We thank the Reviewers for constructive criticism that has led to an improvement of this manuscript. In what follows we present the responses (highlighted in blue) to Reviewers' concerns.

Reviewer #1

I find this manuscript and its findings both interesting and valuable for advancing our understanding of the complexity and predictability of rainfall records, particularly in light of the current uncertainty surrounding general rainfall predictions. The methods used for data analysis are appropriate and reproducible, and I especially commend the application of the relatively new entropy-based calculation method. Overall, I recommend this manuscript for publication in EGUsphere.

My questions and comments are as follows:

1. The use of two climatic time periods for separate analyses is clear. However, I am also interested in whether analyzing the entire available period (1961–2020) would reveal visible changes in the GWPE plots (e.g., crossovers) that might indicate shifts in predictability between the two climatic periods. Could you provide results or insights for the whole period?

   Reply: If GWPE is calculated using 30-year sliding windows (the standard climatological period), this would yield temporal series of GWPE values for each selected value of q (e.g., q = -10, 0, 2, 10). Such an approach would allow for the identification of potential crossovers and long-term trends in predictability. In future work, we intend to apply this analysis using a longer dataset to better capture temporal dynamics and enhance interpretability.

2. The GWPE values are presented with three significant digits. Does this imply that the error of calculation lies in the third digit? More generally, is there a way to estimate or quantify the error associated with this method?

   Reply: While this is a scientifically relevant question, it remains unaddressed in the current body of literature: the choice of three significant digits is a matter of convention.

3. In Figures 3, 8, and 9, would it be possible to display the differences on a color scale distinct from those used for rainfall amount or GWPEC in the two periods? Similarly, in Tables 2 and 3, could you add columns showing the differences in values between the two periods?

   Reply: Done, thank you.

4. For q>0, GWPE values all appear higher than 0.5, except for Sremska Mitrovica during the 1991–2020 period. This suggests a possible pattern—has a similar behavior been observed in other types of real-world data?

   Reply: GWPE is a newly developed method, and this study represents its first application to precipitation data. Previous applications include hot pixel data from Brazilian biomes (Stosic and Stosic, 2024), SPEI time series in Serbia (Stosic et al., 2024b.), and EEG signals across different sleep stages (Duarte et al., 2025). In all these cases, GWPE values exceeded 0.5 for both positive and negative q values. Future studies using precipitation datasets are needed

to determine whether GWPE values greater than 0.5 for $q > 0$ represent an intrinsic characteristic of precipitation dynamics.

Thank you for your responses and for the valuable contribution to this special issue.

Reply: Thank you.