**Supplement A.**

Cumulative net land-atmosphere flux (kgC per 50 years, sum over 1951-2000) or net ecosystem exchange (NEE) estimated with three ecosystem models is shown on Figure S1. The NEE for JULES and ORCHIDEE refer to a simulation accounting for climatic changes, increases in atmospheric CO₂ concentrations, and land use changes (Clim+CO₂+LUC). The NEE simulated by BIOME-BGC is driven by climatic changes, increases in CO₂, and atmospheric nitrogen deposition (Clim+CO₂+N). Areas colored in different shades of red and yellow are carbon sink. Areas colored in different shades of blue are carbon source.
Figure S1.

**ORCHIDEE-NEE**

**BIOME-BGC - NEE**

**JULES-NEE**