

JUNE 2014

Weather Digest



Weather Summary

Significant Events

Special Features

**Temperature &
Precipitation**

Severe Weather

JUNE 2014 Weather Summary

June 2014 got off to a sizzling start by experiencing record breaking heat through the first 6 days of the month. El Paso International Airport broke daily record highs on the 2nd through the 5th, culminating with peak temperatures of 109 degrees on the 3rd. (see graphic). It wasn't just the afternoons that were hot; many of the mornings of June remained quite warm. El Paso set daily high minimum temperature records on 3 different days, and on the 27th only "cooled" to 83 degrees, not only breaking the daily record but tying the monthly record. June 2014 finished as one of the warmest Junes on record. At El Paso Intl Airport, the average monthly temperature of 87.9 degrees was the second warmest of all time. Santa Teresa recorded their 3rd all time warmest average monthly temperature.

June is typically the month when the annual monsoon pattern begins to take shape. There were several times in June where the pattern looked like it would set up into the monsoon, but these occurrences were all false starts. The month was abnormally dry for the most part. The only major area to see above normal rainfall was in Hudspeth County south and east of Sierra Blanca. There were still stormy days, and much of the month set up for an environment that supported strong downburst winds from the thunderstorms. Thunderstorms on the 13th produced strong winds. 50-60 mph winds were felt at many sites, though no significant damage was reported (see severe weather report page).

JUNE 2014 Weather Summary-continued

A non-weather related event, but quite interesting event occurred on the 28th, as an earthquake was felt across much of southern New Mexico and far west Texas. The location of the earthquake was detected about 30 miles northwest of Lordsburg.

On June 21st the Summer Solstice took place, meaning daylight will become less and less each day after until the Winter Solstice. This doesn't end summer however, as as there is a climatic lag from the the solstice to when average temperatures begin declining. That date just happens to be July 10, the first day when our temperatures actually begin cooling.

Significant Events

Tuesday's Record Highs

100
El Paso
Old Record 102

104
Torrey
Old Record 98

105
Las Cruces
Old Record 103

95
Silver City
Old Record 91

81
Cloudcroft
Old Record 80

106
Santa Teresa
Old Record 102

104
Alamogordo
Old Record 97

105
Deming
Old Record 101

June 2014 Significant Events

Earthquake

Event Time

Jun 29, 2014 04:59:33 UTC 10:50:33 MDT

Location

32.607°N 109.151°W depth=5.0km (3.1mi)

M5.2

Nearby Cities

1.50km (31mi) NW of **Lordsburg, New Mexico**

2.83km (52mi) WSW of **Silver City, New Mexico**

3.136km (85mi) WNW of **Deming, New Mexico**

4.144km (89mi) NNE of **Douglas, Arizona**

5.288km (179mi) ESE of **Phoenix, Arizona**

50km NW of
Lordsburg, New
Mexico

2014-06-28

10:59:33 MDT

SEUS64 KEPZ 290539 EQREPZ NMZ401>417-TXZ418>424-290845-

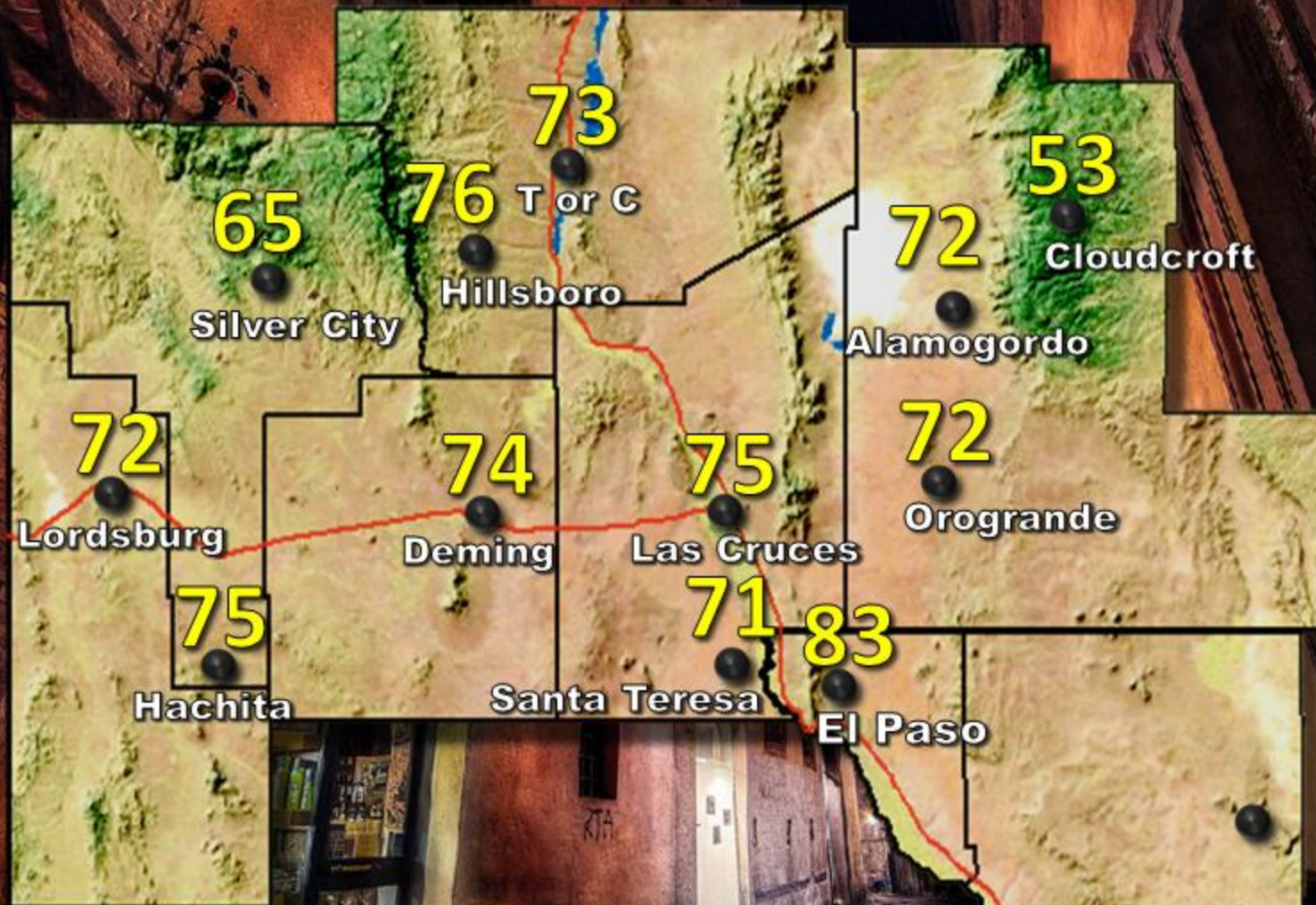
EARTHQUAKE REPORT RELAYED BY NATIONAL WEATHER SERVICE
EL PASO TX/SANTA TERESA NM 1139 PM MDT SAT JUN 28 2014

AN EARTHQUAKE HAS BEEN FELT MODERATELY BY MANY PEOPLE IN THE SILVER CITY AREA OF SOUTHWESTERN NEW MEXICO. NONE OF THOSE REPORTS INDICATED ANY DAMAGE. THIS EARTHQUAKE WAS ALSO REPORTED AS MODERATE IN STRENGTH IN TRUTH OR CONSEQUENCES AND DEMING NEW MEXICO. WEAK TREMORS WERE ALSO REPORTED FROM MULTIPLE LOCATIONS ACROSS EL PASO TEXAS. PRELIMINARY REPORTS FROM THE USGS INDICATE THE EARTHQUAKE WAS A MAGNITUDE 5.2. IT'S EPICENTER WAS LOCATED 31 MILES NORTHWEST OF LORDSBURG NEW MEXICO OR 6 MILES SOUTHWEST OF DUNCAN ARIZONA. THE DEPTH OF THE EPICENTER WAS 3.1 MILES. MORE INFORMATION WILL BE PROVIDED AS IT BECOMES AVAILABLE FROM THE NATIONAL EARTHQUAKE INFORMATION CENTER IN GOLDEN COLORADO.

