

WFO Central IL Severe Weather Operations Plan



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I. OUTLOOKS

1. CONCEPT

The National Weather Service issues a HAZARDOUS WEATHER OUTLOOK (HWOILX) to highlight the possibility of adverse weather within a seven day period. See the ILX Station Duty Manual Chapter 1-5-5 or NWS Directive 10-517 for more information.

2. RESPONSIBILITIES

The Storm Prediction Center (SPC) produces the Convective Outlooks for days 1, 2, 3, and an experimental outlook for day 4 through 8.

The Hydrometeorological Prediction Center (HPC) produces Precipitation Outlooks for days 1, 2, 3 and 4 through 5, along with the Excessive Rainfall Discussion.

We should use these products as guidance to create the HWO, but the forecaster should also use his or her own judgment when analyzing the risk for severe weather.

3. OUTLOOK PROCEDURES

WFO Central Illinois shall issue an **HWO** at least twice daily, at 6:00 A.M. and 11:00-11:30 A.M. local time, and as needed. This product will be a **non-technical description** of anticipated hazardous weather, as outlined in SDM Chapter 1-5-5. This will be done by the short term forecaster.

If flooding is anticipated, it shall be discussed in the HWO. However, an additional product, the **HYDROLOGIC OUTLOOK (ESFILX)**, is also encouraged to highlight any flood potential beyond 36 hours. See Section 4.3.1 of the ILX HYDRO SERVICES MANUAL for more information.

4. EXTERNAL COMMUNICATION OF OUTLOOKS

4a. CONFERENCE CALLS

WFO Lincoln will conduct conference calls with county ESDAs and TV media partners when a significant severe weather event is anticipated. This is defined as an SPC designated **HIGH RISK** or **MODERATE RISK** in the Day 1 outlook, or any event deemed significant by a shift leader.

The purpose for these calls will be to brief our customers on the meteorological conditions and expected severe weather over the next 6-24 hours, while allowing them the opportunity to ask any specific questions they may have. See APPENDIX 8 of this plan for detailed information.

4b. E-mail NOTIFICATION

Step 1. Send an e-mail to all eSpotter users giving them a heads-up about the impending event. This should be done as far in advance of the event as possible, for all HIGH RISKS, MODERATE RISKS, and selected SLIGHT RISKS deemed significant by the staff.

Log on to the ILXSPOTTER e-mail account and open the address book. Choose "eSpotter" to send a message to:

- A) the entire SWOP network
- B) all ESDAs who have eSpotter
- C) ILX staff

NOTE: Before sending a mass message, please check your personal e-mail account and ask the Data Acquisition/Forecast staff to ensure a message has not already been sent.

Step 2. While in the ILXSPOTTER e-mail account, send the same message to the affected ESDA/EMA officials. The address book for "ESDA" is arranged by county. Choose the affected counties and send the message.

4c. E-SPOTTER NOTIFICATION

Use the E-SPOTTER "Field Messaging" to give our Significant Weather Observers, Emergency Managers, and the media that have e-spotter accounts, information about pending severe weather. Use the same guidelines, and send the same information as in the "E-mail Notification" section above.

II. CONVECTIVE WATCHES

1. CONCEPT

The National Weather Service issues Tornado and Severe Thunderstorm watches to advise of the possibility of development of those dangerous events. Watches are issued for large areas, for a duration of 4 to 8 hours. They are usually released well in advance of the actual occurrence of severe weather.

2. RESPONSIBILITIES

The Storm Prediction Center (SPC) analyzes the potential for severe weather, and issues, cancels and coordinates Tornado and Severe Thunderstorm Watches. SPC prepares the following products:

SWOMCD: Mesoscale discussion often released to describe developments when SPC is considering a Watch, and updated information when a watch is in effect.

- WCL#: Preliminary Watch Notification to initiate issuance (# is the last digit in the Watch Number).
- SEL#: The Watch Message giving a full narrative description of the Watch Area and expected conditions.
- WOU#: A product issued at the onset of a watch, which lists the counties included in a watch. It is also updated hourly to list counties remaining in a watch, and counties that have been removed from a watch.

3. WATCH PROCEDURES

- A. SPC will initiate a conference call by sending a notification message - **WSHNIMNAT**
- B. In the GFE check the "Proposed" watch created by SPC. In the "HAZARDS" menu, select VIEW WCL to display the proposed counties. Join the conference call and coordinate the final watch area.

C1. When the watch is issued:

- i. Create a Watch County Notification message (WCNILX) using the formatters in GFE.

NOTE: IF THERE ARE ANY PROBLEMS WITH THE LISTED COUNTIES IN THE SPC "WOU" PRODUCT, SEND THE "WCNILX" FIRST, THEN CONTACT SPC ABOUT THE DISCREPANCY.

- ii. Display the watch on a graphics monitor, and print out a graphic of the watch.
- iii. Verify that the watch has been disseminated on NOAA Weather Radio and the 45.56 MHz/Central Illinois Weather Net radios.
- iv. Update the gridded forecast, zone forecast product, and weather radio forecasts for the watch.
- v. Assess the need for additional staffing and notify volunteer radio operator(s).

C2. Watch cancellation:

- i. WFO Lincoln is responsible for Watch Cancellation via the WCNILX product. Use the GFE to highlight remaining counties in a grid.
- ii. Use the GFE formatter to create the WCN text product. Coordinate with surrounding WFOs as needed.
- iii. Disseminate the WCN message on NOAA Weather Radio, and the 45.56 Central Illinois Weather Net radios.
- iv. Update the gridded forecast, zone forecast product, and weather radio forecasts for the change in the watch.

4. EXTERNAL COMMUNICATION OF WATCHES

4a. Emergency Manager Notification

In the ILXSPOTTER e-mail account, the "Short Term Forecaster" will send a short text message to affected Emergency Managers via their cell phones or pagers for the purposes of planning spotter activation.

- i. Go to the Address Book, and select the **EM PAGER** folder. **Choose the affected counties** to send the message to.
- ii. Create a short message, 160 characters or less, with specific information regarding timing and the anticipated severe threats.

SAMPLE MESSAGE

TOR WATCH 125:STORMS TO REACH A BLOOMINGTON TO SPRINGFIELD LINE BY 6 PM. DAMAGING WINDS AND LARGE HAIL LIKELY. A FEW SPIN UP TORNADOES POSSIBLE.

- iii. Send multiple messages as needed. For a watch in the whole CWA you may need to send 3 to 5 separate messages (e.g. Galesburg to Rushville, along the Illinois River, the I-55 corridor, the I-57 corridor, and the IL/IN border counties.) The short term forecaster is encouraged to coordinate with the Warning Coordinator about these messages.

4b. E-SPOTTER NOTIFICATION

Use the E-SPOTTER "**Field Messaging**", to give our Significant Weather Observers, Emergency Managers, and the media that have e-spotter accounts, information about the timing of the watch for activation purposes. It is recommended that the "Short Term Forecaster" create this message.

- i. Open e-spotter, WFO access. There is a link to e-spotter from the ILX Intranet. **Choose "Field Messaging"**
- ii. Create a short message with specific information regarding timing and the anticipated severe threats.

SAMPLE MESSAGE

TORNADO WATCH 125 TIL 8 PM: A LINE OF STORMS SHOULD DEVELOP NEAR THE MISSISSIPPI RIVER BY 4 PM, REACHING A PEORIA TO RUSHVILLE LINE BY 6 PM, THE I-55 CORRIDOR BY 730 PM, AND THE I-57 CORRIDOR BY 9 PM. BRIEF TORNADOES POSSIBLE ON THE LEADING EDGE, WITH DAMAGING WINDS IN EXCESS OF 70 MPH AND LARGE HAIL.

- iii. Send this message to the counties included in the watch.

III. Convective WARNINGS

1. CONCEPT

The National Weather Service is tasked with issuing Tornado and Severe Thunderstorm Warnings to notify the public of threats to life and property. During times of severe weather, frequent, up-to-date weather information is **EXTREMELY IMPORTANT**, so that our customers can make an informed decision about the protection of their life and property.

