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1. **Introduction**. This procedural instruction describes the narrative and graphical severe weather products issued by the Storm Prediction Center (SPC) for the contiguous United States (CONUS).

2. **Categorical Convective Outlook**.

2.1 **Mission Connection**. SPC issues narrative and graphical Categorical Convective Outlooks to provide CONUS Weather Forecast Offices (WFOs), the public, media and emergency managers with the potential for severe convection through Day 8 and general convection through Day 2.

2.2 **Issuance Guidelines**.

2.2.1 **Creation Software**. SPC will use the National Center's AWIPS (NAWIPS) and/or the SPC Product Generator (PRODGEN) for these products.

2.2.2 **Issuance Criteria**. Categorical Outlooks are a scheduled product in UTC time and calendar day.

2.2.3 **Issuance Time**. Products are issued at times listed in Table 1.

2.2.4 **Valid Time**. Product valid times are listed in Table 1.

2.2.5 Product Expiration Time. Product expiration time is 1200 UTC the next calendar day. See Table 1

<i>SPC Convective Outlook Schedule</i>					
<i>Issuance Time (UTC)</i>	<i>Valid Time (UTC)</i>	<i>AWIPS ID Text Graphic</i>	<i>WMO Graphic Header</i>	<i>WMO Text Header</i>	<i>Product Description</i>
0600	1200 Day 1 to 1200 Day 2 (0-24 hour period)	SWODY1 940	PGWE46	ACUS01 KWNS	Text providing meteorological reasoning for severe weather categorical and probabilistic graphics for Day 1
0600 (Daylight) 0700 (Standard)	1200 Day 2 to 1200 Day 3 (24-48 hour period)	SWODY2 980	PGWI47	ACUS02 KWNS	Text providing meteorological reasoning for severe weather categorical and probabilistic graphics for Day 2
0730 (Daylight) 0830 (Standard)	1200 Day 3 to 1200 Day 4 (48-60 hour period)	SWODY3 990	PGWK48	ACUS03 KWNS	Text providing meteorological reasoning for severe weather categorical and probabilistic graphics for Day 3
0900 (Daylight) 1000 (Standard)	1200 Day 4 to 1200 Day 9 (60- 180 hour period)	SWOD48 TBD	PGNM98	ACUS48 KWNS	Text providing meteorological reasoning for areas where there is at least a 30% probability for severe thunderstorms during Days 4 through 8.
1300	1300 Day 1 to 1200 Day 2 (23 hour period)	SWODY1 940	PGWE46	ACUS01 KWNS	Text providing meteorological reasoning for severe weather categorical and probabilistic graphics for Day 1
1630	1630 Day 1 to 1200 Day 2 (19.5 hour period)	SWODY1 940	PGWE46	ACUS01 KWNS	Text providing meteorological reasoning for severe weather categorical and probabilistic graphics for Day 1
1730	1200 Day 2 to 1200 Day 3 (24-48 hour period)	SWODY2 980	PGWI47	ACUS02 KWNS	Text providing meteorological reasoning for severe weather categorical and probabilistic graphics for Day 2
2000	2000 Day 1 to 1200 Day 2 (16 hour period)	SWODY1 940	PGWE46	ACUS01 KWNS	Text providing meteorological reasoning for severe weather categorical and probabilistic graphics for Day 1
0100	0100 Day 1 to 1200 Day 2 (11 hour period)	SWODY1 940	PGWE46	ACUS01 KWNS	Text providing meteorological reasoning for severe weather categorical and probabilistic graphics for Day 1

Table 1: Issuance time, valid time, product ID and content of SPC Convective Outlook products

2.3 Technical Description. Categorical outlooks should follow the format and content described in this section.

2.3.1 Mass News Disseminator Broadcast Line. None.

2.3.2 Mass News Disseminator Header. The SWO MND header is “DAY (1, 2 OR 3) CONVECTIVE OUTLOOK”.

2.3.3 Content. The Categorical Convective Outlook defines areas of Slight, Moderate and/or

High risk of severe thunderstorms. Severe thunderstorms are storms that produce hail one inch in diameter (U.S. quarter-size) or larger, convective winds of 50 kts (58 mph) or greater and/or tornadoes. A convective day is defined as a 24 hour or less period beginning at 1200 UTC of one calendar day, or scheduled issuance time, and ending at 1200 UTC the next calendar day (i.e. 1200 UTC today to 1200 UTC tomorrow), also known as the current 24 hour period. Two letter postal state identifiers are used to specify all or parts of states in Moderate or High risk areas (see Section 5.2).

SPC will issue a Public Severe Weather Outlook (PWO) for all High risk issuances and for Moderate risks that contain at least a 15% probability of tornadoes or a 45% probability of damaging wind gusts. When a 10 percent probability of significant tornadoes is expected to occur after dark during the cool season, a PWO is also issued following the issuance of a 2000 UTC and/or 0100 UTC Day 1 Outlook (refer to Section 7). Convective Outlook narratives will reference Public Severe Weather Outlooks when necessary. SPC should issue narrative and graphical forecasts at the same time.

The Day 1 and Day 2 Outlooks also define areas where there is at least a 10% or greater probability of (general) thunderstorms. SPC has the option to use “SEE TEXT” for areas where convection may approach or slightly exceed severe criteria (wind gusts 50 knots or greater or hail one inch diameter size or greater). The contour for “General Thunder” in the graphical forecast refers to a 10% or greater probability of non-severe or near-severe convection. Day 3 Outlooks do not forecast the 10 percent probability of general thunderstorms. SPC may issue a Moderate or High Risk for the Day 2 Outlook and a Moderate Risk for the Day 3 Outlook, highlighting the possibility for significant severe weather events.

Day 1 Probability to Categorical Outlook Conversion

(SIGNIFICANT SEVERE area needed where denoted by hatching - otherwise default to next lower category)

Outlook Probability	TORN	WIND	HAIL
2%	SEE TEXT	NOT USED	NOT USED
5%	SLGT	SEE TEXT	SEE TEXT
10%	SLGT	NOT USED	NOT USED
15%	MDT	SLGT	SLGT
30%	HIGH	SLGT	SLGT
45%	HIGH	MDT	MDT
60%	HIGH	HIGH	MDT

Figure 1: Day 1 Probability to Categorical Outlook Conversion

Day 2 Probability to Categorical Outlook Conversion

(SIGNIFICANT SEVERE area needed where denoted by hatching - otherwise default to next lower category)

Outlook Probability	Combined TORN, WIND, and HAIL
5%	SEE TEXT
15%	SLGT
30%	SLGT
45%	MDT
60%	HIGH

Figure 2: Day 2 Probability to Categorical Outlook Conversion

Day 3 Probability to Categorical Outlook Conversion

(SIGNIFICANT SEVERE area needed where denoted by hatching - otherwise default to next lower category)

Outlook Probability	Combined TORN, WIND, and HAIL
5%	SEE TEXT
15%	SLGT
30%	SLGT
45%	MDT

Figure 3: Day 3 Probability to Categorical Outlook Conversion

2.3.4 Format.

```

ACUS0i (i=1,2,or 3) KWNS ddhhmm
SWODYn
SPC AC ddhhmm

DAY (1,2,3) CONVECTIVE OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

VALID DDHHMMZ - DDHHMMZ

...THERE IS A (SLGT, MDT, HIGH) RISK OF SVR TSTMS <valid time>
<location>...
There may be one or more areas headlined for the appropriate area of risk.

...SYNOPSIS...
Broad narrative providing a technical discussion of the overall severe
weather pattern.

...AREA OF CONCERN #1...
AREAS OF HIGHEST RISK ARE DISCUSSED FIRST (HIGH RISK, MDT RISK, SLGT RISK).
THE FORECAST PROVIDES A NARRATIVE TECHNICAL DISCUSSION.

...AREA OF CONCERN #2...
NARRATIVE TECHNICAL DISCUSSION

..FORECASTER(S) NAME.. MM/DD/YYYY

```

Figure 4: Categorical Outlook Format

2.4 Updates, Amendments and Corrections. Updates are scheduled (see issuance times). SPC will correct outlooks for format and grammatical errors. SPC will amend outlooks when it is recognized that the current forecast does not or will not reflect the ongoing or future convective development.

2.5 Graphics PGWE46, PGWI47 and PGWK48. These are the corresponding graphics to the text products and the formats of these products follow Redbook Graphic standards.

3. Probabilistic Convective Outlook,

3.1 Mission Connection. SPC issues probabilistic convective outlooks to provide CONUS WFOs, the public, media, and emergency managers with specific severe weather threats during the next 72 hours. SPC assigns each threat with a percent likelihood of occurrence.

3.2 Issuance Guidelines.

3.2.1 Creation Software. SPC will use the National Centers AWIPS (NAWIPS) and/or the SPC Product Generator (PRODGEN) for these products.

3.2.2 Issuance Criteria. Probabilistic Convective Outlooks are a scheduled product.

3.2.3 Issuance Time. See Table 2.

3.2.4 Valid Time. See Table 2.

SPC PROBABLISTIC FORECAST PRODUCTS				
<i>Issuance Times (UTC)</i>	<i>Valid Times (UTC)</i>	<i>AWIPS ID</i>	<i>WMO Graphic Header</i>	<i>Product Description</i>
0600	1200 Day 1 to 1200 Day 2 (0-24 hour period)	OH1 OW1 OT1	PENE00 PWNE00 PGNE00	Hail Probabilities Wind Probabilities Tornado Probabilities
0600 (Daylight) 0700 (Standard)	1200 Day 2 to 1200 Day 3 (24-48 hour period)	OA2	PGNI00	All Severe Probabilities
0730 (Daylight) 0830 (Standard)	1200 Day 3 to 1200 Day 4 (48-60 hour period)	OA3	PZNK00	All Severe Probabilities
1300	1300 Day 1 to 1200 Day 2 (23 hour period)	OH1 OW1 OT1	PENE00 PWNE00 PGNE00	Hail Probabilities Wind Probabilities Tornado Probabilities
1630	1630 Day 1 to 1200 Day 2 (19.5 hour period)	OH1 OW1 OT1	PENE00 PWNE00 PGNE00	Hail Probabilities Wind Probabilities Tornado Probabilities
1730	1200 Day 2 to 1200 Day 3 (24-48 hour period)	OA2	PGNI00	All Severe Probabilities
2000	2000 Day 1 to 1200 Day 2 (16 hour period)	OH1 OW1 OT1	PENE00 PWNE00 PGNE00	Hail Probabilities Wind Probabilities Tornado Probabilities
0100	0100 Day 1 to 1200 Day 2 (11 hour period)	OH1 OW1 OT1	PENE00 PWNE00 PGNE00	Hail Probabilities Wind Probabilities Tornado Probabilities

Table 2: SPC Probabilistic Outlook Issuance time, valid time, ID and content

3.2.5 Product Expiration Time. Product expiration time is 1200 UTC the next convective day. See Table 2.

3.3 Technical Description. Probabilistic outlooks should follow the format and content described in this section.

3.3.1 Mass News Disseminator Broadcast Line. Not applicable.

3.3.2 Mass News Disseminator Header. Not applicable.

3.3.3 Content. SPC will issue probabilistic convective outlooks in graphic format. The Day 1 Outlook will consist of separate graphics for tornadoes, hail, and (convective) damaging winds. The Day 2 and Day 3 Outlooks will have probabilities for all severe thunderstorm threats (tornado, large hail, and convective wind damage combined) in one graphic. These outlooks

provide numerical probabilities of severe weather within 25 statute miles of any point within a given forecast area. The probability thresholds/contours in each graphic are as follows:

Day 1 Outlook for tornadoes: 2%, 5%, 10%, 15%, 30%, 45% and 60%

Day 1 Outlook for (convective) damaging winds: 5%, 15%, 30%, 45% and 60%

Day 1 Outlook for severe hail: 5%, 15%, 30%, 45% and 60%

Day 2 Outlooks (combined events): 5%, 15%, 30%, 45% and 60%

Day 3 Outlooks (combined events): 5%, 15%, 30% and 45%

SPC will include a hatched area (denoting a significant severe threat) on individual probabilistic graphical products indicating a 10% (or greater) chance of tornadoes that could produce EF2 or greater damage, two inch or greater diameter hail, and/or sixty five knot or greater convective wind gusts within 25 miles of any one point of a forecast area. A hatched area on the Day 2 or Day 3 Outlooks would indicate a 10% (or greater) probability for a significant wind, hail and/or tornado event.

3.3.4 Format.

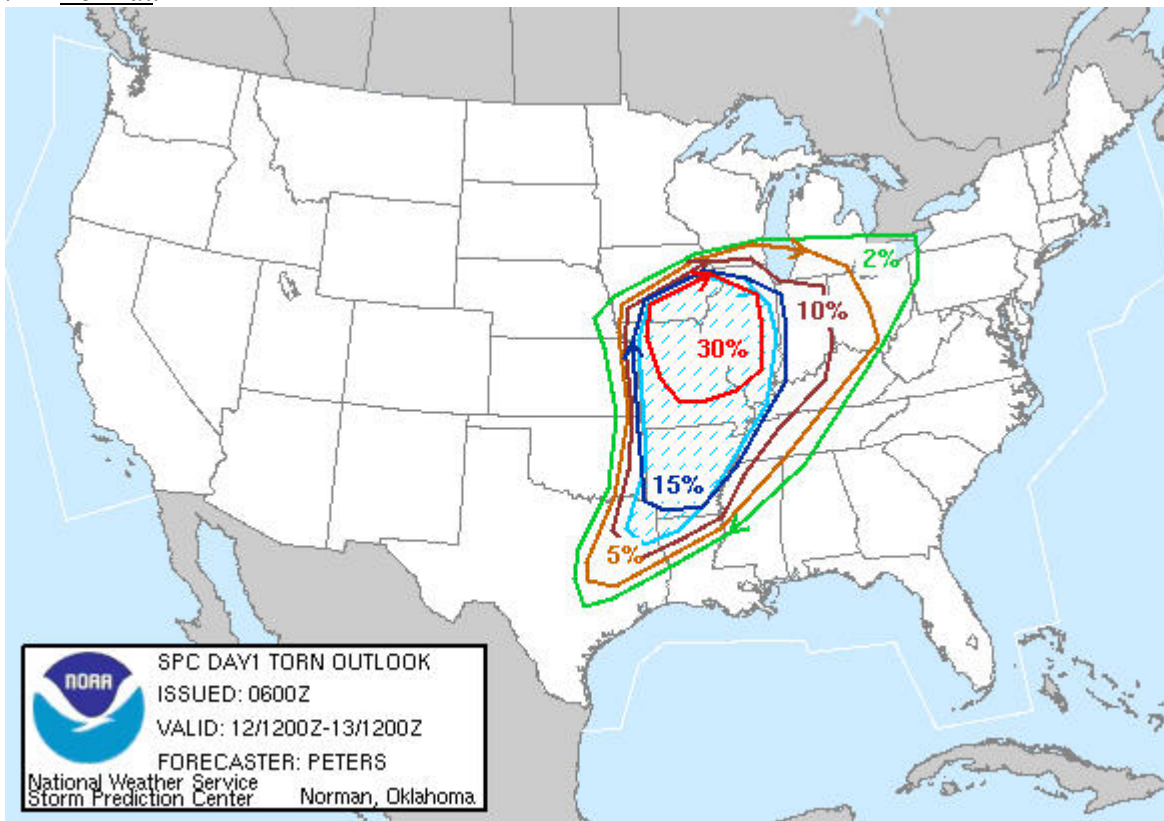


Figure 5: Day One Outlook - Tornado

3.4 Updates, Amendments and Corrections. Updates are scheduled (see issuance times). SPC will amend when it is recognized that the current forecast does not or will not reflect the ongoing or future convective development.

4. **4 to 8 Day Severe Thunderstorm Outlook.**

4.1 Mission Connection. SPC issues narrative and graphical 4-8 Severe Thunderstorm Outlook to provide CONUS Weather Forecast Offices (WFOs), the public, media and emergency managers with the potential for severe convection during the 4-8 Day period. This product will help its users to adequately prepare several days in advance of an expected severe weather episode.

4.2 Issuance Guidelines.

4.2.1 Creation Software. SPC will use the National Center's AWIPS (NAWIPS) and/or the SPC Product Generator (PRODGEN) for these products.

4.2.2 Issuance Criteria. The 4-8 Day Convective Outlook is a scheduled product in UTC time and calendar day.

4.2.3 Issuance Time. Product is issued once daily at 1000 UTC during Standard time and 0900 UTC during Daylight Time. See Table 1.

4.2.4 Valid Time. Product is valid from 1200 UTC on Day 4 to 1200 UTC on Day 9.

4.2.5 Product Expiration Time. Product expiration time is 1200 UTC the next calendar day.

4.3 Technical Description. Day 4-8 outlooks should follow the format and content described in this section.

4.3.1 Mass News Disseminator Broadcast Line. None

4.3.2 Mass News Disseminator Header. The SWO MND header is "DAY 4-8 CONVECTIVE OUTLOOK".

4.3.3 Content. The Day 4-8 Convective Outlook product will consist of one graphic with an area (s) where severe weather is anticipated during the period. The severe weather threat areas will be depicted with a closed line and a label indicating the day(s) (e.g. D4 for a day 4 threat, or D5-6 for a day 5 and 6 threat) of the expected threat where there is at least a 30% probability for severe thunderstorms during day 4-8 period. A concise text discussion is included daily with each Outlook issuance, even if a severe weather area is not included on the graphic.

