Atmospheric Measurement Techniques Discussions

Atmos. Meas. Tech. Discuss., editor comment EC1
https://doi.org/10.5194/amt-2021-97-EC1, 2021

Editor Comment on amt-2021-97

Brian Kahn (Editor)

Editor comment on "Latent heating profiles from GOES-16 and its comparison to heating from NEXRAD and GPM" by Yoonjin Lee et al., Atmos. Meas. Tech. Discuss., https://doi.org/10.5194/amt-2021-97-EC1, 2021

August 2, 2021

Dear Dr. Lee,

We have reached the end of the discussions phase of your manuscript 'Latent heating profiles from GOES-16 and its comparison from NEXRAD and GPM". There are three reviews, one "reject" and two "reconsider after major revisions". I have also performed my own evaluation of the manuscript.

I recommend against submitting a revised manuscript for consideration of final publication in AMT. The scope of the work required is likely to well exceed the 4-8 week time frame for a revision. While the reviewers (unanimously) make the point that your work is scientifically well motivated and potentially has promise, the investigation is not sufficiently mature enough to be considered ready for publication.

Several of the scientific and algorithmic concerns are mentioned by either two of three, or all three of the reviewers. The algorithm is lacking in quantitative detail, nor has been thoroughly validated with a sufficient set of diverse cases. The authors have not quantified the added value of LH from ABI for the limited set of convective clouds that may contain sufficient information at cloud top. Nor have the authors shown, or even discussed, how the ABI-derived LH retrieval products impact initialization of convective-permitting numerical models.

My best advice is that you and your coauthors carefully consider the feedback from the three reviews as you continue to mature your potentially promising research and submit a future manuscript elsewhere. If you and your coauthors decide to proceed against this advice with a revised manuscript, you are bound to the journal timeline for revisions and will undergo a second round of reviews, running the risk of rejection if the revised version does not satisfactorily and thoroughly address every reviewer concern (which are many and substantial).

Best regards,

Brian Kahn

Associate Editor

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