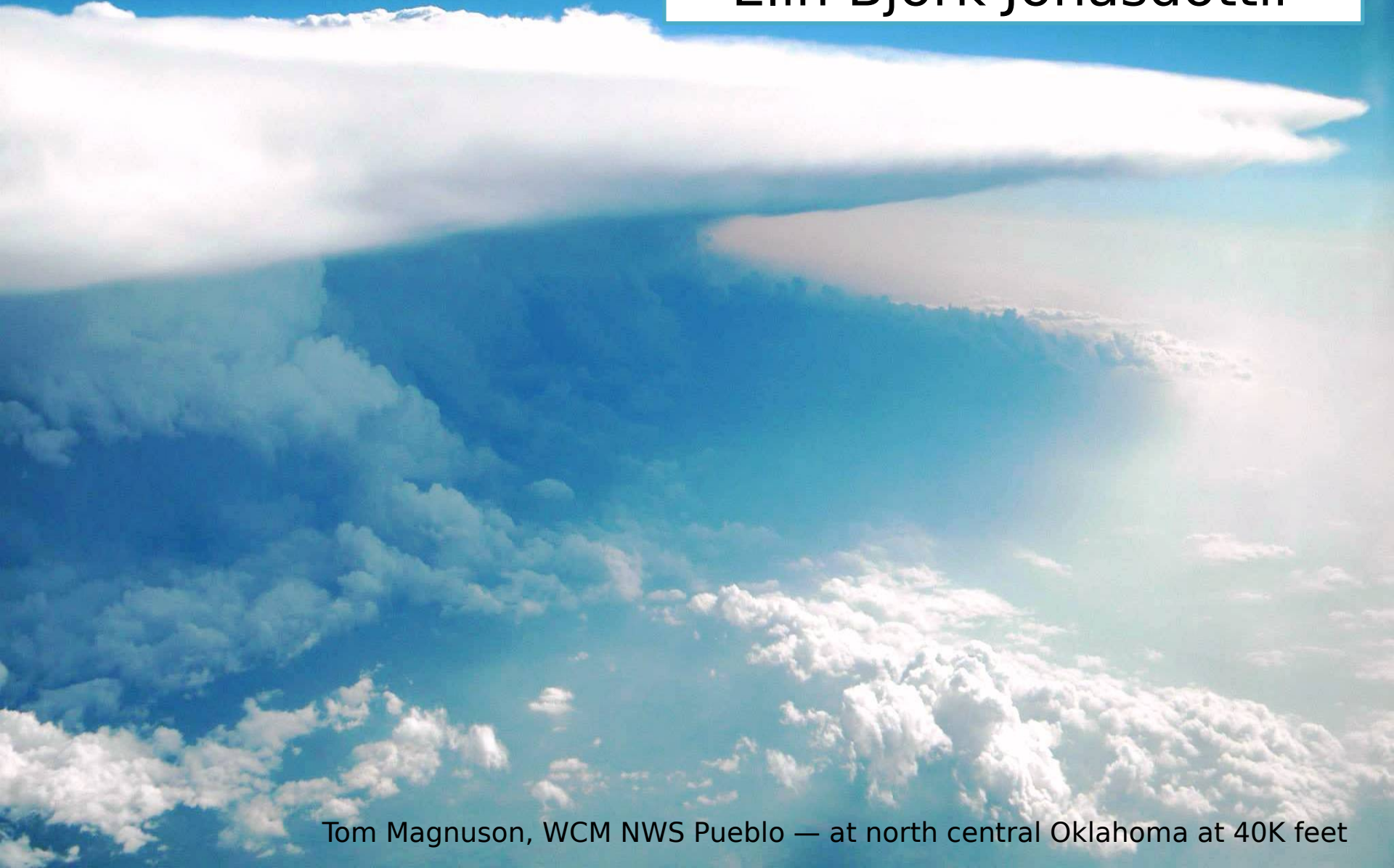


Skýstrókar í Oklahoma

Elín Björk Jónasdóttir



Tom Magnuson, WCM NWS Pueblo — at north central Oklahoma at 40K feet

Yfirlit

- Svæsinns skýstrókatíð í Oklahoma 2013
- Hlýtt og rakt loft úr suðri, háloftavindröst og rakaskil mynda sk. “tripple point”
- 18-20. maí var þriggja daga viðburður eða “outbreak” þar sem fjöldi skýstróka myndaðist, stærstur var EF-5 skýstrókur sem var breiðastur um 1,5 km í þvermál

- 29-31. maí varð annar viðburður sem myndaði fjölda skýstróka, sá stærsti um 4 km í þvermál
- Aftur gengu stærstu skýstrókarnir yfir mjög fjölbýl svæði
- Viðvaranir voru gefnar út en veðurfréttamenn í sjónvarpi gáfu mjög slæm ráð sem varð til þess að mikið umferðaröngþveiti myndaðist í nágrenni stormanna

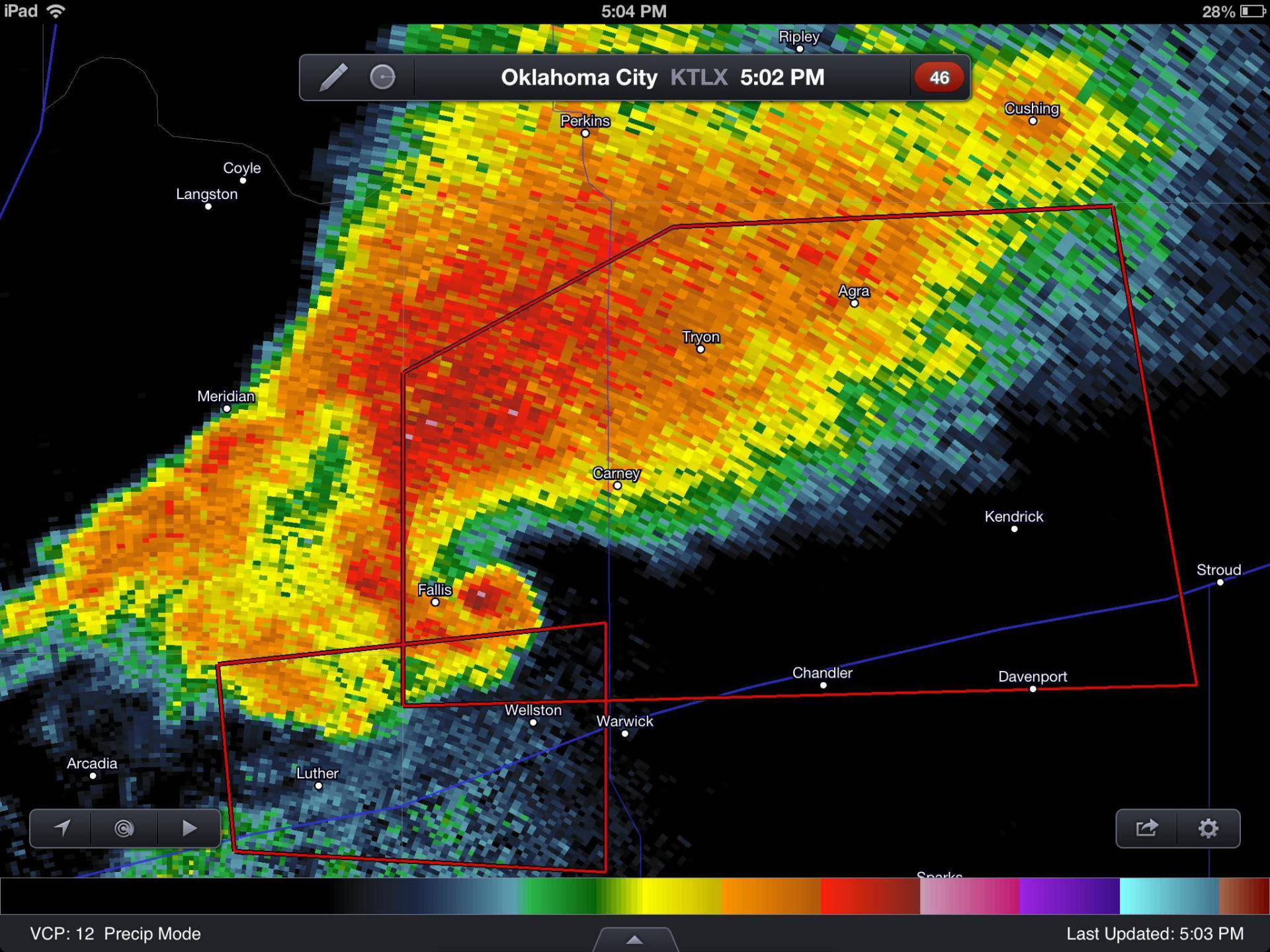
EF Rating	Wind Speeds	Expected Damage	
EF-0	65-85 mph	'Minor' damage: shingles blown off or parts of a roof peeled off, damage to gutters/siding, branches broken off trees, shallow rooted trees toppled.	 
EF-1	86-110 mph	'Moderate' damage: more significant roof damage, windows broken, exterior doors damaged or lost, mobile homes overturned or badly damaged.	 
EF-2	111-135 mph	'Considerable' damage: roofs torn off well constructed homes, homes shifted off their foundation, mobile homes completely destroyed, large trees snapped or uprooted, cars can be tossed.	 
EF-3	136-165 mph	'Severe' damage: entire stories of well constructed homes destroyed, significant damage done to large buildings, homes with weak foundations can be blown away, trees begin to lose their bark.	 
EF-4	166-200 mph	'Extreme' damage: Well constructed homes are leveled, cars are thrown significant distances, top story exterior walls of masonry buildings would likely collapse.	 
EF-5	> 200 mph	'Massive/incredible' damage: Well constructed homes are swept away, steel-reinforced concrete structures are critically damaged, high-rise buildings sustain severe structural damage, trees are usually completely debarked, stripped of branches and snapped.	 

