The manuscript has undergone several rounds of review and revision, significantly improving in quality. In my opinion, the manuscript may be ready for acceptance based on the publication requirements of GMD after a minor revision. I believe this paper contributes meaningfully to AI-based precipitation forecast correction research, though operational implementation may still require further development.

1. Major strengths of the manuscript

- The proposed GFRNet model combines GANs with multi-source NWP data fusion, demonstrating significant improvements in heavy rainfall forecasting (e.g., TS, FSS scores), particularly at 20–40 mm/3h thresholds, outperforming traditional NWP and baseline models (FRNet/MSEM).
- Adversarial training and the weighted loss function effectively mitigate the common "over-smoothing" issue in deep learning models.
- Comprehensive experimental design, including validation on three independent rainy seasons (2022–2024), multi-threshold evaluation (0.1–40 mm/3h), case studies, and statistical significance tests (e.g., Top 10% subset analysis).
- Ablation studies confirm the necessity of the SE block and weighted loss function.
- The model achieves high-resolution (5 km) precipitation forecasts within operational time constraints (3-hour training/2-minute inference on an A100 GPU), showing clear potential for disaster prevention.

2. Outstanding reviewer comments

- Code/Data Availability. The appendix declares access to code/data, but authors must confirm their actual functionality (I did not test them, though future users in the field may verify reproducibility).
- Language/formatting. The authors should carefully proofread the entire manuscript for grammar and spelling errors. I have already identified a few issues. (e.g., ‘‘contrained’’ should be ‘‘constrained’’ in the Line 25; ‘‘Table ??’’ in Line 136).