Dear Drs. McMillan, Coxon, Westerberg, and Senoner,

I am writing to submit our manuscript entitled “A Multi-sensor Evaluation of Precipitation Uncertainty for Landslide-triggering Storm Events” for your consideration as a Research Article in the Hydrological Processes special issue on "Impacts of observational uncertainty on analysis and modelling of hydrological processes". Our article examines uncertainty in precipitation measurements at the locations of landslides and evaluates the impacts of those uncertainties on the landslide modeling. In line with the goal of the special issue, we present an analysis of observational uncertainty impacts on hydrological processes associated with natural hazards, focusing specifically rainfall-triggered landslides.

In spite of the destructive nature of landslides—which cause tens of thousands of deaths each year—these events remain challenging to diagnose, in part due to uncertainty in antecedent precipitation amounts. Practitioners and researchers must select among a wide range of precipitation products, often with little guidance. This analysis of the characteristics of different types of precipitation products drawn from multiple categories of precipitation measurements highlights the qualities of each precipitation product that make them more or less suitable for diagnosing landslides using intensity-duration thresholds in near real-time. We believe that this article will be of interest to the natural hazards community as well as providing a novel lens for precipitation inter-comparison relevant to the hydrology community.

All individuals listed as authors qualify as authors and have approved the submitted version. This work is original and is not under consideration by any other journal. All permissions required for the publication of this manuscript have been obtained.

Thank you for your consideration. I look forward to your reply.

Yours truly,

Elsa Culler