## Memories - Tour 5 June $12^{\text {th }}$ to June $22^{\text {nd }}, 2023$



The team ...


Peter, Jean, Valerie, Louise, Cindy \& Steve


## Chasing summary - Tour 5

On this tour we drove 5,162 miles across five states - Oklahoma, Texas, Kansas, New Mexico \& Colorado.
We chased severe thunderstorms on 6 of the 11 days <a "bonus day" chasing> out on the Plains, sighting 6 tornadoes.
The week's weather was dominated by some pretty active weather patterns, with produced lots of intense storms.
Despite driving long distances \& active chasing, we managed some great restaurant meals on this tour, along with the usual chaser fast food, and enjoyed some picnic sites and even some tourist experiences.

Some of the highlights of the tour were some unforgettable sunset scenes on a rotating supercell in Mason, TX on the "bonus day"; right in front of an advancing tornado <not visible in the murk> in Lautz, TX on Day 1 ; and seeing dual tornadoes on both Day $3 \& 9$.

Always fascinating to witness these rotating mesocyclonic supercells in action - some of the cloud structures provided some very photogenic opportunities - the "bonus day" had some memorable rotating structure near Voca, TX, along with Day 4 near Springfield, CO - it "never gets old". Dramatic memories on Day 5 in the Oklahoma Panhandle as a lead supercell did everything but put down a tornado, then morphed into an outflow "wall" racing across the landscape at $60 / 70 \mathrm{mph}$ - unbelievable sights.

The shared experience on these tours is what makes them so special - and many thanks to Steve for his able assistance with co-driving.
Of course, the challenge on any tour is to make the most of what's doled out by Mother Nature, while taking a great road trip across the landscape, towns and culture of the middle of America ... as detailed on the following pages.

## The SPC forecast at 1300 UTC ... Bonus Day, June $12^{\text {th }}$

Convective Outlook


Tornado Outlook

... SPC focuses on wider areal coverage - is only guidance for storm coverage \& intensity - need to analyse other models/forecasts for chase targets ...

## The chase day in words ... Bonus Day, June 12 ${ }^{\text {th }}$

... a "Bonus Day" for Tour 5 due to a promising setup for tornadic conditions in Texas within driving distance this afternoon ... turned out to be a VERY dramatic day, with some of the best structure I've seen in a rotating tornado-warned supercell, with an echo top of $64,000 \mathrm{ft}$ ... targeted the western end of a $5 \%$ tornado risk, setting Coleman, TX as the spot from which to target actual initiation, forecast to be widely scattered intense supercells, from 6-8pm CDT ... drove 521 miles today from Oklahoma City to San Angelo, TX via Mason, TX ... away SW from Oklahoma City about 12:45pm CDT after picking up Steve/Cindy \& Valerie/Louise from the airport - thankfully their flight arrivals were on time - and after getting Steve added to the car rental policy ... rain \& lightning heading down to Lawton, OK then some clearing with warning temps - then a couple of severe-warned storms south of Wichita Falls, TX which we detoured around on our way to Coleman ... as we headed south to Throckmorton, TX from Seymour, TX a tornado watch was issued at 3:30pm CDT over the target area ... temps now near 90F ... reached our target, Coleman, about 5:45pm CDT with no signs of initiation - then just as we dropped south towards Rockwood, TX about 6pm CDT, the first three towers started going up to our SW ... lots of chasers on the scene, as the middle tower exploded, getting severe-warned and reaching a $64,000 \mathrm{ft}$ echo top within 45 minutes, then tornado-warned within the hour ... stopped multiple times to marvel at this spectacle, only leaving when intense CGs started to bracket our vehicle, or the intense hail core with baseball hail got too close ... the tornado-warned storm was now moving ESE, so took the road running SE to Fredonia, TX just staying ahead of the storm ... stopped near Brady, TX to watch the storm acquire prominent supercellular structure, then stopped near Voca, TX to watch the storm morph into incredible spiral/corkscrew/rotating shapes overhead, then stopped at an overlook on a side road just SW of Fredonia, then stopped on the way to Mason, TX to catch a view of a newly intensifying storm to the west of the tornadowarned storm we'd been tracking ... into Mason, TX to witness the most incredible sunset colours on the anvil/mammatus overhead, and the corkscrewing updraft immediately to our NW, punctuated by vivid CG bolts flashing down just to our north, with booming thunder ... a last minute change in hotel bookings to cut our travel to our hotel in half, still driving for $11 / 2 \mathrm{hrs}$ to San Angelo in the dark, lightning still flashing behind us as we headed west from Mason, TX ... what an incredible storm and a great "bonus day" for Tour 5 ...

During the chase ... Bonus Day, June 12 ${ }^{\text {th }}$

... 2:38 pm CDT - heading towards Wichita Falls - couple of storms in the way to our target ...
couple of storms in the way to our target.


6:02 CDT - first updraft - northern cell

6:09 pm CDT - middle cell of three
strengthening, south of Rockwood, TX ..


.. 3:42 pm CDT - approaching tornado watch box issued over our target area ...


6:14 pm CDT - middle cell now severe-warned - exploding upwards


6:15 CDT - anvil soaring overhead .


6:34 pm CDT - southern storm rapidly intensifying, merging with middle storm ...


6:38 pm CDT - solid base, surging updraft, sharp well-defined anvil near Brady, TX ..

## During the chase ... Bonus Day, June 12 ${ }^{\text {th }}$



6:39 pm CDT - solid core on southern storm which is becoming dominant, $3^{\prime \prime}$ hail marker ...


6:41 pm CDT - 64,000 ft echo top! .


6:43 pm CDT - near Brady, TX ..

... 6:57 CDT - circular mesocyclone structure developing - near Brady, TX .

... 7:03 pm CDT - tornado-warned with distinct hook echo .

.. 7:14 pm CDT - fully-fledged mesocyclone rotating structure now .

## During the chase ... Bonus Day, June 12 ${ }^{\text {th }}$


.. 7:22 pm CDT - massive inflow band into the updraft ..

... 7:39 pm CDT - near Voca, TX - note curved banding aloft

... 7:48 CDT - prominent corkscrew updraft rotation now - near Voca, TX .

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... 7:53 pm CDT - feathery circular structure rotating overhead ...

.. 8:00 pm CDT - tornado-warned again as we head SE from Voca, TX ...

## During the chase ... Bonus Day, June 12 ${ }^{\text {th }}$


... 7:51 pm CDT - timelapse video by Valerie - near Voca, TX ...
.. 8:09 CDT - awe inspiring rotating updraft, solid wall cloud with lowering, almost a tornado


8:52 pm CDT - tornado-warned again right next to us in Mason, TX ...

