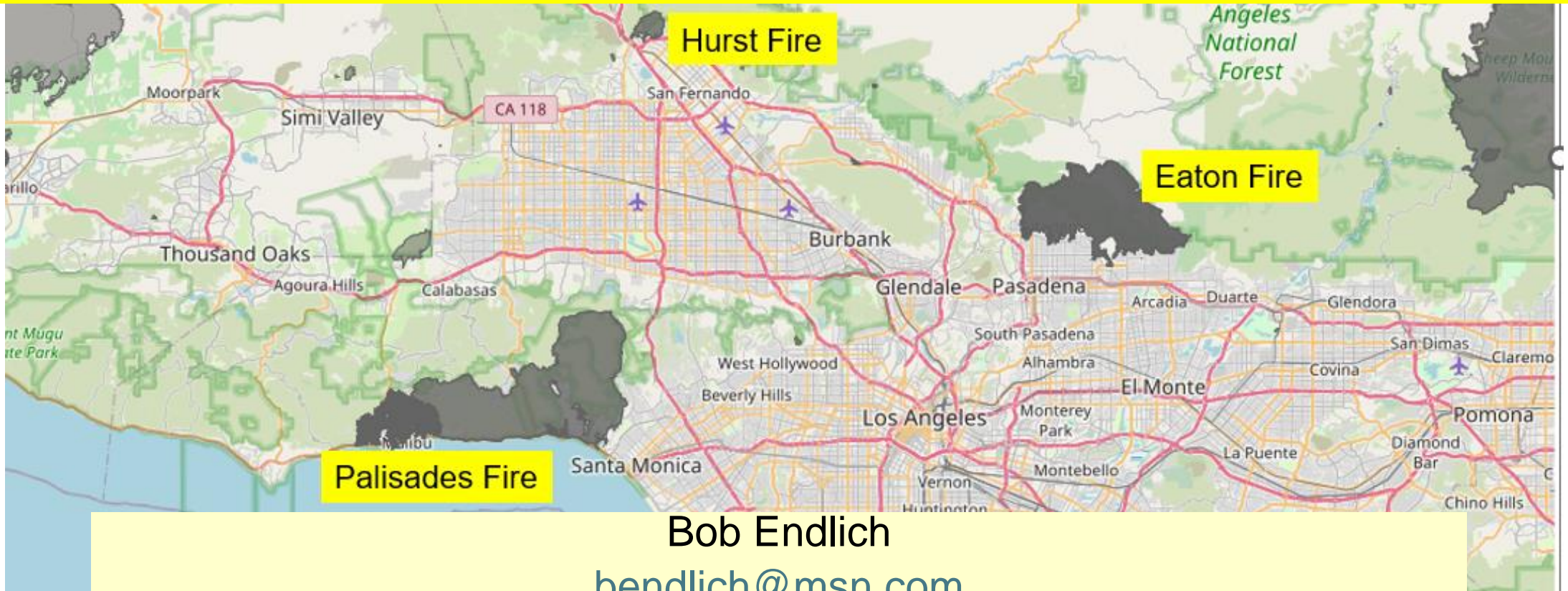


An analysis of Los Angeles' catastrophic Jan 2025 fires ...and claims they were “human-caused by **<CO2-Fueled>** climate change”



Bob Endlich

bendlich@msn.com

Cruces Atmospheric Sciences Forum

18 Apr 2025


Selected References

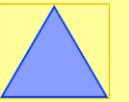
<https://www.nbclosangeles.com/news/california-wildfires/timeline-eaton-palisades-fires-la-county/3614940/>


<https://www.westlionsroar.com/news/2025/03/07/the-2025-los-angeles-wildfires-a-timeline-of-events/>

<https://www.cbsnews.com/video/a-timeline-of-alerts-and-warnings-for-the-los-angeles-area-wildfires/>

<https://www.cbsnews.com/news/la-fires-mayor-karen-bass-trip-ghana-timeline/>

https://casf.me/wp-content/uploads/2024/10/PDF_2024s-Hurricane-Helene-and-Milton_claims-their-power-was-juiced-by-Human-Caused-climate-change-19-Oct-2024-0950.pdf (World Weather Attribution) 

My notes of 2 May 2019, previously not presented, made in conjunction with Park Williams' presentation to the NMSU Climate Education series at the behest of then-Senator Tom Udall. 

<https://casf.me/weather-not-human-caused-co2-fueled-global-warming-is-responsible-for-2017s-damaging-wildfire-history-in-california-2/> 

https://casf.me/wp-content/uploads/2021/06/PDF_EI-Nino-and-La-Nina_19-Jun-2021.pdf 

Useful Video References

American Thought Leaders video on the aftermath of the January 2025 Los Angeles Fire – The Epoch Times
<https://www.youtube.com/watch?v=fXSeXqzx7rQ>

How California's Leaders Caused the LA Fire Devastation |Former LA Mayoral Candidate Rick Caruso
<https://www.youtube.com/watch?v=pTxDPV0LD0s>

'Woke green hydrogen bomb': Historian Victor Davis Hanson blasts local, CA state leaders for wildfire mitigation
<https://www.foxnews.com/video/6367142814112>

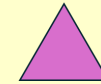
“Design for Disaster” Video from the Bel Air fire of 1961.
<https://youtu.be/UxnC1WW95XE>



LAFD: "Design For Disaster" - The Story of the Bel Air Conflagration | 1962

OUTLINE

<PERTINENT MATERIALS WE'VE SEEN BEFORE (COLORED TRIANGLE MARKERS)>



- SOME CALIFORNIA GEOGRAPHIC BASICS...
- LOS ANGELES, CALIFORNIA, CLIMATE EXTRACT....SANTA ANA WIND EPISODES
- IT'S NOT CLIMATE CHANGE....ITS THE CLIMATE WE HAVE!
ENSO - EL NINO SOUTHERN OSCILLATION
- THE JAN 2025 FIRE FORECASTS, AND THE FIRES THEMSELVES
- MARKER RAINFALL PATTERNS FOR THESE TYPES OF FIRES. THE PATTERNS REPEAT.

SIDEBARS: UPWELLING; HISTORICAL SEA SURFACE TEMPS; CALIFORNIA & LOS ANGELES
AQUEDUCTS.
- IGNORANCE, INCOMPETENCE, CORRUPTION OF LOS ANGELES' CITY LEADERS
- LOS ANGELES DID NOT FORWARD DEPLOY FIRE FIGHTERS ON WEATHER WARNINGS PROVIDED.
PRECEDENCE IN 1961's BEL AIR FIRES
- CONCLUDING REMARKS

Introduction:

As an earth scientist, bachelors in Geology, MS in Meteorology, and 21 years as a Weather Officer in the Air Force, preparation of this presentation helped put the Jan 2025 Los Angeles Fires into the context of a weather- and climate-driven event.

I've found the ingredients that made up the Earth Science, Plant Science, and Fire Science components that led to the “catastrophe-in-waiting” events of 7 Jan 2025, just before ignition of the Palisades Fire. CLUES: Los Angeles' climate, extant dry grass and brush, extreme Santa Ana Winds.

The NWS Los Angeles' Office gave 4+ days notice of this Fire-Catastrophe-In-Waiting. BUT...there is a Back Story...in later slides.

L.A. & CALIFORNIA GEOGRAPHIC BASICS

Large Map

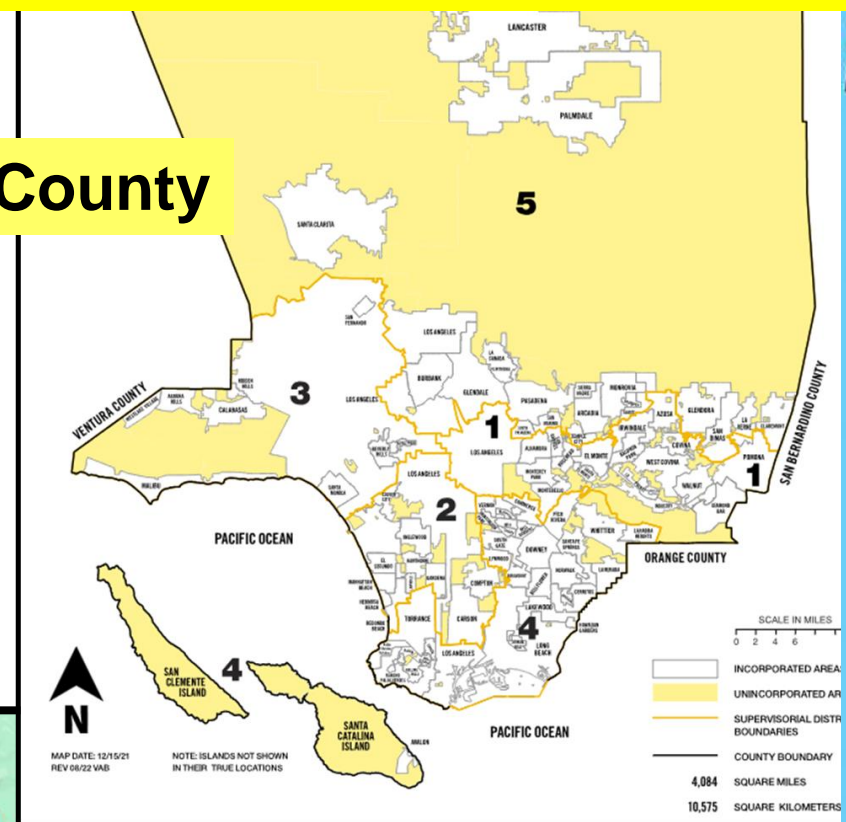
Utah © WorldAtlas.com

Arizona

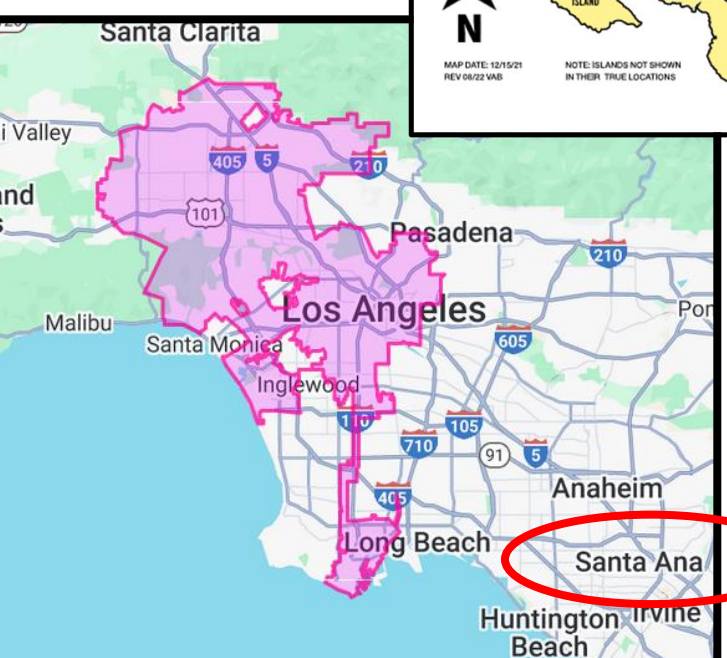
Colorado River

Blythe

L A County



L A City

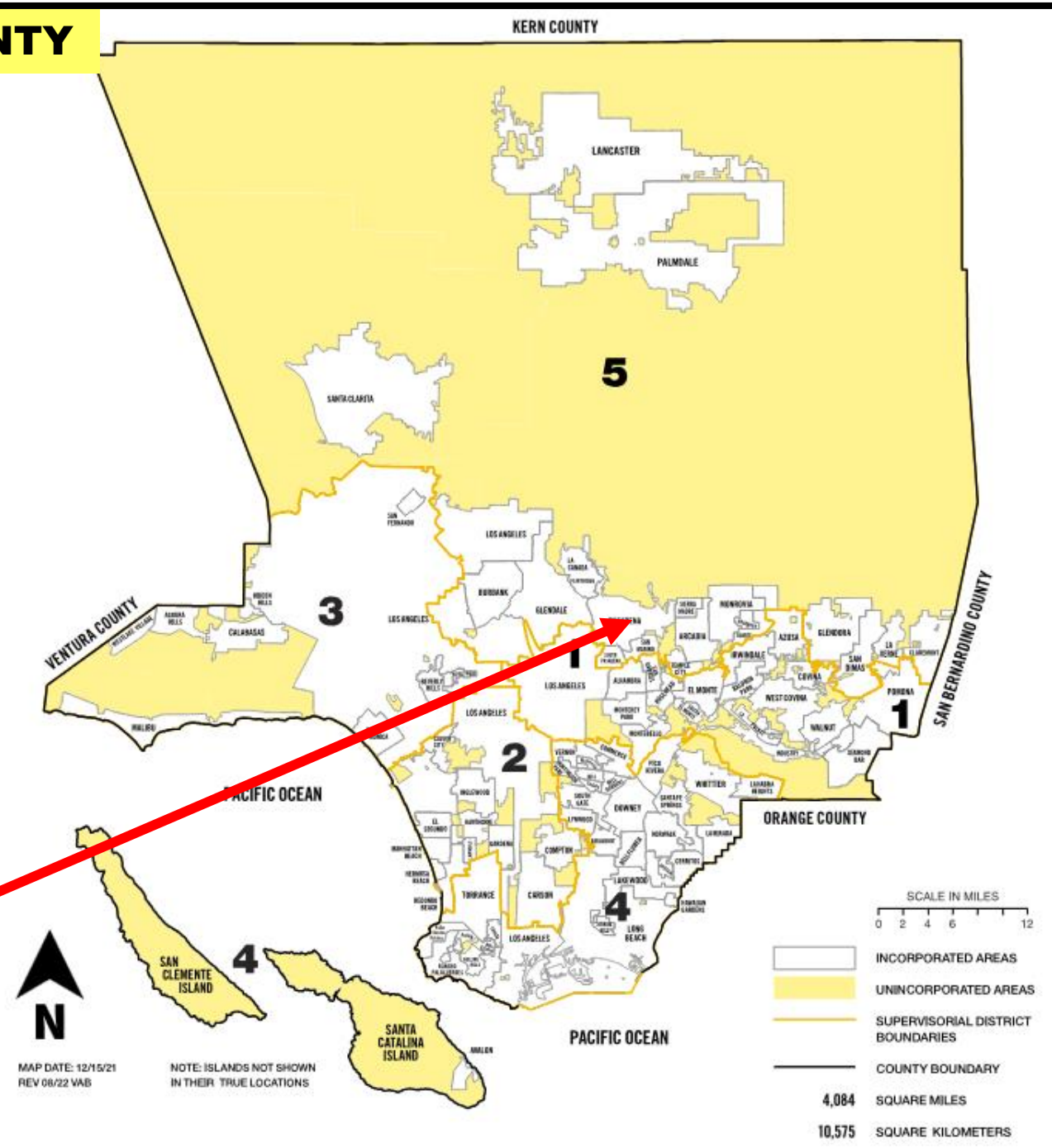
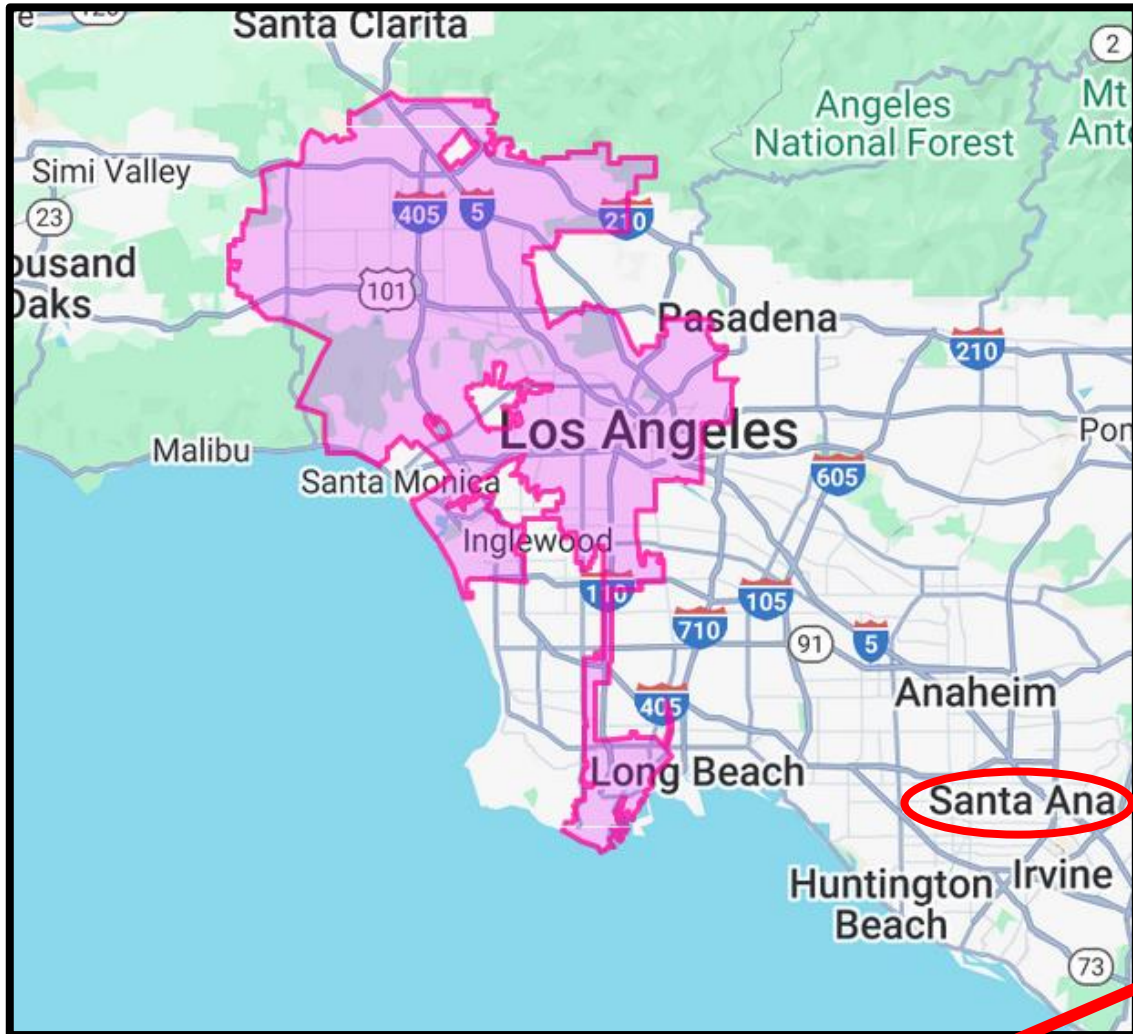


California's geology, & topography present a complex problem with weather forecasting. Coast Ranges, adjacent to the Pacific, Earth's largest ocean, and the presence of the higher Sierra Ranges, makes the forecast challenge even stiffer.



Los Angeles: CITY...

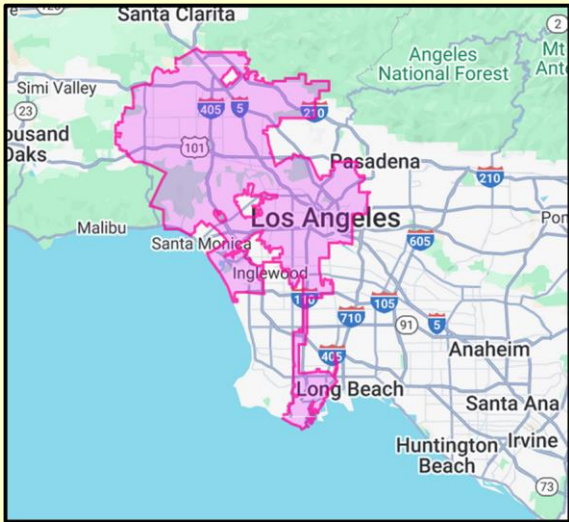
and COUNTY



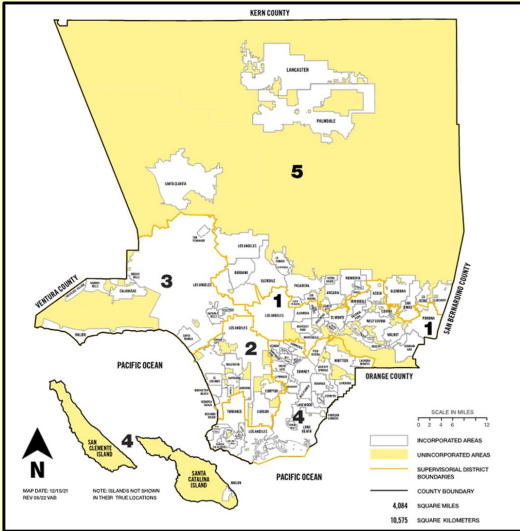
There are 88 cities in Los Angeles County, but only 29 County Fire Departments. Seems as if each fire needs its own strategy of who fights where... the chief has to call/beg other departments to help...

GEOGRAPHIC
Basics:

Los Angeles City



LA County



California



Population	3.8 million	9.76 million	39.43 million
Area	502 mi**2	4753 mi**2	163,696 mi**2
Financial			
Budget	\$12.8 Bil (\$1 Bil)	\$45.4 Bil	\$297.9 (\$46.8) Bil
Fire Budget	\$885 Mil	\$1.6 Bil	\$3.7 Bil

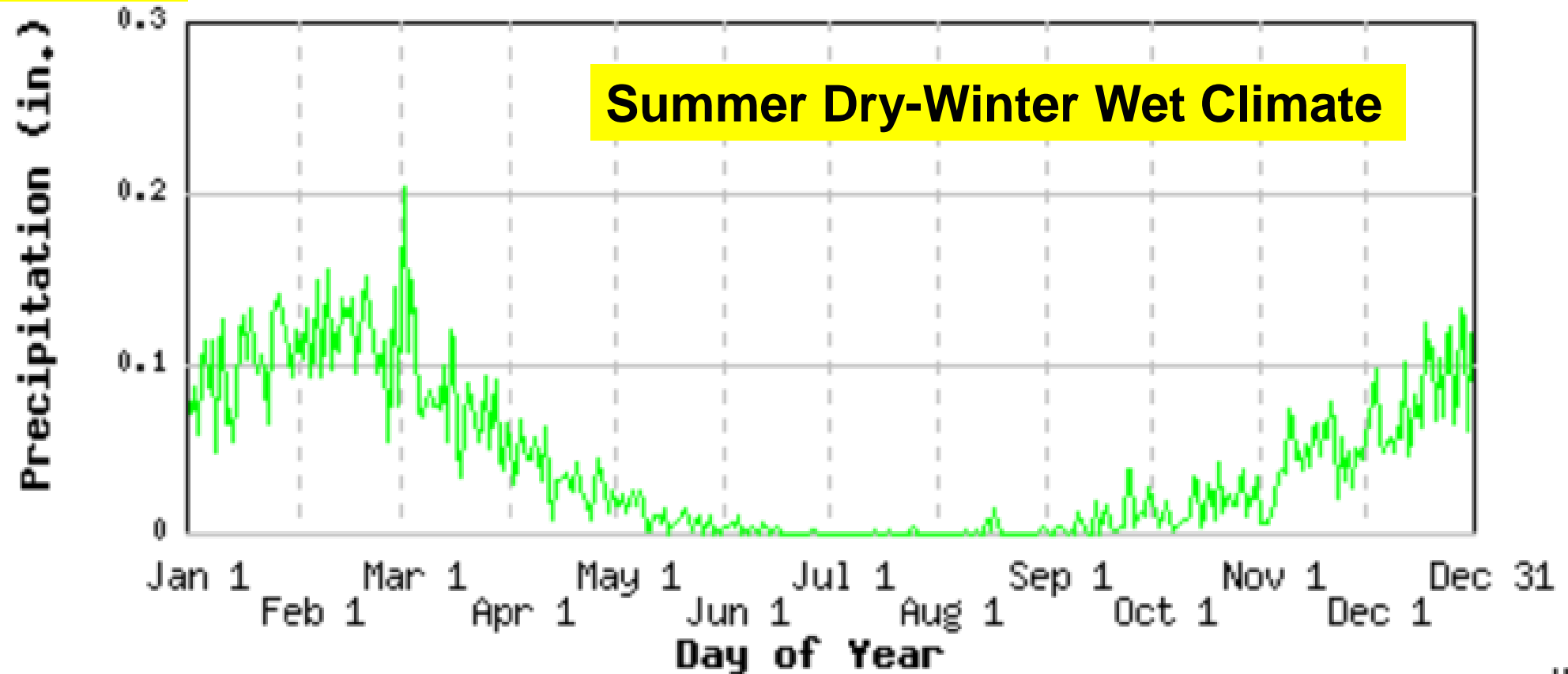
Los Angeles, California, Climate Extract...

Santa Ana Wind Episodes.

LOS ANGELES DWTN USC CAMPUS, CALIFORNIA (045115)

DAILY RAINFALL

Period of Record : 07/01/1877 to 06/09/2016



Western
Regional
Climate
Center

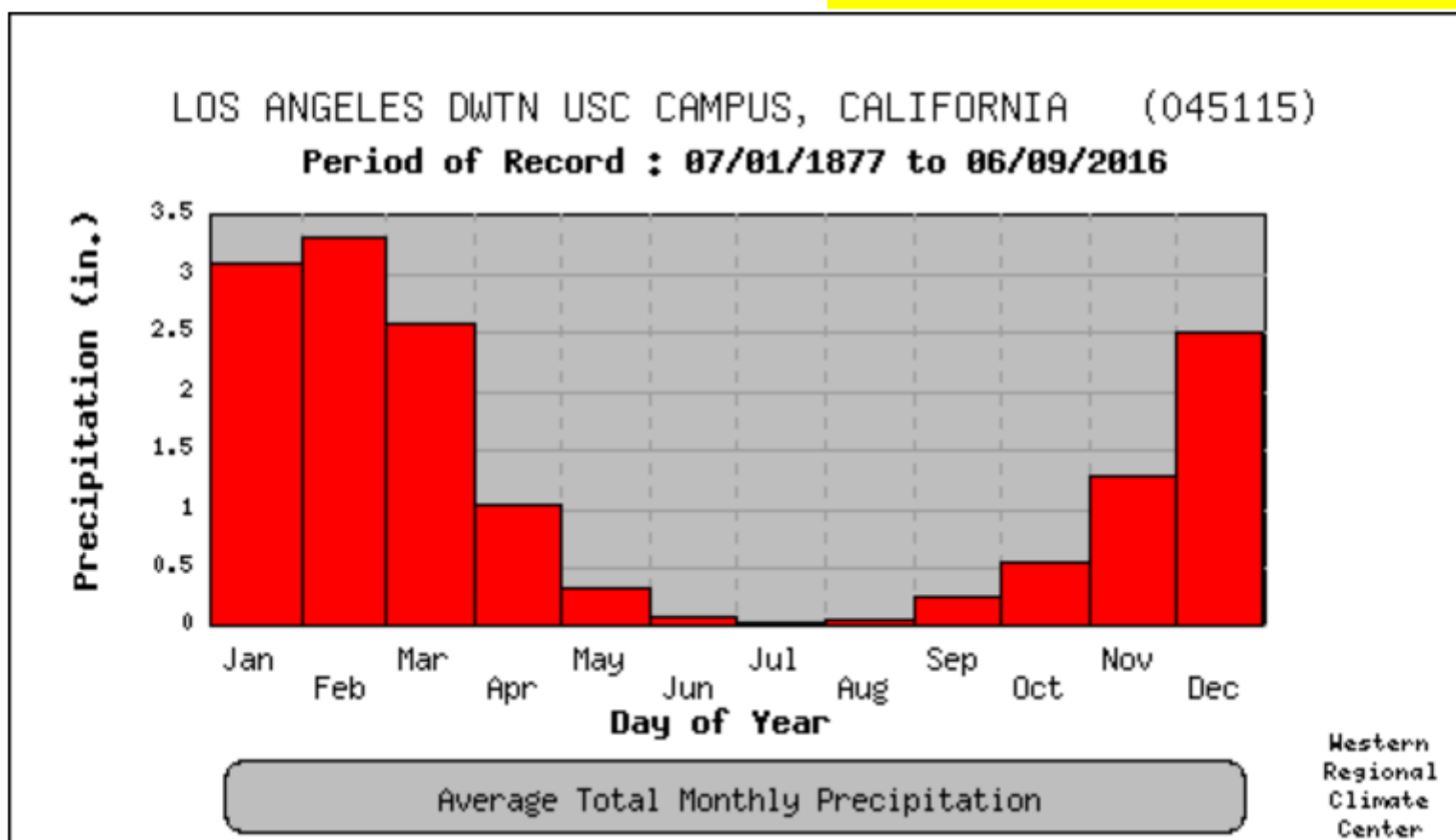
● - Average of all daily precipitation recorded for the day of the year.

LOS ANGELES DWTN USC CAMPUS, CALIFORNIA

POR - Monthly Average Total Precipitation

MONTHLY RAINFALL

Summer Dry-Winter Wet Climate

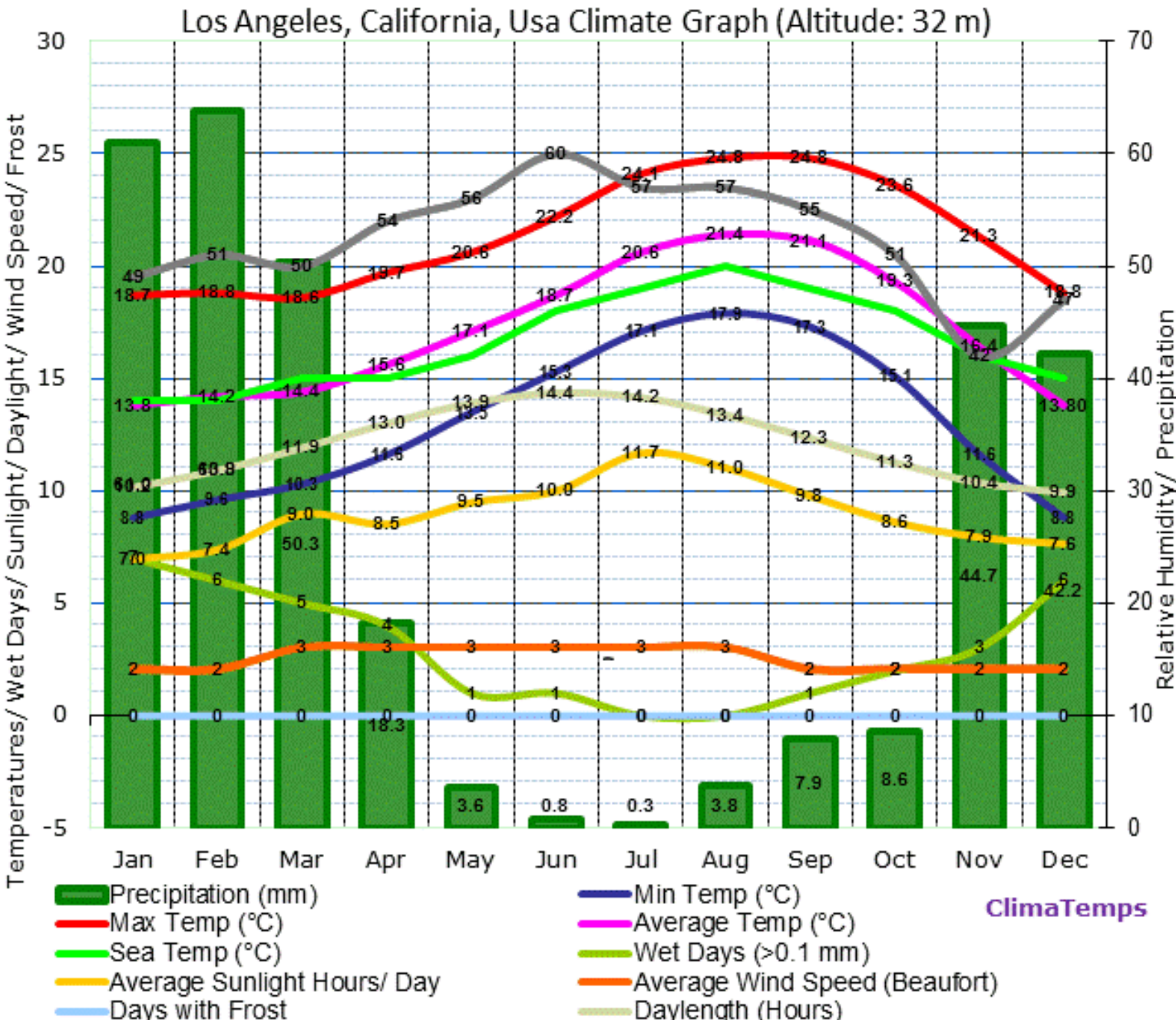


Why & When Santa Ana Winds Occur:

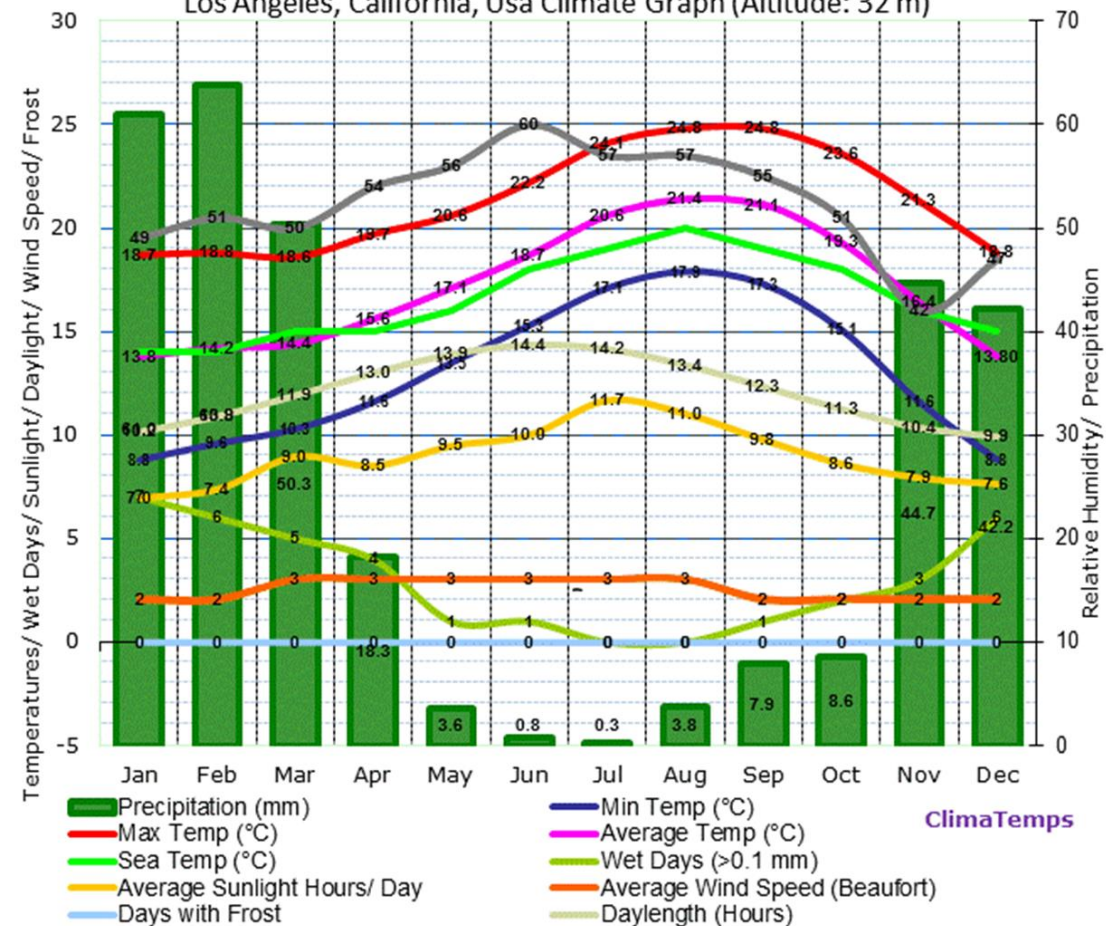
Green (monthly rainfall) bars show a “Winter Wet, Summer Dry,” or Mediterranean Climate.

At the end of summer, the subtropical ridge weakens and retreats equatorward, to be replaced by the westerlies. The cold season progression of low-pressure systems ensues, accompanied by cold fronts and high-pressure systems which bring colder air from subpolar regions into the USA.

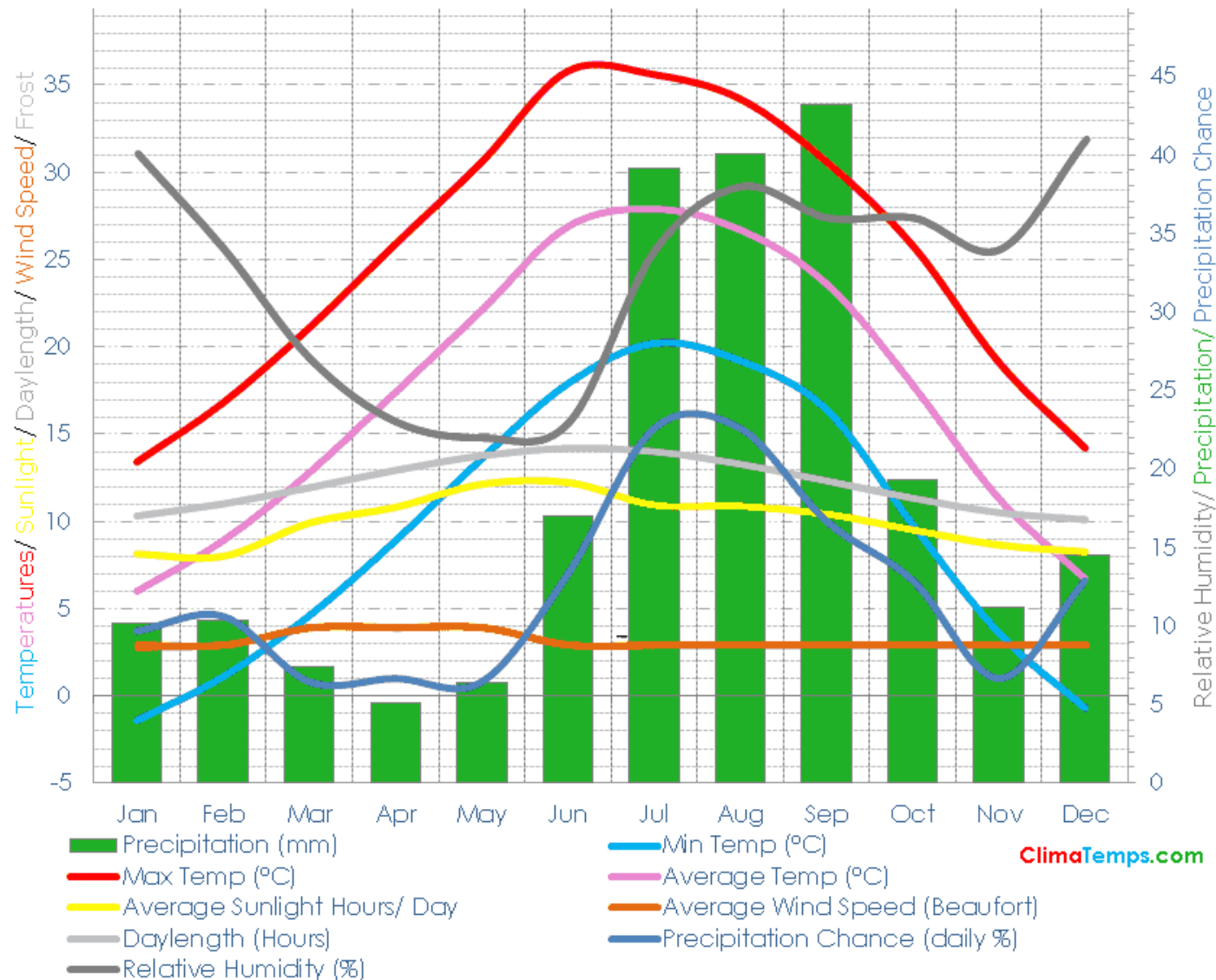
These high-pressure systems bring cool, then cold, high-pressure areas to Nevada, and the pressure gradient drives strong, dry, hot north to easterly downslope winds, the Santa Ana Winds.



