

## ***Interactive comment on “Tethered balloon-borne aerosol measurements: seasonal and vertical variations of aerosol constituents over Syowa Station, Antarctica” by K. Hara et al.***

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The authors thank the anonymous reviewer for helpful comments.

Ref. #1 comment: I strongly recommend that the authors cut the length of sections 3.4 to 3.7 into roughly half, and put the emphasis on discussing the main features of the data.

Reply from authors: We attempted to address description in sections 3-4 - 3-7. Base on referee's comments, comparison between "summer" and "winter" was shown and discussed at first in each section. In addition, approximately 30% of text in the ACPD

C3152

manuscript was removed from these sections. It was difficult to cut the length into ca. 50% because only comparison between "summer" and "winter" was not enough to characterize seasonal features of aerosol chemistry. Also, typical figures are merged and shown in the main text. All plots are moved to 'Supplementary'.

Ref. #1 comment: I like section 3.3. However, this section would become stronger if the authors added a short (one paragraph) discussion on how the different aerosol types observed here compare with those observed, for example, in the Arctic atmosphere.

Reply from authors: We add the short description about comparison with aerosol constituents in free troposphere in the Arctic to last paragraph in section 3-3.

Ref. #1 comment: The section 4 is currently merely a summary of the results described earlier in the paper. This section should contain a paragraph with a few real scientific conclusions.

Reply from authors: We changed the section 4 'summary and conclusion' to 'summary'. Although referee #2 recommended adding short sub-summaries for each sub section, we judged to remain summary in the section 4. We remove approximately 30% of text in the ACPD manuscript from the section.

Others: Some typos and grammatical errors were corrected in the revised manuscript.

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C3153