

Response to the reviewer's technical comments for the paper by Sofiev & Kouznetsov Observation operator and detection limits for MODIS and VIIRS Fire Radiative Power products

First of all, we would like to thank the reviewer for the efforts and very thorough comments. We also apologise for the misprints that, despite all our efforts and embedded spell checks of MS Word, still appeared in the manuscript. The responses are presented below.

Reviewer 2

Typesetting and cross-referencing

a) In Line 156, the sentence ending with "...explicitly accounted for the pixel aggregation and the bow-tie deletion (Error! Reference source not found.)." contains a broken cross-reference. Please correct the reference.

b) There are also some minor formatting inconsistencies throughout the manuscript, particularly concerning units and numerical ranges. For example, expressions such as "375m" (Line 155), "1km 2 " (Line 447), "1.5m" (Line 440), and "1000K" (Line 440) should preferably follow a consistent SI formatting style "375 m", "1 km²", "1.5 m", and "1000 K". Similarly, numerical ranges written with hyphens and spaces, e.g., "35 - 40 MW" (Line 433) should be formatted consistently, preferably using en dashes e.g., "35–40 MW".

Response: *all errors have been corrected. We looked through the manuscript correcting similar issues in other sections.*

2. Minor typographical and language issues

a) Line 52, "We are aware about only one study" should be "We are aware of only one study".

b) Line 78, “we are not aware about any non-trivial OOp” should be “we are not aware of any non-trivial OOp”.

c) Line 115, “The date before February 2012 were discarded” should be “Data before February 2012 were discarded”.

d) Line 150, “A singe VIIRS sensor” should be “A single VIIRS sensor”. e) Line 154, “aggregations zones” should be “aggregation zones”.

Response: *all errors have been corrected.*

3. Figures and captions

a) Line 332, the caption of Figure 8 contains “2018-2024.10. Panel a)...”, where “.10.” appears to be an unintended typesetting artifact and should presumably be removed.

Response: *corrected*

b) In the caption of Figure 9 (Line 340), “mean could fraction” should be corrected to “mean cloud fraction”.

Response: *corrected*

c) Please ensure that the formatting of figure references, e.g., “Figure 3-1” (Line 137), is consistent throughout the text.

Response: *The 3-1 numbering format was used in the quoted work of Nishihama et al. (1997); Figure references in our paper are set automatically and their format differs from that of Nishihama et al.*

4. Satellite naming and terminology

a) The manuscript uses “VIIRS SNP” and “SNP” in several places, apparently referring to the Suomi-NPP satellite. Please consider using a consistent designation such as “Suomi-NPP” or “S-NPP” throughout the manuscript.

Response: corrected

5. References and citations

a) Line 562–564, the reference for Freitas et al. (2007) appears incomplete.

b) Line 660–661, the reference for Soares et al. (2015) is also incomplete and should include the relevant volume and page information.

c) Line 705–707, the title of the reference by Xu et al. contains “Himarawi-8 AHI”, which appears to be a typographical error and should be “Himawari-8 AHI”.

Response: Apologies for the issues: the reference manager failed, for unknown reasons. Corrected manually.