

Interactive comment on “Non-stationary analysis of water level extremes in Latvian waters, Baltic Sea, during 1961–2018” by Nadezhda Kudryavtseva et al.

Anonymous Referee #2

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I have read the MS with great interest, the paper is well-written, and the organization is good. The study provides updated knowledge of extreme water levels in the Gulf of Riga, which seems to be significantly different from those found in the Baltic Sea. It is also interesting the temporal behavior of the shape parameter in those tide gauges located in the interior of the Gulf.

Despite I operate outside this study area, it seems like many efforts have already been done in the literature to explain changes in mean sea level, extreme sea levels, and distribution parameters in the Baltic Sea and the Gulf of Riga. I, therefore, believe that the paper would require more work to create additional value to the existing literature,

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for example, by extending the study to the possible causes of the temporal changes in the tail distribution of the extreme water levels.

Please also note the supplement to this comment:

<https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2020-100/nhess-2020-100-RC2-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2020-100>, 2020.

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