

March 2009 Operations Report

March 25, 2009 - Seeding operations were conducted over Irion (3), Schleicher (12), Sutton (40), and Tom Green (5) Counties. 60 flares were burned within 7 large clouds. An upper level trough, surface low with trough over West Texas, and dryline produced strong thunderstorms early in the day. This is the first day for seeding in March and 1st day for seeding during the season.

The month of March contained 1 day of operations

Date	Flares	Counties seeded
25	60	Irion, Schleicher, Sutton, Tom Green
Total Flares: 60		

The general weather pattern for March began with a ridge dominating the southern Plains pushing above normal temperatures through the first week. On March ninth a deep trough over the Desert Southwest and northern Mexico brought pacific moisture into Texas. A dryline set up just west of the target area, which suggested the possibility for the first storms of the season. Full time pilot and Meteorologist were waiting all afternoon for storms; but decided they would not be developing until too late. Unfortunately, storms did fire over Midland County extending northeast over Glasscock just before 7PM. Mostly cloudy skies prevailed the following day without precipitation. Mostly cloudy skies, rain, and cold temperatures followed a cold front on the 11th with rain showers continues through the 13th with between 1 and 2 inches of rain over the target area. Mild temperatures and mostly sunny skies were associated with a largely zonal ridge into the official spring. A large trough digging into the west coast on the vernal equinox pushed Pacific moisture into Texas with a strong low-level jet. A strong surface low over Colorado provided breezy conditions and mild temperatures. Cloud cover with this system was dominant, reducing chances for greater instability. Rain and storms were limited to the Texas Panhandle on the evening of the 21st. While the surface low strengthened over Colorado, a dryline rested over West Texas, without sufficient surface heating or forcing; thunderstorms eluded West Texas until Wednesday March 25. The large trough persisted across the southern Rockies, and a shortwave pushed through West Texas to create dynamics necessary for storms. A potent dryline also setup over West Texas. The morning was socked in with ceiling at or below 2000ft. At around 11AM, ceilings began to break, storms began to fire, and the pilot was in route. The 2009 season began with good results over Irion, Schleicher, Sutton, and Tom Green. A blizzard followed up the start of the season over the Texas Panhandle and Oklahoma while West Texas returned to dry conditions with a brief cool down associated with a strong cold front. West Texas volleyed between warm and cool days as a series of low develops over the Rockies and crossed the southern Plains. Precipitation was limited to two sets of events over the target area.

Rainfall for January and February was much below normal across the target area with totals less than half an inch. Totals at San Angelo rose above the monthly normal in March. The majority of the target area received un-seedable rain March 10-13 and the eastern target received seedable thunderstorms March 25th. Abilene and San Angelo were below normal for the year receiving 1.88 and 2.27 through March; .01 and .74 inches above normal. Midland received .56 inches in March, .82 inches for the year and .71 inches below normal.

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.

NWS

1.73 Mathis Field
1.42 Abilene
3.42 Junction
0.56 Midland
0.33 Big Spring

AWS

1.33 Grape Creek
0.24 Eldorado MS
0.09 McCamey

Utah Mesonet

1.19 Barnhart
1.76 Sonora
0.73 Big Lake
2.88 Cox Ranch

CocoRaHS

2.14 Eldorado
1.56 Knickerbocker
1.30 Garden City
1.94 Ozona (15mi SSW)
1.38 Iraan
0.99 Iraan
1.47 Vancourt

Wunderground

1.29 Sterling City
1.38 Mertzon

Other

1.01 San Angelo (7NW)
0.72 St. Lawrence
1.60 Mertzon