4.3.4 Format.

```

ACUS48 KWNS ddhhmm
SWOD48
SPC AC ddhhmm

DAY 4-8 CONVECTIVE OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

VALID DDHHMMZ - DDHHMMZ

...DISCUSSION...
A concise text discussion is included daily with each Outlook issuance,
even if a severe weather area is not included on the graphic.

..FORECASTER(S) NAME.. MM/DD/YYYY

```

Figure 6: Day 4-8 Convective Outlook Text Product Format

4.4 Updates, Amendments and Corrections. SPC will correct outlooks for format and grammatical errors. SPC will typically not amend the 4-8 Day Convective Outlook. However, in rare instances where the SPC forecast team, latest model guidance, NWS Partners and WFOs are in agreement that the ongoing forecast needs to be changed, an update can be made.

5. **SPC Points Product.**

5.1 Mission Connection. SPC issues the Points Product to provide CONUS WFOs, the public, media, and emergency managers with the latitude and longitude locations of the points that make up the SPC Categorical and Probabilistic Convective Outlook areas.

5.2 Issuance Guidelines.

5.2.1 Creation Software. SPC uses automated software.

5.2.2 Issuance Criteria. Points Products are scheduled products.

5.2.3 Issuance Time. See Table 3.

5.2.4 Valid Time. See Table 3.

5.2.5 Product Expiration Time. Product expiration time is 1200 UTC the next day.

SPC POINTS FORECAST PRODUCTS

<i>Issuance Times (UTC)</i>	<i>Valid Times (UTC)</i>	<i>AWIPS ID</i>	<i>WMO Text Header</i>	<i>Product Description</i>
0600	1200 Day 1 to 1200 Day 2 (0-24 hour period)	PTSDY1	WUUS01 KWNS	Text provides latitude/longitude for each point creating the convective categorical and probabilistic graphics for Day 1...includes list of anchor points with range/azimuth in statute miles relative to a point
0600 (Daylight) 0700 (Standard)	1200 Day 2 to 1200 Day 3 (24-48 hour period)	PTSDY2	WUUS02 KWNS	Text provides latitude/longitude for each point creating the convective categorical and probabilistic graphics for Day 2...includes list of anchor points with range/azimuth in statute miles relative to a point
0730 (Daylight) 0830 (Standard)	1200 Day 3 to 1200 Day 4 (48-60 hour period)	PTSDY3	WUUS03 KWNS	Text provides latitude/longitude for each point creating the convective categorical and probabilistic graphics for Day 3...includes list of anchor points with range/azimuth in statute miles relative to a point
0900 (Daylight) 1000 (Standard)	1200 Day 4 to 1200 Day 9 (60-180 hour period)	PTSD48	WUUS48 KWNS	Text provides latitude/longitude for each point creating an area or areas as discussed in the day 4-8 Convective Outlook Product. Each day is listed separately or combined (multiple days are listed last). If the potential or predictability for severe thunderstorms is too low for a given day...no outline is listed for that day.
1300	1300 Day 1 to 1200 Day 2 (23 hour period)	PTSDY1	WUUS01 KWNS	Text provides latitude/longitude for each point creating the convective categorical and probabilistic graphics for Day 1...includes list of anchor points with range/azimuth in statute miles relative to a point
1630	1630 Day 1 to 1200 Day 2 (19.5 hour period)	PTSDY1	WUUS01 KWNS	Text provides latitude/longitude for each point creating the convective categorical and probabilistic graphics for Day 1...includes list of anchor points with range/azimuth in statute miles relative to a point
1730	1200 Day 2 to 1200 Day 3 (24-48 hour period)	PTSDY2	WUUS02 KWNS	Text provides latitude/longitude for each point creating the convective categorical and probabilistic graphics for Day 2...includes list of anchor points with range/azimuth in statute miles relative to a point
2000	2000 Day 1 to 1200 Day 2 (16 hour period)	PTSDY1	WUUS01 KWNS	Text provides latitude/longitude for each point creating the convective categorical and probabilistic graphics for Day 1...includes list of anchor points with range/azimuth in statute miles relative to a point
0100	0100 Day 1 to 1200 Day 2 (11 hour period)	PTSDY1	WUUS01 KWNS	Text provides latitude/longitude for each point creating the convective categorical and probabilistic graphics for Day 1...includes list of anchor points with range/azimuth in statute miles relative to a point

Table 3: Issuance time, valid time, product ID and content of SPC Points Forecast products.

5.3 Technical Description. The SPC Points Product should follow the format and content described in this section.

5.3.1 Mass News Disseminator Broadcast Line. Not applicable.

5.3.2 Mass News Disseminator Header. DAY (1, 2, 3, or 4-8) CONVECTIVE OUTLOOK AREAL OUTLINE

5.3.3 Content. SPC will issue separate products for the Day 1, Day 2, Day 3, and Day 4-8 outlooks. The Day 1 product provides the points for the Probabilistic Outlooks for tornado, large hail and damaging winds, and the associated Categorical Outlook. The Day 2 , 3, and 4-8 products list the points for the Probabilistic Outlook for all severe (tornadoes, large hail, and convective damaging winds combined) weather events and the associated Categorical Outlook. Points for areas of significant events (Day 2 and 3) are also part of this product.

Possible values in the product include:

- Probability: 0.05, 0.15, 0.30, 0.45, 0.60,
also 0.02 and 0.10 for tornado probability.
- Significant Severe: SIGN
- Categorical: TSTM, SLGT, MDT, HIGH

Lat/lon values themselves are in decimal degrees, for example: 29450281 is 29.45N and -102.81W. 99999999 is equivalent to "...CONT..." connecting the previous point to the following point. For example:

```
0.05 29450281 32590195 35550068 37480057 38290123 38480333
      39070480 40250518 42580209 46060143 48050263 49150265
      99999999 48729380 46749177 42609035 41508994 36608550
      35208574 33688795 33509118 33249404 27990024
```

0.05 is the 5% probability line, described by the following lat/lon points.

29450281 is 29.45N and -102.81W and is the first point in this line

49150265 99999999 48729380 is 49.15N -102.65W YCONTY 48.72N -93.80W

27990024 is 27.99N and -100.24W and is the last point in the series.

On the Day 4-8 Convective Outlook Areal Outline, each day is listed separately (D4, D5, etc.) and combined days are listed last. In the example below Day 8 is not listed since the potential or predictability for severe thunderstorms is too low on Day 8:

```
D6 43738110 41628135 39388310 38558585 38499110 39439365
    40109439 41409470 43099400 45318996 46248525
D7 45377505 43397287 41357249 39727395 38537638 37688426
    38198516 40098507 42068280 43278023
D4-5 47448528 43528843 42169294 42639686 44470047 45540446
     46920612 49600691
```

5.3.4 Format.

```

WUUS01 KWNS ddhhmm
PTSDY1

DAY 1 CONVECTIVE OUTLOOK AREAL OUTLINE
NWS STORM PREDICTION CENTER NORMAN OK
1155 PM CST THU FEB 09 2006

VALID TIME 101200Z - 111200Z

PROBABILISTIC OUTLOOK POINTS DAY 1

... TORNADO ...

0.02  27759671 28769742 29989747 30769656 31179488 30899293
      30499075 30768839 30988675 30898534 30498441 30038423
      29508444

&&

... HAIL ...

0.05  27569677 28369842 29679973 30579965 31199843 31609712
      31709456 31219192 31048953 31108586 30758471 30308430
      29338474

&&

... WIND ...

0.05  27919643 27739717 27699781 27939837 29029834 30319737
      31129489 31138492 30948436 30438396 29388456

&&

CATEGORICAL OUTLOOK POINTS DAY 1

... CATEGORICAL ...

TSTM  30850563 32240156 32799807 32859739 32889688 33289493
      34479311 34749227 35048999 34778763 34688679 34368518
      33608441 32768370 30828332 29368389

&&
GEN TSTMS ARE FCST TO THE RIGHT OF A LINE FROM 80 SE ELP BGS MWL FTW
DAL 40 SE PRX HOT LIT MEM MSL HSV RMG ATL MCN VLD 50 WSW CTY.

```

Figure 7: Day 1 SPC Points Product Format

5.4 Updates, Amendments and Corrections. Updates are scheduled (see issuance times). SPC will correct outlooks for format errors. SPC will amend when it is recognized that the current forecast does not or will not reflect the ongoing or future convective development.

6. **SPC NDFD Forecast Products.**

6.1 Mission Connection. SPC issues the NDFD Forecast Product to provide CONUS WFOs, partners, and users with the graphical display that make up the SPC Categorical and Probabilistic Convective Outlook areas.

6.2 Issuance Guidelines.

SPC NDFD FORECAST PRODUCTS			
<i>Issuance Times (UTC)</i>	<i>Valid Times (UTC)</i>	<i>WMO Header (grib2)</i>	<i>Product Description</i>
0600	1200 Day 1 to 1200 Day 2 (0-24 hour period)	LEU198 KWNS LFU198 KWNS LGU198KWNS LHU198KWNS LIU198 KWNS LJU198 KWNS LMU198 KWNS	Tornado Probabilities Hail Probabilities Dmg Wind Probabilities Sig Tor Probabilities Sig Hail Probabilities Sig Dmg Wind Probabilities Categorical Outlook
0600 (Daylight) 0700 (Standard)	1200 Day 2 to 1200 Day 3 (24-48 hour period)	LKU298 KWNS LLU298 KWNS LMU298 KWNS	Total Prob. of Severe Thunderstorms Total Prob. of Extreme Severe Thunderstorms Categorical Outlook
0730 (Daylight) 0830 (Standard)	1200 Day 3 to 1200 Day 4 (48-72 hour period)	LKU398 KWNS LLU398 KWNS LMU398 KWNS	Total Prob. of Severe Thunderstorms Total Prob. of Extreme Severe Thunderstorms Categorical Outlook
1300	1300 Day 1 to 1200 Day 2 (23 hour period)	LEU198 KWNS LFU198 KWNS LGU198 KWNS LHU198 KWNS LIU198 KWNS LJU198 KWNS LMU198 KWNS	Tornado Probabilities Hail Probabilities Dmg Wind Probabilities Sig Tor Probabilities Sig Hail Probabilities Sig Dmg Wind Probabilities Categorical Outlook
1630	1630 Day 1 to 1200 Day 2 (19.5 hour period)	LEU198 KWNS LFU198 KWNS LGU198 KWNS LHU198 KWNS LIU198 KWNS LJU198 KWNS LMU198 KWNS	Tornado Probabilities Hail Probabilities Dmg Wind Probabilities Sig Tor Probabilities Sig Hail Probabilities Sig Dmg Wind Probabilities Categorical Outlook
1730	1200 Day 2 to 1200 Day 3 (24-48 hour period)	LKU298 KWNS LLU298 KWNS LMU298 KWNS	Total Prob. of Severe Thunderstorms Total Prob. of Extreme Severe Thunderstorms Categorical Outlook
2000	2000 Day 1 to 1200 Day 2 (16 hour period)	LEU198 KWNS LFU198 KWNS LGU198 KWNS LHU198 KWNS LIU198 KWNS LJU198 KWNS LMU198 KWNS	Tornado Probabilities Hail Probabilities Dmg Wind Probabilities Sig Tor Probabilities Sig Hail Probabilities Sig Dmg Wind Probabilities Categorical Outlook
0100	0100 Day 1 to 1200 Day 2 (11 hour period)	LEU198 KWNS LFU198 KWNS LGU198 KWNS LHU198 KWNS LIU198 KWNS LJU198 KWNS LMU198 KWNS	Tornado Probabilities Hail Probabilities Dmg Wind Probabilities Sig Tor Probabilities Sig Hail Probabilities Sig Dmg Wind Probabilities Categorical Outlook

Table 4: Issuance time, valid time, product ID and content of SPC NDFD Forecast products (only entire CONUS Grid (U) listed).

- 6.2.1 Creation Software. SPC uses automated software.
- 6.2.2 Issuance Criteria. SPC NDFD Forecast Products are scheduled products.
- 6.2.3 Issuance Time. See Table 4.
- 6.2.4 Valid Time. See Table 4.
- 6.2.5 Product Expiration Time. Product expiration time is 1200 UTC the next day.
- 6.3 Technical Description.
 - 6.3.1 Mass News Disseminator Broadcast Line. Not applicable.
 - 6.3.2 Mass News Disseminator Header. Not applicable.
 - 6.3.3 Content. SPC will issue three separate products for the Day 1, Day 2, and Day 3 outlooks. The Day 1 product provides the NDFD graphical products for the Probabilistic Outlooks for tornado, large hail and damaging winds, and the associated Categorical Outlook. The Day 2 and 3 products provide the NDFD graphical products for the Probabilistic Outlook for all severe (tornadoes, large hail, and convective damaging winds combined) weather events and the associated Categorical Outlook. NDFD graphics for areas of significant severe events are also part of this product.
- 6.4 Updates, Amendments and Corrections. Updates are scheduled (see issuance times). SPC will correct outlooks for format errors. SPC will amend when it is recognized that the current forecast does not or will not reflect the ongoing or future convective development.
- 7. **Public Severe Weather Outlook (WMO header WOUS40, AWIPS ID PWOSPC)**.
 - 7.1 Mission Connection. Public Severe Weather Outlooks (PWOs) alert the CONUS WFOs, public, media, and emergency managers to a potentially significant or widespread severe weather outbreak. These outlooks also define the threat area and provide information on the timing of the outbreak.
 - 7.2 Issuance Guidelines.
 - 7.2.1 Creation Software. SPC will use the National Centers AWIPS (NAWIPS) and/or the SPC Product Generator (PRODGEN) for these products.
 - 7.2.2 Issuance Criteria. When a potential exists for a significant or widespread convective outbreak, which is implied with tornado and/or damaging wind probabilities indicative of a High risk or a Moderate risk that contains at least a 15% probability of tornadoes or a 45% probability of damaging wind gusts, a PWO will be issued. Also, when a 10 percent probability of significant tornadoes is expected to occur after dark during the cool season, a PWO is also issued following the issuance of a 2000 UTC and/or 0100 UTC Day 1 Outlook.

7.2.3 Issuance Time. The PWO is an event driven product (see 6.3.3 for more details). The PWO is issued between 1000 and 1100 UTC if the 0600 UTC Day 1 Outlook initiates a HIGH risk or a MDT risk that contains at least a 15% probability of tornadoes or a 45% probability of damaging wind gusts, and between 1300 and 1400 UTC if the 1300 UTC Day 1 Outlook initiates a HIGH risk or a MDT risk with the above criteria. The PWO is then updated between 1700 and 1800 UTC. The PWO may be written if the 2000 UTC Day 1 Outlook is upgraded to HIGH risk or for nighttime cool season tornadoes as defined in section 7.2.2. The PWO is not issued for “hail only” MDT risk.

7.2.4 Valid Time. The valid time is from the time of issuance to expiration.

7.2.5 Product Expiration Time. The product expiration time will be the time of the next PWO issuance or 0200 UTC if no other issuances are expected. A PWO issued at 01Z expires at 12Z.

7.3 Technical Description. Public Weather Outlooks should follow the format and content described in this section.

7.3.1 Mass News Disseminator Broadcast Line. None.

7.3.2 Mass News Disseminator Header. The PWO MND header is “PUBLIC SEVERE WEATHER OUTLOOK.”

7.3.3 Content. SPC will issue a Public Severe Weather Outlook when it forecasts any of the following conditions:

- a. A High risk of severe thunderstorms in the Categorical Day 1 Outlook;
- b. A Moderate risk of severe storms that contains at least a 15% probability of tornadoes, or a 45% probability of (convective) damaging winds.

7.3.4 Format.

```
WOUS40 KWNS ddhhmm
PWOSPC
STZ000>099-CWZ000>099-ddhhmm-

PUBLIC SEVERE WEATHER OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

....HEADLINE OF PARTICULARLY DANGEROUS SITUATION (LOCATION AND TIMING)...

A NARRATIVE PLAIN LANGUAGE DISCUSSION OF THE PARTICULARLY DANGEROUS
CONVECTIVE THREAT. THE SPC FORECASTER SHOULD DEFINE THE LOCATION...TIMING
AND REASONING FOR THIS OUTLOOK. THE REASONING SHOULD BE KEPT IN TERMS THE
PUBLIC WILL UNDERSTAND. INCLUDE CALL TO ACTION STATEMENTS AS REQUIRED.

...FORECASTER NAME...
```

Figure 8: Public Severe Weather Outlook Format

7.4 Updates, Amendments and Corrections. Updates are scheduled (see issuance times). SPC will correct outlooks for format and grammatical errors. PWOs will not be amended.

8. **Watch County List (WMO header NWUS64, AWIPS ID WCL [A-J]).**

8.1 Mission Connection. SPC issues Watch County Lists to collaborate with CONUS WFOs on proposed counties, parishes, independent cities and/or adjacent coastal water marine zones to be included in a convective watch. The AWIPS Message Handling System is used to keep the Watch County List product internal to the NWS.

8.2 Issuance Guidelines.

8.2.1 Creation Software. SPC will use the National Centers AWIPS (NAWIPS) and/or the SPC Product Generator (PRODGEN) for these products.

8.2.2 Issuance Criteria. SPC forecasts weather conditions expected to approach or exceed Severe Thunderstorm or Tornado Watch issuance criteria (see Sections 11.2.2).

