



OCTOBER 2014

Weather Digest

Weather Summary

Significant Events

Special Features

**Temperature &
Precipitation**

Severe Weather

October 2014 Weather Summary

The month of October can have a virtual potpourri of weather which potentially includes a case or two of large hail and damaging winds from thunderstorms, large scale windy dusty events, a day or two of heavy rains and flash flooding, and the first freeze of the season for many sites. Well, this October turned out to be relatively quiet for weather extremes.

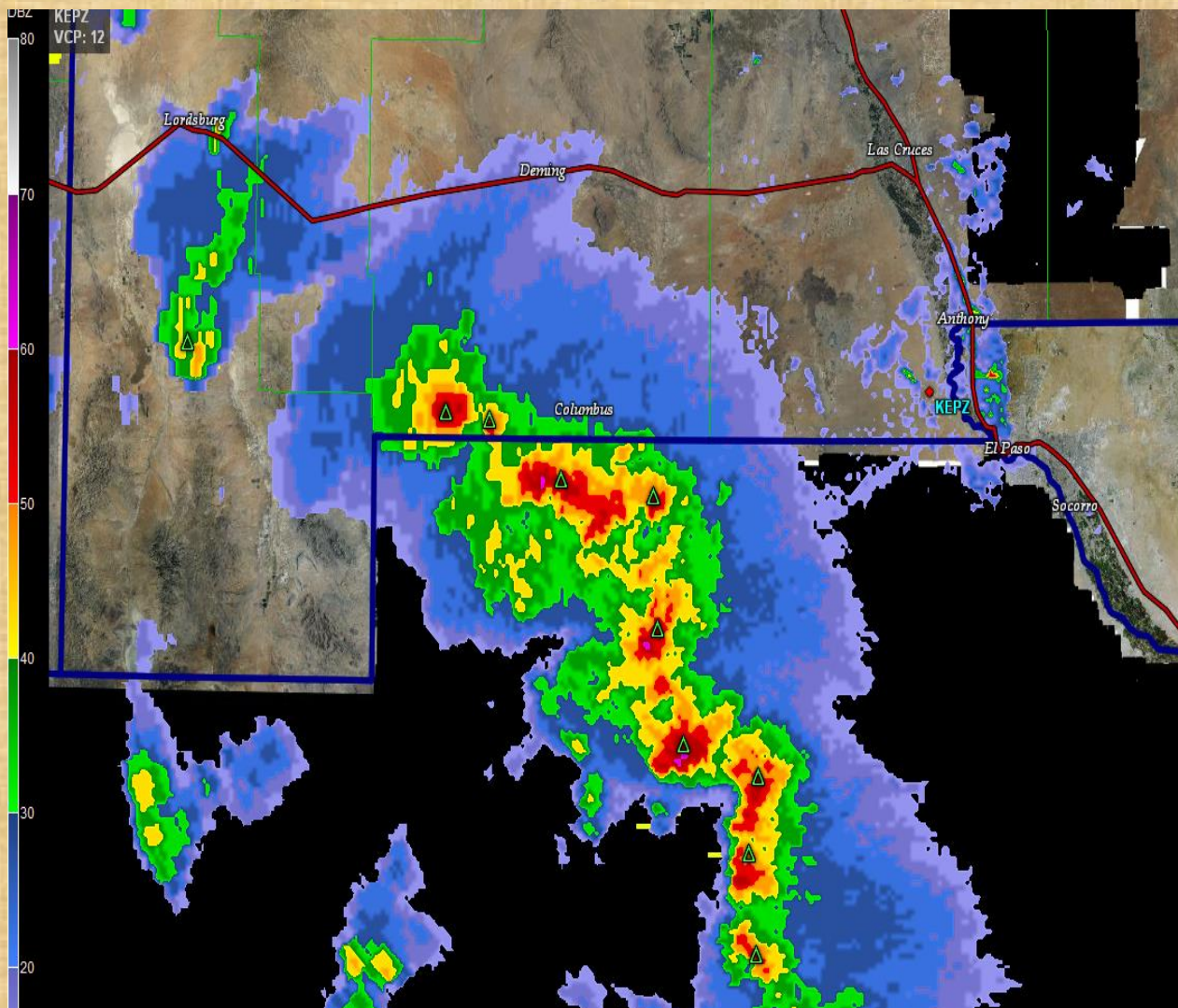
On October 10th, the Borderland got a bit of a taste of strong, but not severe weather. An upper trough dropped down from the northwest and combined with a cool front from the east to form isolated thunderstorms over much of the area. A few of these storms became strong and dropped pea size to dime size hail over the Silver City area. On October 12th, a strong upper trough swept across Colorado and northern New Mexico, resulting in strong winds and blowing dust across southern New Mexico and west Texas. A peak wind of 80 mph was reported at San Augustin Pass east of Las Cruces. More excitement came on the 20th. A strong upper trough moved up from the Sonoran Desert of Mexico and across southern New Mexico and west Texas. This trough formed a well organized line of thunderstorms which moved from Luna County east to Hudspeth County. While the line was near El Paso, a strong cell within this line moved rapidly north across and parallel to the east slopes of the Franklin Mountains. This dropped heavy rain on the east slopes and also parts of northeast El Paso and caused some street flooding (see images 1 and 2).

Weather Summary (continued)

Moving on to the climate, temperatures were generally about 2 to 4 degrees above normal, with both average high and low temperatures above normal. Precipitation, as a percent of normal, was absent of extremes. Generally the entire area ranged from slightly below normal to slightly above normal. Most of El Paso and Hudspeth Counties experienced above normal precipitation.

IMAGE 1

Line of thunderstorms that formed over northern Mexico and Luna County of New Mexico. Line continued moving east and eventually dumped heavy rain on parts of near east and northeast El Paso.