Los Angeles, California, Usa Climate Graph (Altitude: 32 m)

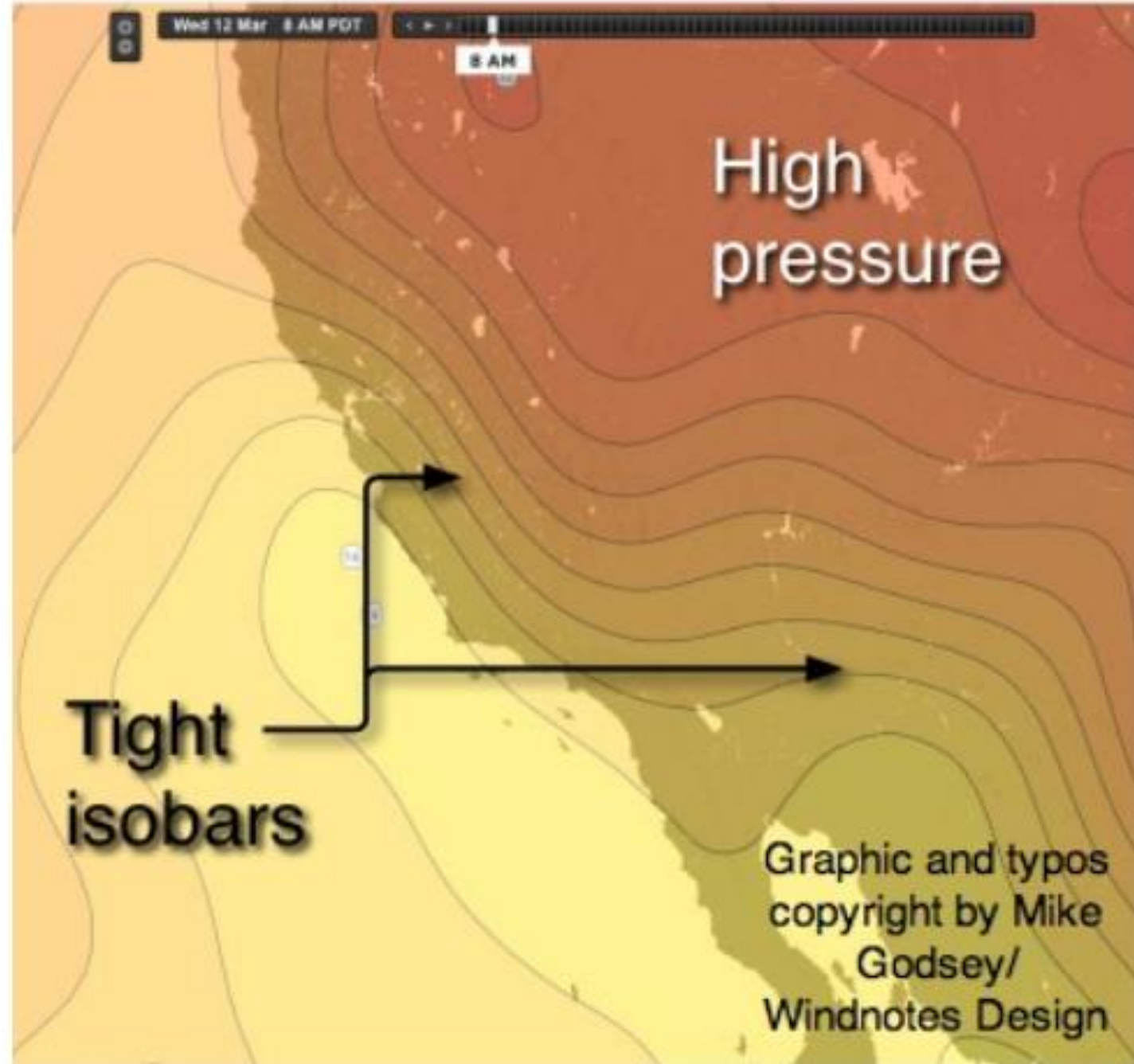
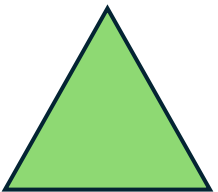


El Paso, Texas, Usa Climate Graph (Altitude: 1194 m)



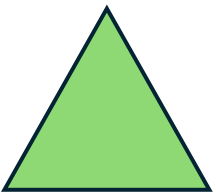
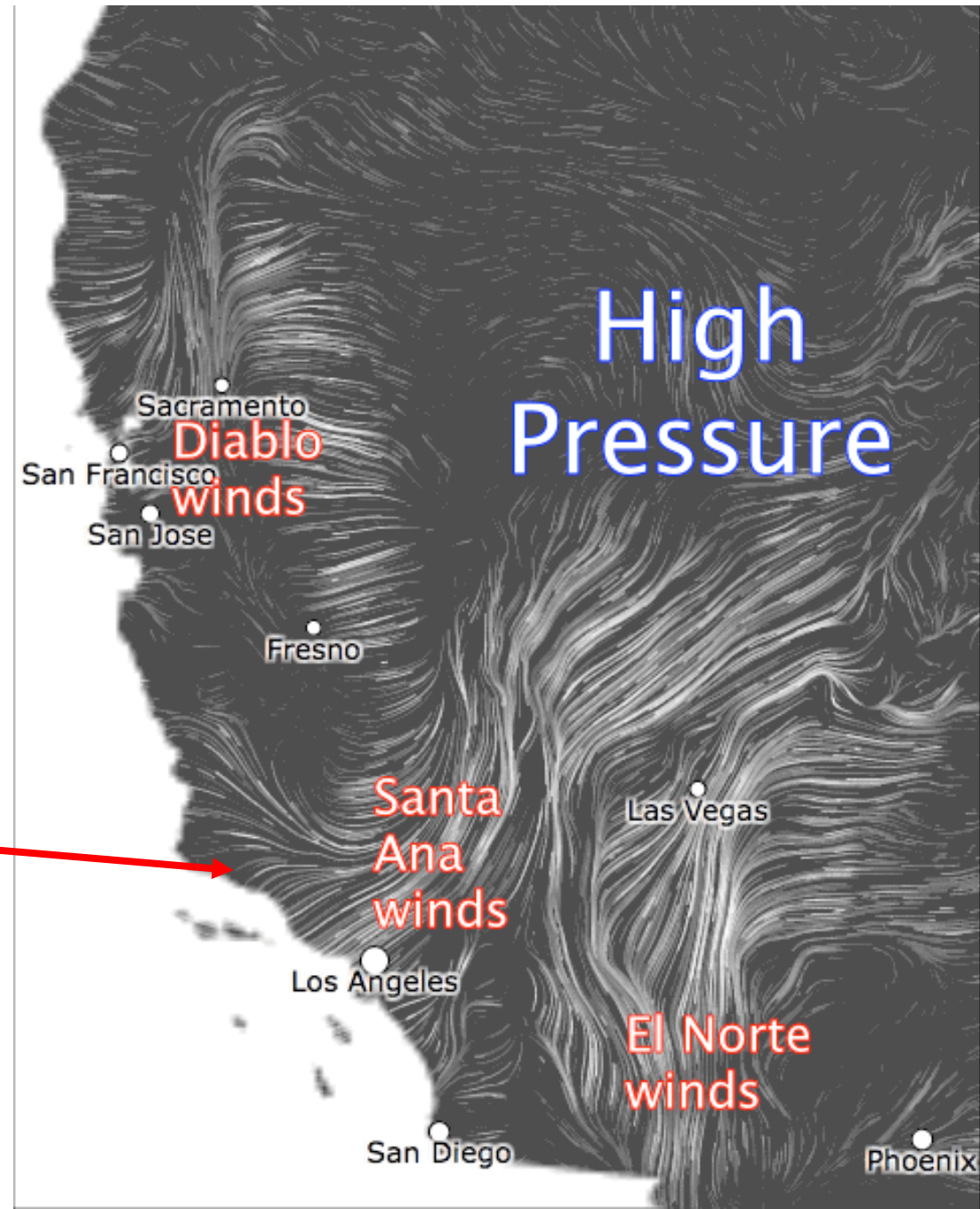
Santa Ana Wind synoptic climatology.

When the isobars are tightly packed, the Pressure Gradient Force, which drives surface winds, is stronger; higher wind speeds result.



This is the “family” of Santa Ana Winds

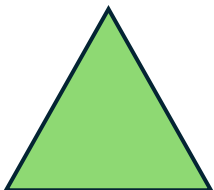
Around Santa Barbara, CA, they are called the Sundowner Winds.



<https://www.marketslant.com/article/15-stark-videos-expose-reality-california-wildfires-0>

Santa Ana Wind synoptic climatology

View looking south



WINDS WHIP UP FIERCE CALIFORNIA FIRES

Hot, dry winds (known as **Santa Anas** in southern California and **Diablos** in northern California) often whip up roaring fires across the state. It usually begins due to winds circulating around a high-pressure area over Nevada or Utah.

Descending dry air warms at the dry adiabatic lapse rate: 9.8C per Km / 5.5°F per 1000 ft

1 HIGH WINDS

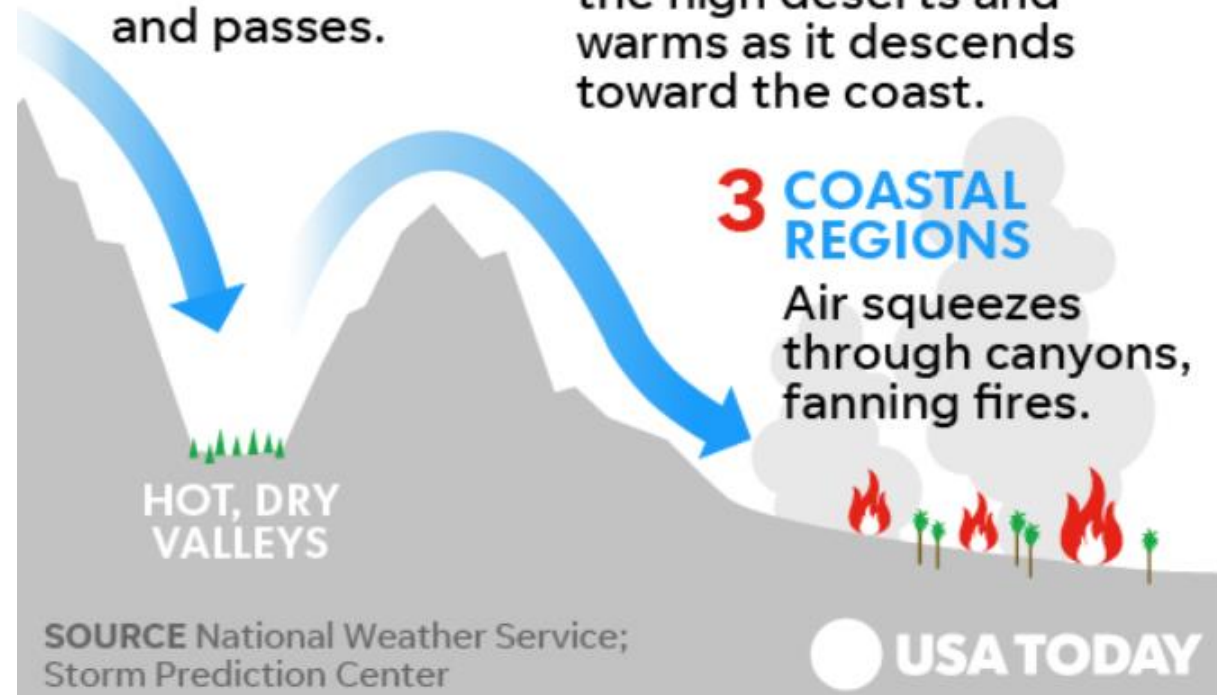
Winds can gust to **80 mph** in the mountains and passes.

2 COMPRESSED AIR

Cool air descends from the high deserts and warms as it descends toward the coast.

3 COASTAL REGIONS

Air squeezes through canyons, fanning fires.



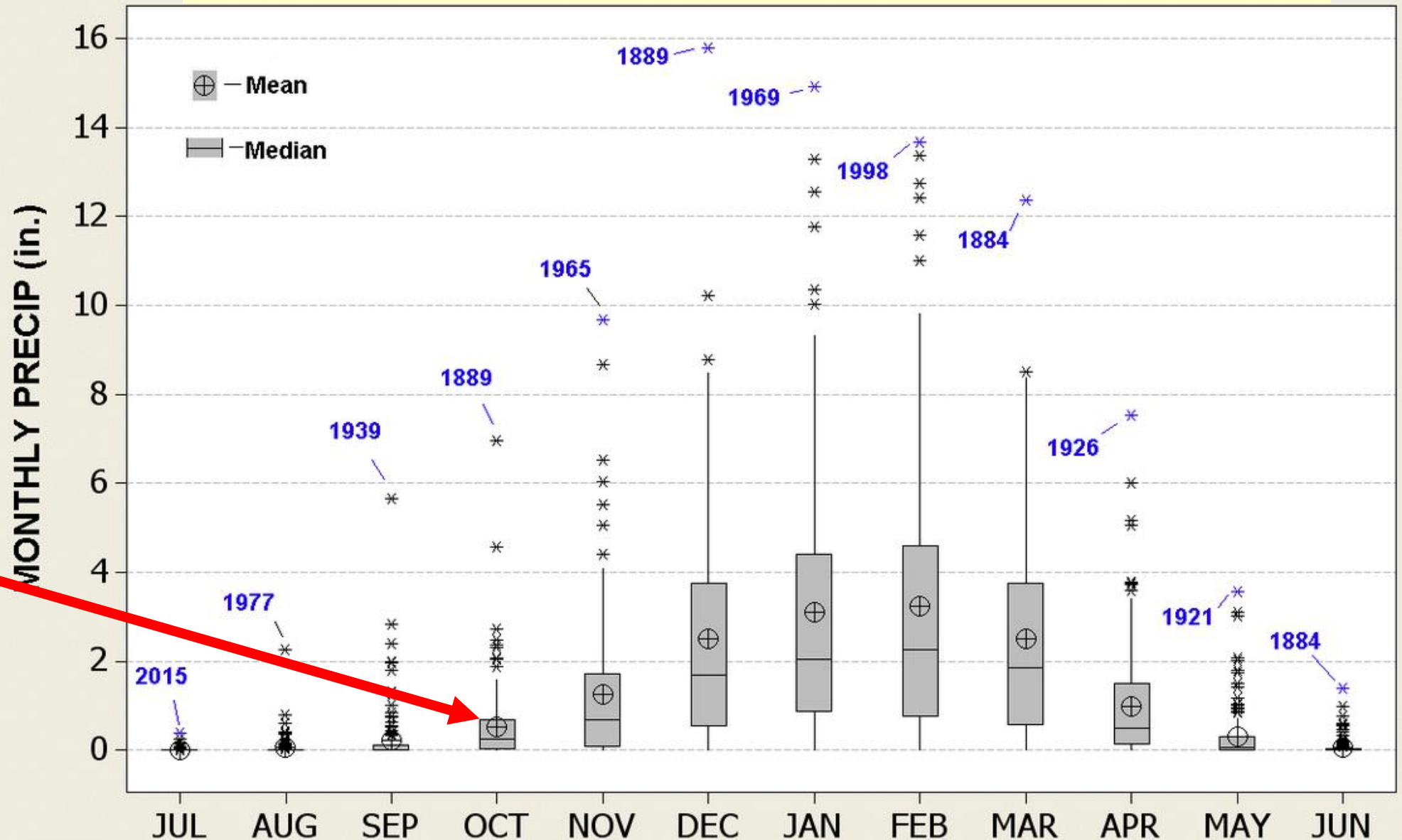
SOURCE National Weather Service;
Storm Prediction Center

USA TODAY

BOXPLOT OF DOWNTOWN LOS ANGELES MONTHLY PRECIPITATION (in.) 1877-78 thru 2016-17 SEASONS

Plot starts in July

https://www.climatestations.com/wp-content/uploads/2017/08/LA_BOX.gif



Usually, the cool season rains begin by October.

But in 2024, these rains did not start in October.

We'll see variations of this chart again

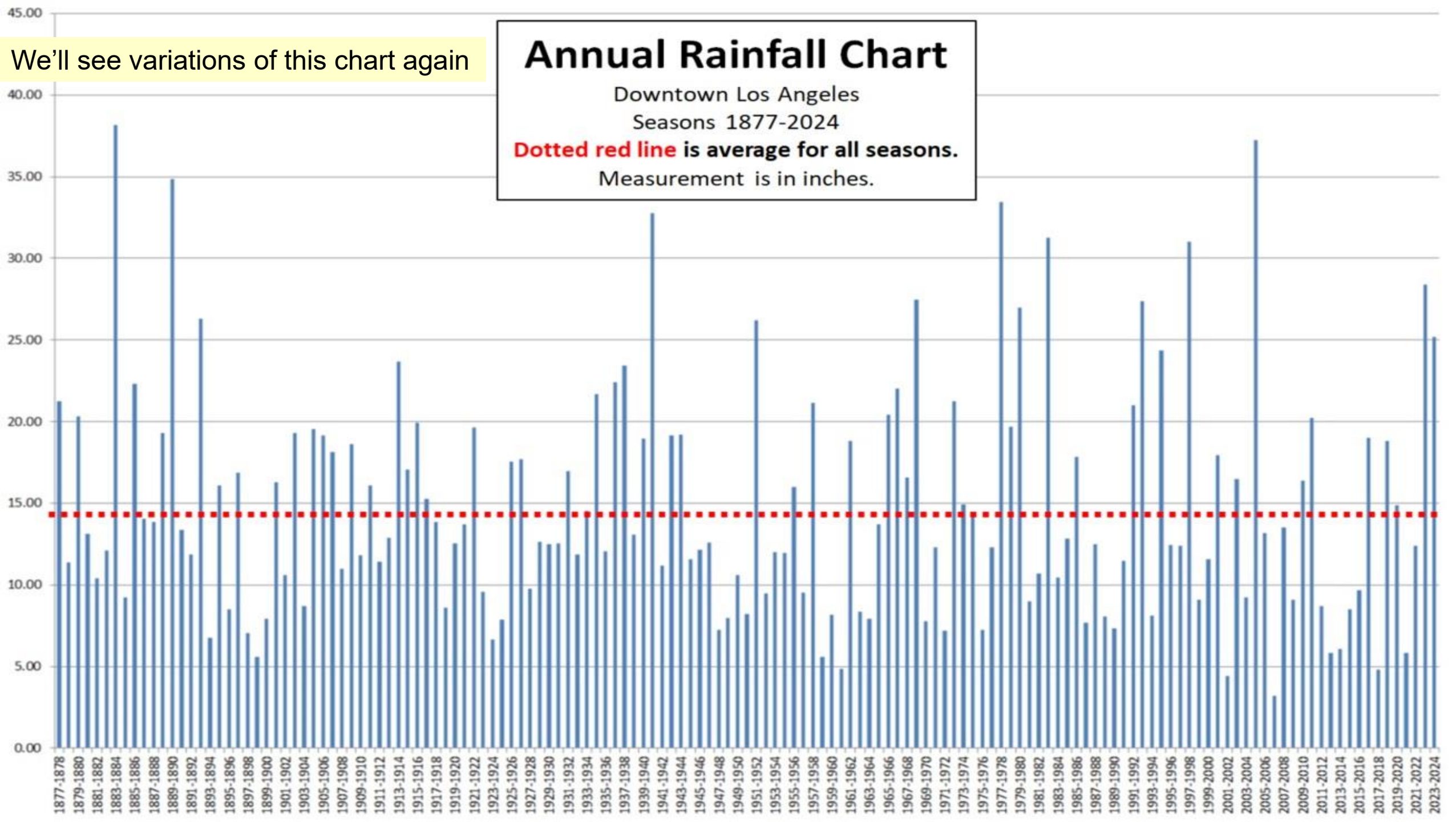
Annual Rainfall Chart

Downtown Los Angeles

Seasons 1877-2024

Dotted red line is average for all seasons.

Measurement is in inches.



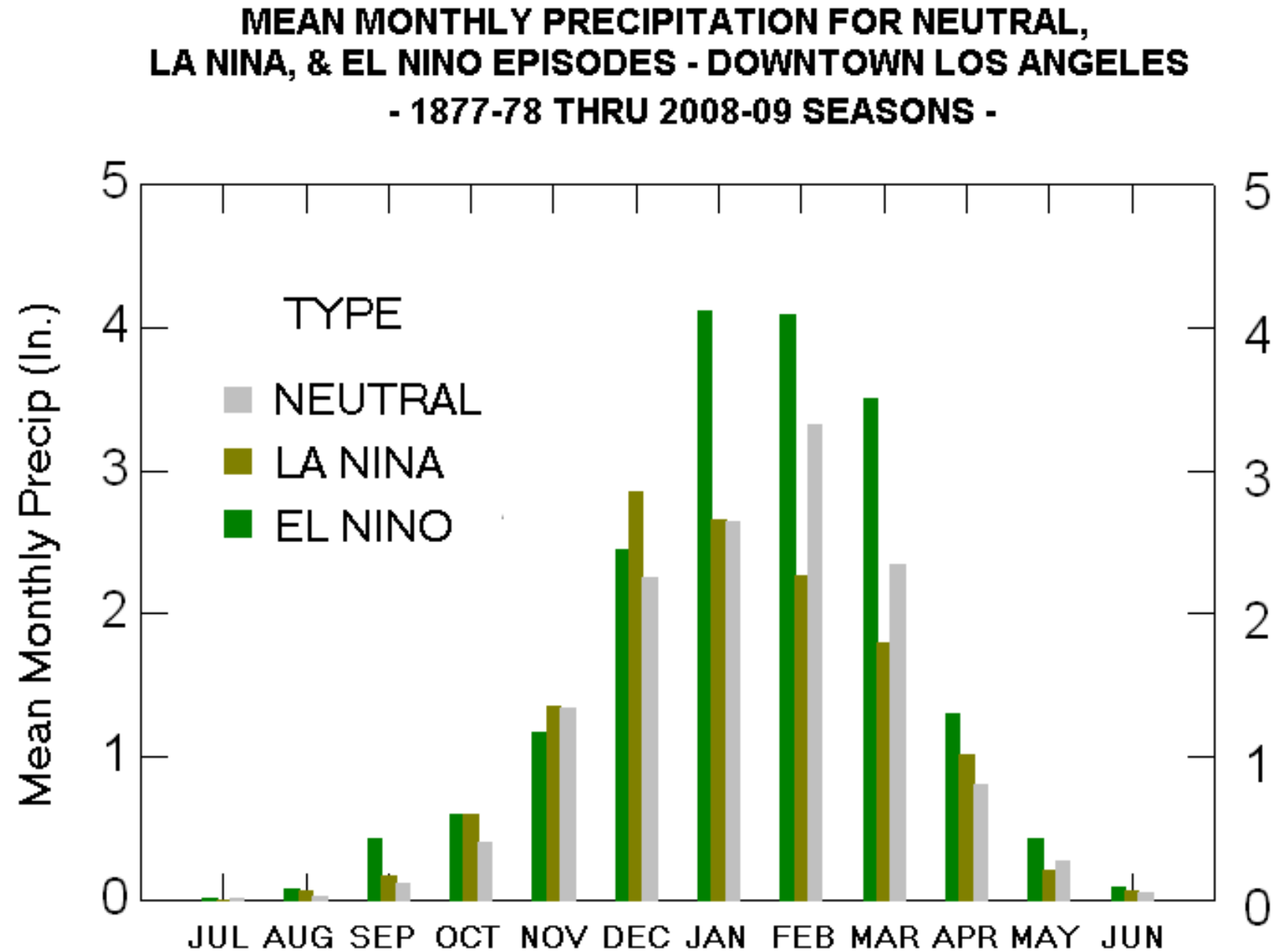
Plot starts in July

The 2024 rainfall season
(and similar years, we will
find...) **did not fit** this pattern.

The pattern changed
over the summer season.

The pattern change
showed up in the 2024
rainfall plot.

We find a diagnostic
and prognostic pattern, a
precursor to catastrophic
Los Angeles Area fires.



Source of El Nino, La Nina, & Neutral Seasonal Breakdowns:

http://www.wrh.noaa.gov/10x/climate/Los%20Angeles%20Yearly%20Rainfall%20-%20jo_8822-image001.gif

IT'S NOT CLIMATE CHANGE....

ITS THE CLIMATE WE HAVE!

Historical Data:

- The driest calendar year was 1953 with 4.08 inches
- The wettest calendar year, 1983, had 34.04 inches.

WOW! A factor of 8 from driest to wettest!

Annual Rainfall Chart

Downtown Los Angeles

Seasons 1877-2024

Dotted red line is average for all seasons.

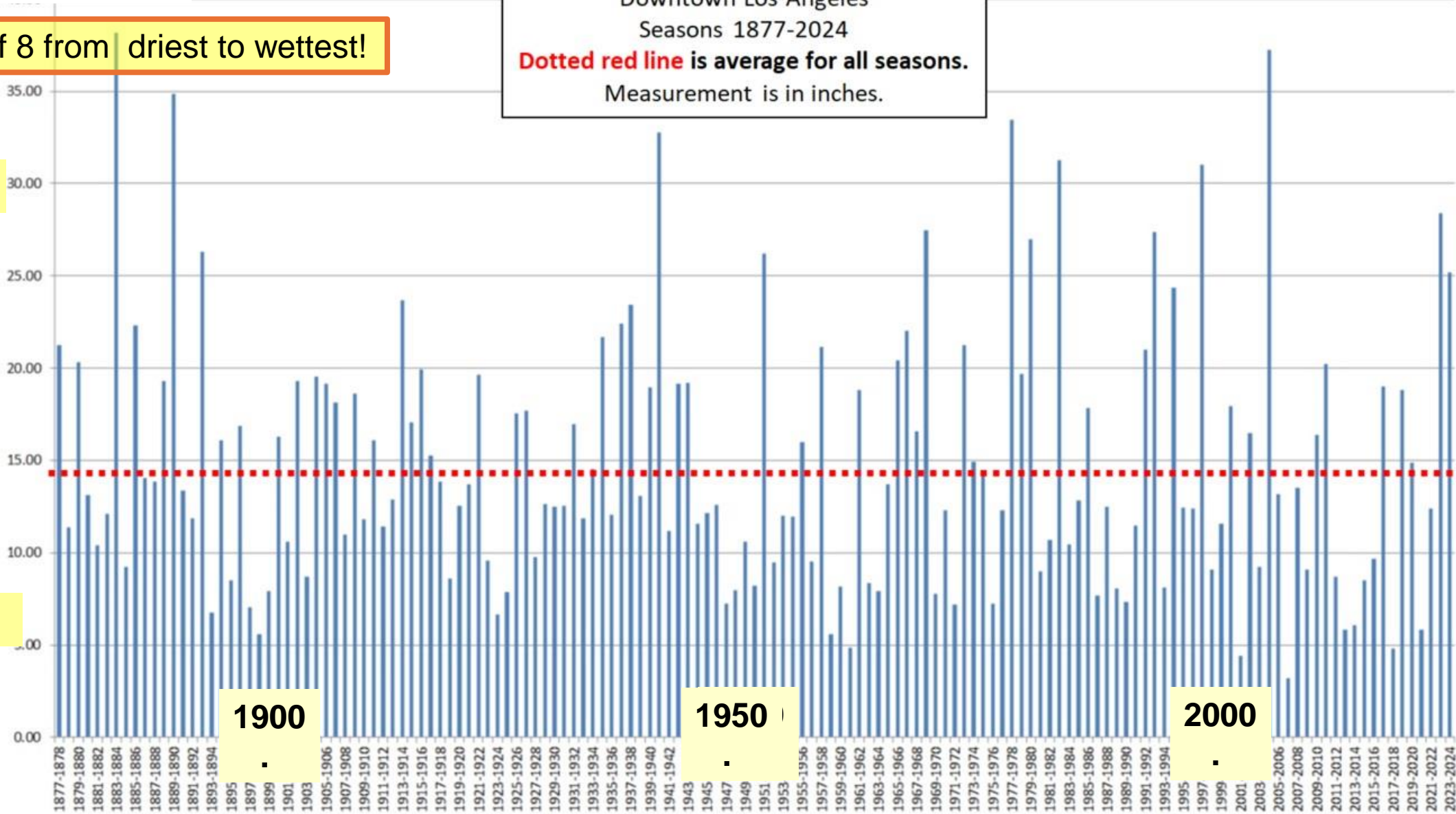
Measurement is in inches.

El Nino years

Mean ~14.25".
Std. Deviation~ 4.6"
...not that many
years are "average"

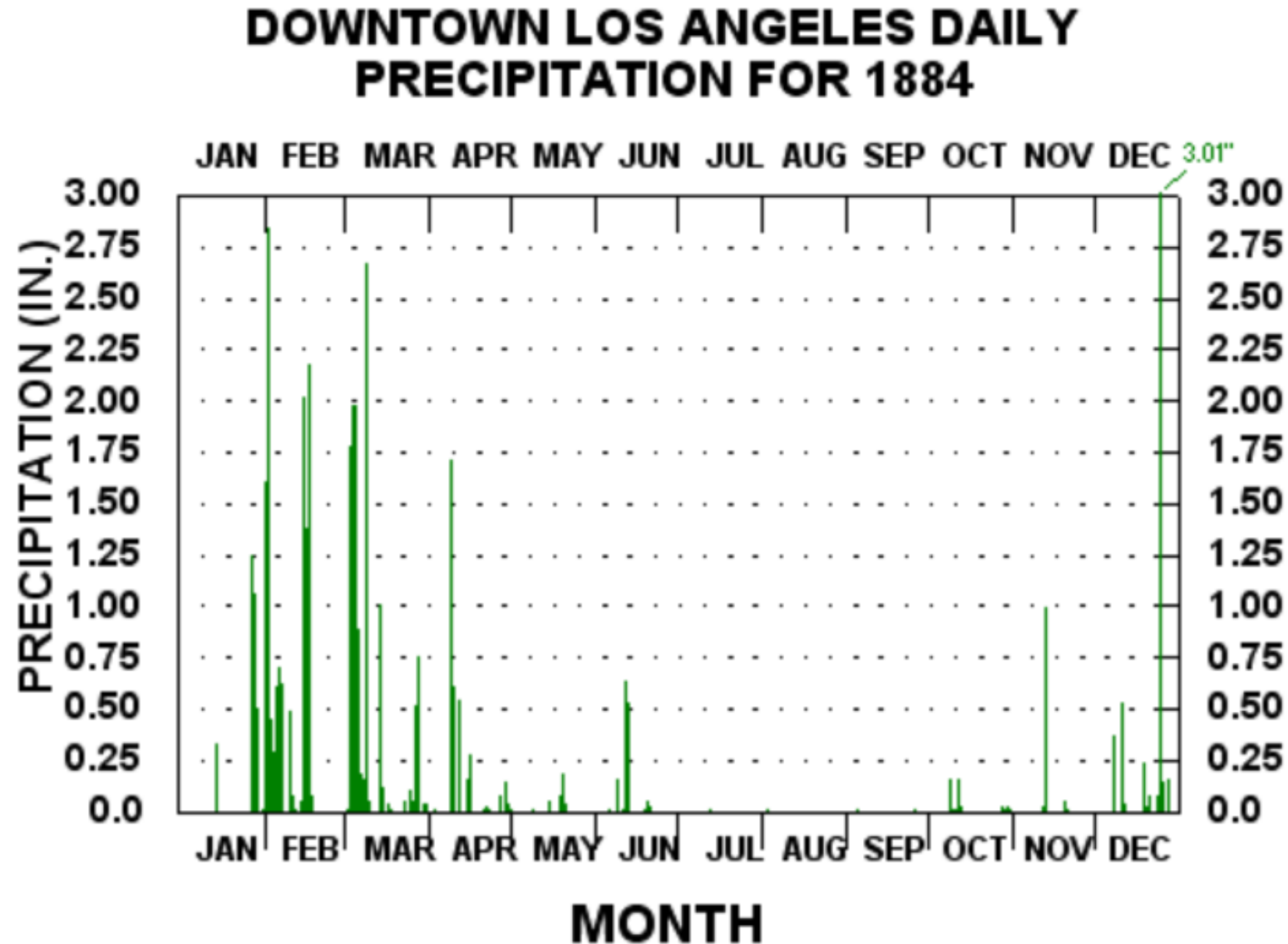
La Nina Years

1877-2024



1884 – Wettest Calendar Year in LA History (40.29").

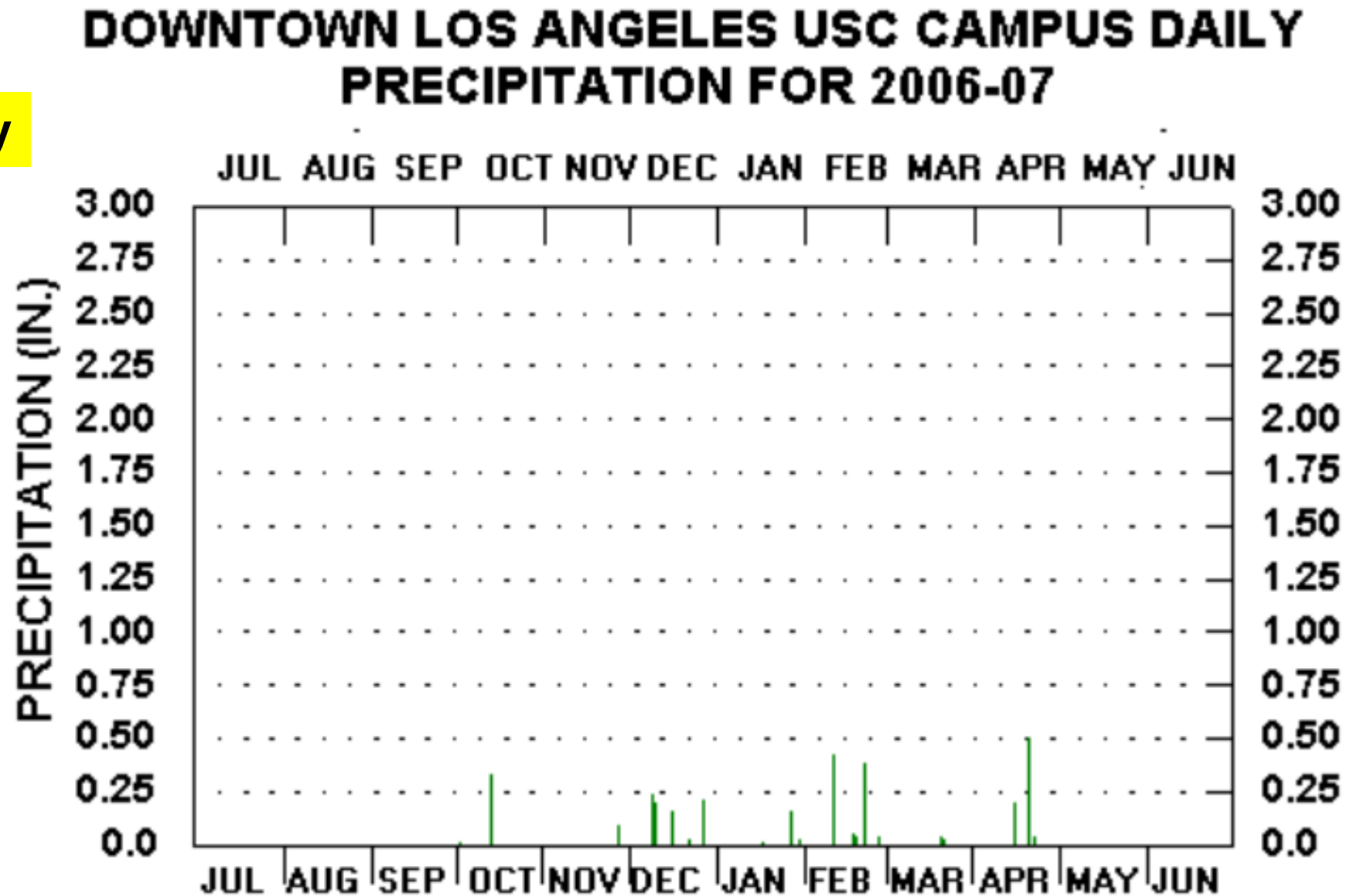
<https://www.climatestations.com/wp-content/uploads/2020/03/lacv1884.gif>



2006-07 – Driest water year (3.21") in recorded LA history.

<https://www.climatestations.com/images/stories/los-angeles/LACV0607.GIF>

Plot starts in July



Here's how climate change fueled the Los Angeles fires

<https://www.npr.org/2025/01/29/nx-s1-5273676/la-fires-climate-change-rainfall-extreme-weather>

JANUARY 29, 2025 · 4:00 AM ET



Lauren Sommer

This NPR story and graphic is a classic in it's stupidity. We will see it again



Lauren Sommer's experts include Park Williams and World Weather Attribution.

<https://www.npr.org/2025/01/29/nx-s1-5273676/la-fires-climate-change-rainfall-extreme-weather>

"The fact that we have a warmer or drier atmosphere today because of global warming very likely causes large fuels like dead logs and fence posts and other materials that you find in urban environments to be drier than they would be otherwise," says Park Williams, a hydroclimatologist at UCLA.

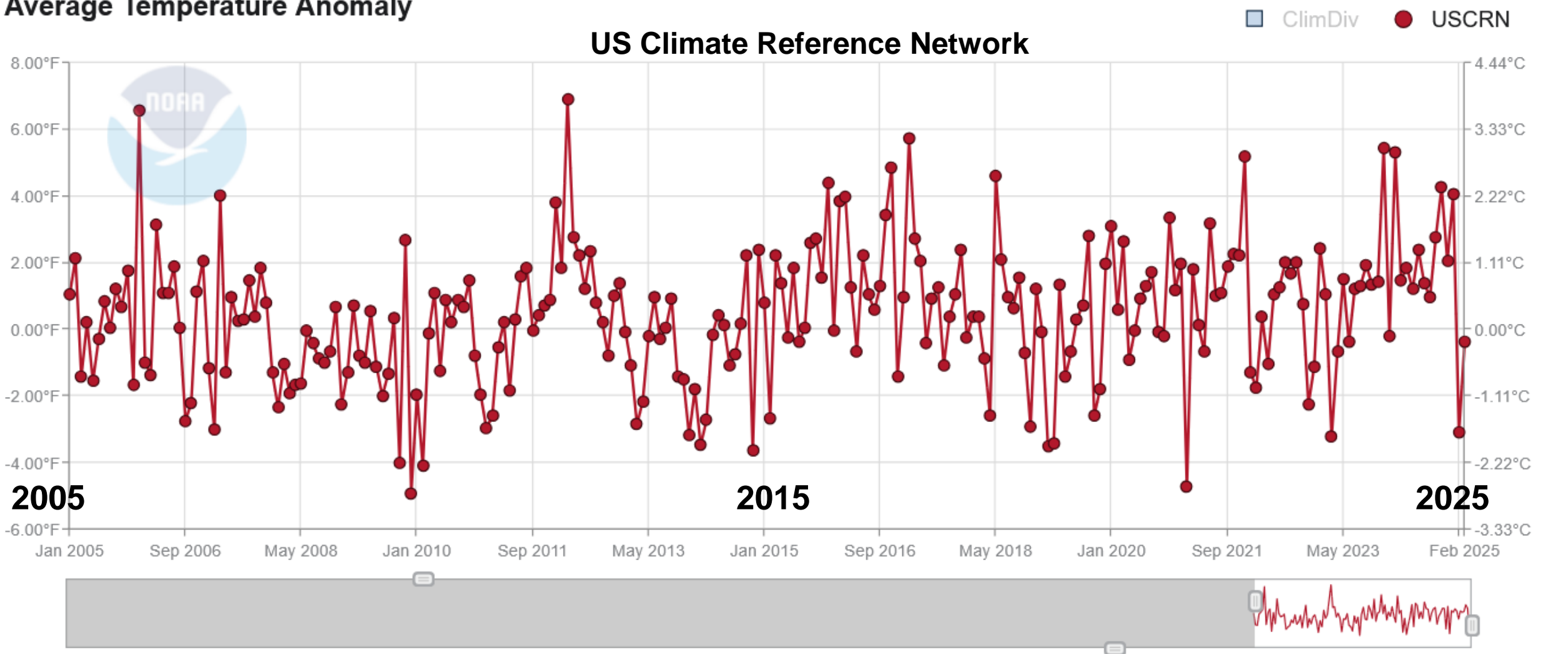
"These fires are very likely more intense and dangerous in urban environments because of global warming."

