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Violent Tornado Climatography, 1880-1982

Prepared by T. P. Grazulis

rivironmental Films Incorporated

Pacific Northwest Laboratory Operated by Battelle Memorial Institute

Prepared for U.S. Nuclear Regulatory Commission

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ABSTRACT

All known information sources, ranging from newspaper reports to the University of Chicago (DAPPL) and National Oceanic and Atmospheric Administration (NOAA/NSSFC) data lists, were utilized to produce a self-consistent compilation and description of violent tornado occurrences in the contiguous United States for the years 1880 through 1982. The 969 F-scale 4 and 5 tornadoes comprise the most complete and rational data base available for studies related to violent tornado risk assessment; the data provide improved bases for licensing decisions and development of standards in safety at nuclear facility sites. Reconciliation of the DAPPL and NSSFC data lists for violent tornadoes has been achieved. Analysis of the data shows geographical and temporal variability of tornado occurrences; suggestions are given to help account for nonuniform distributions, and other suggestions are made for needed future research.

ACKNOWLEDGEMENTS

The author wishes to thank Joe Schaefer and Don Kelly of the NOAA National Severe Storms Forecast Center in Kansas City, Missouri, for their invaluable assistance. The hours of fruitful discussions concerning the many problems inherent in the F-scale rating process, and concerning the details of the NSSFC tornado intensity rating effort, contributed significantly to the success of this project.

The assistance of Ted Fujita and Jamie Tecson at the University of Chicago is acknowledged. Their expenditure of effort, in discussions of DAPPL tornado intensity rating methods and in discussions of evolving F-scale guidelines, provided much-needed insight into the NSSFC-DAPPL data comparison. They also generously provided use of their research library.

Contributions by Jim McDonald of Texas Tech University at Lubbock are noted. His engineering-oriented perspectives have shed much light on the difficult task of separating F4/5 tornadoes from those of lesser intensity. His computer-assisted event-by-event comparison of the NSSFC and DAPPL data sets was among the essential elements in the proper completion of the project.

Grateful appreciation is expressed to Ron Hadlock at Pacific Northwest Laboratory in Richland, Washington, for his professional guidance in maintaining the proper balance of priorities throughout this multi-task effort and for synthesizing this topical report from the completed task reports.

Robert Abbey of the U.S. Nuclear Regulatory Commission is also recognized for his contribution. His dedication to the field of tornado climatology, through this project and others which preceded it, has truly revolutionized this field of study.

The patient assistance of Doris Grazulis, in the organization of tens of thousands of bits of narrative information, is gratefully acknowledged. SUMMARY

The Nuclear Regulatory Commission program in severe weather phenomena: (1) estimates potential effects of severe weather and their distribution in time and space; (2) verifies engineering methods to mitigate the effects; and (3) determines margins of safety. The program provides improved bases for licensing decisions and develops standards in nuclear facility site safety. Violent tornadoes are addressed in Regulatory Guide 1.76 - DESIGN BASIS TORNADO FOR NUCLEAR POWER PLANTS; the NRC position is conservative, based on limited data.

For data of the past several decades, limited and discrepant listings for Fujita-scale 4 and 5 (violent) tornadoes have existed, produced by the National Oceanic and Atmospheric Administration and by the University of Chicago. Reconciliation of these data lists has now been achieved and accepted, and data have been compiled back to 1880. Much of the search for violent tornadoes has taken place in library newspaper archives in 31 tornado-prone states. Data recovery and interpretation has been a process of recognizing and judiciously dealing with vagaries in damage descriptions that form the information base. Close to 1000 events, for tornadoes with wind speeds estimated to exceed 206 miles per hour, have been briefly described and mapped. Violent tornadoes have been separated from tornadoes of less intensity and from other severe events such as downbursts. Geographical and temporal distributions were analyzed. The work has resulted in a complete and rational data base for utilization in further studies and applications to risk assessment.

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INTRODUCTION

The Nuclear Regulatory Commission, Office of Nuclear Regulatory Research, program in severe weather phenomena has three purposes: to (1) estimate reliably the potential effects of severe weather as well as their distribution in space and time; (2) verify engineering methods to mitigate the effects of severe weather phenomena; and (3) determine margins of safety. The overall objective of the program is to provide improved bases for licensing decisions and to develop standards in site safety regarding nuclear facilities.

The objective of the tornado-related research is, also, to provide improved bases for licensing decisions and development and confirmation of regulations, standards, and guides. Regulatory Guide 1.76 - DESIGN BASIS TORNADO FOR NUCLEAR POWER PLANTS (USNRC 1974) describes the current NRC position. This position is conservative, based on limited data. Compilation of historical occurrence and damage reports and application of findings to existing data sets provide requisite information leading to improved and more realistic decisions and guidance. The work dealing with historical data has been integrated with the efforts of other contractors working in the program (McDonald 1983).

The subcontractor, Environmental Films, Incorporated (EFI), with Pacific Northwest Laboratory (PNL) guidance, has completed three tasks:

- Identify, compile, map and assess all known reports of violent (F4/5) tornadoes which have occurred within the contiguous United States since 1880. Document and deliver this work in a format suitable for use in site-specific studies, including a compendium of description.
- 2. Draw conclusions concerning differences between the National Severe Storms Forecast Center (NSSFC) and the University of Chicago (CAPPL) data sets and determine how to achieve reconciliation of the two sets. Achieve this reconciliation for all violent tornadoes since 1950 in consultation with NSSFC and the University of Chicago. Critically assess the DAPPL listing for 1916 through 1949. Deliver the final data for use by NSSFC, University of Chicago, PNL, and NRC.
- 3. Accomplish (1) and (2) through a process of investigation and analysis of historical data including that derivable from widely--scattered local library newspaper files in addition to compiled sources of information. Establish operational criteria for interpretation and assessment of the tornado event reports, including the separation of tornado events and downburst events.

After EFI successfully completed the described tasks, PNL organized and synthesized the EFI task reports into this topical report. Within this process, a paper on findings was presented at the 13th American Meteorological Society Conference on Severe Local Storms (Grazulis and Abbey 1983).

An important research and assessment interaction has occurred among researchers from several organizations through this work. Other program contractors to the NRC include NSSFC, the University of Chicago, Texas Tech University, and PNL. The synergism has produced some new insights and some uncertainties have been resolved; a prime result is the incorporation of the EFI work into the NSSFC and DAPPL data bases for F4/5 intensity tornadoes. The three data bases are now consistent for violent tornadoes and it is expected that consistency can be maintained in the future because of concurrence obtained on methodology. The work to date is of direct applicability by the NRC in improving regulatory positions, is of direct interest to colleagues having tornado research objectives, and is of direct and indirect interest to the public. The work has produced specific benefits as listed below:

- NRC A larger degree of realism and applicability has been obtained in tornado occurrence data. Statistical risk assessment for licensing purposes and regulatory positions may therefore be better developed and better defended.
- Colleagues The obtained data base provides information usable in basic research, especially relating to meteorological and topographical influences which affect tornado genesis, dynamics, and life history.
- Public Improved data bases for tornado and downburst description and occurrence positively influence:
 - Flight safety related to severe weather
 - Structural damage and insurance costs
 - Perception of severe storm watches and warnings and feelings about the value of such
 - Awareness that the NRC is functionally concerned with the safety and well-being of the populace.

HISTORICAL BACKGROUND

Efforts to compile tornado occurrence data have a history of about one hundred years. Only since about 1970 have data sets been produced that are not severely limited in scope and accuracy. The various limited results have indicated the need for further work but also have formed an important part of the basis for discovery of previously unlisted tornadoes. Searches in appropriate library newspaper archives have been narticularly rewarding, interesting, and at times frustrating. All known occurrence listings and descriptions, and all reasonably accessible newspaper sources have been used to produce the complete violent (F4/5) tornado data listed, for the contiguous United States from 1880 through 1982, in the appendices. This project has naturally resulted in much new knowledge concerning tornadoes of lesser intensity and of downburst events; however, compilation and discussion of such is not within the defined project scope.

NSSFC AND DAPPL DATA SETS

The rather primitive state of tornado data compilation was illustrated by Court (1970) with presentation of 109 tornado distribution maps, using a wide assortment of criteria, grid sizes, methods of analysis, and time periods. During the early 1970s, the National Oceanic and Atmospheric Administration (NOAA) National Severe Storms Forecast Center (NSSFC) in Kansas City, Missouri, and the University of Chicago began independent computerizations of thousands of past tornadic events, each ranked for intensity by the Fujita scale or F-scale (Fujita 1971).

The NSSFC chose to use a longitude/latitude, state/county format for the years 1950 to the present. To determine F-scale ratings, and to refine the 'official" data, NSSFC undertook, with fifty student assistants, an extinsive search of local newspaper descriptions and photographs, using the resources of state historical libraries. This effort complemented the use of frequently minimal and sometimes deceptive official narratives in the NOAA publications <u>Climatological</u> Data (1950-1958) and Storm Data (1959-present).

The University of Chicago organized its DAPPL (Damage Area Per Path Length) data base in a highly flexible one-quarter-degree sub-box format (Abbey and Fujita 1979) without county notations, and chose to use, almost exclusively, the official narratives that were available.. The cffort was applied to data starting from 1916, the year in which the United States Weather Bureau began publishing an annual summary of tornadoes.

Both of these pioneering efforts contained weaknesses in the rating of tornadoes at F4/5 intensity. DAPPL events frequently lacked sufficient narrative descriptions and no means were provided to clarify remarks such as "totally destroyed" in reference to building damage. Some of the fifty students hired by NSSFC were neither

meteorology nor engineering students, and in the early years of its use, the problems that a novice might have with F-scale classification had not been identified. Eventual loss of confidence in many student reports led to numerous rating changes at NSSFC. Considerable conflict resulted between NSSFC and DAPPL ratings for the same tornado events.

INITIAL INDICATIONS OF THE NEED FOR NSSFC/DAPPL RECONCILIATION

Recognizing the subjectivity of rating tornadoes by the F-scale, the NRC chose to require that all F4/5 (violent) intensity ratings be identical on the two revised data sets, and to require the F0/1 (weak) and F2/3 (strong) tornadoes to differ by only one rating point, if not identical. Some early indications that the lists of F4/5 tornadoes were not identical were:

- A. Distributions using F4/5 NSSFC data, DAPPL data for F4/5 events, and total F4/5 path lengths each exhibited occurrence maxima and minima in different parts of the United States.
- B. For Illinois, as an example, an approximate 50 percent difference in NSSFC/DAPPL events rated at F4/5 existed in 1950-1981 data, a percentage that was eventually found to be representative for many states.
- C. A significant percentage of the student ratings for Iowa, for example, were carefully changed by NSSFC and then a large percentage of those ratings were apparently later altered.

A full event-by-event comparison of all NSSFC/DAPPL F4/5 tornadoes was completed, aided by a computer-generated comparison produced at Texas Tech University. After the scope and nature of the differences were revealed, the effort to eliminate the unacceptable differences proceeded. In August 1983, at the University of Chicago, the two data sets were presented and discussed at a satisfactory level of agreement. Contractors represented at this meeting with NRC were the University of Chicago, Texas Tech Univer ity, National Severe Storms Forecast Center, and Pacific Northwest Labor. 'ory.

1880 AS A PRACTICAL LIMIT

DAPPL data distributions at F4/5 for the years 1916 through 1949 and NSSFC/DAPPL F4/5 distributions for the years 1950 through 1980 placed occurrence maxima in different geographical locations. The level of tornado activity in the eastern United States on several dates since 1950, especially 3 April 1974, places maxima in that region. No such maxima existed in the eastern United States for 1916 through 1949. This discrepancy pointed out the need to have available the most complete historical perspective possible from which long-term probability estimates could be made.

Newspapers represent the primary source of detailed tornado damage information, aside from engineering damage site surveys. The historical libraries of the tornado-prone states contain over 500,000 different reels of newspaper microfilm, plus thousands of bound volumes in the process of being microfilmed. The archives of Illinois and Pennsylvania are the largest, with 50,000 to 60,000 reels each. The state libraries of Kansas, Iowa, Missouri, Wisconsin, Indiana, and Ohio have 20,000 to 40,000 reels each. The Pennsylvania to Kansas belt is therefore very well documented. Examinations of the library holdings show good documentation for most sections of these states since about 1875.

Research efforts are strongly influenced by the date and location clues necessary to begin a newspaper search. Lack of such clues requires long and tedious searches of all potential occurrence dates. The earliest listings of numerous dates and locations for tornadoes are those of Army Signal Corps Lt. John Park Finley. His "600 Tornadoes" publication (Finley 1884) is of little assistance, because many of the events preceded his assigned active duty efforts. Further, many of the events have been found to be fictitious: for example, floods which distant large-city newspapers referred to as "waterspouts". His later compilations, especially Finley (1889), mark the true beginning of modern tornado documentation. 1880 was Finley's third year with the Signal Corps, his second year of travel for site surveys, and the first year for which he listed over 100 events.

Finley was criticized in his own time for overdocumentation (Hinrichs 1888); much of this took place in the later part of his Signal Corps career, from 1885 to 1888. During this time, he stayed in Washington, D.C. and was dependent on the clippings and reports sent to him by some 1,400 correspondents.

About 65 percent of his listings are confirmable as tornadoes, and about 25 percent are clearly downburst-type events. Because the qualifications of his correspondents are unknown, and because of his close association with the insurance industry (Finley 1887), there exist some questions concerning his work. However, his efforts were without precedent and they mark the practical limit of tornado documentation for most of the United States.

Data for the states of Texas and Oklahoma are especially not complete for the period since 1880. Before the tornado outbreaks of April 1893 and the formation of an Oklahoma Press Association in 1894, there were few tornadoes noted in that area. A few events were large enough for reports to become officially documented, such as that at the McAllister mining community on 8 May 1882 with 21 or more deaths. Frail house construction by the early participants in the post-1888 Oklahoma land-runs provides additional difficulty in judging data validity. Records of significant activity in the Texas Panhandle are very sparse until the outbreaks of May 1949, so this study will be deficient in long-term analysis of that apparently active region. In the southeastern states, newspaper documentation for the Civil War years is outstanding. Preservation of newspaper records for the period 1865 through 1885 is much less complete, however. A major limiting factor in that area is the same as for the Kansas to Pennsylvania belt; the date and location clues needed to begin the search are obscure.

OTHER DOCUMENTATION EFFORTS

A few prior tornado documentations have been of assistance in F4/5 confirmation. The majority of prior documentations, listings, and compilations are simply summaries of the dates and locations listed in the official publications. The most frequently referenced of these include Burley and White (1965) for Wisconsin, Carter (1970) for Georgia, and Vaiksnoras (1972) for Tennessee. While these are useful as convenient date/location checks, some other documents did include detailed narratives and photographs for major F4/5 events. Two of these are Wilson and Changnon (1971) for Illinois and Stanford (1977) for Iowa.

Three published lists were of particular value in locating the needed date/location clues. Cole (1927) for Arkansas, Giles (1927) for Virginia, and Stevens (1925) for Alabama diverted significantly from official listings, deleting downburst-type events and adding events from their own records. While providing no narratives, these sources aided in expanding records for those states.

PREVIOUSLY UNLISTED TORNADOES

Throughout thirteen years of EFI research in newspaper archives, hundreds of descriptions of clearly tornadic events have been found that were not listed in official compilations or summaries. Only one of these events since 1916, however, is confirmable at F4 intensity: the March 24, 1916 tornado at Davis, Oklahoma. The confirmation of only one F4/5 event is significant because it reaffirmed the belief that the great majority of major tornadoes are part of the official records. A discussion of the Davis event, to illustrate convolutions in the information-gathering process, is given later in this section.

The search for previously unlisted tornadoes is tedious and time-consuming. A large number of events were evidently missing from official listings in the 1880-1953 period; the average annual number of recorded events has more than tripled since that time period. The overwhelming majority of missing events are FO/1, and short-path F2 tornadoes. The majority of longer-path F2 and most F3 to F5 events are documented in newspapers.

Several means have been employed for locating previously unlisted tornadoes. Hundreds have been found in the search for details of listed events. Tornado damage descriptions in over 10,000 different reels of microfilm have been reviewed. For the period 1898-1913, during which official efforts were at their poorest, a search of each spring and early summer edition of major regional newspapers was undertaken. These newspapers included the St. Louis POST DISPATCH, the Topeka JOURNAL, the Des Moines REGISTER, and many others. Reports of entire outbreaks were found that had no official mention. Another means employed was to select specific days that seemed to be "most likely" for tornado activity. This was done through the reconstruction of surface weather maps for the spring months in years with poor official documentation. This reconstruction process for 19th-century surface maps was effectively initiated by Showalter (1943) in his classic first paper on tornado forecasting.

For the period 1916 through 1949, only one F4 tornado, the 1916 Davis, Oklahoma event, was found to be officially unlisted and yet confirmable at that level. The initial clue that such an event had existed was in the New York TIMES Index, and in the newspaper itself. The small entry in the TIMES is shown in Figure 1.

EIGHT KILLED BY TORNADO.

Home of Oklahoma Farmer is Demolished by Storm.

DAVIS. Okla., March 25.-Eight members of the family of Alexander Edgemond, a farmer living two miles east of here, were killed last night when a tornado demolished their home. The dead are Mrs. Edgemond, her mother, a son and his wife, and four younger children. Edgemond was the only one to reach the open before the house collapsed. The targ of Davis was not struck, al

NURE 1 The New York TIMES potation of the Da

FIGURE 1. The New York TIMES notation of the Davis, Oklahoma event of 24 March 1916. From the TIMES of 26 March, page 8.

The listing was initially viewed with skepticism, increasingly so since no mention of the event was made in the Oklahoma City DAILY OKLAHOMAN. The lack of mention in that newspaper was likely the cause of no official listing. The local Davis NEWS devoted several pages to details of the major event, and provided additional location clues (see Figure 2). The only official event on this date was an F2 event at Anna, Texas, which was the only Texas event noted in the Dallas NEWS. The Dallas newspaper did describe the Davis event, however. The "Davis outbreak" occurred on a Friday evening which, along with

DAVIS NEWS

DAVIS, OKLAHOMA, THURSDAY, MARCH 30, 1916

SI.00 A YEAR

CYCLONE NEAR DAVIS KILLS NINE PEOPLE AND DES-TROYS MUCH PROP-ERTY.

18 houses demolished, and trees, barns and fences destroyed were the results of a disastrous cyclone. Chigley and was known by near-burial. The funeral was held at

are as follows:

mother, 89 years.

Alonzo Edgmon, 18 years.

ers more or less injured, about ground into the flesh until they day morning and placed in and provided food and raiment

which swept the section of coun- ly everybody as "Grandpa," had the undertaker's Sunday aftertry about three miles east of Da- an arm and a leg broken and suf-vis between 8:30 and 9:00 o'clock fered internal injuries from crowd of sympathizing friends. News was received here today test Friday night. The storm which he died Sunday. The re-traveled nearly due north and wains were buried at Wynne-never been seen in Davis before the Cinahoma line, Friday night

Mrs. Alex Edgmon, 50 years. side of the mountains was at J. well liked by neighbors and Mrs. Hannah Thomas, her R. Etherthn's, whose house was friends and their demise has wlown about 30 feet off its blocks. cast a dark cloud over the lives Ada. Okla., March 25.-As The house of Will Chambers of their many friends. A singu- more definite information comes

blown from, its foundation. A storm caves by those in the denumber of other houses were vastated district is the only moved from their blocks and more thing that kept the death list or less damaged. Trees were from being much larger. twisted off or uprooted, fences The storm left many persons blown down, and the path of the destitute, everything they had storm is plainly marked by havoc being swept away except the and ruin.

the neighborhood of Iona, but we were saved. The people of Dahave none of the details.

Hutchins Bros. undertaking es- for the relief of the sufferers. burial. The funeral was held at CYCLONE IN GRAYSON COUNTY. Lest Friday night. The storm were buried at Wynne-traveled nearly due north and Paine were buried at Wynne-was about a quarter of a mile word Monday. Mrs. Franklin wide and probably 8 or 10 miles had an eye put out and was oth-long. The house of Alex Edgmon was demoliahed and eight members of his frmily killed-his wife and daughter-in-law and two grand-children. There names and ages damaged by the storm: The first dip of the wind this prominent in their community. of life reported.

clothes they had on. In some Lots of damage is reported in instances only their night clothes vis, Sulphur, Wynnewood and Nine persons killed, many oth- debris until the dire had been ily were brought to Davis Satur-their rescue and raised funds

Gainesville, Tex., March 27.-

MANY HOMES WRECKED.

FIGURE 2. A portion of one of the pages detailing the Davis tornado of 24 March 1916, in the Davis, Oklahoma NEWS. The "Gainesville, Texas" and "Ada, Oklahoma" datelines in the right column provide clues to additional missing events.

Saturday, is when most of the now-located "missing" events have occurred. This concurs with the findings of Wilson and Kelly (1977) who noted that a significant Saturday minimum occurs in officially reported tornadoes (1950 through 1976). Early printing deadlines excluded late tornado reports in the Sunday editions of state capitol or state climatologist's newspapers.

It is useful to summarize the various data sources employed in the search for "missing" tornadoes, 1880 through 1982, and in the process of establishing, confirming, and reconciling F4/5 intensity ratings. A chart comprising this information is given as Figure 3.

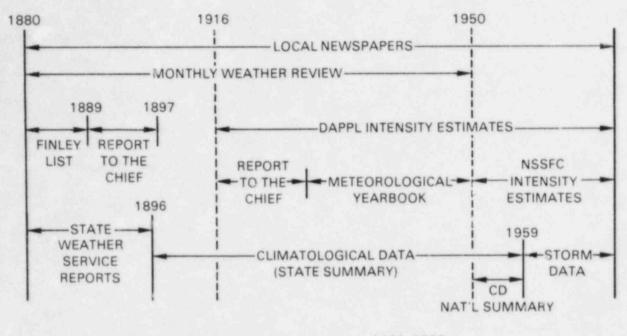


FIGURE 3. Data sources, 1880-1982.

DETERMINATION OF VIOLENT TORNADOES

Violent (F4/5) tornadoes are separated from all tornadoes of lesser intensity through application of rating standards. These standards include those deriving, without modification, from previous efforts. Some measure of subjectivity is necessary with respect to interpretation of newspaper descriptions. Interpretation is required since the terminology used can be inaccurate and misleading; additionally, damage to structures will depend heavily on structure strength--likely on the structure's location in the United States and whether the tornado occurred, say, in 1880 or 1980, considering evolution of construction practice. These are a few of the factors involved in making best judgments of intensity ratings. An event-by-event consistency of judgment was achieved and much derivation of judgment was obtained through interaction with Professor Fujita at the University of Chicago and Professor McDonald at Texas Tech University.

THE LIST OF "SIGNIFICANT" TORNADOES

An initial assumption, that all F4/5 tornado events from 1950 to 1982 would be contained in either the DAPPL or NSSFC data bases for those years, did not prove to be correct. After realization that data changes has been made by NSSFC, the original student rating sheets were added as a source of possible F4/5 events. The assumption that all F4/5 events would be contained in either the DAPPL data base, the NSSFC data base, or on the NSSFC original student rating sheets proved to be much more nearly correct.

Study of 103 years of tornado occurrence, 1880 through 1982, provides a long historical perspective, a check on the DAPPL ratings 1916 through 1949, and another check on the completeness of the 1950 through 1980 F4/5 set of events. From the EFI list of some 31,000 events in the 1880 through 1982 period, a group of tornadoes was selected that would most likely include all confirmable F4/5 tornadoes for that time period. The selection criteria for producing this smaller list were:

- A. all killer tornadoes, i.e., those resulting in human death
- B. all events rated at F4/5 in the DAPPL and NSSFC data bases and on NSSFC original rating sheets
- C. all events with notations of leveled houses, empty foundations, or other F4/5 criteria, on NSSFC rating sheets or from any other available source

- D. all tornadoes with indicated path widths of 400 yards or more. (units such as yards and miles remain standard in the literature and are used here)
- E. excessive damage totals for tornadoes that did not directly strike a town (\$15,000 in 1880 to \$100,000 in 1949).

The list contained approximately 5,700 "significant" tornadoes of which about 3,800 were killer tornadoes. A process of carefully examining and assessing the available descriptive and damage information eventually reduced that total to 969 confirmable F4/5 tornadoes for the 1880-1982 period. It was not initially apparent that so many different events would be involved in bringing the NSSFC and DAPPL data sets into agreement. Early comparisons (McDonald and Abbey 1979) showed relatively small differences in the total number of tornadoes listed by the two sets. The numbers of tornadoes rated at F4 or F5 were significantly different, however, within individual years; for example, comparison shows 6 NSSFC events at F4/5 in 1952 and 18 DAPPL F4/5 events for the same year. Schaefer et al. (1980), using NSSFC data, noted a F4/5 frequency maximum in the Texas Pannandle. Fujita (1978), using DAPPL data, noted no such maximum, indicating that geographical distributions existed, as well as differences for annual totals.

The number of F4/5 tornadoes, listed in the two data sets, was significantly different; the NSSFC total was 379, and the DAPPL total was 436. Some of the larger DAPPL total was because DAPPL listed multiple F4/5 events (while preserving path length at its original value) to account for all towns indicated as damaged in <u>Climatological</u> <u>Data</u> or <u>Storm Data</u>. This splitting of single events or skipping tornadoes accounts for much of the 1952 difference. It was originally believed that most of the 379 NSSFC events would match with most of the 436 DAPPL events, but that was found to be not true. Only 251 events were listed in common at F4/5. Therefore DAPPL listed 185 events as violent which were listed as non-violent by NSSFC, and NSSFC listed 128 events as violent which were not listed as violent by DAPPL. The number of common violent events was thus exceeded by the disagreement. In addition, 21 of the common "F4/5" events were found to be non-violent and 41, listed commonly as non-violent, were found to be indeed violent.

NEWSPAPER AVAILABILITY

Once the candidates for F4/5 rating were chosen, the process of eliminating all those that were clearly not violent could begin. Only about 10 percent of the events were described in official publications or had been site-surveyed, from which an intensity rating could be confidently based. For the remainder, reliance was strictly on the local newspaper details, for larger city dailies could not be considered reliable. The newspaper searches required research at 31 state historical libraries, as well as at many county historical libraries and newspaper offices. If the state historical library did not have a microfilm copy of the local newspaper, the newspaper was usually judged as unavailable. Persistent efforts, however, could track down a copy of some missing newspapers; this was extraordinarily time consuming, requiring weeks of effort for just a few events. In general, for the Kansas-Pennsylvania belt, local detailed descriptions are available for 75 percent of needed events, with summaries for the remaining 25 percent available from newspapers in adjoining counties. For the southeastern belt, Arkansas/Louisiana to North Carolina/South Carolina, the percentage of availability varied widely from state to state and decade to decade, before 1900. For the 1880 through 1889 period, Mississippi documentation is the least adequate, but some records are available for the most severe events through the major regional newspapers (Memphis, Jackson, Nachez, Meridian, etc.).

STANDARDS

No attempt was made to alter the F-scale property damage standards, for this would have made current ratings incompatible with past tornado ratings. Some flexibility, however, is necessary in the assignment of ratings due to the problems with differing and changing house construction techniques. These problems plague the accurate use of the F-scale even today.

Early in the EFI rating efforts it became obvious that poorly constructed "houses" may not follow the classic F-scale sequence of roof damage - roof removal - exterior wall destruction - interior wall destruction. Indeed, some of the houses had no interior walls. The F-scale sequence may also not apply to a 19th century farm house of post and beam construction, on massive sills of hand-hewn oak. Extensive discussion with Professor Fujita in preparation for publication of EFI F-scale posters indicated that for poorly constructed houses it was best to require the appearance of F5 damage for an F4 rating. A case in question is shown in the photograph of Figure 4 and one of the damage/F-scale posters is shown, greatly reduced in size, in Figure 5. The poster includes the information that F4/5 tornadoes have wind speeds in excess of 206 miles per hour.

A large percentage of the NSSFC and DAPPL rating differences were a result of differing interpretations of damage to poorly constructed houses. Before damage was rated at F4 intensity in this study, it was necessary to have clear indications that the poorly constructed house was swept from its foundation and not merely lofted a distance and dropped, or merely shifted from its foundation to collapse a short distance away. Without application of this criterion, well in excess of 500 additional "violent" tornadoes would have been listed in the southeastern states, many of them properly rated at F1. A large percentage of the NSSFC and DAPPL conflicts were a result of differing interpretations of damage to poorly constructed houses. For practical purposes a system of limited maximum values was used to control the tendency to overrate intensity, especially at F4/5. If house construction was "poor", then a maximum value of F3 was placed on the damage unless the house was clearly blasted from the foundation, as opposed to being merely lofted or laterally shifted. If the moved house was not unroofed, a maximum of F2 was allowed. Housing was considered "poor" when associated with company-owned mill or mining towns or rural or suburban poverty.

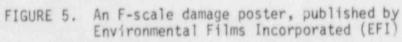


FIGURE 4. An aerial photograph of a destroyed house, with an empty foundation. The construction was probably too poor to consider the damage as an indication of F5 intensity.

In the absence of an engineering site survey, a maximum of F3 was allowed for "freak events" such as bridge movements, wood penetrations, anchors pulled from the ground, or rock-soil-pavement strippings, etc. Very often the entire story is not told in the newspaper or in <u>Storm Data</u>; for example, a structural anchor may have teen pulled from the ground only because it was attached to a blown-over oil derrick.

A maximum of F1 was allowed for the total destruction of asymmetrically attached garages, unless the house indicated a greater intensity of damage. A maximum of F2 was allowed for damage to mobile homes and sheet metal warehouses, in the absence of confirmable greater damage to other structures.





INTERPRETATION OF TERMS

Among the most difficult aspects of interpreting damage descriptions is attempting to gauge the design and strength of the building being described. The phrase "garage totally destroyed" may, for instance, be indicative of wind speeds from F0 to F5 intensity. A "garage" may refer to a blown-over carport (F0/1), a blown down asymmetricallyattached car garage with house roof intact (F1), a destroyed garage section of a ranch-style house (F1/3), a blown down concrete block gas station/auto repair garage (F2/3), or a totally swept away steelreinforced concrete block gas station/auto repair garage (F4/5). This type of confusion was the cause of large numbers of NSSFC/DAPPL rating differences, as well as NSSFC state-to-state inconsistencies. The terms "steel building", often applied to weak sheet metal structures, and "barn", often applied to open sheds, can cause similar confusion. If clarifying details are not available, the weakest form of construction should be assumed, given the information that is present.

A degree of caution and skepticism must be used in interpreting the brief <u>Storm Data</u> and <u>Climatological Data</u> summary descriptions. The more detailed descriptions such as "barn partly unroofed", "house leveled to the ground", "sheds and weaker buildings destroyed", or "car blown 50 yards, and rolled 100 yards" are often very reliable. The less detailed phrases should be used with extreme caution. The following examples have all incorrectly been used to indicate F4 intensity; most of the brief quotes are directly from newspaper headlines.

Quoted Phrase

"car blown 300 yards"

"steel girders twisted"

"fully loaded railroad car blown 100 yards"

"factories totally destroyed"

"large buildings destroyed"

"steel building destroyed"

"houses swept away"

Actual Situation

car rolled 50 yards, parts found at 300 yards

thin reinforcement rods, which girdle wooden silos, were bent around trees

car rolled along tracks - not blown off tracks

factory unroofed with rain damage

Barns and warehouses blown over

sheet metal warehouse blown over

most of house contents swept away, interior walls standing.

INTUITION AND SUBJECTIVITY

While 70 to 80 percent of the 969 tornadoes now rated as violent at F4/5 were indeed clearly violent, a significant number required the use of subjective judgment. The role of subjectivity should be limited to the elimination of events that fit the F4/5 appearance criteria, but are most likely not violent. For instance, if a small "house" had clearly been swept from its foundation and totally destroyed by a physically small tornado, but with no F2/3 damage anywhere in the vicinity, an experienced rater would conclude that this house was poorly anchored and constructed, and not deserving of F4/5 damage status. In the case of hurricane-spawned tornadoes, the house may have already been weakened or partially damaged by the hurricane winds or storm surge. It should be noted that all of the 30 Surveyed F4/5 tornadoes of 3 April 1974 had a path width greater than 200 yards, as do over 95 percent of all tornadoes whose F4/5 rating is not in doubt. Potential candidates for F4/5 ratings, with a path width of under 200 yards, should thus be rated with extreme caution.

No tornadoes should be rated at F4/5 on the basis only of intuition that F4/5 winds were present. Three large tornadoes on the NSSFC and DAPPL lists were rated at F4 and they produced no appreciable damage. Figure 6 is a photograph which illustrates one of these tornadoes and which also was used as a basis for F4 rating.



FIGURE 6. The Sunray, Texas tornado of 9 June 1971. Only sunflowers were leveled, yet an F4 rating remains.

RESULTS AND CONCLUSIONS

An objective of this project was to rationally bring consistency and similarity to the F4/5 ratings on the NSSFC and DAPPL sets. For the period 1950 through 1980, the two data sets are now virtually identical, with NSSFC and DAPPL recording 359 and 360 events respectively. The numbers are not the same because of different "tornado family" analysis for a few events. The appendices for this report describe 358 tornadoes at F4/5 for that period; again, the difference is a result of tornado family analysis. Table 1 lists the number of F4/5 events for each year, and the reasons for differences in yearly tornado totals are given.

NSSFC AND DAPPL DATA CHANGES

The final totals of violent tornadoes were reached after a considerable number of both deletions and additions to original lists. Table 2 summarizes these changes. Tables 3 through 6 show data for those states that required substantial changes in NSSFC/DAPPL F4/5 listings.

ANALYSIS OF THE DISTRIBUTION

Figure 7 shows a path distribution for the 969 violent tornadoes, 1880 through 1982 that were determined to be confirmable by this study. Figure 8 shows an analysis of this distribution, using a 1,000 square-mile grid. Figure 9 shows an analysis of the distribution using a 4,000 square-mile grid. For precisely-plotted tornado paths, refer to the maps of Appendix B rather than Figures 7, 8, 9, 13, and 14.

The most prominent feature of the distribution is a central minimum of violent activity, extending from Texas to Wisconsin. This central minimum was also noted by Tecson, Fujita, and Abbey (1982) in an analysis of all tornadoes in the DAPPL data base, 1916 through 1980. The southern portion of this minimum area coincides with regions of low population density and extreme topography in the Boston Mountains of Arkansas and in the Ouchita Mountains of Oklahoma. These two factors may be the cause of the minimum in those two states. The northern portion differs in that it extends through sections of Iowa and Illinois that have little unique topography. This region also has population densities that exceed those in tornado maxima areas to the west, so that population is unlikely as a contributing factor.

Year	NSSFC	APP. A	DAPPL
1950	7 5 17 ^a	7 5 16 ^a	7
1951	5.	5	7 18 ^a
1952	17 ^d	16 ^a	18 ^a
1953	22	22 7 10 _b 14 ^b	22 7 10
1954	7	7	7
1955	10	10	10
1956	13	14 ^D	13
1957	26	26 5 7 7	26
1958	5	5	5
1959	7	7	7
1960	7	7	7
1961	6	6	6
1962	26 5 7 7 6 6 6 12	6	6
1963	6	6	6
1964	12	12	12
1965	31	31	26 5 7 7 6 6 6 12 32 7 17
1966	7	7	7
1967	17	17	17
1968	12	12	12
1969	7	7	7
1970	9 11	9	9
1971	11	11	9 11 4 14
1972	4	4 14	4
1973	4 14 37d	14	14
1974	37	36	36
1975	11	11	11
1976	16	16	16
1977	10	10	10
1978	57	57	5 7 5
1979		7	7
1980	5	5	5
TOTAL	359	358	360

TABLE 1. Violent Tornadoes by Year, for NSSFC, DAPPL, and Appendix A Data

(a) The nebulous official descriptions for 21 March 1952 resulted in a greater number of family differences, NSSFC vs. DAPPL, than on any other date.

(b) Appendix A lists 2 separate F4 events for NSSFC #IL-1, DAPPL #70, on 25 February.

(c)DAPPL lists 2 separate events for Appendix A #756, NSSFC #0K-1, on 16 March.

(d) The 3 April event known as the Second Tanner Tornado (DAPPL #96, is covered by 2 NSSFC events: A1-#21/TN-#24 and the first segment of TN-#22. This follows the <u>Storm Data</u> analysis, rather than the Fujita aerial survey.

Data Set	Original Number	Number Lowered	Number Raised	Final Total
NSSFC 1950-1980	379	106	86	359
DAPPL 1950-1980	436	206	130	360
DAPPL 1916-1949	376	157	108	327

TABLE 2. Summary of NSSFC/DAPPL F4/5 Changes

TABLE 3. Overrated States at F4/5 - NSSFC

State	Events with Decreased Rating	Events with Increased Rating	Decreased/increased
Arkansas	14	4	3.5
Indiana	9	4	2.3
Iowa	10	12	0.8
Mississippi	11	2	5.5
Texas	14	1	14.0

(a) Iowa is included because of overratings by students, followed by rating alterations at NSSFC.

State	Events with Increased Rating	Events with Decreased Rating	Increased/Decreased
Georgia	4	0	3.3
Oklahoma	13	4	

TABLE 4. Underrated States at F4/5 - NSSFC

State	Events with Decreased Rating	Events with Increased Rating	Decreased/Increased
Arkansas	13	5	2.6
Georgia	11	1	11.0
Kansas	22	9	2.4
Mississippi	18	7	2.6
Missouri	13	5	2.6
Oklahoma	32	8	4.0
Tennessee	18	3	6.0
Texas	17	9	1.9

TABLE 5. Overrated States at F4/5 - DAPPL

TABLE 6. Underrated States at F4/5 - DAPPL

State	Events with Increased Rating	Events with Decreased Rating	Increased/Decreased
Alabama	12	1	12.0
Iowa	21	2	10.5
Wisconsin	7	0	



FIGURE 7. The paths of the 969 confirmable violent (F4/5) tornadoes, 1880-1982.

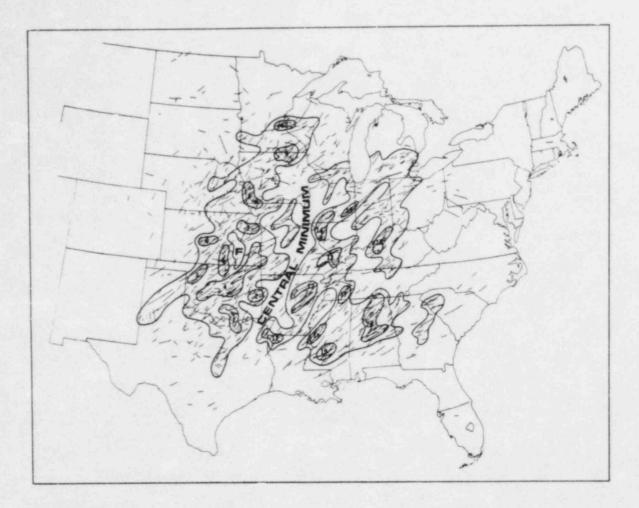


FIGURE 8. The paths of 969 F4/5 tornadoes, with 40 and 80 path-mile analysis for a 1,000 square-mile grid. Twenty sub-regional maxima are noted, with an "F" marking the "Flint Hills minimum."

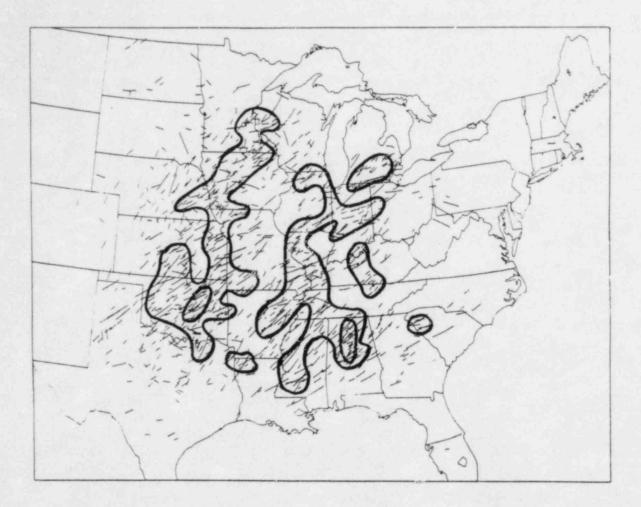


FIGURE 9. The paths of the 969 confirmable violent (F4/5) tornadoes, 1880-1982, with analysis for a 4,000 square-mile grid.

This northern portion coincides with a "favored" track of surface low pressure for many of the worst spring outbreaks. Most violent activity in these outbreaks occurs to the east and southeast of the low pressure center, thus avoiding this area during the time that the eastern tornado maxima are being established. In over two-thirds of the 20 worst F4/5 outbreaks the track of the surface low passed through the state of Iowa, yet only a single F4 tornado was produced in the eastern half of that state (the first Palm Sunday (April 11) event in 1965). In Missouri, the central minimum narrows and the contributing factors become more complex.

Twenty maxima are numbered in Figure 8 and the anomoly called the "Flint Hills minimum" is also indicated, with an "F". Each maximum contains a minimum of 160 path-miles within two adjoining 1000 square-mile blocks. None of these maxima are products of a single outbreak; most of them derive from at least five outbreaks. The reasons for their existence may be more varied than those for the central minimum. The following influences are suggested as possible contributing factors:

CHANCE CLUSTERING: The role of chance is, of course, lessened over a longer period of time. A 103 year period is longer than has been covered in previous documentations, but it still may not be long enough for the true long-term patterns to become well defined.

POPULATION DENSITY: Several of the maxima are located among major population centers, but most are not. While several large cities, notably Minneapolis, Oklahoma City, Omaha, and St. Louis, are contained within maxima, other similarly sized cities, such as Atlanta and Memphis, are actually located within areas of minimum violent activity. Population density, therefore, does not provide a sole explanation, but is a major factor in some areas.

CONFIRMABILITY: This factor is difficult to quantify and is a combination of the availability of suitable targets for the F4/5 winds and the availability of sufficiently accurate descriptions of damage to those targets. It is affected by such things as newspaper coverage, adequacy of housing, and the average size of farms. Despite lower total populations, the confirmability in much of Illinois, Iowa, and Kansas was greater in the late 19th century than it is today. The average number of farmhouses, per square mile of rural land, was many times greater in an era of small farms. Only one-third as many newspapers are published today, with many counties currently receiving no coverage at all. TOPOGRAPHY: The direct effect of misoscale (Fujita 1981) topography, e.g., a 200-yard-wide stand of trees, on a well developed tornado vortex was noted by Baker, et al. (1982). The effect, if any, that larger mesoscale topography (a 50-mile region of hills) may have on the development of a tornadoproducing mesocyclone has not yet been adequately described. The role of surface roughness in increasing inflow was noted experimentally by Dessens (1972), Wilkens, et al. (1975), and Leslie (1977) and has been explored numerically by Bode, et al. (1975) and by Smith and Leslie (1979).

While extreme topographic roughness might induce such turbulence as to reduce inflow, an ideal roughness could increase friction and inflow in such a way as to positively affect mesocyclone development and/or tornado intensity. Increased inflow, producing greater vertical velocities and a greater vertical velocity gradient, might result in a more intense tornado than would have otherwise formed. Another possible effect of increased inflow could be to delay tornado formation through a mechanism such as delay in the formation of a rear flank downdraft. This delay might allow intensification of the midlevel mesocyclone and production of a more intense tornado once less influential topography is encountered. Over a sufficiently long period of time, these interactions would produce maxima in the lee of the ideal roughness areas. The most likely location for such roughness is in the varied topography of the Ozark Plateau. The resulting maxima would be present in Arkansas, Missouri, and Illinois.

SYNOPTIC (MASO-) SCALE INFLUENCES: "Favored" low pressure tracks can produce associated diffuse belts of violent tornado activity. While not well defined, the intersection of two or more of these belts may appear as a sub-regional maximum. Figure 10 shows a plot of 65 tracks of the low pressure centers that were associated with three or more violent tornadoes, 1880 through 1982. Some lack of correspondence with maxima is obvious; an example of needed research is that of diurnal influences on synoptic and mesoscale development.

Table 7 lists the number of outbreaks which produced 3 or more confirmable violent tornadoes. Five of these outbreaks were not associated with a distinct surface low pressure track.

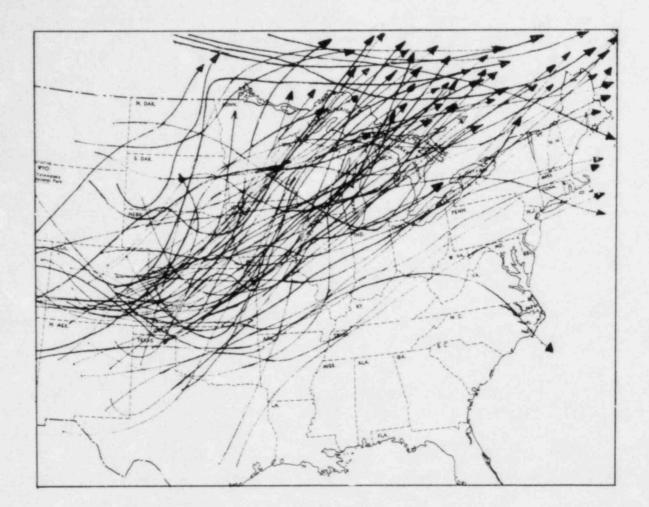


FIGURE 10. The tracks of 65 low pressure centers, associated with outbreaks of three or more F4/5 tornadoes

TABLE 7.	Outbreaks	Producing	Three	or More	Violent	Tornadoes
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Number of F4/5 Tornadoes Per Outbreak	Number of Outbreaks 1880-1982
30	1 (3 April 1974)
17	1 (11 April 1965)
10	1 (21 March 1932)
8	2 (28 March 1920) (21 March 1952)
7	2 (27 March 1890) (16 March 1942)
6	4
5	8
4	18
3	33

ANNUAL AND WEEKLY DISTRIBUTIONS

Figure 11 provides a profile of tornadoes and tornado-days, for violent events, 1880-1982. While site surveys have helped to confirm F4/5 tornadoes in recent outbreaks, they have not significantly altered the shape of the profile. The lower frequency of violent tornadoes before 1908 reflects a lack of sufficient population in Texas and Oklahoma, as well as general difficulties with confirmability in the southeastern states. Figure 12 profiles 103-year weekly totals. The weeks for maximum occurrence of violent tornadoes somewhat precede the maxima for violent tornado days; this indicates the large size of the early spring outbreaks.

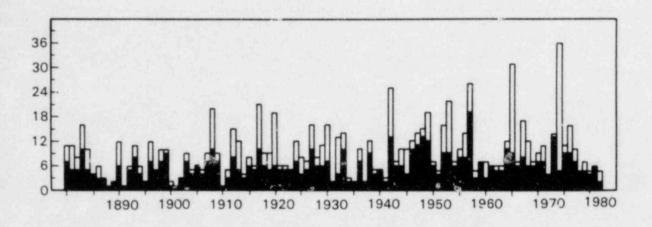
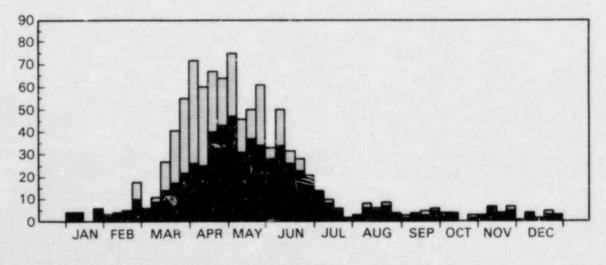
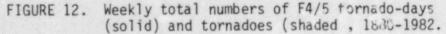


FIGURE 11. Annual numbers of F4/5 tornado-days (solid) and tornadoes (shaded), 1880-1982.





SIGNIFICANCE OF THE 3 APRIL 1974 OUTBREAK

The 147 tornadoes, including 30 F4/5 events, in the "Super Outbreak" weigh heavily in distribution studies for the 1950-present period. The Indiana/Chio to Alabama region is dominant for that time period because of just a few hours of tornado activity. Dominance is considerably less for the 1880-present period, and an added significance of the outbreak is evident when viewed in historical perspective. Figure 13 is a map of the 969 F4/5 paths, with a black dot marking each violent path of 3 April 1974. Figure 14 is a map of 939 F4/5 paths; the 3 April 1974 events have been deleted. The significance is with the location of the paths, rather than their number. The 30 paths serve to reinforce an apparent eastern limit of violent activity in the southeast Ohio to Tennessee area. This eastern limit had already been established by previous violent activity. Despite their rather unique location for the 1950-present period, the tornadoes of 3 April 1974 did not affect the apparent eastern limit. While their number was truly remarkable, the final total was aided by the most extensive site survey efforts ever made.

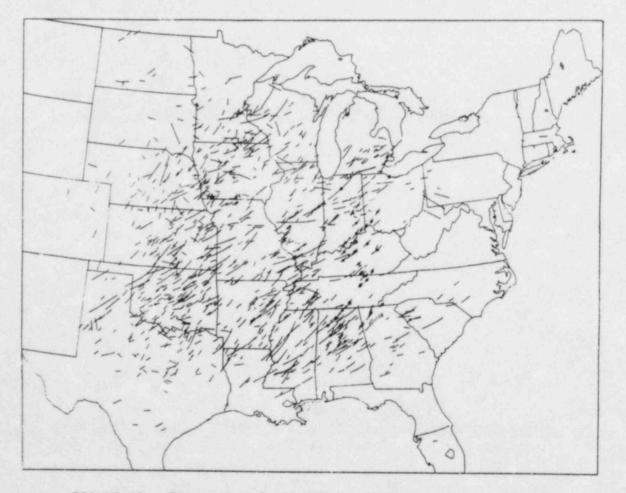


FIGURE 13. The paths of the 969 confirmable violent (F4/5) tornadoes, 1880-1982, with dots at the center of paths for the events of 3 April 1974.

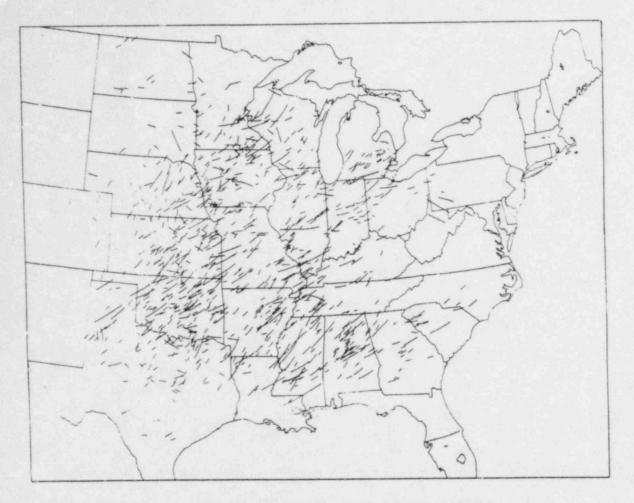


FIGURE 14. The paths of 939 confirmable violent (F4/5) tornadoes, 1880-1982, with paths for 3 April 1974 deleted.

LONG DATA PEPTODS

The danger of using a short data period, such as 1950 or 1971-present, is emphasized by noting that even the longer data base provides only a few hundred violent events. A substantial percentage of those events, and an even greater percentage of the total path length, were created in the late afternoon and evening of 3 April 1974. Since 1950, Kansas, traditionally considered to be at greater risk than Kentucky and Tennessee, has recorded 23 F4/5 events, compared with 30 in a similar-sized area of Tennessee/Kentucky. Since 1971, the F4/5 total for Kansas is only 3, with 18 recorded in Tennessee/Kentucky. The longer data base more effectively deals with such anomolies as the present low level of violent activity in Kansas and the extraordinary events of 3 April 1974.

DIFFERENCES BY ONE F-SCALE RATING POINT

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Approximately 5,000 lesser-intensity events, on the NSSFC and DAPPL data sets, are presently rated at different intensity. They differ by one rating point and are not dealt with in this project. A sampling of the data for several states and years, however, gives the following estimates, in Table 8, of the number of remaining rating differences.

Among the more significant aspects of these estimates is the fact that DAPPL rates all tornadoes, and NSSFC does not rate tornadoes for which no ratable damage occurred.

TABLE 8. NSSFC/DAPPL Rating Differences

by Intensity	y Range (FO-3)
F-Scale Range	Estimated Number of Differences
F0/1ª	2400
F1/2 F2/3	1600

(a) unrated NSSFC tornadoes are given FO rating for comparison

3

SUGGESTIONS FOR FUTURE EFFORTS

There are three areas for needed tornado climatological research that closely relate to this project:

- A) Careful documentation of the approximately 14,000 F2/3 tornadoes would be useful, for only 969 events are provided as the tornado occurrence data base. Detailed analysis and extension of the NSSFC and DAPPL F2/3 data sets to the practical limit of 1880 would allow computer-aided searches for long-term cycles and careful consideration of suggested sub-regional concerns of population, topography, etc.
- B) Comprehensive downburst climatology would provide risk assessment information complementary to a tornado climatology for intensities less than F4/5. Downburst/gust front/severe thunderstorm winds at F0/1 may exceed tornado-generated winds at F0/1 over many times the affected geographical area.
- C) This study has raised questions related to tornado occurrence distribution and the use of a tornado rating intensity scheme. Some examples, which further research might address, are:

What are the actual causes and combinations of causes for the apparent maxima and minima in the F4/5 geographical distribution? Are F4/5 geographical occurrence patterns physically produced or are they always irretrievably involved with population density and reporting adequacy?

What can account for trends of F4/5 occurrence with time? Examples are an apparent increase of occurrence in Ohio and Indiana during 103 years and a general increase of variability in occurrences from year to year in recent decades. Both of these observations cannot be accounted for by either expanding population or improving reporting.

What can be accomplished, thereby improving F-scale guidelines, to better understand the behavior of substandard housing in tornadic winds?

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APPENDIX A

NARRATIVE DESCRIPTIONS OF VIOLENT TORNADOES

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NARRATIVE DESCRIPTIONS OF VIOLENT TORNADOES

This appendix contains 969 brief tornado occurrence descriptions for all events rated at F4/5 (violent) intensity for the period 1880-1982. The length of each description reflects the amount of reliable information available; additionally, in some cases, interesting damage details are given, even though such details do not necessarily support a violent rating. The events are listed chronologically; for each, the date is followed by the state(s) within which the tornado occurred, the time (local) of day, path length in miles, path width in yards (these units remain in standard use, rather than metric units), total deaths, number of persons injured, and intensity rating (F-scale number). For the years 1916-1982, starting with EFI number 262, the corresponding DAPPL number(s) is given and, for 1950-1982, both the DAPPL and NSSFC numbers are given. For the entire list, 7.1 percent are F5 tornadoes; within this, the percentages for the periods 1880-1915, 1916-1949, and 1950-1982 are 7.3, 5.0 and 8.9 respectively.

- Apr 2, 1880 KS 1830 20 miles 200 y 4 dead 17 inj. F4 (001) The tornado first touched down 95 miles 5W of Girard, Crawford Co., and moved NE, passing 1 mile S of Girard. It then weakened and turned to the east, dissipating near the Missouri border. Maximum intensity was SW of Sirard, with several farms virtually vanishing. 17 homes were destroyed to some degree.
- Apr 18, 1880 L/WI 1630 25 miles 500 y 1 dead 20 inj. F4 (002) First touchdown was near Rockton, Winnebago Co., IL. Maximum intensity occurred near the Wisconsin border with the destruction of the Collier farm house, 3 miles SSW of Beloit, WI. The death occurred in that Illinois home. Less intense damage occurred along Turtle Creek and on the west side of Shopiere. Rock Co., WI. Intensity was F2-3 in this area, with up to 350,000 damage. The funnel dissipated near Johnstown, WI, maintaining a northeasterly track the entire way.
- 1630 S0 miles 800 y 99 dead 200 inj. F4 Apr 18. 1880 MO This tornado or tornado family first touched down near the (003) town of McDowell, about 10 miles N of Cassville, Garry Co. Moving to the NE, the tornado damaged many buildings and much timber. Passing 7 miles S and SE of Springfield, 7 people were killed, and the tornado apparently enlarged and intensified. The town of Marshfield lay directly in its path, as it moved paralle; to the RR tracks, to the NE across Webster Co. While this event approached Marshfield, another major tornado was moving on a parallel path, 5-10 miles to the south. while this other event may have been violent, information is too sparse for its inclusion in this list. All but 15 buildings in the town of Marshfield were destroyed, as the tornado swept a path up to 5 mile wide through the community of 1100 residents. Some compilations put the Marshfield death total at 68, but a recent historical study at the University of Missouri indicates that 24 additional deaths tuck place from injuries over the next several weeks, for a total of 92 deaths at Marshfield.
- Apr 18, 1880 M0 1730 30 miles 1200 y 13 dead 30 inj. F4 (004) Occurring at about the same time as the Marshfield tornado, this event touched down in SW Morgan Co. and moved to the NE destroying nomes and causing 5 deaths before reaching Barnettsville. Nearly a mile wide at Barnettsville, the entire village was destroyed, with 8 deaths. The tornado is plotted as having lifted near Russellville, Cole Co., but may nave continued as the tornado passed W of Jefferson City.

Apr 13, 1880 AR 2030 8 miles 400 y 10 dead 25 inj. F4 (005) This was the most intense of several major tornadoes in Arkansas that day, with others being near F4 in the extreme NW corner of the state. This touchdown occurred in the extreme SE section of Faulkner Co., and moved NE across the edge of the town of Elpaso. White Co. All deaths were at Elpaso, with the four bodies of the prominent Pool family found nearly a mile from the empty foundation of their house.

- Apr 21, 19dr 1. 1730 18 miles 800 () dean 2 inj. F4 (006) This very scale funnel too hed down in HE Jersey Co., passed 1 ' is in a sup - Many houses were leveled, but occupanies and taken shelter due to good visibility. ' mile wide path fore up great amounts ' timber along the Macoupin River Possibly reformed just north of Carlinville.
- Apr 24, 1880 IL 1850 13 miles 500 y 6 dead 33 inj. F5 (007) Fouchdown occurred 9 miles Sk of Taylorville, Christian Co., 3 miles W of Palmer. Moving NE through the community of West Prairie, the tornado produced total destruction to houses, barns, and bridges. Bodies were found 1 mile away, and cattle up to a mile away. Houses were of heavy-timber construction. The funnel lifted just NE of Sharpsburg. Previous tornado was in the same family.
- Apr 25, 1880 MS 2030 12 miles 400 y 22 dead 72 inj F4 (008) From southwest of the city, this carnado moved through the NW and N sections of Macon, Noxubee Co 20 homes were leveled, many swept totally away with the decth of entire facts en but house construction was not good. Ra Troad machines, concarned for several hundred yards.
- May 28, 1880 TX 1800 6 miles 200 y 12 dead 60 inj. F4 (009) From SW of town, the tornado passed through Savoy, Fannin Ca. 48 homes were destroyed, but only a few were swept dway. House construction details were not clear, but only 5 buildings in town were undamaged.
- Jun 9, 1880 IA 1800 20 miles 800 y 7 dead 20 mil #4 (010) This massive tornado touched down 2', miles SW of Macedonia. Pottawattamie Co., passed south of town and lifted near Wheeler Grove in Wheeler Twp. Several farms, such as the Ossler farm, virtually vanished.
- Jun 14, 1880 IN 1700 18 miles 400 y 5 dead 30 inj. F4 (011) This tornado, one of many that day, touched down just 5 of Fristaintown, Snelby Co., and moved NE, bassing N of Morristown. It lifted about 5 miles N of Rushville, Rush Co. F4 damage to farm houses occurred NW of Morristown and 4 miles 5 of Carthage Many exaggerated death totals from the other tornadoes are found on "semi-official" records.
- Jun 9, 1881 KS 1630 22 miles 200 y 5 dead 30 inj F4 (012) Touchdown occurred near Solomon Rapids, in N central Mitchell Co. The tornado, associated with widespread thunderstorm and downburst activity, moved to the SE, parallel to the Solomon River, passing E of Beloit and lifting near Glasco, Cloud Co. F4 activity and the deaths occurred in the first part of the path, to 1 mile E of Beloit.

- Jun 11, 1881 IA 1000 36 miles 400 y 2 dead 6 inj. F4
 (013) The tornado originated about 1', miles S of Norwalk, in NW Warren Co. Moving to the NE, the tornado intensified as it passed across the SE corner of Polk Co., just to the E of Avon. F4 damage and deaths occurred in this area. Near F4 damage was reported through Camp Twp. and east of Rising Sun. The F2 and F3 damage near Colfax is plotted as part of this tornado, but may have been a separate event, as the damage is slightly offset to the SE.
- Jun 12, 1881 KS 1600 25 miles 200 y 5 dead 25 inj. F4 From a point on the Marias des Cygnes River, 2 miles NW of Olivet. Osage Co., the tornado moved to the NE F4 level damage occurred from 3 miles NW of Melvern to the N edge of Quenemo, where parts of houses were scattered for miles. The tornado dissipated about 5 miles N of Richter, Franklin Co. 50 homes and barns were listed as being destroyed. Hundreds of farms along the river were spared, as the funnel moved parallel to, and a mile or two N of the river.
- Jun 12, 1881 KS 1630 17 miles 400 y 3 Jeao 22 inj. F4 (015) The tornado touched down near Seely, Cowley Co., about 7 miles NW of Winfield. Moving to the ENE, the tornado passed through and devastated the town of Floral. Most residents in that town had taken shelter, as the funnel was very visible. Many of the 28 homes destroyed in Floral were totally leveled. The funnel lifted NE of Wilmot, Cowley Co.
- Jun 12, 1881 MO 1636 30 miles 800 y 2 dead 15 inj. F5 (016) Tornado damage was first noted about 3 miles W of Burlington Jct., Nodaway Co. The huge funnel developed a multiple vortex structure, and moved to the NE, passing 2 miles S and E of Clearmont and 6 miles W of Hopkins. No damage was reported beyond the lowa border. Farm homes were completely swept away west of Hopkins.
- Jun 12, 1881 M0 1700 30 miles 400 y 5 dead 20 inj. F4 (217) Touchdown occurred 2 miles 5 of Fillmore and the tornado moved to the ENE across Andrews Co. The tornado was apparently most intense near the town of Flag Springs, in E Andrews Co. 80 farms, houses, and barns were destroyed with great losses of livestock. 80 head of cattle were killed on one farm, 60 sheep on another, 6 horses on another. The tornado struck the edge of King City, before dissipating in S Gentry Co.
- Jun 12, 1881 IA 1900 10 miles 200 y 2 dead 10 inj. F4 (018) The tornado probably originated in the SW section of Guthrie Co. near the Adair Co. border. Destroying many farm buildings, the funnel completely leveled a farm house 3 miles N of Casey, and continued to the NE, lifting near the S. Ruccoon River.

- Jun 28, 1881 IA 1900 10 miles 400 y 3 dead 20 inj. F4 (019) From a point about 8 miles SW of Cherokee, Cherokee Co., the tornado moved to the NE, destroying many farm buildings and leveling several houses on the S edge of Cherokee. 3 deaths occurred at Cheroke2, with very little trace of the Aubrey home and several other homes laft on their house lots. The funnel lifted NE of town.
- Jly 11, 1881 MN 1400 30 miles 800 y 4 dead 15 inj. F4 (020) From near the South Dakota border, in the NW corner of Lac qui Parle Co., the tornado moved ENE leveling 's dozen farms E of Odessa, in Big Stone Co. Other farms were destroyed, and 4 deaths occurred E of Fairfield, Swift Co.
- Jly 15, 1881 MN 1600 30 miles 800 y 16 dead 100 inj. F4 (021) Touching down SE of Bird Island, Renville Co., this tornado intensified rapidly and moved to the SE, leveling homes all along its path. The deaths occurred in the SE part of Renville Co... the SW corner of Sibley Co. and the NW part Nicollet Co. In Cairo Twp., 5 members of the Hallover family were killed. At Wellington, one member of the Finley family was killed as was a member of the Fahey family. 3 people were killed near the start of the path. The tornado followed a twisting path into the W half of New Ulm, Brown Co. A straight line path would have missed the town to the SW. The funnel swerved to the left, destroyed the western half of the town, and lifted to the SE of the town, 47 buildings were destroyed and 200 others damaged. Many homes were leveled and 6 people died at New Ulm. The funnel was reported as 1 mile wide there.
- Jly 15, 1881 MN 1650 50 miles 400 y 0 dead 30 inj. F4 (022) This tornado followed a path parallel to the previous event, but through a less populated area of Brown Co. Several homes were leveled and 6 people badly injured near the start of the path at Milford. The tornado lifted near Sleepy Eye.
- Apr 6, 1882 MI 1715 40 miles 300 y 5 dead 20 inj. F4 (023) From about a mile N of Kendall, Van Buren Co., the tornado moved to the ENE across Alamo Twp. and intensified. Farms were leveled at many locations from Alamo, Kalamazoo Co., near Hickory Corners, Barry Co., and S of Kalamo, Eaton Co. Deaths occurred in four farm houses. The funnel dissipated N of Charlotte, Eaton Co.

- Apr 6, 1882 MI 2000 10 miles 400 y 4 dead 0 inj. F4 (024) The tornado touched down in E Livingston Co., 3 miles S of Hartland, and moved to the NE, passing between Clyde and West Highland, Oakland Co. The three deaths occurred as the Crandal house was leveled to the ground. One death was from flying debris near the end of the path.
- Apr 6, 1882 KS 1800 15 miles 200 y 5 dead 30 inj, F4 (025) One of many killer tornadoes in Kansas that day, this event first touched down in extreme NE Stafford Co., and moved to the NE, passing Just N of Raymond, Rice, Co. The ternado passed across the S half of the town of Chase, destroying many homes with F2 and F3 damage. F4 damage and the deaths were noted along the last part of the path, 1 mile NE of Chase and 3 miles NE of Chase. 2/3 of the buildings in town were destroyed or damaged.
- Apr 22, 1882 GA 1900 25 miles 800 y 2 dead 10 inj. F4 (026) This large tornado touched down about 8 miles 5W of Macon, Bibb Co., and moved to the NE, passing about 4 miles 5 of town. The funnel passed through sparsely settled areas, destroying large amounts of timber, and leveling several homes 1 mile S of Griswoldville, Twiggs Co. The funnel dissipated N of Gordon, Wilkinson Co. Home construction along the peth was generally poor, although an F4 house S of Griswoldville is suspected of being of better construction.
- 1830 105 miles 800 y 65 dead 300 inj. F5 un 17, 1882 IA While possibly touching down as far west as Carroll Co., the (027) tornado is plotted here from SE Greene Co., near Rippey. Moving across S Boone and Story Cos., as well as the SW corner of Marshall Co., the tornado leveled farm after farm, and caused the deaths of 10 people. This alone would have made it a major tornadic event, but from there the funnel moved to the SE, killing 7 people on farms in Jasper Co., and passed directly through the town of Grinnell, Poweshiek Co. 45 people were killed as the tornado cut a 200 y swath through the town. destroying 140 homes, with many swept completely away. That damage totalled over \$600,000 in Grinnell alone. Continuing to the SE, the tornado killed 11 people at Malcolm, with \$100,000 damage. Near the end of its path, 2 more people were killed 3 miles S of Brooklyn.
- Jun 17, 1882 IA 1900 33 miles 200 y 1 dead 5 inj. F4 (028) Multiple funnels were reported at many points in the path of the previous event, but at least in one area a distinctly individual tornado accompanied it for part of its path. Forming about 3 miles W of Ogden, Boone Co., this funnel was very visible as it moved to the E, parallel to and about 9 miles N of the previous event, lifting S of Nevada. Story Co. Although several farms were leveled, this tornado probably caused only one death, that of a young child, pulled from her mother's arms as they ran for cover.

- Jun 24, 1882 IA 1930 40 miles 400 y 4 dead 25 inj. F4 (029) One of many tornadoes in NW Iowa that day, the funnel first touched down in SW Clay Co., and moved ENE across the southern part of the county. 20 farm houses were destroyed, many of them leveled to the ground. Considerable F2 damage was done in the S half of Emmettsburg, Palo Alto Co., either by the last segment of this tornado or by associated downburst activity.
- Jun 25, 1882 NE 1800 25 miles 200 y 2 dead 2 inj. F4 (030) The tornado touched down about 8 miles W of Brainard, Butler Co. and moved almost due E. 6 miles west of Brainard, a farm house was leveled and 2 children were killed. F3 level damage was reported to several farms as far E as Wahoo, Saunders Co.
- Apr 21, 1883 1A 2000 15 miles 150 y 2 dead 10 inj. F4 (031) From 3 miles N of Woodbine, Harrison Co., the tornado moved NE along the Boyer River, then turned to the N, crossing the RR tracks 1½ miles SW of Dunlap. The funnel passed just west of town and moved due N into SW Crawford Co. The Burress home. N of Dunlap, was leveled.
- Apr 22, 1883 MS 1515 70 miles 800 y 57 dead 300 inj. F4 (032) This major tornadic event first touched down about 8 miles SW of Wesson, Copiah Co. and moved to the NE. The western half of that town was destroyed, with 13 deaths and many homes leveled. Further to the NE, the entire town of Beauregard was virtually leveled, with 29 deaths. An additional 14 deaths were added on the south side of Georgetown. Simpson co. Passing in isolated rural areas to the NE, as far as central Scott Co., the tornado destroyed large tracts of timber and an accurate death toll will probably never be known, but may be as high as 75.
- Apr 23, 1883 GA 0600 30 miles 400 y 8 dead 25 inj, F4 (033) The tornado fouched down in NW Baker Co. and moved ENE into Dougherty Co., passing 8 miles S of Albany. The 8 deaths accurred on two plantations. The homes of the plantation owners were leveled, as well as those of the sharecroppers. The funnel continued ENE into Worth Co., lifting NW of Sylvester.
- Apr 27, 1883 TX 2000 30 miles 200 y 5 dead 20 inj. F4 (034) From what is now the N end of Belton Lake, the tornado moved to the SE, passing 3 miles N and 5 miles E of Belton. Bell Co. The funnel passed along the outskirts of Heidenheimer and lifted before leaving the county. Most homes were likely to have been of rather poor construction, but many were leveled, and the deaths occurred in two homes that were completely swept away.
- May 14, 1883 IN/MI 1450 15 miles 800 y 4 dead 10 inj. F4 (035) From near Scott, in the N part of La Grange Co., Indiana, this tornado moved to the NE, crossing into St. Joseph Co., Michigan SSW of Sturgis. Passing just to the S and E of Sturgis, the tornado intensified and leveled the Monk farm and others as it passed west of Burr Oak.

- May 18, 1883 IL/WI 1750 20 miles 200 y 3 dead 5 inj. F4
 (036) Originating SW of Capron, Boone Co., Illinois, the tornado moved to the NE passing near Chemung, N of Harvard and N of Alden. The tornado dissipated just over the WI border. Many buildings received F2 damage on the outskirts of Chemung, McHenry Co., and maximum intensity damage was NW of Alden, where deaths occurred. This is possibly in the same family as the Racine tornado.
- May 18, 1883 WI 1845 15 miles 300 y 16 dead 100 tnj. F4 (037) From the N part of Kenosha Co., the tornado moved to the NE, passing along the N part of the city of Racine. 58 houses were listed as destroyed, with many of them leveled. The tornado made a spectacular exit as a multiple vortex waterspout out over Lake Michigan. Damage totalled about \$100,000.
- May 18, 1883 IL 1820 25 miles 400 y 8 dead 50 inj. F4 (038) The tornado touched down 2 miles E of Whitehall, Greene Co. and rapidly intensified, leveling farms all along its path. Moving to the NE, it passed 3 miles E of Roodhouse. Crossing into Morgan Co., the farming community of Greasy Prairie was destroyed, with some f the homes almost completely swept away. After destroying the RR station at Woodlawn, the funnel dissipated SW of Alexander. F4 damage was done to the Isreal, Kelly and Donally homes E of Roodhouse, and F4 damage with deaths occurred at the Blakeman, Westrup, and Williams homes in Greasy Prairie.
- May 18, 1883 IL 1930 40 miles 800 y 11 dead 50 mj. F4 (039) The first damage from this tornado was probably near the RR junction, 2½ miles S of the center of Springfield, Sangamon Co. The tornado intensified and moved to the NE, through what was then the farming community of Round Prairie (beyond Cook Ave. and E of Interstate 55). The tornado leveled farm after farm as the balloon-shaped vortex cut a ½ mile wide path between Dawson and Buffalo After passing between Mt. Pulaski and Latham in Logan Co. the funnel dissipated about 4 miles E of Kenney in De Witt Co. 1000's of head of livestock were killed or injured and 10"x12" oak timbers were carried ½ mile and reportedly imbedded up to 10 feet into the ground.

May 18, 1883 IL 2015 25 miles 800 y 12 dead 50 inj. F4 (040) Originating 7 miles NW of Jacksonville, Morgan Co., the tornado moved to the NE, damaging or destroying all of the community of Literberry. F4 damage and deaths occurred at the Griffin, Trotter, Liter, and Stevenson homes. Continuing to the NE, the tornado crossed the SW corner of Cass Co., with F3 damage just E of Philadelphia. The funnel lifted 5 miles W of Petersburg, Menard Co.

May Id. 1883 IL 2045 20 miles 400 y 9 dead 30 inj. F4 (041) From 2 miles W of Shipman, Macaupin Co. the tornado moved ENE passing just 5 of Plainview, 7 miles N of 6-llespie, and lifted at the E edge of the county. Several houses were leveled, including the Baker home, where 4 deaths occurred. The Fisk farm was leveled 1 mile W of Shipman. May 28, 1883 IN 1615 10 miles 200 y 5 dead 5 inj. F4 (042) This tornado was the second member of a two tornado family. The first tornado touched down five miles west of Clay City, Clay Co., near Neal's Mill. Two people were killed taking shelter under the bridge over the Eel River, west of town. That tornado moved due E, but lifted over Clay City. This event touched down 3 miles E of Clay City and moved to the ENE where it leveled the Croft home to the ground, with 5 deaths. The funnel dissipated SE of Patricksburg, Owen Co. In one woodlot of 500 trees, all but one was either snapped off or uprooted.

- Jly 21, 1883 MN 1130 30 miles 400 y 6 dead 30 inj. F4 (043) The tornado touched down 5 miles SE of Dodge Center, Dodge Co., and moved to the ENE. Farms were destroyed all along the path, with many farm houses leveled. F4 damage occurred S of Kasson. a mile N of Byron, and SE of Douglas. Damage at Elgin was probably from downourst activity after the tornado had dissipated
- Jly 24, 1883 MI 1200 15 miles 100 y 1 dead 0 inj. F4 (044) From the NW part of Jackson Co. the tornado moved to the NE and passed just S of Onondaga and just N of Leslie, Ingham Co. F4 damage is indicated at one small house. Parts of this house, the Barlow home, were found 3 miles away. Mrs. Barlow was 77 years old, and canning jam when the tornado hit.
- Aug 21, 1883 MN 1830 50 miles 1600 y 36 dead 150 inj. F4 (045) From E Dodge Co., 5 miles N of Oslo, the tornado moved to the ENE and grew rapidly in size. The enormous roar was said to have warned most Rochester residents, as the massive tornado passed through the N side of town. 135 homes were destroyed in the city, with many farmsleveled to the SW and NE of town. Many of the injuries were very serious and other deaths probably occurred long after the tornado, and are not listed here. The tornado derailed a train with several deaths resulting. The funnel dissipated N of St. Charles, Winona Co. Another killer tornado, several miles to the south, may have been F4 intensity; so much attention was paid to the Rochester event, that F4 was not confirmable. 32 deaths occurred in the city.
- Nov 5, 1883 NO 1345 20 miles 300 y 7 dead 40 inj. F4 (046) From 1 mile N of Republic, the tornado moved to the NE, across Greene Co. One death occurred as the tornado passed through Brookline Station, and 6 other deaths occurred as the funnel passed through the W and NW edge of Springfield. Leveled buildings were small and construction was probably not strong. The tornado widened from 100 to 300 yards NE of Springfield, at Bridgetown, and unroofed or blew over 30 small nomes. Total damage was about \$200,000.

1300 30 miles 800 y 11 dead 40 inj F4 Feb 19, 1884 AL This tornado was the first significant event in one of the (047) most remarkable tornado outbreaks in U.S. history. It is notable for many reasons, among them: a.) it occurred further to the SE than any outbreak of comparable strength. b.) estimates of a death toll in the thousands were perpetuated by the press and by possibly the tornado insurance industry. A detailed study by the Army Signal Corps in 1889 indicated a maximum toll of under 200 deaths, yet quotes of 2000 still persist today. An extensive newspaper search recently revealed less than 100 confirmed names of deceased. The "Leeds Tornado" touched down about 5 miles S of Birmingham, Jefferson Co., near Oxmoor. Following a skipping oath up the Shades valley, the tornado intensified and leveled a large number of the newer homes in the town of Leeds, Shelby Cc Most of the leveled homes were made of brick. Continuing to the NE the funnel lifted about 25 miles SE of Branchville.