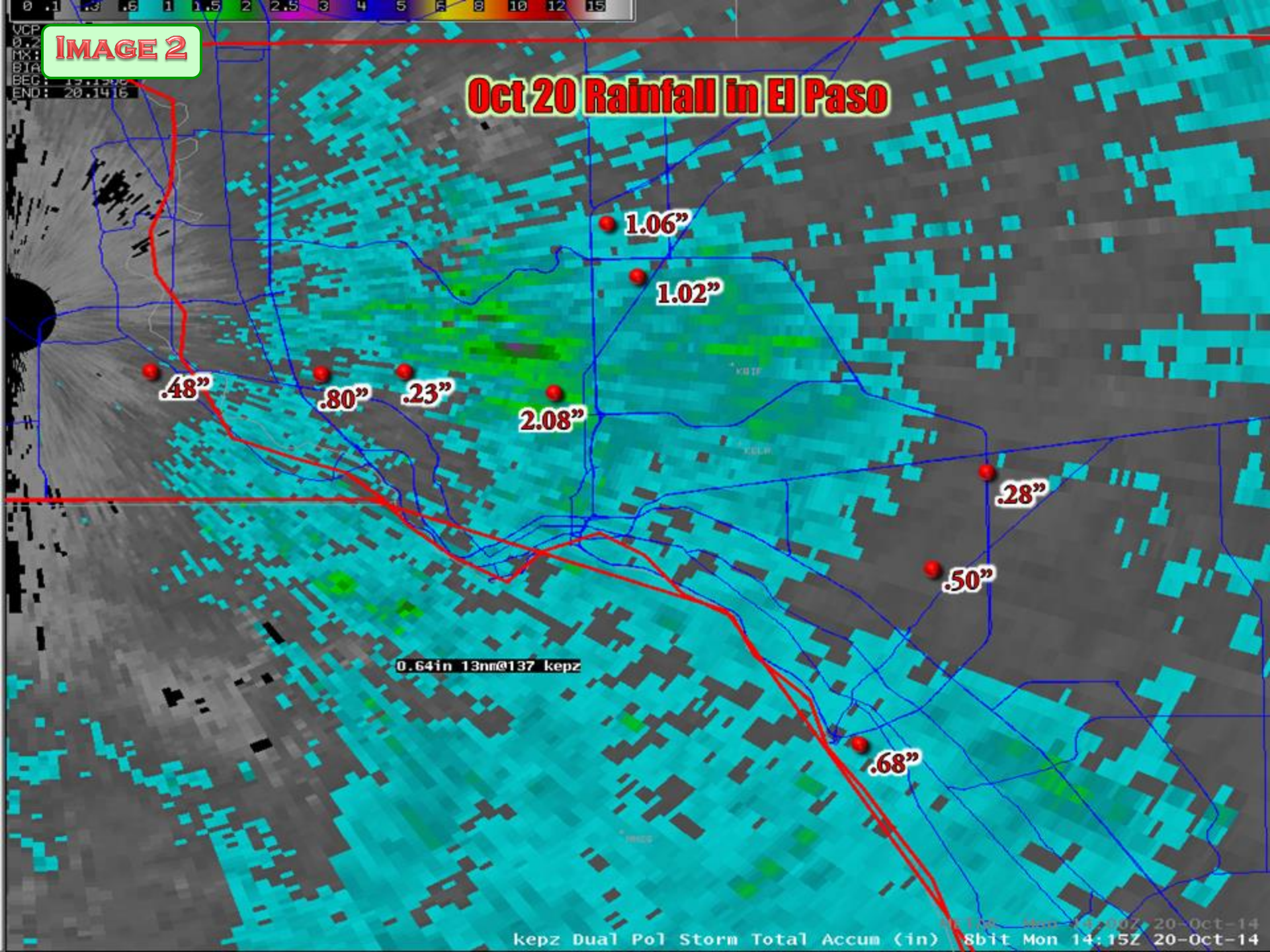


1 1.3 1.5 2 2.5 3 4 5 6 8 10 12 15

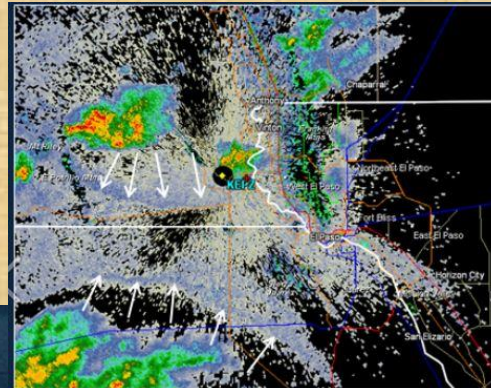
IMAGE 2

VCP
0.2
MX:
BTA
BEG: 13.12M
END: 20.1416

Oct 20 Rainfall in El Paso



An impressive "shelf cloud" that formed along an outflow boundary that was spreading northwestward out of a thunderstorm complex in northern Chihuahua, Mexico. This boundary crossed into Doña Ana and Luna Counties and collided with another outflow boundary which triggered more thunderstorms the evening of October 20.



EPZ Radar- Santa Teresa, NM



The Borderland was treated to a total lunar eclipse during the early morning hours of October 8.

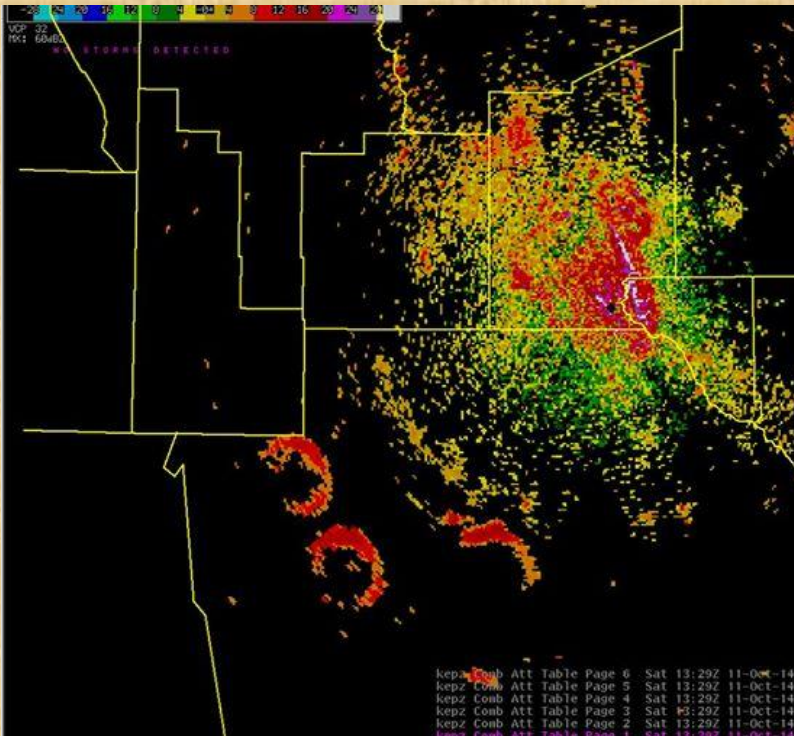


As an additional astronomical treat for the month, the Borderland was treated to a partial solar eclipse of the sun during the late afternoon hours on October 23.

