

Present Weather Discussion

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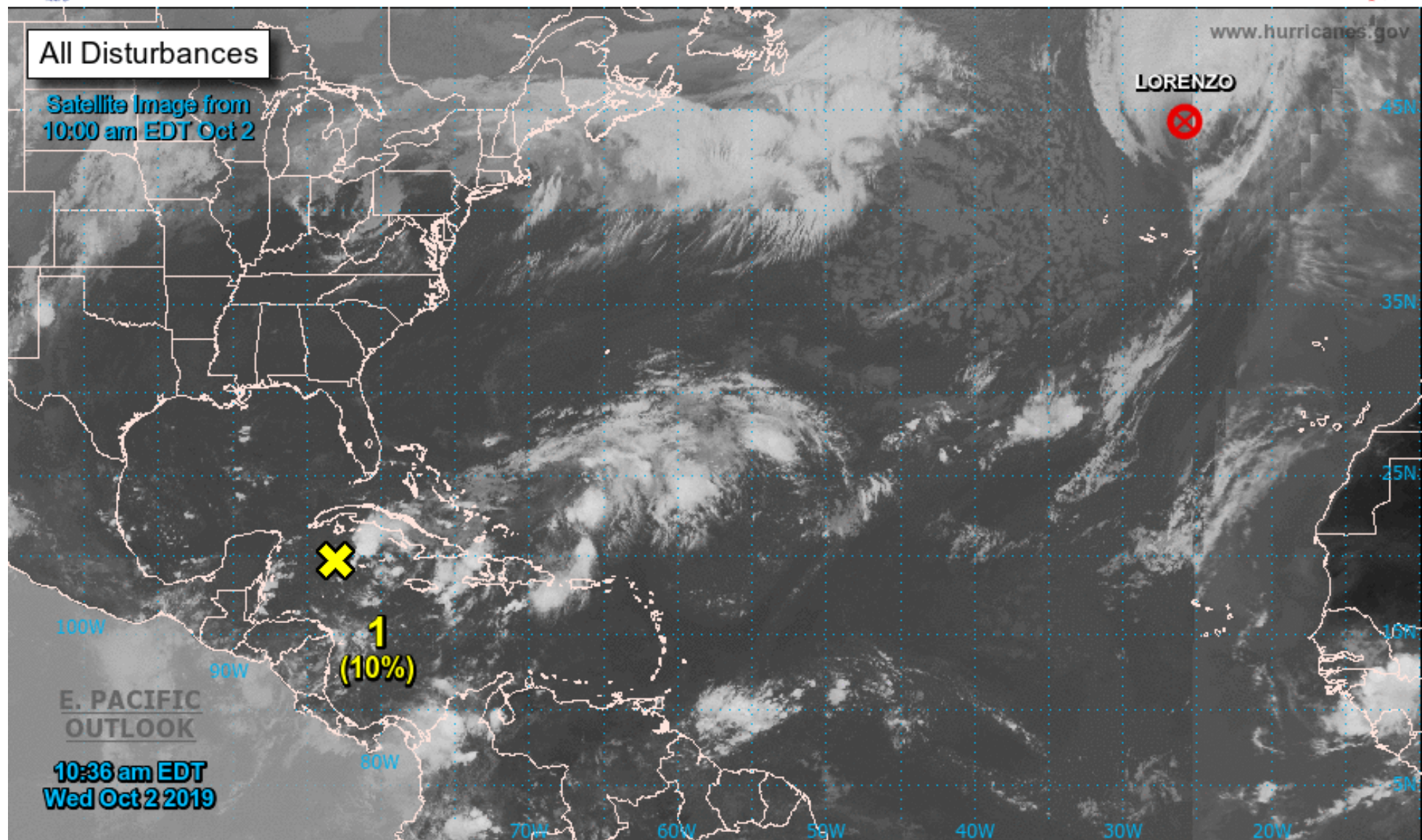
Weather, Climate, and Climate Change—What the Data Tell Us

2 Oct 2019



Two-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Current Disturbances and Two-Day Cyclone Formation Chance: < 40% 40-60% > 60%

