

Interactive comment on “LIDAR vs. GEODAS land elevation data in hurricane induced inundation modelling” by M. Peng et al.

M. Peng et al.

Received and published: 24 July 2007

First of all, we appreciate very much the comments raised by the referee.

We couldn't agree more with the referee that the elevation difference between LIDAR and GEODAS data is within the expectation to produce inundation difference. The question is how much is the difference. To give abusive data users a warning, pronounced inundation differences forced by specific hurricanes were illustrated for the purpose. As indicated in the paper, the modeled inundation difference due to different land elevation input may vary greatly as a hurricane's RMW, translation speed or other parameters change.

As suggested by the referee, additional discussion will be added in the revised paper to interpret the difference in the model results. Furthermore, validation will also be

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

made with actual measurement in historic events. As no good records are available in the two domains, the validation can be conducted in Charleston Harbor region where Hurricane Hugo (1989) induced inundation is available. In fact, our previous study indicates that modeling with GEODAS data somehow overestimates the inundation in the Hugo case.

Thanks again! and all suggestions will be considered in the revised paper.

Interactive comment on Ocean Sci. Discuss., 4, 399, 2007.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper