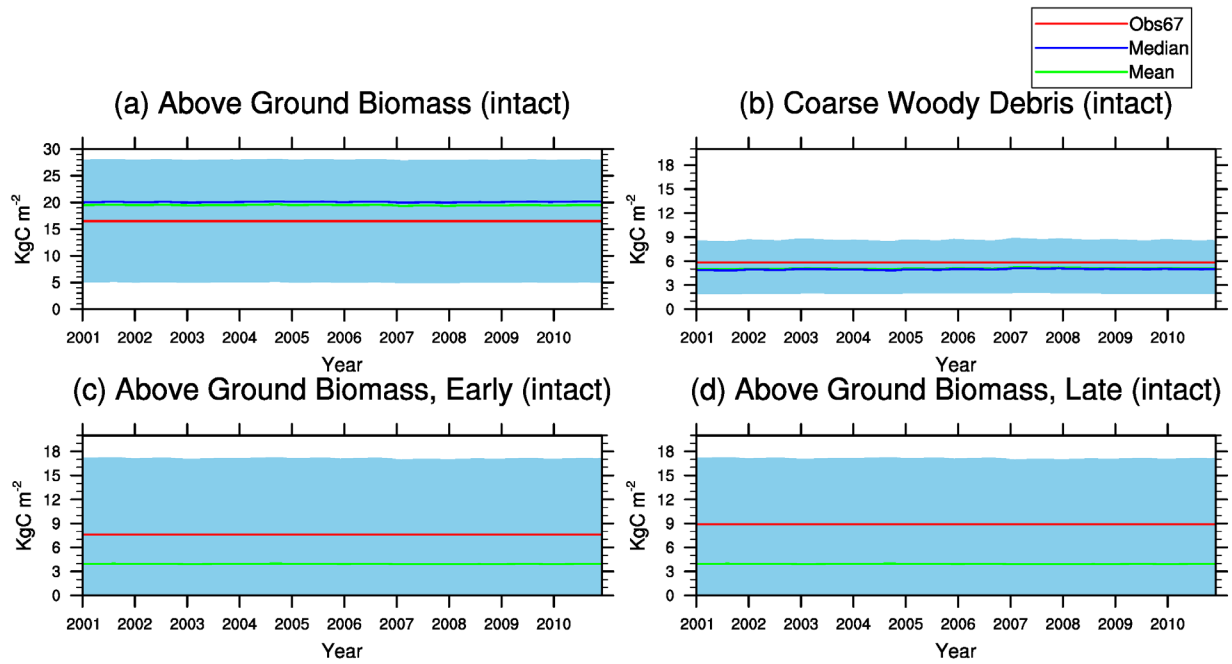
1 Table S1. Summary of parameter values perturbed in the sensitivity experiments. Experiment 63 was  
2 selected as the intact case in the main text based on the following procedure: (a) Calculate the RMSEs of  
3 NEE, GPP, ER, AGB, CWD, and LAI of each simulation; (2) Select 10 simulations with the lowest sums of  
4 RMSEs of the selected variables; (3) Finalize the selection by choosing the simulations with the best ratio  
5 of early vs. late successional PFTs as indicated in Figure 5.



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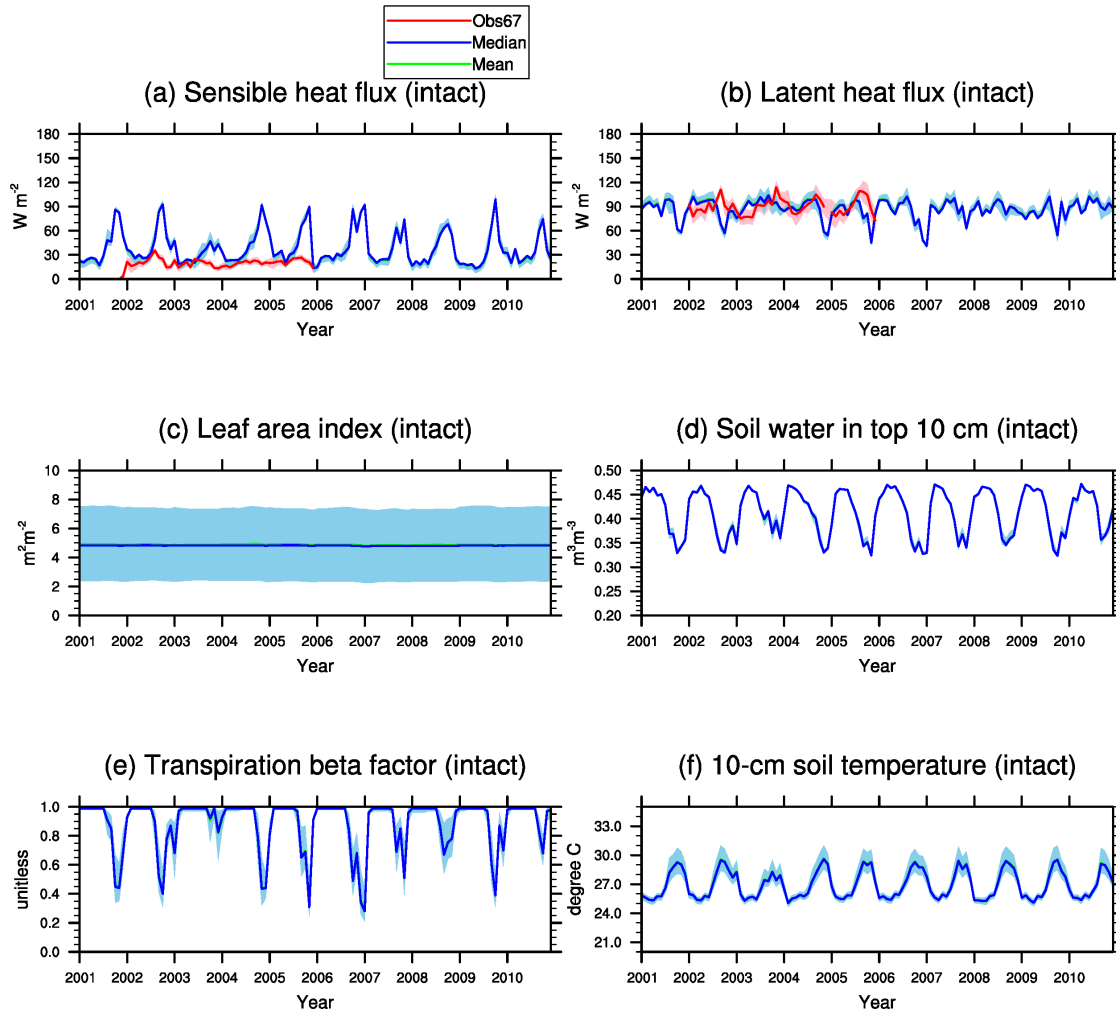
7 Figure S1. Mean, median, and ranges of carbon fluxes from the ensemble simulations by perturbing the  
 8 parameters as shown in Table S1.

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11 Figure S2. Mean, median, and ranges of carbon pools from the ensemble simulations by perturbing the  
 12 parameters as shown in Table S1.



13

14 Figure S3. Mean, median, and ranges of water and energy fluxes and states from the ensemble simulations  
 15 by perturbing the parameters as shown in Table S1.