

## ***Interactive comment on “Time domain reflectometry (TDR) for dielectric characterization of olive mill wastewater (OMW) contaminated soils” by Alessandro Comegna et al.***

### **Anonymous Referee #1**

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The paper topic is interesting but the scientific approach is far to be robust, at the present stage. In fact, in the opinion of the reviewer, there are some major flaws and missing aspects that the Authors are strongly recommended to address before considering a possible resubmission. First of all, the models considered for the permittivity and for the (static) conductivity are very trivial and they do not take into account different non-ideal effects. Also, the literature overview does not include the works available at the state of the art, which propose accurate dielectric models and the related applicability. More importantly, the experiments conducted only on two soil samples are definitely poor and trivial. A comprehensive and more robust approach to the topic should be used, considering various materials, differing in qualitative characteris-

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tics and also evaluating the corresponding metrological performance of the proposed method in terms of capability of discriminating the dielectric characteristics of different samples with respect to standard "reference" soil samples. As a consequence, the sensitivity and discrimination performance of the method should be analyzed and clearly defined.

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