

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

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Comment 1. The only thing missing is a comparison and discussion of the different soils. Results are presented for one of the soil samples (MS1), but no comparison is made for the measurements of the other six soil samples. Table 1 gives the properties of the different soil samples, and there should be some discussion of how these different soil properties impact the results shown in figures 2 through 7.

Answer to comment 1. The data in the figures are given for sample No. 6 (TM). Corrected in text and in captions to figures. This sample was chosen as an example, because the obtained spectra are more evenly distributed depend on moisture and they can be represented in the figures completely without overlapping. In addition, similar dependences have not been previously reported for this sample in the literature, in contrast to other samples. This article describes the created database in general, and the

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given figures rather illustrate the kind of data contained in the database than a comparison of models and dielectric properties of different soils. This is a very large separate work. Comparisons with other samples are not given in this work, since such a comparison in a varying degree in other works was carried out for example (Mironov, V. L., Savin, I. V. and Karavaysky, A. Y.: Dielectric model in the frequency range 0.05 to 15 GHz at temperatures -30°C to 25°C for the samples of organic soils and litter collected in Alaska, Yamal, and Siberian Taiga, in International Geoscience and Remote Sensing Symposium (IGARSS), vol. 2016-Novem., 2016; Mironov, V. L. and Savin, I. V.: Spectroscopic multi-relaxation dielectric model of thawed and frozen arctic soils considering dependence on temperature and organic matter content, *Izv. Atmos. Ocean. Phys.*, 55(9), 986–995, doi:10.31857/S0205-96142019162-73, 2019). In these works, various soil samples are analyzed and compared, which gives an understanding of how certain parameters affect the dielectric properties of soils.

Comment 2. The identifier on the map in Figure 1 “IS” should be changed to “SI”.

Answer to comment 2. Corrected.

Comment 3. The captions for figures 2 through 7 should identify the soil sample used to obtain measurements that are presented (MS1).

Answer to comment 3 Corrections in Figure 1 and captions for Figures 2-7 were made in accordance with the commentary.

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