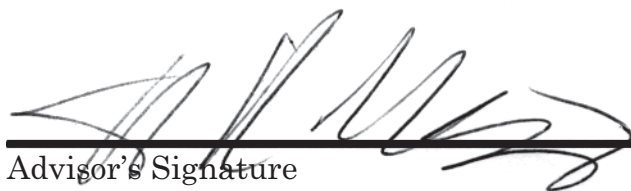


Public Abstract
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Atmospheric Science
The Massive Tornado Outbreak Of May 2003
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Advisor's Signature

09.09.2005

Date

Graduation Term: **Fall 2005 (December 2005)**

In May of 2003, 516 tornadoes touched down in the central portion of the United States, which is a record for the most tornadoes for any single month. There were fourteen deaths associated with those tornadoes. This thesis examines the events that led up to this massive outbreak at all spatial and temporal scales. For a while, meteorologists were aware that the possibility of severe weather existed; they could not have foreseen the massive number of severe weather events that would occur. This thesis examines many possible factors. In particular, a rare phenomena known as “double blocking” is diagnosed. The paper also takes a critical look at the timing of the event. A comparison of this outbreak to the May 2004 outbreak is made as it was fairly similar. An improved analysis of how such a large amount of severe weather could happen in such a short time period will better help the operational community to be prepared if another tornado outbreak of this kind occurs, even if it is not of quite the same scale as this one.