## Reply to Referee #1

We appreciate the helpful comments of the reviewer. Please, find below in black the comments of the reviewer and in blue font how we will address each comment and suggestion in the revised manuscript.

Overall, the manuscript is well structured and nicely written. The topic fits well to the scope of the journal and appears to be of interest for the readers; besides the eventual change into a technical note I only suggest minor revisions prior to acceptance and publication in Hydrology and Earth System Sciences.

Response: We appreciate the overall positive assessment of our work. Following the recommendation and in consideration of the technical aspects of this work we will change the article to a Technical Note.

## Global changes:

Throughout the manuscript: Please add city and country to the suppliers of the instruments/ parts (ISCO, DT85, Picarro, ...)

Response: Thanks for the recommendation; we will add the city and country of the instruments/parts used in the study.

## Specific + technical comments:

L. 34 Please add Isotopic shifts in throughfall Isotopic shifts are mainly caused...

Response: We will add the suggested changes in the text.

L. 35 please insert "but also by sub-canopy water recycling i.e. evapotranspiration and recondensation (Green et al., 2015)" after (Allen et al., 2017)

Response: Following the recommendation, we will add the statement and reference in the text.

L. 140 ... "by the" ... instead of ... "with" ...

Response: Following the recommendations, we will change "with" to "by the".

L. 164 and Fig. 3 Please clarify and rephrase: How can "the maximum splash throughfall diameter be set at 2mm" when the threshold for splash throughfall is < 1 mm?

Response: To clarify this item, we will reword the sentence: "Splash throughfall is smaller than canopy drip. We set the maximum splash throughfall diameter ( $D_{MAX\_SP}$ ) at 2.0 mm and the minimum canopy drip diameter at 1.0 mm, respectively. It indicated

throughfall drops with diameter ( $d_i$ ) from 1.0 to 2.0 mm were generated from the mixture of FR, SP, and DR."

L. 190 Please change to global meteoric water line (GMWL)

Response: We will add the suggested changes in the text.

L. 361 and L. 374 please delete the "Delta" of the "Delta delta 18-O isotopic shift (..."

Response: We will delete the "Delta" in both lines.

L. 371 I suggest "," after "meta-analysis"

Response: We will add it.

L. 386 and L. 400 Please delete either ";" or "and" in these sentences.

Response: We will delete the ";" in both lines.

L. 419 "...isotopic shift (..." should probably be your "Delta delta 18-OTF-RF" in the brackets.

Response: We will fix it.

L. 650 events

Response: We will fix it.

L. 696, Fig. 5 legend and axis labeling is too small.

Response: Thanks for the observation, we will fix this.