

Table A2. Mean and Trends in NPP, RH, NBP as simulated by individual DGVMs and the Ensemble mean (S_L1), CO₂ only

MODEL	NPP (PgC/yr)	Trend (PgC/yr2)	P-value	RH (PgC/yr)	Trend (PgC/yr2)	P-value	NBP (PgC/yr)	Trend (PgC/yr2)	P-value
Global_Land									
CLM4CN	50.778	0.083	0.003	47.035	0.058	0.000	-1.463	-0.029	0.312
HYLAND	73.030	0.217	0.000	68.639	0.162	0.000	-3.300	-0.050	0.000
LPJ	59.226	0.177	0.000	45.769	0.108	0.000	-3.258	-0.034	0.000
LPJ-GUESS	62.522	0.220	0.000	54.641	0.095	0.000	-2.642	-0.131	0.002
OCN	53.275	0.174	0.000	49.637	0.120	0.000	-2.624	-0.047	0.013
ORCHIDEE	77.107	0.319	0.000	72.355	0.199	0.000	-4.753	-0.119	0.000
SDGVM	60.226	0.200	0.000	53.100	0.123	0.000	-2.253	-0.065	0.017
TRIFFID	72.110	0.250	0.000	68.406	0.189	0.000	-3.704	-0.061	0.000
VEGAS	56.802	0.046	0.000	51.685	0.036	0.000	-1.873	-0.009	0.000
ENSEMBLE	62.786	0.187	0.000	56.807	0.121	0.000	-2.875	-0.061	0.000
Std	9.265	0.083		10.184	0.055		1.003	0.040	
Northern_Land									
CLM4CN	16.962	0.027	0.208	15.732	0.023	0.010	-0.607	-0.003	0.896
HYLAND	18.269	0.066	0.000	16.827	0.051	0.000	-0.800	-0.012	0.000
LPJ	23.131	0.071	0.000	17.726	0.033	0.000	-1.641	-0.018	0.000
LPJ-GUESS	28.056	0.098	0.000	24.853	0.036	0.040	-1.134	-0.064	0.001
OCN	20.010	0.072	0.004	18.359	0.045	0.000	-1.060	-0.023	0.199
ORCHIDEE	30.499	0.123	0.000	28.549	0.081	0.000	-1.949	-0.042	0.001
SDGVM	24.309	0.058	0.001	21.748	0.031	0.011	-0.856	-0.025	0.022
TRIFFID	27.563	0.081	0.000	25.961	0.054	0.000	-1.602	-0.027	0.000
VEGAS	20.508	0.011	0.000	18.076	0.007	0.000	-1.004	-0.003	0.000
ENSEMBLE	23.256	0.067	0.000	20.870	0.040	0.000	-1.184	-0.024	0.000
Std	4.714	0.034		4.586	0.021		0.448	0.019	
Tropical_Land									
CLM4CN	26.326	0.051	0.000	24.427	0.031	0.001	-0.726	-0.025	0.025
HYLAND	35.020	0.093	0.000	33.225	0.067	0.000	-1.552	-0.024	0.000
LPJ	26.840	0.080	0.000	21.339	0.060	0.000	-1.196	-0.011	0.000
LPJ-GUESS	22.494	0.092	0.000	19.660	0.053	0.000	-1.098	-0.040	0.002
OCN	23.193	0.077	0.000	21.576	0.061	0.000	-1.327	-0.014	0.105
ORCHIDEE	32.536	0.141	0.000	30.444	0.083	0.000	-2.092	-0.058	0.002
SDGVM	23.713	0.094	0.000	20.958	0.062	0.000	-1.059	-0.024	0.028
TRIFFID	30.980	0.114	0.000	29.596	0.092	0.000	-1.385	-0.022	0.000
VEGAS	24.131	0.028	0.000	22.421	0.021	0.000	-0.591	-0.006	0.000
ENSEMBLE	27.248	0.085	0.000	24.850	0.059	0.000	-1.225	-0.025	0.000
Std	4.536	0.033		4.939	0.022		0.446	0.016	
Southern_Land									
CLM4CN	7.521	0.005	0.574	6.904	0.004	0.339	-0.130	-0.001	0.945
HYLAND	19.826	0.058	0.000	18.664	0.044	0.000	-0.953	-0.014	0.000
LPJ	9.284	0.026	0.000	6.725	0.015	0.000	-0.424	-0.005	0.000
LPJ-GUESS	11.995	0.030	0.087	10.147	0.007	0.266	-0.411	-0.027	0.195
OCN	10.110	0.025	0.101	9.738	0.015	0.013	-0.239	-0.010	0.433
ORCHIDEE	14.092	0.055	0.002	13.379	0.036	0.000	-0.712	-0.019	0.111
SDGVM	12.245	0.047	0.033	10.429	0.030	0.000	-0.340	-0.016	0.490
TRIFFID	13.615	0.055	0.000	12.896	0.043	0.000	-0.719	-0.012	0.000
VEGAS	12.194	0.008	0.000	11.217	0.007	0.000	-0.278	-0.001	0.651
ENSEMBLE	12.320	0.034	0.000	11.122	0.022	0.000	-0.467	-0.012	0.033
Std	3.507	0.021		3.633	0.016		0.270	0.009	

