

## ***Interactive comment on “A spatial decision support system for enhancing resilience to floods. Bridging resilience modeling and geovisualization techniques” by Charlotte Heinzlef et al.***

### **Anonymous Referee #1**

Received and published: 18 October 2019

Section 2.1 The authors present the 100RC framework. Why only this frame. This gives the impression of justifying the choice of authors' framework (Serre 2016). It should be possible to present other frameworks that exist or remove the 100RCs. Line 150: The authors write: lead to decision-making that integrates resilience in risk management strategies It seems to me that it would be quite the opposite because it seems to me that resilience includes risk management. Section 2.2 Figure 3 does not add anything to the text. Figure 4 is not explained and this is an example. Why this figure while there are many similar results. This figure does not add anything to the text unless it is explained and used by the authors. Same thing for Figure 5 which, in addition, is illegible.

C1

Section 2.3 In the title of this section, the authors refer to resilience, but the whole text refers to notions of vulnerabilities. It should either change the title or clearly link resilience and vulnerability to ensure that the reader understands the difference between the authors. Moreover in section 3 (line 275) the 2 terms are used which is troubling. The authors need to clarify this point.

Section 3 and following Lines 275-277: Where do these questions come from? These are the link of these issues with decision making since resilience is presented as a decision support tool. Authors should clarify as these questions directly serve the rest of the results. Table 1 : How has the impact on resilience been determined? Is it based on references or it is the authors who made this evaluation and in this case we should say how it was done. What is the link between this table and Figure 6? It is not easy to follow the arguments of the authors. If I understand correctly, the variables in Table 1 are directly used in equations 1, 2 and 3 and in Figures 10 and 11. On the other hand, I do not see the link with the questions asked in lines 275-277. The numbers in equations lines 345 and 248 are not correct. Figure 9 is illegible, especially the legends ... The results are the result of a lot of work and the authors should discuss and the real implementation of such tools in municipalities or regions. If the premise is that resilience is a decision-making or planning tool, the authors need to discuss the link between the results and the questions in lines 275-277.

---

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2019-306>, 2019.

C2