8.2.3 Issuance Time. Watch County Lists are non-scheduled, event driven products.

8.2.4 Valid Time. Not applicable. Watch County Lists are an internal product.

8.2.5 Product Expiration Time. Not applicable.

8.3 Technical Description. Watch county lists will follow the format and content described in this section.

8.3.1 Mass News Disseminator Broadcast Line. Not applicable.

8.3.2 Mass News Disseminator Header. Not applicable.

8.3.3 Content. CONUS WFOs and SPC are partners in the convective watch process. In the spirit of partnership, WFOs and SPC work toward a consensus convective watch area and duration before, during and at the end of convective watches. This partnership is defined as collaboration.

SPC uses the Watch County List (WCL) to alert affected WFOs to a proposed convective watch. WFOs may call the SPC and propose a new watch area. SPC will provide the watch type and proposed counties or parishes and independent cities segmented by state and adjacent coastal water marine zones and a proposed expiration time. Adjacent coastal water marine zones refer to near shore responsibility (out to 20 nautical miles for oceans). All U.S. Great Lakes marine zones may be included in proposed convective watches.

SPC generates and sends the list through AWIPS to the affected WFOs. SPC will list WFOs in the proposed watch in the ATTN Line. AWIPS software decodes this list into a graphical display of counties and independent cities in each WFO's county warning area. The list and graphical display on AWIPS serve as the basis for a mandatory collaboration conference call between SPC and the affected WFOs prior to a watch issuance. SPC will attempt to individually contact affected WFO(s) which were unable to participate in the collaboration conference call. The affected WFOs and SPC will collaborate on the watch type, the final list

of proposed counties or parishes, independent cities and marine zones to be included in the initial convective watch area. If a consensus cannot be reached through collaboration or SPC is unable to contact an affected WFO(s) during the collaboration call or individually, SPC will decide on the final list of counties or parishes, independent cities and marine zones for all affected WFOs for the initial convective watch area.

8.3.4 Format.

```
NWUS64 KWNS ddhmm
WCLx

.(TORNADO OR SEVERE THUNDERSTORM) WATCH x
COORDINATION COUNTY LIST FROM THE NWS STORM PREDICTION CENTER EFFECTIVE
UNTIL HHMM UTC.

STC001-003-ddhmm-

ST
. STATE 1 COUNTIES INCLUDED ARE

LIST OF COUNTIES

STATE 1 INDEPENDENT CITIES INCLUDED ARE

LIST OF INDEPENDENT CITIES
$$

STC001-003-ddhmm-

ST
. STATE 2 COUNTIES INCLUDED ARE

LIST OF COUNTIES

STATE 2 INDEPENDENT CITIES INCLUDED ARE

LIST OF INDEPENDENT CITIES
$$

CW
. ADJACENT COASTAL WATERS INCLUDED ARE

LIST OF MARINE ZONES
$$

ATTN...WFO...CCC...CCC...CCC... (ALARM/ALERT INFORMATION, WFOS AFFECTED BY
THE PROPOSED WATCH).
```

Figure 9: Watch County List Format

8.4 Updates, Amendments and Corrections. Updates are not applicable. SPC will correct lists for format errors. WCLs will not be amended.

9. **Watch Outline Update Message (WMO header WOUS64, AWIPS ID WOU#).**

9.1 Mission Connection. SPC issues Watch Outline Update Messages (WOU) to provide CONUS WFOs, emergency managers, the media and the general public with the names of all

counties or parishes, independent cities and marine zones in a convective watch area. The WOU product defines the initial list of counties in a watch. The Aviation Watch Notification (SAW) and Public Watch Notification (SEL) products describe an approximation of the watch area via a parallelogram, and these two products refer the user to the WOU product for the actual watch area.

9.2 Issuance Guidelines.

9.2.1 Creation Software. SPC will use the National Centers AWIPS (NAWIPS) and/or the SPC Product Generator (PRODGEN) for these products.

9.2.2 Issuance Criteria. SPC will issue an initial WOU for every CONUS convective watch. SPC will issue updated WOUs as needed when changes are made to Watch County Notification (WCN) messages issued by WFOs to update counties within active convective watches. SPC will issue a final WOU to notify users that a watch has been cancelled or allowed to expire. The cancellation WOU message is issued when all WFOs in the effected watch issue WCNs that cancel the counties within their respective CWAs.

9.2.3 Issuance Time. SPC will issue initial WOUs at the same time the Aviation Watch Notification Message is issued. SPC will issue updated WOUs as needed for active convective watches when WCNs are received from WFOs. SPC will issue final WOUs at the watch expiration time, or when all counties are cleared through the WCN product issued by the WFOs.

9.2.4 Valid Time. WOUs are valid until the product is updated, cancelled or expires.

9.2.5 Product Expiration Time. The product expiration time is the watch expiration time.

9.3 Technical Description. WOUs will follow the format and content described in this section.

9.3.1 MND Broadcast Line. SPC will use “BULLETIN - IMMEDIATE BROADCAST REQUESTED” in WOUs only for the initial issuance of this watch product. The term “BULLETIN” is used when information is sufficiently urgent to warrant breaking into a normal broadcast.

9.3.2 MND Header. The WOU MND header is “TORNADO (or SEVERE THUNDERSTORM) WATCH OUTLINE UPDATE FOR W(S or T) nnnn” where “nnnn” is the watch number. The watch number will be a consecutive number beginning with number 1 at the start of each calendar year.

9.3.3 Content. SPC will issue WOUs for the time zone(s) in the defined watch area. WOUs will be segmented by states and associated marine areas. WOUs will include all counties or parishes, independent cities and adjacent coastal water marine zones in a watch area. Adjacent coastal water marine zones refer to near shore responsibility (out to 20 nautical miles for oceans). All Great Lakes marine zones within the United States will be included in convective watches. The initial WOU automatically generates the initial Watch County Notification Messages (WCN) for the affected WFOs. As a result of a collaboration call with WFOs whose County Warning Area (CWA) is part of a proposed convective watch, the counties or parishes,

independent cities and marine zones listed in the initial WOU will match those listed in the initial WCNs issued by the affected WFOs.

The content of the WOU updates are collected from the latest WCNs issued by the WFOs and issued as needed. WOU updates will include all counties or parishes, independent cities and marine zones which remain in or have been added to the watch area since the initial issuance or update. SPC will issue a final WOU when all counties are cleared through a WFO WCN to inform national and regional partners and users that the convective watch is no longer in effect for any portion of the watch area. SPC and affected WFOs will collaborate when counties or parishes, independent cities, or marine zones are transferred from an existing convective watch to a new watch (e.g., watch replacement), or added to an ongoing watch.

9.3.4 Format.

```
WOUS64 KWNS ddhhmm
WOU#

BULLETIN - IMMEDIATE BROADCAST REQUESTED (Initial Issuance Only)
TORNADO (or SEVERE THUNDERSTORM) WATCH OUTLINE UPDATE FOR W(S or T) nnnn
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

TORNADO (or SEVERE THUNDERSTORM) WATCH nnnn IS IN (or REMAINS IN) EFFECT
UNTIL hhmm AM/PM XDT FOR THE FOLLOWING LOCATIONS:

STC001-003-ddhhmm-
/k.aaa.cccc.pp.s.####.yyymmddThhnnZB-yyymmddThhnnZE/

ST
. STATE 1 COUNTIES INCLUDED ARE

LIST OF COUNTIES

STATE 1 INDEPENDENT CITIES INCLUDED ARE

LIST OF CITIES
$$

nMZ001-003-ddhhmm-
/k.aaa.cccc.pp.s.####.yyymmddThhnnZB-yyymmddThhnnZE/

CW
. ADJACENT COASTAL WATERS INCLUDED ARE

LIST OF MARINE ZONES
$$
ATTN...WFO...CCC...CCC...CCC... (ALARM/ALERT INFORMATION, WFOs AFFECTED BY
THE WATCH).
```

Figure 10: Watch Outline Update Message

(Watch No Longer in Effect- Final Update)

```

WOUS64 KWNS ddhhmm
WOUh

TORNADO (or SEVERE THUNDERSTORM) WATCH OUTLINE UPDATE FOR W(S or T) nnnn
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

TORNADO (or SEVERE THUNDERSTORM) WATCH nnnn IS NO LONGER IN EFFECT.

STZ000-nMZ000-ddhhmm-
/k.aaa.cccc.pp.s.####.yyymmddThhnnZB-yyymmddThhnnZE/

NO COUNTIES (OR PARISHES, INDEPENDENT CITIES) REMAIN IN THE WATCH.

NO MARINE ZONES REMAIN IN THE WATCH (if Marine Zones were in the original
watch area)
$$

ATTN...WFO...CCC...CCC...CCC... (ALARM/ALERT INFORMATION, WFOS ORIGINALLY
AFFECTED BY THE WATCH).
    
```

Figure 11: Example of an updated Watch Outline Update

9.4 Updates, Amendments and Corrections. When appropriate, SPC may correct WOUs for areal omissions, expiration time, and watch type errors. WOUs are updated at least at the top of each hour.

10. **Aviation Watch Notification Message (WMO header WWUS30, AWIPS ID SAW#)**

10.1 Mission Connection. SPC issues Aviation Watch Notification Messages to provide an areal threat alert for the aviation meteorology community to forecast organized severe thunderstorms that may produce tornadoes, large hail and/or convective damaging winds as indicated in Public Watch Notification Messages. The SAW product is an approximation of the area in a watch, for the official area covered by a watch see the corresponding WOU product.

10.2 Issuance Guidelines.

10.2.1 Creation Software. SPC will use the National Centers AWIPS (NAWIPS) and/or the SPC Product Generator (PRODGEN) for these products.

10.2.2 Issuance Criteria. A convective watch is in effect.

10.2.3 Issuance Time. Aviation Watch Notification Messages are non-scheduled, event driven products.

10.2.4 Valid Time. The valid time is from the time of issuance to expiration or cancellation time.

10.2.5 Product Expiration Time. The expiration time is at the end of the watch valid time.

10.3 Technical Description. Aviation Watch Notification Messages will follow the format and content described in this section.

10.3.1 Mass News Disseminator Broadcast Line. Not applicable.

10.3.2 Mass News Disseminator Header. Not applicable.

10.3.3 Content. SPC will issue the SAW after the proposed convective watch area has been collaborated with the affected WFO CWAs defining the approximate areal outline of the watch. SPC forecasters may define the area as a rectangle or parallelogram (X miles either side of line from point A to point B), or (X miles north and south or east and west of line from point A to point B). Distances of the axis coordinates should be in statute miles. The aviation coordinates reference navigational aid VHF Omni-Directional Range (VOR) locations and state distances will be in nautical miles. SPC will provide valid times in UTC. The watch half width will be in statute miles. The Aviation Watch Notification Message will contain hail size in inches or half inches (forecaster discretion for tornado watches associated with hurricanes) surface and aloft, surface convective wind gusts in knots, maximum cloud tops, and the Mean Storm Motion Vector, and replacement information, if necessary.

10.3.4 Format.

```

WWUS30 KWNS ddhhmm
SAWn
SPC AWW ddhhmm
WWnnnn SEVERE TSTM ST LO DDHMMZ - DDHMMZ
AXIS...XX STATUTE MILES EITHER SIDE (or North and South, or East and West)
OF A LINE
XXDIR CCC/LOCATION ST/ - XXDIR CCC/LOCATION ST
..AVIATION COORD.. XX NM EITHER SIDE /XXDIR CCC - XXDIR CCC
HAIL SURFACE AND ALOFT..X X/X INCHES. WIND GUSTS..XX KNOTS.
MAX TOPS TO XXX. MEAN STORM MOTION VECTOR DIR/SPEED

LAT...LON

THIS IS AN APPROXIMATION TO THE WATCH AREA. FOR A COMPLETE DEPICTION OF
THE WATCH SEE WOUS64 KWNS FOR WOU.
    
```

Figure 12: Aviation Severe Weather Watch Notification Message Format

10.4 Updates, Amendments and Corrections. Updates and amendments are not applicable. SPC will correct watches for format and grammatical errors.

11. Public Severe Thunderstorm Watch Notification Message (WMO header WWUS20, AWIPS ID SEL#).

11.1 Mission Connection. SPC issues Public Severe Thunderstorm Watch Notification Messages to alert CONUS WFOs, the public, media and emergency managers to organized thunderstorms forecast to produce six and more hail events of one inch (U.S. quarter-size) diameter and/or greater or convective damaging winds of 50 knots (58 mph) or greater. The SEL product is an approximation of the area in a watch, for the official area covered by a watch see the corresponding WOU product.

11.2 Issuance Guidelines.

11.2.1 Creation Software. SPC will use the National Centers AWIPS (NAWIPS) and/or the SPC Product Generator (PRODGEN) for these products..

11.2.2 Issuance Criteria. SPC should issue a Public Severe Thunderstorm Watch Notification Message when there is a forecast of six or more hail events of one inch (U.S. quarter-size) diameter or greater or convective damaging winds of 50 knots (58 mph) or greater. The forecast event minimum thresholds should be at least 2 hours over an area at least 8,000 square miles. Below these thresholds, SPC in collaboration with affected WFO CWAs may issue for smaller areas and for shorter periods of time when conditions warrant, and for convective watches along coastlines, and near the Canadian and Mexican borders.

11.2.3 Issuance Time. Public Severe Thunderstorm Watch Notification Messages are non-scheduled, event driven products.

11.2.4 Valid Time. The valid time is from the time of issuance to expiration or cancellation time.

11.2.5 Product Expiration Time. The expiration time is the end of the watch valid time.

11.3 Technical Description. Public Severe Thunderstorm Watch Notification Messages will follow the format and content described in this section.

11.3.1 Mass News Disseminator Broadcast Line. Public Severe Thunderstorm Watch Notification Messages will include the broadcast line “URGENT – IMMEDIATE BROADCAST REQUESTED”. The term “URGENT” is used when the information may wait until a stop-set to be broadcast.

11.3.2 Mass News Disseminator Header. The Public Severe Thunderstorm Watch Notification Message MND header is “SEVERE THUNDERSTORM WATCH nnnn.”

11.3.3 Content. A Public Severe Thunderstorm Watch Notification Message will contain the approximate area description and axis, watch expiration time, a description of hail size and thunderstorm wind gusts expected, the definition of a watch, a call to action statement, a list of other valid watches, a list of watches cancelled/replaced by a new watch, a brief discussion of meteorological reasoning, and technical information for the user community (see example).

SPC will include the term “coastal waters” when the watch affects coastal waters within 20 nm of the Pacific, Atlantic, or Gulf of Mexico coast. "Adjacent Coastal Waters" refers to a WFO's marine zone responsibility (out to 20 nautical miles for oceans and Gulf of Mexico). If a Great Lake is included in a watch, the Lake (such as, Northern Lake Michigan) is included in the listing of states. SPC will coordinate with affected WFOs to determine which counties or parishes, independent cities, and/or marine zones are in the initial watch and meteorological reasoning prior to a watch being issued. SPC will issue a watch cancellation message (under SEL, SAW and WOU products) when there are no counties or parishes, independent cities and/or marine zones remaining in the watch area prior to the expiration time, after WFOs have cleared all counties via WCNs. The text of the message will specify the number and area of the cancelled watch.

SPC will enhance a Public Severe Thunderstorm Watch Notification Message by using the words, “THIS IS A PARTICULARLY DANGEROUS SITUATION” when conditions are favorable for widespread significant non-tornadic severe weather events (convective winds greater than 65 knots). An example is a well defined large bow echo with destructive convective winds occurring at the surface, the bow echo is moving at 48 knots or greater, and downstream conditions suggest the bow echo will be maintained or intensify for the duration of the watch.

11.3.4 Format.

```

WWUS20 KWNS ddhhmm
SELn
SPC WW ddhhmm
STZ000>099-CWZ000>099-ddhhmm-

URGENT - IMMEDIATE BROADCAST REQUESTED
SEVERE THUNDERSTORM WATCH NUMBER nnnn
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

THE STORM PREDICTION CENTER HAS ISSUED A
SEVERE THUNDERSTORM WATCH FOR PORTIONS OF

        PORTION OF STATE
        PORTION OF STATE

                                AND ADJACENT COASTAL WATERS (IF REQUIRED)

EFFECTIVE (TIME PERIOD) UNTIL hhmm am/pm time_zone.

...THIS IS A PARTICULARLY DANGEROUS SITUATION (IF NECESSARY)...

HAIL TO X INCHES IN DIAMETER...THUNDERSTORM WIND GUSTS TO XX MPH...
AND DANGEROUS LIGHTNING ARE POSSIBLE IN THESE AREAS.

NARRATIVE DESCRIPTION OF APPROXIMATE WATCH AREA USING A LINE AND ANCHOR
POINTS. DISTANCES TO EITHER SIDE OF THE LINE WILL BE IN STATUTE MILES.
THIS SECTION INDICATES THE WATCH IS AREA IS AN APPROXIMATION AND "FOR A
COMPLETE DEPICTION OF THE WATCH SEE THE ASSOCIATED WATCH OUTLINE UPDATE
(WOUS64 KWNS WOUn)."

```

Figure 13: Public Watch Notification Message Format (for Severe Thunderstorms)

11.4 Updates, Amendments and Corrections. Updates are not applicable. SPC will correct watches for format and grammatical errors.

