

This paper uses AC6 data along with model results to determine the likely size of microburst populations in the radiation belt. It is a useful study to the community, furthering knowledge of microburst populations and driving mechanisms, and could be published with a few additional modifications. Thank you to the author for their responses to the first round of comments. Many of the comments were incorporated into the paper.

Moderate clarifications:

- (1) Thank you for your clarification regarding the microburst scale size versus Lshell. In comments to both reviewers, you gave context as to why Lshell was considered in the first place. This would be helpful background for all reviewers, please add it to the article.
- (2) In your responses to reviewer 1, you mention that the 60-70 km peak in Fig. 3 is likely due to normalization. This is a huge feature in your plots – this needs to be directly addressed. Please add a few lines regarding the 60-70 km peak.
- (3) Line 262: I'm still a little unclear on your use of "qualitatively similar." As far as I can tell, the PDFs are similar in that they both start at 100, then decrease to 0. However, isn't that what any PDF would do? What really makes them at all similar?

Minor clarifications and types

- (1) Line 161: "on an activate day" presumably is intended to be "on an active day"
- (2) Line 241-242: One of the instances of 70-80 km was switched to 60-70 but the other was not.
- (3) Line 262 "CDF" -> "PDF"