Table A3. Mean and Trends in NPP, RH, NBP as simulated by individual DGVMs and the Ensemble mean (S_L2 – S_L1), Climate Effect

MODEL	NPP (PgC/yr)	Trend (PgC/yr2)	P-value	RH (PgC/yr)	Trend (PgC/yr2)	P-value	NBP (PgC/yr)	Trend (PgC/yr2)	P-value
Global_Land									
CLM4CN	0.730	0.066	0.031	0.633	0.048	0.029	0.004	-0.022	0.459
HYLAND	0.392	0.102	0.000	0.197	0.041	0.196	-0.166	-0.059	0.019
LPJ	0.080	0.039	0.296	1.843	0.009	0.743	1.008	-0.034	0.337
LPJ-GUESS	-0.015	-0.045	0.187	0.807	0.050	0.178	0.840	0.088	0.113
OCN	0.666	-0.019	0.601	0.974	0.015	0.549	0.352	0.033	0.304
ORCHIDEE	-1.591	-0.026	0.381	-0.318	0.008	0.732	1.274	0.034	0.276
SDGVM	0.739	0.040	0.429	0.679	0.067	0.022	0.126	0.021	0.612
TRIFFID	-0.181	0.055	0.277	0.761	0.056	0.138	0.942	0.000	0.995
VEGAS	0.506	0.067	0.080	0.245	0.056	0.002	0.090	-0.009	0.772
ENSEMBLE	0.147	0.031	0.231	0.647	0.039	0.090	0.497	0.006	0.817
Std	0.734	0.050		0.599	0.022		0.523	0.044	
Northern_Land									
CLM4CN	0.561	0.016	0.594	0.483	0.013	0.247	-0.063	-0.004	0.916
HYLAND	0.870	0.032	0.010	0.764	0.029	0.088	-0.075	-0.002	0.905
LPJ	1.435	0.008	0.702	1.852	0.028	0.174	0.472	0.012	0.521
LPJ-GUESS	0.428	-0.059	0.022	1.030	0.032	0.292	0.501	0.087	0.030
OCN	0.999	-0.028	0.359	0.905	0.003	0.880	-0.057	0.030	0.177
ORCHIDEE	-0.161	-0.054	0.105	0.563	-0.017	0.412	0.724	0.036	0.086
SDGVM	0.835	0.004	0.864	0.850	0.034	0.157	0.028	0.030	0.141
TRIFFID	0.912	0.007	0.821	1.045	0.049	0.066	0.133	0.043	0.054
VEGAS	1.387	0.037	0.046	0.839	0.036	0.004	-0.318	0.003	0.772
ENSEMBLE	0.807	-0.004	0.815	0.926	0.023	0.160	0.149	0.026	0.044
Std	0.491	0.035		0.395	0.020		0.341	0.029	
Tropical_Land									
CLM4CN	0.074	0.040	0.087	0.037	0.028	0.046	0.035	-0.014	0.577
HYLAND	-0.531	0.020	0.008	-0.530	-0.001	0.963	-0.008	-0.020	0.104
LPJ	-1.010	0.020	0.437	-0.115	-0.025	0.010	0.379	-0.038	0.088
LPJ-GUESS	-0.572	-0.014	0.412	-0.328	-0.002	0.863	0.312	0.004	0.831
OCN	-0.443	0.008	0.684	-0.100	0.004	0.570	0.345	-0.003	0.862
ORCHIDEE	-1.223	0.011	0.618	-0.805	0.025	0.019	0.419	0.014	0.459
SDGVM	-0.208	0.024	0.313	-0.281	0.013	0.312	0.075	-0.014	0.474
TRIFFID	-1.179	0.027	0.356	-0.670	0.004	0.742	0.509	-0.023	0.526
VEGAS	-0.659	0.013	0.523	-0.427	0.012	0.269	0.313	-0.004	0.777
ENSEMBLE	-0.639	0.016	0.334	-0.358	0.006	0.304	0.264	-0.011	0.532
Std	0.436	0.015		0.278	0.016		0.184	0.016	
Southern_Land									
CLM4CN	0.096	0.010	0.441	0.113	0.007	0.334	0.032	-0.004	0.821
HYLAND	0.048	0.051	0.002	-0.040	0.013	0.277	-0.082	-0.037	0.001
LPJ	-0.344	0.011	0.584	0.107	0.005	0.392	0.157	-0.008	0.565
LPJ-GUESS	0.129	0.028	0.283	0.107	0.020	0.019	0.026	-0.003	0.912
OCN	0.112	0.002	0.938	0.170	0.008	0.472	0.065	0.006	0.742
ORCHIDEE	-0.207	0.018	0.487	-0.076	0.001	0.915	0.131	-0.017	0.385
SDGVM	0.113	0.012	0.726	0.110	0.020	0.046	0.023	0.005	0.881
TRIFFID	0.093	0.022	0.476	0.395	0.003	0.750	0.302	-0.020	0.492
VEGAS	-0.223	0.016	0.548	-0.168	0.009	0.385	0.096	-0.008	0.685
ENSEMBLE	-0.020	0.019	0.342	0.080	0.010	0.179	0.083	-0.010	0.562
Std	0.184	0.014		0.162	0.007		0.108	0.013	

