

DE-Hai

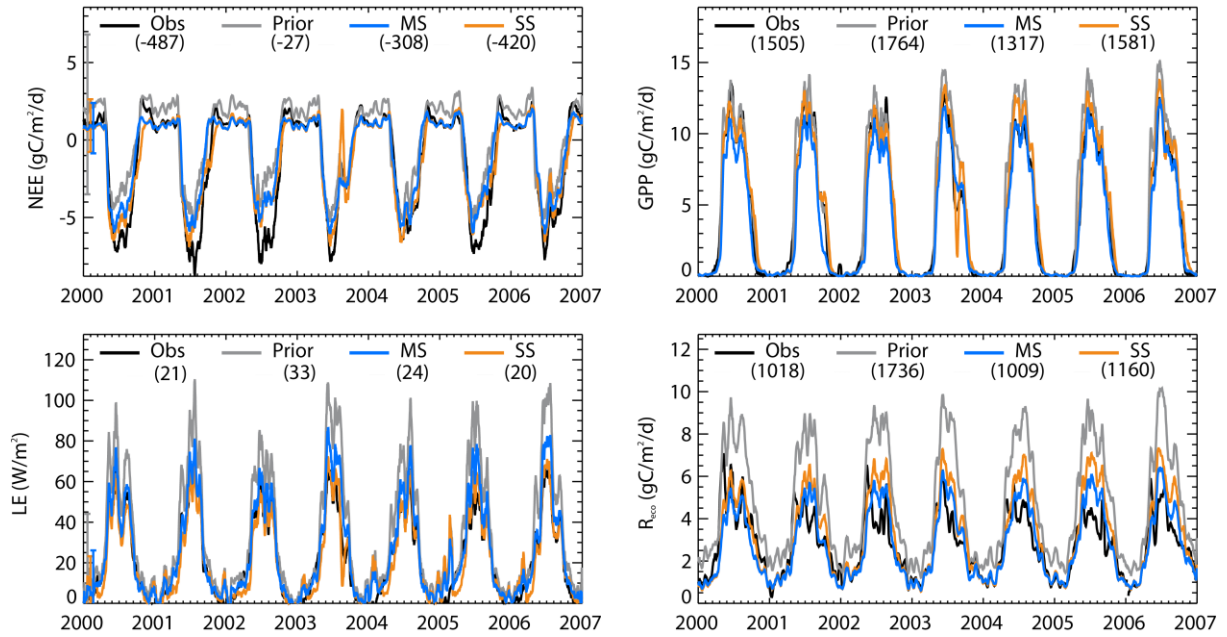


Figure S1. Seasonal cycles of NEE, LE, GPP and R_{eco} at Hainich site, smoothed with a 15-day moving average window. The observations (black) are compared with the prior model (grey), the MS optimization (blue) and the SS optimization (orange). The annual average carbon flux (gC.m⁻².yr⁻¹) and the annually averaged LE flux (W.m⁻²) are given between brackets.

DK-Sor

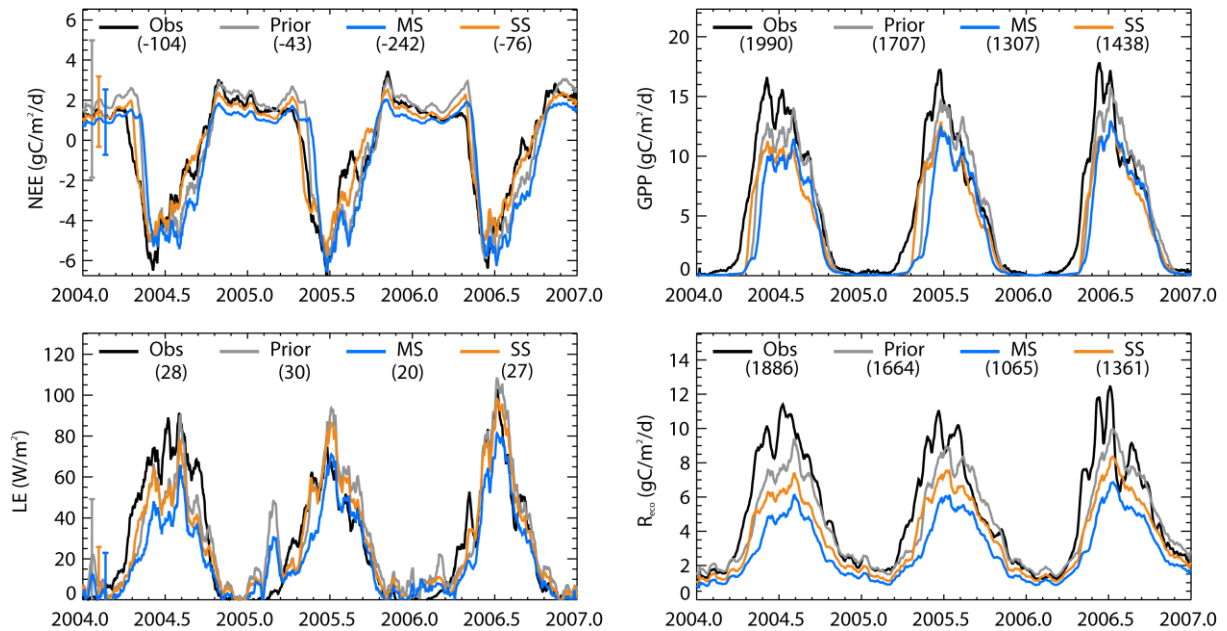


Figure S2. Same as Fig. S1 at Soroe-LilleBogeskov site.

