

Supplementary Material

Tab. S1 - Bivariate relationship (Pearson correlation, r) between the micrometeorological variables, and between detrended growth rates per species and the climate variables. Abbreviations are given in Tab. 1 and Fig. 1. The r values in bold font are significant at $p < 0.05$.

Variable	PAR	Pr	T_{mean}	T_{min}	T_{max}	RH_{mean}	RH_{min}	RH_{max}	VPD_{mean}	VPD_{min}	VPD_{max}	SWC	ET_o
PAR		1											
Pr		-0.53	1										
T_{mean}		0.47	-0.49		1								
T_{min}	0.21	-0.07	0.73	1									
T_{max}	0.35	-0.67	0.80	0.39	1								
RH_{mean}		-0.40	0.73	-0.60	-0.26	-0.66		1					
RH_{min}		-0.53	0.73	-0.70	-0.34	-0.69	0.94	1					
RH_{max}	-0.04	0.53	-0.37	-0.12	-0.47	0.84	0.70	1					
VPD_{mean}	0.44	-0.72	0.73	0.39	0.73	-0.98	-0.95	-0.80		1			
VPD_{min}	0.06	-0.53	0.42	0.19	0.51	-0.85	-0.72	-0.99	0.83	1			
VPD_{max}	0.51	-0.74	0.81	0.42	0.85	-0.91	-0.96	-0.68	0.95	0.71	1		
SWC	-0.11	0.55	-0.39	-0.09	-0.66	0.68	0.58	0.61	-0.66	-0.62	-0.64	1	
ET_o	0.30	-0.53	0.68	0.23	0.93	-0.57	-0.58	-0.38	0.63	0.40	0.74	-0.65	1
Species													
Ecol	-0.27	0.06	-0.18	-0.01	-0.04	0.01	0.12	-0.09	-0.06	0.09	-0.12	-0.12	0.01
Garg	-0.21	0.12	-0.14	0.02	-0.19	0.12	0.17	-0.06	-0.14	0.05	-0.19	0.22	-0.2
Ilau	-0.37	0.33	-0.21	0.05	-0.18	0.31	0.36	0.12	-0.29	-0.11	-0.31	0.13	-0.17
Lmic	-0.31	0.27	-0.31	-0.06	-0.29	0.27	0.30	0.10	-0.29	-0.10	-0.32	0.15	-0.24
Pmac	-0.39	0.31	-0.35	-0.11	-0.28	0.36	0.44	0.12	-0.39	-0.13	-0.42	0.22	-0.20
Pdec	-0.19	0.29	-0.23	-0.02	-0.21	0.28	0.24	0.20	-0.28	-0.21	-0.24	0.31	-0.21
Smic	-0.27	0.31	-0.16	-0.05	-0.20	0.24	0.30	0.15	-0.23	-0.15	-0.27	0.20	-0.16
Stom	-0.06	0.35	-0.23	0.10	-0.37	0.27	0.24	0.14	-0.27	-0.15	-0.29	0.38	-0.45
Tven	-0.40	0.37	-0.42	-0.09	-0.43	0.37	0.46	0.16	-0.40	-0.17	-0.47	0.19	-0.37
$T_{\text{GC-mean}}$	-0.44	0.41	-0.42	-0.08	-0.41	0.40	0.48	0.16	-0.42	-0.17	-0.48	0.26	-0.36

Tab. S2 - Repeated measures analysis of variance of the effect of year, month and species on the radial growth rate of the trees. The number of tree per species (n) is as described in Tab. 1. Each tree was measured at monthly intervals for five years (2013-2017). Data were log-transformed prior to statistical analysis. Abbreviations: DF, degree of freedom; MS, mean square; F , the fisher ratio, and p , the probability value. Values in bold font are significant at the indicated value.

Source of variation	DF	MS	F	p
Species	8	0.5874	3.576	0.003
Error	42	0.1643		
Year	4	0.0251	2.870	0.025
Year*Species	32	0.0081	0.927	0.584
Error	168	0.0087		
Month	11	0.0659	11.190	< 0.001
Month*Species	88	0.0136	2.302	< 0.001
Error	462	0.0059		
Year*Month	44	0.0290	8.817	< 0.001
Year*Month*Species	352	0.0057	1.745	< 0.001
Error	1848	0.0033		

Tab. S3 - Principal component regression of the relationship between $T_{GC\text{-mean}}$ and the principal components z_1 and z_3 . Abbreviations: DF: degree of freedom, MS: Mean squares, R^2 : coefficient of determination, SQ: Sum of Squares, $T_{GC\text{-mean}}$: mean of detrended tree growth across species, VIF: variance inflation factor, α : regression coefficient, $SE(\alpha)$: standard error of α .

Source of variation	SQ	DF	MS	F value	p value
Regression	0.102716	2	0.051358	10.24282	0.000158
Residual	0.285800	57	0.005014		
Total	0.388516				
$R^2 = 0.2643$					
Principal components	α	VIF	SE (α)	t value	p value
z_1	-0.012478	1	0.003205	-3.89376	0.000261
z_3	-0.020444	1	0.008860	-2.30743	0.024684

Tab. S4 – Regression coefficients (Beta, B) obtained by Principal Component Regression (PCR) of the effect of climatic variables on detrended tree growth (T_{GC}) of studied species. The standard error (SE) and p value of each coefficient are also shown. Abbreviations are as shown in Tab.1 and Fig.1. Significant B values are in bold ($p < 0.05$).

