

What's Up With the Ozone Layer?

New Mexico

Supercomputing Challenge

Final Report

April 7, 2010

Team 103

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Table of Contents

Subject	Page
Abstract.....	3
Acknowledgements.....	4
Problem.....	5
Conclusion.....	6
Works Cited.....	7

Abstract

The purpose of the project is to demonstrate the recovery of the ozone hole in a place like Antarctica. The air pollution has its different values. Based on these values the hypothesis will be tested. The expected results of the experiment, is that the ozone hole will recover in a time span of a hundred years.

The procedures used are as followed. Research was gathered and analyzed. Hypothesis was generated based on the research. The mathematic formula was created for preparation of writing code. The formula was written into a code that will simulate the ozone hole and its recovery. After hypothesis is tested, data will be gathered and analyzed. Graphs will be created to support the hypothesis.

After testing our hypothesis, we obtained the data that showed a lower air pollutant will have a positive growth on the ozone hole. The ozone hole was able to recover about 100 years. The recovery for the 50% pollutant was in 50 years. For future studies, which chemical pollutant is destroying the ozone layer at a greater rate?

According the results plotted in the graph, the experiment showed that the ozone hole would recover in fifty to a hundred years. The levels of pollution were lowered by different values which had an effect on the recovery rates. Overall, the project was a success and the results supported our hypothesis.

Acknowledgements

This project could not have been completed without:

Mavis Yazzie: Who served as our supervisor, but also encouraged and challenged us throughout our experiment.

Betty Strong: Science instructor who help us with the research

Kevin Keeley: Science instructor who also helped with research

Supercomputing Challenge Consultants: Assisted with programming

Marisa Page: Assisted with getting abstract approved

Liz Encinias: Assisted with getting abstract approved

Problem

Ginseng has become one of the most sophisticated in the lives of humans. Ginseng has had its benefits and its defects. But Ginseng is a widely used product in the medicinal field and over the counter for many people. Ginseng comes in different forms depending on the place it's grown. There are many beneficial effects of Ginseng.

I will test the amount of ginseng that an adolescent can take to them recover from three different body problems such as Illness, diabetes, and stress using the Star logo program. The data will be compared with an elderly recovery rate from the same problems with their recommended amount of ginseng (500mg). The amount of ginseng needed for adolescents would range from 100mg to 300mg. I am predicting that 300mg of ginseng a day for three months for adolescents will improve their recovery rate of illness diabetes, and stress. Both of the select persons will walk for one hundred steps and based on the patch they walk into, their energy level will go down based on the illness. They will be given amount stated above to help improve or decrease the recovery rate.

The expected results of the recovery rate of an adolescent will raise after their consumption of ginseng. Then the data will be compared to each other and I will see who has a better recovery rate of the three problems. I am predicting that the adolescent will have a better recovery rate after the adolescent has taken ginseng for a certain amount of time.

Conclusion

The hypothesis tested was supported by the data. The ozone was able to recover in fifty years with fifty percent pollution. With the programming we demonstrated the ozone hole recovery with different levels of pollution. After setting up the code, we graphed the results. Overall, the whole project was a success because the hypothesis was supported and the ozone hole was able to recover. For future studies: Which chemical pollutant is destroying the ozone layer at a greater rate?

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