FR-Fon

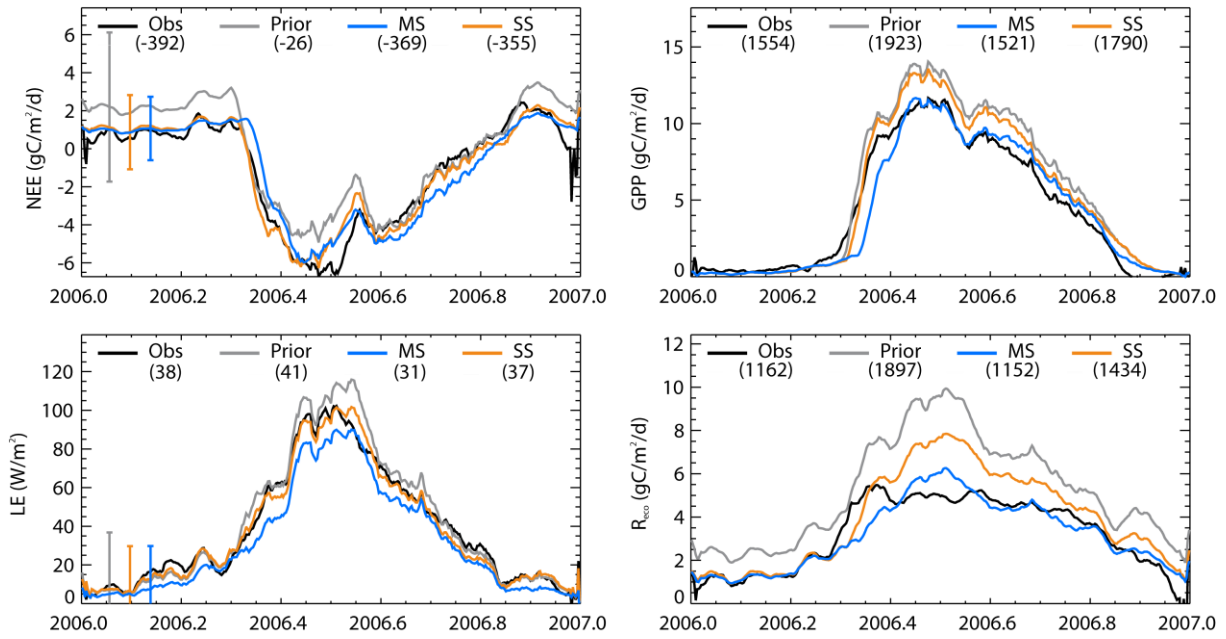


Figure S3. Same as Fig. S1 at Fontainebleau site.

