Supplementary materials

Table S1. Geographical coordinates and elevation of phenological stations and selected plant species at each station.

Station Name	Station Number	East Longitude (°)	North Latitude (°)	Elevation (a.m.s.l)	Observed Plant Species
Huma	1	126.65	51.72	178.2	*P. berolinensis*
Zalantun	2	122.73	48.00	307.9	*S. matsudana, P. simonii , U. pumila*
Jiayin	3	130.40	48.88	91.5	*P. simonii*
Jixian	4	131.13	46.72	106	*P. simonii*
Baoqing	5	132.18	46.32	83.5	*S. matsudana*
Bayaertuhushuo	6	120.33	45.07	629.1	*S. matsudana, U. pumila*
Tuquan	7	121.55	45.40	306	*P. simonii*
Fangzheng	8	128.8	45.83	120	*S. babylonica*
Boli	9	130.58	45.75	220.5	*P. simonii*
Hequ	10	111.15	39.38	861.5	*P. X canadensis*
Yan'an	11	109.50	36.60	958.8	*R. pseudoacacia, S. matsudana, S. japonica, P. simonii, U. pumila*
Chifeng	12	118.97	42.27	568	*S. matsudana, P. simonii, U. pumila*
Changtu	13	124.12	42.78	165	*P. simonii*
Fengning	14	116.63	41.22	660.8	*R. pseudoacacia.*
Chaoyang	15	120.45	41.55	176	*R. pseudoacacia. ,S. matsudana, U. pumila*
Jianping	16	119.70	41.38	422.5	*S. matsudana, U. pumila*
Xinmin	17	122.83	41.98	31.9	*U. pumila*
Jinzhou	18	121.12	41.13	70.2	*R. pseudoacacia, P. simonii*
Dengta	19	123.32	41.42	42.8	*S. matsudana, U. pumila*
Benxi	20	124.28	41.30	205.8	*S. matsudana*
Xinbin	21	125.05	41.73	328.7	*S. babylonica, U. pumila*
Tonghua	22	125.75	41.67	373.3	*S. matsudana*
Chengde	23	118.17	40.77	269.1	*P. X canadensis*
Wafangdian	24	122.02	39.63	119.8	*R. pseudoacacia*
Donggang	25	124.15	39.88	2.0	*S. babylonica*
Yantai	26	121.25	37.50	33.9	*S. babylonica, R. pseudoacacia*
Zibo	27	118.00	36.83	34.5	*S. babylonica, R. pseudoacacia, S. matsudana, S. japonica, P. X canadensis, P. tomentosa, P. simonii*

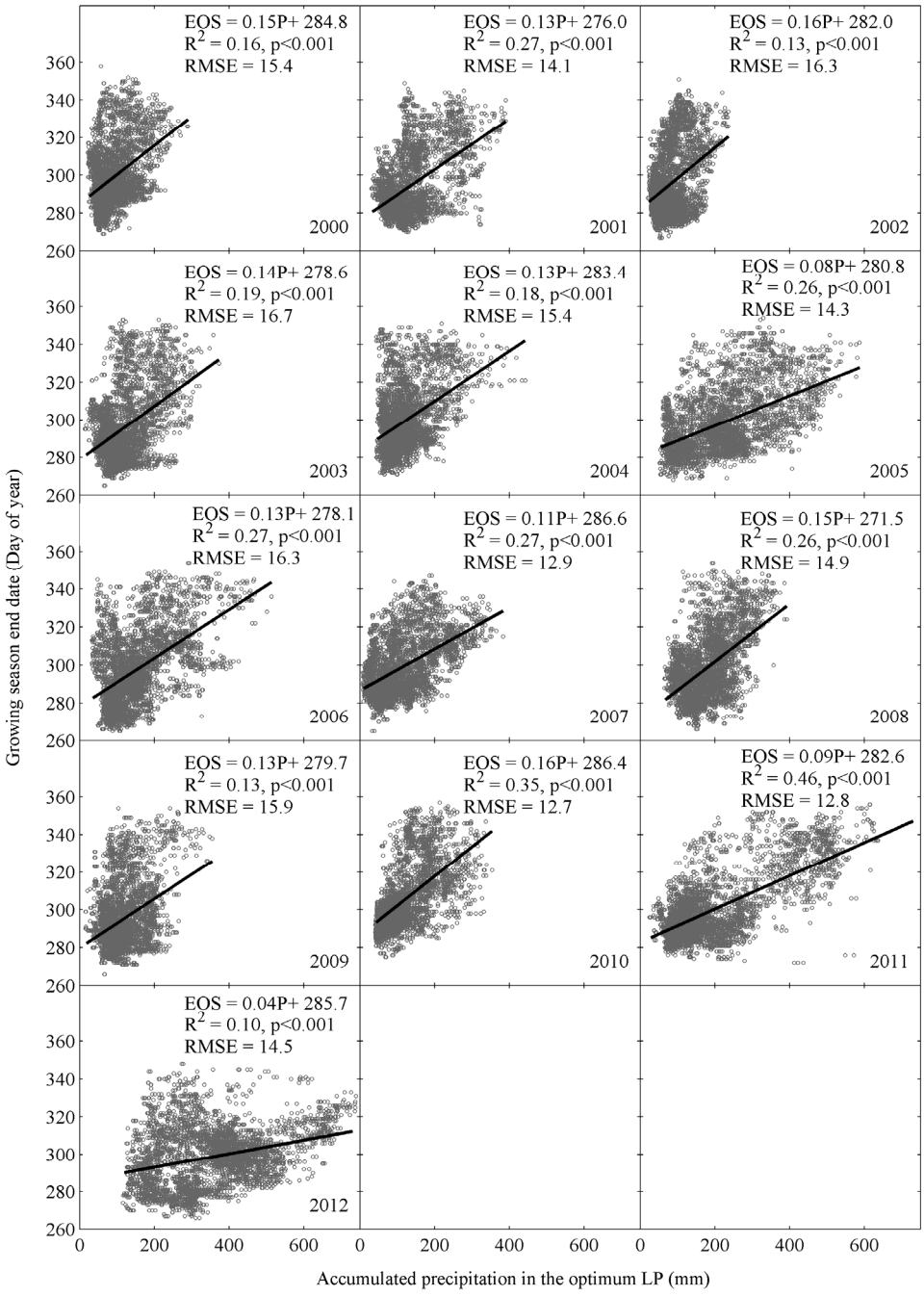

Figure S1. Spatial correlation and regression analyses between PSRI-derived growing season end date and accumulated precipitation during the optimum length period (LP) in each year across the study area.