

WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - May 6, 2023

SYNOPTIC/MESOSCALE CONDITIONS:

Southwesterly flow aloft continues today. Enhanced dynamical forcing will be in place as a series of shortwaves will track over the region. Meanwhile, at the surface, a dryline will be placed across the central portions of the Rolling Plains extending south into the Concho Valley. Ahead of this dryline, strong moisture advection will continue with dew points pushing well into the mid to upper 60's. With afternoon heating, we'll see CAPE values exceeding 3k J/Kg. Storms should fire up by 21Z and become more widespread by 22Z and especially by 23Z. Any storms that develop could quickly become severe with hail being the main threat due to steep lapse rates. Best area for development will be along and east of a Haskell to Ozona line.

LIFTING MECHANISM:

Dryline

THERMODYNAMIC INDICES (12Z KMAF)

| | | | |
|-----------------------------|------|----------------------|------|
| Freezing Level (m) | 4160 | -15°C Height (m) | 6400 |
| Precipitable Water (inches) | 1.05 | CAPE (J/Kg) | 700 |
| LCL | 1104 | CINH (J/Kg) | 573 |
| CCL | 3169 | LI (°C) | -2 |
| MAF ICA | 0.04 | PB | 2 |
| Cloud Base (meters) | 2896 | DRT ICA | 5.08 |
| Warm Cloud Depth (meters) | 1264 | Cloud Base Temp (°C) | 14 |

DISCUSSION:

Convection this afternoon and evening remained just ENE of the target area, with plenty of severe storms in those areas. Target area remained clear, but by 23Z, an isolated storm began to fire up along the Pecos River in far southwestern Crockett County. We'll launch a pilot and head this way as radar imagery began looking more intense. Main concern here is cloud bases. Td in Big Lake was 16F with a reading of 55F in Ozona. If there is sufficient mixing, we could see bases well above 12kft. The pilot arrived at the cell with bases at a workable 9.5kft. Inflow was found with some intense updrafts early, but with the dryline beginning to retreat, we are losing our surface lift. Cell was seeded sufficiently through 0010Z with an RTB time of 0015 as the pilot reported plenty of downdrafts.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

| | | | | | | | | | | |
|-----|--|--|--|--|--|--|--|--|--|--|
| 236 | | | | | | | | | | |
|-----|--|--|--|--|--|--|--|--|--|--|

FLIGHT INFORMATION:

| TIME (Z) | Plane | Flare Location | County |
|----------|-------|----------------|----------|
| 2320 | 09P | IN AIR | |
| 0001 | 09P | 211° @ 73 nm | CROCKETT |
| 0004 | 09P | 212° @ 73 nm | CROCKETT |
| 0006 | 09P | 212° @ 72 nm | CROCKETT |
| 0008 | 09P | 211° @ 74 nm | CROCKETT |
| 0012 | 09P | 214° @ 73 nm | CROCKETT |
| 0013 | 09P | 214° @ 73 nm | CROCKETT |
| 0015 | 09P | RTB | |

Seeding operations were conducted over Crockett (12G+2H) County. 12 glaciogenic flares and 2 hygroscopic flares were burned within 1 cloud. This is the 2nd day for seeding in May and the 4th day for seeding during the season.