

## PCASP-1 (aka, the UWYO/IBR PCASP)


Cai et al. (2013) and Snider et al. (2017) explain how a PCASP is challenged with laboratory-generated monodisperse test particles. This was done before and after the TRANS<sup>2</sup>AM22 deployment. The Table has sizing derived using polystyrene latex test particles (refractive index = 1.59).

The table has upper-bound particle sizes for 29 channels. The lower bound for channel 1 is 0.09 micrometer. The aerosol sample flow rate calibration did not change significantly before-to-after the TRANS<sup>2</sup>AM-22 deployment.

Cai, Y., J.R.Snider and P. Wechsler, Calibration of the passive cavity aerosol spectrometer probe for airborne determination of the size distribution, Atmos. Meas. Tech., 6, 2349-2358, 2013

Snider, J.R., D.Leon and Z.Wang, Droplet Concentration and Spectral Broadening in Southeast Pacific Stratocumulus, J. Atmos. Sci., 74, 719-749, 2017

Channel Number	Size Calibration
	Diameter, micrometer
1	0.10
2	0.11
3	0.12
4	0.13
6	0.14
7	0.15
8	0.16
9	0.17
10	0.19
11	0.21
12	0.23
13	0.25
14	0.27
15	0.29
16	0.45
17	0.55
18	0.65
19	0.75
20	0.85
21	0.95
22	1.05
23	1.25
24	1.45
25	1.65
26	1.85
27	2.05
28	2.35
29	2.65
30	3.05

 Channel 5 removed