This manuscript investigates the influence of soil moisture and precipitation intensity on quick flow transit times in a flashy agricultural catchment. By utilizing δ18O tracer data and enhanced SAS function modeling, the manuscript highlights the importance of accounting for both factors to improve the understanding of quick flow generation and its time scale. While the study has the potential to contribute to the literature, several aspects require improvement to better emphasize the unique contributions and significance of the work.

General Comments:
The abstract needs further refinement to clearly articulate the study's novelty and main findings. Greater emphasis should be placed on the hypothesis of incorporating precipitation intensity into SAS functions and its significance. Additionally, the practical implications of the findings, such as their potential contribution to hydrological modeling and water management strategies, should be explicitly discussed.

In the introduction, the discussion on defining the SAS function shape solely based on soil moisture is limited and does not adequately capture the complexity of hydrological responses in catchments. This section should expand on the rationale for incorporating precipitation intensity as an additional factor. Furthermore, the introduction would benefit from a more structured conclusion that explicitly presents the study's hypothesis and expected outcomes to provide a clearer sense of direction for readers.

The results section does not sufficiently highlight the study's innovative aspects. Greater emphasis should be placed on demonstrating how incorporating precipitation intensity into the SAS function improves tracer simulation and advances the understanding of quick flow processes.

The broader applicability of the findings to different types of catchments should be discussed. Expanding on how the proposed approach could be generalized to catchments with varying hydrological characteristics would enhance the study's relevance and impact.

The conclusions should include a more detailed discussion of the underlying mechanisms and the broader implications of the findings. While the conclusion mentions the potential for contributing to water management strategies, it remains vague. Specific examples of how the results could be applied in practice would make the conclusions more compelling and actionable.

Specific Comments
L33-34: Clarify the meaning of "Flow process promotes contribution of precipitation to the stream." Additional explanation is needed.

Lines 102-109 lack logical clarity, with an abrupt shift from discussing preferential flow in headwater catchments to emphasizing quick flow responses. Refocus the section for better coherence.

L117: The citation is unnecessary in this context.

L149: What does “event intensities” refer to? Are the event intensities specified as 5 mm/h? The phrase “at the end of with that of the following event” is unclear. Please revise for clarity.

L155: Does “Length of event” refer to the event duration? Additionally, how does the “event length” influence the adjustment of sampling frequency? Provide more details.

L254: Check and revise “Equation 2727” as it appears to be an error.

L423: Confirm whether “6.53%” refers to Scenario 2.

L432: Avoid repetition of “based on.”

L445: Delete “as” for grammatical accuracy.

L545: The word “stable” is repeated unnecessarily. Remove one instance.

L571: Provide more explanation regarding the mechanism by which “agriculturally used land tends to seal at the surface during heavy events.” This statement requires elaboration for better understanding.

L668: The statement “assisting in developing effective water management strategies” is too vague. Include specific examples of potential real-world applications to make this claim more concrete and persuasive.

In addition to addressing the specific comments above, it is recommended to carefully proofread the manuscript to ensure proper grammar, sentence structure, and clarity.