12. **Public Tornado Watch Notification Message (WMO header WWUS20, AWIPS ID SEL).**

12.1 Mission Connection. SPC issues Public Tornado Watch Notification Messages to alert CONUS WFOs, the public, media and emergency managers to organized thunderstorms forecast to produce two or more tornadoes or any tornado which could produce EF2 or greater damage. The SEL product is an approximation of the area in a watch, for the official area covered by a watch see the corresponding WOU product.

12.2 Issuance Guidelines.

12.2.1 Creation Software. SPC will use the National Centers AWIPS (NAWIPS) and/or the SPC Product Generator (PRODGEN) for these products.

12.2.2 Issuance Criteria. SPC should issue a Public Tornado Watch Notification Message when there is a forecast of multiple weak tornadoes or any tornado which could produce EF2 or greater damage. The forecast event minimum thresholds should be at least 2 hours over an area at least 8,000 square miles. Below these thresholds, SPC in collaboration with affected WFOs and their CWAs may issue for smaller areas and for shorter periods of time when conditions warrant, and for convective watches along coastlines, and near the Canadian and Mexican borders.

12.2.3 Issuance Time. Public Tornado Watch Notification Messages are non-scheduled, event driven products.

12.2.4 Valid Time. The valid time is from the time of issuance to expiration or cancellation time.

12.2.5 Product Expiration Time. The expiration time is the end of the watch valid time.

12.3 Technical Description. Public Tornado Watch Notification Messages will follow the format and content described in this section.

12.3.1 Mass News Disseminator Broadcast Line. Public Tornado Watch Notification Messages will include the broadcast line “URGENT - IMMEDIATE BROADCAST REQUESTED.” The term “URGENT” is used when the information may wait until a stop-set to be broadcast.

12.3.2 Mass News Disseminator Header. The Public Tornado Watch Notification Message MND header is “TORNADO WATCH nnnn.”

12.3.3 Content. A Public Tornado Watch Notification Message will contain the area description and axis, watch expiration time, the term “damaging tornadoes”, a description of the largest hail size and strongest thunderstorm wind gusts expected, the definition of a watch, a call to action statement, a list of other valid watches, a list of watches cancelled or replaced by new watches, a brief discussion of meteorological reasoning, and technical information for the user community (see example). Mention of hail size associated with tropical cyclones is optional.

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SPC will include the term “coastal waters” when the watch affects coastal waters within 20 nm of the Pacific, Atlantic, or Gulf of Mexico coast. "Adjacent Coastal Waters" refers to a WFO’s marine responsibility (out to 20 nautical miles for oceans and Gulf of Mexico) If a Great Lake is included in a watch, the Lake (such as, Northern Lake Michigan) is included in the listing of states or Great Lakes within the United States. SPC will coordinate with affected WFOs to determine which counties or parishes, independent cities and/or marine zones are in the initial watch and meteorological reasoning prior to a watch being issued. SPC will issue a watch cancellation message (under SEL, SAW and WOU products) whenever a watch is cancelled prior to the expiration time. The text of the message will specify the number and area of the cancelled watch. SPC may enhance a Public Tornado Watch Notification Message by using the words “THIS IS A PARTICULARLY DANGEROUS SITUATION” when there is a likelihood of multiple strong (damage of EF2 or EF3) or violent (damage of EF4 or EF5) tornadoes. SPC will refer to tornadoes as “destructive” for PDS Tornado Watches.

12.3.4 Format.

```
WWUS20 KWNS ddhhmm
SELn
SPC WW ddhhmm
STZ000>099-CWZ000>099-ddhhmm-

URGENT - IMMEDIATE BROADCAST REQUESTED
TORNADO WATCH NUMBER nnnn
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

THE STORM PREDICTION CENTER HAS ISSUED A
TORNADO WATCH FOR PORTIONS OF

        PORTION OF STATE
        PORTION OF STATE

                                AND ADJACENT COASTAL WATERS (IF REQUIRED)

EFFECTIVE (TIME PERIOD) UNTIL hhmm am/pm time_zone.

...THIS IS A PARTICULARLY DANGEROUS SITUATION (IF NECESSARY)...

DESTRUCTIVE TORNADOES...HAIL TO X INCHES IN DIAMETER...THUNDERSTORM WIND
GUSTS TO XX MPH...AND DANGEROUS LIGHTNING ARE POSSIBLE IN THESE AREAS.

NARRATIVE DESCRIPTION OF APPROXIMATE WATCH AREA USING A LINE AND ANCHOR
POINTS. DISTANCES TO EITHER SIDE OF THE LINE WILL BE IN STATUTE MILES.
THIS SECTION INDICATES THE WATCH IS AREA IS AN APPROXIMATION AND "FOR A
COMPLETE DEPICTION OF THE WATCH SEE THE ASSOCIATED WATCH OUTLINE UPDATE
(WOUS64 KWNS WOUh)."

CALL TO ACTION STATEMENTS

OTHER WATCH INFORMATION...OTHER WATCHES IN EFFECT AND IF THIS WATCH
REPLACES A PREVIOUS WATCH.

NARRATIVE DISCUSSION OF REASON FOR THE WATCH.

AVIATION...BRIEF DESCRIPTION OF SEVERE WEATHER THREAT TO AVIATORS. HAIL
SIZE WILL BE GIVEN IN INCHES AND WIND GUSTS IN KNOTS. MAXIMUM STORM TOPS
AND A MEAN STORM VECTOR WILL ALSO BE GIVEN.

...FORECASTER NAME
```

Figure 14: Public Watch Notification Message Format (for Tornadoes)

12.4 Updates, Amendments and Corrections. Updates are not applicable. SPC will correct Public Watch Notification Messages for format and grammatical errors.

13. **Watch Hazard Probabilities.**

13.1 Mission Connection. SPC issues Watch Hazard Probabilities to provide affected users with probabilities of tornado and severe weather events of all active convective watches.

13.2 Issuance Guidelines.

13.2.1 Creation Software. SPC uses automated software.

13.2.2 Issuance Criteria. A convective watch is in effect.

13.2.3 Issuance Time. Watch Hazard Probabilities are non-scheduled, event driven products.

13.2.4 Valid Time. The valid time is listed in the products (WOU, SAW, or SEL).

13.2.5 Product Expiration Time. The expiration time is listed in the product (WOU, SAW, or SEL).

13.3 Technical Description. Watch Hazard Probabilities will follow the format and content described in this section.

13.3.1 Mass News Disseminator Broadcast Line. Not applicable.

13.3.2 Mass News Disseminator Header. Not applicable.

13.3.3 Content. SPC will issue Watch Hazard Probabilities to provide CONUS WFOs, the public, media and emergency managers with a set of seven severe weather probabilities for all issued convective watches.

The minimum tornado watch probability of two or more tornadoes is 30%. However, if a WFO requests a tornado watch issuance or the probability of one or more strong to violent (EF2-EF5) is 10% or greater, a 20% probability is permissible for the watch issuance.

The minimum severe thunderstorm watch probability of six or more severe weather events is 40%. However, if a WFO requests a severe thunderstorm watch, or if the probability of one or more winds events greater than or equal to 65 knots and/or the probability of one or more events of hail greater than two inches in diameter is 40% or greater, a 30% probability is permissible for watch issuance.

13.3.4 Format.

```

WWUS40 KWNS DDHMM
WWP7

TORNADO WATCH PROBABILITIES FOR WT 0987
NWS STORM PREDICTION CENTER NORMAN OK
1235 PM CDT THU JUL 28 2005

WT 987 PDS
PROBABILITY TABLE:
PROB OF 2 OR MORE TORNADOES : >95%
PROB OF 1 OR MORE STRONG /F2-F5/ TORNADOES : 25%
PROB OF 10 OR MORE SEVERE WIND EVENTS : 60%
PROB OF 1 OR MORE WIND EVENTS >= 65 KNOTS : 30%
PROB OF 10 OR MORE SEVERE HAIL EVENTS : 50%
PROB OF 1 OR MORE HAIL EVENTS >= 2 INCHES : 40%
PROB OF 6 OR MORE COMBINED SEVERE HAIL/WIND EVENTS : 80%

&&
ATTRIBUTE TABLE:
MAX HAIL /INCHES/ : 2.5
MAX WIND GUSTS SURFACE /KNOTS/ : 75
MAX TOPS /X 100 FEET/ : 550
MEAN STORM MOTION VECTOR /DEGREES AND KNOTS/ : 27030
PARTICULARLY DANGEROUS SITUATION : YES

&&
FOR A COMPLETE GEOGRAPHICAL DEPICTION OF THE WATCH AND
WATCH EXPIRATION INFORMATION SEE WOUS64 KWNS FOR WOU7.

$$

```

Figure 15: Watch Hazards Probabilities Product

13.4 Updates, Amendments and Corrections. Updates are not applicable. SPC will correct Public Watch Notification Messages for format and grammatical errors.

14. **Watch Corner Points Message (WMO header WWUS60, AWIPS ID SEVSPC).**

14.1 Mission Connection. SPC issues Watch Corner Points Messages to provide affected users with outline latitude/longitude coordinates of all active convective watches. The Watch Corner Point Message product is an approximation of the area in a watch, for the official area covered by a watch see the corresponding WOU product.

14.2 Issuance Guidelines.

14.2.1 Creation Software. SPC uses automated software.

14.2.2 Issuance Criteria. A convective watch is in effect.

14.2.3 Issuance Time. Watch Corner Points Messages are both event driven and scheduled products.

14.2.4 Valid Time. The valid time is until the issuance of the next scheduled update.

14.2.5 Product Expiration Time. The expiration time is at the end of the watch valid time.

14.3 Technical Description. Watch corner points messages will follow the format and content described in this section.

14.3.1 Mass News Disseminator Broadcast Line. Not applicable.

14.3.2 Mass News Disseminator Header. Not applicable.

14.3.3 Content. SPC will issue Watch Corner Points Messages to provide CONUS WFOs, the public, media and emergency managers with approximate outline latitude/longitude coordinates of all issued watches. These points are used for the radar summary chart that appears on AWIPS and web services when watches are valid or in effect. The county information listed in the initial WOU is considered the precise definition of the watch area.

14.3.4 Format.

```
(Watches in Effect)

WWUS60 KWNS ddhhmm
SEVSPC
FILE CREATED DD-MMM-YY AT HH:MM:SS UTC
SEVR 971126 1801 WT0792 2300
02903.09250 03135.09136 03135.08822 02903.08941 02903.08941;

SEVR 971126 1801 WT0793 0000
02957.08110 03248.08751 03248.08456 02957.08621 02903.08941 02903.08941;

(No Watch in Effect)

WWUS60 KWNS ddhhmm
SEVSPC
FILE CREATED DD-MMM-YY AT HH:MM:SS UTC
NO WATCHES CURRENTLY ACTIVE
```

Figure 16: Watch Corner Points Message Format

14.4 Updates, Amendments and Corrections. Updates are scheduled (see issuance times). SPC will correct messages for format errors.

15. **Watch Status Message (WMO header WOUS20, AWIPS ID WWASPC)**.

15.1 Mission Connection. SPC issues Watch Status Messages to provide CONUS WFOs, media, emergency managers and the public with an assessment of the severe weather threat within each active convective watch area.

15.2 Issuance Guidelines.

15.2.1 Creation Software. SPC uses the National Centers AWIPS (NAWIPS) and/or the SPC

Product Generator (PRODGEN) for these products.

15.2.2 Issuance Criteria. A convective watch is in effect.

15.2.3 Issuance Time. SPC should issue a Watch Status Message at approximately 30 minutes past the hour for each active convective watch area.

15.2.4 Valid Time. The status message is valid for one hour.

15.2.5 Product Expiration Time. The expiration time is one hour after the issuance time.

15.3 Technical Description. Watch status messages will follow the format and content described in this section.

15.3.1 Mass News Disseminator Broadcast Line. Not applicable.

15.3.2 Mass News Disseminator Header. Not applicable.

15.3.3 Content. SPC uses the Watch Status Message to help CONUS WFOs, media, emergency management, and the public determine portions of a convective watch where the threat of severe weather continues. This message will include a recommended list of what counties or parishes, independent cities and marine zones should remain in the watch area, and a geographical linear description of the continued severe weather hazard using known points. SPC should refer users to related mesoscale convective discussions (product SWOMCD) for additional information on mesoscale features related to the severe weather hazard, and local convective watch products for the official list of counties, parishes, independent cities and marine zones cleared from the watch area.

The second segment of the product, following the “&&” begins with: “STATUS REPORT W(S or T) #”, where # is the watch number (e.g. 1, 21, 321, 1021). The WS or WT depicts if the watch is a Severe Thunderstorm or Tornado watch respectively. The remainder of this product is formatted similar to the WOU product, i.e., UGC code for each state with a county listing segmented by “\$\$”, except for a lack of VTEC code. Marine zones will be included as applicable.

15.3.4 Format.

```

WOUS20 KWNS ddhhmm
WWASPC
SPC WW-A ddhhmm
STZ000-STZ000-STZ000-ddhhmm

STATUS REPORT ON WT (or WS) nnnn

SEVERE WEATHER THREAT CONTINUES TO THE RIGHT OF A LINE FROM XX DIR CCC...XX
DIR CCC...XX DIR CCC.

THE SEVERE WEATHER THREAT CONTINUES FOR THE FOLLOWING AREAS

&&

STC001-003-ddhhmm-

ST
.   STATE 1 COUNTIES INCLUDED ARE

LIST OF COUNTIES

STATE 1  INDEPENDENT CITIES INCLUDED ARE

LIST OF CITIES

$$

MZ001-003-ddhhmm-

CW
.   ADJACENT COASTAL WATERS INCLUDED ARE

LIST OF MARINE ZONES

$$

FOR ADDITIONAL INFORMATION...SEE MESOSCALE DISCUSSION XXX.

THE WATCH STATUS MESSAGE IS FOR GUIDANCE PURPOSES ONLY.  PLEASE REFER TO
LOCAL SPECIAL WEATHER STATEMENTS FOR OFFICIAL INFORMATION ON
COUNTIES...INDEPENDENT CITIES AND MARINE ZONES CLEARED FROM SEVERE
THUNDERSTORM AND TORNADO WATCHES.
$$

```

Figure 17: Watch Status Message Format

15.4 Updates, Amendments and Corrections. Updates should be issued near the bottom of each hour. When appropriate, SPC may correct messages for format and grammatical errors.

16. **Hourly Severe Weather Report Log (WMO headers NWUS22, PMNA00, AWIPS ID STAHR).**

16.1 Mission Connection. SPC issues Hourly Severe Weather Report Logs to provide WFOs, the public, media and emergency managers with hourly text and graphical reports of severe weather events within the CONUS.

16.2 Issuance Guidelines.

16.2.1 Creation Software. SPC uses automated software.

16.2.2 Issuance Criteria. WFOs issue new Preliminary Local Storm Reports (LSR) since the last hourly report.

16.2.3 Issuance Time. SPC will issue a report log each hour.

16.2.4 Valid Time. Report logs are valid upon issuance.

16.2.5 Product Expiration Time. Not applicable.

16.3 Technical Description. Hourly reports will follow the format and content described in this section.

16.3.1 Mass News Disseminator Broadcast Line. None.

16.3.2 Mass News Disseminator Header. The Hourly Report MND header is “SPC HOURLY TORNADO AND SEVERE THUNDERSTORM REPORTS.”

16.3.3 Content. SPC issues hourly report logs to inform the public, the media and emergency managers to severe weather events on a national scale. SPC updates this log on an hourly basis and lists all events since 1200 UTC. Severe weather events reported in Preliminary Storm Reports (LSR) are automatically included in hourly report logs. Events reported in other products as Severe Weather Statements (SVS) or other sources may be manually inserted into hourly report logs. These reports are considered preliminary information. Final severe weather event information is found in monthly Storm Data reports (see NWSI 10-1605 “Storm Data Preparation”) filed by each WFO and published by the National Climatic Data Center (NCDC).

16.3.4 Format.

```

NWUS22 KWNS 202206
STAHRV

                SPC TORNADO AND SEVERE THUNDERSTORM REPORTS
UNOFFICIAL - FOR OFFICIAL REPORTS, SEE PUBLICATION 'STORM DATA'
                FOR 06CST WED JAN 20 2010 THRU 16CST WED JAN 20 2010

EVENT      LOCATION                                REMARKS                                (CST)TIME
.....TORNADO REPORTS.....TORNADO REPORTS.....TORNADO REPORTS.....
1 *TORN    1 NW VILLE PLATTE LA          (39 NNW LFT)                            20/1455
          CARS BLOWN INTO A DITCH.                LCH/LSR   3070 9229

.....LRG HAIL/STRONG WIND RPTS.....LRG HAIL/STRONG WIND RPTS.....
4 G 56     4 WSW BURLINGAME CA          (4 SW SFO)                            20/1119
          OBSERVED AT SPRING VALLEY RAWS. ELEVATION 1075 MTR/LSR   375612244
          FEET.
2 A175     INDEPENDENCE LA              (36 S MCB)                            20/1540
          LIX/LSR   3064 9051

.....OTHER SEVERE REPORTS.....OTHER SEVERE REPORTS.....
3 G 50     6 NNW MORRO BAY CA          (20 SW PRB)                            20/0805
          58 MPH WIND GUST ASSOCIATED WITH A LINE OF THUNDERSTORMS
          LOX/LSR   354312088
    
```

Figure 18: Hourly Report Log Format

16.4 Updates, Amendments and Corrections. This product is issued hourly and is not updated. SPC will correct reports for format and grammatical errors.

