Audrey Douinot et al. (2022) Flood patterns in a catchment with mixed bedrock geology: causes for flashy runoff contributions during storm events

The manuscript was significantly sharpened and improved. Still, the authors make strong assumptions, that I only partly share regarding extreme events, e.g. in line 127-128: “We indeed assume that the hydrological reactivity of the catchment is detectable independently of the magnitude of the precipitation.” As explained in the first review, catchments can show threshold behaviour at high rainfall magnitude that is not visible at ordinary events. However, since the assumptions are clearly marked as such, they can serve as a starting point for discussions in other publications.

Specific comments:

Line 27: “catchment” instead of “cacthment”

Line 28: “but they diverge” instead of “but diverge”

Line 29: What do you mean with “opposite variations”?

Line 30: What do you mean with “concentrated (+- 48% +-87%)?” I do not understand the numbers

Line 32: Is the water transfer time the same as the TTD? If so, please avoid different names for the same parameter and replace water transfer time by TTD.

Line 73: I would delete “(en)”, “(fr)” – this information can be obtained from the reference list.

Line 81: The validity of the sentence “in these catchments [Central Europe] climate forcing is not primarily controlled by topography” depends on the definition of Central Europe. I would say, that the Alps belong to central Europe. There, however, climate forcing is controlled by topography.

Line 91: Do “9 years” have to be expanded as you expanded the data used in this study?

Line 107: “extreme” instead of “extrem”

Line 205: “four“ instead of “4“

Line 209: “21.7“ instead of “21,7“

Line 215: “Germany) -“ instead of “Germany),“

Line 215: “consists of” instead of “consists in”

Line 215: Please do not only report on the rainfall sum, but also on the rainfall duration so that one can infer the rainfall intensity.

Line 217: The fact that the discharge volume for the event of 13 July 2021 is uncertain despite the measured discharge height is probably due to uncertainties in the water level-discharge curve. A short comment on this would be good.

Line 245: “corresponds” instead of “correspond”

Figure 5: Please point out in the figure caption that the y-axes are scaled differently.

Table 2: “[l . km-2 . s-1]” instead of “[L . km-2 . s-1]”