

I am providing a follow-up review to Heutte et al. "Observations of high time-resolution and size-resolved aerosol chemical composition and microphysics in the central Arctic implications for climate-relevant particle properties". Heutte et al. have made useful revisions to their manuscript. Notably, the manuscript had been significantly shortened by merging sections and moving sections to the Supplement. Also, the readability had been improved by removing redundant information and shorten a few long sentences. While the manuscript could still be more concise, it is comprehensive, which is also important. I have just two further minor comments provided below.

- Thanks for clarification with the NO_3^+ signal and the interferences at m/z 30 with C^{18}O . However, can you please clarify if this is an instrument-specific issue or if it was something specific for this measurement period.
- Besides that, I just recognized that the nitrate signal is partly correlated with the NaCl signal from the AMS (Fig. 5). Is it feasible that some measured nitrate was incorporated in sea salt particles? This might be indicative for aged sea spray particles as for example discussed in Gard et al. (1998).

Gard *et al.*, Direct Observation of Heterogeneous Chemistry in the Atmosphere. *Science* **279**,1184-1187(1998). DOI:10.1126/science.279.5354.1184