

Fig. S1. (a) Annual global burned area and (b) fire carbon emissions normalized by the mean for 1997–2004 from GFED3 and CLM4.5 simulations. The numbers in brackets denote temporal correlation between GFED3 and simulations.

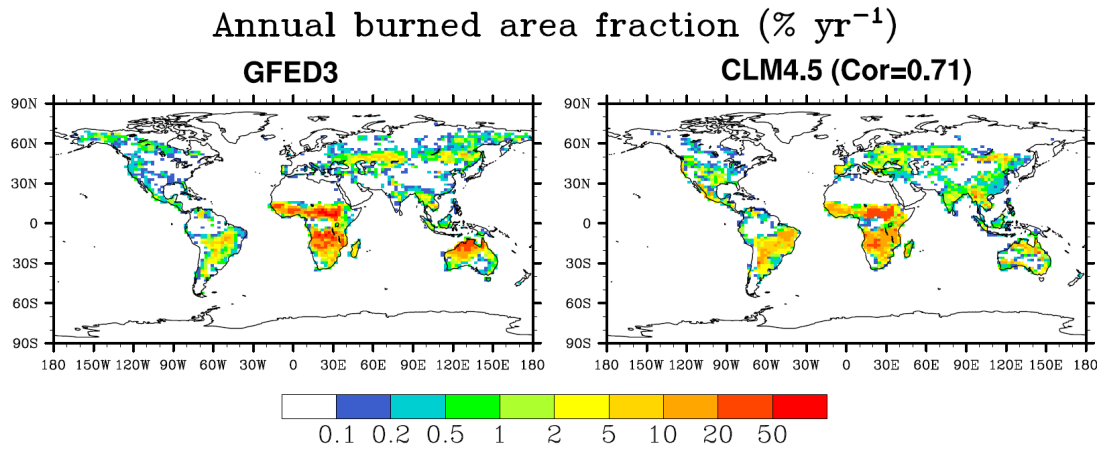


Fig. S2. Spatial distribution of annual burned area fraction averaged over 1997–2004 for GFED3 and CLM4.5. The global spatial correlation (Cor) between GFED3 and CLM4.5 simulation is also given.

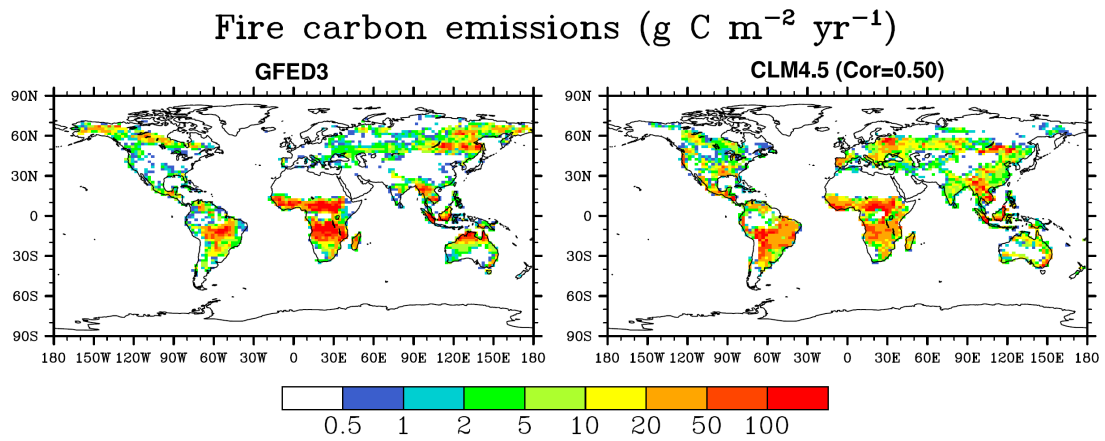


Fig. S3. Same as Fig. S2, but for fire carbon emissions.

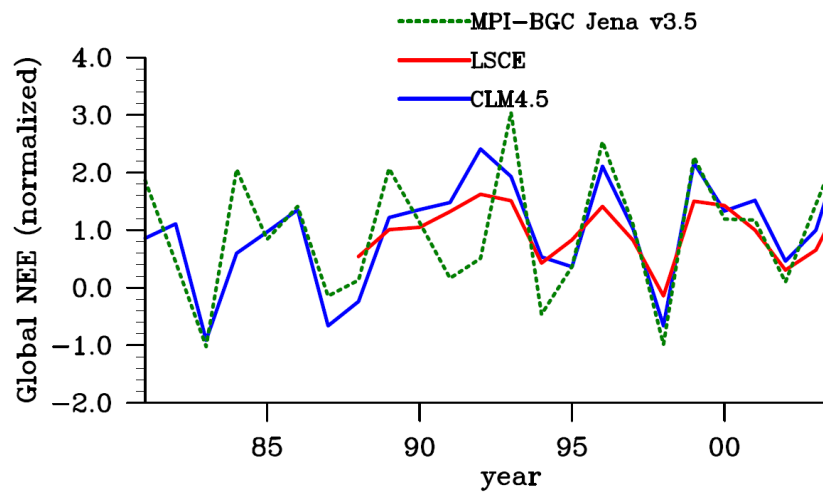


Fig. S4. Annual global net ecosystem exchange (NEE) normalized by the mean from MPI-BGC Jena v3.5, and LSCE, and CLM4.5 simulation.

