

**Response to referee comments on: *Measuring electrical properties of the lower troposphere using enhanced meteorological radiosondes (gi-2021-26)***

I am most grateful to both reviewers for their careful reading of the manuscript and the thoughtful comments made. I have made changes in response to these, which are marked on the manuscript in red. I have also added some very minor clarifications and corrections of my own (lines 37-38, footnotes 10 and 11).

**Response to referee 1**

Thank you for the very positive comments and appreciation of the manuscript.

**Response to referee 2**

Thank you for the careful consideration of the manuscript. I greatly appreciate that it is concluded to be suitable for the journal.

*...an additional information about the worst case parameters would be interesting: lowest operational temperatures, maximum tested shock levels, power consumption per hour of operation and maximum duration with the used batteries.*

Sentences have been added at Line 311 to mention measured internal temperature, observed acceleration and battery life.

*Line 151: , implementing bespoke analogue signal conditioning circuitry is still necessary. I was wondering if you could find a different expression for the word "bespoke". (I as a none-English native speaker had to ask my wife, fortunately an English language teacher, what the meaning might be. Others might have similar problems.)*

This word is no longer used. Where needed, it has been changed to "customised", and "for a chosen application", which I hope is more accessible.

*It would be helpful for the reader if all DOI references would be presented in the same complete web-link form, starting with <https://doi.org/> While this is partly done, it is missing on lines 753, 757, 793, 795, 803, 813, 817, 825, 827, 829, 835, 881, 884 and 898.*

These have been corrected, and many other links are now given where possible.

*The link on line 921 is outdated. The referenced Vaisala document can now be found via <https://www.vaisala.com/sites/default/files/documents/WEA-MET-RS41-Datasheet-B211321EN.pdf>*

Thank you - this has been changed.