## WESTERN KANSAS WEATHER MODIFICATION PROGRAM

P.O. BOX 254 Lakin, KS 67860

Lakin Office: 620-355-6913

waltergeiger@yahoo.com

**Internet:** www.gmd1.org/index-3.html

## WEEKLY NEWSLETTER

No. 2013-4

For the period May 4 – May 10, 2013

General Interest: So far this year, we have experienced cooler temperatures than the same period last year. Episodes of chilly days and nights over the past two months had kept the monthly average temperature on the cool side as compared to April and May of 2012 when it seemed we had already transitioned into summer well before normal. I've heard some of the local talk around town that some folks think we are going to experience a cool year. Based upon the previous couple of months, my personal belief is that we will probably experience a cooler year, on the whole, than the past two years which would certainly be a welcome improvement. One would certainly hope this year will be cooler than the past two years as 2011 and 2012 where some of the warmest years on record across the United States. Although still possible, it would be particularly hard to match the extreme heat and lack of precipitation of 2012. Long-range forecasting is a tough challenge. It will probably never be 100%, 90%, or even 80% accurate. Further, what happened in the past cannot act as a measure of things to come. Everyone who resides in western Kansas knows our weather can and often does change quickly. Last week's temperature change of some 30 to 40 degrees over the course of a few hours during mid day exemplifies that. For our area, that's just normal springtime weather. What is particularly worrisome is that our precipitation situation has not significantly improved across the western half of Kansas like it has over the eastern half.

What does the next few months hold? The latest long-term forecasts from the Climate Prediction Center (CPC) indicate much of the United States stands a decent chance of warmer than average temperatures for June through August. Extended even further, the CPC maps show a 40% to 50% chance of warmer than average temperatures for the remainder of the year across the contiguous United States. Locally, the forecasts are not very encouraging for a mild year. The temperature forecast is yet again indicating a warm summer with a 40% to 50% chance of above average temperatures across most of western Kansas during June through August. The September through December 2013 period stands a 40% chance of above average temperatures. For precipitation, the outlook is also not very encouraging. A 40% to 50% chance of below normal precipitation is forecast for western Kansas, eastern Colorado, eastern New Mexico and northwest Texas during the June through August Period. This is very bad news since a large percentage of our yearly precipitation comes during these particular months.

<u>Weather:</u> The week started out with temperatures in the 60's and 70's under partly cloudy skies Saturday and Sunday. One Monday, a dryline was draped across western Kansas. By afternoon, scattered small showers developed along the dryline from Ulysses north into northwestern Kansas. By early evening, storms turned severe with large hail being the main threat across portions of northwest Kansas southward into southwest Kansas. Another round of strong to severe storms formed by Wednesday afternoon over eastern Colorado which then moved into western Kansas during the evening. A few showers with some thunder occurred on Thursday and Friday during the afternoon and evening hours.

**Operations:** There were two operational days this week. Seeding for rain optimization and hail suppression occurred that day while seeding for hail suppression only occurred the other day.

## May 7<sup>th</sup>, Program Operations Day #1

One plane was launched at 4:46 p.m. to investigate a small storm southeast of Scott City. Radar indicated this storm was rather low-topped with only light rain falling at 5:04. Seeding for rain optimization began at 5:10 over extreme western Lane on a small storm traveling northeast. Seeding transitioned to hail suppression at 5:30 near Dighton. Although radar estimated hail size was around 1.00 inches around Dighton, ground reports confirmed hail was larger at 1.75 inches. Seeding continued as the storm moved east to the county border at 6:45. Seeding was terminated at 6:51. The plane patrolled the cloud until returning to base at 7:20.

## May 8<sup>th</sup>, Program Operations Day #2

All aircraft were launched at 3:52 p.m. to investigate a broken line of thunderstorms traveling east of out of eastern Colorado into Kansas. Some seeding for hail suppression began at 4:37 north of Coolidge. Seeding stopped over western Hamilton at 5:00. Planes remained on patrol of the some line as it continued slowly traveling east. Seeding for hail suppression resumed near Kendall at 6:00 on a small section of the storm capable of producing some small hail. Seeding continued over southern Kearny until the storm passed into Finney at 6:13. Further northeast, seeding for hail suppression began at 7:08 on an isolated storm traveling north over extreme eastern Lane. Radar indicated this storm was severe with large hail likely falling. Seeding stopped over eastern Lane at 7:47 with the planes turning for base by 7:50.

**Acknowledgement:** The Western Kansas Weather Modification Program is funded, in part, through the State Water Plan, administered by the Kansas Water Office.

Walter Geiger, Meteorologist Western Kansas Weather Modification Program