Partitioning climatic controls on global land carbon sink variability: temperature vs. moisture constraints across biomes

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Supplementary tables

Table S1. A summary of the datasets used in this study

Variable name	Temporal resolution	Spatial resolution	References	Data source
NBP/GPP	Monthly	0.5°×0.5°	[1-6]	https://figshare.com/account/items/28233365/edit
Soil moisture	Monthly	0.1°×0.1°	[7, 8]	https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era5
Vapor pressure	Monthly	0.5°×0.5°	[9]	https://crudata.uea.ac.uk/cru/data/hrg/
Mean/Maximum/Minimum air temperature	Monthly	0.5°×0.5°	[9]	https://crudata.uea.ac.uk/cru/data/hrg/
MODIS MCD12Q1	Yearly	0.005°	[10]	https://modis.gsfc.nasa.gov/

Table S2. The magnitude of NBP across the globe and different ecosystems from 1981 to 2017. (Unit: Pg C yr^{-1})

Type / Model name	Forests	Shrublands	Savannas	Graalands	Wetlands	Croplands	Global
ISAM	1.03	0.07	0.67	0.32	0.01	0.24	2.36
LPJ	0.66	0.14	0.69	0.48	0.01	0.22	2.26
LPJ-GUESS	0.83	0.08	0.66	0.31	0.01	0.25	2.18
LPX-Bern	0.38	0.18	0.35	0.28	0.00	0.11	1.36
ORCHIDEEv3	0.83	0.04	0.70	0.27	0.01	0.23	2.10
VISIT	1.25	0.16	0.96	0.37	0.02	0.24	3.06
Ensemble mean	0.82	0.11	0.67	0.34	0.01	0.21	2.21

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