

## ***Interactive comment on “Predicting the hurricane damage ratio of commercial buildings by claim payout from Hurricane Ike” by J. M. Kim et al.***

### **Anonymous Referee #2**

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Referee #1 has already developed extensive general and detailed comments, to which I am totally supportive (general and detailed comments). In order to provide hopefully some additional help for the authors to revise appropriately their paper, which has indeed a potential for publication after revision, I shall just summarize my general impression on the version submitted, in the following 3 main remarks: 1. As insurance claims payouts data have been mobilized, this interesting raw material to work on should be more thoroughly described/discussed in its contents (how are they defined? for which assets / insurance coverage?), limits of professional use, for the reader to get a clearer picture of the context and the potential of the exercise. The uncertainties about the geocoding / GIS treatment of the claims data should be more addressed/discussed: which categories of coordinates? which grid? 2. Appropriate

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developments are missing on the general intention and practical potential use of the conceptual model introduced by the paper for respectively the (re)insurance industry and public authorities, mainly: common goals and respective specific issues for downstream processing? It is not clear if this study ends up "to establish a metric to predict the financial losses of hurricanes". A parallel might be drawn between this correlation study on relevant risk factors and the design research required for the different modules which build a loss modeling tool, in particular the damage functions part of it: as the set of data seem to provide satisfactory statistical correlations between asset damage ratios, with vulnerability factors such as building age and hazard indicators such as the wind speed (flood height?) at (or near) the location of the asset (or on a surfacic basis?), comments/conclusions would be welcome on the damage functions to be retained and their limits of confidence? Does this study teach us something to reduce uncertainties of the modeling tools, depending to their context of use to predict the financial losses of hurricanes (commercial or research)? 3. As already stated by Referee #1 and following previous remarks, the summary and conclusions should be implemented/reformulated, for this paper to emphasize on the innovative added values of the work carried out as an applied research on risk evaluation/prediction, instead of giving the disappointing impression of a statistical study report (with still weaknesses in the way some intermediary figures and results are displayed).

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