

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

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For the period August 16 – August 22, 2014

General Interest: No general interest this week.

Weather: Hot and mostly sunny conditions occurred Saturday through the afternoon hours. However, by Saturday early evening, scattered showers and storms were located over portions of western Kansas. While most of this activity remained sub-severe, a few stronger storms occurred primarily over portions of northwestern Kansas as well as Logan and Gove counties in west-central Kansas. Showers and storms formed again Sunday and Monday over eastern Colorado and portions of western Kansas due to heating, gust front interactions and ample moisture. Tranquil conditions prevailed for most of western Kansas Tuesday while a few weak showers and storms occurred across eastern Colorado. Scattered showers with brief periods of thunderstorms developed during the late afternoon hours again Wednesday mainly along the KS/CO border and portions of west-central Kansas. A brief period of small hail was noted over Wichita County. Hot and sunny conditions were noted on Thursday. By Friday, the active pattern returned as numerous small showers developed early in the day traveling north. Around peak heating, a few of these storms grew strong to severe mainly over west-central and northwest Kansas due to moderate instability and strong gust fronts interacting with these storms. While most of the severe warnings were for high winds, some brief periods moderate to large hail did occur.

Operations: There were three operational days this week. Also, an observation flight was conducted on August 20th.

August 17th, Program Operations Day #16

Weak showers and storms were ongoing over portions of Greeley and western Kearny through 4:00 p.m. By 6:04, one plane was launched to investigate additional developing storms stretching from southern Wichita east to the Scott/Lane border. Seeding for rain optimization began at 6:23 over western Lane County and continued until updraft became spotty to non-existent by 6:45. The plane turned for base at 7:03. The storms line lasted for a while longer before fading away across Kearny, Finney, Scott and Lane by 7:15 due to the loss of updrafts as the gust front exited the area.

August 18th, Program Operations Day #17

A line of storms had developed earlier in the day over eastern Colorado traveling southeast toward extreme southwest Kansas. Meanwhile, rapid storm development occurred over Grant County at 3:45 p.m. moving northeast. Two aircraft were launched at 4:00 to investigate. By 4:15, a solid line of storms had formed from Morton County to northern Gray moving southeast also. Additionally, a singular storm formed just southeast of Lakin around 4:05. Seeding for rain optimization was carried out from 4:45 to 5:17 over southeastern Kearny. Meanwhile, the second plane was investigating another area of storms north of Scott and Lane counties. Seeding for hail suppression began over southern Gove at 5:46 on a storm traveling towards Lane. Seeding continued over southern Gove and Logan until the storms fell below the hail threshold at 6:07.

Aircraft launched again at 7:28 to begin hail suppression seeding on a storm line getting ready to cross into northern Scott and Lane counties. Seeding began at 7:37 over northeastern Scott County. Seeding continued as the strong storms passed into central Lane and collided with a gust front at 8:05. By 8:30, the storms began to decrease to near the hail threshold over eastern Lane. All seeding stopped at 8:32 over eastern Lane. The storm mass continued pushing southeast as primarily a moderate to heavy rain system.

August 22nd, Program Operations Day #18

Two planes were launched at 3:22 p.m. to investigate small storms traveling north through southern Kearny County. The showers and storms passed over Kearny by 4:05 p.m. and moved into western Finney by 4:20 traveling along a gust front line to the northeast. Seeding for hail suppression began at 4:22. Seeding continued over northern Finney/southern Scott through 5:00. All seeding transitioned to northwestern Lane County at 5:30 as new storm growth there presented a hail threat. The storm over Scott had declined enough to vastly ease the hail threat there. Seeding was terminated over Lane County at 5:50 as these storms were exiting the target area. Planes turned for base at 6:10.

Walter Geiger, Meteorologist
Western Kansas Weather Modification Program