## WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

#### SEEDING REPORT - August 21, 2023

#### SYNOPTIC/MESOSCALE CONDITIONS:

Upper-level ridge has lifted to the north some as tropical moisture moves into the region from the east. This could provide just enough to allow for a few showers to fire up along and near I-10 later this afternoon. Latest HRRR does suggest a few storms developing near a line from Ozona to Fort Stockton and possibly even further east as we get into the later afternoon hours. Will keep slight rain chances in place for the Concho Valley and bump up to likely for the Trans-Pecos where terrain helps organize development.

# LIFTING MECHANISM:

Shortwave Aloft

## THERMODYNAMIC INDICES (12Z KMAF)

| Freezing Level (m)          | 5074 | -15°C Height (m)     | 7370 |
|-----------------------------|------|----------------------|------|
| Precipitable Water (inches) | 1.10 | CAPE (J/Kg)          | 368  |
| LCL                         | 2534 | CINH (J/Kg)          | 362  |
| CCL                         | 4035 | LI(°C)               | -1.1 |
| MAF ICA                     | 0.32 | PB                   | 1    |
| Cloud Base (meters)         | 3414 | DRT ICA              | 2.04 |
| Warm Cloud Depth (meters)   | 1660 | Cloud Base Temp (°C) | 16   |

### DISCUSSION:

Sufficient moisture advection was in place for southern parts of the area as an extensive cu field fired up by 19Z. Though we may see a few showers, the activity is expected to be short lived and rather small. Still, we'll try to get airborne and for at least training purposes. Cells did develop near Ozona around 1940Z, pilots were called airborne and should be up just before 20Z. We'll head southwest and investigate these small cells. Cells moved quickly into Pecos County, but the pilots still pushed south into Crockett County where a few small cells were present. Visibilities were limited due to haze, but we found one area of inflow near the Pecos River. We'll hang here for a bit longer before pushing back east. Cells were without much inflow, but pilots are getting some much-needed training in. We did find a cell near I-10 between Sheffield and Ozona which had some solid inflow. We'll focus on this as we are near the 2115 hour. This cell did quickly fall apart, so we dove back south and finally got on a good cell, at least per radar. Seeding did take place here though it became outflow dominate after 6 glaciogenic flares. We'll push further east but these cells were rather small and short-lived, but we'll see if they develop any. These cells were small and had no inflow, so 49P was called RTB.

## WATCHES/WARNINGS:

N/A

#### SEEDED CELL ID'S:

| 39                  | 96  | 98 |      |     |              |     |        |          |        |    |  |  |  |
|---------------------|-----|----|------|-----|--------------|-----|--------|----------|--------|----|--|--|--|
| FLIGHT INFORMATION: |     |    |      |     |              |     |        |          |        |    |  |  |  |
| TIME (Z)            |     | ]  | lane | Fla | re Locat     | ion | County |          |        |    |  |  |  |
| 2000                |     |    | 49P  |     | IN AIR       |     |        |          |        |    |  |  |  |
| 2042                |     |    | 49P  | 221 | 221° @ 76 nm |     |        | CROCKETT |        |    |  |  |  |
| 21                  | .15 |    | 49P  | 231 | °@ 68        | nm  |        |          | CROCKE | TT |  |  |  |
| 2116                |     |    | 49P  | 231 | 231° @ 68 nm |     |        | CROCKETT |        |    |  |  |  |
| 2119                |     |    | 49P  | 233 | 233° @ 71 nm |     |        | CROCKETT |        |    |  |  |  |
| 21                  | .36 |    | 49P  | 219 | °@73         | nm  |        |          | CROCKE | TT |  |  |  |
| 21                  | .38 |    | 49P  | 219 | ° @ 74       | nm  |        |          | CROCKE | TT |  |  |  |
| 21                  | .40 |    | 49P  | 220 | °@45         | nm  |        |          | CROCKE | TT |  |  |  |
| 22                  | 205 |    | 49P  |     | RTB          |     |        |          |        |    |  |  |  |

Seeding operations were conducted over Crockett (13G+1H) County. 13 glaciogenic flares and 1 hygroscopic flare were burned within 3 clouds. This is the  $2^{nd}$  day for seeding in August and the  $19^{th}$  day for seeding during the season.