



3. A night in Madison starts out clear. There are no fronts to speak of and no topographical features in this area that are of importance. What lifting mechanism that we talked about might cause clouds to form?

4. What does DALR stand for, and what is its average value? What does MALR stand for, and what is its average value?

5. Using your knowledge of stability/instability, which of the above environmental conditions (absolutely stable, absolutely unstable, and conditionally unstable) would promote prolonged poor air-quality? Explain your answer. (HINT - picture a polluting smokestack; what could happen to this pollution?).

Go to <http://profhorn.aos.wisc.edu/wxwise/AckermanKnox/chap4/cloudbase.html> and answer the following questions (taken from the above webpage)

6. What happens to the cloud base altitude as the temperature and dewpoint approach one another?

7. Would you expect the cloud base altitude to be higher over the plains of Colorado or the Florida Pan-Handle?