FR-Hes

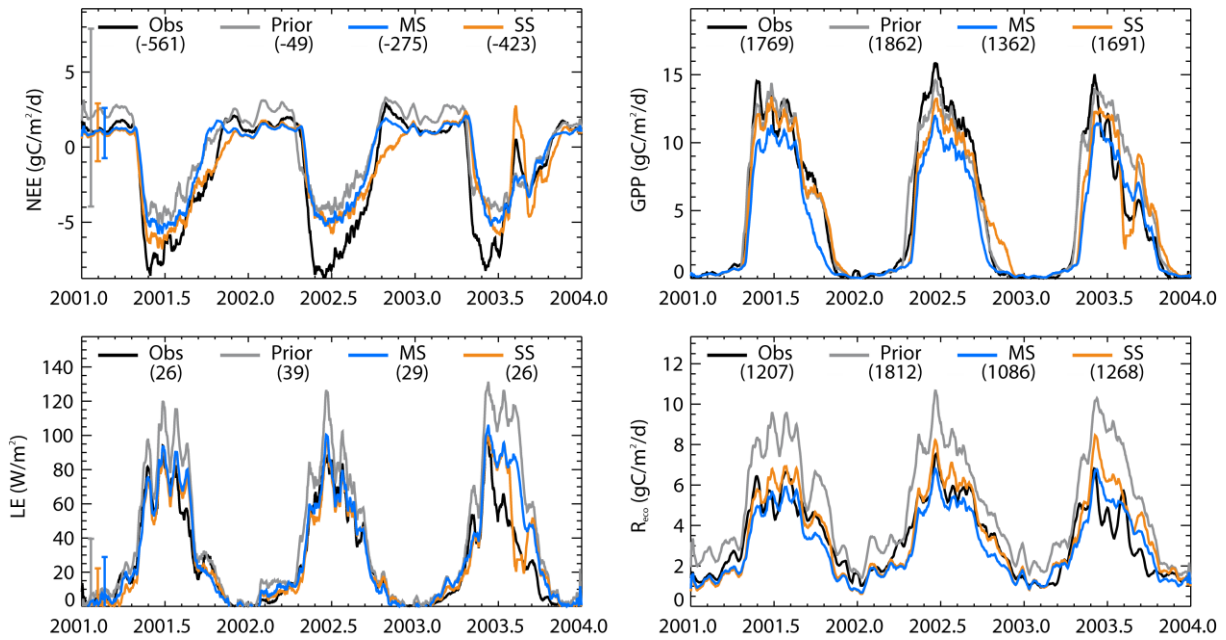


Figure S4. Same as Fig. S1 at Hesse Forest site.

JP-Tak

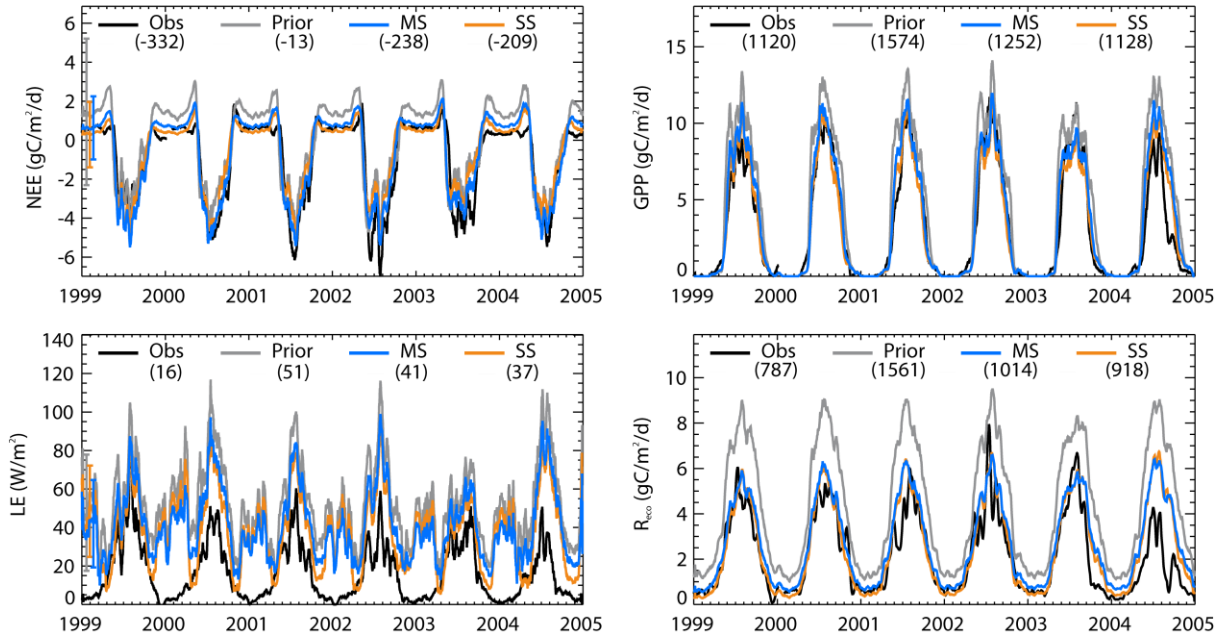


Figure S5. Same as Fig. S1 at Takayama site.