Feb 19, 1884 AL/GA 1400 45 miles 800 y 30 dead 200 inj. F4 (048) Touching down NE of Jacksonville, Calhoun Co., the tornado moved to the WE, passing near to the Calhoun and Cherokee Co. settlements of Eureka, Germania, Cross Plains, Gosnen, Ladiya, Amberson, and Rock Run before moving into Georgia. 26 deaths occurred in AL. 4 additional deaths occurred N of the town of Cave Springs, Floyd Co., Georgia shortly before the funnel dissipated. One school was hit in Alabama, with the schoolmaster killed and 25 children injured. Cotton bales were carried ½ mile and some of the poorer housing literally vanished.

Feb 19, 1884 GA 1330 95 miles 1600 y 22 dead 150 inj. F4
(049) The first damage from this event was reported N of Tallapoosa. Haralson Co. The funnel skipped to the NE across E Polk Co... and intensified S of Cartersville, Bartow Co. F4 activity began further to the NE near Waleska. Cherokee Co. The majority of the deaths occurred south of Jasper, Pickens Co... near the towns of Cagle and Tate, where home after home was leveled and swept away. Doubts about the quality of house contruction prevent an F5 rating. The tornado dissipated into a 3 mile wide downburst on the slopes of Mt. Oglethorpe in W Dawson Co. Miles of forest were flattened to an extent that no local residents had ever witnessed

Feb 19, 1884 GA 1630 20 miles 200 y 11 dead 50 inj. F4 (050) Originating about 10 miles NE of Macon, in central Jones Co., the tornado moved to the ENE passing near the settlement of Blountsville and the RR station at Haddock. All deaths occurred in this area as several plantations were destroyed. Many houses were totally swept away, but house contruction was very poor. The funnel lifted about 5 miles NW of Milledgeville in Baldwin Co. Feb 19, 1884 GA 1700 47 miles 800 y 8 lead 50 in). F4 (051) Touching down about 9 miles S of Eatonton, Putnam Co., the tornado moved to the FHE, leveling many small nouses on the Humber Plantation, with 5 deaths. The tornado apparently continued across the sparsely settled areas of E Putnam and W Hancock Co. Several homes were leveled 3 miles NW of Mayfield and 2 deaths occurred between Norwood and Cemak in Warren Co. One death occurred as the funnel passed 4 miles NW of Thomson. McDuffie Co. The last damage was reported 6 miles NW of Appling. Columbia Co.

Feb 19, 1884 NC 220C 20 miles +00 y 23 dead 125 mj. F4 (052) This event, as with most events in the Feb. 19, 1884 subtreak, is difficult to document and affected areas with primarily substandard housing. This event couched down in the SW corner of Richmond Co. and moved to the NE, passing 2 miles E of Rockingham. The community of Philadelphia, on the RR line. was leveled, with many houses totally swept away. The tornado continued to level forests and rural homes to the NE corner of the county.

Apr 1, 1884 IN 1700 12 miles 600 y 8 dead 70 inj. F5 (053) From a point about 3 miles NE of Mechanicsburg, Henry Co., the tornado moved NE, then ENE, passing through the town of Oakville, Delaware Co., leaving only 3 of the 30 houses standing. Observers stated that many residents had taken shelter, but some sections of the town literally vanished. Early meteorologists considered this to be among the most intense tornadoes of the time. Two deaths occurred on farms 4 miles WSW of town, five Geaths occurred at Oakville, and one death N of Luray, near the end of the path.

Jiy 21, 1884 SD/MN 1400 35 miles 400 y 6 dead 30 inj. F4 (054) After what appears to be downburst dumage at Dell Rapids, Minnehaha Co., the tornado touched down 5 miles 5 of town and moved to the ESE towards the Minnesota border. 4 deaths occurred on farms in South Dakota, with many other deaths from lightning. Crossing into Rock Co., Minnesota the tornado continued to level farm houses, producing one death about 8 miles N of Adrian, Nobles Co.

400 y 6 dead 15 inj. F8 Aug 28, 1884 SD 1515 70 miles (055) This remarkable tornado was among the first ones photographed and produced what may be the longest known NW to SE path. Very visible for miles in all directions, it was photographed from 22 miles to the E as it passed through eastern Sanborn Co. The now famous photograph was taken from a point near Howard, Mine Co. First touchdown was 2 miles NE of Huron, Beadle Co., and from that point the funnel(s) made a slow, 2 hour, very visible journey to the SSE. Dozens of farms were leveled or otherwise destroyed, but the great visibility kept the death toll to b. Many secondary vortices were noted 6 miles E of Forestburg, Sanborn Co., at about the time of the photograph. Final damage was noted 7 miles 5 of Bridgewater, in NE Hutchinson Co. The tornado may not have been a single event, but a true tornado family.

- Sep 9, 1884 MN/WI 1700 45 miles 800 y 3 dead 75 inj. F4 (056) From a point in E Washington Co., about L2 miles N of St. Paul the tornado moved nearly due E, destroying farms and forests near Marine Hills. Passing into Wisconsin, the tornado may have lifted for a few miles before touching down and intensifying into a massive tornado that leveled several farms and killed 3 people at Clear Lake, Polk Co. Most of the \$200,000 damage was in Wisconsin.
- Jan 11, 1885 AL 1830 65 miles 1600 y 5 dead 60 inj. F4 (057) From a touchdown point about 8 miles SW of Eutaw, Greene Co. this tornado or family of tornadoes moved to the ENE, crossing the Warrior river in S contral Hale Co. Miles of forest were leveled across Hale and NW Ferry counties. The tornado turned to the E as it passed 5 miles SW and 5 of Centreville, 81bb Co. and lifted just 5 of Randalph. Other tornadoes, possibly related, moved to the NE of Centreville. The ground was reported to have shaken as if in an estinguake, several miles from the tornado in 81bb Co. The desth toll from this very large tornado was low, for the great majority of its path was over forestland. Many houses were leveled, but all were likely of poor construction. Some of the leveled churches may have been of stronger construction.

Jun 12, 1885 IA 2200 10 miles 200 y 3 dead 10 inj. F4 (058) One of many Iowa tornadoes this day, the first damage was noted near the Missouri border, in S central Davis Co. The tornado moved to the NE, leveling the Solomon Myers farm, with 2 deaths. Another death occurred as a farm was destroyed S of Pulaski.

Jly 15, 1885 SD 1845 25 miles 800 y 3 dead 10 inj. F4 (059) This large tornado was visible from 20 miles away as it moved to the ESE from a point about 5 miles NW of Harrold, Hughes Co. Passing 3 miles E of Harrold, the tornado continued moving to the ESE, then turned to the E, striking the town of Holabird, Hand Co. The railroad depot and several homes were leveled. As many as 8 separate fumels were reported along the path.

Nov 6, 1885 AL 1530 30 miles 800 y 13 dead 100 inj. F4 (060) From a touchdown point in central Dallas Co., the tornado moved to the HE, passing about 4 miles W of Selma and eventually lifting near Plantersville in the HE corner of the county. 30 homes, most of very poor construction, were leveled, and vast amounts of timber was destroyed by this large tornado. Many trees were reported as debarked, and crops were pulled from the ground.

Apr 14, 1886 MN 1600 25 miles 800 y 74 dead 213 inj. F4 (061) From a point in Stearns Co., about 5 miles SSW of St. Cloud this tornado moved NNE and due N into the poorest section of the city of St. Cloud. 22 deaths were reported, as dozens of homes were leveled and swept away. Crossing the Mississippi River the tornado moved through the heart of the city of Sauk Rapids, Benton Co., with 39 additional deaths. Some observers reported that the bottom of the river was visible during the tornado crossing. Continuing to the N and NNW, 11 members of a wedding party were killed, 4 miles SSE of Rice. 2 additional deaths were reported on a farm SW of Buckman, Morrison Co., mar the end of the path. Apr 14, 1886 IA 1500 40 miles 200 y 2 dead 18 inj. F4 (062) The tornado touched down about 5 miles SW of Wiota, Cass Co., and produced its first F4 house damage and a death as it crossed the RR tracks about 2 miles W of town. Continuing to the NRE, the funnel passed 25 miles E of Brayton, Audubon Co From this point, it is not known whether the tornado lifted or skipped to Coon Rapids, in the SE corner of Carroll Co. The tornado derailed a freight train and leveled a house on the W side of Coon Rapids, and lifted 3 miles W of town. 32 buildings were listed as destroyed in that town.

- Apr 14, 1886 M0 1930 15 miles 200 y 6 dead 10 inj. F4 (063) From a point in N central Holt Co., about 7 miles N of Mound City, the tornado moved to the NE, leveling several farm houses 5 miles W of Skidmore, Nodaway Co. The funnel turned to the NNW dissipating near Burlington Jct. where several people were injured in the railway station.
- May 12, 1886 IL/IN 1630 25 miles 150 y 3 dead 10 inj. F4 (064) From near the western edge of Vermillion Co., the tornado rapidly intensified and moved to the ENE, passing 1 miles to the S of Armstrong and 1 mile to the N of Potomac. Considerable F4 damage to farms was indicated in this area, and 2 deaths occurred as the Shaw farm house was leveled. One additional death occurred in the Miller house as the tornado passed between Rossville and Alvin. The tornado passed into Warren Co., Indiana, and dissipated.
- May 12, 1886 IN 1800 10 miles 200 y 5 dead 20 inj. F4 (065) Plotted as a single event, this may have been two members of a tornado family. The tornado touched down about 2 miles NW of Williamsport, Warren Co., and moved due E across the N edge of that town, un oofing several homes. Crossing the Wabash River into N Fountain Co., the tornado struck the town of Attica, damaging or destroying over 100 homes, leveling several completely Damage totalled \$200,000.
- May 12, 1886 OH 2300 10 miles 600 y 2 dead 0 inj. F4 (066) This apparently very intense tornado struck in a part of Ohio where this level of intensity is almost unknown. The funnel cut a % to 's mile wide path from 5 miles SW of Carpenter. Meigs Co to several miles NE of town. As the tornado passed just NW of Carpenter, the McComas farm house was totally leveled, and two people killed.
- May 14, 1886 IN/OH 2000 25 miles 800 y o dead 20 inj. F4 (067) This is the only confirmable F4 tornado among a family of tornadoes that moved across NW Ohio that evening. At least 9 farm houses were leveled as the tornado moved from several miles N of Fortland, Jay Co., Indiana to the NE, crossing into Ohio about 8 miles N of Fort Recovery, Mercer Co. Gre death occurred at the state line, as a farm house was leveled. Continuing to the NE, the funnel passed just S of Wabasi. And about 5 miles NW of Celina. Other killer tornadoes are included in this family, but the total death toll is considerably under the exaggerated totals officially assigned to this outbreak.

(068)

Apr 21, 1887 KS/MO 1730 45 miles 800 y 20 dead 250 inj. F4 From a point about 5 miles SW of Colony, the tornado rapidly intensified and moved due E, passing a mile S of Colony. The approaching tornado was reported from Colony as feeling like an earthquake. Continuing due E, the massive funnel passed just to the S of several Anderson and Linn county towns, including Lone Elm, Kincaid, and Blue Mound. Many farms were leveled along the way. The town of Prescott, Linn Co., was directly in the tornado's path, and 200 of the 300 buildings were destroyed, causing 12 deaths. The funnel crossed into SW Bates Co., Missouri, just N of Hume. From there, the tornado turned to the NE, leveled several famms with 5 deaths NE of Sprague, and dissipated N of Rich Hill, This was one of the few \$1,000,000+ tornadoes of the 19th century.

Apr 22, 1887 [L/IN 1730 25 miles 400 y 5 dead 15 inj. F4 From 5 mile N of Bellmore, Wabash Co., the tornado moved almost (069) due E, passing along the N edge of Mt. Carmel. F4 damage to one or two farms is likely. Damage at Mt. Carmel was \$50,000. with 2 deaths. Passing into Knox and Gibson counties in Indiana. the tornado moved along the White River, at the border of the two counties. 3 additional deaths occurred as the tornado struck Buena Vista, at the northern tip of Gibson Co. No F4 damage was indicated in Indiana.

1500 40 miles 400 y 24 dead 80 inj. F4 Feb 19, 1888 1L While some tornadic evidence is reported from Kaskaskia, in SW (070) Chester Co., the tornado is plotted as having originated near Steeleville, at the E edge of Chester Co. For the great majority of its track to the NE, the tornado did no confirmable F4 damage, passing 4 miles N of Pinckneyville, Perry Co. and into Jefferson Co. The major damage was near the end of its path, in the S half of Mt. Vernon with 19 deaths, \$400,000 damage, and the destruction of 300 homes and 50 businesses. Overturned wood stoves in this winter tornado ignited many fires in the wreckage.

1930 20 miles 200 y 3 dead 30 inj. F4 May 0, 1889 KS Fr an extreme N central Pratt Co., about 2 miles S of the county (071) line, the tornado moved to the NE and NNE into Stafford Co., where 5 farm homes, a school and a church were leveled. Debris from farms was strewn for miles over the prairie. The tornado lifted 4 miles E of Stafford.

1600 20 miles 200 y 1 dead 5 inj. F4 May 28, 1889 KS Touchdown occurred in the SE corner of Marion Co., and the (072) tornado moved to the NNE, crossing the Cottonwood River with "water piled up on both sides", passing 2 miles W of Clements, Chase Co., and lifting about 10 miles N of that town. Many farms were destroyed, and one was apparently leveled to the ground.

Mar 27, 1890 MO/IL 1615 30 miles 400 y 7 dead 80 inj F4

This tornado apparently touched down in N Cape Girardeau Co., MO near Shawneetown. Crossing the Mississippi River, the tornado passed through Grand Tower, Jackson Co., IL with 4 deaths and 60 injuries. Continuing to the NE. 2 people were killed as homes were leveled at Poplar Ridge, S of Murphysboro, and the funnel dissipated N of Carbondale. F3 level damage occurred at Grand Tower. Some doubts remain about the strength of house construction near Musphysboro.

1630 55 miles 800 y 2 dead 30 inj. F4 Mar 27, 1890 MO/IL From N Scott Co., Missouri, the tornado crossed the Mississippi (074) River and passed N of Thebes, Alexander Co., Illinois. Many farm houses were leveled in the Springville community, about 10 miles S and SSE of Anna, Union Co. Other farm houses were leveled 8 miles NW of Vienna, Johnson Co. The tornado dissipated near Sconefort, Saline Co.

Mar 27, 1890 MO/KY/IL 1700 35 miles 400 y 5 dead 70 inj. F4 The most intense level damage was near the start of the path (075) in SE Mississippi Co., Missouri with 4 deaths and several leveled buildings at the Hoff's Station, on the RR line 4 miles E of Charleston. Passing just 5 of Bird Point, the tornado flattened large number of trees. In Kentucky, the tornado skipped across Ballard and McCracken counties before crossing the Ohio River and striking Metropolis, Massac Co., Illinois. The damage at Metropolis was extensive, with many houses and other buildings unroofed or blown over. Damage totalled about \$150,000. One death was reported, and water was said to have been as high as rooftops along the waterfront, as the tornadic waterspout made landfall. The tornado dissipated 5 miles inco Illinois, after the leveling of the Gurley farm.

Mar 27, 1890 IL/KY 1800 50 miles 1200 y 21 dead 200 inj. F4 This tornado was likely to have been a member of same (076) tornado family as the previous event. Touching down several miles 5 of Golcenua, Pope Co., the tornado crossed the Ohio river into Livingston Co., Kentucky with only minor damage. Three deaths were reported from Livingston Co., as the tornado moved to the ENE. The majority of F4 damage and deaths occurred from Blackford to Dixon, Webster Co, where dozens of farms were leveled and miles of timber flattened. The tornado turned to the NE and apparently dissignated near Sebree. The track was near and parallel to a similar tornado in 1852.

1800 25 miles 400 y 6 dead 35 thj F4 Mar 27, 1890 KY From a point several miles NW of Benton, Marshall Co., the tornado (077) moved to the NE, causing widespread destruction of farms and timber especially in the areas around Grand Rivers. Kuttawa and Eddyville Lyons Co. While nearly 12 of the buildings in Grand Rivers were damaged, only a few farms outside of town were leveled. Many bridges were destroyed, as the tornado crossed and recrossed rivers. One farm was leveled at the edge of Eddyville, with 2 deaths, but construction of these farms was probably not strong.

Mar 27, 1890 KY 2000 50 miles 1200 y 7 dead 40 inj. F4 [078]
This tornado, or series of tornadoes, first touched down about 5 miles W of Hartford, Ohio Co., and moved ENE through sparsley settled territory. Massive amounts of timber destruction were reported, and homes were swept away in several of the small communities that were touched. The tornado passed by the edge of Sulpher Springs, Ohio Co. and Falls of Rough, Grayson Co., lifting for the final time about 10 miles NW of Elizabethtown, Hardin Co, with 2 deaths in the Pauley home near Qineyville. The tornado path was similar to one on March 19, 1849

- Mar 27, 1890 KY/IN 2015 15 miles 400 y 76 dead 200 inj. F4 From several miles SW of Louisville, the tornado moved NNE and NE through the Parkland suburb, leveling a few homes. This possible F4 damage was the only indication of violent activity along the path. In Louisville, multiple story buildings were hit and they collapsed rather than being swept away. \$2,500,000 in damage was done as the tornado passed through the center of Louisville, with 44 deaths occurring in the popular meeting place known as Falls City Hall. The tornado widened into what was probably widespread downburst activity as it crossed the Ohio River and unroofed many buildings in Jeffersonville, Clark Co., Indiana.
- May 4, 1890 TX 1700 10 miles 400 y 1 dead 0 inj. F4 (080) This tornado traveled slowly to the E, over the S part of Hamilton Co., originating about 20 miles N of Evant. Many farm houses were leveled, but the visibility and slow movement allowed people to take cover. A man in a wagon was apparently killed at the edge of the tornado. The funnel appeared ', mile wide, and uprooted huge mak trees along the river banks. 14 dead cattle of unknown or the suborted to have unuped into one field.
- May 9, 1890 M0 1730 2 miles 200 y 4 dead 20 inj. F4 (081) From about 5 mile: NN of Albany, Gentry Co. this tornado first moved to the E and to the N°, passing one mile E of Martinsville. Harrison Co., where 3 deaths occurred as the Wilson home was leveled. Further to the NE, one death occurred near the end of the path, as 12 houses were damaged or destroyed at Blythedale.
- Jun 3, 1890 NE 2030 20 miles Bucy 17 dead 100 inj. F4 (082) From the extreme SW corner of York Co., this tornado moved to the NNE passing over a Russian settlement SW of Bradshaw, leveling mearly every building and causing 14 deaths. Continuing to the NNE the tornado struck the town of Bradshaw, causing 3 more deaths and about \$100,000 in property damage.

Jun 20, 1890 IL 1430 25 miles 400 v 15 dead 60 inj. F4 (083) First touchdown was apparently 5 miles WSW of Amboy, Lee Co... and from there the tornado moved due E, passing S of that town. Farms were leveled along the entire section of the path beginning just S of West Brooklyn and continuing a mile S of Compton. Two mile S of Paw Paw, the tornado leveled the Deacon Hunt schoolhouse. Most of the children had been sent home at the start of the storm, but some remained with the teacher. 6 students and the teacher were killed. The tornado dissipated in SW DeKalb Co.

- Jly 13, 1890 MN 1800 15 miles 400 y 13 dead 23 inj. F4 (084) From about 15 miles NW of St. Paul, in SE Anoka Co., this very visible tornado moved to the SE, passing over many lakeside communities and leveling the cottages along the lakes. The houses were probably of varied contruction, but many belonged to wealthy individuals. Cottages along Turtle Lake, Snail Lake, Vadnais Lake, Gervais Lake, and Kohlman Lake were hit, as well as the town of Little Canada. Most of the damage was in Ramsey Co. Many of the occupants drowned. Later in the day, downburst activity about bo miles to the SE, on Lake Pepin, overturned the excursion boat "Sea Wing" with about 200 people on board. 110 people drowned.
- May 20, 1891 MO 1515 35 miles 300 y 4 dead 35 mj. F4 (085) Touchdown occurred 25 miles SE of Sturgeon, Boone Co., and moved due E, passing along the N edge of Centralia. Many associated phenomena were reported along the path from Centralia eastward across Audrain Co., to near Laddonia. Some electrical phenomena such as a "running current" were noted, chickens were plucked, trees debarked, ponds and wells were reported as being emptied of water, and some chickens were reported in a partially cooked condition. Various multiple vortex activity was sighted. While some of these occurrences are obviously fictional, many are frequently reported as associated with major tornado activity. The path was not continuous, and total damage was about \$50,000. While many homes were leveled in the Rush Hill area, construction was probably not strong, 1 mile N of Rush Hill, the tornado was said to have "glowed"
- Mar 31, 1892 KS 2100 50 miles 800 y 17 dead 100 inj. F4 (086) This large tornado touched down just N of South Haven, Summer Co. and moved to the NE, passing 9 miles E of Wellington, where many farm houses were leveled and 6 people were killed. The tornado lifted or skipped over tarms SE of Wichita, but struck again in Butler Ct., leveling farms, causing 8 deaths at Towanda.
- Mar 31, 1892 KS 2340 15 miles 200 y 5 dead 10 inj. F4 (087) Probably in the same tornado family as the previous event, the funnel touched down 2 miles SE of Wamego, along the Kansas River in Wabaunsee Co. Passing E of Wamego into Pottawatomic Co., the tornado leveled the Eggers home, causing 4 eaths. Moving to the NNE, the funnel lifted in the eastern part of the county.

1930 55 miles 800 y 16 dead 100 inj. F4 May 27, 1892 KS This tornado, or series of tornadoes, leveled many farms and hit two towns as it moved due E from a point about 10 miles E of (880) Medicine Lodge, Barber Co. The funnel passed 3 miles N of Attica.Harper Co., and along the edge of the town of Harper. 6 deaths occurred in the Harper area. The town of Wellington, Summer Co. was struck with \$200,000 in property damage and 10 dead The funnel lifted shortly after leaving the town \$300,000 damage was reported for the entire path of the tornado.

1830 15 miles 400 y 6 dead 20 inj. 54 May 31, 1892 Tx From a point in extreme N Bell Co., the tornido moved to the SE (089) and leveled several farm houses and 2 schools near Troy. Passing near Durango, Falls Co., 6 deaths occurred in 4 houses that were leveled. The tornado dissipated W of Travis.

1630 30 miles 800 y 8 dead 30 inj. F4 Jun 15, 1892 MN This tornado, or family of tornadoes, is part of a complex series of tornadoes that touched down in S central MN that day. (090) As plotted, the funnel touched down as the third member of a tornado family which began at Sherburn in W. Martin Co. This event began about 5 miles SE of Winnebago, Faribault Co., then to E and ENE, leveling a number of farms near Easton. The next area of violent activity was about 5 miles N of Wells. The final area of F4 activity was at the edge of the town of Hartland, with 5 deaths.

1500 15 miles 400 y 1 dead 20 inj. F4 Dec 6, 1892 TX/AR Touching down 5 miles SE of Atlanta, Cass Co., the tornado passed 3 miles E of Atlanta and 1 mile E of Queen City, Before (091) moving into Arkansas, the tornado leveled the McAdams house, with one death ... a child whose body was found by mile from the house site. The house was small, and of uncertain construction.

2020 20 miles 400 y 7 dead 50 inj. F4 Mar 3, 1893 GA One of many killer tornadoes across the SE states this day, this (092) event touched down about 8 miles S of LaGrange, Troup Co., and moved to the NE striking the town of Odessadale, Meriwether Co., leveling several homes and causing 6 deaths. Home construction was probably not strong. Continuing to the NE, the tornado struck the N edge of Greenville, damaging or destroying 74 buildings, with 1 death.

1830 20 miles 100 y 9 dead 25 inj. F4 Apr 11. 1893 MO This tornado touched down 4 miles SE of Lenox, and moved to the (093) NE, passing 6 miles NW of Salem, Dent Co., and continuing to the N edge of the county. The tornado leveled homes along the entire path, but most of the deaths occurred 11 miles N of Salem at the Condray (Bangert) community near the end of the path. House construction was not strong.

Apr 11, 1893 MO

(094)

1850 12 miles 500 y 5 dead 20 mj. F4 From just NE of Mayview. Lafayette Co., the tornado moved to the NE, leveling and sweeping away many farm houses between Mayvi, w and Dover. Passing just to the E of Dover, the tornado moved into SW Carroll Co. and dissipated. All of the deaths and most of the injuries occurred from the W of Page City to Dover.

1500 15 miles 800 y 4 dead 25 inj. F4 Apr 25, 1893 OK The cornado touched down about 5 miles ENE of Guthrie, Logan Co. (095) and moved ENE along the Cimarron River. The very visible funnel destroyed over 100 buildings and debarked trees in communities along the river. Passing 1 mile N of Perkins, the tornado lifted near Ripley in Payne Co.

1830 20 miles 800 y 31 dead 100 inj. F4 Apr 25, 1893 OK Touching down in the N tip of McClain Co., the tornado moved to (096) the ENE leveling farm after farm between Moore and Norman in Cleveland Co. Two miles SW of Moore, 11 of the 13 people in the O'Connor home were killed. Nearby, 4 people were killed in the Maroney home and 6 were killed in the Bank home. Some houses were completely swept away, but were probably of very poor construction

2045 35 miles 200 y 2 dead 15 inj. F4 Apr 25, 1893 TX, UK From 5 miles SE of Bowle, Montague Co. the tornado moved to the (097) NE, passing about 2 miles E of Bonita and into NW Cooke Co. 11 houses were destroyed and 2 children were killed in one farm house that was leveled. The tornado crossed the Red River and dissipated in Oklahoma.

1730 15 miles 400 y 5 dead 20 inj. F4 Apr 26, 1893 OK The tornado touched down in N central Noble Co., and moved NE (098) passing 11 miles S and 10 miles SE of Ponca City, in Asage Co. The 5 deaths occurred in the "Ponca" area, 1 m les 5 of what is now Ponca City, as two homes were leveled House construction was probably not strong, with both homes totally swept away.

2130 13 miles 1200 y 23 dead 150 mj. F4 Apr 28, 1893 TX Probably originating near the W edge of Eastland Co., this (099) tornado moved to the NE and destroyed 25 homes and 45 businesses as it passed through the very center of the t wn of Cisco. Destruction of farms continued to the NE, deaths 4 miles NE of town, and 7 miles NE of town. The funnel dissipated in the SE corner of Stephens Co. Damage was estimated at \$400,000.

- May 22, 1893 WI 1700 20 miles 1200 y 3 dead 10 inj. F5 (100) The tornado originated 2 miles N of Darlington, Lafayette Co., and moved to the NE, lifting in the SE corner of Iowa Co. The tornado grew very large and intense in Willow Springs Twp., and many farm houses were leveled, with some farm complexes virtually vanishing, leaving nothing but splinters in the place of a farm house, barns, and trees.
- Jun 21, 1893 KS 1800 8 miles 200 y 11 dead 30 inj. F4 (101) This rather short path tornado touched just SE of Perry. Jefferson Co., and moved NE, passing NW of Williamstown. 1/2 dozen farms were leveled, and 6 members of the Kincade family killed, with bodies carried for a mile. 30 homes were destroyed.
- Jlv 6, 1893 IA 1635 40 miles 800 y 71 dead 200 inj. F5 (102) Possibly beginning in Cherokee Co., the tornado is plotted here as touching down 4 miles SW of Alta, Suena Vista Co. and moving to the ESE crossing the N part of Storm Lake as a tornadic waterspout. Continuing to the ESE, the tornado passed to the S of many communities along the RR tracks. The tracks and the tornado path finally coincided at the town of Pomeroy in Calhoun Co. The funnel lifted before reaching Manson. 80% of the buildings in Pomeroy were destroyed, with most of them leveled to the ground. In few tornadoes is the degree of leveling so complete. Photographs show large areas of the town with not a tree or a wall of any kind standing vertically. 49 of the deaths were in and around the town, the remainder occurred on farms to the NNW
- May 5, 1894 IA 1700 30 miles 200 y 1 dead 5 inj. F4 (103) The tornado first touched down 25 miles 5 of Iconium, in NW Appanoose Co., and moved ESE. A large church was leveled near Maine, along with a farm house. 3 cars of coal were blown 25 yards from the tracks. A woman was killed in her house in this area. Several houses were leveled as the tornado continued to the SSE, down the Fox River valley to near Bloomfield, Davis Co.
- May 17, 1894 OK 1615 9 miles 400 y 5 dead 5 inj. F4 (104) From a point 2 miles N of Montpelier, Williams Co. the tornado moved to the ENE passing across the SE quarter of the town of Kunkle. Several houses were leveled, and 4 deaths occurred in one of them. Property damage totalled about \$50,000. The funnel was very visible and the roar could be heard for miles. One victim was carried & mile.

- Jun 27, 1894 MN 1866 10 miles 100 y 1 dead 5 inj. F4 (105) The tornado formed about 3 miles N of Fulda in S Murray Co. and moved to the NE. The skipping path was part of a very complex series of tornadoes that struck western Minnesota that day. Many of these tornadoes were on the ground only a short time and produced strong F3 damage. The two F4 events listed here are the two which most completely leveled farm houses along their paths. F4 damage in this event was in Des Moines River Twp., Murray Co. as the Ewy farm was leveled.
- Jun 27, 1894 MN 2200 25 miles 150 y 2 dead 6 inj. F4 (106) From near Cosmos, in the SW corner of Meeker Co., the tornado moved to the NE and NNE across the county, passing 1 mile E of Litchfield and dissipating about 8 miles NNE of that town. The Brantz Farm, 4 miles NE of Litchfield, was completely leveled. This event is part of tornado family that originated in Yellow Medicine Co., near Echo.
- Sep 21, 1894 IA 1930 75 miles 1600 y 43 dead 200 inj. F5 (107) From a point 3-1/2 miles SW of Ruthven, Clay Co., the tornado moved to the E, passing S of Emmettsburg, Palo Alto Co., and hit the outskirts of Cylinder. The tornado struck 3 miles N of Algona, Kossuth Co., and 2 miles N of Wesley. It is here that the tornado may have reformed into 2 distinctly different events. Continuing into Hancock Co., the tornado passed 4 miles N of Brift and probably dissipated NE of Fertile, Worth Co. This event consisted of as many as 5 individual tornadoes. Many farms were swept away as the tornado passed just S of Emmetsburg and 9 deaths occurred in the county. In Kossuth Co., many farms were completely swept away and 25 deaths were confirmed. Death and destruction continued all along the storm track, and the tornado, or series of tornadoes, may have been one of the most severe ever to strike the United States. It is a little-known event because no town was struck directly while the fornado was at maximum intensity.
- Sep 21, 1894 IA/MN 2200 70 miles 800 y 10 dead 100 inj, F4 (108) While not as large as the previous tornado, it produced more damage, for two Minnesota towns were struck. The track is plotted from 5 miles NE of Mason City, across Mitchell Co., Iowa and into SE Mower Co., Minnesota where the tornado struck the town of Leroy, producing \$120,000 in damage. Passing into Fillmore Co., the tornado hit the west edge of Spring Valley, leveling several farms at the edge of town and causing \$60,000 in damage. The tornado dissipated about 10 miles to the NE.
- May 1, 1895 KS 1630 22 miles 1200 y B dead 25 inj. F5 Passing from the NW corner of Sedgwick Co., the tornado moved to the NE, leveling many farms near Patterson and Halstead in Harvey Co., and dissipating W of Newton. Hundreds of head of livestock were killed and 4 members each of two different families were killed in the destruction of their homes. The homes in this area were described as well built, in a wealthy farming district, and some were entirely swept away.

- May 3, 1895 IA 1520 16 miles 400 y 11 dead 30 inj. F4 (110) The tornado touched down 4 miles NE of Ireton, Sioux Co., unroofed a farm house and leveled a school house, killing 2 teachers and a student. Continuing to the NE, the tornado destroyed many farms before lifting 3 miles SSW of Hull.
- Apr 20, 1896 OH 1500 6 miles 800 y 3 dead 20 inj, F4 (111) This tornado moved to the ENE passing 4 miles NW of Fremont, Sandusky Co. Homes were leveled in Sandusky and Rice Twps., and the tornado destroyed a large part of the community of Booktown, N of Fremont. In one home, a man and a woman were killed, but the baby was carried into a field, unhurt. Damage totalled about \$100,000.
- Apr 25, 1896 KS 2100 20 miles 800 y 8 dead 20 inj. F4 (112) The tornado touched down about 5 miles SSW of St. Joseph, Cloud Co., and moved NE, passing haif-way between Clifton and Morganville in NW Clay Co. 27 homes were destroyed, many leveled, with the debris strewn for miles. A child was reportedly carried for 5 mile. The funnel dissipated at the S edge of Washington Co.
- May 15, 1896 TX 1600 15 miles 300 y 73 dead 200 inj. F5 (113) This event was the third in a 5 member tornado family. The tornado touched down 13 miles SSW of Sherman, Grayson Co. and moved to the NNE, cutting a 200 y wide strip of total devastation through the W side of that town. The path narrowed to 50 yards in places, with little damage outside of that area, and nothing standing within it. Debris was scattered for miles, as some of the finest homes in the town had little left but kindling wood left on the house lot. A number of deaths occurred on farms that were destroyed SW of town. 3 of the 5 members of the tornado family produced deaths.
- May 17, 1896 KS/NE 1700 90 miles 1600 y 25 dead 200 inj.F4
 (114) This truly major tornadic event began in S central Washington Co. and moved to the NE, then to the ESE when it reached a point 6 miles S of Barnes, and then again to the NE. The tornado passed a mile S of Frankfort, Marshall Co., where the tornado was visible for half an hour, as it approached. In Nemaha Co., the tornado caused great devastation at the towns of Seneca, Oneida, and Sabetha. The tornado widened to 2 miles in Reseive. KS, and the Falls City, NE, area, forming a complex downburst/tornado damage pattern. 6 deaths occurred at Seneca, 6 at Oneida, 3 at Sabetha, and 5 at Reserve. 5 additional deaths occurred in the tornado/downburst area between Falls City and Reserve. Property loss was about \$325,000.

- May 24, 1896 IA 2200 20 miles 1000 y 19 dead 100 inj. F4 (115) While closely associated with a tornado in Dallas Co. the tornado is plotted from 25 miles SW of Polk City, Polk Co., passing 10 miles N of Des Moines, moving ESE. Turning to the E, several homes were leveled on the N edge of Bondurant, with 4 deaths in the Bailey home, NE of town. Continuing to the ENE and NE, 3 deaths occurred as a home was leveled in the community of Santiago. Passing along the N edge of Valaria, several homes were destroyed, and 6 deaths occurred as the Phelan home was leveled. Additional deaths took place at Mingo, as the funnel dissipated in NW Jasper Co
- May 25, 1896 IL 0100 15 miles 200 y 2 dead 5 in). F4 (116) From 3 miles NW of Forreston, the tornado followed a twisting path to the E, frequently moving NE and then SE, across the N part of Ogle Co. Aong the N edge of Adeline, one church was leveled and other churches and houses were unroofed. The funnel lifted 3 miles S of Egan, shortly after leveling the Bird home and causing 2 deaths there.
- May 25, 1896 MI 1930 30 miles 200; 2 dead 15 inj. F4 (117) This tornado touched down at Mt. Clemens. Macumb Co., and moved to the NE between the RR tracks and bridges, before moving out over Lake St. Clair. Several homes and buildings were leveled near the lake shore. The tornado either crossed the N end of the Lake, or reformed at the St. Clair Co. shore, and reintensified as it moved into Canada, where many other homes were destroyed.
- May 25, 1896 MI 2100 27 miles 800 y 47 dead 100 inj. F5 From the NW corner of Oakland Co., this massive cornado moved to the E and ENE.leveling many homes and farms in and near the towns of Ortonville, Oakwood, and Thomas Entire families were willed, with parts of hous" found up to 12 miles away. Frees were debarked "even to the twigs, as though done by the careful hand of an experienced artisan". The tornado moved ENE and lifted in Lapeer Co., W of Dryden, Oamage totalled \$400,000. Deaths were reported in 7 different communities.
- May 27, 1896 MO 1815 5 miles 150 y 2 dead 3 inj. F4 (119) One of many major tornadoes that struck Missouri this day, the funnel passed 42, miles SE of Chamois, Osage Co. Two farms were destroyed, with the death of 2 children on one of them, as all 7 buildings on the farm were leveled.

May 27, 1896 MO/IL 1810 9 miles 2000 y 255 dead 1000 ini. F4 (120)This tornado, which was to be one of the deadliest in U.S. history, touched down about 6 miles due west of the Eads Bridge. St. Louis. From the NW edge of Tower Grove Park, this complex combination of tornado and downburst widened to over a mile and moved due E, collapsing or sweeping away portions of houses. factories, saloons, hospitals, mills, RR yards, churches, and causing a total of over \$10,000,000 in damage. In most areas roofs and trees were not carried away, but thrown to the ground. In other areas, homes were swept away and evidence of extreme wind speed were noted. On the east end of the Eads Bridge (built as tornado proof after the 1871 event in the same place) a 2"x10" white pine blank was driven through the 15" thick wrought iron web. No significant damage was done to the steel span of the bridge, but this remains the only documented example of this type of penetration. 137 people were killed at St. Louis. The tornado was apparently at maximum intensity when it crossed the Mississippi River into East St. Louis, Illinois, and homes along the river were completely swept away. About & of the buildings in the town were destroyed or damaged. A much smaller area of damage occurred at East St. Louis, with a damage total of about \$2,000,000, but the great intensity resulted in 118 deaths.

May 27, 1896 IL 1820 20 miles 1600 y 14 dead 50 inj. F4 (121) This to ado touched down in NW Washington Co. at about the same time as the previous event struck St. Louis. It moved to the ESE and E. leveling many farms as it passed in or near the towns of New Minden, Hoyleton, Irvington, Richview, Washington Co., and Boyd, Jefferson. The majority of the deaths were at New Minden.

May 27, 1896 IL 1845 30 miles 400 y 24 dead 125 inj. F4 (122) This tornado formed as the East St. Louis tornado dissipated. 5 miles to the north. Striking first near the Imbs RR station. the tornado moved to the E, leveling many homes and causing 8 deaths near the Birliner station and 2 at nearby Harmony station. Lifting over Belleville, the tornado touched down or reformed 3 miles N of Mascoutah, St. Clair Co., and continued to the E and ENE into Clinton Co., where farms were leveled and homes destroyed in and near New Baden, with 13 deaths. One additional death occurred in the destruction of a farm house near Germantown. 100 houses were damaged by downburst winds at Mascoutah.

Mar 30, 1897 OK 1730 18 miles 800 y 14 dead 40 inj. F4 (123) The tornado first touched down in SW Lincoln Co., and moved to the NNE, on a path that would have passed west of Chandler, but the tornado turned to the NE and passed through the center of town. Every building in the town received some degree of damage and many homes completely leveled. The damage total of \$100,000 was added to by fires, which were very common in the late winter and early spring tornadoes of the 19th century. Wood heating and cooking stoves were almost always lit at the time of peak tornado a tivity in the late afternoon. Multiple section vortices were well described.

- Mar 31, 1897 AR 1300 30 miles 600 y 7 dead 30 inj. F4 (124) From the SE corner of Cleveland Co., near Orlando, the tornado moved to the NE, across Lincoln Co., leveling and sweeping away several small homes as it passed a mile SE of Star City. The cornado damaged a wide area, but was not as intense as other tornadoes of that size.
- Jun 10, 1897 MN 1900 6 miles 400 y 1 dead 22 inj. F4 (125) From the NW corner of Mower Twp., this tornado moved slowly to the ENE, passing a mile N of Lyle. Several farms were completely leveled, with most buildings on the Hanson farm swept away, and with one death at that location.

Jun 24, 1897 KS 2230 16 miles 150 y 3 dead 4 inj. F4 (126) The tornado originated in the SW corner of Ottawa Co., and moved to the ENE, passing 3 miles N of Culver and lifting NW of Bennington. The tornado damaged or destroyed buildings on 20 farms, with 3 deaths occurring as the Geesey house was leveled.

- Jly 5, 1897 MN 1400 7 miles 400 y 2 dead 8 inj. F4 (127) From 1 mile 5W of Lowry, Pope Co., the tornado moved to the NE, passing along the edge of that town. Visible for miles, the funnel moved beyond Lowry, and destroyed many farm buildings. Only F2 level damage was done in town, but near the end of the path the Morrow farm was leveled and 2 people were killed.
- Jan 11, 1898 AR 2315 10 miles 200 y 55 dead 100 inj. F4 (128) The tornado touched down on the W edge of the city of Fort Smith, near the nat'l cemetery. Moving ENE through the sleeping community, it leveled dozens of homes and businesses, and tore the upper stories off of large brick buildings, such as the new high school. The tornado left the town with \$450,000 in damage and continued to the ENE, crossing the Arkansas River, S of Van Buren, where 3 more people were killed as farms were destroyed. A Fort Smith street sign was picked up 22 miles away.
- Apr 30, 1898 IA 1730 15 miles 150 y 2 dead 5 inj. F4 (129) Dee of a family of tornadoes, this event began 5 miles SE of Stoux Center, Stoux Co. and moved to the NE, ending 3 miles SE of Sheldon, O'Brien Co. Several farm nouses were destroyed, and one was leveled. 2 children were killed 5 of Sheldon.
- May 1, 1898 TX 0145 30 miles 400 y 6 dead 37 inj. F4 (130) This tornado, the first confirmable violent tornado in the Texas panhandle, isveled several farm houses as it moved to the NE across the NW co.mer of Wheeler Co. 23 farm buildings are listed as destroyed.

1510 90 miles 1200 23 dead 150 inj. F4 May 10, 1898 14/11 From a point 1 mile S of Stanwood, in N Cedar Co., this major (131) tormadic event moved to the ENE, passing near the Clinton Co. towns of Lost Nation, Elwood, Delmar, and Riggs. Several farms were destroyed S of Lost Nation, with large amounts of livestock killed. Nearly 1000 head of livestock were reported killed in the Elwood area, with trees debarked and farms destroyed. The funnel passed 15 miles 5 of Preston, Jackson Co., where the 5 members of the Blora family were killed in the leveling of their home. There was \$50,000 in property damage in the Presion area. 5 people were killed near Riggs. 7 near Delmar, and 1 between Quigley and Riggs, for a total of 18 in Iowa. The tornado either reformed slightly to the SE or moved to the SE, as it crossed the Mississippi River at Sabula, into Carroll Co., Illinois. In Illinois, 3 people were killed in Carroll Co., as the funnel passed 3 miles 5 of Savanna, and dissipated N of Adeline, Ogle Co. causing 2 deaths. The tornado either moved to the SE, or reformed to the SE, in Ogle. It is plotted as a reformation in the next event.

May 18, 1898 IL 1600 35 miles 600 y 9 dead 40 inj. F4 (132) From the SW corner of Ogle Co., this tornado moved NE, diagonally across the county, intensifying as it progressed. Considerable F3 level damage was noted 3 miles N of Oregon. The complete leveling of farms began in the area of Stillman Valley, where entire farm complexes were almost totally swept away. 4 deaths occurred in the Nelson family home, at the SE edge of Stillman Valley, and 4 in the Mass family home, 4 miles 5 of Kithwaukee, in the SE corner of Winnebago Co.

- May 18, 1898 FL 1700 25 miles 300 y 2 dead 10 inj. F4 (133) This very visible funnel touched down in N Bortau Co., SW of Ohio, and moved to the NE and EME, crossing into Lee Co. Maximum intensity damage was done to farms due south of Amboy, with one death. The second death was rear the end of the path, N of Paw Paw.
- May 18, 1898 WI 1930 30 miles 800 y 12 dead 75 inj. F4 (134) From about 10 miles E of Abbotsford, Marathon Co., the tornado moved to the NE, leveling farms and forests, to the edge of the county, 15 miles SE of Mervill. 5 deaths occurred in the Hanke family, 4 miles NE of Rtb Falls. The 2 deaths at Antigo were probably from a separate tornado.

J1y 27, 1898 IA 1500 5 miles 150 y 2 dead 3 inj. F4 (135) From a point 2 miles NW of Emerson, Mills Co., this tornado moved to the ESE, passing a mile N of that town. Many farms were destroyed and one was completely leveled. The deaths and injuries were in the destruction of the Thornton home. The funnel moved further to the ESE, and lifted N of Hawthorne, Montgomery Co. Aug 14, 1898 SD 1815 20 miles 800 y 8 dead 6 inj. F4 (136) The tornado touched down in N central Deuel Co., about 7 miles N of Clear Lake. Moving to the SE, the Hutchinson farm was completely leveled, and 5 members of the family killed along with a guest. Continuing to the SE, the funnel passed by Lake Cochran and Lake Hendricks, dissipating in Minnesota The tornado passed 25 miles W of Gary.

Mar 18, 1899 AL 1830 20 miles 400 y 11 dead 30 inj. F4 (137) From 9 miles W of Heflin, this tornado moved to the NE, passing 2 miles N of that town, in Cleburne Co., and dissipated near Muscadine. The funnel destroyed 8 small homes, most of poor construction. The home of the Coffee family was swept completely away, with the death of all 11 members of the family. 50 other buildings were destroyed.

- Apr 26, 1899 IA 2230 15 miles 400 y 4 dead 10 inj. F4 (138) This tornado moved parallel to the Soldier River, in a NE direction, from 3 miles NE of Moorhead, Monona Co., where several barns were destroyed and Hjorlholm farm house was leveled. Further to the NE, one death occurred in the destruction of the Hanson home, and one death in the Amundson home. Passing 3 miles SE of Ute, a death occurred in the destruction of the Furne home. The tornado lifted N of Berne, Crawford Co.
- Apr 27, 1899 MO 1745 10 miles 200 y 12 dead 40 inj. F4 (139) From the SE corner of Mercer Co., E of Harris, this tornado moved to the NE, passing through the village of Hewtown, Sellivan. The majority of buildings received F2 damage, but 3 were apparently leveled in Newtown. The tornado dissipated in SW Putnam Co. 11 people were killed in nomes of the Desper, Evan, and Hayes families. These 3 homes were on a hill at the SW edge of town, and were completely leveled

Apr 27, 1899 MO 1810 6 miles 400 y 34 dead 125 inj. F4 (140) This rather short path tornado passed from SW to NE through the eastern residential portion of the town of Kirksville, Adair Co. The funnel was narrow in appearance, but the damaged area was 4 mile wide, with a total loss of about \$150,000, and about 300 homes were damaged or destroyed. The deaths were scattered through many different families.

May 16, 1899 IA 2030 10 miles 150 y 4 dead 8 inj. F4 (141) The tornado first touched ground 3 miles NW of Greeley, Delaware Co., and moved NE and passed just NW of the town of Colesburg, veering to the left, and dissipating. 4 people were killed, 2 of whom were caught in the open. Farms were leveled along a 3 mile segment where the funnel narrowed to 75 yards in width. May 27, 1899 SD 1630 8 miles 400 y 7 dead 2 inj. F4 (142) From a point about 25 miles S of Chamberlau, Brule Co., this tornado passed to the SSE, parallel to the Missouri River. Many farm buildings were destroyed. The Peterson farm was leveled, with the death of the father, 3 sons, and 3 daughters. The tornado dissipated in extreme NW Charles Mix Co. Heavy farm machinery was carried several hundred yards, and three farm houses were leveled. Experienced observers stated that the devastation exceeded that of any previous tornado they had seen.

- Jun 11, 1899 NE/IA 1700 13 miles 200 y 5 dead 2 inj. F5 (143) From about 4 miles SW of Homer, Dakota Co., Nebraska, the tornado moved ENE, crossing the Missouri River into Woodbury Co., Iowa. 5 homes were leveled on the outskirts of the town of Salix. 5 members of one family were killed when they emerged too early from their storm cellar. The tornado lifted before reaching the town of Luton. Construction of the Mailoy home, where the deaths occurred, is assumed to be good, being called a "fine, new residence", and its appearance after the tornado indicated F5 intensity.
- Jun 12, 1899 WI 1740 30 miles 300 y 117 dead 200 mj F4 (144) This tornado originated as a rather spectacular waterspout on Lake St. Croix, about 5 miles 5 of Hudson, St. Croix Co. The funnel moved to the NE, passing E of Hudson, across St. Croix Co., in the direction of New Richmond. Several people were killed as farms were leveled SW of New Richmond. The tornado passed through that town on a day in which 1000 extra people had come from surrounding villages to watch a circus. Passing through the very center of town, the leveling of all types of buildings and the massive amount of flying depris resulted in multiple deaths in 26 different families. While not a massive type of tornado, the combination of time and position was somewhat unique. The good visibility of the funnel may have prevented an even higher death total.
- Jun 13, 1899 NE 1830 10 miles 600 y 11 deam 25 in). F4 (145) This tornado passed to the ENE along the N border of Washington Co. From 8 miles WSW of Herman, the tornado passed through that town, and lifted shortly thereafter. Accut 90% of the homes and businesses in that town of 500 people were either damaged or destroyed. Maximum intensity damage was not in Herman, but on farms to the W and SW of town
- Jly 5, 1899 NE 1720 18 miles 200 y 1 dead 0 inj. F4 (146) The tornado touched down 5 miles NW of Johnson, Brown Co., and moved to the ESE. Four houses were destroyed as the funnel passed N of Ainsworth, and eventually dissipated about 5 miles NW of Long Pine. At one farm, the house of heavy logs and 6 other buildings were destroyed.

Nov 20, 1900 MS/TN 1415 95 miles 800 y 42 dead 200 inj. F4

- (147) From near Moon Lake, Coahoma Co., this tornado moved to the HE, accompanied by massive electrical displays. The first major dawage was the destruction of the Norfleet farm, with 6 deaths, 5 miles S of Dundee, Tunica Co. Between Dundee and Arkabulta, Tate Co., 9 people were killed and many homes leveled. The towns of Strayhorn and Arkabulta were both hit, with 11 deaths at each town. A second funnel may have developed in this area. 2 miles NW of Coldwater, 2 people were killed and another death occurred at Guys Switch, 1 miles of Love Station. The funnel either lifted or significantly weakened over Marshall Co., for the next significant dawage was at Lagrange, Fayette Co. At Lagrange, the tornado cut a path 175 yards wide, within which all buildings were leveled. 3 people were killed at Lagrange.
- Nov 20, 1900 TN 2130 8 miles 300 y 27 dead 75 inj. F4 (148) Crossing Maury Co. from SW to NE, this tornado passed through the NW section of Columbia, leveling dozens of homes, and sweeping many of them away. The tornado turned to the left, or north, as it approached Columbia, and spared the heart of the city. Most houses were of poor construction, and damage was \$40,000. The two violent tornadoes this day were part of the worst November outbreak of tornadoes in U.S. history.
- Jun 21, 1901 NE 2030 15 miles 400 y 8 dead 10 inj. F4 (149) This tornado traveled for about 15 miles down the Keya Paha valley, Boyd Co., about 10 miles 5 of Naper. Several farms were destroyed, with the 8 deaths in 2 separate amilies whose farm homes were leveled.
- May 18, 1902 TX 1545 10 miles 250 y 114 dead 140 ini. F4
 (150) This tornado was further south than any other confirmable F4 tornado, W of the Mississippi River. The funnel passed through the town of Goliad, Goliad Co., from S to N, leveling virtually every building along a 1% mile, 250 yard path between Church and Patricio Streets. Of the 250 people who lived in this area. 225 were either killed or injured. 150 homes and business in this area were destroyed, with total damage at about \$200,000.
- Jun 9, 1902 MN 1700 20 miles 800 y 6 dead 10 inj. F4 (151) This large and apparently very intense tornado moved to the SE, up the south branch of the Wild Rice River. Many farms were literally swept away, with the most intense damage about 4 miles N of Ulen, Clay Co., where 4 members of the Horim family died in the destruction of their farm. 10 farms in the area were leveled.

Jun 10, 1902 IL 2300 15 miles 200 y 4 dead 40 inj. F4 (152) This event is one of a series of tornadoes that struck the towns around Peoria this evening. Louchdown of this tornado, the most intense of the group, was probably 5 miles due E of Canton, in NE Fulton Co. While a few farm homes were destroyed, with 2 deaths in one home that was swept away, the major damage was at Kingston Mines. 16 small homes were destroyed in that town, along with the roundhouse, which buried 20 men and 18 engines.

Apr 8, 1903 AL 0130 18 miles 100 y 19 dead 20 inj. F4 (153) This tornado followed an irregular path across the SE portion of Cullman Co. The tornado struck only small rural homes, and the path was not continuous, but where it struck the damage was complete...even to the removal of small vegetation. The greatest number of deaths occurred at Hopewell, a small community Us miles NW of Hanceville. 18 of the 19 deaths occurred in the Griffin, McCoy, and Oden homes.

Apr 12, 1903 IL 1400 5 miles 400 y 2 dead 0 inj. F4 (154) This tornado cut a short path across the SE corner of Piatt. killing a baby instantly and fatally injuring the mother, 4 miles NE of Atwood.

May 22, 1903 KS 1600 25 miles 600 y 2 dead 6 inj. F4 (155) The tornado apparently touched down in the NW part of Dickinson Co., where the Harvey and Young homes were destroyed, with 2 injuries, 5 miles NE of Manchester. Moving to the NE, many farms were leveled in Athelstane, Gill, and Grant Twps., as the funnel moved across Clay County, passing 5 miles NW of Wakefield. Two children were killed when they were reportedly pulled out of the NE corner of the cellar of the Daub home, after it was leveled.

May 23, 1903 OK 1700 45 miles 800 y I dead 30 inj. F4 (156) This tornado passed along the Canadian River. from SW to NE. through what is now Roger Mills Co or NW Dewey Co. At that time, before Oklahoma statehood, this area was Day Co. The tornado passed about 10 miles NW of Leedey, near Camargo, destroying many farm houses and killing one man. The tornado passed near the settlements of Winter, Augusta, and Carmen in what was then Woods Co., and what is now Woodward and Major Cos. Total damage was \$75,000.

May 23, 1903 OK 1700 20 miles 400 y 3 dead 10 inj. F4 (157)
 From about 10 miles SW of Burns Flat, Washita Co., the tornado moved to the NE, leveling many farm houses as it passed between Burns Flat and Foss. The three deaths were S of Foss.

May 25, 1903 NE 1600 25 miles 400 y 6 dead 10 inj. F4 (158) From about 10 miles NW of Cowles, this tornado moved to the NE quite showly, allowing most people to take cover. F4 damage to farms was from 2 miles SW of Pauline, Adams Co., to near the end of the path, 2 miles N of Fairfield. 6 deaths occurred near Pauline, as the tornado passed from Webster to Adams Co. May 25, 1903 NE 1700 25 miles 400 y 9 dead 16 inj. F4 (159) From W Franklin Co., 10 miles N of Naponee, this tornado moved to the NE. leveling many farms and churches. 4 deaths occurred in a Gorman Lutheran church, 2 miles E of Upland. 5 more deaths occurred as farms were leveled near the end of the path. in SW Adams Co.

1245 4 miles 300 y 104 dead 180 inj. F4 Jun 1, 1903 GA This tornado is among the physically smallest tornados rated (160)at F4. The funnel struck SSW of Gainesville, Hall Co. and weaved its way to the NE. Near the start of the path, only F2 dumage was done, but with great loss of life. The 5-story wooden structure that housed the Gainesville Cotton Mill was hit, and the upper stories were badly damaged. Unfortunately, 250 children were employed on the top floor. The flying debris and the force of the wind killed some on the upper floors and many others were hurled to the ground below. The fifth floor of the mill fell forward, in the direction of the storm's progress. 10 people who had escaped from the mill were killed when the huge iron cupola, atop a 50' x 40' standpipe, crashed to the ground after being carried 100 feet in the air. Up to this point, the tornado was only 50-75 y wide. The minimal F4 damage occurred near the end of the tornado path, at the village of New Holland. 70 small houses were destroyed, out of the 120 that sat next to the Pacolet Mills. Most of the dead in that village, about 40, were aged woman and young children, for most of the others worked at the mill. Indications that the death toll was as high as 104 comes from later issues of the Gainesville paper, which probably kept records of those who died of injuries after the official total of 98 dead was recorded. Damage totalled about \$1,000,000 . No damage was done in the main part of the city of Gainesville, to the NW of the storm track.

(161) IL 1800 10 miles 400 y 6 dead 30 mj. E4 (161) One of at least 3 strong killer tornadoes that passed across central Illinois this day, this event began in the NW corner of Livingston Co., and moved to the NE. leveling a farm west of Streator, LaSalle Co. The deaths and most of the damage took place on the west side of that town, where 6 people were killed as the race track was destroyed, and the grandstand collapsed onto people who had sought shelter under it.

Oct 3, 1903 WI 1600 15 miles 200 y 5 dead 40 inj. F4 (162) From the NE corner of Adams Co., this tornado moved to the NE, prising 12, miles 5 of Bamcroft, Portage Co. Many farms were reveled, and some reports say the damage area was ', mile wide. Geaths tonk place on 3 separate farms.

- Jan 22, 1904 AL 0020 7 miles 200y 37 dead 80 inj. F4 (163) The tornado touched down about 2 miles SW of Moundville, Hale Co., and moved to the NE, passing through the center of that town, destroying virtually every building and killing 12 % of the people. Many of the buildings were completely swept away, leaving the ground bare. The tornado reached to the town of Hull, where a lumber mill was destroyed. One death or curred at Huil.
- Mar 26, 1904 MO 2200 20 miles 400 y 7 dead 30 inj. F4 (164) Passing along what is known locally as "Hurricane Ridge", this tornado touched in NW Pemiscot Cc., and moved to the NE. 5 members of one family were killed as their home was swept away. N of Portageville, New Madrid Co., and 2 other people were killed as the funnel passed N of Point Pleasant.
- Apr 24, 1904 OK 1200 80 miles 400 y 13 dead 50 inj. F4 (165) From near Broken Arrow, Tulsa Co.this tornado or family of tornadoes moved to the NE, passing near Inola and Choteau. Moving S of Pryor, Mayes Co., the funnel skipped along the Grand River to S of Ketchum, S of Afton, and eventually through the town of Fairland, Ottawa Co. There were at least two distinct funnels, but details for this event, in this section of the Indian Territory, are not clear. It was widely considered to be the worst tornado to date in that area.
- Aug 20, 1904 SD 1800 20 miles 400 y 2 dead 30 inj. F4 (166) From a point about 7 miles west of Willow Lakes, Clark Co., the tornado moved to the ESE, lifting about 4 miles E of Bryant, Hamlin Co. One farm house was leveled, but almost every building in the town of Willow Lakes was damaged. Many houses were shifted off of their foundation and ta¹¹ over.
- Aug 20, 1904 MN 2030 50 miles 1600 y 11 deat 50 inj. F4 (167) This tornado or family of tornadoes moved due E across McLeod Co. leveling many farms and killing four people near Glence. The path from here to S of Minnea nils is not continuous, but shows evidence of F4 activity at various places along the path. Damage at Waconia, Carver Co., was primarily F3, with 4 deaths. The Ohde home, in St. Louis Park, Hennepin Co., was leveled. 3 other deaths occured at St. Louis Park, and from there the storm lost its tornadic character. Extensive downburst damage extended across S. Minneapolis to St. Paul and on into Wisconsin.
- Mar 20, 1905 AL/GA 1720 20 miles 400 y 9 dead 30 inj. F4 (165) From near Double Head. in the NW area of Chambers Co., the tornado moved to the ENE across N Chambers Co. It turned to the NE, passing into Randolph Co., S of Roanoke, and passed into Heard Co., Georgia. Most of the deaths were in Randolph Co. The homes were small and of light construction, with many of them swept completely away.

- May 8, 1905 KS 2345 20 miles 150 y 34 dead 50 inj. F4
 (169) The tornado apparently touched down on the Haywood farm, 11 miles S of Marquette, and moved to the N passing through the sleeping town. Houses of strong and poor contruction were leveled...32 homes being destroyed in town and 7 farms destroyed tooth of town. The Nelson farm was leveled, with all 5 members of the family killed. The tornado passed from McPherson Co. to Saline Co. as a less intense tornado, and dissipated SW of Salina.
- May 10, 1905 OK 1800 40 miles 800 y 97 dead 150 inj. F5 (170) This extremely large and violent tornado began its ENE movement about 10 miles SW of Olustee, Jackson Co. The funnel followed a zig-zag path E and NE, leveling farms and small settlements across Jackson and NW fillman Co. The tornado widened and intensified as it crossed into Kiowa Co., and the roar was reportedly heard some 12 miles away. 10 people were killed before the tornado struck Snyder. The funnel, now over 's mile wide and at full intensity, leveled over 100 homes on the west half of towa, and destroyed or damaged 150 others. Many were totally swept away. 87 deaths occurred at Snyder, with about \$250,000 in property damage.
- Jun 5, 1905 MI 1530 30 miles 800 ; 5 dead 40 inj. F4 (171) This tornado first moved due E across the NE part of Tuscola Co., from S of Colling to S of Cass City. The funnel enlarged. intensified, and moved to the SE as it crossed into Sanilac Co. All deaths occurred on farms their were destroyed, with several homes being leveled. The later part of the path, from N of Skabbon to E of Snover was the deadliest and most intense.
- Jun 28, 1905 KS 1900 15 miles 400 y 6 dead 20 inj. F4 (172) Two farm homes were leveled and several others destroyed as this tornado moved to the SSE across Phillips Co. From the state line near Woodruff, the turnado moved across Walnut Twp. to a point about 4 miles NE of Phillipsburg.
- Jly 5, 1905 TX 1500 25 miles 800 y 26 dead 50 ing F4 (173) This tornado hit no towns directly, but leveled farm after farm as it moved to the SE, diagnally across Montaque Co. Over 100 different farms had buildings damaged or destroyed and deaths occurred on 9 different farms. The funnel passed 3 miles west of Nocona and lifted 4 miles SW or St. Jo.
- Mar 2, 1906 MS 1810 11 miles 200 y 23 dead 60 inj F4 (174) From a point 7 miles SW of Meridian, the tornado skipped to the SW edge of town. From here the tornado moved generally ENE, across the SE portion of town. Man's small homes were leveled at different points along the path, as the tornado frequently changed intensity. Total damage to mill, homes and factories was about \$400,000.

Apr 26, 1906 TX (175)

1815 9 miles 1200 y 17 dead 30 inj. F4 from a point about 2 miles SW of Bellevue, the tornado moved to the NE. Near Bellevue, Clay Co., the funnel turned to the E and widened as it moved into the town from the WSW. The destruction of the entire town was aided by many fires which broke out in the wreckage. All but 10 of the approximately 300 buildings in the town were damaged or destroyed, with \$300,000 in total damage. Near the end of the oath, considerable damage was done near Stoneburg, Montague Co.

1700 15 miles 400 y 0 dead 5 inj. F4 Jun 5, 1906 MN From the NE corner of Anoka Co, this tornado moved through very (176) rural areas, leveling many farms. and uprooting and debarking many trees. The funnel passed just 5 mile E of the town of North Branch, Chisago Co. The funnel dissipated shortly after hitting Pine Island, 3 miles NE of North Branch. The one death occurred on the Endahl farm, and the Magnuson farm was almost completely swept away.

Jun 5, 1906 TA/MN/WI 1630 55 miles 800 y 4 dead 18 inj. F5 This tornado probably had its origins near Burr Oak. (177) Winneshiek Co., Iowa. Moving to the NE and the ENE, the funnel intensified and passed between Freeburg and Caledonia in Houston Co. Minnesota. In this area, the Meyers farm was completely swept away, with the 3 members of the dead family found 5 mile away. Continuing to the ENE and E, the tornado passed into Wisconsin, and leveled the Sheck home, I mile SE of Stoddard. Vernon Co. The funnel apparently dissipated in the SW corner of Monroe Co.

1800 12 miles 200 y 0 dead 10 inj. F4 Jun 6, 1906 KS From about 10 miles SW of the town of Goessel, Marion Co., (172) the tornado moved to the NE, striking the town and leveling several homes. The funnel was very visible, and all residents were able to take shelter. The tornado originated in the N central part of Harvey Co.

Mar 28, 1907 MC/IA 1630 10 miles 400 y 0 dead 5 inj. F4 The tornado touched down 15 miles N of Clearmont, Nodaway Co., (179) Missouri, and passed 1 mile E of the town of Braddyville, Page Co., fowa. Many farm homes were leveled to the ground along the course of the fummel, with Akin and Burch farms losing all buildings. Extensive livestock destruction was reported from every farm that was struck.

1600 25 miles 400 y 9 dead 40 inj F4 Apr 27, 1907 TX From the NE corner of Wise Co., the tornado passed into Cooke (180)Co, and moved to the E, across the S edge of that county, and the N edge of Denton Co. Farm after farm was leveled, and 8 of the 9 deaths occurred as the community of Henning was virtually swept away. A baby was killed as the tornado passed 3 miles S of Valley View.

1330 30 miles 400 y 5 dead 19 inj. F4 May 6, 1907 TX The tornado touched down just S of Ridgeway, Hopkins Co., and (181) moved to the NE across the N part of that county. Many farms were destroyed as the tornado passed to the E of Ridgeway. 90% of the buildings in the town of Birthright were damaged or destroyed. The funnel dissipated N of Sulphur Springs

TX 1820 15 miles 300 y 3 dead 12 inj. F4 This slow and erratic moving to: ado passed through the E part May 25, 1907 TX (182)of the town of Wills Point, Van Zundt Co. 25 building were listed as destroyed and 9 others damaged. The tornado formed 6 miles S of town, and was widely visible and well photographed. The general movement was from N to S. Several farm homes were leveled, as well as a few homes in town.

1600 9 miles 200 y 4 dead 20 inj. F4 Jun 7, 1967 IL From near the town of Covington, Washington Co., 5 miles NW of (183) New Minden, the tornado moved to the ESE passing along the N edge of New Minden. Trees were debarked and farm houses leveled all along the path. The funnel was very visible, and none of the deaths occurred in the 7 farm houses that were leveled. The deaths were in one family that was late in attempts to reach sheiter, and was caught in the open.

1800 15 miles 800 y 4 dead 15 inj. F4 Jun 7, 1907 IL/IN This tornado moved from the S edge of Clark Co., to the SE, (1989) through the town of West York, in the NE corner of trawford Co. A few homes were leveled here, but damage was primarily F2/3. 3 members of one family were killed as their home was destroyed. Much livestock was killed and swept into the Wabash River. Continuing into Indiana, the tornado hit near Grayville, Sullivan with considerable F2/3 damage, with one woman killed in the collapse of her house.

1735 30 miles 1600 y 8 dead 40 inj. F4 Jly 5. 1007 82 From near Warrens, in N Monroe Co., the tornado is plotted on (185) a path nearly due S to 3 miles NE of Tomah, through the town of Oakdale. E of Kendall, dissipating near Elroy, in Sk Juneau Co. This tornado, or series of tornadoes was part of a complex outbreak that produced several other killer tornadoes in the area. The deaths were distributed all along the path. The tornado widened as it traveled to the S and SSE.

1830 15 miles 400 y 2 dead 7 inj. F4 'Jly 3, 1907 WI This tornado touched down just to the E of Berlin, Green Lake Co. (186) and moved S and SSE to 5 miles N of Fairwater, Fond du Lac Co. From there, it turned to the E and dissipated. F4 level damage occurred on 2 farms, with one death on the Troxell farm. which was leveled 3 miles SE of Berlin.

- Aug 6, 1907 MN/IA 1500 30 miles 600 y 3 dead 10 inj. F4 (187) The tornado apparently touched down 2 miles SW of Kiester, Faribault Co., and moved to the SE into Iowa. The funnel moved across the NE corner of Winnebago Co. and the SW corner of Worth Co. Most of the damage was F2/3 in these counties, but the Nelson farm had all buildings leveled to the ground, in Worth Co. In Fertile Twp., Worth Co., 3 members of the Tweed family were killed as they sought shelter in a grove of trees. The funnel lifted 5 miles NW of Mason City.
- Jan 31, 1908 MS 1355 60 miles 800 y 7 dead 40 inj. F4 (188) From near Delmar in E Jefferson Co., the tornado moved to the ENE, leveling cabins and uprooting or snapping trees at Union Church. The tornado leveled several homes 1 mile N of Martinsville, Copiah Co., with 6 of the 7 deaths in that community. The funnel, now appearing wide, and low to the ground, crossed the Pearl River at Georgetown, with 16 injuries. The funnel dissipated near Bower, Simpson Co. Hundreds of head of cattle and other livestock were killed along the path.
- Apr 23, 1908 NE 1800 15 miles 400 y 3 dead 10 inj. F5 (189) The tornado touched down about 6 miles SW of Pender in N central Cuming Co., and moved to the NNE, passing just W of that town, and lifting about 3 miles N of Thurston. Thurston Co. Several farms were leveled along the entire path of the funnel. The three deaths occurred as the 2 story Magunsson farm home was sampt away, along with all other buildings on the farm
- Apr 24, 1908 LA/MS 0500 90 miles 700 y 91 dead 398 inj. F4 (190) From a point just N of Lamourie, Rapides Parish, the tornado moved to the NE, across the N edge of Avoyelles Parish, extreme S Catahoula Parish, and Concordia Parish. The funnel crossed the Mississippi River into Mississippi at Giles Bend, near Videlia. 20 deaths occurred near Videlia, with 20 others at other places along the path in Louisiana. The tornado passed N of Natchez. Adams Co., killing 30 people and injuring 200 others near Pine Ridge. 21 more people were killed 5 of Lorman, Jefferson Co.. and a few injuries were recorded as the tornado dissipated near Tillman, Claiborne Co. Hundreds of poorly constructed homes and cabins were leveled.
- Apr 24, 1908 LA/MS 1145 145 miles 1600 y 143 dead 770 inj. F4 (191)
 This truly major tornadic event touched down near Weiss, Livingston Parish and moved to the NE, crossing into Mississippi near Balltown, Washington Parish. The worst damage, and 29 of the 46 Louisiana deaths, took place at Amite. Tangipahoa Parish, where the damage was said to have been 2½ miles wide. In Mississippi deaths occurred in each of the 5 counties struck by the tornado. 55 deaths occurred in the town of Purvis, Lamar Co., with \$540,000 damage and "early 460 injuries, as the entire town was virtually destroyed, much of it leveled. The damage for the entire tornado was over \$1,000,000...a remarkable achievement, considering the value of rural southern property at that time.

- Apr 24, 1908 AL 1440 105 miles 1600 y 35 dead 188 inj. F4 (192) The tornado first touched down in E Walker Co., and produced a mile wide damage track through the towns of Dora and Bergens. Most of Bergens was destroyed, but local residents attributed a shifting of the path, hat saved Dora, to a ridge of hills. 12 people died in Walker Co., 2 died at Warrior, Jefferson Co., 1 died near Royal, Blount Co., 2 died at Warrior, Jefferson Co., 15 died at the S edge of Albertville, Marshall Co. The funnei dissipated near Sylvania, DeKalb Co. The path is plotted as a single tornado, but the nature of the forested and sparsely populated areas of the N half of the track is such that a reformation would have been possible without being detected. Total damage was over \$500,000.
- Apr 24, 1908
 AL/GA 2000 16 miles 800 y 10 dead 25 inj. F4
 (193)
 From a point near Bluffton. Cherokee Co., Alabama the tornado moved to the NE, passing into Georgia, where it killed 3 people near the town of Hematie, Polk Co., and 7 more near Cave Springs, Floyd Co. Only sub-standard housing was leveled, with much of it completely swept away. The debris was carried for miles, and bodies were found several hundred yards away.
- May 10, 1908 TX/OK 1645 70 miles 800 y 4 dead 40 inj. F4 (194) Probably originating S of the Canadian River in Hemphill Co... Texas, the funnel moved to the NE across the Antelope Hills and killed two people SW of Arnett.Ellis Co. and one other person S of Arnett. Several farms were leveled in this area. The tornado passed across the NW corner of Dewey Co., striking the town of Vici, with much property damage and many destroyee houses. The funnel was very visible, and all residents of Vici took cover. The final death took place at Estelle, Major Co... near the end of the path. The tornado was very large and intense for its entire path length.
- May 12, 1908 TX 1630 7 miles 100 y 2 dead 5 inj. F4 (195) This tornado passed 3 miles SE of Leonard, Fannin Co., as it moved to the NE. Along the path, the Bowdry home was completely leveled, with 2 deaths.
- May 12, 1908 NE/1A 1730 30 miles 400 y 7 dead 20 inj. F4 (196) The funnel struck many farms, but produced little F4 damage on its path from 2 miles SW of Louisville, Cass Co. Moving to the NE on a erratic path, the tornado passed near the Sarpy Co. towns of Springfield, Papillion and Bellevue. F4 damage was to a farm house near the start of the path. The funnel apparently lifted in Inwa.
- May 12, 1908 IA 1730 20 miles 400 y 0 dead 20 inj. F5 (197) Five farms had all buildings completely swept away by this tornado, which moved from a point 7 miles w of Northboro, in SE Frement Co., to near Clarinda, Page Co. Many farms were destroyed all along the path, but the funnel was very visible and all injuries were minor, with people taking shelter in plenty of time.

- May 13, 1908 Tx 1630 12 miles 150 y 4 dead 7 inj. F4 (198) Several farms were leveled as this tornado passed to the NE. and then through the town of Linden, Cass Co. Home construction was probably not strong. Total property damage was \$75,000.
- May 13, 1908 LA 1730 25 miles 600 y 49 dead 150 inj. F4 (199) From SE of Oil City, Caddo Parish, this tornado moved to the NE and struck two towns, Gilliam, Caddo Parish and Bolinger, Bossier Parish. 40 of the 49 deaths occurred at Gilliam, as dozens of small homes were leveled. Only 2 homes is the town remained upright, but most of those leveled were of poor construction.
- May 26. 1908 OK 1830 65 miles 400 y 4 dead 8 inj. F4
 (200) The very visible and well defined funnel touched down in NE Woodward Co., and moved to the NE, passing 15 miles NW of Avard. Alva Co. Increasing in intensity the tornado moved 4 miles 5 of Alva to 2 miles N of Ingersoll, Alfalfa Co. In this area. 13 farms were destroyed, and the 4 deaths occurred. Several farms were totally leveled, and hundreds of cattle were killed. The funnel dissipated in the NE corner of Alfalfa Co.
- Jun 5, 1908 KS/NE 1630 25 miles 400 y 0 dead 10 mj. F4 (201) This tornado was the first of a series of tornadoes. 5 of them violent, that struck along the Kansas-Nebraska border this afternoon. From 2 miles W of Phillipsburg, this tornado passed to the NNE, 6 miles N of that town, leveling several farms. The funnel was very visible, and people were able to take shelter The tornado dissipated S of Republican Jct., Harlan Co., Nebraska.
- Jun 5, 1908 KS/NE 1700 25 miles 800 y 1 dead 15 inj. F4 (202) Second in this series of unusually violent tornadoes touched down 3 miles N of Athol, Smith Co., Kansas. Moving to the NNE, farms were leveled 3 miles west of Reamsville, with one death. Passing into Nebraska, the funnel destroyed several farms before dissipating 10 miles NE of Franklin, Franklin Co.
- Jun 5, 1908 KS/NE 1830 20 miles 400 y 2 dead 5 inj. F4 (203) From 5 miles SW of Burr Oak, this tornado passed to the NNE. leveling farms across Jewell Co. N of Burr Oak. 2 children were killed by the tornado, with another death from drowning in the local flooding. Passing into Webster Co., Nebraska, the tornado destroyed several farms SE of Guide Rock, before lifting.
- Jun 5, 1908 KS/NE 1945 25 miles 400 y 3 dead 20 inj. F4 (204) This tornado was the second member of a tornado family, the first member having lifted, after F2 damage, SW of Scandia. Republic C. The cell spawned other tornadoes that occurred at the same time as this event. Plotted from just W of Scandia. this tornado moved N and NNE, passing 2 miles E of Republic City. and into Thayer Co., Nebraska. The funnel passed a mile W of Byron, finally lifting 5 miles NNW of Deshler. No deaths occurred from this tornado in Kansas, but many farms were leveled, with some swept completely away in Nebraska, where all deaths took place.

Jun 5, 1908 NE 2030 35 miles 300 y 11 dead 30 inj. F5 (205) The third, or fourth member of the previous tornado family, this event touched down about 3 miles SE of Deshler, Thayer Co., at about the same time the previous event was lifting NNW of town. Moving almost due N, the tornado leveled many farms as it passed along the E edge of Carleton, with 3 deaths. Continuing N and NNE into Fillmore Co., the tornado passed E of Shickley and a mile W of Geneva. Among the many destroyed farms was the Shively farm, where 5 members of the family were killed and the house and all buildings were completely swept away. Final deaths and F4 damage took place NW of Geneva. Total damage was \$200,000.

Jun 17, 1908 KS 1530 20 miles 250 y 0 dead 0 inj. F4 (206) The easily visible funnel passed from NE of Gove, Gove Co., to 4 miles W of Quinter, and into Sheridan Co. The Stoner and Feilder homes were leveled, and farm machinery was torn to pieces and carried for miles.

