

Interactive comment on “Meteorological buoy measurements in the Iceland Sea 2007–2009” by Guðrún Nína Petersen

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[This article provides an overview of the meteorological and oceanographic data from a 2-year deployment of a moored buoy in the Iceland Sea, along with brief details of data quality issues. Overall it provides a useful reference for anyone wishing to use these data, and is suitable for publication with minor revision.]

[SPECIFIC COMMENTS I would like to see details of the instrumentation makes and models either added to table 1 or provided as a separate table. This is an essential reference for users of the data. Also, in table 1, details of the measurement uncertainty as well as resolution should be given – the uncertainty is far more important (the air temperature resolution might be 0.001°C, but its accuracy will be nowhere near

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that! The resolution of the RH measurement is given as 0.01%, but I'd be surprised if its accuracy were better than $\hat{\Delta} \approx 2\%$ at best).]

You are absolutely correct, a table of the instrumentation was missing. It has now been added to the paper with information on accuracy from the manufacturers. Also the instrument in question is mentioned at the start of each subsection of section 3.

[The figures showing plotted data are generally OK, but I would ask that the pale grey background with white grid lines be swapped for simple black axes and grid lines. The grid lines are a little difficult to see on a print out, and while the figures look fine on my laptop screen, on my desktop display, the pale grey is lost completely, leaving plotted lines floating with a few labels around them, but no visible axes, tick marks, grid lines, etc. Tick-label font size could also do with being increased a bit.]

Thank you for making this point. In all figures the grey background has now been removed and font size increased.

[Where there are multiple lines on a plot, please add explicit details of which colour line is which variable in the figure caption.]

Legend has been added to the figures with multiple lines.

[Page 2, line 10: '...and a sealed lead acid backup batteries.' – number agreement, either '...and sealed...batteries' or '...and a sealed...battery.']

Thank you, this has been corrected.

[Page 3, line 6: '...a list over times...' → '...a list of times...' Page 3, line 9: '...where appropriated' → '...where appropriate']

Thank you, this has been corrected.

[Page 4, lines 5-7. The 'bad' pressure data is stated to be 'off' – more explicit details would be useful. Is that a mean bias, wild disagreement uncorrelated to ECMWF? I assume the bad data are omitted from the public data set not just the plot? Are they

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actually so bad as to be useless, or might they be useful in a relative sense (tracking high/low pressure) if not absolute? If potentially useful/correctable then publishing the data but with a quality control flag might be worth while.]

Yes, they are that bad. It's not only a bias but also although the data contains highs and lows not all events seem to be accounted for. The magnitude of the error, related to ECMWF mean sea level pressure, also changes throughout the period. In the beginning the pressure is too high while at the end the highs(lows) have too low(high) pressure, i.e. too small variability. A more detailed text has now been added to the paper to explain why the data is excluded.

[Page 6, line 12: '...slower then the fall...' -> '...slower than the fall...']

Thank you, this has been corrected.

[Page 7, line 1-2: 'differences between the water temperature and the air temperature ... varied between 0.5âC and 3.3âC' – for clarity's sake, please be explicit about the sign of this different: (Ta – SST) or (SST – Ta).]

Thank you, this has been clarified.

[Page 8, lines 6-7: 'All measurement have an annual variation..., as well as more variability'. First, 'all measurement' is potentially ambiguous, be explicit as to variables. 'Both wave height and wave periods have an annual...', Second, '...,as well as more variability' is ambiguous – which season is more variable (yes we can infer it from the figure, but...)]

Thank you, this has been clarified.

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