

# Super Tornado Outbreak

## April 3, 1974

### Overview

The Super Tornado Outbreak on April 3-4, 1974 was the worst tornado outbreak in United States history. Within a 16-hour period, 148 tornadoes touched down across 13 states from the Great Lakes to the Southeast. When the storms finally dissipated, 330 people were killed, over 6,000 were injured, and thousands more were left homeless. The damage path created by this tragic event covered 2,500 miles across the Midwest with damage costs totaling around 600 million dollars.

### Across Indiana

Twenty-one tornadoes affected 46 counties causing one of Indiana's worst tornado outbreaks. Many of these tornadoes traveled at nearly a mile a minute, and several were visually observed to have multiple funnels.

The tornado devastation started in Boone county when a brief F2 tornado touched down around 9:30 am EST on April 3, 1974. The main event, however, commenced in Indiana later that day at 2:20 pm EST and lasted until 8:00 pm EST as 20 additional tornadoes ripped through the state.

Among the most destructive Indiana tornadoes was the Monticello tornado. This half mile wide F4 tornado tracked from just southwest of Monticello to north of Fort Wayne killing 19 people. It had a path length of 109 miles which was the longest path of any tornado during this outbreak. (Originally this tornado was thought to have a 121 mile path length, but later analysis determined it was actually 2 tornadoes). Near DePauw (extreme southern Indiana), an F5 tornado killed 6 and injured 76. Two other tornadoes formed near Madison, Indiana, both reaching F4 intensity resulting in 11 deaths and 300 injuries before ending near Cincinnati. The rest of the tornadoes during this super outbreak occurred in the Eastern half of the state with F4s at Parker and Kennard. In all, 47 people were killed, 900 were injured, and over 6,000 families suffered property loss across Indiana.

### Indiana Tornadoes



F4 tornado near Hanover, IN. Tornado #41 on the Fujita map.  
Courtesy of Rosie Graves



Two pictures (shown left and below) of the F4 tornado near Parker City, IN. Tornado #33 on the Fujita map.  
Courtesy of Mick Deck



Tornado damage at the Monticello court house (left) and throughout the town of Monticello, IN (right).

