



An In-Depth Analysis of the Estimation of the Extreme Quantiles of Loss Distribution for Florida Public Hurricane Model

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While the existence of global warming is no longer debatable, the effects of global warming are still the “hot topics” at the “proverbial water cooler.” Rising seas and warmer temperatures are the definitive effects, but what about the extreme cold weather experienced in the North Eastern United States last winter? Scientists increasingly point to these extreme events as evidence of global warming. Rather than experiencing consistently hotter temperatures, we are more likely to see “100 year floods” every five years or the storm of the century every year. Protecting themselves against these extreme events (referred to as Value at Risk (VaR) or Probable Maximum Loss (PML)) has been of paramount interest to insurance companies. In a previous paper, Gulati et. al. (2014) discussed PML estimation for the Florida Public Hurricane Loss Model (FPHLM) using parametric and non-parametric methods. This paper will provide a summary of the results of the Gulati (2014) results followed by results on the use of semi-parametric methods to estimate the extreme quantiles for the FPHLM.

Keywords: Catastrophic Events; Insured Loss; Mathematical Models; Probable Maximum Loss