

Replies to specific comments – RC3

RC3.1: DamaGis is introduced as a “work in progress”, allowing the user to add and update information. Given this, a clear outline as how this can be done should be presented in the manuscript. At this stage the database can be downloaded by anyone and how will different suppliers contribute to the database? How to ensure data consistency between different contributors? How local/national authorities can contribute?

Authors: Indeed, you are right and the authors have not been clear enough and both reviewers 3 and 4 also underlined this point. The quality control of the data from social media is insured by the request of a direct source of information within the database (Page 4, line 14). For now, no quality index has been included to the database as the number of contributors was very limited.

It is important to highlight that there is no online platform to enable a participatory work for now. Indeed, this platform has only been mentioned as a project to keep filling the database “*The objective for the database is to evolve into participatory functioning*” (Page 4, Line 29); “*An online platform could then be considered to encourage collaborative work as well as the creation of multi-stakeholder working groups.*” (Page 16, Lines 5-6).

The current paper only gives tools to develop such an approach: a method to assess the severity of flood-related damage and a structure for the database. We also consider that such a participatory work should be moderated by a dedicated institution such as local or national authorities. We understand that this particular point wasn’t clear enough within the manuscript so the authors will attempt to clarify it.

Changes: Clarifications will be included within the manuscript accordingly, in the “perspectives” section.

RC3.2: I don’t understand the need to incorporate the Basin feature class. These features are clearly related to a specific area, which in this case is the south of France, and the information is independent of the flood-related damage. Furthermore, other types of information, which include other related hydrology objects, may be of relevance to the user, but it should be up to the user to provide them and then cross that information with DamaGiS data.

Authors: The Basin feature class has to do with our own need, in link with hydrological modelling. But you are right: providing hydrological objects is another issue and is also user-dependant. As you wrote, it should be of relevance to the user to provide them and then cross that information with DamaGiS data.

Changes: Basin feature class will be removed. We will mention that having the precise location of the damage, the user will be able to cross that information with its own data

RC3.3: Page 7, line 24: I could not find in any GIS layer with a DETAIL field.

Authors: You are absolutely right; it is a mistake from the authors. The “DETAIL FIELD” used to give more information about damaged elements but we had to take it off as it could jeopardize the protection of individuals’ personal information.

Changes: The “DETAIL” field will be removed.

RC3.4: Types and subtypes of damages should be clarified. For example, sub-type Tow hall belongs to type Crisis management, but shouldn’t belong to Government services, administration type? There are no sub-types for the Water network or Housing types, why?

Authors: To simplify the use and the filling of the database, we have chosen an easy classification of the database into different types. We are aware that this classification might not be ideal for some users. This is why we also have included subtypes to enable users to adapt this classification according to their needs. As for the example of Town Hall, the current classification has been based on French territory where crisis management at the local scale is managed within the Town Hall. You are entirely right; in another context this could be confusing. Town Hall will be replaced by “Centre of crisis management” within the “Crisis management” type of elements.

As for the subtypes, for now, there are no subtypes for water and electric networks because the data we had access to didn’t have this level of detail. But these subtypes could be added (and shared) in the future if needed by a specific user.

Changes: Mentioned changes will be made

RC3.5: Also related to the previous point, Table 1 should present different sub-types belonging to the same type separated by commas, or semicolon, otherwise is confusing to the reader.

Authors: Indeed, you are right. Your comment has been taken in consideration.

Changes: Table 1 will be modified in semicolons to ease the understanding of readers.

RC3.6: The rating system for the severity of the damage is very interesting and constituted the highlight of this manuscript. This should be emphasized not only when presenting the methodology rating, but also in the abstract, for this is what sets apart the DamaGIS database and allows kit to be used for/on other parts of the world.

Authors: We agree that the damage severity assessment method is an important point of this paper. This is why we have followed your lead and emphasized it into the abstract.

Changes: The damage severity assessment method will be included and highlighted in the abstract.

RC3.6: The definition of event should be provided. This is particular useful when presenting the 2015 flood event.

Authors: Indeed, we did not clearly define what is a flood event. Though, we have added a definition within the manuscript: "The overflowing of one or several rivers due to a similar meteorological phenomenon that causes the flooding of lands that are normally dry".

Changes: Definition of event will be included within the manuscript.