

I would like to thank the author for addressing the issues raised in the previous review. I think the paper is improved and the additional analyses on the NAO in relation to AR, and the change in AR over the past century have given more 'body' to the research. That said, I think the text can still be improved and at some places shortened so the article becomes more to the point, and easier to read. Please find my minor comments on these issues below.

Minor comments

Line 25-40: The introduction starts very broad, and in my opinion you can start narrowing down the research a bit more in the introduction already so the purpose of the study becomes clearer at an earlier stage in the text. For example, is it needed to talk about floods in the UK and in the eastern part of Europe when you focus on the Rhine? Similar, is it needed to name the Pacific North American Oscillation when you focus on Europe? I think the start of the Introduction can be a bit more to the point.

Line 50: In line 50 you mention for the first time AR, where the explanation of what is an AR follows a bit later. This is an illogical order.

Line 60: what do you mean with 'can be visible'? From satellites?

Line 69: Sentence on New Zealand can be left out as it does not directly relate to the study here

Section 2.1 Catchment area: There is a lot of information provided in this section. I am not sure if all information is needed for this study. Please consider this.

Line 109-112: Line needs reference

Line 124: The overall increase in the winter precipitation

Section 2.2 Data: I suggest a re-ordering of this section as you now discuss discharge data, then re-analysis data/meteorological data, and then discharge data again. I suggest to move line 169-185 after line 145, to make the order more logic. Then you start with discharge data, then precipitation data, and then the larger-scale meteorological data.

Line 146: At which height did you extract zonal and meridional wind? Please add

Line 146-148: Did you extract both surface pressure and daily sea level pressure?

Lines 155: IVT is introduced and then in section 3.1 there is only referred to IWV, this variable should then also be introduced in this data section

Line 161: gravity --> gravitational constant

Line 210: Sentence is difficult to read

Line 211: third highest value, since when?

Line 218: IWV is not introduced, neither in the data section, please add

Line 304: Rockenau level and Kaub level? do you mean station instead of level?

Line 463: In this study we have shown that extreme floods.. --> indicate your criteria used for extreme floods.

Line 473-479 and Line 481-485: Both are very long sentences, which are hard to read. Please split the sentence in smaller sentences.

Line 498: ..anomaly than its positive counterpart --> not clear what you mean here with positive counterpart? Do you mean high pressure?

Line 498: .. and it guides the IVT is a narrow band through.. sentence should be improved

Table 2: Improve caption. Sentences are illogical now.

Figure 3 and similar: these figures contain a lot of information, and therefore also become a bit hard to read. A suggestion to improve the lay-out of this figure is to make the continents light gray and remove the countries and continental boundaries in black, as these overlap with the moisture arrows.

Figure S14a. This graph is interesting and relevant and in my opinion can be shifted to the main article to verify the findings on the trend in ARs.