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

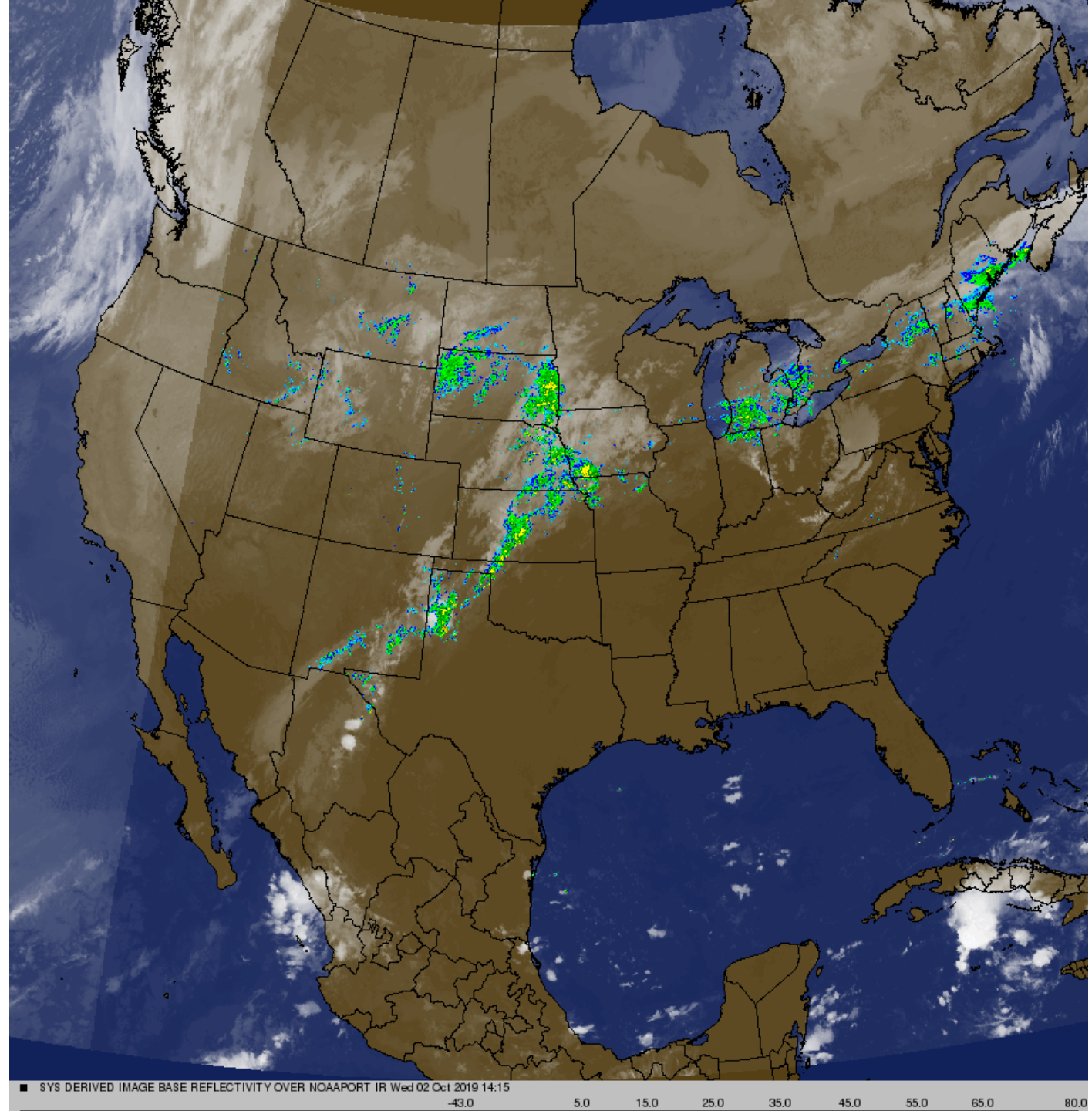
Post-Tropical Cyclone or Remnants

GOES West Satellite

2 Oct 2019/1415Z

Water Channel from ITCZ still working.

