IOWA TORNADO CLIMATOLOGY

Douglas W. Beadle (1) 500 5th Avenue Marion, Iowa 52302

The climatology of tornadoes has been widely studied throughout the United States. However, an aspect which seems to have been largely overlooked is the variation of tornado frequency over much smaller scales.

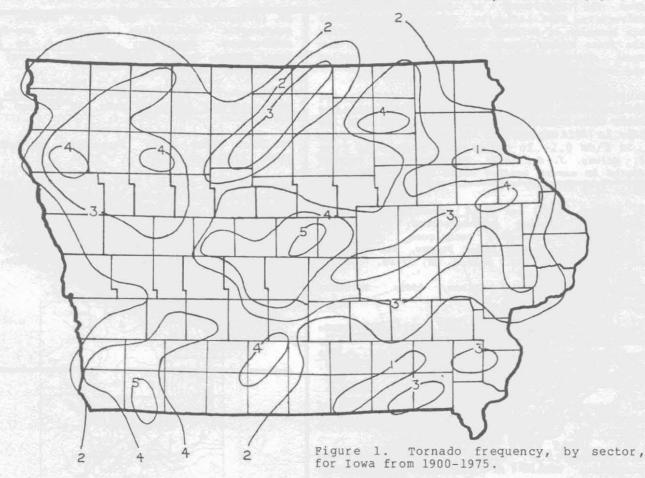
The map shown (Figure 1) is based on tornado reports in Iowa between 1900 and 1975. The data was compiled by dividing the state into approximately 590 sectors (not shown) each having dimensions of 10 minutes latitude and 10 minutes longitude. This gave each section an area of about 400 square miles. A tornado passing through more than one sector was counted in each one. Using this method the total number of tornado touchdowns over the en-

tire 75 year period was recorded in each section.

The data, of course, are biased by the fact that not all tornadoes were reported in earlier years and some storms in recent years may not have actually been tornadoes. No attempt was made to filter these errors from the total number of storms reported.

It is hoped that analysis of tornado frequency on this smaller scale will reveal features not shown by larger scale studies. Compilations such as this for other states are strongly encouraged.

For further information, see Waite (2).



REFERENCES AND FOOTNOTES

1. Doug Beadle has studied meteorology for nearly twenty years and is a member of the American Meteorological Society and National Weather Association. He is also instrumentation editor for the National Weather Digest.

2. Waite, Paul J.: Tornadoes In Iowa, State Climatologist for Iowa, Municipal Airport, Des Moines, Iowa.