Species	PCR	PAR	Pr	T _{mean}	T _{min}	T _{max}	RH _{mean}	RH _{min}	RH _{max}	VPD _{mean}	VPD _{min}	VPD _{max}	SWC	ET _o
Ecol	B	-0.0072	0.0003	-0.0036	-0.0058	0.0019	0.0001	0.0021	-0.0028	-0.0009	0.0024	-0.0011	-0.0058	0.0036
	SE	0.0034	0.0004	0.0021	0.0027	0.003	0.0015	0.0016	0.0025	0.0011	0.0023	0.0005	0.0031	0.0039
	p	0.0385	0.4422	0.0955	0.034	0.5145	0.9629	0.1927	0.2589	0.44	0.3004	0.033	0.0652	0.3673
Garg	B	-0.0077	0.0069	0.0023	0.008	-0.0013	0.0016	0.0023	-0.0016	-0.0007	0.0021	-0.0016	0.0017	-0.0022
	SE	0.0047	0.0039	0.0024	0.0056	0.001	0.0011	0.0013	0.0019	0.0012	0.0022	0.0011	0.0009	0.0012
	p	0.1039	0.0845	0.3357	0.1584	0.1842	0.1379	0.072	0.4125	0.5323	0.3581	0.1551	0.0797	0.0605
Ilau	B	-0.0164	0.0149	0.0044	0.0164	-0.0031	0.0039	0.0053	-0.0029	-0.002	0.0039	-0.0039	0.0039	-0.005
	SE	0.0058	0.0049	0.0029	0.0069	0.0012	0.0013	0.0016	0.0024	0.0014	0.0028	0.0014	0.0012	0.0014
	p	0.0064	0.0035	0.137	0.0204	0.0113	0.0055	0.0013	0.2215	0.169	0.1596	0.0074	0.0016	0.0009
Lmic	B	-0.0139	0.0134	0.0017	0.012	-0.0044	0.0052	0.0063	-0.0006	-0.0038	0.0013	-0.0052	0.0047	-0.0057
	SE	0.0085	0.0072	0.0043	0.0101	0.0018	0.002	0.0023	0.0035	0.0021	0.0041	0.002	0.0017	0.0021
	p	0.1062	0.0655	0.6933	0.2381	0.0153	0.0113	0.0082	0.8692	0.079	0.7463	0.0127	0.0081	0.0098
Pmac	B	-0.0106	0.0104	0.0009	0.0088	-0.0037	0.0043	0.0051	-0.0001	-0.0033	0.0006	-0.0044	0.0038	-0.0046
	SE	0.0055	0.0047	0.0028	0.0066	0.0011	0.0013	0.0015	0.0023	0.0014	0.0026	0.0013	0.0011	0.0014
	p	0.0635	0.032	0.7535	0.1929	0.0024	0.0017	0.0013	0.978	0.0222	0.8216	0.0019	0.0012	0.0018
Pdec	B	-0.0062	0.0062	0.0001	0.0047	-0.0025	0.0029	0.0033	0.0004	-0.0023	-0.0001	-0.003	0.0025	-0.003
	SE	0.0052	0.0044	0.0026	0.0062	0.0011	0.0012	0.0014	0.0021	0.0013	0.0025	0.0012	0.001	0.0013
	p	0.2306	0.1535	0.9708	0.44	0.0212	0.0178	0.018	0.8635	0.0703	0.9776	0.0189	0.0169	0.0239
Smic	B	-0.0158	0.015	0.0026	0.0143	-0.0044	0.0052	0.0065	-0.0013	-0.0036	0.0022	-0.0053	0.0048	-0.006
	SE	0.0097	0.0081	0.0049	0.0115	0.002	0.0023	0.0026	0.004	0.0024	0.0046	0.0023	0.0019	0.0024
	p	0.1021	0.0671	0.5866	0.211	0.0296	0.0216	0.0139	0.7386	0.1362	0.6318	0.0244	0.0143	0.015
Sto	B	0.0072	0.0006	-0.002	0.0031	-0.0104	-0.0016	-0.0028	-0.0009	0.001	0.0009	-0.0015	0.0105	-0.0133
	SE	0.0028	0.0008	0.0007	0.0014	0.0029	0.0015	0.0018	0.0011	0.0014	0.0011	0.0009	0.003	0.004
	P	0.0139	0.407	0.0045	0.0321	0.0009	0.3047	0.1418	0.4312	0.4847	0.421	0.1033	0.0011	0.0015
Tve	B	-0.0352	0.0346	0.0027	0.029	-0.0072	0.0003	-0.0036	0.0001	-0.0111	0.0018	-0.0147	0.0129	-0.0153
	SE	0.0156	0.0132	0.0079	0.0186	0.0032	0.0036	0.0042	0.0064	0.0039	0.0075	0.0037	0.0031	0.0039
	p	0.0301	0.0121	0.7324	0.1295	0.0004	0.0002	0.0002	0.9992	0.0066	0.813	0.0003	0.0002	0.0003
T _{GC-mean}	B	-0.0126	0.0121	0.0016	0.0109	-0.0039	0.0046	0.0056	-0.0006	-0.0034	0.0012	-0.0047	0.0042	-0.0051
	SE	0.0046	0.0038	0.0023	0.0054	0.0009	0.0011	0.0012	0.0019	0.0011	0.0022	0.0011	0.0009	0.0011
	p	0.0085	0.0029	0.5019	0.0518	0.0001	0.0001	< 0.001	0.7691	0.0048	0.5788	0.0001	< 0.001	< 0.001