**Earthquake
M5.2
50km NW of Lordsburg, New
Mexico
2014-06-28 10:59:33 MDT**



Light shake felt at FAA Control Tower at KELP



Record warmth! Morning lows from June 27
Dailey record high minimum at El Paso
Near records at many of these other towns.

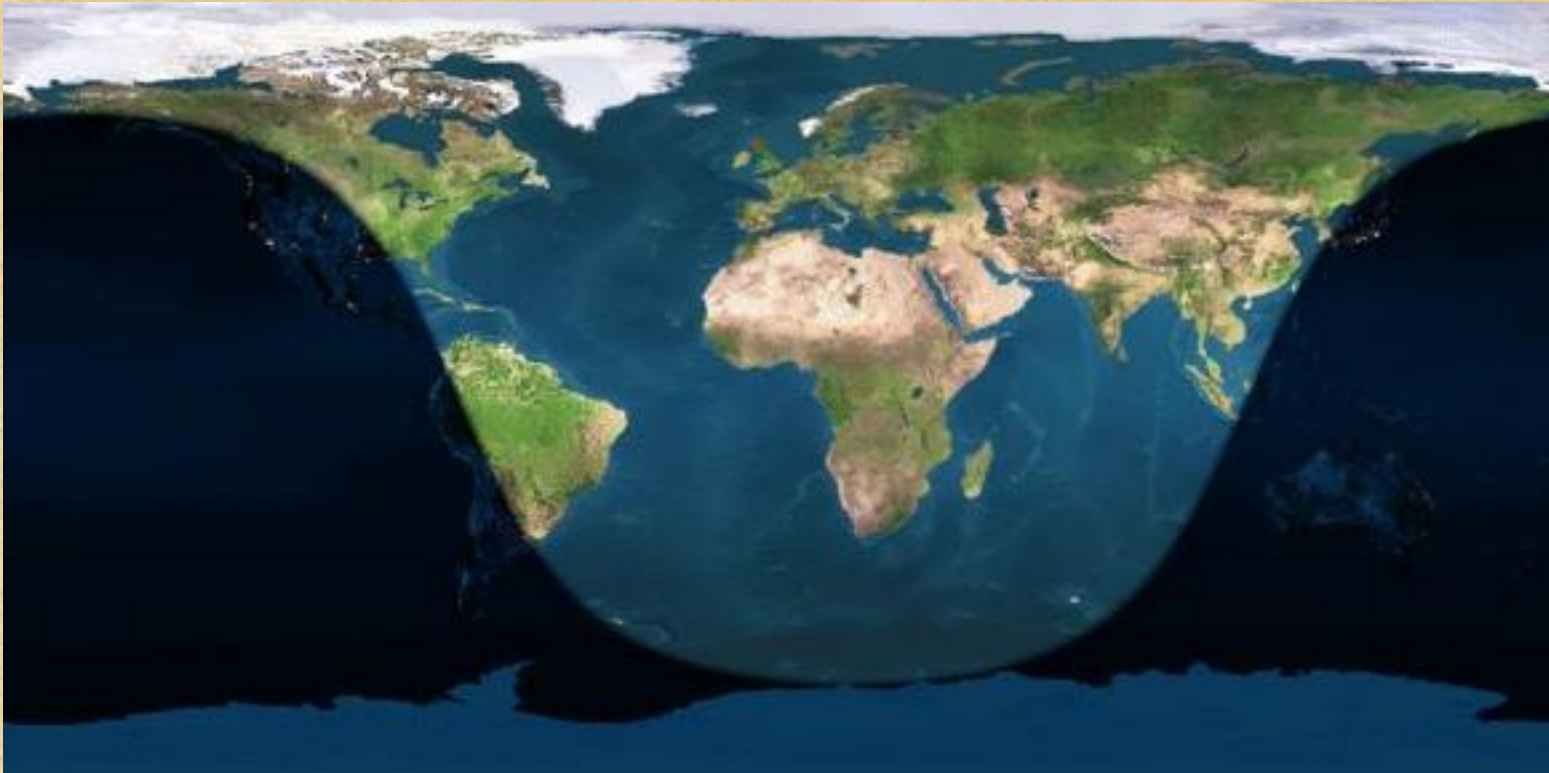
Significant events-continued

**IT WAS A HOT DRY
MONTH**

**F6 EL PASO
RECORDS**

Special Features

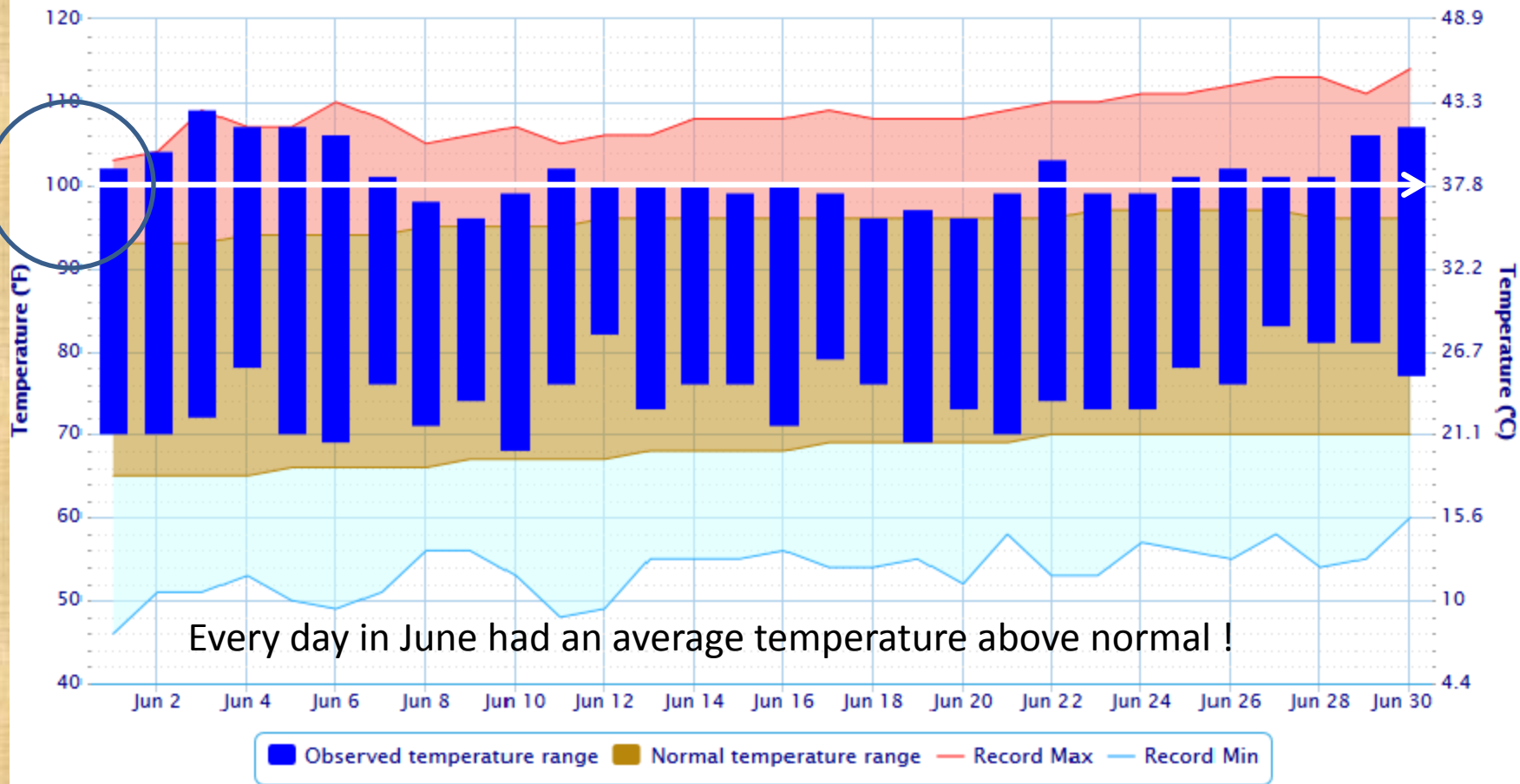
SUMMER SOLSTICE June 21 4:51 MDT



Daily Temperature Data – EL PASO INTL AP, TX



Period of Record – 1942-12-01 to 2014-06-30. Normals period: 1981-2010. Click and drag to zoom chart.