- Jun 27, 1908 MN 1750 7 miles 400 y 7 dead 45 inj. F4 (207) From 5 miles NW of Clinton, Bigstone Co., the tornado moved to the SE, passing through the residential areas on the west side of that town. 35 homes were destroyed, several of them leveled,with \$125,000 in total property damage. One woman was carried is mile to her death. Trees were debarked, birds and chickens defeathered.
- Feb 23, 1909 AR 0200 70 miles 800 y 9 dead 107 inj. F4 (208) The tornado touched down at McCreanor. Lonoke Co., and began its movement to the NE. The path varied widely in intensity and width, and may have been the result of a family of tornadoes. Deaths and injuries occurred all along the path, which was through rural areas with rather poor housing. Many of these small homes were blown down, and Some swept entirely away. One death occured 8 miles S of Hickory Plains, Prairie Co., 5 deaths were a few miles SE of Augusta, Woodruff Co., and 3 people died as most of the buildings were destroyed in the town of Fisher, Poinsett Co.
- Mar 8, 1909 AR 1900 15 miles 1200 y 49 dead 600 inj. F4 (209) One of many killer tornadoes in Arkansas that day, this tornado passed through the town of Brinkley, Monroe Co., with devastating results. From 5 miles SW of town to 10 miles NE of town, houses were blown over, leveled, or completely swept away, wiping out entire families. 860 buildings were listed as destroyed, nearly 2000 damaged, totalling \$600,000 in losses.

Apr 29, 1905 MO 1700 20 miles 200 y 11 dead 18 inj. F4 (210) One of many killer tornadoes in 7 states that day, the tornado touched down either at the Arkansas border, or in NW Carroll Co., Arkansas, Moving to the NE, the tornado passed through the town of Golden, leveling several small homes, and sweeping a few completely away. 8 people died at Golden. Continuing to the NE, several small homes were leveled 21, miles S of Viola, as the funnel passed from Barry into Stone Co. The N limit of the outbreak is marked by a line from this to the next listed event.

Apr 29, 1909 IL 1900 8 miles 200 y 5 dead 6 inj. F4 (211) This tornado formed in NW Saline Co., and moved to the NE. The only F4 evidence was the total leveling and sweeping away of a farm house on the edge of Texas City. All 5 members of the family were killed, and one of the bodies was found & mile away. The tornado dissipated in NW Gallatin Co.

- Aur 29, 1909 TR 2300 30 miles 800 y 29 dead 50 inj. F4 (212) This tornado struck many small communities in Giles and Lincoln Co. Worst hit was Bee Springs in SE Giles Co., where several houses were completely swept away, killing 5 members of one family and 7 members of another, 22 deaths occurred in that area. Further to the ENE, in Lincoln Co. 7 people were killed before the funnel lifted near Millville.
- May 14, 1909 KS 1430 35 miles 400 y 3 dead 21 inj. F4 (213) From near Rozel, Pawnee Co., the tornado moved to the NE and destroyed 5 farm homes. The Carney Ranch home was completely leveled. In Barton Co., the tornado struck a Santa Fe RR work train, killing 3 men and injuring 14 others. Is mile E of Heizer. The funnel dissipated in the Cheyenne Bottoms, 5 miles SE of Hoisington.
- May 29, 1909 OK 1630 25 miles 400 y 3 dead 5 inj F4 (214) The tornado probably touched ground in the SE corner of Lincoln Co., and moved to the NE, damaging or destroying about a dozen farm homes. 3 miles NW of Micawber, the Allec home was leveled and swept away, with the deaths of 4 members of the family. The tornado dissipated in 5 central Creek Co.
- May 30, 1909 TX 0030 10 miles 500 y 28 dead 100 inj. F4 (215) This tornado apparently touched ground near Early, in SE Brown Co., and moved to the SE, passing through the sleeping town of Zephyr. About 50 homes were destroyed, and property damage was listed at \$90,000. A few small homes were completely swept away. Lightning,striking the wreckage of a lumber yard, started a fire which raged through much of the damaged section of town.

Jun 24, 1909 KS 1600 10 miles 200 y 0 dead 3 inj. F4

- (216) This event was the worst of 7 tornadoes in Norton Co. that day A total of 20 separate funnel clouds were reported. This tornado touched down 4 miles NW of Norton, and moved to the NE, destroying farms, ranches, a church and a school. The home at the Gentry ranch was leveled and a 1700 lb. bell was reportedly "carried" for 1 mile.
- May 20, 1910 OK 1800 10 miles 400 y 3 dead 20 inj. F4 (217) The tornado touched down about 10 miles SW of Paul's Valley, Garvin Co., and moved to the NNE, passing through the town of McCarty. Most of the buildings in the town were damaged or destroyed, with a few smaller dwellings leveled and partly swept away.
- Apr 12, 1911 OK 1600 12 miles 300 y 5 dead 50 inj. F4 (218) Moving from the SW, this tornado passed through the town of Bigheart, Osage Co. Now known as Barnsdall, this town had 3/4 of its buildings destroyed, and most of its residents had to move into box cars of the Midland Valley Railway. Damage totalled \$100,000. Several of the houses were ieveled.
- Apr 12, 1911 OK 1700 10 miles 200 y 2 dead 25 inj. F4 (219) This tornado destroyed 14 farm houses, leveling most of them, as it passed to the NE, 3 miles S of Checotah, McIntosh Co.
- Apr 12, 1911 KS 1530 20 miles 400 y 3 dead 20 inj. F4 (220) From W of Netawaka, this tornado moved to the NE, passing just N of that town, and moving from N Jackson Co. to S Brown Co. Farms and schools were destroyed across the county, with the funnel passing 6 miles N of Whiting and 6 miles NW of Horton The funnel dissipated near Hiawatha. F4 damage was limited to a small area at Reserve.
- Aug 21, 1911 ND 1830 25 miles 400 y 4 dead 30 inj. F4 (221) One of many tornadoes in northern North Dakota that day, the Antler tornado was the most intense and the most well bhotographed. Touching down 15 miles WSW of town, the tornado moved to the KNE and turned to the NE before reaching Antler, Bottineau Co. The tornado leveled the Carlson farm, killing 2, then hit a picnic area called Manning's Grove, 2 miles N of town. 2 deaths and 22 injuries were caused by falling trees. The tornado continued to the NE, passing an unknown distance into Manitoba, Canada.

(222)

2100 15 miles 400 y 9 dead 50 inj. F4 Nov 11, 1911 WI This event was the most intense of the many tornadoes that occurred that day in Wisconsin, Michigan, Illinois and lowa. It constitutes the worst November outbreak of tornadoes for this northern tier of states. From 24 miles SW of Janesville, the tornado moved to the NE, through that Rock Co town, \$500,000 damage was done as homes were leveled, and businesses and homes were destroyed. A strong frontal passage plunged temperatures to 00, with blizzard conditions as the residents dug themselves from the wreckage. The Errington farm was totally leveled and other farms destroyed between Janesville and Milton. One death occured Sw of Milton, as the tornado turned to the right and lifted.

1630 35 miles 400 y 9 dead 35 in; F4 Feb 25, 1912 AR The tornado formed over N Lincoln Co., and skipped to the NE. (223) or lifted and reformed. The major damage, and minimal F4 activity was along a 10 mile path from near Swan Lake. Jefferson Co. to a point near Almyra, between Stuttgart and Dewitt, Arkansas Co. A few houses were completely swept away, but were of very poor construction.

1500 15 miles 400 y 2 dead 15 inj. F4 Apr 20. 1912 KS From 5 miles SE of Rush Center, Rush Co., this tornado moved (224) to the NNE leveling several farms and causing great damage in the E half of the town of Bison Total damage was over \$70,000. F4 damage was SW of Bison.

1530 40 miles 800 y 5 dead 10 inj. F4 Apr 20, 1912 TX This tornado skipped along the S edge of Denton and Wise Cos .. (225) destroying many farms. N of Agnes, 4 persons were killed and 4 houses destroyed, 8 houses were destroyed near Elizabeth, Denton Co., and a child was killed near Flour Mound, with 5 more houses destroyed. Several of the houses were leveled.

1600 15 miles 800 y 3 dead 20 inj. F4 Apr 20. 1912 OK From a point about 7 miles SE of Perry, this second member of (226) a tornado family destroyed many farm homes before dissipating in the Orto pastures of Pawnee Co. Damage was \$40,000. Many other tornadoes were reported in Noble and Pawnee counties.

1630 15 miles 1600 y 0 dead 6 inj. F5 Apr 20, 1912 OK This very large tornado, reported to have been 2 miles wide (227) at one point, destroyed \$75,000 in farm property, and swept away many farm homes. The funnel formed S of Hennessey, Kingfisher Co., and moved to the NE, to the NE corner of the county.

Apr 21, 1912 [L] N 1800 24 miles 200 y 9 dead 22 inj, F4 The first damage was reported 1 mile a of Plato, Iroquois Co. NE of that point the tornado became very intense, and N of Pittman and NE of Donovan several farm complexes were totally blown away. Most farmers saw the approaching funnel, and took shelter, but NE of Donovan the Rice farm house was leveled, with 6 members of the family and a farm hand killed. The bodies were found at a considerable distance from one another, up to 150 yards from the home site. A wood stove was carried 5 mile. The tornado did less intense damage in Newton Co., Indiana. Two children were killed on the NW corner of Morocco, Newton Co., as their house shifted just as they entered the basement shelter. The house collapsed but was apparently not blown away. The funnel lifted NE of town.

(228)

1805 26 miles 400 y 11 dead 83 inj. F4 Apr 21, 1912 TL. This tornado touched down 3 miles N of Murphysboro, Jackson Co., (229) with F2 damage to houses and barns. Moving to the ENE and intensifying, the tornado leveled farm complexes across Jackson Co., but with just one death. The tornado entered Bush with somewhat less intensity, leveling 22 of the poorly constructed mining-town homes. 106 other homes were considered destroyed. House damage is quoted at \$25,000. \$50,000 damage was done to farms between Murphysboro and Bush, \$25,000 to RR property in Bush and \$100,000 to mining property. The funnel continued ENE and then E, completely sweeping away a farm house in extreme S Franklin Co., with 3 deaths, 6 miles N of Herrin. The funnel lifted SE of West Frankfort, with mining property damage by downburst winds.

0730 20 miles 800 y 6 dead 20 inj. F4 Apr 22, 1912 GA This tornado passed along the Newton-Jasper Co. line. struck a (230)small community near Newborn, Newton Co., and moved off into Morgan Co. A dozen homes were leveled, but they were of rather poor construction. A few were totally swept away. One report indicates that the funnel may have grown to 3/4 mile wide at one point. The tornado originated just E of Stewart.

1700 20 miles 400 y I dead 10 inj. F4 Apr 25, 1912 OK This very large and well photographed tornado touched down (231) 12 miles SW of Ponca City, Kay Co., destroying many oil derricks. and moved across the W side of town, leveling several homes. Residents had taken shelter, as the funnel was very visible. Total damage was about \$150,000. 119 homes were listed as destroyed and the roar was reportedly audible at a distance of 20 miles.

1030 30 miles 800 y 5 dead 23 inj F4 Apr 27, 1912 TX/OK This tornado was the first in one of the worst outbreaks in U.S. (232)history. Many of the tornadoes did no damage at all, as they moved through sparsely populated areas of NW Texas and W Oklahoma. but most were ', mile in diameter, and leveled farms whenever This event touched down S of Kirkland, they were encountered. in SE Childress Co., Texas, and moved to the NE. 5 deaths and 20 injuries were reported in Texas, 4 in one family as their home was swept away. Passing 4 miles E of Kirkland, the tornado crossed N Hardeman Co., and Entered Jackson Co., Oklahoma. 3 injuries and \$12,000 damage occurred as the funcel passed N of Eldorado . \$65,000 in damage was done in Texas.

Apr 27, 1912 OK 1230 90 miles 800 y 15 dead 40 inj. F5 (233) Among the major tornadic events in U.S. history, this tornado maintained a 's mile diameter for most of its path, and caused \$500,000 in property damage to an area where property values were very low, and houses widely separated. The tornado formed near Lugert, in extreme SW Klowa Co., and was probably related to the previous listed event. Moving to the NE, the tornado leveled ranch after ranch, and farm after farm, with 2 deaths near Lugert, 5 deaths near Hobart, 4 deaths NW of Colony in Washita Co., 1 death NW of Hinton, Caddo Co., and 3 deaths NW of Calumet, Canadian Co.

- Apr 27, 1912 OK 1707 15 miles 1600 y 2 dead 7 inj. F4 (234) 35 homes were destroyed in the Elk City area as 5 separate funnels moved across an area 2 mile wide. Details on each of these funnels is insufficient to plot anything except a single event, moving to the NE, with the listed path width being for the widest funnel. Tornado activity continued in the area until after midnight.
- May 27, 1912 OK 2030 7 miles 300 y 7 dead 30 inj. F4 (235) This tornado leveled several homes, with 4 deaths in one of them, and did \$50,000 damage to oil field equipment, as it moved across the Osage-Tulsa Co. border. The worst damage was at the SW edge of Skiatook, as the tornado moved to the SE.
- Jun 14, 1912 NE 1800 30 miles 400 y 1 dead 5 inj, F4 (236) From just S of Crete, Saline Co., this tornado moved to the SE, just missing the towns of Kramer and Hallam in Lancaster Co., and Cortland in Gage Co. Several homes were leveled along the path, with the worst damage being 4 miles NW of Hallam, and one death occurring near the end of the path, in Hanover Twp., Gage Co. Some evidence exists that this or a related tornado extended into Pawnee Co.
- Jun 15, 1912 KS/MO 1830 60 miles 1200 y 29 dead 70 inj. F4 (237) The tornado was first reported from 3 it N of LaCygne, Linn Co., Kansas. It crossed the border into missouri at Merwin, Bates Co., where many homes were leveled and a Kansas City Southern RR work train was derailed, with 25 injuries. 22 deaths were reported in NW Bates Co., with the body of one child carried 3 miles, and the bodies of 2 men carried 12 mile. Large numbers of livestock were killed. 4 deaths were reported from Creighton, in SE Cass Co., and 3 additional deaths from Leeton in S Johnson Co., near the end of its path.
- Mar 13, 1913 TN 1300 40 miles 400 y 8 dead 20 inj. F4
 (238) With ear ier members of this tornado family touching down in Mississippi, this event seems to have originated SW of Middleton, Hardeman Co., near the Mississippi-Tennessee state line. 5 persons were killed and 20 buildings Jestroyed in this area. Moving to the NE, buildings were destroyed across the N part of McNairy Co. 3 people were killed as homes were leveled 7 miles E of Henderson, Chester Co. Homes were apparently of poor construction.

- Mar 13, 1913 TN 1400 50 miles 400 y 5 dead 30 inj, F4
 (239) The previous event probably reformed as a separate tormado near Huron, in SW Henderson Co., with one death at that location. Moving to the NE, the tornado struck the city of Lexington, destroying 58 homes, many of them being the most substantial in the town. Only the poorer homes were leveled, with 3 deaths. The funnel continued to the NE, striking Cavvia, in the SE corner of Carroll Co, and lifted after destroying 40 buildings and taking one life near Camden, Benton Co. Here it widened to hamle wide and dissipated 3 miles SE of town.
- Mar 13, 1913 GA 2100 25 miles 800 y 15 dead 50 inj. F4 (240) First damage was reported at Armuchee, Floyd Co. and from there the tornade moved to the NE scross Gordon Co., lifting near Resaca. Major damage was at Curryville, where many homes were completely swept away, and most of the deaths took place, including 5 children in one family. The damage path was reported to have been a mile wide in some areas.
- Mer 21, 1913 AL 0430 10 miles 400 y 28 dead 60 inj. F4 (241) From the NE corner of Clarke Co., this tornado moved to the NE and through the town of Lower Peach Tree, Wilcox Co. 100 homes were destroyed or damaged, many were leveled, some swept completely away, killing entire families. Many of the leveled homes were said to be the best in the town. Damaged totalled about \$130,000.
- Mar 23, 1913 NE/IA 1700 70 miles 800 y 21 dead 50 inj. F4 (242) The "Yutan Tornado" as this event was called, first touched down just SE of Mead, in Saunders Co. The funnel rapidly intensified and swept through the town of Yutan, destroying the greater part of this small town. 16 of the deaths occurred at Yutan, and 19 of the 21 were in Nebraska. Moving to the NE, the funnel passed into Harrison Co., lowa with 2 deaths near Logan.
- Mar 23, 1913 NE/IA 1745 45 miles 600 y 96 dead 100 inj. F4 (243) This tornado touched down at the SW city limits of Omaha, and cut a damage swath up to % mile wide across the W and N sections of the city. 94 deaths occurred in Omaha, as 600 houses were destroyed, with dozens completely swept away. Over 1100 houses were Damaged. Most of the nouses were small, and the larger brick structures were not leveled. 2 deaths occurred E of Beebetown. In S Harrison Co., Iowa and the funnel lifted for the last time N of Persia.
- Mar 23, 1913 NE/IA 1800 75 miles 800 y 18 dead 100 inj. F4 (244) The "Berlin Tornado" touched down 5 of Douglas in SW Otce county, and leveled many farms as it moved to the NE across the county. Berlin (now Otce) was directly in the track of the tornado and half of the deaths occurred at that town. Crossing the SE corner of Cass Co., and the Missouri River, the tornado leveled farms in Mills Co., lowa, with 3 deaths a of Bartlett. Two other deaths occurred SE of Glenwood. The funnel dissipated E of Macedonia, Pottawattamie Co.

- Mar 23, 1913 IA 1815 45 miles 400 y 25 dead 75 inj. F4 (245) From near the 5 edge of Council Bluffs, Pottawattamic Co., the tornado moved across the county, NE into Shelby Co., where it lifted E of Harlan. 17 people were killed in the Council Bluffs area, 2 at Gilliatt, 2 at Weston, 3 east of Neola, and one man was killed by a flying timber near the end of the path. The homes that were leveled in the 5 residential section of Council Bluffs were all rather smail, and possibly of poor construction.
- Mar 23, 1913 10 2030 12 miles 200 y 2 dead 5 inj, F4 (246) From about 4 miles SW of Savannah, Andrew Co., the tornado moved to the NE, destroying several homes and leveling one. The home was leveled just SE of Flag Springs, with 2 deaths. Several farms were leveled, including the Armfield farm at the SE mage of Flag Springs, where 2 adults were killed.
- Mar 23, 1913 IN 2130 22 miles 1000 y 21 dead 250 inj. F4 (247) From near Prairieton, Vigo Co., this tornado moved NE and ENE through the S part of the city of Terre Haute, and passed on to the NE, lifting near Brazil, in NW Clay Co. All 21 deaths were at Terre Haute, where 300 homes were damaged or destroyed. Most homes were completely leveled to the ground within one 5 block area. \$1,000,000 damage was reported from Terre Haute, as floods followed the tornado, with 12 more deaths in the town, and 260 deaths from floods in Indiane and Ohio.
- May 14, 1913 NE 1730 40 miles 400 y 8 dead 20 inj. F4 (248) From a point about SSN of McCool Jct., the tornado moved to the NE across York and Seward Cos. Many farms were destroyed, all along the path, but the major F4 damage occurred as the tornado struck the NW edge of the town of Seward. The funnel dissipated in the NE part of Seward Co. Total property damage was about \$200,000, as 40 homes were destroyed.
- Oct 9, 1913 NE 1710 95 miles 600 y 3 dead 30 inj. F4 (249) From a point about 10 miles west of Oconto, Custer Co., this tornado, or family of tornadoes moved to the NE, passing 2 miles SE of Broken Bow, where a farm house was leveled to the ground. Other homes were leveled as the funnel passed 2½ miles SE of Sargent, and 2 miles E of that town. After crossing Garfield Co., the tornado caused 2 deaths 6 miles SW of Chambers, Holt Co., and one death on the E side of that town.
- Mar 28, 1914 KS 1730 15 miles 200 y 0 dead 5 inj. F4 (250) About 20 homes were destroyed by a tornado that passed from a mile N of Chase, Rice Co., to about 5 miles E of Geneseo. Total damage was about \$100,000. The funnel was very visible, and people were able to take shelter. F4 damage was to the Van Buskirk farm...the second time in 3 years that this farm was hit by a tornado.

- Apr 17, 1914 OK/KS 1800 25 miles 800 y 0 dead 12 inj. F4 (251) From the N part of Kay Co., the tornado moved to the NE. from Oklahoma into Kansas, passing about 3 miles E of Huonewell, Summer Co. Many farms and ranches were destroyed as the funnel passed 15 miles w of Ashton and 3 miles W of Geuda Springs. The funnel was very visible and people were abie to take shelter.
- Oct 9, 1914 KS 1800 30 miles 490 y 2 dead 20 inj. F4 (252) The second of three Wilson Co. tornadoes within an hour, this tornado touched down in NE Elk Co., and passed along the SE edge of the town of New Albany, Wilson Co., where several houses were leveled and 2 people were killed. The funnel continued to the NE corner of the county.
- Oct 9, 1914 k5 2000 10 miles 200 y 5 dead 1 ing. F4 (253) This tornado originated near the Oklahoma border and dissipated near the Missouri border, passing just 5 of Baxter Springs, Cherokee Co. One home was leveled, in it 5 of the 6 members of a family died, 5 mile SW of Galena.
- May 6, 1915 TX 1730 15 miles 100 y 2 dead 10 tnj. F4 (254) A few of the 9 homes that were destroyed were leveled to the ground, as this tornado passed to the ENE across Haskell Co. The tornado passed 8 miles W of the town of Haskell.
- Jun 11, 1915 KS 1930 15 miles 1600 y 0 dead 0 inj, F5 (255) This tornado formed SW of Mullinville, and moved to the NE very slowly, allowing people to reach shelter from this extremely large tornado. Striking the edge of Mullinville, the Kline nome was swept away, and many other houses leveled. As it moved NE and NNE, 8 separate funnels were noted at one time under the huge rotating cloud. Damage totaled \$75,000 and it was reported that 3 mules were carried 2 miles. Plotted here entirely within Klowa Eo., the tornado family continued to Pawnee Co.
- Jun 12, 1915 IA/WI 1730 30 miles 400 y 9 dead 50 inj. F4 (256) While some accounts place the origin of this tornado at West Union, Fayette Co., it is plotted here from near Waterville. Allamakee Co., The tornado moved to the NE, destroying several farms, and leveled the Leppard home with 2 deaths. Crossing the Mississippi river 8 miles 5 of Lansing, and entering Wisconsin 2 miles 5 of Ferryville, the tornado leveled the John Finley home, with 3 deaths. 4 other deaths occurred in other destroyed homes. The damage in Iowa totalled \$50,000 and in Wisconsin it was \$75,000. The tornado crossed Crawford Co. and dissipated.

- 1835 10 miles 150 y 1 dead 15 inj. F4 Jun 12, 1915 W1 (257) Probably in the same family as the previous event, this tornado moved to the ENE, passing just S of Reedsburg and destroying many homes. The home and barns at the Schoeman farm were swept away and scattered for miles. Total damage was \$50,000.
- Jun 17, 1915 KS 1600 5 miles 50 y 5 dead 3 ini, F4 (258) This tornado moved from the SW and curved around the town of Onaga, Pottawatomie Co., dissipating 6 miles NE of town. 5 members of the Berges family were killed as their small home was leveled, 5 mile SW of Onaga.
- Nov 10, 1915 KS 1900 35 miles 400 y 11 dead 75 inj. F4 (259) A violent, late-season tornado moved to the NE across Barton Co., touching down 16 miles SW of Great Bend, where the Burger farm was leveled with 2 deaths. 1000 sheep were killed on ranches SW of Great Bend. Passing through the SE section of Great Bend, 150 homes were destroyed, and the total for the entire tornado was about \$1,000,000 in damage. The path continued for another 18 miles, to W of Claflin, but debris was carried 85 miles. Hundreds of dead wild ducks were dropped 25 miles to the NE of where the path ended.
- Nov 10, 1915 KS 2200 16 miles 200 y 4 dead 28 inj. F4 (260) Forming about 5 miles SW of Zyba, Summer Co., the tornado moved to the NE destroying 8 homes, leveling two, at the small town of Zyba. Continuing to the NE, the tornado hit the edge of Gerby, Sedgwick Co. and lifted NE of that town. 3 people were killed at Zyba, and 1 at Derby.
- 1030 15 miles 400 y 10 dead 45 inj. F4 Nov 25, 1915 AR (261) Touching down on the S edge of Garland Co. the tornado moved to the NE, passing along the SE edge of the city of Hot Springs. Dozens of small homes were leveled, with property damage at \$300,000.
- Mar 24, 1916 OK 2030 10 miles 800 y 9 dead 5 inj. F4 (262) This tornado was one of series of strong tornadoes in Texas and Oklahous that is not noted on official records. The DAPPL # 103 large funnel traveled almost due N, as it destroyed 5 farm houses, leveling two of them. In one house 8 members of the Edgemond family some killed. Most members of the small farming community. 3 miles E of Davis, Murray Co., were able to take shelter

Apr 19, 1916 KS/MO 1600 65 miles 800 y 6 dead 19 int. . 4

- The tornado probably originated in the SW section of Bourbon Eq., (263) DAPPL #47 Kansas, and moved to the NE, leveling many farms. The tornado passed N of Redfield and Ft. Scott, destroying 100 farm buildings with \$150,000 in total damage. 3 deaths and 12 injuries occurred in Kansas. The tornado crossed into Vernon Cc., Missouri . causing deaths and leveling homes near Arthur, Vernon Co. and
 - N of Rockville, Bates Co. The funnel passed S of Appleton City. St. Clair Co., and dissipated in S Henry Co. Three people were killed in Missouri.
- Apr 19, 1916 MO 1900 20 miles 400 y 2 dead 5 inj. F4 (264) From the SE corner of Moniteau Co., the tornado moved ENE from DAPPL #68 near Enon, across S Cole Co., to the SE edge of Jefferson City. Two deaths occurred in the Ferris home, 5 miles 5 of Russellville. as the building was leveled to the ground.
- May 20, 1916 TX/OK 2130 10 miles 1200 y 9 dead 28 inj. F4 (265)
- Touching down first E of Denison, Grayson Co., Texas, the tornado DAPPL #74 killed one child in Texas before moving to the NE, through the town of Kemp, Bryan Co., Oklahoma Only 3 of 75 buildings at Kemp were intact, with most of the small homes leveled or collapsed into a pile of debris. The most intense damage was in a 100 y wide swath.
- Jun 5, 1916 AR
- 1600 30 miles 400 y 25 dead 150 inj. F4 (266) One of over a dozen killer tornadoes in Arkansas this day, this DAPPL #15 event touched down near Barney, in NE Faulkner Co., causing one death. Moving to the NNE, the funnel killed 2 more people W of Rosebud, and crossed into Cleburne Co. Passing over the W and NW sections of Heber Springs, the tornado leveled dozens of homes, killing 22 people, many of them children. Damage totalled about \$50,000.
- Dec 26, 1916 AR 1500 30 miles 1600 y 17 dead 72 inj. F4 (267)
- This very large tornado changed intensity and width many times. DAPPL # 33 as it passed over four Arkansas counties. From a point S of Sheridan, Grant Co., the funnel moved to the NE, causing deaths and injuries in small communities and very rural areas of Pulaski, Lonoke, and Prairie Cos. The tornado leveled homes at many points, including 3 miles NW of England, 2 miles 5 of Carlisle, and near the end of the path, 3 miles 5 of Des Arc.

Mar 11, 1917 IN 1455 18 miles 300 y 24 dead 110 inj. F4 (263) This tornad, touched down about 4 miles W of New Castle, Henry Co., and moved due E, passing across the S edge of that town. 21 people were killed and 100 inj. as 75 buildings were destroyed and 175 damaged at New Castle. Several homes were totally swept away. Continuing to the ESE, the funnel passed 1 mile S of Millville, with 1 death and 2 miles S of Hagerstown, Wayne Co., with 2 deaths. Several farm homes were leveled between New Castle, and the end of the path near Greens Fork, with total damage at about \$600,000.

Mar 11, 1917 OH 1620 10 miles 300 y 1 dead 3 inj. F4 (269) The tornado leveled several small farm houses as it moved across DAPPL #96 Montgomery Co. passing about 2 miles S of Brookville and Trotwood. Many farm buildings were completely swept away on 23 farms. The tornado was probably spawned by the same cell that produced the previous event. The funnel lifted about 5 miles W of Dayton The death occurred near the start of the path. \$50,000 damage.

Mar 23, 1917 IN/KY 1508 15 milet 400 y 45 dead 250 inj. F4 (270) Touching down a few miles NW of New Albany, Floyd Co., Indiana, the tornado moved to the ENE, cutting a 1,000 to 1,500 foot wide swath through the entire N side of that city. Damage totalled about \$1.500,000 as 300 homes were destroyed along with 2 schools, and many other buildings. While many homes were swept away, the deaths were concentrated in several groups; 12 dead at the Olden Street School, 8 dead at Kahler's Wood Specialties plant, and 5 members of the Johns family. The tornado passed into Kentucky near Harrods Creek.

May 25, 1917 KS 1400 65 miles 1200 y 23 dead 70 inj F5 (271) The tornado formed 3% miles NW of Cheney, Sedgwick Co., and DAPPL #38 moved to the NE through the S part of the viliage of Andale, through the S edge of Sedgwick, and with less intensity to 3 miles NE of Florence. Marion Co. Along the path, 118 farms. homes and business were destroyed, many of them completely swept away. Damage totalled \$600,000. 12 people died at Andale. as half the town was damaged or destroyed. 8 people died near Sedgwick, 2 mear McLain, and 1 near Elbing. The damage path was reported to be up to 1% miles wide. May 26, 1917 IL

(272)

DAPPL #17

1210 165 miles 800 y 101 dead 638 in). F4 This major tornadic est, is often cited as naving the lociest path length of any tornado, but no evidence exists that it was continuous in Illinois, or that the Indiana damage was done by a single tornado. The illinois portion of that long path is plotted here as a single event, but was quite likely two or more separate tornadoes. The tornado touched down near Pleasant Hill and Nebo, Pike Co., and moved due E to Pearl, Pike Co. and White Hall, Greene Co. The tornado either weakened or lifted between White Hall and Modesto, Macoupin Co., but at Modesto 3 lives were lost and 30 houses were destroyed. Between Modesto and Westervelt, the damage was intermittant, with one death, and much hail damage. At Westervelt, Shelby Co., 4 people were killed, as 10 houses were destroyed. The tornado weakened across NE Shelby Co., and intensified west of Mattoon, Coles Co. Through Mattoon, the funnel cut a swath 25 miles long and 25, blocks wide of near total destruction. Virtually every home on the N half of town was damaged or destroyed. FI damage extended into the central business district. 500 homes were destroyed and 53 people were killed. Mattoon damage was \$1,200,000. Across the county, from Mattoon to Charleston, every farm was damaged. At Charleston, the path was 600 yards wide and 1, miles long, through the heart of this smaller city. 221 homes were destroyed, 38 people were killed, and damage totalled \$780,000. Two people were killed at Embarrass, NE of Charleston, near the end of the tornado's path.

May 26, 1917 IL 1645 35 miles 400 y 5 dead 60 inj. F4 (273) The cell, from which this tornado was spawned produced straight Ward and some tornadic wind damage as far W as Mendota, LaSalle Co. Clearly to madic violence and other characteristics began, however, about 10 miles SSE of Joliet. From there, eastward to near Crete, the tornado iestroyed dozens of farms across central Will Co. In the section between Manhattan and Monee, a few farm houses were totally swept away. The funnel lifted and apparently skipped to the N edge of Crown Point, Lake Co., Indiana, where several homes were leveled. 3 deaths occurred in Ellinois, 2 in Ladiana.

May 26, 1917 IN 1740 20 miles 200 y 2 dead 60 inj F4 (274) While often considered to be the same event as the pre ious DAPPL #18 tornado, a reformation of the funnel took place about 6 miles S of Crown Point, Lake Co. The tornado moved to the E, passing through the town of Hebron, Porter Co., to near the town of Kouts. The funnel struck Hebron from the SSW, with 2 deaths, as several homes were leveled. Less intense damage occurred along the Hebron-Kouts Road, with many injuries and 350,000 in damage. May 26, 1917 IN (275) Thi DAPPL #17 dow

917 IN 1800 15 miles 800 y 2 dead 8 inj. F4 This tornado was the most intense of a series of tornadoes and downbursts that bassed from Vigo to Jennings Cos. From just W of Blackhawk, Vigo Co., the tornado moved to the SE, passing S of that town, where 2 people were killed in the leveling of a large home. F3 damage continued N of Lewis and 1 mile S of Clay City, Clay Co. The funnel widened to 2 miles beyond Clay Co., and is not plotted here as tornadic. The next major damage was in 30 miles, S of Bloomington, Monroe Co. These, and three other tornadoes have been considered as part of the Charleston-Mattoon event.

May 27, 1917 AR/TN 1500 90 miles 800 y 24 dead 175 inj. F4 (276) This tornado moved to the NE across the E part of Mississippi Co.. DAPPL #8 Arkansas, killing 12 people and leveling a dozen homes. The funnel crossed the Mississippi River just N of the town of Tomato and entered Dyer Co., Tennessee. Damage in Arkansas was \$43,000 and another \$120,000 would be added in Tennessee. The major part of the Tennessee damage was done as the funnel passed along the S edge of Dyersburg, where 5 of the 12 deaths in that state occurred. Most of the homes in South Dyersburg were damaged or destroyed. 4 people were killed as the tornado leveled several homes 2 miles 5 of Sharon, Weakley Co. The tornado probably dissipated in E Weakley Co.

May 27, 1917 IN/KY 1600 55 miles 800 y 67 dead 345 inj. F4
(277) The tornado originated in the NW corner of Lake Co., Tennessee, 0APPL #50
4 miles N of Tiptonville, Causing 2 deaths and 20 injuries, then passing into Fulton Co., Kentucky. Across Fulton Co., the death total was 42 along with 200 injuries. In Hickman Co., 18 people died and 100 were injured. In Graves Co., 5 people died and 25 were injured. Total damage for the tornado was about \$1,000,000. Most deaths occurred at 4 towns that were struck: Bondurant, Hickman, and Clinton in Hickman Co., and Oublin in Graves Co.

May 27, 1917 TN 1800 50 miles 400 y 5 dead 67 inj. F4 (278) Touching down near Finger, McNairy Co., the tornado injured DAPPL #125 12 people as it began to move to the NE. Passing across the S edge of Henderson Co., many small homes were leveled, and 3 people were killed. This tornado, or another in the same tornado family struck the edge of Linden, Perry Co., where 2 more deaths occurred. Total property damage was \$35,000.

May 27, 1917 AL 2045 25 miles 800 y 40 dead 100 inj. F4 (279) This tornado, or family of tornadoes, skipped across N DAPPL 42, 43 Jefferson Co. The first major damage was at Sayre, where virtually every one of the homes were leveled. Most of the homes were apparently poorly constructed, and 9 people were killed, with property damage at \$65,000. The tornado passed through the neighboring town of Bradford, with 17 more deaths in the frail homes. A final death occurred near the end of the path, at Village Springs, Blount Co. May 30, 1917 MO (280) This DAPPL #72 very

1300 115 miles 400 y 6 dead 100 inj. F4 This tornado, or family of tornadoes, moved ENE, through very rural areas of 6 counties. It is the southern-most of two tornadoes who paths were roughly parallel, varying between 6 and 12 miles apart. The damage was first reported from W of Success, Texas Co., where 2 people were killed. At about this same time, the slightly less intense N member of the pair of tornadoes was causing 4 deaths near Hazelton. From Success. the funnel passed a mile N of Licking, causing & injuries in the collapse of several houses. Moving into Dent Co., the tornado caused injuries at Coulstone, Ranger, and the SE edge of Salem. Passing near Dillard, Crawford Co. the tornado continued to the ENE into Washington Co, where one person was killed at Eye, Passing S of Potosi, the cornado struck the town of Mineral Point, killing 4 people and destroying or damaging almost every building in the town. Houses on the N side of town were leveled. Damage here was \$300,000. Moving across the S part of Jefferson Co., the tornado produced another \$100,000, with the worst damage near Valles Mines. Given the rural and forested nature of the area, the tornado's maximum intensity was probably not experienced by any buildings.

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May 30, 1917 MO 1700 50 miles 400 y 18 dead 200 in . F4 (281) This event was the northern-most of a pair of intense tornadues DAPPL 476 This event was the northern-most of a pair of intense tornadues into Wayne Co. near Granite Bend, where 1 person as killed in the Jones nome. At Scatterville, 1 child was killed in the White family. After damaging homes near Kime, Shook and Amab, the tornado virtually leveled the town of Dongola, Bol inger Co., killing 7 people, and injuring 43 others. At the S edge of Zalma, many small homes were swept away, as 9 people were killed and 130 injured. Property damage totalled about 400,000. 15 more people were injured near Orum, as the tornad dissipated.

1700 50 miles 400 y 8 dead 10 inj. F4 May 30, 1917 MO This event originated in SE Carter Co., and moved to the ENE (282) parallel to, and about 5 miles 5 of, the previous event. The DAPPL #77 tornado crossed NW Butler Co. and entered Wayne Co., 5 miles 5 of Taskee and 5 miles NW of Hendricksci. At a point 1 miles 5 of Chaonia, Wayne Co., the Moncounery one on the Ferguson farm was leveled and 7 people were kille 1 person was killed as the nearby Bennett home was leveled ENE of Arab. two distinct funnels and damage tracks are no long. reported. but the path was listed as 15 miles wide, rather an the 5 mile that was noted earlier. At haonia, the width sound was described as that of "1000 threshing mac ines".

May 31, 1917 OK 2130 B miles 200 y 3 dead 20 mj F4 (283) From a peint about 10 miles NW of Marietta, Love .o., this DAPPL #103 tornado moved to the SE, through the outskirts of the town of Pittman, where 20 houses were damaged or destroyed, and damage totalled about \$50,000. The tornado lifted 2 miles NW of Marietta.

1600 12 miles 150 y 14 dead 70 inj. F4 Jun 1, 1917 0K Piotted here as originating 10 miles WSW of Coalgate, Coal Co., (284) the tornado may have been the same one that caused 5 deaths at DAPPL #113 Drake, Murray Co. Passing through the NW side of Coalgate. the tornado leveled dozens of small homes, with 200 homes being listed as destroyed. Damage totalled \$500,000. The funnel swept away many homes, but they were of light construction, homes of the coal miners. 11 deaths occurred at the time of the tornado, with 3 people dying after hospitalization.

1705 25 miles 600 y 9 dead 50 inj. F5 KS Jun 5, 1917 while an earlier member of the tornado family touched down (285) near Eskridge, Wabaunsee Co., this event is plotted as DAPPL #48 having originated SW of Bishop, in extreme W Shawnee Co. The tornado moved to the NE, passing 10 miles W of Topeka, and intensified rapidly after crossing the Kansas River. For the next 8 miles farms and homes were completely swept away, trees were debarked, and heavy farm machinery was carried for long distances The village of Elmont was on the edge of the funnel, which initially was reported to have many funnels with the main funnel, then having a pair of writhing elephant's trunks, and then having no funnel at all, but just a boiling mass of cloud moving along ti ground .

1800 15 miles 300 y 1 dead 1 inj. F4 Jun 5, 1917 KS From 2% miles NE of Shaw, this tornado moved to the NE. (286) dissipating 1 mile SE of Savonburg, in NE Neosho Co. DAPPL #46 A farm was completely leveled 2 miles SW of Savonburg. A "cold north wind" gusted through that town, and the tornado turned to the E and dissipated. The funnel was described as an enormous hoop, with strings hanging down.

2030 45 miles 400 y 22 dead 52 inj. F4 Jun 5, 1917 MO This tornado formed 5 miles SW of Clark Fork, Cooper Co., and (287) moved to the across Cooper County, killing 4 people . The DAPPL #86 funnel crossed the Missouri River into Boone Co. 3, miles SE of Rocheport. Each of 6 Boone Co. towns had over \$35,000 in damage, and 5 of the 6 had deaths reported from the tornado. After striking Rocheport, Midway, New Providence, Hinton and Hallsville, the tornado destroyed 27 houses at Centralia, causin 7 deaths.

1200 22 miles 400 y 1 dead 20 inj. F4 Jun 6, 1917 ME This tornado is part of a tornado family which originated (288) near Climax, in E central Kalamazoo Co. Tornadoes of this DAPPL #162 family touched down in the Battle Creek area. This event is plotted from NW Calhoun Co., through the town of Springport, Jackson Co., to a point S of Leslie, in N central Jackson Co. \$100,000 damage was done at Springport, with several small homes being leveled.

Apr 14, 1918 TX (289)

(293)

1830 15 miles 400 y 3 dead 3 inj F4 One of five killer tornadoes that day in Texas, this event touched down SW of Boyd, Wise Co. and leveled a few homes on DAPPI #15 the edge of town as it moved to the NE. Many buildings in town were damaged, and costs were reported to be \$100,000. Near Paradise, in the same county, one home was leveled with a single death in that house.

1600 60 miles 400 y 8 dead 20 in, F4 May 9, 1918 IA This tornado, or family of tornadoes, touched down 5 of (290) Packard Butler Co., and moved to the NE. The first community DAPPL #17 that was struck, was Pearl Rock, where one death occurred and property losses totalled \$30,000. The tornado either moved to the NE or reformed E of Nashua, Chickasaw Co., where one man was killed and \$100,000 in damage done to farms. 3 deaths occurred between Nashua and New Hampton Some farms were leveled and others only slightly damaged, where the damage path was noted as being 2 miles wide. Continuing to the NE, the event changed size, intensity, and character many times. 3 people were killed in the Calmar area of Winneshiek Co., with \$250,000 damage done in that town.

1700 30 miles 1200 y 4 dead 10 inj. F4 May 18, 1918 NE From S central Knox Co., this large and intense tornado (291) moved to the NE. leveling many farms and ranches NW of DAPPL #43 Bloomfield and Crofton. Crossing into South Dakota, only F2

damage was done W of Yankton.

- 2030 65 miles 800 y 10 dead 65 inj. F4 May 20, 1918 KS
- This large tornado, or family of tornadoes, touched down in (292)
- DAPPL #29 Ellis Co., about 15 miles W of Hays . Moving to the NE. many farms and ranches were leveled as the funnel passed across the NW part of Ellis Co., through Codell, Rooks Co., to N of Bloomington, Osborne Co. The town of Codell was hit for the 3rd year in a row, all on May 20th. Damage was \$450,000 for the event, with half of the deaths at Codell.
- May 21, 1918 IA 1430 50 miles 800 y 6 dead 30 inj. F5

From just S of Denison, Crawford Co., this intense tornado DAPPL #20 moved to the ENE across Crawford and Carroll Cos , lifting in the NW corner of Greene Co., near Adaza. Total damage was about \$300,000. Maximum intensity damage was in Carroll Co. were the Rust farm was reported to have had every building ompletely swept away, and at least a dozen farm leveled One death occurred near Denison in a collapsed barn, and

2 members of the Brincks family were killed in their home. N of Carroll. The 3 deaths in the Adaza-Churdan area may have been caused by downburst winds in the dissipating stages of the tornado May 21, 1918 IA 1600 10 miles 300 y 6 dead 15 inj. F4 (294) From near Moingona, in central Boone Co., this tornado moved DAPPL #21 to the NE. leveling several farms NE of Boone, and a few houses on the edge of the town of Boone. The majority of damage in the SE section of Boone was F2/3 intensity, but 200 houses were affected. Total damage was acout \$500,000, with much of that due to the destruction of RR roundhouses and workshops.

May 21, 1918 IA/WI 1900 85 miles 400 y 8 dead 100 mj. F4 (295) First sighted near Guttenberg, Clayton Co., Iowa, this tornado DAPPL #23 skipped across Grant Co., Wisconsin. The tornado intensified in NW Iowa Co., and leveled several farms before moving through the town of Lone Rock, in extreme SC Richland Co. 2/3 of the buildings in that town were damaged or destroyed, and 4 people were killed. Continuing into Sauk Co., deaths occurred on three different farms before the funnel lifted SW of Baraboo. Total damage was about \$400,000.

Aug 21, 1918 NO/MN 2100 25 miles 400 y 36 dead 190 inj. F4

(296) The tornado apparently touched down 1 mile S of Elkton, Brookings DAPPL #36 Co., South Dakota and moved to the ENE into Lincoln Co. Minnesota. Striking and leveling many farms across S Lincoln Co., the funnel passed directly through the town of Tyler, causing \$1,000,000 in damage. Among the nearly 600 buildings that were destroyed or damaged was the towns only hospital, where 3 patients were killed 8 people were killed in a pool hall, ant, on the edge of the tornado's path, a theatre with 150 people was struck, but with no deaths.

Mar 14, 1919 NE 1630 10 miles 300 y 1 dead 3 int. F4 (297) Farms were destroyed at several places along the path of this DAPPL #38 tornado which moved from NE of Weston, Saunders Co. to 5 miles SW of Fremont. Passing between Malmo and Colon, one person was killed as the Dockfweiler farm was leveled and swept away.

Mar 15, 1919 OK 1600 7 miles 75 y 2 dead 25 inj. F4 (298) From a puint about 2 miles SW of Porter, Wagoner Co., this DAPPL #43 tornado moved to the NE, through the E side of the town. 25 small homes were destroyed, many of them leveled to the ground. Most of the houses in the damage path were not of strong construction. Total damage was \$200,000. The tornado lifted 5 miles NE of Porter.

Mar 15, 1919 OK 1900 20 miles 800 y 4 dead 18 inj. F4 (299) Moving to the NE and passing 5 miles to the W of Kingfisher. This tornado destroyed buildings on dozens of farms in Kingfisher Co. Total damage was \$100,000, with one death occurring W of Kingfisher and 3 others occurring 4 miles E of Dover. Mar 16, 1919 LA/MS 1215 95 miles 400 y 39 dead 100 inj. F4 (300) From Richland Parish, Louistana, this tornado skipped to the DAPPL #27 NE, causing 4 deaths, and passed into Mississippi near Lake Providence. 2 miles 5 of Grace, Issaquena Co., the house of a wealthy plantation owner was leveled, one of the class piece of 54 evidence along the path Passing across across

house of a wealthy plantation owner was leveled, one of the few clear pieces of F4 evidence along the path. Passing across the N part of Sharkey Co., small homes were leveled and swept away, resulting in 15 deaths. At Isola, Humphreys Co., more small homes were swept away and 18 people were killed.

- Apr 9, 1919 TX 0015 45 miles 400 y 34 dead 80 inj. F4
 (301) From the NE corner of Collin Co., this tornado, or pair of tornadoes moved to the NNE and due N, striking many sleeping farm communities on the Grayson-Fannin Co. border. Total damage was about \$200,000 to communities such as Selba, Blue Ridge, Trenton, and tsolated farms E of Bells, and W of Leonard. The funnel leveled many of the small farm houses all along the path(s). Continuing into Oklahoma, it leveled farms E of Durant, Bryan Co., and caused 12 additional deaths. Damage in Oklahoma was about \$75,000.
- Apr 9, 1919 TX 0330 30 miles 1600 y 13 dead 40 inj. F4
- (302) The tornado touched down near Eustace, Henderson Co., and leveled DAPPL #63 3 small homes. Moving to the NE, the tornado widened to almost a mile, and damaged most of the buildings in Canton, Van Zandt Co. causing 8 deaths. The funnel lifted near the edge of Grand Saline, causing 3 deaths in this area.
- Apr 9, 1919 TX 0415 30 miles 400 y 25 dead 100 inj. F4
- (303) Touching down NW of Mineola, the tornado moved to the NE. causing DAPPL #64 14 deaths in the small Concord community. 8 miles NE of that town. Continuing to the NE. 11 people were killed as the furmel leveled more small farming communities in NE Wood Co.
- Jun 22, 1919 MN 1600 15 miles 400 y 59 dead 200 int is

(304) DAPPL #30 From the W edge of Otter Tail Co., this tornado moved ENE . moving first through the Lake Alice area, and then directly through the town of Fergus Falls. The first deaths were to 4 children whose house was blown into One Mile Lake. From there, deaths occurred in the wreckage of the Lake Alice Grand Hotel and all along a 3 block wide swath through Fergus Falls. Damage totalled about \$3,500,000, with large sections of the town completely leveled. 400 buildings, including 228 houses, were destroyed.

Mar 11, 1920 AR/MO 1500 30 miles 100 y 10 dead 30 inj. F4 (305) Driginating in the extreme NE corner of Carroll Co., Arkanasas, this tornado mowed to the NE, diagonally across Taney Co. Missouri. In the SW part of that county, one small house was swept away near Oasis, as the tornado skipped along the tops of the Ozark ridge. Continuing to the NE, the funnel struck the town of Melva in the Turkey Creek valley, where many small houses were either leveled or swept away, and all 10 deaths occurred. Further to the NE, the damage area widened to 5 mile, but apparently weakened in intensity, dissipating near Bradleyville \$150,000 damage. (306)

DAPPL #12

1215 55 miles 100 y 20 dead 300 inj. F4 Mar 28, 1920 IL The tornado touched down 15 miles N of Channahon, Will Co., and then NE, destroying 5 houses and injuring 17 people across Channahon, Troy, and Lockport Twps. \$500,000 damage was done in this area. NW of Lockport the tornado skipped through the Romeo area. with little damage along the DuPage-Cook county border. Touching down again in the Bellwood-Maywood areas of Cook Co., the tornado intensified, and 4 people were killed, as 20 houses were destroyed, many being leveled. In Melrose Park, the funnel leveled a 100 y wide section of the town between 21st and 13th streets. 50 homes were destroyed in this area, and 10 people were killed. Continuing to the NE, 6 people were killed at Dunning, and 18 injured at Willmette before the tornado passed out over Lake Michigan. Total damage amounted to \$2,000,000.

1445 50 miles 400 y 27 dead 125 inj. F4 Mar 28, 1920 AL/GA This member of a complex tornado family may have (307) originated 1 mile N of Deatesville, in W Elmore Co., but is DAPPL #2 plotted here from the NE corner of Elmore Co. From there, the tornado(s) moved to the ENE, destroying 60 homes in the Tallapoosa Co. settlements of Agricola, Susanna, and Red Ridge. Many other rural buildings were destroyed and swept away across S Chambers Co., as the damage total reached \$200,000. 17 people were killed in Alabama. Passing to Troup Co., Georgia, the tornado killed 10 people and caused another \$250,000 damage at West Point. Another member of this tornado family killed 27 people in another section of Troup Co., but is not included on the violent list.

1600 10 miles 400 y 5 dead 20 inj. F4 Mar 28, 1920 Mi

Originating 15 miles SE of Lacey, Barry Co., this tornado (308)moved to the NNE, leveling several farms as it passed S and SE DAPPL #31 of Maple Grove. Two separate tornadoes, moving in parallel paths may have been responsible for the deaths, with both events leveling homes. Available information is too incomplete to allow plotting of two separate events. Deaths occurred in the destruction of the Bilson and Moon homes.

1700 10 miles 200 y 4 dead 11 inj. F4 Mar 28, 1920 MI Touching down as a waterspout at the S end of Long Lake. the (309) tornado moved to the NNE. The tornado crossed S Genesee Co., and DAPPL #32 the NW corner of Oakland Co. As the tornado crossed the Flint Fenton highway, many homes were leveled, with 3 deaths in the Nash home. \$200,000 was the estimated damage. The funnel lifted 14 miles SW of Flint.

Mar 28, 1920 IN/OH (310)

DAPPL #17

1715 95 miles 800 y 23 dead 54 inj. F4 Often plotted is a single tornado, this event is probably two distinct tornadoes. Originating near Uniprville, Wells Co., the tornado intensified 5 of Ossian, leveling farm after farm. The destruction continued across SE Allen Co., with deaths in 5 different farm houses. The village of Townley was the only cluster of houses in the path of the tornado, and virtually every building in the small town was leveled, as 4 people were killed. 100 buildings along the path were destroyed, with damage totalling \$1,000,000 in Indiana. From NE of Edgertown, Allen Co., Indiana, the tornado moved into Paulding Co., Ohio. It skipped across Paulding Co., damaging farms and uprooting trees. Damage was much greater in Defiance Co., as 6 people were killed near the town of Brunersburg. Continuing to the NE, over open farm country, the tornado did only scattered damage, until crossing into NW Lucas Co., where the community of Raabs was virtually leveled with 4 additional deaths.

1800 45 miles 800 y 17 dead 70 inj. F4 Mar 28, 1920 [N/OH (311)

Touching down SW of West Liberty, Jay Co. this tornado moved to the NE, through that small town. West Liberty was the only town CAPPL # 17 directly in the path of the tornado, in Indiana. Of the 14 deaths in Indiana, 7 of them occurred as virtually all buildings in West Liberty were leveled to the ground. The most extreme degree of damage seemed to occur E of Geneva and S of Ceylon, Adams Co., as 5 deaths took place in homes that were entirely swept away. Passing into NW Mercer Co., Ohio. the tornado leveled several more farms, and 3 deaths occurred 5 of Van Wert. Van Wert Co., in 2 different houses.

Mar 28, 1920 IN/OH 2000 20 miles 400y 16 dead 40 inj. F4 Touching down N of Fountain City, Wayne Co. the tornado crossed (312) DAPPL # 18 into Darke Co., Ohio where it caused nearly \$1,000,000 in property damage. Beaths occurred from near the indiana border to N of Greenville, as dozens of farms were damaged and several homes leveled. The worst damage occurred in the most populated section of the path, as the tornado passed 1, miles NW of Greenville.

Apr 12, 1920 NC 2100 32 miles 150 y 3 dead 20 inj. F4 (313) Several small homes were totally swept away, as this tornado DAPPL #54 moved to the NE from NW Union Co., 6 miles NW of Mciroe, to near Norwood, Stanley Co. One of the farm houses that was destroyed was described as being "substantial". This house, and the barn, were leveled. A steel range from another house was reported to have been carried 3 miles. Total damage was \$250,000.

Apr 20, 1920 MS/TN 0700 60 miles 400 y 24 dead 180 inj. F4 (314) This tornado touched down in S Union Co., Mississippi striking DAPPL #41 the community of Ingomar, leveling several small homes and _ausing 6 der hs. Moving to the NE, 5 dozen small communities were strp 4, with houses leveled and deaths in each of them. Those that were most severely damaged are Ingomar and Baker in Union Co. Five in Tippah Co., and Glen in Alcorn Co. The funnel dissipated just over the Tennessee state line.

Apr 20, 1920 MS/AL 0800 125 miles 800 v 88 dead 700 int. F4

(315) From a point near Bradley, in SW Oktibbeha Co., this tornado DAPPL #4 moved to the NE and leveled over 200 small homes in Mississippi. 7 deaths occurred as the funnel passed NW of Starkville, Oktibbena Co., and 10 people died in neighboring Clay Co., near Cedar Bluff. Encountering one large town on its path, the tornado killed 22 people along the W edge of Aberdeen, Monroe Co., and added 5 other deaths elsewhere in the county. Entering SW Marion Co. Alabama. the tornado destroyed several farms 5 of Bexar, causing 9 deaths in the area. 11 more people were killed further to the NE in Marion Co. In Franklin Co., scores of homes were leveled or blown away. as 19 people were killed, mostly in the Waco area. The tornado finally weakened after crossing SE Colbert Co., causing 4 deaths, and lifted in NW Lawrence Co., after adding one more death. Damage was probably about \$2,000,000 for the entire track of the tornado

Apr 20, 1920 MS 0830 40 miles 400 y 27 dead 60 ini, F4 (316) This tornado moved diagonally across Heshobalo., leveling GAPPL #43 several small homes, and causing 3 deaths in those homes. Major damage and 19 deaths occurred at a lumber camp at New Deemer, just S of Philadelphia. The camp was leveled. with the workers having no place to take shelter. 5 additional deaths took place in SE Winston Co.

Apr 20, 1920 MS 0955 45 miles 400 y 36 dead 200 inj. F4 (317) The funnel first touched down at Bay Springs, Jasper Co., DAPPL #44 where 7 people were killed. Moving to the NE, 14 more people were killed in Jasper Co., primarily in the Rose Hill area. Crossing into Lauderdale Co. near Savoy, the tornado continued to obliterate small homes, sweeping them entirely away. Passing through the S part of the city of Meridian, the tornado came within a mile of the Weather Sureau. 11 deaths occurred as the apparently weakened tornado struck Meridian. the funnel lifted near Russell, Lauderdale Co.

Apr 20, 1920 AL 1000 60 miles 400 y 21 dead 50 inj. F4 (318) From the NE corner of Fayette Co., near Carbon Hill, the DAPPL #5 tornado moved to the NE, destroying, leveling, and sweeping away homes in dozens of small communities. Particularly hard hit were Arley and Helicon in Win ton Co. The tornado lifted near Lacey, in S Morgan Co. The track of this tornado covered rather remote, rural areas, but there seems little doubt that at least 19 people were killed in the Arley-Helicon area, and that many homes were completely swept away.

Apr 20, 1920 AL (319) 0APPL #100

1230 20 miles 400 y 25 dead 100 inj. F4 Touching down 15 miles 5 of Lily Flagg, Madison Co. the funnel moved to the NE across the county. This tornado was very consistent in its destruction, apparently maintaining its violent nature for a large t of its path Passing about 7 miles S of Huntsville, several homes were swept away that were described as "substantial country homes". Lifting before leaving the county. damage totalled \$200,000. While certainly in the same family as the previous event, this tornado could possibly be a continuation of that event.

May 2, 1920 OK 1930 3 miles 800 y 0 dead 4 ini, F4

(320) This tornado was one of three tornadoes that day, in NE Oklahoma, DAPPL #65 that followed rather short, but parallel paths. The Rogers Co. event, with 5 deaths, is not included in this list. The event listed here passed 4 miles N of Choteau, Mayes Co., leveling 3 farm houses, and killing 100 head of livestock in the short time that it was on the ground.

May 2, 1920 GK 2035 3 miles 800 y 71 dead 100 inj. F4

(321) While this tornado may not have been any more intense than DAPPL #67 the previous event, the path encountered the isolated village of Peggs. Cherokee Co., destroying all but 7 buildings in the town. One of these upright buildings was a one story wooden structure. the "city jail", and stood next to the remains of a leveled concrete block store. With a population of only 200, this was the highest percentage of deaths and injuries to the population of any tornado. News of its destruction did not reach another town for 6 hours.

Jly 1, 1920 IA 1745 20 miles 200 y 0 dead 4 inj. F4 This tornado traveled across the S part of Adams Co., destroying (322) DAPPL #24 property on over a dozen farms, and leveling one farm house. At another, the house collapsed, trapping the family in the debris. As is quite common in late 19th-early 20th century tornadoes, the debris caught fire and the people had a narrow escape.

Feb 10, 1921 GA 1230 8 miles 800 y 28 dead 100 inj. F4 (323) From a point ESE of Toomsboro, Wilkinson Co., this tornado DAPPL #22 passed through the poorly constructed mill village of Gardner. and continued to the ENE to near Oconee, Washington Co. All deaths were at Gardner. The ', mile wide path was possibly at greater than F4 intensity, for many homes were completely swept away. Seven bodies were carried for over 5 mile, but house construction was very poor.

Apr 13, 1921 TX 1420 8 miles 400 y 11 dead 80 mj F4 (324)

From NE of McKinney, this tornado moved to the NE, through DAPPL #101 the E half of the town of Melissa, destroying 100 homes and causing \$500,000 damage. Several other farms in Collin Co. were damaged. A large percentage of the wreckage was consumed by fire. A school was partially destroyed while 240 children huddled in the basement.

1410 105 miles 2000 y 62 dead 300 inj. F5 Apr 15, 1921 TX/AR The touchdown point is plotted in the NW corner of Harrison Co., (325) and from here the tornado moved to the NE, killing 8 people at DAPPL #103 Avinger, Cass Co. as a dozen small homes were leveled. The tornado weakened in Cass Co. causing only 5 injuries as it continued to the NE. 2 people were killed in the SE corner of Bowle Co., as the funnel crossed into Miller Co., Arkansas. In Hiller Co., 16 people were killed as small homes were leveled at Irigenta, Shiloh and on the Boyce, Sims, and Potter plantations. In Hempstead Co., 34 people were killed at 8 different communities. as the tornado widened to 15 miles and turned to the NME. One additional death occurred in Pike Co. Damage totalled over \$3,000,000 in the two states. Homes were completely swept away throughout the Arkansas portion of the path.

1500 25 miles 400 y 15 dead 50 taj. F4 Apr 26, 1921 MS From SE Copiah Co., the tornado moved to the NE accoss (326) Simpson Co., eventually striking the small town of Braxton. DAPPL #60 destroying all but two buildings in the town. Most of these buildings were poorly constructed, and damage totalled \$100,000 in this town of 300 people.

1700 3 miles 100 y 8 dead 2 inj. F4 Nov 17, 1921 AR This short path tornado touched down 1 mile W of Wickes, Polk (327) Co., and moved to the ENE. The tornado encountered two small DAPPL #15 homes, and one home was completely swept away, with 8 of the occupants thrown to their deaths in different directions. The mother and 6 children were buried in a common grave.

1720 40 miles 200 y 3 dead 20 inj. F4 Nov 17, 1921 AR This tornado skipped to the NE, after touching down in NE (328) Clark Co. The three deaths occurred in three separate homes DAPPL #16 that were leveled, as the funnel passed along the mountain tops and occasionally swept into the valleys. The funnel dissipated at the SE edge of Garland.

2050 35 miles 400 y 4 dead 12 inj. F4 Apr 10, 1922 MO This tornado touched down about 5 miles W of Miller, Lawrence Co. (329) and moved to the ENE. The Boyd home was leveled at the very start DAPPL #58 of the path, and the owner died later from injuries. From that point, the tornado produced F2 damage at the N edge of Miller, and passed through the sparsely populated countryside of Lawrence and Dade Cos. The tornado leveled 2 homes near Ash Grove, Greene Co., with a death in each house, and turned to the NNE. Turning again to the E at Walnut Grove, the funnel struck Harrold and Luck, destroying several buildings. At Luck, 2 homes were destroyed and the schoolhouse was leveled, killing a 7 year old student. The tornado probably dissipated shortly after hitting Luck. Damage totalled \$100,000.

(330)

1500 30 miles 800 y 13 dead 40 inj. F4 Apr 17, 1922 IL/IM Touching down 3 miles N of Ogden, at the W edge of Vermillion Co.. Illinois, this event was one of a family of at least 6 tornadoes. DAPPL #23 The family is often plotted as a single tornado. From N of Ogden, the tornado moved to the ENE, causing 2 deaths and destroying several farm homes at the F3 intensity level. F4 intensity was reached after passing across the county. S of Bismark, and moving into Warren Co., Indiana. Farm after farm was leveled, and 11 people died in the hedrick area.

1800 15 miles 200 y 3 dead 25 mj. F4 Apr 17, 1922 IM Touching down near Grestes, in central Madison Co., this tornado (331) moved to the NE. leveling several homes and causing 3 deaths. DAPPL #23 A post card from one of the other houses that mas destroyed was found in Hancock Co., Ohio, 100 miles away. After passing Wheeling, Delaware Co. the tornado widened and lost its rotational characteristics.

1830 20 miles 400 y 0 dead 0 inj. F4 May 10, 1922 NE This tornado touched down near Elwood, Gosper Co., and moved

(332) to the NNE, passing 1 mile E of Lexington, Dawson Co. DAPPL #62 All residents were able to find shelter, for the funnel was very visible and moved slowly. \$150,000 damage was done to the dozens of farms that were damaged. About ', dozen homes were leveled. The funnel lifted 8 miles NE of Lexington.

1900 45 miles 400 y 6 dead 20 inj. F4 Jun 15, 1922 WI

The funnel formed 2 miles N of Roberts, St. Croix Co. and (333)

moved to the NE. About 100 houses and barns were destroyed, DAPPL #112 with many leveled from the NW corner of St. Croix, near Forest, to S Barron Co., at Prairie Farm. All 6 deaths occurred in this area. The funne! dissipated into widespread downburst activity beyond Chetek. N of this tornado, other deaths occurred along a parallel path, but the nature of the event is not certain The official estimate of \$500,000 damage includes much downlurst damage.

\$730 25 miles 500 y 10 dead 40 inj F4 Nov 4, 1922 OK Passing diagonally across NW Creek Co., this massive tornado (334) leveled dozens of small homes, mostly of oil workers. From DAPPL # 89 W of Shamrock, to E of Drumright, to W of Mannford the tornado destroyed 133 oil rigs and scattered buildings and pulping machinery for miles. Some bodies were carried for 1 ' mile and no trace was found of many of the frail homes.

2000 15 miles 400 y 20 dead 70 mj. F5 Mar 11, 1923 TN The tornado formed in extreme SW Chester Co., and moved to the NE (335) striking the edge of the town of Deansburg. One person died at DAPPL # 86 Deansburg. Continuing to the NE, the funnel crossed into Madison Co. and struck the town of Pinson. About 1/4 of the town of Pinson was truly obliterated ... leveled and swept away. In this area 19 people were killed, with bodies carried as much as a mile Destruction to this degree, in a town, is seen quite rarely. The funnel lifted about 3 miles NE of Pinson.

Mar 15, 1923 MS 1745 20 miles 800 y 9 dead 30 inj. F4 (336) From just SW of Savage, the tornado moved to the NE, through BAPPL #42 that town, causing all 9 deaths. The funnel was large, but not as intense as others of that size. Several small homes were swept away, but damage was mostly F2/3 and widespread. \$170,000 in damage was done in Savage and other small communities in Tate and Desoto Cos. The tornado struck Hernando, Desoto Co... with F2 winds, but the \$100,000 in damage at that town was from the ensueing fires, which engulfed a large portion of the town.

- Apr 4, 1923 LA 1800 10 miles 400 y 14 dead 60 inj. F4
- (337) The tornado passed to the NNE, doing widespread damage along DAPPL #35 the N edge of Alexandria. Maximum intensity was apparently in the town of Pineville, Rapides Parish, where many small homes were destroyed and several swept away. Large numbers of homes were affected, and damage totalled nearly \$750,000. A major F4 event in this area would have been a much larger disaster.
- Apr 23, 1923 KS/NE 1700 14 miles 400 y 2 dead 5 ini, F4 From near the town of Oketo, Marshall Co., Kantas the tornado (338)DAPPL #20 moved to the NE. A few farms were destroyed in Kansas, but the most intense damage occurred just across the state line, in Gage Co., Nebraska, SE of Barneston. Here the Bruensbach farm was leveled with 2 deaths occurring in that home.
- May 14, 1923 TX 0430 45 miles 800 y 23 dead 250 mj F4 From a point 5 miles 5 of Big Spring, Howard Co., this (339) DAPPL #93 major tornado moved first to the ENE, then NE across Howard and Mitchell Cos. A few isolated ranches were struck in Howard Co., but in Mitchell Co., 3 or 4 small communities were struck, such as Spade, and the tornado passed within 4 miles of Colorado City. As many as 50 homes were leveled with damage to 100 more, totalling \$500,000.

Mar 28, 1924 OK 1530 30 miles 200 y 8 dead 120 inj. F4 (340) Touching down near Noble, in SW Cleveland Co., this tornado DAPPL 198 killed 2 people and began moving to the NE. Little other damage was done as the funnel moved across Cleveland and Pottawatomie Cos., until the tornado passed through the NW part of the city of Shawnee. A few homes were leveled, but damage at F2/3 occurred to over 200 homes, totalling \$800,000. Among the buildings that were destroyed way the Jefferson Grade School, whose 200 students were sent home 20 minutes before the tornado struck. 2% miles NE of Shawnee, 3 people were killed near the end of the path.

0730 75 miles 100 y 9 dead 100 mj. F4 Apr 30, 1924 64/50

From a point NW of Hartwell, Hart Co., Georgia . this tornado (341)

DAPPL #22 crossed the Savannah River into South Carolina. The first major damage was 2 miles SW of Anderson, Anderson Co., where a store and a few small buildings were destroyed. The tornado moved to the ENE, across the S part of Anderson, causing all 9 deaths and about \$1,500,000 in damage. Only the smaller homes were leveled, and only a few seemed to be swept away. The event produced widespread F2/3 damage, widening to nearly a mile at the end of its path S of Spartanburg, \$500,000 in damage occurred outside of Anderson.

0945 6 miles 300 y 3 dead 40 inj. F4 Apr 30, 1924 GA This tornado touched down 3 miles SW of Macon, and moved to the (342) DAPPL #24 NE, across the S edge of that town. A few small homes were leveled, and one swept away. Damage totalled \$200,000 as many homes were unroofed or collapsed.

Apr 30, 1924 SC 1100 110 miles 1000 y 67 dead 678 inj. F4 (343) Touching down 11 miles NE of Aiken, Aiken Co., the tornado moved ENE across Aiken, Lexington, Richland, Sumter, Lee and DAPPL #113 Florence Cos. The funnel was massive in appearance from Lexington Co. to near the end of its path near Timmonsville, Florence Co. The funnel maintained violent activity for a large part of the path and deaths occurred in a dozen small communities; no town was struck directly. Damage totalled only \$1,000,000 because the hundreds of homes which were destroyed were small ones. 8 people were killed in Lexington Co., 24 in Richland Co., 20 in Sumter Co., 1 in Lee Co., and 14 in Florence Co. The tornado passed 9 miles 5 of the state capital at Columbia.

Apr 30, 1924 NC 1230 2 miles 300 y 4 dead 5 inj. F4 (344) This short path tornado moved to the NE, passing 5 miles N DAPPL #86 of Pittsboro, Chatham Co. Several houses were destroyed, and the Blalock nome was swept away, with 4 members of the family killed.

May 28, 1924 OK. 1730 25 miles 200 y 7 dest 30 int. F4

(345)

From about 5 miles N of Holdenville, Hughes Co., this tornado DAPPL #103 moved to the NE, and then the ENE across the N part of the county. The tornado damaged and destroyed a 6 block area of houses on the S side of Wetumka, in what was described as the town's best residential section. Damage totalled \$140,000. and only a few houses were completely leveled

un 28, 1924 146) 1991 #95	OH 1635 32 miles 400 y 81 dead 300 inj. F4 Plottes here as a single event, the "Sandusky-Lorain Tornado" may have been two separate events. With 24 miles of the track out over Lake Erie, the argument as to whether it was a single tornado is not resolvable. As plotted here, the tornado formed E of Sandusky, over Sandusky Bay, and moved to the east, off t = water, and across the N and NE portion of that city. The tornado returned to take Erie, crossing the Cedar Point peninsula : out 4 miles from its tip. The width of the path at Sandusky was about is mile, and several h. wes were leveled. Damage there totalled \$1,000,000 with 25 factories destroyed, 100 homes destroyed, 8 people killed, and 106 injured. The Sandusky tornado hit at 4:35 PM. At 5:08 PM, the tornado came off of Lake Erie at the Lorain Municipal Bath House. 8 people died at the bath house and the tornado proceeded to move through downtown Lorain. 73 people died and damage totalled \$11,000,000. Many of the hundreds of destroyed buildings were brick structures, with the roof and upper storie: torn off. About is of all buildings in Lorain sustained some kind of damage, but only a few of the smaller homes were leveled. As the tornado passed through the town, it apparently grew wider and weaker. 15 deaths occurred in the collapse of the State Theatre, a movie house. The tornado lifted after causing 4 miles of devastation. Here the tornado lifted after causing 4 miles of devastation.	
	house. The tornado lifted after causing 4 miles of devastation. Reports of other touchdowns further E are confirmed, but not included as part of this event. As of July 25, 1924, 39 people were still reported as missing, and may have been lost out over the lake, during the storm.	

Jun 28, 1924 PA 1830 10 miles 200 y 1 dead 4 inj. F4 Many tornado touchdowns were listed, E of Lorain, Ohio and into N Pennsylvania. This event was the most intense of those tornadoes. CAPPL #111 Touching down 2 miles 5 of Geneva, Crawford Co., the funnel moved to the ENE to just 5 of Frenchtown. Two houses were leveled near the start of the path, and a death occurred to one of them. The \$500,000 damage and 6 deaths listed in official record for this area were a result of downburst damage and drownings in the Crawford-Erie Co. area.

Aug 7, 1924 WI 1830 25 miles 300 y 4 dead 20 inj. F4 From just S of Osseo, this tornado moved to the SE, very (348) close to the current position of highway 1-94. 2 deaths DAPPL #132 occurred SE of Osseo. Trempealeau Co., near the start of the path. Many farms were damaged along the path, but few homes were leveled until the tornado apprnached Black River Falls. Jackson Co. Several homes were destroyed in the NE part of that town, and 2 deaths occurred as a farm house was leveled on the NE edge of town. Total damage was \$200,000.

1500 20 miles 200 y 10 dead 8 inj. F4 Aug 10, 1924 CO From about 4 miles N of Thurman, this tornado moved to ESE. (349) into NW Kit Carson Co. Only one house was struck, on DAPPL #18 the Henry Kuhns farm. Several families had gathered for Mennonite services, and after dinner a tornado was spotted in the distance. The men traveled to the area of the sighting to possibly assist in rescue or cleanup. Finding no damage, they returned to see this event level the farm house to the ground. killing 9 children and one woman, and seriously injuring most of the other occupants.

Sep 21. 1924 WI

(350)

1420 125 miles 400 y 26 dead 70 inj. F4 This extremely long path tornado was a family of tornadoes. DAPPL #136 but with so much of its path over heavily wooded terrain. the numbers of tornadoes may be impossible to determine at this late date. Plotted as a single event from 2 miles SE of Augusta, Eau Clair Co., the tornado moved to the NE with little violence and damage in Eau Clair Co. Intensification apparently occurred as the tornado moved parallel to the Eau Clair River. in NW Clark Co., Many farms were leveled in this area, and 14 were killed. 4 more deaths occurred on farms in neighboring Taylor Co. These deaths were primarily N of Owen and W of Medford. After traveling over 20 miles of heavily wooded areas, the tornado leveled more farms SW of Rhinelander, along the Lincoln-Oneida Co. border, causing 8 more deaths. Path with varied from 50 to 800 yards, and damage totalled \$500,000.

Sep 21, 1924 WI 1600 30 miles 400 y 7 dead 20 inj. F4

(351)

intensity.

While possibly having its origins as far south as Barron Co., OAPPL #134 this tornado is plotted from the SE corner of Bayfield Co., to 10 miles SE of Ashland . All deaths occurred in the Sanborn-Marengo area. 5 deaths were a result of the leveling of the Hill home. Much of the path is heavily wooded, so little

opportunity was present for the tornado to exhibit its full

A-37 14

DA

(347)

Mar 18, 1925 MO/IL/IN 1301 219 miles 1320 y 695 dead 2027 inj. F5 Touching down between Redford and Ellington, Reynolds Co. . (352) DAPPL #17 Missouri, this event became the deadliest tornado in U.S. history. In a number of other ways it was also very unique Its path length is easily the longest recorded continuous track. It maintained an exact heading of N 690 E for 183 of those 219 miles, following a topographic ridge on which a series of mining towns were built. These towns were the targets of the tornado's devastating winds. Through much of its path, no distict funnel was visible. Instead of occurring along a front or squall line, the tornado was closely associated with the center of a surface low pressure area. The event remained on the ground for 3% hours, and moved at an average forward speed of 62 mph. The following table summarizes the tornado's devastation.

STATE	TOWN	COUNTY	DEAD	INJURED	6	ROPERTY	
MISSOURI	Redford	Reynolds	1	2	5	5,000	
	Annapolis	Iran	4	25		400,000	
	Cornwall	Madison	0	0		1.000	
	Biehle	Perry	4	11		45,000	
	rural areas	Madison to Perry	4	25		113,000	
	Missouri stal	te total:	13	63	5	564,000	
ILLINOIS:	Gorham	Jackson	37	170		150,000	
	Murphysboro	Jackson	234	623	11	000,000	
	DeSato	Jeckson	69	105		400.000	
	Bush	Williamson	7	37		212,000	
	Zeigler area	Williamson & Franklin	24	18		170,000	
	W.Frankfort	Franklin	148	410		000,008	
	Parrish	Franklin	22	60		77,000	
	rural areas	Hamilton & White	65	140	1	,100,000	
	Illinois stat	e totals:	609	1563	\$ 12	,909,000	
INDIANA	Griffin	Posey	25	202		375.000	
	Owensville	Gibson	6	47		600,000	
	Princeton	Gibson	45	152	1	.800.000	
	Indiana state	totais:	76	401	\$ 2	.775.000	
	enfire event	totals:	695	2027	\$ 16	,248,000	

60 % of the population of Griffin, Indiana was either killed or in word. 33 of the 69 deaths at DeSoto were in the school 19 students were killed in 3 Murphysboro schools. 7 students died in the Gorham school. A single death occurred in 3 different White Co., Illinois schools

tar 18, 1925 (353) 3APPL ≠56	TW/KY 1700 55 miles 400 y 38 dead 80 inj F4 From a point near Buck Lodge, 8 miles N of Gallatin, Summer Cu., Tennessee, this tornado moved to the ENE across the N part of the county. Houses were swept away in many communities, including Keytown, Angle. Oak Grove, and Liberty. In one home, 8 members of the family were killed. Trees were blown down in the steep valleys as well as on the hilltops. Crossing into Allen Cu., Kentucky, the tornado struck Holland, causing 4 deaths. The tornade either weakened or lifted over S Barren Co.,
	and then struck Beaumont, Metcalfe Co., causing 8 more deaths.