Tab. S5 – Mean monthly tree growth (mm month^{-1}) per species during the study period (January 2013 to December 2017). The mean over trees is also shown ($n=51$). Acronyms of species are as described in Tab.1.

Month/year	Months	Ecol	Garg	Ilau	Lmic	Pmac	Pdec	Smic	Stom	Tven	Mean
Jan/2013	1	0.0405	0.0715	0.2553	0.3326	0.2133	0.2329	0.4806	0.1066	1.1165	0.3440
Feb/2013	2	0.0191	0.0233	0.0395	0.082	0.0732	0.0456	0.1006	0.0297	0.2801	0.0841
Mar/2013	3	0.0355	0.1364	0.1700	0.2324	0.0836	0.1772	0.2317	0.1374	0.4997	0.2005
Apr/2013	4	0.1310	0.1977	0.1751	0.386	0.2451	0.0515	0.2470	0.0971	0.3919	0.2111
May/2013	5	-0.0223	0.0723	0.1668	0.3661	-0.031	0.3167	0.1986	0.2069	0.5885	0.2215
Jun/2013	6	0.0227	0.2087	0.0834	0.0446	0.0756	0.0642	0.0592	0.0637	0.4083	0.1302
Jul/2013	7	0.1219	0.1377	-0.0401	0.4241	0.0143	0.1623	0.1337	0.1385	0.2861	0.1568
Aug/2013	8	-0.0069	0.0315	0.0312	0.0565	0.0143	0.0058	0.0438	0.0435	0.2889	0.0668
Sep/2013	9	0.0227	0.0136	0.1477	0.1592	0.113	0.0122	0.1598	0.0801	0.154	0.0912
Oct/2013	10	0.0637	0.0873	0.114	0.0995	0.0700	0.0477	0.0777	0.0615	0.3235	0.1147
Nov/2013	11	0.0077	0.0121	0.1725	0.3032	0.0883	0.1114	0.2075	0.0663	1.1037	0.2645
Dec/2013	12	0.0286	0.0844	0.0929	0.2443	0.074	0.0207	0.0554	0.0679	0.5996	0.1578
Jan/2014	13	0.0455	0.1255	0.2355	0.5292	0.2348	0.1485	0.233	0.1167	1.2144	0.3485
Feb/2014	14	0.0255	0.0857	0.1025	0.1942	0.1703	0.2297	0.1923	0.1215	0.8626	0.2477
Mar/2014	15	0.0387	0.1484	0.1681	0.5212	0.1798	0.2515	0.1872	0.147	0.3454	0.2136
Apr/2014	16	0.0368	0.1499	0.1763	0.3581	0.1647	0.1968	0.2222	0.1549	0.5153	0.225
May/2014	17	0.0432	0.1636	0.1203	0.3939	0.2188	0.2202	0.1281	0.1318	0.6439	0.24
Jun/2014	18	-0.0027	0.0371	0.0738	0.257	-0.0438	0.0403	0.117	0.1381	0.2638	0.0911
Jul/2014	19	0.0095	0.1359	0.1821	0.3122	0.0541	0.2846	0.2403	0.121	0.4313	0.2059
Aug/2014	20	0.0300	0.0503	0.0637	0.2944	0.0493	0.0293	0.2459	0.0276	0.0744	0.0758
Sep/2014	21	0.0291	0.0522	0.0433	0.308	0.1082	0.0254	0.1541	0.0488	0.0905	0.0807
Oct/2014	22	0.095	0.1859	0.1814	0.195	0.2443	0.0757	0.2375	0.0239	0.3301	0.1677
Nov/2014	23	0.0241	-0.0344	0.3215	0.2674	0.0517	0.0344	0.2279	0.0122	0.3374	0.1366
Dec/2014	24	0.1478	0.0923	0.4323	0.4958	0.331	0.1408	0.6371	0.0743	0.6752	0.3321
Jan/2015	25	0.0937	0.0834	0.3813	0.483	0.2085	0.1382	0.5991	0.1141	0.857	0.3371
Feb/2015	26	0.1678	0.1439	0.345	0.3008	0.1878	0.3206	0.671	0.0907	0.6816	0.3332
Mar/2015	27	-0.0305	0.1146	0.3724	0.4735	0.1679	0.1468	0.4062	0.2424	0.6633	0.2858
Apr/2015	28	-0.0041	0.1127	0.0261	0.26	0.1504	0.0749	0.289	0.0775	0.5312	0.177
May/2015	29	0.0587	0.1343	0.1496	0.2387	0.1631	0.1058	0.1057	0.2218	0.3784	0.1783
Jun/2015	30	0.0423	0.0993	0.0758	0.1814	0.0947	0.0588	0.1706	0.1448	0.2371	0.1245
