

*Supplement of*

**Significant contribution of organics to aerosol liquid water  
content in winter in Beijing, China**

**Xiaoai Jin<sup>1</sup>, Yuying Wang<sup>1,2</sup>, Zhanqing Li<sup>3</sup>, Fang Zhang<sup>1</sup>, Weiqi Xu<sup>4,5</sup>, Yele Sun<sup>4,5</sup>,  
Xinxin Fan<sup>1</sup>, Guangyu Chen<sup>6</sup>, Hao Wu<sup>1</sup>, Qiuyan Wang<sup>2</sup>, Jingye Ren<sup>1</sup>, and  
Maureen Cribb<sup>3</sup>**

<sup>1</sup>State Key Laboratory of Earth Surface Processes and Resource Ecology, College of Global Change and Earth System  
Science, Beijing Normal University, Beijing 100875, China

<sup>2</sup>School of Atmospheric Physics, Nanjing University of Information Science and Technology, Nanjing 210044, China

<sup>3</sup>Department of Atmospheric and Oceanic Science, and Earth System Science Interdisciplinary Center, University of Maryland,  
College Park, MD, USA

<sup>4</sup>State Key Laboratory of Atmospheric Boundary Layer Physics and Atmospheric Chemistry, Institute of Atmospheric  
Physics, Chinese Academy of Sciences, Beijing 100029, China

<sup>5</sup>College of Earth Sciences, University of Chinese Academy of Sciences, Beijing 100049, China

<sup>6</sup>Faculty of Geographical Science, Beijing Normal University, Beijing 100875, China

Correspondence to: Zhanqing Li (zli@atmos.umd.edu), Yuying Wang (wyy\_bnu@126.com)

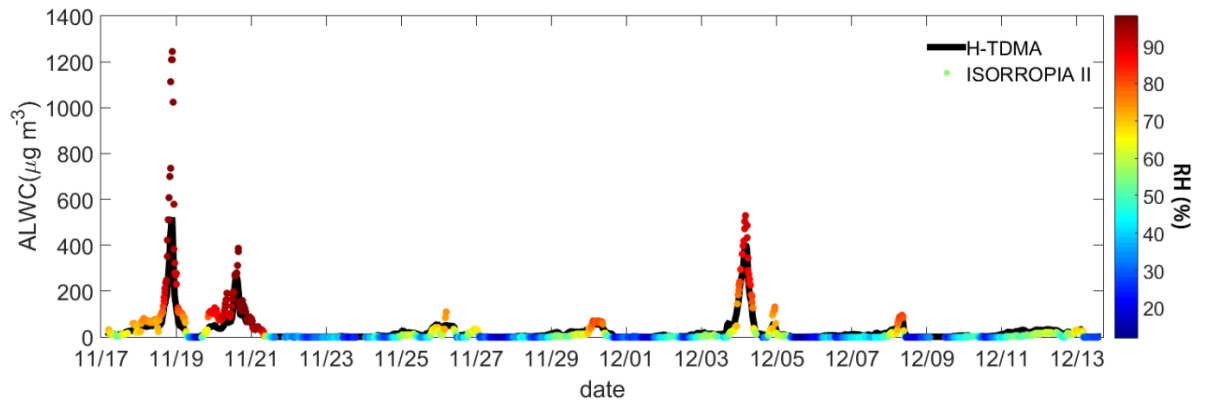


Figure S1. The time series of ALWC calculated from the measured growth factor and simulated from ISORROPIA II model.

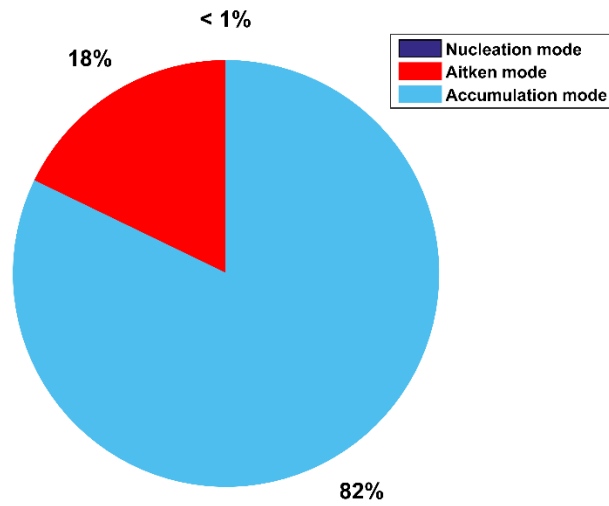


Figure S2. The contribution of particles of different modes to  $ALWC_{HTDMA}$ .