Mesoscale discussion 20. maí

DISCUSSION...RAPID INTENSE STORM DEVELOPMENT IS EXPECTED DURING THE NEXT FEW HOURS...BOTH NEAR A STALLED SURFACE FRONT ROUGHLY WEST OF THE I-35 CORRIDOR...AND NEAR THE PRE-FRONTAL DRYLINE NOSING NORTHEASTWARD INTO SOUTH CENTRAL OKLAHOMA BY LATE AFTERNOON. ISOLATED SUPERCELLS ARE LIKELY ALONG THE DRYLINE...WITH THE MOST PROMINENT TORNADO THREAT...WHICH PROBABLY WILL INCREASE BY EARLY EVENING AS THE SOUTHERLY LOW-LEVEL JET STRENGTHENS AND ENLARGES LOW-LEVEL HODOGRAPHS. ONE OR TWO STRONG TORNADOES MAY NOT BE OUT OF THE QUESTION. OTHERWISE...LARGE HAIL IS LIKELY...SOME VERY LARGE... WITH INCREASING DAMAGING WIND POTENTIAL ACROSS EASTERN OKLAHOMA AS CONVECTION CONSOLIDATES AND EVOLVES INTO AN ORGANIZED CLUSTER.

AVIATION...TORNADOES AND A FEW SEVERE THUNDERSTORMS WITH HAIL SURFACE AND ALOFT TO 4 INCHES. EXTREME TURBULENCE AND SURFACE WIND GUSTS TO 60 KNOTS. A FEW CUMULONIMBI WITH MAXIMUM TOPS TO 600. MEAN STORM MOTION VECTOR 25035.

...KERR



Oklahoma City KTLX 5:02 PM 46

Coyle
Langston

Perkins

Ripley

Cushing

Meridian

Agra

Tryon

Carney

Kendrick

Stroud

Fallis

Chandler

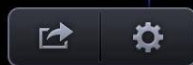
Davenport

Wellston

Warwick

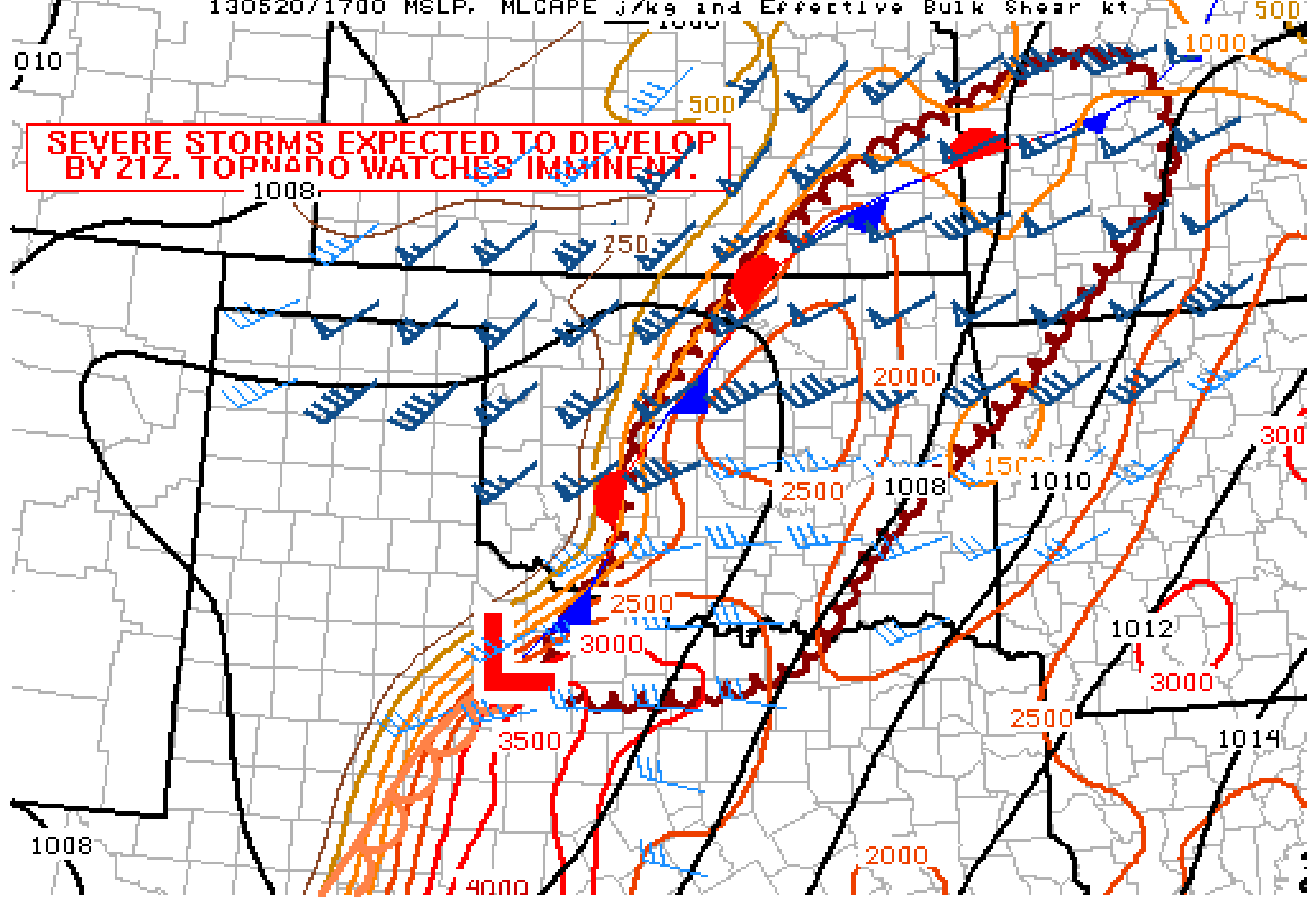
Arcadia

Luther



130520Z/1700 MSLP, MLCAPE J/kg and Effective Bulk Shear kt

SEVERE STORMS EXPECTED TO DEVELOP BY 21Z. TOPNADO WATCHES IMMINENT.