Table A4 Ensemble DGVM regional NBP mean and trend over the period, 1990 – 2009. Grey area denotes significant trend at the 95% confidence level.

Region	Mean NBP (PgC/yr)	Std	Trend (PgC/yr ²)	Std	P-Value
Global Land	-2.378	0.721	-0.055	0.030	0.048
Northern Land	-1.034	0.295	0.002	0.012	0.865
North America	-0.402	0.133	-0.001	0.005	0.833
Europe	-0.179	0.092	-0.000	0.003	0.984
North Asia	-0.454	0.110	0.003	0.009	0.578
Boreal North America	-0.209	0.101	-0.003	0.005	0.183
Temperate North America	-0.193	0.077	0.002	0.005	0.762
Boreal Asia	-0.215	0.081	-0.003	0.004	0.436
Temperate Asia	-0.239	0.096	0.006	0.009	0.267
Tundra	-0.128	0.117	-0.003	0.005	0.073
Tropical Land	-0.961	0.428	-0.036	0.013	0.045
Tropical South America Forest	-0.472	0.211	-0.013	0.007	0.234
North African Savanna	-0.071	0.057	0.001	0.004	0.884
Equatorial Africa	-0.173	0.138	-0.008	0.006	0.047
Tropical Asia	-0.245	0.072	-0.016	0.007	0.000
Southern Land	-0.384	0.285	-0.021	0.017	0.196
South America Savanna	-0.101	0.065	-0.001	0.003	0.804
Temperate South America	-0.054	0.039	0.005	0.005	0.052
Southern Africa	-0.159	0.122	-0.022	0.011	0.010
Australia & New Zealand	-0.070	0.078	-0.003	0.004	0.685

Table A5 Ensemble DGVM regional NPP mean and trend over the period, 1990 – 2009. Grey area denotes significant trend at the 95% confidence level.

Region	Mean NPP (PgC/yr)	Std	Trend (PgC/yr ²)	Std	P-Value
Global Land	62.934	8.729	0.218	0.076	0.000
Northern Land	24.064	4.484	0.063	0.022	0.001
North America	7.779	1.375	0.021	0.008	0.023
Europe	5.082	1.404	0.018	0.006	0.002
North Asia	11.203	1.993	0.024	0.015	0.008
Boreal North America	3.566	1.209	0.014	0.007	0.024
Temperate North America	4.224	0.834	0.007	0.005	0.264
Boreal Asia	4.121	1.456	0.018	0.006	0.012
Temperate Asia	7.086	1.030	0.006	0.014	0.378
Tundra	2.098	1.294	0.013	0.009	0.002
Tropical Land	26.609	4.350	0.102	0.034	0.000
Tropical South America forest	12.041	2.050	0.038	0.015	0.002
North African Savanna	2.807	0.672	0.009	0.008	0.073
Equatorial Africa	5.552	1.428	0.024	0.010	0.000
Tropical Asia	6.209	0.979	0.031	0.011	0.000
Southern Land	12.300	3.528	0.053	0.031	0.011
North African Savanna	2.807	0.672	0.009	0.008	0.073
Temperate South America	1.419	0.478	-0.004	0.005	0.264
Southern Africa	4.669	1.489	0.041	0.018	0.000
Australia & New Zealand	2.167	0.792	0.012	0.010	0.216