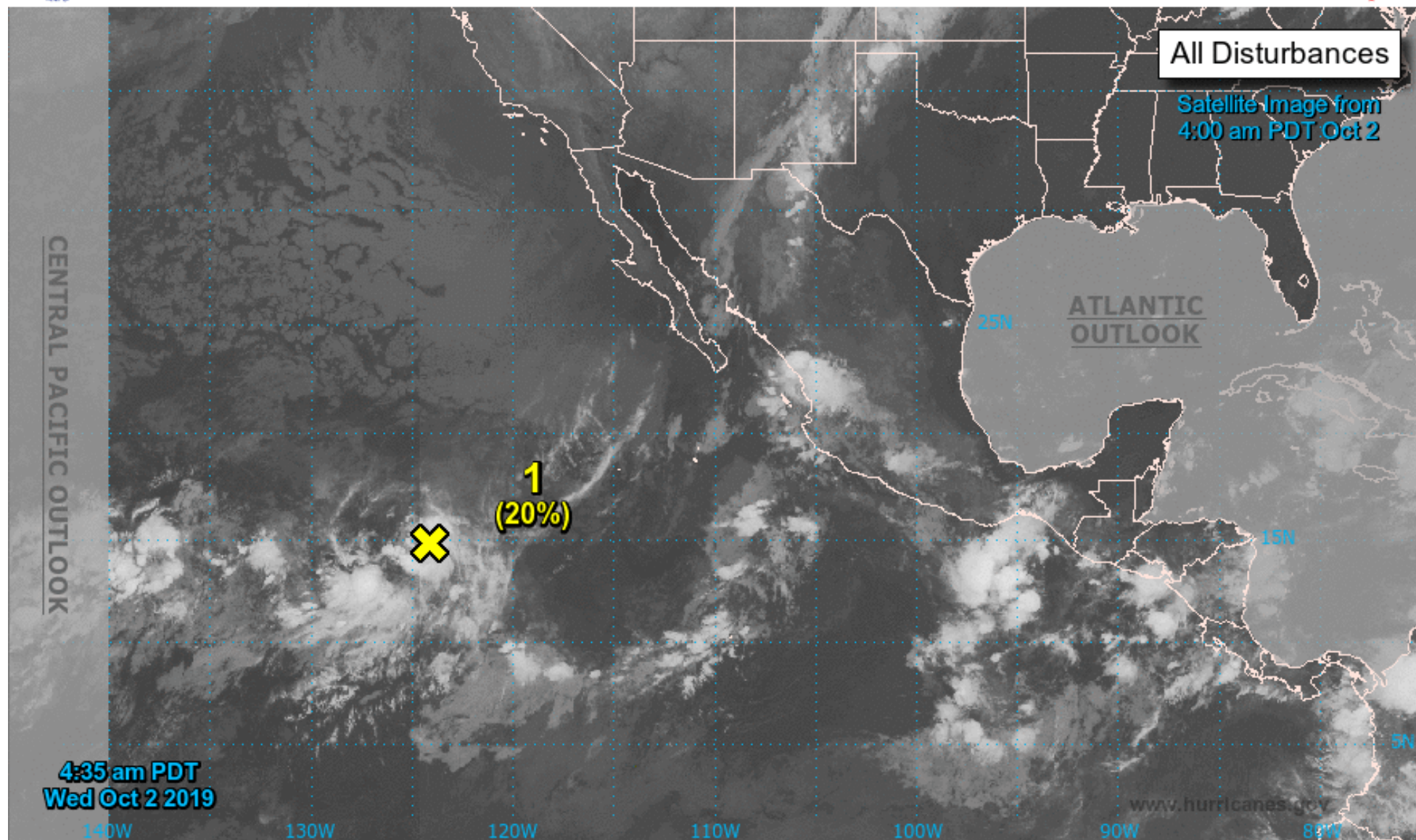
Suspicious area near Los Mochis
...but no statement from NHC...yet.





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Two Air Masses!

Tropopause off chart at 106 mb
Upper, potentially warmer air mass
contains the water channel from the tropics

Nearly saturated aloft portion Temperature follows
the 22 grams of water per Kg of air saturation adiabat.