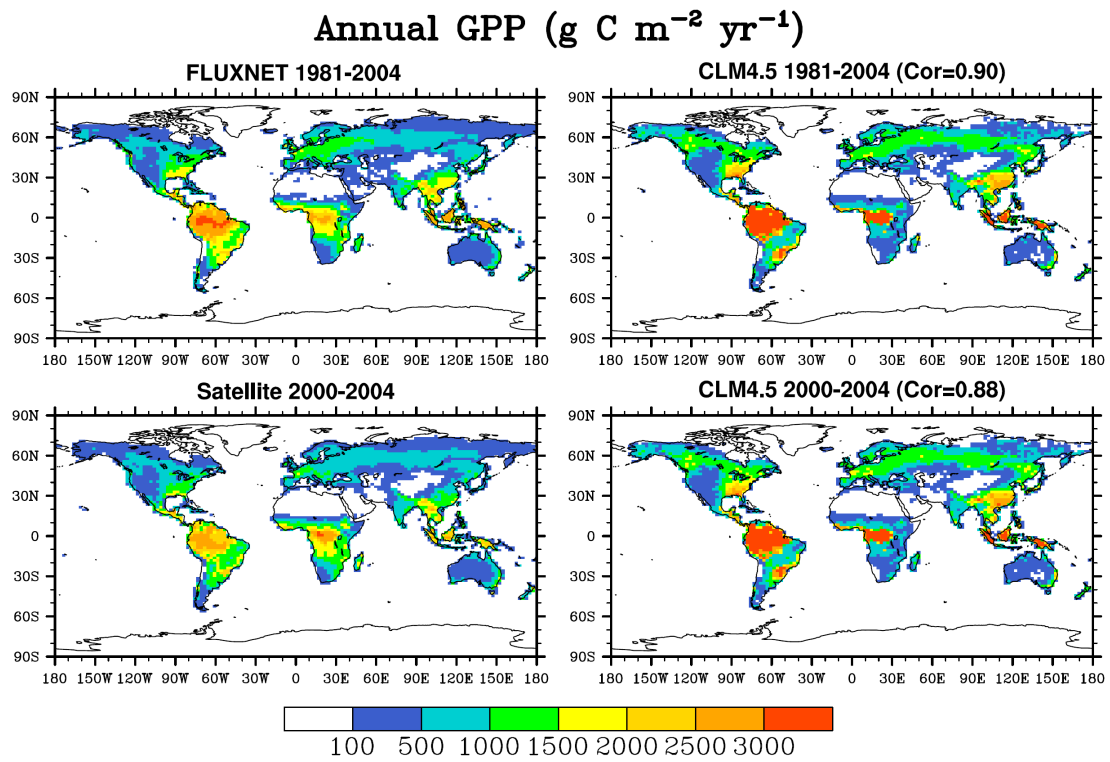


Fig. S5. Spatial distribution of annual gross primary production (GPP) from FLUXNET-based and Satellite-based estimates and CLM4.5 simulations.

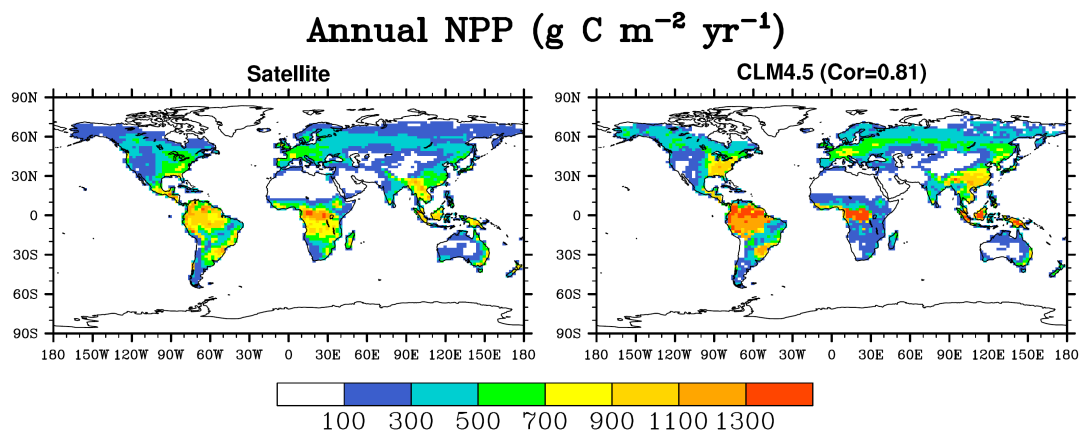


Fig. S6. Spatial distribution of annual net primary production (NPP) from Satellite-based estimates and CLM4.5 simulation