Supplement of

Simulations of Snow Physicochemical Properties in Northern China using WRF-Chem

Xia Wang¹, Tao Che^{2,3}, Xueyin Ruan¹, Shanna Yue^{2,3}, Jing Wang^{2,3}, Chun Zhao^{1,4,5*}, Lei Geng^{1,4,5*}

¹School of Earth and Space Sciences, University of Science and Technology of China, Hefei 230026, Anhui, China

²Key Laboratory of Remote Sensing of Gansu Province, Heihe Remote Sensing Experimental Research Station, Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences, Lanzhou 730000, China

³College of Resources and Environment, University of Chinese Academy of Sciences, Beijing 100049, China

⁴Deep Space Exploration Laboratory, Hefei 230088, Anhui, China.

⁵CAS Center for Excellence in Comparative Planetology, University of Science and Technology of China, Hefei 230026, Anhui, China

Correspondence to: Lei Geng (genglei@ustc.edu.cn) and/or Chun Zhao (chunzhao@ustc.edu.cn)



Figure S1. Simulation domain. The color shading represents the topography height (m)



Figure S2. Spatial distribution of dust emissions (ug/m²/s) across China from December 2017 to March 2018.