Thank you for your detailed and insightful comments.

1) The statement in the manuscript that the composite experiences "ablation damage" above 250°C is based on the general findings in the literature, where the temperature range for the onset of ablation damage is typically reported as between 250°C and 300°C [1-3]. However, for the purposes of the simulation, it is necessary to define a specific temperature threshold. In this study, 250°C was regarded as the threshold for ablation damage onset, as this value represents a reasonable approximation based on available literature. Reference suggests that resin pyrolysis begins at temperatures around 250°C, which is commonly regarded as the point at which ablation damage starts to manifest. This threshold has been adopted in the simulation to provide a concrete starting point for analyzing the material's behavior under lightning strike. It should be noted that while different sources may report a range of temperatures, 250°C is considered a suitable point for initiating the analysis of ablation damage in this study, given the existing body of research.

2) In lines 297–299, it is believed that the predicted damage area values (12.46 ~12 cm^2) have already been mentioned, and the corresponding reference has been cited in line 281. In fact, verifying the validity of the paper by comparing the simulation area values in this study with the simulated values from the cited reference, which show minimal deviation, is a commonly used validation method and has been implemented in multiple studies.

CFRP laminate with a layup sequence of $[45/0/-45/90]_{2S}$ are compared with experimental 280
outcomes from the reference, as depicted in Fig.4. Fu et al.[24] conducted direct effects 281
lightning current experiments, utilizing an 8/20 waveform with a peak current of I=50 282

$12.46\ cm^2$, with a discrepancy of less than 4% compared to the measured value in literature 298
($12.46 \sim 12\ cm^2$). The results of the ultrasonic C-scan, reveal the internal damage of the 299

3) The manuscript’s detailed descriptions were retained to address previous reviewers' comments comprehensively. To respect the opinions of other reviewers and the revision process of the manuscript, these parts were not further simplified.

Thank you once again for your review comments.

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