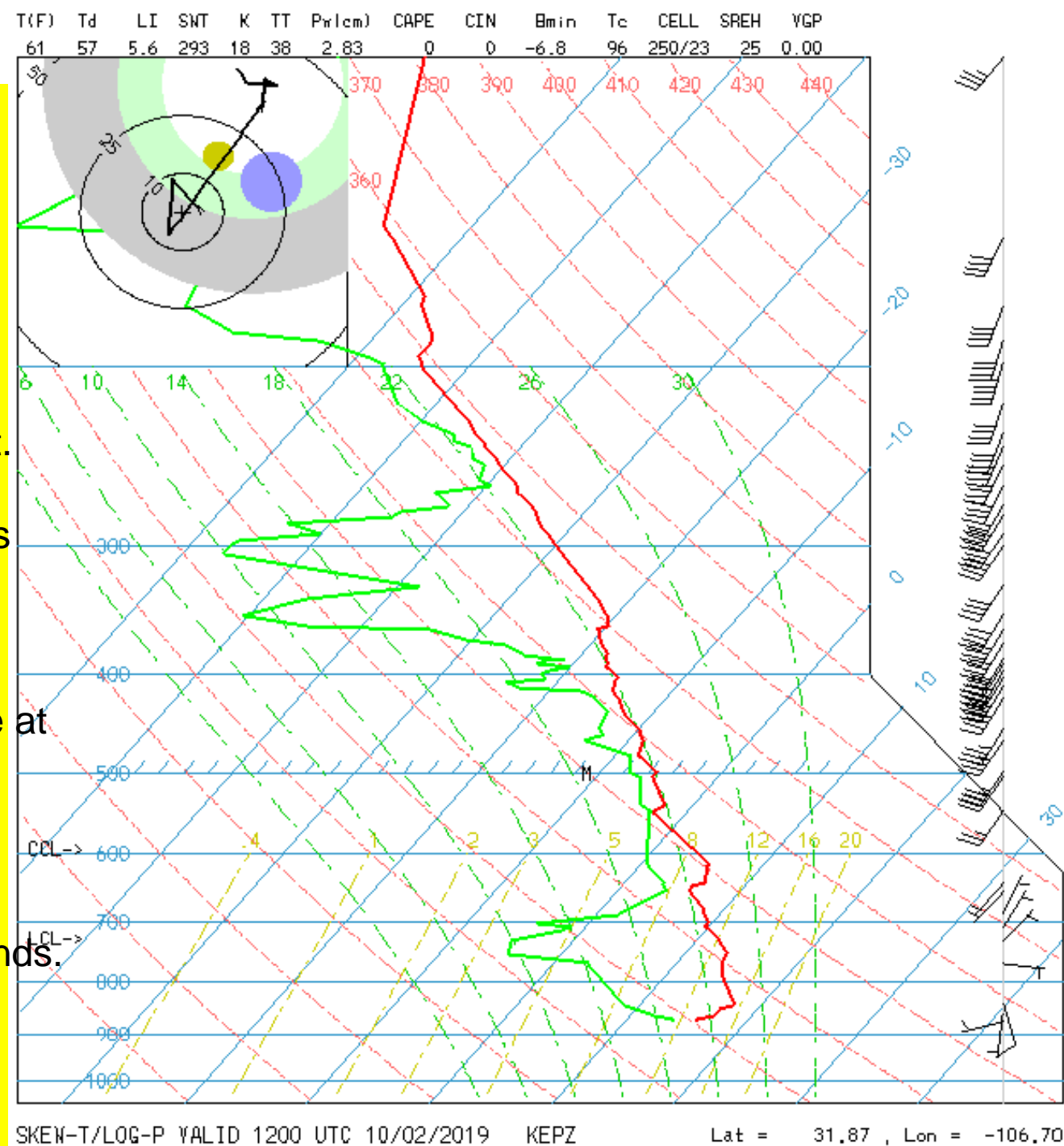
Speed is advecting/exporting the water at 40-45 knots

<PHOTO>

*Can see the two layers having billow cloud structure at
inversion levels of 550 mb and 360 mb

*Maybe can see the CI distant East.

Cooler air mass, below 660 mb, has light/variable winds.
Water at surface likely from human sources
in urban ELP-EPZ-Juarez border region.





<http://weather.uwyo.edu/upperair/sounding.html>

Wide Choice of sounding stations

Allows choice of list or plot on chart

Skew-T or Stuve Chart


Allows look up of older charts

Allows looping of older charts

University of Wyoming
College of Engineering
Department of Atmospheric Science

Region	Type of plot	Year	Month	From	To	Station Number
North America ▼	GIF: Skew-T ▼	2019 ▼	Oct ▼	02/12Z ▼	02/12Z ▼	72364