Another analysis by World Weather Attribution found that the hot, dry conditions were about 35% more likely because of climate change, as measured by the Fire Weather Index, which looks at temperature, humidity and other weather factors.

We'll get to the red underlined topics later, "the usual <Alarmist> suspects"

Park Williams: The fact that we have a warmer or drier atmosphere today because of global warming

Average Temperature Anomaly



At 500 mb, half the atmosphere's mass is above this level, and half is below.

http://weather.rap.ucar.edu/upper/upaCNTR_500.gif

500 mb rawinsonde data 12z Wed 04 Sep 2019

500 Millibar Chart 4 Sep 2019

Especially the southern USA:
Flow dominated by the subtropical
ridge, the high pressure aloft—the blue H.

Many winds are from the east...especially
in the southern USA.

Look at the tropical systems!

Stronger winds are in the Great Lakes to
New England States....and they are
the Westerlies.

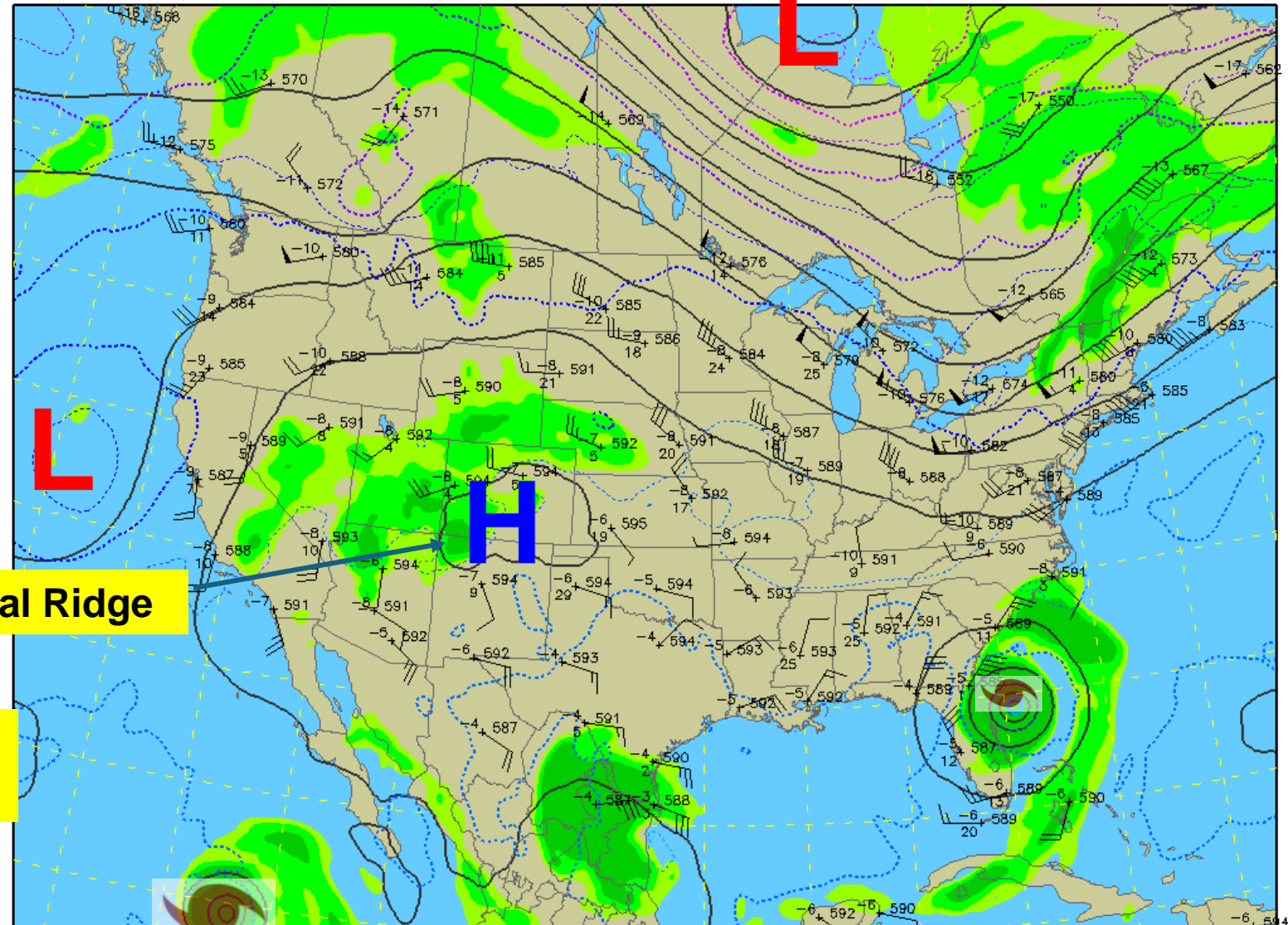
This High is Part of the Subtropical Ridge

**In Los Angeles, this is the “Summer Dry”
pattern of the winds aloft.**

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

0-hour analysis valid 1200 UTC Wed 04 Sep 2019

RAP (12z 04 Sep)



At 500 mb, half the atmosphere's mass is above this level, and half is below.

500 Millibar Chart 27 Mar 2025 Evening

Almost all the CONUS stations have winds from the West...The Westerlies

Zone of strongest Westerlies is along the northern states.

The Ridges and Troughs are reflections of the westerlies and the traveling low-pressure systems which bring the high pressure centers to Nevada...and the Santa Ana Wind families to California and the surrounding areas.

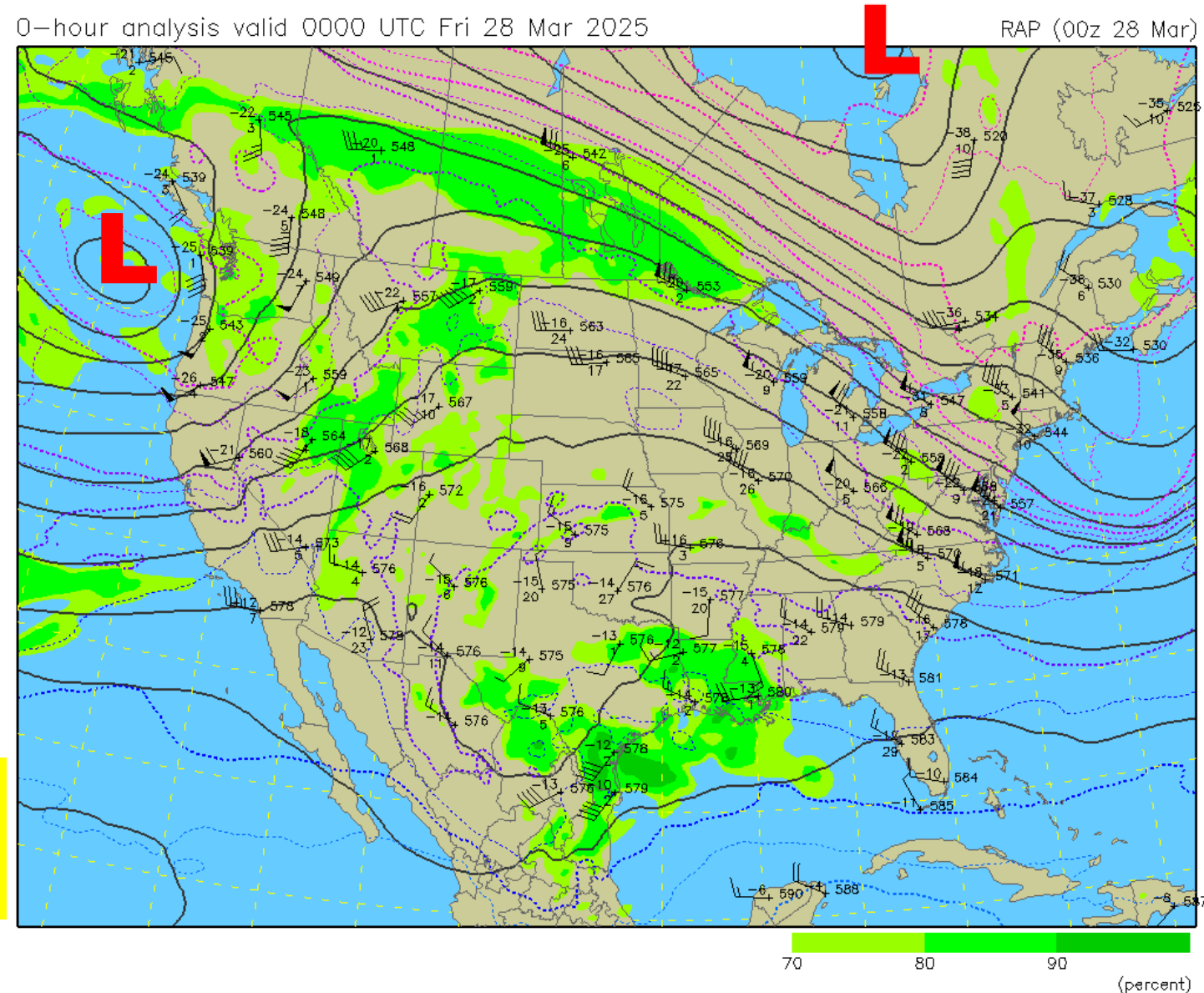
For Los Angeles, this is more typical of the “Winter Wet” pattern of the winds aloft.

500 mb rawinsonde data 00z Fri 28 Mar 2025

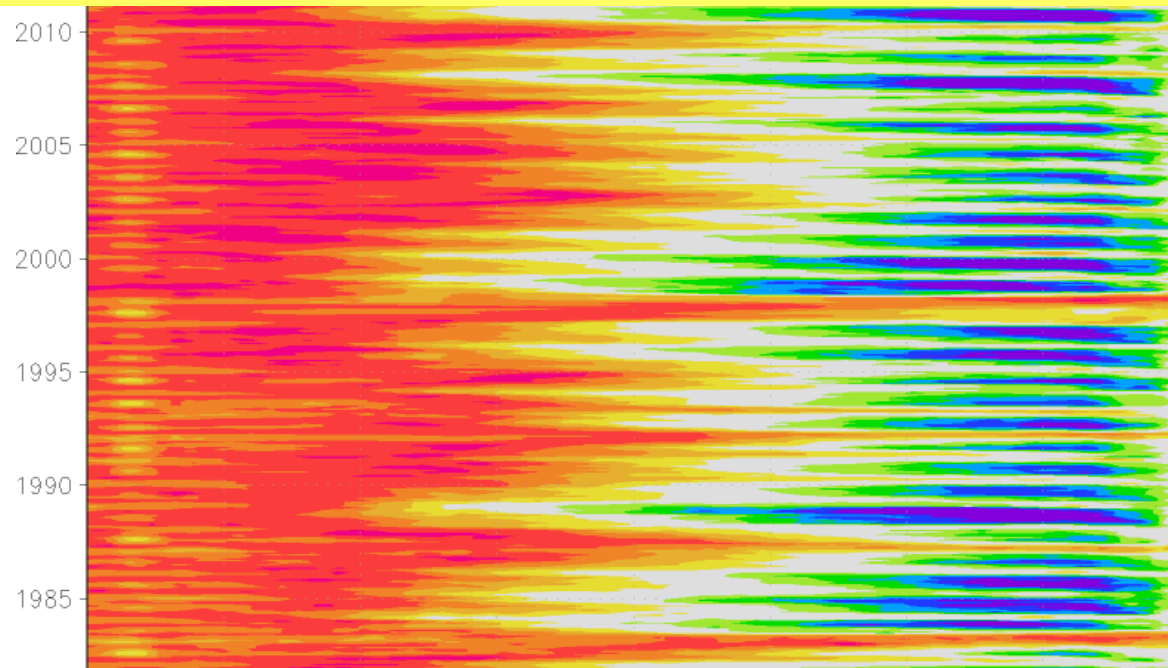
500 mb Heights (dm) / Temperature (°C) / Humidity (%)

0-hour analysis valid 0000 UTC Fri 28 Mar 2025

RAP (00z 28 Mar)



El Nino and La Nina: The Controls on Rainfall and Drought in the Western USA

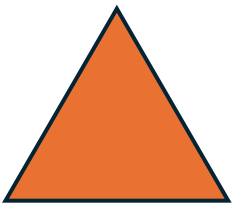


Bob Endlich

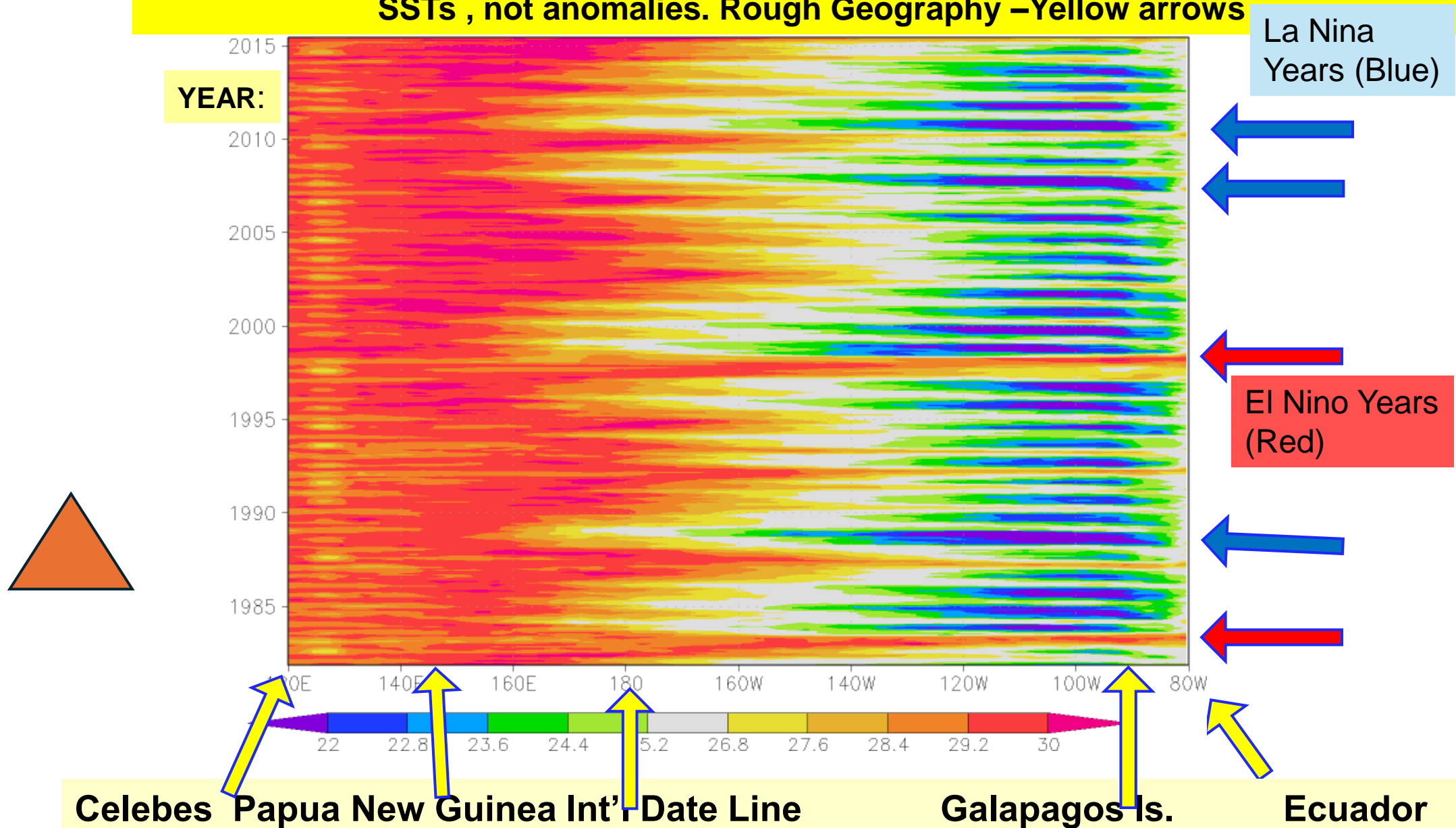
bendlich@msn.com

Cruces Atmospheric Sciences Forum

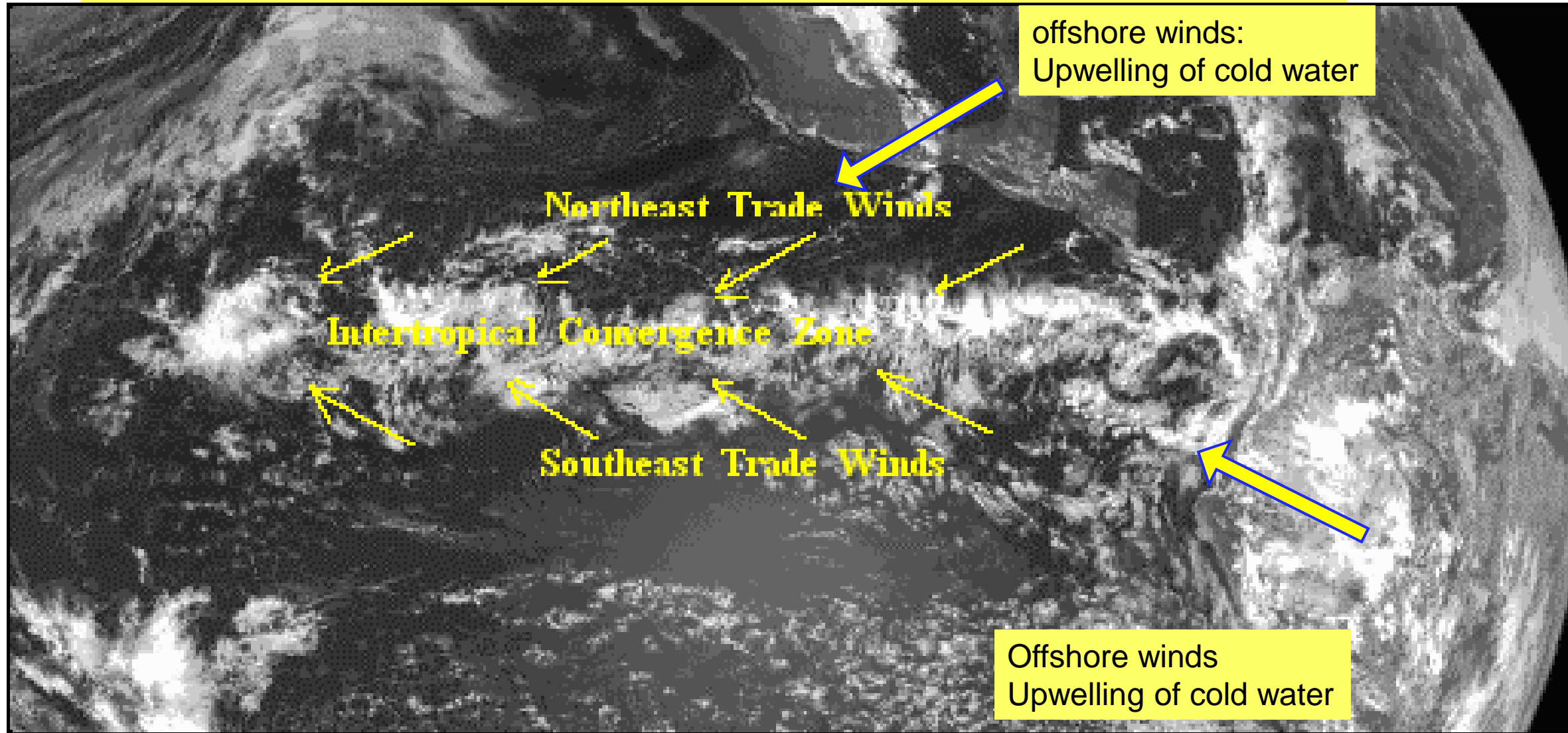
19 Jun 2021 **Edited 30 Mar 2025**



Bob Tisdale's Hovemuller diagram. Equatorial Sea Surface Temperature (Longitude)
SSTs , not anomalies. Rough Geography –Yellow arrows



Northeasterly Trade Winds are very prevalent, stronger in La Nina years.
Visitors to Hawaii usually encounter steady winds from the northeast: Trade Winds

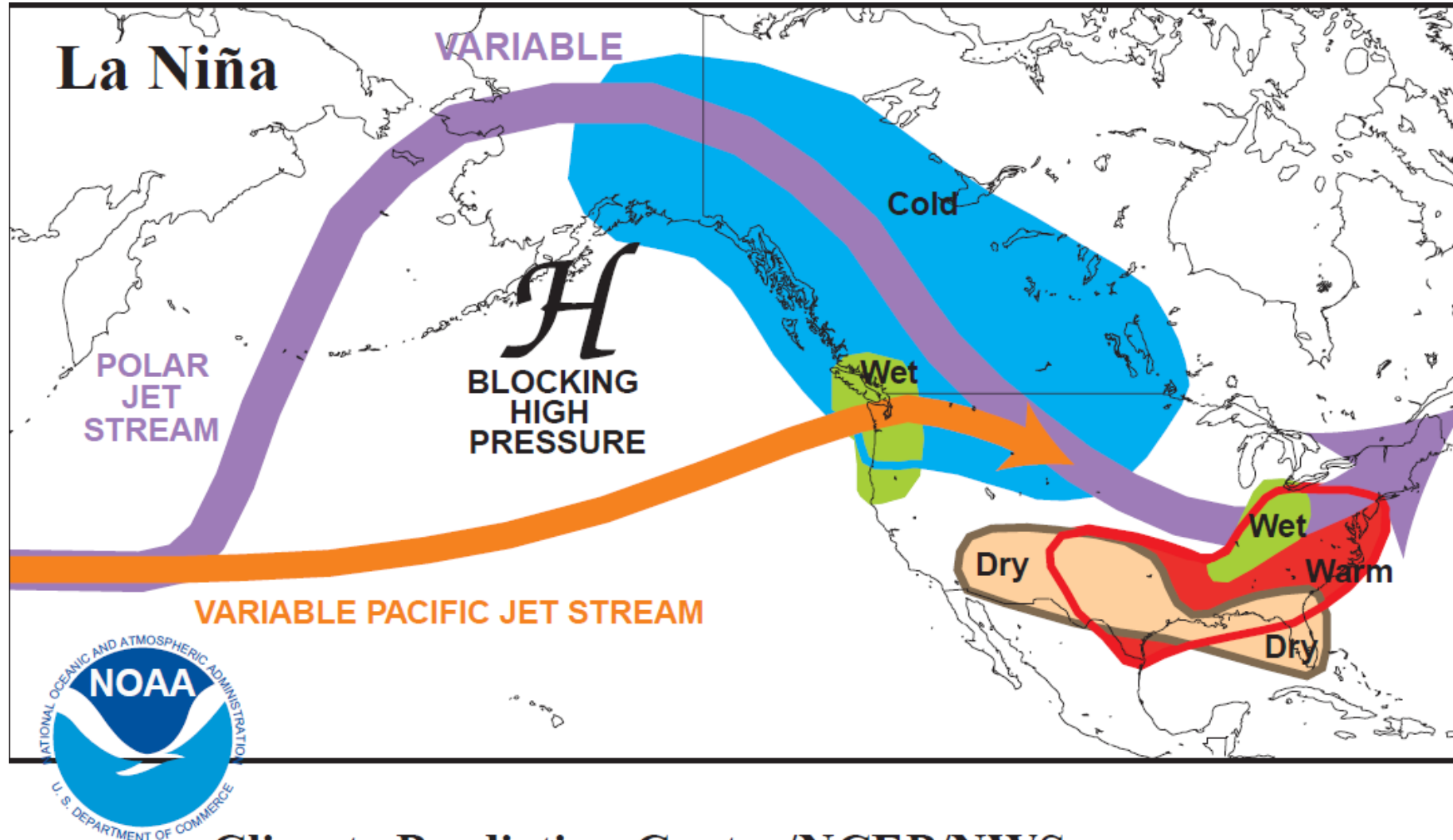


But EL NINO causes a disruption of this pattern, which allows warm water to flow from Indonesia/Western Pacific across the entire Pacific Ocean.

El Niño's counterpart is La Niña.

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensocycle/nawinter.shtml

La Niña results in dry from ~Arizona to Florida

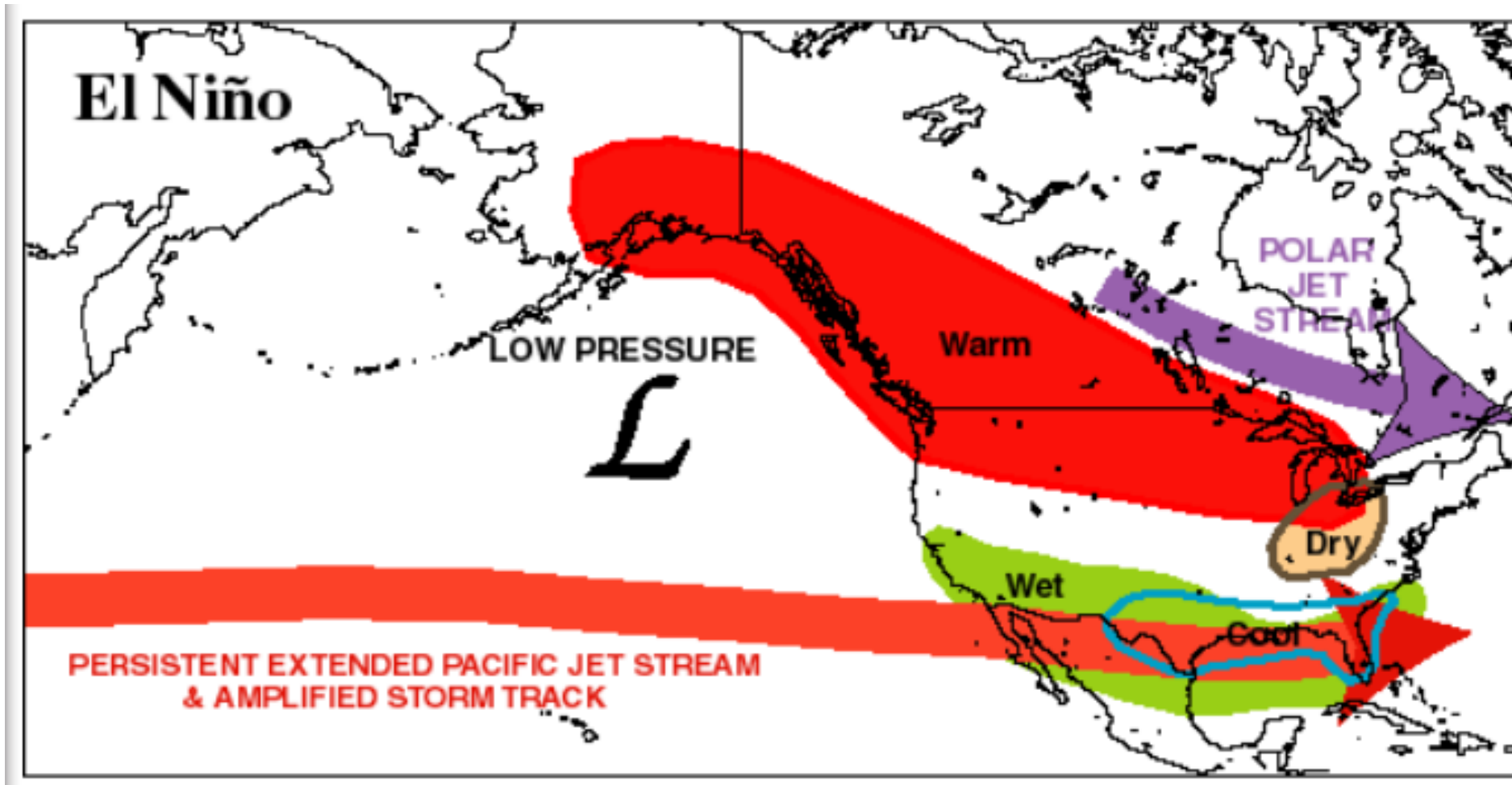


Climate Prediction Center/NCEP/NWS

El Nino pattern: wet weather from California to New Mexico to East Coast

Huge Warm Pattern from Gulf of Alaska all the way to Michigan!

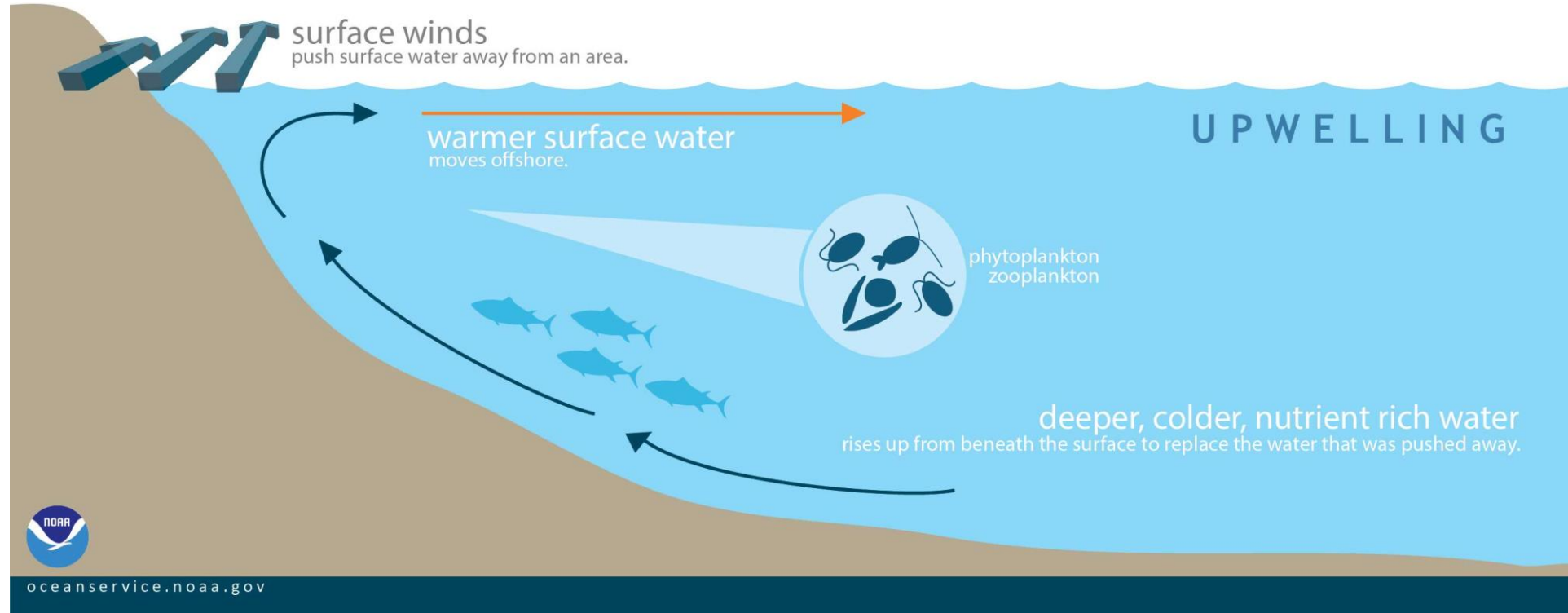
http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensocycle/nawinter.shtml



<https://www.nationalgeographic.org/encyclopedia/upwelling/>

SIDEBAR ON UPWELLING

off West Coasts of North America
and South America



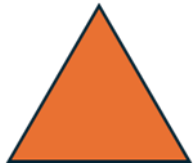
Helps answer the question as to why the Pacific Ocean seems so cold;
Mark Twain's observation,
"The coldest winter I ever spent was a summer in San Francisco."



<https://www.nationalgeographic.org/encyclopedia/upwelling/>

Peruvian Upwelling:

Upwelling is the natural process which brings cold, nutrient-rich water to the surface. A huge upwelling regularly occurs off the coast of Peru, which enjoys a large fishing industry as a result.



El Nino's 'Marker' Storms



GMA JANUARY 6, 2016 **abc GMA** JANUARY 6, 2016



The map displays the Western United States with two prominent low pressure systems (marked with red 'L's) over the Pacific coast. A yellow and orange precipitation band stretches from the coast through California and into the Southwest. Labeled cities include Medford, Eureka, San Francisco, Fresno, Los Angeles, San Diego, Las Vegas, Yuma, and Phoenix. A dashed line runs vertically through the center of the map.

HAPPENING NOW

FLASH FLOOD & MUDSLIDES
EL NINO-FUELED STORMS SLAM WEST

GMA
@GMA

|| 🔊 × ⏮ 10 ⏭ 10 0:06 / 2:04

🔗 📺

<https://www.govtech.com/em/emergency-blogs/disaster-zone/disaster-officials-brace-for-havoc-from-historic-el-nino.html>



FILE - In this Jan. 27, 1983, file photo, the landmark Crystal Pier in the San Diego community of Pacific Beach collapses under the force of surging waves during an El Niño storm.

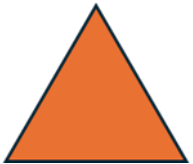
One hundred feet of the 56-year-old structure was lost.



<https://www.usatoday.com/story/weather/2016/01/05/california-drought-el-nino/78304844/>



Portions of the 101 Freeway flood because of rain, Jan 5, 2016, in Ventura, Calif.





Note the bores and hydraulic jump, features of shallow water waves.
<Glendora, not far from where 2025s Eaton Fire Occurred>



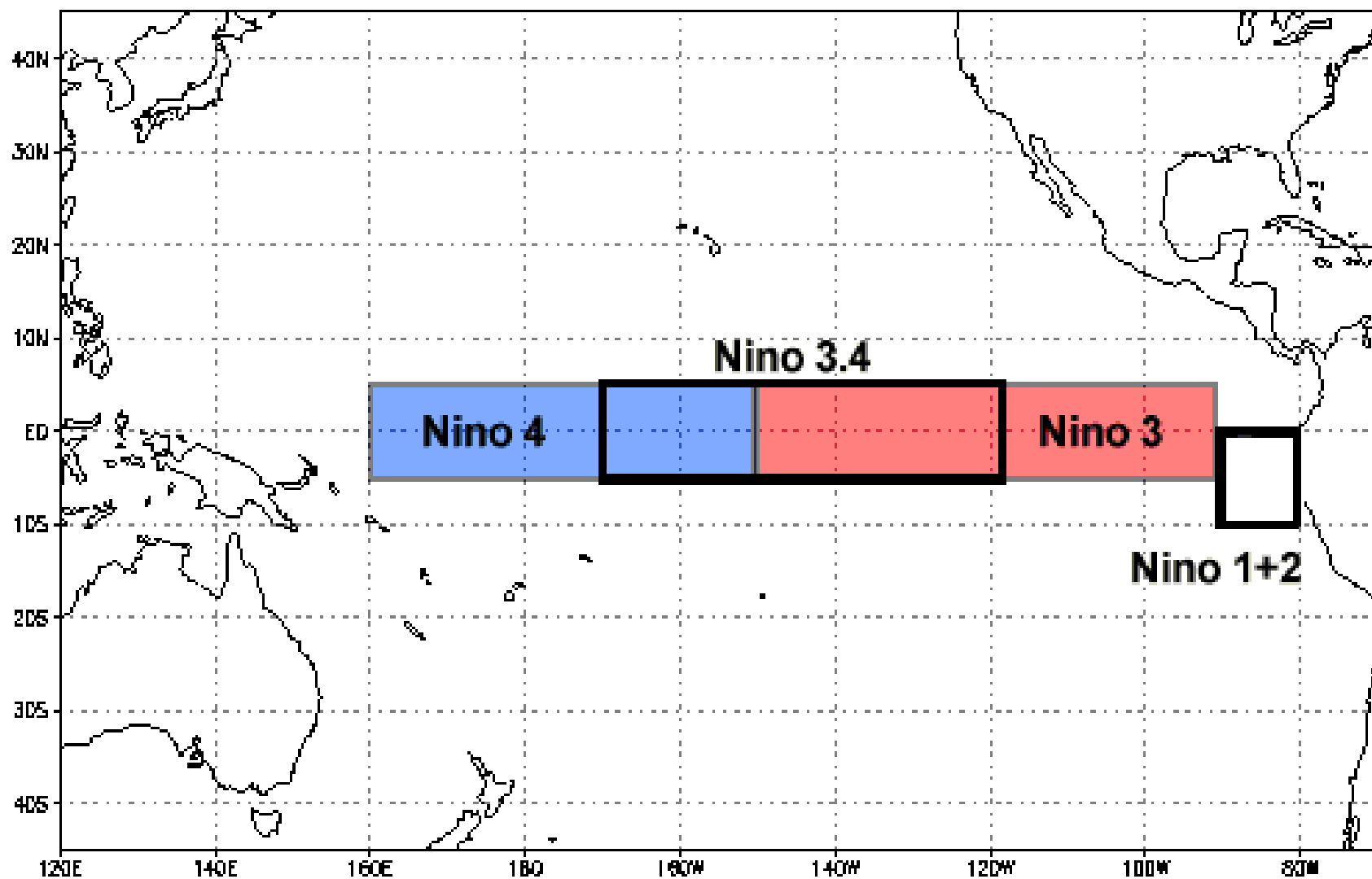
ENSO's Diagnostics:

Nino 3.4 Ocean Temperatures.

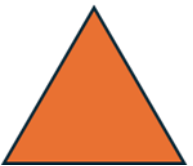
Seen with
Global Tropospheric Temperatures

Nino 3.4 temperatures are both diagnostic and prognostic





The **Oceanic Niño Index: (ONI)** is one of the primary **indices** used to monitor **El Niño-Southern Oscillation (ENSO)**. The ONI is calculated by **averaging sea surface temperature anomalies** in an area of the east-central equatorial Pacific **Ocean**, which is called the **Niño 3.4 region (5S to 5N; 170W to 120W)**.

