

Interactive comment on “Evolution of soil and plant parameters on the agricultural Gebesee test site: a database for the set-up and validation of EO-LDAS and other satellite-aided retrieval models” by Sina C. Truckenbrodt and Christiane C. Schmullius

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The third correction step related to the jumps in-between the VNIR and SWIR1 detector of the ASD spectroradiometer must be regarded as suboptimal. We have just recently provided physical evidence as to the reason for these effects, which can be attributed to instrument temperature and field of view effects. Hence, an additive correction as used here is introducing new radiometric errors while appearing optically more pleasing due

C1

to the removal of the obvious jump.

Details may be found in: Hueni, A. and Bialek, A. (2017). "Cause, Effect and Correction of Field Spectroradiometer Inter-channel Radiometric Steps." IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing 10(4): 1542-1551.

A further point that may be considered is the correction for the reflectance of the white reference panel. In connection with that, a statement regarding the levelling of the Spectralon panel would also be important. We have shown that careful levelling is required to acquire more accurate absolute reflectance factors.

See: Hueni, A., Damm, A., Kneubuehler, M., Schläpfer, D. and Schaepman, M. (2016). "Field and Airborne Spectroscopy Cross-Validation - Some Considerations." IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing 10(3): 1117 - 1135.

Please update the nomenclature: the reflectance that is calculated from radiance measurements in this manner is actually a 'reflectance factor'. For details see: Schaepman-Strub et al., 2006

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C2