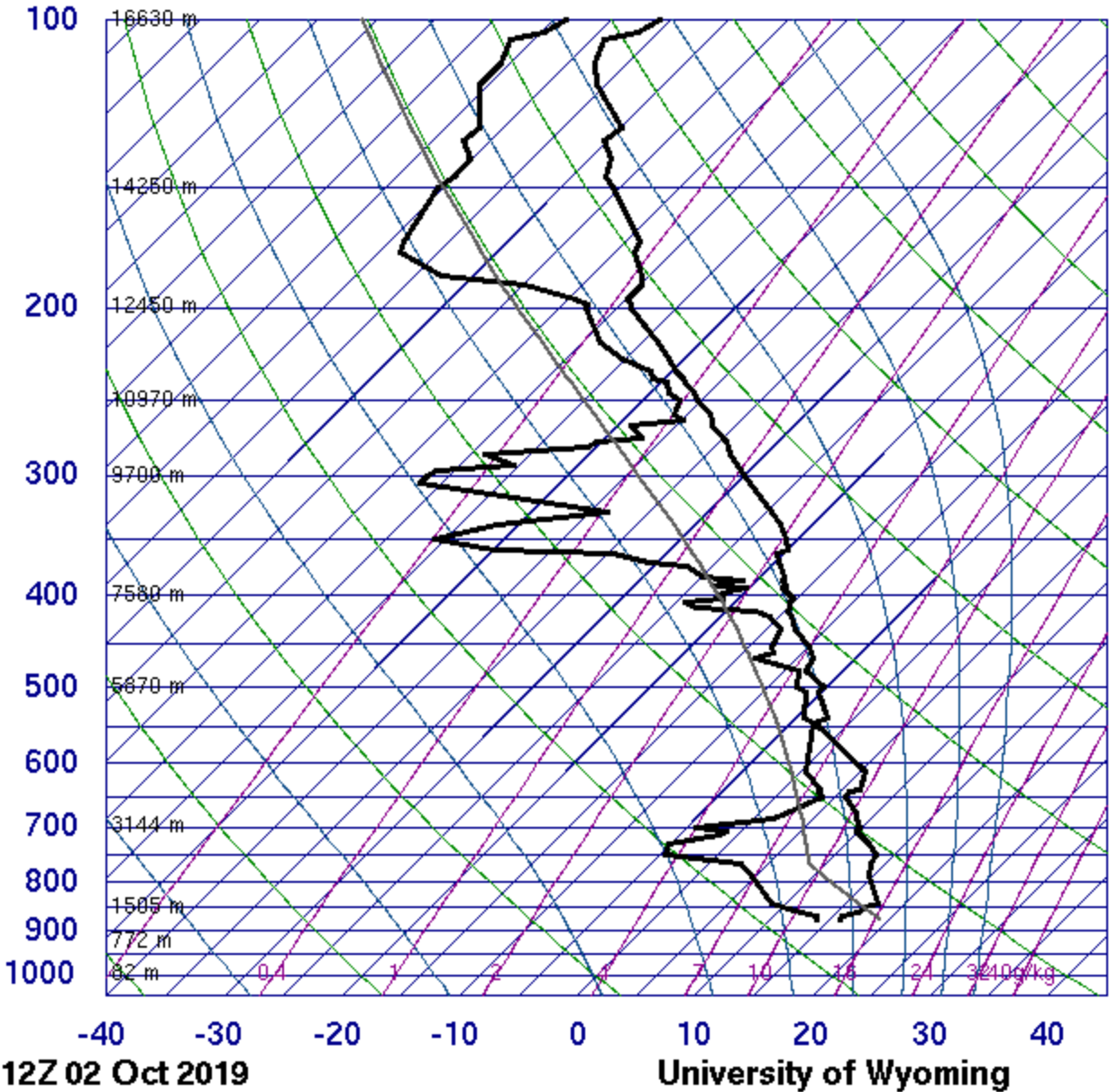
Click on the image to request a sounding at that location or enter the station number above



The map displays the contiguous United States and parts of Canada and Mexico. It is densely populated with three-letter station codes. Examples include PABR, PASV, PASN, PABP, PAMCPAFA, YEV, YCB, YVR, BOEM, BOAM, BOBW, YUQ, YBK, YFB, YUP, VVR, VPH, VMO, VAH, VJT, AVT, ZKS, WSE, VQD, WPL, WPM, GYX, YOI, VZT, CWK, OTX, TFX, GOW, INL, WML, GYX, YOI, SLE, MFR, BOI, RIV, RAP, ABR, MPX, GHE, DTW, BOP, ALB, CHH, OKX, REI, LKNS, GJT, DNR, LBFO, AX, DUN, ILX, ILN, PIT, IAG, WAL, OAK, VEF, VEG, ABO, AMA, OUN, LZK, BNA, GSN, MNX, URG, VEF, FGT, ABQ, FMO, SHW, AN, LCH, LIX, TLH, AX, TBW, MFL, KEY, TUS, EPZ, MAF, FMO, SHW, AN, LCH, LIX, TLH, AX, TBW, MFL, KEY, PHLI, PHTO, 76256, 76225, DRT, CRP, ADN, BBO, 76405, 76459, 76526, 76612, 76654, 76675, 76692, 76805, 76895, MIMM, MVCR, MZB2, SKSP, SKBQ, SKBG, SBBU, TJSJ, TPER, TXKF.

U Wyo Met Department
Shows Tropopause at 106 mb

72364 EPZ Santa Teresa



SLAT	31.86
SLON	-106.70
SELV	1252.
SHOW	5.30
LIFT	5.01
LFTV	5.16
SWET	171.9
KINX	18.30
CTOT	15.30
VTOT	22.30
TOTL	37.60
CAPE	0.00
CAPV	0.00
CINS	0.00
CINV	0.00
EQLV	-9999
EQTV	-9999
LFCT	-9999
LFCV	-9999
BRCH	0.00
BRCV	0.00
LCLT	282.0
LCLP	771.1
MLTH	303.8
MLMR	9.47
THCK	5788.
PWAT	28.61

500 mb~18,000 ft Wed 2 Oct/1200Z
Wednesday AM

Transition to Fall is ongoing:

Over southeast third of the USA the
subtropical ridge still dominates.