2. RESPONSIBILITIES

WFO Lincoln is responsible for issuing Tornado and Severe Thunderstorm Warnings for the County Warning Area which consists of 35 counties in central and southeast Illinois. The goal of warnings issued by WFO Lincoln is to give advance notice of severe weather occurrences, rather than simply reacting to reports of such phenomena.

Illinois Counties in WFO Lincoln's Warning Area:

County	FIPS Code	Zone Code	County	FIPS Code	Zone Code
Cass	ILC017	ILZ047	Marshall	ILC123	ILZ030
Champaign	ILC019	ILZ045	Mason	ILC125	ILZ041
Christian	ILC021	ILZ052	McLean	ILC113	ILZ038
Clark	ILC023	ILZ063	Menard	ILC129	ILZ048
Coles	ILC029	ILZ056	Moultrie	ILC139	ILZ054
Crawford	ILC033	ILZ068	Peoria	ILC143	ILZ029
Cumberland	ILC035	ILZ062	Piatt	ILC147	ILZ044
DeWitt	ILC039	ILZ043	Richland	ILC159	ILZ072
Douglas	ILC041	ILZ055	Sangamon	ILC167	ILZ051
Edgar	ILC045	ILZ057	Schuyler	ILC169	ILZ040
Effingham	ILC049	ILZ066	Scott	ILC171	ILZ049
Fulton	ILC057	ILZ036	Shelby	ILC173	ILZ061
Jasper	ILC079	ILZ067	Stark	ILC175	ILZ028
Knox	ILC095	ILZ027	Tazewell	ILC179	ILZ037
Lawrence	ILC101	ILZ073	Vermilion	ILC183	ILZ046
Logan	ILC107	ILZ042	Woodford	ILC203	ILZ031
Macon	ILC115	ILZ053			

3. EVALUATION AND CONFIRMATION OF THE THREAT

WFO Lincoln shall use a combination of RADAR, Meso-Analysis, and Spotter Reports to determine the potential for Severe Weather and the need for issuance of Warnings.

3a. Spotter Reports / Contacts

All reports received, no matter their source, must be considered accurate, at least initially. Reports from trained, reliable spotters must be acted upon without delay. Phone numbers for primary county contacts can be found on the Intranet (clickable [Phone-Map](#)).

Many counties can also be reached via HAM radio.

- 1) The **Central Illinois Weather Net** can be used to contact the following counties: Knox, Stark, Marshall, Peoria, Woodford, Tazewell, Fulton, Mason, McLean, Schuyler (through a Mason county relay).
- 2) The **45.56 radio**, using the callsign **WPPZ 464**, can also be used to contact the counties in the Central Illinois Weather Net, as well as, the following counties: Menard, Logan, DeWitt, Piatt, and Macon.
- 3) A **2 meter band radio**, which can only be **operated by licensed HAMS**, can be used to contact other multiple locations. See the map near the HAM desk for details.
- 4) The internet based **UI-VIEW programs** can be used to retrieve "packet radio" reports from HAMS in the field.
- 5) The internet based **ECHOLINK** program can be **used by licensed HAMS** to access repeaters in East and Southeast Illinois, to communicate with emergency managers and HAM groups.

3b. SKYWARN Spotters

NWS Lincoln SKYWARN spotters will be activated through the used of E-spotter. SKYWARN spotters will be encouraged to use E-spotter or the NWS Lincoln webpage to relay reports. A few spotters may choose to use our "800" number to relay their reports.

All SKYWARN spotters will be given a unique "**SPOTTER ID**" to assist us with the authentication process. The alphanumeric ID will be assigned in the following way:

First two characters: an alphabetical county code

Next two characters: the two digit year they last received spotter training

Final three characters: a three digit number that identifies the individual

Example: SPOTTER ID# LA06001

Lawrence county = **LA** 2006 spotter class = **06** First spotter = **001**

3c. Calls received directly from "Trained Spotters"

When a caller identifies themselves as a "trained spotter", ask them for their name, and log it on the "Severe Weather Log Sheet" under the "Name of Caller or Agency" column. This will be helpful if follow-up information is necessary.

