

Table S3. Percentage change (%) and lnRR of factors in response to warming under different intensity (eT). TC, total carbon; SWC, soil water content; FN, foliar nitrogen; FP, foliar phosphorus; FV/FM, Maximum quantum yield of PSII; SLA, specific leaf area; WUE, water use efficiency; Pn, net photosynthetic rate; Gs, stomatal conductance; T, transpiration rate; $\delta^{13}\text{C}$, carbon stable isotope composition; SD, stomatal density; SS, stomatal size.

Variables	Warming intensity_eT (°C)	QM	P(QM)	RR (%)	lnRR	95%CI
pH	<2	0.26	1	2.36	0.023	[-0.05,0.1]
	<2	46.83	<0.0001	-16.66	-0.182	[-0.3, -0.06]
SWC	2-4	46.83	<0.0001	-39.43	-0.501	[-0.69, -0.31]
	>4	46.83	<0.0001	-25.64	-0.296	[-0.46, -0.13]
FN	<2	2.2	0.3	-6.58	-0.068	[-0.17,0.03]
	>4	2.2	0.3	12.05	0.114	[-0.2,0.42]
FP	<2	6.29	0.04	-7.92	-0.083	[-0.19,0.02]
	>4	6.29	0.04	-70.51	-1.221	[-2.44,0]
FV/FM	<2	8.66	0.03	-4.55	-0.047	[-0.15,0.06]
	2-4	8.66	0.03	-5.47	-0.056	[-0.1, -0.02]
	>4	8.66	0.03	-0.1	-0.001	[-0.01,0]
Chlorophyll	<2	2.6	0.27	-9.25	-0.097	[-0.22,0.02]
	2-4	2.6	0.27	-3.79	-0.039	[-0.28,0.2]
SLA	<2	28.03	<0.0001	39.21	0.331	[0.21,0.45]
	2-4	28.03	<0.0001	11.78	0.111	[-0.18,0.41]
	>4	28.03	<0.0001	-5.19	-0.053	[-0.59,0.49]
WUE	<2	39.79	<0.0001	-6.39	-0.066	[-0.18,0.05]
	2-4	39.79	<0.0001	-1.39	-0.014	[-0.31,0.28]
	>4	39.79	<0.0001	-30.44	-0.363	[-0.48, -0.25]
Pn	<2	16.3	0.001	-20.37	-0.228	[-0.39, -0.06]
	2-4	16.3	0.001	-14.99	-0.162	[-0.57,0.24]
	>4	16.3	0.001	-18.22	-0.201	[-0.34, -0.06]
Gs	<2	4.87	0.18	-16.94	-0.186	[-0.41,0.04]
	2-4	4.87	0.18	-18.09	-0.2	[-0.56,0.16]
	>4	4.87	0.18	7.06	0.068	[-0.07,0.2]
T	<2	7.27	0.06	-10.29	-0.109	[-0.3,0.08]
	2-4	7.27	0.06	-17.01	-0.186	[-0.62,0.25]
	>4	7.27	0.06	21.75	0.197	[0.03,0.36]
$\delta^{13}\text{C}$	<2	7.78	0.05	-0.41	-0.004	[-0.02,0.01]
	2-4	7.78	0.05	6.28	0.061	[0.02,0.11]
	>4	7.78	0.05	-1.81	-0.018	[-0.11,0.07]
SD	<2	7.3	0.29	-1.57	-0.016	[-0.11,0.08]