

**MOISTURE ADVECTION
STUDENT QUESTIONS SHEET**

Animate the movies showing dewpoint and winds and watch for patterns and changes.

1. What Mesonet variable is color contoured in the first movie? What units are used for this variable?

2. What Mesonet variable is represented by color vectors in the second movie? What units are used for this variable?

3. How many hours are represented in the movie? During what part(s) of the day (e.g., late afternoon)?

4. Describe the general trend of how the dewpoint temperatures change in Oklahoma from the start of the animation to its end.

5. At 12:00 AM, where are the highest dew points located? Approximately what values are these highest dew points?

6. At 4:00 PM, where are the highest dew points located? Approximately what values are these highest dew points?

7. Describe the general trend of how the winds change in Oklahoma from the start of the animation to its end.

8. In the Panhandle, do the dew points increase or decrease during the day? From what general direction are the winds blowing?

9. In eastern Oklahoma, do the dew points increase or decrease during the day? From what general direction are the winds blowing?

10. What physical atmospheric property is measured using dewpoint temperature?

11. In your opinion, what factor(s) influenced how the dew points changed in the Panhandle versus how they changed in eastern Oklahoma?