Mar 18, 1925 IN/KY 1715 18 miles 1200 y 4 dead o0 inj. F4 (354) DAPPL #20 and 2 miles S of Elizabeth, the tornado leveled farm after farm across the county. The 4 deaths occurred in 2 of the leveled homes. 27 farms were struck and damage totalled S150,000. The funnel dissipated after crossing the Ohio River into Kentucky. Other members of this family caused 3 deaths in the Louisville area.

Jun 2, 1925 NE 1520 B miles 800 y 3 dead 4 inj. F4 (355) Three farms were leveled to the ground as this large tornado moved to the NE, across S Mad'son Co. Damage totalled about \$250,000 as barns, other outbuildings, and livestock were destroyed on many other farms. The funnel passed 4 miles W of Madison.

Jun 2, 1925 IA 1630 35 miles 400 y 0 dead 3 inj. F4 (356) F4 damage was noted at two farms near the start of this tornado's path, between Rodney and Ticonic, Monona Co. Dozens of farms were damaged as the tornado moved to the XE across Woodbury Co. \$50,000 in damage was reported from near Smithland, \$200,000 from E of Oto, and \$75,000 from near Cushing.

Jun 2, 1925 IA 2030 14 miles 400 y 3 dead 5 inj. F4 (357) From a point 3 miles NW of Anita, this tornado moved to the NE DAPPL #30 completely leveled 3 miles N of Adair, Guthrie Co. and 3 members of the family were killed.

Jun 3, 1925 IA 1730 10 miles 1600 y 1 dead 29 inj. F4 (358) The tornado touched down 2 miles NE of Neola, Pottawattamie DAPPL #33 Co., and moved due N to near Persia, Harrison Co. This enormous tornado leveled at least 10 of the farms that were struck. This event, and a companion tornado, both a mile wide, damaged 44 farms and destroyed most of the houses in the village

of Yorkshire. Total damage was \$500,000.

(359)

0200 65 miles 200 y 18 dead 50 mj F4 Oct 25, 1925 AL The tormado touched down at the Good Hope community near Luverne, Crenshaw Co., and caused 3 deaths there. Moving to DAPPL +5 the ENE, this long path tornado caused deaths in 4 different small communities and in scattered rural areas across Pike, Bullock, and Barbour Cos. 15 of the deaths occurred near Iroy, Pike Co. and 3 occurred at Comer, Barbour Co., near the end of the path. A few small homes were completely swept away, but very little conclusive F4 evidence was noted along the path.

1620 20 miles 500 y 3 dead 9 tmj. F4 This tornado touched down about 5 miles NW of Fillmore, Johnston Apr 23, 1926 OK Co. and moved to the ESE. 2 miles from Fillmore, several homes (360) GAPPL +81 were leveled, including those of the Morton and Callen families. 2 deaths occurred in the Fillmore area, and 2 others occurred near the end of the path, in Atoka Co., near Caney.

1300 30 miles 800 y 2 dead 23 inj. F4 May 7, 1926 OK Touchdown occurred about 7 miles N of Okensh, Okfuskee Co. and the tornado moved to the NE. Passing from Okfuskee Co. to (361) DAPPT #83 Okmulgee Co. the tornado intensified and widened to ', mile. Several famis were leveled.causing 2 deaths. The funnel passed 4 miles N of Okmulgee and dissipated in the NE part of the county. Damage totalled \$100,000.

1600 25 miles 400 y 0 dead 30 inj. F4 Jun 15, 1926 MD From 3 miles Hw of Brooklyn, the tornado moved to the ENE, passing 3% miles miles 5 of Eagleville, Harrison Co., and 1 mile (362) N of Cainsville. The funnel was very visible, and people were DAPPL #01 able to take shelter. The Collins home, 3 miles NE of Brooklyn, was leveled, as was another home S of Eagleville Hundreds of homes were damaged along the path, but only one person was severely injured.

Jun 16, 1926 14 1500 8 miles 200 y 2 dead 24 inj. F4 Touching down arout 4 miles SSW of Clarinda, Page Co., this (363) tornado moved to the NNE and struck the SE side of that town. DAPPL #30 4 homes in one area were leveled and one death occurred in the Ernest home. Damage to homes and farms was \$250,000.

1815 8 miles 400 y 2 dead 4 inj. F4 Jly 16, 1926 WI From a point about 10 miles NW of Ashland, in Bayfield Co .. (364) the tornado moved to the SE, passing S of Ashland. The funnel CAPPL #110 skipped through sparsely populated areas of Ashland Co. A farm nome was leveled and 2 deaths occurred in the Ashland Jct. area. The tornado and downburst damage was extensive for 85 miles in a SE direction.

Nov 25, 1926 AR (365) DAPPL #9

1700 35 miles 400 y 23 dead 90 thj. F4 Touching down near Greenbrier, Faulkner Co., the tornado moved to the NE across Faulkner and Cleburne Cos. The funnel passed close to several small communities, such as Enders, Quitman, and Pearson, but damage was minor and one death occurred at Enders. It struct one town, Heber Springs, with devastating results. Cutting a 15 block long swath across the residential section of the town, 145 homes were listed as destroyed with many swept completely away. Total damage was about 5450.000.

1830 20 miles 800 y 4 dead 40 inj. F4 Moy 25, 1926 MO The first damage from this tornado was noted about 12 miles (366)

S of West Plains, Howell Co. Moving to the NE, the very large DAPPL # 63 funnel passed through the town of Brandsville, where all deaths occurred, homes were leveled, and damage totalled \$100,000. Continuing to the NE, the tornado passed by Rover and Thomasville, Oregon Co., where a few buildings were blown down.

1930 35 miles 600 y 24 dead 110 mj. Fd. Mar 18, 1927 AR The tornado touched down 8 miles 5 of Eureka Springs, Carroll Co., (367) and moved to the E. ENE, then NE across Carroll and NW Boone Cos-DAPPL #3 The funnel, reported), up to a mile wide, destroyed the entire Shalf of the tion of Green Forest. It is here that most of the deaths occurred, houses were swept away, and several entire families killed \$500,000 in damage was done, as 200 homes were destroyed or damaged.

Aur 12, 1927 1x 1945 68 miles 600 / 74 dead 200 inj. F4 This event is the most southwesterly of all confirmable (368) violent tornadoes, occurring only 50 miles from the Mexican GAPPL +143 border. It was a major tornadic event, touching down about 3 miles NW of Rock Springs, Edwards Co., and moving to the SE The funnel was over a mile wide as it passed through Rock Springs. destroying 235 of the town's 247 buildings. The other 12 were damaged. Further to the SE, the tornado reformed, causing 2 deaths near Leakey, Real Co. Total damage for the event was \$1,230,000.

Apr 18, 1927 TX/CK 2330 20 miles 800 y 12 dead of inj. F4 Touching down near Arthur City, Lamar Co., Texas, the tornado (369) killed one person and caused \$60,000 in property damage. DAPPL #132 Moving to the NE across the Red River, the funnel entered Choctaw Co., Oklahoma. Several farms were leveled as the 5 mile wide funnel moved to the NE and ENE, passing SE of Hugo. and 2 miles W of Fort Towson.

Apr 19, 1927 MO/11 1145 80 miles 400 y 11 dead 63 inj. F4

(370)

Originating 4 miles SW of Apex, Lincoln Co., Missouri, the tornado DAPPL #31 injured 12 persons and moved across the Mississiopi River into Cashoun Co., Illinois. The funnel passed 5 mile NW of Hardin. killed 2 people and crossed into Greene Co. As the tornado moved SW of Carrollton, 3 people were killed, including Miss Keller, the school teacher. As the storm raged outside, she directed her 18 pupils to take cover under the seats while she held the door shut. The building was destroyed, but with no serious injuries to any student. Further along in Greene Co... 4 people died near Wrights, and one near Athensville. The funnel passed 2 miles & of Loami, Sangamon Co. killing one person, and causing about \$65,000 in damage at the SW edge of Springfield. Here the tornado dissipated and reformed at the SE edge of Springfield. Damage totalled \$450,000.

1. dead 60 in; F4 Apr 19, 1927 IL 1310 35 miles 600 v (371) From the SW edge of Springfield, Sangamon Co, this tornado DAPP, #31 skipped to the N edge of Riverton where a few miner's cottages were damaged. Intensifying and moving to the NE, the funnel passed through Buffalo Hart, killing three people. In Logan Co. the tornado destroyed the N half of Cornland, leveling a few small homes. destroying 40 others, and killing 2 people Passing Dy miles 5 of Lake Fork, the school was damaged, with 2 injuries. At Chestnut, the students at the school were instructed to gather at the center of the first floor. Two 8-year-old boys raw from the building and were willed by flying debris from the second floor of the building. Two people were killed at Mt. Pulaski and one near the end of the path in Dewitt Co. Damage totalled \$850,000.

- May 7, 1927 KS 1000 95 miles 1600 y 10 dead 300 mj. F5 (372) This tornado, or series of tornadoes, traveled to the NNE. DAPP1 +74 causing deaths in 4 counties. The massive furnel was very visible. and allowed most people to seek shelter. The large injury total is probably due to the enormous size of the tornado, which varied from 5 to 2 miles wide for nearly 100 miles. Over 100 farms were hit, and some of the farm complexes were totally swept away. In Barber Co., 4 people were killed, and the funnel passed just 2 miles E of Medicine Lodge In Kingman Co., 1 person was killed as the fonnel passed 2 miles W of Kingman. In Reno Co... 3 people were killed as the tornado caused \$750,000 in dumage in E. Hutchinson. In McPherson Co., 2 people were killed just before the funnel lifted, 7 males SSW of McPherson.
- May 9, 1927 MO 2000 105 miles 300 y 10 dead 50 inj. F4 (373) This tornado touched dow near Mack Creek, in the SW corner DAPPL +104 of Camden Co., and moved to the NE. Skipping in places, and lifting over much of Cole Co., the event is plotted here as a single cornado. Little damage was done in Camden Co., but 4 people were killed as houses were levelee near Eldon, in NW Miller Co. Damage near Eldon was \$120,000. The tornado crossed the Missouri River near Claysville, and was very destructive as it passed 4 miles # of Bloomfields, Callaway Co. Here the sturdy nome of a well-to-to farmer was leveled. The house, bolted to a concrete foundation, pulled over a concrete basement wall as it was being blown away. The concrete wall. 16" x 6' x 4", crushed to death 2 members of the family. The tornado lifted near Martinsburg, Audrain Co. Total damage for the event was about \$300,000.

May 9, 1927 TX 0300 8 miles 100 y 11 dead 30 inj, F4

(374) Touching down on the NE edge of Dallas, the tornado moved to the DAPPL +162 NE, passing along the MW edge of the town of Garland. A few homes were leveled in the sleeping town, but this was not a significant F4 event. Such an event in this area would have produced a major disaster.

May 9, 1927 TX 0300 70 miles 600 y 28 dead 200 inj. F4

Touching down on the west side of Nevada, Collin Co., the tornauo (375) DAPPL #10. destroyed all of the homes on that side of town. Many of the homes were leveled and some were swept away, as 16 people were willed. Moving to the SE, many farm homes were leveled, including 2 homes with a total of 6 deaths. 5 miles SE of Celeste, Hunt Co. Continuing to the NE, the tornado did less intense damage through Lamar Co., lifting 15 miles NW of Paris.

1430 60 miles 600 y 38 dead 300 mj. F4 May 9, 1927 AR/MO From the SW corner of Randolph Co., Arkansas the tornado (376) DAPPL #7 moved to the NE and crossed into Missouri E of Correntview. Ripley Co. From here to Poplar Bluff, 10 people were killed and thousands of trees were twisted and uprooted in a path up to 's mile wide. The tornado took 1 minutes to pass through the city of Poplar Bluff, Butler Co. 83 people died in the city, 21 in the Melbourne Hotel, as the funnel swept through and destroyed 31 business and residential blocks. The tornado dissipated shortly after leaving the town. Damage totalled above \$2,100,000 -5 deaths occurred in Arkansas. 93 in Missouri.

May 9, 1927 AR 1450 10 miles 50 / 10 dead 30 inj. F4 (377) Touching down about 5 miles SW of Hoxie, Lawrence Ridge, this DAPPL #10 tornado moved to the NE through that town. 9 people were killed at Hoxie, including 2 teenagers in the destruction of the high school. Many small homes were leveled, but only a few were swept away. The funnel continued to the NE, killing one person on the edge of the village of Walnut Ridge.

Mar 9, 1927 AR 1625 6 miles 300 y 24 dead 72 mj. F4 (378) From the S part of Union Co., the tornado moved to the NE. through the center of Strong, union Co. Every building in town DAPPL #17 was damaged, with a total loss of about \$500,000. Many homes were leveled across the entire town.

May 27, 1927 MO 1700 9 miles 400 y 5 Jead 11 inj. F4 (379)

From just N of Roanoke, Randolph Co., the tornado moved due CAPPL #108 E, passing through the small village of Yates. Several nomes were leveled along the path, and damage was about \$160,000. The funnel lifted before reaching Higbee. A bth person died at Yates when he had a heart attack as the funnel passed near his house.

40

1600 12 miles 200 y 2 dead 12 inj. F4 Jly 16, 1927 KS Touching down about 6 miles N of Harveyville this tornado moved (380) to the SE. \$100,000 damage to farm property was done, as farms DAPPL #8. were leveled all along the path. I mile N of Eurlingame. Usage Co houses were swept away.

1615 28 miles 100 y 3 dead 10 mg F4 Jly 16, 1927 KS The tornado touched down 1 mile N of Dunlap, Morris Co., and (381) moved to the SE Bozens of farms were damaged as the tornado DAPPL +82 moved across Lyon Co. It was said that a "snowy white funnel writhed in the sky like a huge serpent". The Jones farm was almost swept completely away, P; miles N of Lebo, Coffey Co.

1300 8 miles 600 y 79 dead 550 inj F4 Sep 29, 1927 M0/1L Plotted here from the SW edge of St. Louis, this event may have (382) been two separate tornadoes within the city limits of St. Louis. DAPPL #44 Moving across the corner of Forest Park, the path widened from 300 feet to 600 yards, with damage extending out to 1, miles wide Within the path of the storm were few single story homes with whi an estimate of tornado intensity is usually made. A few multi-stdwellings were totally destroyed and partly swept away, and some non-residential buildings were completely swept away. 7 deaths occurred as the funnel dissipated over Granite City, Illinois, \$22,000.000 in damage was reported. The tornado followed a path similar to those in 1871, 1896, and 1957.

Jun 11, 1928 KS/NE 1930 35 miles 300 y 0 dead 25 mj. F4 From near Ludell, 5 miles NE of Atwood, Rawlins Co., this (383) large tornado, or family of tornadoes moved to the NE into DAPPL #87 Hitchcock and Red Willow Cos. Nebraska. While many farms were damaged, only one was clearly leveled. Most of the damage and injuries were at McCook, Red Willow Co., along a 2 block wide path along the NW side of the city Damage was \$1,000,000.

1815 20 miles 800 y 4 dead 50 mj. F4 Jun 16,1928 OK. The great amount of damage from this tornado was due to its (384) size and the fact that a town was directly in its path. Litt CAPPL #154 F4 damage was confirmable. The tornado touched down about 5 mil NW of Blair and moved to the SE, across the NE part of Jackson C The junnel engulfed the entire town of Blair and caused \$1,000.0 in Jamage, with homes on the SW side of town completely destroys Only the brick bank building remained structurally sound. Three deaths occurred at Blair. Continuing to the SE then CSE, the tornado killed one person near Headrick.

1230 15 miles 500 y 3 dead 50 inj. F4 Jun 29, 1928 CO Touching down about 10 miles SSW of Johnstown, Weld Co., this (385) tornado moved almost due N, passing a mile west of Johnstown DAPPL #15 The most intense damage was done to farms in the Little Thompson River valley, many of which were leveled. \$250,000 in property damage was recorded.

(389)

1645 50 miles 800 y 6 dead 60 inj. F4 Apparently touching down in extreme 8 winnebago Co., lowa, the tornalo moved to the ENE, into Freeborn Co., Minnesota. DAPPL #64 The funnel passed 1 mile N of Emmons, Freeborn Co., just 5 of Twin Lakes, and near Glenville. Near Glenville, the funnel was ', mile wide, and the Hagen farm was completely swept away. The body of one family member was found ', mile away. The tornado passed across the S edge of Austin, with F3 damage. and dissipated shortly thereafter Damage totalled \$1,000,000. \$600.000 of which was in the city of Austin.

Aug 20, 1928 IA 1822 30 miles 400 y 1 dead 11 inj. F4 From a point about 10 miles SW of Ellsworth, Hamilton Co., this (387) tornado moved almost due E, passing 3 miles 5 of Ellsworth. DAPPL #66 SE of Ellsworth, the Neaubauer farm was completely leveled, and an infant was killed. Further to the E. farms were damaged or destroyed as far as Eldora, Hardin Co.

Sep 13, 1928 NE/SD 1515 40 miles 200 y 4 dead 9 inj. F4 The tornado touched down in the W corner of Cedar Co., Nebraska (388) and moved NNE into Yankton Co., South Dakota. The tornado 0APPL #137 dissipated SE of Davis, Turner Co., after damaging or destroying 61 homes. Most of the damage was done as the tornado passed 3 miles E of Yankton. 3 of the 4 deaths occurred as a farm home was completely swept away, about 15 miles NE of Yankton.

1550 33 miles 800 y 4 dead 52 inj. F4 Sep 13, 1928 NE From about 7 miles SE of Pender, Cuming Co, the tornado moved to the NNE, across Cuming, Thurston, and Dakota Cos. It dissipated DAPP1 #136 , mile N of Dakota City. Three miles E of Pender, the first of 3 rural schools were destroyed. A farmer, sighting the approaching tornado, warned the school, and all fled to the storm cellar. Two minutes later, only the pump at the well and a swing set in concrete, remained on the site. Seven miles from the James school was the Lamere School. At the Lamere school, a farmer ran to the building to warn of the approaching funnel. All laid on the floor. hands joined. The buildings was leveled, and two of the children were killed. Between that point and Homer, Dakota Co., two farms were completely leveled. I's miles SE of Homer, a farmer rushed to the O'Connor School to warn of the approaching funnel. All students were loaded into his car, and drove off. The t-acher, who declined to enter the car, was found dead 100 yards from the site of the school, with the door knob in her hand. Damage totalled about \$400,000, as over 100 homes were damaged or destroyed, along with 450 other buildings damaged or destroyed.

Sep 14, 1928 IL 1515 27 miles 200 y 14 dead 100 inj. F4 (390) The tornado touched down about 8 miles SSW of Rockford. Winnebago Co. Moving to the NE, the tornado passed across 30 city blocks of the SE part of Rockford. Many homes were destroyed, but only a few smaller ones were completely leveled. 8 of the deaths, and 40 of the injuries, occurred in the destruction of a large 3-story chair factory. The upper part of the building was swept away, much of the rest collapsed both inward and outward. The tornado continued to the ME, passing 1 mile % of Poplar Grove, Boone Co., and dissipating near Campon. Damage totalled \$1,200,000.

Feb 25, 1929 MS 1430 10 miles 200 y 17 dead 40 inj. F4 [391] From about 5 miles SN of Juncan, Bolivar Co., the tornado DAPPL #107 moved to the NE, through that town. Most of the town's buildings were damaged, if not destroyed, with approximately a \$250,000 loss. Dozens of small nomes were leveled, but few were blown completely away. 2 deaths near Darling, while in a straight line with this tornado path, are considered to be a different event.

Apr 5, 1929 MN/WI 1730 60 miles 400 y 6 dead 40 inj. F4 (392) The funnel touched ground E of Lake Minnetonka, in Hennepin Co., DAPPL #103 Minnesota and moved to the NE with large damage in the Minneapolis area. F2/3 damage occurred in NM Minneapolis, but F4 damage to homes and farms was common from Columbia Heights, Anoka Co., to Forest Lake, Washington Co. \$1,000,000 in damage was done effore the funnel dissipated in Polk Co., Wisconsin.

Apr 5, 1929 WI 1745 45 miles 400 y 7 dead 100 inj. F4 (393) Touching down about 5 miles NE of River Falls, St. Croix Co. DAPPL #195 the funnel moved to the NE, across St. Croix and Barron Cos. Several tornadoes passed over these counties that day, and the path of the main event is often extended to Exeland, Sawyer Co., where 4 deaths occurred. These deaths and a death at Glenwood are considered here to be from separate events. During this tornado people were killed and farms were leveled in the second half of the path. near Reeve, Clayton, W of Barron, and SW of Rice take. Damage from this event was probably amout \$500,000. All deaths were in Barron Co.

Apr 10, 1929 AR 1655 18 miles 400 y 7 dead 50 inj. F4 [394] Touching down N of Mt. View, Stone Co., this tornado moved to the DAPPL #9 ENE across leard Co. Two people were killed at Harpel, but the major damage and 5 of the deaths were at Guion. While only three of the 150 buildings in town were not destroyed, most were of poor contruction and few were swept away. A small area of F4 damage is suspected as the concrete block bonk building was destroyed and the vaule was torn open. Damage and injuries continued to Mt. Pleasant. Damage totalled \$200,000. Apr 10, 1929 AR 1800 70 miles 400 y 31 dead 100 inj. F4 (395) This tornado apparently was one of several that tourned do

(395) DAPPL #7 NE Cleburne Co., near the town of Almond From that point, the funnel moved ENE, doing scattered damage for about 20 miles. The tornado intensified in NE Independence Co., and Swept through a community along an E-W highway, 3 miles N of Swifton. Every building here was destroyed and many homes swept completely away. 23 people were killed and damage totalled \$155,000. The tornado weakened again, is it continued to the ENE, but apparently strengthened or reformed in SW Greene Co. In that area, B people were killed, as the Lorado community sustained \$150,000 in damage.

Apr 10, 1929 AR 2000 20 miles 100 y 17 dead 100 inj. F4 (396) Touching down about 3 miles SW of Wynne, the tornado quickly DAPPL #12 caused one death and 37 injuries at Smiths Chapel. From that point, the funnel continued E and ENE across Cross Co., killing 4 people W of Princedale, and II people in Princedale. The tornado killed 1 more person before lifting near Parkin. Damage totaled \$200,000 for the entire event. F4 intensity was apparent only in a small area near Princedale.

Apr 19, 1929 OK 1900 30 miles 1200 y 3 dead 35 inj. F4 [397] This very large tornado touched down about 10 miles SW of DAPPL #149 Mountain View and moved to the ENE across Kiowa Co. Three deaths occurred in Kiowa Co., as 6 rather small homes were destroyed. Passing into Caddo Co. a larger home was leveled and many other farms damaged from 3 miles S of Carnegie, to 5 miles NE of Ft. Cobb.

Apr 24, 1929 TX 1220 9 miles 200 y 7 dead 30 inj. F4 (398) This tornado tourned down non Ellisted 40 inj. F4

(398) This tornado touched down near Elkhart, Anderson Co., and moved DAPPL #177 due E. In the path of the tornado was the town of Slocum, and a large part of the town was destroyed. Property damage totalled \$200,000, as many houses were leveled, and a few were swept away. One death occurred at the school.

Apr 25, 1929 GA 1620 25 miles 400 y 11 dead 130 inj. F4 (399) The tornado originated near the town of Cochran, Bleckley Co.. DAPPL #37 where most of the deaths and damage occurred. The funnel passed north of Chester, Dodge Co. and ended just beyond the town of Dexter, Laurens, Co. where 2 children were killed. Damage totalled \$270,000.

Apr 25, 1929 SC 1550 20 miles 400 y 6 dead 40 inj. F4

(400) This formado changed intensity, skipped, and varied considerably UAPPL #159 In width as it crossed Anderson, Greenville Counties. Four of the deaths occurred near the start of the path, as the funnel passed along the N edge of the city of Anderson. Several homes were completely swept away here, but no F4 activity occurred for the rest of the path. 2 additional deaths occurred at Pelzer. Greenville Co. Most of the \$100,000 in damage was at Anderson. Apr 25, 1929 GA 2020 20 miles 800 y 40 dead 200 inj. F4 (401) The largest number of deaths, 25, were reported from near the DAPPL #39 start of the path of this tornado, at Metter, Chandler Co. Here at least a dozen small homes were completely swept away. Deaths were reported all along the path, which passed 3 miles N of Statesboro, Builoch Co., and ended near Clito. Damage was over \$1,000,000.

May 1, 1930 KS/MO 1815 22 miles 400 y 2 dead 20 inj. F4 (402) From a point 3 miles SW of Dunavant, Jefferson Co., the tornado DAPPL #63 moved to the ENE, passing 2 miles S of Winchester and 2 miles N of Easton, Leavenworth Co. The funnel crossed the Missouri Rive into Platte Cc. Missouri and dissipated. No towns were hit in Kansas, but the funnel passei through almost 100 different farms and 50 farm houses were listed as destroyed. Damage totall \$500,000. The 2 deaths occurred S of Kickapoo, Leavenworth Co.

May 1, 1930 NE/IA 1815 15 miles 600 y 4 dead 40 inj F4 (403) This very large tornado touched down just E of Graig, Burt Co., DAPPL #29 and moved due E, through the N part of the city of Tekamah. Damage totalled \$250,000, and some homes were leveled. The funnel dissipated on the bluffs at the Iowa side of the Missouri River. 15 homes were destroyed at Tekamah, and about 10 farm houses were destroyed across Burt Co.

May 1, 1930 IA 1815 15 miles 400 y 0 dead 7 inj. F4 (404) This tornado passed diagonally across Wayne Co. from NE of Clio DAPPL #32 to S of Bethlehem. Many farms were damaged, and one farm, the C.W. Smith farm, was leveled 2 miles E of Corydon. Damage totalled S50,..00.

May 1, 1930 MO 2115 10 miles 200 y 6 dead 20 inj. F4 (405) This tornado passed to the ESE, across the SW corner of Carroll Co. DAPPL #116 Touching down just inside the Ray Co. border. the funnel passed along the edge of Norbourne, and lifted shortly thereafter. 30 farm houses were destroyed along the path, along with 16 more homes in Norborne. 3 deaths occurred at the start of the path, and 3 more in Norbourne. 2 of the 46 homes were clearly leveled. Damage totalled \$350,000.

May S. 1930 KS 1515 25 miles 800 y 0 dead 2 inj. F4 (406) This tornado moved very slowly across N Stafford and Barton Cos. DAPPE #69 allowing people time to take cover. From a point about 8 miles SW of Ellinwood, the tornado moved to the NE. passing along the SE edge of that town. Many farms were leveled and property damaged totalled \$300,000. 40 box cars were blown from the tracks at Ellinwood. 30 farms were listed as destroyed. May 5, 1930 OK 1710 10 miles 400 y 1 dead 4 inj. F4 (407) This event was the 2nd of two tormadoes in the Walters, Cotton DAPPL #139 Co. area that afternoon. The first tormado produced F3 damage in the NW corner of that town. This event destroyed about a dozen farm houses leveling 2 of them. N and NE of the town. 100 oil derricks were blown down, and damage exceeded \$100,000.

May 5, 1930 OK 2240 15 miles 150 y 2 dead 9 inj. F4
 (408) Occurring too late to be in the same family as the previous event, this tornado touched down in NW Stephens Co. and noved to the NE into Grady Cu. This may have been the 10th major turnado of the day, within 50 miles of Lawton, and there is some difficulty in identifying which damage was caused by which tornado. Most of the tornadoes produced no significant damage despite being from % to 1 mile in diameter. Path lengths were mostly short. At least one farm was leveled by this event and 2 deaths occurred 7 miles NE of Rush Springs.

May 6, 1930 Tx 1530 34 miles 350 y 38 dead 100 inj. F4
 (409) From between Bynum and Irene, in E Hill Co., this tornado moved to the NEE, and struck the town of Frost, Navarro Co. 7 deaths occarred in the Hill Co. segment of the path, as several farm hones were leveled. At Frost, several blocks appeared to be completely swept away, and damage was estimated at \$2,000,000. 21 people were killed at Frost, and 4 people were silled, near the end of the path, S of Ennis, Ellis Co.

May b. 1930 TX 1645 20 miles 350 y 36 dead 50 inj. F4 (410) This tornado struck several towns in Karnes and Dewitt Cos. DAPPL #164 as it moved along the RR tracks, to the NE. Homes were leveled in the 3 towns of Kenedy, Runge, and Nordheim. At Runge, a small nouse was completely swept away, and 9 members of the family were killed. Damage totalled only \$127,000 to the small houses. One person died at Kenedy, 24 died at Runge, and 11 died at Nordheim.

May 9, 1930 OK 1800 20 miles 300 y 1 dead 1 inj. F4 (411) The funnel of this tornado skipped from 5 miles SW of Barnsdall. OAPPL #149 Osage Co., to just S of Bartlesville, Washington Co. Few buildings were struck along the path, and damage totalled \$30,000 One house, near the start of the path, was nurled 150 yards, and a woman occupant was killed, and her husband injured Another small house was leveled, but it may have been abandoned.

May 9, 1930 OK 1710 25 miles 300 y 4 dead 15 inj. F4 (412) From just N of the town of Kinta, Haskell Co., the tornado DAPPL #147 swept to the NE, leveling many small homes. The funnel lifted 2 miles NW of Keota, Haskell Co. This was a complex event, and may have involved a family of tornadoes beginning as far west as Crowder, Pittsburg Co., with the tornadoes moving to the NE and the cell moving due £ The 4 deaths occurred S of Stigler. Damage totalled \$75,000 to small homes. Jun 13, 1930 MN 1545 12 miles 800 y 0 dead 8 inj. F4 (413) from a point about 6 miles N of Austin, Mower Co., this DAPPL #104 to the NE into Dodge Co. While not long-lived, the tornado was massive in appearance, and totally destroyed at least 6 farms. 3 of the farms were completely leveled. Damage totalled \$75,000. The funnel was probably dissipating when it struck 0510, Dodge Co., and destroyed the town hall.

Jun 13, 1930 MN/WI 1600 105 miles 800 y 7 dead 100 inj. F4

(414) The tornado first touched down about 5 miles N of Northfield, Rice Co., Minnesota. Intensifying rapidly, farms were destroyed DAPPL #106 E and W of Randolph, and 1 death occurred as the tornado swept just N of Randolph. Weakening over Goodhue Co., the tornado crossed the Mississippi River about 7 miles N of Red Wing, and entered Pierce Co., Wisconsin. Across Pierce, Dunn, Eau Clair, and Chippewa Cos., the funnel changed size and intensity many times. and this event may have been a family of tornadoes. Scores of farms were damaged and a few were leveled, including the Wolbert farm, S of Menomonie, Dunn Co., where 4 deaths occurred. Only the Becker farm, N of Randolph, was leveled in Minnesota. The tornado destroyed several homes along the N edge of the city of Eau Clair. The funnel lifted just 5 of Boyd, Chippewa Co. Damage was about \$200,000 in Minnesota and over \$1,000,000 in Wisconsin.

Jun 24, 1930 NE 1800 25 miles 400 y 1 dead 10 inj. F4 (415) Plotted here as a single tornado, this tornado may have been two separate tornadoes. The funnel first touched down about 7 miles SW of Gothenburg, Dawson Co., and moved to the SE. The path was parallel to, and on the S side of the Platte River. The funnel was aloft S of Cozad, and toucked down again SW of Lexington. Damage totalled \$100,000, and the leveled farm was 6 miles S of Gothenburg.

Jun 24, 1930 KS 1945 4 miles 800 y 0 dead 2 inj. F4 (416) This massive tornado touched down only briefly, about DAPPL #75 3 miles NW of Pratt, Pratt Co. Seven farms were struck, and 4 of them were completely leveled, along with a school. Total damage was about \$200,000

Nov 19, 1930 OK 930 7 miles 150 y 23 dead 100 inj. F4 (417) The tornado touched down 3 miles W of the western limits of DAPPL #152 Oklahoma City. There was little warning, due to darkness, as the tornado moved NNE. About % of the town of Bethany was destroyed including 110 homes. Nearly 700 other buildings were damaged or destroyed. Near the end of its path, 3% miles NE of Bethany, the funnel struck the Camel Creek School, killing 5 children and the teacher. The tornado struck just as the students were falling to the floor and looking for cover. Few of the small homes were swept away. Damage totalled \$250,000. Sep 21, 1931 IA 1530 30 miles 100 y 2 dead 10 inj. F4

(418) This tornado skipped to the NE from about 9 miles S of Fairfield. DAPPL #34 Jefferson Co., to near Cotter, Louisa Co. The most intense damage was in a small area 2 miles N of Noble, Washington Co. Here the Schaad and Cherryholme farms were leveled. Damage totalled about \$100,000.

Dec 30, 1931 MS 1700 15 miles 400 y 5 dead 53 inj. F4

(419) DAPPL #57 DAPPL #

Jan 14, 1932 TN 1730 8 miles 100 y 10 dead 20 inj. F4

- (420) This tornado passed through the Lexington community, just
- DAPPL #136 E of Eaton. Gibson Co. Several large buildings were leveled, and the Rice home was completely swept away, causing the death of 10 of the 13 members of the family.
- Mar 21, 1932 AL 1600 20 miles 400 y 37 dead 200 inj. F4 (421) The outbreak of March 21, 1932
- (421) The outbreak of March 21, 1932 was among the worst in U.S. history. Its 10 violent tornadoes are exceeded in number only by outbreaks in 1965 and 1974. It is, however, among the least documented of all major outbreaks. The listings here represent an attempt to improve upon the meager official information. A considerable amount of additional research is needed This first violent event touched down near Ralph, in the SW corner of Tuscaloosa Co., and moved to the NE and NNE. The tornado passed through the W and NW edge of Tuscaloosa, and through the center of Northport. There was only scattered F2/3 damage at Tuscaloosa, but 300 buildings were destroyed at Northport.

Mar 21, 1932 AL 1630 60 miles 800 y 47 dead 150 inj. F4

(422) From central Perry Co., where 19 people were killed near Marion, DAPPL #7 the tornado moved to the NE. Crossing the SE corner of Bibb Co., 9 people were killed near Lawley. Passing across Chilton Co., 19 people were killed near Jemison and Union Grove. The funnel dissipated in NW Coosa Co. All along the path, small homes were leveled, with many swept away completely, killing entire families. This event may have been a family of tornadoes.

Mar 21, 1932 AL 1630 30 miles 400 y 18 dead 50 inj. F4 (423) Nuch of the damage and daths

(423) DAPPL #9 Of this tornado, 35 miles S of Cullman, Cullman Co, The funnel moved to the NE, leveling many small homes and destroying dozens of farm buildings near the communities of Phelan, Bolti.

1710 25 miles 200 y 16 dead 75 inj. F4 Mar 21, 1932 AL From SW of Columbiana, Shelby Co., this toimado moved to the NE. passing along the S edge of that town. Beyond Columbiana, farm (424) DAPPL #10 buildings were destroyed as far as W Talladega Co.

1730 50 miles 800 y 31 dead 200 inj. F4 Mar 21, 1932 AL This tornado was similar to DAPPL #7, which previously swept across Chilton Co., in a nearly parallel path. Both may have (425) been tornado families, and separation of Jamage and deaths DAPPL #12 into the proper event is a difficult task. This event killed 12 people near its touchdown point, E of Plantersville, Autauga Co Moving to the NE, several communities were struck, particularly Stanton and Lomax, Chilton Co. The funnel dissignted near Marble Valley, Coosa Co.

1900 25 miles 400 y 31 dead 300 inj. F4 Mar 21, 1932 AL Touching down near Gant's Quarry, Talladega Co., this event was probably in the same tornado family as the previous event. (426) 1 death occurred at Gant's Quarry, and 21 deaths took place as DAPPL 47 the funnel swept across the NW side of Sylacauga. 7 more people died in scattered communities along the rest of the path. which ended at Chandler Spring.

2000 45 miles 400 y 12 dead 50 inj. F4 Mar 21, 1932 AL From about 10 miles NNE of Sylacanga, Talladega Co., this tornado passed scross very rural areas of Clay and Randolph Co. (427) No towns were struck, but small homes were leveled all along DAPPL #12 the path from S of Ashland to S of Lineville and at the end of the path near Newell.

2000 65 miles 400 y 36 dead 100 mj. Fr. Mar 21, 1932 AL/TN From a point near Lacey Springs, Morgan Co. the tornado moved NE across Madison and Jackson Cos., ending in Marion Co. Tenn. (428) about 20 miles W of Chattanouga. 2 deaths occurred near the start DAPPL #13 of the path, and the rest were in small communities all along the path, especially N of Stevenson and Bridgeport, Jackson Cu. 2 deaths occurred in Tennessee, as 12 houses were destroyed at Ladd's Switch, 6 miles E of Jasper. Most of the buildings in Paint Rock were damaged, and 2 of the 6 deaths in that town occurred when a large hostery mill collapsed.

1730 15 miles 400 y 6 dead 18 inj. F4 Mar 21, 1932 TN This event is part of a tornado family which produced killer (429) tornadoes from Lawrence Co. to DeKalb Co. This event is plotted DAPPL #138 from 10 miles SW of Pulaski, Giles Co. to 5 miles N of that town. The only indication of F4 intensity was 2 miles W of Pulaski. where the Puryear family home was swept away, causing 5 deaths.

Mar 21, 1932 GA/TN 1900 22 miles 600 y 15 dead 50 inj. F4

This tornado was reported to be up to a mile wide, as it swept

(430) along the Conasauga River from Whitfield and Mumray Cos, Georgia, DAPPL # 139 to Polk Co., Tennessee. The funnel touched down about 8 miles NE of Dalton, Whitfield Co., and moved MNE hitting the community of Beaverdale, where homes were swept away and the 8 Georgia deaths occurred. In Tennessee, 5 members of the Parks family were killed as their small home was swept away near Conesauga.

2130 16 miles 300 y 6 dead 28 inj. F4 Apr 25, 1932 TN From near Locke, in N Snelby Co., this tornado moved to the (431) ENE to near Rosemark. Homes were leveled along the second half 0APPL #140 of the path, and the Dale and Sparks homes were swept away. None of the homes were of good construction. Damage totalled \$100,000.

Jly 4, 1932 NE/KS 1615 30 miles 800 y 7 dead 20 inj. F4 The tornado touched down N of Hebron, Thayer Co., Nebraska, (432) and moved to the SE. The only F4 damage in Nebraska was the 0APP1 #87 leveling of the Slagle farm, where 2 people were killed, 95 miles E of Hebron. Moving into Kansss, the tornado damaged farm homes just E of Mahaska, Washington Co. The majority of the \$500,000 in damage was done as the funnel passed near Morrowville and through the town of Washington. At Washington, 50 homes and 2 new schools were listed as destroyed. No F4 evidence was noted in Kansas.

Mar 14, 1933 TN/KY 1730 20 miles 200 y 13 dead 166 inj. F4 Passing just S of the Kentucky border, this tornado skipped (433) across the N part of Claiborne Co., and dissipated in Bell Co., 0APPL #224 KY. The tornado touched down S of Jellico, Campbell Co., and moved almost due E across very rural and mountainous terrain. The only town directly in the path of the tornado was Pruden. a coal mining down in Claiborne Co. At Pruden, about 20 small houses were leveled, and some were swept completely away 50 houses were listed as destroyed, with most of the other 200 damaged. \$250,000 in damage was recorded here. Passing W of Harrogate, the tornado crossed into Kentucky.

1630 20 miles 500 y 7 dead 40 inj. 55 Mar 30, 1933 LA The funnel first touched down just N of Hall Summit, Ked River Parish, and moved E and ENE across Bienville Parish. 5 miles DAPPL #122 NE of Hall Summit a small house was completely swept away, and 5 people were killed. Many other buildings were leveled along the path, which ended W of Jonesboro, Jackson Parish. Damage totalled about \$60,000.

(434)

Mar 31, 1933 MS 1030 25 miles 800 y 35 dead 120 inj. F4 (435) Of the many killer tornadoes in Mississippi this day, this event DAPPL #153 was the most intense. Touching down just N of Laurel, Jones Co., the funnel moved to the NE, through the town of Sandersville. 14 people died at that town, as several small homes were completely swept away. Moving across the SE corner of Jasper Co., 16 people were killed in several small communities. In Clarke Co., 12 people were killed, 7 of them at Harmony. The funnel dissipated several miles S of Quitman.

Apr 19, 1933 OK 1910 15 miles 800 y 2 dead 25 inj. F4 (436) From just SE of Agawam, this massive tornado leveled many DAPPL #198 Tarms as it moved to the NNE across Grady Co Two people were killed when a home was swept away as the funnel

crossed the Alex highway, E of Chickasaw. Property damage from this tornado was \$200,000.

May 1, 1933 LA 1600 6 miles 800 y 23 dead 400 inj. F4 (437) This rather short path tornado was very large and intense. DAPPL #126 Touching down 4 miles MSW of Minden, Webster Parish, the tornado moved NNE through that town, virtually leveling it. 500 homes were damaged to some degree, and property damage was estimated at \$1,250,000. Scores of homes were leveled, and many were swept completely away.

May 1, 1933 LA 1700 5 miles 800 y 6 dead 50 inj. F4 (438) As with the previous event, this tornado was on the ground only a short time, but was very large. Touching down WSU of Ancadia. the tornado moved to the NE, and passed along the N edge of Ancadia. Moving from Bienville to Claiborne Parish, the funnel dissipated. 60 homes were destroyed, with most of them being leveled. 98 other homes were damaged, and the total luss was \$200,000. A mile further to the SE, and Ancadia would likely have resembled Minden, in the previous event.

May 5, 1933 AL 0230 35 miles 500 y 21 dead 200 mj. F4 (439) From 3 miles 5 of Brent, Bibb Co., the tornado moved to the DAPPL #8 NE, passing along the SE edge of Centreville. 6 people died in 'his area. Continuing to the NE, the funnel skipped, and apparently changed size and intensity many times through rural Shelby Co. 15 people were killed along the tornado's path in Shelby Co., which probably ended shortly after the funnel struck Helena. She by Co. A few small homes were swept away. May 5, 1933 SC 1430 35 miles 300 y 19 dead 100 inj. F4

(440) From the N edge of the city of Anderson, the tornado moved DAPPL #205 almost due E, leveling a few small rural homes. The tornado then struck the industrial section of Belton, causing about 5250,000 in damage. Il people died in the poorly constructed homes near the mill buildings, especially near Blair's Mill. The tornado continued to the E, leveling homes near Barksdale, Gray Court, Langford Station, and S of Enoree. Laurens Co. Total damage for the event was \$350,000.

May 9, 1933 TN/KY 2030 60 miles 1600 y 36 dead 87 inj F4

(441) This very large tornado apparently touched down in N. Macon Co., DAPPL # 115 Tennessee, and moved to the NE into Monroe Co., Kentucky. The funnel was either aloft or undetected over rural Cumberland Co., but struck with renewed intensity in NW Russell Co. In Monroe Co. the mile wide funnel struck puorly constructed houses on the edge of Tomkinsville, causing 18 deaths. In Russell Co., the tornado was also estimated at 1 mile in width, andleveledmany nomes on the outskirts of Russell Springs, killing 14 people. Damage totalled \$245,000.

May 10, 1933 TN 0015 20 miles 800 y 35 dead 150 inj. F4 (442) From near Civingston, Overton Co., this tornado moved to the NE. 0APPE #229 through a small community known as Beatty Swamp. Continuing into Pickett Co., the funnel struck the edge of Birdstown. At Beatty Swamp, the tornado cut a swath of total destruction about ½ mile wide. Every tree was blown down or uprooted, and 30 houses were totally or partially blown away. 33 of the deaths occurred in that small community, where nearly 100% of the residents were either killed or injured.

May 22, 1933 KS 1725 9 miles 200 y 4 dead 150 inj. F4 (443) Touching down to the SW of Liberal, Seward Co., the tornado moved to the NE, through that town. The business district and the homes on the NW side of town were the hardest hit. 44 business and 55 homes were listed as destroyed. Only one or two homes were completely leveled. Damage was estimated at \$750,000. The tornado struck in what was near total darkness caused by a dust storm, during the Depression era, in droughtstriken western Kansas.

May 22, 1933 NE 1820 25 miles 1200 y 8 dead 10 inj. F5 (444) From a point about 10 miles S of Tryon, this tornado moved almost due N, passing 1 mile E of Tryon, McPherson Co. Only 2 farms were struck directly by the massive funnel, and both were completely swept away. 6 people died on the Pyzer farm, 1 mile NE of Tryon, and 2 people died on the Wate farm, 12 miles N of Tryon. Damage was listed at \$40,000.

May 22, 1933 ND 1900 15 miles 800 y 4 dead 2 inj. F4 (445)
 Moving to the NNE, this tornado leveled several farms along DAPPL #187 the border of Hettinger and Grant Cos. 4 children died on the Lamb farm, as the funnel passed 3 miles west of New Leipzig. A freight train was lifted into the air and set back down in that area. Damage totalled \$100,000

1515 1 mile 35 y Jead 30 inj. F4 J1v 30, 1933 TX This tornado cut a short, but intense path through the Oakhill (446) section, on the SW side of Dallas The short, narrow path DAPPL #249 completely leveled several small homes. A more significant F4 tornado through this area would have resulted in a major disaster. Despite the small size, damage was listed at \$500,000. 50 small homes were listed as destroyed.

1600 15 miles 400 y 4 dead 40 inj. F4 Feb 25, 1934 AL This tornado was one of a family of tornadoes that struck from (447) Chilton to Randolph Co. Plotted here from W of Millerville, DAPPL #1 Clay Co., the tornado moved ENE, passing 3 miles 5 of Ashland. Many rural homes were leveled, and many rural buildings damaged. Two homes were apparently swept completely away, and 4 people were killed in these homes. 90 houses were listed as destroyed, and property damage totalled about \$100,000

1530 15 miles 400 y 3 dead 11 inj. F4 May 4, 1934 OK From about 10 miles SE of Tulsa. E of the town of Jenks, this (448)tornado moved to the NE. The funnel was & mile wide and very DAPPL #109 visible, so few deaths occurred in the 20 homes which were destroyed Passing 15 miles 5 of Alsuma, the tornado leveled a home in which 2 people died. E of Tulsa, a man was killed when he was unable to reach safety from the field in which he was working. The funnel lifted just S of Catoosa.

May 4, 1934 OK/KS 1500 15 miles 800 y 1 dead 17 inj. F4 In Oklahoma, the tornado was very large, but passed over a (449) sparsely populated area of Nowata Co. Two miles S of South DAPPL #49 Coffeyville, Oklahoma one home was completely swept away. and the woman occupant found dead, 100 yards away. A second home in the area was also swept away. Crossing into Montgomery Co., Kansas the tornado damaged several farm buildings and overturned a RR train, E of Coffeyville, Montomery Co. Damage totalled only \$40,000, for although the tornado was very large, the damaged buildings were small and scattered.

1630 25 miles 800 y 5 dead 22 inj. F4 May 31, 1935 NE From a point near Quick, in the extreme SW corner of Frontier (450) Co., this tornado passed E of that town, as it moved to the DAPPI #99 NE across the county. 22 farm homes were destroyed, many of them leveled. The widely scattered positions of the destroyed homes seems to indicate that more than one tornado was involved in the destruction. A few of the homes were totally swept away. One death occurred in the collapse of a storm cave, W of Stockville. The final death occurred 8 miles SE of Moorefield. Damage totalled \$150,000.

Jun 2, 1935 KS/OK 1500 15 miles 800 y 0 dead 9 inj. F4 The tornado originated 1 mile SW of Perth, Summer Co., Kansas. (451) The funnel moved to the SE, just missing the town of South DAPPL #51 Haven on the E side of town, and passed into Kay Co.. Oklahoma. 14 farm houses were destroyed and several of them were leveled along with all other buildings on the farm. Estimated damage was \$100,000.

1445 20 miles 200 y 4 dead 25 inj. Mar 23, 1936 MO

The tornado formed over the SE corner of the town of (452) Marshfield, Webster Co. One mile E of Marshfield, the funnel DAPPL #81 removed a 20-ton hopper car from the middle of a stationary freight train. Further to the NE, 3 people were killed as the tornado passed along the edge of Niangua, and leveled several homes. The tornado moved into Laclede Co., and struck near the Morgan and Oakland communities, causing one death. Damage totalled \$150,000.

2045 20 miles 200 y 5 dead 50 tr.j. F4 Apr 1, 1936 GA (453)

Moving from NW to the SE, this tornado struck the outskirts of Tignall, Wilkes Co., and the center of Lincolnton, Lincoln DAPPL #29 Co. The tornado was considerably more intense at Tignall, destroying 10 nomes, of which a few were completely swept away. All 5 deaths occurred at Tignall. The tornado had weakened considerably by the time it arrived at Lincolnton. F1/2 level damage was reported to 50 homes, with some damage to the courthouse.

0730 15 miles 600 y 23 dead 500 inj. F4 GA Apr 2, 1936

This tornado was a member of a tornado family which began in the (454) Sasser area of SE Terrell Co. This tornado touched down about DAPPL #32 7 miles SW of Cordele, Crisp Co. and moved NNE into that town. At Cordele, half of the town was virtually leveled. 276 homes were listed as destroyed, 100 of which were the best in the town Some of the larger houses were completely swept away. 165 other homes were listed as damaged. The tornado continued to the NNE. causing one death on a farm, 5 miles from town.

1912 11 miles 100 y 13 dead 144 inj. F4 Apr 2. 1936 NC

Smaller homes were swept away as this tornado cut a narrow (455) swath through the S side of the city of Greensboro, Guilford Co. DAPPI #104 56 buildings were listed as destroyed, and 233 as damaged, but only some small homes indicated that F4 intensity was reached. 25 miles of the path were in the city of Greensboro, but most of it was at F1/2 intensity. Damage totalled \$2,000,000.

2055 15 miles 1000 y 216 dead 700 inj. F4 Apr 5, 1936 MS

This tornado, one of the deadliest in U.S. history, was (456) probably a member of a tornado family beginning near Coffeeville. DAPPL #77 Yalabusha Co. As plotted here, this tornado swept across central Lee Co., passing through residential areas of the city of Tupelo. Unlike the Gainesville, Georgia event below, which also killed over 200 people, this tornado missed the downtown business district. The tornado leveled over 200 homes, many of better construction on the west side of town. Here, in the Willis Heights and other residential communities, as many as 13 members of a single family were killed. Closer to the center of town, and on the NE side of town, the more poorly constructed homes were completely swept away, with entire families killed. This tornado was probably of greater intensity than the Gainesville event, which produced a similar death toll by striking the multi-story downtown area buildings, at the start of the business day.

Apr 5, 1936 TN 1945 30 miles 200 y 5 dead 35 inj. F4 (457) From a point in NE Hardin Co., the tornado moved to the DAPPL #137 NE across N Wayne Co., and E Lewis Co. Small homes were leveled in several communities along the path. About 10 miles N of Waynesboro, Wayne Co., the tornado struck a mining community known as Smith's Branch, and leveled all but 2 of the houses, sweeping most of the small homes completely away. 4 of the deaths occurred here. The tornado continued to the NE, either skipping or lifting and reforming before injuring 4 people, 3 miles 5 of Hohenwald,Lewis Co.

Apr 6, 1936 GA (458) Th CAPPL #36 the and #37 to

-86

0827 3 miles 500 y 203 dead 934 inj. F4 This event consisted of two large funnel clouds which struck the city of Gainesville, Hail Co., after a series of smaller tornadoes touched down nearby. The course of one of the funnels led into the city from the SW, just W of the Atlanta highway; the other came in from nearly W along the Dawsonville highway. These 2 paths came together west of Grove Street, and an area 4 blocks wide was laid waste across the entire city, beyond which separate courses of destruction appeared again. The wreckage was astounding, with debris filling the streets 8 to 10 feet deep. 750 houses were destroyed, and 254 badly damaged. Damage totalled \$12,500,000. The largest death toll in a single building, for any tornado in history, occurred at the Cooper pants factory. The multi-story building, crowded with young workers, collapsed and caught fire, killing about 70 people. At the Pacolet Mill, the funnel was seen in the SW, and the 550 workers ran to the NE corner of the building, thus averting an even greater tragedy. Many people, especially high school students, sought shelter in the Newnam's department store. The building collapsed, killing about 20 people. The wreckage was so deep and swept by fires that it was not possible to determine how many people were killed in which buildings. At the time that the 203 person death toll was listed, 40 persons were still missing. In the downtown area, few buildings were swept away, as the mult.-story businesses and factories were blown over or collapsed.

Apr 30, 1936 IA 1500 15 miles 800 y 2 dead 35 inj. F4 (459)
 One of a complex series of tornadoes, numbering as many as six, bAPPL #43
 DAPPL #43 this tornado touched down in NW Clay Co., and moved to the NE. From this point, 7 miles NW of Everly, the tornado crossed into Dickinson Co. and continued to destroy farm houses and other farm buildings. A few of the farms were completely swept away. Near the end of its path, the funnel dissipated into a waterspout at the W end of Lake Okoboji. Several lake front cottages were completely swept away.

Apr 30, 1936 IA/MN (460) Anothe DAPPL #46 event.

16 IA/MN 1617 40 miles 800 y 3 dead 40 inj. F4 Another member of the complex series that includes the previous event, this tornado formed over the N part of Estherville, Enmet Co. Farms were leveled all along the path NE of Estherville, N and W of Dolliver, and on into Martin Co., Minnesota. Passing over the S end of Tuttle Lake. the funnel continued to level farms in Silver Lake Twp. and Tenhassen Twp., causing 3 deaths and \$500,000 in damage. The funnel lifted after damaging Blue Earth, Faribault Co. Damage for the entire event was \$850,000. These tornadoes may have been a series of tornadoes from different cells, or a family of tornadoes spawned by the same thunderstorm cell. May 8, 1936 OK 2000 8 miles 100 y 2 dead 25 mj F4

- (461) The funnel first touched down about 4 miles S of Weblers Fills. DAPPL #115 Muslogee Co., and moved to the NNE. The tornado destroyed several homes along the SE edge of the towns of Webbers Falls, and Gore, Sequoyah Co. The two deaths occurred in a house that was completely swept away.
- Mar 24, 1937 KY 1730 15 miles 200 y 5 dead 25 tnj. F4

(462) This tornado touched down about 9 miles SW of Winchester, Clark Co.

DAPPL #75 Moving to the ENE, it then passed along the S edge of that town, and destroyed several homes, sweeping some completely away. Most of the \$150,000 in damage occurred along the S edge of Winchester.

- Jun 23, 1937 ND 1800 10 miles 800 y 2 dead 2 inj. F4
- (463) Many farms were leveled, some completely swept away, as this
- DAPPL #118 large tornado passed to the NE, about 12 miles N of Kermare. Passing from NE Burke Co., to NW Renville Co., the funnel probably continued into Saskatchewan.
- Feb 17, 1938 LA 2142 5 miles 150 y 21 dead 40 inj. F4
- (464) Many small homes were completely swept away as this tornado

DAPPL #105 swept through the town of Rodessa, Caddo Parish. The funnel apparently touched ground adjacent to town, destroying large numbers of uil derricks, before moving into Rodessa. Damage totalled about \$250,000. Most of the homes in this oil boom-town were hastily constructed and of poor quality.

- Mar 15, 1938 AR/MO 1520 45 miles 300 y 10 dead 60 inj. F4 (465)
 Originating in Greene Co., Arkansas, the tornado crossed the DAPPL #7
 St. Francis River into Dunklin Co., Missouri. Having crossed the river between Senath and Cardwell, the tornado moved to the NE, leveling many small homes. The greatest destruction was in small communities near Bekersville, where homes were completely swept away, and most of the deaths occurred. The funnel was apparently visible for many miles. The funnel probably dissipated in E Pemisscot Co. Among the communities where homes were damaged or destroyed were Nesbit, Caruth, Liberty, Tywhappity, Hemphill, Bakersville, Brahn City, and Wardell.
- Mar 15, 1938 IL 1650 12 miles 300 y 10 dead 65 inj. F4 (466) From a point about 5 miles SSW of Belleville, St. Clair, Co., this tornado moved almost due fi into that town. Moving very slowly, the roar could be heard for 10 minutes before the tornado struck. 60 homes were destroyed in Belleville and many buildings destroyed along an 18 block section of town. 8 people died at Belleville, and several larger homes were completely swept away place glass from a gas station was found 25 miles away. Moving now to the NE, the tornado struck the W edge of 0 Fallon, leveling homes and causing 2 deaths. Damage along the path in Belleville

Mar 30, 1938 OK/KS/MO 1000 150 miles 200 y 10 dead 200 inj. F4 The tornado touched down in 5 Washington Co, near Oglesby, (467) destroying oil drilling equipment. The funnel moved to the NE DAPPL #76 over sparsely populated areas of Nowata and Craig Cos., and entered Labette Co., Kansas near Chetopa. The town of Columbus, Cherokee Co. was directly in the path of the torpado. Passing along the W and NW part of town, 10 people were killed, and 180 homes were damaged or destroyed. Damage totalled about \$575,000. Crossing into Jasper Co. Missouri the funnel moved to the NE, striking the edge of Lamar, Barton Co. Further on, damage was reported 5 miles N of Stockton, Cedar Co. N of Humansville, Hickory Co. It is unlikely that the tornado was on the ground for the entire listed path length. Much of it was over sparsely settled sections of the states.

1800 40 miles 400 y 7 dead 97 thj. F4 Mar 30, 1938 AR From a point in NW Faulkner Co., this tornado moved to the (468) NE through rural areas of Van Buren and Cleburne Co. The tornado DAPPL #16 passed between Guy and Damascus, Faulkner Co.with little damage. It damaged only a few rural buildings in SE Van Buren Co., causing one injury at Sand Springs. In Cleburne Co. 3 of the deaths occurred at Miller, 3 deatns occurred at Tumpling Shoals, and I occurred near the end of the path at Banner. 75 of the injuries took place just W of Heber Springs. Most of the deaths were associated with small homes that were completely swept away.

1415 30 miles 1600 y 3 dead 6 inj. F5. Apr 26, 1938 NE This tornado moved to the NNE, across remote areas of Garden Co. (469)Originating about 12 miles SW of Oshkosh, the mile wide funnel DAPPL #152 encountered two farms, both of which were completely swept away. In the Lore Star school district, 8 miles NNW of Oshkosh. the school was leveled and 3 children were killed. The farms were leveled in this same area.

1800 30 miles 800 y 3 dead 50 mj. F4 Apr 26, 1938 TX From a point about 5 miles 5 of Grandview, Dawson Co., this large (470) tornado moved to the NE, passing S of O'Donnel, Lynn Co. The DAPP: # 197 3 deaths occurred as farms in the Draw area of SE Lynn Co. were leveled.

2130 20 miles 200 y 6 dead 20 inj. F4 May 1, 1938 KS This tornado apparently touched down SW of Sawyer, Pratt Co., (471) and moved to the NE, passing along the edge of that town, and DAPPL #87 damaging some homes. The tornado entered Kingman Co., 3 miles west of Cunningham, and dissipated several miles N of that town. Many farms were damaged along the path, and 2 deaths were reported in Pratt Co. Near the end of the path was the only clear indication of F4 activity. 2 miles N of Cunningham, all buildings on the Miller farm were completely blown away, and 4 members of the family were killed.

1500 30 miles 250 y 4 dead 10 inj. F4 May 22, 1938 TX From SW of the town of Ivan, this tornado passed along the (472) edge of town, and continued to the NE and NNE. About 7 miles DAPPL #201 NE of town, several farms were completely leveled. Continuing into Young Co. the tornado dissipated S of Graham.

1939 10 miles 300 y 14 dead 9 inj. F4 Jun 10, 1938 TX (473)

This very slow moving and intense tornado cut a

path across the W side of the town of Clyde, Caliahan Co. DAPPL #203 The tornado touched down just NW of town and moved to the SE. derailing 19 freight cars, and destroying 21 homes, many of them being leveled. Residents were guoted as saying that the half hour. which the funnel took to move only a few miles, seemed like an eternity. The funnel formed 8 miles NW of town, and was very brown and solid looking, as it pick up large amounts of dirt.

1750 7 miles 800 y 0 dead 1 inj. F4 J1v 9, 1938 SD/MN This very large tornado touched town E of Whiting, Brookings Co., (474) and moved to the NE. 6 miles HE of Whiting, several farms were DAPPL #221 completely leveled, including the McCuen farm, which was almost totally swept away. The funnel dissipated 4 miles E of Hendricks, Lincoln Co., Minnesota.

1450 15 miles 400 y 3 dead 18 inj. F4 JIY 11, 1938 SD This tornado passed due E across Day Co., destroying 17 tuildings (475) along the S edge of Andover, including the Bryant home, which DAPPL #185 was totally swept away. The tornado lifted N of Bristol.

Apr 14, 1939 OK/KS 2300 75 miles 800 y *7 dead 19 ing, F5

This enormous tornado varied in width from 200 y to over a mile. (476) as it passed across sparsely settle territory in NW Oklahoma. DAPPL #63 Isolated farms were completely swept away as the tornado moved from near Vici, Wondward Co., to 5 of Waynoka, Woods Co., to S and E of Alva, through Capron, and into Barber Co. Kansas. Maximum intensity seemed to be 5 miles 5 of Alva, where cars were carried for several hundred yards and homes were completely swept away. The business district and E side of Capron was brushed by the edge of the tornado.

1355 5 miles 200 y 8 dead 37 inj. F4 Apr 16, 1939 LA This tornado touched down SW of Haynesville, Webster Parish, (577) and moved along the NW edge of town, destroying 37 homes. People DAPPL #81 died in a few small houses which were completely swept away. Damage totalled \$75,000

1510 22 miles 400 y 27 dead 62 inj. 64 Apr 16, 1939 AR

The tornado first touched down SW of Collins, Drew Co near (478) the town of Center Point, about 11 miles from Monticello. DAPPL #22

Early in its path, the funnel leveled a church in which funeral services were being held, and killed 9 of the mourners. Deaths occurred as homes were leveled all along the path, which ended shortly after 3 people were killed near Tillar

1510 25 miles 400 y 9 dead 222 inj. F5 Jun 18, 1939 MN From SW of Component, Hennepin Co., this tormado passed just 1 of (479) town, and continued to the NE to Cedar, Anoxa Co. Near the DAPPL #98 start of the path, a car was hurled many hundreds of feet through the air, finally coming to rest 1000 feet from the road, 4 people in the car were killed. On the S edge of Champlin, several homes were completely swept way, and other homes were leveled in Champlin and Anoka. Damage totalled \$1,200,000

Aug 8, 1939 MI 1445 10 miles 200 y 2 dead 75 inj F4 (480) The tornado first touched down as a waterspout on Pretty Lake, DAPPL #94 Kalamazoo Co., and moved to the NE. About \$150,000 in damage was done along the SE edge of the city of Kalamazoo Maximum intensity was in the Comstock area, where 25 homes were destroyed on the S side of town. NE of town, the Willebarger home was completely leveled. Total damage for the event was about \$1,000,000.

Feb 10, 1940 GA 0420 2 miles 400 y 18 dead 300 inj. F4

(481) This tornado produced a wide, but short damage path in the DAPPL #15 City of Albany. Dougherty Co. A few small homes were swept away, but very little F4 evidence was present. A total of 32 city blocks were damaged or destroyed on the S and E side of town. Total damage was about \$5,000,000.

Mar 2, 1940 fL 1230 12 miles 150 y 1 dead 8 inj. F4
(482) The tornado first touched down 6 miles SE of Vienna. Johnson DAPPL #19 Co., and moved to the NE to just W of Glendale, Pope Co. 4 farmhouses were leveled along the first half of the path. The tornado produced only F2 damage after passing 5 mile W of Grantsburg. One person was killed by a flying fence post near Flatwoods, Johnson Co. Damage totalled \$75,000.

Apr 7, 1940 LA 0007 4 miles 100 y 3 dead 25 inj. F4 (483) This short path, but apparently intense tornado cut a narrow path through the town of Amite, Tangipahoa Parish. 50 houses were listed as destroyed, with the home of the superintendant of schools completely swept away. Oamage totalled \$500,000, as 6 blocks of the business district were also struck.

Apr 30, 1940 MO/IL 1630 50 miles 400 y 1 dead 30 inj. F4 (484)
 Touching down just N of Sikeston, Scott Co., Missouri, this tornado remained below violent intensity in Missouri. Passing to the NE, the tornado killed one person near the start of the path, and another person died in a collapsed barn, 3 miles W of Kelso. Moving into Alexander Co., Illinois, the tornado intensified near Cache and leveled many farm nouses W and N of Mounds, Pulaski Co. Damage totalled about \$200,000. The funnel lifted 5 miles E of Vienna, Johnson Co.

- Aug 2, 1940 ND 1620 10 miles 400 y 3 dead 25 inj. F4 (485) This tornado moved to the E, passing along the S edge of Dawson, DAPPL #88 Kidder Co. Several farms were totally leveled, and the Carlson home was almost completely swept away.
- Jun 8, 1941 KS 2230 42 miles 400 y 8 dead 20 inj. F4 (486) DAPPL #55 The tornado touched down 7 miles SW of Maize and moved to the NE across Sedgwick, Butler, and Marion Cos. One person was killed 3 miles NE of Valley Center, Sedgwick Co., and 7 people were killed near Whitewater, Butler Co. Five of the deaths occurred in one house, as the tornado struck during a family party. Damage totalled about \$200,000, as dozens of farms were damaged before the tornado lifted about 10 miles E of Peabody.

Oct 26, 1941 AR 1600 18 miles 150 y 4 dead 20 inj. F4 (487) Twenty homes were destroyed as this tornado passed across the DAPPL #2 S end of Dardenelle, Yell Co. Passing from Chickalah to Pottsville, the cornado encountered only small homes in this very rural area. Damage totalled \$75,000.3 of these small rural homes were completely swept away.

Oct 26, 1941 AR 2315 10 miles 100 y 15 dead 75 dead F4 (488) This tornado cut a narrow, but intense path of destruction DAPPL #3 across the S part of Hamburg, Ashley Co. 53 homes were listed as destroyed. Many of the homes were leveled, and many of them were said to be the best homes in the town.

Feb 6, 1942 GA 1400 55 miles 400 y 13 dead 100 inj. F4 (489) DAPPL #22 This tornado, or family of tornadoes, first touched down N of Alvaton, Meriwether Co. 6 people were killed in the corner of Meriwether Co., 3 in a church that was leveled. Lifting as it entered Spaulding Co. the funnel did only minor damage S of Griffin. From the E part of Spaulding Co. the tornado intensified and widened, as it passed through rural areas of Butts and Jasper Co. Many small homes were leveled, and 3 children and a teacher were killed at the Griggs Chapel School, near the end of the path, 6 miles from Monticello, Jasper Co. Damage totalled :300,000.

Mar 16, 1942 IL 1030 55 miles 400 y 11 dead 60 inj. F4 (490) From tust F of Lessdale Champion Ca. this for inj. F4

(490) DAPPL # 26 DAPPL # 26 From just E of lvesdale. Champaign Co., this tornado moved to the NE across Champaign and Vermilion Co. Several farms were leveled along 2 sections of the path that apparently reached F4 intensity. The first was in the Savoy-Mayview-N of St. Joseph area. The second area of F4 intensity was W of Alvin. The town of Alvin was struck, with F3 damage scattered in a 5 block wide path through the town. 5 people were killed at Alvin. Damage totalled \$200,000 for the event, as 55 homes were destroyed.

Mar 16, 1942 IL 1600 35 miles 400 y 7 dead 70 inj. F5 (491) The tornado had its origin E of Kickapoo, Peoria Co. From there, the tornado moved to the NE, hitting the edge of Alta, and the NW part of Chillicothe. The funnel crossed the Illinois River S of Barrville, where one person was killed. The tornado struck the town of Lacon, Marshall Co., st what must have been its maximum intensity. ', of all the homes in that town were damaged, b0 were destroyed and several were swept completely awa. Damage totalled \$600,000.

Mar 16, 1942 MS 1130 80 miles 600 y 57 dead 560 inj. F4 (492) This tornado touched down 5 of Berclair, Leflore Co., and moved DAPPL #96 to the NNE, passing along the S and E edge of Itta Bena. Passing] miles W and N of Greenwood, across Leflore Co., dozens of small homes were leveled, and 19 people were killed. The funnel passed across the NW tip of Carroll Co., and in that short span, killed 5 more people NW of Avalon. In Granada Co., 3 people were killed as a house was swept away near Holcomb. In Tallahatchie Co. 3 people were killed as a house was swept away near Cascilla. In Yalabusha Co., 10 square miles of forest were leveled and 19 people were killed, mostly at O'Tuckalofa, S of Water Valley Turning to the NE and ENE, the funnel struck at Tola, and dissipated in SE Lafayette Co. Damage totalled about \$500,000.

1625 30 miles 300 y 7 dead 50 inj. F4 Mar 16, 1942 MS Several small homes were leveled as this tornado passed Baldwyn, (493) Lee Co. The tornado struck 40 minutes before another major DAPPL #91 storm hit the town. That second storm was probably related to the previous event. While the tornado was centered on the town, very little F4 evidence was present. Damage was extensive to the entire town, and totalled \$750,000.

1900 45 miles 400 y 17 dead 200 inj. F4 Mar 16, 1942 TN From near Bethel Springs, McNairy Co., this tornado moved (494) to the ME through Chester and Henderson Cos. Damage totalled DAPPL #148 nearly \$500,000. Small homes were leveled all along the path. 3 people were killed near the start of the path, 1 person was killed E of Finger, McNairy Co., 1 person was killed near Enville, Chester Co., 6 people were killed near Reagan, Henderson Co., and I person was killed near the end of the path at Beacon Decatur Co.

1900 15 miles 800 y 15 dead 60 inj. F4 Mar 16, 1942 KY This tornado family had its origins with the F3 level Browder (495) tornado, which killed 9 people in Muhlenberg Co. No evidence DAPPL #78 could be found that the path was continuous from Browder to Bardstown. This event is plotted as a 15 mile path across Nelson Co. with the tornado moving SW to NE. N of Bardstown, many homes were leveled, and several were totally swept away.

2132 10 miles 200 y 2 dead 53 inj. F4 Mar 16, 1942 IN This tornado cut a narrow swath across the S side of Goshen, (496) Elkhark Co. The Gergely home was leveled, and 2 members of the DAPPL #35 family were killed. 87 houses were damaged or destroyed, with a total of \$400,000 in losses.

1300 25 miles 200 y 2 dead 8 inj. F4 Apr 27, 1942 141 From a point in N central Big Stone Co., this tornado moved (497) through rural fammland, to the SE. A few farm houses were destroyed DAPPL #84 and, near the end of the path, a school house was leveled near Odessa. The tornado struck at 3:10 PM, 20 minutes before school was to be let out. Debris from the school was scattered for 3/4 of a mile, and the bodies of the 2 dead students were carried for up to 500 feet. Several of the students were seriously injured. Damage totalled about \$200,000.

1515 20 miles 400 y 52 dead 300 inj. F4 Apr 27, 1942 OK Moving from the WSW, and not far from Rt-20 , this tornado (498)passed from E Rogers Co., across Mayes Co., and through the DAPPL #118 town of Prior. 3 people were killed between Claremore and Pryor, and 49 people were killed at Prior. 181 others were hospitalized. Damage totalled \$2,300,000

Apr 28, 1942 TX (199)

2130 3 miles 1660 y 11 dead 250 mj. r4 This rather short path tornado was extremely wide and intense, as it passed through the town of Growell, Foard Co. Damage tutalled **DAPPL #152** \$1,500,000 as about 75 % of all the buildings in the town were destroyed or damaged fires in the business block burned that section of town to the ground. The best homes in town were those that were leveled.

2230 20 miles 300 y 15 dead 25 inj. F5 Apr 29, 1942 KS Traveling almost due N, this tornado moved from d miles S of (500) Oberlin, to a mile E of Cedar Bluffs. The tornado passed CAPPL #60 1 mile E or Obertin, leveling at least 3 entire farmsteads. and removing several inches of top soil, as well as the buildings Most of the deaths occurred in a few homes, where entire families were wiped out, \$100,000 in damage was incurred, in this sparsley settled area. This was the worst disaster in the area since the Chevenne Indian raid on 36 September 1878.

0200 35 miles 800 y 4 dead 12 inj. F4 Apr 30, 1942 CO

From near McClave, Bent Co., this tornado moved to the NE. (501) leveling 4 farms. The four deaths occurred in 4 separate DAPPL #16 homes that were destroyed. Occurring at night, in this remote area, no warning was given, and the residents had no time to take shelter.

1430 95 miles 800 y 3 dead 80 inj. F4 May 2, 1942 05

The first of three major tornadoes in that area of Oklahoma (502) that day; after touchdown just 5 of Morrison, Noble Co., the OAPPL #122 funnel moved to the NE. Traveling over sparsely settled Pawnee and Osage Cos., the tornado varied in width from 200 feet to 1 mile, leveling most farm buildings that it encountered. The 3 deaths occurred as the tornado cut a 12-block path through the town of Pawnuska, Osage Co. Passing N of Bartlesville, the tornado dissipated in N Nowata Co., mear the Kansas border.

Damage for the entire path totalled \$150,000.

May 2, 1942 OK 1515 60 miles 400 y 7 dead 20 inj. F4 The tornado touched down 2 miles 5 of Cushing, Payne Co., and (503) DAPPL #123 moved to the NE. Passing near Drumright, Olive, and Silver City in Creek Co . the tornado intensified after moving from Creek to Osage Co. Most of the \$65,000 in damage occurred NW of Tulsa. where 4 people were killed 3 of furley, and 3 people were killed at Fisher.

May 2, 1942 OK 1530 45 miles 800 y 16 dead 80 inj. F4 (504) From NW Pottawatomie Co. the tornado moved first to the E, then turned to the NE. Passing S of Prague, the DAPPL #124 funnel widened to over ', mile, and intensified. The funnel leveled isolated farm nomes near Boley, Paden and Welty, Okfuskee Co., and leveled an entire farming community N of Childsville, near Boley. 12 people were killed at that location. Damage totalled over \$100.000.

May 2, 1942 KS 1530 88 miles 1600 y 3 dead 25 inj. F4
(505)
From a point 6 miles SW of Fredonia, the huye tornado moved to DAPPL #61
the NE. While the funnel was very large, it did not often display extreme intensity. Passing across Wilson, Neosho, Allen, Bourbon, and Linn Cos., the tornado leveled many farms, killing 3 people at widely sejarated points. The first death occurred near the origin of the tornado, 5 miles SW of Fredonia, Wilson Co. The second death occurred 5 miles SE of LaHarpe, Allen Co., and the third acth occurred 3 miles SW of Mound City, Linn Co.

 May 2, 1942 KS 1600 15 miles 400 y 0 dead 10 inj. F4
 (506) This tornado touched down 3 miles N of Iola, Allen Cc., passed
 DAPPL #62 3 miles E of Colony, Anderson Co., and lifted 2 miles N of Lone Elm. \$100,000 damage was done to farms that were struck. 9 farm homes were destroyed, and the Victor farm, 10 miles SE of Garnett. Anderson Co., was leveled.

May 12, 1942 NE 2000 40 miles 400 y 6 dead 10 inj. F4 (507) One member of a tornado family that crossed the state, this event is plotted from 20 miles SW of Orchard, in Holt Co., to 20 miles N of Orchard, in Knox Co. Several farm homes were leveled. I death occurred N of Orchard, and 5 members of a family were killed on their way to the storm cave, near the start of the path. Damage totalled \$80,000.

May 31, 1942 KS 1630 3 miles 200 0 dead 2 inj. F4 [508] Moving from NW to SE, this first of two tornadoes DAPPL #66 near Delphos, Ottawa Co. touched down at a point 3 miles WSW of-town. The tornado damaged several farms, leveling one or them. Damage was listed ar \$50,000.

May 31, 1942 KS 1700 8 miles 200 y 0 dead 5 inj. F4 (509) This tornado, the second to form near Delphos, Ottawa Co. in 30 DAPPL #67 Distornado, the second to form near Delphos, Ottawa Co. in 30 ESE. Several farms were destroyed. The tornado lifted 3', miles S of Lamar. This and the previous event both have an official damage total of \$50,000, and both leveled one farm each.

Jun 12, 1942 OK 2215 5 miles 200 y 35 dead 100 inj. F4 (510) This tornado, the second in the area that evening, cut a twisting path through the SW section of Oklahoma City. While the tendency was for the funnel to move from SW to NE, it at times traveled due E and due W. Major damage was in the 27th-29th Street area, between Portland and Goff Avenues. 73 homes were listed as destroyed, and 31 as damaged. Many of the homes were completely leveled, and a few of the smaller ones were completely sweet away. Jun 20, 1942 IN 1830 11 miles 300 y 3 dead 116 inj. F4

(511) DAPPL #39 This tornado touched down 5 miles SW of Kokomo, Howard Co., and moved to the ENE, across the SE residential area of that town. The damage at Kokomo totalled about \$500,000 as a 2 block wide. 2 mile long swath was cut through the area. The Morris home and a few others were leveled, but the funnel showed little F4 intensity. The tornado first Louched down near Alto, and one farmer was killed in that area. The tornado lifted N of Greentown.

