

Interactive comment on "SoilGrids 2.0: producing quality-assessed soil information for the globe" by Luis M. de Sousa et al.

Brendan Malone

brendan.malone@csiro.au

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Thank you to Dr. Poggio for her frank rebuttal to my short comment about the role of ISRIC in delivering consistent global soil information. ISRIC has had a long and important role in advancing the knowledge and understanding of soils around the world, and it is great this vision has not waned and that the latest technologies and approaches to mapping are being exploited to advance this understanding further.

My comments to the paper were more just an open question about whether the approach undertaken in SoilGrids Version 2 (and SoilGrids Version 1 for that matter) is the best approach to take for delivering information about the global distribution of soils.

The point that i wish to take issue within Dr. Poggio's response is "...But to give global

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modelers a consistent and seamless product we have chosen to use consistent global models, rather than compile a patchwork of national products." From a cartographic perspective i understand the need for seamlessness and consistency in order to avoid the off-putting visual of a patchwork of mapping products stitched together. From a modelling perspective however, one is not concerned about visuals, but rather the efficacy and reliability of the data for which said models will ingest. Therefore my argument is that wouldn't it be best for the global assessment of soil resources that the best or most reliable information be used, and thus the role of ISRIC is to compile this (which they have done already) and figure out a way to deliver this seamlessly to the enduser or their target group which are the modellers? I take issue with the fact that in order to deliver a seamless global soil map that a point-based top down approach be used instead of integrating the much more information rich soils data repository which includes existing maps whose provenance could be legacy soil survey or digital soil mapping, particularly if these data provide a more accurate depiction of the soil variability. It makes little sense to me to offer a seemingly sub-standard product on the argument that it is seamless and consistent. Models that ingest this information is just going to give spurious outcomes and that is not good for reputation and is ultimately a lost opportunity in my opinion. Dr Poggio's comments to say that this (data fusion or integration) is on their (ISRIC's) radar is encouraging and acknowledgment that their current point-based top down approach is somewhat deficient. Any effort to fast-track work on these integrative approaches (which Dr Poggio describe one in particular) would be very much welcomed.

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