

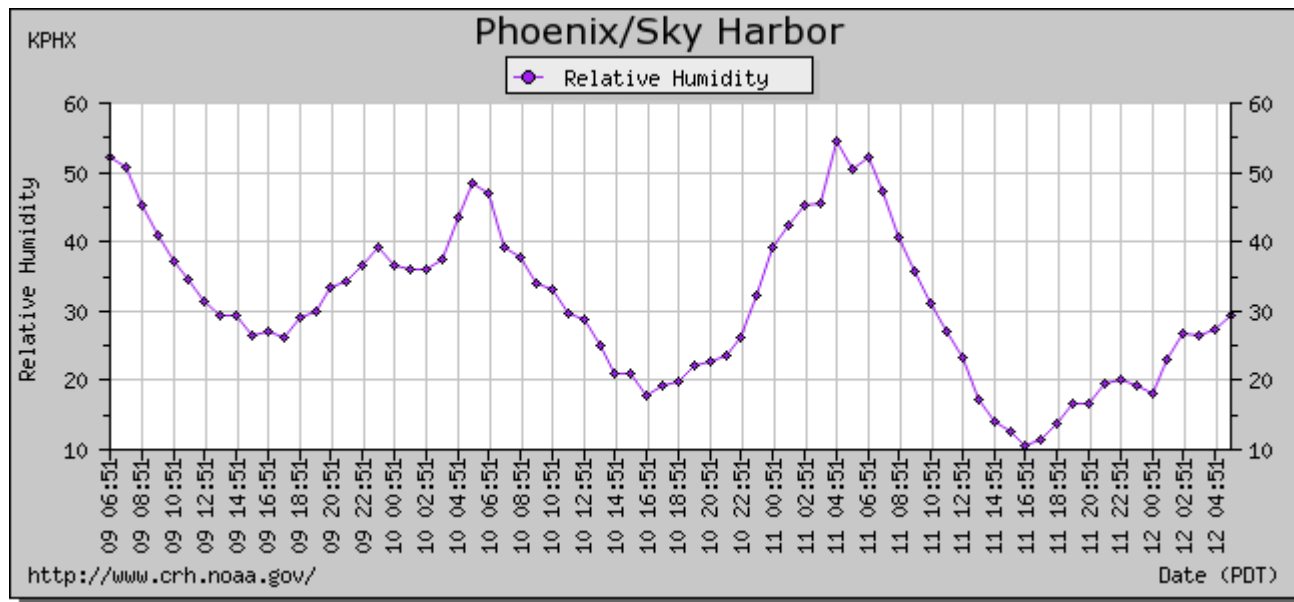
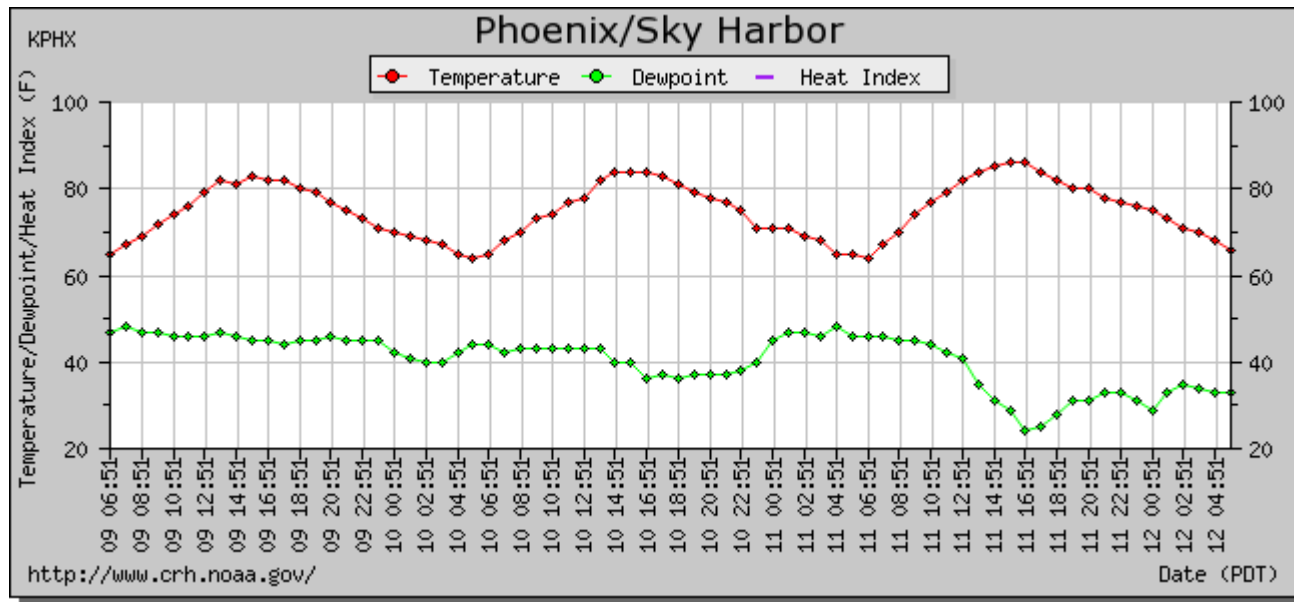
- 4-1 The maximum temperature observed at any location in Kentucky or West Virginia usually occurs _____ .
- A. at or near sunrise
 - B. during the mid-morning
 - C. at noon
 - D. during the mid-afternoon
 - E. at or near sunset
 - F. after sunset and before sunrise
- 4-2 The minimum temperature observed at any location in Kentucky or West Virginia usually occurs at _____ .
- A. at or near sunrise
 - B. during the mid morning
 - C. at noon
 - D. during mid-afternoon
 - E. at or near sunset
 - F. at midnight
- 4-3 The fact that hurricanes do not form at or very near the equator substantiates that the Coriolis effect _____ .
- A. increases with decreasing longitude
 - B. decreases with increasing longitude
 - C. increases with decreasing latitude
 - D. increases with increasing latitude
 - E. decreases with increasing latitude
 - F. does not vary with either latitude or longitude