UK-Ham

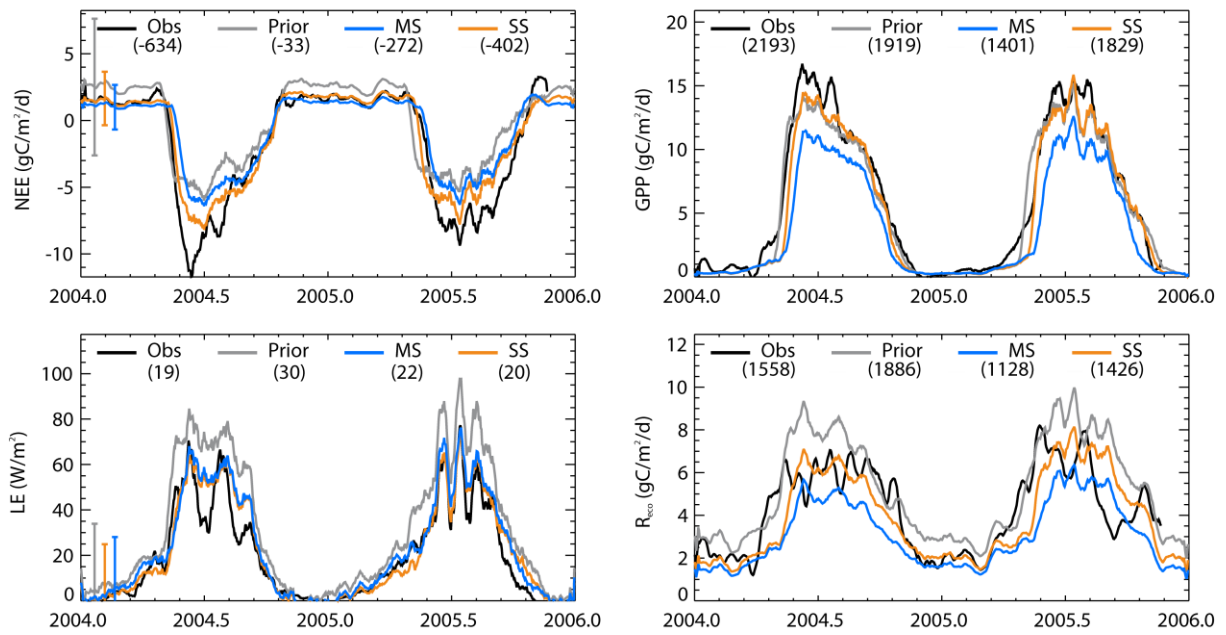


Figure S6. Same as Fig. S1 at Hampshire site.

US-Bar

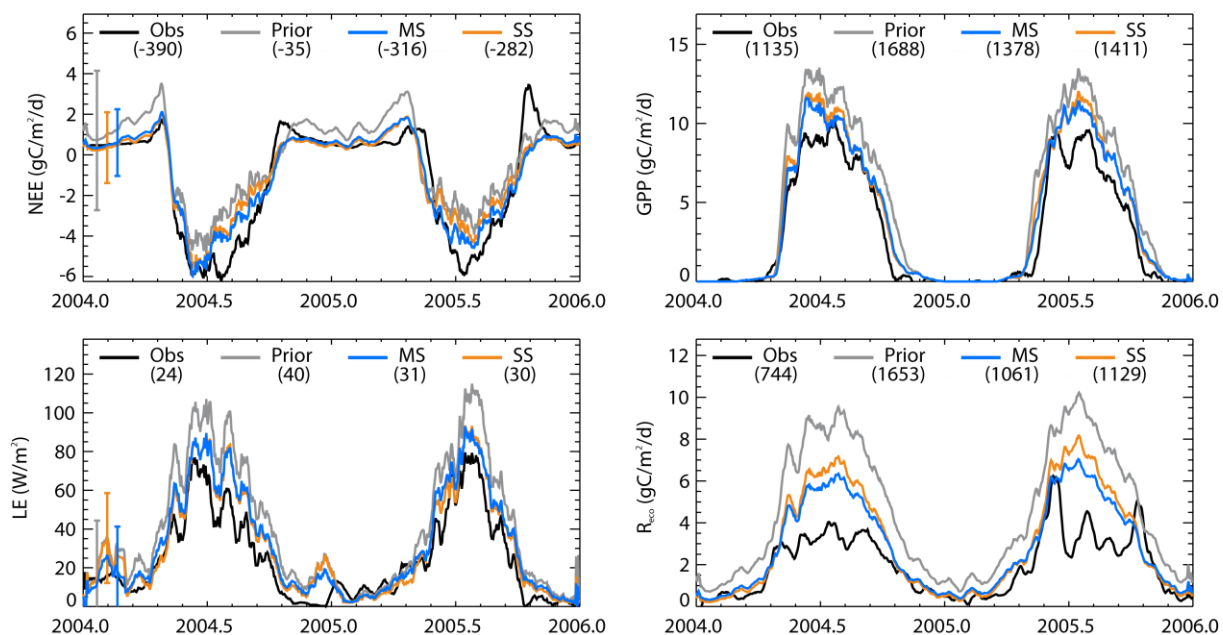


Figure S7. Same as Fig. S1 at Bartlett Experimental Forest site.

