

Supplementary Material

Distinguishing Dominant Drivers on LST Dynamics in the Qinling-Daba Mountains in Central China from 2000 to 2020

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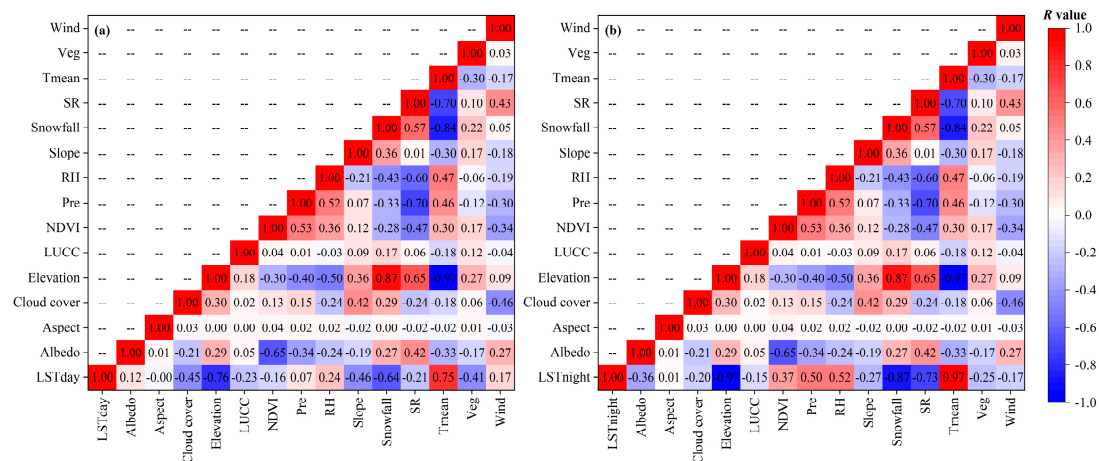
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Table S1. Correlation analysis between all the variables.

Predictor	Coef	SE Coef	P-Value	VIF1	VIF2
Precipitation	0.0015	0.000	0.000	2.67	2.46
Cloud Cover	-3.9554	0.061	0.000	3.13	2.85
Wind	-0.1640	0.006	0.000	1.62	1.57
Relative Humidity	-1.2301	0.042	0.000	2.43	2.38
Albedo	-1.6053	0.082	0.000	2.08	2.02
Solar Radiation	-0.0336	0.000	0.000	6.03	5.95
Elevation	-0.0022	0.000	0.000	37.85	4.03
Slope	0.0499	0.000	0.000	1.49	1.46
Aspect	0.0463	0.001	0.000	1.01	1.01
NDVI	1.9264	0.045	0.000	2.51	2.359
Vegetation type	0.0017	0.001	0.000	1.30	1.29
LUCC	0.0901	0.003	0.000	1.07	1.07
Tmean	0.4191	0.002	0.000	31.44	***
Snowfall	-3252.603	17.712	0.000	4.36	***

Notes: VIF, variance inflation factor; $VIF < 10$, no collinearity problem; $10 \leq VIF \leq 100$, high collinearity. Among them, VIF1 is the result of the first collinearity analysis, and VIF2 is the result after variable screening.

