

Review on “Proposal for a new meteotsunami intensity index” by Clare Lewis, Tim Smyth, Jess Neumann and Hannah Cloke.

The development of the LMTI is a significant contribution to the field of meteotsunami research. This index provides a standardized and quantitative measure of meteotsunami intensity, addressing the need for a clear and consistent way to assess these events. The paper effectively highlights regional variations in meteotsunami occurrence and intensity within the United Kingdom. It points out the specific hotspots in southwest England and Scotland, which is valuable information for local authorities and disaster preparedness.

The main concern on this work is the validation of the index. An index is a systematic way to organize and access information or data. While the paper introduces an index and discusses its application to meteotsunami events in the UK, it does not describe a formal validation procedure. Validation is a critical step in assessing the reliability and accuracy of any index or model. It should involve comparing the results produced by the index with observed data to determine how well the index performs in different situations. Validation is particularly important when attempting to apply an index to various geographical regions or events because it helps confirm the index's robustness and applicability beyond its development context. In particular, it is unclear whether the index will be valid for the events of intensity 4 or 5.

Minor:

L270 Vilibic et als (2021) proposed intensity scale results -> intensity scale results proposed by Vilibic et al. (2021)

L328 under lying -> underlying

The graphical quality of Table 2 is poor. Increase dpi.

Supplementary

P3 Vela Luka $R_{total} = 3.3$ not 3.5 (But, this does not change the index score)

Some locations are missing the name of countries. For example, Ciutadella, Minorca “Wido” is not in Japan.