Every day in June had an average temperature above normal !

Top 10 Hottest Junes

UPDATED

(BASED ON DAILY HIGHS)



1)	1980	103.9
2)	1994	103.3
3)	1990	101.5
4)	2011	101.4
5)	2014	101.0
6)	2013	100.3
7)	2012	100.2
8)	1960	99.8
9)	1978	99.4
10)	2002	99.0

BASED
ON DAILY
AVERAGE
TEMPS

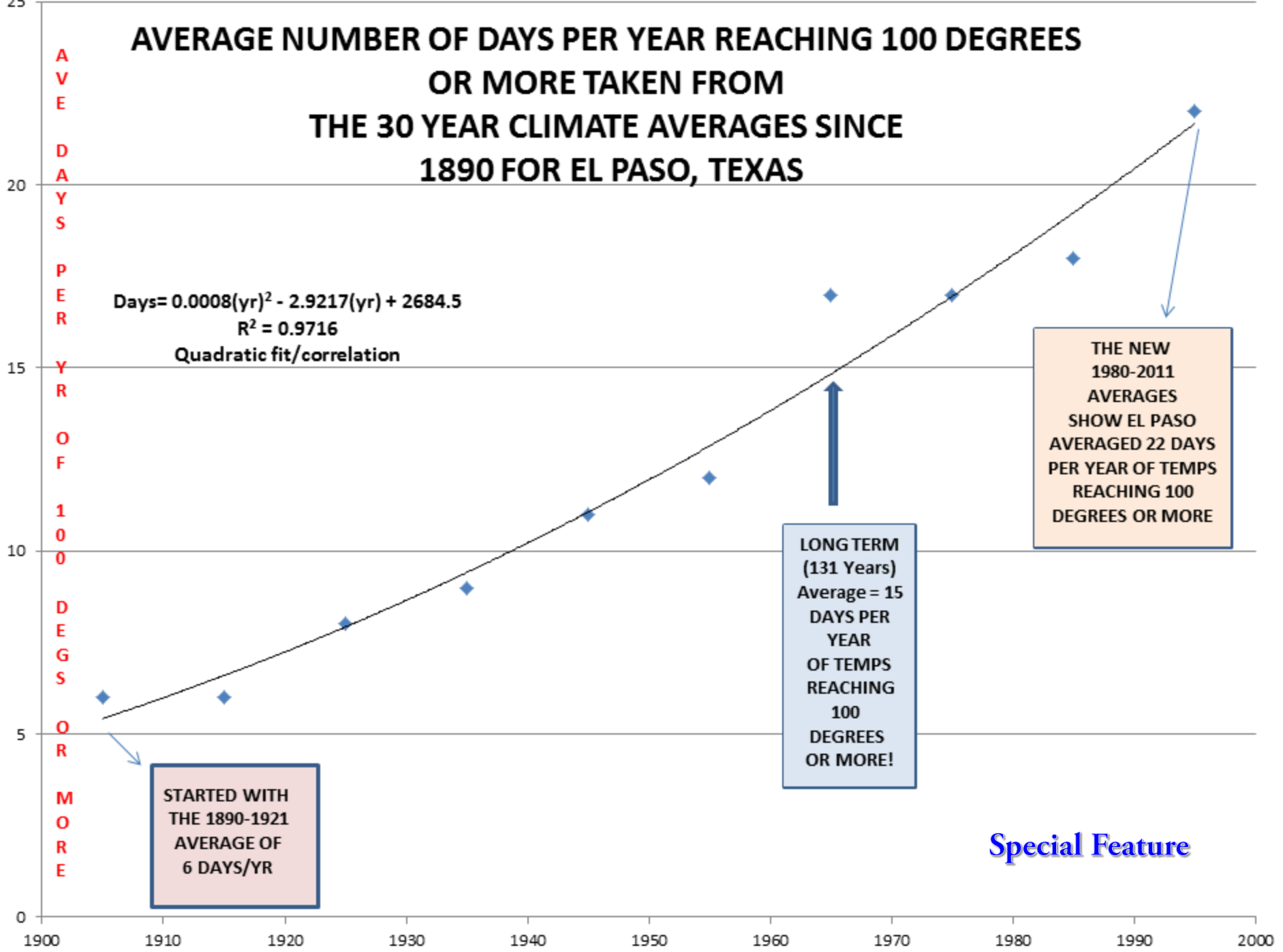
JUNE
2014

2nd
HOTTEST



1129 PM MDT
Mon Jun 30 2014
National Weather Service
El Paso, TX

AVERAGE NUMBER OF DAYS PER YEAR REACHING 100 DEGREES OR MORE TAKEN FROM THE 30 YEAR CLIMATE AVERAGES SINCE 1890 FOR EL PASO, TEXAS