**Figure S1.** Correlation analysis between all the variables in the (a) daytime and (b) nighttime.

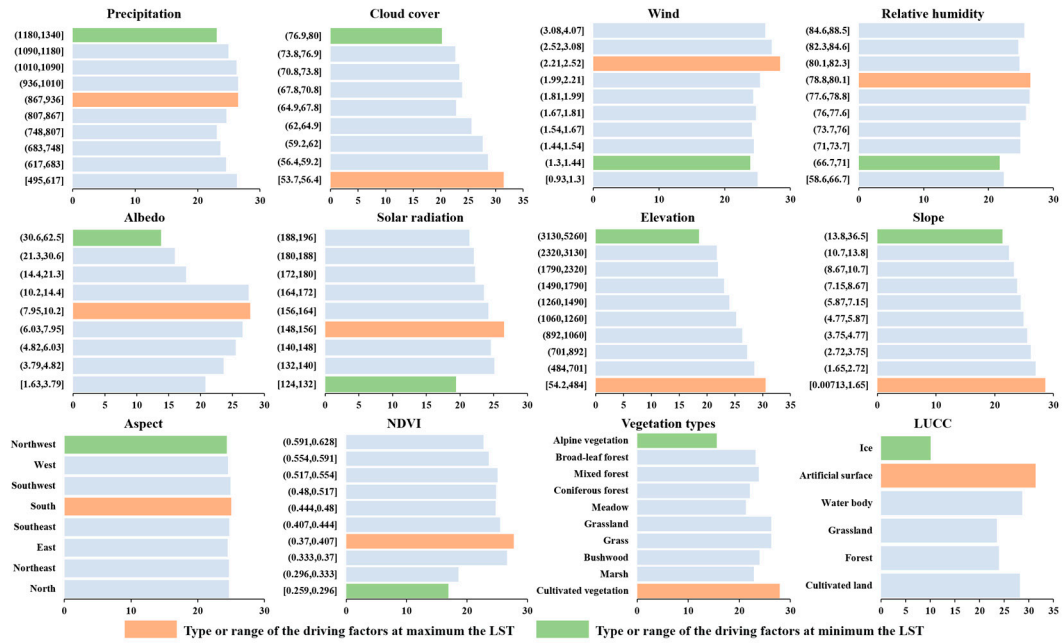


Figure S2. Optimal ranges and tipping points of driving factors that influence daytime LST. Orange indicates the type or range of the driving factors at maximum the LST and green indicates the type or range of the driving factors at minimum the LST. The statistical significance test was passed at the 95% confidence level.

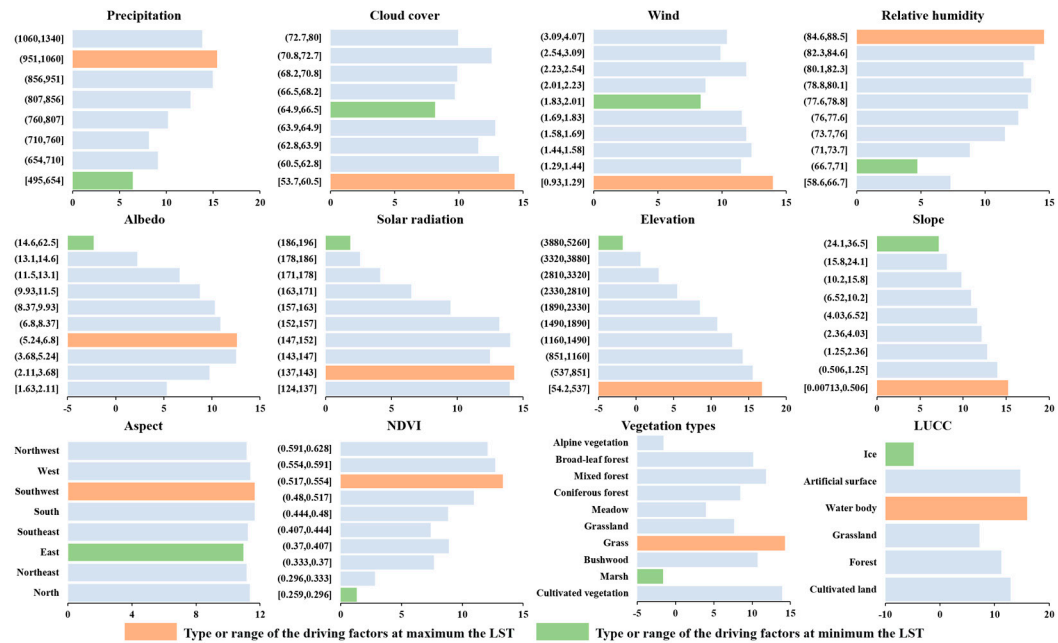


Figure S3. Optimal ranges and tipping points of driving factors that influence nighttime LST. Orange indicates the type or range of the driving factors at maximum the LST and green indicates the type or range of the driving factors at minimum the LST. The statistical significance test was passed at the 95% confidence level.