

Interactive comment on “Review Article: Multi-criteria decision making for flood risk management: a survey of the current state-of-the-art” by M. M. de Brito and M. Evers

Anonymous Referee #1

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The paper presents a comprehensive survey about publications on MCDM (Multi-criteria decision making for flood risk management) in the scientific literature. I've found the paper well written and for sure useful. I would suggest to the Authors to add a more detailed description of the methods and their differences in Section 2. This would help a lot the non-expert reader (including myself). Also, I understand that the Authors are trying to be as objective as possible, and I will not complain if they will decide not to do it, but I would have found more intriguing/exciting to know what is their personal judgment on the methods. Some detailed comments follow.

Page 6693, Section 2: I would suggest to extend the section. Table 1 contains some

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description for each method but the reader cannot grasp what are the fundamental differences among them. Please extend the text on the “description of the theoretical foundations of these techniques alongside with their main strengths and weaknesses”, which “can be found in Triantaphyllou (2000) and Ishizaka and Nemery (2013)”.

Page 6694, line 24: I do not understand the rationale for excluding few publications published before 1995.

Page 6697, line 10 and Figure 1: reporting the polynomial model and R2 is meaningless to me.

Page 6697, lines 12-18: in order to correctly measure the increase of interest in MCDM, the n. of publications for this subject should be normalised by the overall number of publications in the same journals, which have for sure increased significantly in the last 20 years. In other words, is the increase of publications on MCDM significantly greater than the increase of publications on other subjects on the same journals?

Page 6699, line 4: it is interesting to see that, for instance, in Australia MCDM studies were rarely published. Is there an explanation for that? Do they call similar procedures differently? Do they publish MCDM reports in non-ISI journals?

Page 6701, lines 4-10: is it possible that methods like DEMATEL, DRSA and ORESTE are published elsewhere, in non-ISI journals?

Page 6708, line 25: it would be interesting to have a discussion on how do the Authors define “susceptibility, hazard and risk assessment” somewhere in the introductory part of the paper.

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