Supporting Information for "Parametric controls on vegetation responses to biogeochemical forcing in the CLM5"

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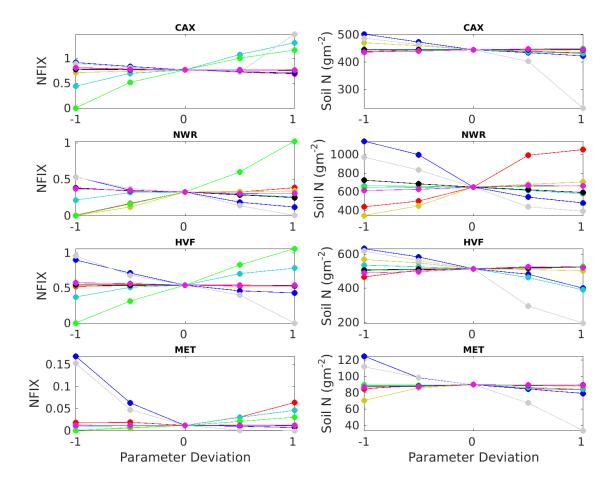


Figure S1. Influence of parametric variation (over the range tested: -1 to +1, Table 1.) on the model pre-fertilization state for Nitrogen fixation and total soil N content across the Caxiuanã (CAX), Niwot Ridge (NWR), Harvard Forest (HVF) and Metolious (MET) sites.

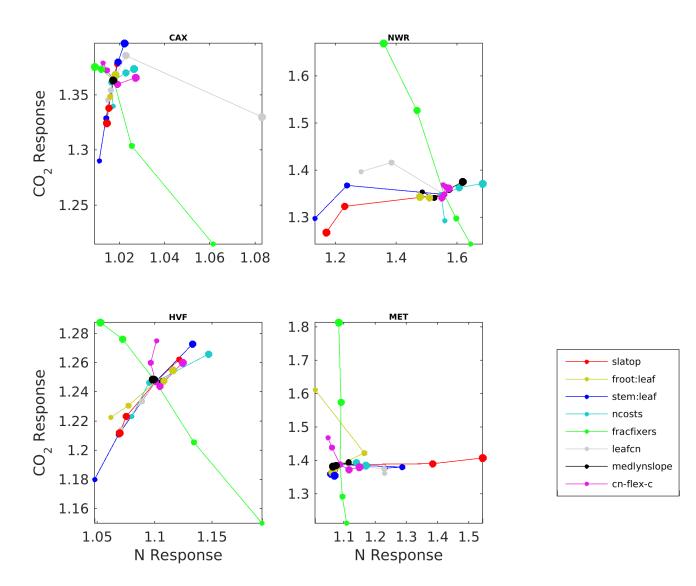


Figure S2. Influence of parametric variation (over the range tested: -1 to +1, Table 1) on the model response (fertilized/control) to 15 years of 500ppm CO_2 and +5 Kg m⁻² y⁻¹ N fertilization, for net primary production (NPP)

