

Interactive comment on “Microphysics and dynamics of snowfall associated to a warm conveyor belt over Korea” by Josué Gehring et al.

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Review of Microphysics and dynamics of snowfall associated to a warm conveyor belt over Korea”, by Josué Gehring, Annika Oertel, Étienne Vignon, Nicolas Jullien, Nikola Besic, and Alexis Berne, <https://doi.org/10.5194/acp-2019-1173>

Overview This very interesting and well written article discusses their interpretation of the microphysics associated with snowfall associated with a warm conveyor belt that occurred over Korea on 28 February 2018. Their interpretations are based on air trajectories using the Integrated Forecast System Model, scanning X-band Doppler dual-polarization radar, vertically pointing W-band Doppler radar combined with an integrated 89 GHz radiometer, and the multi-angle snowflake camera located at the

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ground.

General Comments

The interpretations of the microphysics of ice particle growth in this storm system are based on air trajectories, scanning polarization radar data and vertically pointing cloud radar data, and the MASC instrument. At first, I thought that it would be difficult to interpret the microphysics (habits, etc), nucleation (secondary ice production) and growth processes within this storm system without the use of in-situ (aircraft or some type of balloon-borne device). I was unexpectedly surprised to find that indeed they were able to conduct this type of analysis and justify their analysis. I therefore strongly support the conclusions reached in their study.

Please also note the supplement to this comment:

<https://www.atmos-chem-phys-discuss.net/acp-2019-1173/acp-2019-1173-RC1-supplement.pdf>

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2019-1173>, 2020.

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