

Interactive comment on “Brief communication: Characteristic properties of extreme wave events in the Baltic Sea” by Jan-Victor Björkqvist et al.

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Review comments of the Natural and Hazards Earth System Sciences – Discussions manuscript: “Brief communication: Characteristic properties of extreme wave events in the Baltic Sea” by Björkqvist et al.

An insight on the several storm case studies (extreme wave height events) has been presented, having in mind the “characteristic properties of extreme wave events in the Baltic Sea” is presented by the authors. This (short) manuscript presents a relatively detailed study of several Baltic Sea storms, which had a strong effect in extreme wave height events. The study is directed not to a climatological perspective (as the title might insinuate), but more to the analyse of the storms, having in mind the operational

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forecast scores. The study is simple (simplistic, to a certain extent), and could have been explored into a greater detail. Nevertheless, it is well written, and has a great utility to the seafarers and to the operational forecasters in the area.

The title might direct the readers to a climactic study, which is not the case, since the detailed characteristics of extreme waves in the Baltic Sea are not presented. I would like the authors to defend their point of view on this matter.

The manuscript is, in general, well written, and the ideas are well presented and well defended. Nevertheless, it lacks depth, which can be explained by the “short communication” format. Nothing against. Just that this subject and idea deserves a more detailed analysis.

Here and there some references to back some statements are needed. Some suggestions are made below, but I challenge the authors to read the paper again and make their own review on this matter.

Minor comments and suggestions on the text:

P1, L9 – Replace “in” with “along”. P1, L10 – extreme conditions of what? P1, L12: Add reference after sub-basins P1, L17 – estimated? Modelled, maybe. P2, L21 - The present resolution of the WAM setup in the FMI operational wave product is 4 nautical miles? Since this is not a very common scale (unit) maybe it should be explained. Replace “timestep” with “temporal resolution”. P2, L28 – affects how. I presume it improves. P3, L3-4 – Sentence starting with “Of the . . .” is confusing. Re-write. P3, L15 – Erase “the” before “other”. P4, L3 – What is a “vast low pressure”? This sentence is out of context. P4, L10 – Replace “was” after “maximum” with “occurred at”. P4, L13 – How come mean? P5, L3 – Add “speed” after “wind”. P5, L9 – Replace “was” with “occurred”. P5, L15 – merge this sentence with the previous paragraph.

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