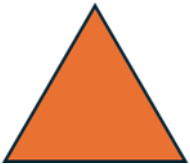
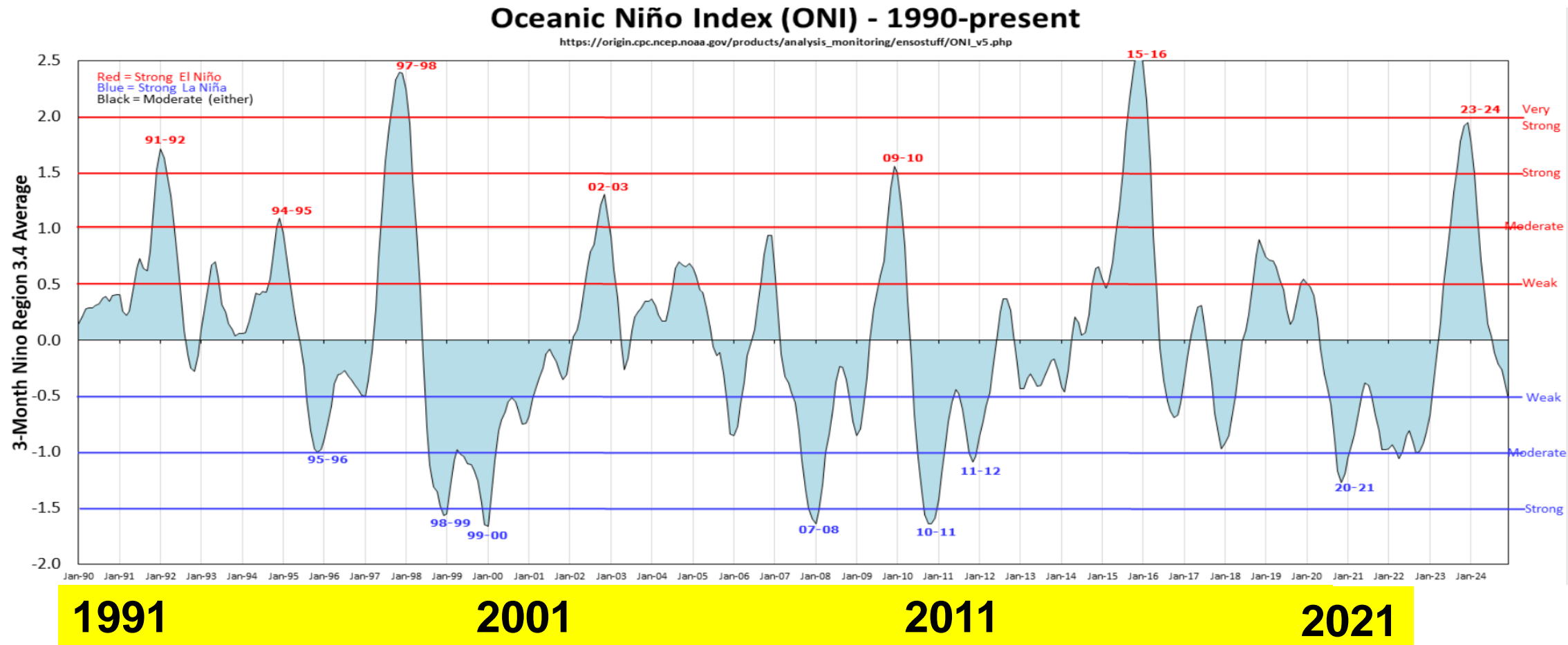


<http://ggweather.com/enso/oni.htm>

Golden Gate Weather Services, Jan Null; used with permission

Red = Strong El Niño
Blue = Strong La Niña
Black = Moderate (either)

Time Series of Nino 3.4 *sea surface temperature anomalies*

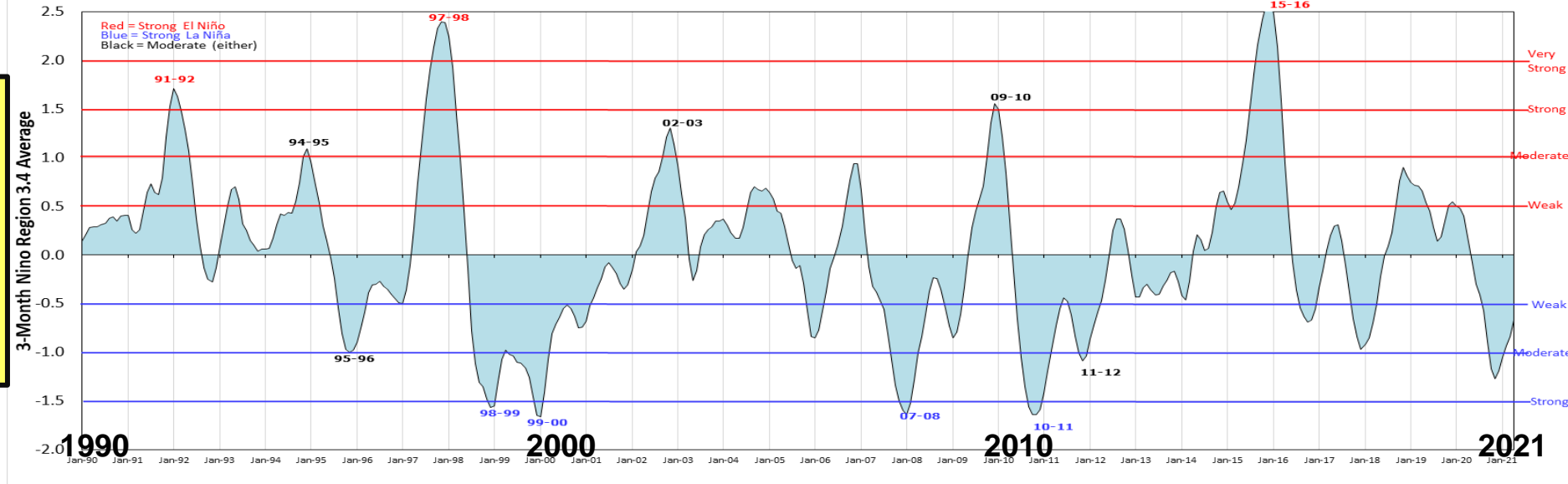




Nino 3.4 Temperatures, Ocean SST

Oceanic Niño Index (ONI) - 1990-present

https://origin.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ONI_v5.php

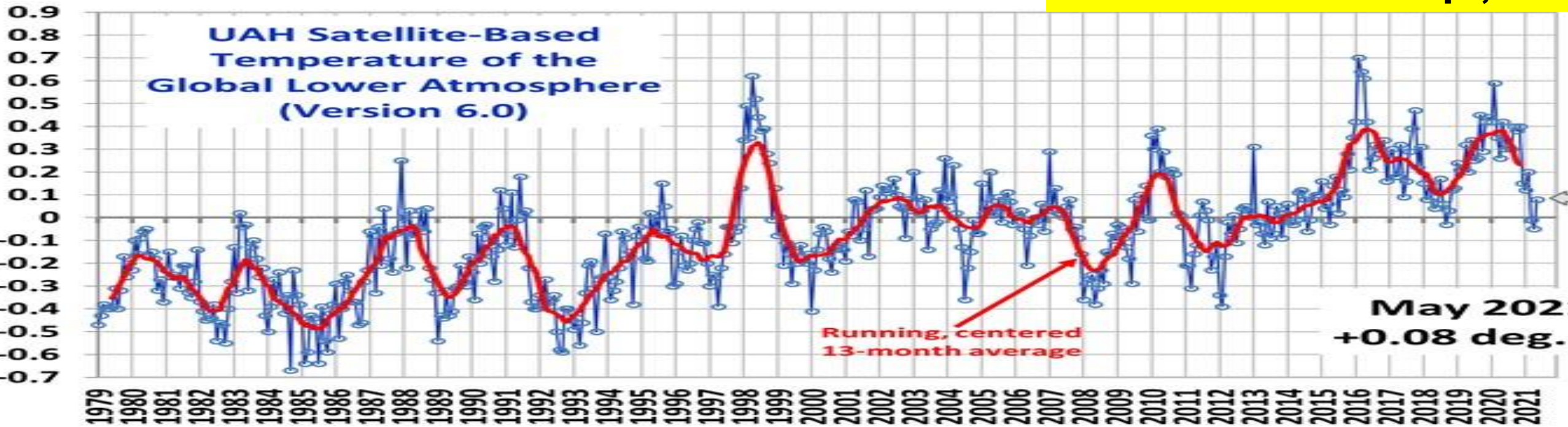


Over this period, 1990-2021,

ONI Temps changed $>4.5^{\circ}\text{C}$
several times.

Global TLT changed $<0.4^{\circ}\text{C}$

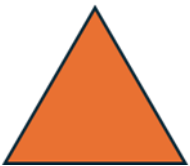
Global Greenhouse Temps, TLT



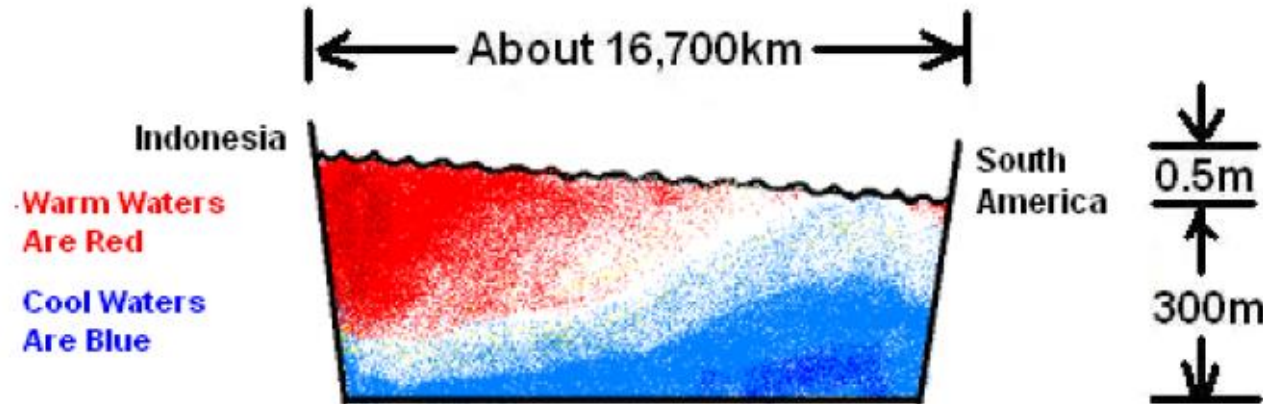
**El Nino, basics on how
it develops and works...**

**The entire phenomenon
is called**

**ENSO: El Nino-Southern
Oscillation**



INTRODUCTION TO THE CROSS SECTION OF THE EQUATORIAL PACIFIC OCEAN USED IN MANY OF THE GRAPHICS THAT FOLLOW

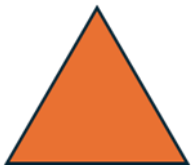


THE DIMENSIONS OF THE CROSS SECTION ARE SKEWED. BUT KNOWING THE SEA LEVEL IS ABOUT 0.5 METERS HIGHER IN THE WEST THAN IN THE EAST UNDER "NORMAL" CONDITIONS IS IMPORTANT.

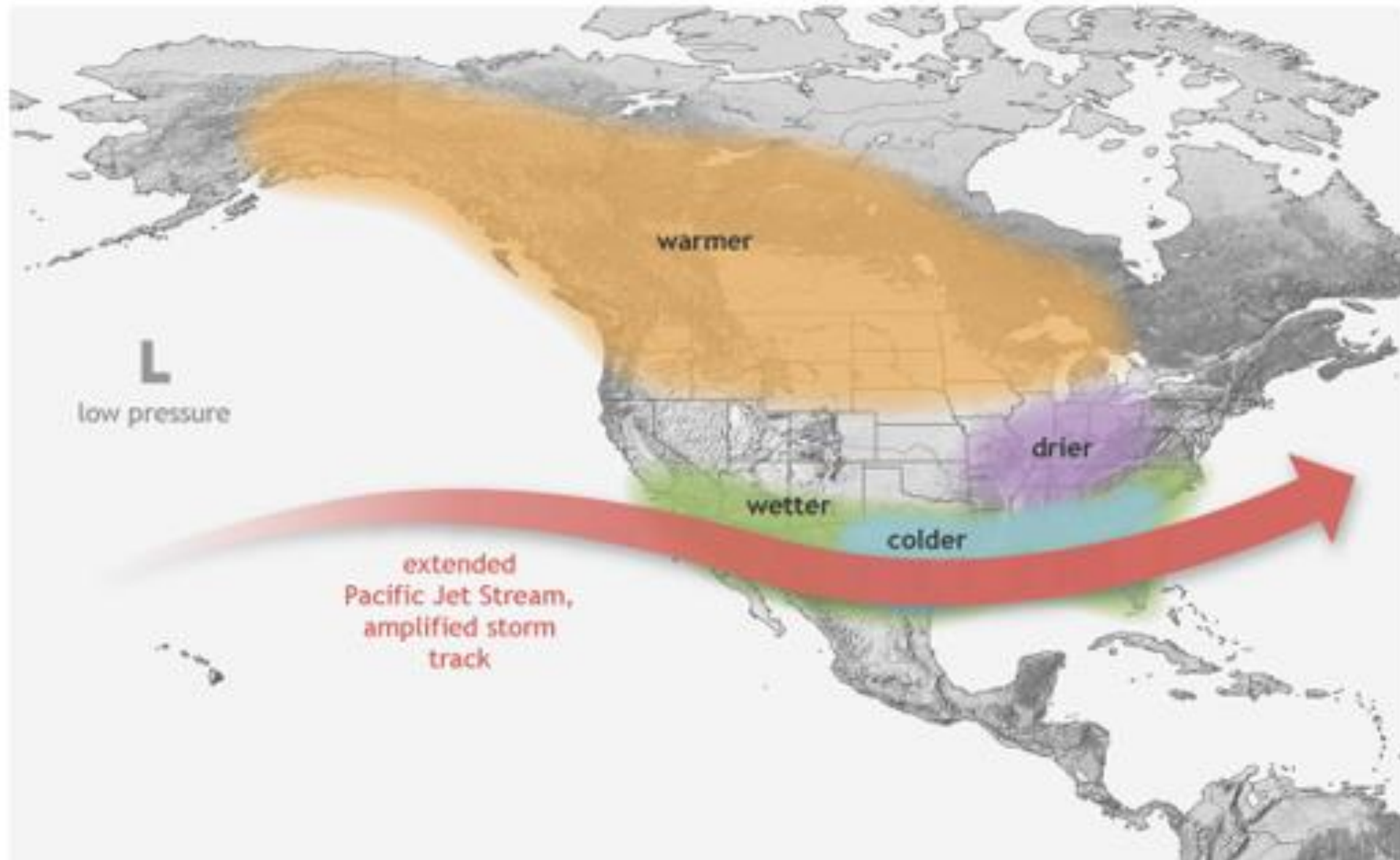
THE VARIATIONS IN TEMPERATURES BELOW THE SURFACE ARE ALSO IMPORTANT, BUT THEY TAKE PLACE IN THE TOP 300 METERS.

AND THE OVERALL WIDTH OF THE TROPICAL PACIFIC MUST BE KEPT IN MIND.--ALMOST HALFWAY AROUND THE GLOBE.

Figure 1-6

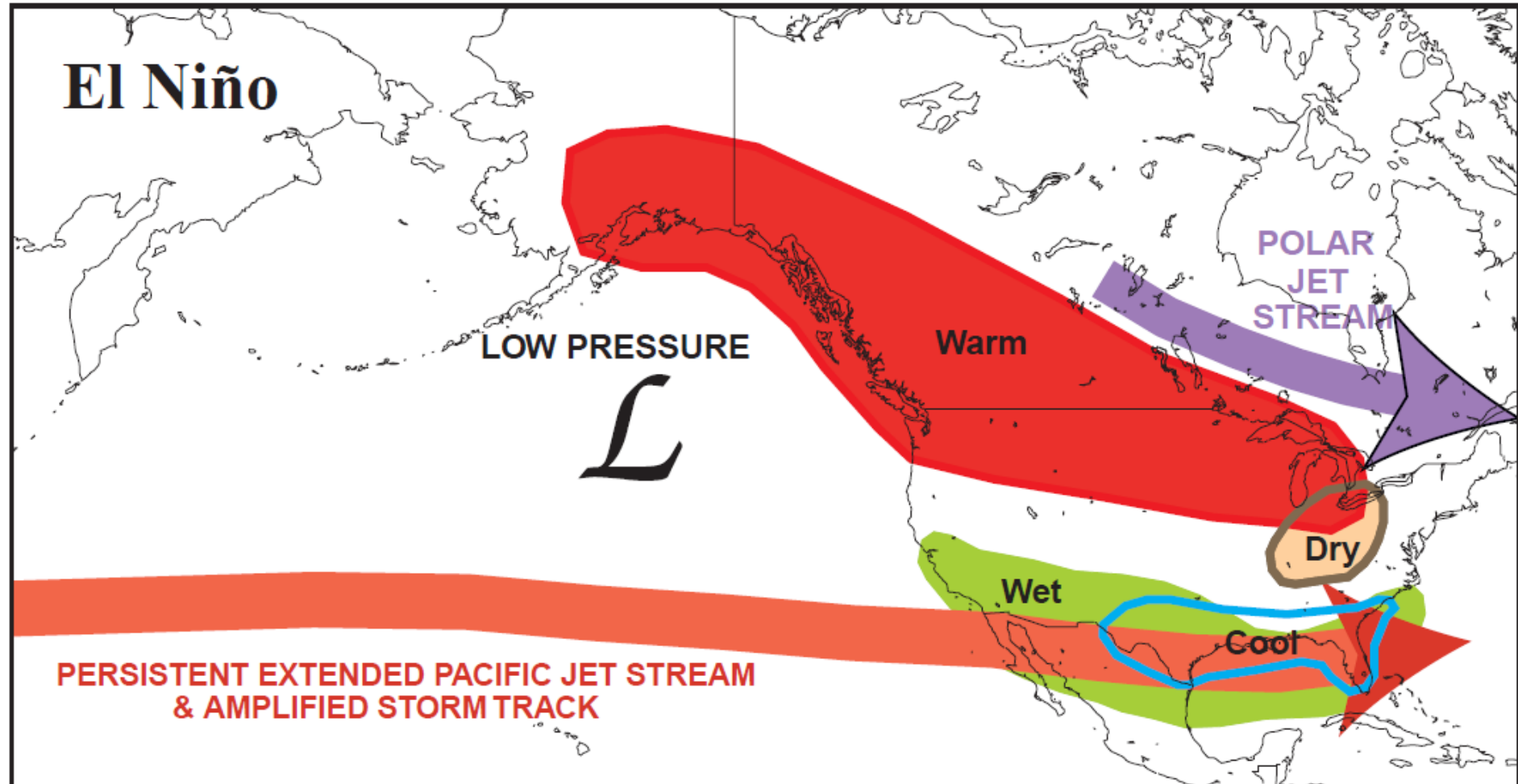


WINTER EL NIÑO PATTERN

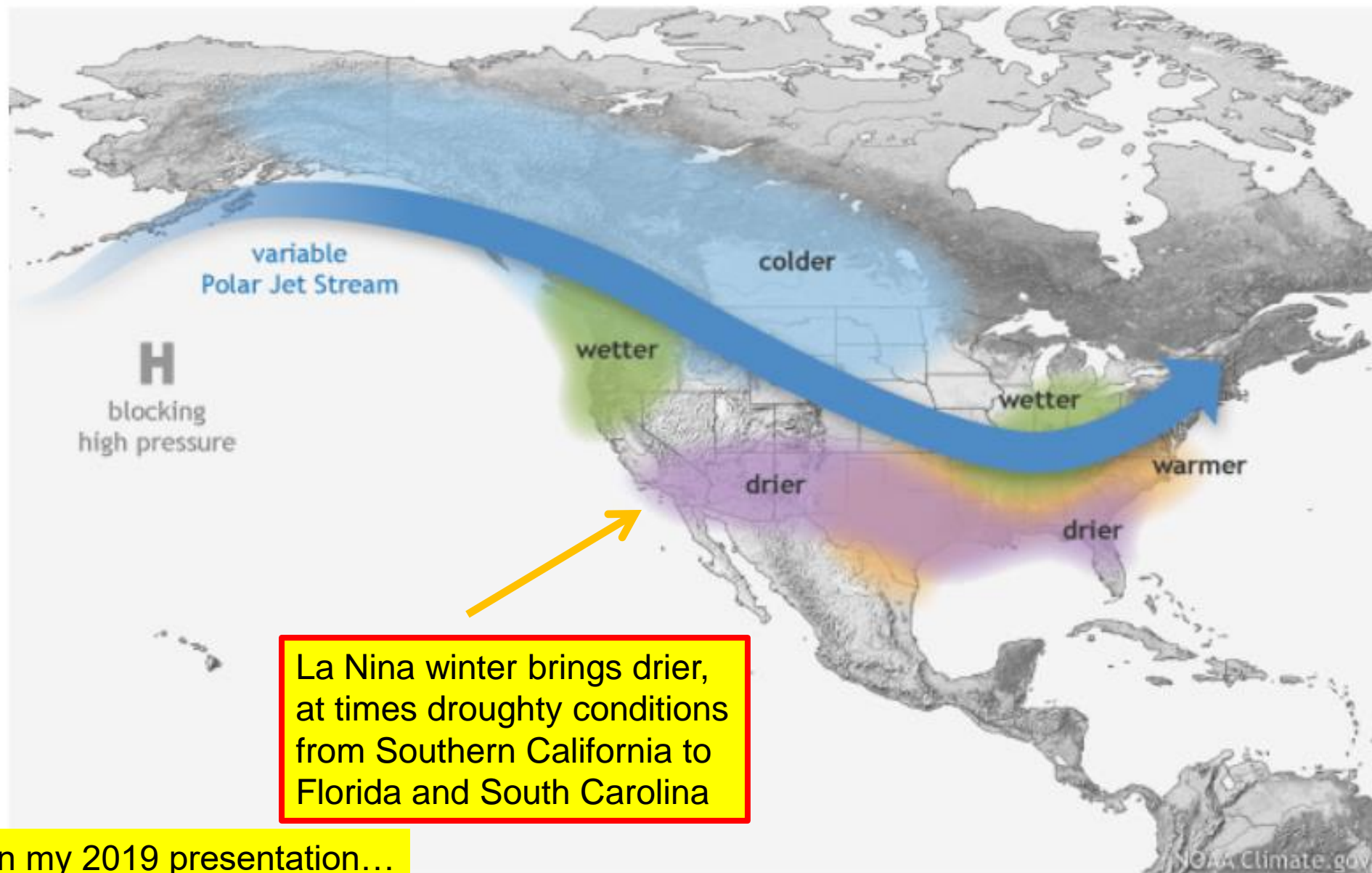


El Niño's effects on Northern Hemisphere Weather Patterns

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensocycle/nawinter.shtml

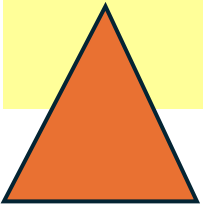


WINTER LA NIÑA PATTERN



We saw this in my 2019 presentation...

**Video graphics show animations
of El Nino, and then La Nina.
(circled next slide)**



<http://ggweather.com/enso/oni.htm>

Golden Gate Weather Services, Jan Null; used with permission

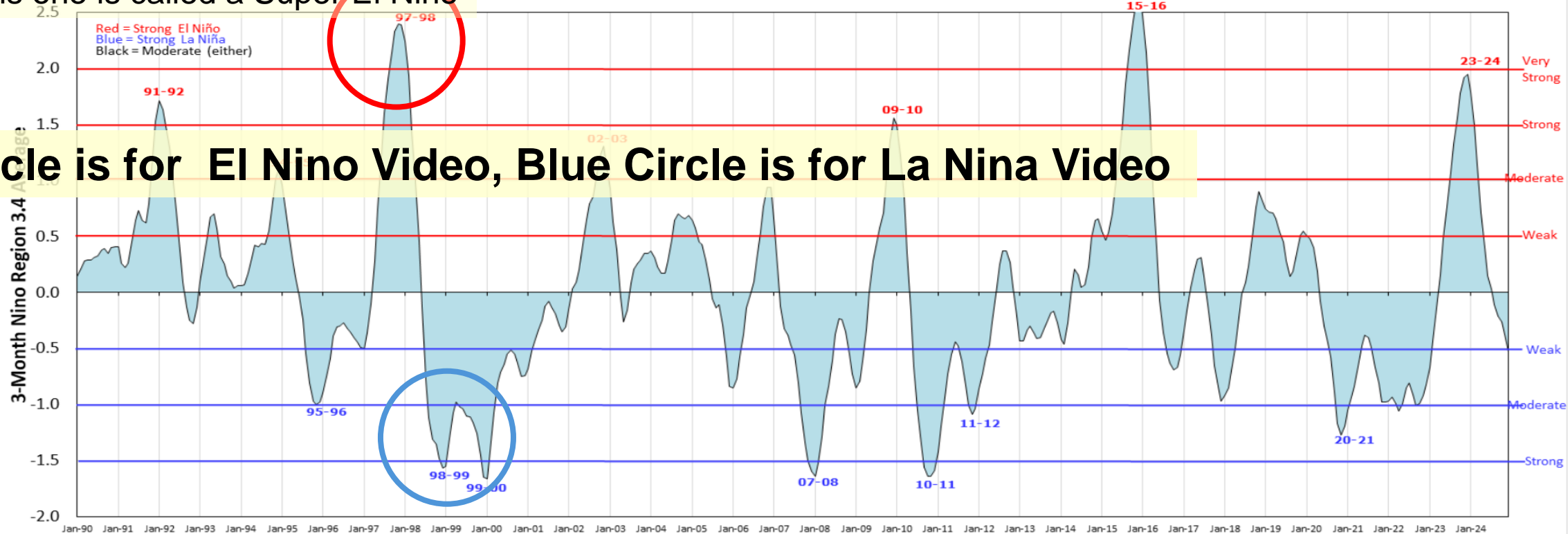
Red = Strong El Niño
Blue = Strong La Niña
Black = Moderate (either)

Time Series of Nino 3.4 sea surface temperature anomalies

This one is called a Super El Nino

Oceanic Niño Index (ONI) - 1990-present

https://origin.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ONI_v5.php



Red Circle is for El Nino Video, Blue Circle is for La Nina Video

1991

2001

2011

2021

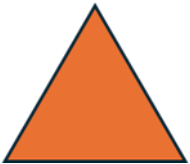
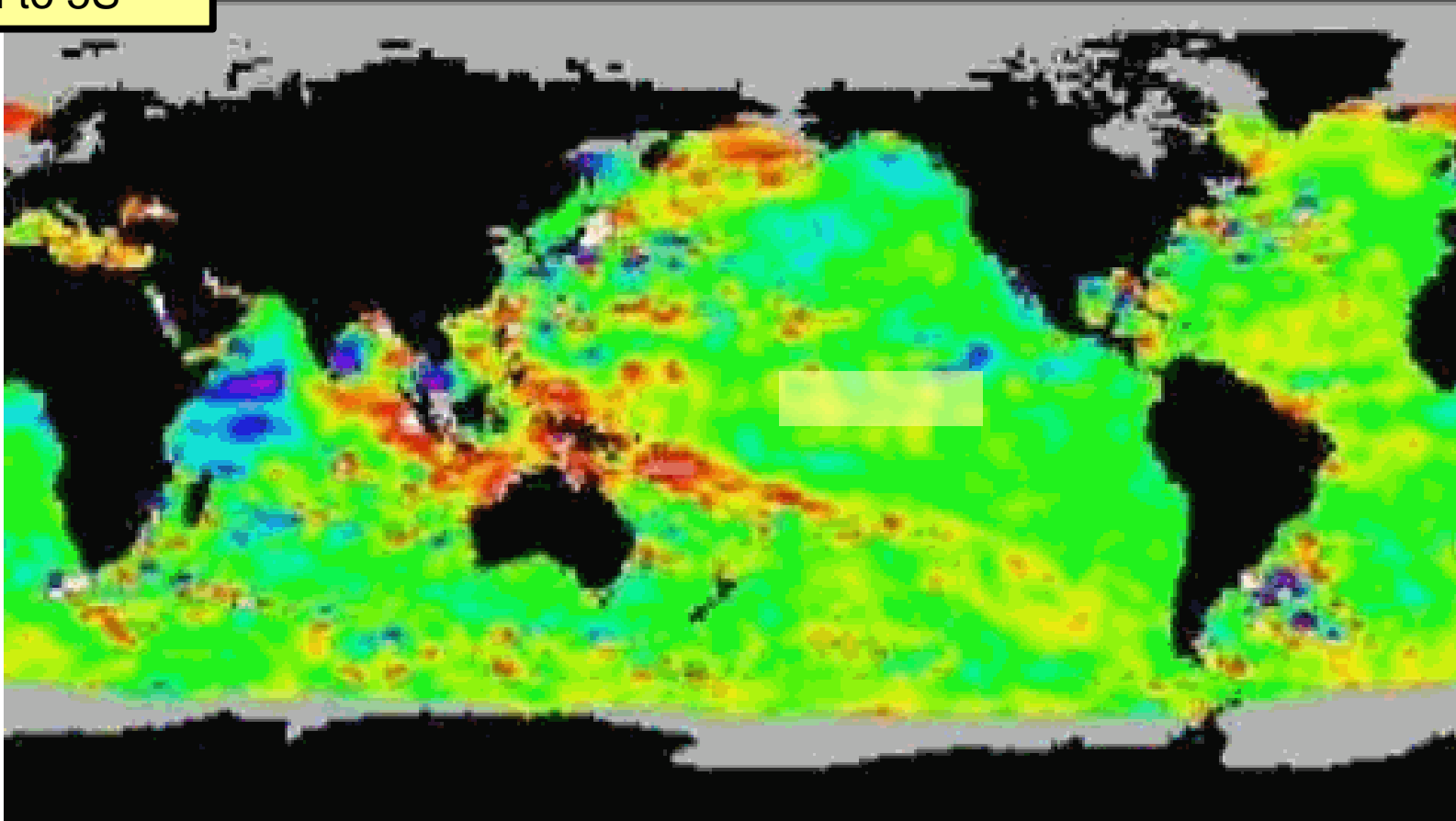


START

DEC 16 1996

El Nino

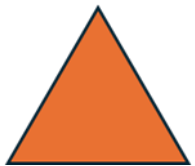
Rectangle is my estimate for
the location of Nino 3.4 area
160W to 120W & 5N to 5S



https://casf.me/wp-content/uploads/2020/11/2020-11-30_16-40-04A.mp4

Animation of La Nina beginning on 31 Jan 1998

<https://bobtisdale.files.wordpress.com/2012/06/animation-3-1.gif>

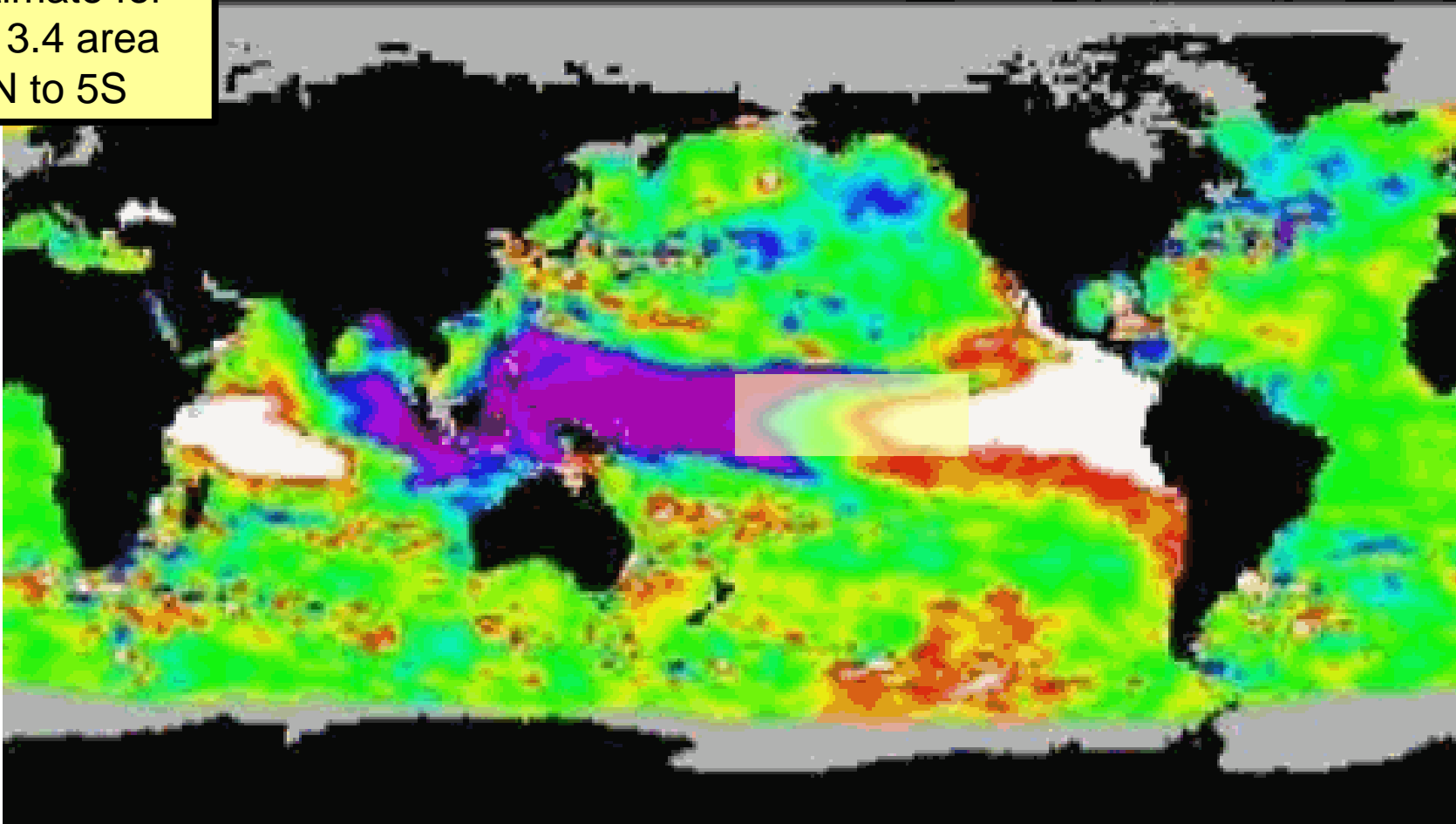


START

DEC 31 1997

La Nina

Rectangle is my estimate for
the location of Nino 3.4 area
160W to 120W & 5N to 5S



https://casf.me/wp-content/uploads/2020/11/2020-11-30_16-52-56B.mp4

Its not necessary to beleive the false CO2 stories.

To explain and understand, it's not necessary to resort to human-caused CO2-fueled climate change, as erroneously stated in the Fourth and Fifth National Climate Assessments, and by NPR.

It's only necessary to understand the ENSO-influenced climate we have here, naturally.



THE JAN 2025 FIRE FORECASTS, AND THE FIRES THEMSELVES

Timeline of NWS forecasts
before the 7 Jan 2025 fires

JANUARY 2025

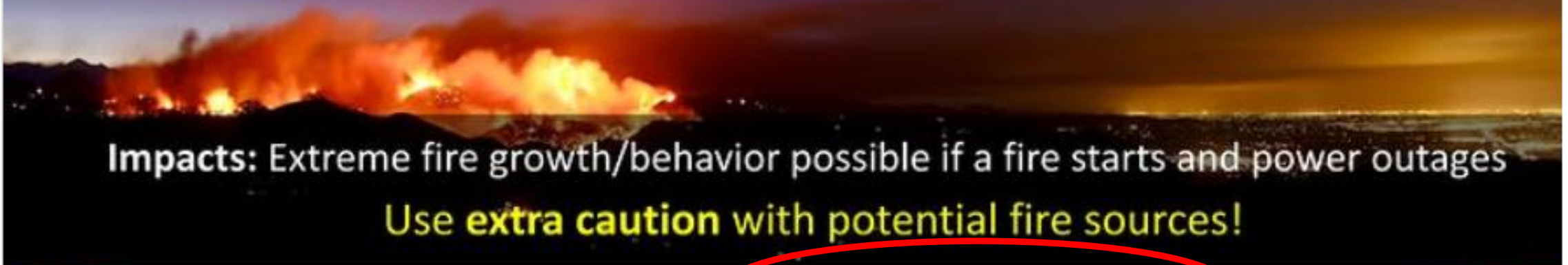
SUN	MON	TUE	WED	THUR	FRI	SAT
			1	21 st NWS Stment: FireWX	3Fire WX WATCH	4Fire WX <u>WRNG</u>
5RED FLAG WRNG	6XTRM FIRE RISK	7Palisades Fire! Eaton Fire! Hurst Fire!	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Potential Fire Weather Risk

Next Tuesday - Thursday (Jan 7-9)

Chance of moderate-to-strong
Santa Ana winds,
combined with dry air and vegetation.

Ready, Set, Go!
[Readyforwildfire.org](https://readyforwildfire.org)



Impacts: Extreme fire growth/behavior possible if a fire starts and power outages

Use **extra caution** with potential fire sources!



NATIONAL WEATHER SERVICE
Los Angeles / Oxnard weather.gov/losangeles

Issued Thursday January 2, 2025

Follow Us:



**Issued Thursday 2 Jan 2025. The fires broke out Tuesday 7 Jan 2025:
Over 4 days lead time!**

LIFE-THREATENING & DESTRUCTIVE WINDSTORM !!!

EXTREME RISK – Take Immediate Action

LOCATIONS OF GREATEST CONCERN

Areas within the magenta-outlined area, including...

*Highways 118/210 corridors, San Gabriel / Santa
Susana / Santa Monica Mountains & Foothills;
San Gabriel and San Fernando Valleys*

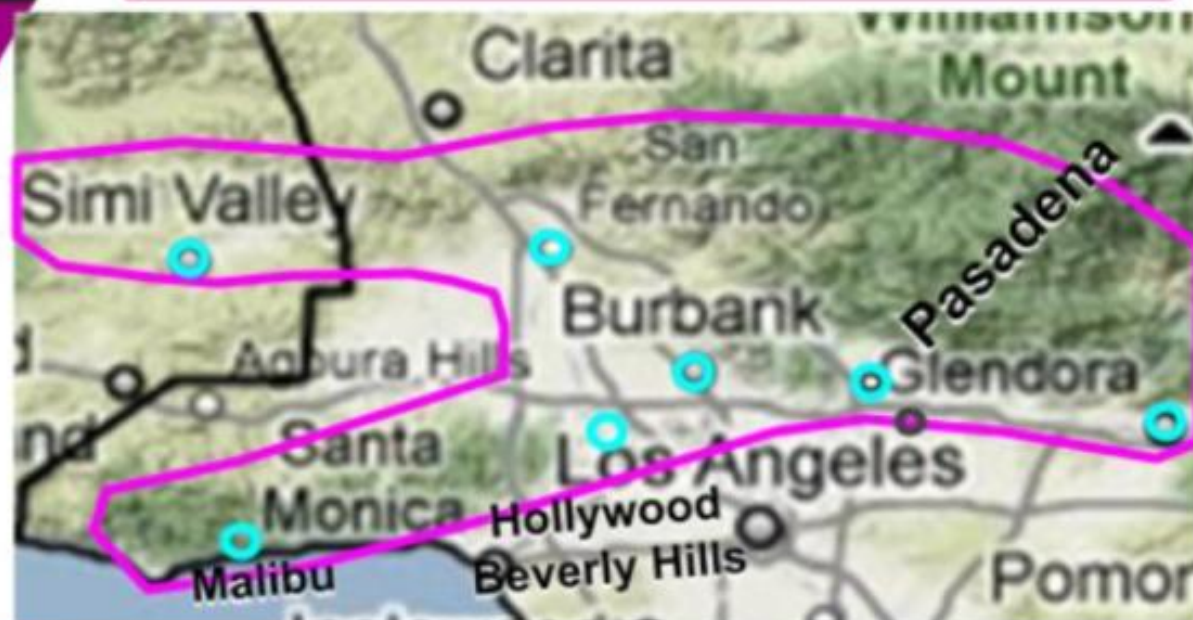
*Stay indoors & away
from windows

*Expect power
outages



*Pasadena, Burbank,
San Fernando, Hollywood,
Beverly Hills, Simi Valley,
Sylmar, Porter Ranch,
Altadena, La Crescenta,
Malibu*

Tues afternoon-Weds morning



***** Important: Damaging winds also expected
outside of magenta-outlined areas *****



weather.gov/LosAngeles

Weather Forecast Office - Los Angeles/Oxnard, CA

Updated: Monday January 6, 2025 at 10:30 am



Severe Windstorm and Extreme...

Follow:



[nwslosangeles](#)

[Warnings and Forecasts](#)

Updated Mon. 6 Jan 2025, 1030 Local, ONE DAY BEFORE the fire storm.

