

Dear Professor Tarolli,

Thank you very much for the opportunity to submit this invited commentary to NHESS and for facilitating the engaging discussion surrounding our initial submission. As we outlined in our response to the two reviewers, Professors Luigi Lombardo and Wei-Li Liang, we appreciate their feedback and suggestions and have made the recommended changes summarized below.

In response to concerns from Reviewer #1, Luigi Lombardo:

1) Substantially reduced the self-citations of works by Ben Mirus, from seven first-authored publications down to only three, and from 15 co-authored publications down to nine. The remaining citations are critical to our main arguments and narrative in this perspective piece. Moreover, we have made a concerted effort to supplement these with additional citations whenever appropriate.

2) Added some discussion of emerging approaches in space-time landslide modeling (i.e., Steger et al., 2024) and another new process-based approach (i.e., Perkins et al., NHESS) to both the “extrapolation in space” and “towards improved forecasting” sections of the paper.

In response to suggestions from Reviewer #2, Wei-Li Liang:

1) Revised Figure 1 to include different panels to distinguish between VWC and PWP. The resulting figure is much easier to interpret.

2) Added a new figure to demonstrate the role of relative wetness and comparing the value of information of different state variables (now Figure 2).

3) Added text to clarify that the “generalized threshold” in earlier version of Figure 2 (now Figure 3) is an untested hypothesis and that further studies will either reveal a range of suitable formats for hydrometeorological thresholds or potentially demonstrate that approaches need to be tailored to individual settings.

We are convinced that these relatively modest changes have greatly improved the manuscript and we hope you will find it suitably revised for publication in NHESS. Once again thanks to you and the reviewers for your time and input throughout the review and discussion process. We and look forward to your decision.

Warmest regards,

Ben Mirus, Thom Bogaard, Roberto Greco, and Manfred Stähli