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Interactive comment on "Dielectric database of organic Arctic soils (DDOAS)" *by* Igor Savin et al.

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The methods presented in this publication are effective, and the data sets provided are of high quality. The breadth of the data set and the precision with which measurements were made gives the data potential to be instrumental in the development of soil moisture remote sensing solutions for applications in tundra regions. The description of the measurement methodology could benefit from further clarification. I believe there are a couple of typographical errors, with the temperature-controlled chamber being referred to as a "camera" in the publication.

The data is easily accessible. The data set for Samoylov Island (SI) is smaller than the other data sets, leaving readers to speculate about the reason. I think it would be helpful to include a brief explanation for this in the publication. Error estimates and potential sources of error would also help to understand the limitations of the data set.

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Discussion paper

It would also help to provide a measure of the uncertainty of key parameters.

Regarding the standard deviation measure used in the automation procedure, what are the units of the S12? I think it should read “0.01 dB.” Also, how many samples are considered in computing the standard deviation? Is it every value measured since the last temperature change? A moving average? It would be helpful to clarify this, because it gives the reader a better idea of the uncertainty in the measurements.

The data are well-formatted, and they seem to be of high quality. The publication is an appropriate length. It is well-structured, but it could use some clarification in some areas. It reads well in general, but it could benefit further from correcting some grammatical errors and typos.

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