This KCAL-CBS clip provides a rapid-fire sequence of events for the development of the Jan 2025 Fires

<https://www.cbsnews.com/video/a-timeline-of-alerts-and-warnings-for-the-los-angeles-area-wildfires>

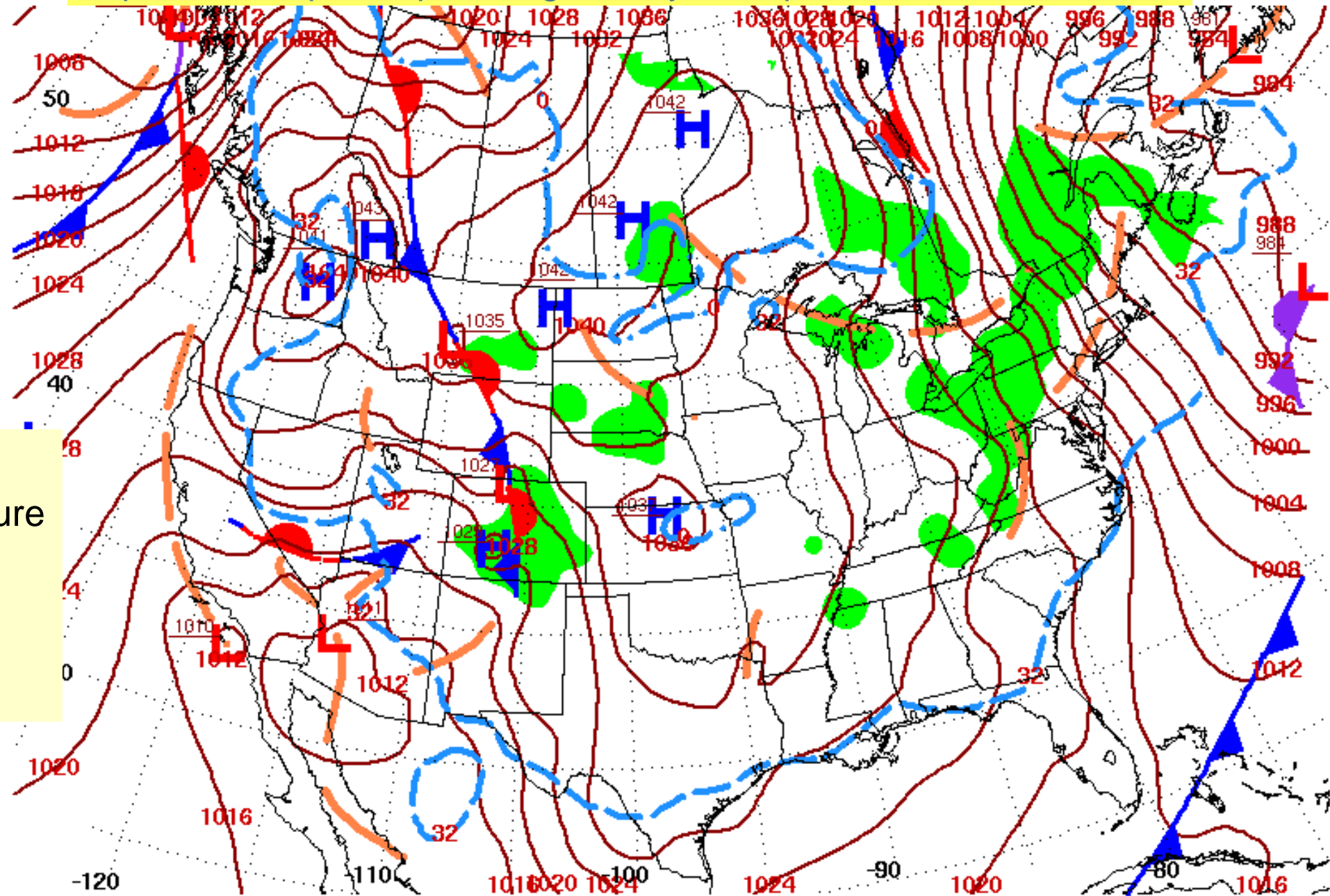
To Play, when the link comes up, click on the screen, the video already playing will appear, click off the x-out of the speaker icon, and back up the time bar to start at the beginning.



7 JAN 2025

Surface Weather Chart

Blue Hs mark the >1040 mb High Pressure driving the pressure gradient force of the Santa Ana Wind family.

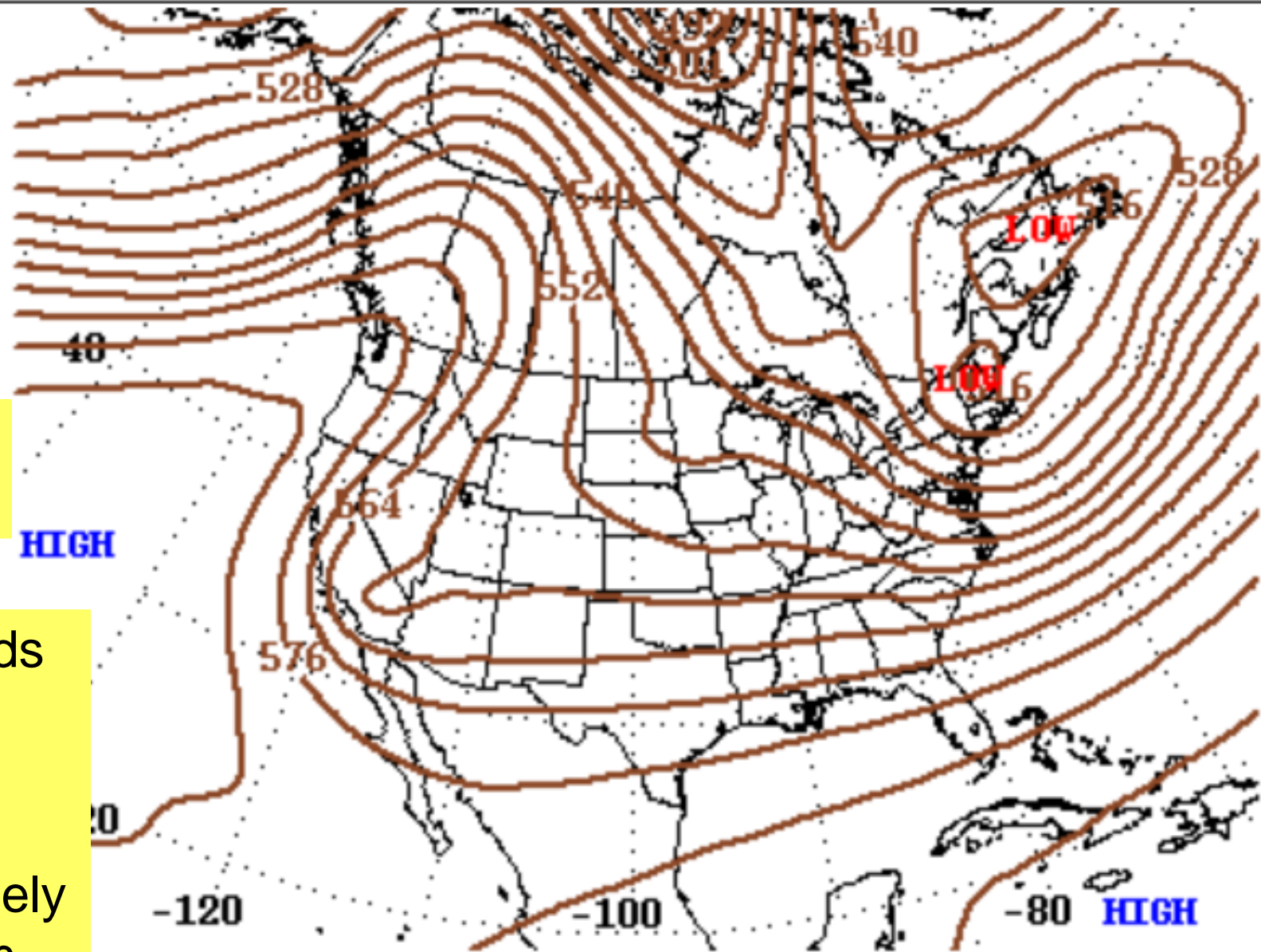


7 JAN 2025

500 mb chart, upper air contours
from 0400L on 7 Jan 2025

This chart shows very strong winds
out of the north from Alberta
to California on the morning of
7 Jan 2025.

This is the Set-Up for an Extremely
Strong, Dry Santa Ana Windstorm.

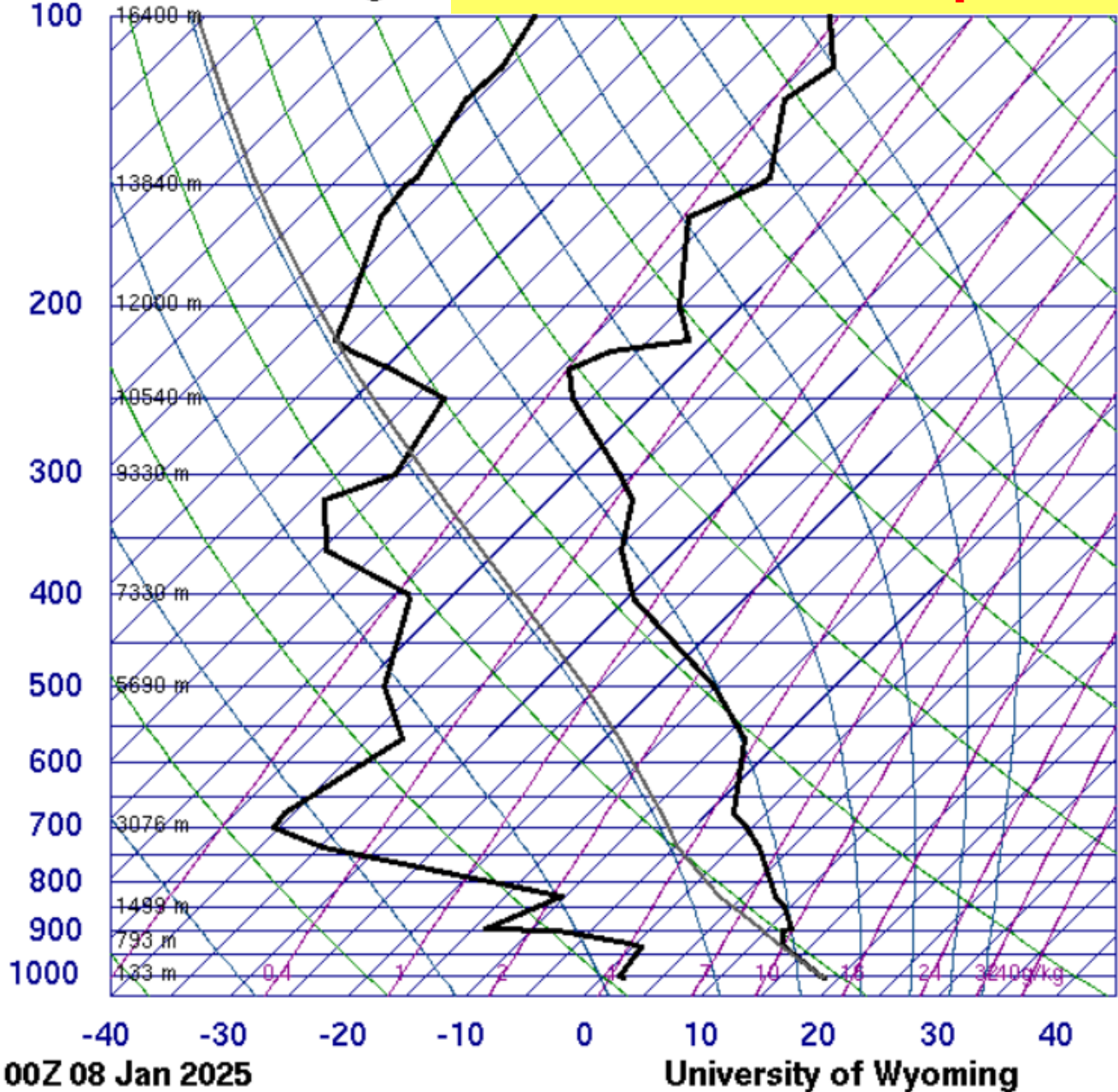


500-Millibar Height Contour at 7:00 A.M. E.S.T.

72393 VBG Vandenberg Afb

Dew Point

Temperature



SLAT	34.75
SLON	-120.56
SELV	121.0
SHOW	12.39
LIFT	10.96
LFTV	10.85
SWET	123.9
KINX	-26.7
CTOT	3.70
VTOT	24.70
TOTL	28.40
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	271.1
LCLP	776.1
LCLE	304.2
MLTH	291.5
MLMR	4.30
THCK	5557.
PWAT	7.25

1600L 7 Jan 2025

Upper Air Balloon Sounding
from Vandenberg SFB at
00Z, 8 JAN 2025
1600L 7 Jan 2025

Wind Barbs show winds
from the north, and very
strong.

Large Dew Point Spread:
The Air is Very Dry!

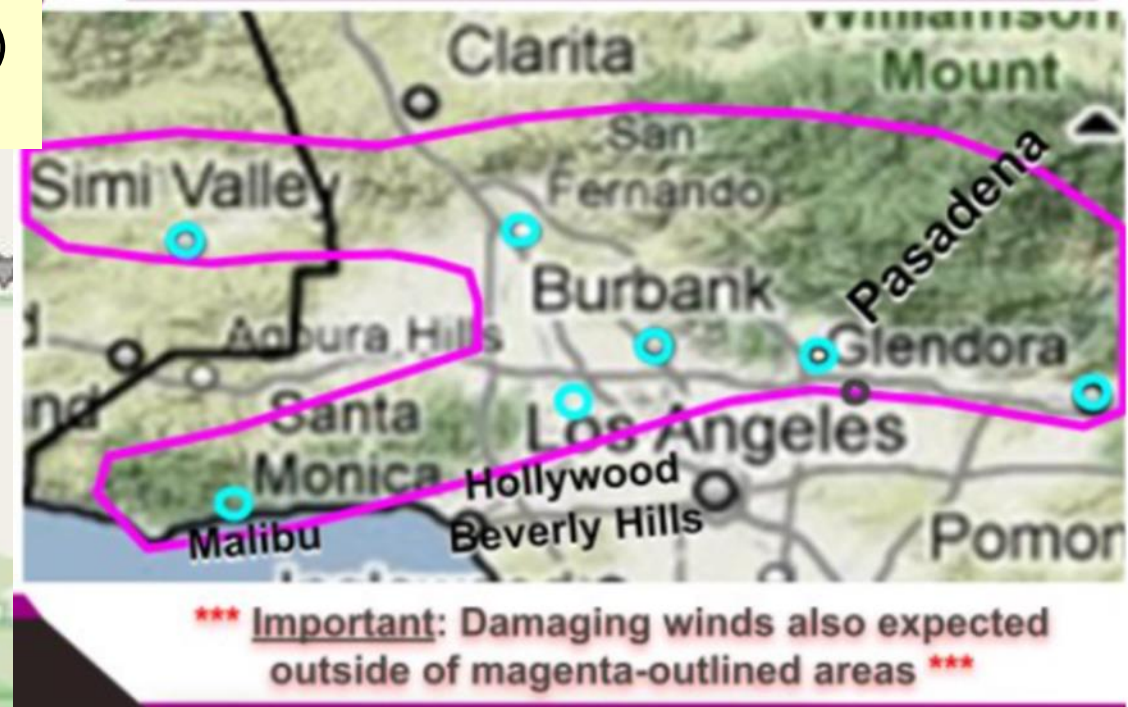
Upper Air Balloon Sounding for 7 Jan 2025
at 1600L, or 4PM, MST. (8 JAN 00Z)
<ZULU Time, GMT, Greenwich Mean Time>



“The area burned in these fires is 2-1/2 times the area of Manhattan,” Former LA Mayoral Candidate Rick Caruso

Side-by side comparison with the NWS forecast (inset, right) with the observed fire areas in black, below.

<https://www.cbsnews.com/news/california-fire-maps-palisades-eaton-hurst-2025>



This was an OUTSTANDING WARNING by the NWS!

Timeline of Events for the Jan 2025 Los Angeles Fires <https://www.cbsnews.com/video/a-timeline-of-alerts-and-warnings-for-the-los-angeles-area-wildfires>

- Thu 2 Jan NWS Potential Fire Weather Risk statement (for fire danger on 7 Jan 2025, 4+-day lead time)
- Fri 3 Jan 1517L NWS Fire Weather WATCH (Afterward, the NWS held a Press Briefing to emphasize the danger)
- Sat 4 Jan Mayor Karen Bass departs for Ghana <https://www.cbsnews.com/news/la-fires-mayor-karen-bass-trip-ghana-timeline/> NWS Fire Weather WARNING

<Mayor had promised that if elected she wouldn't travel abroad if elected. This was her SIXTH OVERSEAS TRIP after her election.>

- Sun 5 Jan 1702 NWS RED FLAG WARNING (for fire danger on 7 Jan 2025)
- Mon 6 Jan 1017 CAL Ofc Emerg Services Pre-Positions Fire Equipment in LA, Ventura, San Diego, Counties
- Mon 6 Jan 1416 NWS High Wind WARNING: 80 MPH Santa Ana Winds
- Mon 6 Jan 1847 NWS EXTREME FIRE CONDITIONS “Particularly Dangerous Situation”
- Mon 6 Jan 1938 Mayor Karen Bass (Mayor is in Ghana) issues restatement of the 1416L NWS HIGH WIND WARNING, **BUT DOES NOT INCLUDE THE FIRE DANGER.**

L.A. Mayor Bass was at cocktail party in Ghana when Palisades fire broke out, report says



even though uh warnings
had been affect before. She
took off for her trip this

67.0k+
LIVE
NOW

LIVENOW FROM FOX

RPT: L.A. MAYOR BASS WAS AT COCKTAIL PARTY IN GHANA WHEN PALISADES FIRE BROKE OUT

<https://www.youtube.com/watch?v=C3Nx2Lce9MU>

Bass was at cocktail party in Ghana when Palisades fire broke out, report says



Los Angeles Times ✓
@latimes

Mayor Karen Bass was at
embassy cocktail party in Ghana
as Palisades fire exploded
latimes.com/california/sto...
pic.x.com/NxpTtIRmJm

Reading this report in the
LA Times written by Julia
Wick. She

67.0k+

LIVENOW FROM FOX

LIVE
NOW

RPT: L.A. MAYOR BASS WAS AT COCKTAIL PARTY IN GHANA WHEN PALISADES FIRE BROKE OUT

Timeline of Events for the Jan 2025 Los Angeles Fires (Continued)

Tue 7 Jan	1030	Palisades Fire begins
Tue 7 Jan	1113	LA City Fire: "Palisades area, prepare to evacuate."
Tue 7 Jan	1207	LA City Fire: Palisades area Evacuation Order
Tue 7 Jan	1522	Traffic backed - evacuation area. Vehicles abandoned. Bulldozers clear for Fire Equipment
Tue 7 Jan	1745	CA Gov Newsom declares State of Emergency
Tue 7 Jan	1818	Eaton Fire starts in Altadena area.
Tue 7 Jan	1930	City of Santa Monica issues Evacuation Order for areas affected by the Palisade Fire "This is a Lawful Order to LEAVE NOW."
Tue 7 Jan	2230	Hurst Fire begins. People evacuate in the dark.
<u>Wed 8 Jan</u>	<u>1100</u>	<u>Mayor Karen Bass returns to Los Angeles from Ghana</u>

In this video report, Michael Schellenberger reported that the total damage caused by these Los Angeles Fires was about \$250 BILLION DOLLARS.

He asks the question, "Do you know how many fire engines could be bought with just \$50 Million,?" a small fraction of this amount of money. The answer is you could buy 100 used fire trucks <each@ \$500,000> for this amount.

Imaginative, proactive fire fighting planning could purchase this number of these and have them forward deployed when strong Santa Ana Wind Warnings are forecast.

**This is a very good video;
it is 1:41:00 long!**





Palisades Fire

<https://www.desertsun.com/story/news/fires/2025/01/18/did-power-lines-cause-los-angeles-fires/77598592007/>

Satellite images taken Oct. 20, 2024 and Jan. 8, 2025 shows the area along the coast in Palisades, Calif. damaged by fire.

Satellite image ©2024 Maxar Technologies



Eaton Fire



This combination of Maxar Technologies satellite images created on Jan. 8, 2025, shows homes and buildings on East Altadena Drive in Altadena, CA, on January 6, 2025 (L) and a color infrared satellite image of houses and buildings burning on East Altadena Drive during the Eaton Fire on January 8, 2025. At least five people have been killed in rampaging wildfires around Los Angeles, officials said on Jan. 8, with firefighters overwhelmed by the speed and ferocity of multiple blaze

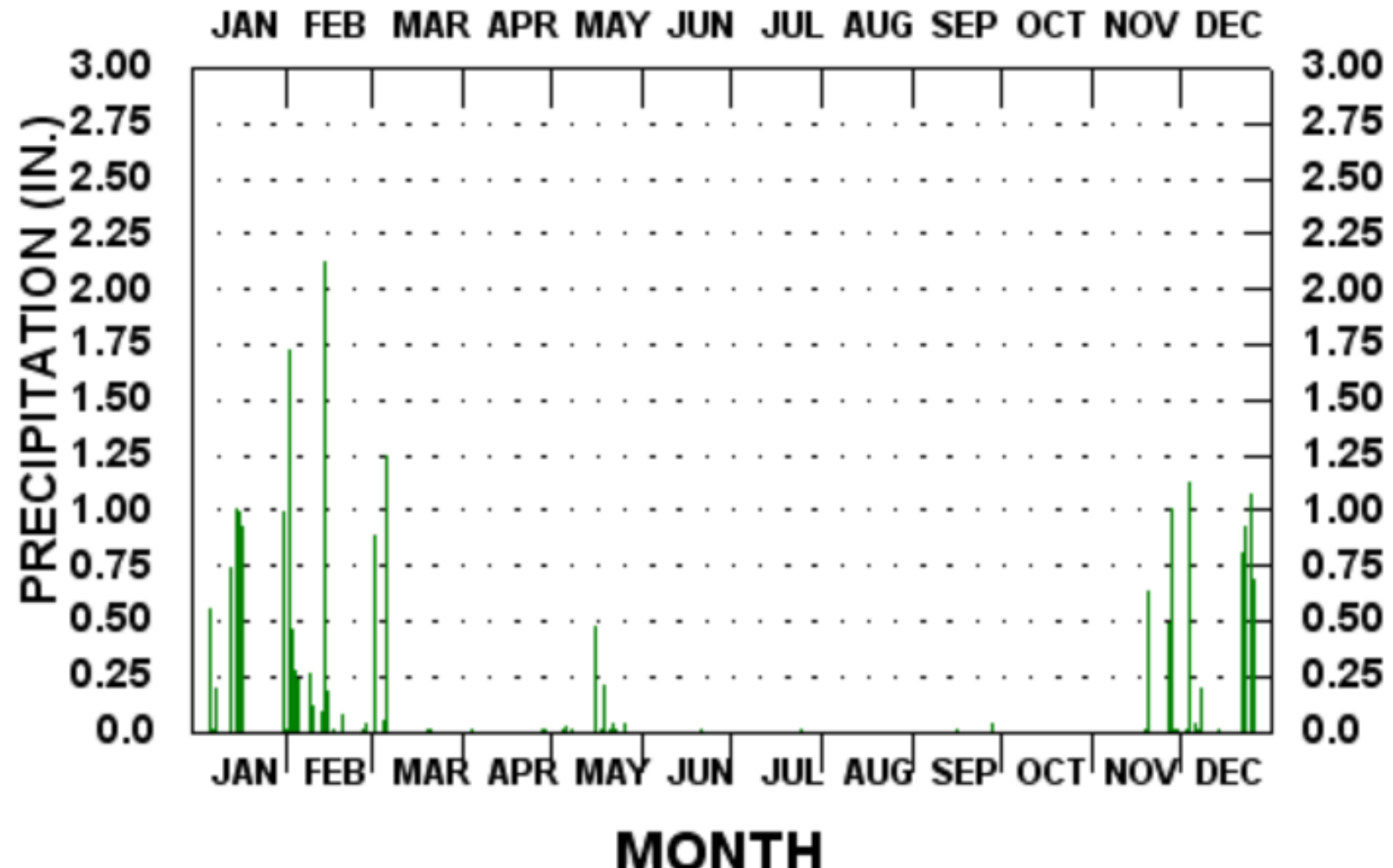
-, Satellite image ©2025 Maxar Tech

<https://www.desertsun.com/story/news/fires/2025/01/18/did-power-lines-cause-los-angeles-fires/77598592007/>

MARKER RAINFALL PATTERN FOR THESE TYPES OF FIRES.

THE PATTERNS REPEAT.

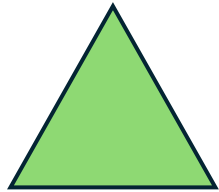
Month	Precipitation (in.)
JAN	0.55
FEB	2.10
MAR	0.00
APR	0.00
MAY	0.45
JUN	0.00
JUL	0.00
AUG	0.00
SEP	0.00
OCT	0.00
NOV	1.10
DEC	0.95



Here are some graphics from

<https://casf.me/weather-not-human-caused-co2-fueled-global-warming-is-responsible-for-2017s-damaging-wildfire-history-in-california-2>

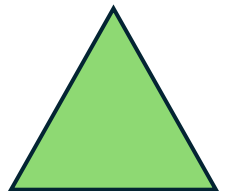
The subject includes the **2017 Thomas Fire**



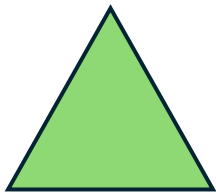
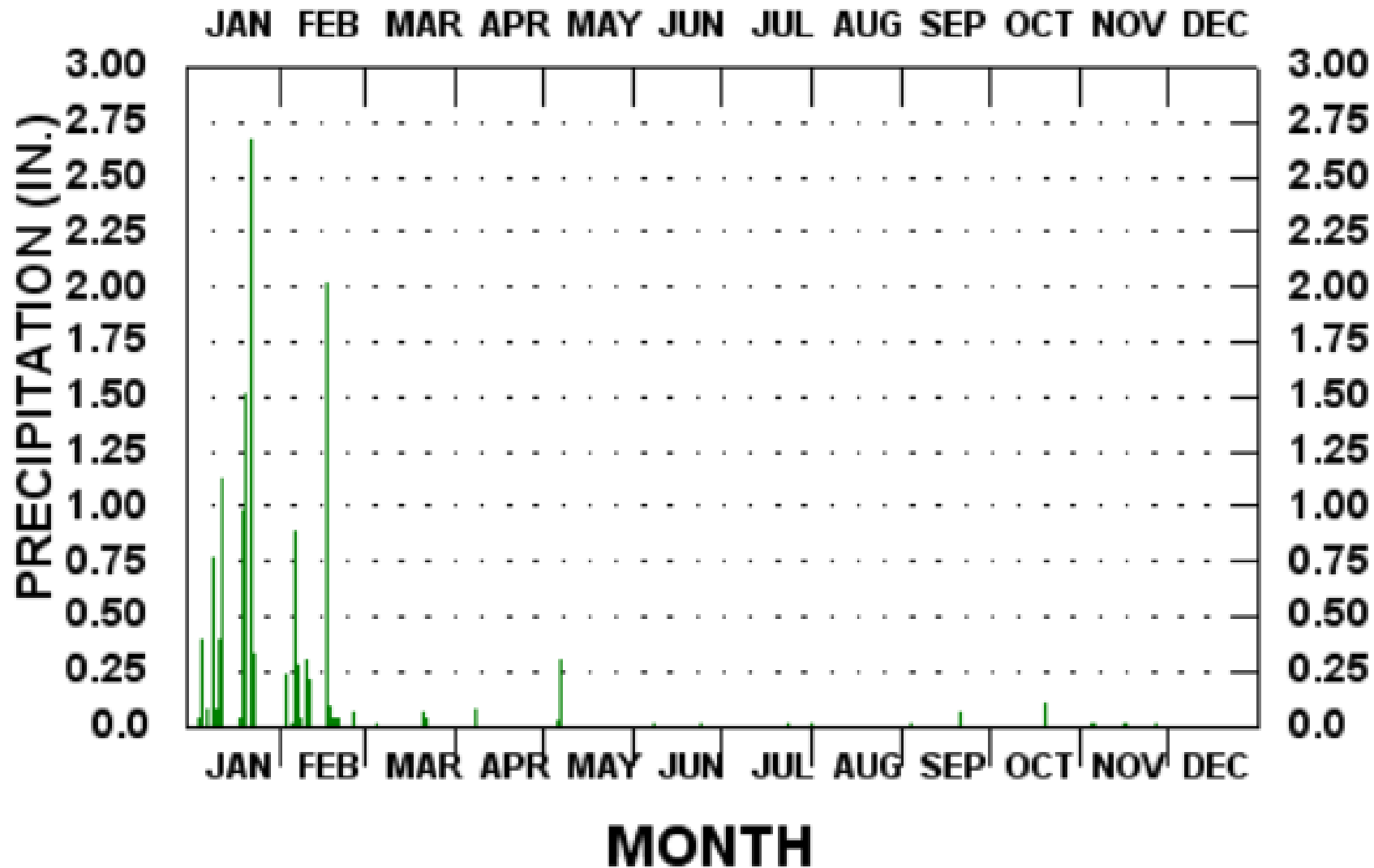
They have this green triangle marker



(Sources: Ventura and Santa Barbara counties, Cal Fire, Mapzen, OpenStreetMap)

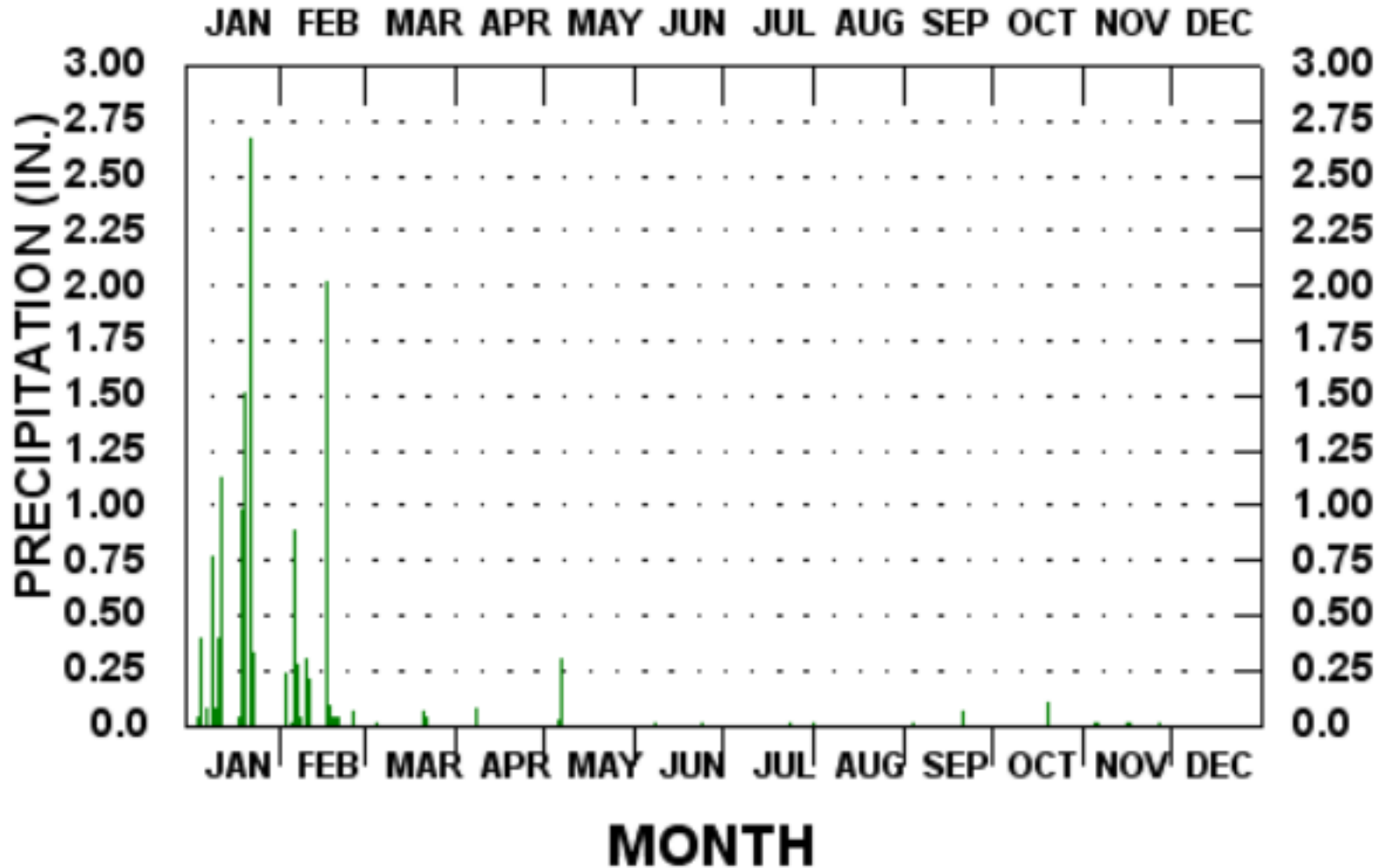


DOWNTOWN LOS ANGELES USC CAMPUS DAILY PRECIPITATION FOR 2017



2017

DOWNTOWN LOS ANGELES USC CAMPUS DAILY PRECIPITATION FOR 2017



In the news today...the Thomas Fire..
California's Santa Ana Winds and
Autumn's Wildfires

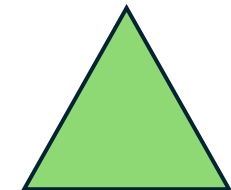


Bob Endlich

bendlich@msn.com

Cruces Atmospheric Sciences Forum

16 December 2017

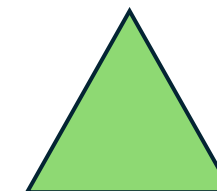
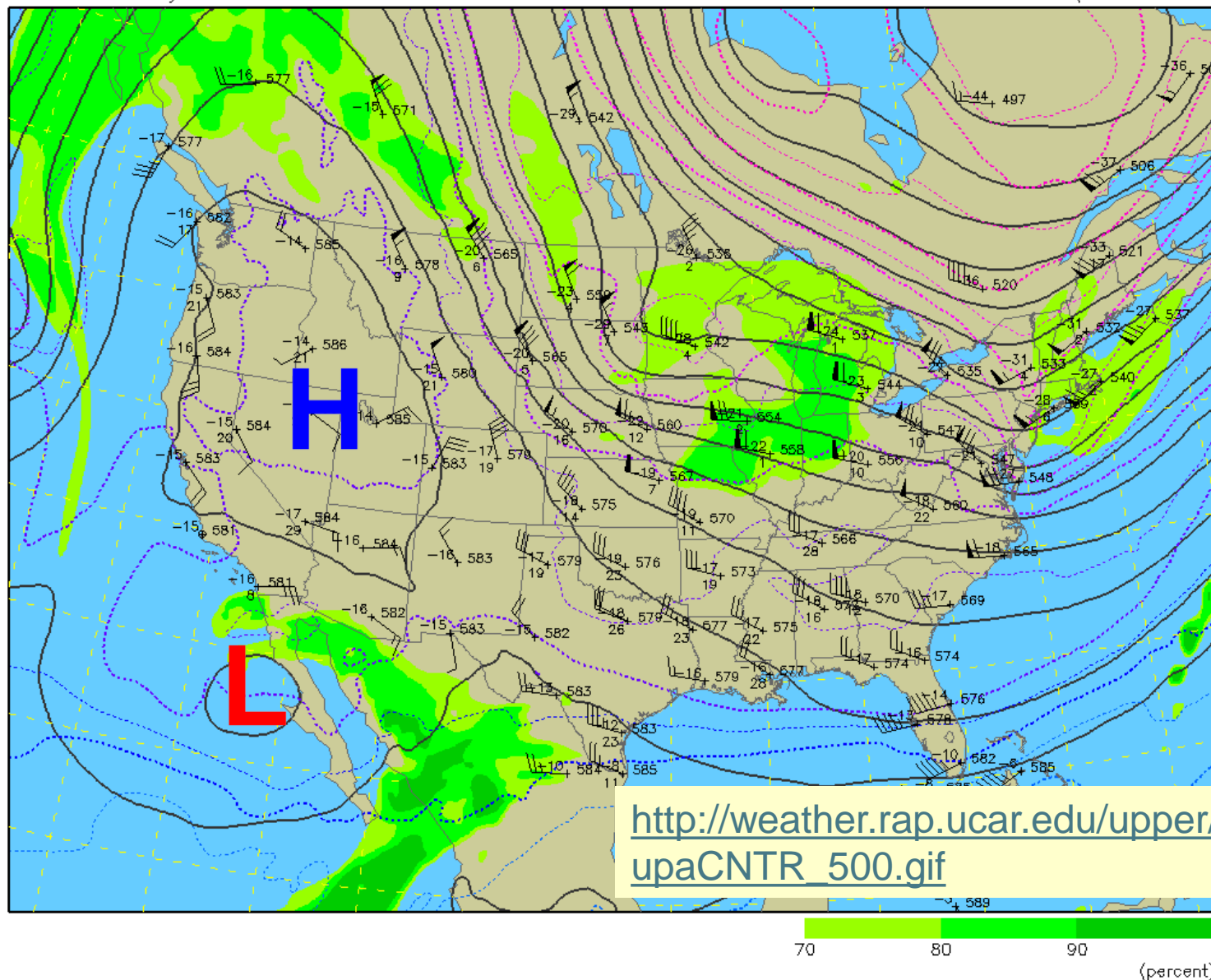


500 mb Heights (dm) / Temperature (°C) / Humidity (%)

11 DEC 2017

0-hour analysis valid 1200 UTC Mon 11 Dec 2017

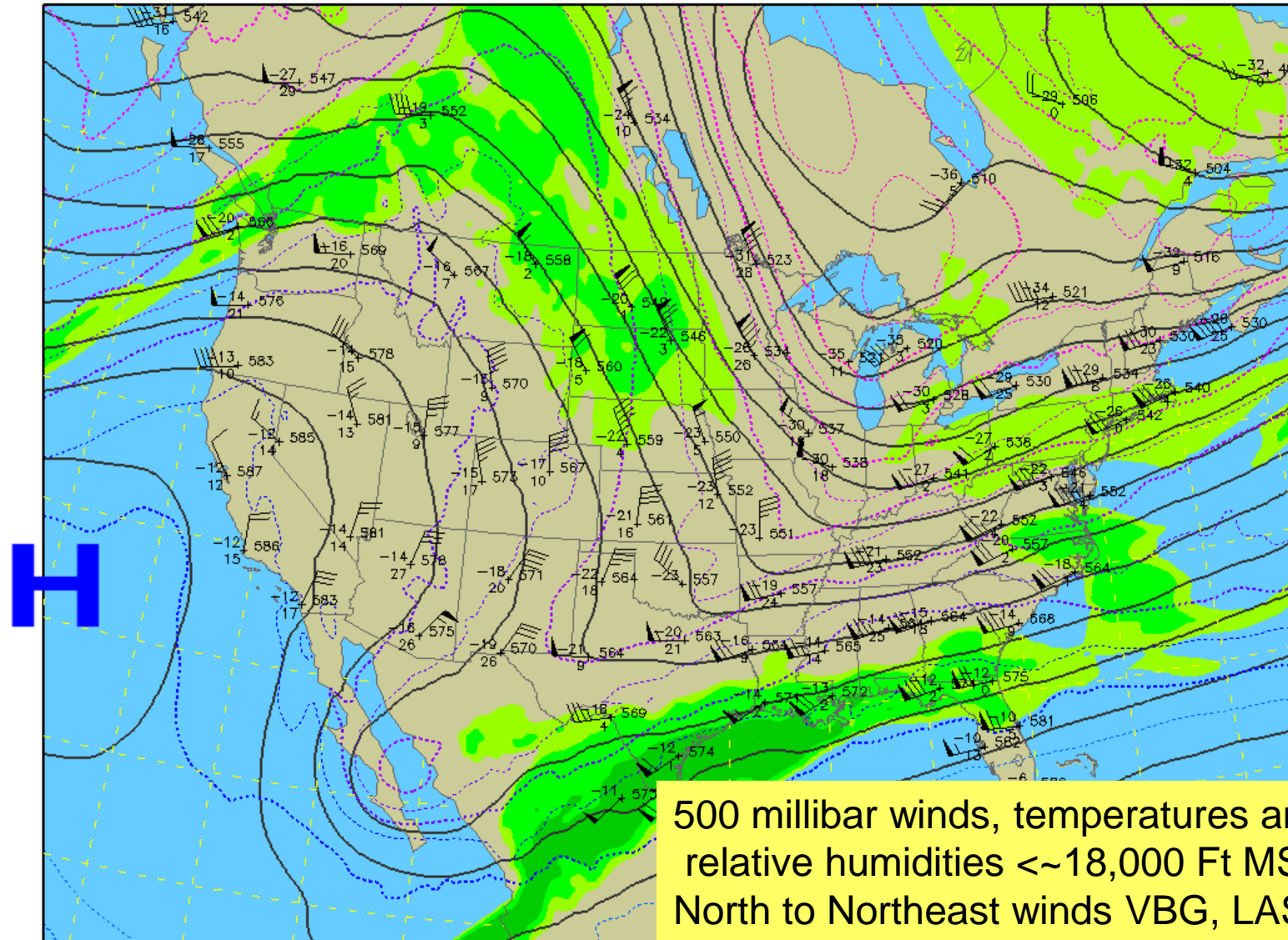
RAP (12z 11 Dec)



500 mb Heights (dm) / Temperature ($^{\circ}\text{C}$) / Humidity (%)**15 DEC 2017**

0-hour analysis valid 1200 UTC Fri 15 Dec 2017

RAP (12z 15 Dec)

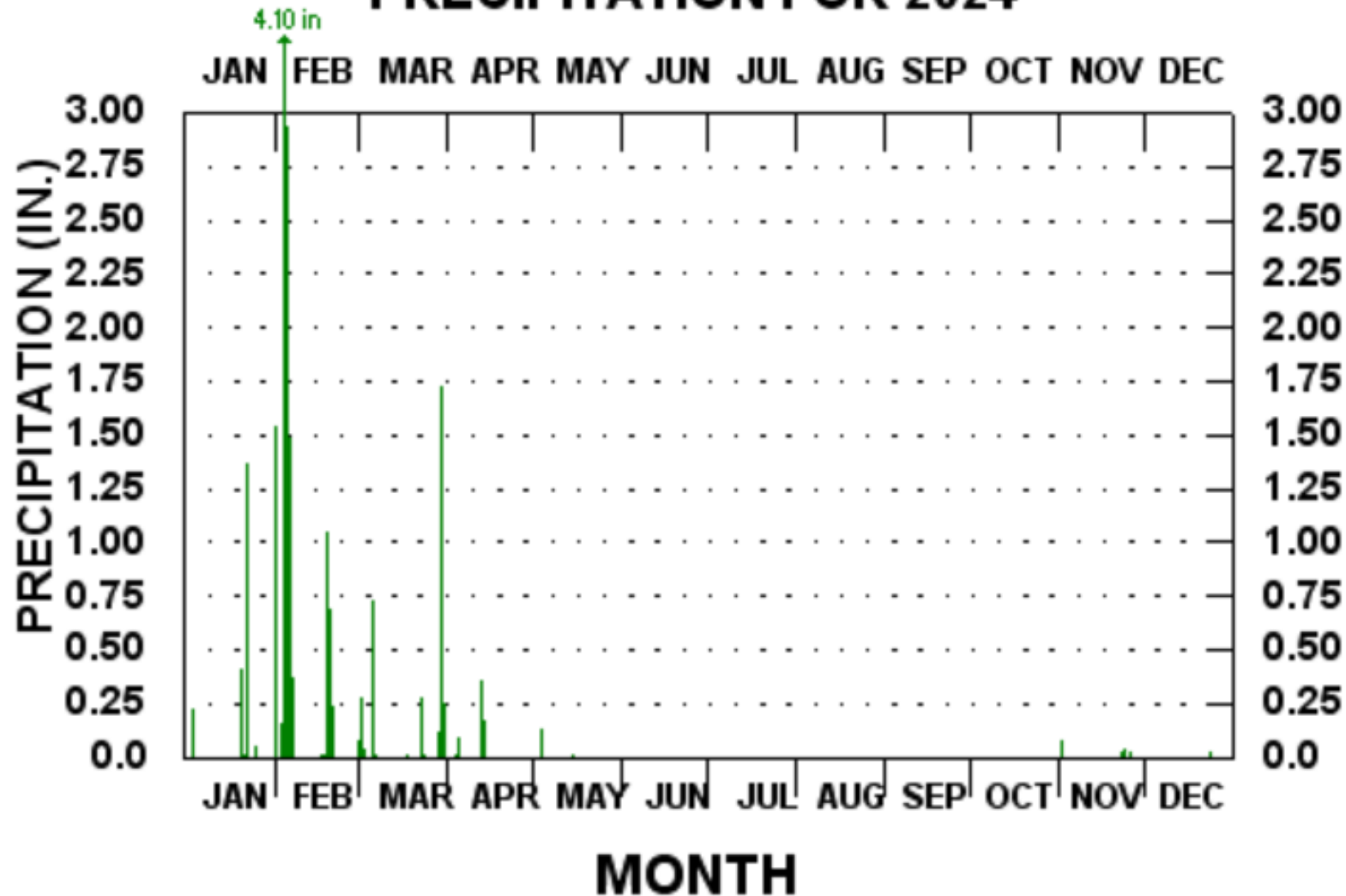


500 millibar winds, temperatures and
relative humidities <~18,000 Ft MSL>
North to Northeast winds VBG, LAS, SAN,
SLC, FLG, TUS, ELP, ABQ

(percent)

2024

DOWNTOWN LOS ANGELES USC CAMPUS DAILY PRECIPITATION FOR 2024



Note the early Feb 2024
Rainfall Maximum and the
Wet winter of 2024

Lots of rainfall, plentiful
conditions for grass growth.

