

Interactive comment on “Cloud particle size distributions measured with an airborne digital in-line holographic instrument” by J. P. Fugal and R. A. Shaw

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Received and published: 28 May 2009

Response to Reviewer #1 J. L. Brenguier Comments

We appreciate Dr. Brenguier's helpful review of the paper and have implemented nearly all of his comments, as indicated below. Page and line numbers refer to the Discussions paper, for consistency with the reviewer comments.

P660, l5, we have used the term “image” as suggested.

P662, l6: we have changed the wording as suggested.

P662, l23-24: we have corrected the line-break error.

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P666, l16: we have moved this statement to a parenthetical remark since it is obviously not a limitation here; but we wish to make the point that it is, in fact, technologically feasible to have “overlapping” volumes with commercially available high speed cameras (for typical flight speeds).

P667, l16: we have changed the wording as suggested.

P668, l6: we have moved the definition to this earlier location in the paper.

P668, l9-10: we have added flight path distances to the paragraph.

P668, l27: we have changed the wording as suggested.

P671, l2: we have added the Isaac et al. reference, but have also left it in the previous location.

P671, l25: we have expanded on this important point by discussing the diffraction limit and pixel size, and their influence on shape determination.

P674, l14: we have changed the wording as suggested.

P675, l10: we have reworded the sentence to clarify the meaning.

Fig. 1: the intent of the top panel in Figure 1 is to illustrate what hologram reconstructions of shattered particles look like. Our hope is that it gives the reader a visual impression of the holographic measurement capability. While we agree that the figure is not critical, we have chosen to leave it unchanged.

Interactive comment on Atmos. Meas. Tech. Discuss., 2, 659, 2009.