Jul/2015	31	0.0068	0.128	0.0439	0.1544	0.1886	0.1252	0.0312	0.0467	0.1611	0.0958
Aug/2015	32	0.05	0.0435	0.0025	0.1257	0.0517	0.1252	0.0013	0.0902	0.0708	0.0627
Sep/2015	33	-0.0282	0.0419	0.128	0.0653	-0.0939	0.0891	0.17	0.0202	0.0426	0.0476
Oct/2015	34	0.055	0.0106	0.0477	0.1106	0.0159	-0.0032	-0.091	0.0403	0.1727	0.0459
Nov/2015	35	0.0537	0.0753	-0.021	0.074	0.0836	0.0552	0.0987	-0.0218	0.3501	0.0951
Dec/2015	36	-0.0214	-0.0117	0.0522	0.2101	0.0414	0.0064	-0.1725	-0.0207	0.7886	0.1256
Jan/2016	37	0.1391	0.0027	0.1108	0.144	-0.0597	0.1305	-0.0038	0.0345	0.4421	0.1253
Feb/2016	38	0.0664	-0.0674	0.077	0.1576	0.0111	0.0573	0.2967	-0.0027	0.2733	0.1004
Mar/2016	39	0.2406	0.2276	0.289	0.3812	0.331	0.0631	0.2145	0.0005	0.8837	0.2969
Apr/2016	40	0.1455	0.1401	0.2445	0.4353	0.3207	-0.0191	0.2152	0.1989	0.8101	0.289
May/2016	41	0.1269	0.3427	0.2865	0.5913	0.2642	0.0599	0.452	0.1257	0.9124	0.3489
Jun/2016	42	0.0855	0.0562	0.2776	0.2363	0.1178	0.1406	0.2152	0.1496	0.3092	0.1771
Jul/2016	43	-0.0159	0.0727	-0.0024	0.1695	0.0016	0.0541	0.2795	0.0233	0.2029	0.0879
Aug/2016	44	0.045	0.105	0.0175	0.1281	0.0326	0.1273	0.1553	0.0828	0.2519	0.1123
Sep/2016	45	0.0482	0.0934	0.0936	0.0788	0.0008	0.1072	0.338	0.0207	0.117	0.0995
Oct/2016	46	0.115	0.1889	-0.0051	0.1878	0.2101	0.1724	0.5144	0.0398	0.195	0.1747
Nov/2016	47	0.1501	0.1252	0.2426	0.5475	0.1027	0.1512	0.7958	-0.0292	0.6931	0.3112
Dec/2016	48	0.1023	0.0626	0.2306	0.2539	0.1798	0.0631	0.4959	0.0817	0.567	0.2326
Jan/2017	49	0.1037	0.0361	0.1341	0.2531	0.1122	0.0897	0.3756	0.0599	0.5491	0.2008
Feb/2017	50	0.0646	0.1231	0.1388	0.3406	0.1225	0.1061	0.289	0.0631	0.688	0.2294
Mar/2017	51	0.0446	0.0212	0.0694	0.0891	0.0151	0.0196	0.1662	0.0154	0.3662	0.1014
Apr/2017	52	0.0477	0.1454	0.0541	0.2427	0.1703	0.044	0.3393	0.1316	0.9352	0.262
May/2017	53	0.0437	0.1613	0.0433	0.273	0.0653	0.0382	0.1502	0.1332	0.7217	0.2038
Jul/2017	54	0.0518	0.052	0.042	0.0724	0.0398	0.0302	0.0618	0.0584	0.1073	0.0595
Jul/2017	55	-0.0127	-0.0074	-0.0159	0.1663	0.0095	0.0175	0.0045	0.0912	0.1241	0.0423
Aug/2017	56	0.0364	0.1135	0.0891	0.3382	0.0915	0.0748	0.3018	0.1178	0.04	0.1105
Sep/2017	57	0.0955	0.0541	0.1700	0.3295	0.1194	0.0589	0.5138	0.1676	0.5143	0.2197
Oct/2017	58	0.0914	0.1279	0.1241	0.2403	0.0756	0.2271	0.5271	0.1714	0.7317	0.272
Nov/2017	59	0.0459	0.2101	0.0802	0.1122	0.0907	0.2239	0.2884	0.0106	0.5329	0.1943
Dec/2017	60	0.1673	0.2966	0.0286	0.1926	0.1011	0.1427	0.5004	0.1793	0.6339	0.2701

Tab. S6 – Detrended tree growth data used in PCR analysis. A first order autocorrelation was used to obtain detrended tree growth from raw data shown in Tab. 5. Acronyms of species are described in Tab. 1.