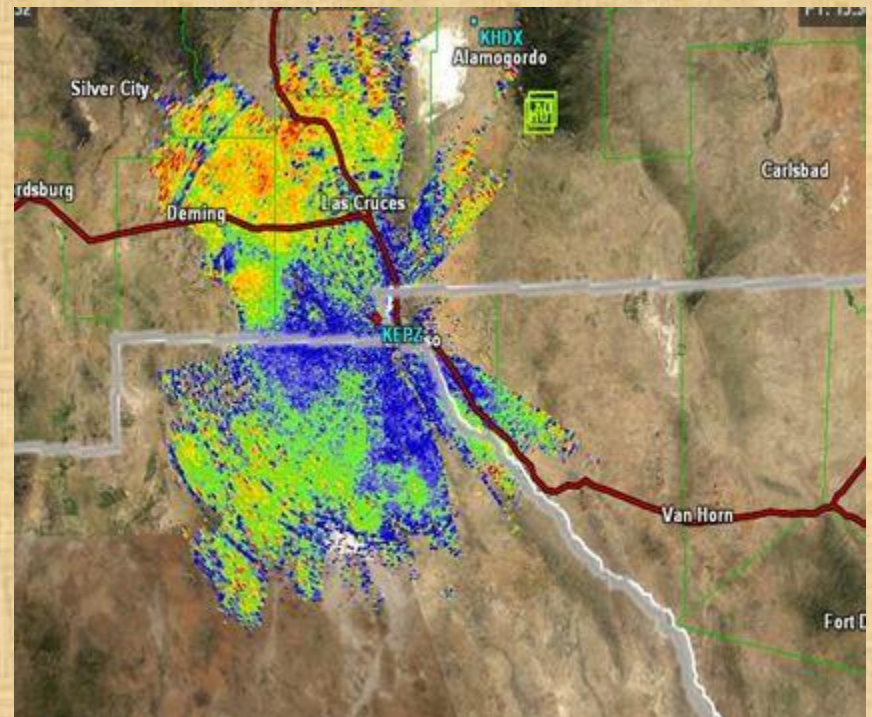


Doppler Weather Radar Detects more than just Weather

Migratory Birds



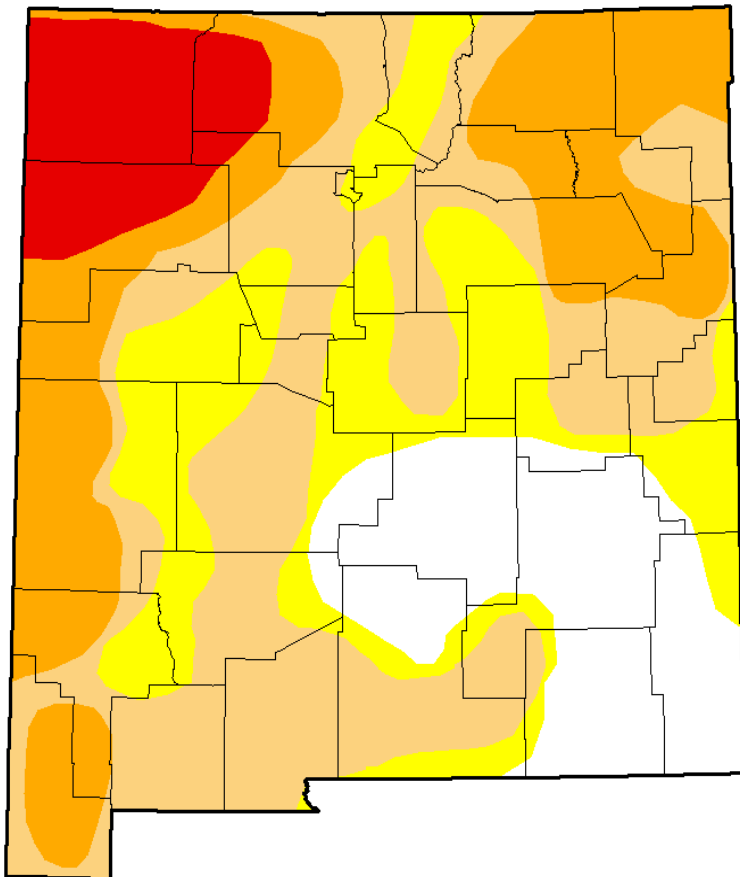
Monarch Butterflies in Migration



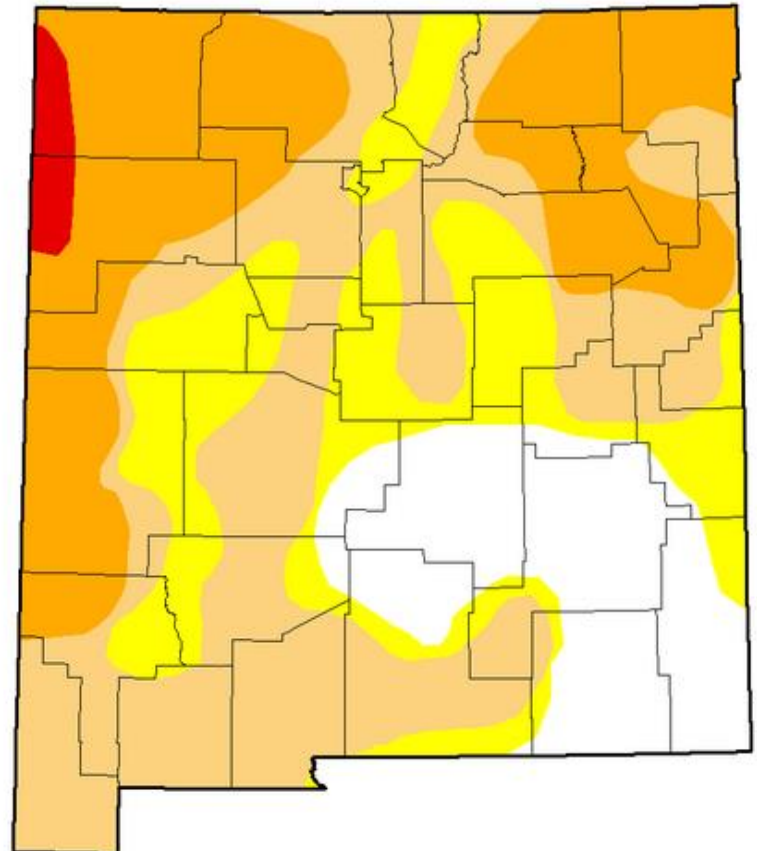
Current drought conditions for New Mexico

- Abnormally Dry – D0
- Moderate Drought – D1
- Severe Drought – D2
- Extreme Drought – D3
- Exceptional – D4

September 30



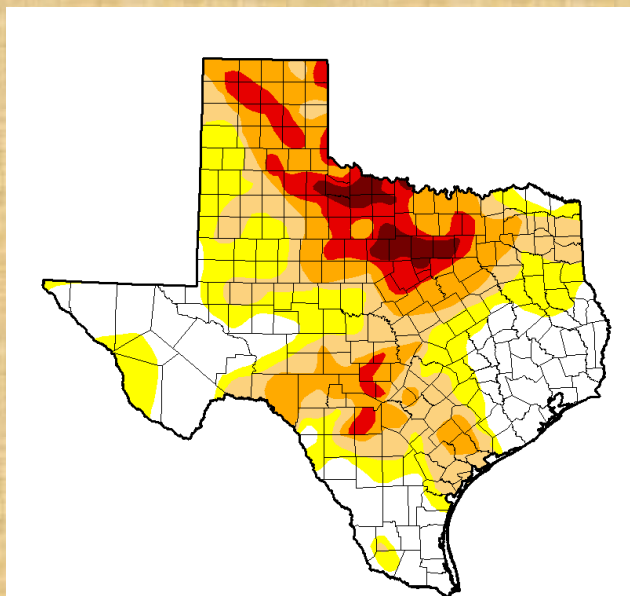
October 28



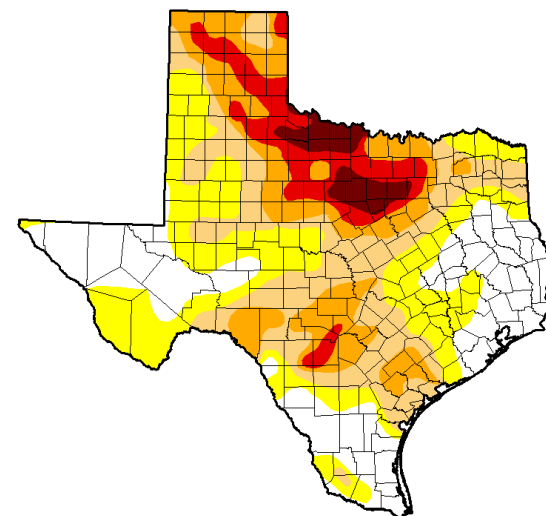
Current drought conditions for Texas.

