

Surface energy balance fluxes in a suburban of Beijing: energy partitioning variability

Supporting Information

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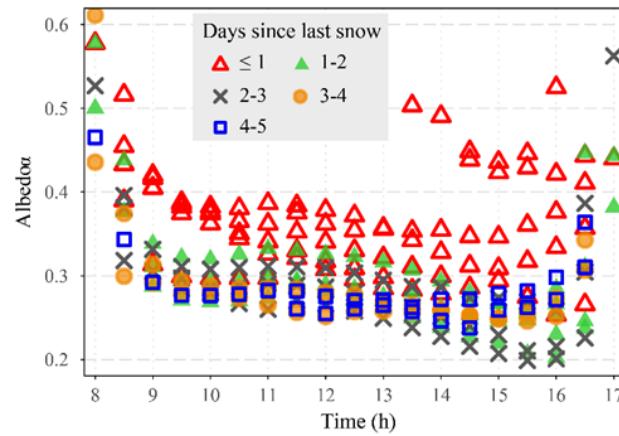


Figure S1: Albedo variation with time since last snowfall from December 2012 to February 2013.

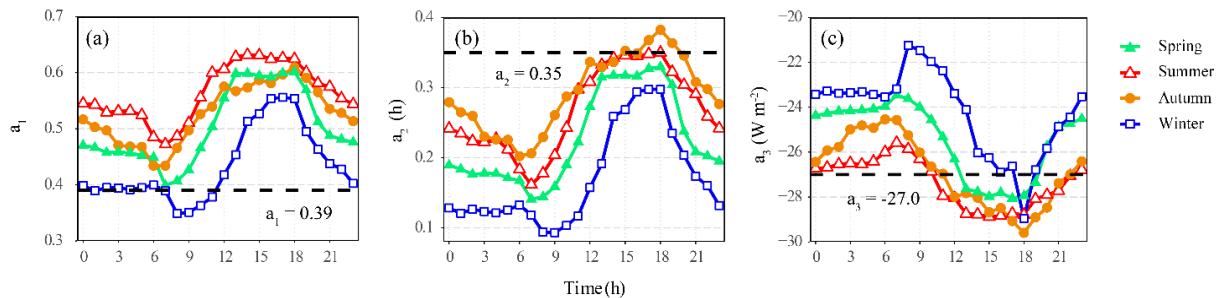
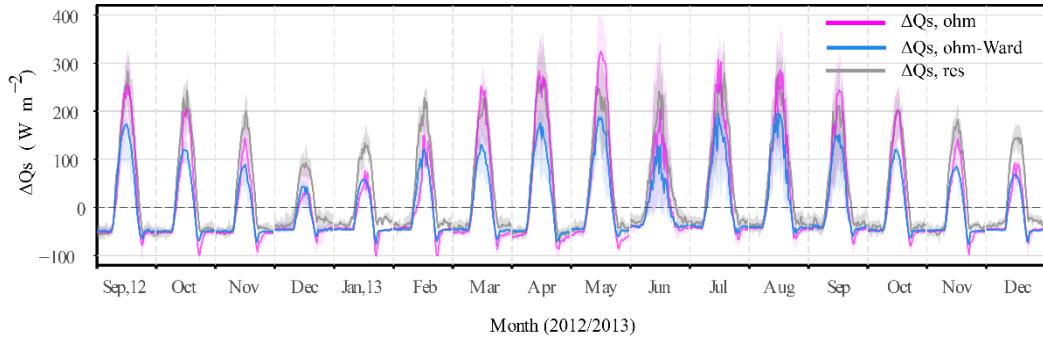


Figure S2: Seasonal diurnal variation of OHM coefficients (a) a_1 , (b) a_2 and (c) a_3 for Miyun and for Swindon (dashed line).



15 **Figure S3:** Monthly median and IQR (shading) diurnal patterns of storage heat flux ($\Delta Q_{s,ohm}$, $\Delta Q_{s,ohm-Ward}$ and $\Delta Q_{s,res}$) at Miyun (September 2012 to December 2013) (section 3.2). $\Delta Q_{s,ohm-Ward}$: estimated ΔQ_s at MY by using OHM coefficients of Ward et al (2013).

