

Supplementary materials

Table S1. Correlations between the tree-ring width chronologies of WFY and scPDSI on seasonal scale during 1951–2014 (note: all correlation coefficients (R) at $p < 0.01$; P indicates previous year, C indicates current year).

Month	R	multi-month	R	multi-month	R	multi-month	R
P10	0.551	P10--P11	0.549	P10--P12	0.552	P10-- C 1	0.556
P11	0.533	P11--P12	0.543	P11-- C 1	0.550	P11-- C 2	0.558
P12	0.551	P12-- C 1	0.557	P12-- C 2	0.566	P12-- C 3	0.568
C 1	0.573	C 1-- C 2	0.584	C 1-- C 3	0.585	C 1-- C 4	0.592
C 2	0.592	C 2-- C 3	0.586	C 2-- C 4	0.592	C 2-- C 5	0.603
C 3	0.570	C 3-- C 4	0.583	C 3-- C 5	0.597	C 3-- C 6	0.617
C 4	0.578	C 4-- C 5	0.597	C 4-- C 6	0.617	C 4-- C 7	0.614
C 5	0.583	C 5-- C 6	0.607	C 5-- C 7	0.597	C 5-- C 8	0.613
C 6	0.583	C 6-- C 7	0.566	C 6-- C 8	0.589	C 6-- C 9	0.572
C 7	0.507	C 7-- C 8	0.554	C 7-- C 9	0.535	P10-- C 2	0.562
C 8	0.531	C 8-- C 9	0.505			P11-- C 3	0.562
C 9	0.466						
multi-month	R	multi-month	R	multi-month	R	multi-month	R
P12--4	0.575	P10-- C 3	0.565	P10-- C 4	0.571	P10-- C 6	0.594
C 1-- C 5	0.602	P11-- C 4	0.569	P11-- C 5	0.579	P11-- C 7	0.606
C 2-- C 6	0.620	P12-- C 5	0.586	P12-- C 6	0.602	P12-- C 8	0.632
C 3-- C 7	0.621	C 1-- C 6	0.619	C 1-- C 7	0.628	C 1-- C 9	0.647
C 4-- C 8	0.632	C 2-- C 7	0.627	C 2-- C 8	0.646	P10-- C 7	0.605
C 5-- C 9	0.600	C 3-- C 8	0.639	C 3-- C 9	0.633	P11-- C 8	0.625
		C 4-- C 9	0.621	P10-- C 5	0.580	P12-- C 9	0.636
				P11-- C 6	0.595	P10-- C 8	0.623
				P12-- C 7	0.612	P11-- C 9	0.631
				C 1-- C 8	0.647	P10-- C 9	0.630
				C 2-- C 9	0.643		