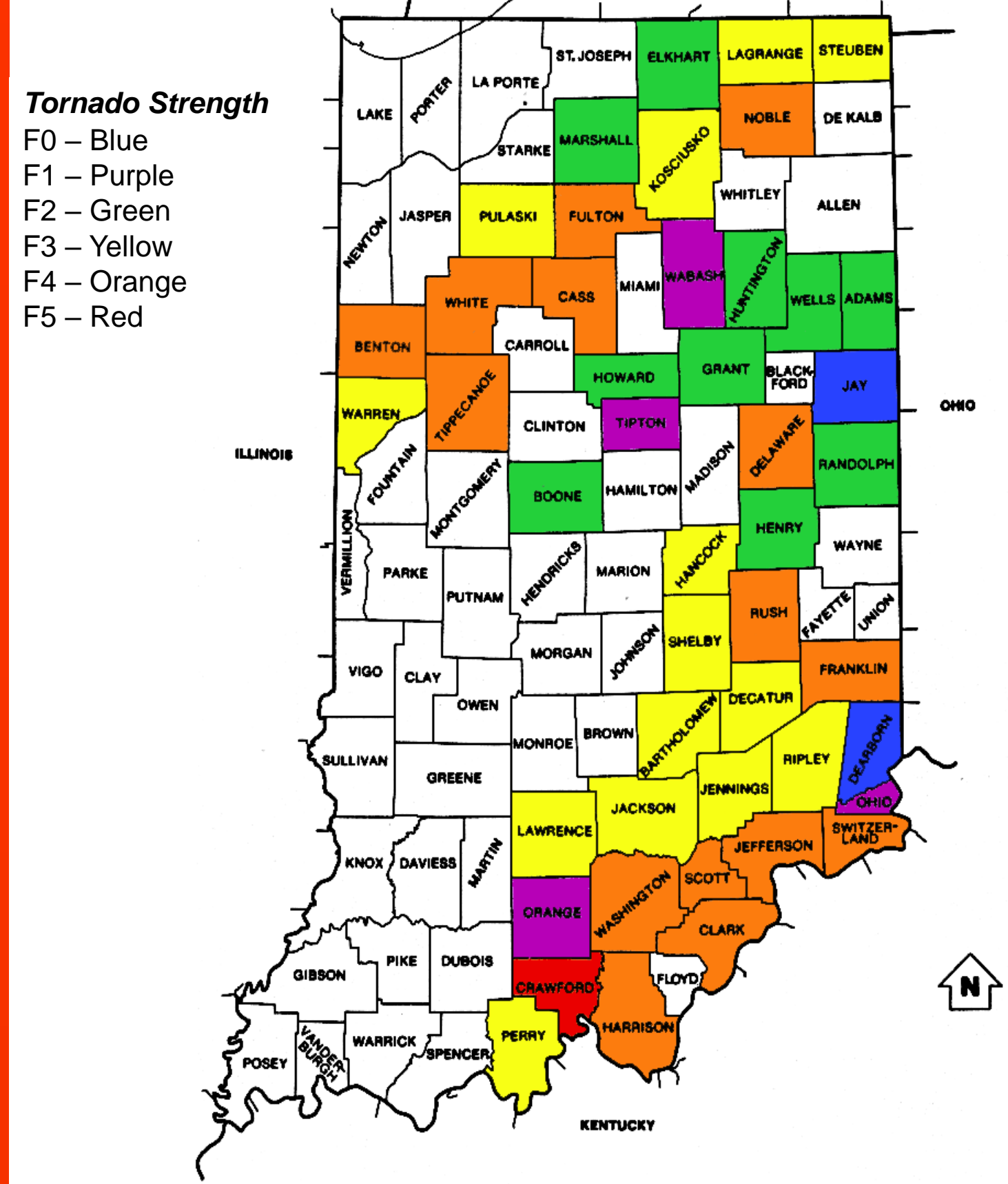
Courtesy of the Monticello Herald Journal

### Summary

The Super Tornado Outbreak of April 3-4, 1974 will always be remembered by those who witnessed and survived the event. The magnitude of this tornado event has not been replicated across the Ohio Valley in over 30 years. Many deaths caused by this outbreak occurred due to a combination of the sheer number of intense tornadoes and a somewhat poor warning broadcast system. Today with new advances in Doppler radar technology, extensive forecaster training, proactive warning operations, and enhanced communications systems, National Weather Service forecasters effectively observe and assess severe storms and provide advanced warning for those in harm's way.

### IN Counties Affected by Tornadoes

(Storm Prediction Center, Significant Tornadoes by T.P. Grazulis & Superoutbreak 1974 map by T.T. Fujita)



Strongest tornado damage reported in each county across Indiana.

**Category F0:** Gale tornado (42-72 mph); some damage to chimneys and branches broken off trees.

**Category F1:** Moderate tornado (73-112 mph); peels surface off roofs, mobile homes pushed off foundations or overturned.

**Category F2:** Significant tornado (113-157 mph); roofs torn off frame houses, mobile homes demolished, large trees snapped or uprooted, light object missiles generated.

