

Interactive comment on “Environmental conditions of a salt-marsh biodiversity experiment on the island of Spiekeroog (Germany)” by Oliver Zielinski et al.

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In this contribution the authors report the abiotic parameters observed from 23 sensors installed around the facilities installed in the framework of the project BEFmate.

My major concern is about the data quality procedures. According to the method described by the authors, quality control was performed by a) erasing negative readings and data covering maintenance activities, b) visual inspection of the overall dataset and c) removal of outliers, defined as data exhibiting changes of more than two standard deviations within one time step.

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Although the authors mention that data quality assurance and quality measures will be further developed, this primary quality control has some potential problems: “Visual inspection of the overall dataset” is always a fuzzy concept that provably change the criteria among different sensors. Furthermore, it is not reproducible.

At present there are several publications and guidelines to apply widely accepted criteria for data quality control of oceanographic data. See for example the guideline from SeaDataNet: <https://www.seadatanet.org/Standards/Data-Quality-Control>

I suggest also to keep the original data and provide quality flags. It could be recommendable also to include a script to perform the quality actions to apply to the data (delete, interpolate, ...) based on the quality flag information. Using this approach, other authors may apply different quality criteria (with methods that can be improved in the future) if the original raw data is available.

I think that it could be interesting to justify how the sampling frequency was selected for each sensor: it was based mostly for operational limitations? or it was designed for the overall goals of the project?

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