

Atmos. Meas. Tech. Discuss., referee comment RC2  
<https://doi.org/10.5194/amt-2021-26-RC2>, 2021  
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## **Comment on amt-2021-26**

Anonymous Referee #2

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Referee comment on "A phase separation inlet for droplets, ice residuals, and interstitial aerosol particles" by Libby Koolik et al., Atmos. Meas. Tech. Discuss.,  
<https://doi.org/10.5194/amt-2021-26-RC2>, 2021

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The SPIDER instrument is a novel approach to access IN residual properties, particularly in mixed phase clouds. For sure it's a really complex instrument that tries to handle interstitial aerosol rejection, droplet transport and evaporation, and finally access to crystal IN residual particle.

The main concern is that the proof of the proper instrument performance could not be clearly quantified, neither in the, not in the field.

Qualitatively the inlet is working, however without quantification of limitations and errors. I am not convinced by the questionable and poor field measurements

Please also note the supplement to this comment:

<https://amt.copernicus.org/preprints/amt-2021-26/amt-2021-26-RC2-supplement.pdf>