

Sensitivity of tropical woodland savannas to El Niño droughts

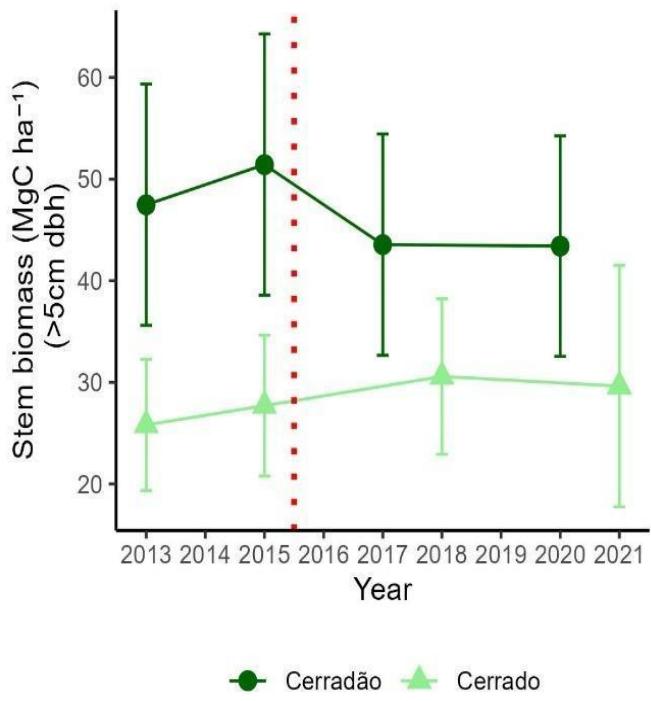


Figure S1. Per tree ($\geq 5 \text{ cm DBH}$) aboveground biomass carbon stocks from *cerrado* (light green) and *cerradão* (dark green) between 2013 and 2021. The error bars represent the standard error. The dashed red line indicates the El Niño periods.

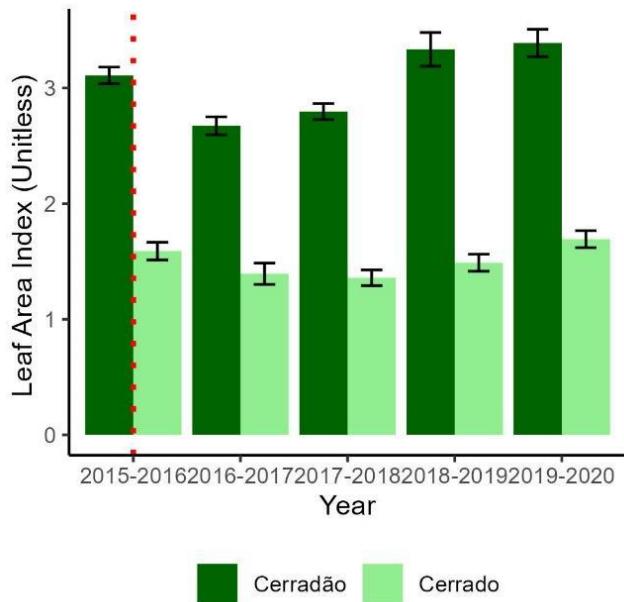


Figure S2. Leaf area index, from *cerrado* (light green) and *cerradão* (dark green), with the 1st month of the dry season (May) representing the beginning of each year's climatic calendar. The dashed red line indicates the El Niño periods.

Table S1. Climatic data between 2000 and 2020 from *cerrado* and *cerradão*, with the 1st month of the dry season (May) representing the beginning of each year's climatic calendar.

Years	Months	MCWD (mm)	Precipitation (mm)	Maximum temperature (°C)	Mean temperature (°C)
2000-2013	May-April	-510.4	1461.5	33.6	24.7
2013-2014	May-April	-526.3	1671.9	33.7	25.0
2014-2015	May-April	-454.9	1417.1	34.3	25.1
2015-2016	May-April	-464.4	790.2	35.4	25.8
2016-2017	May-April	-883.7	1580.2	35.1	25.7
2017-2018	May-April	-584.7	1066.7	34.7	25.2
2018-2019	May-April	-575.4	1468.1	34.3	25.4
2019-2020	May-April	-483.6	1444.9	34.2	23.9

Table S2. Synthesis of NPP values (\pm S.E.) from cerrado and cerradão between 2014 and 2019. NPP_{AG} , aboveground NPP; NPP_{BG} belowground NPP. All units are $Mg\ C\ ha^{-1}\ yr^{-1}$.