SPC MCD #0726

72357 OUN Norman

100

200

300

400

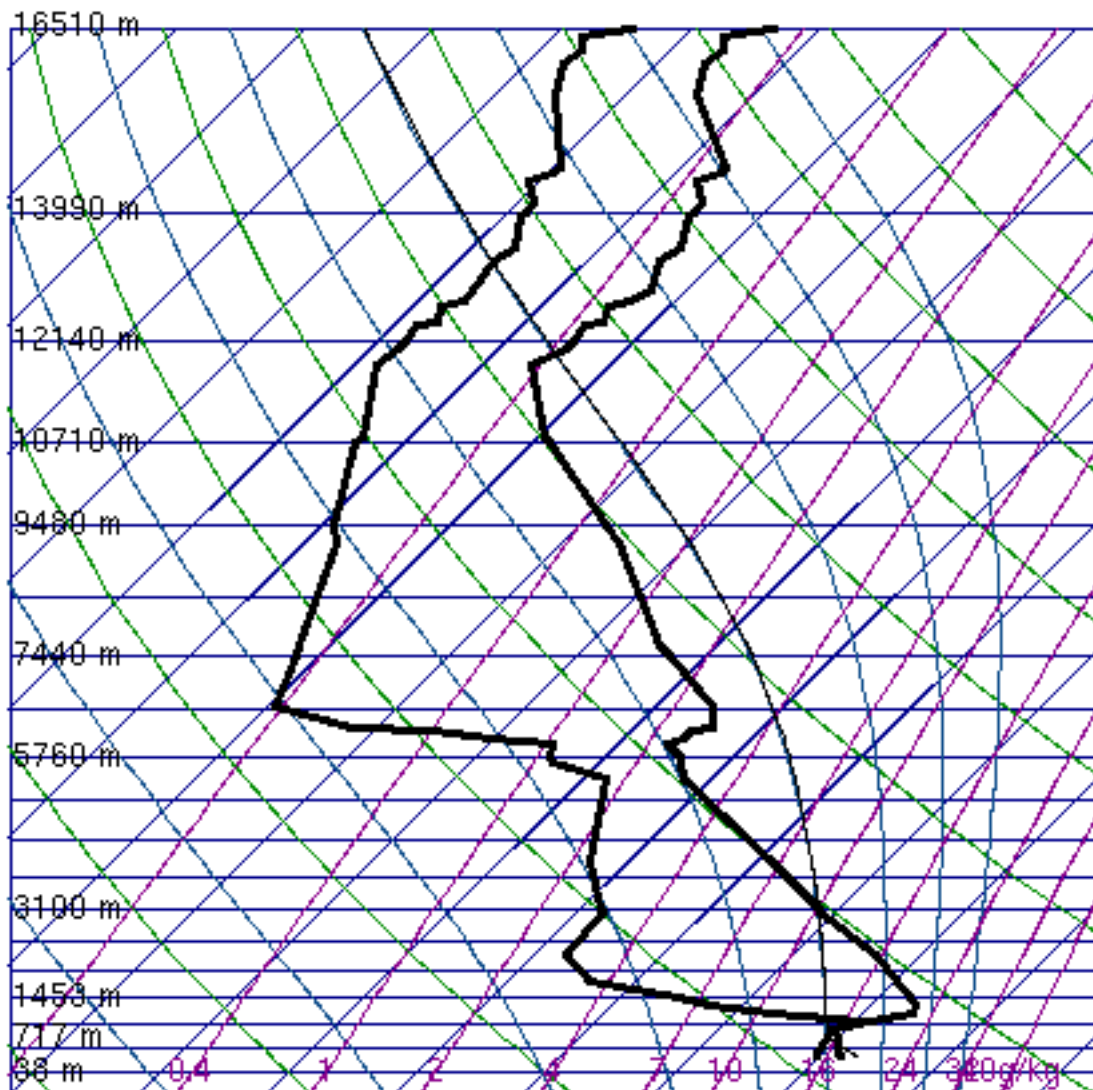
500

600

700

800

900



SLAT	35.18
SLON	-97.44
SELV	345.0
SHOW	-2.56
LIFT	-8.56
LFTV	-9.21
SWET	363.7
KINX	24.30
CTOT	18.70
VTOT	36.70
TOTL	55.40
CAPE	1914.
CAPV	2066.
CINS	-313.
CINV	-228.
EQLV	204.9
EQTV	204.9
LFCT	699.5
LFCV	720.4
BRCH	43.85
BRCV	47.33
LCLT	292.0
LCLP	921.5
MLTH	298.9
MLMR	15.18
THCK	5722.
PWAT	26.02