17. Daily Severe Weather Report Log (WMO headers NWUS20, PMNE00, AWIPS ID STADTS).

17.1 Mission Connection. SPC issues Daily Severe Weather Report Logs to provide CONUS WFOs, the public, media and emergency managers with text and graphical reports of severe weather events on a national scale for the previous day.

17.2 Issuance Guidelines.

17.2.1 Creation Software. SPC uses automated software.

17.2.2 Issuance Criteria. SPC issues this report log daily at 1200 UTC.

17.2.3 Issuance Time. The issuance time will be 1200 UTC. SPC will issue an update at 1800 UTC.

17.2.4 Valid Time. Report logs are valid upon issuance.

17.2.5 Product Expiration Time. Not applicable.

17.3 Technical Description. Daily report logs will follow the format and content described in this section.

17.3.1 Mass News Disseminator Broadcast Line. None.

17.3.2 Mass News Disseminator Header. The Daily Report MND header is “SPC DAILY TORNADO AND SEVERE THUNDERSTORM REPORTS.”

17.3.3 Content. SPC issues daily report logs in a text and graphical format to display all severe weather reports across the CONUS for use by the media and emergency managers. These reports are considered preliminary information. Final severe weather event information is found in monthly Storm Data reports (see NWSI 10-1605 “Storm Data Preparation”) filed by each WFO and published by the National Climatic Data Center (NCDC).

17.3.4 Format.

```
NWUS20 KWNS 211215
STATS
```

SPC TORNADO AND SEVERE THUNDERSTORM REPORTS			
UNOFFICIAL - FOR OFFICIAL REPORTS, SEE PUBLICATION 'STORM DATA'			
FOR 06CST WED JAN 20 2010 THRU 06CST THU JAN 21 2010			
EVENT	LOCATION	REMARKS	(CST)TIME
.....TORNADO REPORTS.....TORNADO REPORTS.....TORNADO REPORTS.....			
1 *TORN	1 NW VILLE PLATTE LA	(39 NNW LFT)	20/1455
	CARS BLOWN INTO A DITCH.	LCH/LSR	3070 9229
2 *TORN	10 SE AMITE LA	(38 S MCB)	20/1615
	SHERIFFS DEPUTIES VISUALLY TRACKING A TORNADO	LIX/LSR	3063 9039
	ON LA 1062 NEAR LORANG		
3 *TORN	GENEVA TX	(50 ENE LFK)	20/1626
	TREES DOWN ACROSS FM 330 THREE MILES FROM	SHV/LSR	3147 9393
	HIGHWAY 21. MOBILE HOM		
4 *TORN	2 N CANTON TX	(31 WNW TYR)	20/1719
	POSSIBLE TORNADO TOUCHDOWN AT I-20 AND HWY 19	FWD/LSR	3258 9587
	NORTH OF CANTON. POWER		
5 *TORN	WASKOM TX	(12 W SHV)	20/1727
	TORNADO REPORTED ON GROUND. TREES DOWN ACROSS	SHV/LSR	3248 9406
	INTERSTATE 20.		
6 *TORN	2 W WASKOM TX	(14 W SHV)	20/1734
	PEOPLE TRAPPED IN HOMES AND BUSINESSES	SHV/LSR	3248 9410
	DESTROYED IN THE VICIN		
7 *TORN	NATCHITOCHE LA	(1 N IER)	20/1755
	TREES REPORTED DOWN ON POSEY ROAD	SHV/LSR	3176 9310
8 *TORN	2 WNW MINEOLA TX	(23 NNW TYR)	20/1805
	TORNADO REPORTED ON HWY 1799	SHV/LSR	3268 9552
10 *TORN	2 S LARUE TX	(24 SW TYR)	20/1820
	EM REPORTED A TORNADO HIT A HOUSE ON CR 2855	FWD/LSR	3209 9568
	SOUTH OF LARUE IN SE H		
9 *TORN	2 WNW MINEOLA TX	(23 NNW TYR)	20/1820
	TORNADO REPORTED ON HWY 1799	SHV/LSR	3268 9552
12 *TORN	4 NNW BULLARD TX	(10 SSE TYR)	20/1856
	FM 2493 AND SOUTHERN TRACE CIRCLE...NUMEROUS	SHV/LSR	3219 9535
	TREES SNAPPED...SHINGL		
11 *TORN	ORE CITY TX	(28 N GGG)	20/1856
	ROOF BLOWN OFF OF A BANK AND GROCERY STORE	SHV/LSR	3280 9472

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13	*TORN	HARLETON TX (20 NNE GGG)			20/1942
		DOWN LINES AND DAMAGE TO GROCERY STORE	SHV/LSR	3267	9457
14	*TORN	3 SW GAARS MILL LA (38 NE IER)			20/1949
		TREES DOWN ON HWY 34	SHV/LSR	3209	9260
.....LRG HAIL/STRONG WIND RPTS.....LRG HAIL/STRONG WIND RPTS.....					
48	WNDG	6 SW BEVERLY HILLS CA (5 NW LAX)			20/0849
		2ND ST AT EL MORRO AV-LG TREE LIMB IN ROADWAY	LOX/LSR	340211848	
50	WNDG	GAVIOTA CA (20 W SBA)			20/0851
		TREE DOWN RT LANE GAVIOTA TUNNEL US101	LOX/LSR	344712021	
49	WNDG	1 N PISMO BEACH CA (19 NNW SMX)			20/0851
		AVILA BCH DR/SAN LUIS ST - TREE LIMB IN RDWAY	LOX/LSR	351512063	
51	WNDG	ARROYO GRANDE CA (17 NNW SMX)			20/1025
		QUEMADO BRDG LG TREE BRANCH IN BLK RDWY	LOX/LSR	351312058	
68	G 56	4 WSW BURLINGAME CA (4 SW SFO)			20/1119
		OBSERVED AT SPRING VALLEY RAWLS. ELEVATION 1075 FEET.	MTR/LSR	375612244	
52	WNDG	1 S BURBANK CA (16 NNE LAX)			20/1123
		EL POMAR DR AT NEAL SPRINGS RD - POWER POLES LEANING TOWARDS RDWY	LOX/LSR	341811833	
53	WNDG	3 SW OJAI CA (14 NNW OXR)			20/1126
		OAKVIEW HIGHLAND DR AT VENTURA AV - OAK TREE FALLING DOWN MAY FALL	LOX/LSR	344211928	
54	WNDG	CAMBRIA CA (26 WSW PRB)			20/1140
		TREE FELL ON RES AND TREE AND LINES HANGING RDWY	LOX/LSR	355512108	
55	WNDG	6 NW PASO ROBLES CA (5 WNW PRB)			20/1140
		ADELAIDA RD JWO NACIMIENTO LK DR - TREE ACROSS RDWAY, POWER LINE IN R	LOX/LSR	356912074	
57	WNDG	4 NNE PISMO BEACH CA (21 NNW SMX)			20/1221
		CORBETT CANYON RD AT SR 227...LARGE TREE DOWN BLOCKING WEST BOUND LA	LOX/LSR	352012060	
56	WNDG	CAMBRIA CA (26 WSW PRB)			20/1221
		INTERSECTION OF COVENTRY AND CROYDEN. POWER LINE DOWN.	LOX/LSR	355512108	
58	WNDG	OXNARD CA (0 W OXR)			20/1236
		TREE AND LINE DOWN ACROSS RDWAY	LOX/LSR	342011921	
15	A175	INDEPENDENCE LA (36 S MCB)			20/1540
			LIX/LSR	3064	9051
16	A175	TROUP TX (20 SE TYR)			20/1545
		MEDIA REPORTING 4 MINUES OF GOLFBALL HAIL AND MINUTES OF PEA SIZE HA	3SHV/LSR	3214	9512
18	A200	OVERTON TX (16 WSW GGG)			20/1617
		PUBLIC REPORTING HAIL UP TO 2 INCHES IN PORTIONS OF OVERTON.	SHV/LSR	3228	9497
19	A175	10 SE AMITE LA (38 S MCB)			20/1620
		OCCURRING WHILE TORNADO BEING VISUALLY TRACKED NEAR LORANGER.	LIX/LSR	3063	9039
21	A175	FORNEY TX (23 ESE DAL)			20/1645
		PUBLIC REPORT OF GOLFBALL HAIL IN FORNEY.	FWD/LSR	3275	9647
24	A125	7 WNW CANTON TX (36 WNW TYR)			20/1700
		HALF DOLLAR HAIL ON I-20 AT EXIT 519 JUST W OF CANTON.	FWD/LSR	3259	9598
59	WNDG	7 S GRAND SALINE TX (23 NW TYR)			20/1736
		SIGNIFICANT DAMAGE REPORTED AT 110 AND FM 1255. TREES AND POWER LINES	FWD/LSR	3257	9572
27	A175	SHREVEPORT LA (1 NE SHV)			20/1758
		REPORTED AT THE INTERSECTION OF HWY 1 AND HWY 71.	SHV/LSR	3247	9380
60	WNDG	4 ENE POCAHONTAS MS (13 NNW JAN)			20/1800
		ELECTRICITY OUT...METAL FLAG POLE BENT OVER WITH ESTIAMTED 60-70MP	JAN/LSR	3250	9022
61	WNDG	16 WSW FRANKSTON TX (33 SW TYR)			20/1805

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		LARGE TREES DOWN ON A HOUSE...A CAR...AND A TRACTOR IN CARROLL SPR	FWD/LSR	3196 9575
62	WNDG	4 S BRASHEAR TX (42 SSW PRX)		20/1825
		MOBILE HOME DAMAGED ON CR 1116	FWD/LSR	3306 9575
32	A275	GILMER TX (27 NNW GGG)		20/1828
			SHV/LSR	3273 9495
63	WNDG	ATHENS TX (27 WSW TYR)		20/1832
		WIND DAMAGE TO A HOME ON FM2588 IN SOUTHERN HENDERSON CO.	FWD/LSR	3220 9585
64	WNDG	2 ESE SULPHUR SPRINGS TX (35 S PRX)		20/1835
		TREES DOWN ON FM1870, CHIMNEY CAVED IN, AND TRAMPOLINE BLOWN INTO	FWD/LSR	3312 9557
65	WNDG	5 E SULPHUR SPRINGS TX (34 S PRX)		20/1905
		TWO TRACTOR TRAILERS OVERTURNED ON I-30 AT MILEFWD/LSR MARKER 131.		3313 9551
36	A425	DODSON LA (34 NE IER)		20/1905
			SHV/LSR	3208 9266
38	A175	GILLHAM AR (9 NNE DEQ)		20/1935
			SHV/LSR	3417 9431
39	A175	GRANNIS AR (13 NNE DEQ)		20/1945
			LZK/LSR	3424 9432
42	A175	MONROE LA (2 WSW MLU)		20/2010
		HAIL COVERING GROUND ON CYPRESS SCHOOL ROAD	SHV/LSR	3251 9208
47	A175	BOLTON MS (21 W JAN)		20/2328
		NUMEROUS REPORTS OF GOLFBALL SIZED HAIL NEAR I-20	JAN/LSR	3235 9046
66	WNDG	HAZLEHURST MS (35 SSW JAN)		21/0050
		TREES DOWN ON JAMES RD. POWER IS OUT IN THE TOWN OF HAZELHURST...P	JAN/LSR	3186 9039
.....OTHER SEVERE REPORTS.....OTHER SEVERE REPORTS.....				
67	G 50	6 NNW MORRO BAY CA (20 SW PRB)		20/0805
		58 MPH WIND GUST ASSOCIATED WITH A LINE OF THUNDERSTORMS MOVING T	LOX/LSR	354312088
17	A100	3 WNW RAYMOND MS (21 W JAN)		20/1615
		HAIL COVERING THE GROUND. MAINLY PEA TO DIME SIZED BUT A FEW LARGER	JAN/LSR	3228 9047
20	A100	1 WSW MORGAN HILL CA (21 SE SJC)		20/1638
			MTR/LSR	371312165
22	A100	1 S HALLSVILLE TX (10 NE GGG)		20/1655
			SHV/LSR	3249 9458
23	A100	QUINLAN TX (41 E DAL)		20/1659
		QUARTER SIZE HAIL IN QUINLAN	FWD/LSR	3290 9613
25	A100	GRAND SALINE TX (28 NW TYR)		20/1743
		1 INCH HAIL AT 125 E FRANK, GRAND SALINE, TX. COVERING GROUND DOWNTOWN	FWD/LSR	3267 9572
26	A100	CROSSROADS TX (24 E CRS)		20/1755
		QUARTER HAIL IN CROSSROADS.	FWD/LSR	3205 9597
28	A100	FLORA MS (20 NW JAN)		20/1806
		QUARTER SIZED HAIL REPORTED	JAN/LSR	3255 9031
29	A100	BLANCHARD LA (9 NNW SHV)		20/1807
		HAIL REPORTED AT NORTHWOOD HIGH SCHOOL.	SHV/LSR	3259 9389
30	A100	TIGERTOWN TX (20 WNW PRX)		20/1815
		IN TIGERTOWN	FWD/LSR	3372 9580
31	A100	4 S BRASHEAR TX (42 SSW PRX)		20/1825
		QUARTER SIZE HAIL REPORTED ON CR 1116 ABOUT 5 MILES SOUTHWEST OF SUL	FWD/LSR	3306 9575
33	A100	1 N MESSER OK (32 N PRX)		20/1832
		HAIL WAS MOSTLY DIME SIZED WITH A FEW UP TO QUARTER SIZE.	TSA/LSR	3410 9547
34	A100	WASHINGTON OK (24 SSE OKC)		20/1852
			OUN/LSR	3506 9748
35	A100	7 N SWINK OK (35 NNE PRX)		20/1853

		HEAVY AMOUNTS OF HAIL FALLING MOST OF IT QUARTER SIZED.		TSA/LSR	3412 9520
37	A100	3 E CHILLICOTHE TX	(28 SSW LTS)		20/1920
40	A100	VIXEN LA	(24 SW MLU)	OUN/LSR	3426 9946
41	A100	BURKBURNETT TX	(6 NNW SPS)	SHV/LSR	3223 9227
43	A100	2 E DENTVILLE MS	(35 SW JAN)	OUN/LSR	3408 9856
44	A100	10 SE LINDEN TX	(39 NW SHV)	JAN/LSR	3196 9052
45	A100	KILGORE TX	(8 W GGG)	SHV/LSR	3291 9424
46	A100	DUNCAN OK	(25 ESE FSI)	SHV/LSR	3239 9487
		REPORTED ON EAST SIDE OF TOWN		OUN/LSR	3452 9797

Figure 19: Daily Report Log Format

How to read an SPC report log:

Event Number: 40 (in chronological order, the 40th severe event received during this 24 hour period).

Event: "A100" One inch hail report.

Location: "VIXEN LA (24 SW MLU)" Event occurred in Vixen, Louisiana, or 24 statute miles southwest of Monroe, Louisiana (MLU).

Date/Time: 20/1949 Occurred on the 20th day of the month at 1949 CST.

Source: "SHV/LSR. Preliminary Local Storm Report issued by the National Weather Service office at Shreveport, Louisiana.

17.4 Updates, Amendments and Corrections. SPC issues a scheduled update at 1800 UTC. SPC will rerun the program, at times, to add additional data from late LSRs into this report.

18. **Monthly Tornado Statistics (WMO header NWUS21, AWIPS ID STAMTS).**

18.1 Mission Connection. SPC issues Monthly Tornado Summary to provide WFOs, the public, media and emergency managers with a preliminary number of tornado reports on a national scale.

18.2 Issuance Guidelines.

18.2.1 Creation Software. SPC will use the National Centers AWIPS (NAWIPS) and/or the SPC Product Generator (PRODGEN) for these products.

18.2.2 Issuance Criteria. This summary is a non-scheduled, event-driven product.

18.2.3 Issuance Time. SPC will issue this summary when tornado numbers are updated and confirmed.

18.2.4 Valid Time. Summaries are valid upon issuance.

18.2.5 Product Expiration Time. Not applicable.

18.3 Technical Description. Summaries will follow the format and content described in this section.

18.3.1 Mass News Disseminator Broadcast Line. None.

18.3.2 MND Header. The Monthly Summary MND header is “TORNADO TOTALS AND RELATED DEATHS”.

18.3.3 Content. This summary tabulates the preliminary number of tornado reports listed in WFO LSR(s) issued during the previous month. These numbers consist of reported and confirmed tornadoes. SPC will create the count of tornadoes when Storm Data is made available by the NWS Verification Branch. The National Verification Program, the National Climatic Data Center, and SPC will confirm the total number of tornadoes, and provide the final update to the monthly summary.

The monthly summary will include final data from each of the last three years, and a three year average. The summary will also include the number of killer tornadoes and number of deaths for the current year and average from the previous three years.