Jun 20, 1942 KS 2032 5 miles 400 y 4 dead 10 inj. F4

(512) This tornado cut a semi-circular path around the town of Mulvane, DAPPL #71 Starting in Summer Co., and ending in Sedwick Co. The funnel first touched down SE of Mulvane and moved due N for 2 miles, then turned to the N and NNW. Many farm buildings were leveled and the Howard farm was leveled 2 miles E of Mulvane. Damage rotalled \$85,000.

Oct 29, 1942 AR 2230 2 miles 800 y 29 dead 100 inj. F4 (513) Touching down for only a few minutes, this formed out a

(513) Touching down for only a few minutes, this tornado cut a DAPPL #14 Short, but intense path through the town of Berryville, Carroll Co. 137 buildings were listed as destroyed, many of them

homes that were completely swept away. Damage totalled \$500,000.

Apr 12, 1943 AL 0130 5 miles 400 y 4 dead 60 inj. F4 (514) A few small homes were completely swept away as this tornado DAPPL #1 moved due E through the town of Hackleburg, Marion Co. Damage totalled \$250,000 as 85 homes were destroyed or damaged, or about 2/3 of the homes in the town. Many residents awoke to the sound of an"unscheduled freight train" through this hilltop town.

Apr 27, 1943 OH 2000 18 miles 200 y 0 dead 150 inj. F4 (515) Touching down 14 miles WSW of Akron, the tornado moved almost due E across the S side of that city, and lifted at the E edge of the county. Damage totalled over \$2,000,000 as nearly 1000 buildings were damaged or destroyed. Of the 67 houses that were

- destroyed, 12 were rated as good construction, 28 as medium, and 27 were rated as being of poor construction. Few of the houses were leveled, but several lake-front cottages were swept away, and an automobule was apparently carried several hundred yards.
- May 15, 1943 KS 1610 40 miles 400 y 0 dead 5 inj. F4 (516) From a point about 5 miles N of Junction City, in Riley Co., the tornado, or family of tornadoes, moved E and then NE across Riley Co. Several homes were leveled including the Pultz home. S of Zeandale. Passing S of Wabaunsee, Wabaunsee, Co. the tornado turned to the NE, lifting 25 miles SW of Bellvue Damage totalled \$75,000. The path was extremely complex, with as many as 5 distinct funnels moving across an area as large as 5 miles wide.

May 15, 1943 MO 2030 10 miles 75 y 3 dead 5 inj. F4 (517) This tornado cut a narrow, but intense path, a few miles 5 and SW OAPPL #96 of Stover, Morgan Co. 8 miles 5 of Stover, the Rapp family home was completely swept away, and 3 members of the family were killed. One death reported from Cole Camp. Benton Co., was not related to this event.

Jun 1, 1943 MI 2000 15 miles 400 y 0 dead 10 inj. F4 (518) From a point about 5 miles S of Morrice, Shiawassee Co., the DAPPL # 79 Koleck home, SE of Morrice. The Beard and Morgan school houses were leveled before the tornado lifted near Vernon. Property damage totalled over \$100,000, as 39 houses and 52 barns were damaged or destroyed.

Jun 15, 1943KS18002 miles800 y0 dead5 inj.F4(519)This wide, short path tornado struck the town of Kipp, Saline Co.DAPPL #62and leveled a few small homes. Property damagewas listed at\$300,000 as the funnel decended on the town from the west.

 Aug 13, 1943
 OH
 2100
 6 miles
 200 y
 1 dead
 34 inj.
 F4

 (520)
 From a point 5 miles S of Massillon, Stark Co., this tornado

 DAPPL #114
 moved through parts of the towns of Genoa, Reedurban, West Manor, and the S edge of Canton.
 11 homes were listed as destroyed, but only one was leveled.
 200 homes were damaged, and the total property loss amounted to about \$1,000,000.

Apr 9, 1944 OK 1930 14 miles 400 y 1 dead 10 inj. F4 (521) From 2 miles S of Cloud Chief, Washita Co., this tornado DAPPL #126 moving along together. Damage totalled \$400,000 as many farms were destroyed, and several were leveled. A total of 75 houses were listed as destroyed. One death occurred 3 miles ENE of Cloud Chief.

Apr 10, 1944 AR 2130 10 miles 400 y 5 dead 28 inj. F4 (522) Passing from Grant to Pulas' Co., this tornado completely DAPPL #19 swept away 7 houses at a FSA Jousing project, 4 miles E of Woodson, Pulaski Co. The funnel, reported to be up to 'y mile wide, produced this intense damage only in a small portion of its path. Some bodies were carried 'y mile.

Apr 10, 1944 AR 2250 45 miles 200 y 19 dead 75 inj. F4 (523) From near Holly Grove, Monroe Co., this tornado moved NNE, leveling farms at several points along the path. Il people were killed in a small cluster of homes that were swept away near Holly Grove. 6 of the deaths were in one family. The most intense damage was probably W of Forrest City, where the homes of some well-to-do farmers were leveled. The funnel lifted 10 miles NNE of Forrest City. Apr 16, 1944 GA/SC 0030 40 miles 400 y 25 dead 120 inj. F4

(524) Moving from the WNW, then almost due E, the tornado cut DAPPL #36 a wide damage swath across the S edge of Royston, Hart Co. 13 people were killed at Royston. Damage continued across Hart Co. to Nuberg, where several homes were swept away and 10 more people were killed. Crossing the N part of Elbert Co., the tornado passed into Anderson Co., South Carolina where 2 people were killed near Iva. The tornado dissipated in Abbeville Co.

Apr 16, 1944 SC 0100 40 miles 400 y 16 dead 200 inj. F4 (525) Touching down on the S edge of Abbeville, Abbeville Co., 4 people were killed as several small homes were leveled. Continuing to the E, the funnel passed through the S side of Greenwood, Greenwood Co., where 8 people were killed and 150 were injured, as more small homes were leveled. \$500,000 damage was done at Greenwood. Passing across Newberry Co., 4 more people were killed, as the tornado brushed several small towns including Chappells and Prosperity.

May 19, 1944 IA 1930 10 miles 400 y 0 dead 5 mj. F4

(526) This tornado moved to the ENE, across Webster Co., to

DAPPL #53 the N edge of Ft. Budge. The tornado touched down just SE of Barnum, and upon reaching Ft. Dodge, lifted and reformed further to the south, seriously affecting Ft. Dodge. That reformation is considered a different event. Several farm homes were leveled along the path between Barnum, and Ft. Dodge, including the Conseur farm.

Jun 22, 1944 WI/IL 2030 80 miles 400 y 9 dead 80 inj. F5

(527) From near Fennimore, Grant Co., this tornado moved to the DAPPL # 37 SE, crossing Grant and Lafayette Cos., and moving into Illinois. 7 people died and 65 were injured in Wisconsin, with most of the damage and deaths having occurred on the S side of the town of Belmont. 20 homes were destroyed at Belmont, and many of them were leveled. Bodies from one home were carried as much as is mile. Further to the SE, the town of Gratiot was damaged and the tornado crossed into Stephenson Co., Illinois. 2 people died and 15 were injured in Stevenson Co. The funnel was particularly intense 21s miles NE of Cedarville, where houses were completely swept away. The funnel dissipated about 10 miles E of freeport. Total damage was \$1,500,000 for the path in both states. 21 farms in Illinois were listed as completely destroyed.

Jun 23, 1944 WV/PA 1730 65 miles 400 y 25 dead 150 inj. F4

(528) This tornado followed a skipping path from near Wellsburg, West

Virginia, across the SW part of Pennsylvania, to the NW DAPPL #115 corner of Maryland. 2 people were killed in Independence Twp. Pennsylvania, and 2 more people were killed N of Claysville. A near tragedy was averted a few miles further to the SE, when a summer YMCA camp was leveled. The children had been led from the dining hall to lie in the shelter of a knoll. Entering Greene Co., the tornado intensified, and leveled many of the homes it encountered for the next 15 miles. 3 people were killed as the Castle community was destroyed. At the coal mining community of Chartiers, a mile E of Clarksville, 10 people were kiiled as the homes of miners were leveled. At Dry Tavern, 3 miles further to the SE, 8 more people were killed. S of Uniontown, in Fayette Co., the funnel either skipped, reformed, or dissipated into a series of downbursts and tornadoes as it moved across and perpendicular to the Appalachian ridges.

Jun 23, 1944 PA 1830 45 miles 400 y 17 dead 100 inj. F4 (529) This tornado is one member of a tornado family that touched down in Ohio. This event is plotted from Baldwin Twp., S of Pittsburg. 17 people were killed as 110 houses were destroyed when the tornado struck the densely populated areas of Dravosburg, Port Vue, S of McKeesport, Versailles, Boston, and Greenock and Allegheny Cos. Most of the multi-story dwellings in the area collapsed and few were leveled and partly swept away. Damage was considerable as the tornado skipped to the SE, parallel to the Pennsylvania Turnpike, N of Donegal to near Somerset.

Jun 23, 1944 WV 2230 70 miles 300 y 92 dead 200 inj, F4 (530) Passing over and along the rough terrain of N central West DAPPL #161 Virginia, the funnel was apparently in continuous contact with ground in Wetzel, Harrison, Taylor and Barbour Counties. The path maintained a straight line despite irregular topography. Touching down near Pine Grove and lifting near Nastorville, houses were leveled and people were killed all along the path. The town of Shinnston, Harrison Co., was the only sizeable community along the path, and 58 persons were killed in that area. The 5 deaths at Meadowville, Barbour Co., and the 3 deaths at Thomas, Tucker Co., were apparently from different events.

Feb 12, 1945 MS/AL 1530 43 miles 300 y 14 dead 103 inj. F4 (531) From about 6 miles 5 of Moridian Landard Lo 6

(531) From about 6 miles S of Meridian, Lauderdale Co., Mississippi, DAPPL #1 this tornado moved to the NE. 5 people were killed in Mississippi, before the tornado crossed into Sumter Co., Alabama. 35 people were killed in Alabama. In Alabama, homes were leveled on the S edge of the towns of York and Livingston. In Mississippi, the tornado did little damage after leveling homes in the Jones-Vimville area. Damage totalled \$250,000. 7 of the Alabama deaths were at Livingston, and 2 were at York.

Feb 12, 1945 AL 1622 13 miles 100 y 26 dead 293 inj. F4 (532) From point 5 miles SW of Montgomery the tornado passed along the west edge of that city, and then struck the small community of Chisholm, N of Montgomery. damage totalled \$1,700,000 as 40 small homes were leveled, and the RR yards sustained severe damage.

Apr 12, 1945 OK 1525 20 miles 400 y 8 dead 200 inj. F4 (533) This tornado, reported to be up to 5 mile wide, skirted the DAPPL #87 Be edge of Oklahoma City, damaging or destroying 160 homes. Damage totalled over \$1,000,000. The tornado passed SW to NE, and maximum intensity was apparently reached only in a 4 block area of Oklahoma City. Many of the dead and injured were families of personel stationed at nearby Tinker AFB, and lived in what are now Valley Brook, Dell City, and Choctaw.

Apr 12, 1945 OK 1650 3 miles 400 y 13 dead 113 inj. F4 (534) This second of three major Oklahoma tornadoes that day, this event moved from the SW across the E edge of Muskogee. This area was primarily a residential section, but contained the Oklahoma School for the Blind. F3 damage occurred at the school and 3 people were killed. Total damage for the brief event was \$1,300,000. Apr 12, 1945 OK 1740 28 miles 500 y 69 dead 353 inj. F5

(535) DAPPL #91 DAPPL #91 DAPPL #91 Dapped through the center of Antlers, this massive tornado destroyed fully 1/3 of the town, destroying 641 buildings, and Gamaging 751 others. Several entire residential areas were literally swept away. Damage totalled \$1,525,000.

Apr 12, 1945 AR 2100 40 miles 600 y 10 dead 70 inj. F4 (536) This event is one of A torrador that dead 70 inj. F4

(536) This event is one of 4 tornadoes that official listings link DAPPL #12 This event is one of 4 tornadoes that official listings link as a single tornado. The 4 are not in the same family This tornado touched down SW of Booneville, Logan Co., and moved to the NE, scross Logan and Johnson Cos. 5 people were killed as small homes were leveled from 2 miles E of Paris to 8 miles NE of Paris, near the Arkansas River. The other 5 deaths occurred as a portion of the Minnow Creek community was swept away. Several hundred buildings were damaged all along the wide path, and damage totalled \$200,000.

- Apr 12, 1945 MO 2045 8 miles 300 y 4 dead 16 inj. F4 (537) This tornado was member of a long tornado family originating DAPPL #72 in Oklahoma, and the third Missouri member of the family. Property damage from this event was about \$250,000, as the funnel struck the NW section of Morrisville, Polk Co. Several homes in one area were apparently leveled.
- Jun 27, 1945 IL 2245 20 miles 400 y 1 dead 20 inj. F4
- (538) Official statistics list this and the following event as a DAPPL #26 Single tornado, but they are clearly two or possibly even three distinct tornadoes. This tornado touched down 3 miles NW of Geneseo, and moved to the ENE, leveling a farm house N of that town. 3 members of the family huddled safely in the basement of that house. Continuing to the ENE across Henry Co... the 20 farm houses were damaged along Rt. 92 in the NE corner of the county. Over \$1,000,000 in damage occurred in the area, Sut much of it was apparently from downbursts, as well as the tornado.
- Jun 27, 1945 IL 2330 20 miles 400 y 0 dead 40 inj. F4 (539) As with the previous event, this tornado was associated with widespread downburst activity. The almost \$1,000,000 damage in the area was caused only in part by the tornado. Touching down NW of Princeton, the tornado moved to the ENE across Bureau Co. F4 level damage was done to homes N of Princeton, on Rt-26, near Zearing, and S of Arlington. Trees were debarked and farm houses damaged all along the path.

Jly 4, 1945 NE 2030 15 miles 400 y 7 dead 12 mj. F4 (540) From the W edge of Butler Co., about 10 miles NW of Rising City. DAPPL #78 this tornado moved to the SSE. The funnel, accompanied by widespread downburst activity, passed 2 miles W of that town, and leveled many buildings, including Henderson and Uphoff farms. Damage totalled \$300,000. Jan 4, 1946 TX 2030 25 miles 800 y 13 dead 250 inj. F4 (541) Touching down about 8 miles W of Lufkin, this tornado moved to DAPPL #94 The NNE, passing through the town of Clawson, Angelina Co. 30 homes were destroyed here, and 18 others elsewhere along the path in this county. Damage in Angelina Co. was estimated at \$500,000, and 3 people were killed. Continuing to the NNE, the tornado crossed the Angelino River into Nacogdoches, destroying 80 homes and dawaging 150 others along a ', mile wide path. Gamage at Nacagdoches was \$1,500,000.

Jan 4, 1946 TX 2100 18 miles 400 y 15 dead 60 inj. F4 (542) Touching down near Tucker, Anderson Co., this tornado moved DAPPL #95 to the NE, passing through the S and SE sections of Palestine. 36 homes were destroyed in that town, and 22 others damaged. Most of the deaths were in the Southview section of town, and damage was estimated at \$500,000

Jan 6, 1946 AR 1800 8 miles 800 y 3 dead 50 mj. F4 (543) Touchdown occurred SE of Wilmot, Ashley Co., and this DAPPL #2 large tormado moved to NE across W Chicot Co. While only small rural southern homes were hit, several of them were completely swept away. A dozen of these small, poorly constructed homes were leveled. Damage totalled \$50,000 over the relatively short path.

Mar 22, 1946 OK 2000 3 miles 400 y 0 dead 0 inj. F4 (544) Passing a mile S of Wynona, Osage Co., this tornado destroyed DAPPL #83 a power plant, throwing heavy machinery of over 500 lbs.. for b mile. Most of the building was completely swept away. No homes were struck.

May 15, 1946 (545) DAPPL #102	TX 1700 7 miles Passing between Maryneal moved to the SE. Only 3	and Champton, Nolan	Co. this tornado
DALLE ALOR	leveled. The one death wa	is in the leveled Min	ton home.

May 18, 1946 TX 1900 60 miles 300 y 4 dead 20 inj. F4 (546) Touching down near Henrietta, Clay Co. this tornado passed to DAPPL #103 the se across Montague Co., and skipped to near Sanger, Denton Co. Damage totalled only \$112,000 along the rather long path, for only one town was directly in the track of the tornado. Although nearly all buildings in the town of Stoneburg, Montague Co., were damaged, none were leveled Only near the end of the path, near Sanger, Denton Co., were homes completely leveled.

May 23, 1946 KS 1530 20 miles 400 y 1 dead 8 inj. F4
(547) This event is one of two tornadoes which moved across Washington
DAPPL #27 Co. on parallel paths. Only one of the two produced F4 damage. This event is plotted from 10 miles SW of Washington to 3 miles N of Hanover, passing west of Washington. The other tornado passed E of Washington. Damage from this event totalled about \$100,000. F4 evidence was noted at a leveled home 65 miles W of Washington on Rt-36, and 15 miles W of Enosdale, where an elderly woman was killed in a leveled home. May 24, 1946 TX 1/00 7 miles 400 y 1 dead 4 inj. F4 (548) Moving to the SE, this tornado completely leveled a home near Granger, Williamson Co. Damage was only \$27,000, as only a few buildings were destroyed

May 29, 1946 KS 1700 7 miles 400 y 0 dead 2 inj. F4

(549) Moving to the ENE.this tornado passed from S of Wellsford to DAPPL #30 2 miles SW of Cullison, Pratt Co. One farm house was leveled and several others were damaged or destroyed, as the tornado caused \$110,000 in damage.

Jun 17, 1946 MI/ONT 1800 12 miles 200 y 18 dead 100 inj. F4

(550) This tornado touched down in E Wayne Co., in the S Detroit

DAPPL #46 suburbs, and moved ENE along the Rogue River. No deaths occurred in Michigan, but 35 people were injured and damage was almost \$1,000,000. Two churches were destroyed, but no F4 evidence was present in the U.S. Crossing the Detroit River, the tornado intensified, and leveled several homes in Sandwich and Windsor, Ontario. The funnel then turned to the N and dissipated as it crossed back into the U.S. All deaths were in Canada.

Aug 17, 1946 MN 1840 10 miles 400 y 11 dead 100 inj. F4 (551) From a point 7 miles SW of Mankato, Blue Earth Co., this tornado DAPPL #55 moved to the NE, destroying several farms. 3 miles SW of Mankato, the tornado struck the Green Gables tourist camp, killing 6 people and injurinn 37 people seriously. Cars and, reportedly, a 27-ton road grader were hurled 100 feet. The funnel dissipated at the NW edge of Mankato, where 2 more farms were destroyed.

Aug 17, 1946 MN 1940 7 miles 200 y 0 dead 25 inj. F4

(552) The tornado probably originated about 5 miles SW of Wells. DAPPL #56 Faribault Co. A farm was leveled SW of Wells, and the tornado continued its destruction through the center of the town, although no F4 evidence was present in town. All of the buildings in the 3 block business section of Wells were damaged or destroyed. 400 people in a theatre were uninjured when the rear section of the building was lifted off and blown away Damage totalled \$700,000, a greater total than the previous event, although the tornado was less intense.

Jan 29, 1947 M0 1800 45 miles 800 y 1 dead 19 mj. F4 (553) This tornado probably first touched down in Arkansas and DAPPL 4100 cut a long, wide damage swath across Oregon and Carter Cos. The track of the tornado was over heavily wooded and sparsely populated territory, and very little F4 evidence was apparent. 300 buildings were listed as being damaged or destroyed in Oregon Co. The tornado is plotted as having touched down 4 miles SE of Thayer, Carter Co. and Lifting S of Van Buren, Carter Co. Homes were leveled in Barren Hollow and Norman, as well as on Hyw-14, E of Alton.

Jan 29, 1947 MO 1330 30 miles 800 y 5 dead 5 inj. F4 (554) From a point in Howell Co., 8 miles SSE of Mountain View, this DAPPL #101 tornado moved to the NE across Shannon Co. All 5 deaths occurred as homes were leveled and swept away 1 mile west of Montier, on hyw-60, between Mountain View and Birch Tree. The funnel passed Alley Springs and lifted N of Eminence. 100 buildings were damaged or destroyed.

Apr 9, 1947 TX/OK/KS 1742 170 miles 2000 y 167 Jead 1000 int. F5 (555) While a small skipping tornado occurred at White Deer, Carson DAPPL #65 Co., Texas, the tornado is plotted here as continuous from just W of Canadian, Hemphill Co., Texas. Most of the buildings at Canadian were damaged, but few were leveled. From there the funnel widened and intensified into one of the largest and longest lived tornadoes in U.S. history. Along most of its path in Texas Oklahoma it was reported to have been from 1 to 2 miles wide. Virtually the entire towns of Glazier, Hemphill Co., and Higgins, Lipscomb Co., were leveled or swept away. At Glazier, the bodies of two people thought to be together, were found 3 miles apart. At Higgins 39 people died and at Glazier 14 people died Property damage in Texas was \$1,500,000. Passing into Ellis Co., Oklahoma, the tornado killed 6 more people S of Shattuck and Gage. destroying dozens of farms and ranches. In Woodward Co., it killed at least 95 people, 89 of them as the N half of the city of Woodward was devastated. Moving into Woods Co., the tornado began turning to the NNE, passing about 10 miles W of Alva. Damage in Oklahoma totalled over \$8,000,000 . In Barber Co. Kansas the funnel passed along the west edge of Hardtner and moved almost due 8 passing directly through Gerlane. F3 damage was noted at Gerlane, and most of the \$200,000 loss in the state occurred there. The path may have been discontinuous in Kansas. More deaths are likely to have occurred than are listed here, as people died weeks later from injuries.

Apr 9, 1947 KS 2015 35 miles 400 y 0 dead 0 inj. F4 (556) From about 7 miles N of Meade, this very visible tornado moved DAPPL #64 to the NE across Meade, NW Clark, and S Ford Cos. Several farms were leveled as it passed 2 miles N of Fowler, Meade Co., and lifted 15 miles ESE of Dodge City, Ford Co. Damage totalled \$225,000.

Apr 29, 1947 MO 1425 30 miles 600 y 14 dead 45 int. F4 (557) This cornado first touched down 7 miles SW of Worth, in the DAPPL #60 NW Jorner of Gentry Co. Moving to the NE, the funnel passod through Worth, Worth Co. destroying or damaging practically every business and home in town. Continuing to the NE, farms were eveled a mile N of Denver and 2 miles J of Hatfield. The ornado dissipated near the Iowa border. A later tornado, possibly of this family, struck Clio, Iowa. Damage totalled about \$700,000.

Apr 29, 1947 AK 2000 20 miles 300 y 9 dead 50 inj. F4 (558) From a point about 7 miles NE of Rogers, Benton Co., this tornado DAPPL #7 miles N of Eureka Springs. 20 homes were leveled along the path and a few were swept completely away, but all were of rural construction. Damage totalled about \$200,000.

May 11, 1947 TX 1800 10 miles 800 y 1 dead 14 inj. F4 (559) This large tornado swept to the NE, across the edge of Lenorah. DAPPL #159 Martin Co. 6 homes were destroyed, and one farm was completely swept away. May 31, 1947 OK 1930 18 miles 800 y 6 dead 15 inj. F4 (560) This huge, slow moving tornado moved from NE Roger Mills Co., DAPPL #141 to SW Dewey Co., passing through the town of Leedey. About 's of the town was destroyed, as damage totalled over \$1,000,000. 147 homes were destroyed, and many of them were swept away. Most of the residents had taken shelter well before the arrival of the tornado touched down 15 miles WSW of Leedey, and lifted a few miles NE of town.

Jun 1, 1947 AR 1520 19 miles 600 y 35 dead 300 inj. F4

(561) DAPPL # 8 DAPPL # 8 DAPPL # 8 DAPPL # 8 Damage totalled \$1,000,000. 11 of the dead were teenagers in a recreational meeting house on Rt-15. The small homes on the Chambliss and Stratton plantations were leveled and swept away, killing entire families.

Jun 7, 1947 OH 1430 40 miles 300 y 6 dead 340 inj. F4 (562) The funnel originated 3 miles SE of Warren Trumbull Co.

- (562) The funnel originated 3 miles SE of Warren, Trumbull Co., Ohio. DAPPL #130 and moved due E, passing 2 miles S of Vienna. 150 buildings were damaged or destroyed in Ohio. Among them, 30 homes were destroyed, and a few were leveled. 3 people were killed in Ohio, and 40 injured, as damaged totalled \$100,000. Crossing into Mercer Co., Pennsylvania the tornado struck the edge of Sharon and Farrell, destroying or damaging 325 homes. Damage totalled over \$1,000,000 as many factories and multi-story residences collapsed, causing a large number of injuries. Only a few homes were leveled in each state, despite the ample opportunity for the tornado to exhibit F4 intensity.
- Jun 8, 1947 10 1430 20 miles 800 y 0 dead 3 inj. F4 (563) This massive tornado leveled 8 of the the 20 farms that it DAPPL #13 encountered in its path across Logan Co. Moving from the SW, the tornado passed 12 miles E of Sterling, and is probably the largest and most intense Colorado tornado on record. The funnel touched down SW of Sterling, a few miles from the Prewitt Reservior, and maintained a 5 to 1 mile width for its entire track. Damage totaled over \$200,000. No one was killed in this Sunday tornado, for all houses were vacant. Every farm family had driven 60 miles to view the destruction at Julesburg, Sedgwick Co. Julesburg was hit by an F3 intensity tornado, 2 days earlier, which caused nearly \$500,000 in damage, a record for Colorado up to that time.

Jun 21, 1947 NE 2030 20 miles 600 y 2 dead 6 inj. F4 (564) This tornado touched down 4 miles E of Oxford, in Harlan Co., killing 2 people on a famm near the start of its path. Moving to the NNE across Phelps Co., 3 other farms were destroyed, including the Hart Farm, 1 mile W of Loomis, which was completely blown away. (565)

(568)

2100 40 miles 300 y 2 dead 10 inj, F4 JTy 3, 1947 ND/MN This tornado touched down about 5 miles S of Hoople, Walsh Co., then moved to the SE, leveling 6 farms. The first was DAPPL #95 the Roggala farm, 4 miles E of Warsaw. Continuing to the SE. the funnel crossed theRed River into Marshall Co. Minnesota. The last farm was leveled 3 miles E of Oslo. The funnel dissipated in Polk Co., S of Alvarado. This tornado was at least the third member of a tornado family, and all three were killers. The first caused a death in a school at Windy Gates. Manitoba. The second killed 7 migrant workers in a cabin near Autorn, North Dakota. This event killed one person near Warsaw. North Dakota, and 2 near Orlo, Minnesota,

1600 60 miles 400 y 18 dead 226 inj. F4 Dec 31, 1947 LA/AR

Touching down 10 miles N of Shreveport, this tornado moved to the (566) NE and ENE across Bossier, Webster, and Claiborne Parishes before DAPPL #10 dissipating S of El Dorado, Arkansas. Homes were leveled in many small communities, but the worst hit was Cotton Valley, Weoster Parish, where 14 of the deaths occurred and most of the \$1,500,000 damage was done. 2/3 of the buildings in Cotton Valley were damaged or destroyed. 2 people died near Haynesville, where 20 injuries and \$450,000 in damage occurred. Other deaths were at Lake Leton and Dykesville.

0600 30 miles 400 y 4 dead 38 inj. F4 Mar 19, 1948 MO From about 5 miles SW of Belgrade, this tornado moved to the (567) KE, striking the town of Belgrade, where many homes were leveled DAPPL #108 nd 4 people died. Passing from Washington to St. Francois Co., the tornado struck the N part of Bonne Terre where 20 homes were destroyed. Total damage for the event was about \$400,000. F4 intensity was likely only in a small part of Belgrade.

0630 30 miles 400 y 33 dead 449 inj. F4 Mar 19, 1948 IL Touching down first at Alton, Madison Co., the tornado did some major damage, but intensified as it moved to the NE. Five DAPPL #43 miles further, the tornado virtually destroyed the entire village of Fosterburg. The village had a population of 250 and 45 of the homes were destroyed. Several were completely swept away. 9 people were killed and 151 injured at Fosterburg. 10 miles further to the NE, 80 percent of the homes in Bunker Hill, Macoupin Co., were damaged or destroyed. The tornado struck the edge of Gillespie, and dissipated shortly thereafter. 24 people died in Macoupin Co. with 295 people injured, mostly at Bunker Hill. 249 homes were destroyed, and almost 2000 other buildings damaged or destroyed. Total damage was about \$4,000,000.

Mar 25, 1948 OK 2030 45 miles 600 y 10 dead 20 inj. F4 This event and the next event are part of a tornado family that (569) is officially listed as a single tornado. This tornado touched down DAPPL #5 2 miles N of Holdenville, Hughes Co., and moved to the ENE. Soon after touchdown, a farm house was leveled and 2 people killed. Five miles further on, 5 people died in a farm house that collapsed and burned. Scattered damage was reported to farms for the rest of the tornado's path in Hughes Co. In McIntosh Co., several farms were leveled and 4 people died in one of the houses near Lenna. The tornado apparently lifted in the Lenna area, and reformed to the south as the next event. Damage totalled about \$200,000.

2200 70 miles 400 y 3 dead 15 inj. F4 Mar 25, 1948 OK/AR

- This tornado touched down about 6 miles N of Eutaula, where one (570) person was killed in the Cathey community. Passing from DAPPI #5 McIntosh Co. to Haskeli Co., the tornado left no F4 evidence despite striking many farms 5 miles S of Webber Falls. The only clear F4 evidence was 3 miles N of Sallisaw, Sequoyah Co., where several homes were leveled and 2 people were killed in one of them. The funnel continued to the ENE, skipping into Arkansas before dissipating. Damage totalled about \$150,000, of which \$14,000 occurred in Crawford Co., Arkansas.
- 1700 35 miles 800 y 20 dead 200 inj F4 Mar 26, 1948 THE .
- This tornado touched down about 8 miles SE of Brazil, Clay Co. (571) killing one person near that point. Moving to the NE across DAPPL #58 Clay and Putnam Co., several farms were damaged, and the tornado began to widen and intensify. The town of Coatesville lay directly in the path of the intensifying tornado. The funnel was i mile wide as it crossed into Hendricks Co., and engulfed Coatsville. a town of 500 people. 80% of the buildings in the town were damaged or destroyed, as 16 people were killed and 150 injured. Damage in the town totalled over \$2,000,000. Continuing to the NE, the funnel struck homes on the S edge of Hadley, killing 2 people, and struck the W side of Danville, killing one more. The funnel lifted shortly after hitting Danville. Scattered tornado activity from this cell apparently continued across and into Ohio. Total damage for the event was \$3,000,000.
- 1700 40 miles 300 y 4 dead 40 inj, F4 IL/IN Apr 7, 1948 From about 5 miles W of Manteno, Kankakee Co., this tornado (572) moved due E, passing N of that town. 3 people were killed % DAPPL #49 of Grant Park as several homes were leveled. Damage in Illinois totalled over \$500,000. Passing into Lake Co., Indiana the tornado struck farms S of Lowell, and continued to the east. S of Hebron, Porter Co., a farmer was killed. \$300,000 in damage was reported in Indiana.

1525 B miles 100 y 5 dead 25 inj. F4 Apr 23, 1948 IA

A funnel cloud was observed NE of Nashua, Chickasaw Co., and the (573) DAPPL #63 tornado touched down a few miles further to the NE. From 2 miles SW of Ionia, where a farm was leveled, the tornado moved to the NE. cutting a 100 yard wide path through Ionia. Major damage occurred in a 3 block section where 6 homes and 2 churches were destroyed. 5 people died at Ionia, 3 of them in a house that was completely leveled. Damage totalled about \$250,000

1825 25 miles 400 y 2 dead 5 inj. F4 May 1, 1948 KS From a point about 2 miles 5 of Thayer, Neosho Co. the tornado (574) moved to the NE, passing just N of Erie and just S of Kimball DAPPL #73 and Stark. Buildings on 60 farms were damaged or destroyed. 14 farm houses were destroyed, and at least 5 were completely leveled. Damaged totalled \$500,000.

1930 10 miles 300 y 5 dead 150 inj. F4 May 2, 1948 KY This tornado struck a number of small communities in the Alpha (575) and Sumpter areas of Clinton and Wayne Cos. The tornado moved DAPPL #88 to the NE and leveled several homes. The Gregory home was completely swept away, with one body found 1000 feet from the home site. 125 people were injured when the tornado struck a church during evening services.

May 3, 1948 OK 1230 55 miles 600 y 0 dead 3 ini, F4 (576) From about 10 miles SW of Sulphur, this tornado moved to the DAPPL #141 ESE across Murray, Johnston, and Atoka Cos. Ranches and farms were leveled at a few locations along the path, including 3 miles E of Mill Creek in Johnston Co., and at Caney, Atoka Co. Damage was spread evenly along the path, except at Caney where a \$70,000 loss occurred in the town. Total damage was \$290,000.

May 5, 1948 TX 1500 15 miles 800 y 0 dead 0 int. F4 (577) This tornado leveled one home, and swept another home completely DAPPL #159 away along a path in the NE corner of McCullock Co., near the town of Mercury. Property damage was listed at \$50,000.

Jun 7, 1948 IN 1815 7 miles 100 y 1 dead 20 inj. 74 (578) Moving from NW to SE, this tornado passed along the edge DAPPL #62 of Henryville, Clark Co., causing \$100,000 damage. One home, the Mullins home, was leveled. A child was killed.

Jun 21, 1948 KS 1900 12 miles 800 y 0 dead 12 inj. F4

(579) This event is one of two tornadoes in the Wichita, Sedgwick Co. DAPPL #76 area that evening. The other event, in the NE section of town, was of F1 intensity. This tornado began about 7 miles SW of Wichita, and passed along the NW edge of town. Two farm homes were leveled SW of the city, but no F4 damage was noted in Wichita. \$1,000,000 damage occurred to homes and at Westport Field, an airport with small businesses.

Jun 22, 1948 NE 1500 50 miles 400 y 1 dead 5 ini. F4 (580) From near Cook, Johnson Co., the tornado moved to the NE, DAPPL #65 passing 15 miles W of Talmage Otoe Co. The Gadeken farm was leveled in Otoe Co., along with several other homes. Most of the damage was done as the funnel passed along the S edge of Nebraska City. In Iowa, several more farms were destroyed in Fremont and Mills Co. The funnel passed N of Sidney and E of Randolph to near Emerson, where one person was injured. Property damage was \$300,000 in Nebraska and \$200,000 in lowa.

Nov 5. 1948 KY 0545 1 mile 50 y 1 dead 2 inj. F4 (581) Two miles from Cecilia, Hardin Co., the Cofer farm was DAPPL #90 completely swept away, in what was apparently a brief but intense touchdown.

Jan 3, 1949 AR 1515 50 miles 500 y 57 dead 400 inj. F+ (582) This event is part of a tornado family which began in Louislana. DAPPL 16 but this formado is plotted entirely within the borders of Arkansas Touching down about 10 miles E of El Dorado, the funnel skipped to the NE, leveling a few small homes, hundreds of acres of timber The tornado was apparently at full intensity when it swept into Warren, Bradley Co. 120 houses were destroyed, with most of them leveled, and many swept completely away. 222 other homes were damaged, and total losses were \$1,300,000. 55 of the deaths were at Warren and 2 were E of El Dorado.

Mar 25, 1949 (583) NAPPL #224	TX 1225 10 miles 800×0 dead 18 inj. F4 This large, very visible tornado moved due E across Eastland Co., passing along the NW edge of Desdemona. 14 small homes were destroyed, and several were swept completely away.	
	Damage totalled only \$31,000.	

Mar 26, 1949 AR 1600 45 miles 500 y 18 dead 150 inj. F4 (584) From about 12 miles N of Sheridan, Grant Co., this tornado DAPPL #11 skipped to within 10 miles of England, Lonoke Co. From 10 miles west of England to 25 miles N of that town, the tornado was very intense and over 1 mile wide, 100 homes were destroyed in that area, and many were swept away. The funne lifted in Prairie Co., just W of Hazen.

Mar 30, 1949 OK/KS 0030 90 miles 300 y 4 dead 38 inj. F4 (585) From a point in W Blaine Co., this tornado, or family of tornadoes. DAPPL #55 moved to the ENE and NE across Blaine, Major, Garfield, and Kay Co. The tornadi hit the NW edge of Canton, where 3 people were killed. and levelec homes E of Longdale, where I person died. The funnel(s) were rather weak for the remainder of the path, and few injurte, and no deaths occurred. \$37,000 in damage was done at the Enid airport. \$300,000 in damage was done in Blackwell, at 3 AM, with 7 injuries. Total damage for the event was \$1,000,000. Other members of the family touched down NE of Blackwell and in Kansas.

May 6, 1949 NM/TX 1700 5 miles 1200 0 dead 0 int, F4 (586) Moving due E, this tornado leveled 2 homes on the edge of the DAPPL #232 town of Bledsoe, Cochran Co. The tornado apparently originated in Roosevelt Co., New Mexico.

May 6. 1949 TX 1745 10 miles 300 y 2 dead 3 inj - F4 (587)

Moving to the NE, this tornado struck the N edge of the town of DAPPL #233 Sundown, Hockley Co. Damage totalled \$350,000 as 20 nomes were destroyed. The tornado killed a minister and his small child, as the church and parsonage were leveled.

May 15, 1949 TX

1830 20 miles 200 y 6 dead 83 inj. F4 This event was probably the first or second event in a long (588) DAPPL # 277 tornado family. Touching down about 10 miles SW of Amarillo, the tornado skipped to the NE, across the S part of that city. F4 damage and all deaths were confined to one city block where the tornado was particularly intense. Damage totalled \$4,779,000. 45 planes were destroyed at the airport. Outside of town, 15 farm homes were listed as destroyed.

May 15, 1949 TX/OK 2300 60 miles 400 y 1 dead 0 inj F4 (589)

This tornado touched down about 6 miles NE of Dalhart, Dallam Co., DAPPL #169 Texas and moved to the NE, into Sherman Co., Texas and Texas Co., Oklahoma. The funnel struck the N edge of Stratford, leveling one small home and passed along the NW edge of Texahoma, before crossing into Oklahoma. One farm house was leveled 3 miles NW of Goodwell, and one person was killed.

1745 15 miles 200 y 1 dead 8 inj. F4 May 17, 1949 TX Touchdown probably occurred about 10 miles SW of Spur, Dickens Co.

(590) The funnel moved to the NNE , passing 4 miles NW of Spur. 12 DAPPL #238 farms were destroyed along the path, as damage totalled about \$100.000.

2000 23 miles 400 y 1 dend 5 inj. F4 May 20, 1949 KS From 7 miles SW of Gypsum, Saline Co., this tornado moved to the (591) NNE, across Saline and Dickinson Cos. One person was killed DAPPL #70 about 5 miles E of Kipp, as the car they were in was thrown 200 yards. The Schwartz home was leveled, 1 mile NE of Gypsum. Damage totalied only \$50,000 as only a few farms were struck.

2230 35 miles 400 y 1 dead 7 inj. F4 May 20, 1949 OK

From W of Greenfield, this tornado moved to the NE across Blaine (592 . Co., and dissipated near Loyal, Kingfisher Co. The death occurred DAPPL #186 as a farm was leveled near the start of the path. Several other tornadoes occurred in the area, and a second member of this tornado family, near Hennessey, is officially linked to this event. About 25 farms were damaged, but very little F4 evidence was present

1650 30 miles 600 y 5 dead 60 inj. F4 May 21, 1949 M0/1L This tornado is part of a tornado family which originated near (593) Washington, Missouri. As plotted here the tornado touched down DAPPL #39 N of Spanish Lake, St. Louis Co., Missouri and moved to the NE. Many homes were destroyed in the Spanish Lake area, but the tornado widened and intensified further as it crossed the Mississippi River and struck Wood River, Madison Co., Illinois The funnel, now 5 mile wide, damaged about 35% of all homes in the Wood River-Roxanna area. F4 intensity was reached in the oth Street section of Wood River. The funnel weakened as it continued to the NE, and only F1 and F2 damage was noted at Livingston and Worden. \$1,500,000 in Jamage was recorded for the entire event.

1700 B miles 50 y 4 dead 7 inj. F5 May 21, 1949 11/1N From just SW of Palestine, Crawford Co. this narrow, but (594) intense tornado completely swept away a restaurant at the N 0APP1 #40 edge of town. The 4 deaths were the patrons who could not get to the basement in time. One body was retrieved from a distant tree. Cars parked outside were carried several hundred yards. The tornado crossed into Sullivan Co. Indiana and dissipated 5 of Graysville.

1715 30 miles 150 y 14 dead 251 inj. F4 May 21, 1949 IN Officially recorded as a continuation of the above tornado, this (595) event is considered here to be a separate event. This tornado DAPPL #40 is plotted as having formed NE of Graysville, Sullivan Co., as the above event dissipated S of Graysville. The funnel moved to the NE, passing along the W and N side of Shelburn, Sullivan Co. 160 homes were damaged or destroyed there. Homes were leveled at Shelburn, and farm houses were leveled S of Lewis, and S of Bowling Green, Clay Co. A man was killed as a cabin was leveled on the Eel River, W of Clay City. The funnel lifted S of Poland. Damage totalled \$1,000,000.

1855 10 miles 200 y 23 dead 130 inj. F4 May 21, 1949 MO (596) DAPPL #118

(599)

Touching down about 3 miles SW of Cape Girardeau, the tornado moved to the NE, across the NW edge of that town. Gazens of homes were leveled, and 202 were listed as destroyed, with 231 more damaged. The destruction was very great, considering that only the edge of town was struck. Damage totalled \$3,500,000.

1815 10 miles 400 y 0 dead 4 inj. F4 Jun 1, 1949 IA From a point 5 miles ESE of Shenandoah, Fremont Co., this tornado (597) struck the edge of Bingham, and moved to the NE. The latter part DAP PL #50 of the the path was the most intense, as 4 farms were completely leveled, including the Froberg and Falk faims, 4 miles E of Essex. Damage totalled about \$200,000.

1815 12 miles 400 y 0 dead 4 inj F4 Jun 1, 1949 MO

From 21, miles S of Fairfax, Atchinson Co., this tornado passed (598) diagonally across the county to a point W of Eurlington Jct . DAPPL #121 Nodaway Co. Passing about 5 miles SE of Tarkio, several farm houses were completely leveled. A second tornado was reported N of Tarkio.

1715 15 miles 100 y 4 dead 44 inj. F4 Nov 24, 1949 AL

from near Fairview, this tornado passed to the ENE across Blount Co. 3 people were killed when a home was swept away at Easley, and OAPPL #4 1 person was killed at the W edge of Oneonta. The tornado lifted near Tate's Gap. 32 buildings were damaged and the loss totalled \$131.000.

1545 10 miles 400 y 6 dead 30 inj F4 Dec 11, 1949 MO

This tornado touched down 5 miles W of Poplar Bluff and moved to (600)

NE, cutting a path across rural Butler Co. Damage totalled about DAPPL #129 \$100,000 as many small homes were leveled. 4 people were killed in the wreckage of the Sparks family home, 3 miles west of Green Forest corners. Much of the damage was near Hilliard.

Feb 12, 1950 TX/LA/AR 1100 103 miles 400 y 23 dead 100 inj. F4

Touchdown occurred 3 miles SE of Center, Shelby Co. and moved (601)

NE, crossing into Louisiana near Logansport, Desoto Parish. DAPPL #182

Continuing to the NE the tornado passed SE and E of Shreveport, NSSEC #LA-1 passing out of Louisiana and into Arkansas about 7 miles NW of Haynesville. The weak funnel skipped across Columbia Co. and lifted near Mt. Holly. One of many strong tornadoes in this area on this day, people were killed at various points along the path in Lousiana. 3 deaths occurred near Haslam, Texas across the river from Logansport. Saw mills and frame houses were leveled all along the path, with \$250,000 damage at Slack AFB near Shreveport, 6 airmen died and 16 were injured as the AFB depot was destroyed. 8 people died in Desoto Parish, near Grand Cane, 4 people died near Sligo, Bossier Parish, and 2 people died in the Hood's Quarter area on the edge of Shreveport. The path was not continuous.

Apr 28, 1950 TX 1800 5 miles 250 y 5 dead 5 inj. F4 (602) Tornado path was from 1 mile N of Clyde, Cailahan Co. to 5 miles DAPPL #186 ENE of Clyde. Several houses were completely destroyed, with NSSFC #TX-11 3 deaths in the Tabor family N of Clyde and 2 deaths in the Walker family near Baird. Suction vortices were very visible.

Apr 28, 1950 OK 1905 44 miles 200 y 5 dead 32 inj. F4 (603) The tornado touched down 2 miles SW of Holdenville, Hughes Co. DAPPL #147 and moved NE through the town, lifting 1 mile NE of town. NSSFC #0K-6 228 howes were destroyed or damaged. A couple was found in the wreckage 150 yards from their home site. \$500,000 damage along a 6 block wide, 18 block long Oath.

May 4, 1950 KS 2310 30 miles 200 y 0 dead 30 inj F4 (604)
DAPPL #46 Touchdown was SW of Zook, Paunee Co. The tornado passed through Zook and continued NE to a point 5 miles NW of Great NSSFC #KS-3 Bend, Barton Co. Eleven homes were destroyed at Zook. F4 damage to Atwater house. F4 to Buhrer house. 66 of 100 units were rendered unitrable at Barton Courts, a housing project near Great Bend. Rural property damage was greatest in SE Pawnee Co. near Ray. \$250,000 property loss.

Jun 8, 1950 KS 2010 18 miles 700 y 1 dead 5 mj. F4 (605) Touchdown was in the extreme SW corner of McPherson Co. The DAPPL v61 funnel moved ENE. passing 2-3 miles south of McPherson and NSSFC #KS-18 lifted 4 miles ESE of town. \$200,000 damage was done to farm homes, power lines, and other rural property. 2 ur 3 homes were leveled sufficiently to justify the F4 rating, near the end of the path.

Jun 25, 1950 WI 2100 12 miles 500 y 2 dead 50 inj. F4 (606) Funnel touchdown was SM of Rhinelander, in Manson and Oneida DAPPL #197 Lakes region of Lincoln Co. The funnel moved NE, lifting 3 miles NSSFC #WI-4 S of Rhinelander. Downburst damage continued to the NE. 40 homes were destroyed or damaged. In one area, the road surface was peeled off. 2 parked cars were rolled the length of a city block. Many trees were uprooted.

Jly 15, 1950 NE 1730 10 miles 400 y 0 dead 3 inj F4

(607) Touchdown was in the extreme SE corner of Cuming Co. The

DAPPL # 126 NSSFC #NE-5 schoolhouse was destroyed. 100 hogs and 40 cattle were killed. Cars and trucks were carried several hundred feet. \$600,000 property loss.

May 18, 1951 TX 1545 3 miles 200 y 2 dead 100 inj F4 (608) Very intense tornado touched down NW of Olney, Young Co., then moved SE and E through the town. 150 homes were destroyed or Many buildings in the center of town were leveled. A couple was killed in the western part of town. \$1,500,000 damage. Very little debris was left on the house lots. Jun 19, 1951 MN 1830 8 miles 330 y 1 dead 20 inj. F4 (609) Touchdown was in Plymouth Twp., Hennapin Co. The tornado moved to the NE, passing about 6 miles NW of Minneapolis. The funnel moved from the edge of Robbinsdale and skipped through Brooklyn Center Twp. Hachals home was leveled near Robbinsdale. This tornado may have been a continuation of an earlier event in McLeod Co., but the first confirmed funnel sighting was over Medicine Lake. The tornado caused a wide variety of damage to all types of suburban property...automobiles, billboards, chimneys...etc., but only a few houses were leveled and the debris was not scattered a long distance.

Jun 27, 1951 KS 0010 1 mile 175 y 5 dead 100 inj. F4

(610) Among the briefest touchdowns of any confirmed F4 tornado.

DAPPL #126 This tornado was associated with widespread downburst activity

NSSFC #KS-61 in six counties. Tornado touched down in the N part of the town of Wakeeney, Trego Co. 45 homes were listed as destroyed, with 60 others damaged. Damage totalled over \$2,000,000.

Sep 26, 1951 WI 1545 20 miles 100 y 6 dead 3 inj. F4

(611) Touchdown occurred just NW of Waupaca, Waupaca Co. The tornado

DAPPL #280 moved to the NE, passing 3 miles N of town. Passing N of

NSSFC #WI-4 Manawa, the funnel dissipated W of Bear Creek. There was F4 damage to the Rasmussen home, 3 miles N of Waupaca. All 5 members of the family were killed. \$250,000 damage.

Sep 26, 1951 WI 1630 10 miles 100 y 1 dead 10 inj. F4

(612) Touchdown was 3 miles 5 of Cambria, Columbia Co. The funnel

DAPPL #281 moved NNE, passing E of town and continuing to the NE corner

NSSFC #WI-5 of the county. 18 inch diameter trees were pulled out by the roots. One large farm house and farm buildings were leveled, at the Llovd farm, NE of Cambria, 200 chickens were defeathered.

Feb 13, 1952 TN 2230 12 miles 300 y 3 dead 44 inj. F4

(613) Touchdown was SW of Marble Hill and skipped due E to a point

DAPPL #295 near Dechard, Franklin Co. The tornado path was clearly

NSSFC #TN-5 not continuous. F4 damage was to the Snell home, W of Dechard. Total damage was over \$100,000. Several tornadoes were reported from Lincoln to Grundy counties, and the skipping nature makes accurate analysis impossible at this late date.

Feb 29, 1952 TN 1630 4 miles 300 y 2 dead 150 inj. F4 (614) The tornado touched down SW of Fayetteville, Lincoln Co. It was one of several, and easily the most intense. The tornado moved through the center of town, after striking the "Young addition" on the SW edge of town. 244 buildings were listed as destroyed, and 360 others damaged...nearly 1/3 of the buildings in the town. Several homes were leveled and the McGowan home, NE of town, was almost totally swept away. \$3,000,000 damage.

1440 13 miles 800 y 7 dead 9 inj. F4 Mar 21, 1952 AR The tornado touched down about 7 miles SW of Dierks, Howard Co., (615) near the Saline River. Moving to the NE, the tornado missed the DAPPL #17 NSSEC #AR-5 town itself, but leveled many homes SW of town. One family was killed, and 22 homes were listed as destroyed. \$150,000 damage. Trees were debarked and the "inside of the funnel appeared on fire

1650 22 miles 800 y 50 dead 325 inj. F4 Mar 21, 1952 AR Probably spawned from the same cell as the Dierks event, this (616) tornado touched down 2 miles SSW of Searcy, White County. The DAPPL #20 NSSEC #AR-10 funnel passed east of Searcy, but struck the town of Kensett on the NW side. The funnel moved through the town of Judsonia, where about 1000 homes were damaged or destroyed. The tornado continued to the NE, striking Bald Knob and lifting 5 miles NE of Baid Knob. 500 lb. concrete block "thrown" 80 yards.

1700 65 miles 600 y 11 dead 56 inj. F4 Mar 21, 1952 AR This event links 4 NSSFC and 4 DAPPL events into a single path (617) The DAPPL events are #23,24,25,26, of which 2 are listed as F4. DAPPL #24 The NSSFC events are # AR-8,11,13,16, of which 2 are listed as F4. and #26 Touchdown was near Wattensaw, Lonoke Co., and the funnel moved NSSEC #AR-8 NE to Hickory Plains, Prairie Co., and Georgetown, Woodruff Co. and #AR-16 Damage in this section totalled about \$500,000 as brick veneer homes were leveled, along with many homes of less study construction. The tornado continued to Hickory Ridge in the NW corner of Cross Co. where over 100 homes were damaged or destroyed The funnel lifted 10 miles NE of Hickory Ridge.

1700 90 miles 800 y 40 dead 274 inj. F4 Mar 21, 1952 AR This analysis links 4 NSSFC and 6 DAPPL events into a single (618) path. The DAPPL events are #30,31,32,33,286,287, of which DAPPL #31 one is listed as F4. The NSSFC events are #AR-9,12,14,18, of NSSFC #14 which one is listed as F4. Touchdown was a few miles SW of England, Lonoke Co. with 9 deaths on the edge of the town of England. The tornado moved NE, parallel to and at the same time as the previous tornado. Damage in this area was \$300,000. with that total including damage at Carlisle. One death occurred NW of Hazen. Prairie Co. 27 deaths and 3/4 million dollars in damage occurred as the tornado passed through Cotton Plant, with the worst damage on the N side of town. The tornado skipped across Cross Co. and struck Marked Tree, Poinsett Co. with ', million doilars in damage.

1755 15 miles 200 y 4 dead 20 inj. F4 Mar 21, 1952 TN One of three major events near Dyersburg within 3 hours, this (619) tornado touched down W of Bonicord. Dyer Co. and moved NE to DAPPL #231 NSSEC #TN-11 just E of RoEllen and lifted SW of Yorkville, Gibson Co. The tornado passing closest to Dyersburg did considerable damage at the airport, but was rated at F3.

Mar 21, 1952 MD/TN 2000 30 miles 1000 y 27 dead 150 inj. F4 Possibly the same event that killed one person near Blytheville. (620) Arkansas, this tornado is plotted as having touched down SW of DAPPL #143 Cooter, Pemiscot Co., and moving NE. The funnel crossed the and #233 Mississippi River 7 miles S of Caruthersville, Missouri, and NSSEC #MO-4 #TN-13 struck S of Owl Hoot, Dyer Co., TN. The tornado continued NE to 3 miles NW of Miston and lifted SE of Ridgely, Lake Co. 17 of the deaths were in Missouri and 10 in Tennessee. 200 homes were damaged or destroyed in Missouri, with nearly \$1,400,000

2145 30 miles 400 y 17 dead 66 inj. F4 Mar 21, 1952 MS/TN Touchdown was about 4 miles SW of Byhalia, Marshall Co., (621) Mississippi. The tornado moved to the NE, causing 9 deaths DAPPL #136 and \$300,000 damage as it passed along the edge of Byhalia and Casey. 22 homes were listed as destroyed in Marshall Co. NSSEC #MS-5

in damage.

and #TN-18 Further to the NE, the tornado passed SW, 1 mile W, and NNE of Moscow, Fayette Co., Tennessee. 8 deaths occurred as 16 homes were destroyed with a total of \$100,000 in property damage.

2300 65 miles 1200 y 38 dead 157 inj. 74 Mar 21, 1952 TN

The funnel touched down about 5 miles SW of Bolfver, Hardeman (622) Co., and moved to the NE. Passing several miles M of Bolivar.

DAPPL #239 NSSEC #TN-19 and 1 mile N of town, the tornado caused 4 deaths and \$225,000 in damage as 14 homes were destroyed. In Chester Co., 23 people were killed as the tornado leveled a large part of the town of Henderson, with \$2,500,000 in damage. There was near F5 damage N side of Henderson. Continuing into Henderson Co., the tornado caused 11 additional deaths at Chesterfield and other communities, with another \$500,000 damage. The funnel finally dissipated near Bible Hill in Decatur Co.

1500 25 miles 100 y 4 dead 50 inj. F4 Mar 22, 1952 AL (623)

The tornado touched down N of Hartselle, Morgan Co., and moved to the NE and dissipated in the southern part of the Redstone

DAPPL #7

Arsenal. Major damage was in the Plainview community on the NSSEC #AL-7 East Hartselle Pike. 35 homes were listed as destroyed. Several were leveled, but were of questionable construction. Total damage was \$50,000.

Apr 21, 1952 TX 1215 10 miles 200 y 0 dead 0 inj. F4

The tornado touched down about 8 miles NW of McGregor, (624)

McLennan Co., and moved to the SE, passing west of town. DAPPL #250

Houses on the Herring farm, McCutcheon farm and Norland farm NSSEC #TX-7 were leveled. A pickup truck was hurled over 200 feet.

- O dead 13 inj. F4 1710 22 miles 440 May 22, 1952 KS
- Touchdown occurred in the NE part of Lawrence, Douglas Co. (625)

The tornado moved ENE across S Leavenworth Co. and into DAPPL #280 Wyandotte Co., ending 15 miles east of Wilder. F4 rating is NSSEC #KS-8 based on the leveling of a bank president's home. 12 houses were listed as destroyed, 14 damaged, with much livestock killed and 11 miles of power lines down. Funnel moved ENE at about 70 mph.

Jun 23, 1952 (626) DAPPL #80 NSSFC #IA-4	IA 1830 20 miles 400 y 0 dead 4 inj. F4 Touchdown was probably about 10 miles SE of Remsen, Plymouth Co. The tormado passed along the SW edge of Cleghorn, and continued 2 miles SE of Larabee, lifting NE of Larabee in the NE corner of Cherokea Co.
	of Cherokee Co. Two farm were leveled with debris scattered for miles. 32 other farms were heavily damaged, and 19 more received some damage. Property damage totalled \$800,000 and crop damage added another \$200,000.

Jly 1, 1952 ND 1800 35 miles 300 y 1 dead 26 inj, F4 (627) Touchdown was 12 miles SW of Wing, Burleigh Co. The funnel DAPPL #174 moved to the NE, passing 5 miles 5 of Arena, and weakened

before hitting the town of Tuttle, Kidder Co. The funnel lifted NSSEC IND-6 in the N part of Kidder Co. F4 damage occurred to 3-4 homes One death occurred as the Olsen farm home was leveled. 8 homes were listed as destroyed, 200 others damaged, with 600 other buildings damaged or destroyed. \$400,000 damage. A man was killed as he sought to first shelter in the basement.

Aug 13, 1952 NE 1800 20 miles 220 y 0 dead 20 inj. F4 Touchdown was 5 miles SW of Wahoo, Saunders Co. The tornado (628) moved E and ENE passing a few miles S of Yutan before lifting. DAPPL #159 NSSEC INE-8 Damage to farms from the tornado totalled \$100,000 with clear F4 damage to the Velinsky and Witte farms S and SW of Yutan. Hail caused an additional \$300,000 damage

1400 18 miles 500 y 17 dead 25 inj. F4 Mar 13, 1953 TX Touchdown was 8 miles NW of Rule, Haskell Co. The tornado moved (629) DAPPI # 396 to the NE, killing 5 people at Judd, 3 west of Rochester, 5 as NSSEC #T1-4 the funnel struck O'Brien, and 4 as it passed east of Knox City, Knox Co. 33 homes were destroyed, and property damage was about \$600.000.

Apr 28, 1953	TX 20	05 25 miles	300 y 3	dead	20 inj	F4
(630)	This complex	series of to	rnadoes pass	ed along	the N ed	ge of
04201 #308		From N of He				

Antonio, from N of Helotes, due E to N of the airport. NSSEC #TX-6 This may have been two distinct events, with 2 deaths 6 miles N of Helotes and 1 death 3 miles N of the airport. Total damage was \$175,000. House construction was questionable.

Apr 30, 1953 GA 1712 10 miles 300y 18 dead 300 inj. F4 The massive tornado passed along the N edge of the town of (631) Warner-Robbins and the S edge of the Air Force Base, Houston Co. DAPPL #30 The funnel moved in an ENE direction, leveling homes and barracks NSSEC #GA-8 housing to the ground. Some of the possibly less sturdy barracks were completely swept away. 65 homes and 275 apartment units were listed as destroyed. Pieces of some barracks housing were found miles away. Damage totalled \$15,000.000

May 1, 1953 (632) DAPPL #18 NSSFC #AL-16	AL 1930 20 miles 440 y 7 dead 12 inj. F4 Touchdown occurred in the hills of SW Clay Co. where 2 people were killed in the destruction of a small house. The path was ENE. 2 miles N of Millerville, 2% miles S of Ashland, and 2% miles S of Lineville. 5 deaths occurred in the Ashland area. Total damage was about \$200,000. Many houses and a gas station were leveled, but house construction was questionable. 19 homes destroyed.
May 1, 1953 (633) DAPPL #20 NSSFC #AL-18	AL 2000 10 miles 200 y 2 deart 3 inj. F4 From just S of Riderwood, Choctaw Co., the tornado moved NE passing 2 miles S of Lisman, and causing 2 deaths. A nouse was scattered over 5 mile, and an iron cookstove was carried 5 mile. House contruction was not good.
May 2, 1953 (634)	TN 0400 3 miles 575 3 dead 8 inj. F4 The tornado moved NNE, along the valley just east of Decatur.

DAPPL #391 Meigs Co. 3 deaths occurred in the Carl Harmon home, which NSSFC #TN-14 was described as a well-built 2 story house that was scattered for 5 mile along the valley. Most of the damage was in the Pleasant Hill community, and totalled about \$168,000. One additional death occurred in the crash of a small plane in the storm.

- May 10, 1953 IA 1515 8 miles 200 y 0 dead 0 inj. F4
- One farm house was leveled as the tornado passed through Union (635)

DAPPL #99 Twp. Wayne Co., N of Old New York. The funnel moved to the NE NSSEC #IA-6

from about 7 miles NW ofCorydon, to NW and N of Millerton. House debris was not scattered very far, so F4 rating is rather marginal. \$20,000 damage.

- May 10, 1953 IA 1610 28 miles 800 y 0 dead 3 in1, F4
- (636) From about 6 miles SW of Ventura (TD in Hancock Co.), the

DAPPL #100 tornado passed 15 miles W of Ventura, Cerro Gordo Co., with NSSEC #1A-7 several farm houses totally leveled in this area. Moving to the NE, the funnel passed 34 miles NW and 5 miles N of Ventura and dissipated 8 miles west of Northwood, after hitting farms 35 miles NW of Hanlontown. Worth Co. 28 farm houses were damaged and nearly 200 farm buildings were damaged or destroyed. Damage totalled about \$1,000,000.

- May 10, 1953 IA/MN/WI 1730 110 miles 400 y 2 dead 29 inj. F4
- (637) This tornado, or family of tornadoes, touched down DAPPL #200
 - 3 miles SW of Chester, Howard Co., Iowa and crossed into
- Minnesota about 2 miles W of Chester. 11 farms were damaged NSSFC #1A-9
 - in Iowa. The tornado skipped to near Wykoff, Fillmore Co. and MN 4

WI-2 intensified to minimal F4 intensity. A farmer was killed in a barn near Wykoff, and a schoolhouse was leveled 3 miles 5 of Chatsfield. Cars were thrown from the road near St. Charles, and one passenger killed. The funnel skipped across Winona Co. and crossed into S Buffalo Co., Wisconsin. About \$1,000,000 in damage was done to property and livestock in Wisconsin, as the the funnel destroyed barns and damaged farm houses across N Central Trempealeau Co. and extreme SE Eau Claire Co. Damage for the entire event was \$1,500,000.

1415 10 miles 800 y 13 dead 159 inj. F4 May 11, 1953 TX This intense tornado moved due E, passing through the Lakeview (638) district, 4 miles N of San Angelo, Tom Green Co. 320 homes DAPPL #400 were listed as destroyed, with at least a dozen completely NSSEC #TX-8 leveled and almost totally swept away. 200 other homes were damaged. \$3,239,000 in property damage.

1610 23 miles 660 y 114 dead 597 inj. F5 May 11, 1953 TX This massive tornado formed 3 miles NNW of Lorena, McLennan Co., (639) and moved NE through downtown Waco, and passing to a point DAPPI #401 5 miles E of Axtell. Many homes were swept away, but the focus NSSEC #TX-9 of attention was on the collapse of multi-story brick buildings in the heart of town, including a 6-story furniture company. 150 homes were destroyed and 900 damaged, but most publicized damage was to the hundreds of tuildings destroyed or damaged in the downtown area. Bricks filled streets to a depth of up to 5 feet, and damage totalled over \$40,000,000. Several days were needed to removed the bodies from cars and buildings buried under the tons of rubble.

1621 15 miles 1000 y 6 dead 118 inj. F4 May 21, 1953 MI This tornado touched down at Smith's Creek, St. Clair Co. and (640) moved to the NE for 8 miles. The funnel turned to the E and hit DAPPL #180 the south edge of Port Huron, with 2 deaths. Crossing into Canada, NSSFC #MI-2 the tornado intensified, causing great destruction of homes at Sarnia. The tornado then moved to the ENE, hitting near Nairn and then moved NE, lifting S of Stratford. 4 deaths occurred in Canada, with \$15,000,000 damage. 390 homes were damaged or destroyed in the U.S., with damage totalling \$2,500,000.

2000 20 miles 600 y 2 dead 20 inj. F4 May 29, 1953 ND From SW of Fort Rice, Morton Co., the tornado moved to the ENE (641) and damaged nearly every building in the town. The Catholic DAPPL #290 church was leveled, with pews jammed 4 feet into the ground. NSSEC #ND-2 Crossing into Emmons Co., the tornado leveled a farmhouse, with house and car debris scattered for ', mile.

1515 10 miles 550 y 11 dead 5 101. F4 Jun 7, 1953 NE The tornado touched down in the NW corner of Sherman Co., and (642) moved to the NE passing 5 miles 5 and E of Arcadia, Valley Co. DAPPL #258 NSSFC #NE-19 F4 damage was done to 3 homes. One death occurred in the Hays Creek area and 10 deaths in one home at the Madsen family

reunion. Damage totalled \$150,000. 1715 6 miles 300 y 4 dead 18 inj. F4 Jun 8, 1953 MI This tornado touched down near Temperance, Monroe Co. and (643) moved due E along E Temperance Road to Telegraph. Lifting over DAPPL #183

Erie, the funnel touched down again along Substation Road and NSSFC #MI-5 moved out over take Erie as a waterspout for another 44 minutes. Cars and trucks were hurled off the road as the funnel passed over U.S. Rt-24. The last waterspout position noted was about 10 miles SW of Kingsville, Ontario. Damage totalled about \$500,000, as 15 houses were destroyed and 14 damaged. A 6 ton truck was thrown 80 feet and three cars were seen in the air at one time.

1800 60 miles 440 y 8 dead 30 inj. F4 Jun 8, 1953 OH

(644)

From near Deshler, in extreme SE Henry Co., the tornado

moved due E, leveling several homes across S Wood Co. DAPPL #300

5 deaths occurred in one home at Cygnet. The funnel continued NSSEC #OH-2 moving to the E, along the N part of Senaca Cu., lifting 5 miles SE of Bellevue ... in the NW part of Huron Co. The Elyria-Cleveland event was a distinctly different tornado. and not violent.

Jun 8, 1953 MI 2030 20 miles 800 y 116 dead 844 inj. F4 From a point 2 miles N of Flushing, Genesee Co., this intense (645) DAPPL #188 tornado moved due E, passing down Coldwater Road, along the N NSSFC #MI-10 edge of Flint. The incredible destruction wiped out many entire families, as 200 homes were destroyed on that single road. Moving slightly to the ENE, the funnel lifted near Columbiaville,

Lapeer Co., and reformed slightly to the south. Property damage was estimated at about \$19,000,000.

Jun 8, 1953 MI 2130 40 miles 1000 y 1 dead 50 inj. F4 From 4 miles SE of Columbiaville, Lapeer Co., this tornado (646) snaked its way across central Lapeer Co. and extreme N DAPPL #461

NSSFC #MI-12 St. Clair Co., passing N of Yale and then S of Jeddo and N of Lakeport to Lake Huron. Damage in both counties totailed over \$1,000,000 as many homes were leveled

- 1525 46 miles 1600 y 90 dead 1288 inj. F4 Jun 9, 1953 MA
- (647) Touching down further east than any other knows F4 tornado.
- DAPPL #177 the funnel struck the town of Petersham and moved to the SE
- NSSEC #MA-1 through Barre, Rutland (2 dead), Holden (10 dead, \$5,000,000 damage), the N part of Worcester (62 dead, \$32,100,000). Shrewsbury (6 dead, \$8,000,000), Westborough (5 dead, \$5,000,000) and Southborough (5 dead, \$547,000). The path turned to the E in Shrewsbury, and the funnel lifted at 1645 EST. Large amounts of debris were carried eastward and dropped in the Boston area and out in the Atlantic Ocean. The destruction was enormous, but no clear F5 evidence could be found. Many of the houses that were nearly leveled were two and three story tenament buildings, 4,000 buildings were either damaged or destroyed, hundreds of automobiles tossed about and thousands of trees splintered. The tornado was on the ground 38 of the 46 miles.

Jun 27, 1953 1A 1545 10 miles 200 y 1 dead 2 inj F5 (648)

This tornado touched down about 5 miles SW of Adair, in

extreme NE Cass Co. Moving to the ENE, the funnel passed DAPPL #113

NSSEC #1A-20 4 miles S of Adair, Adair Co. One of a family of tornadoes, this event caused \$100,000 damage The McMurphy farm virtually vanished, with barely a scrap of the house, barns, and shelterbelt of trees remaining. Heavy machinery was thrown hundreds of feet and 2 x 4 's were driven into trees. 3 other farm houses were destroyed.

Dec 3, 1953 LA 0100 45 miles 300 y 7 dead 50 in1. F4 Touchdown was 4 miles NW of Fullerton, Vernon Parish. (649) The funnel moved to the NE, causing 7 deaths in the Leander-DAPPL #168 NSSEC #LA-16 Lecamp area of E Vernon Parish. Continuing to the NE, the tornado destroyed several homes 8 miles W and N of Alexandria. The tornado lifted in SE Grant Parish, and the cell spawned another tornado to the NW, which was not violent, but killed two people. Total damage was about \$500,000.

Dec 5, 1953 MS 1735 7 miles 500 y 38 dead 270 inj F4 (650) Probably forming near the LA/MS border, the tornado touched down on the SW edge of Vicksburg, Warren Co., and moved across DAPPL #226 NSSFC #MS-21 the south-central part of the city. The tornado destroyed 7 blocks of the business district and lifted temporarily. The residential areas on the NE and E side of town were then destroyed. 575 homes were damaged or destroyed, along with 300 businesses. The event was described as the worst disaster to hit the city since the Civil War. Damage totalled \$25,000,000.

Mar 25, 1954 MO 0055 12 miles 100 y 2 dead 0 inj. F4 (651) Touchdown occurred 15 miles NW of Bendavis, near the western edge DAPPL #295 of Texas Co. Moving NNE, the tornado struck a farm mouse, blowing NSSFC #MO-11 it to bits and scattering the debris. The occupants were blown 150' to their death. The funnel lifted near Success. A pickup truck was thrown a considerable distance.

Apr 5, 1954 MO/IA 1730 25 miles 900 y 0 dead 0 inj. F4 The tornado skipped from near Elmo, Nodaway Co., Missouri to (652) DAPPL #135 S of Braddyville, Page Co., Iowa and then intensified. F4 NSSFC #MO-17 damage was done to many farms, especially the Gibson and Beal IA-1 farms, as the funnel moved 2 miles west and north of Siam, Taylor 5 miles N of Bedford. This was one of at least 4 major tornadoes in these two counties this day. Total damage for the 4 events was

\$318,000.

IA 1900 30 miles 200 y 0 dead 0 inj. F4 This was the second event in a 5 member tornado family that Apr 30, 1954 IA (653) extended from Missouri to Wisconsin. Touchdown was in Linn Co., DAPPL #146 NSSFC #IA-10 10 miles N of Cedar Rapids. The funnel moved to the NNE. The the most intense level of damage was to the Bahr home near the start of the path and to farms 6 miles SE of Ryan, Delaware Co. The funnel lifted 1 mile east of Delaware. Damage for the 5 tornadoes was listed at \$1.240,000.

1415 55 miles 440 y 0 dead 5 inj. F4 May 1, 1954 TX/OK (654) Originating several miles east of Crowell, Foard Co., Texas the DAPPL #504 tornado moved to the NE passing 4 miles W and NW of Vernon, NSSFC #TX-28 Wilbarger Co. The funnel crossed into Oklahoma SW of Frederick #OK-21 and continued to the NE, passing just west of Manitou, Tillman Co. and dissipated south of Snyder, in extreme S Kiowa Co. Damage in Texas totalled \$100,000 with F4 level damage to homes in the Vernon area. Damage was over \$400,000 in Oklahoma but not at the F4 level. 1953 Mercury sedan blown and rolled 3/4 mile.

May 1, 1954 OK 1800 35 miles 1000 y 0 dead 65 inj. F4

(655) From 5 miles ENE of Dale, Pottawatomie Co, the funnel mover NNE

hitting the E part of Meeker, Lincoln Co., the S part of Sports, 0APP1 #401

- NSSFC #OK-29 passing 2 miles SE of Davenport and 2 miles NW of Stroug. The funnel lifted in western Creek Co. Many homes were totally levered. A large bus was thrown 30% and overturned, east of Meeker, with no deaths among the passagers. Damage totalled \$800,000 as 32 houses were listed as destroyed and 31 damaged.
- May 30, 1954 NE 2000 38 miles 400 y 6 dead 23 inj. F4

(656) From the NW corner of Platte Co., the tornado moved to the NE. DAPPL #323

- passing 5 miles west of St. Bernard, Madison Co. Greatest NSSEC MNE-3
 - intensity, all deaths, and most of the injuries took place in Stanton Co., 10 miles SE of Norfolk. Three farm houses were leveled, with the foundations broken. Bodies of victims were widely scattered and one found in a tree. The funnel lifted several miles E of Hoskins, Wayne Co. \$450,000 total damage.

Jun 9, 1954	IA	2200 12	miles	400 v	1 dead	0 inj.	F4
(657)	The funne				of Lake City		

The funnel touched down 1 mile SE of Lake City, Calhoun Co. 01001 #153

Moving to the NE, the tornado leveled the Nickolson farm complex NSSEC #TA-16 to the ground, killing the owner. The tornado lifted 35 miles SE of Rockwell City. \$200,000 total damage was done to the 6 farms that were struck.

- Apr 24, 1955 A 0545 12 miles 200 y 5 dead 20 inj. F4
- (658) This tornado originated 4 miles WWW of Piney Grove, Lawrence Co.
- DAPPL #3 From there, the tornado moved to the ENE, lifting NE of Falkville
- At the northern edge of Falkville, Morgan Co., the Smith home NSSEC #AL-3 was completely swept away, and both adults in the house killed. Damage totalled \$100,000, as over 20 houses were destroyed.
- May 25, 1955 TX/OK 1517 45 miles 1000 y 2 dead 13 inj. F4
- (659) Touchdown occurred 10 miles N of Vellington, Collingsworth Cc., UMPPL #521
 - just west of Lutie. The tornado moved NNE, crossing into
- NSSEC #1X-58 Oklahoma at highway 152, E of Wheeler, Wheeler Co. Much OK-27 livestock was killed in TX, with 5 farm homes destroyed (F3+ level) and 5 injuries. Many farm homes were leveled to the ground in Oklahoma, as the funnel passed across Roger Mills Co. to a point about 5 miles W of Cheyenne. Two deaths occurred in a leveled house 12 miles SW of Cheyenne. One car was carried 700 feet. Damage in both states totalled about \$500,000.
- May 25, 1955 OK/KS (660)
 - 2126 23 miles 500 y 20 dead 280 inj. F4 From a point about 2 miles NE of Tonkawa, Kay Co., the tornado
- DAPPL #373 moved N and NNW through the heart of the city of Blackwell.
- NSSFC #OK-33 Many homes were leveled, with 400 homes listed as destroyed. #KS-12 and 500 others as damaged, 60 businesses were also damaged or destroyed as the funnel cut an 8 block long, 2', block wide path through town. Damage was \$150,000 in the Tonkawa area and \$8,000,000 in Blackwell. The funnel dissipated just over the KS border as the Ildall tornado was forming. The Blackwell tornado was accompanied by remarkable electrical activity, with up to 25 discharges per second recorded on sferics equipment. The funnel was said to glow and have associated "arcs" of glowing light Remarkable electrical activity is not uncommon with violent tornado events.

May 25, 1955 OK/KS 2215 30 miles 800 y 80 dead 270 inj. F5
 (661) The funnel touched down in Kay Co., Oklahoma near the KS/OK
 DAPPL #139 border, due S of Ashton, Summer Co. Moving NNE, the tornado
 NSSFC #OK-34 passed along the west edge of Geuda Springs. 5 children were #KS-13 killed NE of Oxford, as the tornado entered Cowley Co. Over 5 of the population of Udall were killed or injured as the tornado completely leveled a large portion of town. 75 people were killed and most of the 270 injuries were serious. Damage in the small town was listed at \$2,225,000. Damage to the cast

in the small town was listed at \$2,225,000. Damage to the cast that is often attributed to this tornado may have been downburst damage only.

Jun 4, 1955 KS 1630 22 miles 400 y 0 dead 0 inj. F4 (662) From 4 miles SN of Garfield, the tornado moved to the NE DAPPL #'58 travelling parallel to U.S. Rt-56. F4 damage was done to NSSFC #KS 46 several farm houses NE of Larned, shortly before the funnel lifted in the SW corner of Barton Co. This was a member of a family of tornadoes which began in Ford Co. F4 damage in the Garfield area of Pawnee Co., was to the Brown and Mostrom farms.

Jun 4, 1955 KS 1630 15 miles 800 y 0 dead 4 inj. F4 (663) From a point 2 miles N of Downs, Osborne Co., the tornado DAPPL #170 moved almost due N through the Dispatch community of SE NSSFC #KS-48 Smith Co., destroying or damaging 10 farm houses. F4+ damage was done to the Mansholt farm in this area. This the first member of a tornado family which extended into Nebraska.

1650 11 miles 400 y 2 dead 20 inj. F4 Jun 27, 1955 NE This tornado was originally considered to be a 30 mile long (664) event, touching down S of Mitchell, Scotts Bluff Co. Detailed DAPPL #291 NSSEC +NE-13 site survey efforts now indicate this event to be a complex of 13 individual tornadoes. As plotted, this tornado, the 11th of the 13, touched down about midway between Mitchell and Scotts Blut? The funnel moved in a winding path to the SE, passing N of the latter city, and S of the airport 28 homes were destroyed, several leveled to the ground, but good advance warnings kept the death toll low. Damage totalled \$450,000. The spiral ground markings left by this tornado were the first of that kind to be used in an effort to estimate tornadic wind speeds.

Jly 2, 1955 ND 1800 12 miles 150 y 2 dead 19 inj. F4 (665) The tornado cut a zig-zag path, moving due E, passing 3 miles

DAPPL #326 S of Walcott, Richland Co. Damaged totalled \$150,000 as many

NSSFC #ND-6 farm buildings were leveled, including F4 damage to the Nelson and Bakko homes. Many farm animals were carried hundreds of yards, and one man was pulled through the window of his home. Trees were debarked.

Uly 5, 1955 ND 1715 25 miles 100 y 0 dead 0 inj. F4 (666) From a point about 8 miles 5 of Powers Lake, Mountrail Co., UAPPL #327 NSSFC #ND-7 in the NW corner of Ward Co. 5 miles NE of Lostwood, the Haugen farm was leveled. house, garage and barn. with hogs and poultry killed The same site was struck by a tornado on July 2, 1935. J1y 7, 1955 MN (667) The DAPPL #233 and NSSFC #MN-9 Tree

The tornado touched down 1 mile south of Arco, Lincoln Co., and moved NE to a point 11 miles west of Marshall, Lyon Co. 9 Trees were debarked and buildings destroyed on four farms. A thirteen year old boy was killed on one of them. Damage totalled \$1,000,600. F4 level damage was near the end of the path.

1600 10 miles 200 y 1 dead 13 inj. F4

0025 30 miles 300 y 6 dead 20 inj. F4 Feb 25, 1956 MO/IL Listed a single event by both data sets, this tornado is (668) (669) clearly a family of 3 or 4 relatively short path tornadoes. DAPPL #70 two of which exhibited great intensity. From Missouri, the NSSEC #IL-1 tornado family moved E through lmbs, Summerfield, Trenton, Aviston and Breese. The Imbs and Summerfield tornadoes were the most intense...both leveling several prick homes and each A 15 mile path is plotted for each event causing 3 deaths. The Imbs tornado damaged or destroyed 30 homes in the Imbs-Dupo area of St. Clair Co. The Summerfield tornado caused some damage to nearly every house in the town, with the F4 damage and deaths occurring in the SW section of town.

- Mar 6, 1956 IN 2050 3's miles 45 y 1 dead 31 ing. F4
- (670) This rather short and narrow path moved across the S side of
- DAPPL #110 the town of Marion, Grant Co. Some level of damage was reported

NSSFC #IN-13 from over 400 homes, with F1 and F2 damage to the great majority of them. F4 indications were near the end of the path, NE of town.

- Apr 2, 1956 OK/KS 2130 65 miles 880 y 2 dead 29 inj. F4
- (671) Touchdown occurred 6 miles SE of Newkirk, Kay Co., and the
- DAPPL #391 tornado moved to the NE. The town of Hardy was hit, just before
- NSSFC #0K-9 KS-7 the funnel moved into Kansas. F4 damage was done to the Cline home in Oklahoma with many trees bebarked in the area. One U.S. Government bond, originating in a destroyed Oklahoma home was found near Williamsburg, Kansas over 100 miles away. In Kansas, the funnel passed S of Maple City, Cowley Co., 3 miles E of Grenola, Elk Co., and 5 miles NW of Howard, lifting shortly thereafter. 2 deaths occurred 24 miles E of Winfield. Clear F4 damage to the Mann house occurred 4 miles S of Grenola. All but 2 of the injuries occurred in Kansas. Some analyses indicate this tornado as continuous to Coffee Co. but this is doubtful.
- Apr 3, 1956 OK/KS/MO 0010 40 miles 800 y 0 dead 54 inj. F4
- (672) The tornado first struck ground near Narcissa, Ottawa Co., and
- DAPPL #396 moved to the NE striking the towns of Miami and Quapaw. F4
- NSSEC #OK-13 damage in this area was to the Blevens home which was blown
 - KS-9 apart and scattered for 500 feet. 46 injuries occurred in Miami MO-12 as 56 homes were listed as damaged or destroyed. 5 homes were listed as destroyed in Quapaw. Total damage in Oklahoma was about \$500,000. The funnel passed over the extreme SE corner of Cherokee Co. Kansas hitting the 5 and E edges of Baxter Springs. with F1 to F3 damage to 27 homes and causing 6 injuries. In Missouri the tornado entered the state W of Joplin and passed W
 - of Webb City, Jasper Co., finally lifting in the N central part of the county. 30 homes were damaged with 2 injuries.

Apr 3, 1956 WI 1330 12 miles 400 y 7 dead 50 inj. F4 (673) From SW of town, the tornado moved NE through the SE section DAPPL #548 of Berlin, Green Lake Co. and into the E part of Winnebago Co. NSSEC #WI-3 Berlin 20 homes were destroyed, several at the F4 level of intensity. The Sands Knitting Mill was destroyed, with materials from the plant found 35 miles to the north. A box of deer hides was found 60 miles to the northeast, and a package of papers 75 miles to the north-northeast.

Apr 3, 1956 TN 1645 12 miles 100 y 3 dead 60 ing F4 (674)

Moving to the NE, this tornado passed through the outskirts DAPPI #460

of Lexington, Henderson Co. 50 homes were listed as destroyed,

NSSEC #TN-6 with several of them leveled. Bodies were thrown up to 100 yards. but contruction of the homes was probably weak. 275 homes and businesses were damaged.

Apr 3, 1956 MI 1830 65 miles 400 y 18 dead 340 inj. F5 (675) From near Saugatuck, Allegan Co., the tornado moved to the NE. DAPP1 #244 After passing near Holland and Zeeland, the tornado intensified NSSEC MI-2 and leveled a large portion of Hudsonville, Ottawa Co. causing 14 deaths and 200 injuries. Passing into Kent Co., the tornado struck the suburban business community of Standale, causing 4 deaths and completely sweeping away homes, as it did at Hudsonville. Most businesses had closed, thus avoiding a potentially enormous death toll. Total damage for the tornado was over \$10,000,000. The funnel finally lifted in SW Montcalm Co., near Trufant. 332 homes were listed as badly damaged or descroyed.

Apr 3, 1956 MI 1922 52 miles 400 y 2 dead 24 inj. F4 (676) The tornado touched down a short distance N of Portage Lake, DAPPL #245 Manistee Co., and moved to the NE across Benzie Co. One person NSSEC MI-3 was killed near Thompsonville when the house collapsed. The F4 damage occurred at Cedar Run, N of Traverse City, when a post office and store was completely leveled. The funnel then moved out over Grand Traverse Bay. 13 houses were listed as destroyed. The construction of the post office and store is somewhat in doubt. 15,000 fruit trees were damaged or uprooted

Apr 15, 1956 AL 1500 20 miles 300 y 25 dead 200 inj. F4 (E77) This tornado passed along the NW edge of the city of Birmingham, DAPPL #2 Jefferson Co. Touchdown was in the Pleasant Grove and McDonald's NSSFC #AL-2 Chapel area. The deaths and F4 damage were in McDonald's Chapel. but houses in the area were not well contructed. The funnel skipped to the NE, lifting in the Trussville Chalkville area. Total damage amounted to \$1,500,000. 400 homes were damaged to some degree. and over 1100 people were made homeless.

1725 6 miles 100 y 3 dead 116 in F4 May 12, 1956 MI (678) Touchdown was on the SE edge of Flint, Genesee Co. The funnel moved due E along the Dort highway, severely damaging many homes DAPPL #253 NSSEC #MI-11 and businesses. 350 homes were damaged or destroyed, along with

21 businesses. The homes damaged to the greatest degree were just barely leveled, and these were the smaller homes.

May 12, 1956.	M1 1855 6 miles 400 y 0 dead 22 mil F4
(679)	The funnel first touched down in Allen Park, Wayne Co., and
DAPPL #257	moved E through the neighboring town of Lincoln Park, 3
NSSEC #MI-15	homes were listed as destroyed and 100 damaged. One of the homes destroyed was completely leveled. This home, on
	White St., in Lincoln Park, was a rather small house and was possibly not well constructed.

- Jun 6, 1956 NE 1530 5 miles 500 y 0 dead 1 in1, F4
- (683) This tornado moved to the SE from a point about 3 miles N of

DAPPL #316 Pleasanton. 2', miles NE of Pleasanton, Buffalo Co., the

NSSFC #NE-10 Berkheimer farm house and 5 other buildings were leveled and the bodies of dead chickens were scattered for ', mile The injury occurred when a man was blown from a haystack and may not have been tornado related. Wood stove was found 15 miles from the house site.

- Oct 29, 1956 NE 1645 45 miles 440 y 0 dead 2 inj. F4
- (681) This tornado first hit about 15 miles 5 of North Platte, Lincoln
- DAPPL #337 Co. The funnel moved to the NNE on what has been plotted NSSEC #NE-31 elsewhere as a 100+ mile path. While that is possible, it is unlikely that the path was continuous for that long. It is plotted here as moving NE to E Logan Co., passing between Gandy and Arnold. The tornado leveled the Bradley farm, 9 miles SE of North Platte leaving only piles of debris. A large number of farms received some damage all along the path. Damage from tornadoes was reported as far north as Rock Co.

Jan 22, 1957 OK 0645 5 miles 50 y 9 dead 21 inj. F4 Touchdown was 2 miles WSW of the town of Gans, Sequoyah Co. DAPPL #902 The tornado was rather narrow, but of great intensity. Houses NSSEC #OK-4 were totally leveled, with some bodies carried 5 mile from the Johnson house site. A refrigerator was carried ', mile. Up to 15 feet of soil was reportedly removed from some spots. 23 homes were damaged or destroyed, 5 of which appeared to be near F5 intensity, but construction was in question.

(682)

Apr 2, 1957 OK 1729 8 miles 200 y 2 dead b inj. F4 (683) First sighted over Lake Texahoma, in S Marshall Co., the tornado DAPPL #535 destroyed fishing camps at Cumberland. The Pure Oil refinery and nearby houses at Little City were struck and several of the NSSEC HOK-8 smaller houses leveled. An automobile was picked up and thrown until only small pieces were left, with one death. The best F4 example is the Simpson home. The tornado moved to the NNE, but probably only a short distance NE of Little City.

Apr 2, 1957 OK 1758 15 miles 200 y 3 dead 3 inj. F4 While a funnel aloft was sighted as far to the SW as Denison. (684) DAPPL #536 Texas, touchdown is plotted at the NE edge of Calera, where NSSEC #OK-9 a drive-in theater and a large stock barn were destroyed. In the S and SE part of Durant, Bryan Co., 9 blocks were badly hit with 135 homes either damaged or destroyed. F4 rating is from the leveling of the Harper home, near the end of the path, 41, miles NNE of Durant. Roof damage was done to nearly all buildings. at SE State College. 2 deaths occurred in the collapse of a service station

Apr 8, 1957	This series of tornadoes, or single skipping tornado first
DAPPL #508	touched down in E Lancaster Co., and moved due E striking near lefferson (nesterfield Co., Cheraw, Chesterfield Co., and McColl,
NSSFC #SC-5 #NC-5 #NC-6	Marlboro Co. Crossing into North Carolina, this large, but not violent, funnel touched down near Johns, Scotland Co., NE of Marton, Robeson Co. and finally in Sampson Co. between Roseboro and Parkersburg. F4 damage is confirmable only near the end of this long path, and is where the 4 deaths occurred.

Other events this day produced F# appearing damage in NC, but house construction was very poor and concrete block buildings and foundations were not reinforced.

1530 20 miles 300 y 1 dead 0 inj. F4 Apr 19, 1957 WI The tornado moved NNE from just W of New Lisbon, through the (686) Necedah Wildlife Refuge, to a point about 8 miles N of DAPPL #847 Necedah. One death occurred when a single small house was leveled. NSSEC #W1-2 and the occupant thrown 100 feet and killed, 5 miles N of Necadah. New Lisbon damage was at F2 intensity.

1744 26 miles 1900 y 0 dead 7 inj. F4 Apr 21, 1957 TX This massive tornado first touched down 51, miles E of Levelland, (687) Hockley Co., and moved NNW passing E of Whitharral, near DAPPL #744 NSSFE #TX-54 Littlefield, to 1, miles E of Amherst, Lamb Co. 11 farms houses were destroyed, mostly leveled to the ground, with considerable damage to crops, livestock, farm buildings and farm machinery along the entire path. \$680,000 total damage.

1800 30 miles 400 y 0 dead 29 inj. F4 Apr 21, 1957 TX This tornado touched down shout 5 miles SSW of Shallowater. (688) Lubbock for , and moved to the NNW, passing over the SW corner of DAPPL #746 NSSEC #TX-55 Hale Co. and dissipating 5 miles SE of Olton on the Lamb/Hale Co. border F3 damage was done to farms SW of Shallowater and minimal F4 damage to a farm NW of Shallowater. Heavy farm machinery was reported to have totally disappeared in the tornado passage near Shallowater. An earlier member of this tornado ramily lifted before reaching Lubbock.

Apr 25, 1957 NE 1800 45 miles 400 y 1 dead 18 inj. F4 The first touchdown occurred about 2 miles north of Geneva. (689) Fillmore Co. The funnel moved to the NE, passing a mile N DAPPL #437 of Friend, Saline Co., hit the edge of Milford and dissipated NSSEC INE-8 in E Seward Co. Other members of this tornado family continued to near Omaha. Total damage was \$1,500,000, with most of the damage at Milford. 49 homes were listed as destroyed, with several homes leveled to the ground, including the Kroger and Welsch homes.

2235 17 miles 300 y 21 dead 80 inj. F4 May 15, 1957 TX First touchdown was near Lone Star, in the NW corner of (690) Floyd Co. One death occurred in this area. The funnel moved

DAPPH #793 NSSEC #TX-100 ME, passing through the town of Silverton, and lifting 4

miles NE of town, 25 homes were destroyed at Silverton, with many completely leveled and almost entirely swept away. Most of the homes were of new construction. Automobiles were carried several hundred feet. 30 other homes were damaged along with many businesses. The Vaughn and Stephens homes at Silverton were "stripped to the foundation", and 7 people died in the wreckage

1450 45 miles 400 y 0 dead 0 inj. F4 May 20, 1957 KS (691)

This event is the most intense of numerous tornadoes which

touched down to the S. E. and NE of Concordia, Cloud Co. DAPPL #260

NSSEC #KS-26 Damage was first noted 5 miles ENE of Glasco, and the funnel lifted 8 miles NE of Haddam, Washington Co. As the main funnel crossed Cloud, Republic and Washington Cos., numerous tornadoes and funnel c'ouds would form on either side of the main funnel and move parallel to it for short distances. F4 damage occurred S and SE of Concordia at the Waters, Deneault, and Pailette farms. Near the end of the path, 6 miles NE of Haddam, the Eichman farm was leveled, with every building reported to have "disintegrated"

1815 71 miles 700 y 44 dead 531 inj. F4 May 20, 1957 KS/MO

- This tornado was on the ground almost continuously from a (692)
- point 2 miles SW of Williamsburg. Franklin Co., NE for 71 miles DAPPL #267
- NSSEC #KS-33 to 2 miles NE of Knobtown, Mo. In Kansas, 7 people were killed
 - #MO-12 and 31 injured. 2 deaths occurred as the Marsh farm was leveled to the ground, 2 miles E of Ottawa. Other houses were leveled N of Rantoul. 5 deaths occurred in the Spring Hill area of Johnson and Miami Cos. . 4 of them in one family that was fleeing their house and heading for the family car. In Missouri, the tornado produced 37 deaths and 500 injuries as it passed through the Kansas City suburbs of Martin City, Ruskin Heights and Hickman Mills. Near FS damage was done to housing developments, and 15 stores at a shopping center were destroyed. 842 homes and stores were damaged or destroyed. Debris from Hickman Mills was found at Ottumwa, lowa.

May 21, 1957 MN 1400 9 miles 100 v 0 dead 2 inj, F4 (693) The tornado touched down about 1 mile E of Harris, Chisago Co... DAPPL #355 and moved due N to a point i mile NNE of Rush City. Trees up to NSSFC #MN-3 24 inches in diameter were twisted off or uprooted. One house, the Thompson home near the end of the path was leveled to the ground in near F5 fashion. The injuries were to a mother and child who were hurled through the air. 4 houses were damaged and 8 barns were blowh over.

May 21, 1957 MD 1553 25 miles 500 y 7 dead 75 inj. F4

(694) This tornado devastated the town of Fremont as it moved across

0APPL #408

Carter Co. The tornado probably touched down in the Mark Twain NSSFC #MO-19 National Forest, in the SE corner of Shannon Co. and lifted in the NE corner of Carter Co. Only 7 buildings were left intact in Fremonic, with FS appearing damage on the E side of town. That

section, along the RR tracks, had houses of only poor construction however. The path may have been longer, or this could have been just a member of a cornado family. This determination is difficult to make in this sparsely populated and heavily forested section of state, F3 damage was reported from the S edge of Van Buren.

1730 22 miles 880 v 4 dead 5 inj, F4 May 24, 1957 OK Touchdown occurred in the Apheatone area, near the Widge of (695) DAPPL #601 Cotton Co. The tornedo moved to the NE, lifting about 7 miles NSSFC #OK-74 SW of Lawton Comanche Co. Much F4 appearing damage was done all along the path, including total leveling of the Ashline. Johnson, and Harry homes 6 miles 5 of Lawton. The 4 deaths occurred in 2 of the 12 destroyed homes. 70 head of cattle were killed, and fencing was rolled into balls up to 50 feet

Jun 14, 1957 IL 1400 3 miles 220 y 1 dead 50 inj. F4

in diameter.

(696) This rather short path tornado touched down on the SW edge of

DAPPL #168 Springfield, Sangamon to, and moved to the ENE across the NSSFC #IL-20 south side of the city. Considerable F2 and F3 damage was done within a 5 mile section. 1000 homes were damaged and 20 listed as destroyed, but only one small home was leveled. One other death occurred from electrocution.

Jun 20, 1957 ND/MN 1828 9 miles 400 y 10 dead 103 inj. F5 (697) This tornado was originally considered to be a 30 mile long DAPPL #888 event, touching down N of Casselton, North Dakota. Detailed NSSFC #ND-7 site surveys have shown that it is the third member of a MN-7 5 member tornado family, the second member of which originated at Casselton. As plotted, this tornado touched down about 3 miles W of Fargo, and moved in a winding path that was generally to the E and NE. The funnel dissipated 3 miles NE of Moorhead, Minnesota. The tornado struck the newest section of town, the NW part, and destroyed all buildings within its path. The swath through Fargo was 5 city blocks wide and 20 city blocks long, 1364 homes were damaged or destroyed, with many leveled and some completely swept away. The tornado caused considerable damage after it crossed the Red River into Clay Co., Minnesota. The F5 damage was noted between 7th and 8th Avenues and 25th Street.

Jly 4, 1957 MI 1855 10 miles 50 y 0 dead 6 inj. F4 (698) This tornado touched down SW of Brighton and moved to the SE DAPPL #350 of that town in Livingston Co. The Bidwell and Beadle homes NSSFC #MI-10 were leveled SW of the railroad overpass on U.S. Rt. 23. From there the funnel skipped to the NE, dissipating in SE Oakland Co.

Sep 14, 1957 OK 1730 30 miles 800 y 2 dead 6 inj, F4 (699) The tornado formed N of Wayne, McClain Co. and moved to the ENE. DAPPL #629 crossing the Canadian River into extreme S Cleveland Co., where NSSFC #OK-102 three barns were destroyed. Continuing aimost due E, the tornado intensified along a 7 mile section in SE Pottawatomie Co and SW Seminole Co. 2 deaths occurred as the Campell and Ackerman homes were leveled, about 2 miles N of Konowa. Gil field losses were extensive, as were losses to other farm buildings. Activity futher east was likely due to a different tornado.

Nov 7, 1957	TX 2307 13 miles 200 y 1 dead 81 .nj. F4
(700)	This tornado moved to the ENE along the edge of the town of
DAPPL #834	Orange, Orange Co. 130 houses were destroyed, with many leveled.
NSSFC #TX-144	but most were of poor construction. 250 other homes were damaged. 9 ships and 3 barges were torn from their moorings. The death occurred in a two-story house that was leveled.

Nov 17, 1957 AL 1512 5 miles 400 y 4 dead 15 inj, F4

(201) The tornado touched down at Cross Roads. 6 miles NW of Jasper

DAPPL #34

and lifted 1 mile N of Manchester. 3 members of the Bradford NSSFC #AL-28 family were killed as their new ranch house was picked up and scattered & mile across the pasture.

Nov 18, 1957	AL	1730	27 miles	100)	/ 3 dead	12 inj. F4
(702)	From near	Rosa.	Blount Co.	, the	tornado moved	NNE passing E

of Snead and continuing to W and NW of Albertville, Marshall Co. DAPPL #46

NSSFC #AL-40 Maximum intensity was in Blount Co. where several homes and a school leveled, causing 3 deaths. Several cars were thrown over 100 feet. House contruction was probably not good. Pilot reported path to be as "straight as an arrow". In the Susan Moore community, Blount Co. a home was picked up and dropped 500 feet away, causing one death.

- Dec 18, 1957 IL 1555 18 miles 250 y 1 dead 45 inj, F4
- (703) The tornado was first observed 10 miles WSW of Mt. Vernon.
- DAPPL #176 Jefferson Co. Patrol cars followed the movement of the funnel

NSSFC #11-28 and reports were troadcast on a local radio station. The most intense damage was on the SW side of town, where several homes were leveled. The homes are described as prefabricated ranch houses, but appear to be of rather standard construction. Damage was less intense on the N side of town. The tornado lifted about 8 miles NE of town.

- Dec 18, 1957 IL 1635 5 miles 200 y 1 dead 6 ing. F5
- (204) This tornado moved through the Sunfield community. Perry Co. at

OAPPL #180 junction of highways 51 and 154. Moving to the ENE, the NSSFC #IL-32 tornado totally swept away every vestige of the buildings. Residents had taken shelter, except for one 70 year old man who was killed.

- Dec 18, 1957 1L 1645 30 miles 300 y 11 dead 200 inj. F4 (705)
- This tornado followed very closely a section of the great DAPPL #181
 - Tristate tornado track of March 18, 1925. This event

NSSFC #IL-33 began a few miles WSW of Gorham, Jackson Co. The point of origin may have been in Missouri. 40 houses were damaged or destroyed in Gorham, but the most intense damage was at Murphysboro. 10 deaths occurred in the town, with one additional death at Sand Ridge. F4 damage area was very small and was in the area with most of the deaths, in the older section of town. The city was without electric power for nearly 3 days for most of the utilities were centered in the major damage area. Intermittent damage continued to the ENE in sections of Desoto, Hurst, Bush, and Plumfield.

Dec 19, 1957 AR 1244 15 miles 200 y 2 dead 9 inj. F4 (706) From a point 6 miles NE of Waldo, Columbia Co., the tornado DAPPL # 82 NSSFC #AR-26 Vista. The most intense damage was in the Cotton Belt community. 5 homes were leveled wear the start of the path, but construction was rather poor. Bodies from one house were carried 250 yards and cars reportedly carried 600 yards.

Apr 15, 1958 FL 1100 5 miles 300 y 0 dead 7 inj F4 (707) This tornado skipped to the E across extreme 5 Polk Co.. DAPPL #71 sweeping away several homes in the Bereah community, SW of NSSFC #FL-9 Frostoroof. 9 houses were listed as destroyed, but construction was rather poor. A 2500 gallon water tank was found a mile from its original position, but information was not available as to

whether it was empty or full.

Jun 4, 1958 WI 1730 32 miles 880 y 21 dead 110 inj. F4 (708) This tornado was the first in a family of 3 very violent DAPPL #541 tornadoes this day in NW Wisconsin. From 4 miles SW of Woodville. NSSFC #WI-4 in SE St. Croix Co., this first event moved due E, passing a mile S of Knapp, Dunn Co., and then along the N edge of the town of Menomonie. 3 deaths occurred in this early part of the path. The funnel turned to the ENE and passed along the S and E sections of the town of Colfax, leveling dozens of homes and debarking trees. 18 deaths occurred in the town. The massive tornado leveled farm houses NE of town before lifting 5 miles beyond Colfax.

Jun 4, 1958 WI 1845 12 miles 600 y 3 dead 50 inj. F4 (709) Touching down about 5 miles W of Chippewa Falls, the tornado DAPPL #542 moved to the ENE along the N edge of town to a point about 6 miles NSSFC #WI-5 NE of town. F4 damage was to farms outside of town. Deaths occurred in the NW section of town, and the most intense damage w65 lb miles NE of town. 2 of the deaths took place as an auto was thrown off a highway.

Jun 4, 1958 WI 1930 27 miles 800 y 4 dead 3 inj. F4 (710) From 2 miles SW of Stanley. Chippewa Co, the tornado moved DAPPL #545 NSSFC #WI-8 that was leveled. S of Stanley, one person was killed as a house was destroyed. Continuing into Clark Co., one person was killed 4 miles S of Thorp. The tornado lifted SW of Curtiss. and later touched down again in Marathon Co. Debris from the leveled homes was not widely scattered.

Jun 10, 1958 KS 1745 8 miles 300 y 15 deaths 50 inj. F4 (711) Moving from the WNW this tornado touched down 7 miles west and 2 miles N of downtown Eldorado, Butler Co. The funnel passed NSSFC #KS-9 through the newer residential areas on the SW side of town, destroying over 200 homes. The intensity of the tornado may have been F5, but the debris scattered widely over 45 square blocks made this determinination impossible from newspaper photographs. Damage totalled over \$3,000,000. Feb 10, 1959 MO/IL 0140 27 miles 200 y 21 dead 345 inj. F4

(712) The tornado first touched down in the Sherman area, in the SW

DAPPL #33 part of St. Louis Co. Minor damage was reported for the first

NSSFC #MO-3 several miles, followed by intensification to F2 damage in

the Warson Woods development. Considerable damage to roofs and #11-1 other property occurred S of Forest Park, as the tornado skipped parallel to Manchester Road. From that point the tornado strengthened further to F3 and minimal F4 intensity. The greatest damage from there to the McKinley Bridge was to tenament houses and apartment buildings. A few small homes were leveled, and some large tenament houses collapsed, burying the occupants in the wreckage. In St. Louis, nearly 2000 buildings were damaged or destroyed, but only 41 houses were listed as destroyed. Total damage amounted to over \$10,000,000. The track of this tornado was not far from the tracks of major tornadoes in 1871, 1896, and Some factory building damage was reported in Madison 1927. and St Clair Cos., in Illinois, for the tornado crossed the Mississippi River into the Venice-Granite City area.

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Mar 31, 1959 TX 2100 20 miles 1320 y 6 dead 31 inj. F4
 (713) The tornado touched ground on the S shore of Lake Whitney and DAPPL #74
 NSSFC #IX-8 shore. Intensifying, the tornado swept just N of the town of Aquilla, where one home wis damaged. The most severe damage occurred as the tornado passed through the town of Vaughn, leveling many homes. Continuing to the ENE, the funnel dissipated near Bynam, Hill Co.

May 9, 1959 OK 1840 8 miles 880 y 7 dead 12 inj. F4

(714) The tornado formed just N of Harden City. Pontotoc Co. and moved

DAPPL #257 to the NE, passing 1 mile W of Stonewall, and then lifting 3 miles

NSSFC #OK-42 N of that town. 20 oil derricks N of Harden City were destroyed. The deaths occurred on three farms where the homes were leveled. West of Stonewall, a cement block cafe was blown over, with the patrons taking shelter behind the counter. Many cars, trucks, farm vehicles and trees were destroyed, and many cattle were killed.

May 10, 1959 IA 1300 40 miles 400 y 0 dead 1 inj. F4 (715) While only one tornado is officially reported from this area, DAPPL #136 at least 5 distinct tornadoes were responsible for the damage in Guthrie and surrounding counties. The most intense event began about 10 miles WSW of Guthrie Center, and caused F4 damage to homes all along its path. Homes were leveled 4 miles west of Guthrie Center, in the village of Fansler, 3 miles W of Yale, and 2 miles E of Rippey. The tornado lifted about 5 miles NE of Rippey, in the SW corner of Boone Co. Nearly all of the buildings at Fansler were damaged or destroyed and a pickup truck was hurled 300 feet.

May 20, 1959 IA 1900 15 miles 450 y 0 dead 5 inj. F4 (716) This tornado touched down SW of Promise City, Wayne Co., DAPPL #142 and moved N and NNW, passing E of Bethlehem and lifting in NSSFC #IA-16 extreme S Lucas Co. The house and all barns were leveled on the Hickie farm, SE of Bethlehem.

4-69

1445 8 miles 100 y 0 dead 0 inj. F4 Sep 26, 1959 110 The tornado touched down 5 miles SW of Grovespring, Wright Co. (717) moved through the town, and lifted 3 miles NE of town. The 0APPL #520 NSSFC #MO-21 observer saw the funnel, and warned the town. All residents had taken shelter when the tornado hit, leveling several homes, and throwing and rolling cars up to & mile. House construction on the leveled homes was probably not strong, and the tornado itself was not physically large.

Sep 27, 1959 OK/KS 1800 20 miles 440 y 0 dead 1 inj. F4 The tornado moved NNE from just S of Hollow, in the N part of (718) DAPPL #516 Craig Co. The tornado did only minor property damage in Oklahoma, NSSFC #OK-67 crossing into Labette Co. Kansas SW of Chetopa. Continuing to the KS-63 MNE, F4 damage was done to 3 farms S and SE of Oswego, as the tornado passed into W Cherokee Co. The funnel was very slow moving and accompanied by a tremendous warning roar. One man was injured as he ran for shelter, and one man died from a heart attack as he attempted to drive away from the tornado as it passed 3 miles from

2005 20 miles 400 y 0 dead 0 inj. F4 May 4, 1960 OK From 2, miles W of Konawa, Seminole Co., the tornado passed 5 (719) miles N of Konaw: and skipped to NW of Wewoka. 4 farms were 0APPL #402 NSSEC #0K-40 destroyed in the Konawa area, and the new Ackerman home was completely swept away. The Ackerman family, as with other affected families, had taken shelter in a storm cellar.

Oswego.

2116 12 miles 150 y 0 dead 3 inj. F4 May 4, 1960 OK A block-wide path was cut out of the center of Soper, Choctaw Co., (720) as this tornado moved across the town from S to N. The funnel DAPPL #651 NSSEC #OK-41 turned to the NE after leaving town and lifted. Most families were in storm cellars, including the Boykins family, whose house was completely leveled. Of the 300 homes in Soper, 100 were damaged or destroyed. Farms were destroyed just to the N and S of town.

May 5, 1960 OK 1700 85 miles 800 y 5 dead 81 inj. F5 (721) This large and destructive tornado was observed as it formed in DAPPL #407 the North Canadian River bottom, just 5 of Shawnee. Moving to the NSSFC #OK-45 NE, several farms were destroyed 2 miles E of Shawnee, Pottawatomic Co. Continuing to the NE, at least 14 farms were destroyed between Prague and Paden, Lincoln and Okfuskee Cos. NE of Prague. the barrel shaped funnel damared an oil retinery, causing a loss of \$750,000, 2 people were killed in the Iron Post area S of Bristow. Homes in this area were swept completely away. The tornado moved through the W and N portions of Sapula, Creek Co. killing 3 people and destroying 100 homes. The funnel lifted shortly thereafter.

May 5, 1960 OK 1910 50 miles 200 y 16 dead 106 mj. F4 (722) This tornado swept across a valley northward through Wilburton. DAPPL +413 Latimer to. The tornado cut a two block wide path through town. NSSFC #OK-51 13 people were killed and 82 homes were destroyed, as the tornado caused \$1,500,000 damage. 6 houses were destroyed at the Center Point community, 3 miles NNE of Wilburton. 3 people were killed at Keota, Haskell Co., Hear The end of the path, SW of Sallisaw, 10 houses were destroyed.

May 5, 1960	OK 1940 5 miles 200 / 5 dead 13 inj, F4
(723)	This tornado moved northward from just 5 of Highway 64 to
DAPPL #418	just E and NE of Roland, Sequoyah Co. All 5 people were killed
NSSEC MOK-56	when the McQuire home was completely swept away. Several other
	homes were destroyed and a pickup truck was carried 300 yards.

Max 19, 1960 KS 1730 15 miles 800 y 0 dead 3 ini. F4 One of family of at least 6 tornadoes, this event touched down (724)

DAPPL +162 4 miles NE of Rossville, Shawnee Ed. and moved to the ENE.

NSSFC #KS-22 lifting NE of Elmont. It would be impossible, at this late date, to specify what amount of Jamage was some by which tornado in this

complex family. The tornado family's Lotal damage figures are given in the next event. Homes were leveled between the shove indicated points.

1747 20 miles 800 y 1 dead 40 in). F4 May 19, 1960 KS 7251 From 3 miles E of Elmont, SE of the point at which the previous

DAPPI +638 event lifted, this Cornado moved to the ENE across defferson Co.

MSSFC -KS-23 This event struck the town of Meridian, where scores of homes were damaged or destroyed, and at least 10 were completely leveled. Many advance warnings preceded the tornado, so deaths and injuries were kept low in number. The funnel lifted N of Oskaloosa The Red Cross totals for the tornado family, Pottawatomie to Leavenworth Cos. were: 110 homes destroyed, 350 damaged, and 9 schools and business destroyed.

Apr 25, 1961 IN/OH 1427 30 miles 200 y 0 dead 7 inj. F4

(726) This tornado touched down N of Connersville, Fayette Co., about 8 miles ESE of the point where the Rushville tornado (F3) livied.

0APPL =176

NSSEC #18-12 Moving to the ENE, the tornado destroyed 3 houses in Fayette Co., and skipped across Union Co., Indiana into Preble Co., Ohio. Near the end of its path.NW of Eaton, the Brinley farm was leveled. The funnel was very visible, along with its multiple vortices, and all Eaton residents were able to take cover.

May 5, 1961 OK 1720 40 miles 400 v 16 dead 58 int - F4

(727) The tornado touched down 1 mile 5 of Talahina, LeFlore Co .

- DAPPL #732 and damaged a farm. Skipping to the NE, the tornado passed NSSEC #OK-38 through the towns of Reistert and Howe. 12 people died it
 - Howe and 4 people died at Reichert, as a total of 7d homes were destrined. Houses were completely leveled at Howe.

May 7, 1961 ×5/MO 15 15 miles 200 v 0 dead 12 int. F4

- (728) Inis event is the first of a family of tornadoes that continued
- DAPPL -265 into Missouri for another 37 miles. This event originated .
- NSSEC #KS-21 miles NNW of Basehor, Leavenworth Co., moved to the ENE.

MO-22 passing 3 miles NW of Wolcott, and passed into Platte Co. Missouri Multiple vortex "fingers" were observed as it damage or destroyed 50 houses in Kansas, and did some damage in the Weatherty Lake- Parkville area in Missouri. An auto was carried 300 feet. and over a 50 foot high grove of trees, injuring 1 passengers.

1700 45 miles 400 y 0 dead 0 inj. F5 This tornado was first observed in the vicinity of Anselmo. May 30, 1961 NE Custer Co., and moved to the E across sparsely settled (729) ranch and farm land. The tornado passed N of Gates and Sargent. DAPPL #282 and probably lifted in NW Valley Co. It could possably have been NSSEC FNE-2 a family of tornadoes. E of Gates, the Olsen farm virtually vanished, with all buildings and machinery swept away while 14 people huddled in a storm cave.

1745 28 miles 200 y 0 dead 7 inj. F4 IA. Touching down 2 miles NW of Dumont, the tornado moved to the Sep 1, 1961 NE. At Packard, Butler Co., the funnel moved more to the ENE (730) DAPPL #582 then E. lifting in NW Bremer Co. \$1,000,000 in farm property was damaged, and many farms were leveled. At the McWilliams NSSEC #1A-9 farm, the fruit jars were "sucked out of the basement" after the home was swept away, and a car was carried 100 yards in the air.

0315 2 miles 400 y 8 dead 55 inj. F4 Sep 12, 1961 TX One of only two hurricane-spawned tornadoes on this violent tornado list, this event occurred during hurricane Carla. (731) NSSPC #TX-109 The tornado swept across Galveston Island between 19th and 25th Streets, destroying 75 buildings and damaging 125 others. Many homes were leveled, and some swept completely away. Doubts about the quality of construction exist, and the there is the likelihood that the buildings were weakened by the hurricane winds.

1828 7 miles 750 y 0 dead 9 inj. F4 The tornado first touched down 3 miles W of Dill City, Washita May 25, 1962 OK Co., destroying buildings and killing 400 turkeys. The funnel (732) NSSFC #OK-20 skipped to the E, and struck the small farming community. cutting across the N side of the town. The funnel turned to the NE. lifting W of Cordell. A farm was completely leveled near the end of the path. 27 frames homes and 2 trailers were listed as destroyed. Many of the homes in Dill City were completely leveled.

2000 16 miles 400 y 0 dead 1 inj. F4 May 26, 1962 OK The tornado dropped from the clouds 4 miles 5 of Randlett. Cotton Co , and destroyed 2 farms near the touchdown point. (733) NSSFC #OK-29 One of the farms was leveled to the ground. As the tornado skipped to the NE and N. 3 more farms were leveled, and an unoccupied house was lifted and set down intact, 100 yards away The most intense damage was 1 mile SE of Randleti.

2050 12 miles 800 y 0 dead 0 inj. F4 May 26, 1962 TX Virtually every building in the town of Haskell, Haskell Co., (734) was destroyed or damaged by a group of tornadoes which NSSFC #TX-34 swept across the city. At least three separate funnels were involved, and debris from the town was scattered for 10 miles to the east. With good warnings issued, the only injury was to a man hit by a large hailstone. A few homes were leveled. but most homes received only roof and window damage.

1140 20 miles 400 y 0 dead 0 inj. F4 May 29, 1962 NE/SD Regarding a STORM DATA notation that tornadoes that day produced no property damage in Nebraska, one must assume that reports

(735)

NSSEC #NE-29 from the rural area described below were not assembled. This event is the last in a family of tornadoes that crossed central Nebraska. The tornado is plotted from E of Butte Boyd Co., Nebraska, to NW of Pickstown, Charles Mix Co., South Dakota. The Ficenee farm was completely leveled near Hwy-281, N of Spencer, Boyd Co. Other tornadoes, near F4 intensity, occurred on the NE/SD border that day, $\overset{\mu_{\mathrm{res}}}{\longrightarrow}$ which no official record exists.

11. FA 1740 11 miles 400 y 0 dead Aug 6. 1962 KS The most damaging in a series of 8 tornadoes, this event (736) touched down 3 miles NW of Holton, Jackson Co. and lifted CAPPL #511 NSSEC #K5-54 2 miles S of Birmingham. Many farm houses were damaged. and 3, such as the Bontrager home, were completely leveled.

0410 1 mile 75 y 0 dead 33 inj. F4 Sep 16, 1962 MN in one of the briefest violent tornado touchdowns, this tornado struck a housing development 4 miles SE of Rochester, Olmsted Co. (737) NSSEC #MN-13 4 homes were leveled to the ground, and 7 others destroyed. The tornado we, moving to the NE when it struck the community

Damage Lotalled \$200,000.

1535 15 miles 600 y 0 dead 35 inj. F4 Mar 5, 1963 AL The tornado was observed as it struck first in extreme SW (738) Bessemer, Jefferson Co. The funnel moved across Bessemer. DAPPL #22 NSSEC #AL-3 and on to the NE, striking a portion of Homewood and Mountain Brook. At Bessemer, 29 buildings were destroyed and over 200 damaged. In other sections of the path, 40 buildings were damaged. A few small homes were leveled at Bessemer, poor construction was likely.

1400 25 miles 600 y 2 dead 6 inj. F4 Mar 11, 1963 AL The tornado was first reported in the Valley Grove compunity, (739) Cullman Co. It then moved NE through Pheian, Berlin and Fairview. DAPPL #26 20 nomes and 20 farm buildings were destroyed, and 120 homes. NSSEC #AL -7

were damaged. The 2 deaths occurred in 2 separate homes that were leveled.

1725 30 miles 400 y 2 dead 7 inj. F4 Mar 11, 1963 MS

The tornado first cut a 10 mile path through Attala Co .. (740)

injuring an elderly woman as it leveled her nome, and injuring DAPPL #50 the driver of a pickup truck that was hurled 50 feet to the MS-1 top of a pine tree. In Choctaw Co., 2 people were killed and 7 homes destroyed, with household goods scattered for 10 miles. The funnel lifted in the Sherwood area, and reformed fulher to the NE. The deaths occurred 2 miles E of sherwood.

Apr 17, 1963	1L/IN 1555 65 miles 200 y 1 uead 70 tnj. F4
(741)	Touching down in the NW corner of Kankakee Co., this tornado
DAPPL #149	moved to the ESE, into Newton Co., Indiana. In Illinois, the
NSSFC #1L-2	most intense damage was from N of Bourbonnais and Bradley to
IN-8	S of Momence. Several homes and farms were leveled in this area, and at least one was completely swept away. In Indiana, the tornado moved to the ESE across Newton and Jasper Cos, and lifted just W of Medaryville, Pulaski Co. The tornado intensified in Jasper Co., and leveled 7 farm homes and damaged dozens of others, with a total loss of \$250,000 in that county.

Apr 29, 1963 MS 1815 18 miles 1000 y 3 dead 25 inj, F4 (742) Touching down first just S of Shannon, Lee Co., this tornado DAPPL #116 was visible for miles, with no accompanying rain or hail. NSSEC #MS-6 27 homes were destroyed as it swept to the NE across the county. Asphalt was torn from Highway 45 and scattered hundreds of yards. The funnel dissipated in E Itawamba Co. Near Shannon, 30 people huddled in a 8' x 10' storm shelter as the nearby homes were leveled.

Jun 6, 1963 SD 1845 25 miles 1000 y 0 dead 0 inj. F4 (743) The tornado moved from the WSW to the ENE. from near Swett DAPPL #288 to near Patricia, Bennett Co. Several buildings, including NSSFC #SD-6 2 farm homes and a church, were completely swept away in the Patricia area.

Jan 24, 1964 AL 1900 3 miles 100 y 10 dead 6 inj. F4 (744) This tornado struck in a wooded area 1 mile SW of Harpersville. DAPPL =2 Shelby Co., and moved ENE across hwy-25 and into the SE NSSEC AL-2 portion of town. On US Rte. 280, 3 houses were leveled, and 10 people were killed. The funnel lifted a mile further to the NE One of the houses flew more or less intact for 300 feet, and then struck a tree and another house. 20 other homes were damaged.

1130 20 miles 400 y 3 dead 24 inj. F4 Mar 4, 1964 KY The tornado first touched down 3 miles W of Kirksey, Calloway Co. (745) and moved to the NE, passing NW of Hardin, Marshall Co., and only DAPPL +28 NSSFC #KY-5 a few yards from a grade school at Fairdealing. The funnel dissipated on the shore of Kentucky Lake. The tornado hit 45 farms and many were damaged severely. 24 houses were listed as destroyed. All three deaths were in Marshall Co.

Apr 3, 1964 TX 1435 6 miles 500 y 7 dead 111 dead F5 (746) This large and visually spectacular tornado struck the NW DAPPL =182 section or wichits Fails and Sheppard AFB. Property damage NSSFC #TX-8 was estimated at \$15,000,000. The tornado first touched ground near the intersection of Farm Road 369 and Seymour highway. It moved northeastward across highway 287 into the Sunset Terrace addition, then crossed the Red River expressway into the Lincoln Heights addition and the AFB. 225 homes were destroyed, but \$10,000,000 of the \$15,000,000 damage was done on the AFB.

Apr	12 .	1964	KS	1600	15 mi	les	300	y i	3 dead	.9	inj.	. F.	4

(747) This tornado touched down about 8 miles SW of Lawrence.

DAPPL +95 Douglas Co., and moved to the NE, leveling nomes and farms

NSSEC =KS-6 along the entire path. Passing W and NW of Lawrence, some homes, such as the Steymaier home, were completely swept away As many as 20 homes may have been leveled, and damage totalled about \$1,000,000. The funnel dissipated NE of town. Other tornadoes in this family produced damage in many Kansas and Missouri counties.

Apr 12, 1964 1A 1645 15 miles 400 y 1 deed 28 int. F4 This tornado moved to the NNE from near Coin, Page Co., (748)

DAPPL =81 through the town of Yorktown, and dissipated 5 of Bethesda. NSSFC =1A-1 Damage along the path was about \$2,000,000, primarily in the town of Yorktown. While most buildings in the town were damaged or destroyed, only a few homes were completely leveled

May 5, 1964 NE 1525 20 miles 200 y 0 dead 11 inj. F4 (749)

From 8 miles NH of Cushing, Howard Co., this tornado, a member 0APP1 #257

of a complex family of tornadoes, moved to the NE. The funnel NSSEC #NE-12 passed through the town of Wolbach, Greeley Co., and lifted

in SW Boone Co. Touchdown reported at various points for the next 100 miles. While most of the homes were damaged at Wolbach. only one home was leveled.

May 5, 1964 NE 1830 70 miles 800 y 2 dead 50 inj. F5 (750) This extremely large and intense tornado touched down in NW Clay Co., and moved to the NE. The first farm leveled DAPPL #259 NSSEC #NE-14 was 4 miles NW of Harvard, and at least a dozen farms were leveled in the first 30 miles of the path. 21, miles W of Bradshaw. York Co., 2 people were killed on a farm that was completely swept away. The path may have been up to 110 miles long, and this may have been a family of tornadoes. The funnel lifted S of Bellwood, Butler Co. Damage totalled about \$10,000,000.

(751)

May 8, 1964 MI 1559 4 miles 800 y 11 dead 244 inj. F4 This tornado struck the Anchor Bay area, N of Mt. Clemens, DAPPL #242 Macomb Co., with a short, but wide and intense path of destruction. NSSFC #M1-4 Touching down in the Cape Heart housing area, several homes were leveled. In the Forbes residential area, many homes were leveled, and cars were hurled for hundreds of feet, crashing into houses. 132 homes were destroyed, and 80 of the injured were hospitalized. The high water table in the bay area

allows for few basements, and thus people were less able to get below ground level. Damage totalled about \$3,000,000.

- Jun 22, 1964 IA 1900 30 miles 400 y 0 dead 0 inj. F4 (752)
- This tornado touched down 5 mile NW of Farragut, Fremont Co., DAPPL #361

and moved to the SE, passing just S of Farragut. Turning NSSFC #1A-35 to the ESE and E across Page Co., the funnel passed just

N of Coin, turned to the NE, dissipating 2 miles 5 of Clarinda. A few homes were leveled, but the majority of damage was to barns and other farm buildings and machinery.

1550 4 miles 100 y 0 dead 30 inj. F4 Aug 22, 1964 WI This tornado skipped across Ozaukee Co., but leveled houses (753) in almost every area where it touched ground. The funnel DAPPL +607 NSSEC #WI-28 first touched down near Highway 22 and traveled from SW to NE through the city of Port Washington. 22 homes were destroyed and 174 were damaged. Total losses were set at \$1,500,000.

1630 15 miles 100 y 0 dead 2 inj. F4 Aug 29, 1964 IA From near Galbraith, Kossuth Co., this tornado moved to the NNE. (754) passing 5 miles E of Algona and dissipating shortly thereafter. DAPPL #552 NSSEC #18-47 The Hurlburt farm was leveled as the funnel passed 2 miles E of Galbraith.

0630 2 miles 75 y 22 dead 165 inj. F4 LA Oct 3, 1964 One of only two furricane-spawned tornadoes on this violent (755) tornado list, this event is associated with hurricane Hilda. DAPPL #654 A tornado touches down on the E side of Bayou Lafourche, N of NSSEC #LA-6 Larose, Lafourche Parish, and crossed to the W side. The funnel leveled homes along Rt-1, for about 1 mile. Only the wooden homes were leveled. All brick homes had at least one wall standing. The tornado moved to The NW Debris was found 16 miles away.

Mar 16, 1965 OK/KS 1640 70 miles 500 y 0 dead 7 inj. F4 Two funnels aloft were sighted over E Alfalfa Co., and the tornado (756) first touched down 6 miles SSW of Nash, Grant Co. Near the touchdow DAPPL #73 the Liberty Church and the parsonage were leveled. The tornado +919 skipped across Grant Co., but many farms were badly damaged 5 USSEC 40K-1 and E of Medford. N of Deer Creek, the cornedo leveled 3 farms, and damaged at least 12 others. Crossing the extreme NW corner of Kay Co., 10 summer cabins were destroyed at Lake Blackwell In Kansas, the tornado damaged homes at Geuda Springs, Summer Co., and lifted for the final time near Winfield, Cowley Co.

1826 5 miles 200 y 6 dead 250 inj. F4 Apr 10, 1965 AR The tornado began SW of Conway, Faulkner Co., and cut a swath (757) of interse damage through the 28 and E portions of the city. DAPPL #92 NSSFC #AR-17 185 homes were heavily damaged or destroyed. Many were leveled in a block-long swath of F4 intensity damage. 100 persons were nospitalized.

1255 35 miles 200 y 1 dead 3 inj. F4 Apr 11, 1965 1A The first violent tornado of the Palm Sunday outbreak touched (758) down 2 miles W of Lowden, Cedar Co. The Dircks farm was 0APPL #100

HSSEC #IA-1 leveled and almost completely blown away. The funnel moved to the NE, damaging farms across Clinton and Jackson Cos. The tornado dissipated near Springbrook, Jackson Co. 18 farms were damaged or destroyed, and the total loss was over \$500.000

1527 11 miles 400 y 6 dead 75 inj. F4 Apr 11, 1965 11 The tornado first touched down 2', miles SW of downtown Crystal (759) Lake, Hollenry co. At least 45 houses were destroyed and 110 DAPPL #188 NSSFC #IL-2 badly damaged in one subdivision. Major damage occurred in a 4 block long , 200 yard wide area at Island Lake, Lake Co. 5 people died at Crystal Lake and 1 person died at Island Lake.

Apr 11, 1965 MI (760) DAPPL #177

1754 23 miles 400 y 5 dead 142 inj. F4 The tornado first couched down S of Allendale and Pearline, Ottawa Co., and moved to the ENE and NE across the NW and N NSSFC #MI-H1 suburbs of Grand Rapids, Kent Co. The funnel lifted near Rockford 2 homes were destroyed and 14 damaged in less populated Ottawa Co. 32 homes were destroyed and 192 damaged in Kent Co. The most intense damage was apparently N of Grand Rapids, in the Comstock Park-Alpine areas. At Alpine Avenue and Six-Mile Road, the homes were almost completely swept away. Damage totalled over \$15,000,000.

1815 22 miles 400 y 14 dead 200 inj. F4 Apr 11, 1965 IN This tornado touched down 5 miles SW of Wakarusa, killing one (761) child and moving to the NE across Elkhart Co. The funnel developed DAPPL #620 NSSFC #IN-J2 a spectacular double-funnel structure, SW of Elkhart, as it moved through the Midway Trailer Court on rt-33 between Elkhart and Goshen. 80 of the 100 trailers were destroyed and 10 people were killed. To the NE, 3 more people were killed in the Middlebury area, as homes were completely leveled.

1840 23 miles 400 y 19 dead 100 inj. F4 Apr 11, 1965 IN Touching down 7 miles SE of Goshen. Elkhart Co. the tornado (762) moved to the NE across LaGrange Co., lifting near Brighton. DAPPL #622

were killed as a home was leveled near Ontario.

NSSFC #Lix-J3 The tornado was very intense in the Rainbow Lake-Shore area. S of Shipshewana, leveling over a dozen homes and killing 17 people. Most of the 17 were killed in 4 homes. 2 more people

A-73

Apr 11, 1965 M/MI 1900 75 miles 2000 y 37 dead 500 inj. F4 (762) Listed together, these 2 events traveled nearly identical paths DAPPL #623 across Hillsdale and Lenawee Counties in Michigan. The tornadoes NSSEC #IN-J4 were reported as about 1, hour apart. The first was probably the MI-J4 more intense, and may have caused most of the leaths. When the second event passed through the area, people were either in or (764) near shelter. The first event touched down in the N4 corner of DAPPL #179 Steuben Co., Indiana and crossed into Branch Co., Michigan. The NSSFC #MI-K3 town of East Giliad was struck, and the tornado proceeded to damage dozens of homes at Coldwater Lake, sweeping large amounts of debris into the lake. The second tornado touched down SW of Kinderhook, Branch Co., leveled a home N of Reading, and began following in the exact path of the first tornado about 5 miles WSW of Hillsdale, Hillsdale Co. The death toll in Branch Co. was 19, with 200 injuries and \$20,000,000 in damage. The tornadoes crossed Hillsdale Co., killing 11 people, injuring 100 others, and causing \$7,000,000 in property damage. S of Hillsdale, the tornadoes were reported 35 minutes apart. The second tornado leveled the standing parts of nouses that were struck by the first tornado. In E Lenawee Co., the Ferguson home was completely swept away, 1 mile S of Manitou Beach, and 6 members of the family of 7 died in the wreckage. With 50 people attending Sunday evening services, the Manitou Beach Baptist Church was blown down. 26 people did not make it to the basement. and were buried in the debris for up to two hours. One man died in a Jackson hospital from injuries at the church. 100 vacation cottages were destroyed at the beach. As with most of the cottages on the lakes that were struck, these were vacant at this time. Damage in Lenawee Co., where the damage path was to 4 miles wide. totalled \$5,000,000. 198 homes were destroyed in Branch Co., and 177 in Hillsdale Co. The less intense tornadoes in Lenawee Co. destroyed 189 homes. N of Tecumseh, Lenawee Co., a wind tower recorded 150 mph from the W at 2007 and 75 mph from the 5 at 2104 Originally, the first turnado #623-J4 was 30 minutes ahead of #179-K3. That 30 minute spread had widened to almost an hour.

Apr 11, 1965 IN 1907 22 miles 400 y 0 dead 48 inj. F4 (765) From 7 miles SW of Lafayette, this tornado moved to the ENE. DAPPL #627 Passing from Tippecanoe Co. to Clinton Co., the tornado NSSFC #IN-L1 intensified and struck the towns of Mulberry and Moran. A few homes were leveled at Moran, but damage was primarily at the F2/3 level. All injuries and most of the \$2,000,000 damage was in Clinton Co. ENE of Moran the funnel narrowed and weakened, and is plotted here as the end of the event. 12 homes were destroyed and maximum intensity occurred from S of Rossville to Moran.

Apr 11, 1965 IN 1910 35 miles 400 y 36 dead 320 inj. F5 (766) Touching down about 8 miles 5 of South Bend, the tornado DAPPL #621 killed two people in St. Joseph Co., and moved to the ENE NSSFC #IN-K2 toward Dunlap, Elkhart Co. At Dunlap, 2 housing developments. Sunnyside and Kingston Heights, were almost entirely destroyed. 28 people were killed as many homes were leveled and swept away. Further to the NE, a truckstop and a home, converted from a restaurant, were leveled at the intersection of Rts. 15 and 20, with 6 additional deaths. The tornado dissipated in the NW corner of LaGrange Co.

Apr 11, 1965 IN (767) DAPPL #628

1920 47 miles 800 y 25 dead 835 inj. F4 This tornado originated in the SW corner of Howard Co., and moved to the ENE through the town of Russiaville. 90% of the NSSEC #IN-L2 buildings in Russiaville were damaged or destroyed, but with little F4 evidence. At Alto, and the S edge of Kokomo, the funnel widened to nearly a mile and destroyed 100 homes. The Maple Crest apartments were destroyed, as the roofs and upper-story walls of the brick buildings were blown off. The tornado may have been at its most intense at Greentown where swaths of debris, from groups of leveled homes, lay spread out over the landscape. 18 people died in Howard Co., and about 600 received injuries. In Grant Co. 3 people died as the tornado leveled more homes S of Swayzee. Further to the E, the funnel passed S of Marion, unroofing part of a VA hospital. In the Marion area a few homes were leveled, and hundreds damaged. The Panorama shopping center was destroyed, as much of it either collapsed or was blown down. Looters converged on the center almost immediately. 5 people were killed in Grant Co., and the funnel lifted near Arcana. Damage amounted to \$12,000,000 S of Marion alone.

- Apr 11, 1965 IN 1950 45 miles 800 y 28 dead 123 inj. F5 (768) From 3 miles SE of Crawfordsville, Montgomery Co., the DAPPL #630
- tornado moved to the ENE, leveling a home 7 miles E of town. NSSFC #IN-MI and causing its first death, Passing across Boone and Hamilton, the tornado leveled dozens of homes, and destroyed nearly 100. N and NW of Lebanon, the mile wide funnel destroyed 54 homes, killing 9 people. 4 people died in 2 different cars that were thrown from the road. 10 more people died as homes were leveled in the Sheridan area, on the Boone-Hamilton Co border. The funnel dissipated S of Arcadia.
- Apr 11, 1965 IN/OH 2020 55 miles 600 y 6 dead 90 inj F4
- (769) Forming near Roll, in NW Blackford Co., this tornado produced
- F4 intensity damage to rural homes in 3 areas along its path. DAPPL #629
- 2 people died in each of those 3 areas. The first was at Keystone, NSSFC #IN-L3 in S Wells Co., where a home and several churches were leveled. MI-L3 The second was at Linn Grove, in S Adams Co. Passing into Ohio, the tornado struck at greatest intensity along the Mercer-Van Wert line, 2 miles S of Willshire. 10 homes were destroyed in that area. with about half of them leveled to the ground. The tornado lifted about 5 miled E of Venedocia.

Apr 11, 1965 MI 2115 25 miles 100 y 1 dead 8 inj. F4 (770)

Touching down just S of Dewitt, Clinton Co., this tornado DAPPL #182

moved to the NE, lifting near Bennington, Shiawassee Co. A NSSFC #MI-8 nine year old girl was killed when a home was leveled near the start of the path, at Dewitt. While that was the only house along the path that was leveled. 5 other homes in the area

were destroyed, and 3 more were destroyed in Shiawassee Co. The funnel was aloft for half of its plotted path.

2130 18 miles 400 y 18 dead 236 inj. F4 Apr 11, 1965 OH/MI This tornado touched ground only after the thunderstorm had passed (771) over the north part of the city of Toledo, Lucas Co. At the DAPPL #125 MSSEC #OH-O1 N edge of the city, the Fuller's Creekside addition was devastated MI-OI as was another development NE of Toledo. In the Creekside addition 50 homes were destroyed, and many of them were completely swept away. 16 people were killed in Ohio, 4 of them in a bus that was overturned on the Detroit-Toledo Expressway. The funnel skipped into Michigan, killing 2 people on the Lost Peninsula of Monroe Co. Cars and boats were thrown into and onto buildings.

2130 35 miles 400 y 13 dead 104 inj. F4 Apr 11, 1965 OH The tornado first touched down NW of Lima, near the town of (772) Elida, Allen Co., and moved to the ENE. lifting 8 miles SE DAPPL #124 NSSFC #OH-L4 of Finlay, Hancock Co. Homes and farms were leveled at several widely spaced points along the path. 2 people were killed in a car, near Cairo, Allen Co., and 5 people were killed as homes were leveled S of Bluffton. The other deaths were scattered along the path. This event and next are members of the Fujitadesignated "L" family of events, which began near Lafayette, Indiana and ended with the next event near Cleveland, Ohio.

Apr 11, 1965 OH 2200 20 miles 300 y 3 dead 50 inj. F4 This tornado passed W to E across Shelby Co., originating (773) 2 miles E of Ft. Loramie and lifting just N of Maplewood. DAPPL #946 Its course took it over open farming country, barely missing NSSFC #OH-9 the communities of Ft. Loramie, Anna, Swanders, and Maplewood. It first appeared near the western end of Lake Loramie, then moved to near Swanders where 53 freight cars were derailed from a 68-unit train. The fatalities were near Maplewood. 40 houses were destroyed in the county.

Apr 11, 1965 OH 2305 25 miles 400 y 18 dead 200 inj. F4 This event was one of the most intense and destructive of the (774) DAPPL #128 Palm Sunday outbreak, passing through more densely populated NSSFC #OH-L6 territory than most of the Ohio tornadoes that day. Touching down WSW of Pittsfield, Lorain Co., the tornado rapidly intensified and passed through this crossroads community with devastating results. Only 4 people died in the community, but many homes were leveled, and several swept completely away. Continuing to the ENE, the tornado weakened in the Grafton area. but intensified again in the Columbia Station area, and continued to level homes in Cuyahoga Co., at Strongsville. 18 homes were destroyed at Strongsville, and 50 damaged severely.

1730 10 miles 200 y 0 dead 0 inj. F4 May 5, 1965 IA The tornado touched down a few miles WSW of Farnhamville. (775)Calhoun Co., and moved to the ENE. 8 farms were damaged DAPPL #217 as the funnel passed NW and N of Farnhamville. Passing along NSSFC #IA-6 the S edge of Slifer, Webster Co., the tornado hit a church and parsonage, which were both leveled to the ground and totally swept away.

May 5, 1965 [A (776) DAPPL #218

2000 55 miles 150 y 0 dead 11 inj. F4 This event was part of family of tornadoes which extended into Wisconsin and Minnesota. As plotted here, the funnel first touched down near Nora Springs, Floyd Co., and moved to NSSEC #IA-7 NE across SE Mitchell Co., and Howard Co. The funnel was aloft

much of the time, but 28 farms were damaged to some degree and 2 were leveled, near the end of the plotted path. The Landswerk home, 9 miles NE of Cresco, and the Trouten home. N of Kendallville, were both completely leveled to the ground The funnel dissipated just over the Minnesota line, but reformed as a separate event in Houston Co., Minnesota.

1827 27 miles 200 y 3 dead 175 inj. F4 May 6, 1965 MN This event is the first of 4 violant tornadoes in the Minneapolis (777) area that day. During that evening, 24 hook-shaped echoes DAPPL #275 appeared on the Minneapolis WBAS radar. This event touched down NSSFC #MN-8 I mile S of Chanhassen, and skipped to the NNE, damaging a lumber yard and shopping center. Continuing to the NNE, 35 homes were damaged at Lotus Lake and 18 homes were destroyed at Christmas Lake. At Deephaven, 100 homes were damaged, and the first homes were leveled, as the tornado turned to the NE. S of Medicine Lake, the tornado damage was not continuous, and a few homes were damaged in the Golden Valley-Brooklyn area of Heonepin Co. The tornado intensified as it crossed the Mississippi River in Fridley, the first of three F4 events in that town this day. Clocks stopped at 1910. Leaving Fridley, the tornado struck the Anoka Co. airport at Blaine, destroying 10 planes.

May 6, 1965 MN 1850 40 miles 800 v 4 dead 50 inj. F4

Sighted by a pilot near Green Isle, Sibley Co., this tornado (778) leveled at least 5 dozen farms and destroyed 20 farms as it

DAPPL #276

moved to the NE across Carver and Hennepin Cos. 3 miles NSSEC #MN-9 SE of Hamburg, a farmer was killed along with a barn full of prize cattle. Barely missing the towns of Norwood, Young America. and Waconia, the funnel in this area was reported to be 3/4 mile wide. At Island Park, one woman was killed in one of the several homes that were leveled. Several more homes were leveled at Mound, as two more people were killed. The funnel finally dissipated near Hamel.

2010 7 miles 200 y 1 dead 150 inj. F4 May 6, 1965 MN This event first touched down in extreme N Menneapolis, striking (779) the Northern Ordinance industrial area, and moving NNE into DAPPL #279 NSSEC #MM-12 Fridley. This tornado hit Fridley's main school and park complex as well as the trailer court. One infant died in one of the 200 trailers that were destroyed. Continuing to the NNE, the funnel struck Spring Lake park with greater intensity, leveling some of the 150 homes that were listed as destroyed. 75% of the business in Spring Lake Park were destroyed, and 900 people were left homeless. The tornado dissipated there.

May 6, 1965 MN 2040 21 miles 400 y 6 dead 150 inj F4 (780) This tornado touched down at Douglas Drive and Hwy-55 DAPPL #914 Golden Valley, Hennepin Co. and moved to the N. damaging 25 NSSEC #MN-13 homes. Winding to the N, NNE and NE, the funnel hit the Fridley trailer court and intensified as it passed into Mounds View, in the NW corner of Ramsey Co. 45 homes were destroyed at Mounds View, 6 people were killed, and damage totalled about \$1,000,000. Many homes were completely leveled. The funnel then skipped across several lakes in Anoka Co., and lifted N of Centerville

- May 8, 1965 NE 1525 90 miles 400 y 0 dead 0 in1, F4 (781) Plotted here as a single event, this tornado was almost
- DAPPL #292 certainly a family of tornadoes, of which more than one event was violent. Plotted from SW Howard Co., the funnel(s) moved NSSFC #NE-3 to the NNE and N across Greeley and Wheeler Cos., lifting along the Holt-Antelope Co. border. In Greeley Co., The Jeffres farm, 4 miles N of Greeley, was one of many farms that were leveled. In Wheeler Co., several farms were leveled in the area about 10 miles NE of Bartlett.

May 8, 1965 NE 1730 50 miles 400 y 4 dead 53 inj. F5 (782) Plotted here from near Cushing, Howard Co., this tornado was DAPPL #294 one of family of such events that extended from Hall Co. to NSSFC #NE-10 Knox Co. The funnel lifted near Petersburg, Boone Co. and touched down again in Antelope Co., as what is counted here as a separate event. This leveled farms all along the cornado path including the Meyers farm , 3 miles E of Wolbach, Greeley Co. The tornado struck only one town along its path, Primrose, Boone Co. The funnel passed down the main street of town, leveling several homes and businesses, killing 4 people. Only the school at Primrose remained completely upright. One car was carried & mile

May 8, 1965 1715 25 miles 1600 y 0 dead 1 inj. F5 SD This massive tornado struck and damaged 23 farms as it (783) DAPPL #372 passed to the NNE across Tripp Co. Seven farms were NSSFC #SD-3 leveled and a few swept completely away as the tornado barely missed the town of Colome. The Houl and Von Heeder farms were among those leveled.

Jun 2, 1965 TX 2105 40 miles 200 y 4 dead 76 inj. F4 (784) This tornado killed 3 people as it passed through the town DAPPL #584 of Hale Center, Hale Co. One of the deaths occurred in one NSSFC #1X-61 of two farm houses that were leveled, 2 miles E of Cotton Center. Total property damage was listed at \$8,000,000. Touchdown was near Spade in Lamb Co. 66 homes were destroyed in Cotton Center and Hale Center, with one entire block of homes being leveled at Hale Center. Most of the injuries occurred as a church was damaged during services at Hale Center. 100 new automobiles were destroyed at a Ford dealership.

Jun 7, 1965 (785)	SD 1700 15 miles 500 y 1 dead 0 inj. F4 20 funnel clouds were sighted in the Viborg area, and 8 of them
DAPPL #569 NSSFC #SD-46	touched ground, damaging or destroying 20 farms. This well- photographed event killed an elderly farmer. SW of town, and swept cottages into Swan Lake, N of Viborg, Turner Co.
	The actual path positions of the 8 funnels which touched down can never be determined, but this was the largest and most prominent event of the 8.
Aug 26 1065	18 2020 14

2030 14 miles 200 y 1 dead 17 inj. F4 Aug 26, 1965 IA (786)

This tornado first touched down just to the E of Hwy-218. DAPPL #735

25 miles 5 of LaPorte City, in Benton Co. The funnel NSSEC #1A-38

- moved to the SE passing along the edge of Mount Auburn. The Wallis home was the only home clearly leveled. Total damage was listed at \$1,500,000.
- Mar 3, 1966 MS 1600 80 miles 900 y 57 dead 504 inj. F5 (787) This extremely intense tornado first touched down S of Learned.
- DAPPL #33

Hinds Co., and moved to the ENE to the city of Jackson.

Homes were leveled or swept away from the Jackson city limits. NSSEC #MS-9 across the city, and across Rankin, Scott and Leake Cos. The Candlestick Shopping Center, in Jackson, was destroyed. 12 people were killed at the shopping center and 100 were injured as several of the stores were actually leveled to the ground. Large swaths of concrete blocks stretched across the parking lot and into neighboring lots. Total damage for the event was \$18,000,000. 19 people were killed in Hinds Co., mostly in Jackson. 26 people died in Scott Co., 6 died in Rankin "J., and 6 in Leek Co. The event is officially plotted as a 190 mile path into Alabama, but virtually no damage was reported for 60 miles beyond Leek Co., and the path is better considered as a family of tornadoes.

Apr 4, 1966 FL 0700 140 miles 300 y 11 dead 530 inj. F4 (788) Touching down at the N edge of Clearwater, Hillsborough Co., DAPPL #45 this tornado swept across the entire state of Florida, dissipating NSSFC #FL-1 near Cocoa and Merritt Island. It may have been continuous from the Gulf of Mexico to the Atlantic Ocean, but it changed size and intensity many times. The tornado struck Temple Terrace, on the N edge of Tampa, hit the airport N of Lakeland, and passed over sparsely settled territory during the last half of its path. Final damage was at F2 intensity in a trailer park at the N edge of Cocoa. Most of the damage, deaths, and injuries occurred in Hillsborough Co., in the first 30 miles of the path.

Apr 27, 1966 OK 1900 10 miles 400 y 0 dead 2 inj. F4 (789) The tornado formed 4 miles NW of Fillmore, Johnston Co., and nearly DAPPL #114 leveled a hilltop farm. Moving to the ESE, the tornado leveled NSSEC #OK-8 Walters home, 2 miles N of Fillmore, and dissipated 3 miles E of Coleman, Atoka Co. 17 farms were damaged and 7 of the houses were destroyed. A food freezer from the Walters home was found a mile away. 2 cars and a truck were found several hundred feet away.

1900 22 miles 800 y 16 dead 406 inj. F5 Jun 8, 1966 KS This devastating tornado touched down 3 miles SSE of Dover (790) and passed directly over the Indian Mound that was said to protect DAPPL #332 Topeka from tornadoes. Passing through the heart of the city, NSSFC #KS-21 820 homes were destroyed, as entire neighborhoods were leveled and swept away. Most of the damage was done along an 8 mile by 4 block wide path. The funnel lifted 2 miles NE of the city limits. 3000 homes were damaged along with the 820 destroyed, and the total loss was about \$100,000,000. Wasi ourn University was badly damaged.

2000 15 miles 200 y 1 dead 2 inj. F4 Jun 8, 1966 KS This tornado touched down 6 miles NW of Tonganoxie, Leavenworth (791) Co., and skipped to 31, miles WSW of Jarbalo. The funnel passed DAPPL #333 NSSEC #KS-22 through Jarbalo on an ENE path, and lifted 3 miles ENE of

Lansing. The Bachoss home was leveled, one person was killed, and the wreck of the family car was found 3/4 of a mile away from the home site.

1700 30 miles 400 y 0 dead 3 inj. F4 Jun 11, 1966 MN The funnel first touched down on a farm just W of Jenkins, in (792) Cass Co. The funnel lifted over that town, and touched down 0APPL #246 to the NE of Jenkins. The path from that point, to 3 miles NSSFC #MN-3 continuous, and very intense. The E of Outing was Satchell, Moser and several other farms were leveled, and at least 20 others were damaged. Thousands of trees were snapped or uprooted, mostly pines.

1355 12 miles 1000 y 6 dead 172 inj. F5 Oct 14, 1966 1A As skies threatened during a homecoming parade, the crowd (793) dispersed before the tornado passed through the town of Belmond, DAPPL #513 NSSFC #IA-29 Wright Co. 109 homes were destroyed and 468 were damaged. On either side of town, 28 farms were struck. Several of them were leveled, and at least one was completely swept away. Damage totalled about \$11,000,000. 75 of the 112 business building were damaged or destroyed.

1445 20 miles 400 y 0 dead 2 inj. F4 Jan 24, 1967 MO/1A An intense tornado cut a swath of near total destruction from (794) 2 miles E of Queen City, Schuyler Co. across the NW corner DAPPL #25 of Scotland Co., and 2 miles into Davis Co., Iowa. 5 farms NSSFC #MO-8 were destroyed, and at least 2 of them were leveled. 20 others IA-1 were damaged. This event was part of a very unusual and extensive January outbreak that extended as far north as Wisconsin.

1855 21 miles 200 y 3 dead 216 inj. F4 Jan 24, 1967 MO The tornado touched down in the west portion of St. Louis Co., (795) near Diive Street Road and White Road Skipping to the NE, it DAPPL #26 passed over Maryland Heights, St. Ann, the SE corner of Lambert NSSFC #MO-9 Field Spanish Lake, and dissipated at the Mississippi River. 168 homes were destroyed and over 1700 were damaged. Only a few were actually leveled. Damage totalled about \$15,000,000.

1530 30 miles 200 y 2 dead 25 inj. F4 Mar 6, 1967 AL

The tornado strucj SW of Sumiton, Walker Co., moved to the (796)

NE, and lifted near Hwy-31 N of Warrior. About 32 houses DAPPL #51

were destroyed, 18 houses damaged and about 50 outbuildings NSSFC #AL-3 and barns destroyed. A few small homes were leveled at Rocky Hollow and at Empire, and I death occurred in each of those communities.

1420 60 miles 300 y 0 dead 2 inj. F4 Apr 21, 1967 MO Touching down near Summer, in NW Chariton Co., the tornado (707) moved to the NE across rural areas, missing all of the small DAPPL #184 NSSFC #MO-22 towns near its path. Warnings and good visibility kept the

toll of deaths and injuries to a minimum. The tornado injured 2 people as they huddled in the SW corner of their home, which was destroyed, about 5 miles SE of Brookfield. A home leveled in the SW corner of knox Co. had some of its contents dropped near the end of the tornado path, near Novelty. N of Bucklin, on Rte-129, a house was destroyed by a tornado for the second time in two years.

1550 28 miles 800 y 24 dead 500 inj. F4 Apr 21, 1967 11

This tornado touched down 2 miles SE of Cherry Valley, Boone (798)

Co., and lifted 2 miles N of Woodstock. While farms were DAPPL #104

NSSFC #IL-13 leveled all along the path, no deaths occurred outside of Belvidere. The tornado passed through the SE edge of that town and, while producing no clear F4 eveidence, struck two locations with disastrous results. 7 people were killed at a shopping center, and 14 were killed and 300 injured at Belvidere High School. The funnel swept into the bus loading area, as the students were being dismissed. 16 buses had already picked up the elementary students. In the chaos that followed, 12 buses were overturned or thrown about and students and a bus driver were killed. Damage at Belvidere was about \$20,000,000.

1700 9 miles 150 y 1 dead 100 inj. F4 Apr 21, 1967 IL This tornado skipped from the SE corner of McHenry Co., near

(799)

DAPPL #111

Fox River Grove, to Barrington Hills and Lake Zurich Manor in NSSFC #IL-20 Lake Co. A 4 story brewery was destroyed and 500 homes were damaged or destroyed. The brewery collapsed vertically and was

partially blown away. At Barrington Hills, a thousand-pound heating unit from a summer home was carried for one-half mile.

Apr 21, 1967 1724 16 miles 200 y 33 dead 500 inj. F4 IL

Touching down in Palos Hills, Cook Co., this tornado moved (800)

DAPPL #115 through the Chicago suburbs of Oak Lawn, Hometown, Evergreen

NSSFC #11-24 Park and then the south side of Chicago to Lake Michigan. Many deaths occurred in cars that were thrown about at traffic lights. Many people were killed when the tornado destroyed a roller skating rink. A high school and 200 homes were destroyed along with a grocery store. The tornado hit during the Friday evening rush-hour.

Apr 21, 1967 MI 1915 12 miles 50 y 0 dead 8 inj. F4 This tornado damaged a high school and 22 homes as it passed (801) DAPPL #154 along the S edge of Fowler, Clinton Co. 4 of these homes were NSSFC #MI-11 listed as destroyed, and 1 of them, the Koenigsknecht home, was leveled just E of Fuwler.

