**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*

H. Thomas (Referee)

ht@nicarnicaaviation.com

Received and published: 14 May 2014

Overall this paper contains some interesting information about a new satellite instrument and is worthy of publication, following some major revisions. In general, the paper reads much more like a technical report, rather than a scientific article as it seems to focus much more on the history of the instrument and basic performance metrics, rather than a specific scientific focus.

The abstract is too long and generalised and includes details about the history of the
instrument which are not relevant. The abstract direction in the introduction section which needs to focus much more on the scientific analyses that are the results of this paper (the SNR etc.) rather than giving a biography of the instrument. This historical information could be omitted and the reader referred to a report/website/other reference to provide this sort of detail. No references are used in the introduction section which is unusual and should be rectified – use references to direct the reader to the details which are not relevant to the study undertaken and instead provide more of an introduction to the scientific work that is the main focus of this article. Section 2 serves as an extension of the introduction and much of this could be summarised in a table. I suggest that sections 1 and 2 are both shortened and merged, with most of the remaining introduction content coming from the later part of section 2. Section 3 again serves as a technical introduction to the instrument and should be reduced and summarised.

The results section needs to be extended for an article of this type. More detail should be given into the tests which were conducted. The section on the functional tests are not very informative, and simply demonstrate that the instrument works (as do figures 2-5). The information in section 4.2 is the “new” material and should be the focus of the paper. The results quoted should be expanded upon, for example some results are quoted but not demonstrated. The sensitivity test for the dependence of calibration slopes that are quoted as having been conducted should be described and the results shown as should the obtained values for PRNU at 220 and 300K.

Some general comments Needs to be thoroughly proof read before resubmission. The manuscript is littered with typographic errors and grammatical inconsistencies. For example, tenses are frequently interchanged and the terms “is” and “are” are often used incorrectly. Also, numbers less than ten should be consistently spelt out, rather than written as words. Equations should always be written on a new line and assigned an equation number.

Table 2: States that the 100% albedo values will be given, but these are missing from the table. Table 4: in the caption “the requirement is the same for the same channel”
does this mean the requirement is the same for each detector in the same channel?

Figure 7: the graph needs to include a key / labels to explain what each of the lines represent.