

Interactive comment on “Introduction to the in orbit test and its performance of the first meteorological imager of the Communication, Ocean, and Meteorological Satellite” by D. Kim and M. H. Ahn

Anonymous Referee #2

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General comments:

In this article in-orbit test results for the COMS satellite mission is documented demonstrating the functional and radiometric performance. It has been concluded that payload performs as expected, and within the specifications. This could be a good scientific research paper. Unfortunately, the authors have failed to deliver the scientific message, and as such, this article is not publishable in its current form.

The article seriously lacks a clear objective, in which the scientific discussion should

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be based. Having said that, it is unclear to this reviewer, what is the main goal of this article? What is something novel in this article in terms of scientific orbit test analysis? What other studies have been conducted in the area, and how they relate to this study? All these fundamental points are missing in this manuscript, and lack a serious scientific value to be published in AMT. I understand that in-orbit test results are reported in this article. Nevertheless, they are documented like a report, and without enough scientific justification. Given this reasoning, I would like to see a complete revisit of the paper, with incorporating sufficient scientific research and discussions. The paper might be suitable for a short communication or letter, but not for a full research article, at least at this stage.

I am not rejecting this paper, and would like to give the authors a chance to revise the article for re-review.

Specific comments:

Here are some of the major comments/suggestions:

• The paper started like a report. I am really surprised to see that there is not a single citation/reference in Introduction section! What is the goal of this article? What the authors are up to in this scientific article? Why this study is conducted? Rather than reporting the IOT results, what is something new? As a reader, I am missing all these information. Even the results presented in the article are not presented in an interesting way.

• The only fruit of this article, I can see, seems the results of SNR, NEDT, and pixel-to-pixel non-uniformity. So, please blow this up. Please stretch out enough scientific thought to demonstrate the results. The authors may include some simulation results or sensitivity test, to make the paper readable and interesting.

• Section 2 seems unnecessarily long. Is it really necessary to provide such long technical history for the COMS/MI? May be for a technical report, but not in a research

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article.

â€” Section 3 also reads like a technical report. Please summarize this section. What messages are you trying to deliver to the readers? You really don't need to give all those historical details. Please be specific.

â€” Previous sections are not well organized, and this is impacting on the results and discussions section as well (Section 4). The authors have shown some preliminary images. Okay. But, sometimes, I have felt that they are unnecessary, and completely random in nature.

â€” The radiometric performance section in Section 4.2. This section can be significantly improved and enhanced. The authors may include some time series results. The COMS satellite is launched in 2010. So, the authors must have enough radiometric data to go for a good scientific analysis and discussion. Are the radiometric performances consistent, or they vary from time-to-time, year-to-year? This section could be interesting, and should be extended, aligned to the topic. Please try to keep the paper more research oriented, with some scientific thought. This is seriously missing in this manuscript.

â€” It would be interesting to include some radiative transfer simulation results, to make the paper publishable. How the IOT results would compare with those could be obtained in simulation?

Interactive comment on Atmos. Meas. Tech. Discuss., 6, 10889, 2013.