Geoscientific Instrumentation Methods and Data Systems Discussions

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Comment on gi-2021-26: Measuring electrical properties of the lower troposphere using enhanced meteorological radiosondes by G. Harrison

Anonymous Referee #1

Referee comment on "Measuring electrical properties of the lower troposphere using enhanced meteorological radiosondes" by R. Giles Harrison, Geosci. Instrum. Method. Data Syst. Discuss., https://doi.org/10.5194/gi-2021-26-RC1, 2021

This paper is a summary of the author's medal lecture given at European Geoscience Union meeting. It is clear and comprehensive overwiev of the meteorological radiosondes applications and its challenges beyond its main purpose of weather forecasting. The study revises and discusses the standard radiosondes measurements possibilities when equiped with additional sensors for a specific scientific applications. Reviewed applications, besides measuring atmospheric electricity, include the space weather, turbulence, radiactivity, clouds and volcanic ash. The huge adavntage of such measurements is that they can be easily obtained at low cost and many locations, praticulary by adapting self-configuring interfaces, that does not affect the meteorological data and retain the radiosonde original purpose. The manuscript is well motivated, very well written, discussed applications are supported by proper figures and well referenced.

Therefore I recommend the publication of this work in GIMDS.