Month/year	Ecol	Garg	Ilau	Lmic	Pmac	Pdec	Smic	Stom	Tven	Mean
Jan/2013	-0.0067	-0.0079	0.1666	0.1045	0.112	0.1358	0.3238	0.0352	0.7107	0.1991
Feb/2013	-0.0320	-0.0827	-0.1099	-0.1710	-0.0302	-0.0689	-0.1354	-0.0676	-0.1976	-0.1015
Mar/2013	-0.0385	0.0159	0.0183	-0.0460	-0.0522	0.0793	-0.0135	0.0497	0.0573	0.0112
Apr/2013	0.0938	0.1068	0.0272	0.1109	0.1647	-0.0816	0.0310	-0.017	-0.1149	0.0182
May/2013	-0.0703	-0.0507	0.0577	0.1441	-0.1328	0.2171	0.0668	0.1273	0.1407	0.0604
Jun/2013	-0.0491	0.1024	0.0318	-0.2401	-0.0139	-0.0484	-0.1176	-0.0339	0.0006	-0.0401
Jul/2013	0.0809	0.0564	-0.1249	0.2002	-0.0752	0.0705	0.0112	0.0637	-0.1226	0.0179
Aug/2013	-0.0549	-0.0456	-0.1078	-0.1844	-0.095	-0.0868	-0.1488	-0.0401	-0.0756	-0.0806
Sep/2013	-0.0351	-0.0809	0.0244	-0.0719	0.0123	-0.0852	0.0168	0.001	-0.2660	-0.0644
Oct/2013	0.0192	0.0105	-0.0366	-0.1652	-0.0343	-0.0581	-0.1437	-0.0187	-0.3520	-0.0932
Nov/2013	-0.0417	-0.0817	0.059	0.0482	-0.0131	0.0176	0.078	-0.0143	0.5933	0.0938
Dec/2013	-0.0248	-0.0191	-0.0869	-0.0577	-0.0597	-0.0901	-0.1814	-0.0245	-0.1121	-0.0794
Jan/2014	-0.0032	0.0314	0.1176	0.2825	0.114	0.027	0.0208	0.0232	0.6178	0.1465
Feb/2014	-0.0264	-0.0231	-0.046	-0.1066	0.0476	0.1053	-0.0168	0.0218	0.4355	0.0575
Mar/2014	-0.0128	0.0392	0.0158	0.2475	0.0602	0.1343	-0.0431	0.0454	-0.1374	0.0195
Apr/2014	-0.0161	0.0375	0.0501	0.0784	0.0342	0.0766	0.0487	0.0589	-0.0097	0.0256
May/2014	0.0013	0.0809	0.0157	0.1368	0.141	0.1238	-0.0386	0.0342	0.2434	0.0926
Jun/2014	-0.0476	-0.0688	-0.0811	-0.0091	-0.1412	-0.0885	-0.1242	0.0447	-0.1915	-0.0963
Jul/2014	-0.0402	0.0501	0.0822	0.049	-0.0424	0.1896	-0.0042	0.05	0.0929	0.0639
Aug/2014	-0.0195	-0.0359	-0.0268	0.029	-0.059	-0.0651	0.0568	-0.0485	-0.2693	-0.0679
Sep/2014	-0.0363	-0.0655	-0.1114	0.0612	-0.0274	-0.0757	-0.0854	-0.0212	-0.3317	-0.0935
Oct/2014	0.0467	0.1200	-0.0384	-0.0638	0.1473	-0.02	0.0038	-0.0434	-0.0944	0.0044
Nov/2014	-0.0539	-0.1300	0.0501	-0.0291	-0.1013	-0.0754	-0.2528	-0.07	-0.1978	-0.0949
Dec/2014	0.0827	-0.0012	0.1846	0.2014	0.2026	0.0314	0.1794	-0.0175	0.0805	0.0988
Jan/2015	0.0109	-0.0244	0.1505	0.2187	0.0842	0.0047	0.0979	0.0279	0.3198	0.1052
Feb/2015	0.1325	0.0430	0.1015	0.008	0.0675	0.2101	0.3297	-0.0319	0.1503	0.1179
Mar/2015	-0.0721	0.0141	0.29	0.2159	0.0511	0.0458	0.1356	0.1595	0.1753	0.1084
Apr/2015	-0.0607	0.0071	-0.1138	0.0059	0.0311	-0.0302	0.1291	-0.0402	0.0932	-0.0008
May/2015	0.0059	0.0370	0.0441	-0.0058	0.0575	0.007	-0.0934	0.1226	-0.0133	0.0193
Jun/2015	-0.0019	-0.0047	-0.015	-0.0587	-0.0297	-0.0489	0.0557	0.0693	-0.1297	-0.0246
