

CClimate Change Impact on the Distribution of Forest Species in the Brazilian Amazon

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SUPPORTING INFORMATION

Additional Supporting Information may be found in the online version of this article:

Table S1. Coefficients of the principal components (PCS) selected by the PCAs for bioclimatic and edaphic variables together.

Variable	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12	PC13	PC14
va_1	-0.251	-0.097	0.201	-0.035	0.001	-0.077	0.116	-0.047	0.011	-0.047	0.049	-0.075	0.003	-0.002
va_2	0.176	0.040	0.198	-0.086	0.005	0.004	0.062	0.076	-0.461	-0.182	-0.002	0.155	0.396	0.365
va_3	-0.229	0.055	0.000	0.059	-0.186	0.061	-0.191	-0.066	-0.028	-0.024	-0.156	-0.221	0.429	0.279
va_4	0.243	-0.054	0.001	-0.002	0.229	-0.047	0.226	0.039	-0.005	-0.046	0.186	0.193	-0.094	-0.082
va_5	-0.173	-0.134	0.288	-0.058	0.097	-0.115	0.265	-0.046	-0.033	-0.104	0.181	0.104	0.027	0.045
va_6	-0.274	-0.068	0.107	0.003	-0.046	-0.045	0.033	-0.071	0.136	0.008	0.020	-0.104	-0.004	-0.023
va_7	0.243	-0.022	0.105	-0.056	0.155	-0.038	0.193	0.061	-0.228	-0.106	0.134	0.246	0.029	0.075
va_8	-0.212	-0.115	0.232	-0.043	0.051	-0.109	0.180	-0.033	-0.110	-0.084	0.011	-0.111	0.035	-0.015
va_9	-0.260	-0.060	0.132	-0.015	-0.060	-0.032	0.019	-0.064	0.158	0.003	0.073	-0.031	-0.003	0.010
va_10	-0.208	-0.139	0.239	-0.039	0.092	-0.111	0.232	-0.050	0.029	-0.071	0.144	0.000	-0.030	-0.030
va_11	-0.268	-0.064	0.160	-0.026	-0.061	-0.049	0.033	-0.052	0.018	-0.023	-0.004	-0.106	0.028	0.022
va_12	-0.250	-0.048	-0.170	0.089	0.105	0.044	-0.041	-0.022	-0.147	-0.049	-0.040	0.213	-0.022	-0.058
va_13	-0.257	-0.023	-0.064	0.005	-0.023	0.059	-0.111	-0.062	-0.165	-0.020	-0.098	0.356	-0.116	-0.142
va_14	-0.138	-0.055	-0.306	0.197	0.276	0.013	0.057	0.069	-0.042	-0.074	0.039	-0.118	0.249	0.133
va_15	0.029	0.089	0.268	-0.163	-0.336	0.034	-0.192	-0.075	-0.200	-0.009	-0.274	0.197	0.186	-0.153
va_16	-0.258	-0.021	-0.069	0.010	-0.013	0.058	-0.104	-0.058	-0.173	-0.024	-0.092	0.355	-0.123	-0.144
va_17	-0.148	-0.058	-0.307	0.196	0.267	0.016	0.052	0.063	-0.041	-0.073	0.041	-0.090	0.227	0.124
va_18	-0.150	-0.081	-0.142	0.043	0.186	-0.011	0.000	0.115	-0.540	-0.141	-0.255	-0.249	-0.185	-0.304
va_19	-0.188	-0.006	-0.160	0.111	0.044	0.063	-0.060	-0.111	0.244	0.043	0.133	0.559	0.223	0.103
va_20	0.030	-0.035	0.212	0.228	0.133	0.174	-0.312	0.009	0.144	-0.504	-0.056	0.030	-0.303	0.187
va_21	-0.020	-0.295	-0.004	-0.202	-0.008	0.104	-0.370	0.142	-0.066	-0.048	0.333	-0.033	-0.031	0.070
va_22	0.029	0.197	-0.041	0.222	-0.195	-0.051	-0.112	-0.336	-0.217	-0.190	0.439	-0.145	-0.029	-0.062
va_23	-0.071	0.338	0.108	0.201	-0.016	0.022	0.095	0.204	0.089	-0.192	-0.080	0.042	-0.032	-0.046
va_24	0.134	-0.251	-0.028	0.113	0.054	-0.075	0.045	-0.449	-0.001	-0.026	-0.268	0.014	-0.137	0.186
va_25	-0.002	-0.193	-0.165	0.159	-0.415	-0.181	0.111	0.238	-0.006	-0.210	-0.019	0.068	-0.210	0.223
va_26	0.161	-0.066	0.179	0.202	0.116	0.048	-0.162	-0.073	0.187	-0.441	-0.092	-0.021	0.161	-0.184
va_27	0.118	-0.315	-0.093	0.100	-0.173	-0.123	0.001	0.033	0.078	-0.150	0.032	0.018	0.257	-0.373
va_28	-0.016	-0.038	-0.137	-0.214	-0.138	0.524	0.293	-0.094	0.044	-0.200	-0.004	-0.050	0.005	-0.024
va_29	-0.017	-0.122	0.241	0.283	0.060	0.354	-0.024	0.174	-0.072	0.312	-0.004	-0.001	-0.096	0.080
va_30	-0.020	-0.315	0.064	-0.161	0.058	0.190	-0.308	0.178	-0.075	0.105	0.234	-0.044	-0.044	0.054
va_31	0.013	0.139	0.004	0.324	-0.188	0.131	0.008	-0.293	-0.235	0.131	0.414	-0.046	-0.043	-0.107

