

## Geological Significance in Tornado Formation in Site-Specific Repeatability

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Tornado formation seems to be inherited in geological significance, although little attention has been paid to geological interference on meteorological phenomena. This study finds that tornadoes tend to form out of same spots repeatedly rather than randomly over ground surface by making use of statistic data reduction of tornado-generating spots. Therefore, statistic data of tornado formation spots alone indicates that tornado formation may be site-specific phenomena. Eliminating possible effects of topography, a chronological set of tornado touch-down data reported by NOAA is applied to a relatively flat western part of Kansas state as a Midwest region in the United States. This probability and statistic study of touch-down data of tornadoes is analyzed by means of statistic possibility of double or multiple hit occurrences on same ground spots during a continual period of decades in a flat Midwest region as a topographically not significant region, in statistically nullifying random spot occurrence of these locally induced severe weather phenomena.

This probability study concludes that tornado occurrence is not randomly distributed over the ground surface, but rather highly extremely significantly location-specific phenomena and suggests that the cause of tornadoes may be inherited in or induced by subterranean geological origin, in conjunction with certain weather conditions such as thunderstorm passage over such regions, in relation to moisture, temperature, seasons, latitude, and other possible effects.