## During the chase ... Bonus Day, June $12^{\text {th }}$

... incredible scenes in Mason, TX - corkscrew updraft just boiling up in front of us in the sunset light - CG lightning shooting down from the clouds ...

.. 8:34 pm CDT ..

.. 8:41 pm CDT ..

. 8:41 pm CDT .


8:48 pm CDT ...
what we also witnessed, but didn't capture - lightning photos by Charles Peek from a little further away https://m.facebook.com/story.php?story fbid=845976867147471\&id=100052054955893\&mibextid=qC1gEa ...

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## The chase day in maps ... Bonus Day, June 12 ${ }^{\text {th }}$


... where we drove on the day -521 miles ..

... where the storm reports were on the day ...

## The SPC forecast at 1300 UTC ... Day 1, June $13^{\text {th }}$

Convective Outlook
Tornado Outlook

... SPC focuses on wider areal coverage - is only guidance for storm coverage \& intensity - need to analyse other models/forecasts for chase targets ...

## The chase day in words ... Day 1, June $13^{\text {th }}$

... drove 580 miles from San Angelo, TX to Perryton, TX targeting a Marginal Risk in the Oklahoma Panhandle/far Northern Texas Panhandle ... the models \& CAMs looked more promising than just Marginal Risk, and the Enhanced Risk in east Texas looked messy \& disorganised, so decided to head north ... helpfully the SPC upgraded the risk to Slight, with a $2 \%$ tornado risk, with the early morning update - selected Stratford, TX as the nominal target, with forecast storms there by 5-6pm CDT ... out for a good breakfast at Fleming's Family Diner, then a visit under cloudy "gray soup" skies to the International Waterlily Collection at the Civic League Park - the collection has the most extensive collection of water lilies in the US ... away from San Angelo heading north about 10:15am CDT ... picnic lunch in the Buddy Holly Lake Recreation Area in Lubbock, TX under sunny skies ... through Amarillo, TX about 4:30pm CDT as storms had fired early in the Oklahoma Panhandle headed for Stratford, TX ... storm tornado-warned as we headed north from Amarillo, TX towards Dumas, TX ... through Dumas about 5:15pm CDT heading towards the "tornado on the ground" storm, stopping near Lautz, TX right in front of the advancing storm ... watched as the edge of obvious rotation in the storm was almost overhead estimate we let the possible tornado come within $1 / 2$ mile of our position <but couldn't make out an obvious tornado shape> before we bailed south several times to stop \& observe - strong cold outflow slammed into us each time, with circulation now moving SE just to our NE ... drove east at Machovec, TX then south \& east on US152 to Stinnett, TX to keep in front of storm ... storm continually tornado-warned, including "tornado on the ground" warnings - stopped short of Stinnett, TX a couple of times to marvel at incredibly turbulent inflow bands with developing updrafts overhead, and the dramatic storm structure in front of us ... tornado sirens wailing in Stinnett as we drove through - lots of chasers fleeing down from the north ... another storm developed south of Borger, TX threatening to cut off our escape path east from the tornado-warned storm ... decided to make a run for it from Borger to Pampa, TX - tornado sirens wailing in Borger ... some heavy rain \& noisy hail as we cut through, with the storm strongly intensifying behind us, then merging with the previously tornado-warned storm, to form a new tornado-warned storm right over where we had been ... decided to call it a day about 7:30pm CDT and head northeast to Canadian, TX out of the merged storm's path, which was then newly tornado-warned - some heavy spots of rain \& lightning under the anvil as we drove northeast ... good dinner at The Stumblin' Goat in Canadian, then a 40 minute drive to our hotel in Perryton ... a VERY dramatic day with a close encounter with the rotation on a tornado-warned storm - too much rain wrapping, dust \& then outflow arcus clouds to actually sight a funnel, but some amazing sights nonetheless ...

## Before the chase ... Day 1, June $13^{\text {th }}$



## During the chase ... Day 1, June $13^{\text {th }}$



5:03 pm CDT - tornado-warned storm to our north as we were heading to Dumas, TX ..

... 5:33 CDT - sitting in Lautz, TX as tornado-warned storm approaches .

... 5:36 pm CDT - tornadic circulation approaches - Lautz, TX ..

.. 5:37 pm CDT - getting closer

.. 5:40 CDT - obvious circular rotating structure - about to bail south on US287 ..

... 5:41 pm CDT - circulation passing over US287 to our north - multiple "tornado on the ground" warnings, 3 " hail marker .

5:39 pm CDT - tornado in that dark area under the base?

... 5:40 pm CDT - getting much closer .

## During the chase ... Day 1, June $13^{\text {th }}$


. 5:46 pm CDT - tight circulation nearly on the ground just to our NNE


6:26 pm CDT - rotation couplet just to our NW - heading to Stinnett, TX ...


5:56 CDT - watching from near Cactus, TX - tornado-warned again ..

.. 6:11 pm CDT - arcus outflow cloud surging forward - near Sunray, TX ...

... 6:22 pm CDT - tornado-warned again, on SR152 about to head east to Stinnett, TX .

... 6:44 pm CDT - south of Stinnett, TX sirens blaring as we drive through ...

## During the chase ... Day 1, June $13^{\text {th }}$


.. 7:09 pm CDT - escape route east, have just cut through developing storm, noisy hail on the roof, heavy rain \& lightning .

. 7:13 pm CDT - intensifying southern storm has closed in behind us - note curving outflow boundary to the west ...

.. 7:27 CDT - storm merger underway behind us, tornado-warned again heading east from Pampa, TX ..

... 7:37 pm CDT - southern storm now dominant, we're breaking away to Miami, TX under the anvil ..

... 7:40 pm CDT - storm merger almost complete behind us ...

... 7:43 CDT - merged storm tornadowarned again - would go on to produce grapefruit-sized hail near McLean, TX ...

## The chase day in maps ... Day 1, June 13 ${ }^{\text {th }}$


... where we drove on the day -580 miles .

... where the storm reports were on the day ...

## The SPC forecast at 1300 UTC ... Day 2, June $14^{\text {th }}$

Convective Outlook
Tornado Outlook

... SPC focuses on wider areal coverage - is only guidance for storm coverage \& intensity - need to analyse other models/forecasts for chase targets ...