Jul/2015	-0.0477	0.0438	-0.0275	-0.081	0.0916	0.0175	-0.0657	-0.0393	-0.1761	-0.0417
Aug/2015	0.0142	-0.0403	-0.1273	-0.0996	-0.0161	0.0223	-0.1974	0.021	-0.2572	-0.0695
Sep/2015	-0.084	-0.0345	0.0355	-0.1676	-0.1837	-0.0015	0.1288	-0.0539	-0.328	-0.0841
Oct/2015	-0.0004	-0.0810	-0.0128	-0.1162	-0.0875	-0.1016	-0.2467	-0.0188	-0.256	-0.1028
Nov/2015	0.0162	0.0041	-0.1156	-0.1753	-0.0114	-0.0367	0.1067	-0.0811	-0.2222	-0.0644
Dec/2015	-0.0973	-0.0862	-0.0696	-0.0283	-0.0333	-0.1020	-0.2663	-0.0933	0.3298	-0.0337
Jan/2016	0.0806	-0.0554	0.0047	-0.0966	-0.1485	0.0319	-0.2790	-0.0292	0.0385	-0.0254
Feb/2016	-0.0339	-0.1948	-0.1277	-0.1200	-0.1418	-0.0421	0.0711	-0.0671	-0.3301	-0.1189
Mar/2016	0.1631	0.1207	0.105	0.0947	0.1801	-0.0254	-0.0115	-0.1116	0.3044	0.0804
Apr/2016	0.0725	-0.0145	0.0409	0.1230	0.1811	-0.1181	-0.1538	0.1044	0.1973	0.0517
May/2016	0.0638	0.2555	0.0871	0.3376	0.154	-0.0497	0.226	0.0254	0.4971	0.1715
Jun/2016	0.0467	-0.0348	0.2084	-0.0063	0.0308	0.0424	-0.0496	0.0797	-0.0714	0.0308
Jul/2016	-0.0693	-0.0260	-0.0808	-0.0663	-0.0916	-0.0538	0.0896	-0.0609	-0.1936	-0.0669
Aug/2016	-0.0091	0.0091	-0.0963	-0.0995	-0.0542	0.0221	-0.1448	0.0135	-0.1005	-0.038
Sep/2016	-0.0220	-0.025	0.0257	-0.1668	-0.1279	-0.0068	-0.0686	-0.0532	-0.2609	-0.077
Oct/2016	0.0365	0.0855	-0.1882	-0.1173	0.1029	0.0613	-0.0621	-0.0175	-0.3461	-0.0495
Nov/2016	0.0829	0.0365	0.0650	0.2910	-0.0200	0.0518	0.4003	-0.1131	0.1934	0.1144
Dec/2016	0.0349	-0.0198	0.098	-0.0026	0.0707	-0.0398	0.1731	0.003	0.0731	0.0469
Jan/2017	0.0456	-0.0668	-0.0007	-0.0178	0.0010	-0.0155	0.105	-0.0195	0.0097	0.0051
Feb/2017	0.0113	0.0441	0.0362	0.1113	0.0329	0.0124	0.0926	-0.0049	0.254	0.0784
Mar/2017	-0.0095	-0.0869	-0.0261	-0.1656	-0.1056	-0.0773	-0.1348	-0.0806	-0.2541	-0.1056
Apr/2017	-0.0053	0.0335	-0.0363	-0.0170	0.0706	-0.0521	0.1525	0.0352	0.3848	0.0752
May/2017	-0.0114	0.0751	-0.0465	0.0464	-0.0294	-0.0569	0.0169	0.0548	0.3725	0.0675
Jul/2017	0.0123	-0.0202	-0.0209	-0.1697	-0.0488	-0.0631	-0.037	-0.0279	-0.2474	-0.0709
Jul/2017	-0.0640	-0.1081	-0.1277	-0.1042	-0.0954	-0.0835	-0.2738	-0.0014	-0.203	-0.1118
Aug/2017	-0.0291	0.0269	-0.0602	0.0692	-0.019	-0.0241	-0.1045	0.0132	-0.4425	-0.0818
Sep/2017	0.0310	-0.0499	0.0419	0.0751	0.0176	-0.0623	0.0994	0.0621	-0.0394	0.0092
Oct/2017	0.0378	0.0045	0.0165	0.0072	-0.0292	0.1063	0.2569	0.1045	0.2431	0.0886
Nov/2017	-0.0368	0.0664	-0.0034	-0.1342	-0.0162	0.1139	-0.1098	-0.0968	0.0113	-0.0156
Dec/2017	0.0400	0.1083	-0.1862	-0.1364	-0.0936	-0.0229	0.1003	0.0075	-0.2761	-0.0851

