WEST TEXAS WEATHER MODIFICATION ASSOCIATION – SAN ANGELO, TEXAS

SEEDING REPORT – August 9, 2018

SYNOPTIC/MESOSCALE CONDITIONS:
Cold front has pushed its way through the area overnight and is currently stalled just south of highway 67. Showers and storms remain abundant along a line from Bronte to Mertzon to Ozona and areas north. Rainfall totals are likely exceeding half of an inch in areas that are receiving heavier rainfall. This main cluster will likely dissipate by noon as the atmosphere balances out. This could allow some clearing to take place. With that, convection will likely fire up during the afternoon across parts of the Concho Valley and eastern Trans-Pecos. Likely rain chances will stay in place for the Concho Valley while the Trans-Pecos lacks coverage and stays too far east which will result in only slight rain chances.

LIFTING MECHANISM:
Cold Front

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4795	-15°C Height (m)	7250
Precipitable Water (inches)	1.44	CAPE (J/Kg)	129
LCL	1205	CINH (J/Kg)	348
CCL	3505	LI(°C)	-2.5
MAF ICA	2.76	PB	3
Cloud Base (meters)	2591	DRT ICA	-3.24
Warm Cloud Depth (meters)	2204	Cloud Base Temp (°C)	12.8

DISCUSSION:
Morning showers have pretty much dissipated completely by 18Z. Latest sat imagery shows some cu developing along a boundary that is placed from Ballenger to Christoval southwest towards western Schleicher County. Decent convergence along this boundary is being reported via SPC mesoanalysis, however, the atmosphere remains capped. We'll need some more time for heating to overcome the cap and then storms should begin to fire up. HRRR model continues to suggest development between 20 and 21Z. Sat imagery became more favorably by 1855Z. Therefore, we decided to send pilot up as well as research aircraft to intercept developing storms in Schleicher County. First storm was intercepted in northwestern Schleicher County and was quickly seeded. Pilot reported CG lightning just after initial dose. We'll continue to work this area while the research aircraft focuses on convection further east. About 10 minutes after initial dosage, storm began to intensify and appeared to be responded. We'll continue to seed this storm and others as they pop up. A few storms did pop to the east northeast in Crockett/Irion Counties. These were seeded into the 20Z hour with more convection off to the west. Everything in Schleicher has now been heavily seeded. We'll let these go as they have now become heavily embedded. We may readdress these storms if needed. Storms in far western Crockett County were on the tail end of the boundary. Therefore, convergence is not as strong, but we are taking a look anyway. First cell did not produce anything, so we'll look at the furthest west cell. Nothing produced here so we went back to cell #2914 and began seeding that. However, after a while this began to become outflow dominate as was much of the convection in Crockett and Schleicher Counties. Additionally, NWS put a flood warning on that cell. We pushed south into Sutton County but after investigating several storms no inflow was found. This is likely due to overcast skies taking over and strong northerly winds advecting cooler air into the area. We'll RTB for fuel and look to relaunch if needed.

WATCHES/WARNINGS:
Flood Warning - Crockett

SEEDED CELL ID'S:

2826	2915	2914									

FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
1910	**24P**	In Air	
1928	**24P**	209° @ 30 nm	**Schleicher**
1928	**24P**	209° @ 30 nm	**Schleicher**
1929	**24P**	211° @ 32 nm	**Schleicher**
1932	**24P**	211° @ 32 nm	**Schleicher**
1937	**24P**	211° @ 32 nm	**Schleicher**
1940	**24P**	212° @ 31 nm	**Schleicher**
1941	**24P**	208° @ 31 nm	**Schleicher**
1942	**24P**	204° @ 32 nm	**Schleicher**
1945	**24P**	204° @ 33 nm	**Schleicher**
1954	**24P**	226° @ 32 nm	**Crockett**
1954	**24P**	228° @ 32 nm	**Crockett**
1955	**24P**	231° @ 32 nm	**Crockett**
1959	**24P**	234° @ 33 nm	**Crockett**
2000	**24P**	234° @ 35 nm	**Crockett**
2007	**24P**	222° @ 38 nm	**Crockett**
2007	**24P**	222° @ 38 nm	**Crockett**
2009	**24P**	219° @ 38 nm	**Crockett**
2010	**24P**	221° @ 37 nm	**Crockett**
2041	**24P**	229° @ 43 nm	**Crockett**
2048	**24P**	223° @ 44 nm	**Crockett**
2049	**24P**	222° @ 44 nm	**Crockett**
2053	**24P**	216° @ 41 nm	**Crockett**
2057	**24P**	224° @ 40 nm	**Crockett**
2058	**24P**	228° @ 41 nm	**Crockett**
2135	**24P**	RTB	

Seeding operations were conducted over Schleicher (16+2H) and Crockett (34+1H) Counties. 50 flares plus 3 hygroscopic flares were burned within 3 clouds. This is the 1st day for seeding in August and the 18th day for seeding during the season.