

**Lab Exercise 1: Establishing the Significance of the Joplin Tornado and the Effectiveness of the Forewarning (100 points)**

**Answer on separate sheets of paper.** Each answer is worth 8 points (except where noted). This exercise involves student access of the [Storm Prediction Center \(SPC\) Storm Report Database](#) entries for May 22, 2011.

A. Provide the following information:

1. The number of states that reported severe weather.
2. The number of tornado reports that occurred across the country.
3. The number of reports of "giant" hail.
4. The number of fatalities and injured associated with the Joplin MO tornado.
5. The time (UTC) of the Joplin tornado.
6. The diameter (inches) of the hail stone reported in adjacent Oklahoma (Carter County) at 2217 UTC.

B. Examine the text information given for Tornado Watch #325.

1. What was the categorical likelihood (descriptor in colored boxes) attached to the Tornado Hazard in the Watch area?
2. What was the categorical likelihood(descriptor in colored boxes) attached to the Hazard of EF2 or greater tornadoes in the Watch Area?
3. When (UTC) was the Watch issued?
4. How much "lead time" were the residents of Joplin given (hours and minutes) between when the Watch was issued and when the tornado occurred?

C. Examine the text information given in the Public Severe Weather Outlook (1627 UTC).

1. How many hours before the Joplin tornado occurred was the Public Severe Weather Outlook issued?
2. In your opinion, if this severe weather outlook was distributed to the public and you lived in the highlighted area ("areas most likely to experience this activity"), do you feel that your attention to the possibility of damaging severe weather, tornadoes in particular, would have been heightened. (12 points)