AOS 453 Lab #6
Due: Thursday Mar. 4, 2010

A major component of 453 is learning how to write case studies. This lab is intended to help familiarize you with a mesoscale case study. We want you to have experience reading a case study before we ask you to write a case study. Please read the paper on the Moberly, MO tornado of July 4, 1995. After you have read the case study, answer the following questions. Some of these questions do not have a "right" or "wrong" answer. I am more interested in your ability to support your answers, then in their "correctness"!

1. What were the technologies used in this paper to examine the event?
2. What was the synoptic set-up that lead to this event?
3. The authors mention that the lapse rate between 800 and 500mb, on the Springfield 1200 UTC sounding, was nearly dry adiabatic. Why is this worthy of mentioning?
4. What are the key mesoscale features of this event?
5. How did the environment in central MO evolve from mid-morning to early afternoon to late afternoon?
6. Study Figure 11. What is the point the authors are trying to make with this figure? Does the evidence in Figure 11 support the authors' hypotheses? Why or Why not?
7. Which figures were the most beneficial in your understanding of this paper? Why?
8. Are there any figures that were not shown that you would have included if this had been your case study? Which ones? Why? Also, were there any figures which did not help in your understanding of this case, and should have been omitted?
9. Are there any questions that you have about this event, which were left unanswered by this paper? What are they?
10. Do the authors appear to have a conceptual model for this event? How can you tell?
11. Based on your understanding of this case, as it was presented in this paper, create a conceptual model for the Moberly, MO tornado of July 4, 1995.