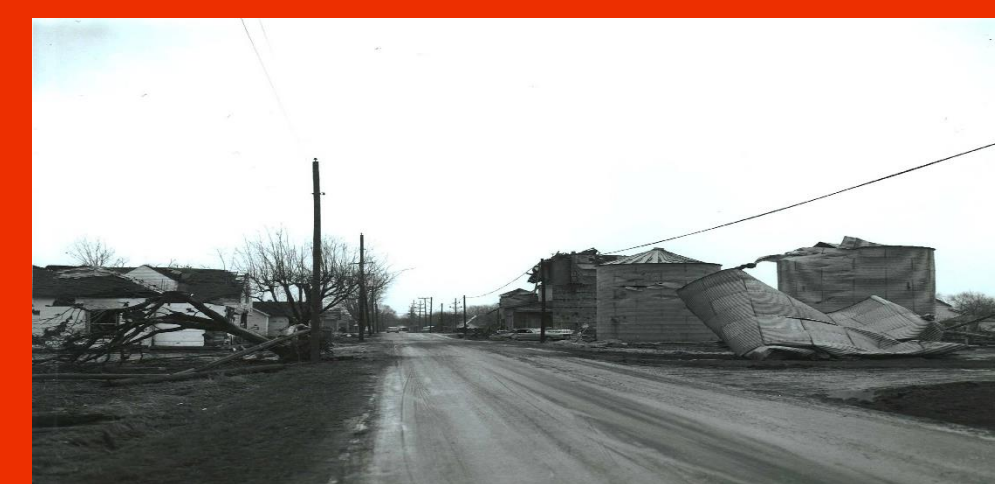
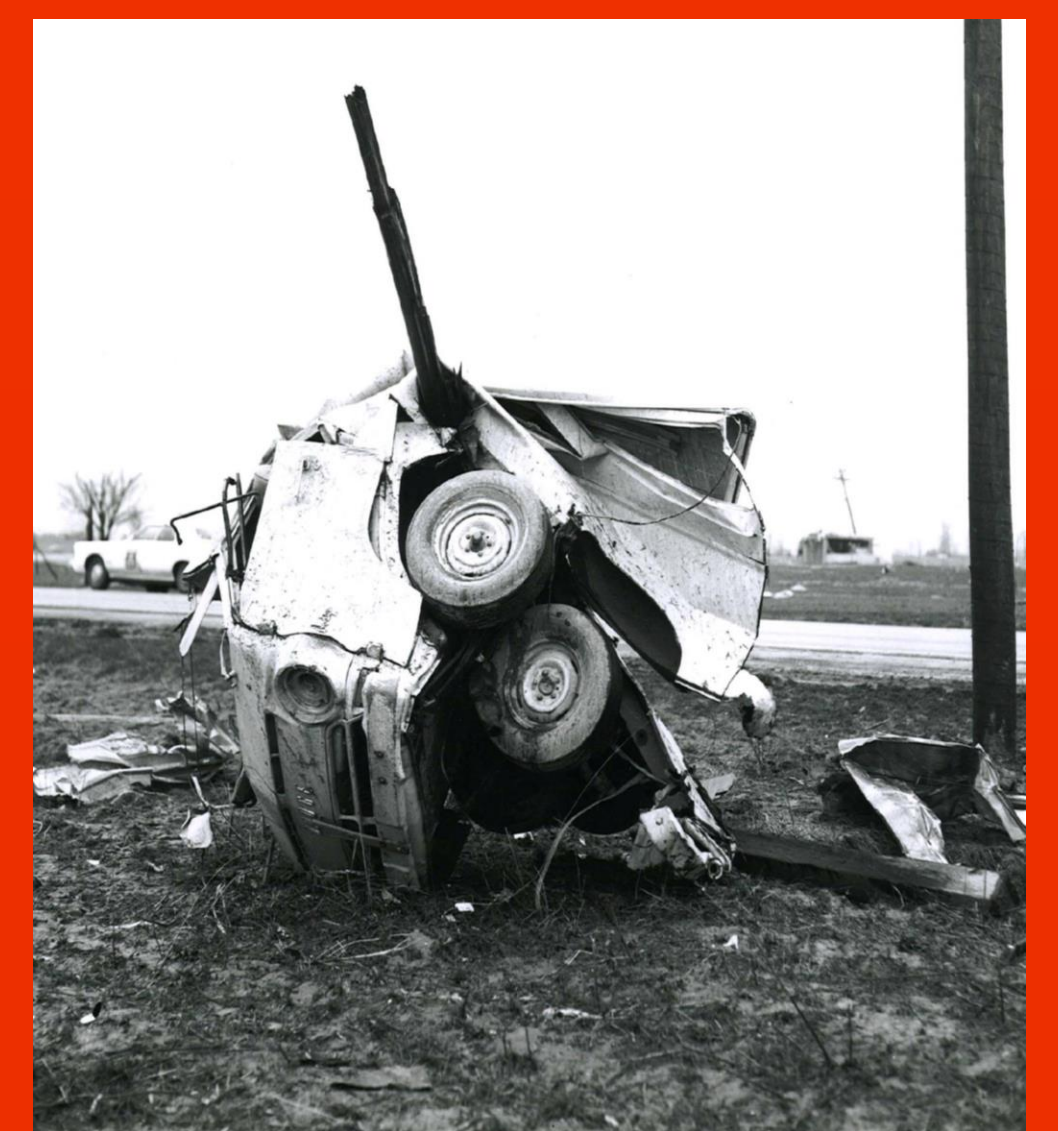
**Category F3:** Severe tornado (158-206 mph); roofs and some walls torn off well-constructed houses, most trees in forest uprooted, trains overturned.