Apr 30, 1967 IA/MN 1728 12 miles 400 y 0 dead 0 inj. F4 (802) This event was the first in a series of violent tornadoes DAPPL #131 along the lowa-Minnesota border this day. This tornado passed along the E edge of the town of Manly, leveling one home. Worth Co. was hit by at least 3 large tornadoes within an hour. Separation of the damage into its proper event is virtually impossible. The total damage in the county for the three events is given as \$2,000,000 as 47 farms were struck. 2 of these events are listed as violent, but it is possible that all three were violent.

- Apr 30, 1967 TA/MN 1820 20 miles 500 y 0 dead i inj. F4 (803) Touching down 2 miles SE of Manly, Worth Co., this tornado
- DAPPL #133 moved almost due N, damaging and destroying farm after farm.

NSSEC #IA-28 Passing E of Kensett and Northwood, the Mooney farm, the

NN-6 Weidler farm, the Hanson farm and serveral others were leveled to the ground. The funnel passed into Minnesota, and dissipated near Myrtle.

Apr 30, 1967 MN 1823 40 miles 200 y 5 dead 35 inj. F4

(304) From near Twin Lakes, Freeborn Co., this tornado moved

DAPPL #160 NNE, passing along the W side of Albert Lea and on to

NSSEC -NN-5 Clarks Grove and Ellendale. From there, it skipped through Steele Co., to W of Owatonna. S2.000.000 in damage was reported from the W side of Albert Lea, as 26 homes were destroyed. 64 were badly damaged. 3 people were killed. Farms were leveled at several points on the path, as well as at Albert Lea, and 3 people were killed near Owatonna.

Apr 30, 1967 MN 1852 30 miles 500 y 6 dead 22 inj. F4 (805) This tornado touched down at county road #33 near Hartland, Freeborn Co., and moved N along Hyw-67 into the city of Waseca. Waseca Co. Sweeping from one side of the highway to the other, many farm buildings were destroyed, and a few farm houses were leveled. At Waseca, the funnel cut u 4 block wide path on the E side of town. 16 homes were destroyed, about 5 dozen of which were leveled. The funnel lifted about 7 miles NNE of town.

Jun 8, 1967 IA 2130 10 miles 100 y 0 dead 5 inj. F4 (806) From S of Moorland, Webster Co., this tornado moved to the DAPPL #377 NE hitting the Sheker addition on Rt-20, 1 mile W of Fort Dodge. NSSFC #IA-40 The Stiles home was leveled.

Jun 10, 1967 OK 1704 8 miles 400 y 4 dead 1 inj. F4 (807) The tornado formed 3 miles S of Hammon, with the first major damage 3 miles E of town. There, the hill-top Silva farm was almost completely blown away. One woman and 3 children were killed, and the husband injured. Five other farms were damaged or destroyed as the tornado foilowed a zig-zag path across Custer Co. The funnel lifted 6 miles ENE of Hammon.

DAPPL #486	OK 2045 5 miles 100 y 0 dead 0 inj. F4 One of several tornadoes in the Watonga, Blaine Co. area that evening. This tornado struck 6 miles E of town, leveling a farm and lifting a 30 ton OG&E transformer station into the air and dropping it 150 feet to the east.
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Dec 1, 1967 MS 1230 4 miles 400 y 2 dead 10 inj. F4 (809) This formado four-bad dos 400 y 2 dead 10 inj.

(809) This tornado touched down on a chicken farm 8 miles NE of Forest.

DAPPL #769 Scott Co. The tornado moved to the NE, passing near the Salem NSSFC #MS-17 community and through the Brusha community. The funnel, described

as"2 or 3 funnels dancing over a one mile area". 3 homes, in one area, were completely swept away, with debris scattered formiles through the woods. A car was carried 300 y through the air, and the bodies of a woman and her daughter were found is mile from the home site.

Dec 21, 1967 MO 0045 33 miles 200 y 3 dead 52 inj. 74

(810) The tornado which was eventually to devastate the business district DAPPL #778 of Potosi, first touched down in extreme western Iron Co., 2', miles NSSFC #M0-66 S of Viburnum. Five persons were injured as the tornado destroyed house and trailer on Hwy-49, between Viburnum and Bixby. It intensified SW of Potosi, swept into town and destroyed the city hall and a large portion of the business district. Along Hwy-E a child was killed and IS people were killed as a trailer court was struck. 2 people were killed as home was leveled furtner to the NE on Hwy-E. This home was almost completely swept away, but not likely of good construction.

Apr 3, 1968 AR 1820 14 miles 400 y 5 dead 16 inj. F4 (811) 12 farm homes were destroyed, and cars were blown off highways SE of Star City, killing two people. A 68,000 pound truck was blown from the highway in the same vicinity. Thousands of trees were destroyed. Highway 81's pavement were torn up 5 of Star City. The tornado lifted near Gould. All towns were in Lincold Co.

Apr 3, 1968 KY 2330 40 miles 200 y 2 dezd 30 inj. F4

- (812) The storm cut a swath beginning 10 miles NE of Murray,
- DAPPL #76 Calloway Co., near a trailer court on Highway 641. It moved NSSFC #KY-1 NE through Alamo Heights to about 2 miles E of Dexter, to the Aurora-Unity area, across Kentucky Lake, Land Between the Lakes, Lake Barkley, across northern Trigg County, southern Caldwell Co., and into northwest Christian Co. through Pennyrile Forest State Park about 0015 April 4. At least 50 homes were damaged or destroyed in Marshall and Calloway Cos. Many roads were blocked by trees and fallen utility lines. Land Between the Lakes had many downed trees. There was damage to at least 30 farms in Trigg Co. There was extensive damage to a new lodge and to the forest in Pennyrile State Park, and farm buildings in adjacent areas. The path was reported to have been a half- mile wide along some stretches, a mile wide and 10 miles long in Trigg Co.

Apr 19, 1968 AR 1512 2 miles 300 y 14 dead 270 inj F4 (813) This vicious tornado struck Greenwood, Sebastian Co., after DAPPL #52 the sky became very dark with a thunderstorm and heavy rain NSFC #AR-8 The path of the torm with a thunderstorm and heavy rain

1-8 The path of the storm was almost directly through the center of town. Over 400 homes were destroyed or damaged, as were 69 businesses. The tornado was on the ground for about 4 minutes.

1345 30 miles 300 y 5 dead 360 inj. F4 Apr 23, 1968 KY/OH (814) The storm touched down about 15 miles SW of Falmouth, Pendleton DAPPL #104 Co., and moved S and E of the business district of the town. It moved E into Bracken Co., causing damage in Berlin, Bladeston, NSSFC #KY-2 and Chetham. It continued eastward into Mason Co., striking Dover. #OH-3 Some residents reported seeing 2 or 3 funnels. The path here was variable, from less than 100 yards to 300 yards. The funnel seemed to stay on the ground most of the time, even dipping down into the hollows between the hills. 4 people were killed in the Falmouth area and 1 near Augusta, Braken Co. There were 350 injured in the Falmouth area, 250 of which were treated at the hospital or by a physician. There were at least 8 injuries in Braken Co. in Falmouth, 380 houses were damaged to some extent, 180 of which were described as destroyed. In Braken Co., 20 homes were demolished, 50 damaged, and 175 barns lost. In Dover, 115 of the 127 houses were badly damaged, 3 churches and 3 trailers were destroyed, and 3 businesses were damaged. At this point, the tornado moved across the Ohio River between Levanna and Ripley and moved up Chicken Hollow Road, 3 miles N of Ripley on U.S. 62. A woman was killed and her son injured as the tornado destroyed their trailer home. In the Ripley area, 30 homes were damaged and 40 barns totally destroyed. 17 barns were leveled near Decatur, Brown Co. In Adams Co., 25 houses and barns were destroyed or damaged, and 4 house trailers were destroyed.

Apr 23, 1968 OH 1356 25 miles 400 y 1 dead 29 inj. F4 (815) This tornado first touched down near Glen Este, then moved NE DAPPL #102 at 40-45 mph, crossing Rte. 50 E of Perintown, just E of NSSFC #OH-1 Newtonsville, Clermont Co. It lifted about 3 miles E of Westboro, Clinton Co. Between Glen Este and Newtonsville. 5 homes and a house trailer were destroyed. The heaviest damage occurred E of Newtonsville, where 30 homes and 50 tarns were totally destroyed. A 13 year old boy was killed when his home was completely leveled. The path width ranged from 50 yards near Glen Este, to nearly 3/4 mile near Newtonville. The funnel lifted after passing through a woods near Westboro. Many people reported hail and a deafening "roar"

Apr 23, 1968 OH/KY (816) DAPPL #107 NSSFC #OH-6

1605 38 miles 400 y 7 dead 92 inj F4 A tornado moving in an ENE direction at about 45 mph crossed the Ohio River from Kentucky and hit a train, leaving several cars overturned. It then crossed Rte. 52 and moved into the town of Wheelersburg, Scioto Co. In this area, the tornado destroyed or damaged 550 homes, killing 7 people, and injuring 75 others primarily in the Dogwood Ridge Road residential section 4 miles ENE of Wheelersburg. After leaving Wheelersburg, it skipped through a sparsley populated rural area to Gallipolis. Near Lyra, about 2 miles N of the junction of State Rte. 141 and 233. a home was leveled, and another lost its roof. In the Gallipolis area, damage was heaviest along Chillicothe and McCormick Roads, where 6 neuse trailers, 8 homes and 4 farm buildings were destroyed or damiged. At the Gallipolis State Institute, 15 buildings sustained moderate to heavy damage, estimated to be a \$230,000 loss Damage in Scioto Co. was estimated at \$2,000,000

May 15, 1968 IA 1510 65 miles 600 y 13 dead 450 inj. F5

while a funnel was sighted as far to the SE as Franklin Co., the

DAPPL #173 touchdown point is plotted just E of Marble Rock, Floyd Co. NSSFC #IA-10 The tornado moved to the NE, growing larger and more intense as it approached Charles City. The huge funnel passed directly through the city, destroying 337 homes, and causing about \$30,000,000 in damage. The tornado continued to the NE. hitting Elma, Howard Co., causing \$1,500,000 in damage. From there the tornado turned to the N, dissipating S of Chester, 4 miles from the Minnesota border. Nearly 2000 homes were damaged or destroyed.

May 15, 1968 (818) IA 1557 15 miles 500 y 5 dead 156 inj. F5

DAPPL #174

(817)

Touching down just SW of Delwein, Fayette Co., the warning

NSSFC #IA-11

sirens sounded for only 15 seconds before the power failed. Passing through Oelwein, the tornado moved to the NNE, hitting Maynard, and lifting 5 miles NNE of that town. Homes were leveled in both towns and swept completely away in Maynard. Damage totalled \$21,000,000 as nearly 1000 homes were damaged or destroyed.

May 15, 1968 AR 2036 5 miles 300 y 7 dead 24 ing F4 (819) Half to two thirds of Oil Trough, Independence Co. was destroyed. DAPPL #149 Few houses escaped damage. There was roof and wall damage to the NSSFC #AR-15 high school, and the post office and a grocery store were destroyed An implement company was also destroyed. There were 60 people in the church when it was struck, but only I person was injured. A dozen or more cars were damaged. The tornado moved in a WSW to ENE direction, and caused \$750,000 damage

May 15, 1968 AR 2045 40 miles 100 y 35 dead 361 thj. F4

(820) 6 houses were destroyed and 15 damaged in the 5 part of

DAPPL #151 Tuckerman, Jackson Co. The tornado then continued to Valley View.

NSSEC #AR-16 and followed Highway 39 into Jonesboro, Craighead Co., then struck Fairview and Nettleton. The high school there was almost completely destroyed. At least 7 cars on one stretch of highway were hurled across a nearby railway, and some cars were wrapped around trees, killing the occupants. 164 homes were destroyed. The tornado lifted in Needham.

Jun 13, 1968 MN 1850 13 miles 150 y 9 dead 125 inj. F5

(821) This severe tornado formed and touched down NE of Lake Sarah, and DAPFL 336

moved NE, striking Tracy, Lyons Co. 9 people were killed and 125 NSSFC #MN-19 injured as it destroyed 111 nouses and damaged 198 more. 13 farms

and 10 businesses were also destroyed or heavily damaged, and a few were swept away. The tornado could be observed for 20 miles in all directions. At one home site, part of the foundation was missing. Several box cars were blown 3 blocks.

A-79

1610 25 miles 75 y 2 dead 3 inj. F4 Aug 19, 1968 W1 This relatively small tornado moved to the E across S Marinette (822) Co., parallel to and 5 of Hwy-64. Farms were destroyed near DAPPL #540 NSSEC #WI-18 Pound and again S of Marinette. Two elderly brothers were killed when their farmh use near Pound was leveled. The funnel cloud was first observed aloft, 20 miles to the west of the touchdown point, 3 miles SW of Pound.

0525 95 miles 1200 y 32 dead 241 inj. F4 Jan 23. 1969 MS This massive tornado passed through portions of 6 counties. but, with the exception of Hazelhurst, the funnel struck DAPPL #2 only small rural communities. The tornado's first damage NSSEC #MS-1 was the destruction of a vacant house, 6 miles SE of Fayette. Jefferson Co. In Copiah Co., the funnel cut a 5 mile wide swath across the S side of Hazehurst, killing 11 people, injuring 140 others, and destroying or damaging 175 homes. Damage there was about \$900,000. In Simpson Co., 2 people were killed as their home was leveled S of Harrisville. A school bus was carried & mile in that area.Further on 10 people died as 4 more farm homes were leveled. 14 students were injured when a school bus was overturned. In the SE corner of Rankin Co., several homes were leve ed and cars and pickup trucks were thrown up to k mile, but no people were killed. In NW Smith Co., the tornado leveled the Sardis community, 6 miles N of White Oak. 6 people were killed in the Smith home, and 2 in the Shows home. 2,500,000 board feet of timber were destroyed in the Bienville National Forest. In Scott Co., the tornado leveled more forest land and damaged a few homes before lifting.

15 inj F4 0230 57 miles 500 y 2 deus Apr 18, 1969 41 This tornado first touched down near Greenville, Butler Co., (824) and did only minor damage. It skipped, touching down again DAPPL #15 near the Butler-Crenshaw Co. line in the Danielsville and Panola NSSFC #AL-2 communities, where it killed 2 people and injured 11 others. 18 homes were destroyed and 30 more damaged. The next time it touched down it destroyed some farm buildings and trees in the Ramer area of Montgomery Co. The last time it struck, it hit Fitzpatrick, Bullock Co., injuring a w man and 3 children, destroying 2 houses and sumaging 5 others.

1740 21 miles 500 y 2 dead 22 inj F4 Jun 22, 1969 MO This intense tornado first touched down in the Clark National (825) Forest, 16 miles W of Potosi, Washington Co. It moved E through OAPPL #271 heavily timbered areas, then damaged buildings on 3 farms 1, mile NSSFC #MO-9 N of the dam on Sumner Lake. It then turned ENE, crossed State Highway 185 5 mile SE of Latty, and continued toward the S edge of Old Mines. Just west of Hwy. 21, it destroyed a house, killing 2 people. In the Old Mine: area it destroyed or damaged 17 houses and 10-20 cars. It lifted about 15 miles ESE of town.

1835 15 miles 440 y 4 dead 14 inj F4 Jun 22, 1969 MO The tornado first touched down 2% miles W and I mile S of (826) Doe Run, St. Francois Co. It moved ENE across Hwy. W in the DAPPL #272 NSSEC #MO-10 southern part of town, 1 mile SW of the junction of Hwys. B and w.

It then traveled due E from Doe Run. Two people were killed when their camper-bus was swept off Highway 67 just N of H. and 2 more deaths occurred just E of Highway 67 as a home was leveled. The tornado then turned ESE towards Libertyville, and became less intense, with some evidence of skipping. It lifted about Dy miles ENF of Libertyville. 22 homes were completely destroyed and 90 others were damaged. Many barns, outbuildings, power and telephone lines were leveled.

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1600 12 miles 600 y 0 dead 6 inj. F4 Jun 23, 1969 KS The tornado began about 12 miles W of the Wichita Municipal Airport (827) and moved E, then SE, ending about 5 miles SW of the airport. OAPPL #259 NSSEC #KS-10 Several farm houses were leveled or badly damaged. Its forward speed was about 25 mph.

1715 4 miles 200 y 0 dead 0 inj. F4 Jly 7, 1969 SD The tornado completely leveled a ranch house, and part of (828) the foundation was torn up 12 miles SSW of Buffalo. DAPPL #357 NSSFC #SD-8 Harding Co.

1548 33 miles 1600 y 12 dead 70 inj. F4 Aug 6, 1969 MN Thousands of trees, dozens of cabins, and many farms were leveled, (829) DAPPL #489 as this massive tornado passed across Cass and Aitken Co. NSSFC #MN-14 The funnel touched down NW of Outing , on the E side of Stewart Lake, and moved N of Outing . 11 of the 12 deaths occurred on the shores of Roosevelt Lake., and one person was killed near Reservoir Lake. N of Outing, the funnel was 13 miles wide. The total damaged exceeded \$2,000,000. The funnel lifted 5 of Hill City, Aitken Co. Many large tornadoes struck N Minnesota

that afternoon, but struck only trees.

2050 35 miles 800 y 0 dead 24 inj. F4 Apr 17, 1970 TX Touching down at Whiteface, Cochran Co., this tornado destroyed (830) or damaged almost every building in town, leveling some. 20 DAPPL #707 NSSFC #TX-10 people were injured. Damage was estimated at \$2,000,500. Hailstones 4 inches in diameter fell during the storm. It touched down again at the Whitharral community a short time later. A large grocery store and cotton gin were destroyed, and the school building was heavily damaged. 4 persons were injured. Property loss here was estimated at \$700,000.

80

(823)

Apr 17, 1970 TX 2200 65 miles 800 y 5 dead 51 inj F4 (831) The tornado ripped through the Cotton Center-Hale Center rural OAPPL #135 area. Two funnels, one to two miles apart, were on the ground NSSFC #TX-11 at the same time, but four or five funnels were reported. NW of Cotton Center, the tornado struck a pickup truck, killing a woman and her son. In spite of the fact the the truck was "smashed flat as a pancake", several members of the family escaped. The tornado continued moving N of town, missing the town center by 2 miles. It destroyed 8 homes, and many outbuildings and barns N of Hale Center. It touched down on the SW edge of Plainview. in the Plainview Country Club area, and traveled E along 5th St., uprooting trees, ripping out power lines and destroying buildings. Turning NE, it skipped along, at times damaging taller buildings severely and leaving lower structures with only minor damage. When it reached the Seth Ward community, NE of Plainview, it stayed firmly on the ground, cutting a swath 3 to 6 city blocks wide. Almost everything in its path was leveled in that area. In the Plainview area, 40 people were injured and property damage was estimated at \$4,500,000. The next damage was in SE Swisher Co.. 15 miles SE of Claytonville. 2 homes were leveled, and a couple in one of the homes was killed. Damage in this area was estimated at \$445,000. The tornado moved from the Briscoe Co. line straight to Silverton, then hopped and skipped through the S and SE part of that town. A 14 year old girl was killed here as her home was

Apr 17, 1970 TX 1230 130 miles 600 y 1 dead 13 inj. F4 A tornado, accompanied by other damaging winds and hail, cut DAPPL #138 an intermittent path approximately 120 miles long and up to NSSFC #TX-12 5 mile wide from the Lazbuddie community, in SE Parmer Co., to Pampa, in NW Gray Co. The death occurred near the touchdown point in Lazbuddie. 3 farm homes were destroyed, 3 were damaged extensively, and 3 people were injured in the area. The damage there was estimated at \$500,000. When the tornado touched down again, in SW Randall Co., it cut a path 20 miles long, from 18 miles W and 2 miles N of Happy to 5 miles S of Canyon. The next stretch of track was in the vicinity of Conway, in southern Carson Co. Apparently it touched ground again W of U.S. Highway 70, then moved into the outskirts of Pampa. Here it cut a swath 7 miles long and 100-200 yards wide across the SE corner of the city. 10 people were injured, and 12-20 houses were destroyed or heavily damaged. A number of mobile homes were destroyed. The damage estimate there was \$2,000,000.

destroyed. Four other people were injured in Silverton, as the

tornado did \$1,500,000 damage.

Apr 18, 1970 TX 1300 65 miles 600 y 16 dead /42 inj. F4 This tornado first touched down 15 miles NE of Tulia, in NE Swisher (833) DAPPL #139 Co., and moved NE to near McLean, in the SE corner of Gray Co. NSSFC #TX-13 In Swisher Co, it cut across farm and ranch land, causing \$100,000 damage to property and livestock. In the NW corner of Briscoe and the SE portion of Armstrong Cos., the tornado cut across rough ranch land. Near Clarendon, in Donley Co., the tornado struck first in the Martin Community on U.S. Highway 287, about 7 miles WNW of the city. The Land home was leveled, and the tornado moved across the highway, destroying the Osburn home and killing Mr. Osburn, injuring his wife. The tornado continued in a NE direction, striking the Sherwood Shores resort community at Green Belt Reservoir, about 75 miles NW of Clarendon. 12 people were killed in this area, and 35 others injured, 1 fatally. This community was mostly mobile homes. 172 of the homes were destroyed and only 1 remained intact. Damage was estimated at \$1,300,000 in this area. The tornado next struck at the mobile home of the Pools, on Highway 70, killing both of them and blowing the trailer away. It continued NE through northern Donley Co., damaging several farm homes, then crossed Interstate 40, 4 miles W of McLean in SE Gray Co. Here, it blew several tank cars off the railway tracks, one right onto the highway. Near McLean, 3 farm houses were destroyed. N of McLean, a coltage at Sand Spur Lake was destroyed and 5 others were damaged. Property loss in Gray Co. was estimated at \$400,000. A widely circulated photograph of an iron pipe, pierced by a piece of wood, was taken at Clarendon after this event.

Apr 19, 1970 MS/TN 1206 45 miles 200 y 4 dead 78 inj. F4 (834)

This tornado touched down about 3 miles SW of Ripley, Tippah DAPPL #97 Co., and cut a 100 yard wide skipping path south of that town.

- NSSEC #MS-7 Several small buildings were destroyed, but no injuries were TN-5 reported and damage totalled \$50,000. The funnel skipped to the S edge of Corinth, Alcorn Co., where it leveled a church and
 - several homes. Two people were killed in the concrete block church. A total of 69 homes were destroyed and damage totalled \$1,800,000. \$30,000 in damage was done in Counce, Hardin Co., Tennessee.

1400 50 miles 200 y Apr 19, 1970 TN 3 dead 85 ini, F4

(835) DAPPL #738

This tornad produced a skipping path across 3 counties.

Touching down 8 miles S of Clarksville., Montgomery Co., NSSFC #TN-10 it then damaged several homes and trailers as it moved to the east. In Robertson Co., many homes and farm buildings were leveled between Springfield and Greenbrier. In Summer Co., one home was leveled S of Fountain Head, near the end of the tornado's path. Damage totalled \$1,500,000 with 76 homes listed as destroyed. The majority of this damage was in Robertson Co.

(832)

May 11, 1970 TX (836) DAPPL #714

This, the costliest tornado in Texas history to that date, developed over the SW section of Lubbock, and dipped to earth NSSFC #TX-34 just S of the downtown section. It skirted just E of the Texas Tech campus, then plowed through the downtown area, destroying and damaging apartment houses and other buildings en route. It move NE generally along U.S. Highway 87, and stayed on the ground for 8 miles before lifting. The area of tornado damage covered 15 square miles, almost 's of the city. Within this area, 600 apartment units were destroyed, 430 houses were destroyed, and 250 businesses were damaged or destroyed. It turned into shambles the expensive homes near the Country Club, uprooted large trees, folded entire buildings in on their contents, destroyed or damaged about 10,000 cars, and, near the point where it lifted, destroyed 119 aircraft at the Lubbock Municipal Airport. Damage was about \$200,000,000.

2035 8 miles 1600 y 26 dead 500 inj F5

Jun 12, 1970 MO 1430 17 miles 400 y 0 dead 0 inj. F4 (837) This tornado cut a swath of near total destruction across more DAPPL #310 than a dozen farms from the Mussel Fork community, 7 miles SW of NSSEC #MO-19 Synumville to SE of that town. 3 homes, 1 trailer, and several barns were leveled. 5 homes and 10 barns suffered extensive damage. Some observers reported seeing 2 and 3 funnel clouds at one time. From that point, the damage path crossed the open fields of the Chariton River Bottoms, as the tornado turned NE, to Buster's Bridge, on the Chariton-Macon Co. line. Buster's Bridge, a single span of steel girder construction built in 1927. was lifted bodily and dropped into the river upstream, one span's length from its original location. NNE of the bridge, there was extensive damage of outbuildings, barns and machinery on 3 farms, and less damage on 5 others. The tornado lifted just W of State Highway 3, 4 miles S of U.S. 36, 5 miles SSW of Callao. There was F4 damage to the Niemeter and Scott homes.

Oct 5, 1970 OK 1542 25 miles 200 y 4 dead 80 inj F4 The tornado formed over the city of Shawnee, Pottawatomie Co., (838) 0APPL #721 dipped near the center of town, and moved to the NE. The NSSFC #OK-44 funnel crossed 1-40, 6% miles NE of the town. The funnel passed through the SE part of Prague, Lincoln Co., and lifted 2 miles N of Paden, Okfuskee Co. 4 were killed and 80 injured in Shawnee, and the other 4 injuries occurred at Prague. At Shawnee, 564 homes were damaged or destroyed, and a few were leveled. 14 homes were damaged at Prague.

1450 110 miles 600 y 46 dead 400 inj F4 Feb 21, 1971 LA/MS (839)

The first of three major tornadoes in the Mississippi River Delta that day, this event first touched down in extreme W

DAPPL #51 NSSEC #LA-2

(840)

Madison Parish and moved to the NE. Striking south of US 80 MS-10 in the Waverly community, the funnel leveled the Lenore home killing 10 of the occupants. A few other homes in the area were also destroyed. While striking mostly wooded parts of East Carroll Parish, the tornado did pass through the edge of the Melbourne community, S of Transylvania, where 7 homes and 2 trailers were destroyed. Passing across the Mississippi River into Issaquena County, Mississippi, the tornado weaken until it entered

N Sharkey Co. From here it remained intense until dissipating in NW Leflore Co. 7 people were killed at Delta City, Sharkey Co. and 2 people were killed near Camena. In NW Humphreys Co., 2 people were killed W of Isola. In Sunflower Co., the community of Inverness was completely leveled, with 21 deaths and over 200 injuries. 4 people were killed as homes were leveled in the NW section of Moorhead.

Feb 21, 1971 MS 1600 160 miles 800 y 58 dead 700 inj. F4 Touching down near Fitler, Issquena Co., this tornado passed DAPPL #954 NSSFC #MS-12

through portions of at least 8 counties and completely leveled several small communities along the way. The end of the path is plotted N of Oxford, Lafavette Co. The official analysis of this tornado extends the path through Benton Co. and into Tennessee,. A 1 hour time difference in just a few miles, however, indicates that the Benton Co. tornado was a later and quite separate event. In Sharkey Co., the Evanna Plantation was destroyed S of Cary with 14 deaths in the area. In Humphreys Co., 7 people were killed Gooden Lake, and 2 at Mound Lake Plantation. In Leflore Co., many small homes were swept away, killing entire families. 21 people died at Pugh City, 2 at Swiftown, 6 at Morgan City, 2 died at a point 2 miles W of Greenwood, and 4 people died near Money. From here to Oxford, damage was less severe and the tornado path was not continuous. Damage was reported from Cascilla. Tallahatchie Co., and Tillabota, Yalobusha Co.

Feb 21, 1971 MS 1706 70 miles 800 y 13 dead 200 inj. F4

(841) DAPPL #64 From a point SSW of Bovina, Warren Co., this tornado moved to the NNE, quickly leveling one home S of Bovina and killing two

NSSFC #MS-13 people. The next major damage was between Little Yazoo and Bentonia where 11 people were killed and a dozen homes were leveled. The tornado skipped through very rural territory for the remaining part of its path.

Mar 12, 1971 TX 1830 6 miles 600 y 1 dead 5 inj. F4 (842)

A 25 mile strip of houses at Malta suffered total or partial DAPPL #137 destruction when this tornado dipped down on this town, located

- NSSFC #TX-27 half way between DeKalb and New Boston. The tornado moved NE. where it leveled the Sanford home and also that of his mother,
 - at Daniel's Chapel, about 5 miles NW of New Boston. Mr. Sanford was killed in the destruction of his home, and his wife and daughter were injured. Property damage was estimated at \$127,000.

Apr 23, 1971	AL 2340 15 mile 200 y 0 dead 0 inj. F4
(843)	This tornado struck the Old Texas community in Monroe Co.,
DAPPL #142	then moved ENE for 15 miles. For the first 10 miles, it
NSSFC #AL-15	stayed continuously on the ground, and caused near-total destruction of small houses. The couch from one was found
	is mile away. A small home in Old Texas was completely swept

2030 15 miles 200 y 6 dead 58 inj. F4 Apr 27, 1971 KY Moving almost due E and ENE across Adair Co., this tornado (844) passed 35 miles N of Columbia. All 6 people died as the DAPPL #170 tornado leveled several homes along Hwy-551. N of Columbia NSSFC #KY-6 Along the path, about 100 houses were damaged or destroyed.

2153 14 miles 300 y 2 dead 72 in). F5 Apr 27, 1971 KY This tornado touched down 3 miles E of Russell Springs and moved (845) to the E. and ENE. In the Gosser Ridge community, 2 people DAPPL #171 of the buildings were were killed on a farm, and most NSSEC #KY-8 completely swept away. Along the path, 35 homes were listed as destroyed and 105 others damaged. The funnel lifted near Faubush, Pulaski Co. The Fujita survey rated this event at F5. The possibility exists that this event would be rated at F4 by 1982 standards.

2 dead 137 inj. F4 1745 50 miles 100 y May 7, 1971 TN (846) The tornado first touched down 3 miles E of Bradford, Gibson Co., DAPPL #346 where it destroyed an unoccupied trailer. From this point the NSSFC #TN-7 tornado left an almost continuous path of destruction through Huntington and Buena Vista in Carroll Co. to Eagle Creek, Benton Co. After crossing the Tennessee River, trees were leveled near Cuba Landing. 49 homes were destroyed along the path, with most of the \$6,000,000 in damage occurring at Huntington. One person was killed at Huntington and one at Buena Vista. Although the damage at Huntington was extensive, only a few small homes were completely leveled.

1700 6 miles 600 y 0 dead 0 inj. F4 Jun 9, 1971 TX 9 funnels, of which at least 4 touched ground, were observed (847) in the SE corner of Sherman Co., N and NE of Sunray. As many DAPPL #532 as 3 funnels were seen on the ground at the same time. The NSSFC #TX-93 largest funnel stayed on the ground for 19 minutes. It was 7 miles N and 6 miles E of Sunray, traveling SSE for almost 6 miles. One person said that he could outrun it by foot, it was traveling so slowly at one point. F4 intensity was estimated from appearance on photographs, by NWS personnel.

Jun 9, 1971 (848)

TX

2050 16 miles 2400 y 0 dead 0 tnj. F4 This tornado, the largest ever recorded in Texas, was estimated

to have achieved F4 intensity, although no F4 damage was DAPPL #537 confirmed. It touched ground SW of Gruver, Hansford Co., and NSSFC #TX-98 followed a meandering 15 mile path S, E, and NE of Gruver. In one area, 27 power poles were splintered like matchsticks. The tornado diameter grew to 2 miles at one point, with as many as 20 other funnels reported in the area. Property damage totalled \$15,000.

1715 30 miles 1300 y 0 dead 8 inj. F4 1A Jly 12, 1971 Moving from NW to SE, this tornado destroyed buildings on 50 (849)farms in SW Howard and NE Chickasaw Cos. Between Elma and Alta DAPPL #597 Vista, 11 farm houses were destroyed and 3 of them were NSSFC #1A-29 completely leveled. The funnel skipped as far as Lawler.

1700 25 miles 50 y 5 dead 6 inj. F4 Apr 19, 1972 OK The first evidence of damage in this tornado was about 5 miles (950) SW of Ratliffe City, Carter Co. It moved ENE about 35 mph. DAPPL #180 with the funnel on the ground about 20 percent of the time, NSSEC #OK-6 and at tree-top level the rest. The heaviest damage occurred in a swath 2 miles S of Ratliffe City to NW of the junction of Interstate 35 and State Highway 7. A wooden frame house was destroyed in this area, causing 3 injuries. About 7 miles WNW of Davis, in Garvin Co., the Baird home was leveled, with only a few concrete blocks remaining around the foundation. 5 deaths and 6 injuries took place here.

1825 24 miles 75 y 0 dead 1 inj. F4 Apr 30, 1972 KS This tornado, moving NE at about 32 mph, stayed on the ground (851) DAPPL #146 for most of its path. It moved from 12 miles W of Jetmore to 17 miles NE of that town. A farm house and all its outbuildings NSSFC #KS-8 were destroyed.

May 14, 1972 IN 2415 29 miles 100 y 0 dead 20 inj. F4 (852) The touchdown point for this tornado was in the 9700 block of E. Washington St., Indianapolis. The first segment of the DAPPL #219 damage path was 3 miles long and 200-300 yards wide. The path, NSSFC #IN-3 which was intermittent, moved to the NE for 29 miles, ending at Mechanicsburg. 68 homes in Marion Co. alone were destroyed or damaged, some leveled, but there were no deaths. There was F4 damage at 16th and German Church Road. Near Eden, roofs were damaged, trees up to 2 feet in diameter were uprooted, a boat and motor were blown away, and a camper was wrapped around a tree. NW of Markelville, several trailer homes were badly damaged. The last dip of the tornado unroofed a barn near Mechanicsburg. This narrow, but intense tornado did \$2,000,000 damage.

Sep 28, 1972 (853)

1755 5 miles 220 y 0 dead 20 inj. F4 IL

DAPPL #640

This tornado touched down 1/8 mile SW of Forrestal Village

NSSFC #IL-30 Trailer Park, North Chicago, and moved NE at 30 mph to and over Lake Michigan, just E of Waukegan. The width of the path varied from less than 50 feet to 21, blocks. The damage, as a result, varied greatly in intensity and consisted of partial and total destruction of trees and buildings. Most of the injuries took place at the Naval Training Center. Great Lakes Naval Station, where numerous trailers were damaged or destroyed. Apparently, a large number of them were not tied down. while most of the damage was to mobile homes, a few small frame homes were leveled, but were probably of poor construction.

Mar 10, 1973 TX (854) DAPPL #99

1805 25 miles 150 y 6 dead 77 inj. F4 Near its touchdown point, this tornado caused heavy damage to 2 houses in Mart. Next, it moved to the E of Tradinghouse Creek NSSFC #TX 25 Reservoir, and destroyed the Lakeview Bath House, a home, and caused 2 injuries. Continuing N, it struck Watts, at County Line Road and Highway 84, destroying or damaging 10 homes, 2 taverns, and carrying a trailer several hundred yards. Another trailer was destroyed 2 miles S of Hubbard, and was found wrapped around a tree. Parts of the trailer were found & mile away. 3 people were killed in its destruction. The storm then moved into Hubbard, destroying 1/3 of the city, including 5 of the business district. 3 people were killed, and 75 were injured. 45 homes and 7 businesses were destroyed, 75 homes and 12 businesses suffered severe damage.

Mar 31, 1973 SC (855) DAPPL #92 NSSFC #SC-2

1935 23 miles 200 y 7 dead 30 inj. F4 This tornado touched ground first about 1 mile SE of the intersection of Routes 81 and 72 in Calhoun Falls. 3 miles E of that town, it struck a motel, leveling it completely and killing 4 occupants. The entire building and its furnishings and occupants, from the foundation upward, were carried across the highway towards the S and spread over a large field. Continuing N and almost parallel to Rte. 72, it passed through the N part of Abbeville, and went a short way into Greenwood Co. About 50 families were left homeless, and many other houses were damaged.

Apr 15, 1973 TX (856) DAPPL #253

1720 23 miles 400 y 5 dead 12 inj. F4 The tornado's path began 8 miles W of Frio County Airport, moved E across the airport and Melon, ending 15 miles due E of NSSFC #TX-51 the airport. All persons killed were occupants of two cars that were traveling on IH 35, as the tornado crossed it. 3 of the occupants of the cars were injured, the rest were residents of homes that were struck. 8 houses were totally destroyed, and several others were damaged. There were 3 airport hangars damaged, and 8-10 aircraft destroyed. 2 runways were partially torn up.

Apr 20, 1973 .0 1825 12 miles 800 y 0 dead 5 mj. F4 (857) This large tornado produced only widely scattered F4 evidence DAPPL #210 as it skipped across the NW part of Benton Co. The funnel NSSFC #MO-11 probably originated about 10 miles S of Windsor, Henry Co. The tornado moved to the NE, passing 8 miles SE of Windsor. and destroyed several farms in the Brandon area of Benton Co. Continuing to the NE, the funnel dissipated in SW Pettis Co. The tornado eventually reformed and struck the town of Sedalia, producing F2/3 damage. F4 damage was apparent to the home on the Wiskur farm. Further to the east in Benton Co. 's hour earlier, a tornado apparently approached F4 intensity.

1730 10 miles 800 y 1 dead Apr 20, 1973 MO 3 101. (858) The tornado destroyed 2 homes and damaged buildings on 4 farms as it moved from 25 miles N of Atlanta to 4 miles SE of LaPlata DAP/1 #217 NSSFC #MO-21 The Carnahan home was leveled, and one person was killed there. The behavior of the house indicates that it was possibly of poor construction.

(859) This tornado touched down 5½ miles SE of Princeton. Mercer Co., DAPPL #226 and moved to the NE into Putnam Co., lifting 1½ miles NW of NSSFC #MD-28 Lucerne. Many farm houses, barns, and pieces of farm machinery were destroyed. All of the buildings, including the house, on the Lowry farm were leveled N of Newtown in W Putman Co.	
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1925 10 miles 100 y 0 dead 0 inj. F5 May 6, 1973 TX This tornado followed an intermittent path from 5 miles 5 of (060) Valley Mills, McLennan Co., to just inside SE Bosque Co. A DAPPL #509 NSSEC #TX-74 pickup truck was carried 's mile, and another 200 yards. 2 barns were destroyed, leaving only small pieces of tin remaining in the area.

1752 5 miles 400 y 0 dead 20 inj. F4 May 19, 1973 AL This tornado formed over a ridge just H of Fort Payne, DeKalb Co., (861) and adjacent to 1-59. It moved ENE across the floor of the valley, DAPPL #285 NSSFC #AL-16 passing just N of downtown Fort Payne and up Lookout Mountain to the E. 24 buildings, including a fire station and a church, were destroyed, as were 13 trailer homes. 117 buildings were damaged, 45 of which were damaged severely. A large 2 story apartment building was pushed 70 feet intact. One small house was completely swept away.

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May 24, 1973 OK 1600 9 miles 300 y 2 dead 6 inj. F4 This is among the most studied of all tornadic events, with (862) DAPPL #462 many published reports on all aspects of the event. It was NSSFC #OK-27 an intense tornado, that touched down several miles WNW of Union City, moving ESE through that city. 22 homes and 18 trailer homes were destroyed. 43 homes and several commercial buildings and churches had major or minor damage. Property damage was estimated at \$1,000,000. After leaving the city, the tornado turned more southeastword, and moved several more

miles before dissipating or lifting. There was F4 damage to one home near the end of the path. May 26, 1973 OK

1600 3 miles 500 y 5 dead 25 inj. F4 (863) This tornado touched down & mile WSW of downtown Keefeton. DAPPL #466 Muskogee Co, and moved ENE. It cut a swath 1/4 to 1/3 of a NSSFC #OK-31 mile wide along a 3 mile path, destroying 8 homes, a few of which were leveled. 29 other homes had varying degrees of damage. 4 trailer homes were destroyed, and 1 other suffered major damage. 15 farm buildings were destroyed. Trees were found that had been debarked.

May 26, 1973 AR 2230 55 miles 300 y 3 dead 289 inj. F4 (864) The tornado first touched down at Augusta and moved NE. leaving DAPPL #303 a path of twisted trees and destroyed or damaged buildings in NSSFC #AR-30 Tupelo and Balch, Jackson Co. Property damage in the county was estimated at \$110,000, and 25 people were injured. It continued NE across NW Poinsett Co., injuring 7 people. It killed 1 person in Otwell, Craighead Co., and moved into Jonesboro, destroying much of the residental and business district. I person was killed there. Eyewitnesses report seeing 2 funnels in Jonesboro. Damage there was estimated at \$37,000,000. Another death was at Weiner.

1720 65 miles 800 y 7 dead 208 inj. F4 May 27, 1973 AL After touchdown, the tornado moved for 65 miles without lifting. (865) After striking Montevallo, Shelby Co., it skipped and was more 0APPL #294 NSSFC #AL-24 intermittent. The first major damage occurred at Greensboro. where 72 people were injured and I person was killed. Cancelled checks from a firsensboro bank were found at Gadsden, over 100 miles to the NE Shortly after striking Greensboro, it roared into Brent, destroying 90% of the town, killing 5 people and injuring 56 others. In that county, in Brent and Centreville. 67 houses and 27 trailer homes were destroyed, and 36 businesses were destroyed or heavily damaged. Along the entire path, 216 buildings were destroyed, 570 damaged, 97 trailer homes were destroyed or had major damage, and 45 businesses were heavily damaged or destroyed. More than 12, 100 acres of timber was heavily damaged.

1300 11 miles 313 y 4 dead 43 inj. F4 Aug 28, 1973 NY/MA The touchdown point for this tornado was near Canaan, Columbia (866) Co. It struck the Berkshire School for Boys, severely damaging DAPPL #846 several structures. Damage there was estimated at \$250,000. NSSEC #NY-4 #MA-2 Continuing SSE, it crossed into New York near Rte. 295, then turned to the SSW and leveled a large truck stop complex on Rte. 102 in W. Stockbridge. The property damage there was estimated at \$1,000,000. 3 of the deaths and most of the injuries occurred there. 2 fully loaded semi-trailors rolled over several times. 6 houses were destroyed, and one of the occupants was killed. The Rawson house had F4 damage. The last damage to structures was to the Fairmont Boys Camp, after which the tornado traveled several miles through the woods to Alford.

1525 18 miles 200 y 2 dead 26 inj. F4 Dec 13, 1973 SC The touchdown point for this tornado was 3 miles 5 of Greenwood. (867) Greenwood Co. The funnel traveled E, only on the ground 20% DAPPL #1089

#SC-20 of the time, but causing extensive damage to homes, utilities and industrial property. A few small homes were leveled. 2 people died in a collapsed factory. Major damage was done in the Ninety Six area and the Chappells area.

Apr 3, 1974 IN 1420 62 miles 1600 y 6 dead 76 inj. F5

(868) Touching down 3 miles S of Huffman, in W Perry Co., this

DAPPL #143 tornado immediately killed a woman as it destroyed her mobile NSSFC #IN-5 home. The tornado passed along SE Branchville and killed one person. That person was one of two people, riding in school bus, who saw the tornado and took shelter in a nearby (872) ditch. The bus was thrown 50 feet into the ditch, crushing the couple and killing the woman. Moving across Crawford Co., the tornado widened to over a mile , missed many small communities, NSSFC #OH-5 but leveled several farms. In Harrison Co. the tornado struck the SE part of Depauw, killing a woman in her mobile home. Another woman was killed in her home 2 miles E of Palmyra. In the SE corner of Washington Co., the tornado struck the town of Martinsburg, destroying 38 of the town's 48 homes. Homes in the Daisy Hill area were completely swept away. The funnel lifted N of Rt-160, in Scott Co.

Apr 3, 1974 IN

1519 38 miles 1200 y 11 dead 190 inj. F4 This tornado touched down just NE of Henryville, Clark Co., at

(869) about the time the previous tornado was lifting. Moving to the DAPPL #144

NE, a teenager was killed in Scott Co., and the tornado moved NSSFC #IN-10 into Jefferson Co., heading toward Hanover. Hanover College sustained \$10,000,000 in damage. No homes were leveled in Hanover, but the tornado intensified as it passed N of Madison, and 7 people died in the area. 300 homes were destroyed along the N edge of Madison. Many of those leveled to the ground were among the most expensive in the county. Continuing to the NE and NNE, the tornado killed 3 people as it passed along the N edge of the town of China. Just missing the town of Canaan, the funnel crossed into Ripley Co. and dissipated 3 miles SW of Cross Plains.

1540 28 miles 800 y 0 dead 104 inj. F4 Apr 3, 1974 IN While the previous tornado was turned to the left and entering (870)

DAPPL #145

Ripley Co., this tornado touched down just S of Mannville, NSSFC #IN-12 Jefferson Co. The tornado intensified as it crossed into Switzerland Co. and leveled many homes W of Fairview. In Ohio Co., a large brick church was leveled near Bear Branch. The tombstones in the church cemetary were blown down, and some of the smaller ones were apparently airborne. Passing just S of Milton.

the funnel crossed into Dearborn Co., and lifted near Wilmington. The next tornado was touching down at about the time this event lifted.

Apr 3, 1974 IN/KY/OH 1615 21 miles 500 y 3 dead 210 inj. F5 Touching down 2 miles N of Rising Sun, Ohio Co., Indiana, the (871) funnel crossed the Ohio river into Boone Co., Kentucky. 75 homes DAPPL #146 NSSFC #IN-14 were damaged and 20 people injured in Kentucky before the funnel KY-8 again crossed the Ohio River, this time into Hamilton Co., Ohio.

OH-6 Homes were leveled and swept away as the funnel moved NNE through Saylor Park, Mack, and Dent...all suburbs of Cincinnati.

Apr 3, 1974 OH 1628 20 miles 175 y 2 dead 39 inj. F4 This tornado touched down on the NE side of Cincinnati, near DAPPL #255 Elmwood Place and skipped to the NNE through the town of Mason. The Miller home was the only home leveled, as the tornado damaged 100 homes and caused \$5,000,000 damage in the Mason area. Greatest intensity was in the Sherman Terrace subdivision, just S of Mason. 2 people were killed when their mobile home was destroyed. This was the 5th consecutive member of the tornado family to reach F4 intensity of greater. The other 4 members are the 4 previously listed events.

Apr 3, 1974 (873) DAPPL #253 NSSFC #OH-3	OH 1630 32 miles 800 y 34 deed 1150 inj. F5 This devastating tornado first touched ground 5 miles SW of Xenia, Greene Co., between Bellbrook and Xenia. It quickly intensified and moved NE, through Xenia, a town of about 25,000 people. Producing large swaths of F4 damage, the tornado destroyed 300 homes and damaged over 2000 others. The high school was destroyed, as were buildings on two college campuses. Damage exceeded \$100,000,000 as entire subdivisions and older residential areas were turned into a
	patchwork of F2 to F5 damage.

Apr 3, 1974 in 1454 20 miles 1200 y 1 dead 17 inj. F4 (874)

This tornado touched down 2 miles E of Westland and rapidly DAPPL #138 intensified as it crossed the corners of Rush and Hancock Cos. NSSEC #IN-8 The funnel was 1 mile wide as it passed through the small community of Grant City, Henry Co., and moved NNE toward Kennard. As well as leveling several homes, the tornado sheared off the upper story of the Kennard Elementary School as the students huddled in the basement. 11 houses were destroyed at Grant City. and 48 were destroyed at Kennard. Damage totalled about \$1,500,000 The funnel lifted 2 miles N of Cadiz, after displaying a classic multiple vortex structure.

Apr 3, 1974 IN 1535 22 miles 1400 y 1 dead 12 inj. F4 This tornado touched town 1 mile SW of Blountsville, Henry Co., (875) DAPPL #139 and moved MNE across the extreme SW corner of Delaware Co. In NSSFC #IN-11 Randolph Co., the funnel gro. to almost a mile wide by the time it crossed Rt-32. On one side of that highway it destroyed the high school and leveled homes on the other side, killing one woman. In this area it produced a classic multiple vortex structure which, like the previous event, was captured on movie film. The funnel weakened as it passed 2 miles west or Ridgeville, and lifted 2 miles N of that town.

1505 37 miles 1200 y 4 dead 17 inj. F4 (876) This tornado was the third member of a tornado family which began DAPPL #142 in Orange Co., but was the only one of the three to produce NSSFC #IN-9 F4 level damage. Touching down in the SE Corner of Bartholomew Co., it moved to the NE, passing 1 mile 5 of Letts, Decatur Co. Homes and barns were leveled across Decatur Co. SE of Greensburg. two people were killed in 2 separate homes. Passing through the town of Hamburg, Franklin Co., virtually every home was damaged or destroyed. A woman and her 3-year-old daughter were killed as their mobile home was thrown into a tree. The funnel weaken after passing Hamburg, and lifted 2 miles S of Laurel. The most intense damage was on a farm 3 miles SW of New Point, Decatur Co., where every building was leveled, and

heavy implements were blown over 400 feet.

Apr 3, 1974 KY/IN 1530 34 miles 800 y 31 dead 270 inj. F5

- Touching down 5 miles SW of Hardinsburg, Breckinridge Co., (877)
- DAPPL #169 the tornado passed along the N edge of that town, with F3
- NSSFC #KY-6 damage to homes. 13 people were injured and 35 homes destroyed #[N-13 as the funnel moved to the NE across Breckinridge Co. and into Meade Co. The tornado gradually enlarged and intensified as it approached Brandenburg. The funnel devastated that town and crossed the Ohio River into Harrison Co., Indiana. At Brandenburg, 128 homes were completely destroyed, many of them leveled and swept away. 30 businesses were destroyed and damage totalled over \$10,000,000. 28 deaths were in the Brandenburg area. F4 damage occurred from N of Irvington, into Indiana

Apr 3, 1974 KY (878)

DAPPL #174

NSSEC #KY-9

This tornado touched down at the Kentucky State Fairgrounds in the S part of Louisville, Jefferson Co. Large holes were torn in the roof of Freedom Hall at the fairgrounds. Moving NNE, many homes were unroofed and hundreds of trees uprooted. Maximum intensity occurred in affluent suburb areas of ME Louisville, where nearly a dozen large, expensive homes were leveled. The tornado skipped, for the last 10 miles of its path. through Oldham Co. 425 homes were destroyed in Jefferson Co. and 25 damaged to Oldham Co.

1637 21 miles 200 y 2 dead 228 inj. F4

Apr 3, 1974 KY 1600 28 miles 300 y 0 dead 2 inj. F4 (879)

- From near the Tanyard community, on the Butler-Grayson Co. DAPPL #170
- line, the funnel moved to the NE across rural areas of Grayson NSSFC #KY-7 Co. The basis of the F4 rating was the complete leveling of the John Day home, S of Caneyville. This house was one of the few encountered by the tornado. The funnel lifted near Big Clifty.

Apr 3, 1974 KY

(880) DAPPL #171

1700 42 miles 400 y 3 dead 81 inj. F4 Touching down 3 miles NH of Elizabethtown, Hardin Co., this

- tornado destroyed many businesses as it passed 2 miles N of NSSFC #KY-10 town, crossing the "Miracle Mile" strip on Highway 31-W. 2 people were killed in this area. F4 damage to several homes was done as the tornado passed across Nelson Co. 15 homes were destroyed and one person killed at Coxs Creek. The funnel lifted 2 miles N of Fairfield, Spencer Co. The Bogard home, where the death occurred, and the Whitney home, 10 miles NW of Bardstown, were among the homes leveled in Nelson Co.
- Apr 3, 1974 KY 1800 36 miles 800 y 4 dead 122 inj. F4 (881)
- This tornado touched down in NW Anderson Co. destroying 12 DAPPL #172
- homes and leveling one. Passing across Franklin Co., the
- NSSFC #KY-14 tornado destroyed homes, factories and businesses along the S edge of Frankfort. 120 nomes were destroyed in and near Frankfort, with maximum intensity SW of the city. 4 people were killed in the Jett suburb, S of Frankfort.

Apr 3, 1974 IN

Apr 3, 1974 [N (R82) DAPPL #149 NSSFC #IN-16

1650 121 miles 900 y 19 dead 362 inj. F4 Touching down in an open field, 2 miles W of Otterbein, Benton Co., this event was one of the longest continuous path tornadoes ever officially surveyed. Rapidly intensifying, a home was leveled N of Otterbein and two people were killed. Doing only slight damage as it passed N of Chalmers, White Co., the tornado apparently intensified as it neared Monticello. Residents were well warned, and only 2 of the residents were killed as the funnel swept through the heart of the city. destroying the landmark county courthouse. The stores were closed, as usual, on Wednesday afternoon. A minibus, caught by the tornado as it crossed a bridge over the Tippecanoe River, was thrown into the river, killing 5 of the 6 passengers. Maximum intensity was reached NE of Monticello, fortunately for the town. Farms NE of town were completely leveled. Crossing Fulton Co., and nearing Rochester, a truck was blown from Rt-14. killing the driver, and a couple were killed in their mobile home. Passing across the N edge of Rochester, 2 people were killed, one by a pickup truck that was thrown into a home. Nearly every building was damaged in Talma, and a child was killed in a mobile home. In the southern part of the town of Atwood, Kosciusko Co., a visitor from Mexico City was killed. Buildings were damaged at F3 intensity in the S half of Leesburg. In the SW corner of Elkhart Co., a boy was killed in a campground as the funnel crossed Rt-6. An elementary school was destroyed N of Ligonier, Noble Co. In LaGrange Co., a woman was killed near Topeka, and the funnel lifted near the Oliver Lake airfield. Damage in the Rochester area alone was \$10,000,000.

Apr 3, 1974 KY (883) DAPPL #177

1740 29 miles 800 y 0 dead 56 inj. F4 From the SE part of Green Co., this tornado moved to the NE across Taylor Co. Homes were leveled all along the path in NSSFC #KY-13 Taylor Co., but most of the damage was done as the funnel passed through the town of Hannsville. 40 homes were destroyed at Mannsville; 7 of those were houses in the Stray Winds development and were completely leveled.

Apr 3, 1974 KY 1920 35 miles 400 y 7 dead 28 inj. F4 Touching down W of Cottonburg, in NE Garrard Co. the funnel (884) DAPPL #183 moved across Madison Co., passing just N of Richmond. The funnel NSSFC #KY-20 lifted E of Mt. Sterling, Montgomery Co. All leveled homes and deaths were in Madison Co.; in the communities of Cottonburg, Red House, and the NW edge of Richmond. 30 homes were destroyed along the path.

Apr 3, 1974 GA 1840 26 miles 200 y 9 dead 54 inj. F4 (885) From just SW of Sugar Valley, Gordon Co., this tornado leveled **DAPPL #109** several homes as it passed along the E edge of that community NSSFC #GA-13 and as it passed NW of Resaca. 8 people were tilled in that area, 4 of them in the Gobel home, which was almost completely swept away. Another death occurred near the end of the skipping path. W of Chatsworth, Murray Co. Damage totalled \$4,300,000.

Apr 3, 1974 AL 1750 51 miles 500 y 28 dead 258 inj. F5 This extremely intense tornado first touched ground near Mount (886) Hope, Lawrence Co., about 10 miles WSW of Moulton. Rapidly DAPPI #95 NSSFC #AL-18 intensifying, the funnel swept away nome after home, causing 14 deaths in rapid succession SW and W of Moulton. 6 members of the Owens family were killed as were 4 members of the Letson family, as their homes were completely swept away. The funnel passed across Wheeler Lake as a giant waterspout and entered Limestone Co. on a small peninsula. Here a 3/4 mile swath of trees were leveled and turned reddish by the soil that was dug out and plastered onto them. A nearby mobile home park was damaged on the edge of the tornado and an injured man was taken to a church. That man died 5 hour later, as the church was destroyed by the second tornado to hit Tanner...see event 888 below. Fatalities by county: Lawrence 14 ; Limestone 5;

Madison 9. The 9 dead in Madison Co. were S of Harvest.

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Apr 3, 1974 TN 1900 36 miles 400 y 5 dead 20 inj. F4 (887) Touching down in the SE corner of Lincoln Co., this tornado DAPPL #299 moved to the NNE and gradually intensified as it crossed into NSSEC #TN-22 Franklin Co. At Harmony, and the Pleasant Ridge and Broadview communities near Harmony, many homes were completely leveled, with the esulting deaths and injuries. Two of the deaths occurred in the basement of a home, as the concrete block wall collapsed. The funnel passed over Tims Ford Lake and produced minor damage in Coffee Co. 20 homes were destroyed in Franklin Co. and most where at F3 and F4 level of damage.

Apr 3, 1974 AL/TN 1825 50 miles 500 y 22 dead 150 inj. F4 (888)This tornado touched down just N of the Tennessee River in

DAPPL #96 SE Lawrence Co. 8 miles SSW of Athens. The tornado traveled NSSFC #AL-21

just 1 to 1 mile N of the path of event #886. The communities TN-24 of Tanner and Capshaw in Linestone Co., and Harvest in Madison Co., were hit by a second violent tornado in just 5 hour. The tornado produced F3 or F4 damage for its entire path length. 1000 buildings were destroyed by these two tornadoes, but no effort was made to determine the exact number of buildings destroyed by the individual tornadoes.

A total of 16 people died in Alabama, during this tornado. Crossing into Lincoln Co., Tennessee, homes and a church were leveled at the Vann Town community, just N of the Alabama state line. 2 of the 6 deaths were at the church, and included the minister. The funnel dissipated at the Franklin Co. border.

Apr 3, 1974 AL (889) DAPPL #94

1735 103 miles 500 y 3 dead 178 inj. F4 Touching down 9 miles NNW of Aliceville, Pickens Co., the tornado moved to the NE across parts of 5 counties. The tornado

leveled homes in SW Walker Co., as well as a church. 2 deaths NSSFC #AL-20 occurred in the church. The funnel weaken in central Walker Co. as it passed through Jasper. 100 people were injured there, but damage was only at F2 intensity. One person died and 36 were injured as the tornado moved along the SE edge of Cullman. Cullman Co. A few homes were destroyed, and the funnel lifted 8 miles NE of that town.

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Apr 3, 1974 (891) DAPPL #110 MSSFC #GA-14	Touching down 2 miles S of Kettle, Cumberland Co. the tornado moved across very sparsely settle territory and crossed into Clinton Co. The 8 ceaths occurred in 5 different small Clinton Co. communities. The community of Ida, 8 miles NW of Albany, was particularly hard hit. Many of the 50 houses that were destroyed in Clinton Co. were leveled. Damage totalled \$1,500,000. GA 1930 24 miles 400 y 6 dead 30 inj. F4 This tornado touched ground N of Ball Ground, Cherokee, Co. and moved to the NE, through the edge of Juno, Dawson Co. Several homes and a church were leveled in the Juno area, and damage totalled about \$2,000,000.	Apr 3, 1974 (896) DAPPL #97 NSSFC #AL-22	Thought to be among the most intense tornadoes in Alabama's history, the funnel dipped first into Monroe Co., Mississippi. From 4 miles S of Sulligent, the path was long, continuous and intense. The only clearly violent damage was at the only town directly in the tornado's path. At Guin, Marion Co., 20 people were killed as the entire town was damaged or destroyed, and many homes were completely swept away. Moving at up to 75 mph, the funnel passed through a city lot in 2 or 3 seconds, carrying away everything on the lot. In the rural areas NE of Guin, many homes were destroyed, but not leveled. Crossing the Bankhead National Forest, tens of thousands of trees were leveled along a path up to a mile wide. The swath was visible on satellite photographs. The funnel lifted E of Decatur, and traveled mostly aloft over the N part of Huntsville.
DAPPL #293	TN 1915 32 miles 700 y 10 dead 51 inj. F4 Touching down at Macedonia, White Co., the tornado moved to the NE, passing across Putnam Co., SE of Cookeville. The tornado lifted in the S part of Overton Co. Many homes were leveled, and all deaths occurred about 6 miles SE of Cookeville.	Apr 3, 1974 (897) DAPPL #190 NSSFC #KY-30	KY 2200 26 miles 500 y 0 dead 10 inj. F4 Moving to the NNE across McCreary Co., this tornado leveled one small home on Wolf Ridge at Rt-92. The tornado also leveled 10,000,000 board-feet of timber in the Boone National Forest.
		Apr 21, 1974	W1 1440 25 miles 200 y 0 dead 35 mj. c4
Apr 3, 1974 (893) DAPPL #294 NSSFC #TN-27	The previous event reformed about 2 miles SE of Davidson. Fentress Co. All deaths and injuries occurred near Jamestown, as houses were leveled in 4 different subdivisions. A trailer truck was lifted and thrown 100 yards into one of them.	(898) DAPPL #350 NSSFC #WI-3	This tornado first touched down 5 miles 5 of Ripon, Fond du Lac Co. and moved to the NE. The tornado destroyed buildings on 30 farms before reaching the city linits of Osnkosh, Winnebago Co. Passing across the NW side of the city, 400 homes were damaged with a loss totalling \$4,200,000. Several homes in the Algoma Park area, near the end of the path on the N side of Oshkosh, were leveled and almost completely swept away.
DAPPL #243	GA/NC 2130 22 miles 600 y 4 dead 40 inj. F4 This tornado touched down in extreme NE Fannin Co., Georgia, and moved to the NE, into Cherokee Co., North Carolina. Rarely has a violent tornado occurred in such mountainous terrain. The funnel caused over \$3,000,000 in property damage, and \$10,000,000 in timber damage as it moved to the NE, parallel to the highways leading into Murphy. 2 people died in one of the many frame houses that were leveled in the Murphy area; 45 were destroyed. 2 people died in one of the 17 mobile homes which were destroyed. The tornado lifted between Marble and Peachtree after passing I mile SE of Murphy.	Jun 8, 1974 (899) DAPPL #609 #0K-24	OK 1555 55 miles 400 y 14 dead 150 inj. F4 A tornado struck the Oak Grove community, about 3 miles SW of Drumright, damaging the school there. A few minutes later, it struck Drumright, doing extensive damage to the NW part of town. 6 people were killed in a nursing home that was hit, and 6 more were killed as the to. vado continued ENE through the city. About 100 homes were destroye. If severely damaged. Next it struck Olive, destroying parts of the school, 2 trailer homes and leveling several frame homes. I death occurred in Olive. The tornado then turned more NE, and caused sume damage on pier 51 at Lake Keystone. 7 miles WSE of Sperry, several trailer homes were destroyed, and a woman was killed in the destruction of one of them. The last damage reported was W of Skiatook, where several
Apr 3, 1974 (895) DAPPL #302 NSSFC #TN-26 KY-28	TN/KY 2030 19 miles 300 y 5 dead 6 inj. F4 First touching down near Faix, Pickett Co., the tornado moved to the NE through Moodyville, were homes were leveled and all 5 deaths occurred. The funnel continued to Caney Creek and crossed into Wayne Co., Kentucky, where it lifted W of Mt. Pisgah.		KS 1700 38 miles 600 y 6 dead 177 inj. F4 This tornado touched down in NW Emporia, Lyon Co., at 15th and Industrial Sts., cutting a 2½ mile swath NE. A nursing home, apartment complex, shopping center, residential section, and a large trailer court were destroyed or suffered heavy damage. The tornado then skipped NE to 4 miles SW of Auburn. Along the way, at least 10 farmsleads were heavily damaged. Most of the deaths and injuries occurred in the trailer court.

A-88

Jun 18, 1974 1A 2235 25 miles 400 y 2 dead 50 inj. F4 (901) This SE moving tornado probably touched down before arriving DAPPL #545 in Ankeny, Polk Co. A few small homes were leveled on the NSSFC #13-21 E side of that cown. The tornado continued on and ended near Runnels. Damage in the Ankeny area was estimated at \$2,000,000.

 Aug 12, 1974
 IA
 1620 5 miles
 400 y
 0 dead
 12 inj. F4

 (902)
 Moving SE, this tornado moved across the S and SE part of Ryan.

 0APPL #775
 32 homes were destroyed or damaged, and several were leveled.

 NSSFC #IA-26
 particularly the Riniker and Flannagan homes. A church, a school, and several bus inesses were also destroyed or damaged. Property loss was estimated at \$1,500,000. 3 funnels were observed.

Aug 12, 1974 IA 1915 5 miles 100 y 0 dead 5 inj. F4 (903) Traveling 2 miles in 20 minutes, this tornado moved to the SE DAPPL #776 near Ladora, Iowa Co. It destroyed 2 farm homes, sweeping one #IA-27 almost completely away, and damaged 4 other farms.

2014 47 miles 100 y 9 dead 210 inj. F4 Jan 10, 1975 MS This tornado first touched down 7 miles SN of McComb, Pike Co., (904) at the dam at Percy Quin State Park Lake. It destroyed a marina DAPPL #MS-1 and 7 buildings, and downed at least 10,000 trees. Continuing #MS-1 into McComb and Summit, it did extensive damage to so blocks in McComb. 88 homes were destroyed, as were 30 businesses. 80 spartment units were destroyed, and 3 people killed in them. 30 businesses were badly damaged, as were 2 schools and 2 National Guard armortes. 150-200 cars were destroyed or heavily damaged. 36 homes were destroyed outside of McComb. When the tornado struck the school, 325 students had taken shelter -- only 5 were injured. A shopping mall was also struck in McComb. Leaving Pike Co. and entering - Lincoln Co, the NE moving tornado destroyed 7 homes, 5 m sile homes, 5 cars, 19 barns and 17 other farm buildings. 1 death occurred in a frame house, and the other 4 in the mobile homes. The tornado then moved NE out of the county, near Hwy. 84, and lifted S of Oma, near Hwy 27. It touched down again just W of Pinola, in Simpson Co., near the Strong River Bridge on Hwy 28. There was some damage in the Bush community, and in the Camper community, an anchored trailer home was ripped apart and scattered across the road, with its frame twisted around a utility pole.

Peb 23, 1975 AL 1235 15 miles 500 y 1 dead 51 inj. F4 (905) This tornado first struck down 5 miles 5 of Tuscaloosa at DAPPL #AL-16 Taylorville, Tuscaloosa Co., and moved NNE, skipping along. NSSFC #AL-17 Damage was heavy just 5 of Tuscaloosa, and small homes were leveled. There was heavy damage in the SE part of the city too, particularly in the commercial area at the intersection of I-59 and McFarland Blvd. Mest of the upper floor of a motel was sliced off, killing 1 person, and a nearby restaurant and several other buildings were damaged. The tornado move NE towards Holt, where it destroy: 30 houses and damaged others. Over the entire path, this to do destroyed 289 houses were destroyed or heavily damaged is were 30 businesses and 21 trailer homes. Mar 28, 1975 AR 1852 4 miles 250 y 7 dead 50 inj. F4

(906) This tornado first struck 3 miles SW of Warren, Union Co.,

DAPPL #AR-10 at Farmville, and moved NE into the center of Warren before

NSSFC #AR-10 dissipating. Property damage was widespread, with the city's major employer, the Potlach Corp., sustaining extensive damage. 151 buildings were destroyed, 100 heavily damaged, and 200 had minor damage.

Apr 23, 1975 M0 1440 11 miles 500 y 1 dead 3 inj. F4 (907) Touching down 5 miles SE of Hamilton, Caldwell Co., the tornado DAPPL #MO-2 NSSFC #MO-2 in Breckenridge. The funnel lifted in E Livingston Co. The Carter home was leveled.

Apr 23, 1975 MO 1640 28 miles 1000 y 1 dead 5 inj. F4 (908) The tornado began in SW Macon Co., % mile W of Highway 3, 5 miles DAPPL #MO-4 S of US 36. It moved due E, crossing route 63, 3 miles S of Macon. Multiple funnels were observed and it continued E into Shelby Co. The path was up to 1 mile wide. More multiple vortices were reported 4 miles S of Clarence. The path curved to the ESE and lifted about 4 miles SW of Shelbina. Houses were leveled on route YY, SE of Macon.

- Apr 24, 1975 MO 1840 9 miles 600 y 3 dead 22 inj. F4
- (909) A tornado developed just E of Seneca, Newton Co., and moved E

DAPPL #MD-7 along route 60, into Neosho. The funnel passed through the

NSSFC #MO-8 city, leveling many homes and causing \$10,500,000 in damage. A NWS film documents the good warnings which the town received, and which undoubtedly kept the death toll low. 171 houses and 39 mobile homes were destroyed. The town had 15 minutes warning. The three eiderly women who were killed lived outside of town, and apparently did not hear the warnings.

May 6, 1975 NE 1305 22 miles 400 y 0 dead 1 inj. F4

(910) This tornado touched down 3 miles E of Pierce, Pierce Co., and

DAPPL #NE-15 skipped almost due N. The funnel was aloft as it passed over

DAPPL #HE-15 McLean, but was at maximum intensity as it passed through the town of Magnet, damaging or destroying every building. The funnel lifted 6 miles N of Magnet.

1533 10 miles 300 y 3 Jead 133 inj. F4 May 6, 1975 NE (911) The tornado first touched down in N Sarpy Co. and moved NNE into DAPPL #NE-17 the residential areas of west-central Omaha. The funnel lifted NSSEC #NE-17 over the northern part of that city, but only after it destroyed 287 homes, and damaged over 1400 others. Damage estimates were as high as \$500,000,000, but \$250,000,000 is a more realistic figure. The city was well warned by REACT teams and by other Civil Defense systems. One elderly woman, who probably did not hear the warnings, died in her home. A waitress was killed in the destruction of a restaurant, as she huddled with others in the restroom. A man was killed as a gas station, in which he sought shelter, was destroyed.

Jun 18, 1975 NE 2015 15 miles 500 y 0 dead 0 inj. F4 (912) Originally listed in Storm Data as a family of tornadoes with DAPPL #NE-51 a total path length of 106 miles, a Univ. of Chicago NSSFC #NE-51 survey indicated that this event was the Sth. the last, and the most intense member of that family. The funne, moved to the NNW from Custer to Logan Cos., passing 3 miles W of the town of Arnold. Other events in the family may have been more intense, but only this tornado produced confirmable F4 damage. The Hickenbottom farm , in E Logan Co., was leveled.

Jun 28, 1975 1430 6 miles 1300 y 0 dead 0 inj. F4 MN (913) This tornado moved slowly NNE between Moorhead and Dilworth, Clay DAPPL HMI-4 Co., While no farm homes were leveled, a NWS survey team reported NSSEC #MN-5 that farm machinery was carried far enough to indicate F4 intensity The cone shaped funnel was clearly visible as little dirt was thrown into the air, for the tornado was preceeded by heavy rains up to 41, inches.

Jun 29, 1975 NU 2020 70 miles 880 y 1 dead 4 inj. F4 (914) This tornado was observed 4 miles W of New England, moving E DAPPL #ND-7 slowly SE of Regent, the Focht farm was leveled, and an NSSEC #ND-7 infant was killed and 4 other people were injured. The tornado continued E, passing S of Mott, Burt, and finally leaving Hettinger Co. to enter Grant Co. 10 farms were destroyed along the path and 12 others were damaged. Many cattle were killed. A cement block was carried is mile.

Mar 20, 1976 IL 1315 60 miles 800 y 0 dead 18 inj. F4 (915) This tornado was first spotted near Casner, SE of Decatur, and DAPPL #IL-10 moved NE . 5 of Bement, to Ivesdale, through Sadorus and NW NSSFC #IL-10 of Philo, SE of St. Joseph, in Ogden, and finally lifted NW of Danville. Although there was destruction a 1 along the path. the worst hit areas were Sadorus and Ogden. At Sadorus, the property loss was estimated at \$2,000,000 as 30 families were made homeless. 13 houses and 7 trailer homes were destroyed. 25 houses were damaged beyond repair, and at least a dozen cars were crushed by falling debris. The tornado passed through the downtown area of Ogden, destroying the lumber yard, a bank, water tower, grain elevator, fire house and several homes. Damage there was estimated at \$1,000,000.

Mar 20, 1976 [N 1620 18 miles 300 y 0 dead 8 inj. F4 (916) This tornado first touched down 7 miles NW of Lafayette, in DAPPL #IN-18 Klondike, Tippecanoe Co. 8 homes were destroyed and 31 NSSFC #IN-19 homes and 16 trailer homes were damaged. Traveling NE, the

tornado moved into Carroll Co., where it damaged several homes in the Springboro-Pittsburg area. It continued to Delphi, and lifted.

Mar 20, 1976 MI 1915 5 miles 115 y 1 dead 55 inj. F4 (917)

The tornado first touched down in a creek bed just W of a

DAPPL #MI-12 small residential area in West Bloomfield, Oakland Co. It NSSEC #MI-12 traveled NE to a major intersection and then through another residential area. As it passed through the intersection, it struck a car, turning it upside down and killing an occupant. A dozen other cars in the intersection were lifted and their occupants injured. The funnel lifted after destroying a garage near the water's edge at Walnut Lake. Along the path, 6 homes were destroyed and 91 damaged. 3 business buildings were destroyed and 20 were damaged.

Mar 26, 1976 OK 1450 9 miles 300 y 1 dead 4 inj. F4 (918) Touching down at Falfa, 2 miles W of Talihina, Latimer Co., DAPPL #OK-7 this tornado moved NE in a rather zig zagging manner. 12 homes. NSSEC #OK-7 and a church were destroyed, and 18 homes and 3 businesses were danaged.

Mar 26, 1976 OK 1528 12 miles 300 y 2 dead 64 inj. FS (919) This tornado first touched ground 4 miles E of Bokoshe DAPPL #OK-8 Leflore Co., and began moving NE. It crossed Hwy 59-271 at NSSFC #OK-8 a point 2 miles 5 of the intersection of Hwy 59-271 and Hwy 9, destroying a trailer home and a business. As it entered the SE part of Spiro, it caused much heavy damage to houses, trailer homes, railroad cars and business buildings. Crossing Rte. 9, it destroyed or damaged more homes, and reached F5 intensity in the Murry Spur area. A man was killed, a trailer home was leveled, and 7 homes were destroyed in this area. Turning E after crossing the Lock and Dam-Fort Coffey Road, 3 more trailer homes were destroyed. It continued E, crossed Rte. 9 again, and finally lifted.

Mar 26, 1976 MS 2355 20 miles 880 y 0 dead 11 inj. F4

(920) This tornado moved from 2 miles WSW of Shivers, Simpson Co. to

DAPPL #MS-17 N of Magee and 25 miles E of Sanatorium. The areas that suffered

NSSEC #MS-17 the most damage were the Oak Grove community and Sanatorium. 1 home was destroyed and 6 were damaged. 5 mobile homes were destroyed. 2 children were thrown from one of these, and a woman from another, and all were injured. 18 service buildings were destroyed or damaged, and a dairy farm suffered considerable damage to both equipment and livestock. 4400 acres of timber was damaged. Several small homes were swept away.

1402 26 miles 880 y 3 dead 177 inj. F4 Mar 29, 1976 MS The tornado first touched down 10 miles SW of Canton, (921) DAPPL #MS-20 destroying 3 steel towers on a main MP & L transmission line. NSSEC #MS-20 It traveled NE into W Canton, where it struck a trailer park, killing 2 people. It continued through the city, causing major destruction. 72 homes, 4 service buildings and 121 pieces of machinery were destroyed. The tornado lifted slightly. and moved NE for 15 more miles, clipping tree tops. It passed just S of Sharnon and lifted for the last time before reaching Camden.

1405 107 miles 1000 y 0 dead 8 inj. F4 Mar 29, 1976 MS This tornado first touched down 15 miles WSW of Hazlehurst, (922) DAPPL #MS-21 Copiah Co., and moved to the ENE. NSSFC #MS-21

> The massive tornado struck no large communities. In Copiah Co., 30 homes were destroyed, 70 were damaged, and losses totalled almost \$1,000,000 but there were no deaths or injuries. In Simpson Co., 24 homes were destroyed and damaged totalled another \$1,000,000, but again with no deaths or injuries. Across the SE corner of Rankin Co., the pattern of destruction continued, with no deaths or injuries. Rankin county damage was near \$1,000,000 and Smith Co. damage was about \$500,000. The injuries occurred as the tornado destroyed 61 homes and produced \$4,650,000 as it passed along the S edge of Newton, Newton Co. The tornado weakened and lifted in the N suburbs of Meridian, Lauderdale Co. Although the tornado was very large, the amount of F4 appearing damage was very small, considering the path length and diameter.

0150 18 miles 100 y 0 dead 2 inj. F4 Apr 17, 1976 KS This tornado was on the ground for about 20% of the time from (923) DAPPL #KS-7 5 miles NE of Hardtner, Barber Co., passing NE to 2 miles NE of NSSEC #KS-7 Sharon. Damage was heaviest in the Sharon area, mainly to homes and trailer homes. A small house was leveled SW of Medicine Lodge.

0412 28 miles 300 y 0 dead 6 inj. F4 Apr 17, 1976 OK The first touchdown point was 8 miles W of Apache, Caddo Co. (924) DAPPL #OK-12 The tornado moved NE. 3 miles NW of Anadarko, SW of Gracemont NSSFC #OK-12 and near Washita. 6 homes were heavily Lamaged, one of which was swept away. A trailer home was destroyed, and a school and 11 other homes were damaged. The most costly damage occurred when the tornado struck and damaged 6 cooling towers of the power plant w of Washita.