GUIDELINES FOR INTERROGATING INFORMATION FOR TORNADO WARNINGS

SPOTTERS:

- Is organized rotation evident?
- Is the funnel well defined (smooth, laminar) or rugged?
- How far does it extend to the ground?
- Is there any evidence of a debris cloud at the surface?
- Is it persistent? Is it still there?

RADAR:

- Compare spotter reports with location of thunderstorm cells. Is the report in a logical location?
- Check the 8-bit SRM, especially using a 4-panel. Is there any evidence of rotation? (NOTE: Be sure that the storm motion is representative!)
- If the location is distant from the RDA, look at the storm using another radar.
- Small scale tornadoes that spin-up on the leading edge of a line of storms, or a landspout are not generally associated with mesocyclones. Thus, there will likely be no detectable rotation on radar. Although they are usually weak and short lived, they are still tornadoes!

4. PROCEDURES FOR ISSUING WARNINGS

Once the decision to warn for a Tornado or Severe Thunderstorm has been made the Warning Message must be delivered to the public, media and other users without delay. The message can usually be delivered most efficiently with the radar person preparing the warning and then it will automatically go into CRS via the NWRWAVES program...so be sure to **double check** the warning for any errors before sending it out from the AWIPS Text Station.

PREPARATION: Use **WARNGEN** program in AWIPS.

CONTENT: The required content for a warning in order to meet expectations must include:

1. Correct generic coding (includes county names and expiration time).
2. Time reference and basis for warning (e.g. radar, spotters, emergency services, etc.). Be sure and provide source of information, if known.
3. Location of storm from a community (or area) in the warned county, as well as, from an approved reference city.

4. Movement of storm, along with community(ies) or areas at risk.
5. A call-to-action statement. A specific call-to-action statement is encouraged.

DISSEMINATION: Warnings must be delivered to all users with as little delay as possible. The following is a priority list for disseminating Warnings:

1. Weather Radio
2. WARNGEN program in AWIPS.
3. NAWAS (State that a warning has been issued for XYZ County).
4. Central IL Weather Net/45.56 MHZ and/or ham radio networks.

NOTE: *The use of a telephone or fax to disseminate warnings should be done ONLY as a backup, should one of the primary systems fail.*

TORNADO WARNINGS FOR THE CITY OF PEORIA:

- We SHALL include Peoria as a location listed in a Tornado Warning, any time that any portion of the Peoria city limits is threatened by a tornado.
- If a Tornado Warning is issued for Peoria county, and it does not include the Peoria city limits, then Peoria will not be listed as a location affected by the tornado.
- If it becomes apparent that any portion of the Peoria city limits is going to be threatened by the tornado, then a new Tornado Warning will be issued by us. This shall include Peoria, and the Peoria metro areas of Tazewell and/or Woodford counties (Creve Coeur, East Peoria, Germantown Hills, Bayview Gardens and/or Spring Bay).

FOR BACKUP PURPOSES - In a short-fused warning event, if we are ready to transmit any warning, and AWIPS communications go down, contact our backup offices (1) WFO Chicago or (2) WFO St. Louis. See Volume I, Section 3.4 for Backup Specifics.

Loss of the ILX radar feed into AWIPS is NOT a reason to go into backup mode. Immediately contact the ROC for assistance, and/or a member of the electronics staff. Utilize surrounding WFO radars in the meantime.

5. PROCEDURES FOR UPDATED INFORMATION/LOCAL STORM REPORTS DURING WARNING MODE

Frequent, up-to-date weather information is vital during times of severe weather. Our customers from all areas have stressed this as the number one need from the Weather Service.