**Category F4:** Devastating tornado (207-260 mph); well-constructed houses leveled, structures with weak foundations blown off some distance, cars thrown, large missiles generated.

**Category F5:** Incredible tornado (261-318 mph); strong frame houses lifted off foundations and carried considerable distance to disintegrate, car-sized missiles fly through air, trees debarked.

### Tornado Damage in Indiana

Courtesy of the Indiana State Police and Mike Shartran.



**"In the heavens, a storm of overwhelming magnitude was forming..."**

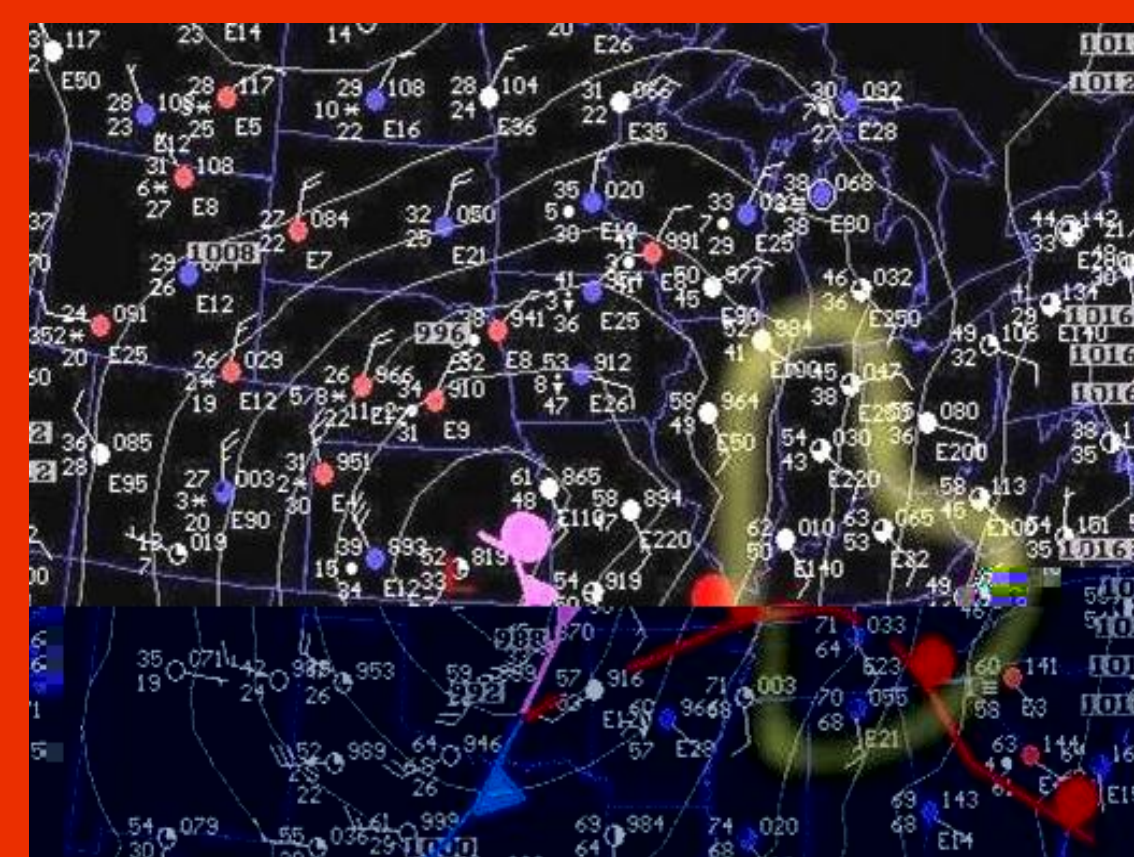
-Scott Koerner, tornado enthusiast, www.april31974.com

