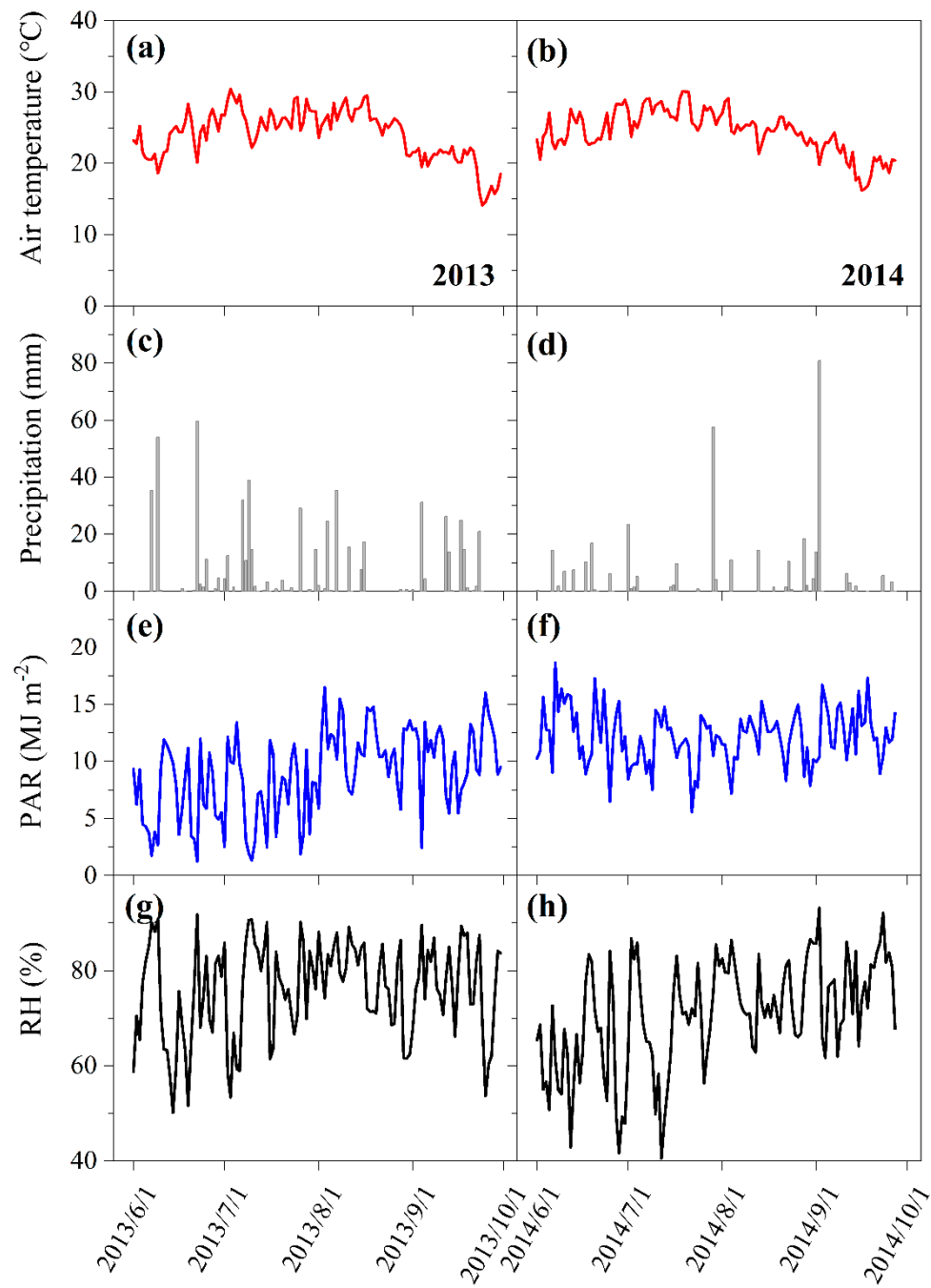


## Supporting Information



**Figure S1.** Time series of air temperature (a,b), precipitation (c,d), photosynthetically active radiation (e,f), and relative humidity (g,h) during the 2013–2014 growing seasons.

**Table S1.** The mean values of LAI, CWC, VWC and spectral vegetation indices during soil drying under different irrigation treatments in the 2013 and 2014 growing seasons

Year	Treatments	LAI	CWC	VWC	WI	NDWI	NDII	NDVI	OSAVI
2013	T1	1.501 ± 0.212	0.255 ± 0.036	1.154 ± 0.219	1.044 ± 0.010	0.024 ± 0.015	0.169 ± 0.033	0.663 ± 0.043	0.520 ± 0.033
	T2	1.376 ± 0.209	0.222 ± 0.034	0.913 ± 0.182	1.034 ± 0.008	0.009 ± 0.012	0.164 ± 0.030	0.689 ± 0.039	0.553 ± 0.033
	T3	1.193 ± 0.167	0.207 ± 0.030	0.864 ± 0.174	1.025 ± 0.007	-0.004 ± 0.012	0.123 ± 0.029	0.618 ± 0.040	0.501 ± 0.034
	T4	1.112 ± 0.158	0.178 ± 0.025	0.870 ± 0.182	1.026 ± 0.007	-0.001 ± 0.010	0.125 ± 0.025	0.623 ± 0.034	0.502 ± 0.028
	T5	0.919 ± 0.155	0.126 ± 0.022	0.496 ± 0.131	1.015 ± 0.007	-0.016 ± 0.009	0.078 ± 0.022	0.550 ± 0.030	0.452 ± 0.023
2014	W1	1.122 ± 0.161	0.165 ± 0.022	0.575 ± 0.102	1.012 ± 0.007	-0.023 ± 0.010	0.073 ± 0.022	0.538 ± 0.028	0.440 ± 0.024
	W2	1.105 ± 0.145	0.158 ± 0.020	0.566 ± 0.098	1.011 ± 0.007	-0.024 ± 0.009	0.076 ± 0.023	0.522 ± 0.028	0.433 ± 0.022
	W3	0.820 ± 0.127	0.111 ± 0.015	0.275 ± 0.044	0.991 ± 0.005	-0.050 ± 0.007	0.002 ± 0.017	0.400 ± 0.019	0.333 ± 0.015
	W4	0.517 ± 0.091	0.072 ± 0.012	0.162 ± 0.030	0.971 ± 0.003	-0.082 ± 0.004	-0.088 ± 0.010	0.264 ± 0.013	0.227 ± 0.011
	W5	0.424 ± 0.079	0.058 ± 0.010	0.121 ± 0.024	0.962 ± 0.003	-0.096 ± 0.006	-0.119 ± 0.009	0.196 ± 0.011	0.167 ± 0.008

Mean ± SE. LAI, leaf area index; CWC, canopy water content ( $\text{kg m}^{-2}$ ); VWC, vegetation water content ( $\text{kg m}^{-2}$ ); WI, water index; NDWI, normalized difference water index; NDII, normalized difference infrared index; NDVI, normalized difference vegetation index; OSAVI, optimal soil-adjusted vegetation index.