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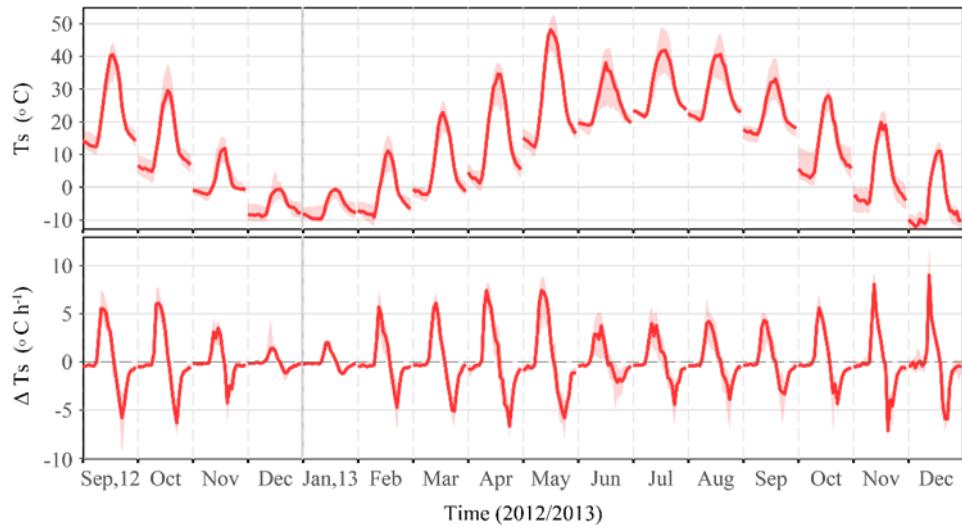
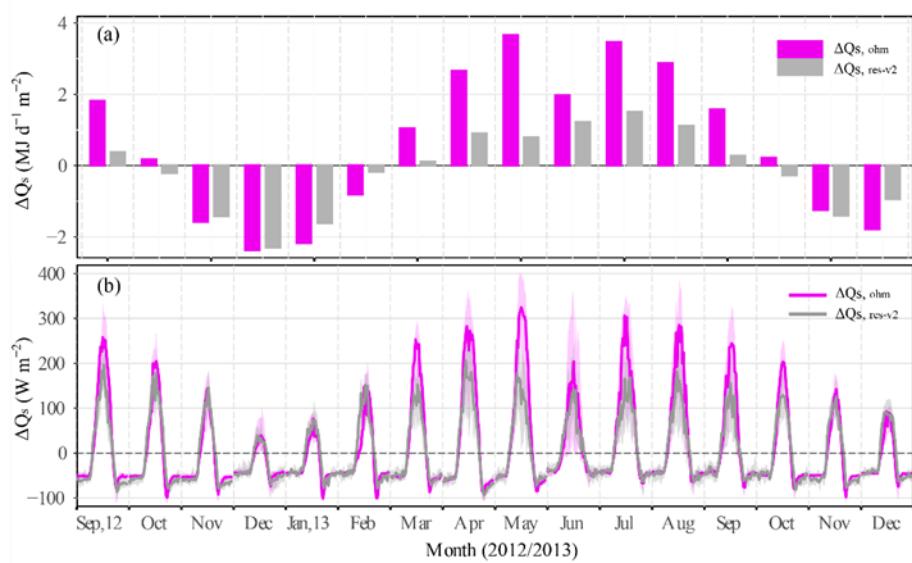


Figure S4: Observed monthly median and IQR (shading) diurnal patterns of (a) soil surface temperature (0 cm) and (b) hourly soil temperature difference ($\Delta T_s = (T_{s_{i+1}} - T_{s_i})/\Delta t$, where $i=0-23$ and $\Delta t = 1 h$).



25 **Figure S5:** Monthly storage heat flux ($\Delta Q_{S,\text{ohm}}$ and $\Delta Q_{S,\text{res-v2}}$) at Miyun (September 2012 to December 2013) (section 3.2): (a) mean flux for 24 h, and (b) median diurnal patterns with inter-quartile range (IQR) (shading).