- 4-4 If the stability of the atmosphere is categorized as being neutral, then the variation of surface wind direction over an hour's time is _____ .
- A. greater than if the atmosphere was unstable.
 - B. less than if the atmosphere was stable.
 - C. equal to that of an unstable atmosphere.
 - D. equal to that of a stable atmosphere.
 - E. less than if the atmosphere was unstable and more than if the atmosphere was stable.
- 4-5 If the average wind speed measured by an anemometer over an hour during a sunny day is 10 knots, the highest wind gust would probably be no higher than _____ .
- A. 10 knots
 - B. 12 knots
 - C. 30 knots
 - D. 45 knots
 - E. 8 knots

Answer the Questions 4-6 to 4-9 based on Figure 4A on the following 3 pages.

- 4-6 What is the dry bulb temperature on 09 at 12:51 PDT?
- 4-7 What is the wind speed, wind gust and wind direction on 10 at 14:51 PDT?
- 4-8 How much rain fell during the three-day period from 09 at 06:51 PDT to 12 at 05:51 PDT?
- 4-9 On the 09 day, the dew point temperature is relatively constant throughout that day. What caused the relative humidity to drop to a minimum in the mid to late afternoon on the 09 day?

Figure 4A



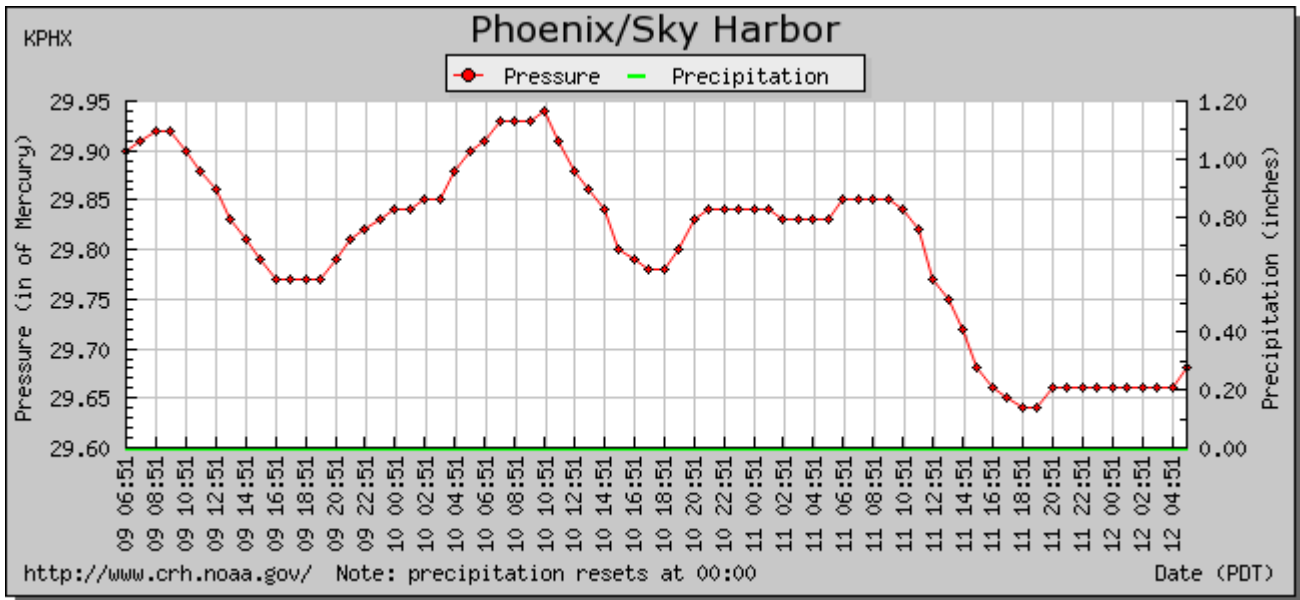
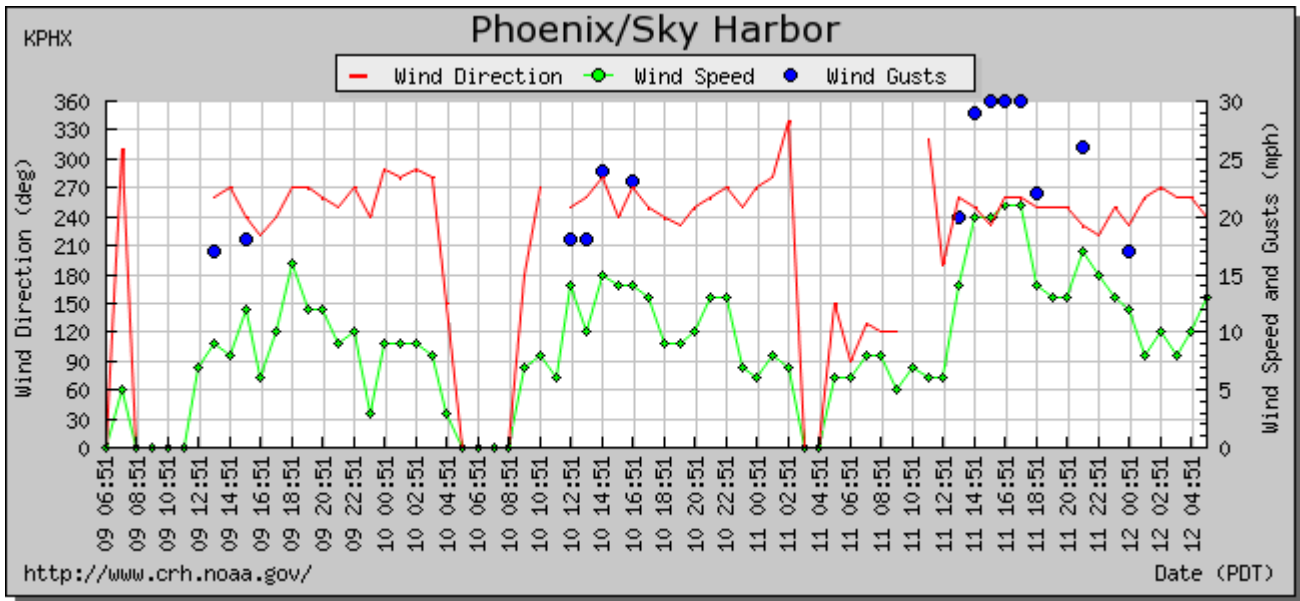
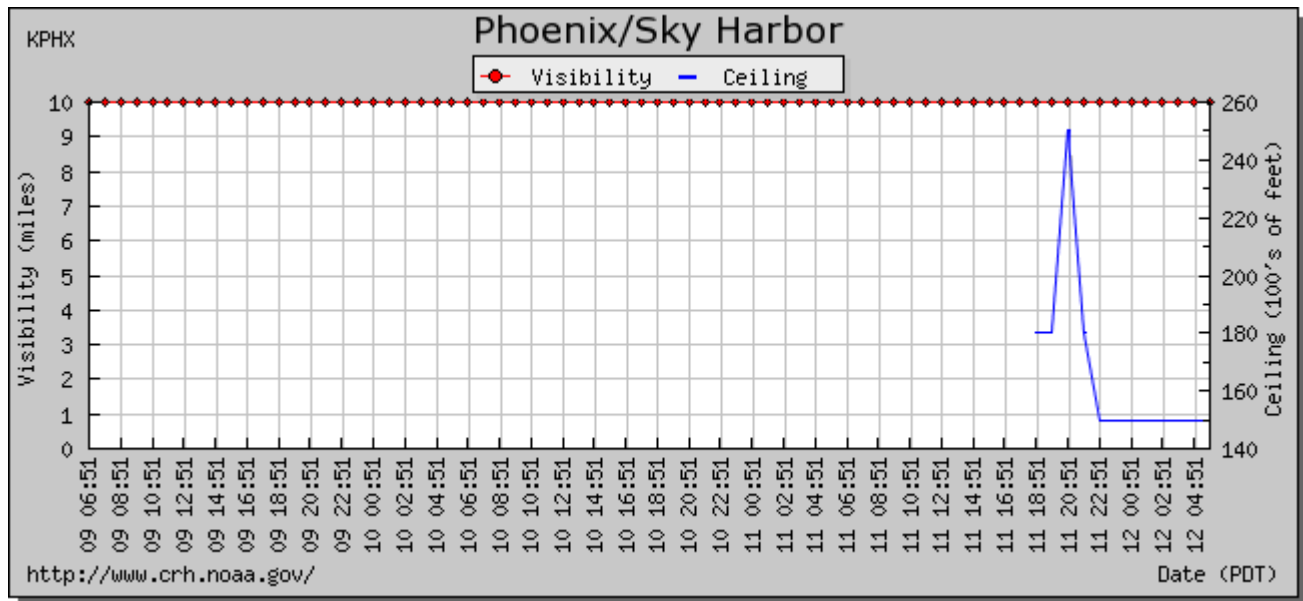