Intensity:

- D0 - Abnormally Dry
- D1 - Moderate Drought
- D2 - Severe Drought
- D3 - Extreme Drought
- D4 - Exceptional Drought



09/30/2014



10/28/2014

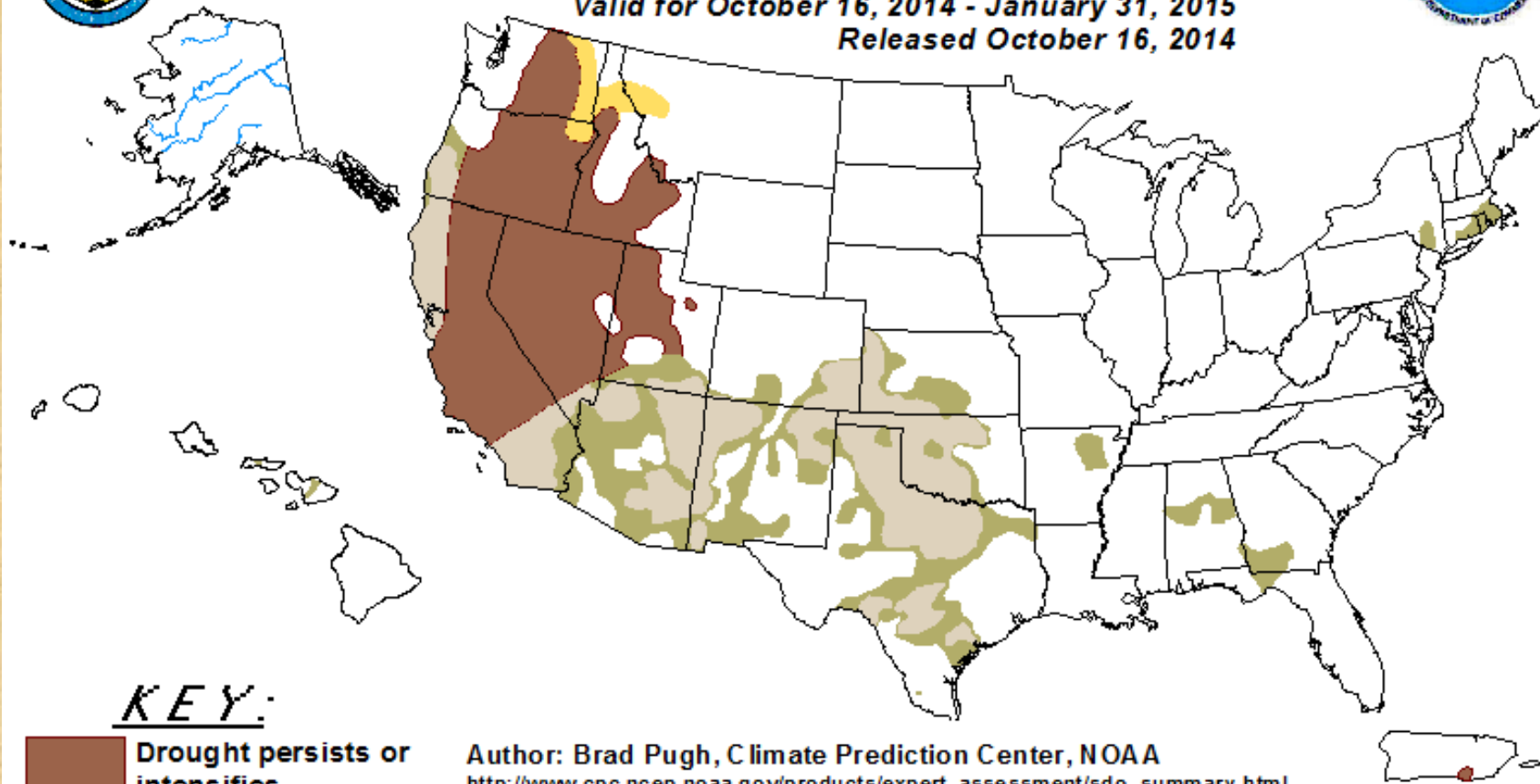


U.S. Seasonal Drought Outlook


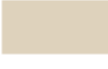


Drought Tendency During the Valid Period

Valid for October 16, 2014 - January 31, 2015

Released October 16, 2014



KEY:

-  Drought persists or intensifies
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely

Author: Brad Pugh, Climate Prediction Center, NOAA

http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.html

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events – such as individual storms – cannot be accurately forecast more than a few days in advance. Use caution for applications – such as crops – that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity).

For weekly drought updates, see the latest U.S. Drought Monitor.

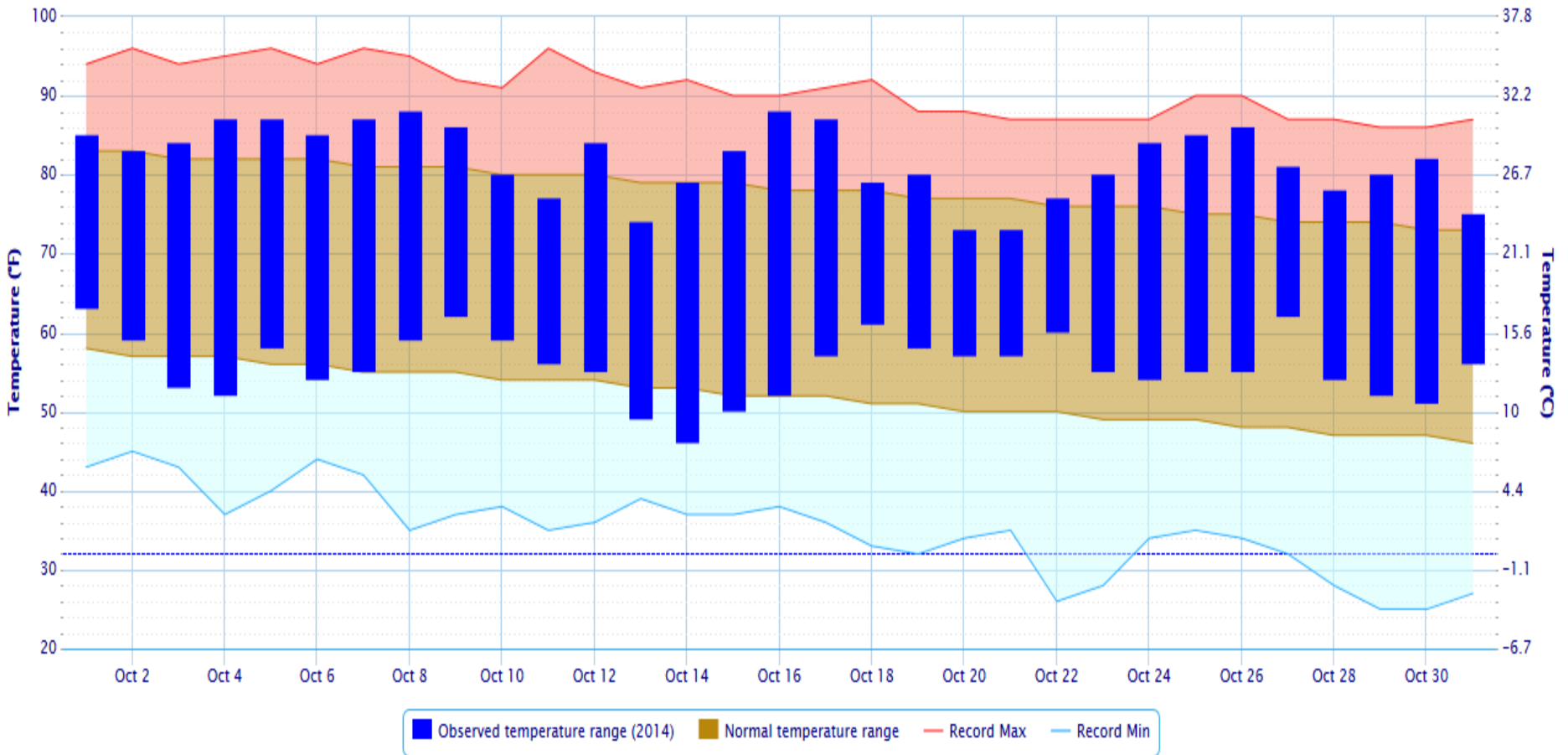
NOTE: The tan area areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain.