12Z 20 May 2013

University of Wyoming



Nicole Giuliano 2013



Nicole Giuliano 2013



Nicole Giuliano 2013



Gabe Garfield



May 19-20 Tornadoes

Edmond Tornado

May 19 4:22-4:30, 7 miles, EF1

Arcadia Tornado

May 19 4:33, <1 mile, EF0

Carney Tornado

May 19 4:41-5:24, 20 miles, EF3

Lake Thunderbird-Shawnee Tornado

May 19 6:00-6:50, 20 miles, EF4

Prague Area Tornado #1

May 19 6:59-7:12, 7 miles, EF2

Prague Area Tornado #2

May 19 7:17-7:33, 10 miles, EF1

Newcastle-Moore Tornado

May 20 2:45-3:35, 17 miles, EF5

Marlow Area Tornado

May 20 2:58-3:20, 6 miles, to be determined

Other tornado reports are
also being investigated

EF-0

EF-1

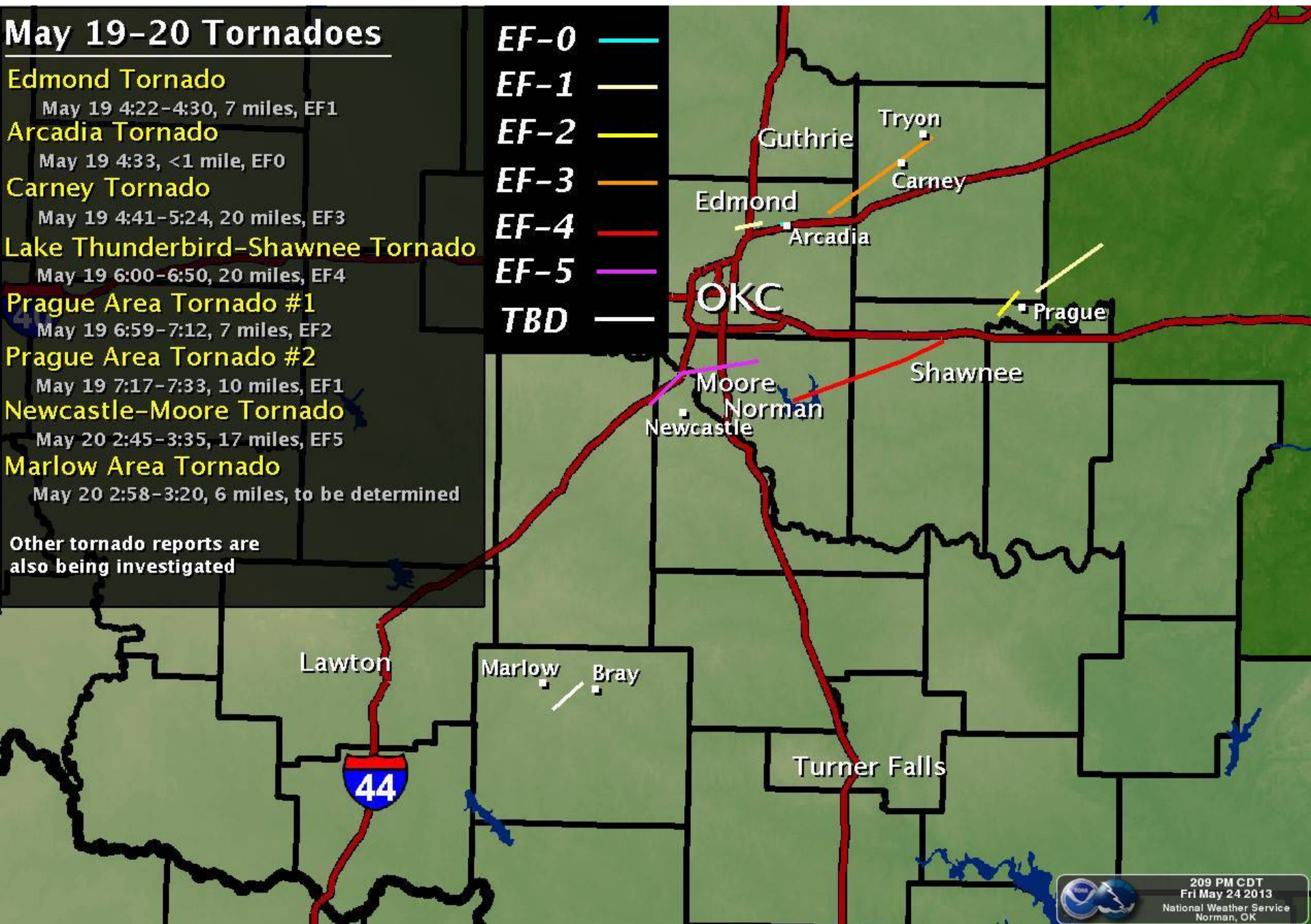
EF-2

EF-3

EF-4

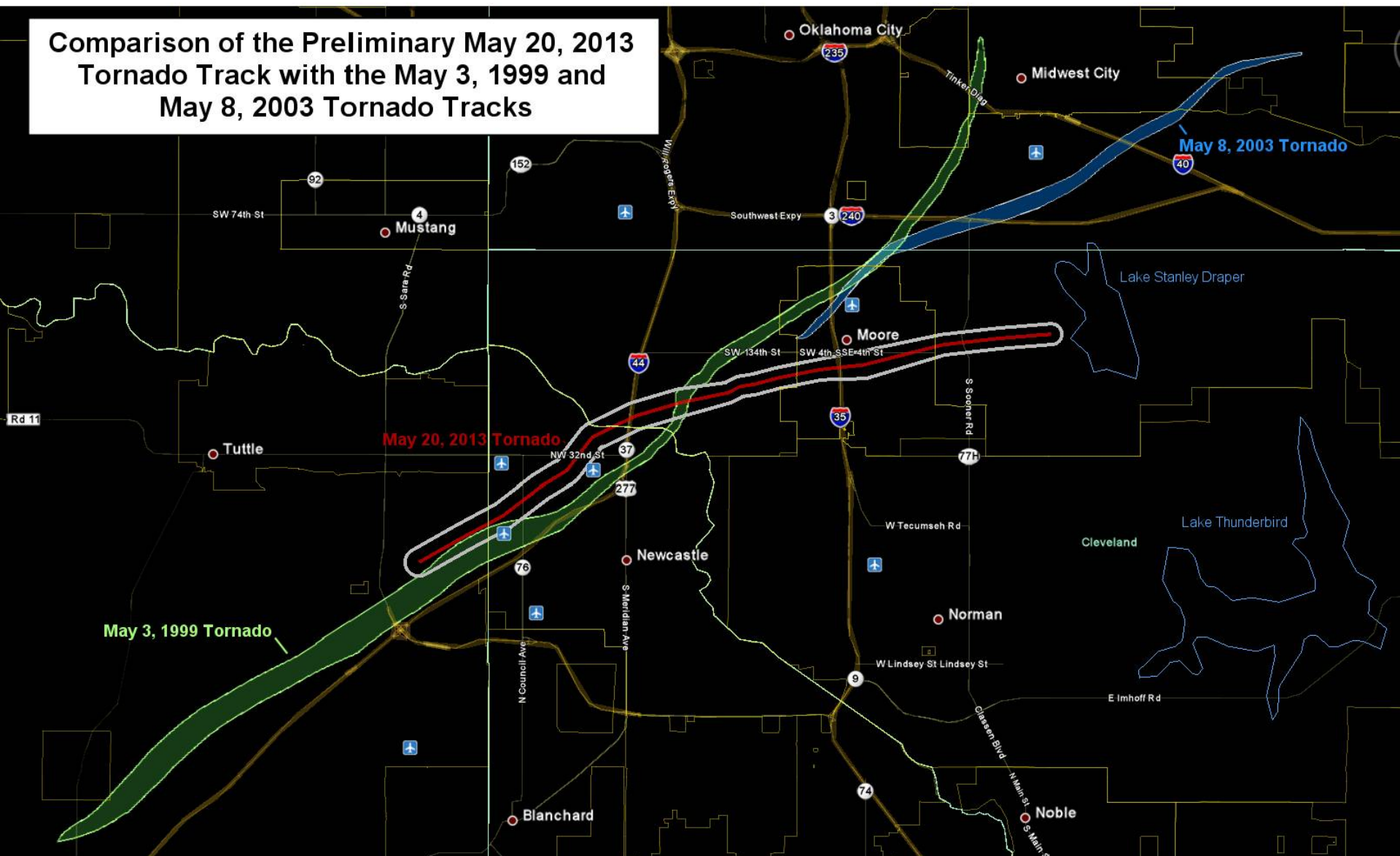
EF-5

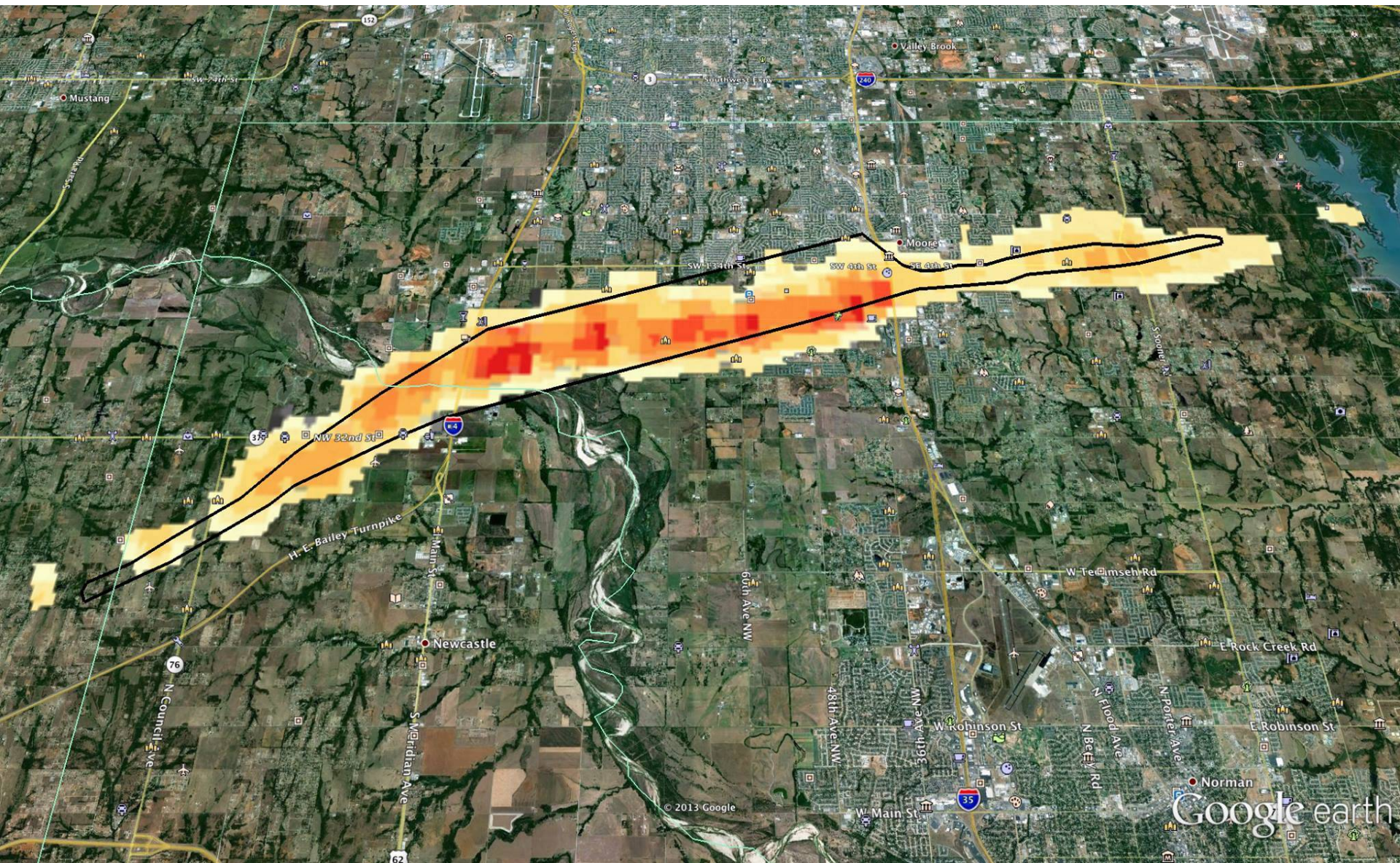
TBD

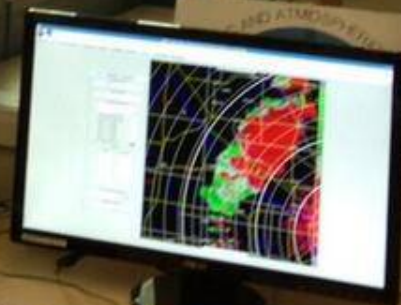
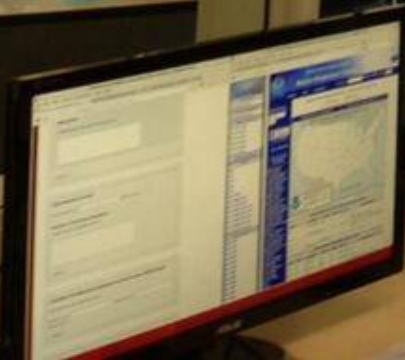
