Replies to specific comments – RC5

- **RC5.a:** Despite this database has currently been implemented in France, as mentioned by the authors it would probably also be useful for the collection of information on flood-related damages in other countries. To facilitate its use at an international scale, it would be better to provide the geographic coordinates of damages in a more generic coordinates system (WGS 84 for instance).
- Authors: Indeed you are right, the use of Lambert 93 is specific to the French territory and though not the most practical coordinates system for international use. However, changing the coordinates system from Lambert 93 to WGS 84 would cause losing precision in damage location. As a solution, we propose to add a column with WGS 84 coordinates to the actual damage table.

Proposed changes: Adding a column with WGS 84 coordinates to the actual damage table.

- RC5.b: Additional links with other existing databases on floods and related damages could probably be developed. Even if the damaGIS database offers a level of detail which is probably not available in other open data sources, I am wondering for instance if the "EVENTS" table could not be linked to the following other data sources: Gaspar (http://www.georisques.gouv.fr/dossiers/telechargement/gaspar), BDHI (http://bdhi.fr) or even Erisk (https://erisk.ccr.fr), or the research "FloodHymex" database (http://mistrals.sedoo.fr/HyMeX/?project_name=HyMeX).
- Authors: The EVENT table could indeed be filled with more information from other databases such as BDHI, ERISK, etc. Even if it hasn't been done in the current database it is a relevant lead for further developments. As for now, the start and end dates of each flood event enable to use the EVENT feature class from DAMAGIS in addition to other databases.

Proposed changes: Adding the possible links with other databases within the manuscript.

- **RC5.c:** The spatial extent of each event seems to be represented as a combination of administrative territories in the geometry of the "EVENT" class. Are there any reasons for this? It is a quite surprising choice since a number of recorded damages are located outside the geometry of the event. Why not having simply chosen a box with the maximum/minimum x and y values the damages records for each event? As an alternative, this "EVENT" class could also be provided without associated geometry.
- Authors: Indeed, this point hasn't been clearly exposed as already highlighted by RC1. The EVENT polygon features correspond to French administrative entities known as departments where flood events have caused damage. We chose to use

administrative territories for analyse purposes and GIS use. However, you are right we could have only provided an "EVENT" class without associated geometry.

Proposed changes: This precision will be included within the manuscript.

RC5.d : Even if using new media is an efficient way for the inventory of damages, one drawback is that some of the references used will not be available anymore after several years. See for instance the reference provided for damage Id "Dam 5-02". I do not see any solution to this, but this limit of the dataset should at least be clearly stated in the text of the article.

Authors: You are perfectly right; this limit should be mentioned.

Proposed changes: Adding the limit of expired web links to the manuscript.

- **RC5.e:** I could only check the content of data provided in shapefile .shp format. In these files, two additional fields "Shape-length" and "Shape-area" do appear. These fields can be removed, or their signification has to be detailed in the text of the paper.
- Authors: These two additional fields are automatically added to the database when exported into another format. Unfortunately, they can't be deleted. So you are right, this should be mentioned.

Proposed changes: Adding the description of the additional fields to the manuscript.

- **RC5.f:** The question of extending the feeding of this database to a collaborative way is finally central to improve in the future its spatial coverage, its comprehensiveness, and its final usefulness. This question could be slightly more developed in my opinion to see what could be the possible options for this purpose.
- Authors: Indeed, you are right and the authors have not been clear enough and both reviewers 3 and 4 also underlined this point.

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.

Proposed changes: Clarifications will be included within the manuscript accordingly, in the "perspectives" section.