

June 2009 Operations Report

June 2, 2009 - Seeding operations were conducted over Crockett (9), Glasscock (2), Sterling (27), and Tom Green (18). 56 flares were burned within 4 clouds, most of which merge into one large cloud system. Surface heating and a shortwave trough produced seedable storms over the western target.

June 6, 2009 - Seeding operations were conducted over Crockett (8), Glasscock (42), Reagan (2), and Sterling (2). 54 flares were burned within 3 clouds with multiple cells, two of which merge into one large cloud. A dryline and a shortwave trough produced seedable storms over the western target.

June 7, 2009 - Seeding operations were conducted over Crockett (16) and Glasscock (12). 28 flares were burned within 2 clouds with multiple cells. A dryline and a trough produced seedable storms over the western target.

June 8, 2009 - Seeding operations were conducted over Glasscock (9). 9 flares were burned within 1 cloud. A dryline produced a seedable storm over Glasscock County and further north.

June 10, 2009 - Seeding operations were conducted over Crockett (66), Glasscock (1), Sterling (7), and Sutton (4). 78 flares were burned within 3 clouds; one severe storm crossed Crockett County. A shortwave trough produced marginally seedable clouds and a severe storm for the western target.

June 13, 2009 - Seeding operations were conducted over Glasscock (8) and Reagan (6). 14 flares were burned within 1 cloud over Glasscock County. A shortwave trough produced a short-life seedable cloud over Glasscock.

June 19, 2009 - Seeding operations were conducted over Irion (7), Schleicher (10), and Tom Green (5). 22 flares were burned within 6 clouds. A shortwave trough produced marginal clouds. This is the seventh day for seeding in June and 21st day for seeding during the season.

June 26, 2009 - Seeding operations were conducted over Schleicher (9), and Sutton (20). 29 flares were burned within 11 small clouds. A shortwave trough and surface heating produced marginally seedable clouds.

June 27, 2009 - Seeding operations were conducted over Glasscock (2), Irion (16), Reagan (2), Schleicher (6), and Tom Green (2). 28 flares were burned within 9 small clouds. A meso-low and surface heating produced marginally seedable clouds.

June 28, 2009 - Seeding operations were conducted over Crockett (23), Glasscock (8), Irion (27), Reagan (12), Schleicher (13), Sterling (6), and Tom Green (10). 99 flares were burned within 20 clouds. A frontal boundary and surface heating produced seedable clouds throughout the target.

June 29, 2009 - Seeding operations were conducted over Crockett (22), Glasscock (12), Irion (11), Reagan (22), Schleicher (37), Sterling (8), Sutton (9), and Tom Green (12). 133 flares were burned within 36 clouds, many of which merged together with other cells. A frontal boundary and surface heating produced seedable clouds throughout the target.

June 30, 2009 - Seeding operations were conducted over Glasscock (40), Schleicher (15), and Sutton (11). 66 flares were burned within 5 clouds, two of which were large clouds with multiple cells. A frontal boundary and surface heating produced seedable clouds throughout the target. This is the twelfth day for seeding in June and 26th day for seeding during the season.

The month of June contained 12 days of operations

Date	Flares	Counties seeded
2	56	Crockett, Glasscock, Sterling, Tom Green
6	54	Crockett, Glasscock, Reagan, Sterling
7	28	Crockett, Glasscock
8	9	Glasscock
10	78	Crockett, Glasscock, Sterling, Sutton
13	14	Glasscock, Reagan
19	22	Irion, Schleicher, Tom Green
26	29	Schleicher, Sutton
27	28	Glasscock, Irion, Reagan, Schleicher, Tom Green
28	99	Crockett, Glasscock, Irion, Reagan, Schleicher, Sterling, Tom Green
29	133	Crockett, Glasscock, Irion, Reagan, Schleicher, Sterling, Sutton, Tom Green
30	66	Glasscock, Schleicher, Sutton
Total Flares: 487		

June 2009 began as May had left off with a persistent trough over Baja sending shortwave impulses into the southern Plains. A ridge dominated East Texas and held shortwave influence to the western target area through the first week of the month. Shortwave influence managed to bring seedable thunderstorms a couple more days through the second week. Upper level ridging took hold during the third week until the 19th when the ridge moved east and southerly flow pulled moisture into West Texas. A trough over the Desert Southwest and Mexico also aided to develop thunderstorms over Mexico, which brought an MCS to the western target area early morning. Mostly cloudy skies, un-seedable showers persisted through the afternoon then turned marginally seedable late afternoon. Another MCS moved north through the western target on the 20th with similar un-seedable conditions through the afternoon. The ridge took hold again temporarily turning into a long last week of seeding. The ridge maintained position over West Texas but airmass thunderstorms persisted over 5 days with a frontal boundary lingering over the target area during the last two days. High moisture content and temperatures near 100 degrees for 14 days during the month yielded an above average seeding month.

Rainfall in May was very good over parts of the target area but missed some areas almost completely. Mathis Field in San Angelo recorded 1.74 inches. Midland, Abilene, and San Angelo remain below annual normal. Abilene recorded 2.68 inches in June and 8.91 inches this year. Midland recorded 2.33 inches in June and 2.33 inches for the year. Annual departures from normal are: Abilene -2.16, San Angelo -1.46, and Midland -1.67.

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 Mesowest sites are provided.

<u>NWS</u>	<u>CocoRahs</u>	4.37	Ozona (15mi SSW)
1.74 Mathis Field	0.77 Eldorado	2.14	Iraan
2.68 Abilene	1.35 Knickerbocker		
1.12 Junction	2.45 Ozona (26 SW)	<u>Other</u>	
2.33 Midland	2.02 Ozona (30 SW)	3.96	San Angelo (7NW)
1.38 Big Spring	2.36 Iraan	2.76	St. Lawrence
2.83 Sonora	3.51 Garden City	1.78	Mertzton
<u>Wunderground</u>	<u>Utah Mesonet</u>		
8.02 Sterling City	2.72 Barnhart		
1.92 Mertzton	3.48 Cox Ranch		