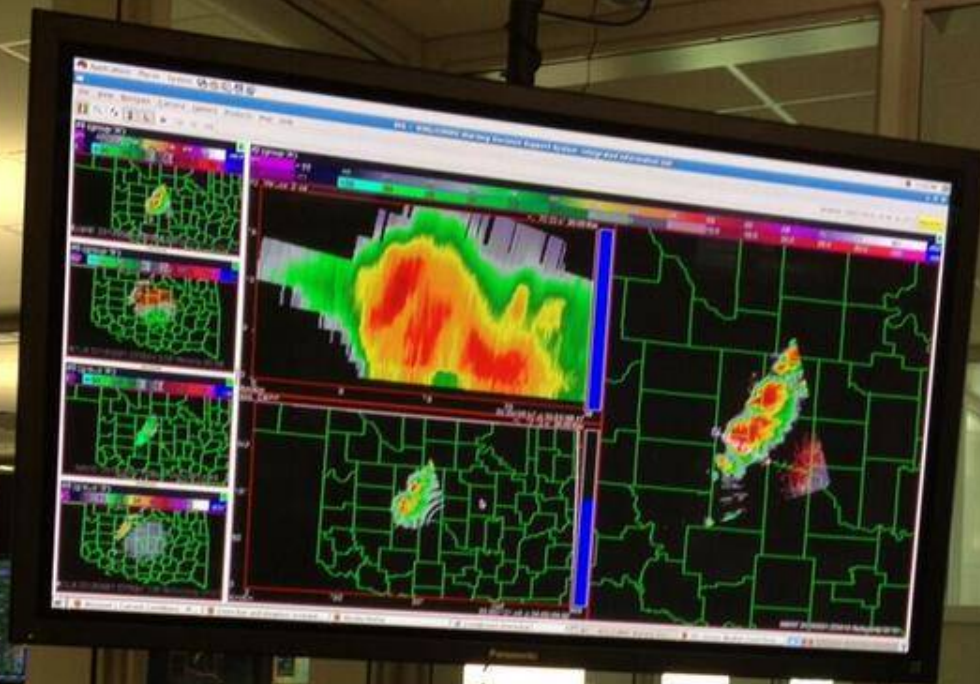


209 PM CDT
Fri May 24 2013
National Weather Service
Norman, OK

**Comparison of the Preliminary May 20, 2013
Tornado Track with the May 3, 1999 and
May 8, 2003 Tornado Tracks**







Mesoscale discussion, 31. maí kl. 15:30

DISCUSSION...THUNDERSTORMS ARE BEGINNING TO INTENSIFY OVER SOUTHEAST KS AND WESTERN/CENTRAL MO. STORMS WILL LIKELY BECOME SEVERE OVER THE NEXT COUPLE OF HOURS WITH THE RISK OF A FEW SUPERCELL STORMS. LOW LEVEL VERTICAL SHEAR PROFILES ARE FAVORABLE FOR THE THREAT OF A FEW TORNADOES /PERHAPS STRONG/. HIGH CAPE VALUES AND STEEP MID LEVEL LAPSE RATES WILL ALSO POSE A RISK OF VERY LARGE HAIL.

AVIATION...TORNADOES AND A FEW SEVERE THUNDERSTORMS WITH HAIL SURFACE AND ALOFT TO 3 INCHES. EXTREME TURBULENCE AND SURFACE WIND GUSTS TO 65 KNOTS. A FEW CUMULONIMBI WITH MAXIMUM TOPS TO 550. MEAN STORM MOTION VECTOR 24030.

