**Manuscript:** Reliability Analysis Method for Soil Slopes Permanent Displacement under Mainshock-Aftershock Sequences.

**Date：** September 8, 2026.

# Response to Reviewer Comments

We sincerely thank the Editor for this valuable and constructive comment. It has prompted us to critically re-examine the correlation analysis in our manuscript and to streamline the presentation for greater clarity and focus.

In the original manuscript, we defined six correlation coefficients to comprehensively explore the relationships between seismic ground-motion parameters and slope displacements:

- $\boldsymbol{\rho_1}$: correlation between mainshock parameters and $D_m$;
- $\boldsymbol{\rho_2}$: correlation between mainshock parameters and $D_{ma}$;
- $\boldsymbol{\rho_3}$: correlation between aftershock parameters and $D_a$;
- $\boldsymbol{\rho_4}$: correlation between aftershock parameters and $D_{ma}$;
- $\boldsymbol{\rho_5}$: correlation between MAS parameters and $D_{ma}$;
- $\boldsymbol{\rho_6}$: correlation between the ratio of MAS parameters and $\delta D$.

After careful consideration, we acknowledge that our study is fundamentally based on the relationship between MAS parameters and slope permanent displacement $D_{ma}$, i.e., $\boldsymbol{\rho_5}$. The other five coefficients, although initially defined for completeness, were not actually utilized in the subsequent analyses. Their presence could distract readers and obscure the core message of our work. Therefore, we have removed the other five sets of data that were not used in the manuscript.

We believe this revision substantially improves the manuscript's readability and scientific clarity. Once again, we are grateful for the Editor's insightful suggestion, which has significantly strengthened our manuscript.