18.3.4 Format.

```

ZCZC STAMTS ALL
NWUS21 KWNS 281917

TORNADO TOTALS AND RELATED DEATHS...THROUGH WED JAN 27 2010
NWS STORM PREDICTION CENTER NORMAN OK
0117 PM CST THU JAN 28 2010

...NUMBER OF TORNADOES...      NUMBER OF      KILLER
                                TORNADO DEATHS  TORNADOES
                                3YR           3YR
..2010.. 2009 2008 2007 3YR 10 09 08 07 AV 10 09 08 07 AV
PREL  ACT  ACT  ACT  ACT  AV
JAN   41   -   6   84  21  37 -  0  7  2  3 -  0  4  1  2
FEB   -   -   36  147  52  78 -  9  59 22 30 -  2  12  3  6
MAR   -   -  115  129  170 138 -  0  4  27 10 -  0  3  10  4
APR   -   -  226  189  167 194 -  6  0  9  5 -  3  0  3  2
MAY   -   -  201  461  252 305 -  5  44 14 21 -  3  10  4  6
JUN   -   -  270  294  128 231 -  0  7  0  2 -  0  4  0  1
JUL   -   -  118   93   69  93 -  0  1  0  0 -  0  1  0  0
AUG   -   -   60  101   75  79 -  0  0  1  0 -  0  0  1  0
SEP   -   -    8  111   52  57 -  0  2  0  1 -  0  1  0  0
OCT   -   -   64   21   86  57 -  1  0  5  2 -  1  0  3  1
NOV   -   -   2*   15    7   8 -  0  2  0  1 -  0  2  0  1
DEC   -   -  52*   46   19  39 -  0  0  1  0 -  0  0  1  0
-----
SUM   41   - 1158* 1691 1098 1316  0  21 126 81 76  0  9  37 26 24

* TOTALS FOR NOV/DEC 2009 AND 2009 ANNUAL RE2010 PRELIMINARY
PENDING STORM DATA SUBMISSIONS.

PREL = 2010 PRELIMINARY COUNT FROM NWS LOCAL STORM REPORTS.
ACT = ACTUAL TORNADO COUNT BASED ON NWS STORM DATA SUBMISSIONS.

TORNADO-RELATED FATALITY NUMBERS ARE ENTERED WHEN CONFIRMED BY NWS
FORECAST OFFICES.

..CARBIN..01/28/2010

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Figure 20: Monthly Tornado Statistics Format

The statistics are broken down by month and contain final data for the last three years. A "-" in a column means the data is missing or not yet available.

The SPC includes all reports of tornadoes, including “unconfirmed,” “possible,” “suspected” and duplicate reports from Local Storm Reports issued by WFOs. The "PREL" column lists the number of preliminary tornadoes from the Local Storm Reports.

When the digital Storm Data database arrives from the NWS Office of Climate, Water and Weather Services, the actual tornado counts are entered in the column labeled "ACT".

Along the bottom of the report are totals for the columns. In the example, there were 41 preliminary (PREL) tornadoes reported through this date in January, 2010, versus 6 actual January tornadoes in 2009.

18.4 Updates, Amendments and Corrections. SPC should update this report at least twice per month. SPC will correct reports for inaccurate statistical information, when possible.

19. **Killer Tornado Statistics (WMO header NWUS23, AWIPS ID STATIJ).**

19.1 Mission Connection. SPC issues Killer Tornado Statistics to provide WFOs, the public, media and emergency managers with a list of the dates, locations and number of deaths due to tornadoes since the start of the calendar year on a national scale.

19.2 Issuance Guidelines.

19.2.1 Creation Software. SPC will use the National Centers AWIPS (NAWIPS) and/or the SPC Product Generator (PRODGEN) for these products.

19.2.2 Issuance Criteria. SPC issues a new list of statistics following new killer tornado events.

19.2.3 Issuance Time. This list is non-scheduled, event driven.

19.2.4 Valid Time. Lists are valid upon issuance.

19.2.5 Product Expiration Time. Not applicable.

19.3 Technical Description. Lists will follow the format and content described in this section.

19.3.1 Mass News Disseminator Broadcast Line. None.

19.3.2 Mass News Disseminator Header. The Statistics MND header is “(YEAR) PRELIMINARY KILLER TORNADOES

19.3.3 Content. This summary will list the dates, times, locations, and number of deaths from killer tornadoes from Jan 1 of the current calendar to the time of the latest report, whether the deaths occurred in a tornado or severe thunderstorm watch, near a watch, or with no watch in effect, the watch number where the death occurred, and the F-scale damage, if available. The summary should list the circumstances in which each death occurred. The summary will also list the number of tornado deaths by state.

19.3.4 Format.

```

ZCZC STATIJ ALL
NWUS23 KWNS 301839

2009 PRELIMINARY KILLER TORNADOES
NWS STORM PREDICTION CENTER NORMAN OK
1139 PM CST TUE JAN 12 2010

##      TIME
DATE   CST  LOCATION          DEATHS A B C D WATCH EF CIRCUMSTANCE
-----
01 FEB 10 1930 CARTER CO. OK           8  8 0 0 0 WT008 EF4 06M 01H 01V
02 FEB 18 2140 HANCOCK CO. GA           1  1 0 0 0 WT025 EF3 01M
03 APR 09 1910 POLK CO. AR           3  3 0 0 0 WT125 EF3 02H 01P
04 APR 10 1145 RUTHERFORD CO. TN       2  2 0 0 0 WT132 EF4 02H
05 APR 19 1835 MARSHALL CO. AL         1  0 1 0 0 WS174 EF1 01M
06 MAY 08 1504 MADISON CO. KY          2  0 2 0 0 WS268 EF3 02M
07 MAY 13 1630 SULLIVAN CO. MO         1  1 0 0 0 WT293 EF1 01M
08 MAY 13 1710 ADAIR CO. MO           2  2 0 0 0 WT293 EF2 02H
09 OCT 09 1045 WASHINGTON CO. MS        1  1 0 0 0 WT762 EF1 01M

TOTALS:                               21  18 3 0 0

FATALITIES BY STATE:
AL01 AR03 GA01 KY02 MO03 MS01 OK08 TN02

FATALITIES BY CIRCUMSTANCE:
07H 12M 01P 01V

A = IN TORNADO WATCH
B = IN SEVERE THUNDERSTORM WATCH
C = CLOSE TO THE WATCH /15 MINUTES OR 25 MILES/
D = NO WATCH IN EFFECT
H = HOUSE
M = MOBILE HOME
O = OUTDOORS
P = PERMANENT BUILDING/STRUCTURE
V = VEHICLE
? = UNKNOWN
WS = SEVERE THUNDERSTORM WATCH /NUMBER/
WT = TORNADO WATCH /NUMBER/
EF = ENHANCED FUJITA SCALE RATING

