**Tour 3 Day 1, May 19th 2009**

Day 1 was a travel day. We drove from OKC up to Colby, KS, to set up for chasing in Nebraska on day 2, and then had dinner at Twister's Bar.

Mileage for the day: 452 miles.

**Tour 3 Day 2, May 20th 2009**

We left Colby with the intent of getting north to Ogalalla and evaluating whether we needed to get up towards Valentine or farther northwest to Alliance. We stopped for lunch in Ogalalla ahead of the cold front with a surface obs of 88 degrees and a 45 dewpoint, meaning the cloud bases were near 10000 feet off the ground!

We got to the point where we could see a small cluster of storms getting started, along with a sort of dry line feature to our northwest, so we proceeded to Bridgeport to intercept. Once we got there, we went north of the town to get a good view of the storm, which was a nice high-based storm with a big precipitation core that dropped some pebble hail on us. That storm appeared to be collapsing, and was heading into one of the infamous Sand Hills road holes, so we went north to intercept a group of three cells that were severe warned up near Chadron. By the time we got up there, the cells had been more or less cut off by a rogue cell moving north across their path and died a horrible death. We decided to circle around the back of those cells to Crawford and the tail end storm, which had pretty cool structure with a knuckling updraft, re-intensified. We pursued it through Hemingford to a point where we either had to plow into the core as it drifted off into another hopeless road hole, or break off south and more or less give up. Ultimately, we gave up. Little did we know at the time that if we had traveled on that northeast road for 1/2 a mile, we would have run into the entire Vortex-2 armada. We eventually headed east towards Hyannis, NE, towards Thedford, where our original storm had become a powerful HP supercell, but even though it was moving very slowly we had no chance of catching it. We ended the night in North Platte, NE. The horrible Nebraska Panhandle roads won out this day, making it nearly impossible to get position on the storms.

Mileage for the day: 605 miles.

**Tour 3 Day 3, May 21st 2009**

This day was a repositioning day: We drove from North Platte, NE to Denver, CO with a small detour to Limon, CO from Brush to observe some development to the south along a weak boundary we detected on radar. It turned out to be nothing interesting and we proceeded to head to the hotel used to host the Denver tours.

Mileage for the day: 396

**Tour 3 Day 4, May 22nd 2009**

Starting at the host hotel in Denver, we were already in our target area so we were able to sleep in and meet at noon. The plan was to head east of the city to play in the Denver Vorticity Convergence Zone looking for landspouts. What happens is this: surface winds come over the Palmer Divide from the southeast into the "bowl" east of Denver. They then travel and get to the foothills or the Cheyenne Ridge and wrap back around. This sets up an area of convergence along I-76 or I-70 where the two air masses meet. If there is enough instability, storms fire along that line and can potentially produce landspout tornadoes. Interestingly, for landspouts to form you want very low wind speeds aloft, counter to what we usually want for supercells.

The line did indeed form east of town and we headed out to Strasburg to observe. Once we got out there it was fairly clear that we were not likely to get a landspout since the winds were unidirectional from the southeast. We spent the day working up and down the line from Strasburg to Deer Tail. Then, as we worked our way back up towards Denver, a big rain-maker near Watkins east of the airport produced some great cloud to ground lightning, which we watched from the backside of the storm as it slowly moved north. Finally, as the storms wrapped around the convergence zone we ended up in Aurora on the other side of the airport, having dinner and watching as the slow-moving storm flooded portions of Denver as they came back south. Overall the lightning was the best feature of the day. Finally, we returned to the host hotel in Denver for the evening.

This was one of the shortage mileage days of my chasing career, 144 miles!

**Tour 3 Day 5, May 23rd 2009**

It was a somewhat similar day to the previous day, but with slightly better conditions we were hoping for better storms. We met at noon again and headed east to Limon, Colorado. There was no cap so there were popup storms everywhere immediately and we knew we were in trouble right away. A line of storms fired along a convergence boundary running along the Palmer Divide, and after waiting for awhile at a truck stop in Limon a storm formed almost right over us that, much to our surprise, soon had a pretty nice wall cloud. We head south of town and found a good vantage point to watch the storm, which had some decent structure for about 15 minutes. It was soon clear however that the storm was collapsing and saw that a new line of storms was forming to our north along the outflow being kicked out by the line of storms we were on.

We headed north out of Limon towards Last Chance and passed through a core that dropped pebble sized hail on us. Our target was a storm that was moving north out of Burlington. We proceeded east to Anton, CO then north towards Akron, but the cluster of storms was weakening. We stopped in Akron for a while to see if anything would develop and let another core catch up to us, but it was just rain. We then proceeded through Brush and over to Ft. Morgan where we decided to grab dinner and see if the cores to our south did anything. Other than raining on us from Ft. Morgan all the way back to Denver, they didn't do much. We returned to the hotel in Denver for the 3rd night in a row.

