Answers to reviewers

Reviewer 1 :

Remarks	Answers
The author present the 100 RC Framework. . Why only this frame. This gives the impression of justifying the choice of authors' framework (Serre 2016).	We had already presented another model for analysing resilience (the DS3 Model), but we have now added another comparative study, the Cutter et al. (2014) methodology. "A third study conducted by Cutter identified six indicators to measure resilience - social, economic, community, institutional, infrastructural and environmental. Each indicator is divided into sub-variables such as education, age, language proficiency, employment rate, immigration rate, access to food, disaster training, social stability, access to health, access to energy, and so on. Each variable has a positive or negative effect on community resilience. Calculated using quantitative data, this method makes it possible to quantify and map resilience at the national level and more specifically at the county level in the United States. While this method greatly facilitates comparison across a large number of variables, the disadvantage is that the final score is not an absolute measure of community resilience for a single location, but rather a relative value against which multiple locations can be compared. For this reason, the proposed work is done at the US scale and not at a finer scale or for a single year, not being a comparative work over several years."
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	It depends on whether we are talking about the general concept or the strategies for applying the concept. We have added the precision "resilience strategies".
Section 2.2 Figure 3 does not add anything to the text.	We have deleted figure 3.

Figure 4 is not explained and this is an example	We added an explanation : « Geovisualisation techniques make it possible to aggregate different types of raw data (e.g. underground dynamics, urban structure, building vulnerability), transform them by joining these data (Fig.4), calculating the damage rate based on these raw data, and then producing a final result, translated into a dynamic, understandable and accessible map. »
Section 2.3 In the title of this section, the authors refer to resilience, but the whole text refers to notions of vulnerabilities.	We added a precision “In addition, this research focuses on the "vulnerability" prism of risk management. While we defend the fact that these two concepts are linked and inseparable (Provitolo, 2012) in the apprehension of climate disruption (Heinzlef, 2019), the difficult definition of resilience and its operationalisation is noteworthy. When vulnerability is defined as the propensity of a territory and a population to suffer damage, resilience focuses on the strategies and means to prepare territories and populations for the increase in risks and their damage, in order to limit the negative impacts. Resilience is therefore more complex to quantify, operationalize and visualize”
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	These indications come from the references given in Table 1
What is the link between this table and Figure 6?	Table 1 and Figure 6 are linked, with Figure 6 being the conceptual circle of the three indicators of resilience defined in this study, technical, social and urban resilience.
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.	We added a precision: “Therefore, several questions must be asked to support the understanding of the concept of resilience and decision making: Who is vulnerable/resilient? What? When? What elements could limit the impacts of a crisis

	like a flood event? Are they efficient before, during and after a flood? »
The numbers in equations lines 345 and 248 are not correct	The changes have been made.
. Figure 9 is illegible, especially the legends	We made modifications
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	We added this paragraph: “Following theoretical modeling and visual, cartographic and geovisualized production work, further development included the organization of workshops to question users on their understanding and use of the tool and the results (Heinzlef, 2019). These workshops took place with critical infrastructure managers and made it possible to (re)launch the debate around the issue of resilience and thus to build knowledge without hypothesis a priori (Maceachren and Kraak, 1997) around a tool for visualizing a concept that is difficult to put into practice. This methodology made it possible to launch a longer-term reflection with local actors to reflect on a resilience strategy and integrate the concept into risk management. In particular, the results made it possible to consider a strategy for managing the risk of flooding in the Rhone. »