The Green areas imply drought removal by the end of the period (D0 or none)

Daily Temperature Data - EL PASO INTL AP, TX

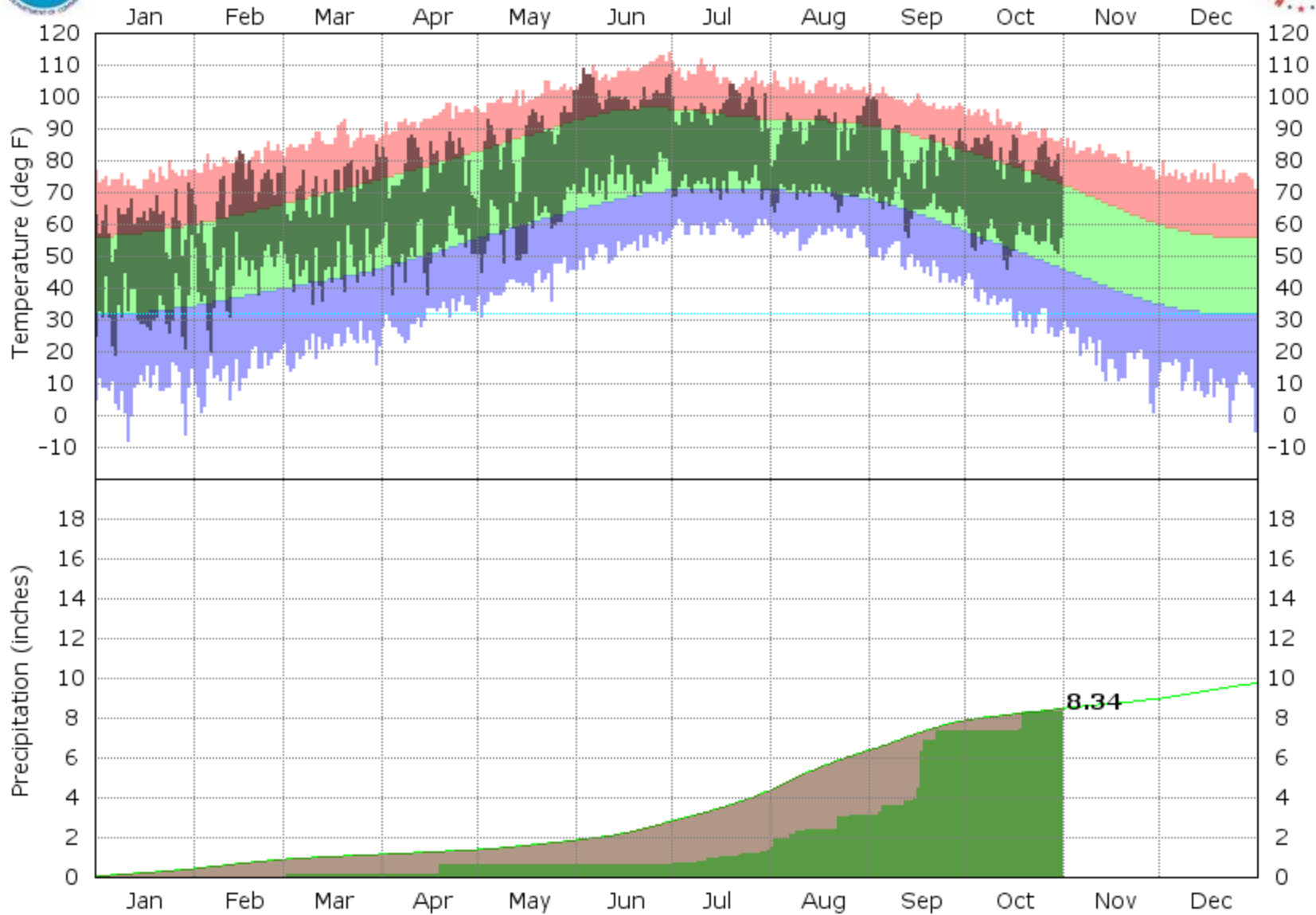


Period of Record - 1942-12-01 to 2014-10-31. Normals period: 1981-2010. Click and drag to zoom chart.

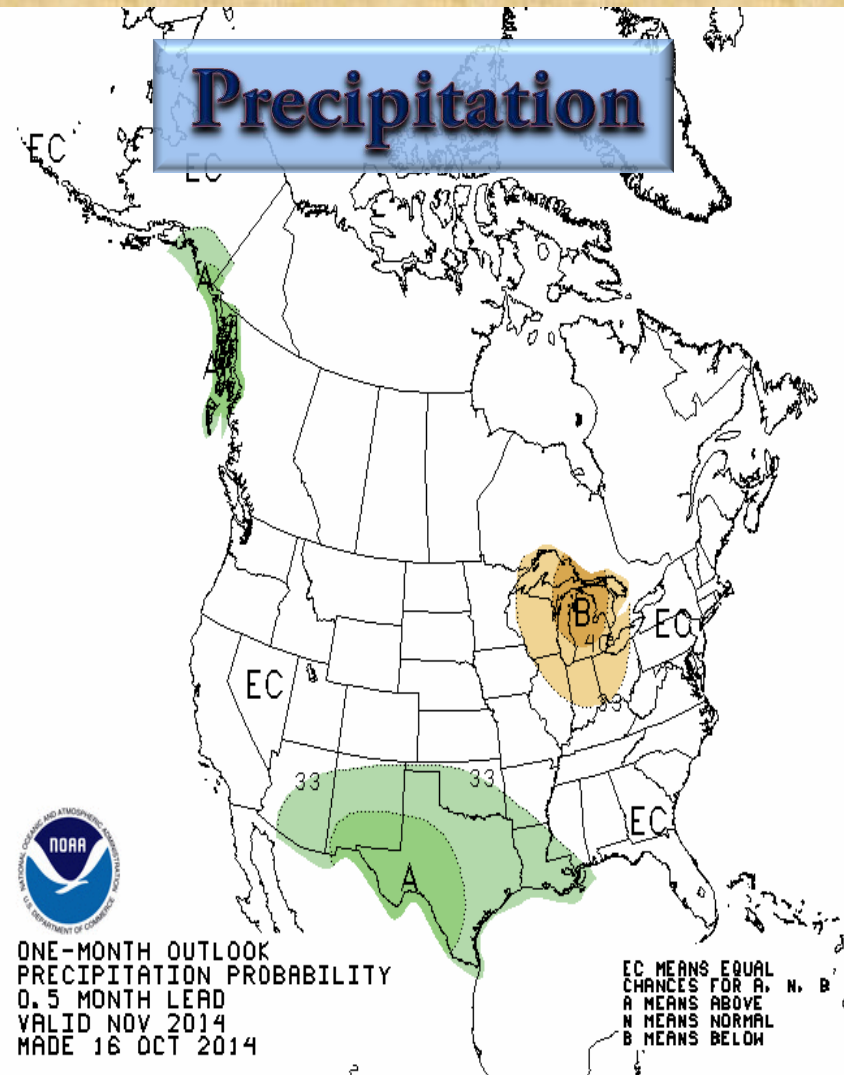
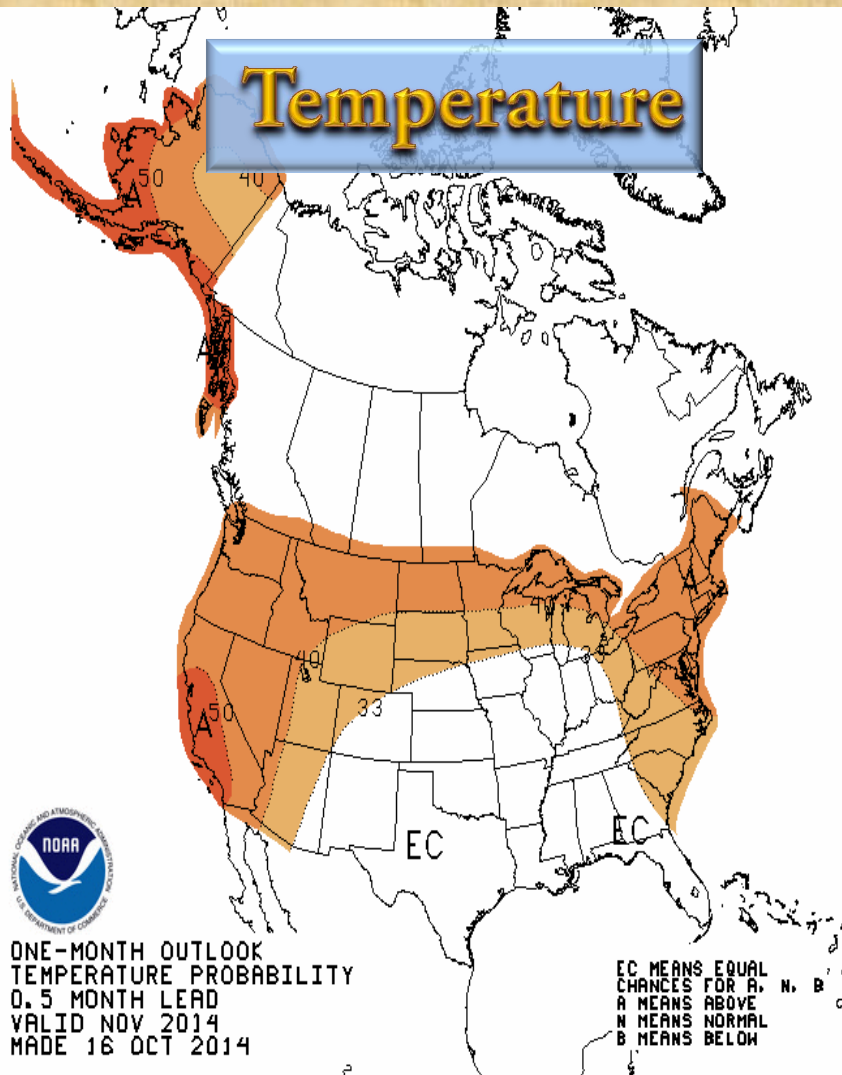