Table A6 Ensemble DGVM regional RH mean and trend over the period, 1990 – 2009. Grey area denotes significant trend at the 95% confidence level. RH includes Rh term, i.e. does not represents other C loss terms, wildfire, DOC, Harvest.

Region	Mean RH (PgC/yr)	Std	Trend (PgC/yr ²)	Std	P-Value
Global Land	57.454	9.791	0.160	0.053	0.000
Northern Land	21.796	4.562	0.063	0.020	0.001
North America	7.026	1.376	0.020	0.006	0.004
Europe	4.659	1.420	0.018	0.007	0.001
North Asia	10.111	1.974	0.025	0.011	0.006
Boreal North America	3.255	1.079	0.012	0.003	0.016
Temperate North America	3.782	0.930	0.008	0.005	0.014
Boreal Asia	3.784	1.352	0.015	0.004	0.008
Temperate Asia	6.330	1.133	0.010	0.009	0.080
Tundra	1.932	1.197	0.011	0.006	0.000
Tropical Land	24.492	4.752	0.065	0.025	0.000
Tropical South America Forest	11.114	2.219	0.023	0.010	0.000
North Africa Savanna	2.554	0.699	0.009	0.005	0.000
Equatorial Africa	5.118	1.450	0.017	0.007	0.000
Tropical Asia	5.705	1.013	0.016	0.007	0.000
Southern Land	11.202	3.597	0.032	0.016	0.000
North Africa Savanna	2.554	0.699	0.009	0.005	0.000
Temperate South America	1.286	0.451	0.000	0.002	0.956
Southern Africa	4.227	1.502	0.021	0.007	0.000
Australia & New Zealand	1.956	0.668	0.009	0.007	0.009

Table A7. Mean and Trends in NPP, RH, NBP as simulated by individual DGVMs and the Ensemble mean for Southern Africa

MODEL	NPP (PgC/yr)	Trend (PgC/yr2)	P-value	RH (PgC/yr)	Trend (PgC/yr2)	P-value	NBP (PgC/yr)	Trend (PgC/yr2)	P-value
CO2 + Climate (S2)									
CLM4CN	2.562	0.012	0.008	2.321	0.007	0.018	-0.031	-0.009	0.110
HYLAND	8.052	0.065	0.000	7.536	0.033	0.000	-0.428	-0.031	0.000
LPJ	3.688	0.040	0.000	2.877	0.018	0.000	-0.114	-0.020	0.006
LPJ-GUESS	4.367	0.039	0.000	3.496	0.019	0.000	-0.193	-0.027	0.009
OCN	3.991	0.031	0.013	3.885	0.022	0.000	-0.090	-0.009	0.263
ORCHIDEE	4.927	0.057	0.000	4.730	0.026	0.000	-0.197	-0.031	0.001
SDGVM	4.429	0.034	0.017	3.749	0.025	0.000	-0.136	-0.015	0.256
TRIFFID	4.994	0.064	0.002	4.779	0.024	0.000	-0.215	-0.041	0.035
VEGAS	5.008	0.031	0.030	4.668	0.019	0.005	-0.025	-0.014	0.102
ENSEMBLE	4.669	0.041	0.000	4.227	0.021	0.000	-0.159	-0.022	0.010
Std	1.489	0.018		1.502	0.007		0.122	0.011	
CO2 only (S1)									
CLM4CN	2.625	0.004	0.298	2.368	0.001	0.799	-0.033	-0.004	0.514
HYLAND	8.460	0.024	0.000	7.945	0.018	0.000	-0.425	-0.006	0.000
LPJ	3.904	0.011	0.000	2.848	0.006	0.000	-0.191	-0.002	0.000
LPJ-GUESS	4.413	0.012	0.081	3.541	0.008	0.040	-0.166	-0.004	0.647
OCN	4.108	0.017	0.107	3.970	0.012	0.004	-0.120	-0.005	0.508
ORCHIDEE	5.193	0.018	0.018	4.937	0.015	0.000	-0.256	-0.003	0.625
SDGVM	4.468	0.012	0.240	3.796	0.007	0.033	-0.112	-0.003	0.755
TRIFFID	5.100	0.022	0.000	4.782	0.016	0.000	-0.318	-0.006	0.000
VEGAS	4.864	0.004	0.000	4.498	0.003	0.000	-0.084	-0.001	0.029
ENSEMBLE	4.793	0.014	0.000	4.298	0.010	0.000	-0.189	-0.004	0.077
Std	1.578	0.007		1.610	0.006		0.124	0.002	
Climate effect (S2- S1)									
CLM4CN	-0.063	0.008	0.055	-0.047	0.006	0.122	0.002	-0.005	0.454
HYLAND	-0.408	0.041	0.000	-0.409	0.015	0.011	-0.003	-0.026	0.000
LPJ	-0.217	0.029	0.006	0.029	0.011	0.008	0.078	-0.018	0.013
LPJ-GUESS	-0.045	0.026	0.009	-0.045	0.012	0.003	-0.027	-0.023	0.057
OCN	-0.117	0.013	0.290	-0.085	0.010	0.114	0.030	-0.004	0.687
ORCHIDEE	-0.266	0.039	0.000	-0.207	0.011	0.012	0.059	-0.028	0.000
SDGVM	-0.039	0.022	0.215	-0.047	0.018	0.002	-0.025	-0.012	0.487
TRIFFID	-0.106	0.042	0.030	-0.003	0.008	0.051	0.103	-0.034	0.068
VEGAS	0.144	0.027	0.056	0.170	0.016	0.017	0.059	-0.014	0.114
ENSEMBLE	-0.124	0.027	0.007	-0.072	0.012	0.002	0.031	-0.018	0.017
Std	0.158	0.012		0.161	0.004		0.047	0.010	

