

Explain the following *apparent* contradictions in meteorology:

1. As moisture is added to air, the air becomes *less* dense.
How can air become less dense when something is *added* to it?

2. The dew point is a temperature. Yet we cannot change the dew point by heating or cooling air.
Why doesn't heating air change the dew point?

3. How does heating air change its relative humidity?

4. Heating air makes it expand. But when we expand the air, it gets cooler.
Why does air become *cooler* when it expands?

5. Why does moist air cool more slowly than dry air, as the air rises and expands?

6. The Coriolis force causes the winds to curve to the right in the Northern Hemisphere.
So, why do the winds curve to the *left* as they blow into a cyclone (low pressure system)?

(Cartoon about Tests)