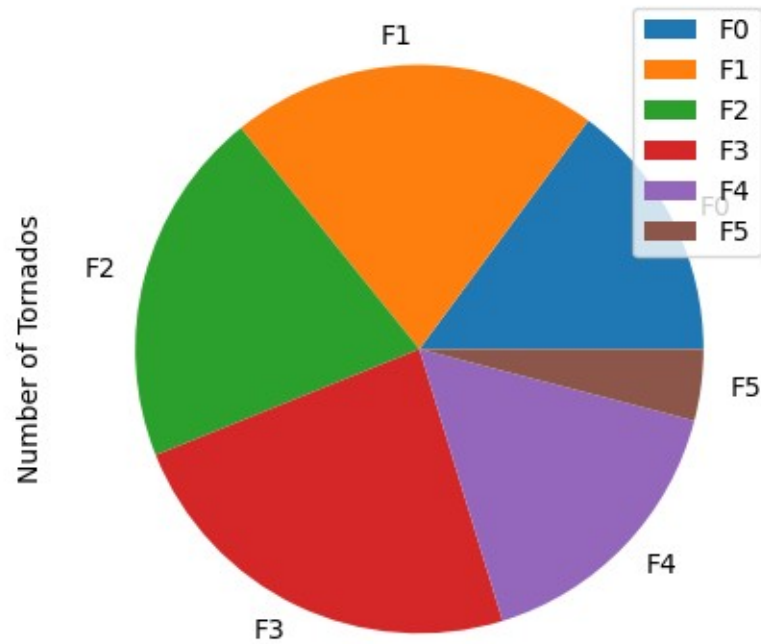


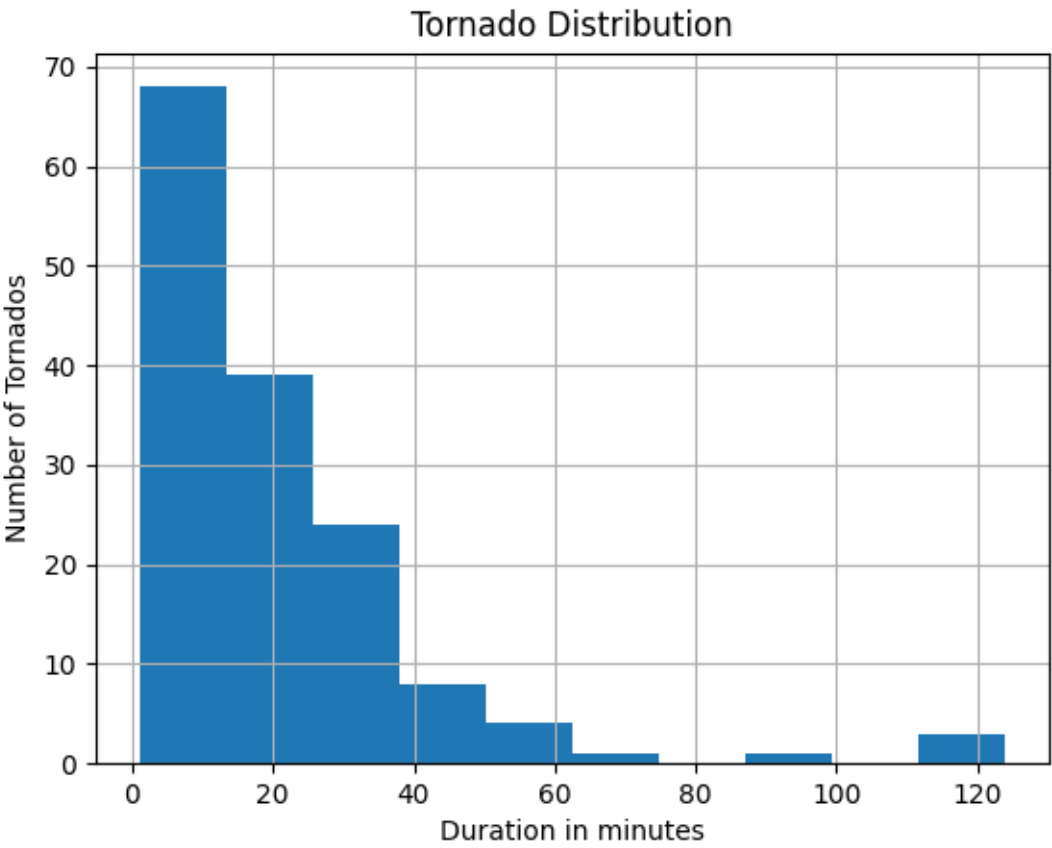
**Assignment 1**  
**Tornado Data Report**  
**Math 2050**  
**Hunter Stevens**

