

Online Supplemental Material

Spatial and temporal variation of daytime and nighttime MODIS land surface temperature across Nepal

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**This file includes:
Supplementary Figures S1–S2 and Table S1**

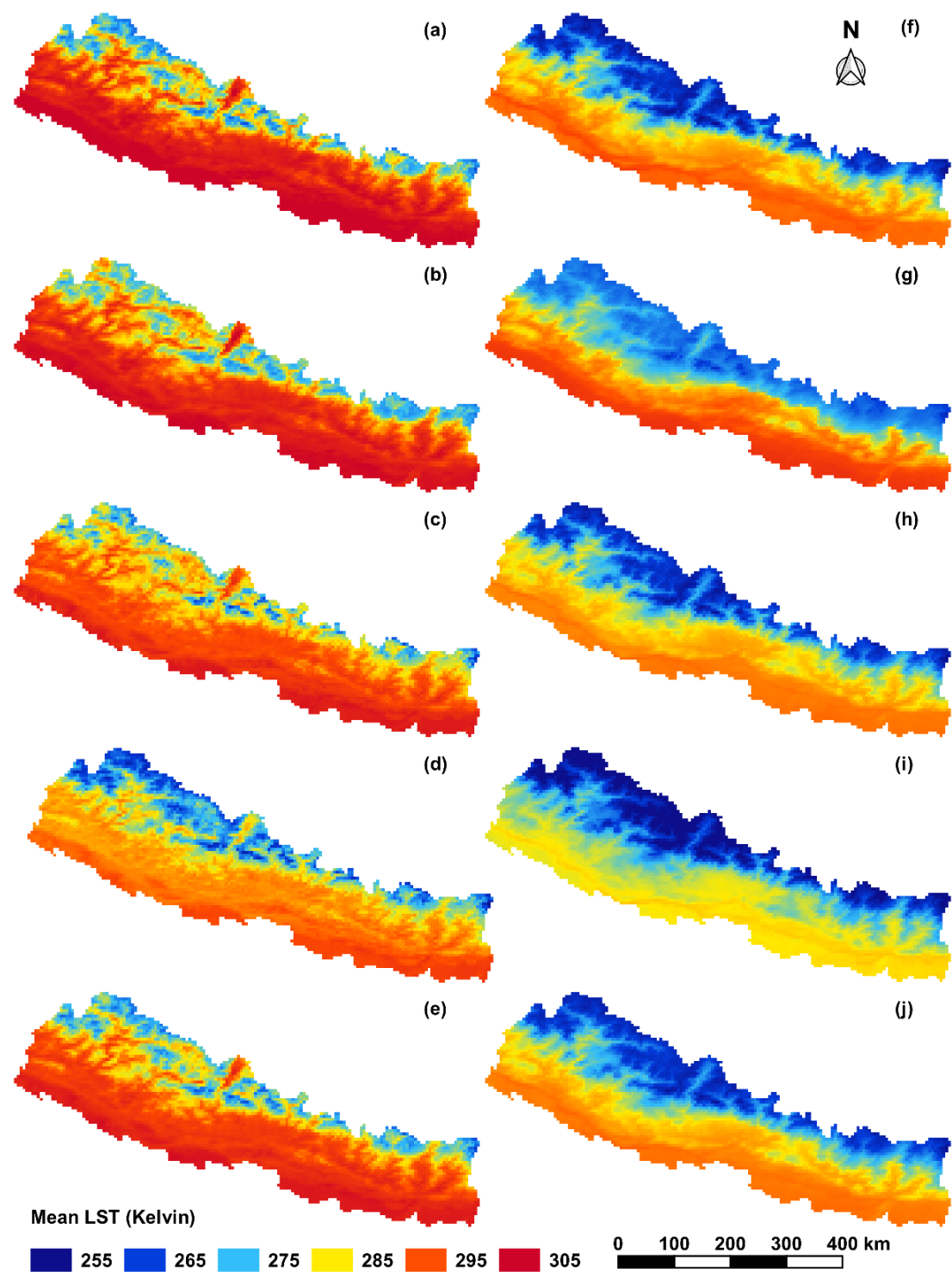


Figure S1. Spatial pattern of average (a–e) daytime and (f–j) nighttime LST in Nepal: (a, f) pre-monsoon season; (b, g) monsoon season; (c, h) post-monsoon season; (d, i) winter; (e, j) annual.

