

# A COMPARITIVE STUDY OF TEMPERATE AND DESERT CLIMATES

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# PROBLEM

I chose this project because I was interested in how plants and animals adapt to the weather in different places. I've always wondered how so many plants (such as *Cylindropuntia fulgida* (jumping cactus)) and animals such as *Suricata suricata* (meerkat) have lived in such hot weather. Also, I thought it was interesting how the plants and animals endure and restrain heat and not having much water to drink or food to eat.

# HYPOTHESIS

My hypothesis is that the desert area in Las Vegas, Nevada and Walvis Bay, Namibia will be warmer than the surface temperature in Akron, Ohio throughout the year.

# MATERIALS

- (IRT) Infrared Temperature Thermometer. Fluke 63.
- (GPS) Global Positioning System. Garman eTrex venture.
- [www.globe.gov](http://www.globe.gov) website.
- Surface Temperature Data Sheet.
- Pencil or pen
- Hand-held Infrared Thermometer.
- GLOBE Cloud Chart.
- Accurate Watch.
- Thermal Glove (use when the air temperature at the study site varies more than 5 degrees Celsius from the air temperature of where the IRT has been stored.)
- Ruler or Meter Stick (if snow cover is present)

# PROCEDURE

1. I took the Infrared thermometer (IRT) outside to the study site. (Found by GPS)
2. I pointed the IRT perpendicular to the ground where the study site was found.
3. I recorded what was on the screen of the IRT & the time I took it.
4. I went to [www.globe.gov](http://www.globe.gov) & entered the data into the website.
5. I found a school in a desert area on the globe website.
6. I recorded the data from that school.
7. I found the average of all the days.
8. I typed out & printed all of it.

# RESULTS

DAY 1:

**Akron, OH-**

Hot: 64

Cold: 48

**Las Vegas, Nevada-**

Hot: 84

Cold: 60

**Walvis Bay, Namibia -**

Hot: 71

Cold: 48

DAY 2:

**Akron, OH-**

Hot: 55

Cold: 46

**Las Vegas, Nevada-**

Hot: 87

Cold: 62

**Walvis Bay, Namibia-**

Hot: 69

Cold: 51

DAY 3:

**Akron, OH-**

Hot: 72

Cold: 46

**Las Vegas, Nevada-**

Hot: 85

Cold: 65

**Walvis Bay, Namibia-**

Hot: 69

Cold: 51

DAY 4:

**Akron, OH-**

Hot: 71

Cold: 57

**Las Vegas, Nevada-**

Hot: 73

Cold: 59

**Walvis Bay, Namibia-**

Hot: 64

Cold: 48

DAY 5:

**Akron, OH-**

Hot: 79

Cold: 54

**Las Vegas, Nevada-**

Hot: 71

Cold: 52

**Walvis Bay, Namibia-**

Hot: 68

Cold: 53

DAY 6:

**Akron, OH-**

Hot: 60

Cold: 53

**Las Vegas, Nevada-**

Hot: 68

Cold: 53

**Walvis Bay, Namibia-**

Hot: 77

Cold: 53

DAY 7:

**Akron, OH-**

Hot: 46



Cold: 39

**Las Vegas, Nevada-**

Hot: 68

Cold: 48

**Walvis Bay, Namibia-**

Hot: 60

Cold: 57

DAY 8:

**Akron, OH-**

Hot: 43

Cold: 19

**Las Vegas, Nevada-**

Hot: 57

Cold: 47

**Walvis Bay, Namibia-**

Hot: 73

Cold: 57

DAY 9:

**Akron, OH-**

Hot: 46

Cold: 30

**Las Vegas, Nevada-**

Hot: 55

Cold: 43

**Walvis Bay, Namibia-**

Hot: 77

Cold: 57

DAY 10:

**Akron, OH-**

Hot: 48

Cold: 39

**Las Vegas, Nevada-**

Hot: 57

Cold: 43

**Walvis Bay, Namibia-**

Hot: 77

Cold: 62

DAY 11:

**Akron, OH-**

Hot: 42

Cold: 33

**Las Vegas, Nevada-**

Hot: 48

Cold: 35

**Walvis Bay, Namibia-**

Hot: 75

Cold: 62

DAY 12:

**Akron, OH-**

Hot: 48

Cold: 37

**Las Vegas, Nevada-**

Hot: 47

Cold: 30

**Walvis Bay, Namibia-**

Hot: 75

Cold: 62

DAY 13:

**Akron, OH-**

Hot: 37

Cold: 28

**Las Vegas, Nevada-**

Hot: 50

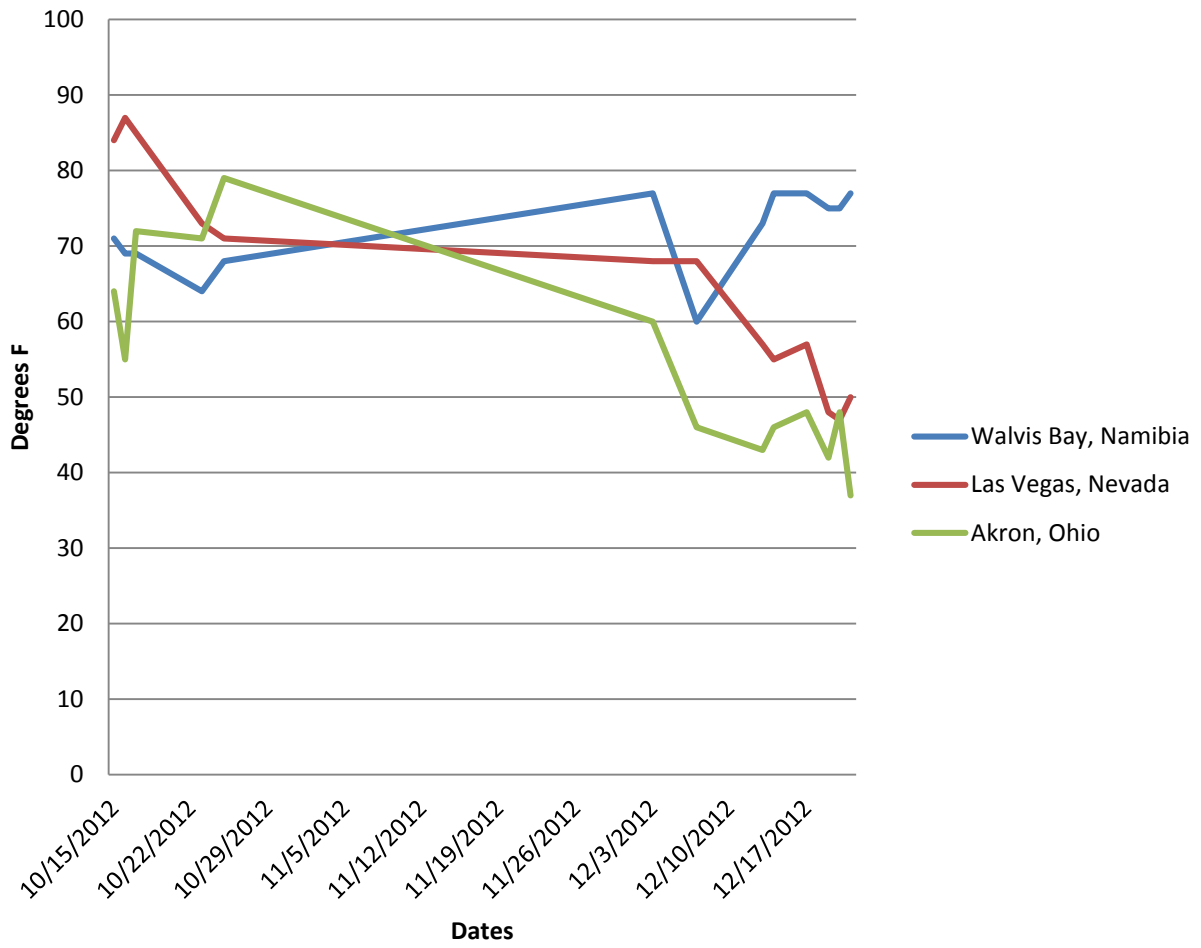
Cold: 31