## 1. Number of Tornadoes by F Scale

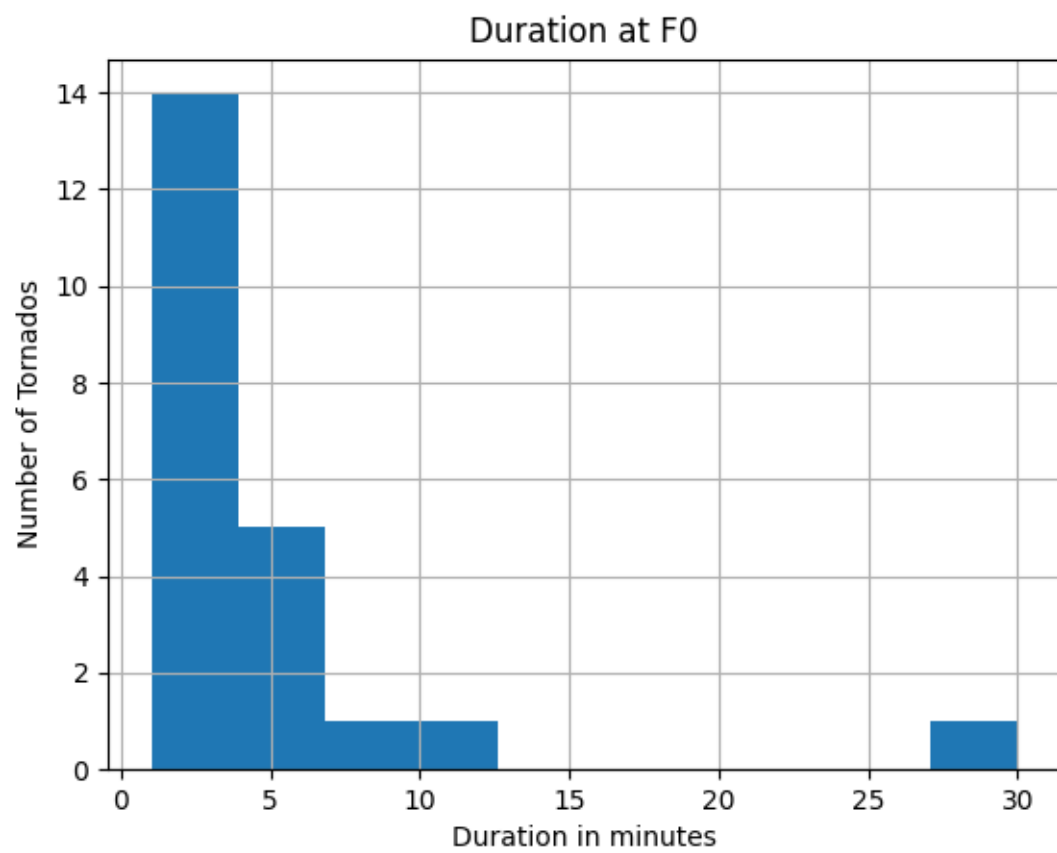


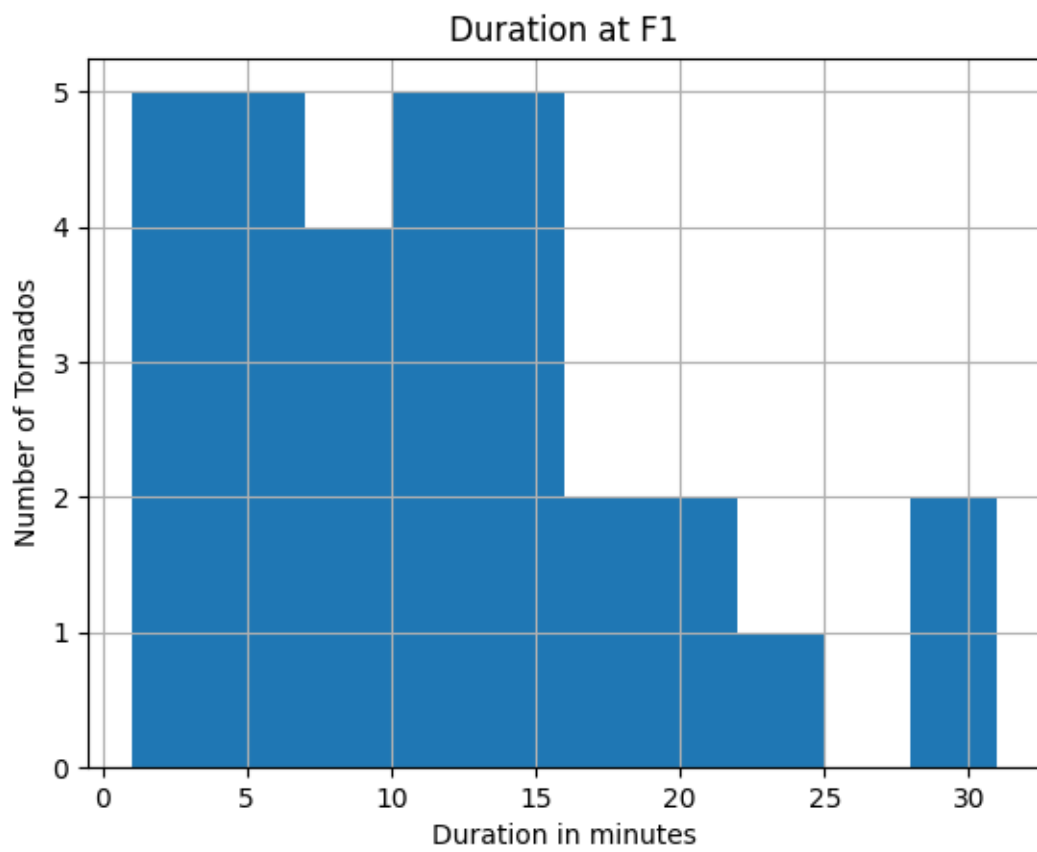
The April 1974 outbreak has almost a quarter of the total number of tornadoes coming from F4 and F5 tornadoes, which differs greatly from the common rate of 1%.

