

Review Comments on Revised “**Observation operator and detection limits for MODIS and VIIRS Fire Radiative Power products**” by Mikhail Sofiev and Rostislav Kouznetsov

General Comments:

The authors have adequately addressed my comments from the previous review round, and I appreciate the considerable effort made to revise and improve the manuscript. In particular, the major scientific and methodological issues raised in the previous round have been appropriately considered and clarified.

After reviewing the revised manuscript, I have no further major concerns regarding its scientific content. I only noticed a limited number of minor typographical, typesetting, language, and reference-related issues. These issues do not affect the scientific conclusions of the manuscript.

My final recommendation is “accepted subject to technical corrections”. I would nevertheless encourage the authors to carefully proofread the manuscript once more before the next submission, with particular attention to cross-references, typographical errors, figure captions, formatting consistency, and the completeness and consistency of the reference list.

Minor and Technical Comments:

1. 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), “1km²” (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”.

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”.

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.
- b) In the caption of Figure 9 (Line 340), “mean could fraction” should be corrected to “mean cloud fraction”.
- c) Please ensure that the formatting of figure references, e.g., “Figure 3-1” (Line 137), is consistent throughout the text.

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.

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”.