

Interactive comment on “A web based spatial decision supporting system for land management and soil conservation” by F. Terribile et al.

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The major part of this paper consists of technical software details and operational aspects. I am not in a position to judge this. I asked a specialist from Wageningen University to review this part. Here are his comments:

“Technical implementation of the system is technically correct and corresponds with what is currently common in the field. The use of PostGIS, Geoserver and Openlayers

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is good. These packages are currently most commonly used for open-source applications. They fit in well with guidelines of INSPIRE (The EU directive). Nothing being reported is, however, new. GIS students at Wageningen University routinely use the tools being mentioned here. This puts particular emphasis on the need to present case studies, showing the potential of the methodology, including scenario - and sensitivity analyses, evaluation of practical use by stakeholders etc. ”

The introduction of the paper is well written and presents a number of valid considerations. The authors also illustrate that the SDSS system has been applied already in several studies. The authors may want to emphasize what, if anything, is new in their work compared with what has been done elsewhere. Including “what-if” modeling in an agricultural version of SDSS, as suggested by the authors, would appear to be a good idea.

Unfortunately, very briefly described “applications” presented in sections 3.2.1 and 3.2.2 on “olive growing” and “protection groundwater from pollution” don’t meet scientific standards. Figs 4, 6 and 8 are unreadable and this means that the text, as presented , cannot be understood. The flowcharts in Figs 5 and 7 are unclear as well. Only one of the lines is elaborated upon, the rest ends in the middle of nowhere. More importantly, what are the questions and who is being addressed by the exercise? Planners? Land users? Policy makers? Is the idea to define the general suitability or potential of the area being considered for a given form of land use? An automated form of land evaluation? Or is advice included for management? Whether or not groundwater is protected from pollution is, for example, very much a matter of proper management! Is the overall concept that use of the system presented can be left to land users and planners without any assistance by specialists, such as soil scientists? I question whether that would work. Still, a system that logically combines different location- specific landscape and soil data into spatial maps could be very helpful for soil scientists to assist and advise land users.This needs to be elaborated upon and demonstrated. The authors have to make a serious attempt to describe how the proposed system is going

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to work, what the questions are that are to be answered and who is being addressed. This could result in a valuable paper. As is, the paper is highly unbalanced with major and almost exclusive emphasis on technical aspects which are not new according to the above comments by a GIS expert.

Interactive comment on Solid Earth Discuss., 7, 661, 2015.