

Interactive comment on “Meteorological observations in tall masts for mapping of atmospheric flow in Norwegian fjords” by Birgitte Rugaard Furevik et al.

Etienne Cheynet

etienne.cheynet@uib.no

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The manuscript "Meteorological observations in tall masts for mapping of atmospheric flow in Norwegian fjords" by Furevik et al. deals with a unique data set, freely accessible since 2018, which is particularly valuable for both engineers and scientists working on the E39 Coastal Highway Route (Ferry Free E39). Nevertheless, some of the statements in the manuscript may be unclear, ambiguous or misleading:

- Line 59, the authors mention that the "dataset provides invaluable data describing the atmospheric forcing, both climatic and short-term, pertaining to the technical

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design of large structures in complex terrain." Although I understand the enthusiasm of the authors, one should keep in mind that the potential and limits of the dataset have not yet been assessed in details. It is also unclear to me what the authors mean exactly by "atmospheric forcing, both climatic and short-term" with respect to structural design. A more specific reformulation would be welcome.

- Line 34-35. As the authors already know, there has been a similar campaign in the Bjørnafjord since 2015. Although the data in that fjord are not publicly available, it may be useful to the reader to know that the campaigns in the Sulafjord, Halsafjord and Julsundet are not the only ones.
- Line 98: If no filtering is applied beforehand, downsampling a time series from 20 Hz to 10 Hz will amplify aliasing not reduce it. In general, downsampling increases aliasing. As far as I know, the downsampling procedure was done without filtering, resulting in undesirable aliasing, visible in Figure 15, at frequencies above 4 Hz.
- It may be informative to the reader to know if the high-frequency sonic temperature is freely available or not. I am aware that some 2-Hz sonic temperature records are usable, but this sampling frequency may be too low to study turbulent fluxes. A sampling frequency of 10 Hz or more is desirable for such purposes.

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