Table A8. Mean and Trends in NPP, RH, NBP as simulated by individual DGVMs and the Ensemble mean for Temperate South America

MODEL	NPP (PgC/yr)	Trend (PgC/yr2)	P-value	RH (PgC/yr)	Trend (PgC/yr2)	P-value	NBP (PgC/yr)	Trend (PgC/yr2)	P-value
CO2 + Climate (S2)									
CLM4CN	0.714	-0.002	0.455	0.654	0.002	0.252	-0.004	0.005	0.258
HYLAND	2.261	0.003	0.249	2.103	-0.001	0.734	-0.116	-0.004	0.188
LPJ	0.854	-0.006	0.236	0.717	0.001	0.475	-0.032	0.007	0.071
LPJ-GUESS	1.648	-0.003	0.495	1.394	0.000	0.888	-0.053	0.007	0.104
OCN	1.096	-0.011	0.053	1.052	-0.004	0.270	-0.019	0.006	0.032
ORCHIDEE	1.754	-0.001	0.762	1.647	0.001	0.471	-0.107	0.003	0.327
SDGVM	1.492	-0.002	0.546	1.252	0.001	0.611	-0.033	0.006	0.104
TRIFFID	1.568	-0.011	0.237	1.489	0.002	0.430	-0.079	0.014	0.085
VEGAS	1.381	-0.007	0.035	1.261	-0.004	0.078	-0.041	0.004	0.038
ENSEMBLE	1.419	-0.004	0.264	1.286	0.000	0.956	-0.054	0.005	0.052
Std	0.478	0.005		0.451	0.002		0.039	0.005	
CO2 only (S1)									
CLM4CN	0.653	-0.002	0.536	0.594	0.001	0.563	-0.012	0.004	0.423
HYLAND	2.236	0.007	0.000	2.074	0.006	0.000	-0.121	-0.001	0.000
LPJ	0.866	0.003	0.000	0.700	0.002	0.000	-0.049	-0.001	0.000
LPJ-GUESS	1.598	-0.005	0.207	1.342	-0.002	0.221	-0.047	0.003	0.519
OCN	0.958	-0.009	0.085	0.921	-0.006	0.035	-0.018	0.003	0.443
ORCHIDEE	1.519	0.005	0.095	1.436	0.004	0.003	-0.083	-0.001	0.734
SDGVM	1.403	0.008	0.040	1.172	0.004	0.031	-0.035	-0.005	0.132
TRIFFID	1.133	0.005	0.000	1.055	0.004	0.000	-0.079	-0.001	0.000
VEGAS	1.304	0.000	0.214	1.192	0.000	0.000	-0.033	0.000	0.966
ENSEMBLE	1.297	0.001	0.062	1.165	0.001	0.008	-0.053	0.000	0.882
Std	0.471	0.006		0.440	0.004		0.035	0.003	
Climate effect (S2- S1)									
CLM4CN	0.061	0.000	0.992	0.060	0.001	0.546	0.008	0.001	0.889
HYLAND	0.025	-0.005	0.064	0.029	-0.007	0.082	0.005	-0.003	0.385
LPJ	-0.013	-0.009	0.085	0.018	-0.001	0.491	0.017	0.008	0.049
LPJ-GUESS	0.050	0.002	0.679	0.052	0.003	0.375	-0.006	0.005	0.383
OCN	0.138	-0.002	0.783	0.132	0.002	0.578	0.000	0.003	0.410
ORCHIDEE	0.235	-0.006	0.249	0.211	-0.003	0.274	-0.024	0.004	0.333
SDGVM	0.089	-0.010	0.067	0.080	-0.003	0.331	0.002	0.011	0.037
TRIFFID	0.434	-0.016	0.096	0.434	-0.002	0.545	0.000	0.015	0.065
VEGAS	0.078	-0.007	0.025	0.069	-0.004	0.057	-0.008	0.004	0.026
ENSEMBLE	0.122	-0.006	0.128	0.120	-0.002	0.404	-0.001	0.005	0.061
Std	0.137	0.006		0.131	0.003		0.012	0.005	

