

First of all, thank you for your comments. In response to your questions, I have made the following responses.

- (1) Some of the grammar and punctuation questions you raised will be revised and improved in the future.
- (2) The manuscript mainly starts with the correction of snowfall attenuation, and then proposes to correct the attenuation of mixed precipitation echoes, but there is no in-depth study on the attenuation characteristics, which is what I need to study in the follow-up.
- (3) The manuscript is too simple to identify the melted layer, but uses the temperature recorded by the airborne probe to make a rough judgment.
- (4) You are right. The manuscript does not actually consider the attenuation of the echo from the melting layer. Of course, this is a relatively complicated task. More in-depth research is needed in the follow-up.
- (5) The original idea of the manuscript was to study the attenuation of the melting layer by looking at the plane's position above and below the melting layer. Therefore, the examples shown are divided into the plane's position above and below the melting layer to observe the attenuation of the echo after passing through the melting layer.

The above is a simple reply to some of the questions you raised. Further research is needed to consider the actual attenuation of particles in different phases and the attenuation of echo by the melting layer. This is a complex issue, and there is still a lot of work to be done in the research content of the manuscript. I will improve it in the follow-up work according to your valuable suggestions.