Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2017-337-SC1, 2017 © Author(s) 2017. This work is distributed under the Creative Commons Attribution 4.0 License.



## **NHESSD**

Interactive comment

## Interactive comment on "Quick Response Assessment of the Impact of an Extreme Storm Combining Aerial Drone and RTK GPS" by Arthur C. Trembanis et al.

E. Duo

duonrc@unife.it

Received and published: 6 December 2017

The authors of the manuscript "Quick Response Assessment of the Impact of an Extreme Storm Combining Aerial Drone and RTK GPS" by Trembanis et al. (nhess-2017-337) are grateful to the reviewers for their useful comments and suggestions. The authors are willing to improve the manuscript, addressing their comments.

On the basis of the two reviews we propose a restructuring of the manuscript addressing the main limitations highlighted.

The proposed changes will indeed: - better contextualize the local survey implemented

Printer-friendly version

Discussion paper



at Lido degli Estensi within the regional protocol implemented by the regional authorities; - address the lack of information on the local interviews and the collected qualitative information.

In the following we summarize the main changes that we propose to implement: - the title will be changed in "Integrating Regional Protocols for Post-Event Assessments with Local UAV-based Surveys: the Emilia-Romagna (Italy) case study"; - the "Abstract" will be completely revisited; - the "Introduction" will be revisited and specific paragraphs will be added focusing (i) on the existing regional protocol for emergency and post-event assessment and (ii) on the importance of local stakeholders' involvement for coastal studies: - the section "Study Area" will be renamed as "Case study" and will be revised: the new section will include (i) the regional setting and the description of the local case study, revised on the basis of the reviews; (ii) a review of the protocol for coastal alert and monitoring of the Emilia-Romagna Region with focus on the importance of the regional EWS and the methods for post-event assessments; (iii) a thorough description of the February 2015 event, including the regional implementation of the protocol for coastal alert and monitoring described in the paper (in italian) by Perini et al. (2015b). - the "Methods" section will be revised: the current section 4.2 will be deleted; the local protocol description will be restructured and additional information on the performed interviews will be added; the description of the photogrammetric process will be reviewed; minor changes will occur in the other subsections, addressing the specific comments: - the "Results" section will be improved adding the qualitative information collected through the local community, minor changes will be applied in the other subsections. - the "Discussion" section will be enriched by adding a discussion of the outcomes of the interviews including references to standard protocols for stakeholder involvements that can improve the quality and reliability of the collected information; moreover, a discussion of the outcomes of the local survey will be added focusing on how the local assessment could be integrated in the regional scale assessment; the existing text will be revisited; - "Practical and general recommendations" will be reviewed, better contextualized and merged in a separate section named "Suggestions

## **NHESSD**

Interactive comment

Printer-friendly version

Discussion paper



for possible improvements"; - "Conclusions" will be reviewed accordingly with the new manuscript structure with emphasis on the possible improvement of the existing regional protocol with local assessments based on the proposed methodology; - logic flaws and writing will be improved, as suggested, and all the other specific comments will be addressed.

Thus, the new structure will be as follows: 1. Introduction 2. Case study 2.1. Regional settings and case study site 2.2. Coastal alerts and monitoring in Emilia-Romagna 2.3. Storm event 3. Methods 3.1. Quick Response Protocol 3.2. Stakeholder interviews 3.3. Ground GPS survey 3.4. AUV survey and Ground Control Points 4. Results 4.1. Summary of the interviews 4.2. Topographic profiles and Digital Elevation Model surface 4.3. Coastal flooding 4.4. Erosion and sedimentation patterns 5. Discussion 6. Suggestions for possible improvements 7. Conclusions

We hope that the proposed changes will meet the Editor's and Reviewers' expectations. We are looking forward to receive the Editor's decision on the further handling of the manuscript.

Best regards,

Arthur C. Trembanis, Enrico Duo, Stephanie Dohner, Edoardo Grottoli and Paolo Ciavola

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2017-337, 2017.

## **NHESSD**

Interactive comment

Printer-friendly version

Discussion paper

