Review of egusphere-2025-691

The manuscript's topic is within the journal's scope. The authors introduce a method based on the updated/improved CVP for German weather radar network augmentation. The paper is solidly written, with only a few minor remarks from the reviewer—see the specific comments. The recommendation is acceptance past minor revision.

Specific comments:

Line 79: Rephrase "QVP-radars" to perhaps "radar-centric QVPs", or "radars providing QVPs".

Figure 3: Add the mutual distances between the MIRA and the other radars to the figure for easier visualization (the information is already in the text; e.g., the distance from MIRA to MHP is ~ 57 km).

Figure 4: According to the figure, the POLDIRAD RHI data are not directly over the MIRA-35. What is the offset? The authors should add this fact to the text where appropriate.

Lines 235-310: Is reflectivity averaging performed on the linear or dB scale? Z and ZDR averaging should be on the linear scale.

Line 345: The radar measurements at higher frequencies are affected below the melting layer and in the melting layer, where the melting begins.

Lines 373-374: Rephrase "Germany was located at the front side" to perhaps "Germany was affected by the front side"

Line 400: The authors should add the term "mostly" to "offers gapless" to address the features in Fig. 8 more appropriately.

Line 408: The part of the sentence "slightly bright band..." is confusing. Clarify.

Line 415: The authors should use "fewer" instead of "much less" as it fits the context better.

Lines 418-419: Add commas to the sentence – it is harder to read without them: "Alone from the data of the radar MEM, the ML height can, therefore, only be estimated to lie between 1.2 km and 3 km within the lowest measured radar beam."

Lines 484-485: Rephrase the sentence, it is hard to follow. Perhaps "On this date, more high-ranging clouds upwards of 7 km were present, marking the region where the closer radar ISN has less coverage due to the limited number of measured elevation angles." fits the context better.

Line 495: "DB" should be "dB".

Line 498: There is a subtle increase in Ze (Fig 11b, MHP) before 17:00, between 17:38 and 17:45, and at ~17:54 UTC with respect to 3 km height, indicating ML. However, the ML signal is very difficult to interpret without other measurments.

Line 504: Add "to" between "due the...".

Line 508: Remove one "method" from "profile method method by...".

Lines 553-555: The statement about ice hydrometeor attenuation is questionable. Liquid hydrometeors experience much higher attenuation than ice particles at the C band. Authors may want to investigate the causes of such behavior further. Could the different microphysics along the path explain and account for the difference? Another convective cell along the route, closer to the MEM?

Lines 570-571: Permute the word order in "the with range decreasing sensitivity", it is hard to follow ("the decreasing sensitivity with range" should fit much better).

Line 639: Use "beam-broadening" instead of "-broadening".

Line 641: Use "fewer" instead of "less".