

Measurement report: Atmospheric Ice Nuclei at Changbai Mountain (2623 m a.s.l.) in Northeastern Asia

5 Yue Sun¹, Yujiao Zhu¹, Yanbin Qi², Lanxiadi Chen³, Jiangshan Mu¹, Ye Shan¹, Yu Yang¹, Yanqiu
Nie¹, Ping Liu¹, Can Cui¹, Ji Zhang¹, Mingxuan Liu¹, Lingli Zhang⁴, Yufei Wang², Xinfeng Wang¹,
Mingjin Tang³, Wenxing Wang¹, Likun Xue¹

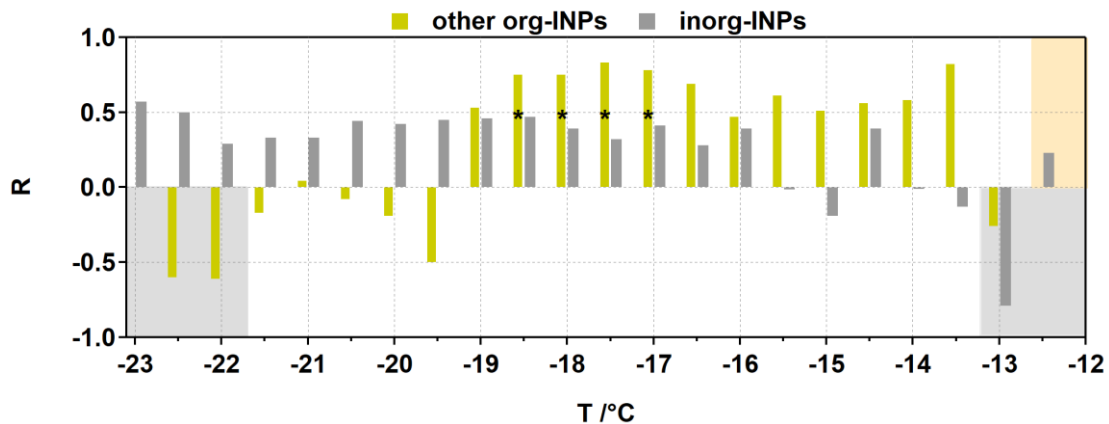
¹Environment Research Institute, Shandong University, Qingdao 266237, China

²Jilin Provincial Technology Center for Meteorological Disaster Prevention, Changchun 130062, China

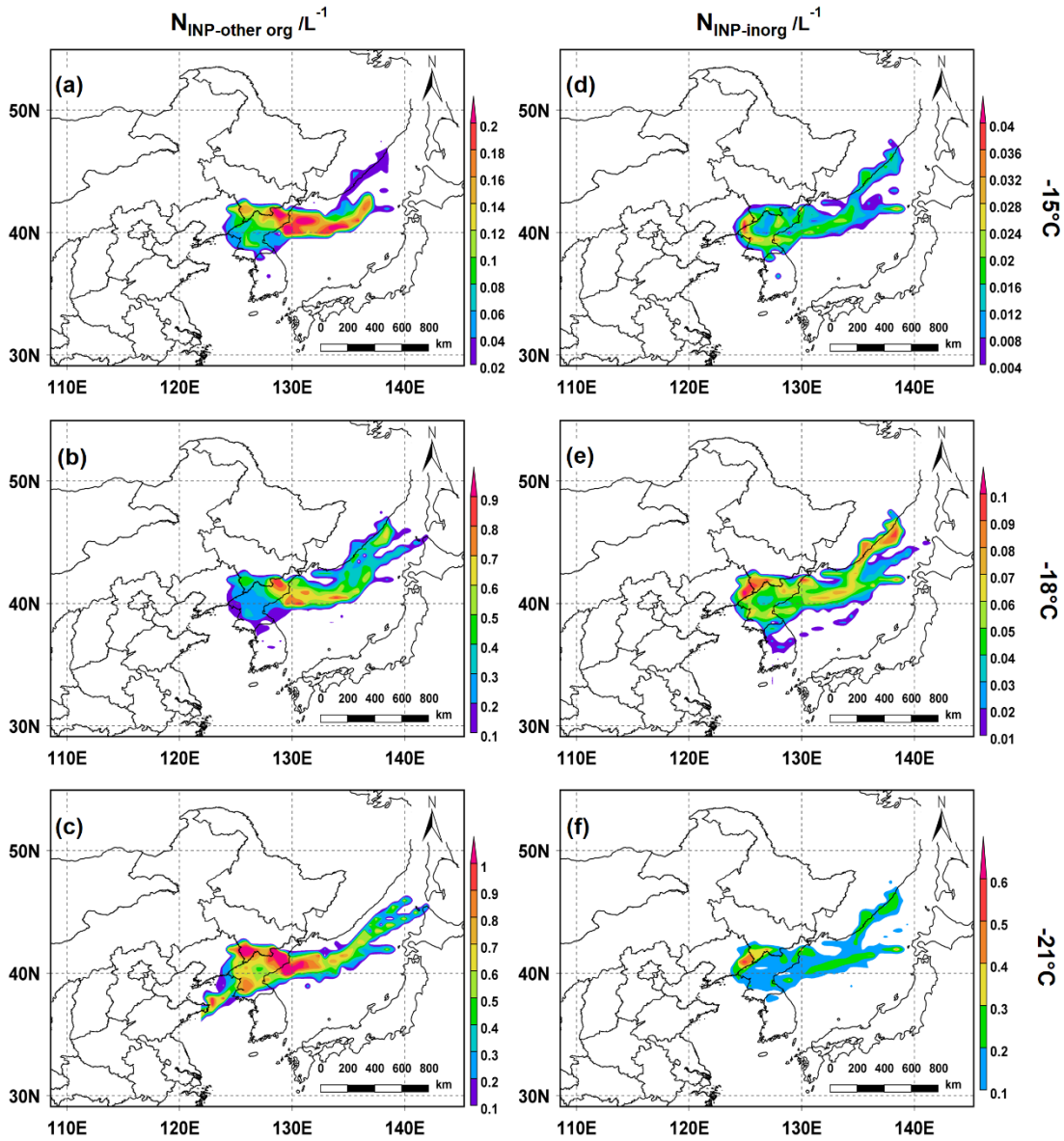
10 ³State Key Laboratory of Organic Geochemistry, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences,
Guangzhou 510640, China

⁴Changbai Mountain Meteorological Observatory, An Tu, Jilin 133613, China

Correspondence to: Yujiao Zhu (zhuyujiao@sdu.edu.cn), Likun Xue (xuelikun@sdu.edu.cn)



15 Figure S1. The relationship between PBL height and $N_{\text{INP-other org}}$ as well as $N_{\text{INP-inorg}}$ during daytime (8:00-17:00, m above ground level) as a function of temperature. The asterisk indicates $p < 0.05$. The orange and gray shades indicate that the data points number of the other org-INPs and inorg-INPs were less than half of all samples at each temperature.



20 Figure S2. The concentration-weighted trajectory (CWT) analysis for the distribution of $N_{\text{INP-other org}}$ (a-c) and $N_{\text{INP-inorg}}$ (d-f) at -15°C , -18°C and -21°C .