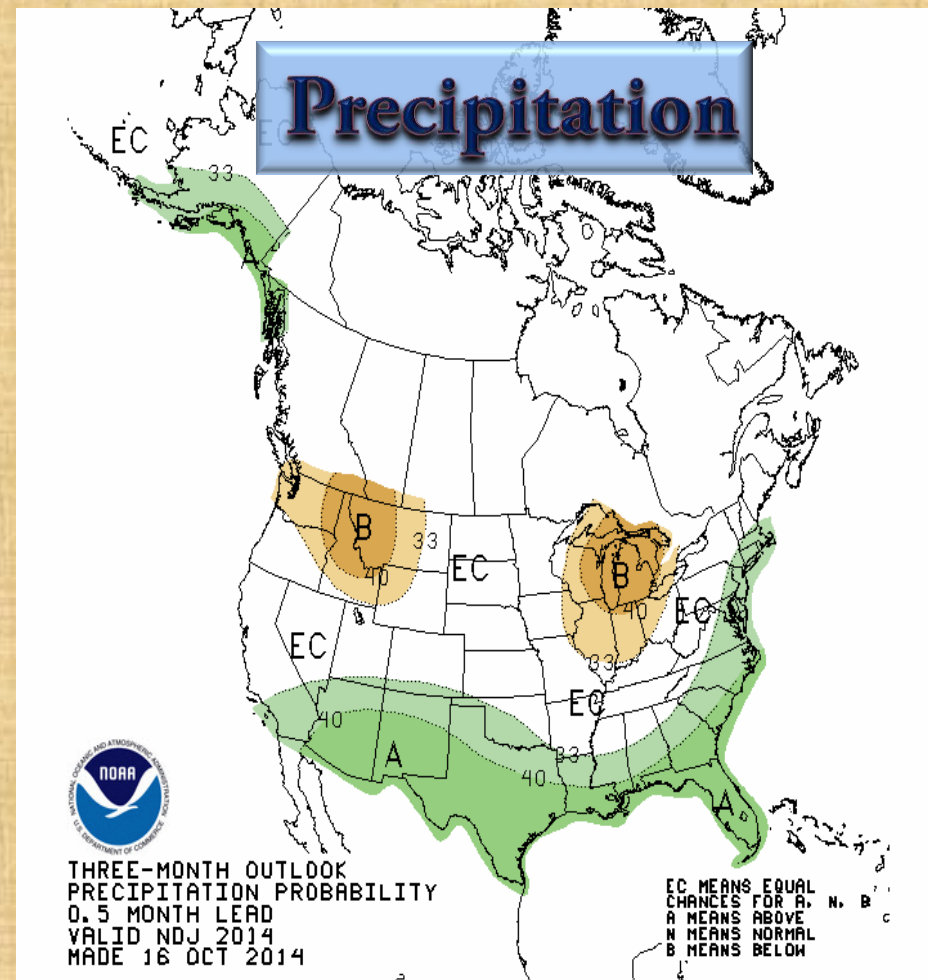
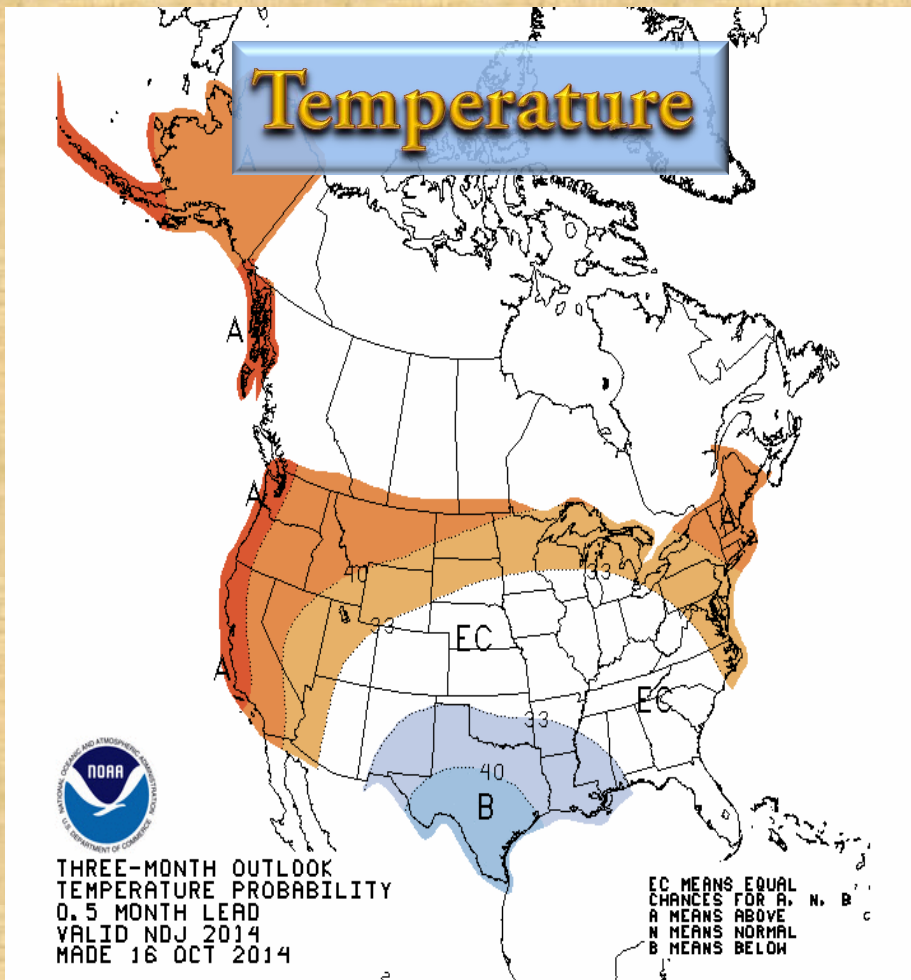
El Paso TX - 2014