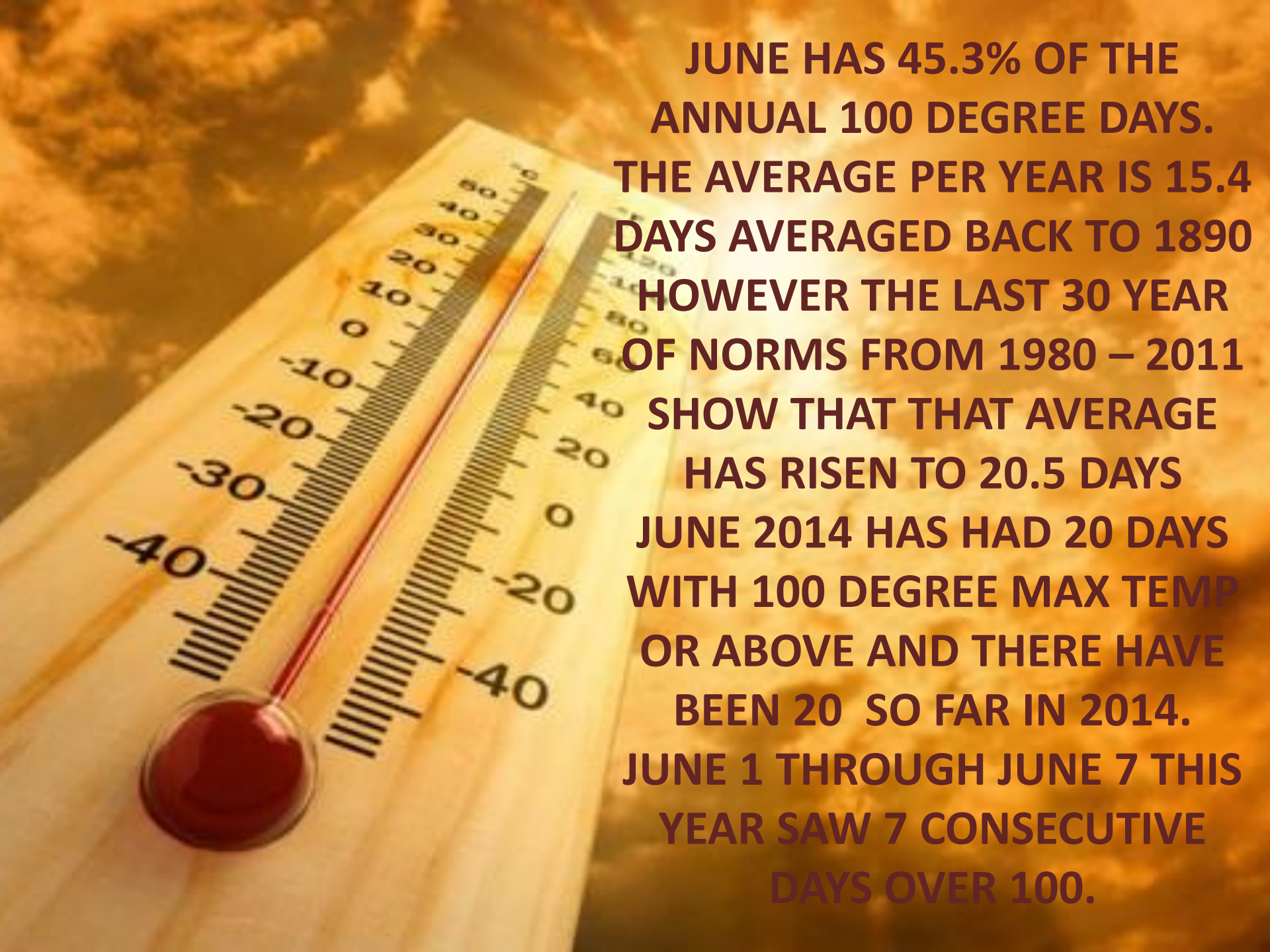


STARTED WITH THE 1890-1921 AVERAGE OF 6 DAYS/YR

LONG TERM (131 Years) Average = 15 DAYS PER YEAR OF TEMPS REACHING 100 DEGREES OR MORE!

THE NEW 1980-2011 AVERAGES SHOW EL PASO AVERAGED 22 DAYS PER YEAR OF TEMPS REACHING 100 DEGREES OR MORE

Special Feature



JUNE HAS 45.3% OF THE ANNUAL 100 DEGREE DAYS. THE AVERAGE PER YEAR IS 15.4 DAYS AVERAGED BACK TO 1890 HOWEVER THE LAST 30 YEAR OF NORMS FROM 1980 – 2011 SHOW THAT THAT AVERAGE HAS RISEN TO 20.5 DAYS JUNE 2014 HAS HAD 20 DAYS WITH 100 DEGREE MAX TEMP OR ABOVE AND THERE HAVE BEEN 20 SO FAR IN 2014. JUNE 1 THROUGH JUNE 7 THIS YEAR SAW 7 CONSECUTIVE DAYS OVER 100.

FOR SOME **HOT FACTOIDS ABOUT
TRIPLE DIGIT TEMPERATURES
(**100 F / 37.7777C**)
IN EL PASO TEXAS
VISIT**

http://www.srh.noaa.gov/epz/?n=elpaso_100_degree_page

**AS USUAL TRAFFIC CAMS WEST OF LORDSBURG NEW MEXICO
SHOWED BLOWING DUST KICK UP IN STRONG WINDS...
ALWAYS AN EXCELLENT WARNING INDICATOR TO SLOW DOWN...
TURN ON LIGHTS...AND POSSIBLY PULL ASIDE TO AVOID
THE PROBLEM ALTOGETHER. JUNE 13**

Back Traffic Camera

I-10 @ E of Steins



Refresh

nmroads.com has been developed and is hosted and maintained by RealTimeStats, with contributing support from NMDOT and GIS staff.

JUNE 13



**BLOWING DUST From Thunderstorm Winds
Lowering visibility to near zero**

**Web cam view from
STEINS looking east
Towards Lordsburg**

Thunderstorms Create Strong Winds



**Thunderstorm Wind Gust Front
Approaching NWS Office At
3:45 pm**

- **High Based T-Storms**
- **Light Rain Filaments**
- **Dust Band Near The Ground**



JUNE 13



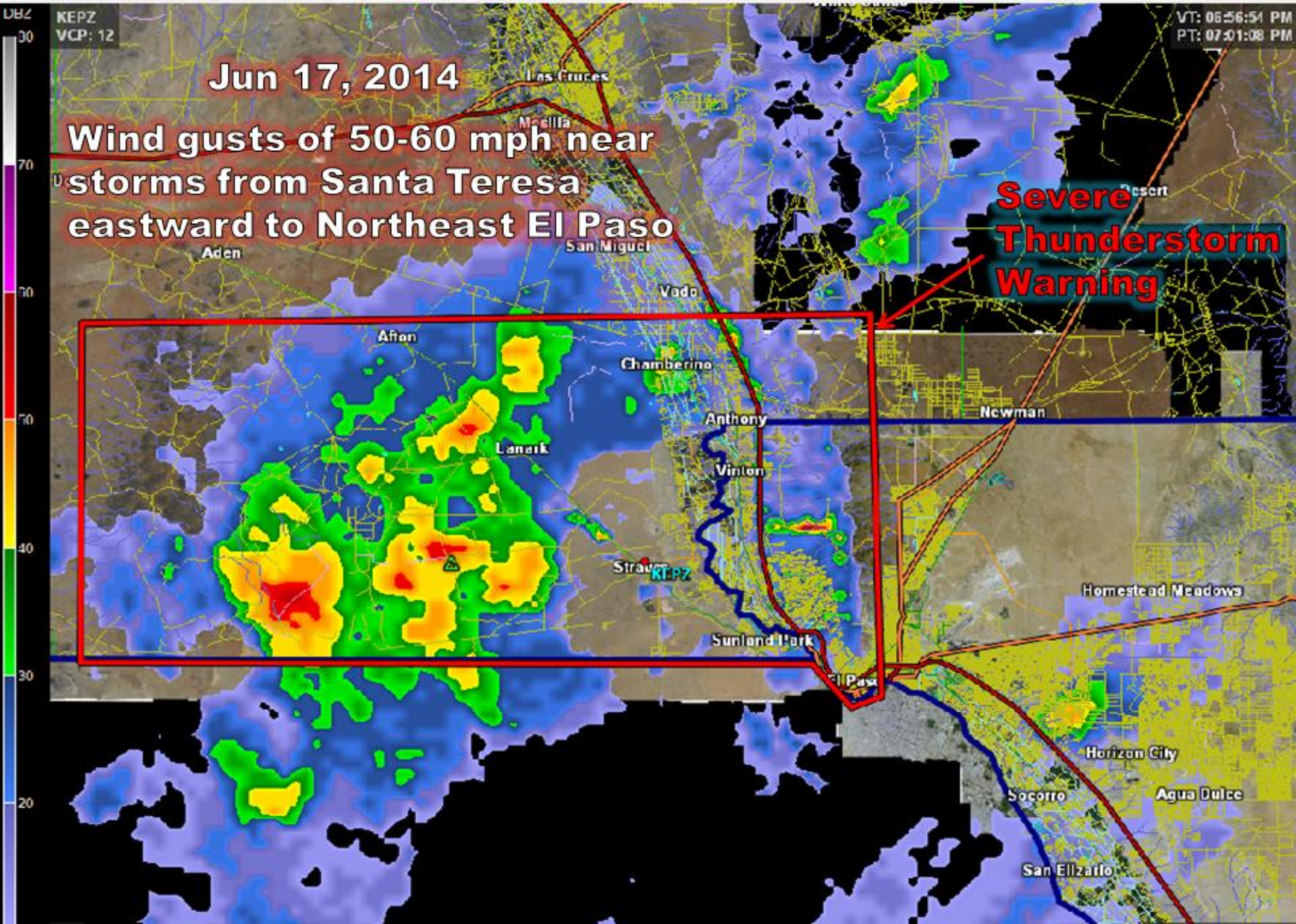
**Thunderstorm Wind Gust
Front Reaches NWS Office
At 4:00 pm**