**"It was just spitting rain, and the sky was black... Suddenly I saw this one cloud just sweep down out of the sky and hug the ground."**

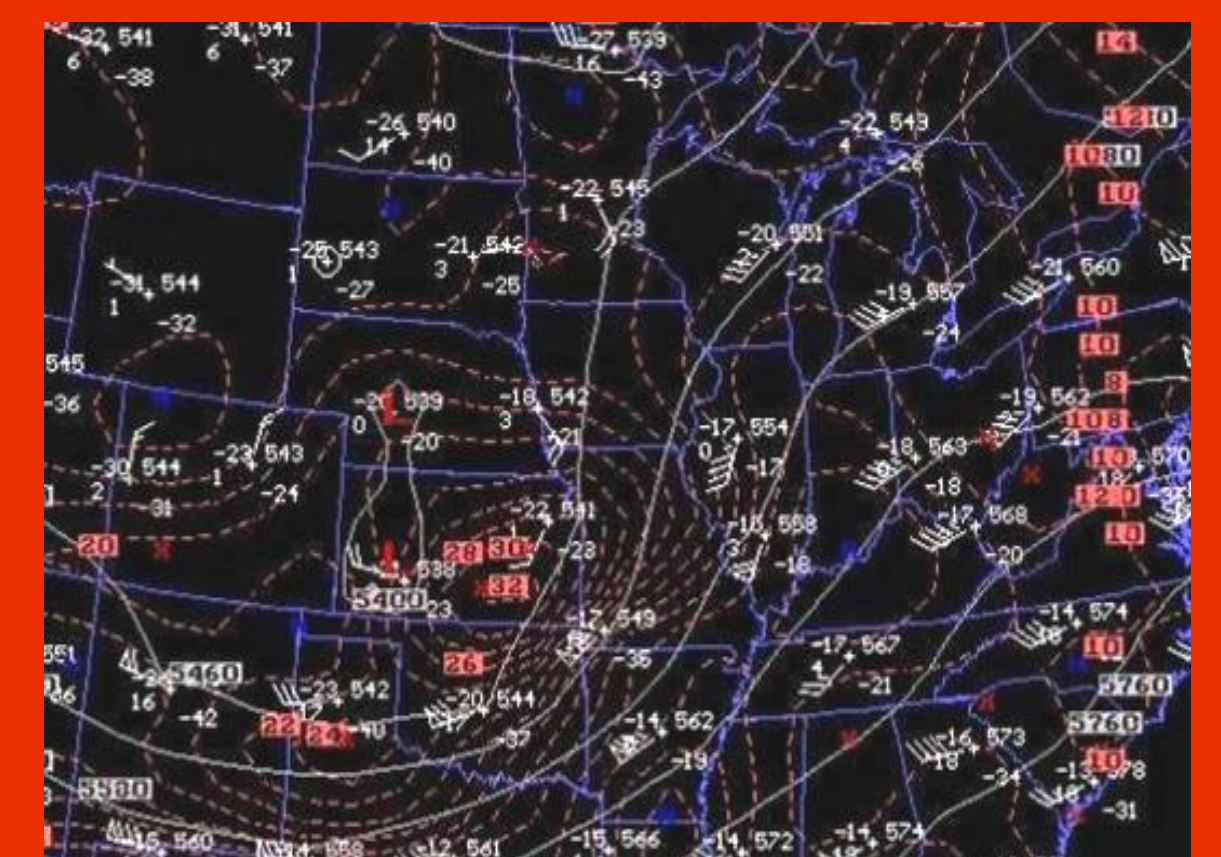
-John Sherer, eyewitness, The Muncie Star, April 4, 1974