..CARBIN..12/30/2009

$$

```

Figure 21: Killer Tornado Statistics Format

The killer tornadoes are listed in the chronological order of occurrence, by DATE and CST TIME. LOCATION is the county or parish and state where the first tornado-related deaths occurred. Each event will be numbered according to the actual tornado rather than segment when crossing state borders. This list may be updated as Storm Data information is available through the NCDC. "DEATHS" is the number of deaths in the whole tornado path -- not just the given location. The ABCD column letters represent the number of deaths:

- A = In tornado watch
- B = In severe thunderstorm watch
- C = "Close" to the watch (15 minutes or 25 miles)
- D = No watch in effect

If the tornado was in a watch, the watch type and number is given. For example, WT008 is Tornado Watch number 8. If known, the F-scale damage rating of the tornado is listed; if not, a "?" mark is entered. The deaths are broken down by the following circumstances of the victims, if known:

- H = House (permanent foundation)
- M = Mobile home (a.k.a. "manufactured home")
- O = Outdoors (not inside any vehicle, mobile home or permanent building)
- P = Permanent structure (school, garage, factory, store, warehouse, etc.)
- V = Vehicle (includes parked RVs)
- ? = Unknown

Information for the killer tornadoes list comes from Preliminary Local Storm Reports or Public Information Statements (PNS) issued by WFOs, supplemented by NWS event memorandums and media accounts and monthly Storm Data Reports filed by the WFOs. Since killer tornado information, especially death counts, circumstances and EF scale, may not be completely known until many days after an event, these numbers are subject to change as more information becomes available.

19.4 Updates, Amendments and Corrections. SPC will update this report as the information becomes available and is deemed reliable. SPC may also verify the information as Storm Data is updated through the NCDC.

20. **Operations Administrative Message (WMO header NOUS74, AWIPS ID ADMSPC).**

20.1 Mission Connection. SPC issues Operations Administrative Messages to inform WFOs of changes in SPC operational status (going to or from backup operations) or communications issues (i.e. advance notice of upcoming test convective watches).

21. Backup Operations.

21.1 Backup. Storm Prediction Center emergency backup operations are supported by the Air Force Weather Agency as specified within a Memorandum of Understanding between the National Weather Service and the Air Force. When emergency backup operations are active, only select high priority products for protection of life and property are routinely disseminated. Transitions to (or from) emergency backup status or to a backup exercise are announced via an administrative message. Additional information on Storm Prediction Center backup can be found in NWSI 10-2201.

APPENDIX A – Examples

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1. **Introduction.** This appendix provides WFOs and the public with examples of national severe weather products.
2. **Categorical Convective Outlook (Graphic).**

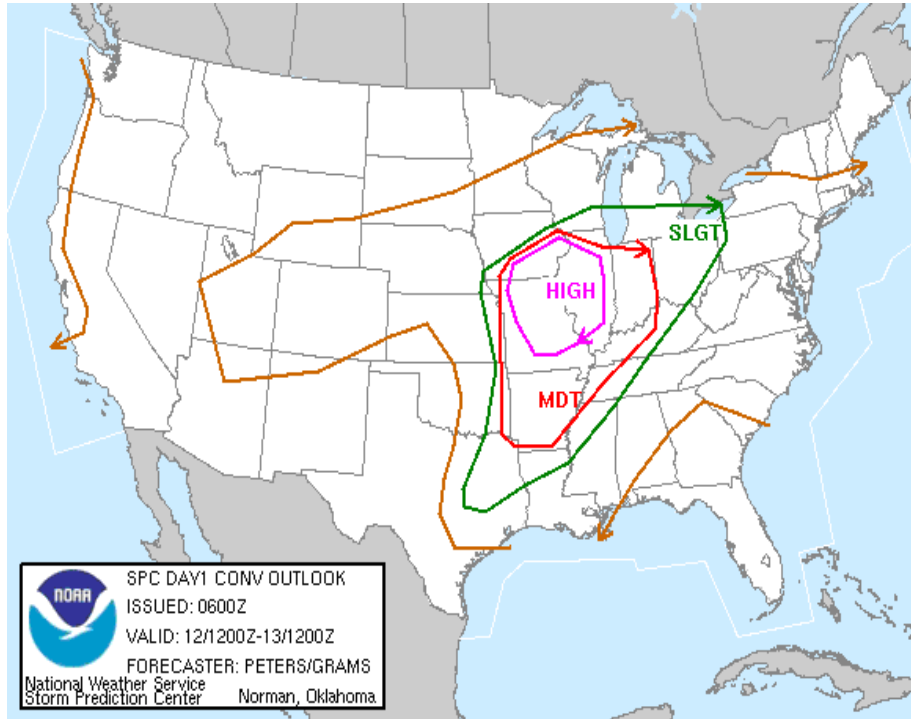


Figure 22: Day One Outlook

3. **Categorical Convective Outlook (Narrative).**

SPC AC 120603

DAY 1 CONVECTIVE OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
1203 AM CST SUN MAR 12 2006

VALID 121200Z - 131200Z

...THERE IS A HIGH RISK OF SVR TSTMS FOR THIS AFTERNOON AND EVENING ACROSS PARTS OF CENTRAL/NRN MO INTO SERN IA AND PARTS OF WRN/CENTRAL IL...

...THERE IS A MDT RISK OF SVR TSTMS EXTENDING FROM AR NWD TO SRN IA AND EWD INTO THE LOWER OH RIVER VALLEY...

...THERE IS A SLGT RISK OF SVR TSTMS EXTENDING FROM NERN TX TO THE MID MS/OH RIVER VALLEYS AND SRN GREAT LAKES REGION...

...SIGNIFICANT OUTBREAK OF TORNADOES IS FORECAST THIS AFTERNOON AND EVENING ACROSS PARTS OF THE LOWER MO AND MID MS RIVER VALLEYS...

STRONG MID/UPPER LEVEL TROUGH WITH 100+ KT MID LEVEL JET...CURRENTLY MOVING EWD ACROSS THE LOWER CO RIVER VALLEY...WILL TRACK NEWD OVER THE CENTRAL/SRN

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PLAINS TODAY REACHING THE WRN GREAT LAKES REGION BY 12Z MONDAY. 60-120 METER HEIGHT FALLS EXPECTED WITH THIS.

TROUGH AS IT TRACKS NEWD WILL AID IN THE DEVELOPMENT OF A STRONG SSWLY LLJ /50+ KT/ FROM THE ARKLATEX REGION TO THE MID MS RIVER VALLEY BY THIS AFTERNOON. FURTHER STRENGTHENING /60-80 KT/ OF THIS LLJ IS EXPECTED SECOND HALF OF FORECAST PERIOD AS IT VEERS TO SWLY FROM THE MID MS RIVER VALLEY TOWARD THE UPPER OH RIVER VALLEY/ LOWER GREAT LAKES REGION.

IN THE LOW-LEVELS...A SURFACE FRONT IS EXPECTED TO INITIALLY EXTEND FROM LOWER MI SWWD ACROSS THE MID MS RIVER VALLEY TO OK...AND THEN WNWWD TO A SURFACE LOW OVER ERN CO. THIS BOUNDARY WILL RETREAT NWD AS A WARM FRONT TODAY IN RESPONSE TO STRONG SURFACE PRESSURE FALLS TRANSLATING FROM THE CENTRAL PLAINS TOWARD THE GREAT LAKES REGION.

SURFACE LOW IS PROGGED TO TRACK EWD ACROSS NRN KS REACHING FAR NRN MO BY 00Z...WITH THE WARM FRONT EXTENDING EWD ACROSS NRN PARTS OF IL/IN/OH. INCREASING LOW-LEVEL CONVERGENCE IN THE VICINITY OF THE SURFACE LOW AND SWD ALONG A PRE-FRONTAL TROUGH/DRY LINE ACROSS FAR ERN PARTS OF KS/OK INTO NERN TX ARE EXPECTED TO BE THE FOCI FOR THUNDERSTORM INITIATION THIS AFTERNOON. BROAD ZONE OF RICH MOISTURE RETURN...ALREADY UNDERWAY AT THIS TIME...WILL CONTINUE SPREADING NWD TODAY FROM THE SERN PLAINS/LOWER MS RIVER VALLEY TO THE MID MS/OH RIVER VALLEYS. SURFACE DEWPOINTS IN THE UPPER 60S SHOULD REACH AS FAR NORTH AS SERN MO/PARTS OF SRN IL...WITH LOWER 60S DEWPOINTS EXTENDING FROM THE MID MS RIVER VALLEY EWD TO WRN PA.

WHILE CONSIDERABLE CONVECTION...SOME POSSIBLY SEVERE...ASSOCIATED WITH A LEAD SRN PLAINS SHORT WAVE IMPULSE SHOULD BE ONGOING AT 12Z SUNDAY ACROSS LOWER OH RIVER VALLEY...MUCH OF THE EAST CENTRAL PLAINS AND MID MS RIVER VALLEY ARE EXPECTED TO BE RELATIVELY FREE OF CONVECTION/PRECIPITATION. WITH INSOLATION...STEEP MID-LEVEL LAPSE RATES ON NOSE OF RETURNING ELEVATED MIXED LAYER...AND SURFACE DEW POINTS IN THE 60S...SHOULD CONTRIBUTE TO MIXED LAYER CAPE ON THE ORDER OF 2000 J/KG IN SURFACE WARM SECTOR. DEEP LAYER SHEAR WILL BE MORE THAN SUFFICIENT FOR SUPERCELLS...WITH INITIAL ACTIVITY LIKELY BEING DISCRETE FROM THE SURFACE LOW SWD ALONG THE DRY LINE. STRONG LLJ WILL CONTRIBUTE TO LARGE HODOGRAPHS SUPPORTING TORNADOES...SOME STRONG TO SIGNIFICANT ACROSS CENTRAL/ NRN MO INTO SERN IA AND WRN/CENTRAL IL. IN ADDITION...GIVEN STEEP LAPSE RATES AND MODERATE INSTABILITY...LARGE HAIL WILL BE LIKELY ALONG WITH DAMAGING WINDS.

INITIAL ACTIVITY IS EXPECTED TO EVOLVE INTO A SQUALL LINE THIS EVENING SPREADING EWD FROM THE MID MS RIVER VALLEY TO THE OH RIVER VALLEY WITH DAMAGING WINDS BEING THE GREATER THREAT INTO THE OVERNIGHT PERIOD INTO IND/WRN KY.

..PETERS/GRAMS.. 03/12/2006

4. **4-8 Day Convective Outlook (Graphic).**

Day 4-8 Convective Outlook Issued on Jan 18, 2010

Updated: Mon Jan 18 09:15:02 UTC 2010

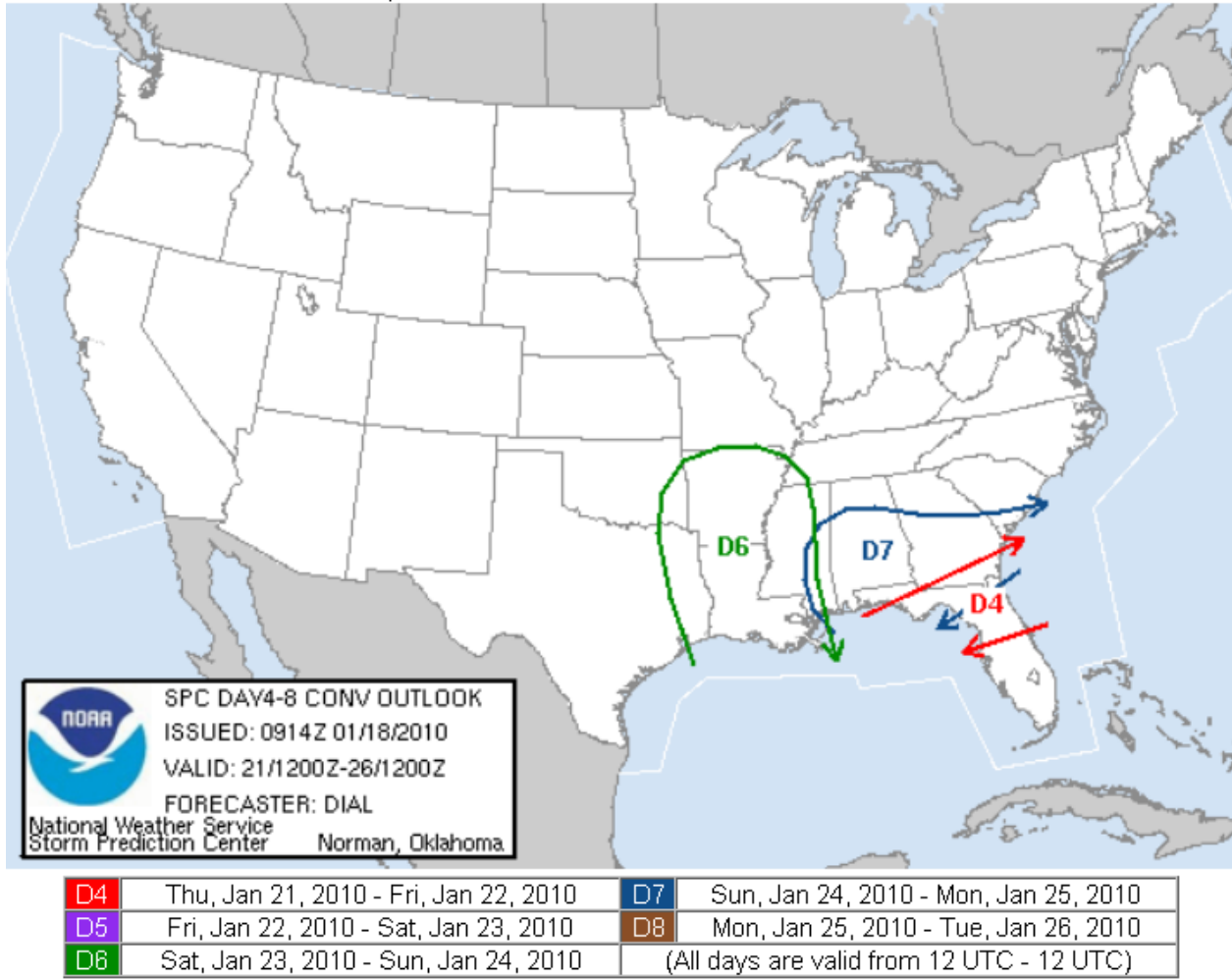


Figure 23: Day 4-8 Convective Outlook Graphic

5. **4-8 Day Convective Outlook (Narrative).**

ZCZC SPCSWOD48 ALL
 ACUS48 KWNS 180914
 SPC AC 180914

DAY 4-8 CONVECTIVE OUTLOOK
 NWS STORM PREDICTION CENTER NORMAN OK
 0314 AM CST MON JAN 18 2010

VALID 211200Z - 261200Z

...DISCUSSION...

DAY 4...MODEL CONSENSUS IS THAT SRN STREAM SHORTWAVE TROUGH WILL EJECT ENEWD THROUGH THE TN VALLEY AND SERN U.S. THURSDAY...BUT ECMWF AND GFS SOLUTIONS HAVE TRENDED FARTHER NORTH COMPARED TO 24 HOURS AGO. DESPITE THIS

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TREND...WILL MAINTAIN SEVERE PROBABILITIES ACROSS NRN FL INTO SRN GA. PARTIALLY MODIFIED GULF AIR WILL ADVECT NEWD INTO THIS REGION AND CONTRIBUTE TO AT LEAST MODEST INSTABILITY. THE MOIST AXIS WILL BE CO-LOCATED WITH STRONG DEEP LAYER WINDS AND VERTICAL SHEAR ATTENDING THE EJECTING UPPER TROUGH. STORMS DEVELOPING EWD THROUGH THIS AREA MAY BE ROOTED CLOSE ENOUGH TO THE SURFACE TO POSE A SEVERE RISK.

DAY 6 AND 7...ECMWF ENSEMBLE MEANS...GFS AND MREF MEMBERS HAVE CONVERGED ON A SIMILAR SOLUTION AND MOVE THE LARGE UPPER TROUGH OVER THE ERN PACIFIC EWD INTO THE PLAINS BY SATURDAY. SEVERAL IMPULSES WILL ROTATE THROUGH THE UPPER LOW AS IT MOVES EAST. A LARGE CYCLONE WILL DEVELOP OVER THE PLAINS IN ASSOCIATION WITH THIS FEATURE SATURDAY BEFORE SHIFTING EWD INTO THE MS VALLEY SUNDAY. INTRUSION OF CP AIR IN WAKE OF EJECTING IMPULSE THURSDAY WILL NOT EXTEND FAR INTO THE GULF. AS A RESULT...RICHER LOW LEVEL MOISTURE WILL BE POISED TO ADVECT NWD AS CYCLONE DEEPENS...THOUGH DURATION OF THE MOIST ADVECTION WILL NOT BE OPTIMAL. A FORCED BAND OF STORMS WILL LIKELY DEVELOP INITIALLY OVER THE SRN AND CNTRL PLAINS INTO THE LOWER-MID MS VALLEY SATURDAY. ACTIVITY WILL SUBSEQUENTLY SHIFT EWD THROUGH THE TN VALLEY AND SERN STATES SUNDAY. UNCERTAINTY REMAINS REGARDING EVOLUTION OF THERMODYNAMIC ENVIRONMENT. HOWEVER...STORMS WILL BE EMBEDDED WITHIN STRONG VERTICAL SHEAR AND SUFFICIENT MOISTURE MAY ADVECT NWD TO SUPPORT SURFACE BASED STORMS AND A SEVERE THREAT DURING THIS TIME.

..DIAL.. 01/18/2010

6. SPC Points Products.

WUUS01 KWNS 242000
PTSDY1

DAY 1 CONVECTIVE OUTLOOK AREAL OUTLINE
NWS STORM PREDICTION CENTER NORMAN OK
0256 PM CDT TUE APR 24 2007

VALID TIME 242000Z - 251200Z

PROBABILISTIC OUTLOOK POINTS DAY 1

... TORNADO ...

0.02	29620205	31840009	32829969	34159878	36099883	36799895
	37439938	38560042	38090265	38050340	38680379	39790269
	39900075	40429732	41399221	40059052	39508808	38848564
	37958418	36688449	36088692	35588921	33819081	32059225
	29659495	28589620	26289945			
0.05	29550170	33779847	35549836	36789867	37619929	38279974
	38710060	38390214	38280314	38770342	39260258	39360172
	39509970	40169713	40909286	39849131	39048841	38398803
	37448813	36758853	35928920	33509150	31049381	29099597
	27789751	26449956				
0.10	29500136	33379826	35499756	37319785	38319929	38949924
	39759814	40179578	40499340	39289233	38749194	36299189
	34829230	33299242	31799365	29989600	27459954	
0.10	39060283	39150244	39090206	38990200	38820243	38760293
	38850315	39060283				
0.15	30249988	32459837	33369742	34759578	34969526	35409451
	35059336	33139327	31769445	30429616	29259925	29769996

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30249988
 0.15 39719785 39919645 39729543 39329501 38109484 37649701
 38449807 39129831 39719785
 0.30 30309950 31689830 32449704 33389538 32929425 31979466
 30609634 29699874 29879941 30309950
 SIGN 31789866 33809690 34729571 35339445 35059328 33169330
 31689449 29879683 29119908 29749991 30499968 30759941
 31789866
 SIGN 39129842 39759783 39839654 39229472 37729465 37549634
 37549693 37719740 38259817 39129842

&&

... HAIL ...

0.05 29650201 32140011 34599916 36349962 37050198 37290333
 38660379 40300339 41580106 42179536 41689109 40798770
 39788436 39667747 39077554 36917640 36718008 36128201
 35358552 34898760 34738965 32249172 29769453 28639565
 27089750 26179916
 0.15 29550170 31799985 34789887 36459924 37859953 38520131
 39180149 40100082 41409705 41449484 40819111 39948973
 38978842 38558631 37058608 36158712 35918911 32429238
 31179365 29319563 27699758 26449946
 0.30 27209939 29270097 30200067 33499882 36349816 37399833
 38169835 39319913 39989816 40219512 39169315 37159202
 34349268 32549350 31259478 28449757 27209939
 0.45 31489929 33889802 35379766 36979761 38769791 39179792
 39619766 39819588 38129409 35659433 32829516 30829700
 30599807 30879869 31489929
 SIGN 29460151 31209974 33579842 36749822 38179875 38399992
 38640023 39699947 40219785 39899520 38909460 35769417
 32989427 30559601 28429775 27069950 29460151

&&

... WIND ...

0.05 29650209 32159992 34169930 35429924 37469976 37990069
 38360159 39970166 40769832 41209418 40038854 38928357
 39177826 38437605 36997636 36558088 35538498 34898735
 34688957 31619218 28899546 28299609 27129746 26239913
 0.15 29510177 31729960 34019867 36439857 37739919 38790129
 39130053 39839895 40029561 40039285 39519138 38548923
 37588699 37288639 36098722 36088908 32369224 29379563
 27789740 26479946
 0.30 30559488 28449842 29009984 29990072 31629920 33109814
 35349755 37089730 38879742 39519664 39659344 38689113
 38459108 37039121 33329237 30559488
 0.45 34069739 35319705 38379651 39359554 39049450 36309293
 34099320 32199425 30209681 29419808 30229957 30809976
 31529897 32459824 33229788 34069739

&&

CATEGORICAL OUTLOOK POINTS DAY 1

... CATEGORICAL ...

HIGH 31669833 33369540 32959433 31969465 30629634 29729868
 29859935 30209948 31669833
 MDT 29200108 32869880 35109778 36909769 38059785 38959804

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	39579780	39889595	38389395	36069290	33169293	31759409
	30109599	27489954				
SLGT	29480125	32709939	34779862	36599924	37859945	38530128
	38290314	38760342	39270254	39430135	40040097	41399740
	41399441	39949122	38538963	37718720	37398653	36188712
	36148914	33539142	32239259	29639532	27859744	26449949
TSTM	35417465	33747922	33438106	33078530	33218761	33349009
	29979238	28959306	99999999	29420244	31390109	32720034
	34539995	36020006	36660134	35450376	32870522	32550789
	33791015	34841184	36931277	37581309	40771190	41100955
	40170572	40940405	42620260	43879693	43929262	43228958
	41378664	40228330	40157685	40607191		

&&

THERE IS A HIGH RISK OF SVR TSTMS TO THE RIGHT OF A LINE FROM 35 ESE BWD 20 S PRX 40 SSW TXK 30 S GGG CLL 20 NW SAT 35 NNW HDO 30 SE JCT 35 ESE BWD.

THERE IS A MDT RISK OF SVR TSTMS TO THE RIGHT OF A LINE FROM 15 SW DRT 45 W MWL 10 E CHK 35 WNW PNC HUT 25 WNW SLN 10 WNW CNK 25 SW FNB 30 SW SZL 20 SE HRO 10 WSW ELD 50 SSW SHV 40 SE CLL LRD.

THERE IS A SLGT RISK OF SVR TSTMS TO THE RIGHT OF A LINE FROM 20 WNW DRT 25 NE ABI 15 WNW FSI 35 WSW AVK 30 ENE DDC 50 NW GCK 25 NE LHX 40 SSE LIC 15 W ITR 20 ENE GLD 25 WSW MCK OLU 40 WSW DSM UIN 10 E BLV OWB 30 NNW BWG 25 W BNA 15 NE DYP 20 ESE LLQ 40 WSW MLU HOU CRP 75 S LRD.