...HART

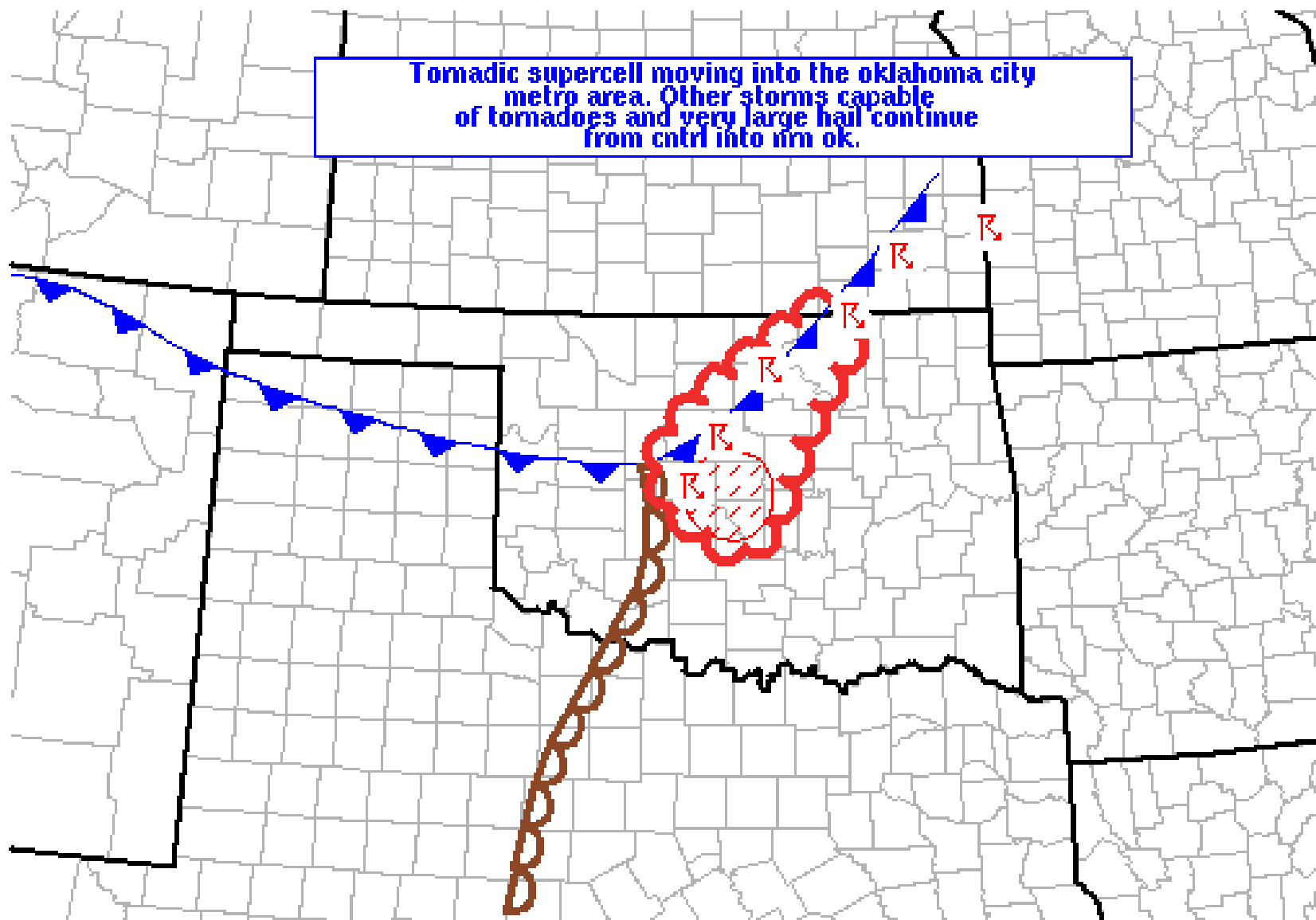
Forecaster discussion, 31. maí kl. 15:30

DISCUSSION...AN EXTREMELY UNSTABLE AIR MASS HAS DEVELOPED ACROSS MUCH OF CENTRAL/EASTERN OK THIS AFTERNOON. THIS WILL LIKELY RESULT IN RAPID DEVELOPMENT OF SEVERE THUNDERSTORMS THIS AFTERNOON AND EVENING ALONG THE DRYLINE OVER WEST-CENTRAL OK...AND ALONG A WEAK BOUNDARY EXTENDING NORTHEASTWARD INTO NORTHEAST OK. DISCRETE SUPERCELLS CAPABLE OF EXTREMELY LARGE HAIL AND DAMAGING TORNADOES ARE POSSIBLE. DAMAGING WINDS WILL BECOME AN INCREASING THREAT THROUGH THE EVENING.

AVIATION...TORNADOES AND A FEW SEVERE THUNDERSTORMS WITH HAIL SURFACE AND ALOFT TO 4 INCHES. EXTREME TURBULENCE AND SURFACE WIND GUSTS TO 70 KNOTS. A FEW CUMULONIMBI WITH MAXIMUM TOPS TO 600. MEAN STORM MOTION VECTOR 26025.

...HART

**Tomadic supercell moving into the oklahoma city
metro area. Other storms capable
of tornadoes and very large hail continue
from cntrl into nrm ok.**