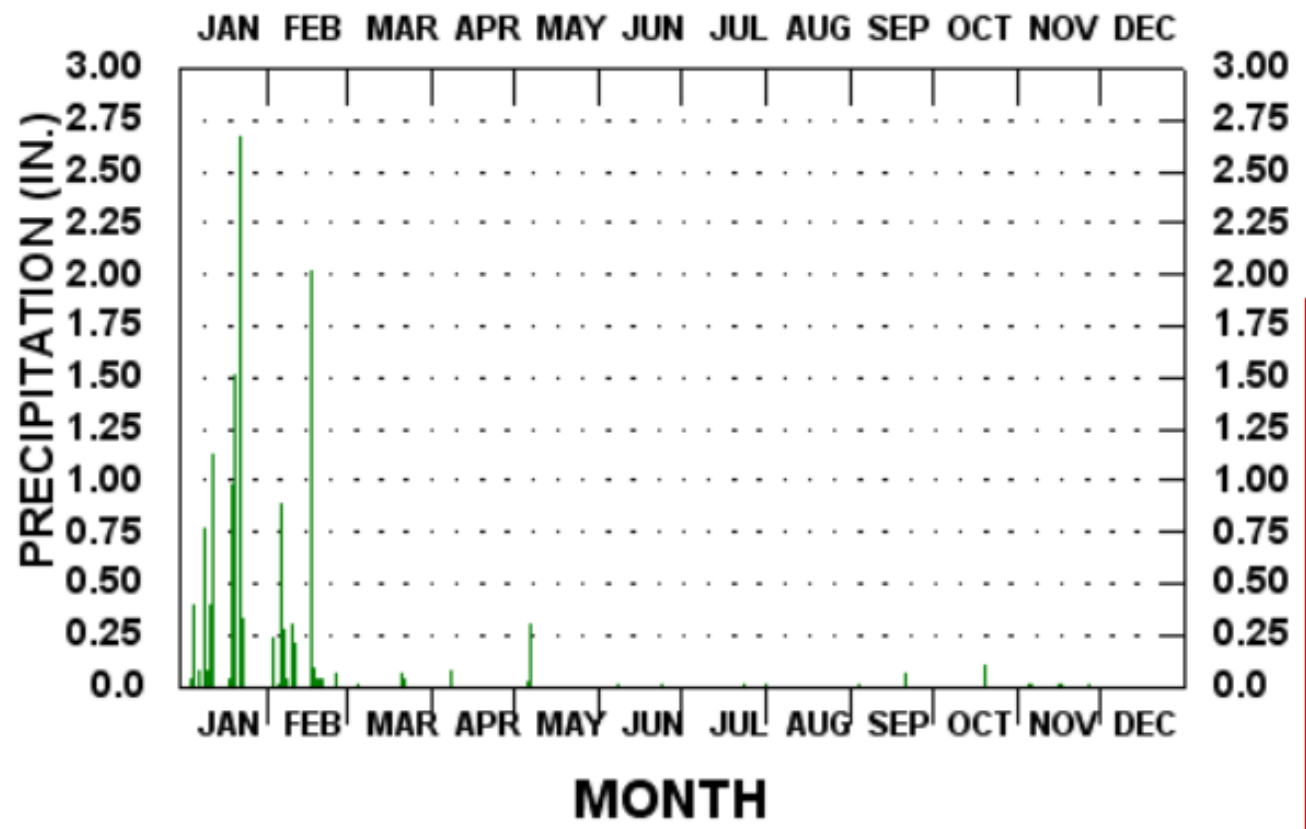
Almost no precipitation for
the ensuing months.

The grasses were plentiful,
then they dried. Following
fall, winter rains almost non-
existent in 2024.

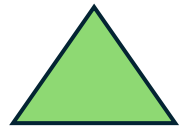
High fire potential!

We saw this pattern in 2017!
<Next Slide>

DOWNTOWN LOS ANGELES USC CAMPUS DAILY PRECIPITATION FOR 2017

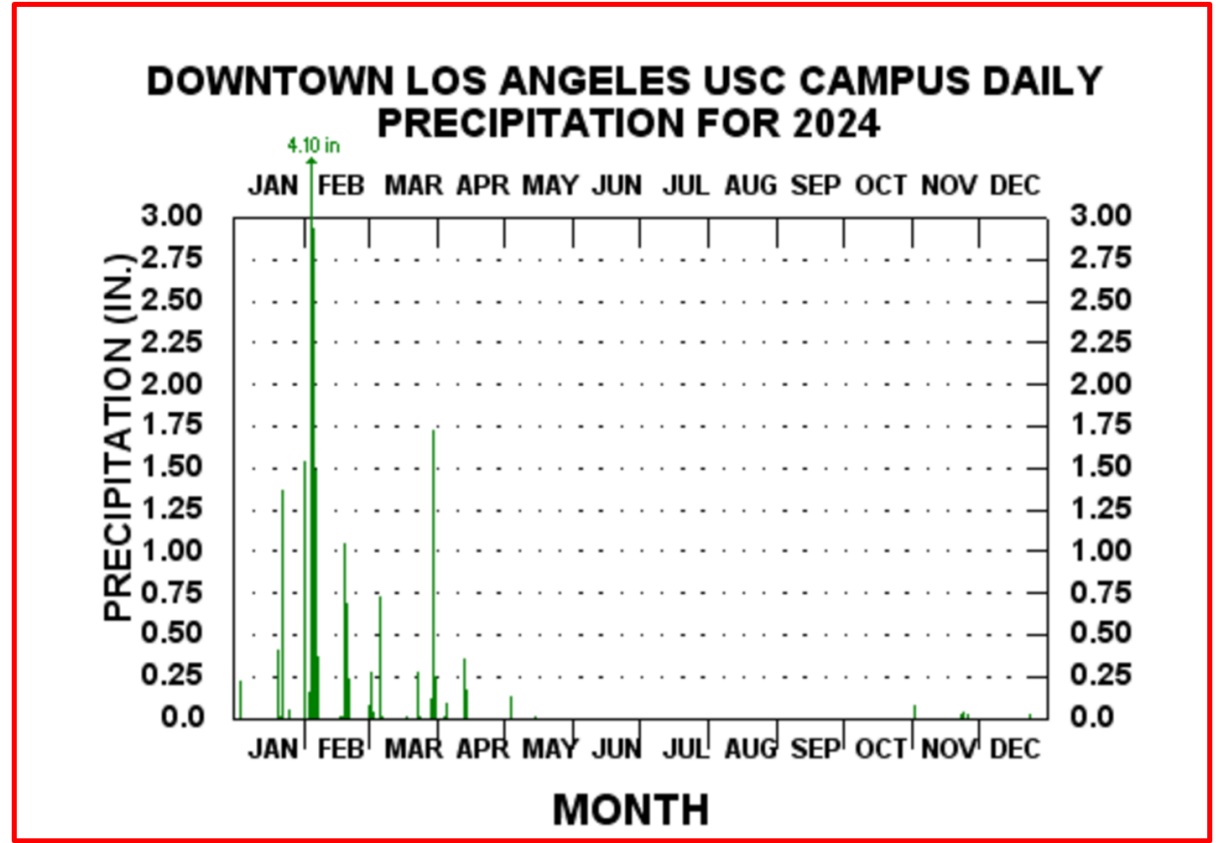


Left is 2017 Rainfall for USC, taken from my 16 Dec 2017 presentation on the Thomas Fire

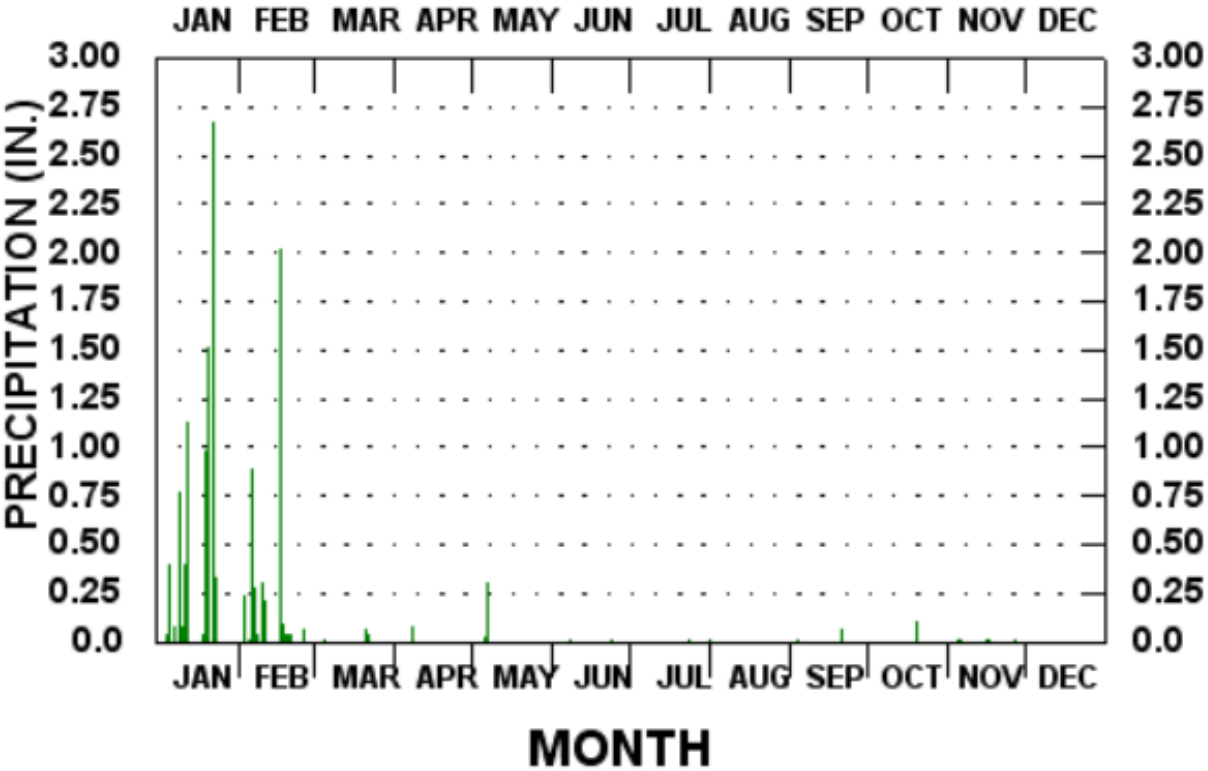


This pattern repeats!

Below is the 2024 Rainfall for USC, for the 7 Jan 2025 Los Angeles Fires

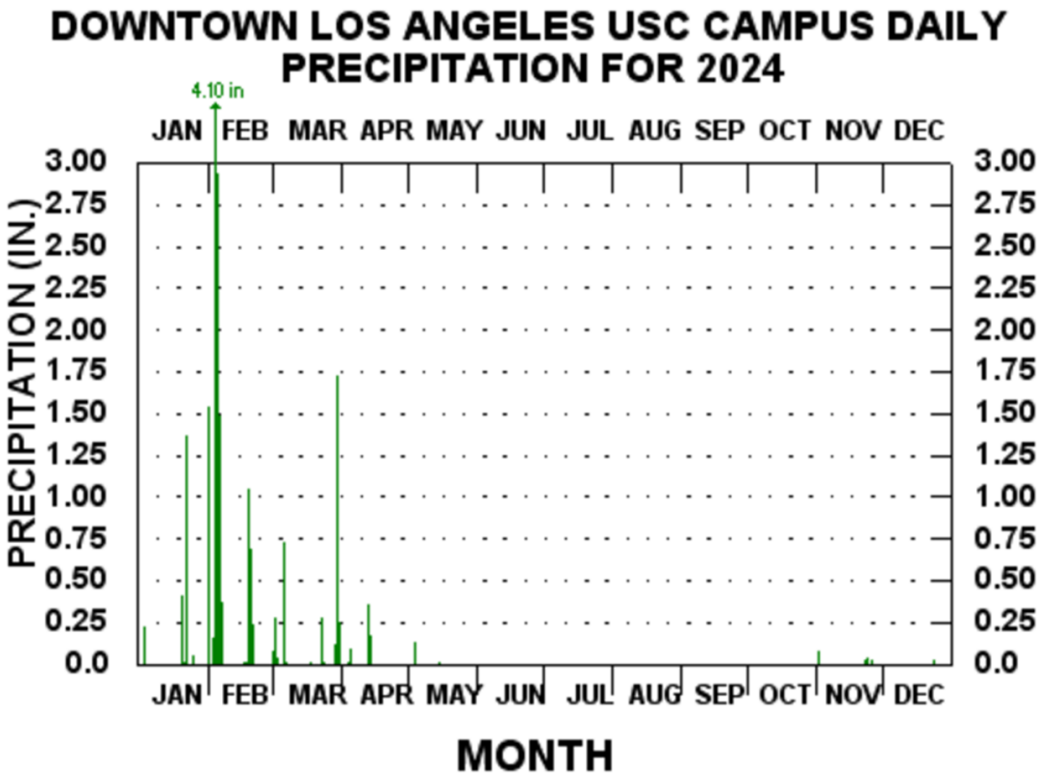


**DOWNTOWN LOS ANGELES USC CAMPUS DAILY
PRECIPITATION FOR 2017**



Left is 2017 Rainfall for USC, taken from my 16 Dec 2017 presentation on the Thomas Fire

Below is the 2024 Rainfall for USC, for this presentation on the 7 Jan 2025 Los Angeles Fires



THIS PATTERN IS THE MARKER for the Los Angeles area's tragic fires: Plentiful winter rains, grass grows luxuriantly, dry summer... winter rains don't occur on time.

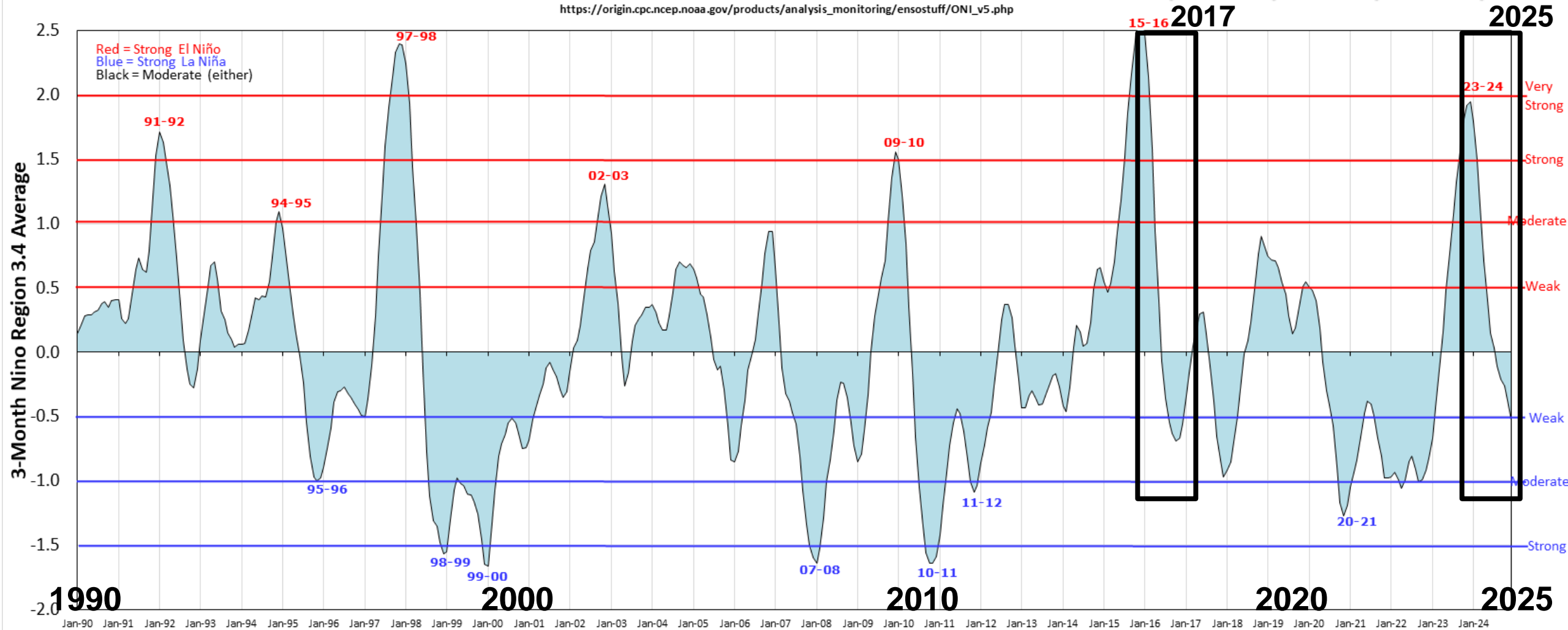
<https://ggweather.com/enso/oni1990.png>

Golden Gate Weather (Jan Null) used with permission.


Oceanic Niño Index (ONI) - 1990-present

https://origin.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ONI_v5.php

Red = Strong El Niño
Blue = Strong La Niña
Black = Moderate (either)



From 2024 to Jan 2025, conditions changed from quite strong El Nino (WET) to weak La Nina (DRY), which also happened in 2016-2017, the black boxes. **THIS IS AN IMPORTANT DIAGNOSTIC PATTERN**



SIDEBAR: Historical Sea Surface Temperature (SST) Measurements.

In 1963, when I was taking “***Meteorological Instruments and Observations***” in Air Force Basic Meteorology at Texas A&M, we learned the both instrumentation and weather codes used in the operational weather community.

The first code we learned was Synoptic Code (NDDFF, VVWWw PPPTT...)

We learned to extract one of the elements, then plot it on a map.

The first element we plotted was surface pressure in millibars, PPP.

There was a variation, Ship Synoptic Code. There was a place in the code for SST.

The SST was taken by a sailor who threw a bucket into the sea, fetched the bucket out, stuck a thermometer into the water, measured and recorded the SST.



Courtesy of Alexander Klink, Wikimedia Common.

Less than a century ago, Jack and Jill weren't the only ones filling buckets with water. Scientists and sailors were using actual wooden buckets to measure [sea surface temperatures](#) well into the mid-20th century. Because of their efforts, we can better understand Earth's climate and how current events fit into longer-term historical context.

PUBLISHED

MAY 9, 2017

UPDATED DATE: AUGUST 6, 2024



Matthew Fontaine Maury devised the method for measuring sea temperature using a simple bucket and thermometer

Abstract Log of Ship <i>Bremen</i> Captain <i>Paul Meinke</i>												From <i>Bremen</i>	to <i>New Orleans</i>	1856
IV												REMARKS.		
Day	Month	Year	Latitude	Longitude	Direction	Force	Time	Wind	Barometer	Thermometer	Remarks	Day	Month	Year
1	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2	First part moderate breezes and pleasant weather, very refreshing of a strong trade wind, which commenced at about 10 P.M., breeze increased by	1	Apr	1856
2	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2	First and middle part fresh trade and clear	2	Apr	1856
3	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2	Later part light breezes and cloudy	3	Apr	1856
4	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		4	Apr	1856
5	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		5	Apr	1856
6	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		6	Apr	1856
7	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		7	Apr	1856
8	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		8	Apr	1856
9	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		9	Apr	1856
10	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		10	Apr	1856
11	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		11	Apr	1856
12	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		12	Apr	1856
13	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		13	Apr	1856
14	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		14	Apr	1856
15	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		15	Apr	1856
16	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		16	Apr	1856
17	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		17	Apr	1856
18	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		18	Apr	1856
19	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		19	Apr	1856
20	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		20	Apr	1856
21	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		21	Apr	1856
22	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		22	Apr	1856
23	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		23	Apr	1856
24	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		24	Apr	1856
25	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		25	Apr	1856
26	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		26	Apr	1856
27	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		27	Apr	1856
28	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		28	Apr	1856
29	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		29	Apr	1856
30	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		30	Apr	1856
31	Apr	1856	51 20 N	10 10 W	SW	4	10 10	SW	30.0	51.2		31	Apr	1856

The Bremen recorded these observations in April 1856 while sailing across the Atlantic from Bremen, Germany, to New Orleans, Louisiana. The water temperatures were likely obtained using a wooden bucket

Why Measurements of Sea Surface Temperatures are important, Aerially and Temporally

Structures in the SST often control the dynamics of weather and climate. Think the Gulf Stream, which pumps Gulf water from off Florida to Britain and keeps Europe so warm (compare with Siberia).

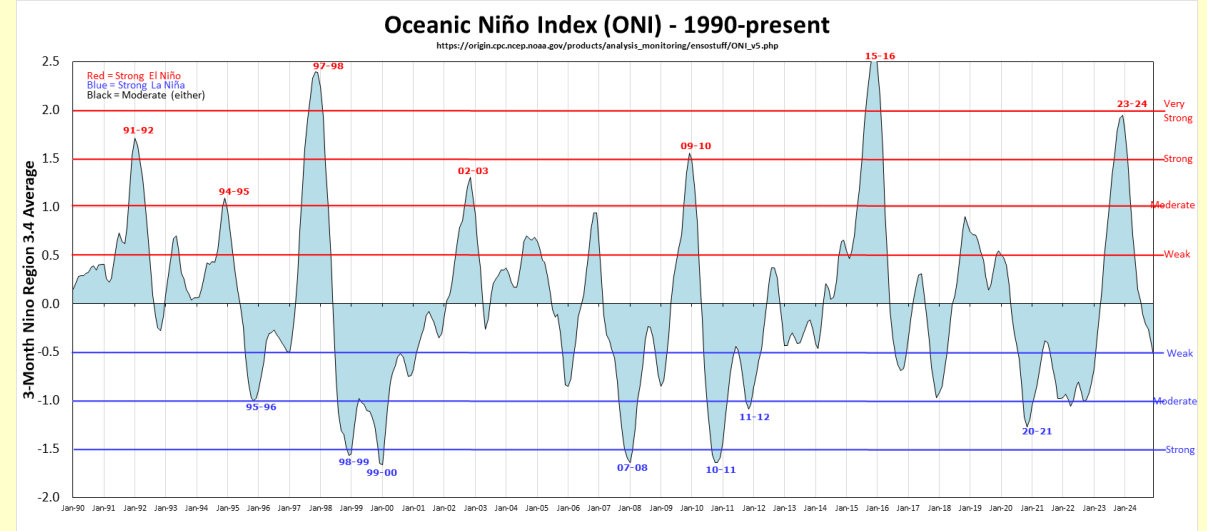
Another is Japan, with the Kuroshiro and Oyashiro; the latter also is called the Kamchatka Current

Fine and larger structures in SST became obvious when Weather Satellite SSTs became available.

The change in SST during El Nino events was known since the Spanish came to the west coast of South America.

Time series of SSTs are a logical extension.

It took several tries before researchers determined that the best diagnostic was the **Nino 3.4 region, (5S to 5N; 170W to 120W).**



NINO 3.4 time series is now used in USA for monitoring El Nino Southern Oscillation, ENSO, progression

SIDEBAR EXTENDED

Brief history of SSTs.... and the ONI Time Series from Satellites

Sea surface temperatures (SSTs) were only crudely known from bucket measures in ship synoptic reports.

Satellite images, later, satellite data, revealed the complex nature of SST patterns.

Crude basics of weather forecasting became known in WWI; upper air data started only in the 1930s as aviation expanded.

- TIROS 1, a polar orbiter, was launched 1 April 1960
- In the early 1960s, in Basic Meteorology, we were barely aware of El Nino's existence.
- ATS-1's Geostationary Satellite images were available only beginning in 1966.
- Routine satellite SSTs became available only in 1979, the same year that global satellite-based measurements of earth temperature began.
- The 60-year cycle of the Pacific Decadal Oscillation was first published in 1997

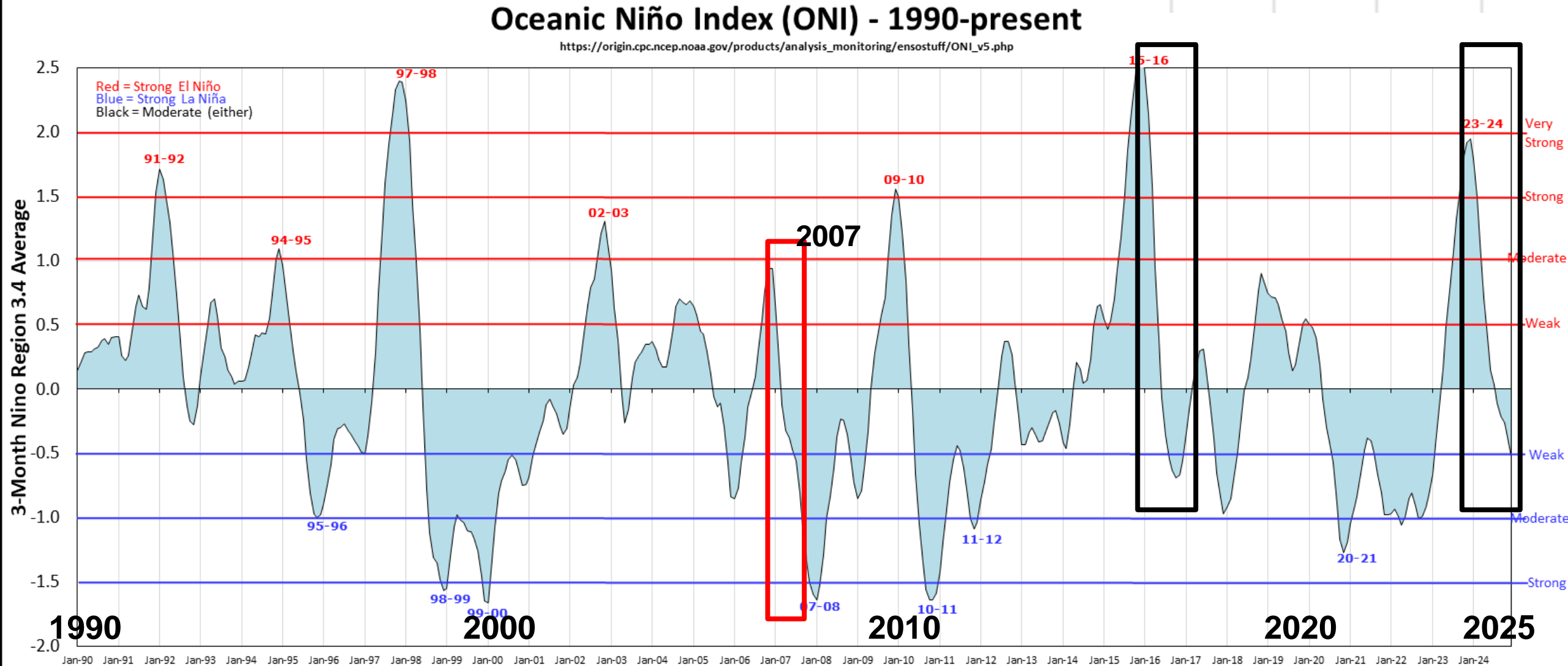
HALF-WAY

**Let's see if the “marker pattern”
shows up in previous years...and
if violent fires occurred then.**

<https://ggweather.com/enso/oni1990.png>

Golden Gate Weather (Jan Null) used with permission.

Red = Strong El Niño
Blue = Strong La Niña
Black = Moderate (either)



From 2024 to Jan 2025, conditions changed from quite strong El Niño (WET) to weak La Niña (DRY), which also happened in 2016-2017, black boxes. **HAS THIS SCENARIO HAPPENED BEFORE? What about 2007? <Red>**

The **October 2007 California wildfires**, also known as the **Fall 2007 California firestorm**,^[11] were a series of about thirty **wildfires** (17 of which became major wildfires)^[8] that began igniting across **Southern California** on October 20. At least 1,500 homes were destroyed^[12] and approximately 972,147 acres (about 3,934 km², or 1,520 mi²) of land was burned from **Santa Barbara County** to the **U.S.–Mexico border**, surpassing the October 2003 California wildfires in scope, which were estimated to have burned 800,000 acres (3,200 km²).^[3] The wildfires killed a total of 14 people, with nine of them dying directly from the fires;^[13] 160 others were injured, including at least 124 **firefighters**.^{[3][14]} At their height, the raging fires were visible from space.^[15] These fires included the vast majority of the largest and deadliest wildfires of the **2007 California wildfire season**. The only wildfire in 2007 that surpassed any of the individual October 2007 fires in size was the **Zaca Fire**.^[16]

California Governor **Arnold Schwarzenegger** declared a **state of emergency** in seven California counties where fires were burning.^[17] President **George W. Bush** concurred, and ordered federal aid to supplement state and local response efforts.^[18] Over 6,000 firefighters worked to fight the blazes; they were aided by units of the **United States**

October 2007 California wildfires



NASA satellite photo (provided by NSPO, Taiwan National Space Organization) from October 22, 2007, showing the active fire zones and smoke plumes.

Date(s) October 20, 2007^[1] – November 16, 2007^[2]

Location Southern California

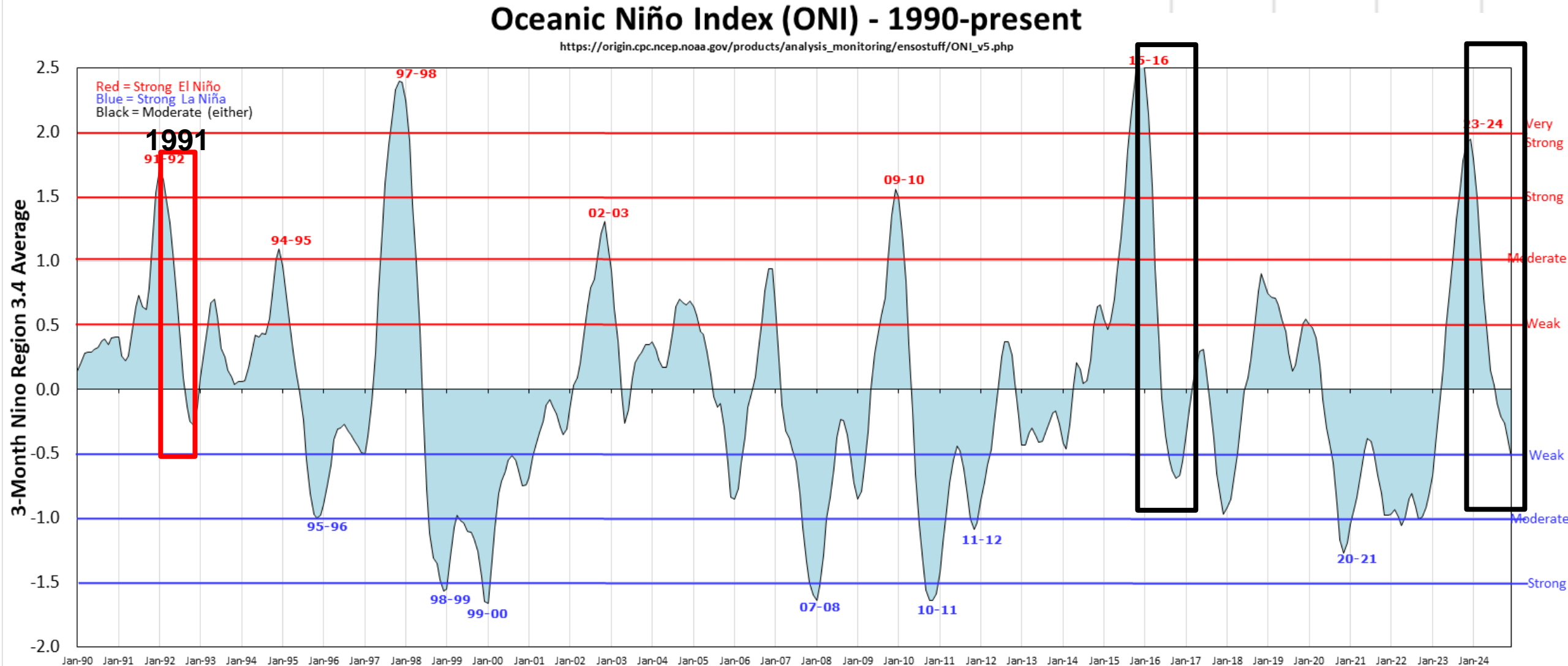
Statistics	
Total fires	30 ^[3]
	972,147

“Major contributing factors to the extreme fire conditions were drought in Southern California, hot weather, and unusually strong Santa Ana winds, with gusts reaching 85 mph...”

<https://ggweather.com/enso/oni1990.png>

Golden Gate Weather (Jan Null) used with permission.

Red = Strong El Niño
Blue = Strong La Niña
Black = Moderate (either)



From 2024 to Jan 2025, conditions changed from quite strong El Niño (WET) to weak La Niña (DRY), which also happened in 2016-2017, black boxes. **HAS THIS SCENARIO HAPPENED BEFORE? What about 1991? <Red>**



A firefighter keeps an eye on his partner who is sprawled on a lawn and recovering from exhaustion while other firefighters continue to battle blazes in Oakland, California, on Oct. 20, 1991. The firestorm burned 3,000 homes and killed 25 people.

Credit: AP Photo/Glen Morimoto

The **Oakland firestorm of 1991**, also known as the **Tunnel Fire** was a large suburban wildland–urban interface conflagration that occurred on the hillsides of northern Oakland, California, and southeastern Berkeley over the weekend of October 19–20, 1991, before being brought under full control on October 23. The official name of this incident by Cal Fire is the **Tunnel Fire**.^[3] It is also commonly referred to as the **Oakland Hills firestorm** or the **East Bay Hills fire**. The fire ultimately killed 25 people and injured 150 others. The 1,520 acres (620 ha) destroyed included 2,843 single-family dwellings and 437 apartment and condominium units. The economic loss from the fire was estimated at \$1.5 billion (\$2.99 billion in 2024 dollars^[2]).^[1]

Origins [\[edit \]](#)

The fire started on Saturday, October 19, from an incompletely and improperly extinguished grass fire in the Berkeley Hills, northeast of the intersection of California State Routes 24 and 13 (0.5 mi (0.8 km) north of the Caldecott Tunnel west portal. Firefighters fought the 5-acre (2.0 ha) fire on a steep hillside above 7151 Buckingham Boulevard, and by Saturday night believed it to be under control.

