

## General

The paper described the combination of two existing methods to detect convection initiation in order to improve on validation statistics. Although the methodology is not perfected yet, important improvements were made a) in order to also detect convective initiation at night time and b) to deduce false alarm and bias scores and increase the detection of early convection. I see no need for changes and recommend that the paper is published as is.

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1. Does the paper address relevant scientific questions within the scope of AMT?

Yes

2. Does the paper present novel concepts, ideas, tools, or data?

Yes, a combination of SATCAST and CbTRAM strengths is made to make use of the best of both the methodologies.

3. Are substantial conclusions reached?

Yes.

4. Are the scientific methods and assumptions valid and clearly outlined?

Yes, written in a very clear and easy to follow style.

5. Are the results sufficient to support the interpretations and conclusions?

Yes.

6. Is the description of experiments and calculations sufficiently complete and precise to allow their reproduction by fellow scientists (traceability of results)?

Very clear description.

7. Do the authors give proper credit to related work and clearly indicate their own new/original contribution?

Yes.

8. Does the title clearly reflect the contents of the paper?

Title is appropriate

9. Does the abstract provide a concise and complete summary?

Very well summarized.

10. Is the overall presentation well structured and clear?

Very well written.

11. Is the language fluent and precise?

Yes.

12. Are mathematical formulae, symbols, abbreviations, and units correctly defined and used?

Yes.

13. Should any parts of the paper (text, formulae, figures, tables) be clarified, reduced, combined, or eliminated?

No, the paper is accepted without comments or changes suggested.

14. Are the number and quality of references appropriate?

Yes.

15. Is the amount and quality of supplementary material appropriate?

Yes.