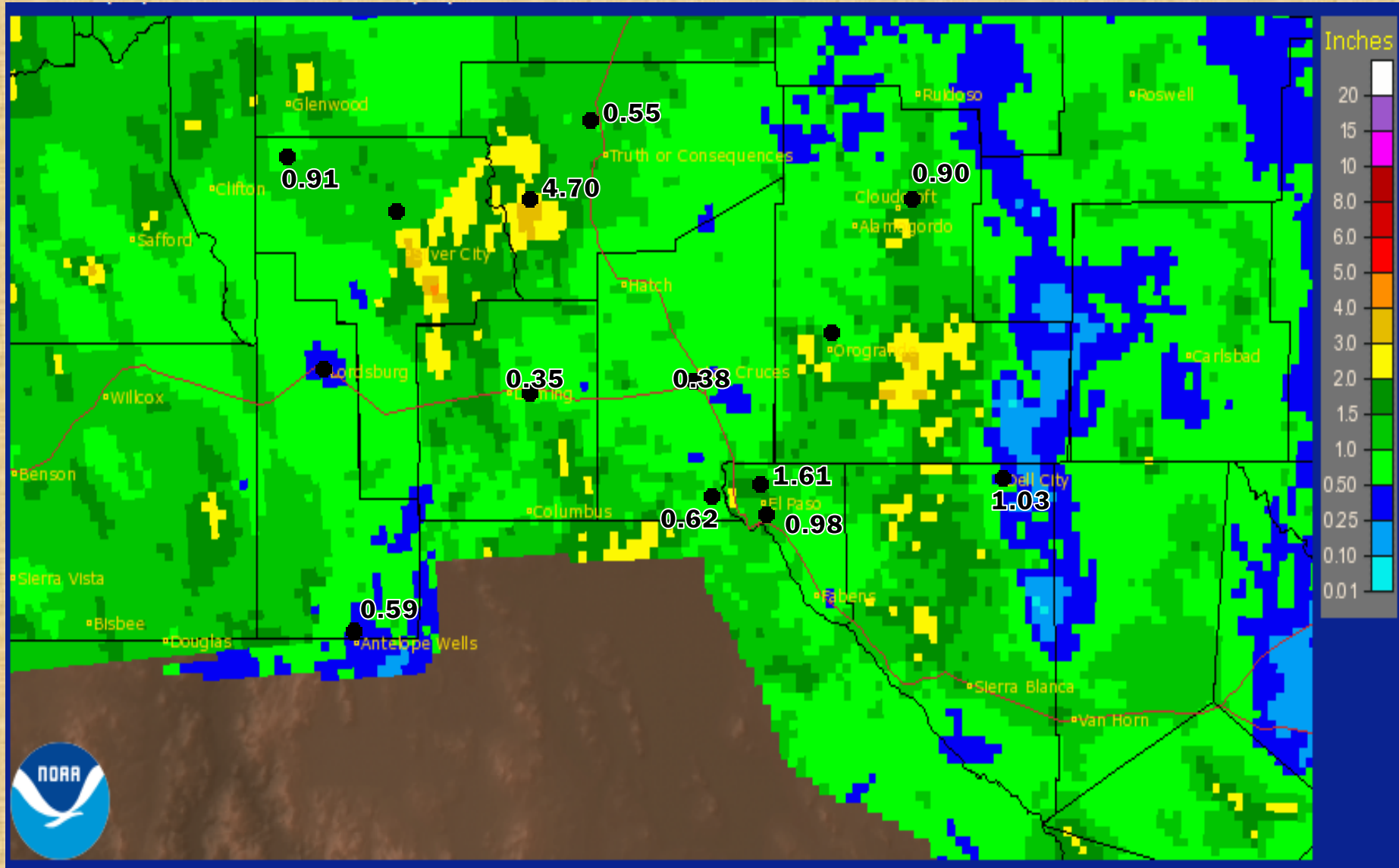
Temperature and precipitation outlook for November 2014



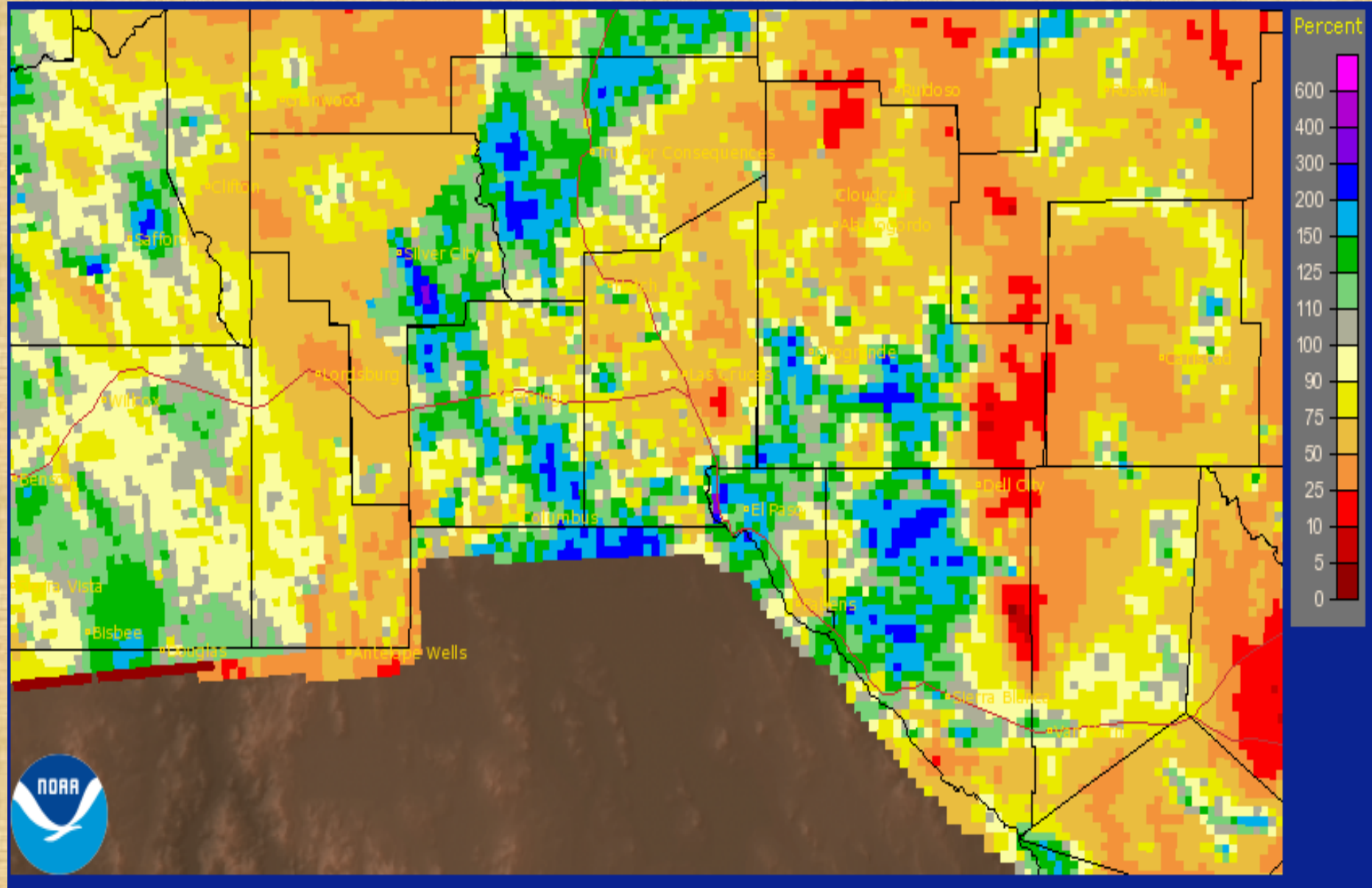
The Climate Prediction Center of the National Weather Service is predicting slightly cooler than normal temperatures with above normal precipitation for the Borderland for the months of November through January courtesy of a forecast El Nino event.



