



Storms on the Horizon: Statistical Analysis of Global Warming and Severe Storms

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Abstract

This research study sought to answer the question of whether or not global temperature increase affects severe storm formation. Storms like hurricanes and tornadoes can create widespread damage and billions of dollars in cost, creating a huge strain on American families and their checkbooks. If temperature change does indeed create an increased potential for storms then it is worth monitoring closely. While many different factors affect the birth of a storm, heat has an unquestionable effect on the outcome. No other climatic variables have such a long-lasting effect on the weather. First, a positive correlation between time and temperature increase was established based on data from NASA (2010). Further data was obtained from both NOAA (2012) and the NCDC department of NOAA (Lott & Ross, 2012). Then, hypothesis tests were completed for the correlation of temperature anomaly and hurricanes and temperature anomaly and tornadoes.