

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

## Supporting Information

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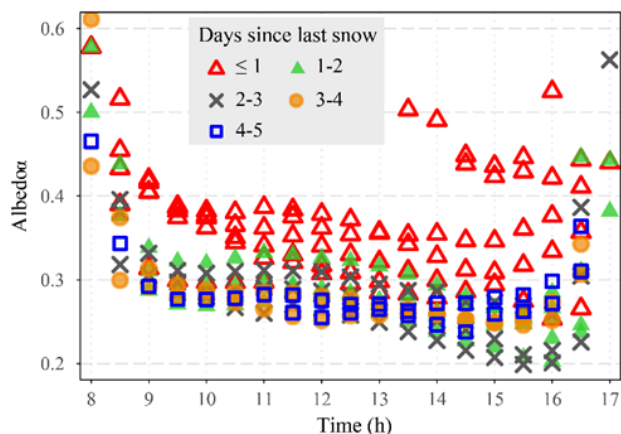
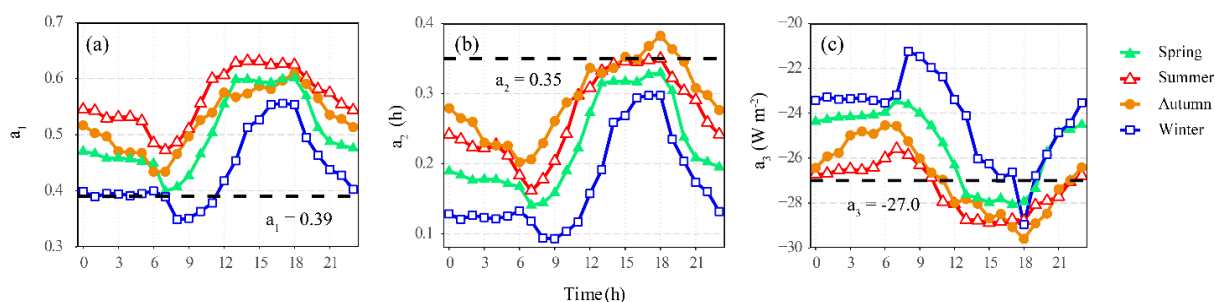
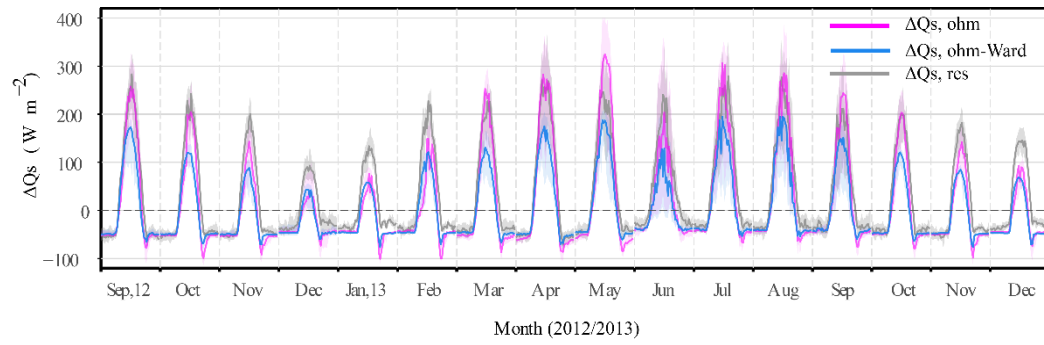


Figure S1: Albedo variation with time since last snowfall from December 2012 to February 2013.

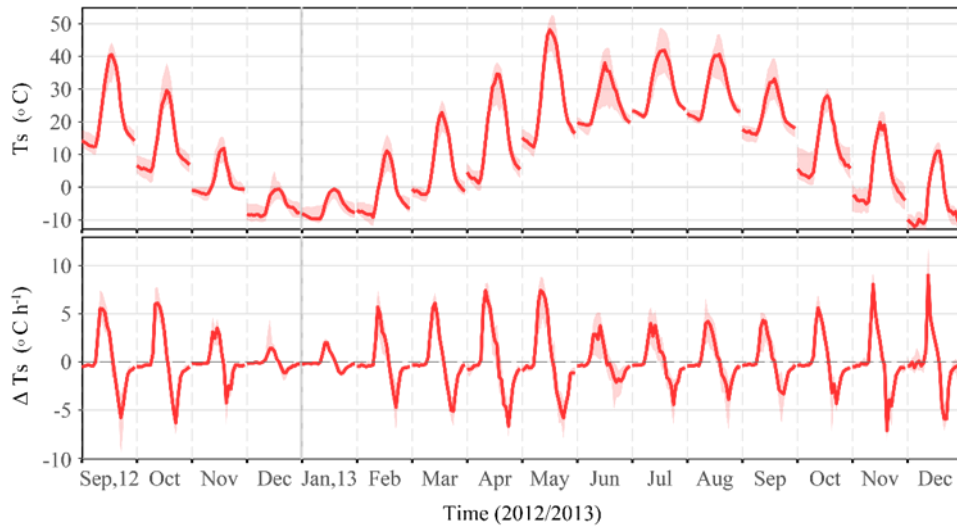


10 Figure S2: Seasonal diurnal variation of OHM coefficients (a)  $a_1$ , (b)  $a_2$  and (c)  $a_3$  for Miyun and for Swindon (dashed line).

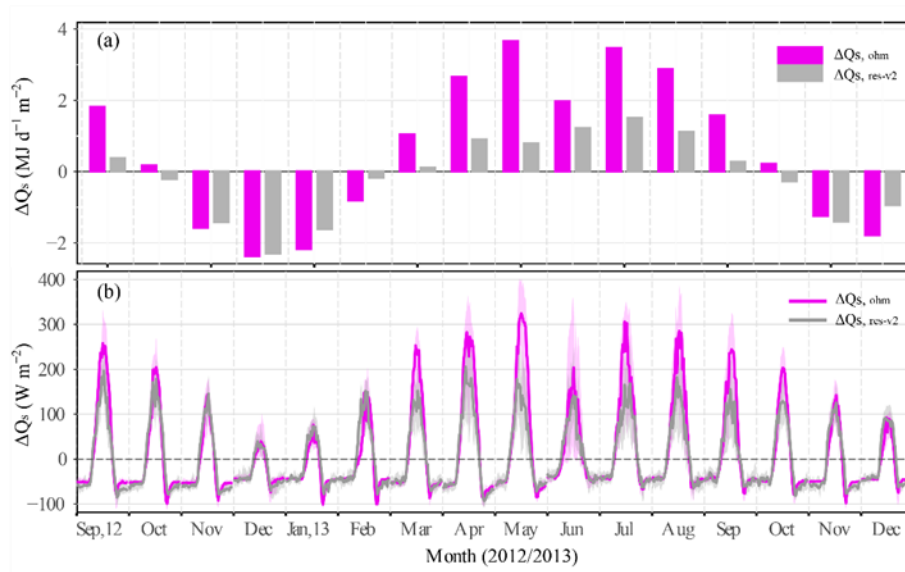


15 **Figure S3:** Monthly median and IQR (shading) diurnal patterns of storage heat flux ( $\Delta Q_{S,ohm}$ ,  $\Delta Q_{S,ohm-Ward}$  and  $\Delta Q_{S,res}$ ) at Miyun (September 2012 to December 2013) (section 3.2).  $\Delta Q_{S,ohm-Ward}$ : estimated  $\Delta Q_S$  at MY by using OHM coefficients 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 ( $\Delta Q_{s,ohm}$  and  $\Delta Q_{s,res-v2}$ ) 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).