## The chase day in words ... Day 2, June $14^{\text {th }}$

... drove 306 miles from Perryton, TX to Trinidad, CO - pretty much a sightseeing day as there were no real storms to target within chasing distance, except for some possible evening thundershowers off the Rockies ... away from Perryton about 10:30am CDT after a really delicious breakfast at The Golden House Cafe in Perryton - highly recommend ... stop along the way for an abandoned farmhouse photo shoot ... picnic lunch at Clayton Lake State Park \& Dinosaur Trackways - said to be the most extensive \& best preserved dinosaur footprints in the USA from 113 million years ago when this area was covered by an inland seaway ... then a visit to Capulin Volcano - site of the annual "chaser fitness test" did the crater rim AND the descent into the crater this time - guess I can continue on with storm chasing ... west \& north towards our hotel in Trinidad with the sun lowering behind some thundershowers, pretty virga hanging down - beautiful golden light on the grasslands just to the east of Raton, NM ... into our hotel about 7pm MDT, and another great dinner at the Sunset Bar \& Grill - CGs \& thunder during dinner on a storm just north of Trinidad ... pleasant, relaxing day ahead of a forecasted 5\% tornado risk tomorrow largely over SW Kansas/Western Oklahoma - time for a good night's rest before tomorrow's promised action, parameters lining up for a good chase day ...

... abandoned farmhouse shoot near Gruver, TX ...

... "do you think there are ticks in there?"...


## Before the chase ... Day 2, June $14^{\text {th }}$

... visit to Clayton Lake State Park \& Dinosaur Trackways, then Capulin Volcano National Monument ...

.. 12:53 pm MDT - picnic lunch ...

.. Clayton Lake \& camping pavilions across the water ..

... view from summit - looking south .. Capulin Volcano - looking west ..

... 2:03 pm CDT - many footprints ...

... 5:19 MDT - deer grazing inside the cone near the crater floor ..

. out for a stroll 113 million years ago ..

. 6:18 pm CDT - pretty virga on the way to Raton, NM ...

## The chase day in maps ... Day 2, June $14^{\text {th }}$


... where we drove on the day - 306 miles ..

... where the storm reports were on the day ...

## The SPC forecast at 1300 UTC ... Day 3, June $15^{\text {th }}$

Convective Outlook


Tornado Outlook

... SPC focuses on wider areal coverage - is only guidance for storm coverage \& intensity - need to analyse other models/forecasts for chase targets ...

## The chase day in words ... Day 3, June 15th

... we drove 505 miles from Trinidad, CO to Enid, OK targeting the western edge of a $10 \%$ tornado risk in extreme NE Texas Panhandle specifically between Spearman, TX \& Canadian, TX ... SPC issued a substantially updated risk overnight, showing a Moderate Risk of severe weather, with a $10 \%$ tornado risk in an elongated narrow zone from the NE Texas Panhandle through much of Western Oklahoma ... away south from Trinidad about 8:30am MDT after an early wake-up at 7am MDT, then a slow breakfast due to staff shortages at Bob \& Earl's Cafe ... clear sunny skies across New Mexico, then into Texas about 11:15am CDT ... pretty much straight east from Dalhart, TX, then a jog north to Spearman, TX for lunch at Mur Mur's Cafe ... after lunch drove east then south from Spearman, and sat just east of an advancing dryline/convergence boundary patiently watching for $11 / 2$ hrs for some initial convective cumulus, until a storm fired to our west about 4:00pm CDT ... headed east, then NW on US83 towards Perryton, TX tracking the storm and watched as the storm merged with a stronger one to its north ... the merged storm was then tornado-warned for a large multi-vortex tornado that heavily damaged Perryton just to our north - not visible to us positioned about 10 miles south of Perryton ... just after 5 pm CDT, the storm building southwards just to our east put down what initially looked like twin dust devils, but as a funnels developed downwards from the base, it was soon apparent that we had two tornados just to our SW - one tornado persisted and morphed through several stages, crossing US83 to our south, developing a white funnel in the sunshine, then finally roping out, lasting at least 15 minutes ... we then tracked the storm down to Canadian, TX - really strong gusty inflow winds blowing dust across the gas station forecourt, and an intense rotation in the clouds passed just to our east ... we then headed northeast towards Higgins, TX into heavy rain to track the storms east, as the storm was again tornado-warned for a large cone tornado which we couldn't see ... the main tornadic activity had now shifted well to our southeast ... waited in Arnett, OK for the storms to shift east, and sunshine to emerge under the retreating anvils ... the drive from Arnett to Harmon, OK was in a beautiful golden light from the lowering sun ... we then stopped near Cestos, OK as the setting sun started to colour up mammatus overhead - gorgeous ... we then stopped just north of Seiling, OK as the sun finally slipped below the horizon, bathing the mammatus overhead is really beautiful soft tones ... then the hour drive to our hotel in Enid, with frequent lightning flashing among the horizon to our east, with occasional looping bolts of lightning across the clouds to our east ... a magical day for us, with a very photogenic non-damaging tornado ... P.S. sad news out of Perryton - 3 dead, more than 50 injured and 200 homes destroyed by the large tornado that hit the town early this evening - we've stayed there twice this season, making the impact more personal \& disturbing than usual ...

## During the chase ... Day 3, June $15^{\text {th }}$



During the chase ... Day 3, June $15^{\text {th }}$

. 5:19 pm ..

. 5:25 pm ..


5:19 pm ..

.. 5:27 pm ...

... 5:20 pm CDT - video of tornadoes just 10 miles south of Perryton, TX ..

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.. 5:20 pm

... 5:28 pm ...

.. 5:21 pm ...

... 5:32 pm ...

## During the chase ... Day 3, June $15^{\text {th }}$


.. 5:32 pm CDT - radar image as we observed the tornadoes south of Perryton ..

... 5:39 pm CDT - 63,000 ft echo top on storm south of Perryton ..

... 5:46 pm ...
... sequence of photos of intense storm rolling SE towards Canadian, TX ...

.. 5:47 pm
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5:47 pm ..

... 6:14 pm - strongly rotating storm about to roll by Canadian, TX

## During the chase ... Day 3, June $15^{\text {th }}$



6:15 pm CDT - time lapse by Valerie as strongly rotating wall
cloud just passes to our east in Canadian, TX

During the chase ... Day 3, June $15^{\text {th }}$

.. 6:22 pm CDT - storm redevelops quickly to our SE - we're heading NE to Higgins, TX

. 7:23 pm CDT - in Arnett, OK


6:57 pm CDT - new "tornado on the ground" on storm now well to our south.

.. 7:22 pm CDT - view of retreating storm from Arnett, OK ..

. 7:29 pm CDT - intense bow of storms to our SSE, three new tornado-warnings ..

... 7:56 CDT - looking east near Harmon, OK ...

. 7:57 pm CDT - looking south, all peaceful here in the sunshine ..


## During the chase ... Day 3, June $15^{\text {th }}$


... 8:28 pm CDT - near Seiling, OK

. 8:29 pm CDT ...

... 8:30 pm CDT ...

... 8:30 pm CDT ..

.. 8:45 pm CDT ..


8:45 pm CDT .

.. 8:49 pm CDT ...

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## The chase day in maps ... Day 3, June $15^{\text {th }}$


... where we drove on the day - 505 miles ..

... where the storm reports were on the day ..