- **60+ mph winds**
- **Blowing Dust**
- **Zero Visibility**



**6/13/2014 0510 PM BILLBOARD DAMAGE NEAR INTERSTATE 10
AND REDD ROAD IN WEST EL PASO...EST. 55-60 MPH CONVECTIVE GUST**





Jun 17, 2014

Wind gusts of 50-60 mph near storms from Santa Teresa eastward to Northeast El Paso

Severe Thunderstorm Warning

VT: 06:56:54 PM
PT: 07:01:08 PM

UBZ
30
70
70
40
30
20

KEPZ
VCP: 12

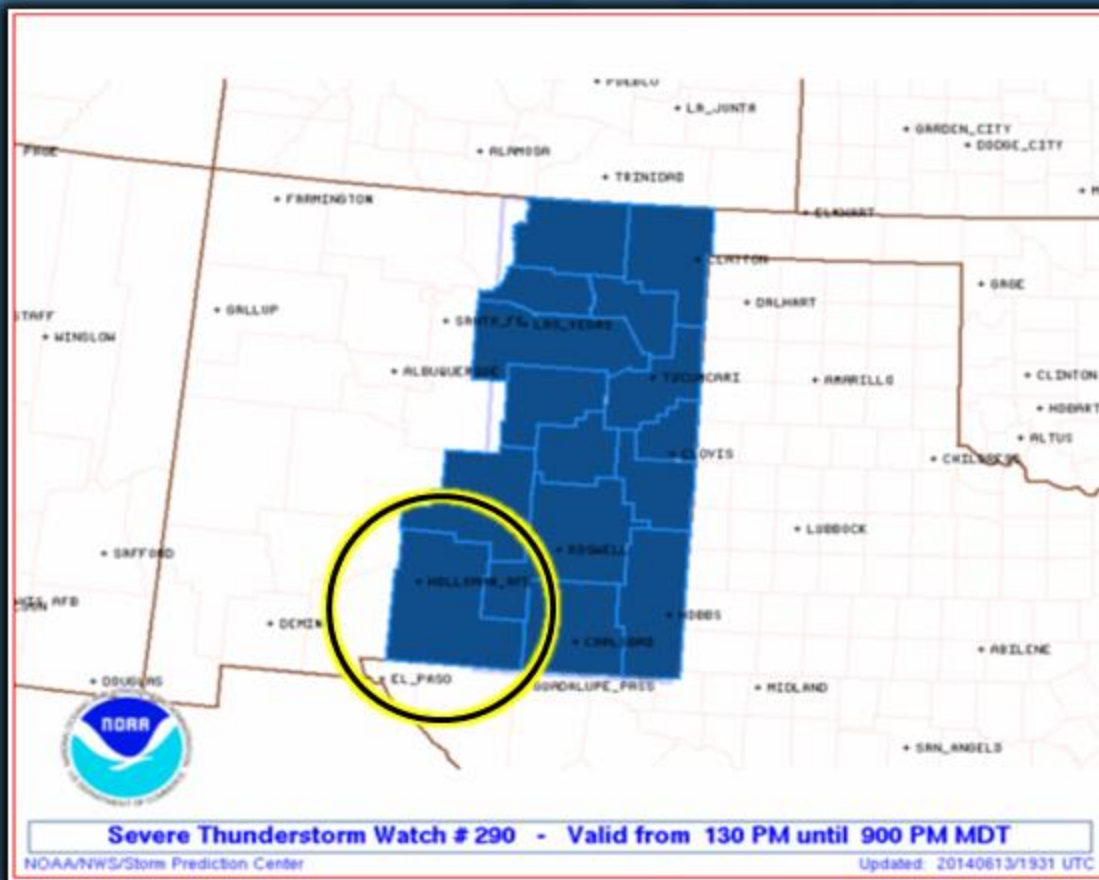
Las Cruces
Mesilla
Aden
San Miguel
Vado
Afon
Chamberino
Anthony
Vinton
Straupe
Sunland Park
El Paso
Newman
Homestead Meadows
Horizon City
Socorro
Agua Dulce
San Elizario



NATIONAL WEATHER SERVICE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



Severe Thunderstorm Watch



OTERO COUNTY

SUPERCELLS CAPABLE OF PRODUCING LARGE HAIL & DAMAGING WIND GUSTS. TSTMS MAY EVENTUALLY CONGEAL INTO CLUSTERS/LINE SEGMENTS VIA STORM/OUTFLOW INTERACTIONS.

US National Weather Service El Paso Texas



Follow us on Twitter @NWSEIPaso



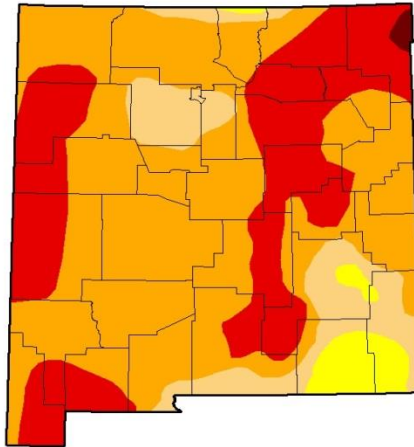
YouTube



Current drought conditions as of June 24

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

U.S. Drought Monitor New Mexico



June 24, 2014
(Released Thursday, Jun. 26, 2014)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	96.09	84.56	29.24	0.42
Last Week 6/17/2014	0.00	100.00	96.09	84.56	29.24	0.42
3 Months Ago 3/25/2014	0.49	99.51	97.49	65.09	24.56	0.00
Start of Calendar Year 1/2/2014	0.39	99.61	75.21	32.68	3.96	0.00
Start of Water Year 1/9/2013	1.66	96.34	74.92	37.81	3.39	0.00
One Year Ago 6/26/2013	0.00	100.00	100.00	98.79	83.46	44.79

Intensity:

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

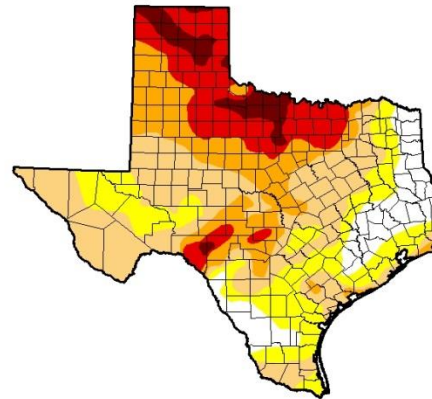
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Eric Luebbehusen
U.S. Department of Agriculture



<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor Texas



June 24, 2014
(Released Thursday, Jun. 26, 2014)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	11.41	88.59	69.00	36.86	19.27	4.95
Last Week 6/17/2014	10.45	89.55	70.95	41.30	21.50	6.56
3 Months Ago 3/25/2014	14.73	85.27	67.43	41.85	24.97	3.48
Start of Calendar Year 1/2/2014	28.48	71.52	43.84	21.15	5.82	0.79
Start of Water Year 1/9/2013	6.62	93.38	70.95	25.08	4.01	0.12
One Year Ago 6/25/2013	4.99	95.01	84.00	60.59	30.10	11.27

Intensity:

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

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Eric Luebbehusen
U.S. Department of Agriculture



<http://droughtmonitor.unl.edu/>

As Bad as it Gets

New Mexico & Far West Texas

The following maps show, for each climate division, how summer (June-August) precipitation & temperature has trended during the last 30 years.