Last contour drawn is 588 line = 5880 meters
several stations reporting 594 heights
but NCAR misses the analysis of them
(LZK) LIT, BNA, (BMX) BHM, JAN

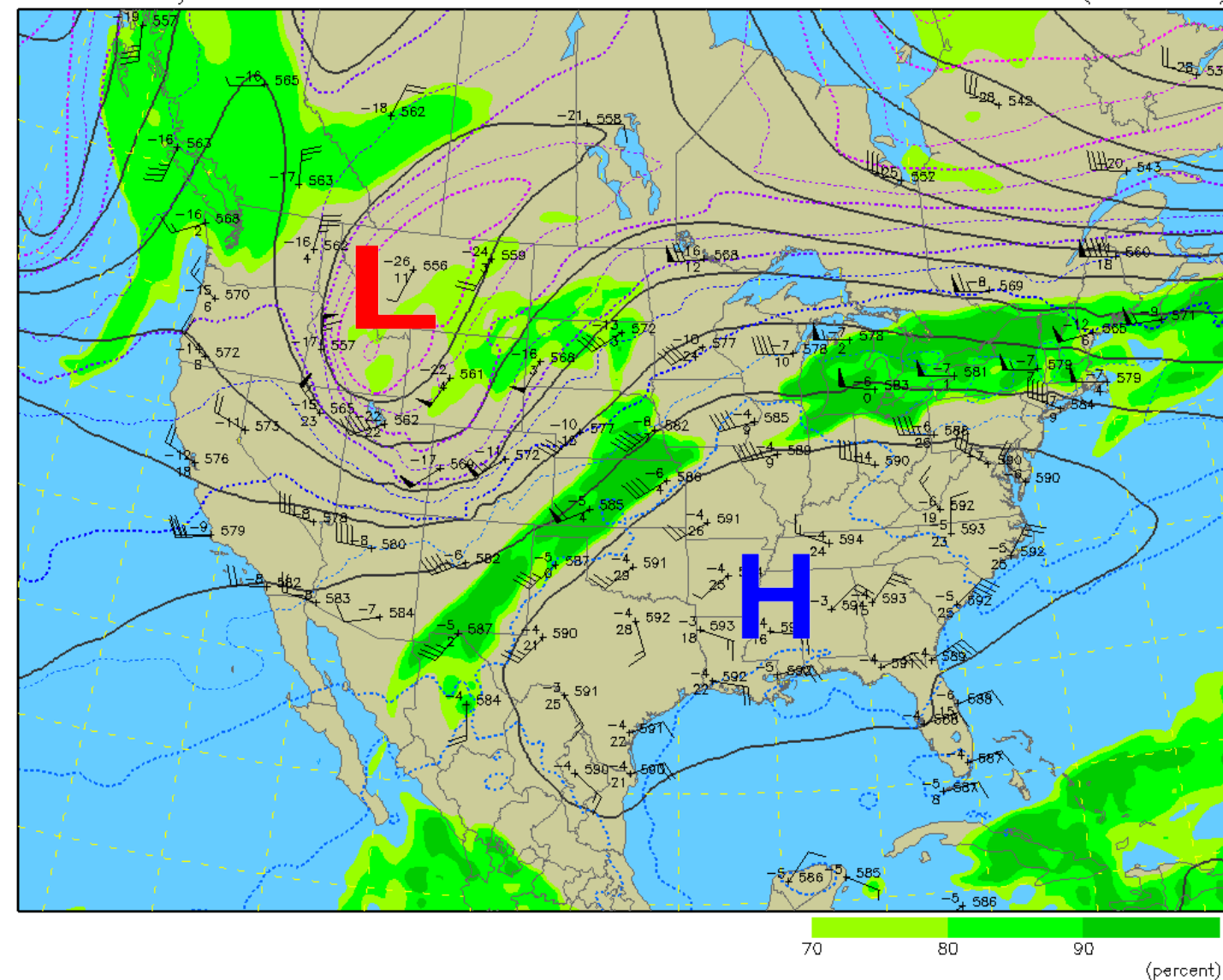
Center of closed Low is between GTF and SKA

Some analysis of overhead moisture channel from
the ITCZ.