GEN TSTMS ARE FCST TO THE RIGHT OF A LINE FROM 55 ENE HSE 15 WNW CRE 15 W OGB 15 WNW LGC TCL 10 S GWO 20 NW 7R4 80 SW 7R4 ...CONT... 45 SSW 6R6 35 W SJT 45 WNW ABI 20 ENE CDS 25 SW GAG 10 E GUY 20 NNW TCC 45 SSE SRR 15 ESE SVC 35 SSW SOW 20 SSW FLG 45 ESE SGU 10 S CDC SLC 45 SW RKS 15 NNE 4FC 45 ESE CYS 30 ESE CDR 20 NNW FSD RST 15 WNW MSN 20 ESE VPZ 25 NW CMH CXY 45 SSW BID.

(Day 4-8 Point Product)

WUUS48 KWNS 290909
PTSD48

DAY 4-8 CONVECTIVE OUTLOOK AREAL OUTLINE
NWS STORM PREDICTION CENTER NORMAN OK
0409 AM CDT FRI JUN 29 2007

VALID TIME 021200Z - 071200Z

SEVERE WEATHER OUTLOOK POINTS DAY 4-8
... ANY SEVERE ...

D6	43738110	41628135	39388310	38558585	38499110	39439365
	40109439	41409470	43099400	45318996	46248525	
D7	45377505	43397287	41357249	39727395	38537638	37688426
	38198516	40098507	42068280	43278023		
D4-5	47448528	43528843	42169294	42639686	44470047	45540446
	46920612	49600691				

7. Public Severe Weather Outlook.

ZCZC SPCPWOSPC ALL
WOUS40 KWNS 091122
ARZ000-KSZ000-MOZ000-OKZ000-091915-

PUBLIC SEVERE WEATHER OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
0622 AM CDT THU APR 09 2009

...SEVERE THUNDERSTORMS EXPECTED OVER PARTS OF THE CNTRL PLAINS...SRN PLAINS
AND OZARKS THIS AFTERNOON AND EVENING...

THE NWS STORM PREDICTION CENTER IN NORMAN OK IS FORECASTING THE DEVELOPMENT
OF NUMEROUS SEVERE STORMS WITH THE POTENTIAL FOR A FEW STRONG TORNADOES OVER
PARTS OF THE CNTRL PLAINS...SRN PLAINS...OZARKS THIS AFTERNOON AND EVENING.

THE AREAS MOST LIKELY TO EXPERIENCE THIS ACTIVITY INCLUDE

NORTHWEST ARKANSAS
SOUTHEAST KANSAS
SOUTHWEST MISSOURI
NORTHEAST OKLAHOMA

ELSEWHERE...SEVERE STORMS ARE ALSO POSSIBLE ACROSS PARTS OF THE SRN
PLAINS...CNTRL PLAINS...MID-MS VALLEY AND OZARK REGION

A WELL-DEVELOPED SPRING STORM SYSTEM OVER THE SOUTHERN PLAINS TODAY WILL
RESULT IN A RISK OF SEVERE THUNDERSTORMS ALONG A CORRIDOR FROM SRN KS ACROSS
NE OK INTO SW MO AND NW AR THIS AFTERNOON AND EVENING. SEVERE THUNDERSTORMS
ARE EXPECTED TO DEVELOP RAPIDLY THIS AFTERNOON ALONG A WARM FRONT ORIENTED
EAST TO WEST ACROSS THE MODERATE RISK AREA AND ALONG A COLD FRONT/DRYLINE SWD
ACROSS NERN OK AND NW AR. LOW-LEVEL MOISTURE WILL CONTINUE TO RETURN NWD INTO
THE REGION TODAY AND A MODERATELY UNSTABLE AIRMASS SHOULD BE PRESENT
SOUTHEAST OF A SFC LOW AND WARM FRONT BY MID-AFTERNOON.

WINDS ALOFT WILL QUICKLY INCREASE TODAY AS AN UPPER-LEVEL JET MOVES INTO THE
REGION FROM THE WEST. AS VERTICAL SHEAR INCREASES...SUPERCELLS WILL BECOME AN
INCREASING CONCERN DURING THE AFTERNOON AND THE STRONGER STORMS SHOULD BE
CAPABLE OF PRODUCING TORNADOES. SOME TORNADOES THAT OCCUR WITH THE MORE
INTENSE AND PERSISTENT SUPERCELLS COULD BE STRONG FIRST BEGINNING IN SRN KS
AND NERN OK EXPANDING SEWD ACROSS NW AR AND SW MO BY EARLY EVENING.

THOSE IN THE THREATENED AREA ARE URGED TO REVIEW SEVERE WEATHER SAFETY RULES
AND TO LISTEN TO RADIO...TELEVISION AND NOAA WEATHER RADIO FOR POSSIBLE
WATCHES...WARNINGS AND STATEMENTS LATER TODAY. ADDITIONALLY...STATE AND LOCAL
EMERGENCY MANAGERS ARE MONITORING THIS DEVELOPING SITUATION.

STATE AND LOCAL EMERGENCY MANAGERS ARE MONITORING THIS DEVELOPING SITUATION.
THOSE IN THE THREATENED AREA ARE URGED TO REVIEW SEVERE WEATHER SAFETY RULES
AND TO LISTEN TO RADIO...TELEVISION...AND NOAA WEATHER RADIO FOR POSSIBLE
WATCHES...WARNINGS...AND STATEMENTS LATER TODAY.

..BROYLES/HART/HURLBUT.. 04/09/2009

\$\$

8. Watch County List.

NWUS64 KWNS 102117
WCLA

.SEVERE THUNDERSTORM WATCH A
COORDINATION COUNTY LIST FROM THE NWS STORM PREDICTION CENTER
EFFECTIVE UNTIL 0500 UTC.

ILC007-031-037-043-063-089-091-093-097-099-103-111-141-197-201-
110500-

IL
. ILLINOIS COUNTIES INCLUDED ARE

BOONE	COOK	DE KALB
DUPAGE	GRUNDY	KANE
KANKAKEE	KENDALL	LAKE
LA SALLE	LEE	MCHENRY
OGLE	WILL	WINNEBAGO
\$\$		

INC073-089-091-111-127-131-149-110500-

IN
. INDIANA COUNTIES INCLUDED ARE

JASPER	LAKE	LA PORTE
NEWTON	PORTER	PULASKI
STARKE		
\$\$		

WIC021-025-027-055-059-079-089-101-105-127-131-133-110500-

WI
. WISCONSIN COUNTIES INCLUDED ARE

COLUMBIA	DANE	DODGE
JEFFERSON	KENOSHA	MILWAUKEE
OZAUKEE	RACINE	ROCK
WALWORTH	WASHINGTON	WAUKESHA
\$\$		

LMZ644-645-646-665-740-741-742-743-744-745-746-766-867-868-
110500-

CW
. ADJACENT COASTAL WATERS INCLUDED ARE
NEARSHORE WATERS BY PORT WASHINGTON TO NORTH POINT LIGHTHOUSE...
NEARSHORE WATERS FROM NORTH POINT LIGHTHOUSE TO WIND POINT...

NWSI 10-512 APRIL 23, 2010

NEARSHORE WATERS FROM WIND POINT TO WINTHROP HARBOR ILLINOIS...

WISCONSIN ADJACENT OPEN WATERS OF LAKE MICHIGAN TO MID LAKE

WINTHROP HARBOR TO WILMETTE HARBOR IL

WILMETTE HARBOR TO NORTHERLY ISLAND IL

NORTHERLY ISLAND TO CALUMET HARBOR IL

CALUMET HARBOR IL TO GARY IN

GARY TO BURNS HARBOR IN

BURNS HARBOR TO MICHIGAN CITY IN

MICHIGAN CITY IN TO NEW BUFFALO MI

LAKE MICHIGAN/WINTHROP HARBOR IL EASTWARD TO THE MID-POINT OF THE LAKE AND SOUTHWARD TO NEW BUFFALO MI BEYOND 5 NM OFFSHORE

LAKE MICHIGAN/NEW BUFFALO TO HOLLAND MI 5 NM OFF SHORE TO MID-LINE OF LAKE

LAKE MICHIGAN HOLLAND TO WHITEHALL MI 5 NM OFF SHORE TO MID-LINE OF LAKE

\$\$

ATTN...WFO...LOT...GRR...MKX...IWX...

9. Watch Outline Update Message.

(Initial Issuance)

WOUS64 KWNS 102120

WOU6

BULLETIN - IMMEDIATE BROADCAST REQUESTED
SEVERE THUNDERSTORM WATCH OUTLINE UPDATE FOR WS 876
NWS STORM PREDICTION CENTER NORMAN OK
320 PM CST THU FEB 10 2005

SEVERE THUNDERSTORM WATCH 9876 IS IN EFFECT UNTIL 1100 PM CST
FOR THE FOLLOWING LOCATIONS

ILC007-031-037-043-063-089-091-093-097-099-103-111-141-197-201-
110500-
/O.NEW.KWNS.SV.A.0876.050210T2120Z-050211T0500Z/

IL

. ILLINOIS COUNTIES INCLUDED ARE

BOONE	COOK	DE KALB
DUPAGE	GRUNDY	KANE
KANKAKEE	KENDALL	LAKE
LA SALLE	LEE	MCHENRY
OGLE	WILL	WINNEBAGO

\$\$

INC073-089-091-111-127-131-149-110500-
/O.NEW.KWNS.SV.A.0876.050210T2120Z-050211T0500Z/

IN

. INDIANA COUNTIES INCLUDED ARE

JASPER	LAKE	LA PORTE
NEWTON	PORTER	PULASKI
STARKE		

\$\$

WIC021-025-027-055-059-079-089-101-105-127-131-133-110500-
/O.NEW.KWNS.SV.A.0876.050210T2120Z-050211T0500Z/

WI

. WISCONSIN COUNTIES INCLUDED ARE

COLUMBIA	DANE	DODGE
JEFFERSON	KENOSHA	MILWAUKEE
OZAUKEE	RACINE	ROCK
WALWORTH	WASHINGTON	WAUKESHA

\$\$

LMZ644-645-646-665-740-741-742-743-744-745-746-766-867-868-
110500-
/O.NEW.KWNS.SV.A.0876.050210T2120Z-050211T0500Z/

CW

. ADJACENT COASTAL WATERS INCLUDED ARE

NEARSHORE WATERS BY PORT WASHINGTON TO NORTH POINT LIGHTHOUSE...

NEARSHORE WATERS FROM NORTH POINT LIGHTHOUSE TO WIND POINT...

NEARSHORE WATERS FROM WIND POINT TO WINTHROP HARBOR ILLINOIS...

WISCONSIN ADJACENT OPEN WATERS OF LAKE MICHIGAN TO MID LAKE

WINTHROP HARBOR TO WILMETTE HARBOR IL

WILMETTE HARBOR TO NORTHERLY ISLAND IL

NORTHERLY ISLAND TO CALUMET HARBOR IL

CALUMET HARBOR IL TO GARY IN

GARY TO BURNS HARBOR IN

BURNS HARBOR TO MICHIGAN CITY IN

MICHIGAN CITY IN TO NEW BUFFALO MI

LAKE MICHIGAN/WINTHROP HARBOR IL EASTWARD TO THE MID-POINT OF THE
LAKE AND SOUTHWARD TO NEW BUFFALO MI BEYOND 5 NM OFFSHORE

LAKE MICHIGAN/NEW BUFFALO TO HOLLAND MI 5 NM OFF SHORE TO MID-LINE

OF LAKE

LAKE MICHIGAN HOLLAND TO WHITEHALL MI 5 NM OFF SHORE TO MID-LINE
OF LAKE

\$\$

ATTN...WFO...LOT...GRR...MKX...IWX...

(Hourly Update)

WOUS64 KWNS 102201
WOU6

SEVERE THUNDERSTORM WATCH OUTLINE UPDATE FOR WS 9876
NWS STORM PREDICTION CENTER NORMAN OK
401 PM CST THU FEB 10 2005

SEVERE THUNDERSTORM WATCH 9876 IS IN EFFECT UNTIL 1100 PM CST
FOR THE FOLLOWING LOCATIONS

ILC007-031-037-043-063-089-091-093-097-099-103-111-141-197-201-
110500-
/O.CON.KWNS.SV.A.0876.000000T0000Z-050211T0500Z/

IL

. ILLINOIS COUNTIES INCLUDED ARE

BOONE	COOK	DE KALB
DUPAGE	GRUNDY	KANE
KANKAKEE	KENDALL	LAKE
LA SALLE	LEE	MCHENRY
OGLE	WILL	WINNEBAGO

\$\$

INC073-089-091-111-127-131-149-110500-
/O.CON.KWNS.SV.A.0876.000000T0000Z-050211T0500Z/

IN

. INDIANA COUNTIES INCLUDED ARE

JASPER	LAKE	LA PORTE
NEWTON	PORTER	PULASKI
STARKE		

\$\$

WIC021-025-027-055-059-079-089-101-105-127-131-133-110500-
/O.CON.KWNS.SV.A.0876.000000T0000Z-050211T0500Z/

WI

. WISCONSIN COUNTIES INCLUDED ARE

COLUMBIA	DANE	DODGE
JEFFERSON	KENOSHA	MILWAUKEE
OZAUKEE	RACINE	ROCK
WALWORTH	WASHINGTON	WAUKESHA

\$\$

NWSI 10-512 APRIL 23, 2010

LMZ644-645-646-665-740-741-742-743-744-745-746-766-867-868-
110500-
/O.CON.KWNS.SV.A.0876.000000T0000Z-050211T0500Z/

CW

. ADJACENT COASTAL WATERS INCLUDED ARE
NEARSHORE WATERS BY PORT WASHINGTON TO NORTH POINT LIGHTHOUSE...
NEARSHORE WATERS FROM NORTH POINT LIGHTHOUSE TO WIND POINT...
NEARSHORE WATERS FROM WIND POINT TO WINTHROP HARBOR ILLINOIS...
WISCONSIN ADJACENT OPEN WATERS OF LAKE MICHIGAN TO MID LAKE
WINTHROP HARBOR TO WILMETTE HARBOR IL
WILMETTE HARBOR TO NORTHERLY ISLAND IL
NORTHERLY ISLAND TO CALUMET HARBOR IL
CALUMET HARBOR IL TO GARY IN
GARY TO BURNS HARBOR IN
BURNS HARBOR TO MICHIGAN CITY IN
MICHIGAN CITY IN TO NEW BUFFALO MI
LAKE MICHIGAN/WINTHROP HARBOR IL EASTWARD TO THE MID-POINT OF THE
LAKE AND SOUTHWARD TO NEW BUFFALO MI BEYOND 5 NM OFFSHORE
LAKE MICHIGAN/NEW BUFFALO TO HOLLAND MI 5 NM OFF SHORE TO MID-LINE
OF LAKE
LAKE MICHIGAN HOLLAND TO WHITEHALL MI 5 NM OFF SHORE TO MID-LINE
OF LAKE
\$\$
ATTN...WFO...LOT...GRR...MKX...IWX...

(Final)

WOUS64 KWNS 110501
WOU6

TORNADO WATCH OUTLINE UPDATE FOR WT 876
NWS STORM PREDICTION CENTER NORMAN OK
1101 PM CST THU FEB 10 2005

TORNADO WATCH 9876 IS NO LONGER IN EFFECT.

ILZ000-INZ000-WIZ000-LMZ000-271700-
/O.CAN.KWNS.TO.A.0876.000000T0000Z-050211T0500Z/

NO COUNTIES OR PARISHES REMAIN IN THE WATCH.

NO MARINE ZONES REMAIN IN THE WATCH.

ATTN...WFO...LOT...GRR...MKX...IWX...

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10. **Aviation Watch Notification Message.**

WWUS30 KWNS 171510

SAW4

SPC AWW 171510

WW 1234 SEVERE TSTM CO KS 171510Z - 172300Z

AXIS..60 STATUTE MILES EAST AND WEST OF LINE..

55W LBL/LIBERAL KS/ - 80NNE RSL/RUSSELL KS/

..AVIATION COORDS.. 50NM E/W /48W LBL - 67NNW SLN/

HAIL SURFACE AND ALOFT..2 INCHES. WIND GUSTS..60 KNOTS.

MAX TOPS TO 500. MEAN STORM MOTION VECTOR 24035.

LAT...LON 37020305 39929936 39929711 37020088

THIS IS AN APPROXIMATION TO THE WATCH AREA. FOR A COMPLETE DEPICTION OF THE WATCH SEE WOUS64 KWNS FOR WOU4.

11. **Public Watch Notification Message (Tornado and Severe Thunderstorm).**

WWUS20 KWNS 102120

SEL6

SPC WW 102120

ILZ000-INZ000-WIZ000-LMZ000-110500-

URGENT - IMMEDIATE BROADCAST REQUESTED

SEVERE THUNDERSTORM WATCH NUMBER 876

NWS STORM PREDICTION CENTER NORMAN OK

320 PM CST THU FEB 10 2005

THE NWS STORM PREDICTION CENTER HAS ISSUED A SEVERE THUNDERSTORM WATCH FOR PORTIONS OF

NORTHEAST ILLINOIS
NORTHWEST INDIANA
SOUTHEAST WISCONSIN
SOUTHERN LAKE MICHIGAN

EFFECTIVE THIS THURSDAY AFTERNOON AND EVENING FROM 320 PM UNTIL 1100 PM CST.

HAIL TO 2 INCHES IN DIAMETER...THUNDERSTORM WIND GUSTS TO 70 MPH...AND DANGEROUS LIGHTNING ARE POSSIBLE IN THESE AREAS.

THE SEVERE THUNDERSTORM WATCH AREA IS APPROXIMATELY ALONG AND 60 STATUTE MILES EAST AND WEST OF A LINE FROM 40 MILES EAST SOUTHEAST OF MARSEILLES ILLINOIS TO 30 MILES NORTH NORTHWEST OF MILWAUKEE WISCONSIN. FOR A COMPLETE DEPICTION OF THE WATCH SEE THE ASSOCIATED WATCH OUTLINE UPDATE (WOUS64 KWNS WOU6).

NWSI 10-512 APRIL 23, 2010

REMEMBER...A SEVERE THUNDERSTORM WATCH MEANS CONDITIONS ARE FAVORABLE FOR SEVERE THUNDERSTORMS IN AND CLOSE TO THE WATCH AREA. PERSONS IN THESE AREAS SHOULD BE ON THE LOOKOUT FOR THREATENING WEATHER CONDITIONS AND LISTEN FOR LATER STATEMENTS AND POSSIBLE WARNINGS. SEVERE THUNDERSTORMS CAN AND OCCASIONALLY DO PRODUCE TORNADOES.

DISCUSSION...S CENTRAL WI SQUALL LINE EXPECTED TO CONTINUE EWD... WHERE LONG/HOOKED HODOGRAPHS SUGGEST THREAT FOR EMBEDDED SUPERCELLS/POSSIBLE TORNADOES. FARTHER S...MORE WIDELY SCATTERED SUPERCELLS WITH A THREAT FOR TORNADOES WILL PERSIST IN VERY STRONGLY DEEP SHEARED/LCL ENVIRONMENT IN N IL.

AVIATION...A FEW SEVERE THUNDERSTORMS WITH HAIL SURFACE AND ALOFT TO 2 INCHES. EXTREME TURBULENCE AND SURFACE WIND GUSTS TO 60 KNOTS. A FEW CUMULONIMBI WITH MAXIMUM TOPS TO 500. MEAN STORM MOTION VECTOR 24035.

...SPC

12. Watch Status Message.

WOUS20 KWNS 102220
WWASPC
SPC WW-A 102230
ILZ000-INZ000-WIZ000-LMZ000-102340-

STATUS REPORT ON WW 876

SEVERE WEATHER THREAT CONTINUES RIGHT OF A LINE FROM 15 SW JVL TO 20 NE JVL TO 35 WNW MKE TO 40 NW MKE.

..SPC..02/10/05

ATTN...WFO...LOT...IWX...MKX...GRR...

&&

STATUS REPORT FOR WS 876

SEVERE WEATHER THREAT CONTINUES FOR THE FOLLOWING AREAS

ILC007-031-037-043-063-089-091-093-097-099-103-111-141-197-201-102340-

IL

. ILLINOIS COUNTIES INCLUDED ARE

BOONE	COOK	DE KALB
DUPAGE	GRUNDY	KANE
KANKAKEE	KENDALL	LAKE
LA SALLE	LEE	MCHENRY
OGLE	WILL	WINNEBAGO

\$\$

INC073-089-091-111-127-131-149-102340-

IN

. INDIANA COUNTIES INCLUDED ARE

JASPER	LAKE	LA PORTE
NEWTON	PORTER	PULASKI
STARKE		

\$\$

WIC055-059-079-089-101-105-127-131-133-102340-

WI

. WISCONSIN COUNTIES INCLUDED ARE

JEFFERSON	KENOSHA	MILWAUKEE
OZAUKEE	RACINE	ROCK
WALWORTH	WASHINGTON	WAUKESHA

\$\$

LMZ644-645-646-665-740-741-742-743-744-745-746-766-867-868-102340-

CW

. ADJACENT COASTAL WATERS INCLUDED ARE

NEARSHORE WATERS BY PORT WASHINGTON TO NORTH POINT LIGHTHOUSE...

NEARSHORE WATERS FROM NORTH POINT LIGHTHOUSE TO WIND POINT...

NEARSHORE WATERS FROM WIND POINT TO WINTHROP HARBOR ILLINOIS...

WISCONSIN ADJACENT OPEN WATERS OF LAKE MICHIGAN TO MID LAKE

WINTHROP HARBOR TO WILMETTE HARBOR IL

WILMETTE HARBOR TO NORTHERLY ISLAND IL

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CALUMET HARBOR IL TO GARY IN

GARY TO BURNS HARBOR IN

BURNS HARBOR TO MICHIGAN CITY IN

MICHIGAN CITY IN TO NEW BUFFALO MI

LAKE MICHIGAN/WINTHROP HARBOR IL EASTWARD TO THE MID-POINT OF THE LAKE AND SOUTHWARD TO NEW BUFFALO MI BEYOND 5 NM OFFSHORE

LAKE MICHIGAN/NEW BUFFALO TO HOLLAND MI 5 NM OFF SHORE TO MID-LINE OF LAKE

LAKE MICHIGAN HOLLAND TO WHITEHALL MI 5 NM OFF SHORE TO MID-LINE OF LAKE

\$\$