Tab. S7 – Standardized climate data (observed value minus the mean divided by the standard deviation) used in PCR data analysis (rounded to six digits). The months are as described in Tab. S5.

Month	PAR	Pr	Tmean	Tmin	Tmax	RHmean	RHmin	RHmax	VPDmean	VPDmin	VPD-max	SWC	ETo
1	-1.49956	2.366257	-0.31389	0.729676	-1.2689	1.032291	1.397659	0.358714	-0.94789	-0.34007	-1.29529	0.593952	-1.16583
2	-1.7474	1.299997	-0.12527	-0.41657	-0.55622	1.256973	1.031748	0.593902	-1.12082	-0.60551	-0.90518	1.100365	-0.51557
3	-1.91602	2.030525	-0.16244	0.004468	-0.7756	1.256998	1.219251	0.596392	-1.1238	-0.59907	-1.07741	0.913396	-0.19806
4	-1.13843	1.043535	0.77606	1.597229	-0.18048	0.585337	0.380715	0.249691	-0.44456	-0.19669	-0.37324	0.852208	-0.60894
5	-0.22928	0.571024	0.521816	2.205565	-0.76227	0.083865	-0.44336	0.22255	-0.03295	-0.14436	-0.01202	0.99503	-1.65446
6	0.551581	-0.40198	0.160641	0.507919	-0.55258	0.720402	0.481205	0.387722	-0.63512	-0.37649	-0.54542	0.515786	-1.33106
7	1.571603	-0.56829	-0.0702	-0.65032	-0.38896	0.022772	-0.28998	0.25571	-0.06786	-0.2828	0.010644	0.304904	-0.57697
8	1.659331	-0.44705	0.681522	-0.53345	0.556444	0.2327	-0.26352	0.438423	-0.14173	-0.45664	0.314256	0.118135	0.676793
9	2.371166	-1.09365	0.881155	0.379059	0.450995	-0.30961	-0.5737	0.014864	0.376437	-0.00388	0.499506	-0.17256	0.53259
10	2.236412	-0.48746	1.673261	1.011369	1.241252	-0.46802	-0.81155	-0.0256	0.668373	0.066884	0.985783	-0.37626	1.532882
11	0.13923	1.540916	-0.27488	-0.49898	-0.72045	0.953422	0.6919	0.730885	-0.8782	-0.74075	-0.7266	0.786004	-0.34242
12	0.764758	-0.3367	0.953665	1.444396	0.115864	0.161523	0.176279	0.366246	-0.03824	-0.32517	-0.14393	0.880786	0.037166
13	0.458506	-0.02117	-0.75813	-0.86309	-0.3029	0.501021	0.380979	0.527899	-0.5611	-0.55144	-0.40887	0.366531	0.275721
14	-0.32312	0.340985	-1.31618	-0.68328	-0.93256	1.330199	1.224923	0.806141	-1.27024	-0.81641	-1.11624	0.390197	-0.92623
15	0.061988	2.069383	-0.98759	-0.36113	-1.02286	1.165983	1.236785	0.751468	-1.11521	-0.75877	-1.14367	0.450299	-0.4315
16	-0.09815	1.819138	-1.12433	-0.59787	-0.90165	1.357446	1.119556	0.862365	-1.27818	-0.86992	-1.0429	0.652467	-0.75717
17	-0.62188	1.090165	-0.95547	-0.33117	-0.81741	1.38078	1.125256	0.920559	-1.28496	-0.92424	-1.02711	0.940683	-0.97218
18	-0.27234	-0.14862	-0.00641	0.495932	-0.36229	0.714428	0.547209	0.588973	-0.64846	-0.58101	-0.53628	0.332515	-1.20054
19	-0.46346	-0.5885	-0.18264	-0.28322	-0.36956	0.514399	0.19147	0.625793	-0.49906	-0.63405	-0.30233	0.550755	-0.69473
20	-0.07713	-0.61958	0.675556	-0.024	0.445541	-0.33756	-0.68664	-0.16834	0.365624	0.160071	0.578387	0.420929	0.431691
21	0.954185	-0.72994	1.714564	1.269088	1.350336	-1.11006	-1.41843	-0.4315	1.287589	0.504003	1.504088	-0.09482	1.122514
22	-0.28126	0.314562	0.146873	0.489938	-0.35381	0.557968	0.15989	0.577947	-0.49671	-0.56996	-0.27664	0.252383	0.02734
23	-0.58311	-0.24077	-0.42128	-1.11331	0.809156	0.451653	0.345154	0.603848	-0.47538	-0.62944	-0.04675	-0.03283	1.045423
24	-0.4962	-0.12665	-0.2992	-0.74771	1.065504	0.714154	0.647964	0.767131	-0.68022	-0.77958	-0.19421	-0.10532	1.303472
25	-0.94522	-0.15755	-1.58603	-1.20172	-1.218	1.320039	1.286066	0.926572	-1.28142	-0.93693	-1.21649	1.075736	-0.54556
26	-0.35799	0.037835	-0.52499	-0.50647	-0.25018	0.706503	0.595603	0.640657	-0.69823	-0.65295	-0.53762	0.631726	-0.30399
27	-0.6275	2.052612	-0.60026	0.885506	-1.00104	1.471177	1.350421	0.991514	-1.33414	-0.98722	-1.20983	1.663247	-0.85351
28	0.301089	-0.01482	-0.69204	-0.30869	-0.76045	0.421956	0.683197	0.277541	-0.48384	-0.29253	-0.7314	1.166375	-0.66789
29	-0.57452	1.108232	-1.01146	-0.46752	-0.93438	1.371114	1.235249	0.832045	-1.28114	-0.83898	-1.12313	1.729938	-1.03244