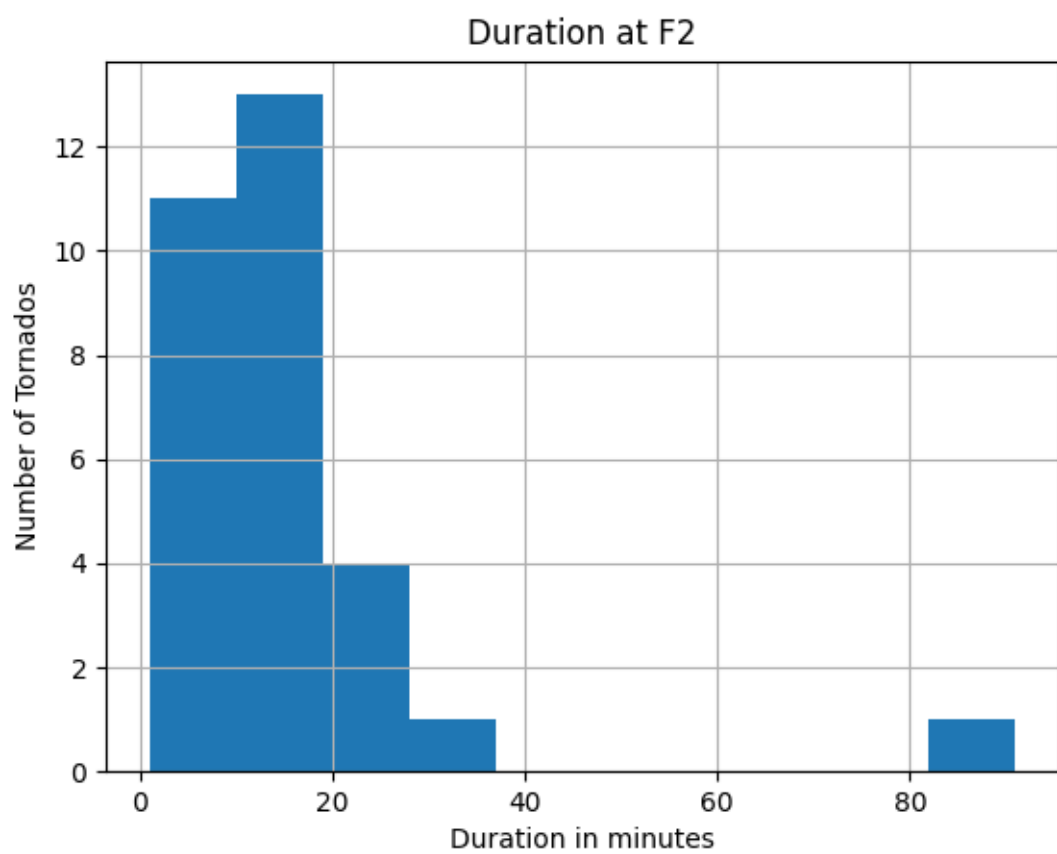
2. Distribution of Tornado Duration

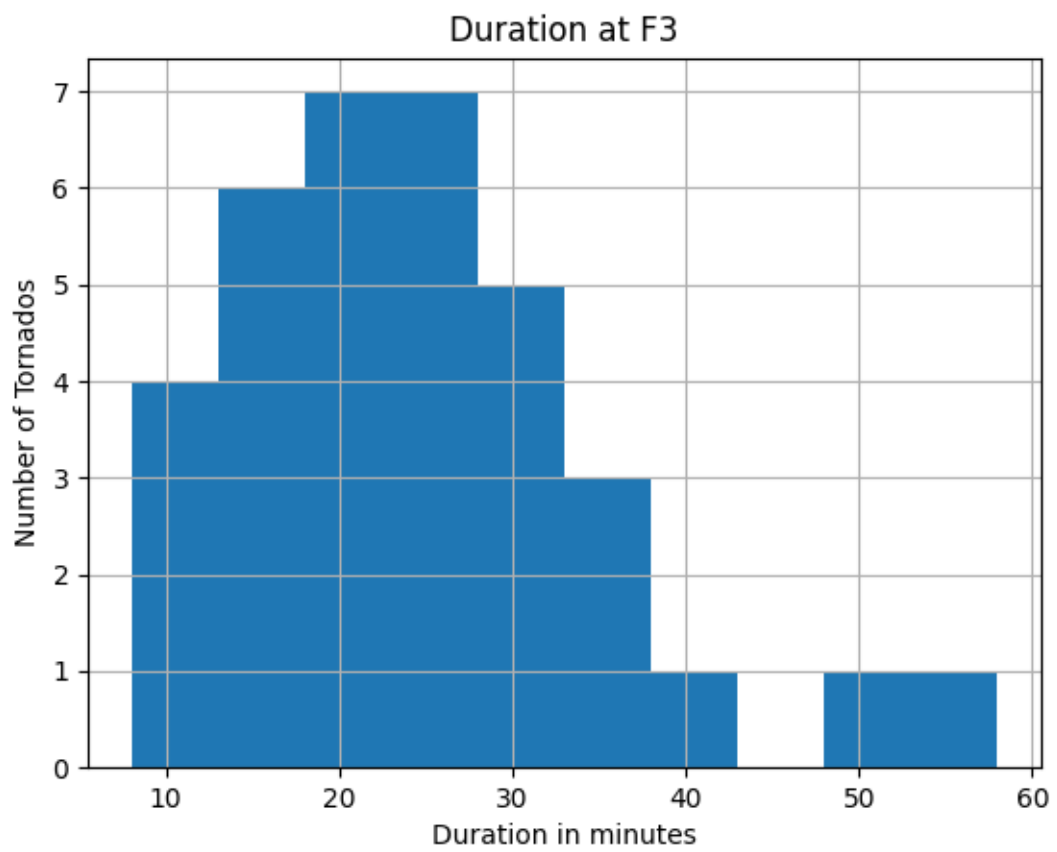


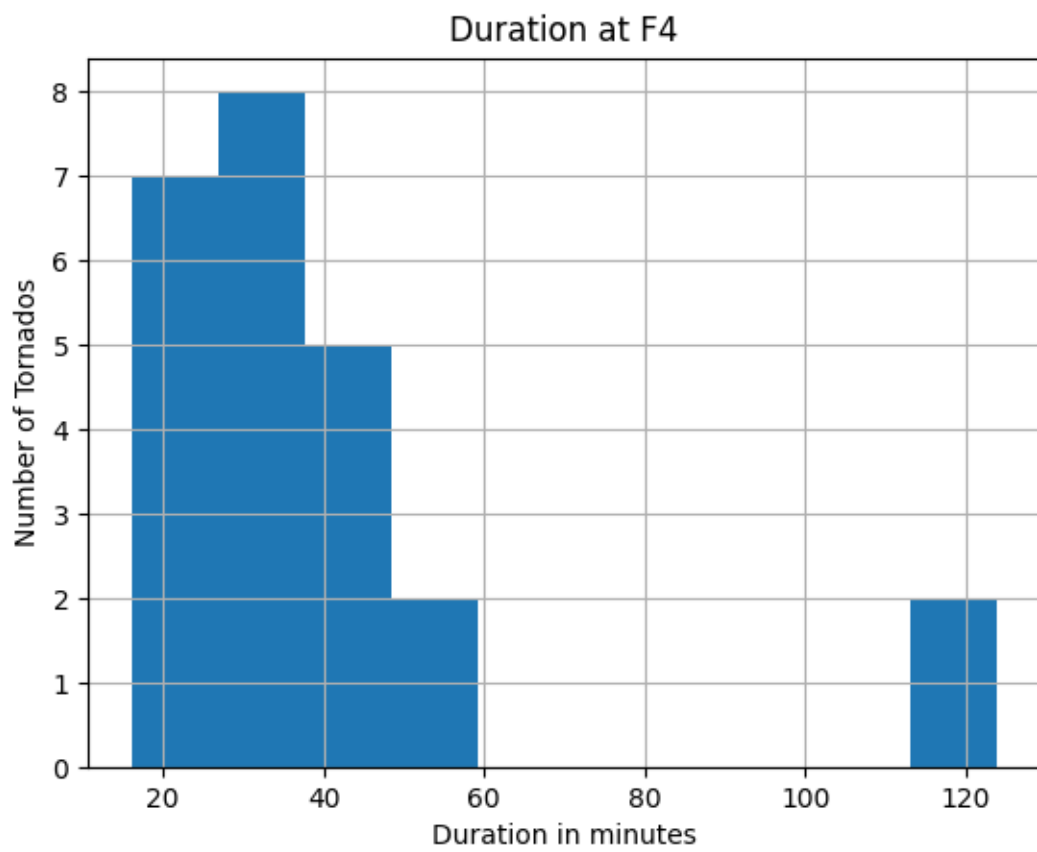
### 3. Tornado Duration By F-Scale



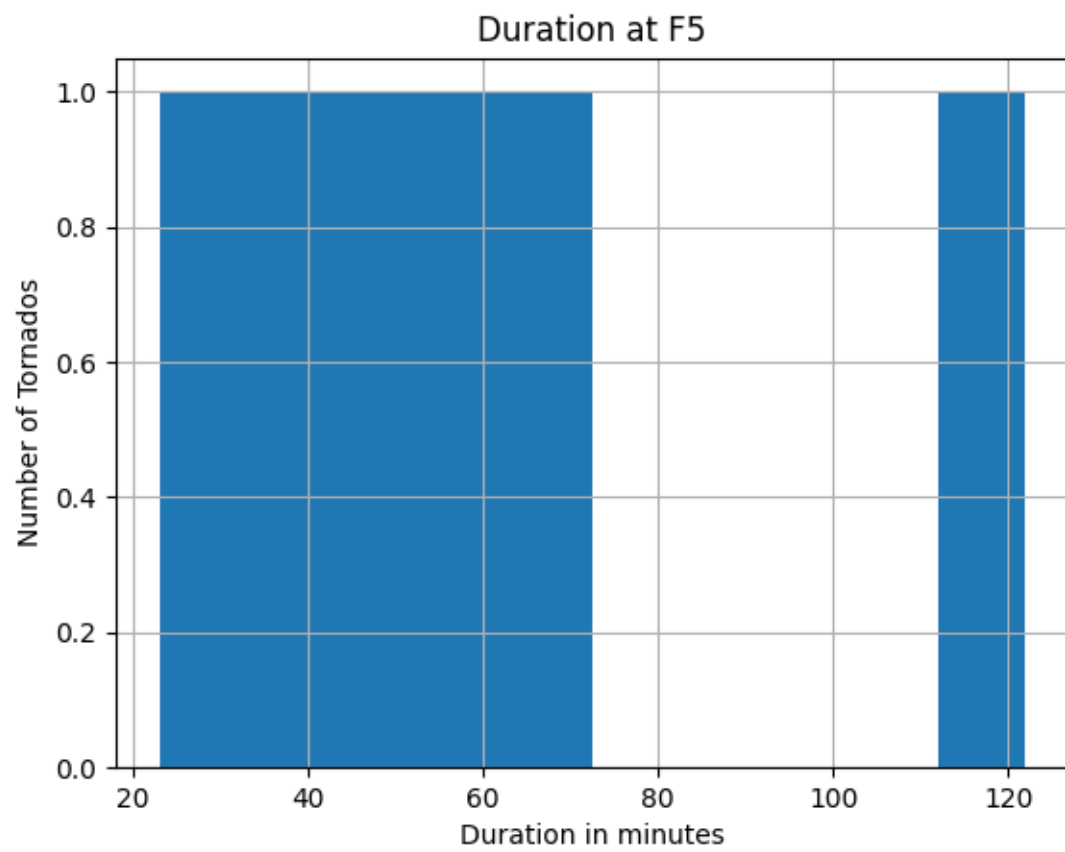




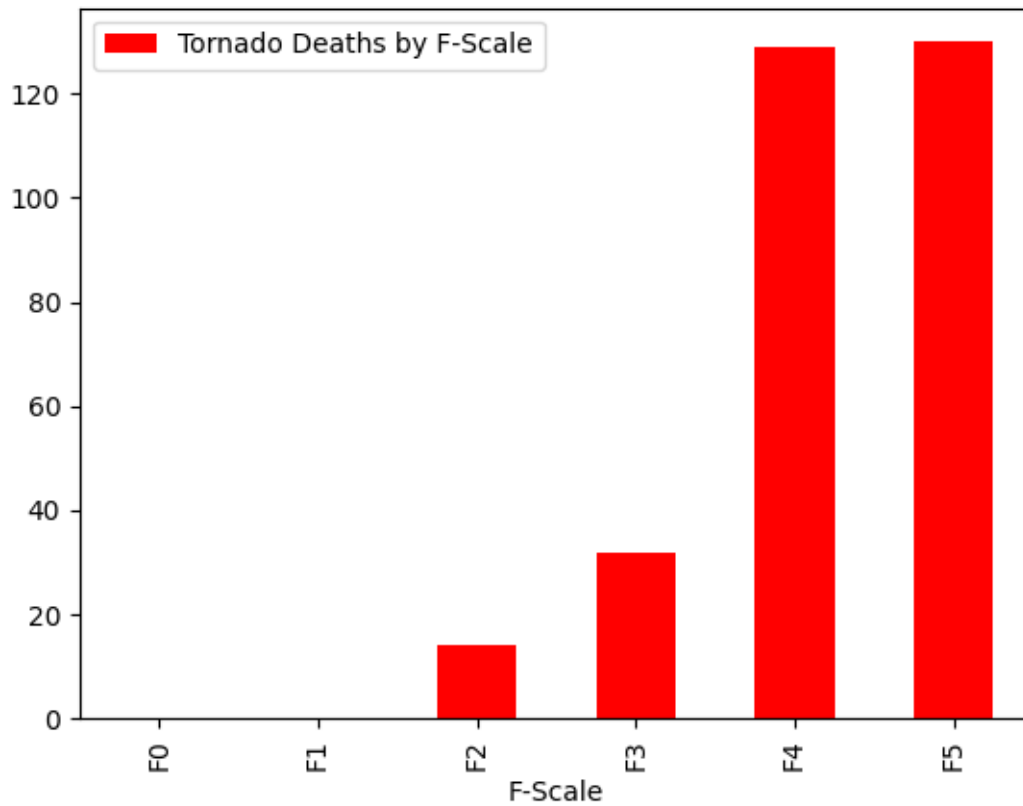








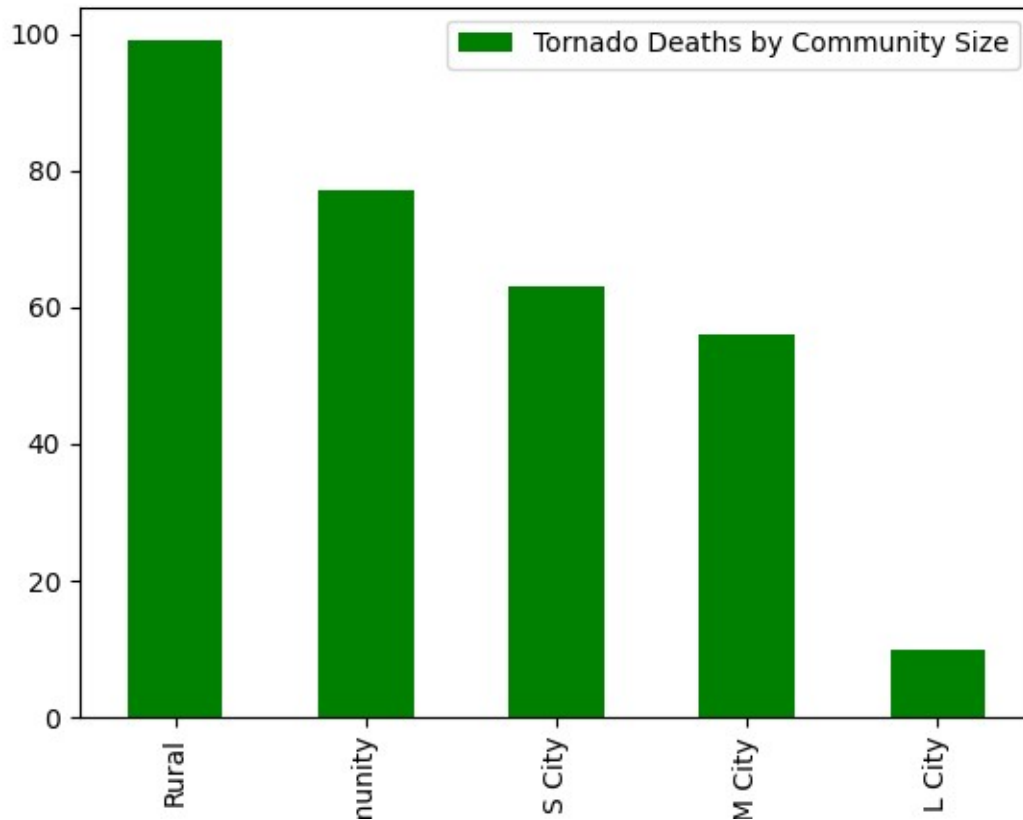
#### 4. Deaths and Tornado Intensity



Ordinarily, the most severe tornadoes (F-4 and F-5) account for more than 70% of deaths. Is the death distribution of this outbreak consistent with this observation?

Yes, F-4 and F-5 tornadoes account for approximately 86% of the deaths that occurred during this super outbreak.

## 5. Deaths and Community Size



Its hard to say if tornadoes are more likely to hit rural areas based on the data, but it is obvious that tornadoes are more dangerous in rural areas based off of the death tolls. This could be due to various factors. Maybe in larger communities the larger buildings offer better protection to people or factors contributing to tornado formation are more favorable in less developed areas.

Deaths do appear to decrease as community size increases based on the super outbreak data. With a notable jump between a medium sized city and a large city.

## **6. Summary**

This tornado super outbreak had a significantly higher than normal amount of F-4 and F-5 tornadoes which caused a great deal of destruction and many deaths.

As F-Scale grows the duration of tornadoes tends to increase. Most F-0 tornadoes last a couple of minutes at most, while F-5 tornadoes can last up to two hours.

The more powerful tornadoes that last longer also cause far more deaths with F-4 and F-5 tornadoes accounting for about 86% of deaths during this outbreak in 1974.

Furthermore deaths appear to decrease in larger communities with a significant decrease between medium and large cities.