

**Greater San Diego Science and Engineering Fair
2015 PROJECT SUMMARY**

Name: Lenette Leung

Grade: 8 **School:** Marshall Middle School **Teacher:** E. Gillum

Project Title: Does Hurricanes Make Hurricanes Stronger?

Abstract

Objectives/Goals: The objective is to find out whether or not the warmer waters of the ocean has been making the hurricanes stronger.

Hypothesis: That hurricanes intensity have increased by 45% in strength and speed due to the rising temperature of the ocean waters.

Methods/Materials: Gathering hurricane data charts and graphs would be the only way to allow the research of finding out if warmer waters were allowing the hurricanes to become stronger. With more data that has been gathered, the accuracy with the conclusion would be higher.

Results: The results of this research project is that hurricanes have been becoming stronger with the warmer waters of the ocean. The data shows that the hurricanes have been going up in speed about 20% - 30%, and that the hurricanes' strength had gone up about 10%- 15%, due to the fuel that the water has provided.

Conclusions/Discussion: Hurricane strength had been going up ever since the 1980s, and they keep going up today. Since hurricanes are formed with warm waters from the ocean and the cold air moisture that come up from the ocean, there has been a possibility that the warm water of the ocean was providing energy for the hurricane to get stronger with the hurricanes' strength (10%- 15% higher than usual) is now getting stronger with hurricane speed (20%- 35% higher) that is getting faster. These data tables show that the hurricanes have been getting stronger ever since as the ocean temperature gets warmer.

Summary Statement: Hurricanes have been getting stronger, and it makes people wonder what is causing these hurricanes to become even more powerful. In this science fair research project, the data that was collected has shown that the warmer waters in the ocean has been fueling the hurricanes, which allows the hurricanes to become even stronger.

Help Received: My mentor, Mr. Kory from Texas University and my parents.