

1. Which other hydroclimatic changes reported in the article and not discussed above?

- higher temperatures will reduce the amount of snow accumulation during winter. This results in higher winter discharge, and lower summer discharge. In addition, winter precipitation increases, while precipitation may decrease in summer months

2. Can you detect three assumptions made by Middelkoop et al. (2001)?

- In the German Middle Mountains, the investigated catchments demonstrate only a minor seasonal shift in river flow. The changes in runoff are controlled by the balance between increased precipitation on the one hand, and increased evapotranspiration rates due to higher temperatures on the other hand.

4. Are there other studies that have a similar analysis over Rhine, or a similar hypothesis in other regions? (hint: use google scholar or web of science/scopus).

- Yes there are,

Greater Alpine river network evolution, interpretations based on novel drainage analysis

<https://link.springer.com/article/10.1007/s00015-018-0332-5>

Assessment of Hydrologic Alterations in Elbe and Rhine Rivers, Germany

<https://www.mdpi.com/2073-4441/9/9/684/htm>

3. Is there any evidence in the news about low or high flow events of Rhine since 2000?

-Yes, there is

(Rhine Basin)

Impact of Climate Change on Hydrological Regimes and Water Resources Management in the Rhine Basin

<https://link.springer.com/article/10.1023/A:1010784727448>

Climatic change and the effect on hydrology and water management in the Rhine basin.

<https://www.ncbi.nlm.nih.gov/pubmed/15918355>