Figure 4A



Answer the Questions 4-10 to 4-12 based on Figure 4B on the following 3 pages.

- 4-10 What day and time did the visibility first show a decrease from 10 miles in Figure 4B? (Use only the times indicated on the x axis.)
- 4-11 What occurred between 10 17:52 and 11 3:52?
- A. A squall line passed by the station.
 - B. A warm front passed by the station.
 - C. A stationary front was located at this station.
 - D. A high pressure system passed by the station.
 - E. A cold front passed by the station.
 - F. A snowstorm passed by station.
- 4-12 After the event that occurred between 10 17:52 and 11 3:52, what was the wind direction between 11 4:52 through 11 15:52?
- A. North to Northeast
 - B. Northeast to East
 - C. East to Southeast
 - D. Southeast to South
 - E. South to Southwest
 - F. Southwest to West
 - G. West to Northwest
 - H. Northwest to North

Figure 4B

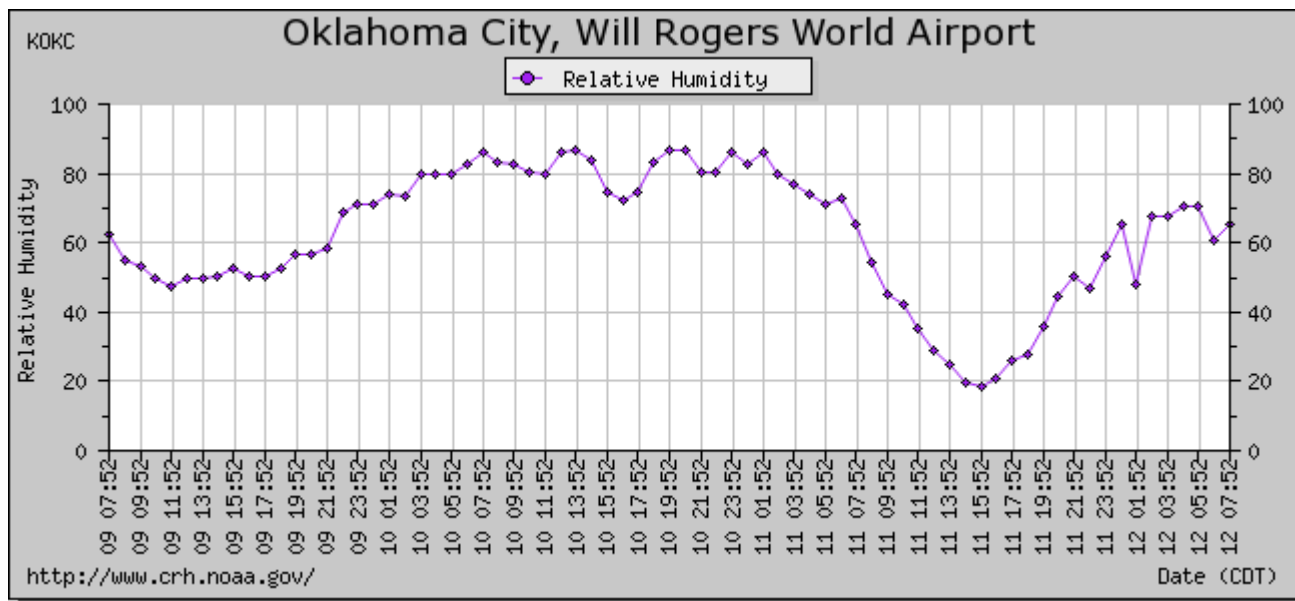
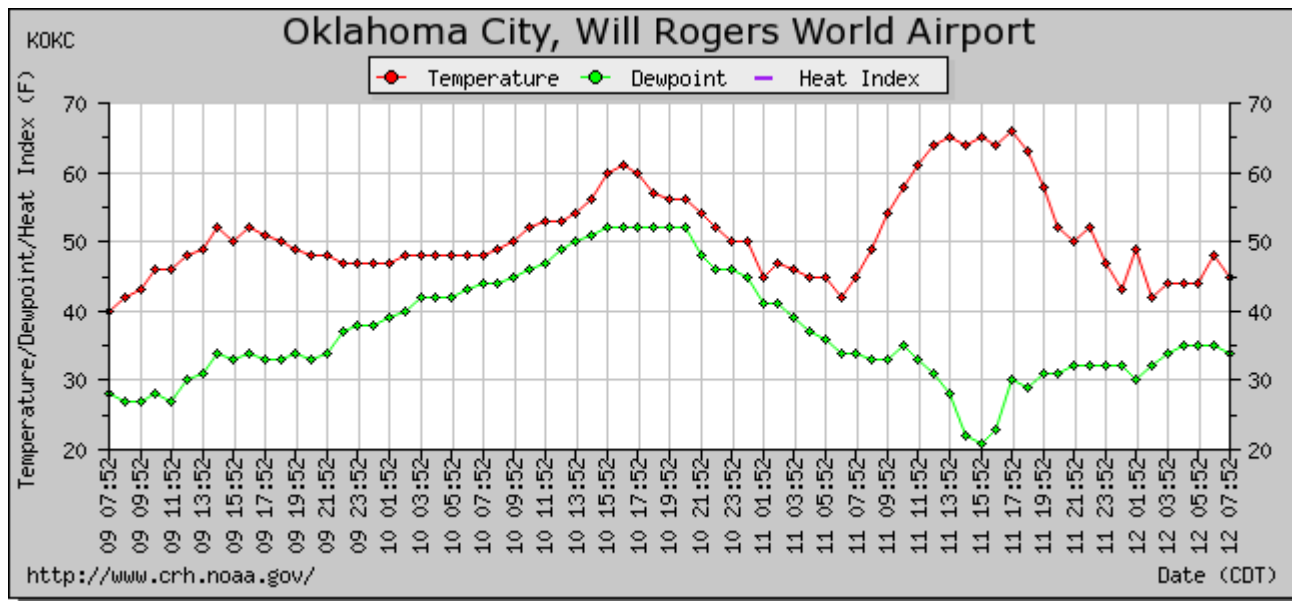