The National Weather Service issues Severe Weather Statements and Short Term Forecasts to apprise the public of potential weather dangers and to provide further information concerning Severe Weather Watches and Warnings.

i) **Severe Weather Statements (SVSILX)** are issued to describe observed severe weather, to provide follow-up information concerning a warning, and to cancel all or part of a warning. A separate SVS should be written for each individual warning, headlined with the appropriate warning information (i.e. Type of warning, county(ies) warned, & expiration time). **SVSs should be issued FREQUENTLY** during the valid time of a warning. At a minimum, each warning should have two follow-up SVSs, however more are encouraged. Each SVS should be thought of as an update to the warning, and should be able to replace the original warning in the NWR cycle (i.e. headline with warning information such as Type of warning, county(ies)warned, & expiration time).

A Severe Weather Statement for a current warning in effect, in order to meet expectations, **MUST** be generated in WARNGEN, and shall include:

1. Correct Generic Coding (including expiration time).
2. Type of Warning in effect, affected county(ies), and expiration time in the headline. If canceling only part of a warning, be sure to put in two headlines. One stating which county has been cancelled from the warning and another stating which county is still in the warning and until what time.
3. Time reference for reports received and/or current location and status. Give source of reports, if known. If practical, ground truth reports should be placed ahead of the radar based position.
4. Location of the storm from a community (or area) in the warned county, as well as, from an approved reference city.
5. Movement of threat along with the community(ies) or areas at risk.

Other element of information suggested for inclusion, when deemed appropriate:

- Specific call to action statement

During the life of a warning, Severe Weather Statements should be issued frequently to relay important ground truth information received from spotters or Emergency Preparedness.

ii) LOCAL STORM REPORTS (LSR)

Local Storm Reports should be issued periodically during an event by the Data Acquisition Unit. A summary LSR issued within a few hours after an event has ended. Be sure to only include severe reports (i.e. winds 50 kts or greater, 3/4 inch hail or larger, tornadoes, flooding, and damage). Do not include reports of winds and hail below severe criteria or funnel clouds that are unconfirmed.

Use the AWIPS LSR Program to generate Local Storm Reports.

Local Storm Reports should include:

1. type of phenomena;
2. date/time of occurrence when known (including time zone);
3. location of event, including state, county, direction and distance (in statute miles) from a well known site;
4. source of report (i.e. ESDA, Sheriff, etc.);
5. damage, deaths, and/or injuries (if any); and
6. any other useful information.

ii.a) Marble sized and Dime sized hail reports

Marble sized hail - Spotters have been trained NOT to report marble sized hail. However, these reports are still received at times. If a spotter reports marble sized hail (through any reporting source - phone, NAWAS, HAM radio, etc...) IMMEDIATELY ask them for a definite size (example: "Would that be 1/2 inch or 3/4 inch diameter or bigger")

Dime sized hail - The diameter of a dime is 0.71", which is below the severe thunderstorm threshold of 0.75". Since it is nearly impossible for a spotter to determine a difference of 0.04" (the difference between a dime and a penny), follow these procedures for dime sized hail reports:

- Ask the caller **"Is the size of the hail closer to a penny or larger, or is it smaller than this?"**

- Log the response.

If it is smaller, or the caller says "exactly the size of a dime" then log "dime sized hail" or "smaller than a penny". Do not send this in an LSR. This will NOT verify a warning.

If it is closer to a penny, or larger, log the appropriate size, and issue an LSR. If a severe thunderstorm warning was in effect, it will be verified. If no severe thunderstorm warning was in effect, it will be a missed event.

iii) Short Term Forecasts (NOWILX) - When a warning(s) is in effect, the NOW is our primary product for keeping our customers in the non-warned area of the CWA informed on the location and movement of significant weather. Watches in effect shall be mentioned in the headline of the Short Term Forecast.

The Short Term Forecaster will be responsible for issuing frequent NOWs. After a NOW is transmitted via AWIPS, follow these steps to send the same information in E-spotter (as time and workload allows):

- 1) At the workstation PC, open Internet Explorer, and go to the ILX webpage. View the NOW that was just transmitted. Right-click and copy the text.
- 2) In the E-spotter program, go to "Field Messaging". In the text area, right-click and paste the text.
- 3) Send the message to the affected counties.

