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Interactive comment

## Interactive comment on "HOAPS and ERA-Interim precipitation over sea: Validation against shipboard in-situ measurements" by Karl Bumke et al.

## Anonymous Referee #1

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The authors have compared two precipitation data sets, HOAPS and ERA-Interim with shipboard gauge and disdrometer measurements for the spans 1995-1997 and 2005-2008. I find shipboard precipitation measurements potentially valuable as there is little in-situ information about precipitation over the open ocean. As the authors' state, low lying atolls are often used as a proxy for open ocean. While I do find merit to this work and the manuscript is comprehensive, I found the sentence structure choppy and very difficult to follow. Hence, my comments are limited to overall results. My hope is that if/when the manuscript is edited it will flow better and not be quite as difficult to read. Detailed comments are provided below.

(1) I highly suggest the authors' summarize the results in tabular form or at least focus



Discussion paper



of the most important results. Stating every result sentence by sentence is tedious to read and detracts from the readability. For example, the results on Page 11, lines 1-19, could be listed in tabular form. It's quite taxing to read and comprehend in an efficient manner.

(2) Being a satellite data person, I find the HOAPS comparisons quite interesting and illuminating. Satellite data sets are generally more challenging to characterize than the more predictable behavior of model and reanalysis data. I feel the manuscript would be much more interesting and useful if additional satellite-based precipitation data sets were compared with the shipboard gauges. I realize this is significant additional work, but comparisons with the shipboard gauges could be quite useful for ocean validation purposes.

(3) I believe it's well-known that ERA-Interim overestimates precipitation frequency so the authors' could have forecast this result. I'm not quite sure how useful it is dwelling on this, but I understand the authors' need to be thorough.

- (4) Page 2, Line 21 "male-functions" should be "malfunctions".
- (5) Page 9, Line 31 "Figure 4" should be "Figure 5".

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