US-Ha1

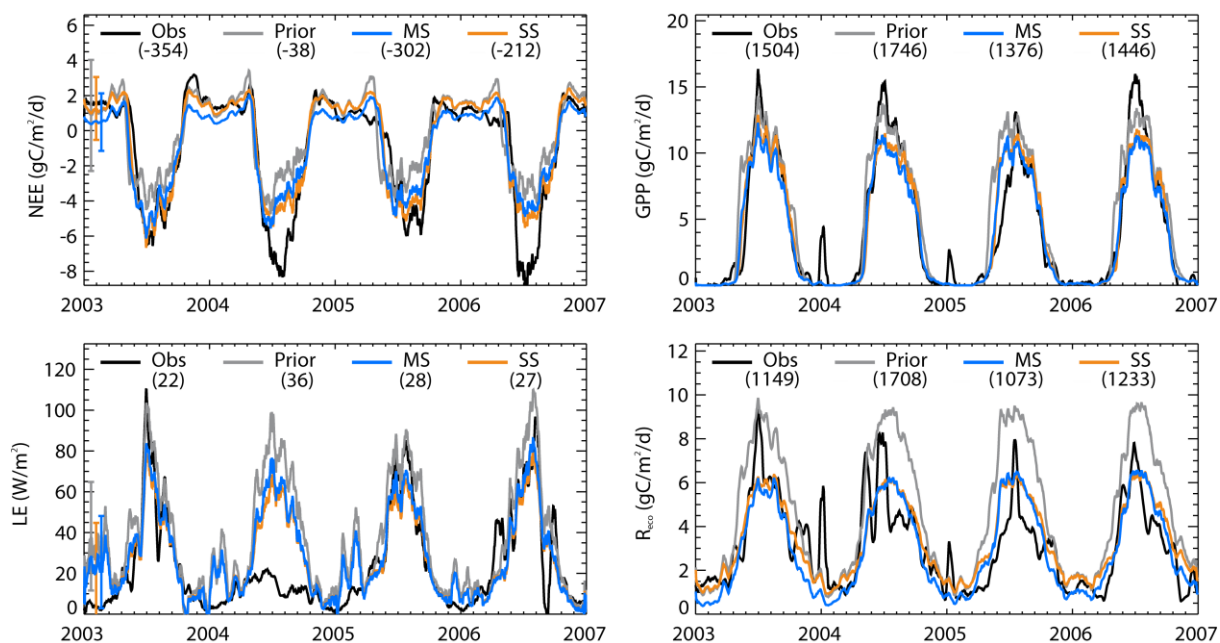


Figure S8. Same as Fig. S1 at Harvard Forest site.

US-LPH

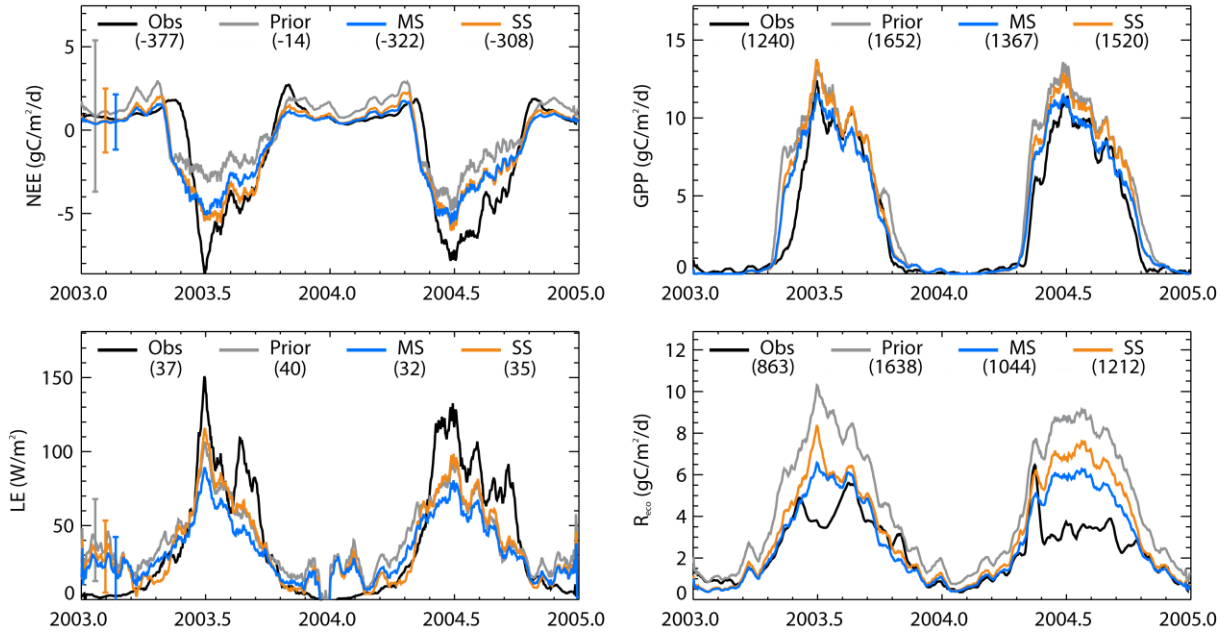


Figure S9. Same as Fig. S1 at Little Prospect Hill site.

