EGUsphere, author comment AC2
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Reply on RC2

Maximilian Schaper et al.

Author comment on "Radio frequency interference detection and mitigation in the DWD C-band weather radar network" by Maximilian Schaper et al., EGUsphere, https://doi.org/10.5194/egusphere-2022-692-AC2, 2022

Regarding the general comment:
The description of the RFI identification and classification is summarized in the enumeration at the beginning of section 2.1. A detailed description of the exact method used to identify an RFI source is given in appendix section A. The classification is done in two steps. First an RFI class is determined for each identified RFI source. Afterwards the internal parameters derived during the identification are used, together with the RFI class, to determine the RFI severity of each identified RFI. To clarify the classification process multiple examples are given throughout section 2.1 regarding the RFI class and RFI severity.

Regarding the minor comments:
Line 22: rewrote the sentence, now: "Many forecast models assimilate radar data, successfully improving their prediction skills."
Line 25: "German Weather Service" is the English term. The equivalent long German term is "Deutscher Wetterdienst", which is why the abbreviation "DWD" is commonly used in Germany to reference the national weather service.
Line 29: Removed the abbreviation entirely as it is not used anywhere.
Line 35: Removed the abbreviation as of the recommendation of the first referee comment.
Figure 4: TSG references the built-in "test signal generator" used to calibrate the receive path of the radar. Added: "Also shown is the test signal generator (TSG), which is used to calibrate each receive path."
Figure 8: The amount of disturbance caused by RFI sources (percentage of compromised rays) is accumulated in each bin. The result is than scaled by the total percentage of caused disturbance. The plotted unit is therefore a scaled percentage (percent scaled by total percent).
Line 385: rewrote the sentence for clarification: "In order to relate the pure number of detected RFI sources to an actual threat to data quality caused by them, the disturbance caused by each RFI source is evaluated as a daily mean fraction of disturbed rays."