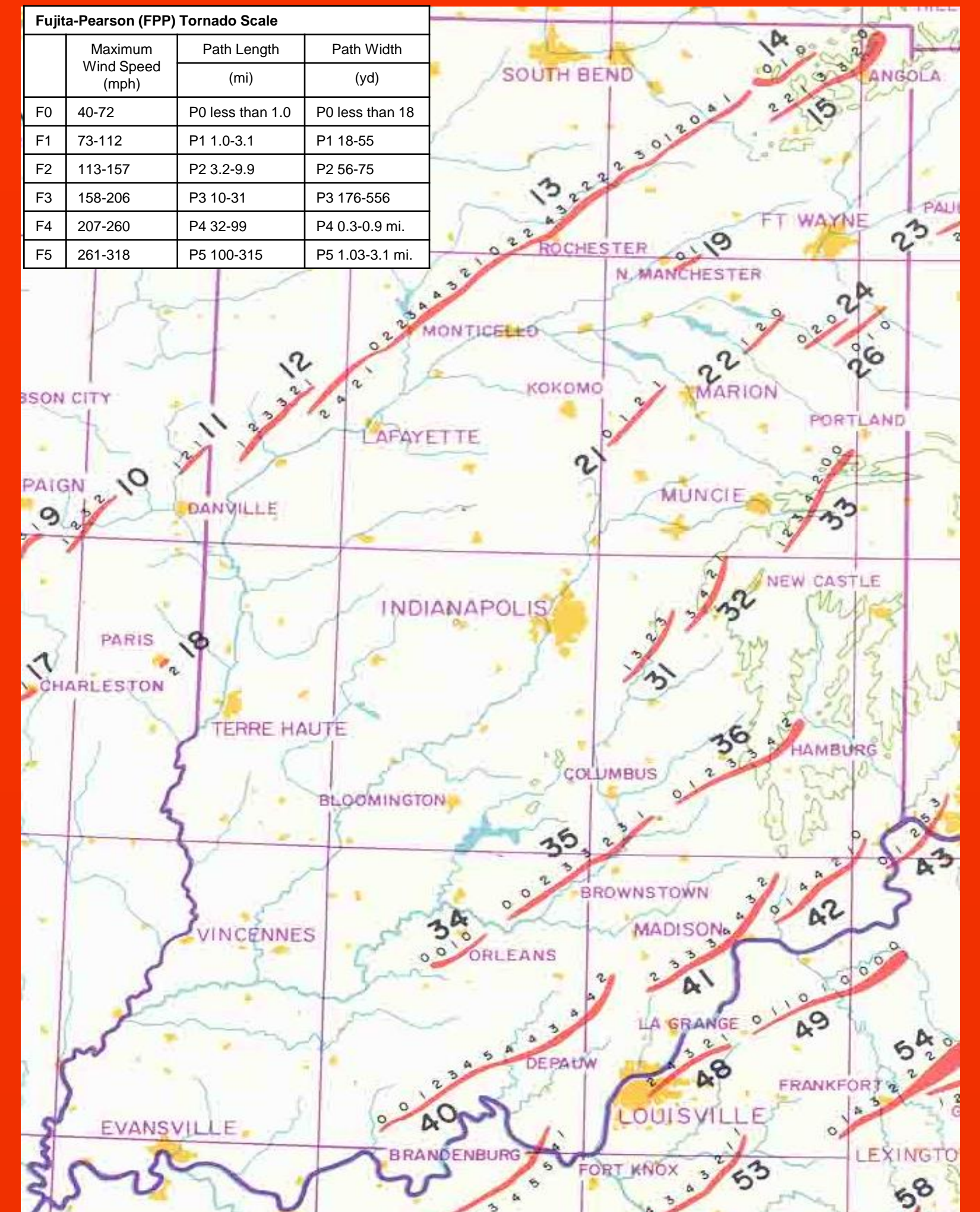
Cloud cover over the U.S. on April 3, 1974 taken by an Applications Technology Satellite 3.



Surface chart at 7 am April 3, 1974. Area in yellow is where the majority of tornadoes occurred.



500 mb (18,000 ft) chart at 7 am April 3, 1974. A strong storm system was approaching Kentucky.



Tornado paths over Indiana and northern Kentucky on April 3, 1974 by T.T. Fujita.