

Atmos. Meas. Tech. Discuss., author comment AC2  
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## Reply on RC1

Yann Fabel et al.

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Author comment on "Applying self-supervised learning for semantic cloud segmentation of all-sky images" by Yann Fabel et al., Atmos. Meas. Tech. Discuss.,  
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Thank you very much for your detailed review and the provided feedback.

- Line 24 and Line 34 was adapted based on your suggestions.
- Figure 1 was updated, as there was an error regarding the turbidity and sun elevation subplots. Thus, the individual plots in the figure do refer to the same dataset of 770 images. However, the first plot does not represent mutually exclusive labels but counts each ASI containing the respective cloud layer (or combination of cloud layers) independently. For instance, an ASI with low- and high-layer clouds counts for low-layer, high-layer as well as low-layer & high-layer. This shows the reader how many ASI contain which cloud layer and how many images are combinations of multiple cloud layers. A remark was also added to the figure's caption.
- Furthermore, for the computation of the turbidity coefficient a reference to Ineichen, P. and Perez, R (2002) was added
- Regarding Lines 158-159, we clarified what we meant with "border" part of the ASI. It is the black area which is not part of the actual ASI, as the fish-eye lens produce a circular image, but which still gets fed to the model as the model expects square images.
- We also updated section 4.1 to emphasize that it is only an example and we cannot conclude the general performance from this example alone. However, we also added a note, that we visually inspected images from several days and could not find any unexpected predictions.
- To show that the images from Figure 5 are random, we included a timestamp to the individual images. Apart from two images they are also all from different days.