SPC MCD #0913

72357 OUN Norman

100

200

300

400

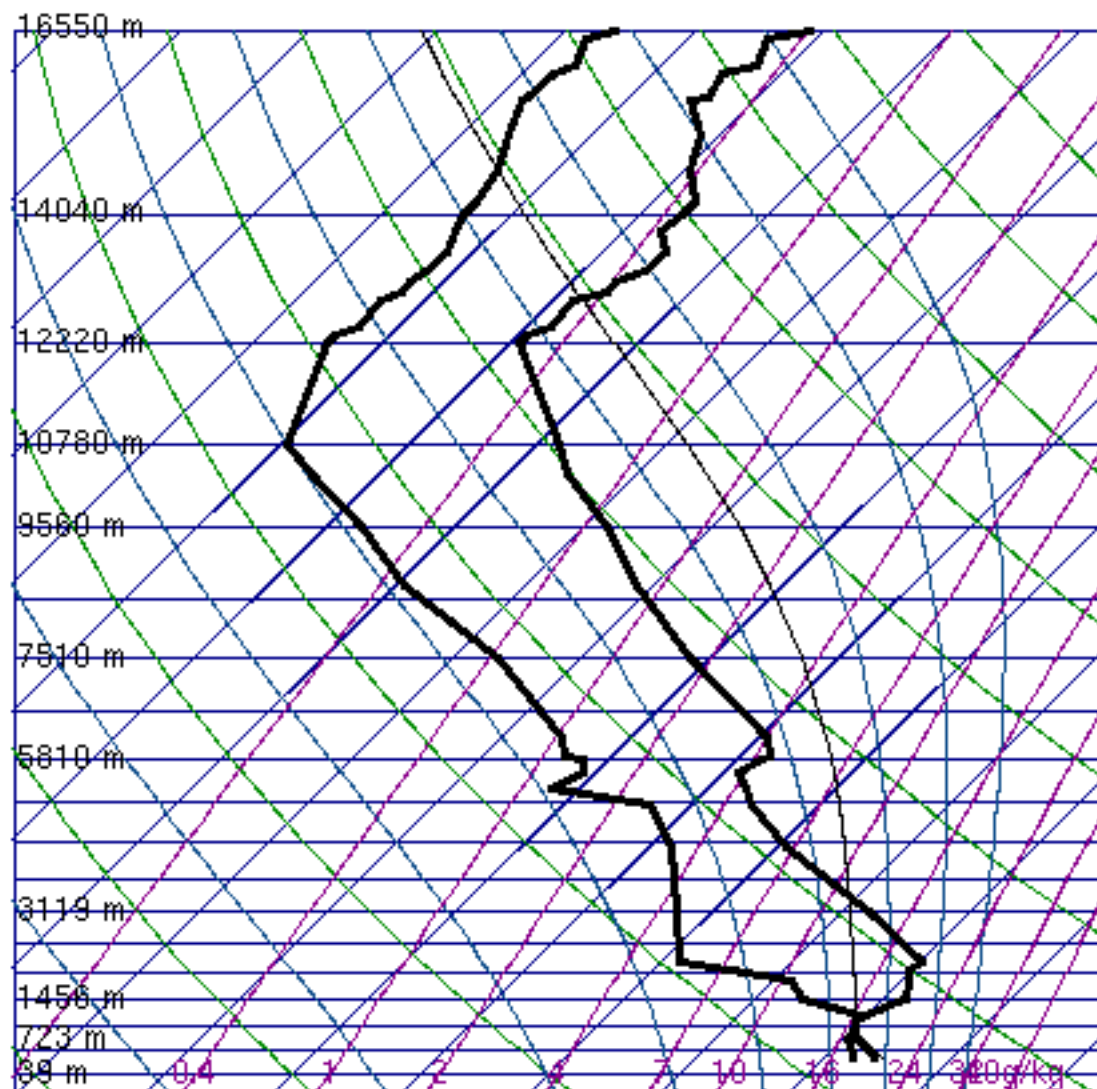
500

600

700

800

900

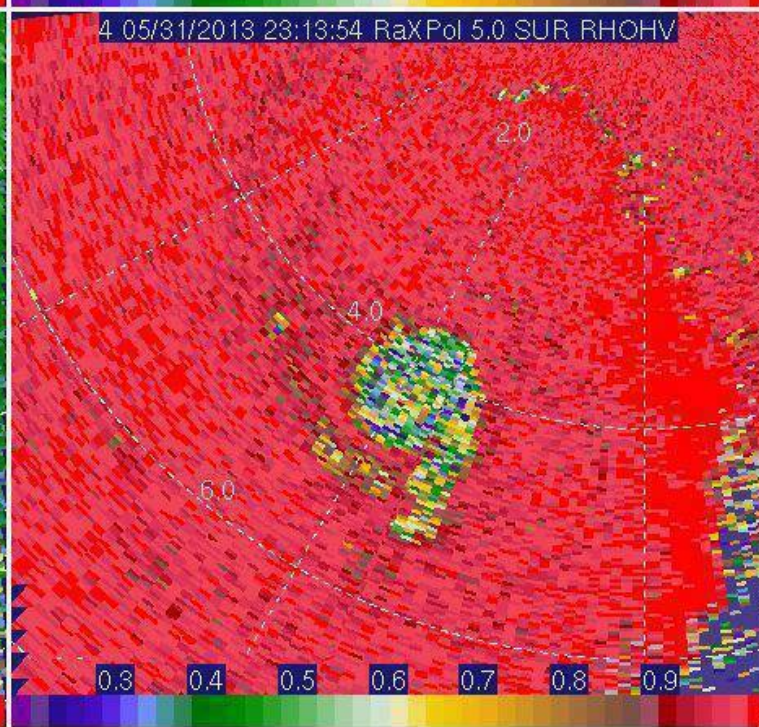
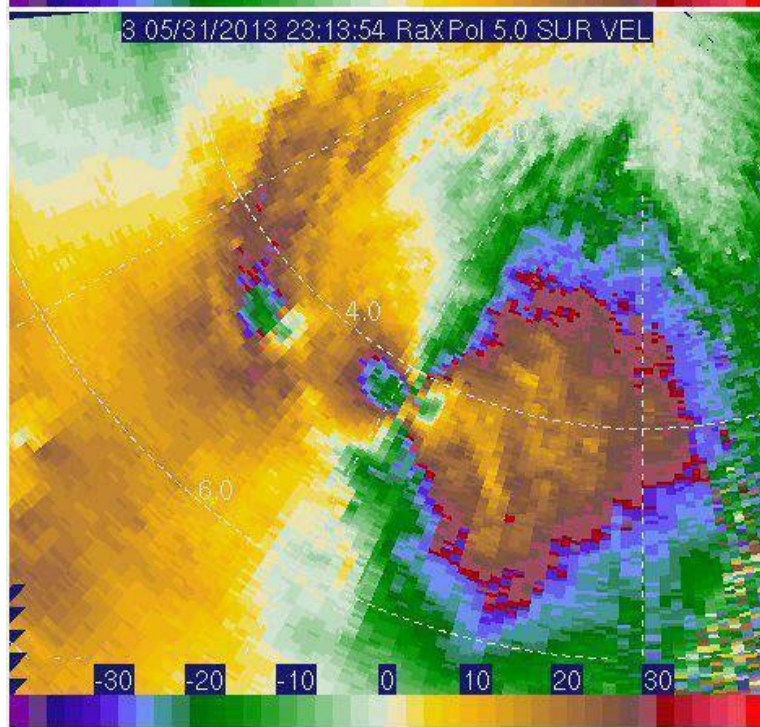
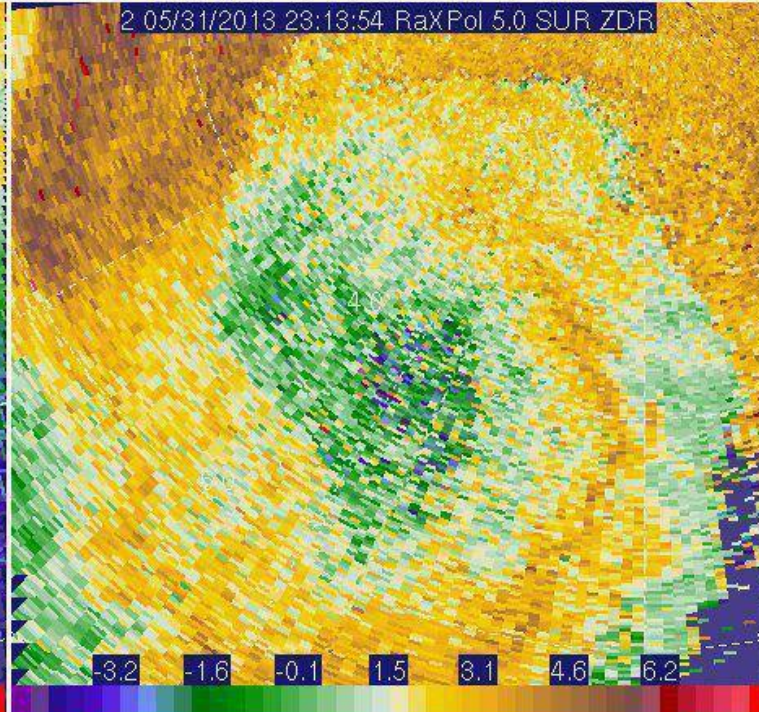
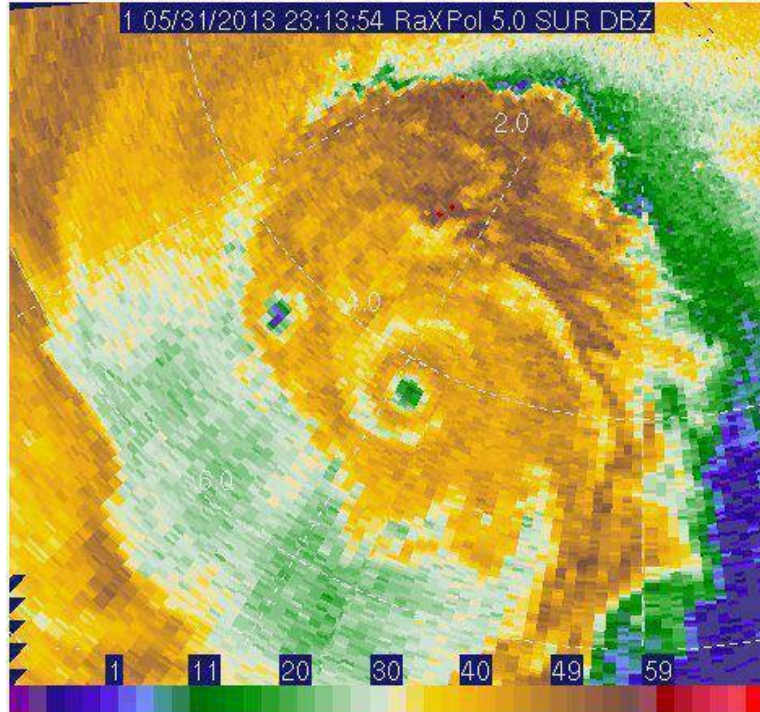


SLAT	35.18
SLON	-97.44
SELV	345.0
SHOW	-3.04
LIFT	-5.29
LFTV	-6.11
SWET	410.9
KINX	28.50
CTOT	21.70
VTOT	29.70
TOTL	51.40
CAPE	2856.
CAPV	3027.
CINS	-243.
CINV	-170.
EQLV	180.9
EQTV	180.9
LFCT	677.2
LFCV	697.8
BRCH	28.18
BRCV	29.86
LCLT	294.0
LCLP	924.4
MLTH	300.7
MLMR	17.16
THCK	5771.
PWAT	37.28