1 **Table A9. Mean and Trends in global NBP over the time periods, 1960-1988, and**
2 **1989-2009**

MODEL	NBP	Trend	P-	NBP	Trend	P-	Change
Global_Land	(PgC/yr)	(PgC/yr2)	value	1989-2009	(PgC/yr2)	value	mean
				(PgC/yr)			NBP
CLM4CN	-0.863	-0.038	0.049	-1.525	-0.027	0.337	0.661
HYLAND	-1.538	-0.057	0.000	-3.474	-0.092	0.001	1.936
LPJ	-1.020	-0.038	0.123	-2.277	-0.051	0.125	1.257
LPJ-GUESS	-1.252	-0.008	0.772	-1.843	-0.026	0.535	0.591
OCN	-1.566	-0.033	0.060	-2.288	-0.008	0.720	0.722
ORCHIDEE	-0.625	-0.092	0.000	-3.524	-0.062	0.127	2.899
SDGVM	-1.056	-0.034	0.131	-2.152	-0.031	0.293	1.096
TRIFFID	-2.302	0.001	0.979	-2.807	-0.040	0.425	0.505
VEGAS	-1.510	0.004	0.862	-1.864	0.007	0.833	0.353
ENSEMBLE	-1.304	-0.033	0.074	-2.417	-0.037	0.168	1.113
Std	0.495	0.030		0.710	0.029		0.826

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1 **Table A10** List of Abbreviations

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Abbreviation	
AVHRR	Advanced Very High Resolution Radiometer
CSoil	Soil Carbon Content
DGVM	Dynamic Global Vegetation Model
FACE	Free-Air-Carbon-Enrichment Experiments
GIMMS	Global Inventory Modeling and Mapping Studies
GCM	General Circulation Model
IPCC	Intergovernmental Panel on Climate Change
LAI	Leaf Area Index
LUC	Land Use Change
MRT	Mean Residence Time of Soil Carbon
NBP	Net Biospheric Production
NCEP	National Centers for Environmental Prediction
NDVI	Normalized Difference Vegetation Index
NOAA	National Oceanic and Atmospheric Administration
NPP	Net Primary Production
OBGCM	Ocean Biogeochemical General Circulation Model
Onset	Leaf onset, beginning of the growing season
Offset	End of growing season, beginning of leaf senescence
pCO₂	CO ₂ partial pressure
RECCAP	Regional Carbon Cycle Assessment and Processes
RH	Heterotrophic Respiration
RLS	Residual Land Sink
SST	Sea Surface Temperature

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Table A11 Correlations and test of significance for trend in flux vs trend in driver (spatial correlation, weighted by grid-size).

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	Temperature	Precipitation
Correlation		
NBP	-0.17	0.36
NPP	-0.1	0.5
RH	-0.01	0.48
R²		
NBP	0.19	<0.0001
NPP	0.36	<0.0001
RH	0.47	<0.0001
P-value		
NBP	0.03	0.13
NPP	0.03	0.25
RH	<0.0001	0.23

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