va_32	-0.080	0.263	0.144	0.288	-0.047	0.127	0.160	0.258	0.009	0.069	-0.025	0.040	0.007	-0.064
va_33	0.113	-0.256	0.036	0.199	0.015	0.047	0.092	-0.381	-0.078	0.207	-0.231	0.005	-0.105	0.229
va_34	-0.010	-0.215	-0.088	0.216	-0.410	-0.070	0.157	0.300	-0.060	-0.007	0.007	0.047	-0.129	0.203
va_35	0.078	-0.152	0.249	0.292	0.091	0.277	0.025	0.098	0.008	0.215	-0.065	-0.017	0.155	-0.138
va_36	0.125	-0.330	-0.020	0.152	-0.130	-0.052	0.069	0.022	0.055	0.019	-0.014	0.020	0.263	-0.354
va_37	-0.016	-0.037	-0.135	-0.214	-0.139	0.524	0.293	-0.094	0.044	-0.200	-0.003	-0.051	0.003	-0.026

Bioclimatic variables: va_1= Annual Mean Temperature (°C), va_2= Mean Diurnal Range (Mean of Monthly (maxtemp–mintemp) (°C), va_3= Isothermality (BIO2/BIO7) (*100) (°C), va_4= Temperature Seasonality (standart deviation *100) (°C), va_5= Max Temperature of Warmerst Month (°C), va_6= Min Temperature of Coldest month (°C), va_7= Temperature Annual Range (BIO5-BIO6) (°C), va_8= Mean Temperature of Wettest Quarter (°C), va_9= Mean Temperature of Driest Quarter (°C), va_10= Mean Temperature of Warmest Quarter (°C), va_11= Mean Temperature of Coldest Quarter (°C), va_12= Annual Precipitation (mm), va_13= Precipitation of Wettest Month (mm), va_14= Precipitation of Driest Month (mm), va_15= Precipitation Seasonality (Coefficient of Variation) (mm), va_16= Precipitation of Wettest Quarter (mm), va_17= Precipitation of Driest Quarter (mm), va_18= Precipitation of Warmest Quarter (mm), and va_19= Precipitation of Coldest Quarter (mm). Edaphic variables of soil depth (0–20 cm): va_20= Bulk Density (g/cm³), va_21= Clay (%), va_22= Coarse fragments (%), va_23= Sand (%), va_24= Silt (%), va_25= Organic Carbon Content (g/kg), va_26= pH in water, va_27= Cation Exchange Capacity soil (cmolc/Kg), and va_28= Probabilidade prevista de ocorrência do horizonte (%). Edaphic variables of soil depth (0–40 cm): va_29= Bulk Density (g/cm³), va_30= Clay (%), va_31= Coarse fragments (%), va_32= Sand (%), va_33= Silt (%), va_34= Organic Carbon Content (g/kg), va_35= pH in water, va_36= Cation Exchange Capacity soil (cmolc/Kg), and va_37= Predicted probability of horizon occurrence (%).