12Z 31 May 2013

University of Wyoming

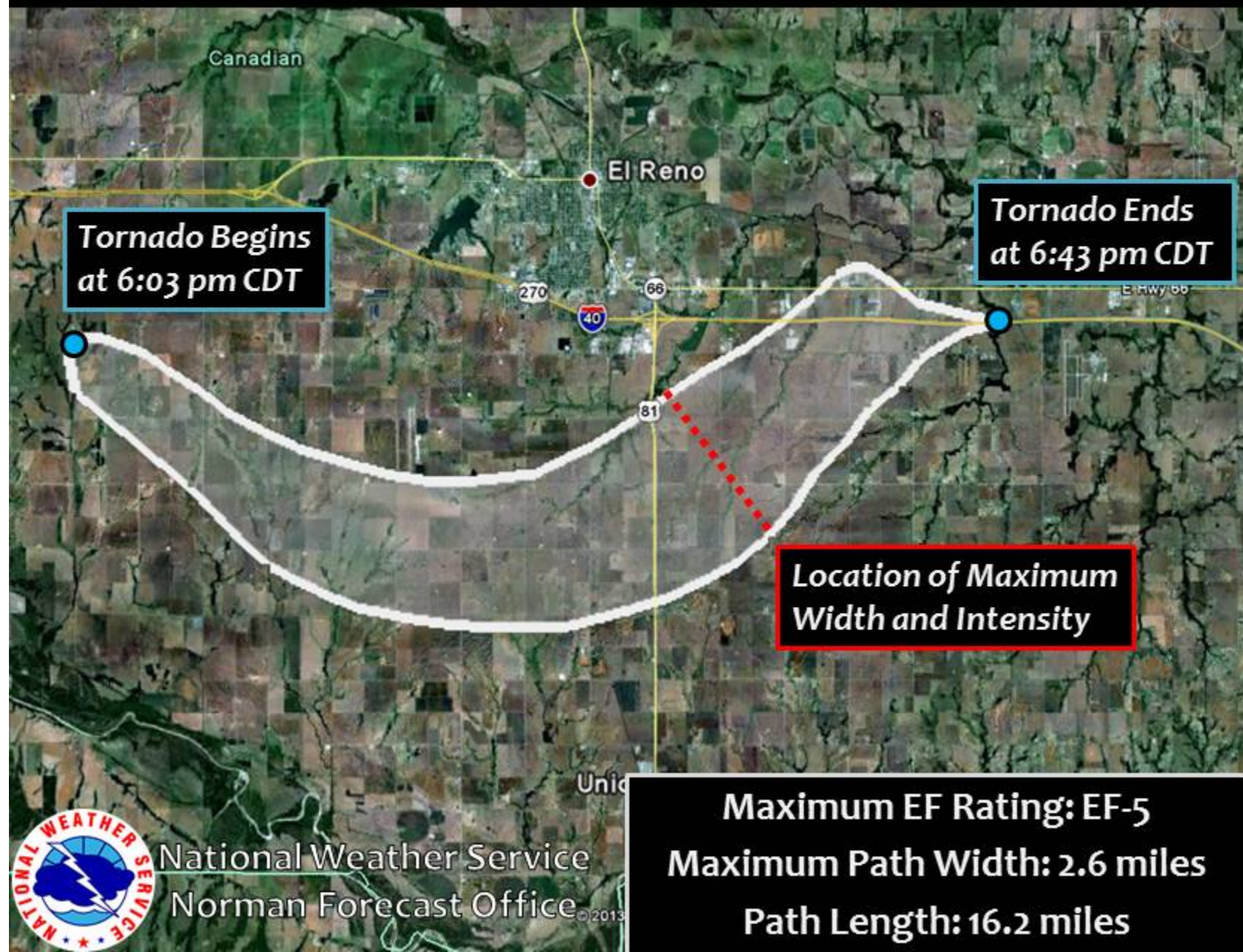






© 2013 Y. Snyder

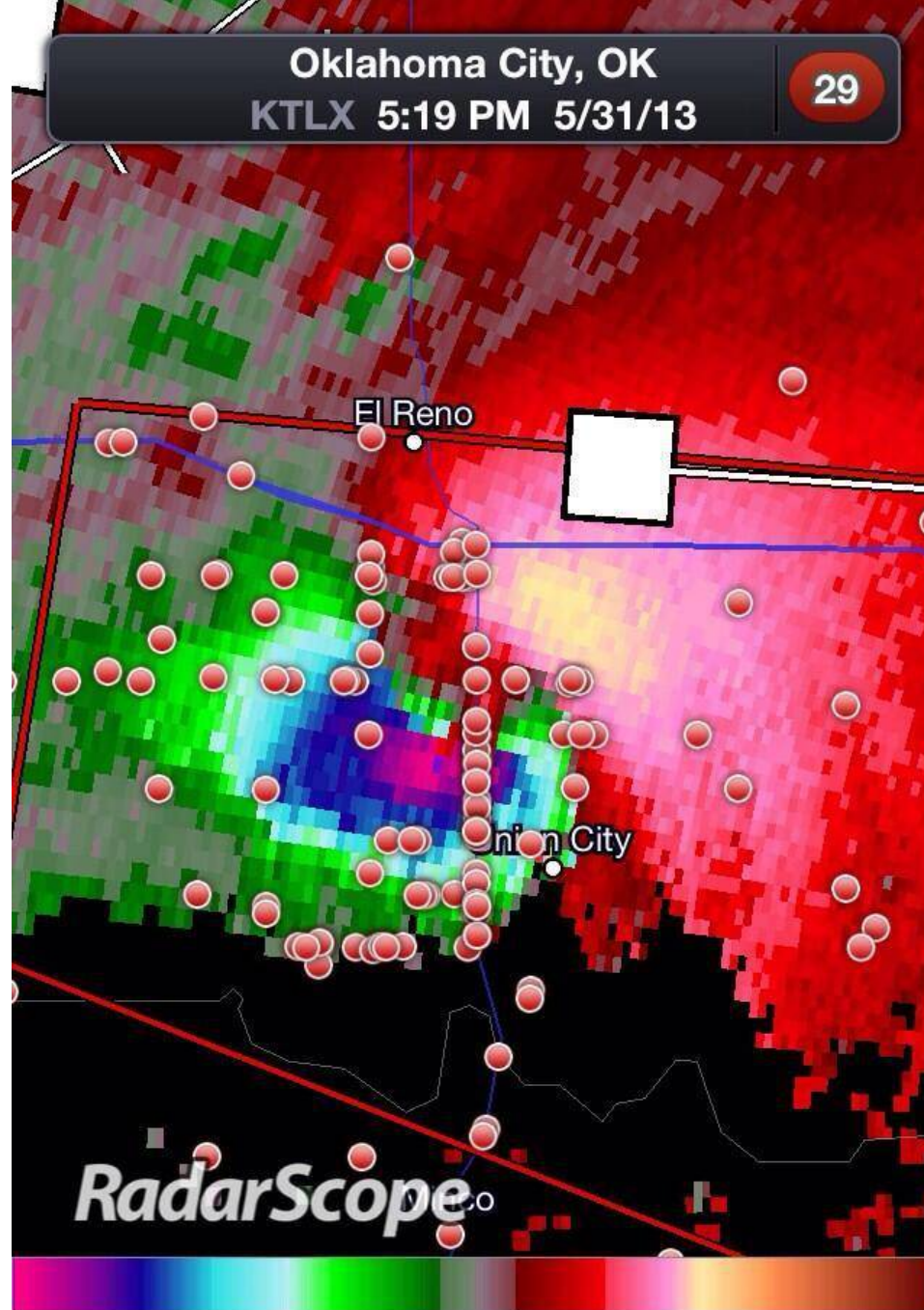
El Reno Tornado - May 31, 2013



Maximum EF Rating: EF-5
Maximum Path Width: 2.6 miles
Path Length: 16.2 miles

Oklahoma City, OK
KTLX 5:19 PM 5/31/13

29



SuperRes Velocity

Tilt 1 (Elevation = 0.5°)

Preliminary Tornado Tracks for the May 31, 2013 El Reno and South OKC Tornadoes