IV. STAFFING DURING CONVECTIVE WEATHER

Staffing is a critical concern when Severe Weather threatens. The nature of such events requires advance planning and quick, decisive action to assure adequate staff is in place before Severe Weather develops. Watch issuance requires an assessment of staffing needs, as does development of thunderstorms that have severe potential. Also, it will be necessary for the Warning Coordinator to contact the volunteer Ham Radio operators at this time if they have not been notified yet, so that someone will be able to come in and operate the ham radios during an event.

RESPONSIBILITIES: Primary responsibility for determining staffing needs and staffing assignments during Severe Weather Episodes lies with the **lead forecaster/shift leader** on duty.

TASKS: Each essential task should be assigned to a member of the team working an episode. An individual may be assigned more than one task. The following are those **TASKS** determined essential:

RADAR- Evaluates the RADAR products in AWIPS to determine the likelihood of occurrence of Severe Weather, then issue the appropriate product(s), including follow-up statements. If busy, have another team member issue followup statements.

Warning Coordinator (WCO)- Provides direction and coordination to the team, which includes ensuring proper staffing levels for all areas (including HMT/Intern side). Also, keeps track of Warnings and Statements when issued. Assists all other staff members where needed.

Warning and Statement Dissemination on CRS- Dissemination of Warnings, Statements and routine products on NWR.

Communication Person (COP)- primarily handling incoming phone calls, and calling county warning points advising of developments and threats or collect reports from them via NAWAS, E-spotter, ILXSPOTTER email account, HAM radios, etc.

Short Term Forecaster/Meso-Analyst (STF) - Updates grids/forecasts, Short Term forecasts, terminal forecasts, does frequent meso-analysis, sends initial watch information and updates to emergency managers and spotters through the use of the ILXSPOTTER e-mail account and the E-spotter program.

Data Acquisition Unit - Monitors CRS/NWR broadcasts, creates frequent LSRs, does the upper air launch, acquires data from SWOPs/COOPs, assists with the NOW, monitors e-spotter.

Flash Flood Analyst - monitors 88D precipitation products, FFMP, and real-time precipitation/flooding reports from observers.

Electronics Technician - monitors/troubleshoots/repairs equipment during Moderate and Major events, and as contacted for Weak events.

We will have several staffing scenarios depending on the severity of the event...

Weak event

- Radar / warning meteorologist
- WCO/COP
- Short Term forecaster / Meso-Analyst
- Data Acquisition #1
- Data Acquisition #2 / CRS
- Long term forecaster (if needed)
- Flash Flood Analyst (if needed)

Moderate

- Radar / warning meteorologist #1
- COP #1
- Radar / warning meteorologist #2
- COP #2
- WCO
- Data Acquisition #1
- Data Acquisition #2 / CRS
- Short Term forecaster / Meso-Analyst
- ET Staff member
- Long term forecaster / Flash Flood Analyst (if needed)

Major

- Radar / warning meteorologist #1
- COP #1
- Radar / warning meteorologist #2
- COP #2
- Radar / warning meteorologist #3
- WCO
- Data Acquisition #1
- Data Acquisition #2 / CRS
- Short Term / Long Term forecaster / Meso-Analyst
- ET Staff member

NOTE ABOUT ELECTRONICS STAFF MEMBERS:

PLEASE make every effort to contact the ESA before planning for, or calling in an ET Staff member for Severe Weather Operations. This is of particular importance for overnight or weekend events.

Two Meteorologists trained in the operation and interpretation of the WSR-88D must be working, one as the Warning Coordinator and the other as Radar operator. At WFO Lincoln, this can include Forecasters, Meteorologist In Charge, Science & Operations Officer, or Warning Coordination Meteorologist. Any staff member may serve in any of the other positions.

Planning should begin the day before the expected severe weather based on the severe weather outlooks. Inquiries as to the availability of staff members, if needed, should be determined.

