

## Response to Reviewer

We would like to thank the reviewer for spending their time reviewing the manuscript again and for their comments. They have been very helpful, in our view, in improving the manuscript and making the study more complete. We include answers to their general comments below. All specific comments were corrected as suggested

- 1) We agree that it would make the study much more complete to do this comparison, but we do not believe that it is possible given the data quality that we have. Figure S1 attached below show the retrieved DSD for the two case study times in Figure 7 of the manuscript together with the disdrometer observations for the minute surrounding the best estimate of the time of DSD observation (that is the radar time plus 5 minutes). It can be seen that the disdrometer observations do not vary much between the two cases in terms of magnitude of the drop count and the observations do not spread across much of the retrieved DSD. We do not believe that any comparison against the disdrometer observations is a useful comparison for this study. We have moderated some of the language within the text to allow for the lack of independent measurements.
- 2) We have included the Ka-G retrieval in Figure 7 for the two case study times. Text has been added throughout section 4.2 to discuss the new subfigures.
- 3) We have rephrased the paragraph as suggested to suggest that there is an improvement but it cannot be verified without independent measurements of LWC.

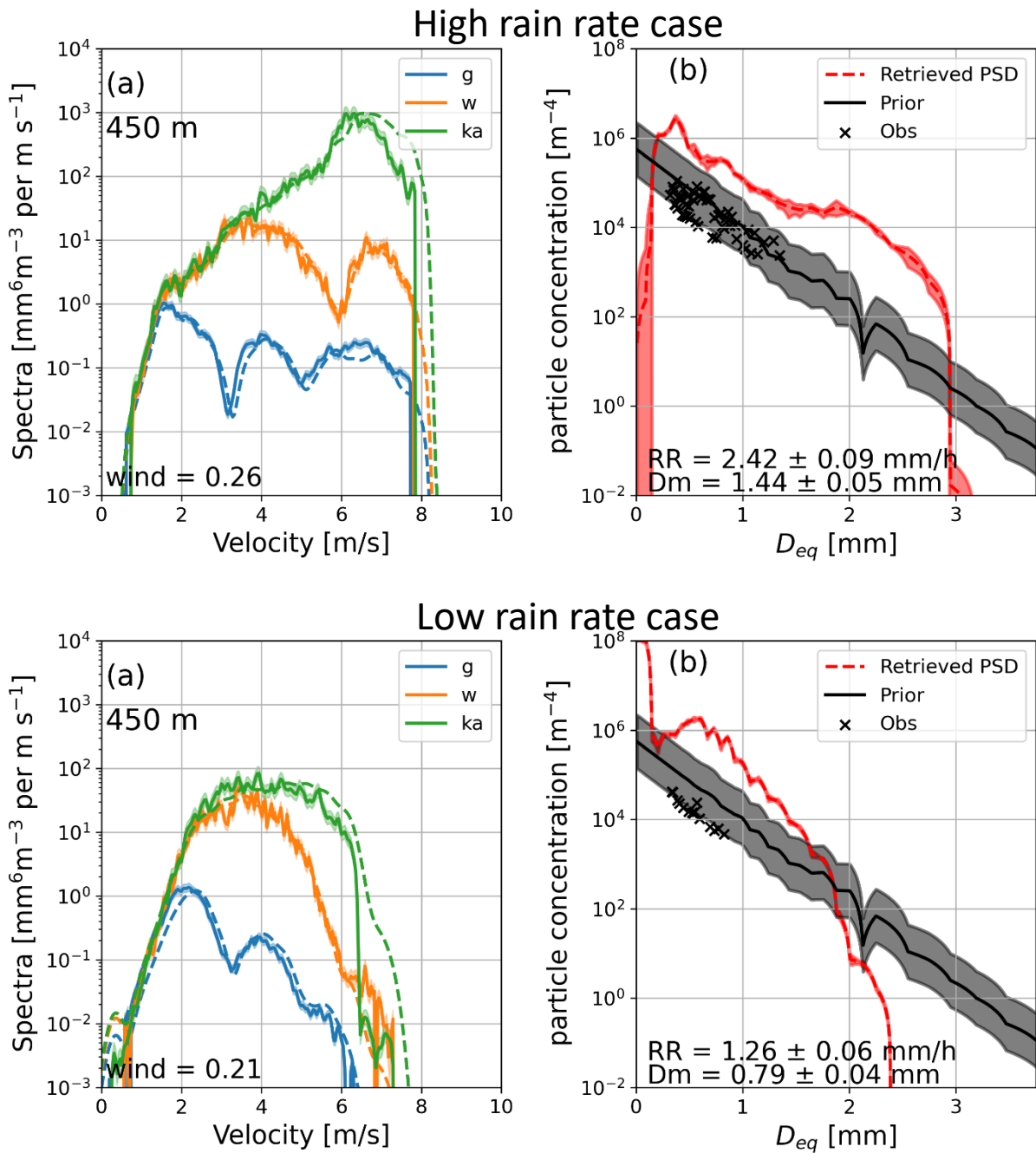


Figure S1: As Figure 7 within the manuscript but only showing the two triple frequency retrievals. The crosses on the right-hand figures show the disdrometer observations averaged over a 1 minute period centred on the time of the radar observations.