1730 10 miles 300 y 0 dead 11 inj. F5 Apr 19, 1976 TA This intense tornado was in the formative stage when sporadic DAPPL #TX-38 damage was reported between Bangs and Brownwood, near Hwy. 67. NSSEC #TX-53 It traveled NE, passing 4 miles NW of Brownwood. About 5 miles N of that town, it struck the Fabis farm. A row of 4 houses and several outbuildings were leveled. The owner of the houses, narrowly escaped death as the storm blew his frame house away. The owner, and the bathtub he had a firm grip on, remained on the foundation after the storm passed. Several teenagers were thrown about 1000 yards when caught in the open after returning from fishing in Lake Brownwood. NNE of the city, the tornado struck the airport. A set of T-hangars and 6 aircraft were destroyed. 4, mile NE of Hwy. 183, the tornado lifted.

1617 25 miles 200 y 0 dead 0 inj. F4 May 26, 1976 TX The touchdown point for this tornado was about 6 miles E of (926) DAPPL #TX-92 Grandview. It moved ESE, striking and destroying a farm home and NSSEC #TX-113 outbuildings SW of Grandview. After entering Hill Co., it lifted

and momentarily disappeared, then reformed and damaged a farm house near Hwy. 81, 5 miles NW of Itasca. Root and wall debris from the house was thrown in an arc toward the SW and W. Next it struck the N half of the Presbyterian Children's Home campus. 4 miles NE of Itasca. Many trees were uprooted and \$500,000 damage was done there. The last damage occurred to outbuildings in Ellis Co., about 65 miles W of Italy

1410 20 miles 1000 y 0 dead 9 inj. F5 Jun 13, 1976 This huge and well-studied tornado first touched down (927) on the E bank of the Des Moines River, 45 miles NNW of Madrid DAPPL #1A-8 Boone Co. It began moving NE and turned to the N. completely NSSEC #1A-9 leveling the small community of Jordon, where some homes were swept totally away. The tornado curved to the NNW and NW . slowed almost to a stop, and then began moving due E and eventually NE, passing N of Gilbert, Story Co. The funnel lifted before reaching Story City.

1618 71 miles 1760 y 2 dead 23 inj. F4 Jun 13, 1976 IL

The first evidence of this tornado was near the railroad tracks (928)

DAPPL #IL-20 just N of Lemont's downtown area. It traveled SE, then turned

(925)

NSSEC #11-20 to a more easterly course as it reached the eastern edge of town. It became more intense and inflicted heavy damage on the Hillcrest subdivision and in particular, McCarthy Road. Homes were left in total ruin, trees uprooted, cars tossed about like toys. It then veered N, across the Cog Hill Golf Course, to the Des Plaines River. Veering NW, it passed over Argonne National Laboratory, peeling a section of roof from the building housing the nuclear reactor. The tornado then crossed 1-55, damaged several homes in the Brookeridge subdivision. Total damage was estimated at \$13,000,000.

1715 6 miles 200 y 0 dead 6 inj. F4 Jun 26, 1976 IA The tornado first touched down 3 miles WSW of Minden, moving ENE (929) DAPPL #IA-15 It went through the main portion of town, damaging half of the NSSFC #IA-15 homes. 80 homes were either severely damaged or destroyed, and several were leveled. 2 churches and numerous businesses were heavily damaged. The tornado then moved E along Hwy. 93, and dissipated 25 miles E of town.

Jun 29, 1976 IL 1345 5 miles 40 y 0 dead 0 inj. F4 (930) This tornado touched down about 1 mile N of Kickapoo, then DAPPL #IL-21 traveled NE to near the intersection of IL 25 and the railroad NSSFC #IL-21 tracks 2 miles SE of Dunlap. The most severe damage took place at several farms near IL 91 35 miles 5 of Dunlap. One complex of farm buildings was leveled, leaving only a pile of debris. 2 other homes were also destroyed, their debris being scattered in adjoining fields.

Feb 23, 1977 MS 1600 15 miles 350 y 2 dead 5 inj. F4 (931) This tornado touched down 13 miles SW of Louisville, Winston DAPPL #MS-6 Co., and a few miles later struck the Shilow community, 10 NSSFC #MS-6 miles SW of Louisville. 12 homes and 1 trailer home were destroyed, and several cars and 20 farm structures were destroyed. 1 person was killed outright and another was fatally injured. A small home was swept away. The tornado lifted 4 miles NW of Louisville.

Apr 2, 1977 Ml 1434 13s miles 190 y 0 dead 10 inj. F4 (932) This tornado traveled from 1 mile N of Kalamazoo through the LNOPL #ML-3 towns of Constock and Augusta. 90 homes and businesses were MSEFC #ML-3 destroyed or heavily damaged. An elementary school was also struck. 130 people were left homeless. A small area of F4 damage was found in the SW corner of Augusta.

Apr 2, 1977 MI 1506 18 miles 615 1 dead 44 inj. F4 (933) This large tornado touched down 1 miles SSE of Bellevue and DAPPL #MI-4 cut through Eaton Co., destroying 21 homes, 10 trailers, 24 NSSFC #MI-4 barns, 28 outbuildings and 21 vehicles. As the funnel crossed I-69, it swept 2 motor homes and a pickup truck off the road. The pickup was thrown 50 feet and landed upside down in a pile of fallen trees, crushing a young boy inside. There was clear F4 damage to the Newland home, 1 mile N of Olivet. The furnel lifted or dissipated 2 miles NW of Eaton Rapids.

Apr 4, 1977 42 1500 15 miles 550 y 22 dead 130 inj. F5 (930) This powernal transformatio touched down about 4 miles NW of downtown DAPPL FAL-11 Strmingurs. It cut a northeastward path, destroying 167 homes NSSFC FAL-11 and damaging 48 others. One well constructed home literally winished from its lot. Daniel Payne College was backly damaged, with property loss of \$1,300,000. It finally lifted just E of Tarrant. Total property damage was estimated at \$15,000,000. A damage photo from this event is the F5 standard.

May 4, 1977 MO 1640 10 miles 400 y 0 dead 5 inj. F4 (935) This tornado formed in Jackson Co., on the S bank of the Missouri DAPPL #MO-9 River, near Atherton. It crossed the river and entered Clay NSSFC #MO-8 Co. moving NNE. A small group of homes were struck 2 miles NE of Missouri City, and 4 were destroyed, one completely leveled. Continuing NNE, it crossed over open country until it reached the S part of Excelsion Springs, where it destroyed 2 dorms and a home on the church campground. The turnado lifted before reaching the morp populated part of the city. A total of 28 homes were destroyed or damaged. May 4, 1977 MO 1715 S0 miles 880 y 0 dead 1 inj. F4
(936) The tornado formed N of Richmond, and moved NE, but turned due DAPPL #M0-4 E as soon as it left Ray Co. N of Rockingham. It continued E, through the S part of Carroll Co., inflicting heavy damage to rural homes and farms. It passed N of Carrollton, then turned ENE. It dissipated shortly after causing damage in Brunswick, just inside Chariton Co. This tornado stayed on the ground continuously, and eye-witnesses reported seeing as many as 5 funnels at a time. 200 homes were destroyed or damaged. The Fifer home was leveled as the family huddled in the basement. Property loss was estimated at \$4,000,000.

May 4, 1977 IA 1832 2 miles 70 y 0 dead 14 inj. F4 (932) This short path tornado cut a 6 block wide swath, destroying DAPPL #IA-10 50 homes and damaging 250 others. It cut across the NE NSSFC #IA-10 section of Fort Dodge, Webster Co. One home was leveled near the end of its track through town.

May 5, 1977 IL 1920 10 miles 1000 y 0 dead 2 inj. F4

(938) This tornado touched down SW of Atlanta, Logan Co. and

OAPPL #IL-1 inflicted heavy damage on that town. At least 4 homes were NSSFC #IL-1 reported to be leveled, and 12 others received severe damage. A woman was hurt when her trailer home was overturned. Farm machine sheds were picked up and sailed for long distances through the air. The tornado continued into McLean Co. and dissipated or lifted near Funks Grove.

May 18, 1977 OK/CO 1750 35 miles 500 y O dead O inj. F4

(939) This tornado struck 3 farms as it moved from the Cimarron

DAPPL #OK-25 River, 24 miles SE of Walsh. Farm machinery was scattered

NSSFC #0K-25 for 5 mile. 11 outbuildings were destroyed, as were a house, CO-10 a bunkhouse, and a corral.

Jly 30, 1977 WI 1835 20 miles 300 y 0 dead 20 inj. F4

(940) This tornado first touched down at Cooks Valley, about 2 miles

DAPPL #WI-7 W of Bloomer. It destroyed several farms, then moved into NSSFC #WI-7 extreme NW Bloomer, Chippewa Co., destroying 50 houses. 100 to 150 homes and businesses along the path sustained major to

minor damage. As the storm crossed Hwy, 64, after leaving Bloomer. it inflicted severe damage on a farm, then continued through sparsely settled areas. It finally lifted near LaRose Lake, 16 miles NE of Bloomer. Damage from this storm was estimated at \$6,000,000.

Apr 17, 1978 MS 2230 15 miles 100 y 0 dead 3 inj. F4

(941) 50 to 60 homes were damaged or destroyed as the storm struck

DAPPL #MS-1 the Metcalf and Lake rerguson areas near Greenville. Except

NSSFC #MS-1 for one brick wall, every bit of one house was swept away. A house trailer was overturned near Mound Bayou, Bolivar Co.

1230 11 miles 100 y 4 dead 31 inj. F4 Apr 18, 1978 MS. This tornado destroyed one home, and damaged other homes near (942) Monticello. The McNease home was completely leveled, and almost DAPPL #MS-4 totally swept sway. 4 people were killed. Other damage to NSSEC #MS-5 buildings occurred near Prentiss.

1820 8 miles 1 mile 0 dead 0 inj. F4 Apr 30, 1978 OK This tornado touched down 5 mile N of the intersection of Hwys. (943) DAPPL #OK-13 3 and 4 in Canadian Co. It moved ENE into Oklahoma Co., passing NSSFC #OK-13 SE of Piedmont, where it inflicted heavy damage. A housing tract was severely damaged, with 15 homes destroyed or damaged. Just to the E of the addition, 10 rural nomes were damaged. The funnel picked up and carried such large items as cars, oil storage tanks, and stock feeders, carrying them as much as 5 mile. The storm dissipated 9 miles W and 1 mile N of Edmond.

2034 28 miles 200 y 5 dead 35 inj. F4 11y 4, 1978 NO This tornado touched down 1 mile W of Elgin and moved NE through (944) DAPPL #ND-20 that town. It hit the residential section along the edge of NSSFC #ND-20 Elgin, doing extensive damage to a 17 block section. It then followed Hwy. 27 for 27 miles, doing trememdous damage before the tornado dissipating S of Carson. Although it skipped,

was on the ground for about an hour.

- 0150 8 miles 400 v 2 dead 266 inj. F4 Dec 3, 1978 LA
- This tornado touched down just across the Red River from (945)
- DAPPL #LA-19 Veteran's park, after which it moved to the NE, passing

NSSFC #LA-19 through the city of Beoster City, Bossier Co. Schools, homes, business and apartments were devastated. 75 homes and 51 business were listed as destroyed, but hundreds of others were badly damaged. Estimates of losses ran from \$25,000,000 to \$100,000,000

1745 35 miles 150 y 0 dead 4 inj. F4 Mar 29, 1979 MO/1A This tornado was first spotted near Burlington Jct. It passed (946) DAPPE #MO-6 NE between Elmo and Clearmont, Nodaway Co., MO. Near Elmo, it NSSEC #MO-1 destroyed farm homes and outbuildings, and a bridge. Several #IA-2 people in one of the homes were injured. Continuing into Iowa, it struck Braddyville. In the 92 homes and businesses in that town, 32 were destroyed, and only 9 were undamaged.

1810 28 miles 400 y 0 dead 1 inj. F4 Mar 29, 1979 IA This tornado touched down on the lowa-Missouri border 4 miles (947) W of Hwy. 148, and moved NE. There was F4 damage to the DAPPL #IA-2 Wainwright home W of Bedford-- it was leveled. The storm NSSFC #IA-3 continued NE, destroying farms and narrowly missing the town of Gravity. It dissipated 2 miles NW of Lenox, Taylor Co. A man was injured when falling bricks fell on him as he took shelter in his basement.

1520 37 miles 880 y 11 dead 68 inj. F4 Apr 10, 1979 TX/OK This tornado moved along and just N of Hwy. 70 to the Lockett. DAPPL #TX-27 Wilbarger Co. area. As it crossed that highway, it struck and NSSEC #TX-39 threw a car 200 yards off the roadway, killing a woman. After #OK-7 striking the Lockett area, it continued NE towards Vernon, where it missed the business district but hit the S and E sides. A residential area on the S side of Vernon was heavily damaged. with at least 3 people killed. The worst destruction was in the Gordon and Atlanta St. area. As the tornado moved into the E part of town, a motel, cafe, truck stop and several businesses were destroyed. It swept a number of cars off Hwy. 287, killing 7 people. The cars were nothing more than compacted masses of twisted metal afterwards. Crossing the Pease River, it continued NE, passing into Oklahoma. It left property damage in Texas estimated at \$27,000,000. Crossing the Red River SW of Davidson, it moved ENE of Davidson before dissipating. 3 homes were destroyed and 5 others were damaged in Oklahoma. A man was injured when his car was thrown into a ditch.

(948)

(949)

1750 47 miles 1320 y 42 dead 1740 inj.F4 Apr 10, 1979 OK This tornado began about 3 miles ENE of Holliday, in Archer Co., DAPPL #FX-31 and would become one of the most destructive tornadoes in history. NSSFE #TX-43 It moved along the Fort Worth and Denver RR into Wichita Co. #OK-12 2 oil-storage tanks were blown away and several homes were unroofed near Farm road 2650, and 6 steel transmission towers were just E of there. As it entered Wichita Fall, it first struck Memorial Stadium, then McNeil Jr. High School, damaging it severely. It continued into the Western Hills neighborhood; it destroyed several apartment complexes and caused the first death. Increasing in size, the funnel crossed Southwest Parkway and entered the Faith Village neighborhood, where it destroyed most of the homes. It encountered the Ben Milam Elem. School and destroyed part of that building. The storm then destroyed several businesses, and struck a restaurant on Kemp Blvd., where 3 people were killed. It crossed a few open fields, then moved into the Colonial Park area. It destroyed several more apartment complexes and caused widespread home destruction. The tornado next swept through Southmoor where it destroyed a number of homes and a shopping center. After crossing Hwy. 281, the tornado struck the Sun Valley neighborhood; destroyed homes, apartments and businesses on the 5 side of Hwy 287 A large number of cars were smashed and some people were killed along that highway. Just before moving into Clay Co. just S of Highway 79, it destroyed several industrial plants. The tornado was up to 1.5 miles wide as it passed through 8 miles residential area in Wichita Falls. 42 people died outright by the storm, and 3 others died of heart attacks. 25 of the deaths were auto related, 16 of which were people who had entered their cars trying to evade the tornado. 3,095 homes were destroyed and 600 were damaged. 1,062 apartment units were destroyed and 130 were damaged. Property damage in Wichita Falls was estimated at \$400,000.000. About 20,000 people were left homeless. As the tornado crossed the Red River into Oklahoma, it veered to the NNE and damaged or destroyed about 20 homes in the Noble Wray Road area. A new brick home was leveled there, and several trailer homes were desiroyed. The tornado dissipated NNE of Waurika.

May 2, 1979 OK. 1615 24 miles 800 y 1 dead 25 inj. F4 This tornado formed 3 miles NE of Cleo Springs and moved to the (950) DAPPL #OK-21 ESE, causing only minor damage until the Ringwood area of E NSSFC #OK-24 Major Cn. Here it intensified and damaged a dozen farms. NE of Rindwood, the home and all other buildings on a farm were leveled. 1 mile NE of Meno, a young girl was killed as she and her family were trying to flee the area in a pickup. The tornado skipped through Lahoma, Garfield Co., damaging the high school and town hall. In the Imo area, a man died of a heart attack as he was trying to seek shelter in a grain elevator This death in not added to the tornado statistics.

Jun 28, 1979 IA 1820 30 miles 350 y 3 dead 26 inj. F4 (951) This tornado touched down 6 miles W of Palmer, Pocahontas Co., DAPPL #IA-20 and skipped over a church before staying on the ground NSSFC #1A-21 continuously. As it approached Manson, it widened and speeded up, striking and destroying 25 of the 35 businesses in that city. 110 homes and the junior high school were destroyed. Continuing SE, it destroyed several farms before lifting 5 mile NW of Knierim.

Oct 3, 1979 CT 1500 4 miles 500 y 3 dead 500 inj, F4 (952) This tornado took Windsor Locks completely by surprise.

DAPPL #CT-1 Over 100 homes were destroyed. A man was killed by flying lumber

NSSEC #CT-1 as he sought shelter in his truck. A woman was killed in the destruction of her home. A historic aircraft museum at Bradley Field was damaged, with aircraft thrown upside down on top of autos and across streets. 16 planes were destroyed, and 13 others were badly damaged.

Apr 2, 1980 TX 1210 7 miles 250 y 0 dead 0 inj. F4 (953) This tornado was estimated at F4 intensity by an NSSL storm DAPPL #TX-10 chaser. No clear F4 damage was produced by the tornado. This NSSEC #TX-10 is one of three such tornadoes on this list. Touching down 5 miles E of Seymour, Baylor Co., and the tornado moved to the NE and ENE where it intensified to a multiple vortex structure and leveled mesquite to the ground.

Jun 2, 1980 IA 1525 32 miles 140 y 0 dead 0 inj. F4 (954) This tornado touched down, moved to the east, and leveled the DAPPL #IA-13 Brenizer home, 1 mile SW of Davis City, Decatur Co. This was NSSFC #1A-13 the only F4 evidence along the path, which extended to N of Lineville and lifted 11 miles 5 of Corydon, Wayne Co.

Jun 3, 1980 PA 1030 14 miles 200 y 0 dead 140 inj. F4 (955) The tornado touched down NW of Natrona Heights, in extreme DAPPL #PA-9 NE Allegheny Co., and moved to the SE. Near the start of the DAPPL #PA-6 path, 2 stores and a restaurant were damaged at Natrona Heights. Near Vandergrift, 7 homes were badly damaged, and at Apollo, Armstrong Co., hali of the 177 mobile homes in a trailer court were destroyed. One home near Vandergrift was almost completely leveled, and was the basis for the NWS F4 rating. Damage totalled \$6,000,000.

(956) DAPPL #NE-23	NE 2116 6 miles 500 y 3 dead 111 inj. F4 This tornado leveled homes at several different places along its path, which made a large counterclockwise arc around and west of Fonner Park, Grand Island, Hall Co. F4 intensity was reached N of Bismark Road, between Bismark and Fonner Park Roads, on Stolley Park Road, and W of Locust Street. This tornado was one of 7 to hit that city in 2 hours. This event was #5 of the 7.
	of 7 to hit that city in 2 hours. This event was #5 of the 7.

Jly 9, 1980 IN 2035 13 miles 266 y 2 dead 25 inj. F4

This well-surveyed and studied tornado first touched down in (957)

CAPPL #IN-34 open fields between US Highway 52 and State Highway 44, about

NSSFC #IN-34 2 miles SW of Rushville. 3 homes were leveled 2 miles 5 of Rushville, and deaths occurred in 2 separate houses. The tornado moved E for 5 additional miles, then made an abrupt turn 120 degrees to the right and curved back to the south, dissipating 1 mile SW of New Salem. 10 homes were destroyed, 22 damaged, and the total loss was \$2,500,000.

Apr 4, 1980 WI 0004 2 miles 50 y 3 dead 53 inj. F4

(958) This tornado is the only confirmed example of an anti-

DAPPL #WI-2 cyclonic, clockwise-rotating tornado. It first touched down at NSSFC #WI-2

the St.Mary's School, and moved to the NE. F4 intensity was in the narrower, early section of the path, which grew to 1000 feet wide at it's end. Damage totalled \$12,900,000.

Apr 22, 1981 MO 1650 50 miles 400 y 2 dead 32 inj. F4 (959)

This tornado first hit the N portion of Malden, Bunklin Co., DAPPL #MD-7

destroying much of an industrial park and some houses. One NSSFC #MD 7 restaurant was destroyed except for the w.lk-in cooler, where customers and employees were huddled. I death occurred at Malden. along with 26 injuries and \$4,800,000 in damage. At East Prairie, Mississippi Co., a young girl died and her father seriously injured as their 2-story home was almost completely swept away. Many other buildings were destroyed and damage totalled about \$1,500,000. The tornado skipped to near Parma. Almost everyone along the path was warned, and the girl who died at East Prairie was huddled at the center of her home under a mattress when the building was completely torn apart, scattering the family along with the house debris.

May 13, 1981 TX 1815 9 miles 450 y 0 dead 30 inj. F4 (960)

The funnel first touched down 2 miles NW of Sunner, Lamar Co., DAPPL #TX-59 about 10 miles NW of Paris. Moving to the ENE, several homes. NSSFC #TX-59 were damaged just N of Summer. The funnel reached F4 intensity as it passed through the small community of Emberson. Witnesses did not see a funnel, but instead described a wall of debris coming at them. 22 homes were destroyed, most of them leveled. One man huddled in a bath tub that was hurled & mile. A 3/4 ton recreational vehicle was hurled 500 yards. 90% of Emberson was destroyed, and damage totalled about \$2,000,000.

May 17, 1981 OK 1900 35 miles 800 y 0 dead 2 inj. F4 (961)

The tornado touched down 2 mile: SSE of Little, Seminole Co. and

DAPPL #OK-26 moved NE into Okfuskee Co. Passing N of Okemah, the tornado NSSFC #OK-26 dissipated at the W edge of Lake Okmulgee, Okmulgee Co. Homes,

trailers, trees, barns, and cars were destroyed.

May 22, 1981 OK 1845 15 miles 1900 y O dead O inj. F4 (962) The very large tornado formed a mile W of Binger, Caddo Co.,

DAPPL #OK-38 and moved to the NE, dissipating in the S. Canadian River bed'

MSSFC #OK-38 11 miles W and 3 miles N of Union City, Canadian Co. This tornado created missiles from refrigerators, automobiles, trucks.

combines, and utility poles. Dead cattle were found up in denuded trees. Large oil storgage tanks, butane tanks, and motor vehicles were moved up to b mile by the winds. Damages were extensive, but all families in the path had underground shelters.

 Mar 19, 1982
 TX/OK
 1600
 70 miles
 800 y
 0 dead
 5 tnj
 F4

 (953)
 This 's mile wide tornado touched down 5 miles SE of Sunray.

 DAPPL #TX-6
 Moore Co., and moving to the NE. Passing across Hansford Co.,

 NSSFC #TX-6
 into Oklahoma, the tornado produced about \$1,000,000 in damage

 OK-11
 to a wide variety of farm property and oil wells.

Apr 2, 1982 OK 1550 53 miles 800 y 0 dead 29 inj. F5 (964) This intense tornado touched down just S of Speer, Choctaw Co., OAPPL #OK-20 and moved to the ESE crossing Hugo Reservior. Passing just N of NSSFC #OK-20 Valliant McCurtain Co., the funnel continued to S of Wright City. the S tip of Broken Bow, and dissipated 4 miles S of Eagletown. The tornado occasionally had multiple funnels and grew to a width of 1% miles near Goldew. Several ranch houses were leveled and a small home near Messer, Choctaw Co., was swept away, along with the carpet on the slab. The Tri-Night Motel sign from Broken Bow was found 30 miles away in Arkansas. About 35 homes were destroyed and damaged totalled \$8,000,000.

1600 23 miles 250 y 10 dead 170 inj. F4 Apr 2, 1982 TX This tornado, a member of a family of tornadoes which began in (965) Fannin Co., formed near Campbell Road and Loop 286 in extreme DAPPL #TX-9 NW Paris, Lamar Co. The tornado moved to the E, across the N part NSSFC #TX-9 of that town, destroying 465 homes and apartments. Only a very few homes were leveled. While most residents of a mobile home park had left when warnings were issued, a family of 4 did not and 2 of them were killed. 6 of the other 8 ceaths occurred out in the open and 2 deaths occurred in destroyed homes. Damage totalled about \$50,000,000. After leaving Paris, the tornado hit the N sections of Reno and Blossom. Nearly 100 buildings were damaged or destroyed in those communities.

Apr 2, 1982 AR 1720 45 miles 200 y 3 dead 23 inj. F4 (966) The tornado touched down 4 miles east of Horatio and moved DAPPL #AR-10 generally to the E at 25 mph. The funnel moved through or near NSSFC #AR-10 Frog Level, Meirose, and Milford in Sevier Co., destroying 5 homes and damaging 10 others. The three deaths occurred in a leveled home in the small community of Buck Range, Howard Co. The funnel lifted 3 miles E of Blevins. Howard Co. Extensive damage to timber was done along the entire path.

Apr 2, 1982 MO 1815 20 miles 500 y 2 dead 28 inj. F4 (967) Touching down 2 miles £ of Tecumseh. Ozark Co.. the tornado OAPPL #MO-16 skipped to the NE, lifting near West Plains. Howell Co. One house was completely leveled, and 20 others damaged along the path. 200 cars were severely damaged in a used car lot. Total damage was estimated at \$5,000,000 May 29, 1982 IL 1405 17 miles 400 y 10 deau 181 mil. 14

(968) This tornado cut a path through 3 towns in Williamson (a .

DAPPL FIL-19 and showed evidence of 3 separate vortices rotating around the NSSFE FIL-19 main tornado. The initial touchdown was approximately 4 miles. NW of Carterville. Skipping into a Carterville subdivision, 2 homes were destroyed and several others damaged. Moving the the E and ESE, the funnel damaged homes in Crainville. Increasing in size, the funnel struck the airport and followed highway 13 through Marion. In western Marion, a truck plaza was destroyed and a motel and 3 shopping centers were damaged Passing through Marion, 161 homes and 47 business were destroyed Outside of Marion, another 100 homes were destroyed, as damage neared a total of \$130,000,000

Dec 24, 1982 AR/MO 1800 64 miles 400 y 0 dead 13 inj. F4
(969) Touching down near Ash Flat, Sharp Co., Arkansas the tornado was
DAPPL #AR-64 nearly a mile wide in Sharp Co. 15 homes were destroyed as the NSSFC #AR-64 tornado moved to the NNE, through the E part of Fulton Co., passing MO-74 into Oregon Co., Missourt E of Mammoth Spring and Thayer Continuing to the NNE, the funnel passed just NW of Couch and just NW of Wilderness. In Carter Co., the funnel became less intense 6 miles SW of Van Buren, as well as causing only intermittent damage. This tornado, and a second one that followed 6 miles to the SE, destroyed 20 homes and damaged buildings on 50 farms. The two parallel tornado paths in Missouri destroyed an estimated 4,000,000 board-feet of timber. F4

intensity damage is indicated from Arkansas.

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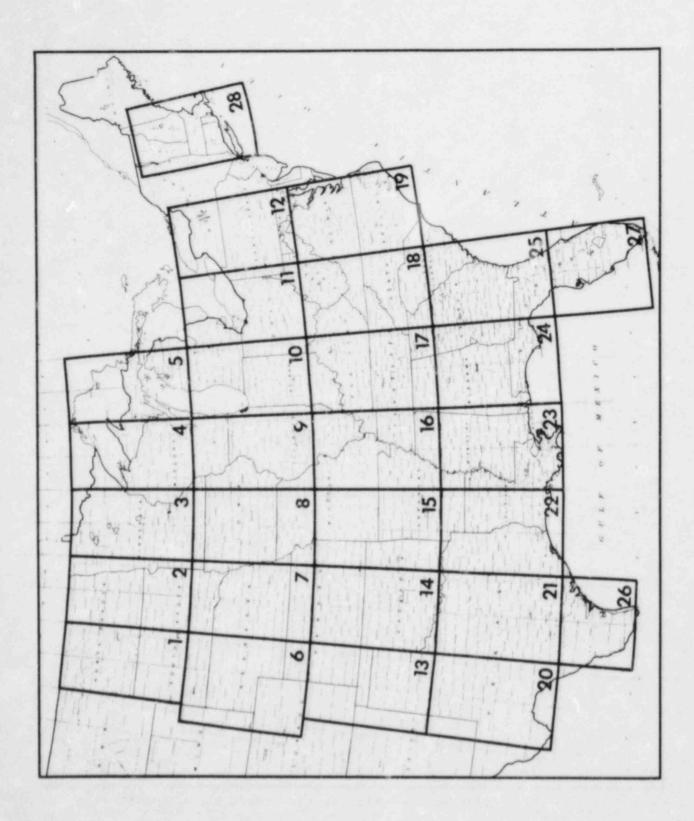
APPENDIX B

STATE MAPS OF VIOLENT TORNADO PATHS

APPENDIX B

STATE MAPS OF VIOLENT TORNADO PATHS

The appendix contains 28 maps, most of which are 4-degree by 5-degree areas, on which are plotted the paths of the 969 confirmable violent (F4/5) tornadoes described in Appendix A. These maps follow, and are numbered from, a directory map for ease in finding geographic locations. The information in the two appendices is readily cross-referenced.



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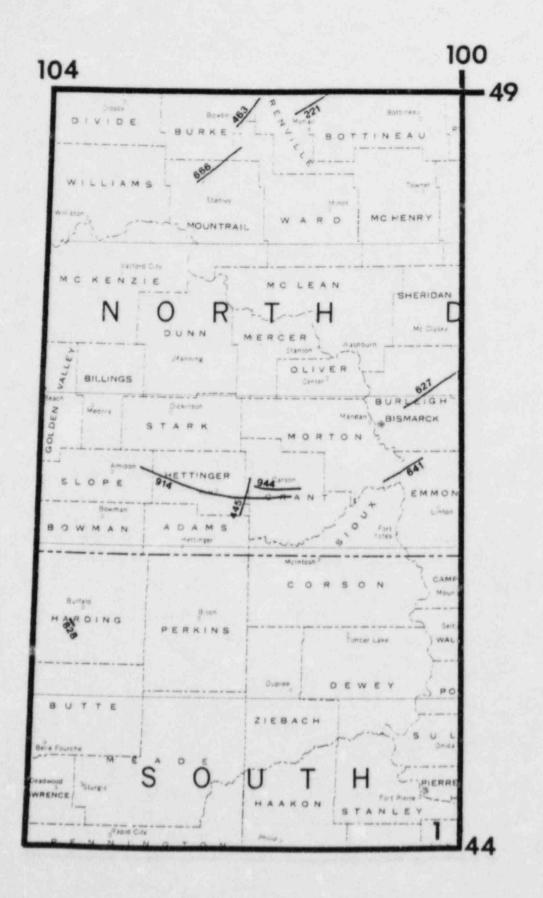
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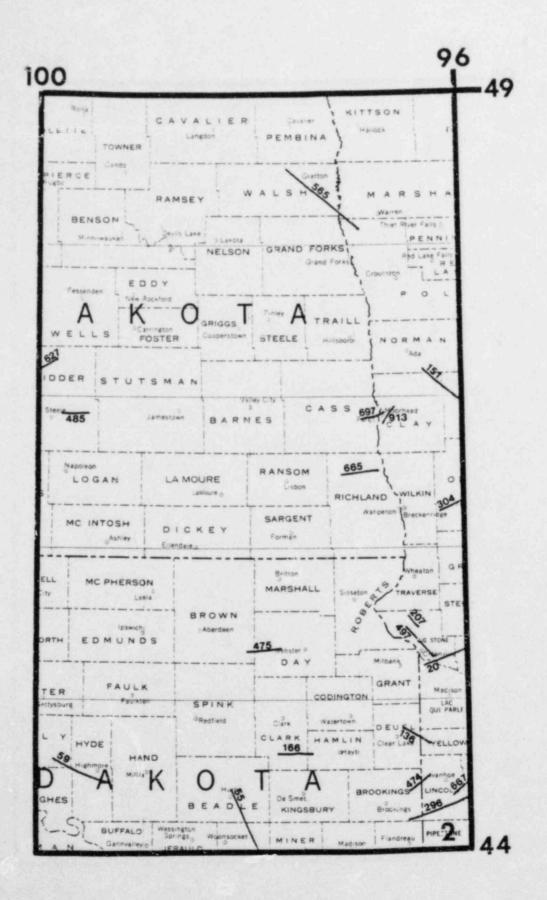
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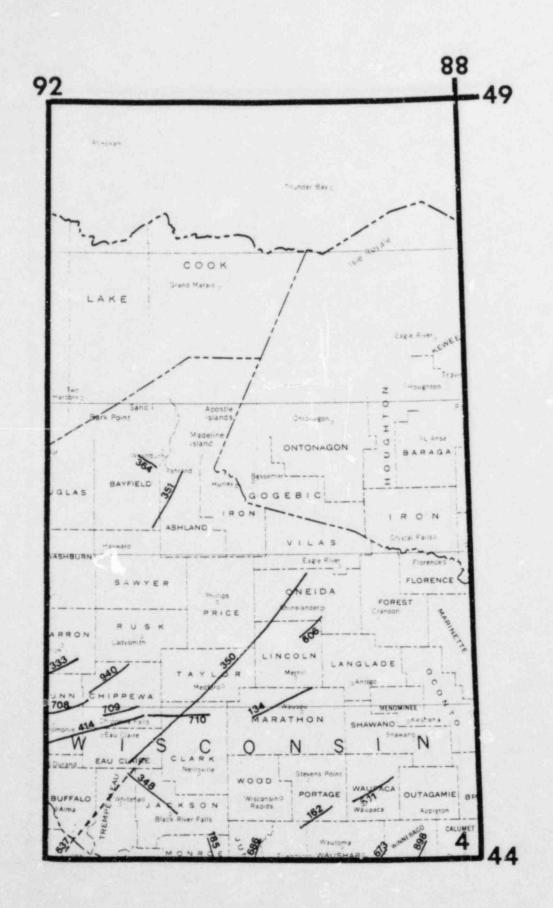
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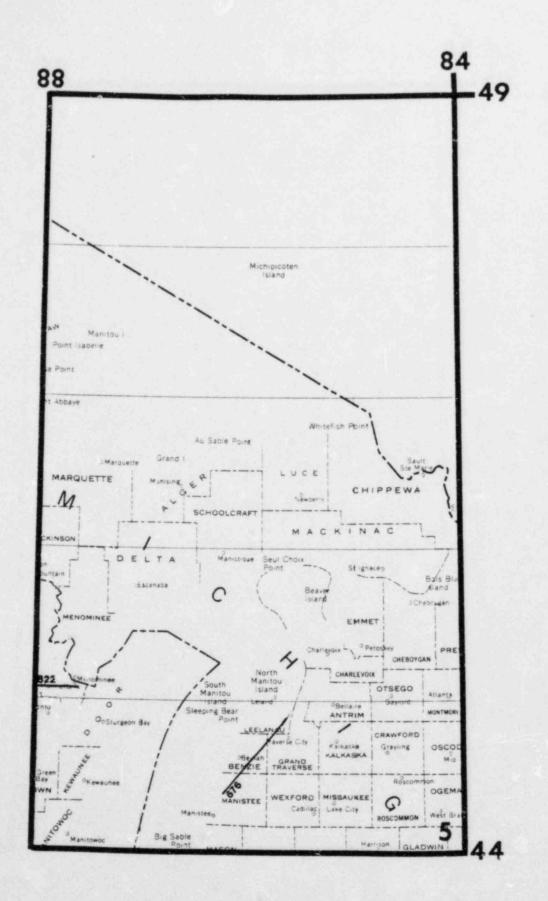


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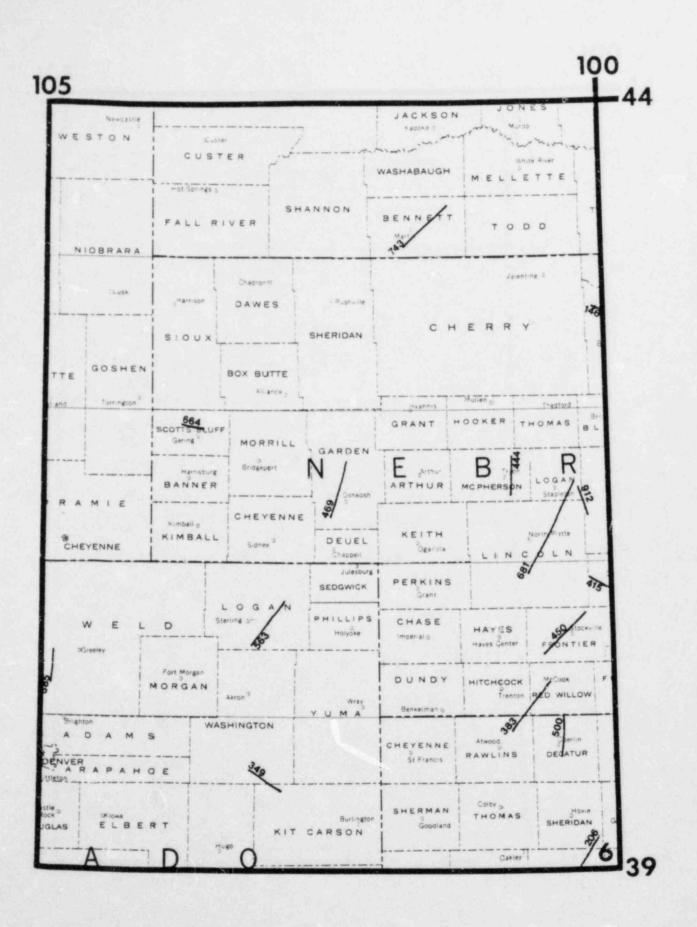
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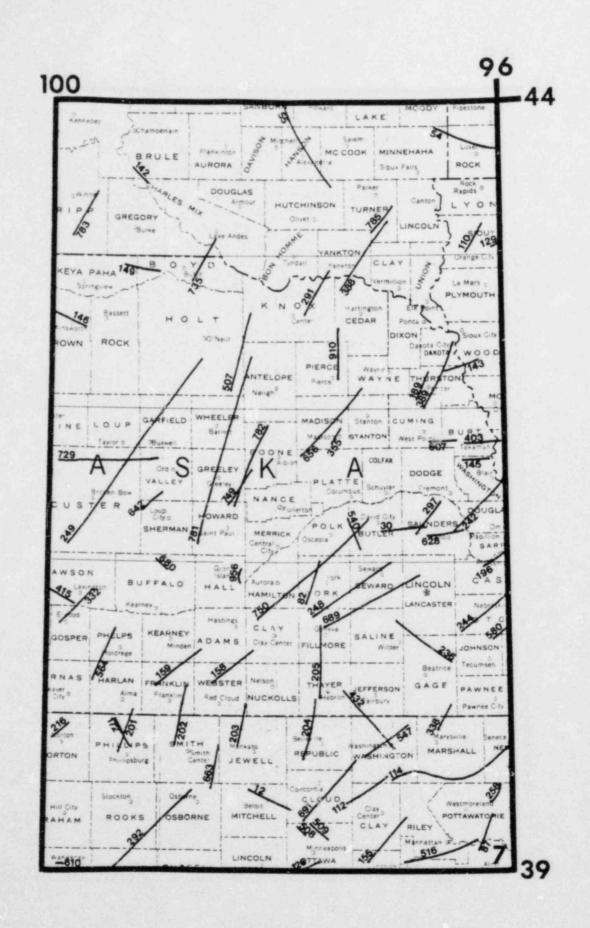
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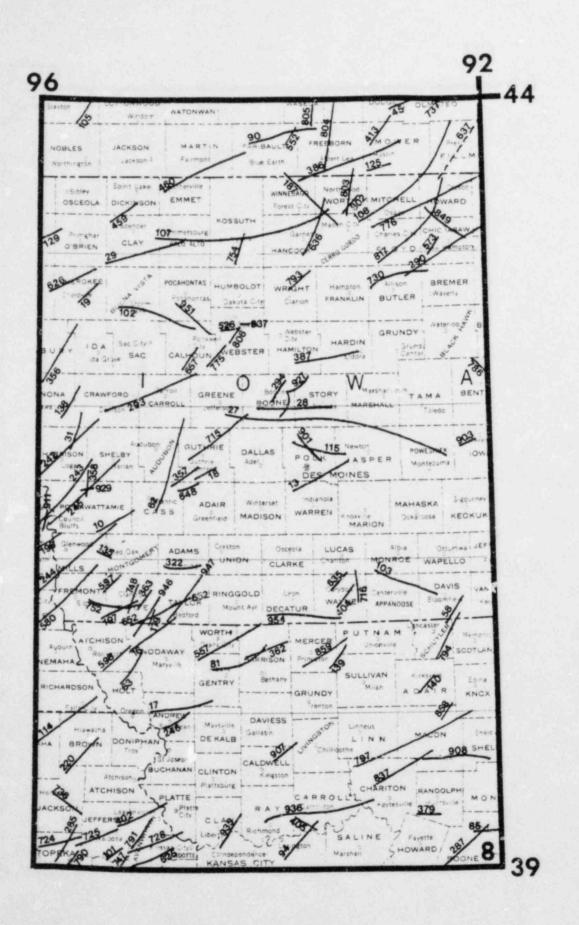
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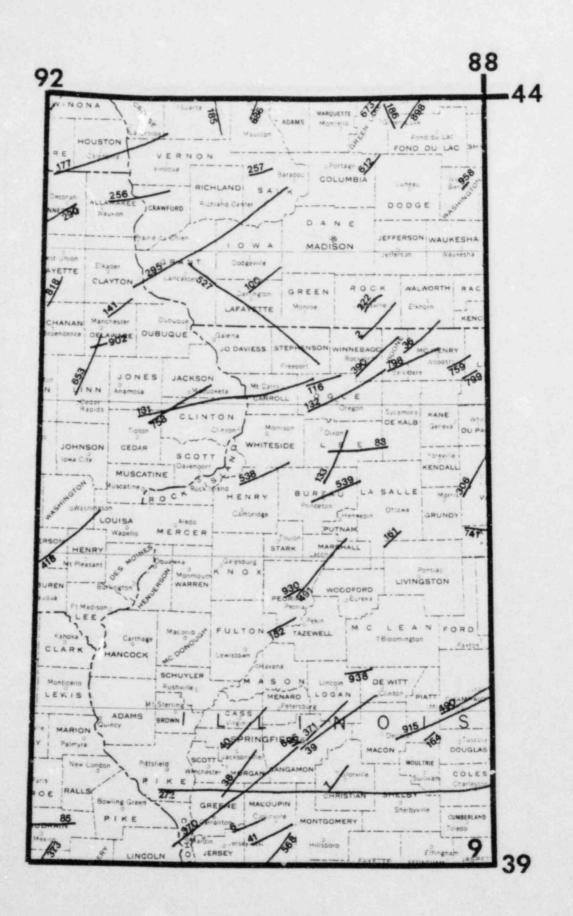
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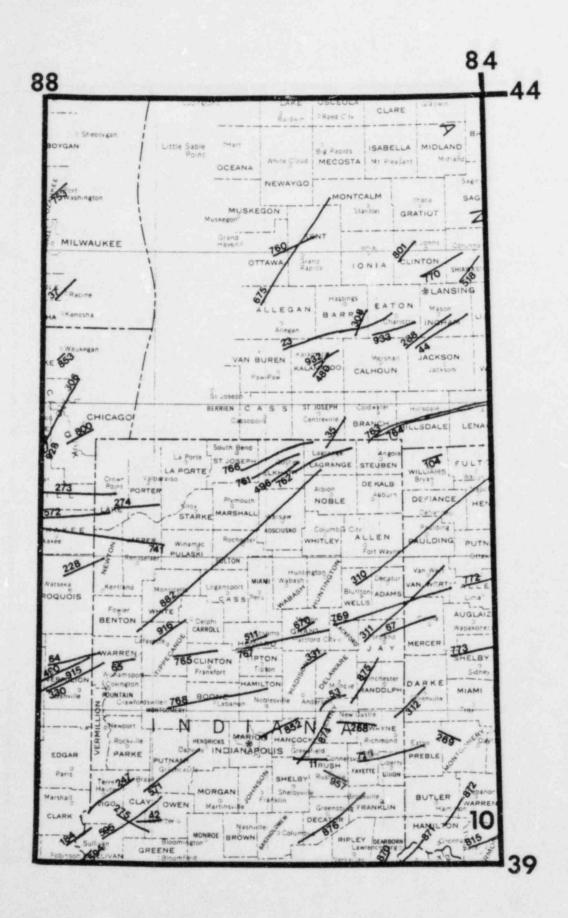
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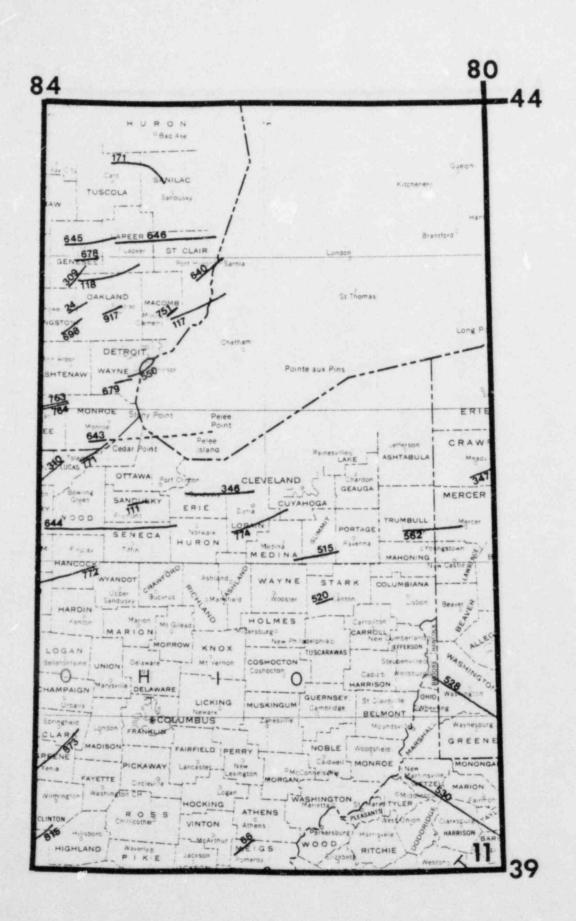




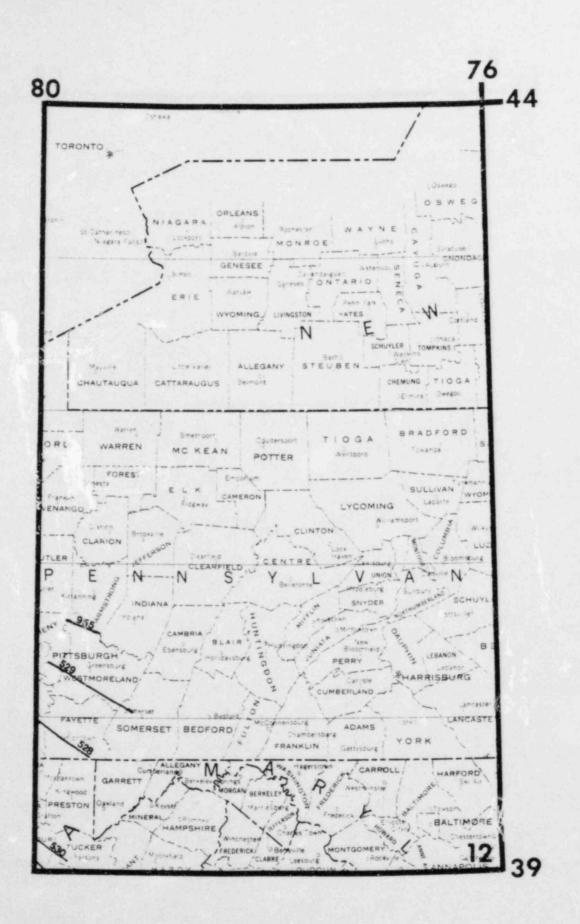
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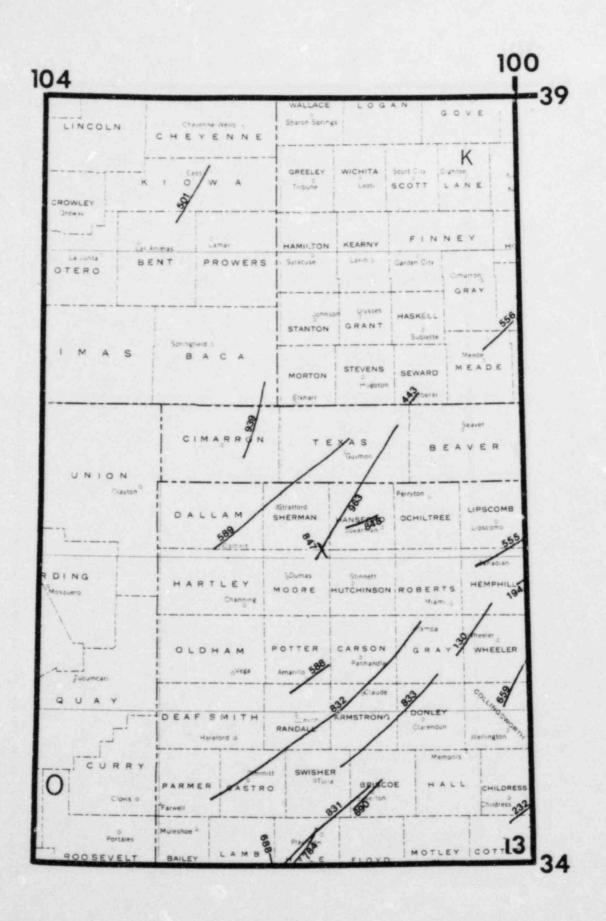
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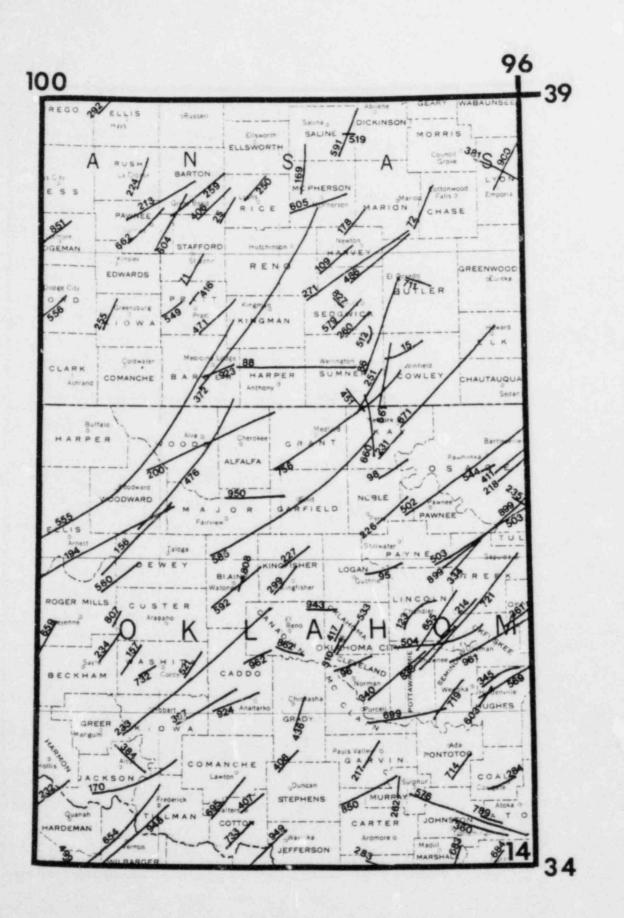
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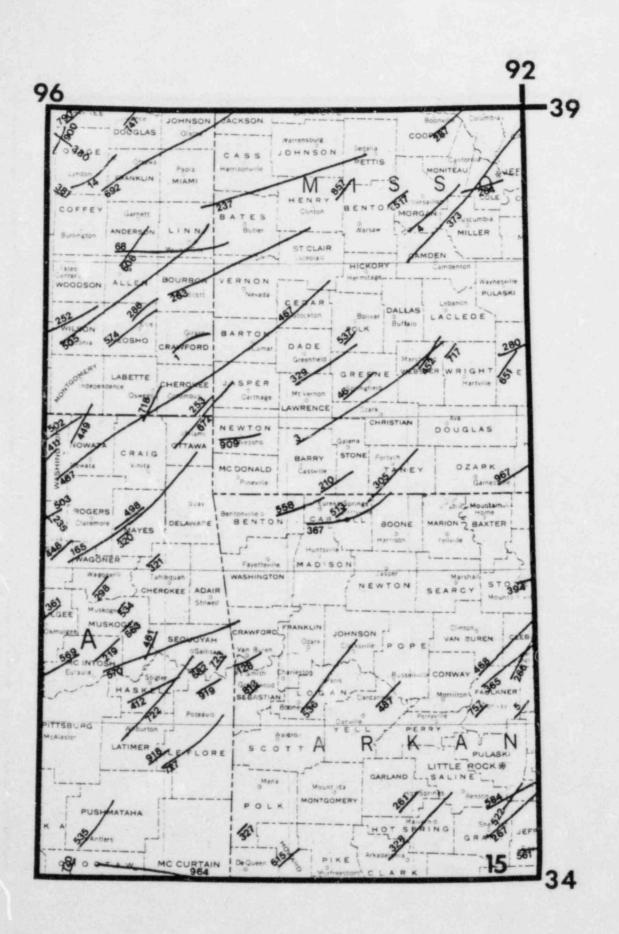
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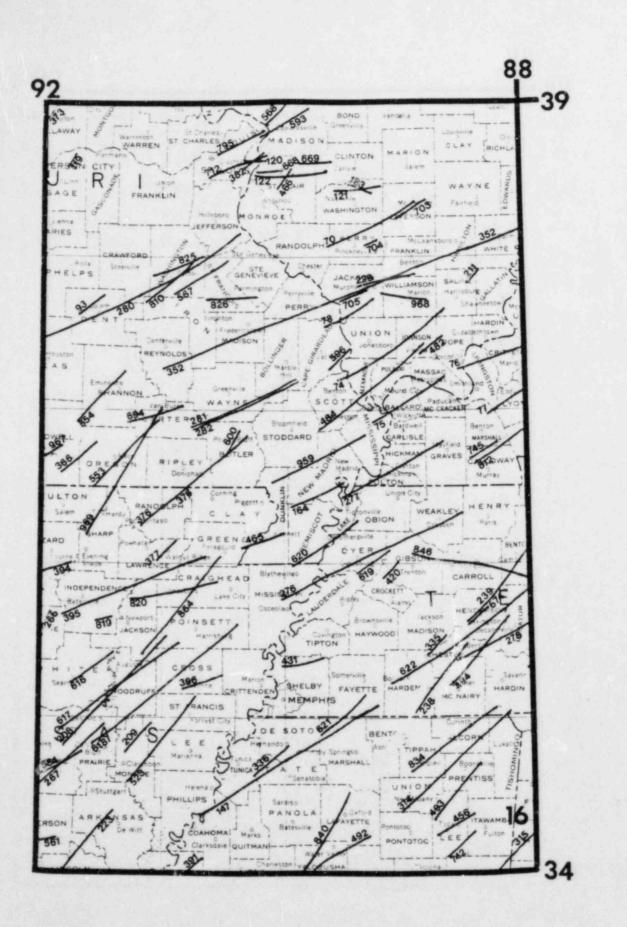
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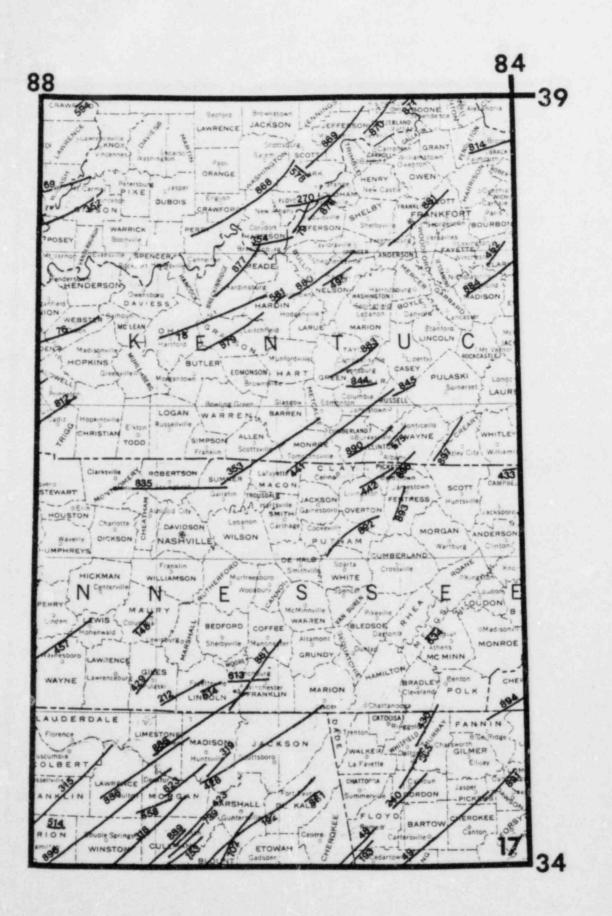


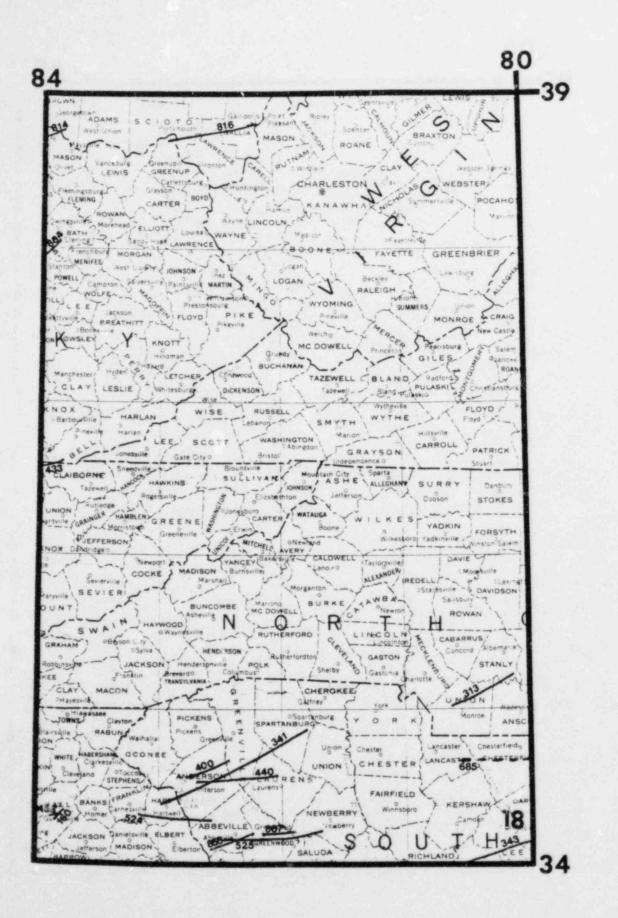
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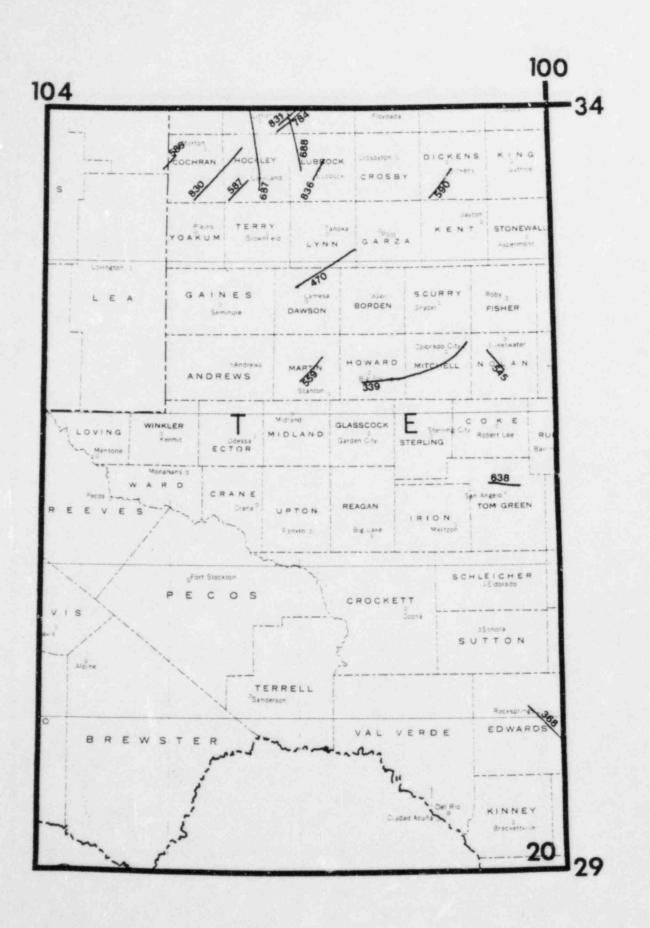
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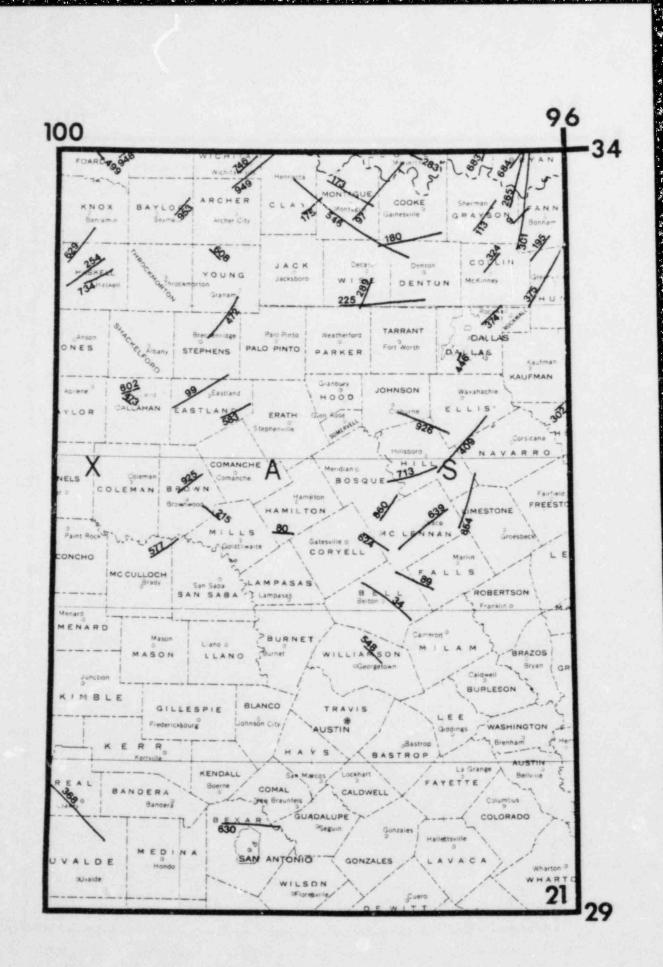


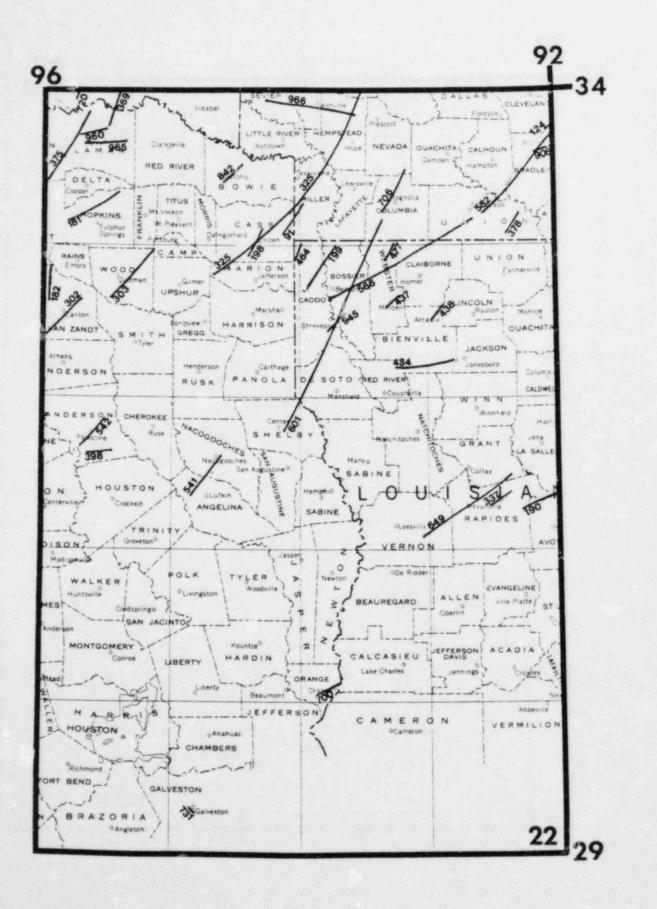


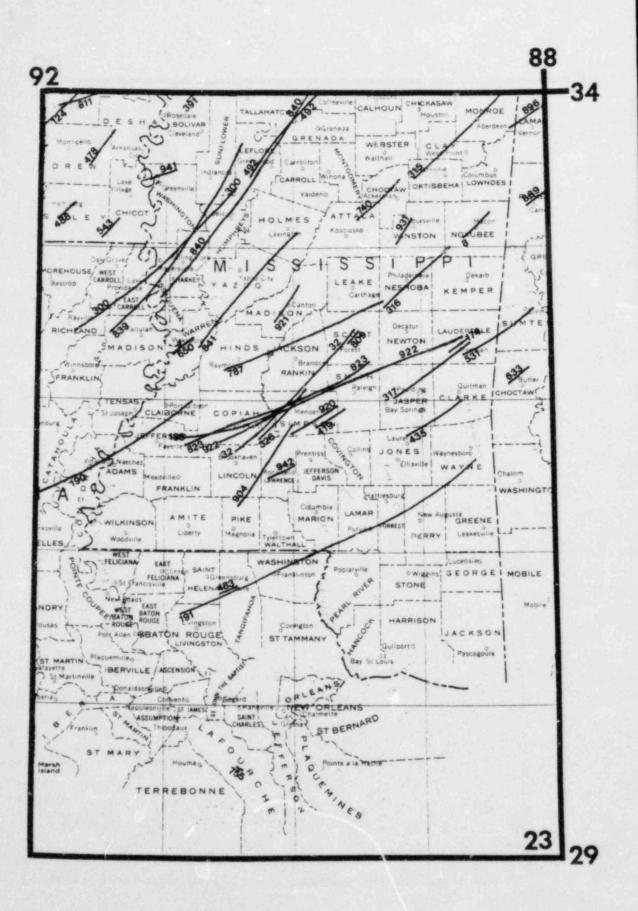




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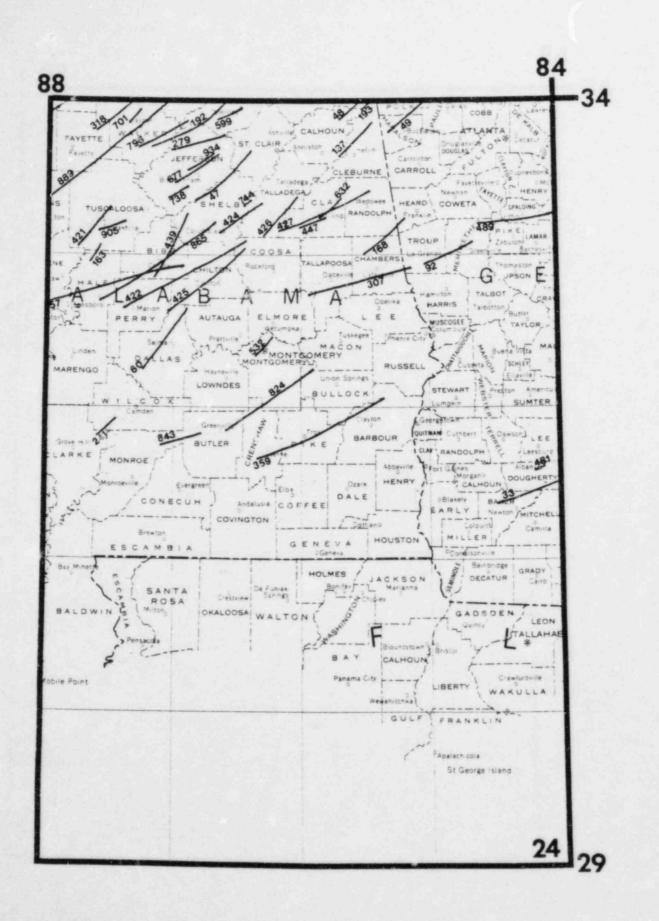




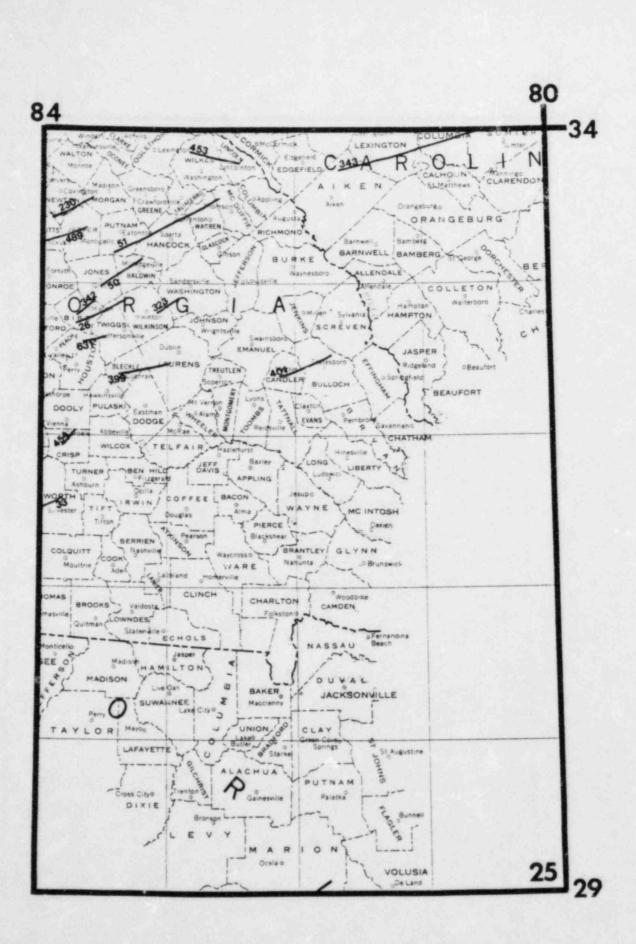
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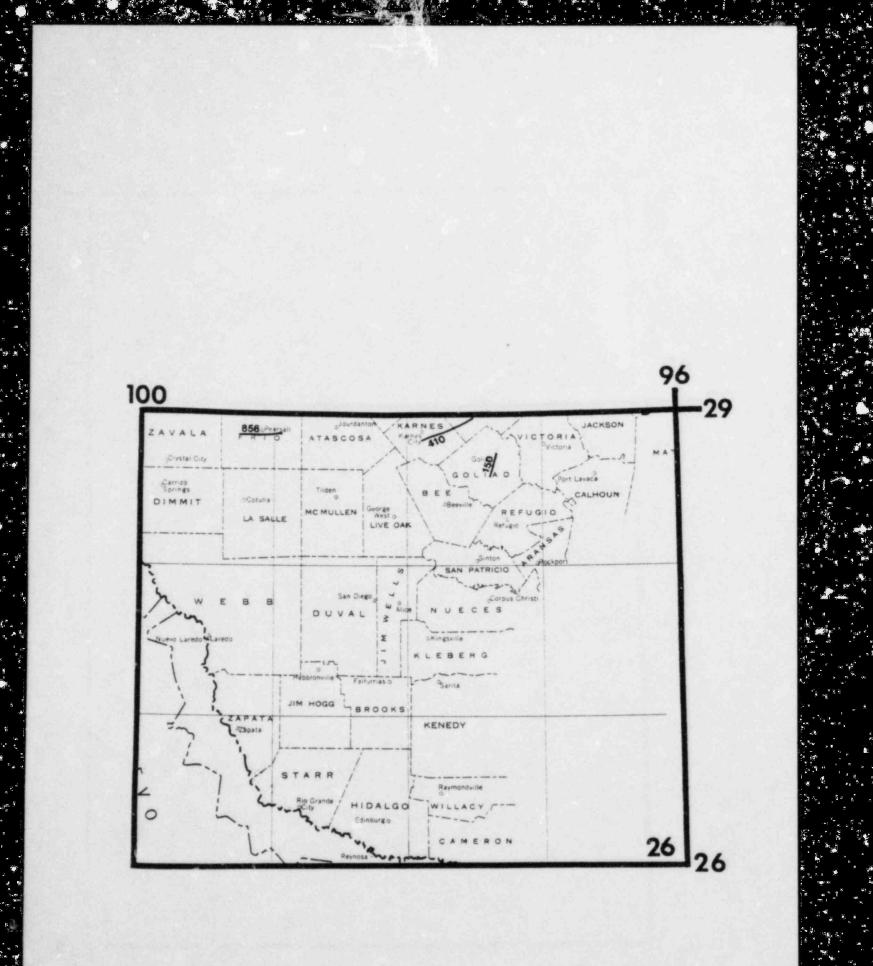
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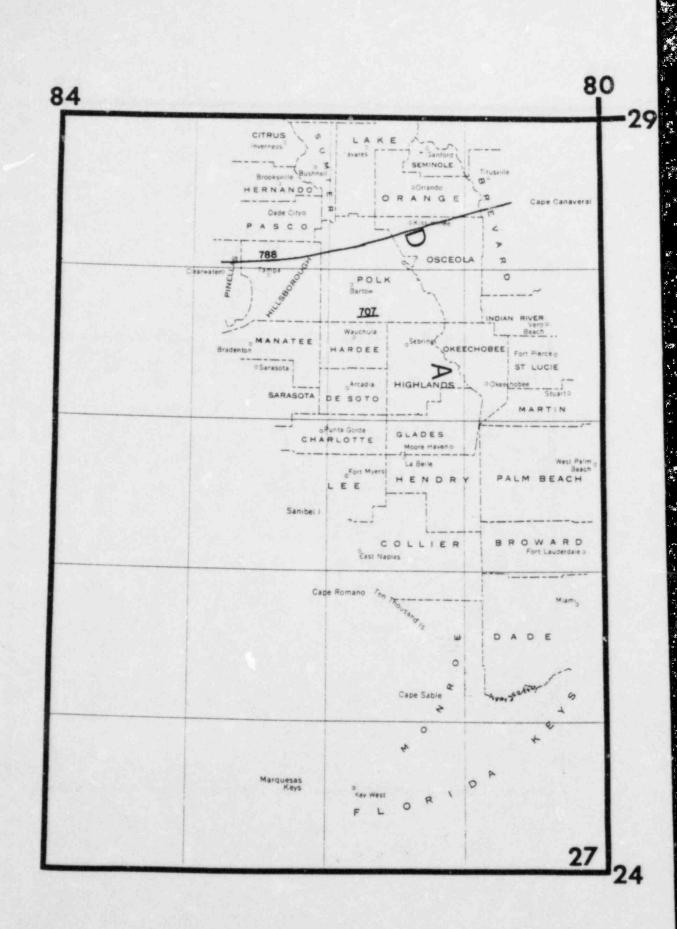


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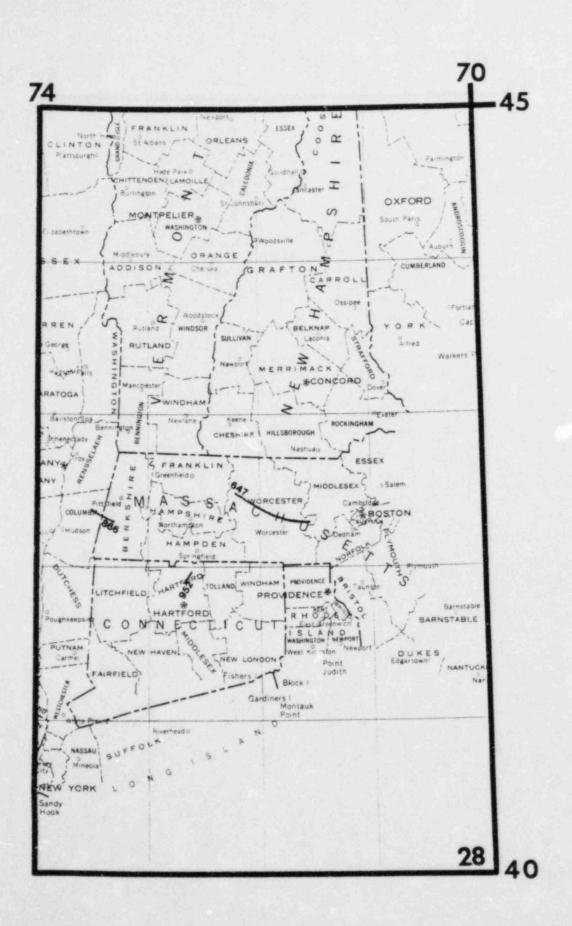
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