

## ***Interactive comment on “Improved chloride quantification in quadrupole aerosol chemical speciation monitors (Q-ACSMs)” by Anna K. Tobler et al.***

### **Anonymous Referee #2**

Received and published: 3 June 2020

General Comments: The manuscript by Tobler et al. focused on particulate chloride detection and quantification issues observed for some quadrupole aerosol chemical speciation monitors, which presented an approach to correcting the chloride concentration. This is an important and necessary work, which can be applied for measurements in environment where chloride is dominated by  $\text{NH}_4\text{Cl}$ . Overall the paper is well written. I recommend acceptance for publication on AMT after minor revisions.

Specific comments: 1, What is the reason for setting the voltage to 7.7 V (line 83, 84)? Please elaborate it. 2, Please consider placing the high resolution peak fit of  $m/z$  23, 39, 58 and 74 (line 208-215) in the supplementary. 3, Before March 2018,

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the chloride shows the positive concentration (Fig.2), please compare this with the chloride after recalculation based on fragmentation table adjustments, and elaborate the error margin. 4, I suggest that the sample/filter cycle in Fig.3 and 4 be shaded as an indicator, just like Fig.2.

Please also note the supplement to this comment:

<https://www.atmos-meas-tech-discuss.net/amt-2020-117/amt-2020-117-RC1-supplement.pdf>

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