Another low mileage chase day, 309 miles.

**Tour 3 Day 6, May 24th 2009**

As we awoke in Denver, we had a number of options: play in Wyoming, head up to central Nebraska, or stay in Colorado. As of our group meeting Roger liked the conditions up north, assuming the cloud cover that was up there at the time cleared out to allow surface heating, so we proceeded up I-25 to Cheyenne, WY and then stopped to observe. It was a tough call as storms were firing down on the DVCZ and also north of us up near Wheatland. Again, drawn by the better conditions up north we targeted a storm in that direction near Wheatland, WY that was dumping copious amounts of hail as it came off the Laramie Range. After stopping to take structure shots from a distance of about 20 miles neat Chugwater, WY, the first updraft had started to fizzle but additional cells were developing on it's flanking line so we targeted those cells and closed in for the intercept. After watching the big rain and hail cores pass, along with some nice cloud to ground lightning, we went hail hunting and soon found ourselves in flash flood conditions. GRLevel3 estimated that 3 1/2 inches of rain had fallen at our location from this storm. We also drove through hail fields where hail was stacked up 6 inches high at some points.

After deciding the roads were too flooded to continue poking around the back roads for hail, we decided to call it quits on that storm and start heading south since we had to be in Pueblo that evening. We kept an eye on the pop-up thunderstorms all around us, but nothing too interesting happened and we eventually had dinner south of Denver on our way to our hotel in Pueblo, expecting to head to Texas between Lubbock and Amarillo the following day depending on how the morning model runs looked.

Total mileage for the day: 459 miles.

**Tour 3 Day 7, May 25th 2009**

A long chase day and finally some real storms! We left Pueblo early and headed south through the Raton Pass into New Mexico then southeast, stopping for lunch in Dumas, TX. The conditions, other than the 500 mb flow, were actually pretty good, but we found ourselves a bit puzzled at why the well developed cumulus field to our southwest was not lighting up. Ultimately, we realized that there was no real convergence, and with the weak dry line advancing and veering a lot of the surface winds, we were running out of time. We decided to head for the area where there were at least some signs of storms blowing up, towards Childress through Clarendon, TX.

After stopping in Clarendon because the small cells we saw going up died, we again paused, finally deciding to go after another pulse storm that had formed over Childress on the pinch point of the dryline and the moist air coming up from the southeast. As we got to the cell it was clear that with no upper level flow, the storms precipitation was falling right back down the updraft and the storm died a quick and horrible death as we approached. During this time, storms were firing up in the better moisture and flow to our north, one near Elk City, OK and another group up near Canadian, TX. After some deliberation, we decided to go after the Elk City storm since it had an overshooting top and was clearly a supercell. Plus, with all of the storms barely moving due to lack of mid-level winds, we knew we could go after the northern storms after we finished with the Elk City one.

We proceeded up to Shamrock, TX then blasted east into Oklahoma, barely beating the massive hail core to Cordell, OK and getting around to the southeast side where there were distinct signs of rotation. We were caught in traffic on the south side of the storm and for a few moments I thought we were going to get pummeled, but the storm was moving so slow we were still able to get around it, even though the approaching hail was clearly visible about 1/2 a mile away in the fields to our north.

The meso was indeed rotating rapidly, but with two distinct areas of rotation near each other the rotation could never get focused. The storm finally collapsed as it slowly approached us, and we decided to drop that storm and head for what was now a monster up near Canadian. We headed through Clinton, OK and up to Cheyenne, OK, but the storm we were watching died and we stopped in Reydon, OK for a gas break. By then, the cells behind the one that had just died had become supercellular. Since it was on our way back to the hotel anyway, we went after those storms, two cells of which merged into a huge HP beast. We'd made it all the way to Miami, TX as it started to get dark and the lightning was very impressive and we wanted to get closer in for a better view. Unfortunately, the storm was anchored right over the Canadian River and after we went all the way back to the town of Canadian itself, we still couldn't get close enough for very good lightning viewing.

Ultimately, we gave up and headed back to Amarillo for the night. As we headed for the hotel there was a lot of lightning from various cells and we passed though a little core near Panhandle, TX that minutes later was a vicious line segment (glad I didn't have to drive through it) that produced a tremendous lightning show as we got to the hotel.

All in all, a pretty good day and some actual supercell storms! 793 miles for the day.

