

Dear Authors,

I am glad to accept your study for publication in Earth System Dynamics subject to a final minor edit. As Reviewer #2 points out in his comment No. 8 (Line 225), there are some caveats to the chosen percentile threshold methodology. While I agree that changing this methodology would require additional tests beyond the scope of the current submission, I would nonetheless suggest that you briefly mention its limitations as well as potential alternative methodologies (such as the one suggested by the Reviewer) that may be tested in future studies.

We thank the Editor for careful reading of our manuscript.

We find this is an excellent idea and have included

“We note that the detection using the 85th percentile at 10°W is well validated for AR over the Atlantic. However, it may lead to some inaccuracies over the eastern European land mass. This is because the AR landfall at the western European boundary may decrease the IVT along the eastern landmass due to moisture loss by precipitation and the moisture cut-off from the ocean. This could limit the detection of AR impact over the distant parts in eastern Europe. A potential solution could be to take the local 85th percentile over land points instead the 85th percentile at 10°W as threshold. However, this should be robustly tested and validated in future research.”

At line 230 of the revised manuscript.

Kind regards

Matthias