US-MOz

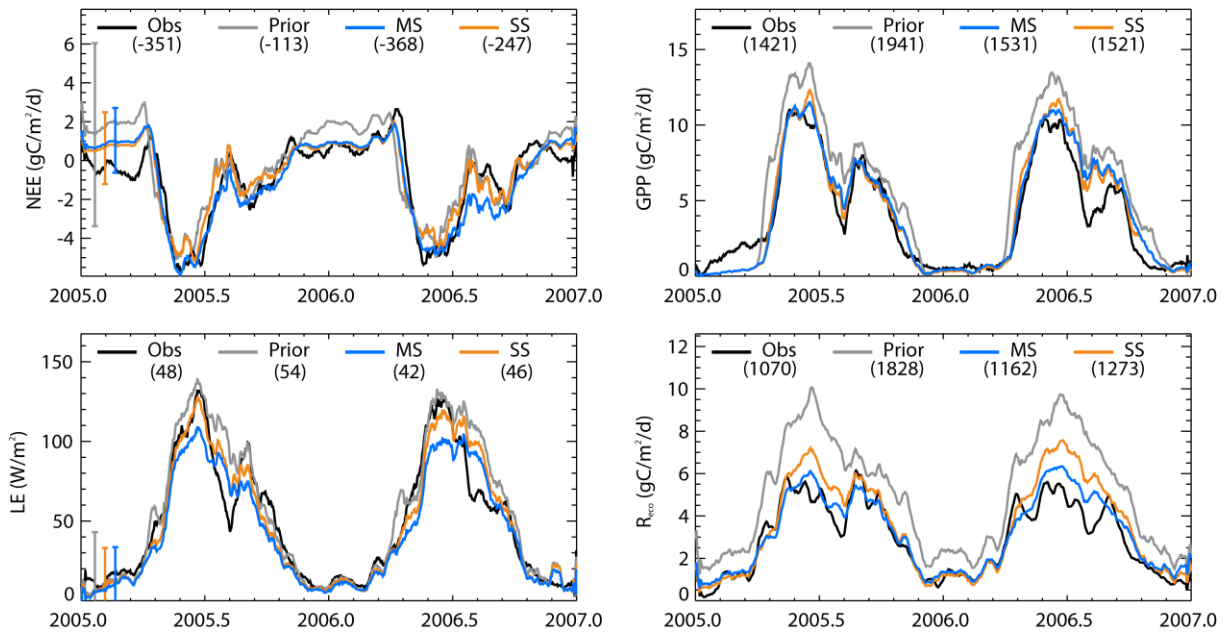


Figure S10. Same as Fig. S1 at Missouri Ozark site.

US-UMB

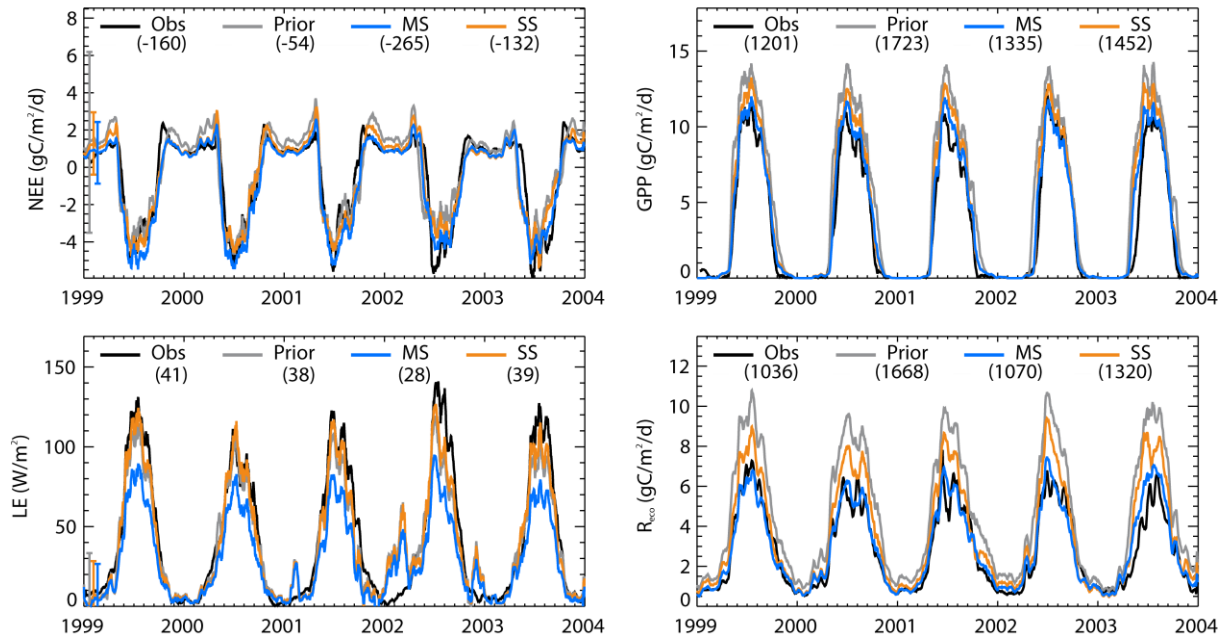


Figure S11. Same as Fig. S1 at Univ. of Mich. Biological Station site.