Summer TEMP Trend



Summer PCPN Trend

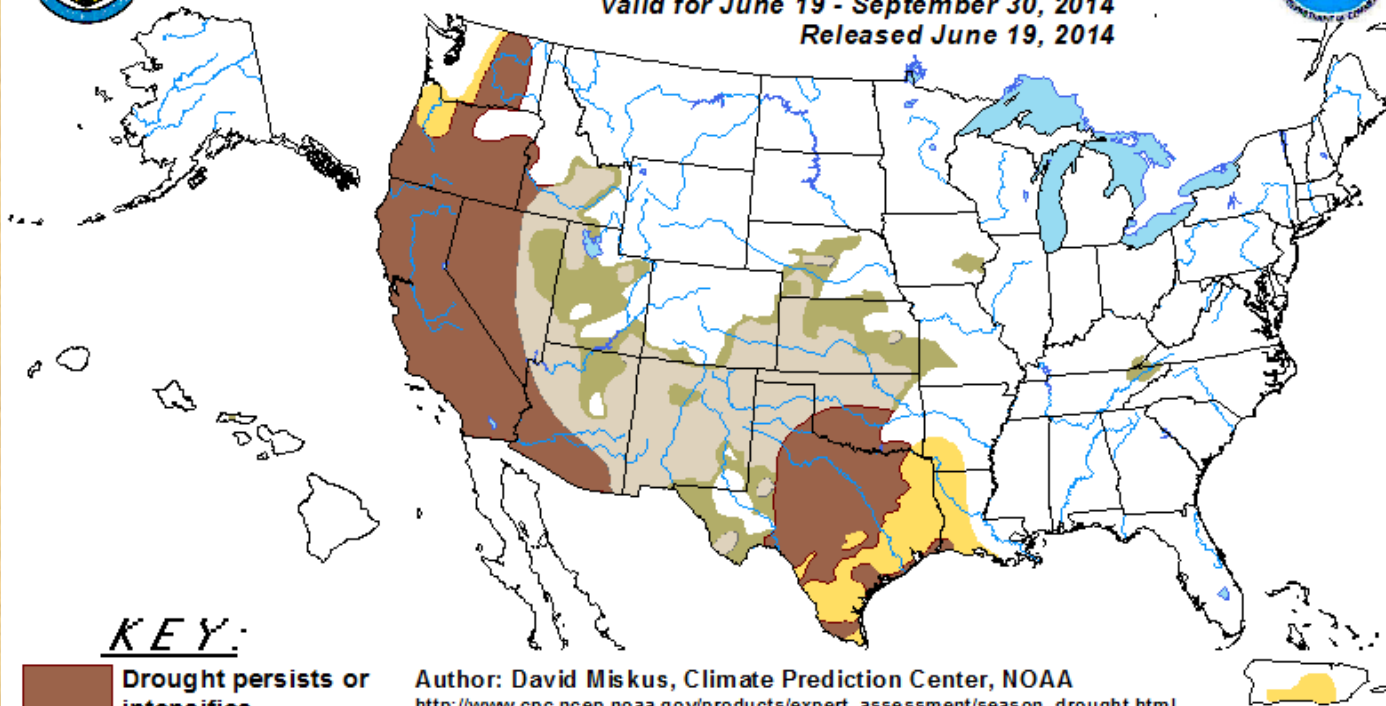


U.S. Seasonal Drought Outlook





Drought Tendency During the Valid Period

Valid for June 19 - September 30, 2014

Released June 19, 2014



KEY:

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

Author: David Miskus, Climate Prediction Center, NOAA

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

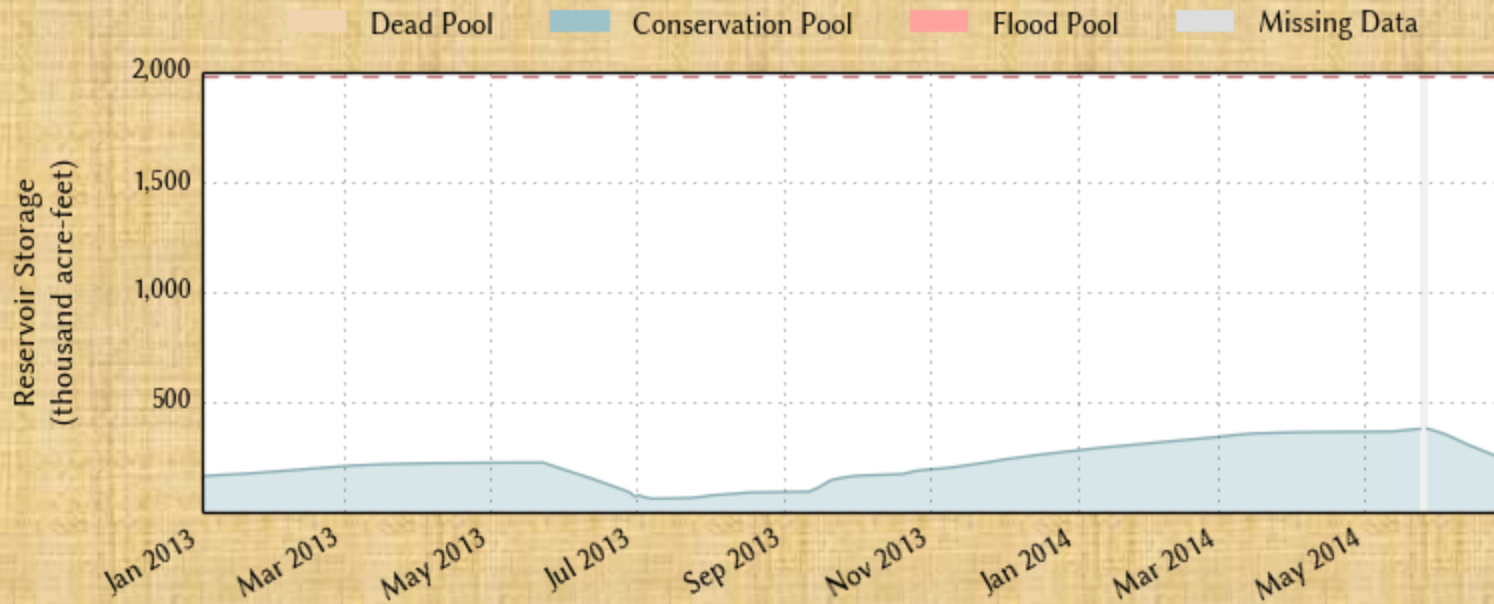
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- 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)