## The SPC forecast at 1300 UTC ... Day 4, June $16^{\text {th }}$

Convective Outlook


Tornado Outlook

... SPC focuses on wider areal coverage - only guidance for storm coverage \& intensity - need to analyse other models/forecasts for chase targets ...

## The chase day in words ... Day 4, June $16^{\text {th }}$

... drove 585 miles from Enid, OK to Lamar, CO via La Junta, CO \& near Kim, CO targeting SE Colorado, namely around La Junta, CO for a $2 \%$ tornado risk within a larger Slight Risk area - the intersection of a southward moving cold front, a dryline push from the west, dewpoints surging into the area with SEly winds around a surface low, 40 knots of bulk shear, and decent low-level shear later in the afternoon - the local forecaster quite bullish about tornado chances ... away from Enid, OK about 8:45am CDT after Starbucks \& gas for the vehicle ... stopped at Glass Mountain State Park for a short walk, pretty scenery ... Walmart in Woodward, OK for picnic supplies, then onward for the remaining 5 hr drive to the target under sunny skies ... picnic lunch in Thompson Park/Sunset Lake Park in Guymon, OK under sunny skies, temp 80F - peaceful setting ... meso discussion issued over our target area during lunch ... away north to Lamar, CO about 1:45pm CDT ... severe thunderstorm watch issued over our target area at 2:20pm CDT as we headed west to Boise City, OK ... reached Lamar, CO about 3pm MDT as storms started to fire to the SW of La Junta ... as we drove west to Las Animas, CO a storm just SW of La Junta was severe-warned, then tornado-warned, so cancelled the mooted DQ stop, and headed straight to La Junta, then dropping south from there on SR109 to get in front of the storm ... the storm cycled up \& down, getting tornado-warned again - stopped at numerous places down SR109 <btw, a very scenic road> to watch as the storm put on a display of gorgeous cloud shapes \& colours ... then a dryline push from the SW initiated an impressive line of convection, which overran our original storm, creating a new merged line of storms which generated multiple tornado warnings ... dropped south to near Kim, CO then east to near Springfield, CO to get ahead of the line of storms ... just south of Springfield a tornado warning was issued over us, the tail-end storm creating a gorgeous sculpted base, and definite rotation in the base/wall cloud ... the southern storm slowed right down, so decided to break north before the core located over US287 north ... some heavy rain \& a bit of hail as we drove north, but then a great lightning show on the way up to Lamar \& our hotel for the night ... McDs for dinner, and now a new round of storms is providing a lightning show outside the hotel ... an enjoyable day chasing, with some spectacular cloud shapes \& colours ...
... 1:13 pm CDT - picnic lunch in Thompson Park/Sunset Lake Park in Guymon, OK ...

## During the chase ... Day 4, June $16^{\text {th }}$



1:51 pm CDT - meso-discussion issued over our target area - Guymon, OK .

.. 4:07 MDT - severe-warned, then tornado-warned SW of La Junta, CO ..

. 4:22 pm MDT - approaching La Junta,
CO - getting ready to drop south ...

.. 4:34 pm MDT - wet downburst descending from storm ...


4:40 pm MDT - tornado-warned again, distinct hook echo, clear inflow notch ..

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## During the chase ... Day 4, June $16^{\text {th }}$



4:45 pm MDT - south of La Junta, CO


5:02 pm MDT - aqua colours developing - large hail? .

. 5:06 pm MDT ...


5:28 pm MDT - dryline push from the SW triggering new severe-warned storms .


5:36 pm MDT ..


5:39 pm MDT .

. 6:11 pm MDT - wave of storms on the dryline catching up with "our storm" dropping south to Kim, CO, then east .

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## During the chase ... Day 4, June $16^{\text {th }}$



6:18 pm MDT - storms about to merge new tornado-warning on the SW line ...

... 6:19 pm MDT - solid updraft line on dryline storms advancing rapidly - near Kim, CO ...

.. 6:50 pm MDT - merged storms behind
us - new tornado-warning ...

.. 7:30 pm MDT - view west from gas station in Springfield, CO ..

. 7:30 pm MDT - merged line now with 2 tornado warnings - one over us ...

.. 7:54 pm MDT - beautifully sculpted base - vague signs of rotation in rising scud ...


7:58 pm MDT - multiple tornado warnings up the line from us, re-warned over us ..


8:17 pm MDT - escaping north to Lamar, CO - just heading into heavy rain/small hail lightning flashing all around us ..

## StormGroup

Chasers

## The chase day in maps ... Day 4, June $16^{\text {th }}$


... where we drove on the day -585 miles ..

... where the storm reports were on the day ...

## The SPC forecast at 1300 UTC ... Day 5, June $17^{\text {th }}$

Convective Outlook


Tornado Outlook

... SPC focuses on wider areal coverage - only guidance for storm coverage \& intensity - need to analyse other models/forecasts for chase targets ...

## The chase day in words ... Day 5, June $17^{\text {th }}$

... a great day chasing one of the memorable storms in my chasing career ... we drove 394 miles from Lamar, CO to Enid, OK targeting the western end of a $5 \%$ tornado risk - major Enhanced Risk area from the SPC this morning, with a forecasted violent MCS to sweep from SE Colorado across Oklahoma in the overnight hours ... storms to initiate early afternoon off the Palmer Divide ... target was Turpin, OK along \& just north of an outflow boundary from yesterday's storms forecasted to lift north during the day, with rich dewpoints flowing into the area on strengthening southeasterly winds - CAMs showed discrete long-track storms breaking out there by $4-5 \mathrm{pm}$, well ahead of the developing MCS in SE Colorado ... relaxed start this morning due to short driving distances, and the need for a restorative deep sleep ... away from Lamar about 10:45am after a McDs takeaway breakfast ... cloudy skies at first, but starting to clear as we entered the Oklahoma Panhandle about 1:25pm CDT with a severe thunderstorm watch issued over SE Colorado at 1:20pm CDT - ignored this watch due to the targeting tactics for the day ... lunch at Jack's Bar \& Grill in Guymon, OK - during lunch cumulus started to look more agitated, so about 3:45pm CDT headed northeast, then east to our nominal target, Turpin, OK ... as we arrived in Turpin there was a nice convective tower overhead, but a stronger storm soon fired just southwest of us near Hardesty, OK - this would become the tornadic supercell we'd chase for the rest of the day ... the storm intensified explosively - getting severe-warned, then tornado-warned in rapid succession, as its echo top reached 53,000 ft ... dropped south to intercept, stopping just south of Boyd, OK then positioned on a hilltop at Boyd just off US83-stayed there for nearly an hour with ringside seats as the storm headed east just in front of us, rotating strongly, producing dust whirls on the ground and spinning up all sorts of actively rotating wall clouds, with some amazing structure - intense inflow at our backs as rotations would tighten up, making it difficult to stand, eyes watering with dust \& sand blown across us ... as the storm moved past, we stepped down to US412 to drive east to keep ahead of the storm ... stopped just north of Elmwood, OK to observe active wall clouds, and the first signs of developing outflow arcus clouds - the storm continued to be tornado-warned ... continued east on US412 stopping periodically to marvel at the storm's structure ... at one stop a new corkscrewing updraft on an inflow band to the main storm threatened to put down a funnel pretty much over our heads ... stopped again just before the intersection of US412 \& US283 to admire a stacked pancake structure that had developed - three huge layers, all strongly rotating ... then started some "storm fleeing" as the storm went strongly outflow, developing a spectacular arcus boundary racing through the countryside at $60 \mathrm{mph} .$. through Woodward, OK about 8:20pm CDT, then east at 70 mph , barely able to keep ahead of the boundary - just a quick break at Mooreland, OK but the boundary rolled over us with heavy winds, dust \& temps dropping to 65F - drove east again through the boundary - turbulent near the boundary, then southeasterlies again with temps back up to 84 F ... stopped at Glass Mountain Rest Area to watch great lightning to our west, then dashed away east again as the boundary neared, cars just down the road already shrouded in dust ... into Enid just ahead of the line of storms ... what a day!! no classic tornado sighted, but what a visual feast of superb rotating supercell structure ...