	2014	S.E.	2015	S.E.	2016	S.E.	2017	S.E.	2018	S.E.	2019	S.E.	Mean	Error
Cerrado														
NPPlitterfall	2.20	0.15	2.31	0.16	1.93	0.11	1.92	0.15	2.36	0.17	2.48	0.18	2.20	0.44
NPPlleaf	1.94	0.16	1.95	0.16	1.67	0.11	1.66	0.15	1.99	0.16	-	-	1.84	0.37
NPPtwigs	0.12	0.01	0.13	0.01	0.11	0.01	0.14	0.01	0.16	0.02	-	-	0.13	0.03
NPPrep(flower,fruit,seeds)	0.11	0.01	0.17	0.01	0.10	0.00	0.12	0.01	0.17	0.01	-	-	0.13	0.04
NPPother	0.03	0.00	0.06	0.00	0.06	0.00	0.04	0.00	0.04	0.00	-	-	0.05	0.01
NPPherbivory	0.06	0.03	0.06	0.03	0.05	0.03	0.05	0.03	0.06	0.03	-	-	0.06	0.06
NPPbranch turnover	0.14	0.05	0.14	0.05	0.23	0.07	0.23	0.07	0.23	0.11	-	-	0.19	0.17
NPPacw \geq 5cm dbh	1.16	0.12	1.31	0.13	1.31	0.13	1.31	0.13	0.38	0.04	0.38	0.04	0.98	0.48
NPPcoarse root	1.59	1.09	1.79	1.23	1.79	1.23	1.79	1.23	0.52	0.36	0.52	0.36	1.34	2.57
NPPfine root	1.37	0.16	0.85	0.12	1.25	0.25	1.54	0.27	0.98	0.25			1.19	0.56
NPP_{AG}	3.56	0.20	3.82	0.21	3.52	0.18	3.51	0.21	3.03	0.21			3.49	0.54
NPP_{BG}	2.96	1.10	2.64	1.24	3.04	1.26	3.33	1.26	1.50	0.44			2.70	2.57
NPP	6.52	1.12	6.46	1.26	6.57	1.27	6.85	1.28	4.53	0.48			6.19	2.68
Cerradão														
NPPlitterfall	4.29	0.22	4.14	0.23	3.62	0.11	4.27	0.18	4.28	0.21	4.37	0.14	4.16	0.52
NPPlleaf	3.04	0.18	3.38	0.22	2.50	0.09	3.47	0.18	2.96	0.19	-		3.07	0.56
NPPtwigs	0.39	0.02	0.33	0.02	0.32	0.02	0.41	0.02	0.73	0.06	-		0.44	0.18
NPPrep(flower,fruit,seeds)	0.76	0.07	0.32	0.02	0.68	0.05	0.39	0.03	0.46	0.04	-		0.52	0.21
NPPother	0.10	0.01	0.11	0.00	0.13	0.01	0.11	0.01	0.17	0.01	-		0.12	0.03
NPPherbivory	0.13	0.07	0.15	0.07	0.11	0.06	0.15	0.08	0.13	0.07	0.13	0.07	0.14	0.15
NPPbranch turnover	0.49	0.41	0.49	0.41	0.49	0.41	0.49	0.41	0.49	0.41	0.49	0.41	0.49	0.92
NPPacw \geq 5cm dbh	2.78	0.28	1.16	0.12	1.16	0.12	2.21	0.22	2.21	0.22	2.21	0.22	1.96	0.85
NPPcoarse root	0.61	0.10	0.26	0.04	0.26	0.04	0.49	0.08	0.49	0.08	0.49	0.08	0.43	0.23
NPPfine root	0.99	0.13	1.73	0.3	1.00	0.38	0.81	0.15	0.48	0.13			1.00	0.71
NPP_{AG}	7.69	0.55	5.94	0.49	5.38	0.44	7.12	0.50	7.11	0.52	7.20	0.49	6.74	1.47
NPP_{BG}	1.60	0.17	1.99	0.30	1.26	0.38	1.30	0.17	0.97	0.15			1.42	0.69
NPP	9.29	0.57	7.93	0.58	6.64	0.59	8.42	0.53	8.08	0.54			8.07	1.58