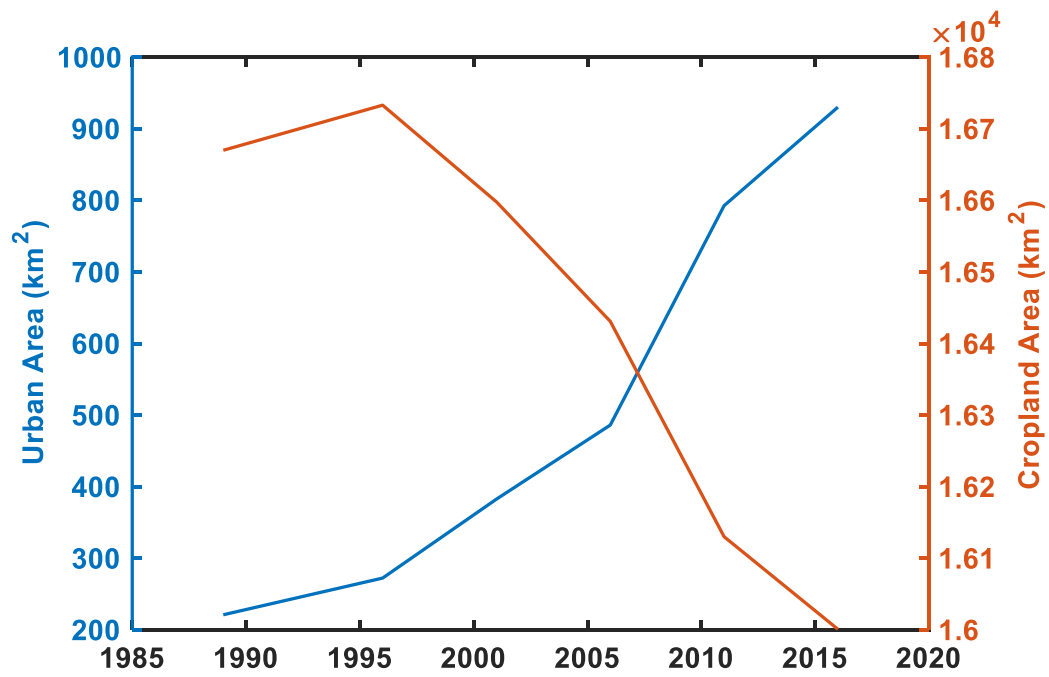


Figure S2. Land cover plot of urban area and cropland area in the low-elevation southern plains (Terai region) of Nepal (data obtained from Rimal et al. (2018)).

Table S1. Standard deviation of temporal and spatial mean daytime and nighttime LST in each season in Nepal.

| | | Annual | Pre- monsoon | Monsoon | Post- monsoon | Winter |
|---|-------|--------|-----------------|---------|------------------|--------|
| | | | | | | |
| Standard deviation of time series of spatial mean LST over Nepal (K) | Day | 0.43 | 1.02 | 0.72 | 0.79 | 1.11 |
| | Night | 0.40 | 0.73 | 0.72 | 0.62 | 0.78 |
| Standard deviation of temporal mean of LST of pixels inside Nepal (K) | Day | 9.02 | 10.25 | 9.37 | 7.69 | 8.81 |
| | Night | 10.86 | 11.75 | 10.84 | 10.56 | 11.01 |

Reference

Rimal, B., L. Zhang, N. Stork, S. Sloan, and S. Rijal. 2018. "Urban Expansion Occurred at the Expense of Agricultural Lands in the Tarai Region of Nepal from 1989 to 2016." *Sustainability* 10 (5). <https://doi.org/10.3390/su10051341>.