

Interactive comment on “Rivers in the sky, flooding on the ground” by Monica Ionita et al.

Anonymous Referee #1

Received and published: 3 May 2020

The paper provides an interesting and unique contribution showing atmospheric rivers as drivers of high flows in the lower Rhine catchment. It thus enriches our understanding of hydrometeorological flooding drivers at the catchment level for this global region. By utilizing a long and comprehensive meteorological record, the authors show how indeed ARs have led to important damages in the region. It also provides interesting insights these events are preceded up to 7 days by intense moisture transport from the tropical North Atlantic basin typically precede ARs. The comments I have are minor which concern mainly methodological clarifications as well as suggestions to provide more insights of the repercussions of their findings. If a new version of the manuscript successfully address these issues I would recommend the article for publication. Please find here attached (as supplement) my specific observations:

Please also note the supplement to this comment:

C1

<https://www.hydrol-earth-syst-sci-discuss.net/hess-2020-149/hess-2020-149-RC1-supplement.pdf>

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-149>, 2020.