

Look Out Chicagoland – We Are Overdue!

Jim Allsopp, Warning Coordination Meteorologist from NOAA's National Weather Service Forecast Office, Chicago, Illinois, was the speaker at the March 7, 2007 meeting of the Chicago Chapter of the AMS. Allsopp spoke about various tornado statistics for the Chicago metropolitan area and emphasized that it has been an unusually long time since we have experienced a significant tornado. Some of the statistics support popular beliefs; others were not as expected.

Allsopp culled tornado statistics from NWS records going back to 1950, and from Tom Grazulis' book, *Significant Tornadoes 1680-1991/a Chronology and Analysis of Events*. He used Grazulis' definition of a significant tornado: one rated at F2 or greater, or caused any fatalities, or caused ten or more injuries.

Allsopp started with some tornado frequency statistics by time of day and year, and by area. Highlights included a noticeable peak during the 1950s, 1960s and 1970s, although the reason for this is not clear. There has not been a significant tornado in Chicagoland yet in the current decade. Will County, Illinois, southwest of the city of Chicago, has a local reputation for being a tornado hot spot. But Lake County, Indiana actually has had the highest number of tornadoes per square mile in the eight-county region.

Then some figures to support the attention-grabbing headline that we are overdue for a significant tornado. On average, Chicagoland experiences:

An F5 tornado every 9.5 years. It has been 16 years since the last event.

An F3 tornado every 5.2 years. It has been 15 years since the last event.

An F2 tornado every 1.3 years. It has been 9 years since the last event.

Next was a description of the five most notorious tornadoes. Allsopp acknowledged this list was subjective and was his opinion. Number 5 was May 6, 1876, which moved through downtown Chicago and had a multiple vortex structure as it moved out over Lake Michigan. It refutes the idea that the relatively cold lake water protects downtown Chicago. Number 4 on June 20, 1976 moved from the suburb of Lemont across Argonne Laboratory. There was brief but vivid video footage of this tornado. Number 3 was March 28, 1920, which moved from Channahon through the suburbs of Romeoville, Maywood and Wilmette before moving out over Lake Michigan. The 53-mile long track makes it likely it was actually more than one tornado. Number 2 on the list was August, 28, 1990, with a track through the suburbs of Oswego, Plainfield and Joliet. Topping the list was April 21, 1967. There were about eight tornadoes, although there is conflicting information on the precise number. There is better agreement on the biggest three that affected Chicagoland. They were all part of a larger tornado outbreak that day.

Since the fortieth anniversary of the April 27, 1967 outbreak is coming soon, Allsopp spent some time concentrating on the biggest three of those tornadoes. One ran from Cherry Valley through Belvidere to north of Woodstock. In Belvidere it hit a school just at dismissal time, when many students were already loaded on buses. Another was from near Fox River Grove through Barrington Hills to Lake Zurich. The worst damage was in Lake Zurich. One note in the storm survey mentioned the value of the homes in a badly damaged subdivision were \$14,000 to \$17,000. Quite a change in 40 years! The third of the big three moved from Palos Hills through

Oak Lawn and on towards the lakefront. It hit at the afternoon rush hour and moved across a major intersection in Oak Lawn. Interestingly for 1967, there was a 24-minute lead time on the warning for Oak Lawn. People in their homes were largely able to shelter themselves from harm. The fatalities came from people caught out on the road. This situation of people on the road being more vulnerable still happens today.

Allsopp's parting message for everyone was that it is "just a matter of time". He urged everyone to be prepared and have a plan. Our own personal safety is our responsibility.

Patricia Wontroba
Chicago Chapter