## During the chase ... Day 5, June $17^{\text {th }}$


... video of on-the-road briefing about target selection ..

. 4:02 pm CDT - meso-discussion issued over our target area - nearing Hooker, OK.


4:36 pm CDT - tornado watch issued over target area - in Turpin, OK ...


4:54 pm CDT - storm firing to our WSW this would be come the supercell we would chase for the next 5 hours.

. 5:21 pm CDT - storm rapidly intensifying, now tornado-warned ..


5:29 pm CDT - wall cloud forming, this would be our vantage point an hour - near Boyd, TX ..

## During the chase ... Day 5, June $17^{\text {th }}$

> ... 5:38 pm CDT - boiling updraft, solid wall cloud with appendages - Boyd, OK ...

... 5:46 pm CDT - inflow beaver tail, funnel at lower left ...

... 5:56 pm CDT - inflow winds getting strong, Lousie \& Valerie having difficulty standing at times ...

... 5:58 pm CDT - very strong inflow winds, "hang on to that camera!" ...
.. 5:59 pm CDT - rapid rotation, clear slot from RFD developing ...

... 6:04 pm CDT - tornado-warned again just to our north, multiple tornado reports - near Boyd, OK - about to head east with storm ..

## During the chase ... Day 5, June $17^{\text {th }}$


.. time lapse video by Valerie - near Boyd, TX ..


## During the chase ... Day 5, June $17^{\text {th }}$


... 6:41 pm CDT - rotating wall cloud just north of Elmwood, OK...

... 6:42 pm CDT - funnel developing under the wall cloud ...

.. 6:42 pm CDT - almost on the ground ..

... 7:01 pm CDT - heading east towards Slapout, OK ...



## During the chase ... Day 5, June $17^{\text {th }}$


... 7:25 pm CDT - lead supercell developing pancake structure - layers visibly rotating in front of us ...

... 7:34 pm CDT - going seriously outflow now - south of Laverne, OK

... 7:37 pm CDT - rain-wrapped tornado being reported in there ..

.. 7:38 pm CDT - south of Laverne, OK .

... 7:39 pm CDT - HUGE arcus outflow boundary surging towards us ...

... 7:39 pm CDT - chaser "storm fleeing"

.. 7:41 pm CDT - tornado-warned again we're about to "flee" east as well .

$.7: 45 \mathrm{pm}$ CDT - heading east to May, OK

## StormGroup

Chasers

## During the chase ... Day 5, June $17^{\text {th }}$



... time lapse video by Valerie - near Laverne, OK .

During the chase ... Day 5, June $17^{\text {th }}$

... 7:50 pm CDT - incredible sights - note line of chaser headlights - in May, OK ...

. 8:00 pm CDT - from Fort Supply, OK ...

... 7:50 pm CDT ..

.. 8:03 pm CDT - hard to capture scale ...

... 7:50 pm CDT ..

.. 7:51 pm CDT ...

... 8:04 pm CDT - storm re-intensifies about time to continue "fleeing" to the east ahead of the rapidly advancing outflow boundary ...

## During the chase ... Day 5, June $17^{\text {th }}$


. 8:10 pm CDT - time to go!! ...

.. 8:49 pm CDT - outflow boundary racing alongside us, we barely creeping ahead while driving at 70 mph .

... 8:54 pm CDT - heading east from Woodward, OK - storm "hot on our heels"...

... 9:11 pm CDT - video of lightning from Glass Mountain State Park, OK ...

... 9:32 pm CDT - heading to Enid, OK - line of storms now just severe-warned ...

... 9:57 pm CDT - video of lightning from our hotel in Enid, OK .


10:22 pm CDT - video of storms arriving in Enid, OK view from hotel portico ..

## StormGroup

Chasers

## The chase day in maps ... Day 5, June $17^{\text {th }}$


... where we drove on the day -394 miles ..

... where the storm reports were on the day ...

## The SPC forecast at 1300 UTC ... Day 6, June $18^{\text {th }}$

Convective Outlook


Tornado Outlook

... SPC focuses on wider areal coverage - only guidance for storm coverage \& intensity - need to analyse other models/forecasts for chase targets ...

## The chase day in words ... Day 6, June $18^{\text {th }}$

... drove 418 miles from Enid, OK to Fairfield, TX targeting the western end of a Marginal Risk in Texas, where the CAMs showed some supercell thunderstorms breaking out later in the day along an outflow boundary from yesterday's storms in Oklahoma ... away from Enid about 9:45am CDT after a good breakfast at Wee Too Restaurant <very busy as it was Father's Day, and our first choice, Cafe Volare, was booked out as a result> ... drove south under clear blue skies, washed clean by yesterday's storms ... into Texas about 1:15pm CDT - lunch at the Wolf Den Family Restaurant in Gainesville, TX ... had Waco, TX as an initial staging point, but a crash on I35W created a 1 hr traffic jam that was getting worse as we headed south, so decided to divert east to Waxahachie, TX then southeastwards to Fairfield, TX located inside the Slight Risk and 2\% tornado risk extended westwards by the SPC in their late morning update - a mesoscale discussion was issued at $3: 12 \mathrm{pm}$ CDT over the area, with a $40 \%$ probability of watch issuance ... as we drove to Fairfield some cumulus showed signs of increased convective activity, but to no avail ... into our hotel at about $6: 15 \mathrm{pm}$ CDT, with BBQ \& Southern buffet dinner at Sam's Original Restaurant in Fairfield ... no storms today, but perhaps a welcome rest is on offer tonight ...

