Please see below how we handled the queries from the reviewer with minor concerns. The second reviewer indicated "accept as is".

Review of `The canopy interception-landslide initiation conundrum: Insight from a tropical secondary forest in northern Thailand'

The authors collected and analyzed rainfall interception and soil moisture data at their study site in northern Thailand over a three year period. They examine trends between rainfall intensity, rainfall duration, antecedent precipitation, and throughfall and discuss implications for the effects of canopy interception on the potential for shallow landslide initiation. I think that this manuscript will be of interest to readers of Hydrology and Earth System Sciences. The problem is well motivated and the results generally support the conclusions. The authors have addressed many of the issues raised in previous reviews. In general, I have few substantive comments but think that a few clarifications and presentation of additional data (as noted below) would improve the manuscript.

General Comment: Goal number one of the study is to evaluate rainfall interception by a secondary tropical forest canopy. A large amount of data is presented and I think it would improve the impact of the study if it were possible to synthesize some of it in a few simple ways. For example, would it be possible to determine a canopy storage capacity for this setting from the data?

We added the following sentence in the Discussion on pg. 14 to address this question (and referred to data in Fig. 4b): "*Although the canopy storage capacity is quite variable, especially during small events, based on data in Figure 4b, the upper limits of canopy storage appear to be about 35% of rainfall for small events increasing to nearly no storage in the largest events.*"

Section 3.1, Line 25: Explicitly state the motivation for using these rainfall-intensity duration thresholds. I'm guessing it is helpful to roughly identify the types of storms that have the potential to trigger landslides since the effectiveness of interception is known to vary with rainfall intensity and duration.

At the bottom of pg. 8 we have added the following sentence to clarify: "*Herein we employ these thresholds to ascertain whether interception has a significant effect on the intensity-duration relations that may trigger landslides at our site.*"

Page 11, Line 1: There is a lot of focus on antecedent rainfall, but other meteorologic factors may be equally important. For instance, how much does canopy interception at this site depend on the evaporation rate? I imagine this could be critical, especially for the longer events. Evaporation rate could potentially be estimated using data from the hydrometeorological station data.

In the paper, we mostly use antecedent rainfall because this parameter (API) has been correlated with maximum piezometric response in unstable hollows in other studies and has also been used to segregate 'wet' (API . 20 mm) and 'dry' ($API_2 \leq 20$ mm) antecedent conditions using intensity–duration relationships.

We agree that other meteorologic factors are important. We report wind conditions in partial effort to address this. An estimate of canopy drying from evaporation is a relevant process, however, we don't have access to all of the data needed to do this, hence we were forced to rely on wind and API data. Considering the variation in Ci values we observed, it is likely that a more accurate measure of canopy drying (stemming from the evaporation estimate), will not affect our results, because the overwhelming variables affecting Ci are rainfall intensity and a rainfall depth that far exceeds canopy storage—both are associated with large storms. It is possible, that drying could reduce throughfall during some of the longer storms with intermittent rainfall, (see in Figure 4 c), but these events are few in the data set. In the absence of the evaporation estimate, we have done the best we could do in terms of mentioning the effect of canopy storage/wetting/drying.

Page 11, Line 23: Suggest starting a new paragraph with the sentence beginning `The three largest events….'

Revised as suggested.

Page 12, Line 3: `While in five of these six….' Some supporting data showing early storage during other storm events needs to accompany this statement.

We agree with the comment. We now refer to Figure 5, where this pattern is shown. The following passage is relevant:

> While in five of these six large events rainfall exceeded throughfall when intensities were < 1.0 – 1.1 mm min^{-1} and, typically, throughfall exceeded rainfall when intensities were > 1.1 mm min^{-1}, this pattern was not consistently found in other storms (Figure 5).

Page 16, Line 26: The potential failure plane could be close to the surface in some environments. I suggest making this statement more specific to your field site.

Actually the potential failure plane (for relatively shallow landslides) is typically 2 m or greater in this region. To clarify, we modified the text on pg. 16 as follows: "*Because of the absence of a constricting permeability layer at shallow depths in these deeply weathered soils, most potential failure planes occur at depths of 2 m or greater. At the depth of 2 m only very minor increases in soil moisture (≤ 0.01-0.02 m^3 m^{-3}) were recorded …*"

Page 18 Line 23 - Page 19 Line 2: Much of this was stated earlier and could be summarized more succinctly so that the focus remains on the new insights gained in this study.

We agree, the last two paragraphs of the Conclusions have been condensed as follows: "*Few studies have reported intra-storm comparisons of incident rainfall and throughfall at temporal resolutions that could be used to assess effects on shallow landslide initiation (i.e. ≤ 1 h). While many of these investigations note smoothing effects of canopy interception on incident rain intensity, none show any physical evidence that canopy smoothing lowered soil moisture or pore pressures at depths that would reduce landslide susceptibility. Although our throughfall results from many large and intense monsoon events in northern Thailand were affected by instrumental errors (common in all studies of this type), our results indicate that these secondary tropical forest canopies have relatively small smoothing effects on incident rainfall peaks. We also show that soil moisture response is quite dampened or even non-responsive at depths where potential failure planes exist in this region (≥2 m). These data coupled with our analysis of mean rain intensity – duration thresholds…*"

Page 18, Line 6: Potential failure planes could be very shallow in some settings.

This issue about potential failure plane depth has now been clarified on pg. 16, L 25-27 and pg. 19 L 1.

Figure 6: Since bulk density varies with depth, I would suggest plotting percent saturation on the y-axis.

This information is now provided as "Wetness" reported in Table 2. The readers can easily see that for all events, the maximum soil moisture is well below saturation for depths of 1m and 2m.