500 mb Heights (dm) / Temperature (°C) / Humidity (%)

0-hour analysis valid 1200 UTC Wed 02 Oct 2019

RAP (12z 02 Oct)





web.meteostar.com/models/noaaport_loop.pl=/var/www/leads_images/satellite/SYS/WV/_OOP=10

Water Vapor Image from GOES Satellite

2 Oct 2019 1610Z

Wednesday 1015 L

6.7 to 7.3 micrometer wavelength range.
The upper and middle levels of the atmosphere are
~ 650 mb to the top of the troposphere.

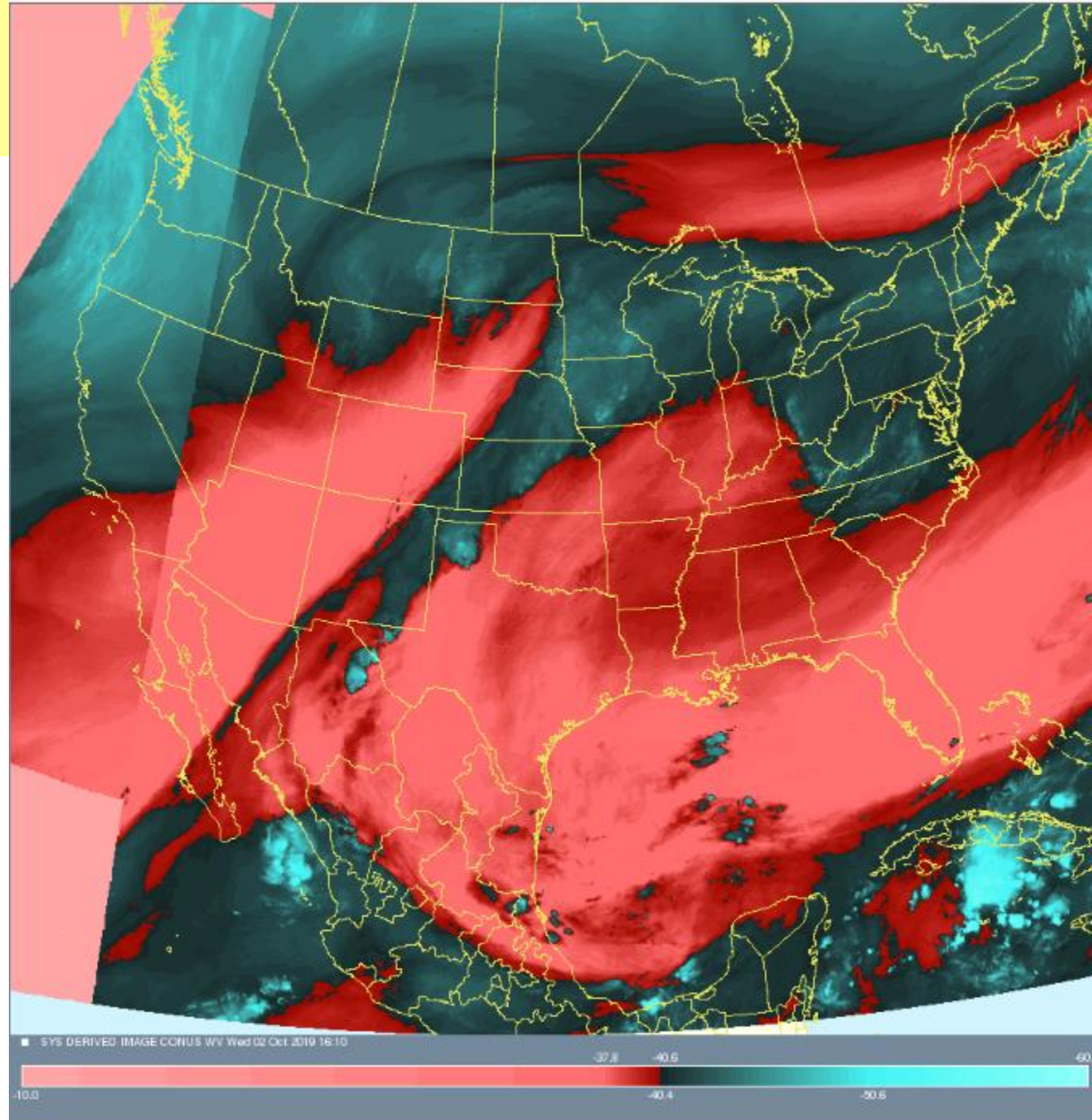
Dry is in Red

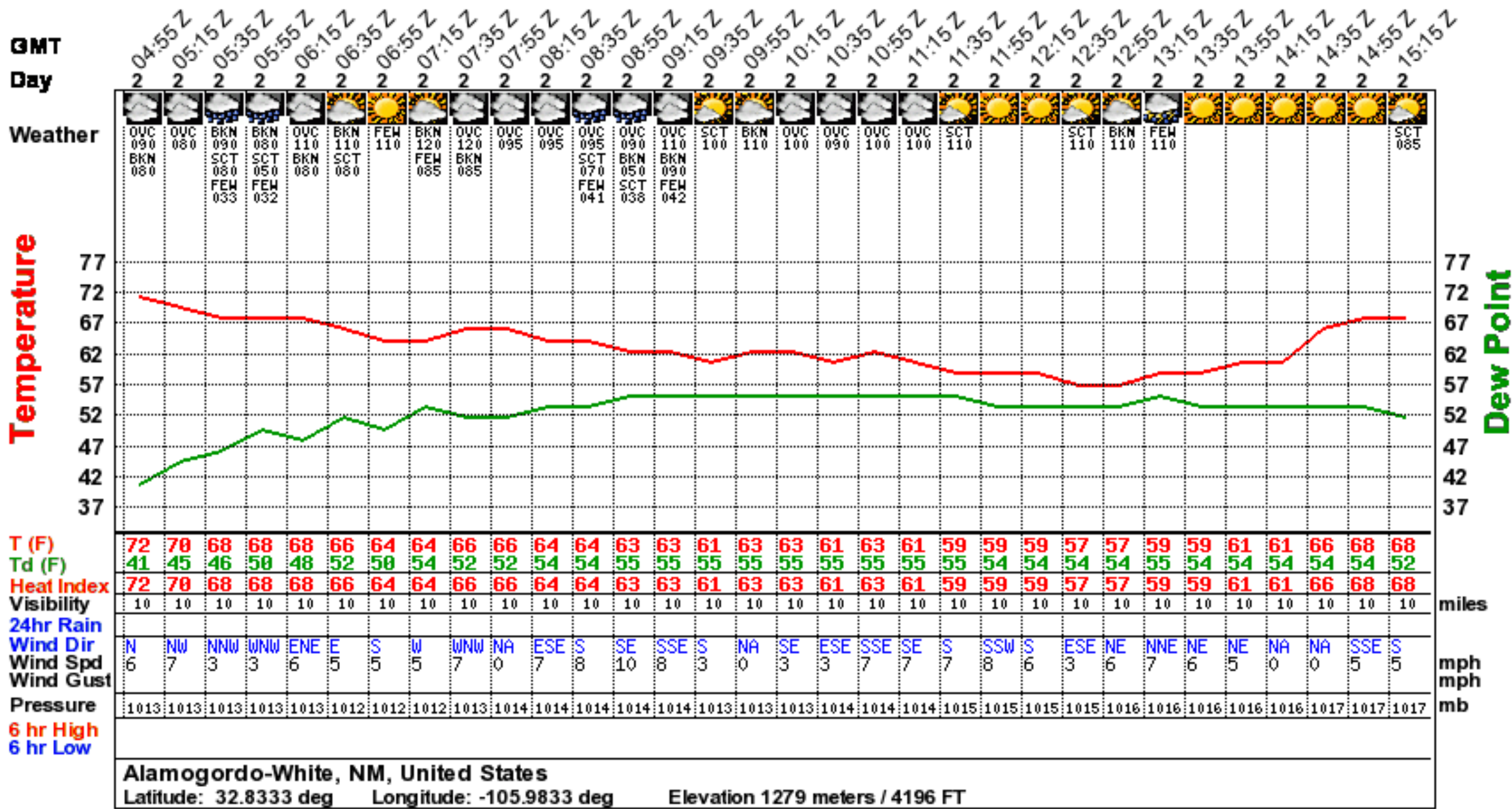
Deepest Red is over area of 594 contour height.

Clouds at this wavelength are blue blobs.

Best portrayal is N Cal to W Hudson Bay this image.

Does show the water vapor channel into NM
bootheel region.





<http://wxmaps.org/pix/elpgfs.png>

Forecast 10-day meteogram for El Paso
based on GFS model.

Temps aloft in Deg F (Unusual)
Freezing Level Double Black Line

Diurnal Temps shown as humps in temp curve.
Color-coded isotherms

Cold Front Passage on 8 October
Pressure SLP rises, thickness falls
Strong winds from East for a day

Clear Skies = Blue
Cloud bases/Tops in White

Rain/Rain Showers on Fri/Sat

El Paso

GFS 0~10day 3-hourly Forecast Meteogram for (106.5W, 31.75N)