V. OPERATIONAL POLICY FOR FUNNEL CLOUDS

All reports of funnel clouds will require some kind of response from the Shift Leader during their shift. Funnel cloud reports may range from real funnels associated with thunderstorms, cold air funnels not associated with thunderstorms, or erroneous reports of ragged low-hanging clouds reported by the public. Funnel cloud reports cannot just be brushed-off because the WSR-88D cannot confirm the report or the convective activity does not appear to be significant enough to support a funnel cloud. Small bona fide funnels occur regularly in Central Illinois during the convective season when conditions do not seem to warrant their existence.

Normally, in a convective situation, when a funnel cloud is reported and can be substantiated by radar, a Tornado Warning should be issued. Verification should not be the motivating force in these, sometimes, marginal cases. Even if the reported funnel(s) remain aloft throughout their entire existence, residents in the affected area(s) still perceive them as potentially threatening.

Two types of **funnel cloud reports** need **SPECIAL ATTENTION** and subsequent courses of action. These are (1) **PUBLIC reports of funnel clouds** and (2) **COLD AIR FUNNELS**.

PUBLIC FUNNEL CLOUD

- 1) Use the **GFE Formatter - Products - SPS Funnel Clouds (Not CA)** to create a **Special Weather Statement**.
- 2) If you issue this type of SPS, you should, subsequently, issue a follow-up SPS to indicate that ***"Trained weather spotters/law enforcement officers could not confirm the public report of a funnel cloud at (time) over (location). Many low-ragged clouds are in this area and may have been mistaken for funnel clouds"***.

COLD AIR FUNNELS are a phenomena that usually take place without any thunderstorms in existence. They are more likely to occur in the Spring or late Fall, but can occur any time during the summer, also.

- 1) Tornado warnings are **not issued for Cold Air Funnels**.
- 2) Use the **GFE Formatter - Products - SPS Cold Air Funnels** to create a **Special Weather Statement**.

VI. POST-EVENT DATA GATHERING

Post event data gathering is a very important duty, and is the responsibility of the shift leader of each shift to obtain as much data as possible from various sources. These can be, but are not limited to:

ESDA offices

Sheriff's Departments

Fire Departments

Significant Weather Observers or Co-operative Weather Observers

Media outlets (TV, Radio, Newspaper)

Highway departments

Utilities

Through the use of the "Individual County Follow-up Call Sheet" (**APPENDIX 6**) and the list of warnings that were issued for the event, make calls to all of the counties affected by the event over the next several days to obtain a more complete picture of what occurred.

VII. DAMAGE SURVEYS

Significant convective events that cause extensive property damage, injuries and/or fatalities will require a damage survey by the WFO ILX staff. ESDA coordinators may also request a damage survey to determine the cause of a particular severe weather event.

A) The basic goals of the damage survey are:

1. A detailed mapping of the damaged area that shows path length, approximate times, and in the case of a tornado an F-scale rating. Also document any unusual occurrences or airborne missiles. Photograph the damaged areas for documentation purposes.
2. Discussions with eyewitnesses and storm spotters.
3. Attempts to locate photos or video of the event.
4. Accounts of the event from those with information that could be incorporated into our Preparedness program.

B) Suggested equipment to take on the damage survey:

1. Accurate maps of the area
2. Camera with film and digital camera with floppy disks
3. GPS unit and laptop or handheld computer
4. Government identification
5. CWA Phone Numbers binder with listings of ESDA and law enforcement officials

6. Proper clothing (ie...boots, jacket, hardhat)
7. Pens/pencils, note paper, clipboard
8. Tape measure
9. Map or sketch of approximate paths and notes or pictures of radar images
10. Food and water
11. First Aid kit
12. Video camera
13. WFO CENTRAL ILLINOIS STORM DAMAGE SURVEY FIELD GUIDE

C) Rating Tornado damage

Information regarding descriptions of tornadic damage and the associated Fujita scale are listed in the DAMAGE SURVEY FIELD GUIDE. Remember to take into account the type of structures damaged during the assessment. The scales we can assign are **F0, F1, F2, F3, damage is potentially greater than F3. Any tornadoes suspected of producing damage greater than F3 are to be surveyed by an NWS Quick Response Team (QRT)**. A Service Assessment Team may also need to be deployed for these events. The decision to do this will be made by Central Region Headquarters.