Elephant Butte Lake is 12.1% full as of 2014-06-28

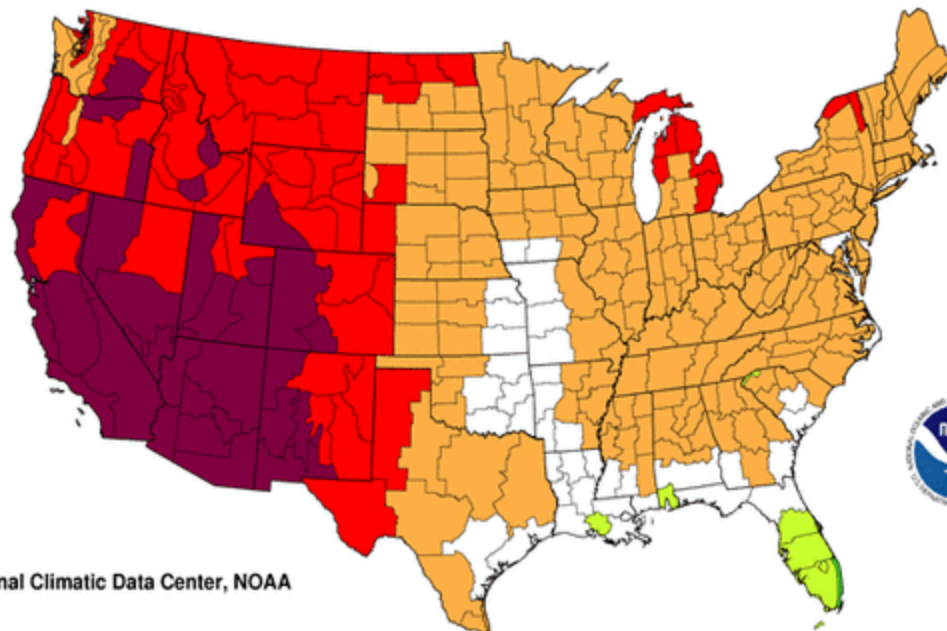


ELEPHANT BUTTE JUNE 2004-----→JULY 2013



Precipitation Required to End a Level -2 PHDI Drought in One Month

June



National Climatic Data Center, NOAA



trace
to
3.00



3.01
to
6.00



6.01
to
9.00



9.01
to
12.00



12.01
to
15.00



15.01
to
18.00

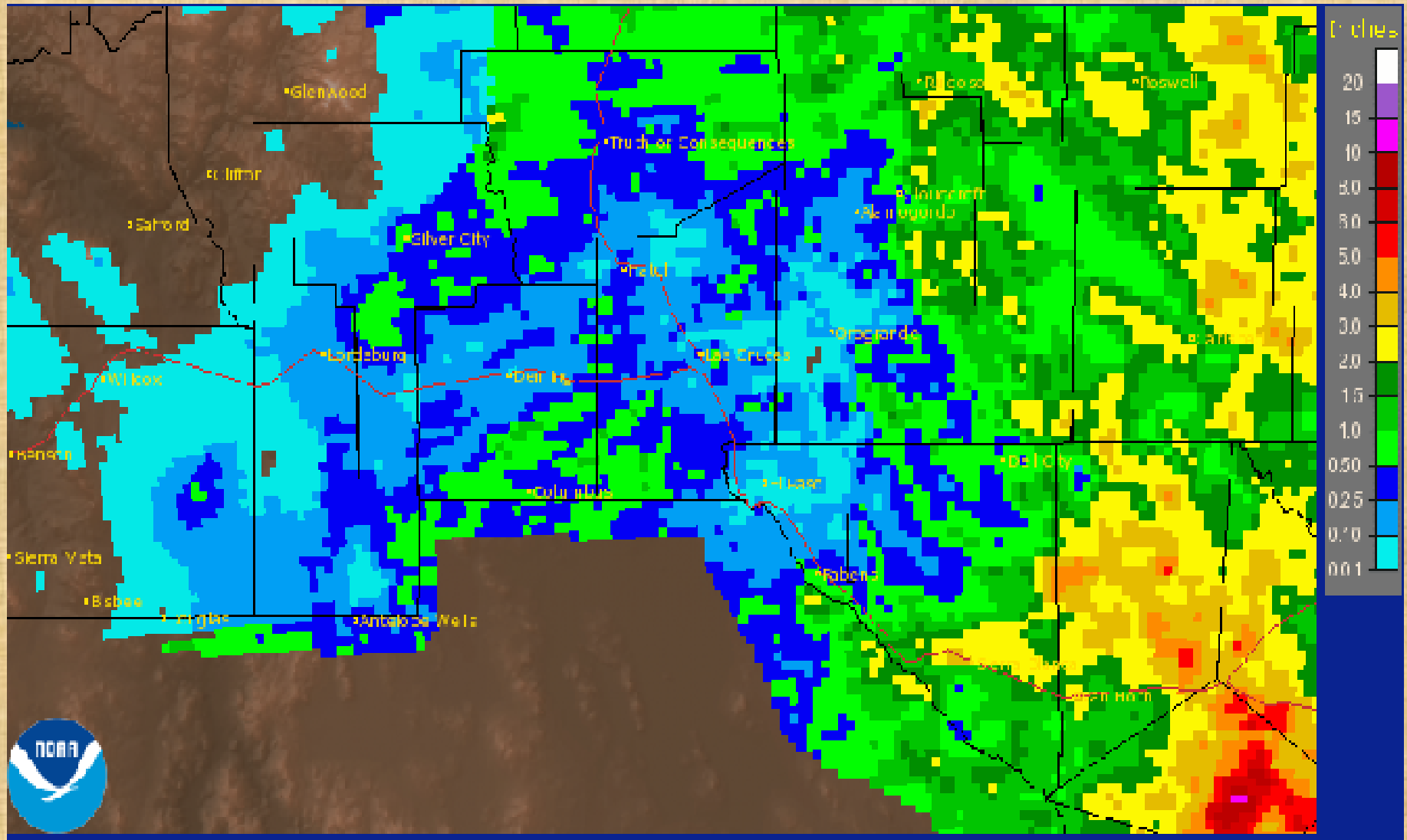


18.01
to
21.00

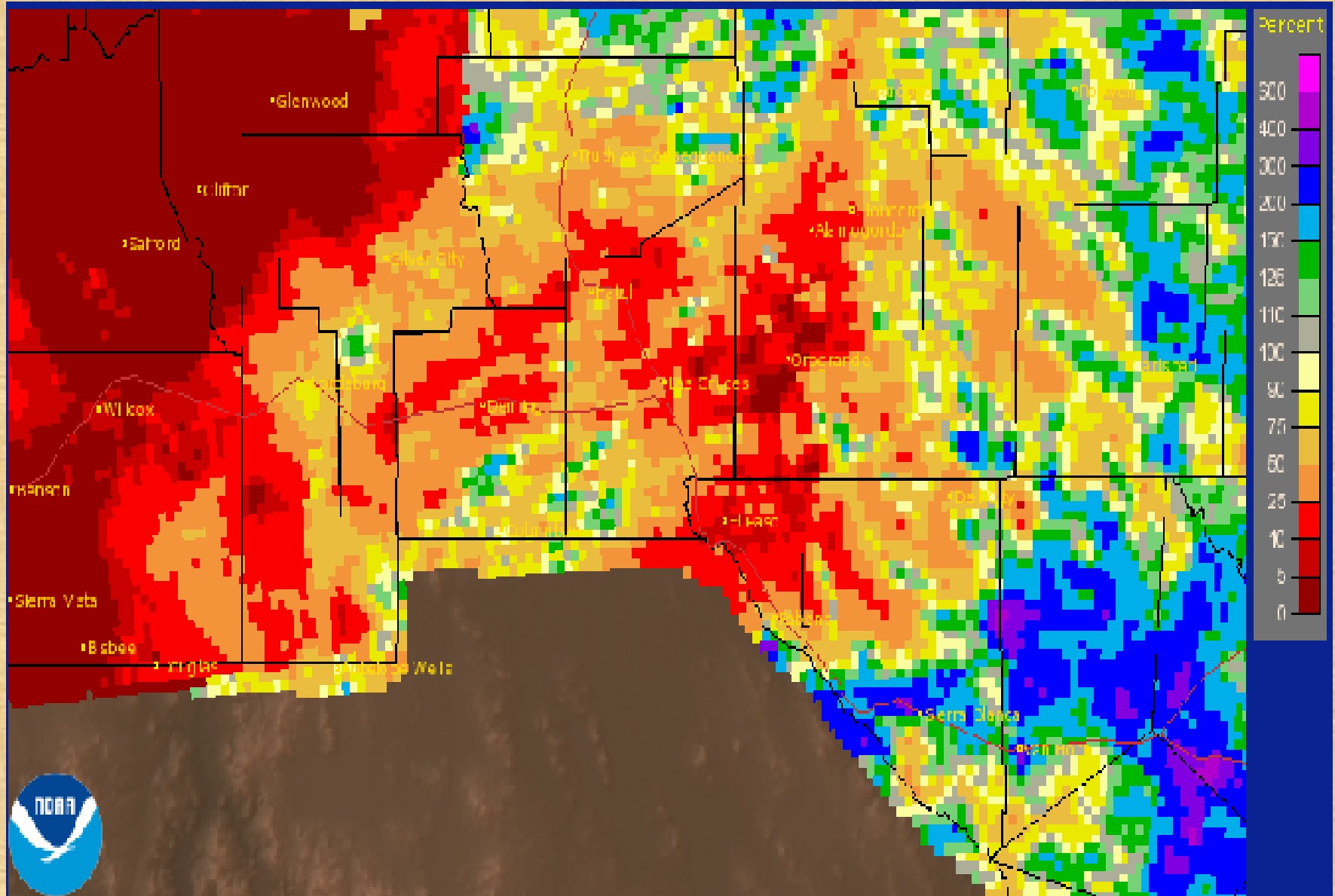
inches

Temperature and precipitation

June 2014 Radar Rainfall Estimate



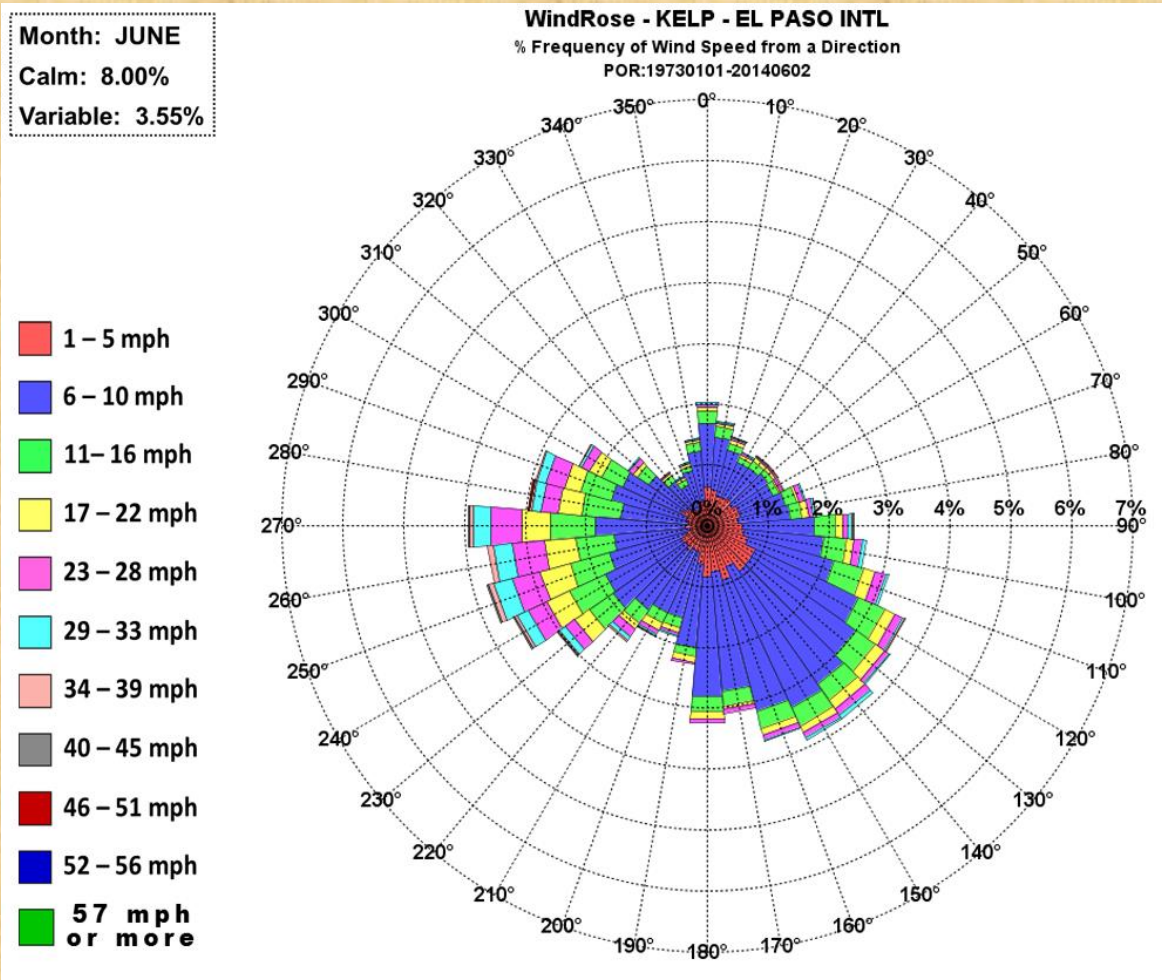
June 2014 Radar Rainfall Estimate (Percent of normal)



Special Features

NEW !

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



Severe Weather Reports May 2014

Date/Time	Location	Event
6/13/2014 415 PM	SANTA TERESA	69 MPH CONVECTIVE GUST
6/13/2014 600 PM	3 S RADIUM SPRINGS DONA ANA	59 MPH CONVECTIVE GUST
6/13/2014 610 PM	1 NW GARFIELD DONA ANA	50 MPH CONVECTIVE GUST
6/13/2014 735 PM	12 SE SILVER CITY GRANT	59 MPH CONVECTIVE GUST
6/13/2014 429 PM	FAR NE EL PASO TOM LEA ES	55 MPH CONVECTIVE GUST
6/17/2014 750 PM	CHAPARRAL	50 MPH CONVECTIVE GUST
6/17/2014 746 PM	NE EL PASO	59 MPH CONVECTIVE GUST
6/17/2014 830 PM	SANTA TERESA	59 MPH CONVECTIVE GUST
6/23/2014 349 PM	7 ESE WHITE SANDS MAIN POST	58 MPH CONVECTIVE GUST
6/23/2014 829 PM	19 ENE EL PASO	54 MPH CONVECTIVE GUST
6/24/2014 720 PM	4 NW FORT BLISS	52 MPH CONVECTIVE GUST
6/30/2014 844 PM	TCS AIRPORT	58 MPH CONVECTIVE GUST

Got Rainfall?

GET READY FOR THE MONSOON !

Join CoCoRaHS!



