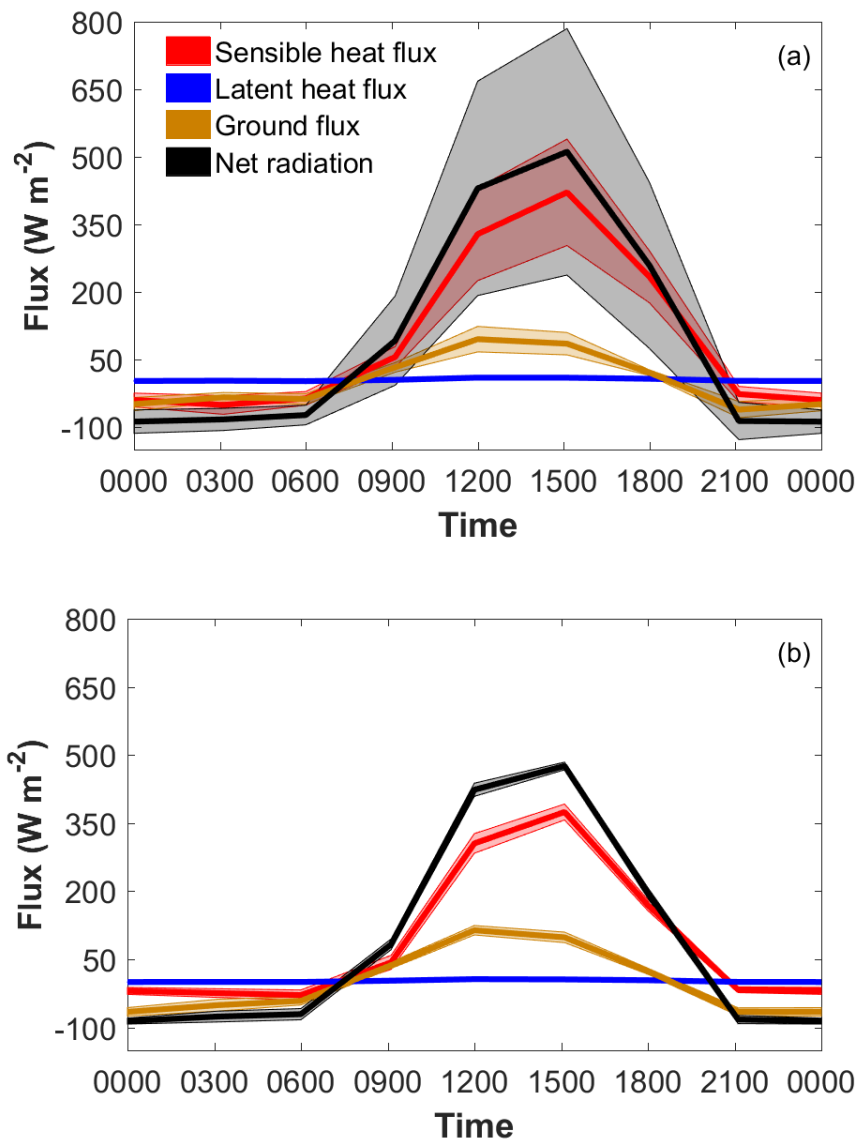


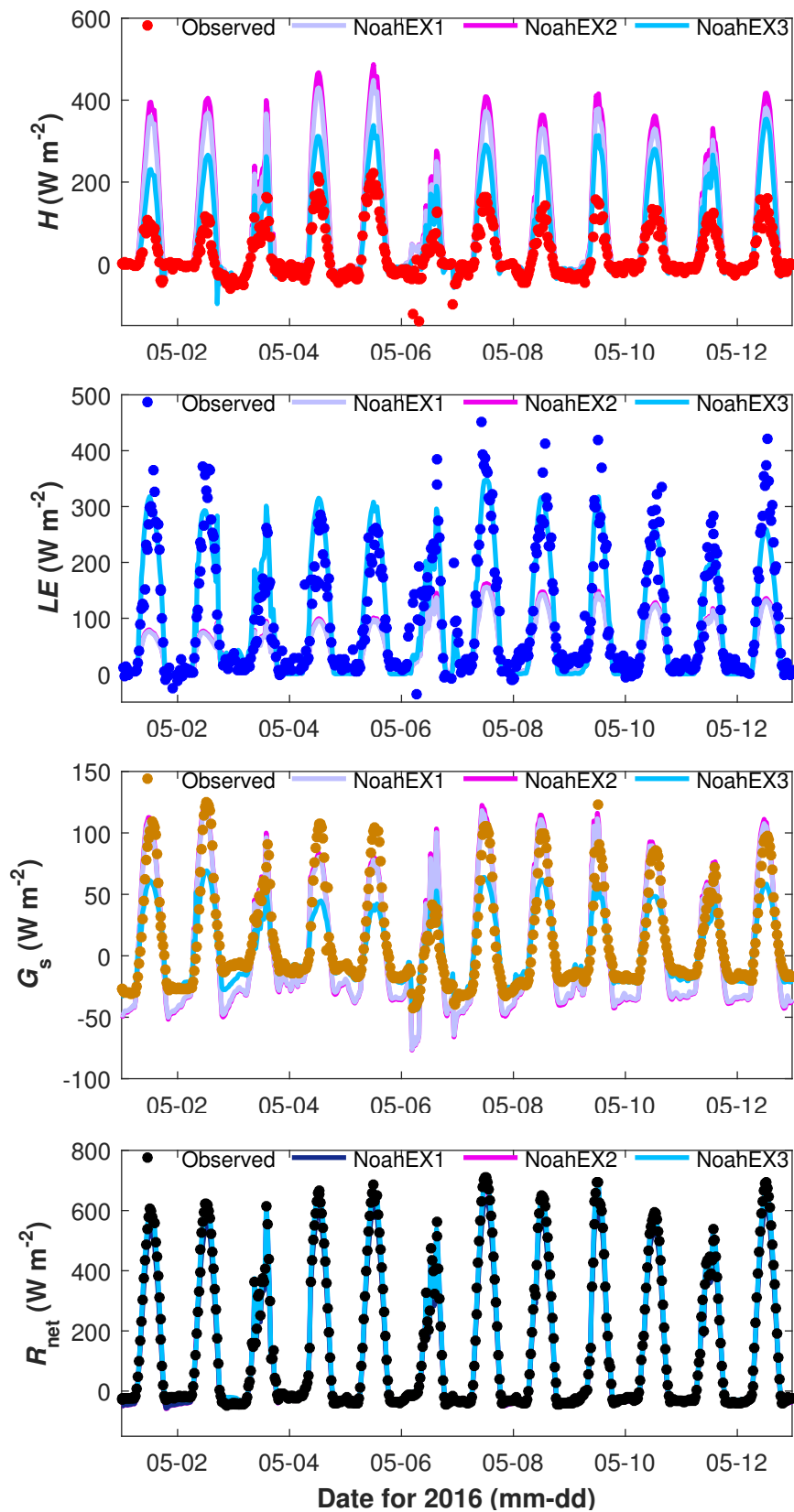
1 **Biases in Model-Simulated Surface Energy Fluxes During the**
2 **Indian Monsoon Onset Period - Supplementary Information**

3 **Tirthankar Chakraborty · Chandan Sarangi ·**
4 **Mithun Krishnan · Sachchida Nand Tripathi ·**
5 **Ross Morrison · Jonathan Evans**

6
7 the date of receipt and acceptance should be inserted later

**Fig. S1**

Diurnal variation of GLDAS-simulated H , LE , R_{net} , and G_s for the study period for **a** 2016 and **b** 2017. The solid lines represent the mean values, while the shaded areas represent the standard deviations

**Fig. S2**

Time series of observed and offline Noah-simulated **a** H , **b** LE , **c** G_s , and **d** R_{net} for the study period in 2016. The observed values are represented by dots while the modeled runs are shown using solid lines. The dates are in the format, mm-dd