October 2014 radar rainfall estimate with surface rainfall reports

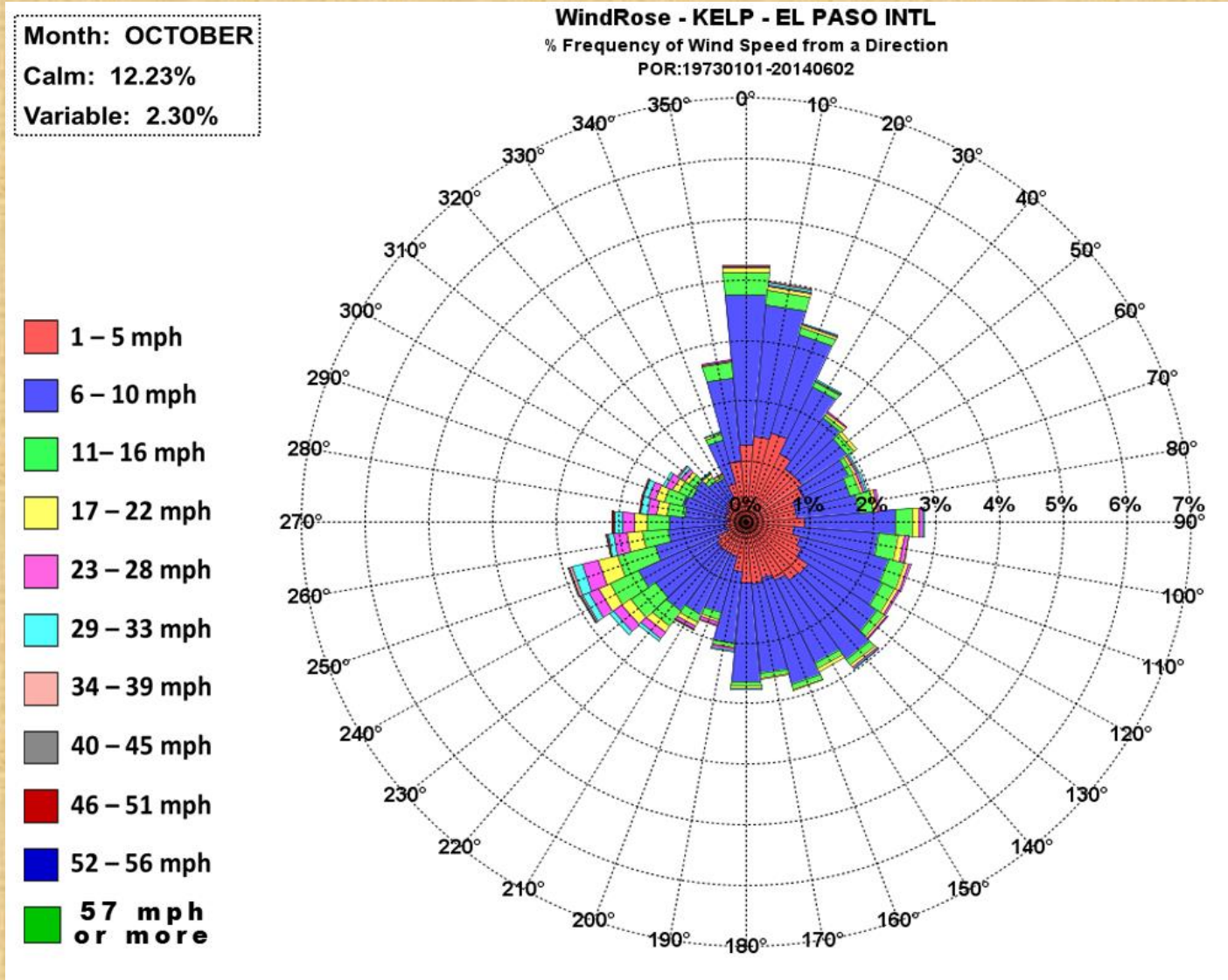


October 2014 Radar Rainfall Estimate (Percent of normal)



Special Features

<http://www.srh.noaa.gov/epz/?n=elpwindrosedata>



Severe weather reports October 2014

Date/Time	Location	Event
10/10/2014 509 PM	LTL WALNUT VLG-GRANT CO	0.75 INCH HAIL
10/10/2014 334 PM	HURLEY-GRANT CO	0.25 INCH HAIL
10/10/2014 513 PM	5 SE SILVER CITY-GRANT CO	0.25 INCH HAIL
10/12/2014 350 PM	SAN AUGUSTIN PASS-DONA ANA	80 MPH PEAK WIND
10/12/2014 800 PM	10 NNE EL PASO	64 MPH PEAK WIND
10/12/2014 450 PM	1 SE WSMR-OTERO CO	62 MPH PEAK WIND
10/12/2014 500 PM	3.3 NNE EL PASO	57 MPH PEAK WIND
10/12/2014 600 PM	2 SE DEMING-LUNA CO	50 MPH PEAK WIND
10/12/2014 730 PM	1 SW HIGH ROLLS-OTERO CO	50 MPH PEAK WIND
10/12/2014 659 PM	12 E REDROCK-GRANT CO	49 MPH PEAK WIND
10/12/2014 755 PM	CONDRON FIELD-DONA ANA CO	48 MPH PEAK WIND
10/12/2014 215 PM	SILVER CITY AIRPORT	48 MPH PEAK WIND
10/12/2014 235 PM	NORTHRUP STRIP-DONA ANA CO	47 MPH PEAK WIND
10/12/2014 337 PM	28 ENE OROGRANDE-OTERO CO	47 MPH PEAK WIND
10/12/2014 600 PM	6 WSW LAS CRUCES	46 MPH PEAK WIND

Severe weather reports October 2014

Date/Time	Location	Event
10/12/2014 900 PM	20 WNW TULAROSA-SIERRA CO	46 MPH PEAK WIND
10/12/2014 326 PM	DRIPPING SPRGS-DONA ANA CO	45 MPH PEAK WIND
10/12/2014 441 PM	MESCALERO-OTERO CO	45 MPH PEAK WIND
10/20/2014 700 AM	2 W EL PASO	2.08 HEAVY RAIN
10/20/2014 700 AM	2 NW EL PASO	1.42 HEAVY RAIN
10/20/2014 700 AM	3 NNE EL PASO	1.38 HEAVY RAIN
10/20/2014 700 AM	2 SSW EL PASO	1.36 HEAVY RAIN
10/20/2014 813 AM	6 NW EL PASO	1.25 HEAVY RAIN
10/20/2014 700 AM	2 S CLOUDCROFT-OTERO CO	1.24 HEAVY RAIN
10/20/2014 801 AM	10 NE EL PASO	1.13 HEAVY RAIN
10/20/2014 535 AM	5 W EL PASO	1.06 HEAVY RAIN
10/20/2014 600 AM	1 SW SPARKS-EL PASO CO	1.02 HEAVY RAIN