CoCoRaHS is the Community Collaborative Rain, Hail, and Snow Network -- a non-profit, community-based, high-density network of volunteers who take daily measurements of rain, hail, and snow in their backyards.

The data is sent to the National Weather Service, and is used to help improve river forecasts, and flash flood guidance. It also helps meteorologists understand local rainfall and snowfall patterns.

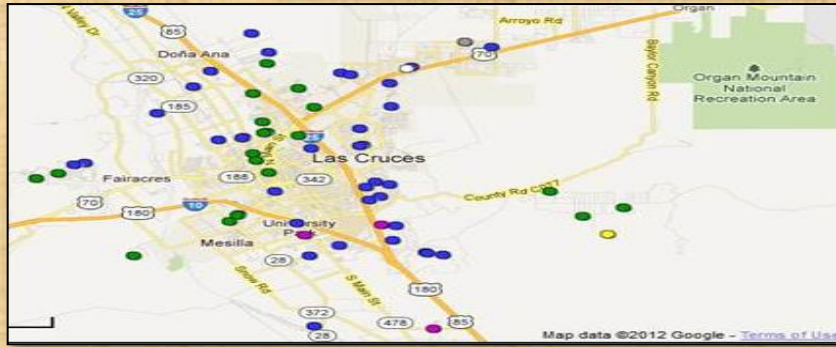
All you need is a standard 4-inch rain gauge, an interest in weather, and an internet connection!

CoCoRaHS has been a nationwide network for many years, and there are several observers in the El Paso/Santa Teresa County Warning Area... especially around Las Cruces and Deming. However, there are only a handful of observers in the El Paso area, and there are plenty of gaps in Sierra, Hudspeth, and Hidalgo counties.

CoCoRaHS is volunteer-friendly. Unlike the NWS COOP Observer Program, the emphasis is on understanding areal distribution of precipitation for specific events – not on building a continuous record for a specific point location. If you're away, you can easily send a "multi-day precipitation" report, or just report "Missing" precipitation. During dry stretches, you can report "daily zeros" *en-masse* rather than remembering to do it every day.

For more information on CoCoRaHS, visit the NWS El Paso Volunteer Portal at:

www.weather.gov/elpaso/?n=volunteer



There's plenty of CoCoRaHS observers in Las Cruces, but very few in El Paso. Help us fill-in the gaps!

