

## ***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

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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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