... Sam's Original BBQ - Fairfield, TX ...

... the "Prime Directive" for BBQ ...

... a HUGE fajita © ...

## The chase day in maps ... Day 6, June 18 ${ }^{\text {th }}$


... where we drove on the day -418 miles .

... where the storm reports were on the day ..

## The SPC forecast at 1300 UTC ... Day 7, June 19th

Convective Outlook


Tornado Outlook

... SPC focuses on wider areal coverage - only guidance for storm coverage \& intensity - need to analyse other models/forecasts for chase targets ...

## The chase day in words ... Day 7, June 19 ${ }^{\text {th }}$

... we drove 307 miles from Fairfield, TX to Kerrville, TX - no real target this morning as SPC has a very conditional Marginal Risk out, and the CAMs showed very little convection in that area ... however, with 5,000 forecasted CAPE, extreme heating and favourable bulk shear, SPC was hinting in their text about a possibility for supercells in a limited area, IF convection could initiate ... away from Fairfield about 11am CDT after breakfast at Something Different Restaurant, then an oil change \& gas, and stopping at the Armadillo Emporium for a little "non chase day" shopping ... forecasted temps today at extreme values, with 114F forecasted for Del Rio, TX - a new record ... into Waco, TX about 1pm CDT, temp near 95F - visited the Dr Pepper Museum, then walked over to The Silos/Magnolia Market - VERY hot walking over, and little relief in The Silos - people standing in line outside to get into Silos Baking Co - "baking" themselves - walked through the complex, but no air conditioning in the places for lunch, so decided to leave for a cooling DQ stop, on the way to visit the Waco National Mammoth Monument - we'd also booked into Austin, TX planning an evening out there ... then a small storm fired near Brady, TX and the SPC put out a mesodiscussion, then an upgrade to Slight Risk, and a Severe Thunderstorm Watch in short order ... as they say "never stop chasing", so changed plans and made the 2 hr drive to San Saba, TX to get near the storms ... on the way temps hit 107F ... as we neared Goldthwaite, TX the anvils came into view - one storm had an echo top of 65,000ft ... drove west from San Saba to near Richland Springs, TX to get closer - saw a couple of brilliant long vertical CGs, with thunder after 25/30 secs ... then dropped down from San Saba to get on the southernmost storms - no time to lose, as the loss of daytime heating would soon weaken the storms ... not a highly photogenic set of storms as the skies were murky \& relatively featureless, with grey anvils covering most of the sky as they spread southeastwards under northwesterly winds aloft ... a few decent bolts of lightning on the way to Fredericksburg, TX from new development within the anvil from an intense storm between Junction \& Mason, TX ... excellent dinner at the Hitchin' Post Steakhouse in Fredericksburg, then into our hotel about 8:30pm CDT ... enjoyable day ...

Before the chase ... Day 7, June 19 th

... 10:04 am CDT - breakfast at Something Different Restaurant in Fairfield, TX ...


10:35 am to 10:55 am CDT in Fairfield, TX ..

. when there's no storms apparent, there's shopping ..

... 12:45 pm CDT

.. Dr Pepper Museum in Waco, TX ...

StormGroup
Chasers

## During the chase ... Day 7, June $18^{\text {th }}$



2:50 pm CDT - severe thunderstorm watch issued, "never stop chasing" .

.. 4:44 pm CDT - heading down to meet storms - near Goldthwaite, TX ...

. 4:58 pm CDT - 65,000 ft echo top!

- near San Saba, TX ..

.. 5:19 pm CDT - near Richland Springs, TX ...

... 5:20 pm CDT - near Richland Springs, TX ...

... 5:20 pm CDT - mammatus near Richland Springs, TX .

... 6:36 pm CDT - cutting through electrified line of storms, pretty looping lightning overhead - near Fredericksburg, TX ..


## The chase day in maps ... Day 7, June 19th


... where we drove on the day -307 miles .

... where the storm reports were on the day ...

## The SPC forecast at 1300 UTC ... Day 8, June 20 ${ }^{\text {th }}$

Convective Outlook
Tornado Outlook

... SPC focuses on wider areal coverage - only guidance for storm coverage \& intensity - need to analyse other models/forecasts for chase targets ...

## The chase day in words ... Day 8, June 20th

... drove 517 miles from Kerrville, TX to Amarillo, TX - while primarily a repositioning day for tomorrow's potential tornado risk in NE Colorado/NW Kansas/SE Wyoming, there was also the chance of late high-based thundershowers coming off New Mexico into the Texas Panhandle ... away from Kerrville about 10:15am CDT after a good breakfast at Hill Country Cafe <"A Legend in Texas"> established in 1942 ... stopped in Llano, TX for a look around, already over 100F, and by the time we reached San Angelo, TX it was 109F <43C> ... a good lunch at Miss Hattie's Restaurant in the historic district in San Angelo, and a bit of shopping at J Wilde's ... temps now 111F <44C> ... onto Lubbock under clear skies - some convection to the south of San Angelo ... into Lubbock, TX about 6:30pm CDT for a Thai dinner at Thai Pepper - still 102F <39C> ... few small storms initiating to the west in New Mexico ... gusty downburst winds near Tulia, TX from some high-based storms with dark virga ... into our hotel as the sun set ... long day driving, but hopefully sets us up for some severe weather tomorrow ...
... 11:00 am CDT - Blue Skies Campground northeast of Frederisksburg, TX - offers a stay in retro caravans ...


Before the chase ... Day 8, June 20 ${ }^{\text {th }}$

.. late morning images from Llano, TX ..


... 3:02 pm CDT - photoshoot for an upcoming play in San Angelo, TX ..


3:07 pm CDT - a little shopping next door at J Wilde's in San Angelo, TX ...

## The chase day in maps ... Day 8, June 20 ${ }^{\text {th }}$


... where we drove on the day -517 miles .

... where the storm reports were on the day ..

## The SPC forecast at 1300 UTC ... Day 9, June $21^{\text {st }}$

Convective Outlook


Tornado Outlook

... SPC focuses on wider areal coverage - only guidance for storm coverage \& intensity - need to analyse other models/forecasts for chase targets ...

