Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2018-729-RC1, 2018 © Author(s) 2018. This work is distributed under the Creative Commons Attribution 4.0 License.



Interactive comment on "Can downwelling far-infrared radiances over Antarctica be estimated from mid-infrared information?" by Christophe Bellisario et al.

Anonymous Referee #1

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This paper is clear and well presented with a valid methodology to simulate FIR radiances from the Mid-IR. However it is not clear what is the need for this as radiative transfer models can make the same simulation with probably better accuracy.

The other major limitation is the results are only valid for radiances over Antarctica which limits the interest as to be of real value to climate modellers a more global application of this technique is required.

Hence before accepting publication of this paper I would like to see a much clearer explanation for why this technique would be useful given its limitations outlined in the paper. Also a demonstration of the technique over a wider range of atmospheric con-

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ditions is needed.

Interactive comment on Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2018-729, 2018.