

September 2010 Operations Report

September 1, 2010 - Seeding operations were conducted over Glasscock (13) Reagan (20), and Sterling (17) Counties. 50 flares were burned within 1 large track moving into the target while building new cells.

September 2, 2010 - Seeding operations were conducted over Crockett (16), Irion (16), Schleicher (34), and Tom Green (4) Counties. 70 flares were burned within 10 clouds sparked by an outflow boundary.

September 10, 2010 - Seeding operations were conducted over Schleicher (25) County. 25 flares were burned within 3 named cells in response to surface heating.

September 11, 2010 - Seeding operations were conducted over Schleicher (7) and Sutton (18) Counties. 25 flares were burned within 3 named cells in response to surface heating.

September 12, 2010 - Seeding operations were conducted over parts of Crockett (4), Irion (4), and Reagan (28) Counties. 36 flares were burned within 6 named clouds in response to surface heating along a remnant outflow boundary. This is the fifth day for seeding in September and 43rd day for seeding during the season.

The month of September contained 10 days of operations

Date	Flares	Counties seeded
1	50	Glasscock, Reagan, Sterling
2	70	Crockett, Irion, Schleicher, Tom Green
10	25	Schleicher
11	25	Schleicher, Sutton
12	36	Crockett, Irion, Reagan
Total Flares: 206		

The general weather pattern for September began with a dirty ridge centered over the Desert Southwest and thermal ridge over Texas providing sufficient surface heating to develop thunderstorms for day 1 and 2. A mild upper level ridge and surface high pressure fell in on the 3rd and held weather at bay through the 7th as a Tropical Storm moved on shore at the Texas Gulf. Tropical Storm Hermine developed over the southwestern Gulf and moved northward onto the Texas Gulf coast moving up through west-central Texas. An upper level ridge became more pronounced once again over Texas; surface moisture remained prominent and surface heating given temperatures in the mid 90s providing additional chances for seedable clouds during a 3day period from the 10th through 13th. High pressure set in for the following 10 days with fair yet hot and sticky conditions. A cold front approached West Texas on the 24th and 25th bringing very good rains across the area. Very moist conditions brought mostly cloudy conditions and poor conditions for seeding. An attempt at the best clouds of the day on the 24th found multiple layered bases with negligible inflow. Following the cold front, the atmosphere was completely changed to a stable and much drier environment. High pressure at surface and ridge brought cooler evenings from the mid 50s to upper 80s in the afternoon for the remaining days in the month.

September rainfall occurred during several events throughout the month; the final event between the 24th and 25th was natural rainfall. Totals at San Angelo, and Abilene were below the monthly normal for September; Midland was just barely above. San Angelo received 1.72 inches and was 1.23 inches below normal. Abilene received 2.44 inches and was .47 inches below

normal. Midland received 2.35 inches in September and was .04 inches above normal. All three sites were above normal for annual precipitation. San Angelo recorded 16.63 inches, Abilene 24.92, and Midland 16.38 inches. Respectively, each site was above normal by .33, 6.61, and 4.65 inches for the year.

Monthly rain gauge measurements from nearest locations inside and out of the target area recorded either by the National Weather Service, Weatherbug Sites, Wunderground or Mesonet sites are provided.

NWS

1.72 Mathis Field
 2.44 Abilene
 1.85 Junction
 2.35 Midland
 0.69 Big Spring

Utah Mesonet

0.65 Barnhart

0.49 Cox Ranch
 0.34 Ozona
 0.41 Iraan

CocoRahs

1.68 Eldorado
 1.17 Knickerbocker
 2.18 Garden City
 0.66 Ozona (15mi SSW)

2.94 Vancourt

Wunderground

3.98 Sterling City
 2.01 Mertzson

Other

2.15 San Angelo (7NW)
 2.61 St. Lawrence
 1.70 Mertzson