

Atmos. Meas. Tech. Discuss., author comment AC2
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Response to Reviewer #2

Bu-Yo Kim et al.

Author comment on "Twenty-four-hour cloud cover calculation using a ground-based imager with machine learning" by Bu-Yo Kim et al., Atmos. Meas. Tech. Discuss., <https://doi.org/10.5194/amt-2021-179-AC2>, 2021

This manuscript presents a comparison of several methods of obtaining the cloud cover without reliance on human eye. The presentation of the methods and the results is well-written, clear and convincing. As far as I can tell, it does not introduce any new tools to obtain cloud cover via machine learning or other methods, but it does provide a valuable benchmark using a large sample of images.

Thank you for your consideration for reviewing this manuscript. Following the reviewer's comments, we have added/revised the contents/sentences to the revised manuscript as detailed below. We believe that the quality of the manuscript has been improved and clarified through the reviewer's comments.

I only have a few minor suggestions:

Line 164: How is image radius defined ? Why aren't the equations placed after line 146 when they are first mentioned ?

We have added definition as follows:

Line 148: "..., *radi* is the image radius (distance between center and edge pixel of circular images), ..."

Line 146: And we have moved these equations after line 146.

Line 207 : Missing "was" : ... was used, the SVR kernel ...

Line 228: We have revised this sentence.

Line 212 : -> where x_i is the i -th data point ...

We have revised this sentence as follows:

Line 232: "where subscript i and j are i -th and j -th data points, respectively, and ..."

Line 345 : By time -> Conditioned on the time of day, high ...

Line 357: We have revised this sentence.