

## ***Interactive comment on “Uncertainties, sensitivities and robustness of simulated water erosion in an EPIC-based global-gridded crop model” by Tony W. Carr et al.***

### **Anonymous Referee #1**

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Despite the decades of research, modelling spatially distributed phenomena such as soil water erosion, still represents very challenging job. The biggest challenge lies in comparing modelled and measured soil erosion rates, especially in case of global scaled models such EPIC. The main added values of presented paper are: 1. Evaluation of simulation results against field data and uncertainty assessment. Uncertainty assessment represents a crucial factor, when communicating the results of simulation and further incorporation of such models into for instance global circulation models. 2. The authors pointed out several obstacles, which prevent further development of soil erosion modelling research such as lack of uniform and reliable data on water erosion rates, lack of datasets providing distributed data on topography, soil, climate, land use

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and field management at the field scale. Supplementary TableS5 contains the list of soil erosion measurement records, it would be good to add an information about the scale of measurement (plot, field, ...) The article is of high scientific value and I recommend it for the publication without any substantial revision.

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