

The paper contains a set of measurements of several units of two models of portable self-contained nanoaerosol classifier-quantifier. The devices are evaluated against a reference instrument before and after servicing. Measurements against ambient aerosols and laboratory aerosols are performed in the size range of 10-200nm. Additional information regarding flowrate calibration, laser performance and time since last service is also included but not commented on. The comparison among various instruments of the same model is uncommon in the nanoaerosol field and relevant for future publications, especially after long usage intervals. The reviewer recommends addressing the following comments prior to publication.

- **Annual calibration:** “The results indicate that the portable instruments must be serviced and calibrated annually” The claim for this conclusion is not demonstrated. The flowmeter error and counting inaccuracy is measured for units with known last services, but (time-since-last-service vs counting-error[corrected for final inaccuracy]) is not displayed, therefore the statement “annually” has no basis.
- **Time series ambient intercomparison:** The methodology and usefulness for this measurement is unclear. I understand that the evaluated parameter is the stability over time of the overall counts. Additionally, since concentrations change over time, linearity can be evaluated (Figures 9 a)b)c)d). The measurement method is confusing though. Particle number concentration over time incurs in the size dependent counting error. The Nanoscan SMPS ambient test, before and after the cleaning shows, two clearly different particle distributions. A more relevant representation should evaluate the time dependent ambient aerosol per size channel or at a set of size channels, this way time-linearity can be appropriately evaluated. Otherwise, if the ambient aerosol were to change its distribution counting will be affected. Figures 1b and 3b as printed, suggests that you should not service your device as you will lose counting efficiency.
- **Nebulizer-generated NaCl aerosol:** It is not specified the generation device/method for the precharged NaCl aerosol nor if the charger on the particle classifiers was turned off.
- There is little to no scientific value in including results from inaccurate or defective devices with regard to the GRIMM Mini WRAS spectrometers with SW <10 being uncalibrated. Unless a dedicated section addresses the background of said updates commenting on the inversion algorithm I would suggest removing any measurement data regarding said units. Data could be left as is, as a correction for previous publications with these instruments, if a comment is added.
- Regarding the test against 125nm PSL particles. This is quite a relevant plot, it provides a high concentration high resolution aerosol, which challenges both devices and shows the limitations of the instruments. For any of the cases it is not commented on the nature of the particles with aerodynamic diameters $\ll 125\text{nm}$. For 125nm the charging efficiencies of radioactive and corona should be similar but there is clearly a difference on the small size residues? A comment will help the reader with this plot. Maybe the devices did reach saturation