## Final review of manuscript egusphere-2022-637 by Erdmann et al. (2022)

## **Final recommendation:**

I find that the authors have addressed (most of) my major comments in the revised version of their manuscript. Therefore, I now deem it suitable for publication.

## Some final minor comments:

- \* line 25: MTG was launched in December 2022. This would be worth updating in the text.
- \* line 55: proxies based on [...].
- \* line 109: Section 7 describes [...].
- \* Figure 3: Following on the other reviewer's comments, I would agree that column-integrated graupel mass should be expressed in units of kg m<sup>-2</sup> rather than just kg (kg per which unit of space?).
- \* line 223: "[...] AROME-France dBFED by converting the output of the FFO to dB units."
- \* Figure 4 (caption): "cycles" (mistyped).
- \* line 249: "cycles" (mistyped).
- \* line 281: "In example, the HA generates 1.6% of almost [...]"  $\rightarrow$  "For instance, the HA only contributes to 1.6% of almost [...]".
- \* Figure 6 (caption): "B" (resp. "H") indicates low (resp. high) geopotential (rather than pressure) values, since pressure on geopotential surfaces is constant, by definition (500 hPa here).
- \* Figure 8 (caption): "Vertical cross-sections along 44 N [...]".
- \* Figure 8: Out of curiosity, would the authors have an explanation for the strange saw-tooth features on the RH fields at longitude around 4°W (along the edges of the column with very high RH)?
- \* Figure 10 (caption): I would suggest: "The size of the neighbourhood used to calculate the FSS was set to 0.5 deg".
- \* line 414: "overestimate".