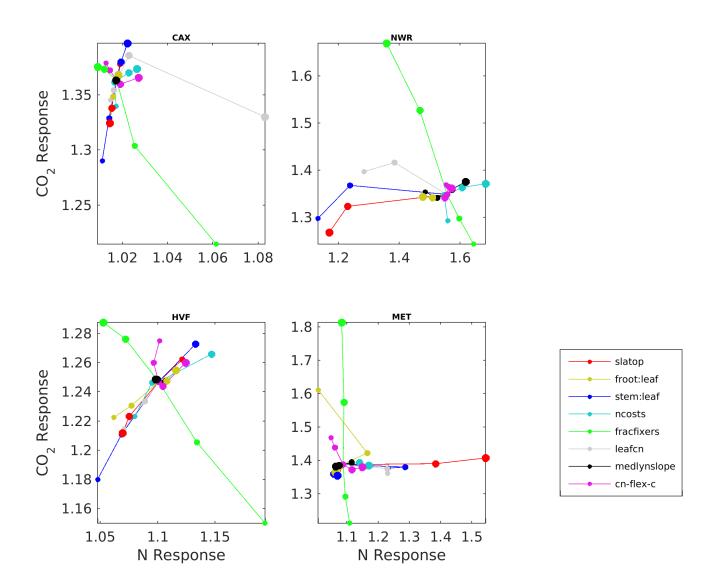


Figure S3. Influence of parametric variation (over the range tested: -1 to +1, Table 1) on the model response (fertilized/control) to 15 years of 500ppm CO_2 and +5 Kg m⁻² y⁻¹ N fertilization, for total vegetation carbon)

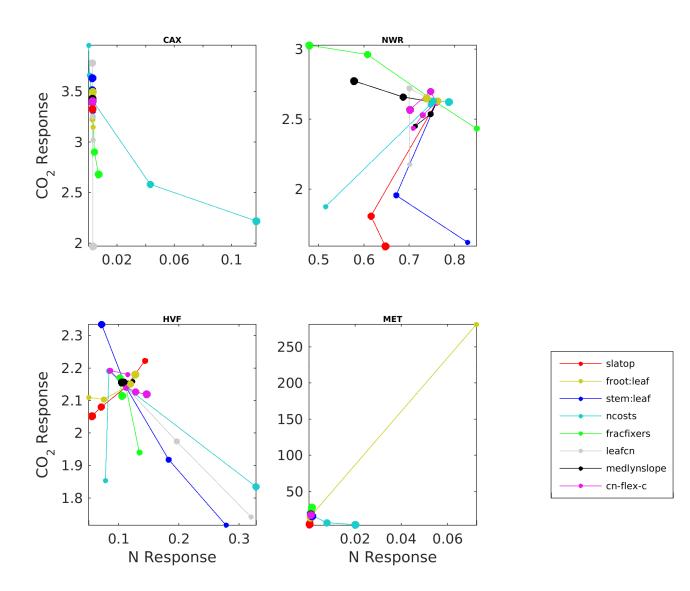


Figure S4. Influence of parametric variation (over the range tested: -1 to +1, Table 1) on the model response (fertilized/control) to 15 years of 500ppm CO_2 and +5 Kg m⁻² y⁻¹ N fertilization, for nitrogen fixation rates (NFIX, gN m⁻²)

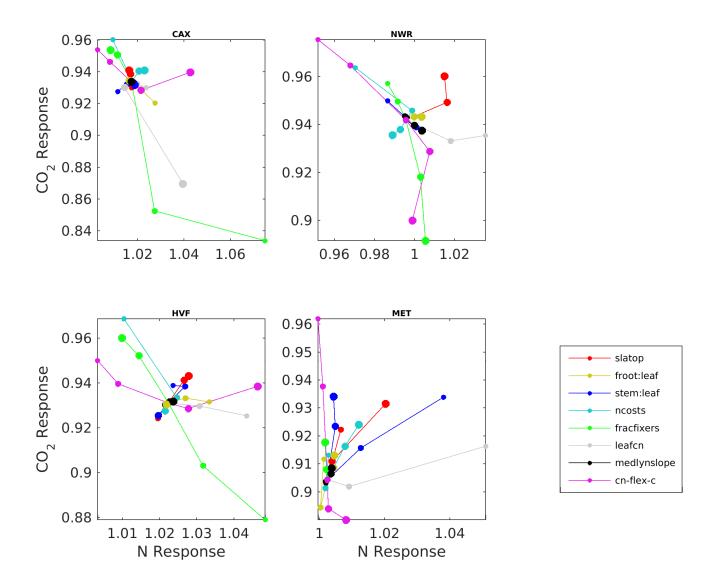


Figure S5. Influence of parametric variation (over the range tested: -1 to +1, Table 1) on the model response (fertilized/control) to to 15 years of 500ppm CO₂ and +5 Kg m⁻² y⁻¹ N fertilization, for leaf nitrogen (N_{leaf})