US-WCr

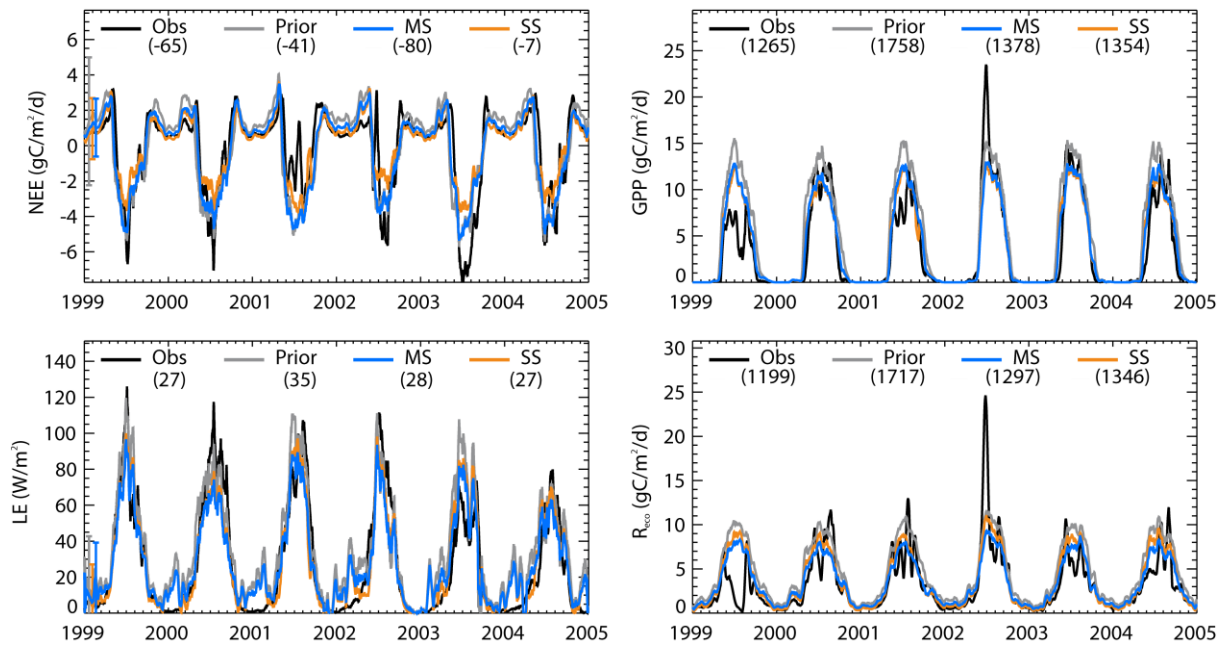


Figure S12. Same as Fig. S1 at Willow Creek site.