## StormGroup <br> Chasers

## The chase day in words ... Day 9, June 21 ${ }^{\text {st }}$

... a fabulous day with at least 4 tornadoes sighted by us ... <P.S. later analysis by another chaser on the storm, indicated up to 27 tornadoes!!> ... we drove 573 miles from Amarillo, TX to Goodland, KS via just south of Akron, CO targeting a $5 \%$ tornado risk in northeast Colorado, possibly SE Wyoming, with a nominal target of Akron, CO ... away early at 7:45am CDT for the long drive to meet initiation ... McDs breakfast in Dumas, TX ... into Colorado about 9:45am MDT ... late morning update from the SPC upgraded the risk to Enhanced, extending the 5\% tornado risk southwards in Colorado to include Akron, CO ... mesoscale discussion for a $95 \%$ watch probability was issued over target area at 11:51am MDT, with a tornado watch issued at 12:35pm MDT ... forecast for most likely area for tornadoes in an area from Fort Morgan, CO to Greeley, CO northwestwards into Wyoming north of Cheyenne, WY ... into Limon, CO about 1:15pm MDT, with storms initiating north of Sterling, CO, with one already tornado-warned ... then two storms fired up near Akron, CO within the tornado watch box \& the $5 \%$ tornado risk area, so headed for Akron to target the southernmost storm, which unusually was moving WSW - soon had a $58,000 \mathrm{ft}$ echo top ... stopped 10 miles south of Akron to observe ... then a couple of miles east on a dry dirt road to get better visibility of a wall cloud/lowerings ... retreated west to the main paved road as the storm slowly approached, then a new cell fired to our south, rapidly intensifying, so dropped south about 5 miles just clear of the new base, then watched as it moved north and was dragged into/merged with the original storm - inflow movement in the clouds above our heads was phenomenal ... moved back north 3 miles to observe dramatic new wall cloud/lowerings which soon started to rotate rapidly ... intense inflow winds increased at our backs, making it difficult to stand outside \& watch ... then a beautiful white tornado formed, with dust swirling around its base, retrograding around the main circulation, as a smaller white tornado formed, rotating in front of the first tornado ... then we observed a probable cone tornado under the base, and what looked like a much larger ground-hugging wedge under the base, reported several times as a "large \& extremely dangerous tornado" near Akron ... a new storm formed to the south again, so we dropped back south to Anton, CO and watched it get sucked into the main storm - moved north once again but visibility was poor with rain/hail wrapping, so decided to break away through Cope, CO to Burlington, CO for an excellent celebratory dinner at The Dish Room ... drive to Goodland and our hotel only $1 / 2 \mathrm{hr}$ on 170 east, with lightning flashing to our right from storms near Sharon Springs, KS ... still of lot of active storms to our west, one with a tornado warning, so have activated weather radio in case of warnings overnight ... a great day chasing ...

. 12:00 pm MDT - Art Deco theatre in Lamar, CO - peaceful, sunny skies

.. 1:25 pm MDT - in Limon CO - mesodiscussion issued at 11:51 am MDT over target area - already a tornado-warned storm ...

During the chase ... Day 9, June $21^{\text {st }}$

. 1:25 pm MDT - in Limon, CO - tornado watch issued over target at 12:35 pm MDT .

. 1:53 pm MDT - heading towards two storms near Akron, CO


1:57 pm MDT - storms intensifying and now severe-warned near Akron, CO ..

.. 2:30 pm MDT - distant anvil on southernmost storm near Akron, CO

... 2:41 pm MDT - targeting southernmost severe-warned storm .

.. 3:59 pm MDT - watching from paved/dirt intersection near Akron, CO ..

## StormGroup

Chasers

## During the chase ... Day 9, June $21^{\text {st }}$



3:07 pm MDT - wall cloud forming, about 2 miles east on dirt road ...


3:10 pm MDT - watching storm intensify, about 2 miles east on dirt road, 12 miles south of Akron, CO ...
... 3:21pm MDT - getting pretty murky

... 3:28 pm MDT - curvature in storm a sign of developing rotation ...

... 3:38 pm MDT - video by Valerie of inflow dust being lofted up into the storm ...


3:45 pm MDT - storm rapidly intensifying to our south - visually exploding upwards ..

... 3:59 pm MDT - anvil soaring overhead ...

## StormGroup

Chasers
... 3:39 pm MDT - dropped south through developing storm, watched as it merged into original storm, forming a new base ..

## During the chase ... Day 9, June $21^{\text {st }}$


... 4:06 pm MDT - radar image of new storm heading north, merging with original now tornado-warned storm ...

... 4:07 pm MDT - wall cloud rapidly forming on merging storm ..

... 4:12pm MDT - positioned just south of merging storms ..

... 4:15 pm MDT - wall cloud starting to rotate ..

.. 4:22 pm MDT - merging storm now tornado-warned ..

... 4:24 pm MDT - rapidly rotating collar cloud, with lowering under the base ..

.. 4:26 pm MDT - wall cloud lowering even more, rapid rotation of entire structure ..

... 4:27 pm MDT - tornado forming, white rounded object under right of the base ..

## StormGroup

Chasers

## During the chase ... Day 9, June $21^{\text {ST }}$


. time lapse video by Steve - near Akron, CO

## During the chase ... Day 9, June 21 ${ }^{\text {st }}$


... 4:28 pm MDT - funnel lowering towards ground contact ...

... 4:28 pm MDT - ground contact .

... 4:29 pm MDT - wider view of rotating collar cloud..

... 4:31 pm MDT - second tornado touchdown, starting to rotate around first tornado .

## StormGroup <br> Chasers

## During the chase ... Day 9, June $21^{\text {ST }}$



4:36pm MDT - radar image just after the two tornadoes.


## During the chase ... Day 9, June 21 ${ }^{\text {st }}$


... 4:49 pm MDT - massive wall cloud to our north, likely wedge tornado under ...


4:49pm MDT - full ground-hugging contact by the wall cloud/wedge tornado ..

... 5:09 pm MDT - new storm to our southwest, punching through the anvil of larger storms to the north .


5:22 pm MDT - new storms to our west \& NE - repeated "tornado on the ground" warnings

.. 6:02 pm MDT - breaking away as new storms fire again to our south ..


9:08 pm MDT - after dinner, numerous storms forming as we head east for Goodland, KS ...


## The chase day in maps ... Day 9, June 21 ${ }^{\text {st }}$


... where we drove on the day -573 miles ..

... where the storm reports were on the day ...

## The SPC forecast at 1300 UTC ... Day 10, June $22^{\text {nd }}$

Convective Outlook


Tornado Outlook

... SPC focuses on wider areal coverage - only guidance for storm coverage \& intensity - need to analyse other models/forecasts for chase targets ...