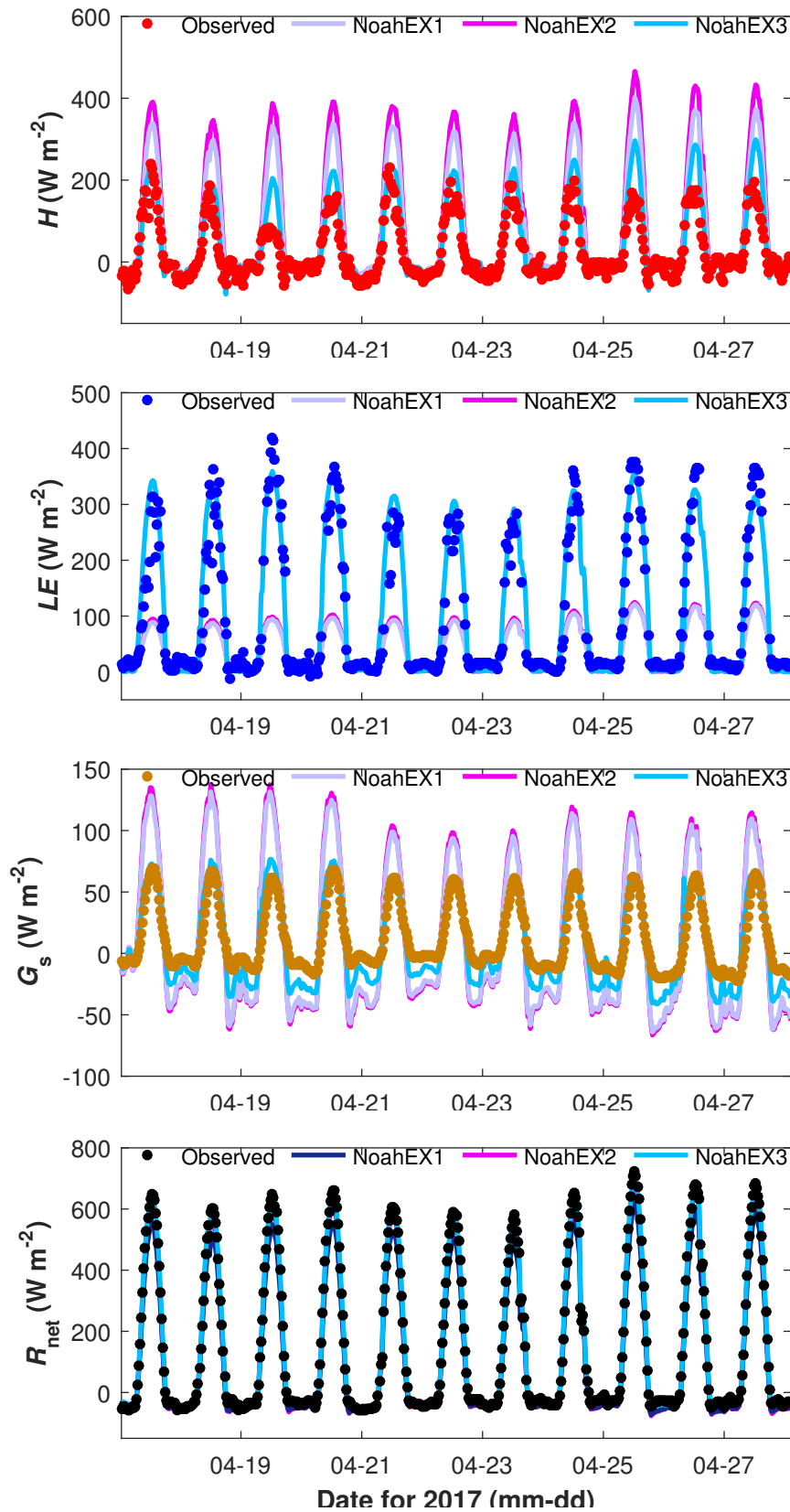


Fig. S3

Time series of observed and offline Noah-simulated **a** H , **b** LE , **c** G_s , and **d** R_{net} for the study period in 2017. The observed values are represented by dots while the modeled runs are shown using solid lines. The dates are in the format, mm-dd.

Table T1: Sensitivity of modeled H and LE to LAI . The model was run with the NoahEX3 configuration, with LAI increased and decreased by 0.2.

Change	2016		2017	
	LAI increased by 0.2	LAI decreased by 0.2	LAI increased by 0.2	LAI decreased by 0.2
Change in H (%)	-0.29	0.33	-0.44	0.50
Change in LE (%)	2.80	-2.04	3.06	-2.74