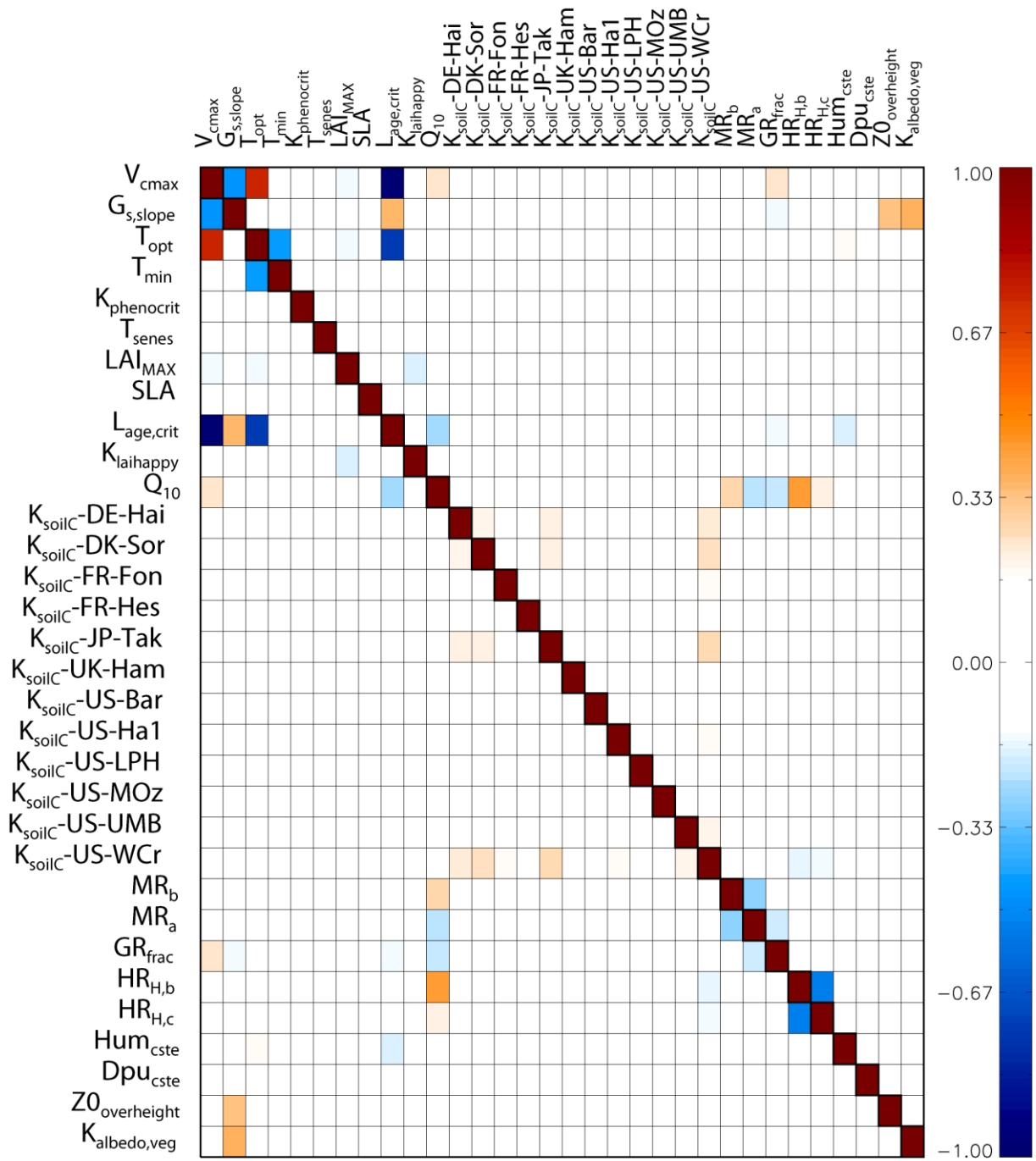


Figure S13. All-site MS posterior parameter error correlation matrix.

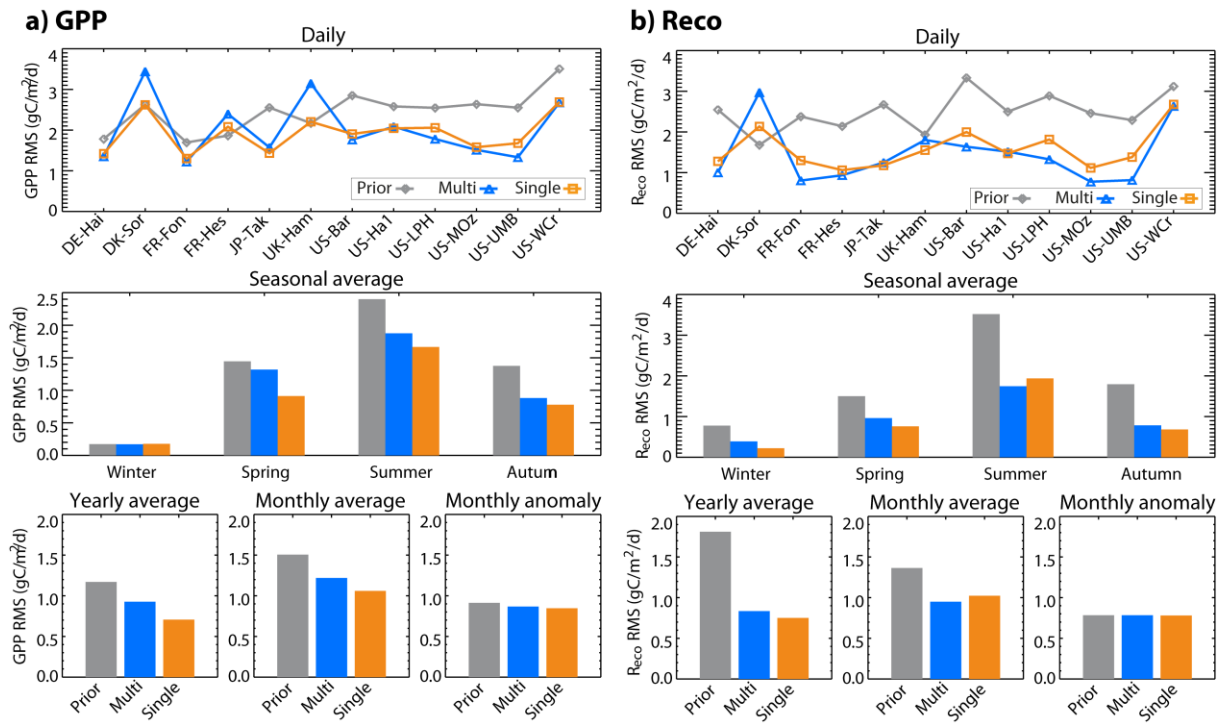


Figure S14. Model-data RMSs at different time scales for a) GPP and b) R_{eco} . Prior model is in grey, MS optimization in blue, and SS optimization in orange.