

Interactive comment on “Development and testing of a community flood resilience measurement tool” by A. Keating et al.

Anonymous Referee #1

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The manuscript closes an important gap and is worth to be published. However, a few things need to be described in more detail.

First, please provide a more detail what is the aim/objective of the paper, as well as a more in-depth overview of the literature is needed ->what are the gaps within the scientific discussion. Second, please provide a more detail theoretical overview of the resilience term (especially referring to natural hazards, such as Zhou, H., Wang, J., Wan, J. & Jia H, 2010. Resilience to natural hazards: a geographic perspective. *Natural Hazards*, Volume 53, pp. 21-41. Menoni, S. et al., 2012. Assessing multifaceted vulnerability and resilience in order to design risk-mitigation strategies. *Natural Hazards*, 64(3), pp. 2057-2082. McDaniels, T. et al., 2008. Fostering resilience to extreme events within infrastructure systems: Characterizing decision contexts for mitigation and adaptation. *Global Environmental Change*, Volume 18, pp. 310-318. Fuchs, S.,

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2009. Susceptibility versus resilience to mountain hazards in Austria-paradigms of vulnerability revisited. *Natural Hazards and Earth System Sciences*, Volume 9, pp. 337-352. Adger, W. N. et al., 2005. Social-ecological resilience to coastal disasters. *Science*, 309(5757), pp. 1036-1039. And many more) as well as how you define resilience within your paper, which is at the moment missing. Introduction: somehow what means Sendai for the society is missing, see for example Zimmermann & Keiler (2015): International Frameworks for Disaster Risk Reduction: Useful Guidance for Sustainable Mountain Development? *Mountain Research and Development*, 35, 195-202 Chapter 2 as well as section 3.2 line 12: I would suggest to provide (maybe as an appendix) an overview table with the main references, how they develop/use resilience indicators, how many indicators, advantages/disadvantages of each resilience indicator. Chapter 3: I would like more explanation about the used methodologies; please, provide a more detail information on the aspect of focus groups and household surveys, such as number of asked people or how it was applied. How did each data source contribute to it? Is it possible to add more to the 'results' so as to directly relate it to the methods used? Further, please provide a more critical reflection in the used method and how you used/integrated all different methodological styles within your paper. Section 4.1.1: why you choose these five capitals instead of Kuhlicke et al. (2011) six capacities (Kuhlicke et al. (2011): Perspectives on social capacity building for natural hazards: outlining an emerging field of research and practice in Europe. *Environmental Science & Policy*). Further, please provide a more critical reflection on each capacity in terms of social inclusion/exclusion – who gains/who losses (see for example: Thaler & Levin-Keitel (2016): Multi-level stakeholder engagement in flood risk management – a question of roles and power: Lessons from England. *Environmental Science & Policy* and/or Thaler & Priest (2014): Partnership funding in flood risk management: New localism debate and policy in England. *Area*) Sections 4.3+4.4. I would suggest to move this section within chapter 3 Section 4.4, line 20: why you choose the weighting with 20%. There is currently no heading labelled 'discussion' and I suspect that most of what is currently in 'Results' more properly belongs in a discussion. However, what

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is missing: how your paper fits in the actual literature, theoretical implication as well as critical reflection on your results is partly missing. Appendix B: also here, please provide a more further description/explanations about your used variables is needed

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