

Comment on hess-2021-482

Anonymous Referee #1

Referee comment on "Hydrological modeling using the Soil and Water Assessment Tool in urban and peri-urban environments: the case of Kifisos experimental subbasin (Athens, Greece)" by Evgenia Koltsida et al., Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2021-482-RC1>, 2021

The paper is interesting and pleasant to read. I have only minor doubts that could be addressed before publication.

first of all, in the introduction (lines 33-45) the Authors provide an overview of experimental watersheds dealing with hydrological observations. Although the topic is interesting, I suggest to shorten this paragraph because the cited watersheds are not considered in the present manuscript and the topic could be misleading for the reader.

Second, in introduction (lines 72-73) I believe that aims and novelty of the manuscript should be more emphasized.

Third, in paragraph 2.2, I found a little confusing the instruments description and the data that later are used in the manuscript. The Authors mention (lines 101-106) water level and water velocity sensor that are installed in the experimental watershed, but specify only units in mm, what about the velocity? is the sensor present and used?

Fourth (lines 296-297), the Authors mention an interesting effect of precipitation time step that could affect the result, but in my opinion the results could be affected also by the classic difficulty in obtaining reliable estimations of GAML parameters based on the soil type and heterogeneity. Eventually this issue could be discussed here.

Fifth (line 337) the Authors mention observational errors; could they specify if this could be attributed to the estimation of channel and hillslope flow velocities?

other minor corrections are:

line 81: route?

line 97: specify the acronym.

line 190: changing or constant?

line 198: do the numbers refer to discharge?