

# The Relationship between Barometric Pressure and Temperature



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# Abstract

Does temperature affect barometric pressure? Online evidence has shown that temperature does affect barometric pressure. For this project, the temperature and barometric pressure in Bay Saint Louis, Mississippi, will be examined.

# Research Question and Hypothesis

Does temperature affect barometric pressure? This question was prompted by doing the weather station and seeing a pattern.

My hypothesis is that temperatures does affect barometric pressure. This is because of the meeting with reference to warm air and cold air. Warm air will rise over the cold air making the air pressure drop.

# Introduction and Review of Literature

Barometric pressure is another term for air pressure. Pressure is caused by gravity. Gravity is pulling the air molecules down creating pressure.

Temperature is “the degree of hotness or coldness measured on a definite scale”, according to Merriam-Webster. Molecules in hot air move quicker than molecules in cold air. Hot air molecules, because how fast they are moving, tend to bounce off of each other.

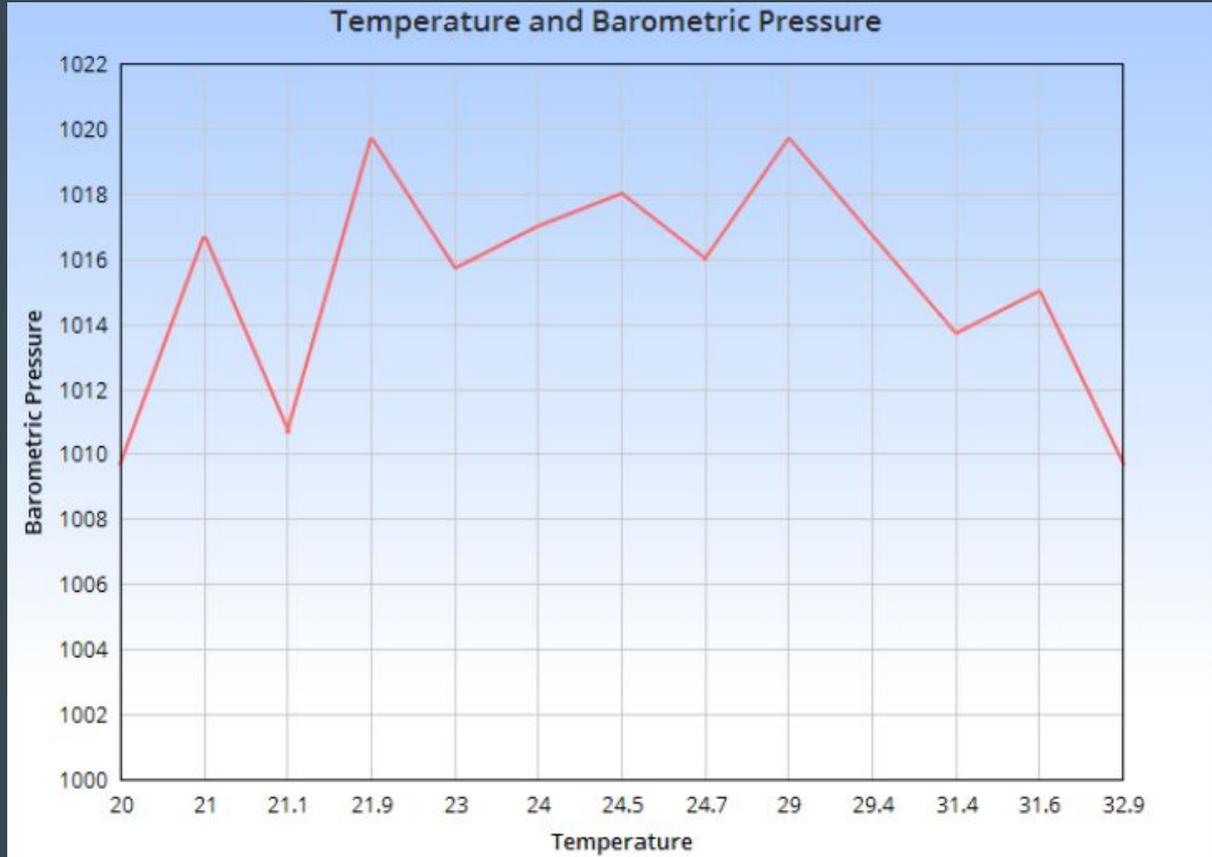
# Research Methods and Materials

To help see the relationship between temperature and barometric pressure, for this paper, a lot of different materials will be used. Globe Data and some other online websites will be used in this project.

Studying Data will be the research method used in this project. This data will go as far back as September of 2020. This research method is going to allow people to see how to determine the weather in the surrounding area.

# Results

These are the results that have been gathered by the Globe Data. There could be some uncertainties and misentered data into the site, but this is what came out of it. One of the uncertainties is whether the barometric pressure was read correctly or not.



# Discussion and Conclusion

To make this experiment more reliable, next time, a digital barometer will be used. Using a digital barometer instead of using an analog barometer will help read the pressure more accurately. For further study, the relationship between temperature, barometric pressure, and weather can be studied. Online websites state that temperature, barometric pressure, and weather have a big impact on each other. The conclusion that has been reached is that barometric pressure does have an effect on the temperature of the surrounding area.

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