**Tour 3 Day 8, May 26th 2009**

We had a great chase day on this day!! It started very slowly: At the hotel in Amarillo, TX, the guides huddled up and we decided.... not to decide, because we didn't know where to go. So, we headed to Walmart to wait for the 15Z RUC and kill some time. Once we saw the RUC we decided we had to get southeast regardless of which of our plays panned out: Head south to the low end of the dryline near Abilene (ironically as I typed this at 1 AM, we were getting cored at the hotel by the squall line that finally did develop down there), or near the Red River near where the surface low heading through southwest Oklahoma intersected with the dryline and a frontal boundary coming out of Kansas.

We headed for Childress, TX along the same road as the previous day, but then decided to continue on to Vernon to get past the dry line which was out ahead of us. After stopping for a while in Vernon for lunch, we eventually decided to move on to Wichita Falls.... and to ANOTHER Walmart. We were there close to our target area, but while we sat there for over an hour it became clear that the area was heavily capped as the cumulus field above us began to shrivel and die. We decided to get south where a couple of storms were percolating when a bomb exploded to our southeast near Weatherford, TX, which just happened to also be the location of our hotel for the evening. We waited for a few scans to see if the storm would indeed survive, and when it did, we went after it though it was about 100 miles away.

As we approached, the storm pulsed a couple of times and looked like it was going to die, but we continued on and there were several hail reports over Weatherford. Our biggest challenge was that by the time we got there the storm would be right over the Dallas Metroplex highways and we would have to try and punch the core on the interstate near Ft. Worth. Shortly before we got there, the storm split into two discrete segments, then the southern of the two, which was our target, merged with a cell that had formed on it's flanking line and got very intense. Despite Roger's screams that we would not wreck the rental vans in a big hail core, we went charging in! The noise was deafening as we got blasted by copious amounts of nickel and quarter sized hail with a few ping pong and golf ball sized stones thrown in for good measure. The biggest problem was the idiot drivers who all tried to jam under bridges and stop, leaving so little room that the highway came to a complete halt at each one and we sat there getting pounded while we waited our place in line to get moving again. Luckily, we ended up with only a few dents on the vans and no blown out windows so we continued on.

Finally, we got through the core and stopped for a few minutes to look back at the storm and also regroup. We also reviewed the radar which revealed that the cell we had just punched was turning into a multicelled blob of mush, while the northern cell appeared to now be an anti-cyclonic supercell headed northwest! We decided to blow off the storm we were on and plow north to intercept. As we headed the 30 miles north towards the new cell, we went under some outstanding mammatus clouds from the southern cell. Meanwhile, the northern cell had become a very strong low precipitation supercell with a persistent 75 kg/m2 VIL core. As we approached Rhome, TX, the structure was absolutely stunning so we decided to stop about 10 miles away and video and photograph the storm. It was one of the most beautiful storms I’ve ever seen! We sat there for about 1/2 an hour as the sun set and the lightning rolled up and down the updraft while we filmed away. Better still, we were only 35 miles from the hotel! We eventually gave up the chase, ate dinner in Decatur, TX, and went back to the hotel, only to get cored by the line of storms that came up from our second target area.

We spent the night in Weatherford, TX with the expectation of targeting the area between Midland, TX and Ft. Stockton, TX the next day.

Total mileage for the day was 481 miles.

**Tour 3 Day 9, May 27th 2009**

This was a long chase day that turned out to be a long driving tour of Texas. Leaving Weatherford, our target for the day was the Davis Mountains in southwest Texas, hoping that the upslope flow would help storms form despite limited instability. Eventually we got all the way down to Ft. Stockton and evaluated two cells that had formed in the mountains, one to the south of Marathon and the other over Alpine. We proceeded down to Marathon, TX and again paused to choose between the two storms. The north storm then fell apart so we headed towards the southern one, which had just received a severe thunderstorm warning for baseball sized hail, on the one south road there was. After passing through the secondary US border heading towards Big Bend National Park, we realized that the storm was unchasable: It was already over the road and proceeding very slowly along it heading into the park and then Mexico. With the big hail in the core, we couldn't pass through it so we had no way to get south of the updraft to take a look, and with almost 300 miles to the hotel and darkness coming, we called it a day. The most interesting part of the day was probably getting stopped at the secondary border and the non-US citizens being forced to produce their papers! We spent the night in Snyder, TX, knowing that the final day of our tour would just be a travel day back to Oklahoma City.

Not a very successful chase day, but I enjoyed the drive having never been through that part of Texas.

Total mileage for the day 756.

**Tour 3 Day 10, May 28th 2009**

A travel day back to Oklahoma City for 320 miles. The total tour mileage was 4715 miles.

Considering the awful pattern, we made the best of it, chasing 7 out of 10 days. Some of them weren’t the best, but even a bad chase day is better than no chase day!