

**TRANS-PECOS WEATHER MODIFICATION ASSOCIATION - PECOS, TEXAS**

**SEEDING REPORT - June 30, 2023**

**SYNOPTIC/MESOSCALE CONDITIONS:**

A dryline is in place across Far West Texas into the Trans-Pecos region. The upper-ridge has broken down allowing for southwesterly flow aloft to develop over the region. This should provide enough support for the dryline to kick up a few showers and storms across the region this afternoon and evening. Will go with likely rain chances as a result.

**LIFTING MECHANISM:**

Dryline, Upper-Level Forcing

**THERMODYNAMIC INDICES (12Z KMAF)**

|                             |      |                      |      |
|-----------------------------|------|----------------------|------|
| Freezing Level (m)          | 4955 | -15°C Height (m)     | 7300 |
| Precipitable Water (inches) | 1.31 | CAPE (J/Kg)          | 492  |
| LCL                         | 2018 | CINH (J/Kg)          | 415  |
| CCL                         | 3713 | LI (°C)              | -0.8 |
| MAF ICA                     | 2.32 | PB                   | 1    |
| Cloud Base (meters)         | 3152 | DRT ICA              | -    |
| Warm Cloud Depth (meters)   | 1803 | Cloud Base Temp (°C) | 8    |

**DISCUSSION:**

Weak showers were ongoing into the 20Z hour, but with the shortwave well defined on water vapor imagery moving over the region, we should see convection ramp up in the next 20-30 minutes. Pilot is on standby in 24P. By 2025Z, we decided to launch as one cell east of Pecos was looking good in Ward County. This will be our first target. We'll work the west end of the cell as it spread north into Ward County. We'll put a proper dosage in here and then work to the south near Coynosa and much of western Pecos County. This cell was seeded up to the 21Z hour before we pushed into NW Pecos County. We'll work this cell with a similar dosage as it appeared to work well on the Ward County storm. Second cell was seeded into 2115Z. Both cells merged and became much larger and more intense with the pilot reporting very heavy rainfall. We'll now dive south into Pecos County to the SW of Fort Stockton. We'll start just W of Fort Stockton and work our way SSW along the leading edge of cell #145. Meanwhile, cell #20 (merged with 136) became warned for Ward County. Cell was seeded well just W of Fort Stockton. We'll dive a bit further south and work the southern bow of the storm. This area was worked as we neared 2145Z. Therefore, we'll head back towards Fort Stockton for one last dosage before RTB. This area was re-worked by 2150Z so we'll RTB as resources are out. All clouds have been seeded and pilot is enroute back to SJT as he provided coverage for the day. As we RTB'd warning came out for cell #145, so timing was good.

**WATCHES/WARNINGS:**

T-Storm Warning - Ward  
 T-Storm Warning - Pecos

**SEEDED CELL ID'S:**

|     |    |     |  |  |  |  |  |  |  |  |
|-----|----|-----|--|--|--|--|--|--|--|--|
| 136 | 20 | 145 |  |  |  |  |  |  |  |  |
|-----|----|-----|--|--|--|--|--|--|--|--|

**FLIGHT INFORMATION:**

| TIME (Z) | Plane | Flare Location | County |
|----------|-------|----------------|--------|
| 2035     | 24P   | IN AIR         |        |
| 2034     | 24P   | 049° @ 14 nm   | WARD   |
| 2056     | 24P   | 070° @ 19 nm   | WARD   |
| 2058     | 24P   | 070° @ 21 nm   | WARD   |
| 2059     | 24P   | 074° @ 20 nm   | WARD   |

|      |     |              |       |
|------|-----|--------------|-------|
| 2107 | 24P | 091° @ 27 nm | PECOS |
| 2108 | 24P | 089° @ 26 nm | PECOS |
| 2111 | 24P | 096° @ 28 nm | PECOS |
| 2112 | 24P | 094° @ 30 nm | PECOS |
| 2115 | 24P | 092° @ 32 nm | PECOS |
| 2132 | 24P | 126° @ 37 nm | PECOS |
| 2134 | 24P | 140° @ 40 nm | PECOS |
| 2136 | 24P | 137° @ 38 nm | PECOS |
| 2137 | 24P | 137° @ 41 nm | PECOS |
| 2140 | 24P | 140° @ 46 nm | PECOS |
| 2141 | 24P | 141° @ 52 nm | PECOS |
| 2143 | 24P | 140° @ 52 nm | PECOS |
| 2145 | 24P | 139° @ 46 nm | PECOS |
| 2147 | 24P | 136° @ 42 nm | PECOS |
| 2148 | 24P | 132° @ 40 nm | PECOS |
| 2150 | 24P | RTB          |       |

Seeding operations were conducted over Ward (8G+1H) and Pecos (30G+2H) Counties. 38 glaciogenic flares and 3 hygroscopic flares were burned within 3 clouds. This is the 2<sup>nd</sup> day for seeding in June and the 9<sup>th</sup> day for seeding during the season.