

September 2007 - Operations Report

September 2, 2007 - Seeding operations were conducted over Glasscock (2) and Reagan (2) with fair results. 4 flares were burned within two small clouds. Surface heating and an upper-low/shear axis helped to produce marginal clouds.

September 10, 2007 - Seeding operations were conducted over Reagan (6), Sterling (4), and Tom Green (10) with fair results. 20 flares were burned within five small clouds. Surface heating and a cold front helped to produce marginal clouds.

September 18, 2007 - Seeding operations were conducted over Reagan (13), Schleicher (13), and Tom Green (2) with fair results. 28 flares were burned within five small clouds. Surface heating and an upper level trough helped to produce seedable clouds.

September 19, 2007 - Seeding operations were conducted over Glasscock (11), Irion (4), and Sterling (15) with good results. 30 flares were burned within five small clouds. Surface heating and a shortwave helped to produce seedable clouds.

September 25, 2007 - Seeding operations were conducted over Crockett (29), Irion (24), and Tom Green (3) with good results. 56 flares were burned within 3 large clouds over four hours. Surface heating and a cold front helped to produce seedable clouds.

September 27, 2007 - Seeding operations were conducted over Irion (10), Reagan (6), Sterling (3), and Tom Green (8) with good results. 27 flares were burned within 2 clouds. Surface heating and a cold front helped to produce seedable clouds. This is the sixth day for seeding in September and 43rd day for seeding during the season.

The month of September contained 6 days of operations:

Date	Flares	Counties seeded
2	4	Glasscock, Reagan
10	20	Reagan, Sterling, Tom Green
18	28	Reagan, Schleicher, Tom Green
19	30	Glasscock, Irion, Sterling
25	56	Crockett, Irion, Tom Green
27	27	Irion, Reagan, Sterling, Tom Green
Total Flares: 161		

The general weather pattern for September began with an upper-low/shear-axis migrating across Texas from east to west. It was created by a high pressure ridge anchored over the Four Corners region and the Central Appalachian Mountains. The upper low drew in tropical moisture from Tropical Storm Henriette which hugged the coast of Mexico on the 3rd pushing into Baja during the first week. Conditions were unfavorable for seeding as low-thick stratus build into the target area. A ridge continued to suppress convection and keep temperatures warm through the middle of the month. A series of troughs began digging into the northwest and translating across the northern Plains. The majority of the later half of the month found a ridge over Texas; subtle short-waves, and the occasional weak cold front helped to produce seedable conditions over 6 days this month. The jet stream began to make its way south; with the occasional low-level jet returning to the target area. The abundance of rainfall seen through the year dwindled this month over much of the area, but a few thunderstorms dumped plentiful rains over discreet locations at different times. Midland, San Angelo, and Abilene received less than average rainfall; Midland and Abilene received near 1.25in and San Angelo 2.55.

Monthly rain gauge measurements from nearest locations inside and outside of the target area recorded either by the National Weather Service, Weatherbug Sites are provided, and the CoCoRaHs national rainfall network.

0.78	Grape Creek
0.47	Eldorado
2.17	McCamey
1.22	Barnhart
2.55	Mathis Field
1.80	Junction
1.21	Abilene
1.25	Midland
2.63	Sonora
0.63	Big Spring
1.93	Mertzon
1.93	Garden City
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