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Supplement of

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

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Here we repeat ALWC simulation using ISORROPIA II model assuming the chemical species in metastable state. As shown in Fig. S1a, the simulated ALWC in metastable state ($ALWC_{ISO\text{metastable}}$) is similar with that in stable state ($R^2 = 0.99$). Figure S1b further compares the simulated ALWC in metastable state and calculated ALWC, showing $ALWC_{ISO\text{metastable}}$ is still lower than $ALWC_{HTDMA}$.

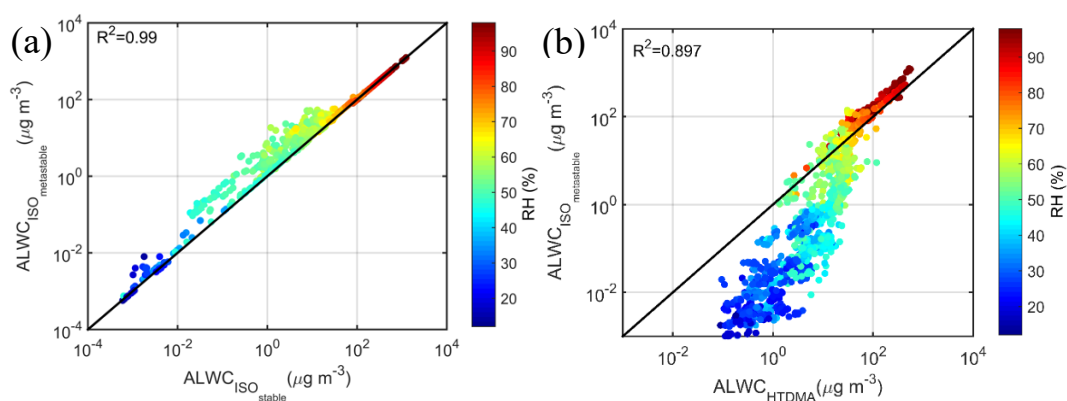


Figure S1. The correlation analysis between (a) $ALWC_{ISO\text{stable}}$ and $ALWC_{ISO\text{metastable}}$ and (b) $ALWC_{HTDMA}$ and $ALWC_{ISO\text{metastable}}$. $ALWC_{HTDMA}$ refers to calculated ALWC based on the measured growth factor and PNSDs, $ALWC_{ISO\text{stable}}$ refers to simulated ALWC from the ISORROPIA II model assuming chemical species in the stable state. $ALWC_{ISO\text{metastable}}$ refers to simulated ALWC from the ISORROPIA II model assuming chemical species in the metastable state. The coefficient of determination R^2 is given in each panel. The color of the dots denotes the ambient RH; the black solid line denotes the 1:1 line.