Figure 4B

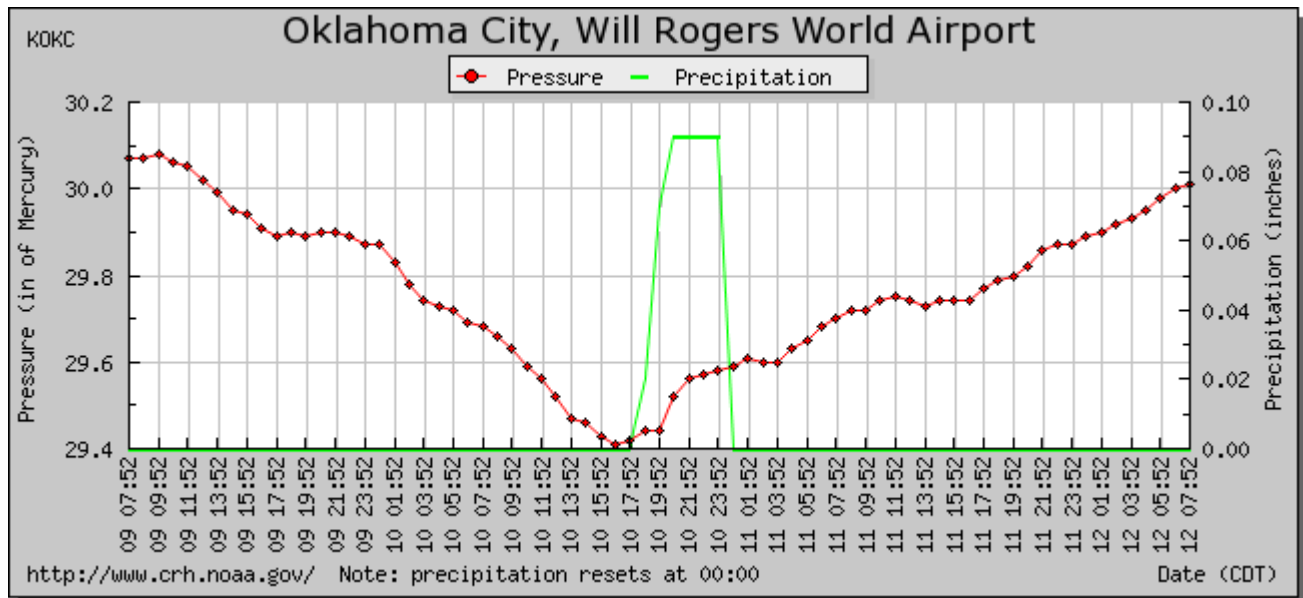
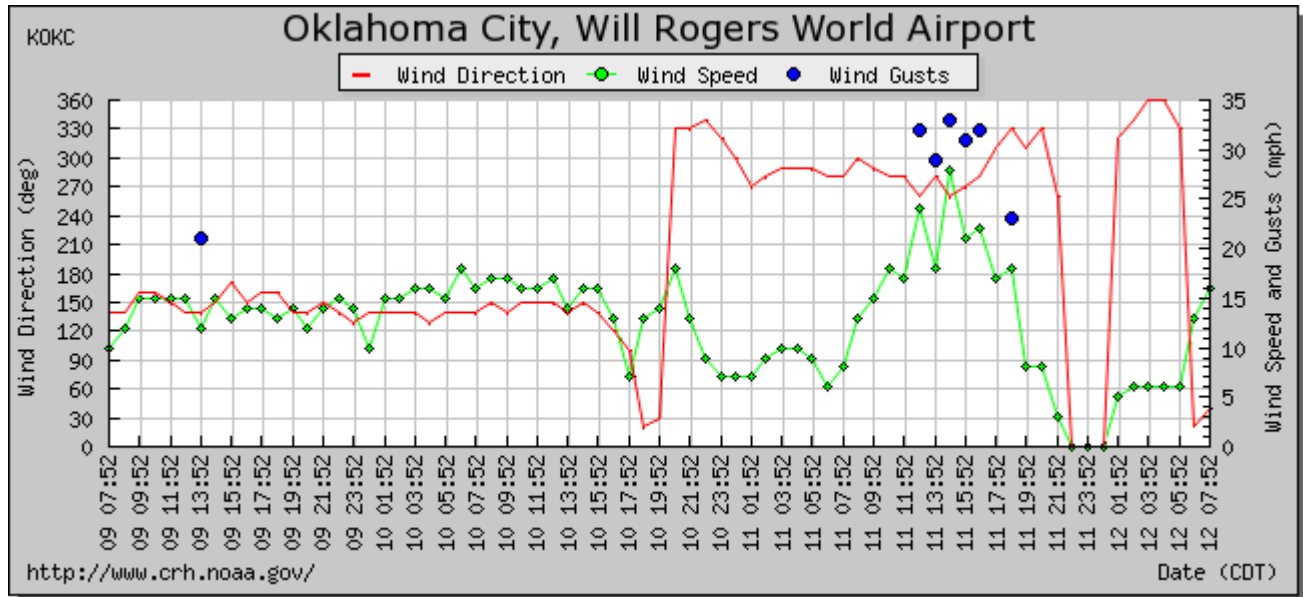


Figure 4B

