

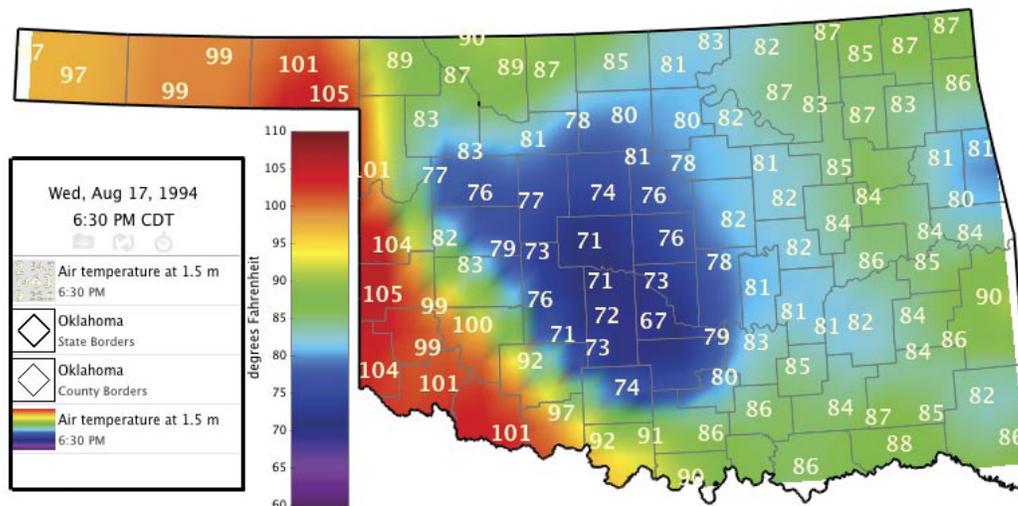
CLASSROOM ACTIVITY

A major, intense severe weather event occurred on August 17, 1994 in western Oklahoma. Severe property damage was reported in the town of Lahoma, Oklahoma, and along U.S. Highway 81 through Kingfisher and Canadian counties. Although not producing major tornadoes, this summer thunderstorm was responsible for 113.4 mph winds reported at the Oklahoma Mesonet site at Lahoma and for baseball-sized hail over a large area of the state. This event produced significant severe weather from Kansas, western Oklahoma, and north Texas in many areas that were forecast to experience a normal summer day.

This activity looks at the case after it has moved into central and southern Oklahoma, after a gust front has formed. Look at the maps of air temperature and winds to determine where you believe the largest storm is located.

1. On Map 1, circle the region of cooler temperatures that indicate the presence of a gust front.
2. Describe the pattern in the wind field on Map 2 that indicates the presence of a thunderstorm.
3. Indicate with Xs on each map, where you believe thunderstorm(s) is/are located. Check your answers with the map on page 25.

Map 1 – Air Temperature (°F) from 17 August 1994



Map 2 – Wind Vectors from 17 August 1994

