OZONE PROJECT

By Zach Lentz and Donavan Slater

Problem/Purpose

How does population affect ozone?

Hypothesis

- Our hypothesis is that Atlanta will have higher ozone levels than Macon due to population and air pollution.

Procedures

- Turn on your computer
- Go to http://www.georgiaair.org/smorforcast/
- Click on "visit the ambient monitoring homepage for current conditions"
- Go to ozone and click on it 
- Go to the graph and go down to hour 15, it is on military time so it will be 3.
- Log the readings in notebook

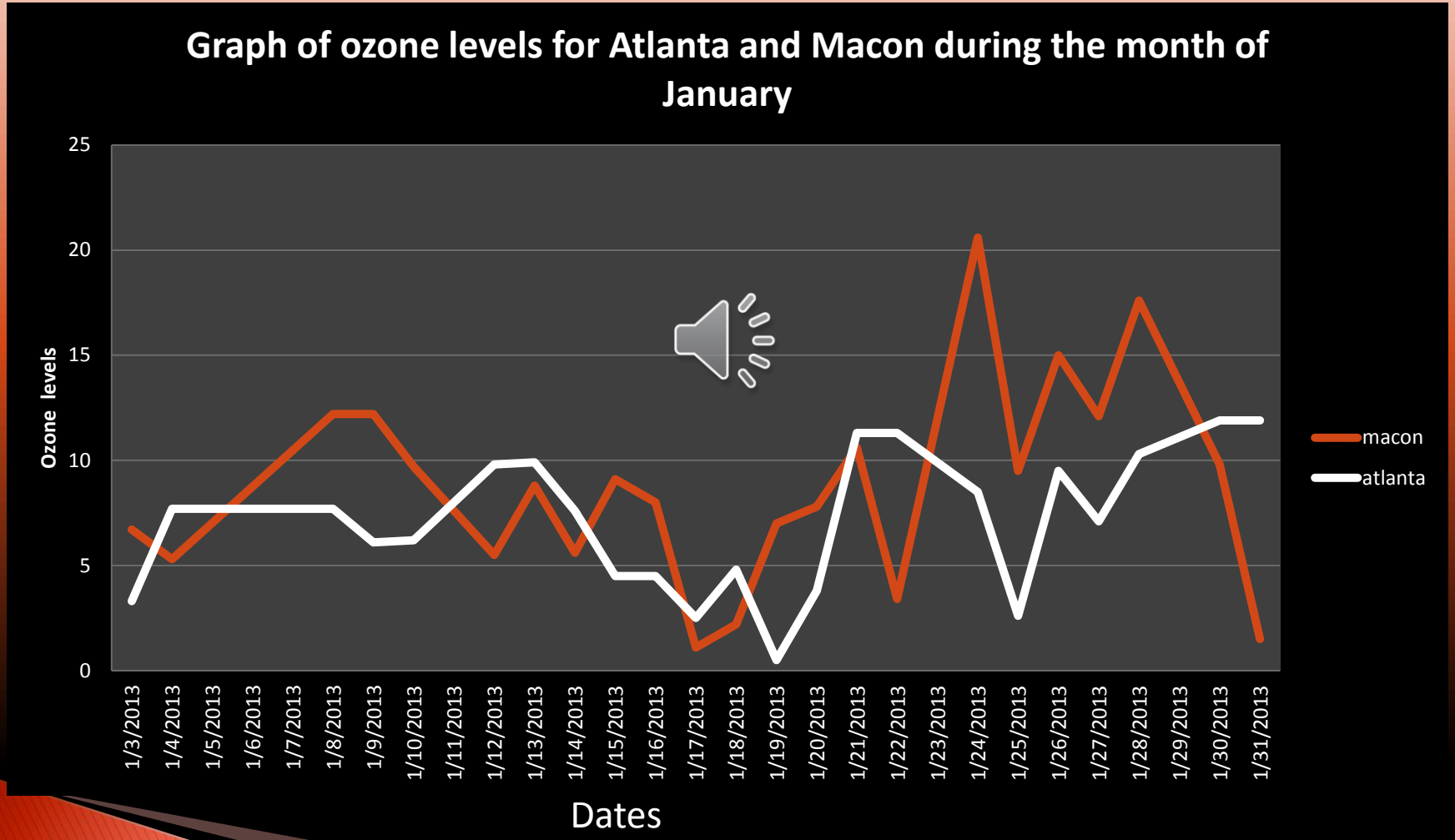
Materials List

- Computer
- Microsoft Excel
- Microsoft PowerPoint
- Website （see procedures)

Parts of an Experiment

- Independent Variable: Dates
- Dependent Variable: Ozone levels
- Constant: Location
- Control: No control

Graph


Graph of ozone levels for Atlanta and Macon during the month of January
Ozone levels
25
20
15
10
5
0
1/3/2013
1/4/2013
1/5/2013
1/6/2013
1/7/2013
1/8/2013
1/9/2013
1/10/2013
1/11/2013
1/12/2013
1/13/2013
1/14/2013
1/15/2013
1/16/2013
1/17/2013
1/18/2013
1/19/2013
1/20/2013
1/21/2013
1/22/2013
1/23/2013
1/24/2013
1/25/2013
1/26/2013
1/27/2013
1/28/2013
1/29/2013
1/30/2013
1/31/2013
Dates
macon
atlanta

Conclusion

The conclusion that we have come to is that Macon had higher ozone levels than Atlanta, so the data did not support our hypothesis. Our new hypothesis is that Macon had higher ozone levels than Atlanta. The summary of our data is that, except for a few days, Macon always had higher levels than Atlanta. A possible explanation for the increased ozone level could be that Macon is downwind from Atlanta, thereby picking up Atlanta's ozone on windy days. The experiment could have been improved if we had taken readings from other months. This experiment applies to the real world by showing us what cities and towns have higher or lower ozone levels.