30	-0.05633	0.127115	-0.53601	-0.27872	-0.74227	0.649307	0.255376	0.680245	-0.65225	-0.68751	-0.4528	1.506424	-1.32744
31	0.471789	-1.11075	0.081706	0.49149	0.11344	0.185319	-0.26891	0.568067	-0.1848	-0.5819	0.164413	0.761886	-0.22252
32	1.14002	-1.42627	0.638842	1.060815	1.033385	-1.06723	-1.20095	-0.4368	1.007967	0.495962	1.195472	0.3435	0.540736
33	1.830549	-1.48067	3.607174	2.782436	2.81934	-2.90505	-2.82266	-2.65805	3.673853	3.080207	3.474928	-1.03924	2.166574
34	0.774413	-1.24752	3.285008	3.115072	2.550871	-2.03137	-2.31844	-1.17437	2.635295	1.46509	2.867921	-2.64098	2.24569
35	0.355734	-0.94132	0.621402	-0.65331	1.952724	-0.72793	-0.8382	-0.53441	0.702878	0.48238	1.309889	-1.62975	1.937198
36	-0.26442	-1.46357	0.724202	0.11235	1.647894	-0.95085	-0.73679	-0.58694	0.922358	0.585308	1.096442	-2.12985	1.688591
37	-0.2517	-0.82941	0.084459	0.639775	0.841275	-1.18166	-1.0084	-1.03859	0.988538	1.082836	0.969749	-1.79807	0.875086
38	-0.33568	0.235292	-0.88479	-0.27872	-0.09079	0.548409	0.426471	0.502613	-0.60905	-0.51284	-0.37819	-1.52801	-0.07303
39	-1.09886	0.313007	-0.39558	0.855539	-0.36168	0.56073	0.074759	-1.73683	0.37003	1.820694	-0.2225	-0.81692	-0.17051
40	-1.34746	0.117526	-0.54611	0.465964	-0.72409	-0.48762	0.248676	-1.68215	0.283385	1.719553	-0.4433	-1.0778	-0.89012
41	-1.48135	-0.45239	-0.62963	-0.28622	-0.06049	-0.64323	-0.11295	-1.65756	0.396676	1.610494	-0.00096	-0.84842	-0.32983
42	-1.15289	-0.45988	-0.93803	-0.96198	0.138287	-1.11174	-0.54125	-0.202121	0.718551	1.884629	0.362421	-0.68578	-0.55851
43	-0.76207	-0.91335	0.693913	-1.52237	0.227372	-1.80427	-1.53145	-2.77116	1.676068	2.521524	1.08882	-0.61298	0.264941
44	-0.10774	-1.24123	-0.4534	-1.35755	0.700072	-2.66762	-2.26068	-3.45342	2.105433	3.183041	1.829278	-1.73225	0.808178
45	-0.03673	-0.73965	0.262522	-1.07286	1.348518	0.182213	0.656248	0.230007	-0.15589	-0.27226	-0.11552	-1.87982	1.53375
46	-0.41039	-0.75323	0.225808	-0.39859	1.221253	-0.44721	0.0296	-0.69085	0.381612	0.652579	0.329106	-0.0454	1.672726
47	-0.94643	-0.93392	-0.22945	0.43905	0.495235	-0.41217	-0.05507	-0.18245	0.274502	0.1525	0.142678	-1.12216	0.644892
48	-1.74033	1.474369	-0.25423	-0.56491	0.384939	1.028539	1.791449	0.620622	-0.93929	-0.63459	-1.2096	-0.3491	0.739033
49	0.28536	0.867925	-1.02097	-0.91564	-1.31422	0.375346	0.920511	0.847018	-0.48617	-0.85849	-1.01542	0.28852	-0.65005
50	-0.4941	0.609868	-0.97373	-0.85581	-1.25292	0.3952	0.279367	0.474201	-0.49633	-0.49968	-0.61017	-0.15921	-1.08818
51	0.159823	0.891441	-0.88597	-0.50365	-1.15483	-0.05333	-0.19452	1.033426	-0.12416	-1.03563	-0.2917	0.211505	-0.48672
52	-0.13986	0.840234	-0.88122	-0.34561	-1.27595	0.039778	0.474498	0.474201	-0.19854	-0.48663	-0.73514	0.181476	-1.14497
53	0.981874	-0.64356	-0.45388	0.024779	-0.9212	0.165719	0.697505	0.008181	-0.24234	-0.01311	-0.78177	0.409084	-1.10923
54	0.788897	-0.68247	-0.82155	-0.85613	-1.06905	-0.16659	0.613877	0.380997	-0.02314	-0.41015	-0.76731	0.708847	-1.43993
55	1.583531	-0.75258	-1.03086	-1.8415	-0.98392	-1.21041	-1.36531	-0.36464	0.77887	0.250029	0.492798	-0.31423	-0.8147
56	1.899076	-1.21328	0.788396	-0.36787	0.782025	-1.31819	-1.67194	-0.83066	1.26559	0.791292	1.4359	-0.9946	0.8162
57	0.612298	-0.56576	1.466938	1.139307	1.264079	-0.69422	-0.94717	0.474201	0.840961	-0.44728	1.100089	-1.8432	1.04843
58	1.136205	-0.22574	1.019518	1.245097	0.81483	-0.48595	-0.66841	0.194589	0.561344	-0.15208	0.706704	0.759873	0.962726
59	0.469101	-0.43414	0.926539	1.003103	0.632109	-0.42507	-0.58478	0.567405	0.488939	-0.54747	0.575256	0.371445	0.501743
60	-0.67962	1.331497	-0.26345	0.116071	-0.61881	-0.27725	-0.36178	0.474201	0.155527	-0.47461	-0.01759	0.802634	-0.34729