Listen: Remembering the 1991 Oakland-Berkeley Firestorm

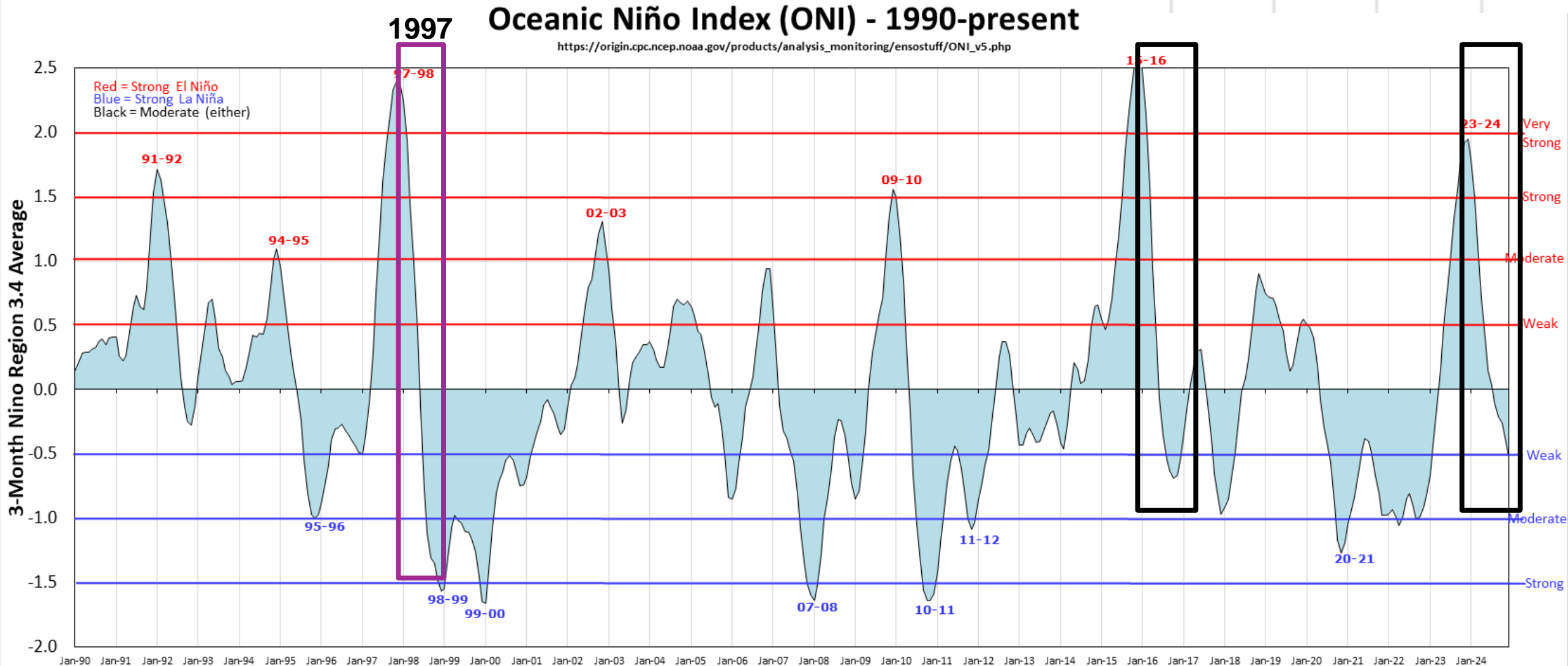


.aerial photo showing damage to the Oakland Hills following the 1991 firestorm Credit: East Bay Regional Parks District

<https://ggweather.com/enso/oni1990.png>

Golden Gate Weather (Jan Null) used with permission.

Red = Strong El Niño
Blue = Strong La Niña
Black = Moderate (either)



From 2024 to Jan 2025, conditions changed from quite strong El Nino (WET) to weak La Nina (DRY), which also happened in 2016-2017, black boxes. **HAS THIS SCENARIO HAPPENED BEFORE?** What about 1997?<PURPLE>

The very strong El Nino of 1997 produced extensive rainfall in Fall 1997, extending into Winter and Spring 1998. **The wet weather dominated: few fires.** Examples from <https://www.weather.gov/media/sgx/documents/weatherhistory.pdf>

9.4.1997	Hurricane Linda became the strongest storm recorded in the eastern Pacific with winds estimated at 180 mph and gusts to 218 mph. For a time it threatened to come ashore in California as a tropical storm, but the storm turned away, affecting the region with added moisture for showers and thunderstorms. This occurred during the strong El Niño of 1997-98. 2.5” of rain within 45 minutes was reported at Forest Falls.	Disastrous flooding and debris flows occurred at Forest Falls, totaling \$3.2 million in damage. Car-size boulders and a wall of mud 150 feet wide and 15 feet high were reported. Another wall of water, this one 10 feet, rolled through Little San Gorgonio Creek flooding portions of Oak Glen. Roads were buried in debris. Two homes were completely destroyed and 77 suffered damage.
9.24-26.1997	Heavy rain and thunderstorms from Hurricane Nora. 5.50” at Mt. San Jacinto, 4.70” Mt. Laguna, 4.41” Mt. San Gorgonio, 3-4” at several locations in mountains, 3.07” Twentynine Palms, 1.5-2” at Coachella and Borrego Valleys, 2.88” Hemet, 1-2” in many inland areas.	Flooding in Palm Springs, Borrego Springs and Spring Valley. Traffic deaths.

The very strong El Nino of 1997 has been called a SUPER EI NINO

The very strong El Nino of 1997 produced extensive rainfall in Fall 1997, extending into Winter and Spring 1998. **The wet weather dominated: few fires.**

Examples from <https://www.weather.gov/media/sgx/documents/weatherhistory.pdf>

12.6-8.1997	<p>A stationary line of thunderstorms brought the heaviest rain in 70 years to portions of Orange County.</p> <p>Widespread 4 to 8" rainfall totals, with as much as 10" in Mission Viejo. Over 4" in Corona. Heavy downpours in Victor Valley. On 12.6 Newport Beach and Laguna Beach reported respective rainfall totals of 6.00" and 5.50", both all-time records for a single day by more than an inch.</p>	<p>Widespread flooding in Orange County. Mud slides and coastal erosion. Flooding in Corona and several communities of Victor Valley. Mud flow through Adelanto. In the days after the storm local beaches were littered with debris from the floods.</p>
1.8-10.1998	Heavy rain of 2".	Floods and mud in Del Dios (near Escondido).
2.3-4.1998	Heavy rain of 3".	Flooding, mud slides, power outages.

The very strong El Nino of 1997 has been called a SUPER EI NINO

The very strong El Nino of 1997 produced extensive rainfall in Fall 1997, extending into Winter and Spring 1998. **The wet weather dominated: few fires.**

Examples from <https://www.weather.gov/media/sqx/documents/weatherhistory.pdf>

2.6-9.1998	Heavy rain. Up to 3" rainfall over all of Southern California.	Catastrophic and widespread flooding, especially in Newport Beach and Irvine. Lots of property damage in southern Orange County. Evacuations and swift water rescues. Landslides, mud slides, and sink holes. Roads, bridges, and railroads damaged.
2.14-15.1998	A powerful storm during this El Niño year brought 1-2" of rain to coastal areas, 3-5" in valleys and foothills.	The San Luis Rey River left its banks in Pauma Valley, and numerous area roads were closed due to mudslides, high water and damaged bridges. A hillside slid into a restaurant in Laguna Beach, and a large sink hole forced the closure of Santiago Canyon Road for several days.

The very strong El Nino of 1997
has been called a SUPER EI NINO

In the news today...the Thomas Fire...
California's Santa Ana Winds and
Autumn's Wildfires



Bob Endlich

bendlich@msn.com

Cruces Atmospheric Sciences Forum

FALL 2017

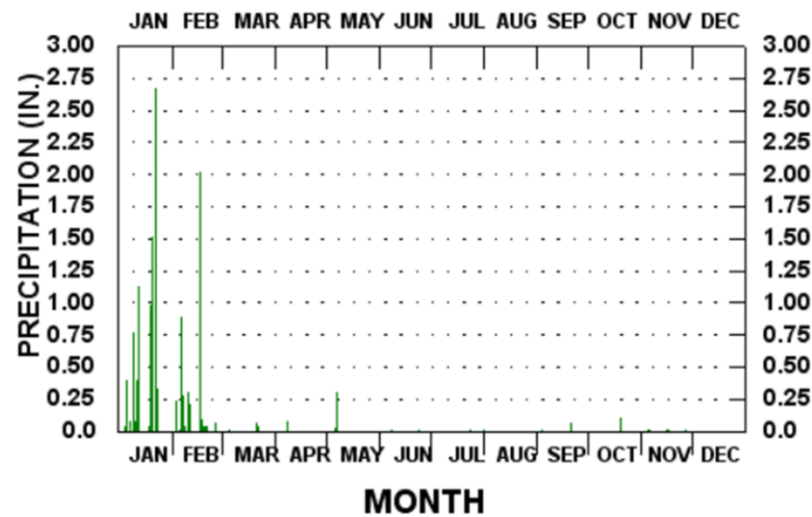
16 December 2017

<https://www.yahoo.com/news/contained-los-angeles-fires-crews-220559162.html>

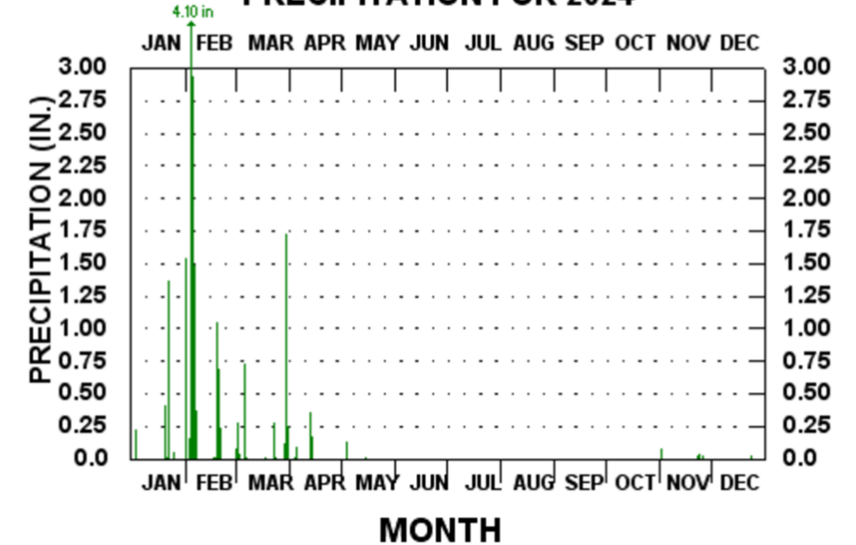


JAN 2025

DOWNTOWN LOS ANGELES USC CAMPUS DAILY
PRECIPITATION FOR 2017



DOWNTOWN LOS ANGELES USC CAMPUS DAILY
PRECIPITATION FOR 2024



**This is the Back Story I mentioned
at the top...**

**IGNORANCE, INCOMPETENCE,
CORRUPTION, OF LOS ANGELES'
CITY LEADERS**

US NEWS

LA Mayor Karen Bass' office hit with scandals over hush money, bribes and accusations of 'legalized corruption'

By Isabel Vincent

Published Jan. 17, 2025, 2:53 p.m. ET

1.2K Comments

“Los Angeles Mayor Karen Bass got into office promoting diversity, equity and inclusion (DEI) and promising to tackle homelessness and pollution — but she never promised to drain the swamp.

Now she stands accused of adding to it, through “legalized corruption” and a number of eye-opening scandals which have come to light after renewed scrutiny in the last two weeks following the revelation Bass and her cronies defunded the Los Angeles Fire Department by \$17 million, contributing to them being underprepared to tackle the wildfires currently destroying the city. <UDERLINING ADDED>

ALSO:

The deputy mayor was raided by the FBI over an alleged bomb threat against City Hall.

“...However, in a bizarre turn of events, he is suspected of ringing in a bomb threat against city hall last September. Due to his relationship with the LAPD, the matter is being handled by the FBI, who raided his home in December, after he was identified as the “likely” source of the threat. **At that point he was placed on administrative leave.**”

<https://www.nationalreview.com/news/l-a-mayor-karen-bass-claims-she-wasnt-aware-of-wildfire-warnings-when-she-left-the-country/>

BOB'S OPINION:

As the leader of City Hall, it is the duty of the Mayor to organize the work of City and other employees, to present her the operational, maintenance, logistics, labor, financial, administrative, resources, scheduled events, **even the weather, so that she knows** the status of the city.

She is supposed to be in charge.
She should act as if she is in charge.

Having and conducting a daily or several times weekly Ops Briefing, making her aware, might be a good place to start!

L.A. Mayor Karen Bass Claims She Wasn't 'Aware' of Wildfire Warnings When She Left the Country



Los Angeles Mayor Karen Bass leaves a press conference as she visits the FEMA Disaster Recovery Center following wildfires in Los Angeles, Calif., January 14, 2025. (Daniel Cole/Reuters)

<https://www.politico.com/news/2025/02/28/la-city-hall-charter-reform-karen-bass-00206738>

LOS ANGELES — The push for sweeping City Hall reforms, born out of corruption scandals and [an explosive leaked audio controversy](#), has quietly stalled out in the nation's second-largest city.

The hold-up: its embattled mayor, Karen Bass.

Bass has failed to name appointees to a commission to change the city's charter for more than six months, well before historic wildfires ravaged the city in January, consigning the fledgling effort to purgatory. The inaction from the mayor's office makes Bass the most conspicuous logjam in a process fraught with political tripwires, a reworking of the city's balance of power certain to face backlash from those who enjoy tremendous sway under the status quo.

CALIFORNIA

Karen Bass' curious absence from a push to clean up Los Angeles City Hall

The mayor's inaction on a key commission has critics questioning her commitment to overhauling city government after a series of scandals before she took office.



A protest sign is displayed after a leaked audio tape scandal upended Los Angeles City Hall. | Getty Images

By MELANIE MASON

02/28/2025 02:18 PM EST

[Latest](#) [Local News](#) [• Live](#) [Shows](#) [...](#)

 **CBS NEWS**

[U.S.](#) [World](#) [Politics](#) [Trump Tariffs](#) [HealthWatch](#) [MoneyWatch](#) [Entertainment](#) [Crime](#) [Sports](#)

U.S.

A month before fires, L.A. fire chief warned budget cuts were hampering emergency response

By **Julia Ingram**

Updated on: January 13, 2025 / 9:35 AM EST / CBS News



CALIFORNIA WILDFIRES

Los Angeles cut \$17.5M from fire department budget months before deadly fires

Seven months before the uncontrolled [Palisades Fire in Los Angeles](#), the city's fire department budget for this fiscal year was cut by more than \$17.5 million, records show.

Mayor Karen Bass signed the City of Los Angeles' budget for the 2024-2025 fiscal year.

The total budget for the city's fire department was \$819.64 million. Records show that for the previous fiscal year, the LAFD's total budget was \$837.2 million.

The total budget includes salaries, expenses and equipment.

<https://www.latimes.com/california/story/2025-01-10/how-much-did-the-l-a-fire-department-really-cut-its-budget>

This is how the Liberal Media avoids blurting out the truth!

Did Mayor Karen Bass really cut the fire department budget? The answer gets tricky



Gov. Gavin Newsom and Los Angeles Mayor Karen Bass tour the destruction in Pacific Palisades on Wednesday amid a massive wildfire.(Eric Thayer / Getty Images)

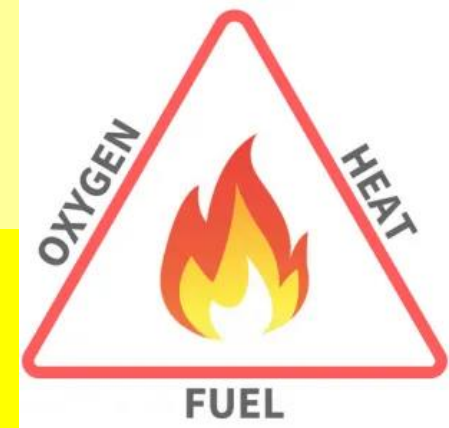
When Mayor Karen Bass unveiled her budget plan for 2024-25, she called for a 2.7% reduction in spending at the Los Angeles Fire Department.

Her proposal, unveiled in April, sought \$23 million in cuts to the department, with much of it focused on reduced equipment purchases.

But while her citywide spending proposal was being reviewed, Bass was also in closed-door negotiations over a major boost in pay for the city's 3,300 firefighters. Those pay hikes — four years of raises and an array of other financial incentives — were not finalized until several months after her budget went into effect.

<https://cnr.ncsu.edu/news/2021/12/explainer-how-wildfires-start-and-spread/>

“...about 85% of wildfires in the U.S. result from human causes, including arson, unattended campfires and debris fires and discarded cigarettes.”



The Fire Triangle <**Fuel, Oxygen, & Heat**> and 2025's Los Angeles Firestorm

FUEL: The annual cycle of rain in the Mediterranean Climate brings forth especially **lush grasses** in the winter and spring. When they dry, it is almost like tinder, with fuel in a web with lots of nearby oxygen in the air.

I saw at least two references to excessive fuel buildup because of unburned brush. Next slides contain ones I saved. There are reports...downed power line at the fire origin. (**Heat on Fuel**)

OXYGEN: High winds during Santa Ana Wind Episodes provide incredible amounts of **Oxygen** to a fire, and high winds spread embers. We have this saying: “It spread like wildfire!”

NWS' dire Weather Warnings: LOW HUMIDITY & HIGH WINDS-More OXYGEN-was SPOT-ON!

In the 2018 Camp Fire in Paradise, CA, **STRONG WINDS** brought down Pacific Gas & Electric's power lines into dry brush, **HEAT** that sparked that fire, and **HUGE AMOUNTS OF OXYGEN!**

We all have heard the expression, “like a blowtorch.”

Maybe we have seen a worker cutting steel with an oxygen-acetylene torch

The mechanism to create the steel cutting torch is the Oxygen Blast Trigger...next slide.

Thinking critically...

Nature’s way of creating the strong fires necessary to clean accumulated grass and brush in Los Angeles is the high winds of the Santa Ana Wind family;

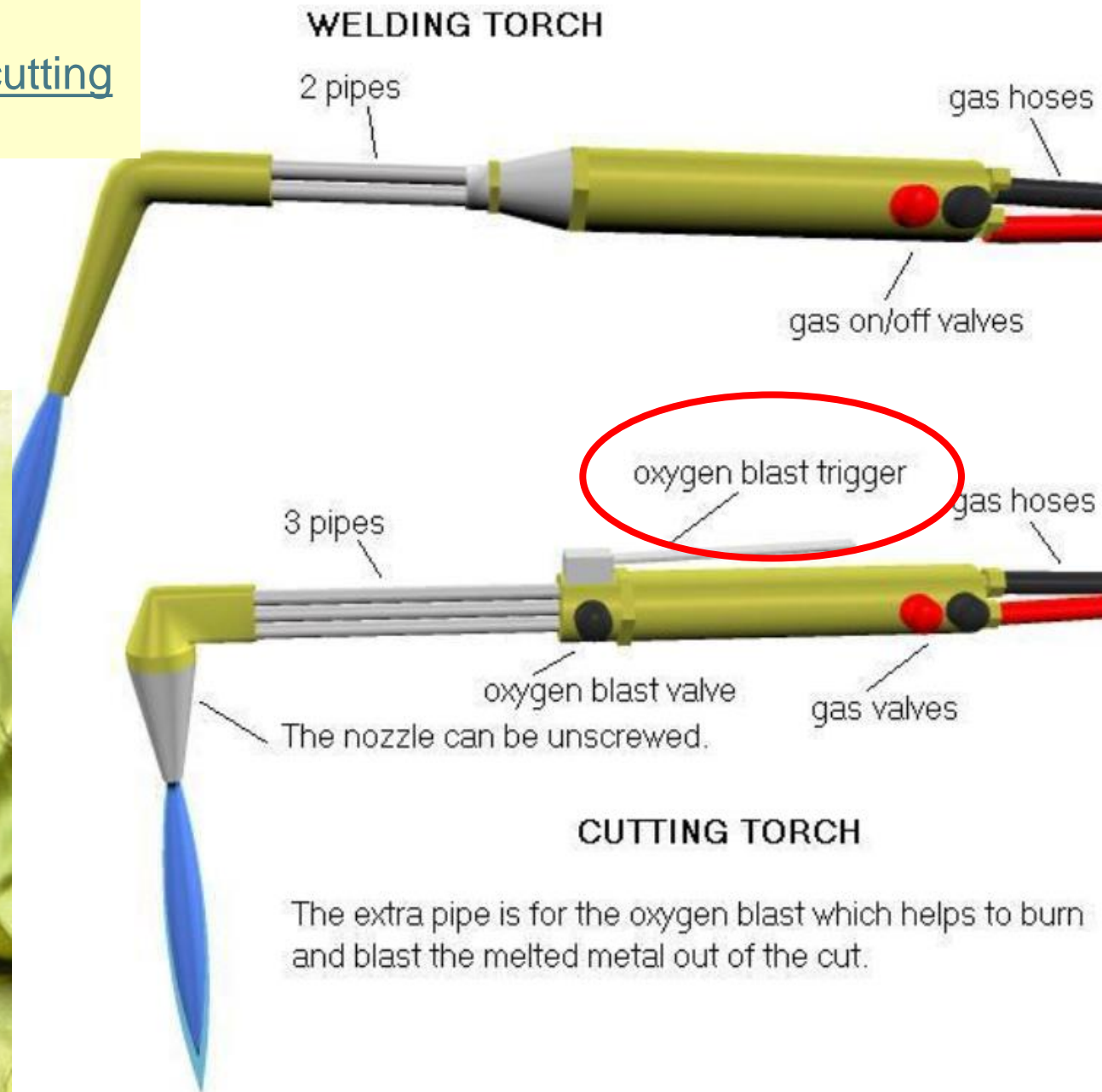
The high winds supply the extra oxygen, just the way the Oxygen Blast Trigger in the Oxygen Acetylene Torch does.



A cutting torch being used to cut a steel pipe

https://en.wikipedia.org/wiki/Oxy-fuel_welding_and_cutting

The blast trigger is the mechanism a welder uses to inject a blast of extra oxygen into the torch, making the hotter cutting flame.



<https://www.youtube.com/watch?v=fXSeXqzx7rQ>
...a 23 minute video.



Play (k)



The Causes of California's Devastating Fires and How They Could Have Been Prevented: Edward Ring



LIVE: HOSTAGE EXCHANGE

POLITICS

LOCAL

● WATCH LIVE



<https://www.youtube.com/watch?v=fXSeXqzx7rQ>

WESTERN WILDFIRES

Decades of mismanagement led to choked forests – now it's time to clear them out, fire experts say

“Forest management is a lot like gardening. You have to keep the forest open and thin,” said Mike Rogers, a former Angeles National Forest supervisor.



Former Mayoral Candidate Rick Caruso's quotes:

"The level of incompetence by both elected and appointed leadership is like nothing I have ever seen ."

"No one has taken responsibility for this..." Q: Who?

"Mayor Bass. Head of DWD. How did the second largest city in the country run out of water?"

"You had 40 years of brush that had not been managed."

"I told (then-Mayor) Garcetti that <an I-405> fire in Brentwood could move down the hills and engulf the Palisades"(because of the uncleared brush)

"The Fire Department had been underfunded for 10-15 years"

"We have Fire equipment that has been mothballed, sitting in yards, because we don't have mechanics to have them repaired so they can operate. That's a sin!"

"Mayor Bass cut the Fire Department even more this year, and the (Fire) Chief said publicly, "This will impact our ability to keep people safe." "

For some reason, the Fire Department did not deploy (forward).

<https://www.youtube.com/watch?v=pTxDPV0LD0s>

14:06 Video



**How California's Leaders Caused the LA Fire Devastation |
Former LA Mayoral Candidate Rick Caruso**

Video below is from 17 Nov 2018! It did not age well.

<https://www.npr.org/2018/11/17/668947908/trump-blames-forest-management-again-during-california-visit>

"I got a call from one of my senior leaders in the Command Center...'your daughter's house just burned down. The hydrant ran out of water'

"They ran out of water because they did not manage the water supply."

City ran out of water to fight the Palisades Fire because the 120 Million-Gallon Santa Ynez Reservoir was ~ dry

Victor Davis Hansen reported:

“The 120-Million Gallon <Santa Ynez> Reservoir had been idle for ~1 year because cover had been torn.”

Mchael Shellenberg reported,

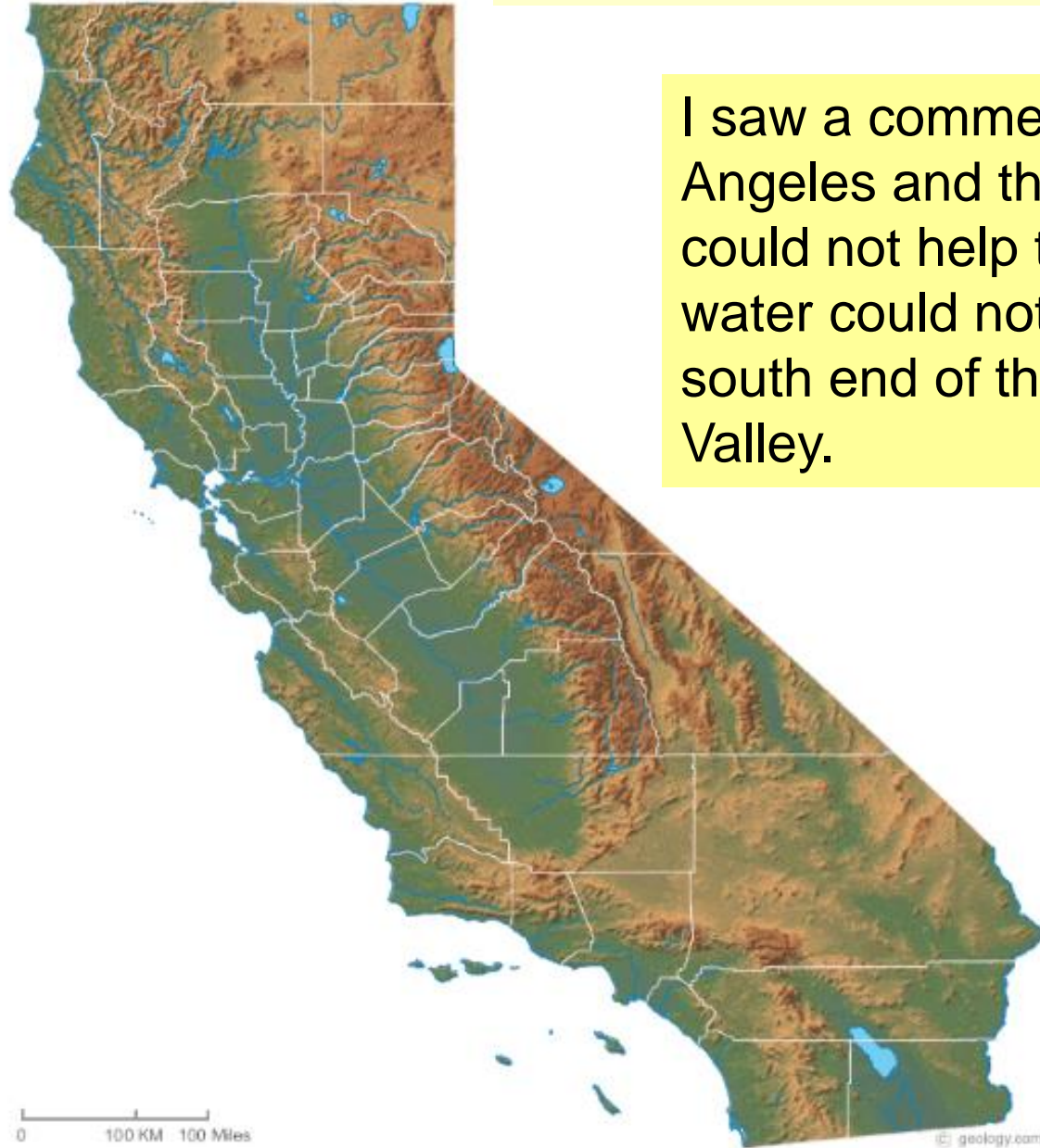
A cover was needed because the reservoir supplies water for drinking and for fire fighting. The torn cover allowed bird poop to get into the water supply, so the city did not put water into the Santa Ynez Reservoir.

Repairing this cover was not put on the priority list of stuff to fix.

No one in the Water Department told the Fire Department that the Santa Ynez Reservoir was almost empty.

Mayoral Candidate Rick Caruso: “They ran out of water because they did not manage the water supply.”

Sidebar on California Aqueduct and Los Angeles Aqueducts.



I saw a comment pertaining to the water situation in Los Angeles and the contention that Sierra Nevada snowmelt could not help the water quantity in Los Angeles because the water could not flow over the <Tehachapi> Mountains at the south end of the San Joaquin Valley, California's Central Valley.

That comment was along the lines that the Sierra Nevada runoff needed to flow out to sea to protect the endangered Delta Smelt

However....

For the SIXTH year, NO Delta Smelt have been found in the Sacramento River Delta

https://ic.arc.losrios.edu/~veiszep/32fall2015/Yu/G350_Yu_Project.html

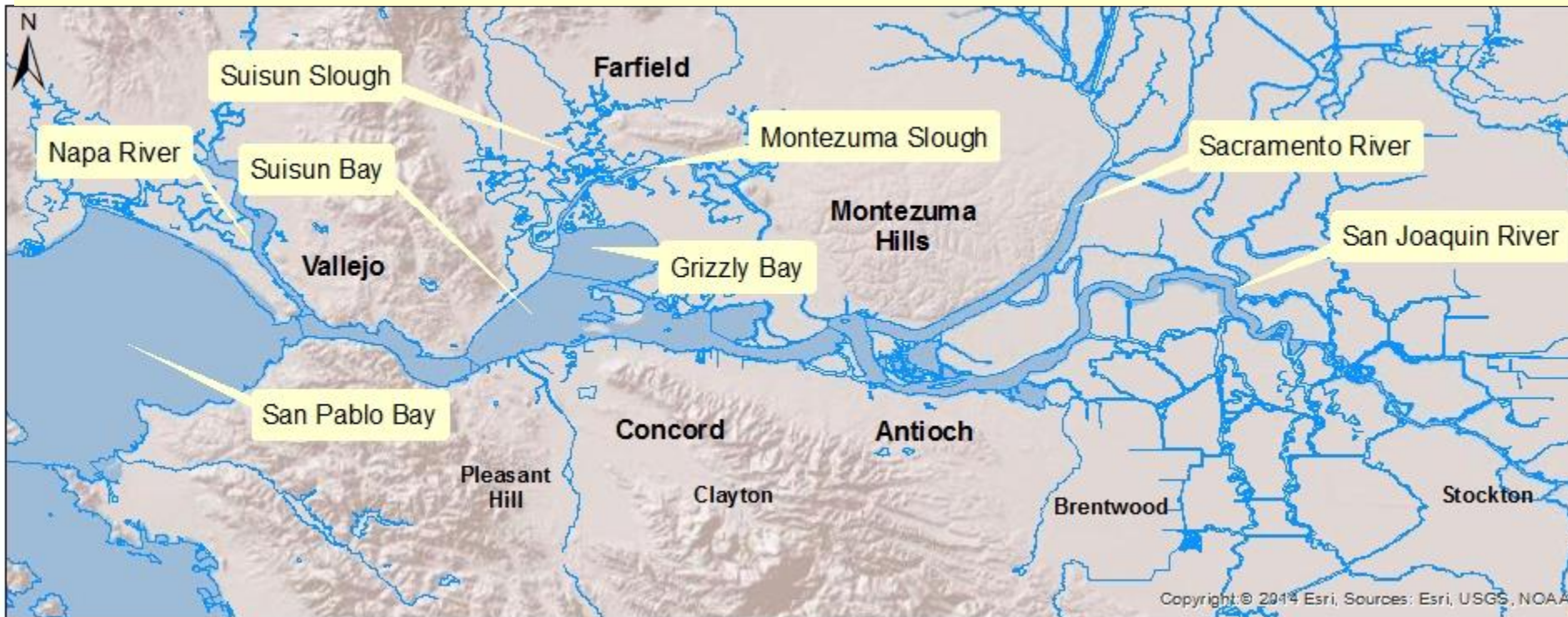
Delta Smelt

For the SIXTH year, NO Delta Smelt have been found in the Sacramento River Delta

Habitat Suitability for Spawning Adult Delta Smelt during Dry and Wet Years



Figure 1. An overview of the upper San Francisco Estuary, where Delta Smelt inhabit.



<https://sites.uci.edu/energyobserver/2015/04/28/california-water-projects-feeding-southern-california/>

The part of the system **in bold** is the **California Aqueduct**, more of which in later slides.



<https://geology.com/county-map/california.shtml>



ADVERTISEMENT

California Aqueduct

The Bay-Delta Watershed and Major Water Projects



<https://sites.uci.edu/energyobserver/2015/04/28/california-water-projects-feeding-southern-california/>

Los Angeles Aqueduct

Bay-Delta Watershed

Delta

Tulare Sub-Basin

This basin flows into the San Joaquin River only in wet years.

Engineering Projects

Federal

State

State & Federal

Local

Los Angeles Aqueduct

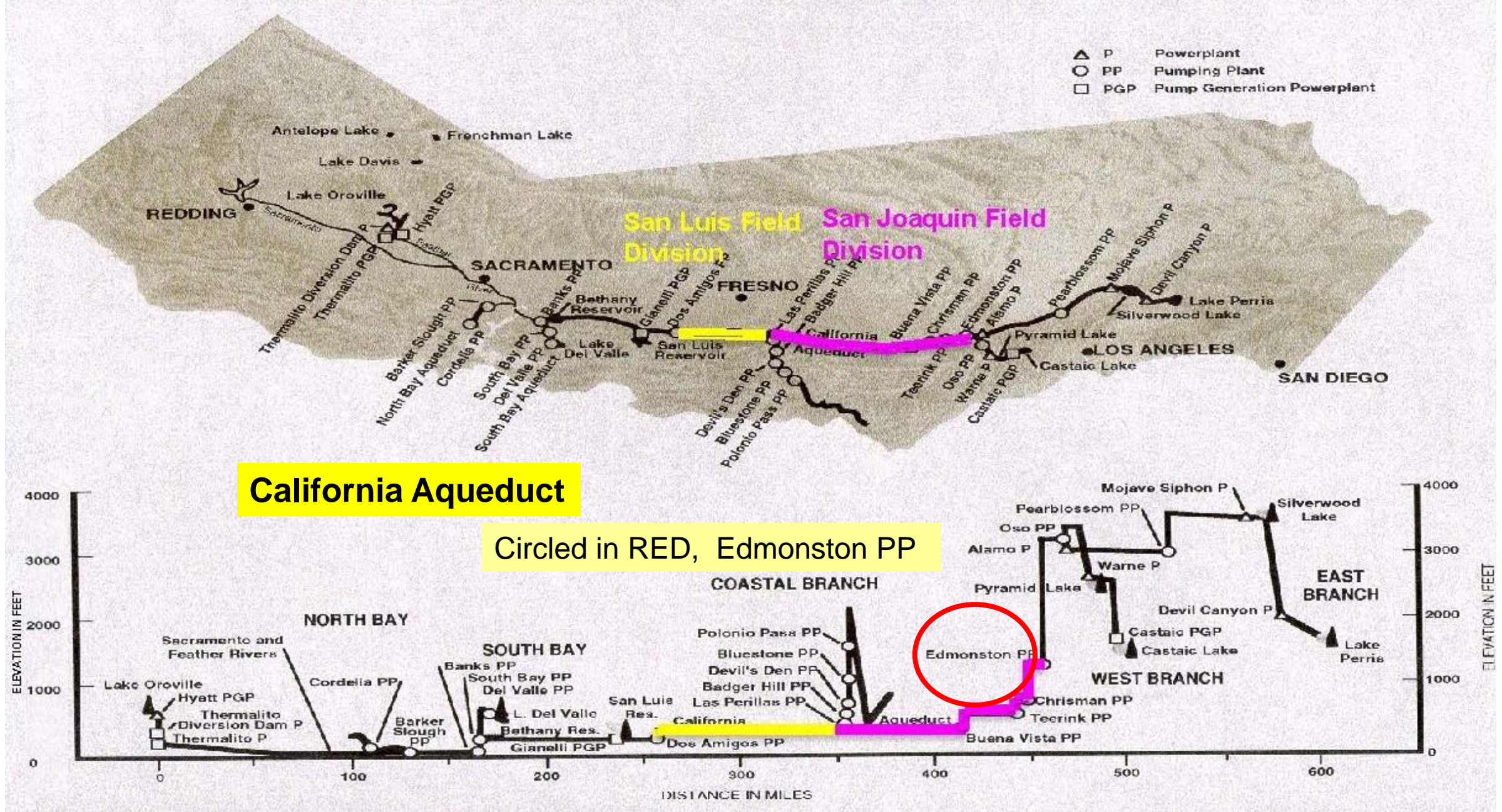
San Diego Aqueducts

Colorado River Aqueduct

Coachella Canal

All American Canal

Location and Profile of State Water Project Facilities



Edmonston Pumping Plant

This is how the California Aqueduct pushes water over the Tehachapi Mountains at the south end of the San Joaquin Valley.

Aqueducts at the south end of San Joaquin Valley, push water uphill, over the Grapevine, enroute to Los Angeles, part of the California State Water Project....

We are looking into the summer sun. This side of Water Tank is in the shade....Means we're looking south, over the Tehachapi Mountains.



The Big Lift: A photo tour of the State Water Project's Edmonston Pumping Plant

<https://mavensnotebook.com/2013/03/07/the-big-lift-a-photo-tour-of-the-state-water-projects-edmonston-pumping-plant/>



“The State Water Project’s Edmonston Pumping Plant is the highest single lift pumping plant in the world, capable of flinging 2 million gallons per minute over the Tehachapis. In April of 2011, I had the pleasure of touring the facility on a Metropolitan Water District Inspection Tour.”

Los Angeles Aqueduct Daily Report

Click on an area on the map or a link below to get a daily snapshot as of 7 a.m. of water flows, reservoir elevations, climate conditions and more.

Please be patient. It takes a few moments to retrieve realtime data.

[Mono Basin](#)

[Long Valley](#)

[Northern Owens Valley](#)

[Southern Owens Valley](#)

[Southern District](#)

[Reservoir Overview](#)

[Climate Overview](#)

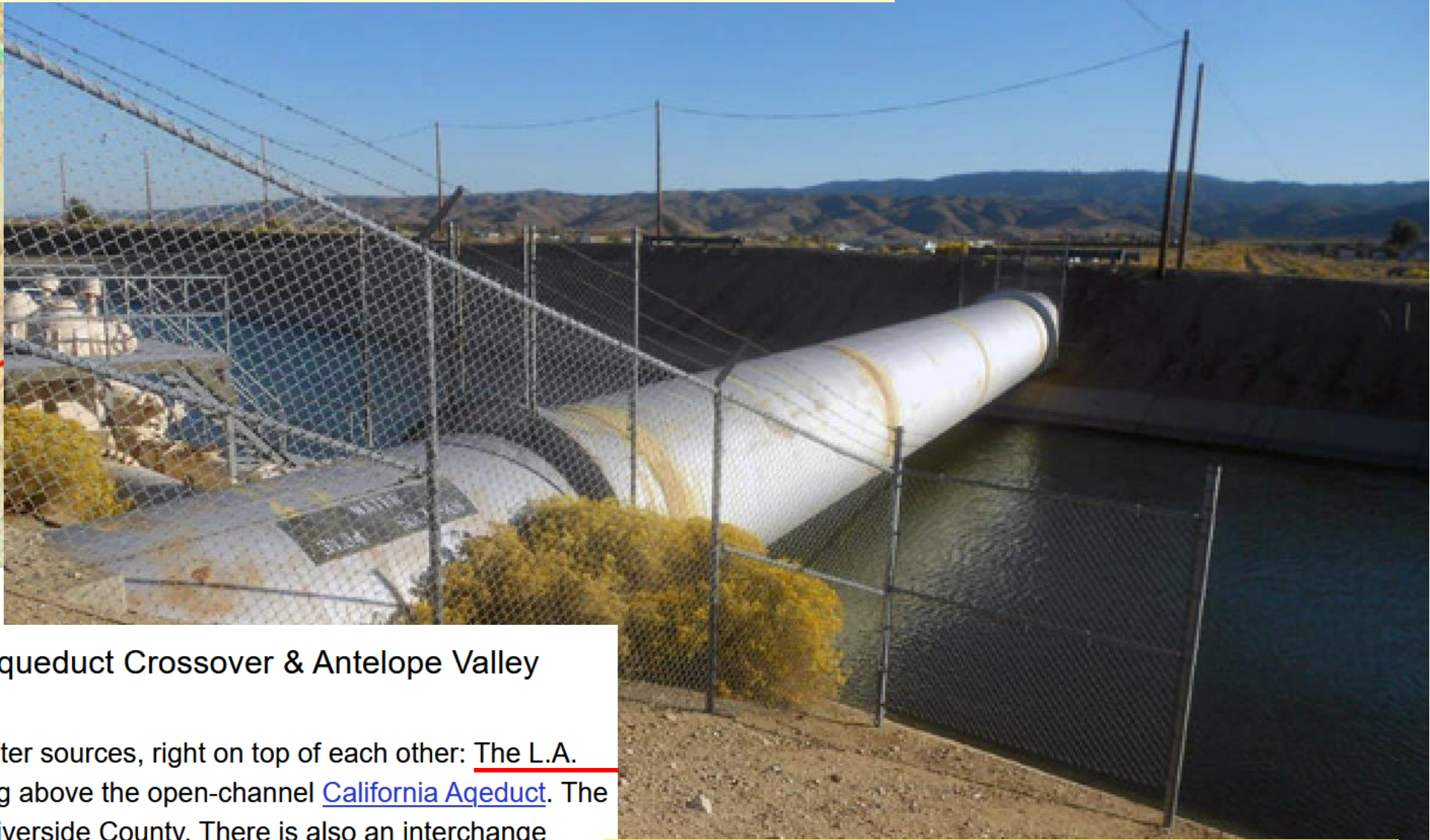


Mono Lake is a great navigation aid for Pilots and Radar Navigators:
A lake with an island in the middle.