The QRT and SAT may also be deployed for other significant severe convective wind events.

D) Public Statements

Upon the completion of a damage survey, a report shall be written for public dissemination. The report should be sent as a PUBLIC INFORMATION STATEMENT (PNS). The report should contain the findings of the survey team, including the area affected, path width and length, estimated wind speeds/Fujita scale, a general description of the type of damage produced.

Remember - **for tornadoes greater than F3 intensity, we can only use the phrase "damage is potentially greater than F3". Do NOT use F4 or F5 until the QRT has assessed the damage and completed their findings.**

E) Suggested reading:

National Post-Storm Data Acquisition Plan (FCM-P33-2003), Office of the Federal Coordinator for Meteorological Services and Supporting Research, March 2003

A Guide to F-Scale Damage Assessment, U.S. Dept. Of Commerce, NOAA, NWS, April 2003

VIII. STORM DATA / VERIFICATION TEAM DUTIES

The Storm Data/Verification team is responsible for doing quality control, archiving of severe events and preparing preliminary verification statistics for local, regional and national reports. The following are guidelines to assist with these duties:

A. After each severe weather event, collect all of the products issued and put them in chronological order. If any hydrologic products (Flash Flood Warnings or Statements) have been issued, make two copies of each product and give one set to the Hydrologic Program Team.

B. Make sure that someone has issued a Local Storm Report (CHILSRILX) for that event. If one has not been sent out, issue one as soon as possible by using the AWIPS LSR program. This program has the correct format needed for the LSR report.

C. Make follow-up calls to all of the counties for which warnings were issued. Get detailed information about the locations, extent of damage/reports, and approximate time of occurrence. Additional information may be gathered from newspaper articles, most of which are sent to us via a private service.

D. A weekly report of warnings issued by our office can be obtained via the internet at <http://verification.nws.noaa.gov/> Check over the report for missing warnings, erroneous valid times or counties, or other errors. To correct these errors, send copies of the warnings to Brent Macaloney (address is located in item 8 of this section).

E. By the 10th of the next month, verify the authenticity of reports and warnings using the PANDA software.

F. Soon after the event, the WCM will QC the warnings and statements issued.

G. Headquarters allows 60 days for preparation of the monthly F-8 Report beginning from the end of that month. When ready to prepare the F-8, use StormDat program installed on the WCM's PC. Collect all of the Severe Weather Contact sheets, the Individual County Follow-up Call sheets, and LSRs issued. These will be used to prepare the F-8 report. When finished with the F-8 report, StormDat has an FTP feature where you can export a zipped file to them through the FTP program. Create an F-8 .pdf file to our homepage

H. Log onto the StormDat and Verification Information website and use the Stats on Demand feature...create the monthly report that you need (generate a "Reports Summary" and a "Detailed Report")...print it up and check it over for errors. Use the list of warnings issued by WFO ILX and the F-8 report for that month to check the report. If any warnings are not listed on the report, make copies of those warnings and email or fax them to either Robb Kookaby

or Brent Macaloney at Office of Meteorology. Also, if there are missing events make sure that they were listed on the F-8 report. If not, enter the missing events into the Stormdata Program and FTP them to OM with the next month's report. The address to send the corrections is:

Robb Kookaby or Brent Macaloney
Office of Meteorology #14405
1325 East West Hwy
Silver Spring MD 20910

Problems with warnings, F-8s, verification, etc., contact Brent Macaloney at (301)713-0090 ext. 135 or via email.

If there are any questions or problems concerning the STORMDATA Program, contact Robb Kookaby at (301)713-0090 ext. 148 or via email. The fax number for the Office of Meteorology is (301)713-1598.

If there is a problem in the Storm Data publication (i.e. our entries are missing, etc.), the contact point at NCDC is

William Angel
National Climatic Data Center
151 Patton Avenue
Asheville NC 28801-5001

His email address is wangel@ncdc.noaa.gov or the phone # is (704)271-4437.