## The chase day in words ... Day 10, June $22^{\text {nd }}$

... we drove 456 miles from Goodland, KS to Oklahoma City to conclude the tour, and the 2023 SGC season ... no chaseable severe weather within a reasonable distance today as an overnight/morning MCS in SW Kansas overturned the atmosphere, then propagated into the Oklahoma/Texas Panhandles then into western Oklahoma in the late afternoon eliminating any severe weather chances for us today ... away from Goodland about 10:50am CDT after a good breakfast at Maria on the Bricks, and some sightseeing/photo ops in Goodland ... stopped at Oasis Center in Colby, KS for a Starbucks and a Sasquatch "meet \& greet" ... then on to the Buffalo Bill Cody sculpture in Oakley, KS \& some souvenirs, then into Keystone Gallery near Monument Rocks, then a picnic lunch at Lake Scott State Park in the sunshine ... meanwhile the MCS in the Oklahoma Panhandle kept "chewing" its way southeast ... a good dinner at Diarti Italian Cafe in Woodward, OK then the final 2 hr drive to Oklahoma City as the sun set - first a beautiful golden light across the landscape, then a stout updraft \& soaring anvil on a storm in southern Oklahoma lit up by the setting sun, then after sunset a beautiful progression of yellow, orange then red colours as the clouds under the anvils on the retreating MCS now over Oklahoma City were lit up by the sun now below the horizon - beautiful ... occasional lightning flashes to the east from the decaying MCS ... into our hotel about 10pm CDT ... has been a wonderful tour with a great group, and many thanks to Steve for his capable co-driving for the second tour this season ...

... 9:30 am MDT - meeting Murray in Murray Custom Body \& Paint - Goodland, KS ...


9:48 am MDT - Louise \& the Giant Van Gogh - Goodland, KS ...

.. 12:00 pm CDT - Buffalo Bill Cody - Oakley, KS .

During the chase ... Day 10, June $22^{\text {nd }}$

... 1:43 pm CDT - picnic lunch at Scott Lake State Park, KS ..

... 3:55 pm CDT - MCS well to our south re-energised - severe-warned heading towards 140

. 6:19 pm CDT - in Woodward having dinner - severe thunderstorm watch issued to our south .

... 7:40 pm CDT - backside of anvils from MCS heading into Oklahoma City .


7:42 pm CDT - MCS rolling into Oklahoma City - lightning flashes to our east later, as we headed into Oklahoma City along 140 ...

.. 9:04 pm MDT - and with the sunset the 2023 SGC season comes to a close - looking west from Geary, OK ...

## StormGroup

Chasers

## The chase day in maps ... Day 10, June $22^{\text {nd }}$


... where we drove on the day -456 miles .

... where the storm reports were on the day .

## Chaser "refueling" stops ...

## Hotels:

12-Jun Ramada - San Angelo, TX
13-Jun Baymont - Perryton, TX
14-Jun Days Inn \& Suites - Trinidad, CO
15-Jun La Quinta - Enid, OK
16-Jun Quality Inn - Lamar, CO
17-Jun La Quinta - Enid, OK
18-Jun La Quinta Inn \& Suites - Fairfield, TX
19-Jun La Quinta Inn \& Suites - Kerrville, TX
20-Jun Super 8 - Amarillo East, TX
21-Jun Super 8-Goodland, KS
22-Jun Wyndham Garden Hotel, Oklahoma City, OK

## Picnic Sites:

13-Jun Buddy Holly Lake Recreation Area, Lubbock, TX
14-Jun Clayton Lake State Park, NM
16-Jun Thompson Park/Sunset Lake Park, Guymon, OK 22-Jun Lake Scott State Park, KS

## Other Stops:

32 stops at gas stations, convenience stores and supermarkets, including 1 Walmart, 3 McDonalds, 1 DQ, 1 Subway \& 3 Starbucks

## Restaurant meals:

13-Jun Fleming's Family Diner - San Angelo, TX
13-Jun Stumblin' Goat Saloon - Canadian, TX
14-Jun The Golden House Cafe - Perryton, TX
14-Jun Sunset Bar \& Grille - Trinidad, CO
15-Jun Bob \& Earl's Cafe - Trinidad, CO
17-Jun Jack's Bar \& Grill - Guymon, TX
18-Jun Wee Too - Enid, OK
18-Jun Wolf Den Family Restaurant - Gainesville, TX
18-Jun Sams Original Restaurant - Fairfield, TX
19-Jun Something Different Cafe - Fairfield, TX
19-Jun Hitchin' Post Steakhouse - Fredericksburg, TX
20-Jun Hill Country Cafe - Kerrville, TX
20-Jun Miss Hattie's Restaurant - San Angelo, TX
20-Jun Thai Pepper Restaurant - Lubbock, TX
21-Jun The Dish Room - Burlington, CO
22-Jun Maria On The Bricks - Goodland, KS
22-Jun Diarti Italian Restaurant - Woodward, OK


## Being a tourist ...

... "while waiting for storms, there's always something interesting to do" - SGC motto ...

## Sights:

14-Jun
International Waterlily Collection, San Angelo, TX
Dinosaur Trackways, Clayton Lake State Park, NM
Capulin Volcano National Monument, NM
16-Jun
19-Jun
19-Jun
20-Jun
20-Jun
22-Jun
22-Jun
22-Jun


## StormGroup Chasers

The complete journey for Tour 5, 2023... 5,162 miles


The SGC 2023 season ... 24,441 miles

... why we chase ... some highlights from 2023 ...


May $6^{\text {th }}$ - Trenton, MO ..


May $18^{\text {th }}-$ Chunky, TX

.. May $24^{\text {th }}-$ Broadview, NM ..

.. May $9^{\text {th }}-$ Stafford, KS ...

. May $22^{\text {nd }}-$ Crosbyton, TX .

. May $23^{\text {rd }}$ - Wilson, TX

... May $24^{\text {th }}-$ Farwell, TX
StormGroup
Chasers

... May $23^{\text {rd }}$ - Justiceburg, TX ..

.. May $12^{\text {th }}-$ Lyndon, KS...

.. May $23^{\text {rd }}-$ Snyder, TX .

## ... why we chase ... some highlights from 2023 ..


.. May $30^{\text {th }}$ - Colby Travel Center, KS

... June $2^{\text {nd }}-$ Sanderson, TX ...

.. June $2^{\text {nd }}-$ Langtry, TX
... just a few selected images from a highlight-filled season ...

... June $12^{\text {th }}-$ Mason, TX ...

... June $3^{\text {rd }}$ - San Angelo, TX .

... June $17^{\text {th }}$ - Fort Supply, TX

... June $12^{\text {th }}-$ Voca, TX ...

## ... and then there's the tornadoes ...


. time lapse video by Dave Evans of the storm/tornado cycle - near Encino, NM - May $26^{\text {th }}$ on Tour 3 ...

... video by Steve Graham of the storm/tornado cycle near Akron, CO - June $21^{\text {st }}$ on Tour 5 ...
... but then, it's really just the majesty of storms ...

.. time lapse video by Valerie - near Laverne, OK - June $17^{\text {th }}$ on Tour 5 .
StormGroup
... why we chase ... it's all about the shared experience ...

... bring on 2024 ...


## StormGroup Chasers

