

Supplement of Atmos. Meas. Tech., 10, 4639–4657, 2017  
<https://doi.org/10.5194/amt-10-4639-2017-supplement>  
© Author(s) 2017. This work is distributed under  
the Creative Commons Attribution 3.0 License.



*Supplement of*

## **Using depolarization to quantify ice nucleating particle concentrations: a new method**

**Jake Zenker et al.**

*Correspondence to:* Sarah D. Brooks ([sbrooks@tamu.edu](mailto:sbrooks@tamu.edu))

The copyright of individual parts of the supplement might differ from the CC BY 3.0 License.

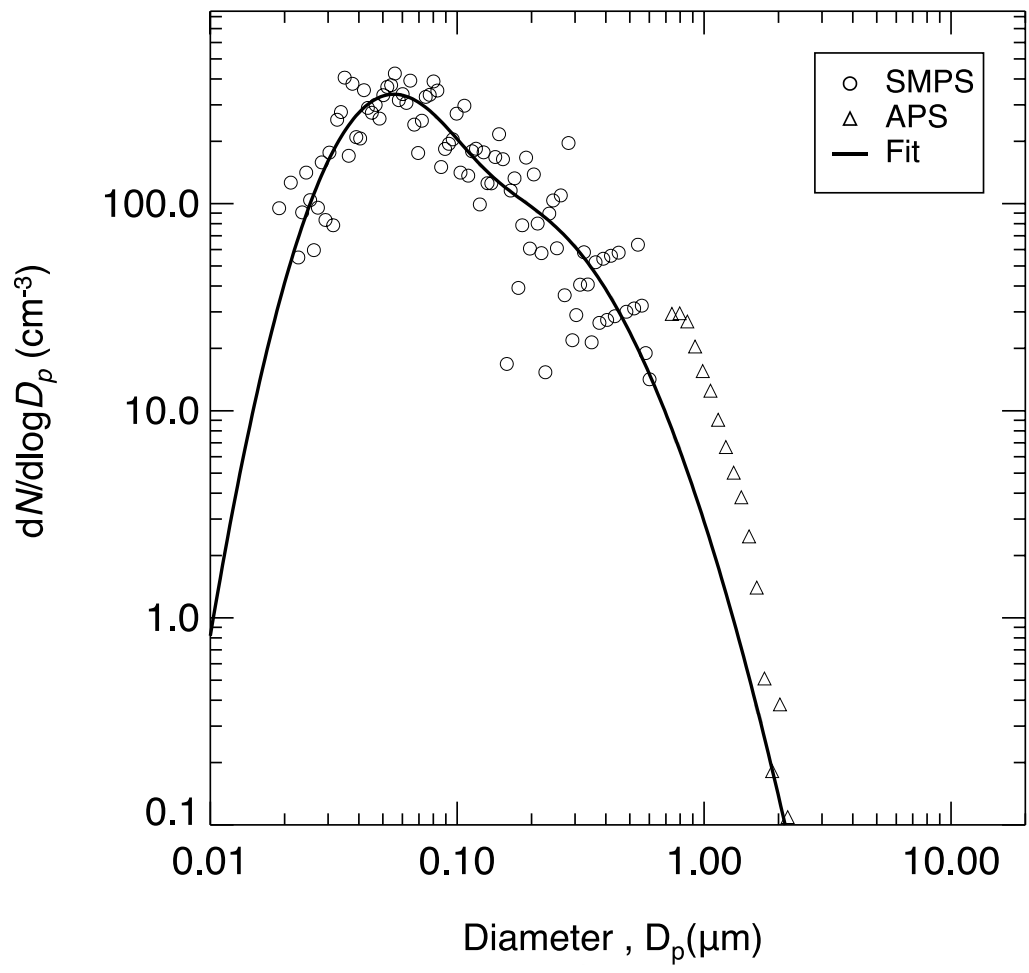


Figure S1. The number lognormal size distribution for Snomax<sup>®</sup> run on March 27<sup>th</sup> (case 27 in table) and featured in Fig. 4. SMPS data is reported as [circles](#), APS data is reported as [triangles](#), and a fit is reported as a black line.

<b>Simulation <math>M</math></b>				
Segment No.	Ice crystals	Droplets	Aerosol	$\geq \delta$ -Threshold
1	0	$M \times 100$	$M \times 300$	.
2	2	$M \times 100$	$M \times 300$	.
3	5	$M \times 100$	$M \times 300$	.
.	.	$M \times 100$	$M \times 300$	.
.	.	$M \times 100$	$M \times 300$	.
.	.	$M \times 100$	$M \times 300$	.
120	350	$M \times 100$	$M \times 300$	.
<b>Simulation <math>M+1</math></b>				
Segment No.	Ice crystals	Droplets	Aerosol	$\geq \delta$ -Threshold
1	0	$(M+1) \times 100$	$(M+1) \times 300$	.
2	2	$(M+1) \times 100$	$(M+1) \times 300$	.
3	5	$(M+1) \times 100$	$(M+1) \times 300$	.
.	.	$(M+1) \times 100$	$(M+1) \times 300$	.
.	.	$(M+1) \times 100$	$(M+1) \times 300$	.
.	.	$(M+1) \times 100$	$(M+1) \times 300$	.
120	350	$(M+1) \times 100$	$(M+1) \times 300$	.

**Table S1.** This table illustrates how the simulated data sets are constructed as detailed in section 3.7 for  $M$  and  $M+1$ .