**Walvis Bay, Namibia-**

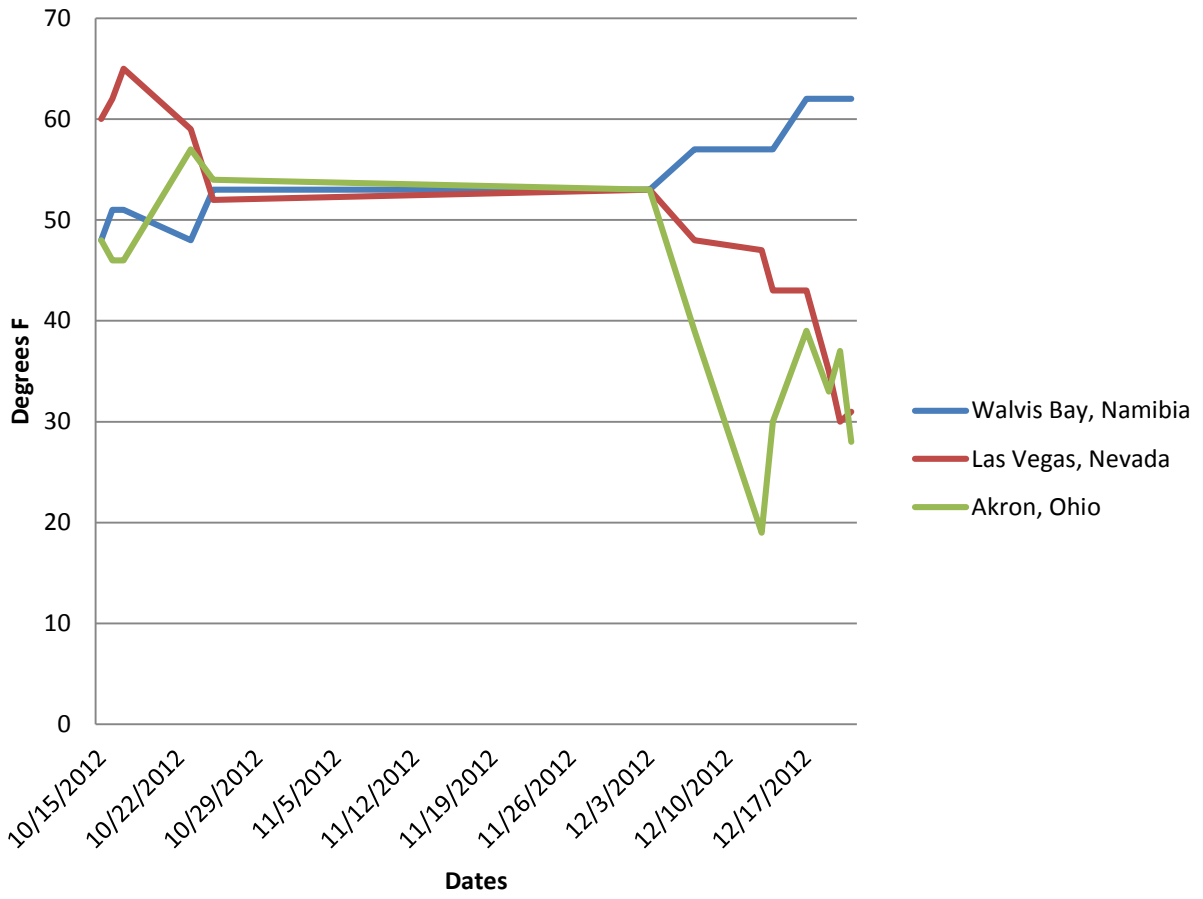
Hot: 77

Cold: 62

# Extreme Hot Temperature Data



# Extreme Cold Temperature Data



# CONCLUSION

My results did support my hypothesis because Las Vegas, Nevada and Walvis Bay, Namibia were warmer than Akron, Ohio's surface temperature throughout the year.

# REFERENCES

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