We now switch to the Los Angeles Aqueduct.
It flows down the back side of the Sierra Nevada.

https://en.wikipedia.org/wiki/Los_Angeles_Aqueduct





8. California Aqueduct-LA Aqueduct Crossover & Antelope Valley "Siphon"

Here, you can view two of our water sources, right on top of each other: The L.A. Aqueduct encased in pipe running above the open-channel California Aqueduct. The latter ends up at Lake Perris in Riverside County. There is also an interchange mechanism to transfer water from one aqueduct to another in case of emergency. Looking toward the other direction is the four-mile Antelope Valley pipe, the longest continuous pressurized pipe section of the aqueduct. This is also the path of the Pacific Crest Trail.

Looking North, Los Angeles Aqueduct water is flowing south, towards us (and Los Angeles) over the California Aqueduct.

This video by Victor Davis Hansen tells a good story of this fire episode:

<https://www.foxnews.com/video/6367142814112>

Significant points by Victor Davis Hansen: Climate Change played no role.

LA Mayor Karen Bass cut the Fire budget by ~\$18M; had plans for further cuts

**There was no one in charge when the (Palisade, Eaton and Hurst) Fires broke out.
Mayor was in Ghana; Deputy Mayor was suspended (phony bomb threat);**

Public Service Dep't--troubled— a previous head was convicted and in prison for bribery.

Fire Chief was proudest of being female and gay, rather than demonstrated ability to fight fires and manage Dep't. Hired 70% new hires under DEI. Said her job started at the fire hydrant (but many, ~300) hydrants had no water.

120-Million Gallon <Santa Ynez> Reservoir had been idle for ~1 year because cover had been torn.

Gov Newsom came into office with \$7.5 Billion budget to build 3 new reservoirs; didn't build any.

California Water Project Aqueduct flow was tapped over the years for side users; less water for Los Angeles, while LA's population grew. Newsom let water out to Pacific to please environmentalists.

California Forests were not taken care of, cleaned of dead brush, for years. Down to 3 sawmills.

Here's how climate change fueled the Los Angeles fires

<https://www.npr.org/2025/01/29/nx-s1-5273676/la-fires-climate-change-rainfall-extreme-weather>

JANUARY 29, 2025 · 4:00 AM ET



Lauren Sommer

We saw this graphic before. Here it fits into the gross incompetence...



"The fact that we have a warmer or drier atmosphere today because of global warming very likely causes large fuels like dead logs and fence posts and other materials that you find in urban environments to be drier than they would be otherwise," says Park Williams, a hydroclimatologist at UCLA. "These fires are very likely more intense and dangerous in urban environments because of global warming."

Another analysis by World Weather Attribution found that the hot, dry conditions were about 35% more likely because of climate change, as measured by the Fire Weather Index, which looks at temperature, humidity and other weather factors.

Underlined in red, "the usual alarmist suspects." More on World Weather Attribution, then, Park Williams, speaker at NMSU's "Climate Education" series in 2019, follows, with my color-coded triangle markers.

I contend that NPR, Park Williams, and World Weather Attribution are Absolutely WRONG in their analyses.

The measured rainfall data from the downtown Los Angeles weather station at USC for both 2017, when the Thomas Fire raged in the area just north of Los Angeles, and for 2024-2025, show the same pattern.

This tell-tale pattern occurs when an El Nino event brings copious winter rain to the Southern California-Los Angeles area, followed by a La Nina, with little subsequent autumn rainfall.

Winter grasses and like vegetation flourish with the abundant rainfall.

The normal “summer dry” pattern or “Mediterranean climate type” dries out the previous luxuriant grass growth.

Onset of La Nina in fall brings LITTLE (or NO) AUTUMN RAINFALL.

Purple Triangle shows these slides

<https://casf.me/2024s-hurricanes-helene-milton/>

2024's Hurricanes Helene & Milton and claims their power was juiced by "Human-Caused Climate Change"

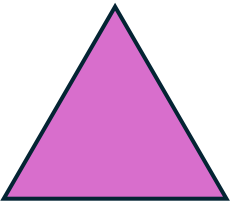


Bob Endlich

bendlich@msn.com

Cruces Atmospheric Science Forum

EDITED 13 NOV 2024



The “Weather Attribution” Industry, part of Climate Alarmists

Weather attribution industries I found in preparing; this list is not complete

Yale Climate
Connections



<https://casf.me/2024s-hurricanes-helene-milton/>

World Weather
Attribution



Climate Crisis 247

Climate Crisis 247

Climate Central



Reuters, NPR, USA
Today



When weather attribution is used while the weather story is in the news, it is called **Tactical Science**.

<https://rogerpielkejr.substack.com/p/weather-attribution-alchemy>

Weather Attribution Alchemy

A new THB series takes a close look at extreme weather event attribution, Part 1



ROGER PIELKE JR.

OCT 07, 2024

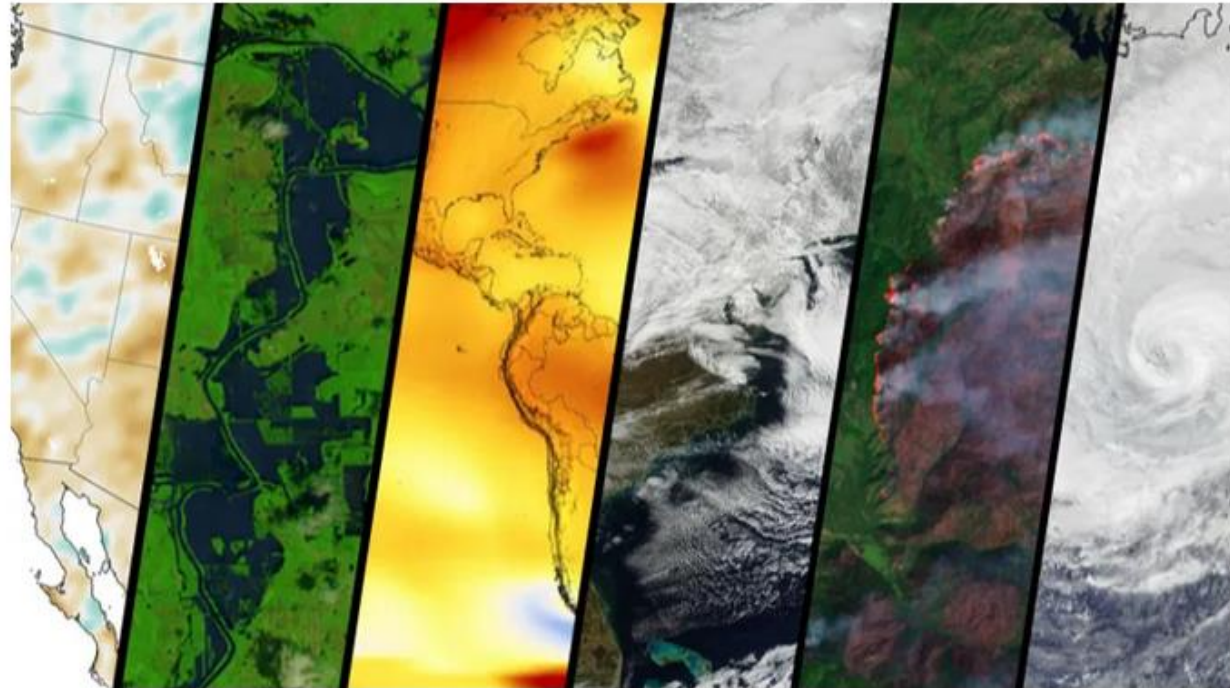
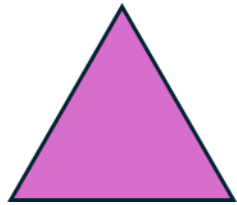


126



47

Share



About the thing that just happened (Source: [NASA](#))

The Honest Broker

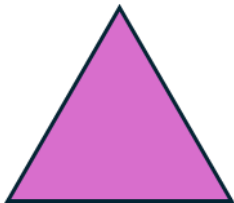
For instance, researchers behind the World Weather Attribution (WWA) initiative **explain** that one of their key motives in conducting such studies is, “increasing the ‘immediacy’ of climate change, thereby increasing support for mitigation.” WWA’s chief scientist, **Friederike Otto**, **explains**, “Unlike every other branch of climate science or science in general, event attribution was actually originally suggested with the courts in mind.” Another oft-quoted scientist who performs rapid attribution analyses, **Michael Wehner**, summarized their importance (emphasis in original) — “The most important message from this (and previous) analyses is that **“Dangerous climate change is here now!”**



This post <https://rogerpielkejr.substack.com/p/weather-attribution-alchemy> is thought-provoking and way too long to be analyzed today.



World
Weather
Attribution



We are supposed to be shocked, SHOCKED! by this report!

[Home](#)

[About](#) ▾

[Analyses](#) ▾

[News](#)

[Peer reviewed research](#) ▾



I contend, and the data show, that this claim is just NOT TRUE

[Home](#) > [Storms](#) > [Yet another hurricane wetter, windier and more destructive because of climate change](#)

Yet another hurricane wetter, windier and more destructive because of climate change

11 October, 2024

Extreme rainfall, Storms
North America

The event

Hurricane Milton began as a tropical depression in the Gulf of Mexico on Saturday 5th October. It very rapidly intensified to tropical storm status, before undergoing explosive intensification to a high category 5 between Sunday 6th and Monday 7th, as it moved southeast towards the Yucatan Peninsula (NOAA, 2024), where the central pressure fell to below 900 mbar (NHC, 2024). This was driven and sustained by the very high sea surface temperatures in the Gulf, which previous analysis has shown to have been made 100,000 times more likely by climate change (Climate
Calculator)

Guide for journalists

Reporting extreme weather and climate change: a guide for journalists – in a number of languages)

You may also be interested in...

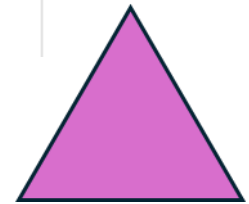
Climate change key driver of catastrophic impacts of Hurricane Helene that devastated both coastal and inland communities

Climate change and high exposure increased costs and disruption to lives and

van Oldenborgh, G.J et al. (2017) *Attribution of extreme rainfall from Hurricane Harvey, August 2017*. *Environmental Research Letters*, 12: 124009. doi: 10.1088/1748-9326/aa9ef2

Philip, S.Y (2022) *Rapid attribution analysis of the extraordinary heat wave on the Pacific coast of the US and Canada in June 2021*. *Earth System Dynamics*. doi: <https://doi.org/10.5194/esd-13-1689-2022>

We will get to these later. **I have written previously about these events.**



The Honest Broker

Weaponizing Peer Review

Tactical science in service of political ends



ROGER PIELKE JR.

OCT 03, 2024



156



55



Today, I focus on the use and abuse of the peer reviewed literature to produce *tactical science* which I define as:

Publications — often targeted for the peer reviewed literature — designed and constructed to serve extra-scientific ends, typically efforts to shape public opinion, influence politics, or serve legal action.

I first became aware of tactical science in 2008, when Princeton professor **Stephen Pacala** explained candidly that his famous 2004 “**stabilization wedges**” paper (with Robert Socolow) was actually written to serve political ends and to marginalize other researchers:

“The purpose of the stabilization wedges paper was narrow and simple – we wanted to stop the Bush administration from what we saw as a strategy to stall action on global warming by claiming that we lacked the technology to tackle it. The Secretary of Energy at the time used to give a speech saying that we needed a discovery as fundamental as the discovery of electricity by Faraday in the 19th century.

We also wanted to stop the group of scientists that were writing what I thought were grant proposals masquerading as energy assessments. There was **one famous paper published in Science** that went down the list [of available technologies] fighting them one by one but never asked “what if we put them all together?” It was an analysis whose purpose was to show we lacked the technology, with a call at the end for blue sky research.

Reading their own words, the Alarmists believe that humans can control the climate.. President Bush “**stalled action on global warming**”



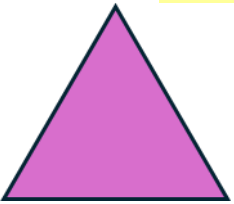
Since then, I've seen tactical science become increasingly prevalent in the climate science literature. Here are just a few examples of tactical science that is also bad science:

- **Howarth (2024, published just today)**. Funded by the **Park Foundation** — **opponents of natural gas** — and released as a pre-print apparently to support the Biden Administration's LNG pause. **Jonah Messinger explains** why this paper is riddled with errors.
- **Serofim et al (2024)**. Funded by EPA — and written by EPA, one of its government contractors, and others — the paper defends EPA's continued use of RCP8.5, which is **fundamental to the Biden Administration's "social cost of carbon."** Jessica Weinkle has a **must-read eye-opening post on this paper**. RCP8.5 is **indefensible**.
- **Schwalm et al. 2020**. From the Woodwell Climate Research Center, which is funded by McKinsey — a heavy user of RCP8.5, the paper also justifies the continued prioritization of RCP8.5. The **paper relies on fanciful assumptions** of massive increases in land use carbon dioxide emissions completely at odds with observations and the IPCC.

None of the three papers above disclosed the interests of funders in the published results of the analyses. If you click through the links above you will find detailed critiques of each paper.¹ At the same time, each paper is heavily cited in other research and in political settings because each is tactically useful.

An allied group, the Main Stream Media.

Here's an example from CNN.





Charlie Chester, CNN Technical Director

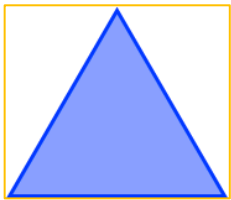
Yeah. Fear sells.

Park Williams was invited to present at the NMSU Climate Education series sponsored by the Office of then-Senator Tom Udall.

Bernie McCune, Fran Lavery and I attended, IIRC.

Following are some slides I put together just after Park Williams spoke in Las Cruces, 3 Apr 2019.

These slides are indicated by the Blue Triangle.



NMSU climate change lecture to focus on wildfires

From Staff Reports, Las Cruces Sun-News

Published 5:47 p.m. ET April 1, 2019

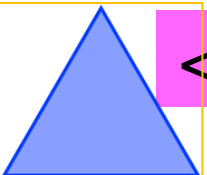


A. Park Williams, a climatologist at the Columbia University Lamont-Doherty Earth Observatory, will be conducting the eighth and final talk in climate change series. (Photo: Provided by NMSU)

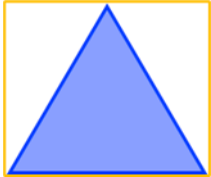
LAS CRUCES - The eighth and final talk for the New Mexico State University Climate Change Education Seminar Series will explore the recent pattern of wildfires blazing through the western half of the country.

Renowned fire expert and hydroclimatologist A. Park Williams will present "Climate Change, Wildfire and Megadrought in Western North America," at 7 p.m. Wednesday, April 3 at the Rio Grande Theatre in downtown Las Cruces. Williams, who works out of the Columbia University Lamont-Doherty Earth Observatory, will explore climate change's influence on the 21st century droughts in the Southwest and the intense fires that followed as a result.

<In 2019> Park Williams said that this La Nina was the second driest one on record.



Notes on “second driest La Nina” claimed by Park Williams on 3 April 2019

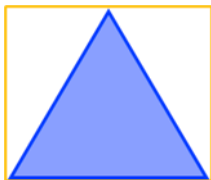


Bob Endlich

bendlich@msn.com

2 May 2019

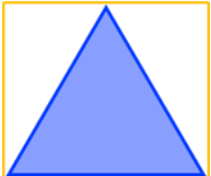
Stories from 2019



PELOSI: BARR COMMITTED CRIME
'HE LIED TO CONGRESS'

DRUDGE REPORT

GLOBAL WARMING: Sierra Final Snowpack Measured
at 188% of Average...



REPLAY: KTLA 5 NEWS AT 6

KTLA 5 TV SCHEDULE

WATCH CW SHOWS



NEWS

MORNING NEWS

VIDEO

PODCASTS

FOOD

CONTESTS

TRAFFIC

EVENTS

ABOUT

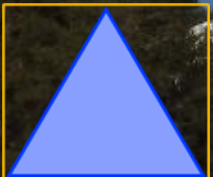
Sierra Snowpack Is Measured at 188% of Average in Final Survey of the Year

POSTED 3:12 PM, MAY 2, 2019, BY ASSOCIATED PRESS, UPDATED AT 06:06PM, MAY 2, 2019

California cities and farms can expect ample water supplies this summer after winter storms blanketed the Sierra Nevada, nearly doubling the snowpack average for this time of year, state water officials said Thursday.

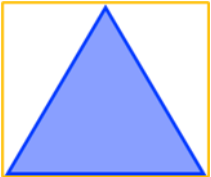
The fifth and final survey of the season at Phillips Station recorded 47 inches of snow depth and a snow water equivalent of 27.5 inches, the Department of Water Resources said. That's 188% of average for the location near Lake Tahoe.

Just four years ago, then-Gov. Jerry Brown found a field at Phillips Station barren of any measurable snow amid an historic drought.



<https://www.mercurynews.com/2017/06/29/california-in-july-its-time-to-hit-the-slopes/>

In April 2019 Park Williams told us that
The recent drought was the second
Driest on record or some such



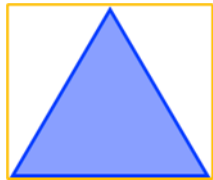
Summer skiing in California: Squaw Valley open until July 7

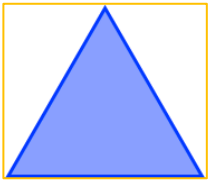
Swimsuit! Sunscreen! Skis! Snowy February extends ski season



Santa Clara University student Miranda Dunne, 20, skis down the slopes of the "Gold Coast Face" run at Squaw Valley in Lake Tahoe, California on Sunday, June 25, 2017. Thanks to abundant winter snow, Squaw Valley's management announced the ski resort's upper ski runs will remain open past July 4 indefinitely for the first time in the history of the ski resort. (Josie Lepe/Bay Area News Group)

Story from 2017





It's not just Oroville: Record rain is straining California's whole flood control network



What can be seen is the result of the massive collapse (pictured) when 100,000 cubic feet of water per second was rushing down the spillway

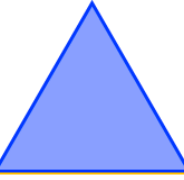
The frantic effort over the last few days to lower water levels at Oroville Dam after the structure's two spillways became damaged is part of a larger drama playing out as California rapidly shifts from extreme drought to intense deluges.

Large swaths of the region are on track to experience their wettest winter on record, with many areas having already surpassed their average precipitation for an entire year.

And all that water is putting new strains on the network of dams, rivers, levees and other waterways that are essential to preventing massive flooding during wet years like this one.

Be prepared: Monster storm could be biggest of season for L.A. area

Feb 16, 2017 | 7:45 AM



It's not just Oroville: Record rain is straining California's whole flood control network



A bird's eye view taken on Monday shows the massive pile of grey rubble that has settled at the bottom of the spillway. Because of the damage, the water flow is not fast enough to clear any of the rubble when it reaches the bottom

The biggest danger zone lies in the Central Valley at the base of the Sierra Nevada, whose tall peaks can wring the skies of huge amounts of rain and snow. The area is essentially one giant floodplain that would be easily transformed into an inland sea without man-made flood control. At 400 miles long and 40 miles wide, it has only a tiny bottleneck from which to drain — a one-mile opening at the Carquinez Strait at San Pablo Bay — before water heads into the San Francisco Bay.

The key to fire destruction can be seen when El Nino-fed winter rain and snow change over to La Nina-dominated drying. The change usually leads to fire catastrophe.

Image below shows the destruction on 2 Feb 2017 when melting snow runoff tore up the Oroville Dam.



Yet, by December 2017, the lack of fall rainfall dried out California so much that the Santa Ana Wind-driven Thomas Fire devastated southern California.

**In the news today...the Thomas Fire...
California's Santa Ana Winds and
Autumn's Wildfires**



Bob Endlich

bendlich@msn.com

Cruces Atmospheric Sciences Forum

16 December 2017

Here's how climate change fueled the Los Angeles fires

<https://www.npr.org/2025/01/29/nx-s1-5273676/la-fires-climate-change-rainfall-extreme-weather>

JANUARY 29, 2025 · 4:00 AM ET



Lauren Sommer

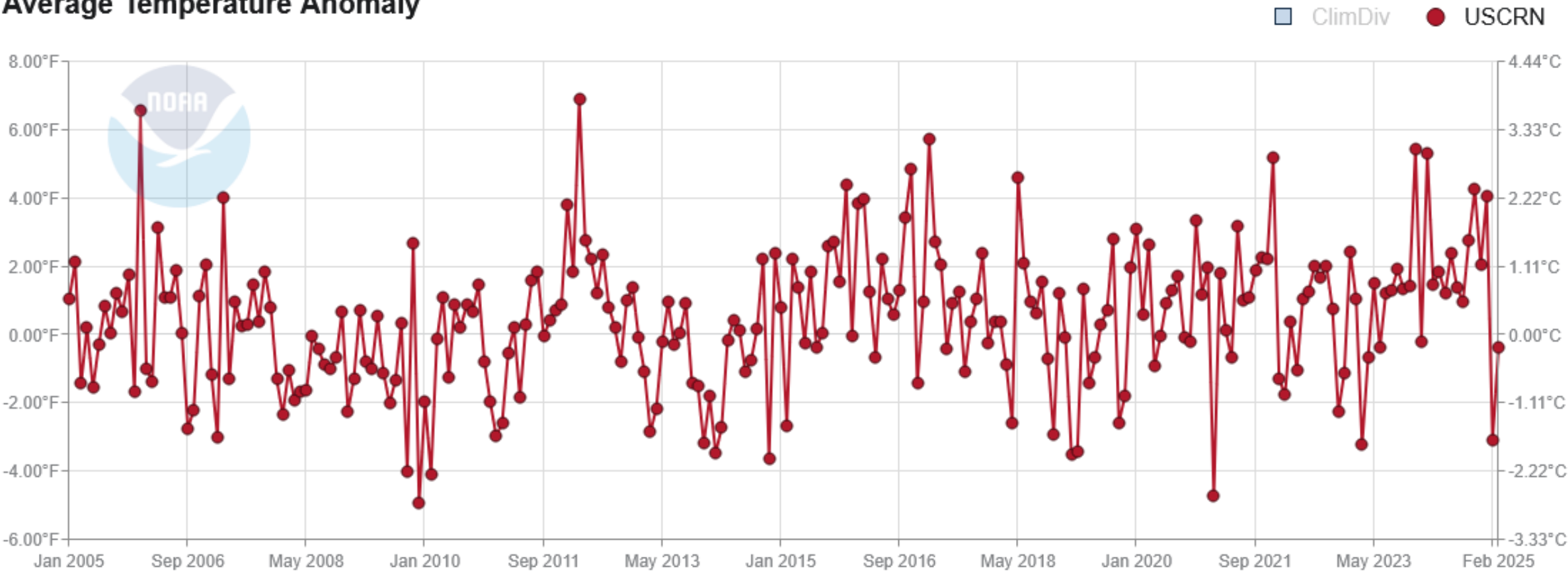
We saw this graphic twice before. Here it fits into measurements



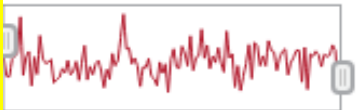
So,

HOW MUCH CLIMATE CHANGE?

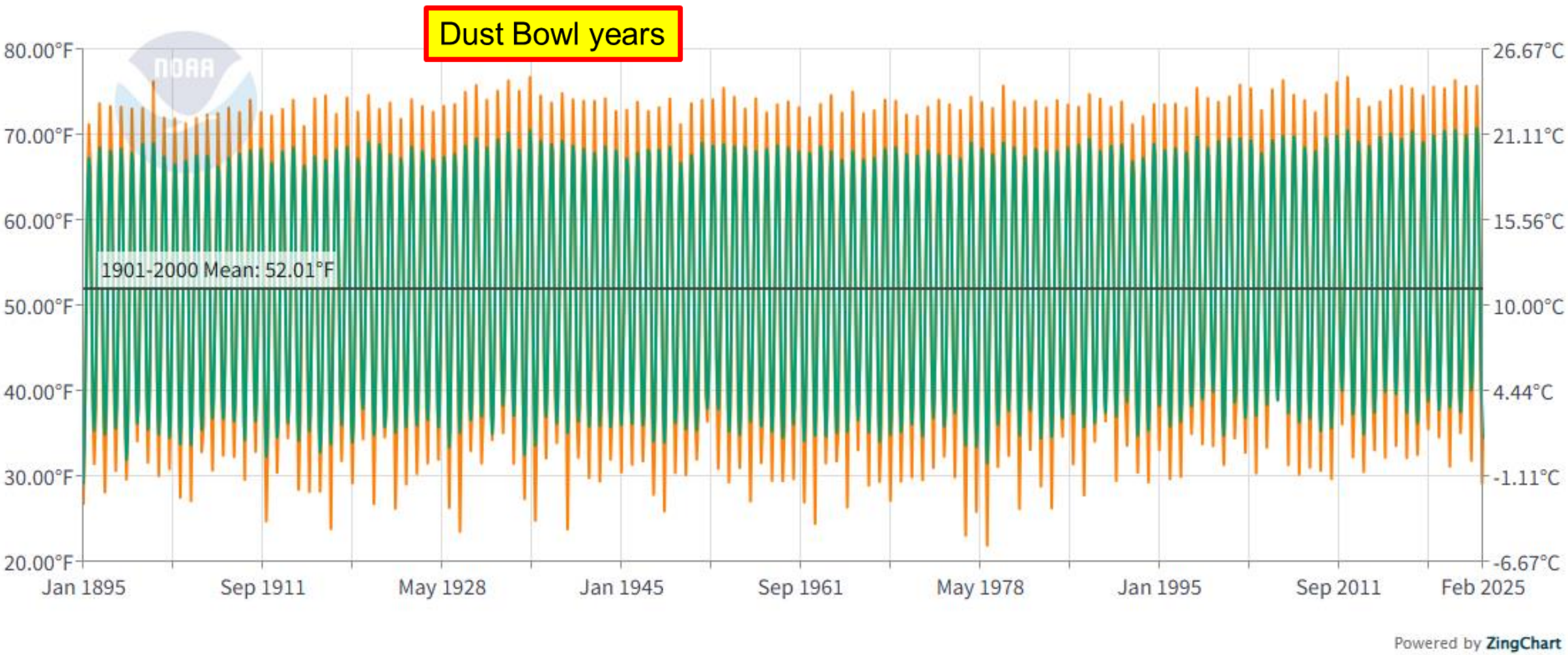
Average Temperature Anomaly



Data from the US Climate Reference Network, USCRN, does not show much in the way of human-caused, CO2-Fueled Global Warming or any warming at all, for the Continental United States.



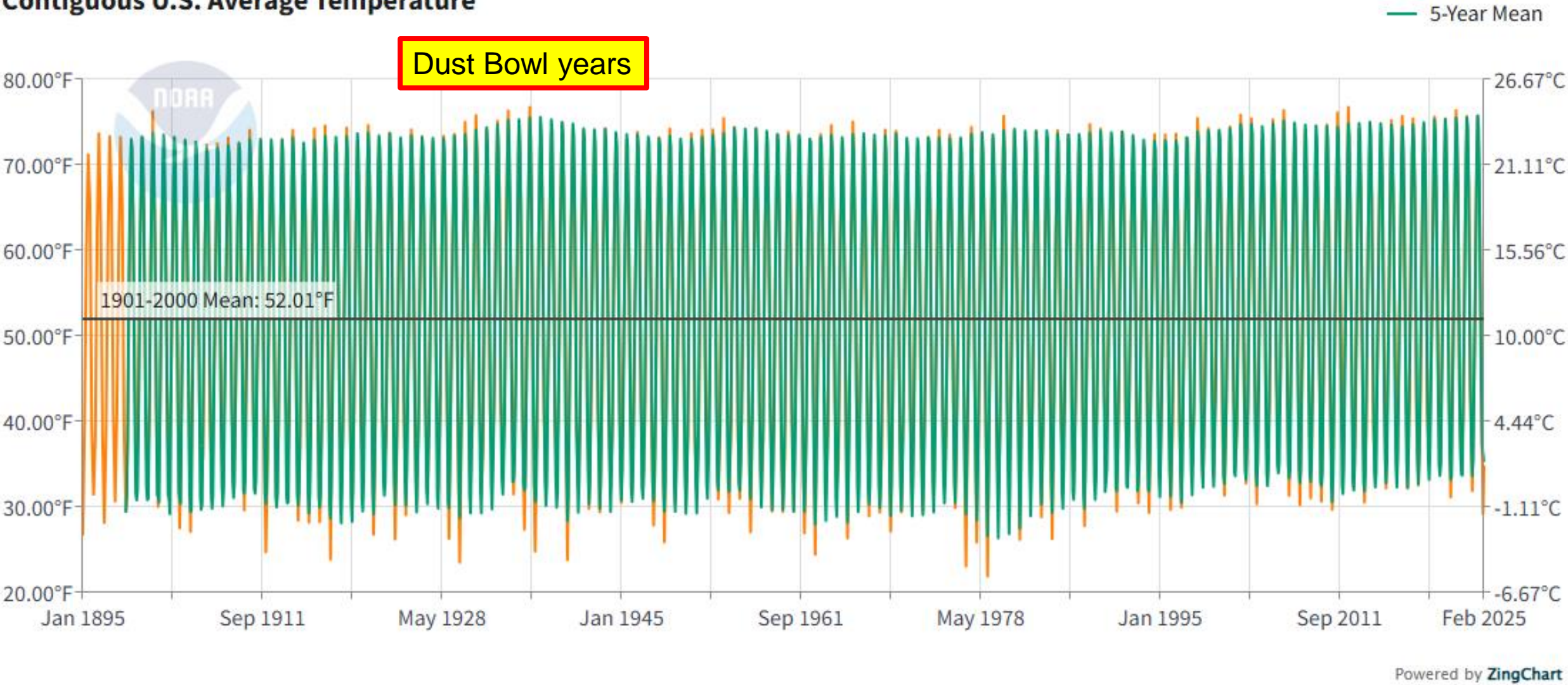
Contiguous U.S. Average Temperature



Data from NOAA's Climate-at-a-Glance site does not show much in the way of human-caused, CO2-Fueled Global Warming or any warming at all, for the Continental United States.

https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/national/time-series/110/tavg/1/0/1895-2025?base_prd=true&begbaseyear=1901&endbaseyear=2000&filter=true&filterType=running-mean

Contiguous U.S. Average Temperature



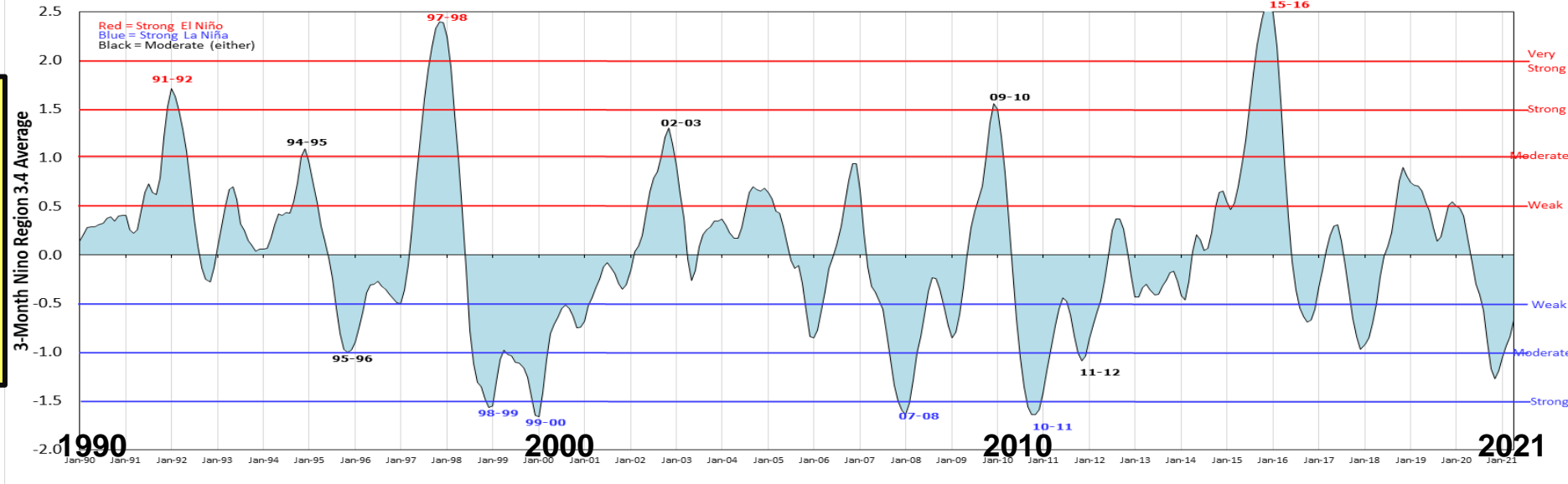
Data from NOAA's Climate-at-a-Glance site does not show much in the way of human-caused, CO2-Fueled Global Warming or any warming at all, for the Continental United States.



Nino 3.4 Temperatures, Ocean SST

Oceanic Niño Index (ONI) - 1990-present

https://origin.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ONI_v5.php

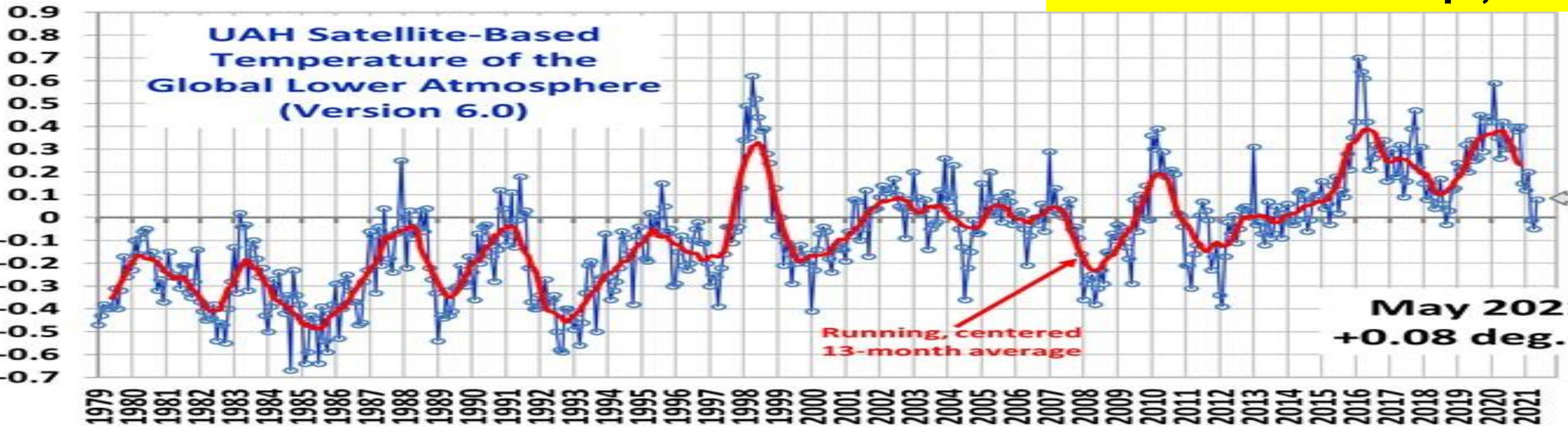


Over this period, 1990-2021,

ONI Temps changed $>4.5^{\circ}\text{C}$
several times.

Global TLT changed $<0.4^{\circ}\text{C}$

Global Greenhouse Temps, TLT



<https://www.youtube.com/watch?v=DtWk5AxTioY>

This Wall Street Journal Video, under 10 minutes long, is a pretty good post-fire analysis.

Los Angeles had all 106 Fire Stations at the ready on 7 Jan 2025

His description of the force and first-hand descriptions of the effects of the winds are memorable.



Fire Captain Breaks Down Los Angeles Wildfire Disaster | WSJ
insight

Fire Captain Erik Scott provides details that were not available in other sources I viewed.

**In 2025, LOS ANGELES DID NOT FORWARD DEPLOY FIRE
FIGHTERS ON WEATHER WARNINGS NWS PROVIDED.**

THERE WAS PRECEDENCE FOR SUCH, IN 1961's BEL AIR FIRE

THIS video is from the Bel Air fire of 1961 (!) <https://youtu.be/UxnC1WW95XE>

The link to this video was published
by Tony Heller in his blog
[https://realclimatescience.com
/#gsc.tab=0](https://realclimatescience.com/#gsc.tab=0)



**LAFD: "Design For Disaster" - The Story of the Bel Air
Conflagration | 1962**

<https://youtu.be/UxnC1WW95XE>
(5:50)



Vehicles from the 30s, 40s, and 50s show us these fire lessons are over 60 years old.

Video from the Bel Air fire of 6 Nov 1961 (!) <https://youtu.be/UxnC1WW95XE>

“The Dry Chaparral of Los Angeles is the fastest burning ground cover in the Western Hemisphere.”
(1:40)

At 0803, “Condition of High Hazard,” Standby Companies of Fire Trucks and Crews are forward deployed (2:22)

At 0815, First Fire report on 3600 Block of Stone Canyon Road, Division Fire Chief responds immediately (2:47)

First Responders stop Bel Air Fire on north, south and east sides, but fire explodes downwind, towards the south (3:23)

Chief Engineer William Miller arrives to take command at the Fire Operations Desk. Miller orders all units available to fight the fire. (4:44)

All Off-Duty Firemen called to duty (5:30) Hit and Run Firefighting (6:20) Sundown, winds increase, Firefighters lose what control they might have had (7:40)

LA County units supplement LA City Fire units. (8:05)

Hit-and-Run Firefighting

<https://youtu.be/UxnC1WW95XE>
(6:20)



Part 2: Video from the Bel Air fire of 6 Nov 1961 (!) <https://youtu.be/UxnC1WW95XE>

Out of control fire leaps from wood roof to wood roof (11:38)

Second Major Fire in Santa Ynez Canyon (13:15)

Third Fire in Benedict Canyon (13:45) Fires create their own weather.

In Brentwood, downdraft of firebrands starts scores (60-70) of fires, simultaneously. (14:00)

Fourth Fire Emergency fire jumps huge man-made firebreak, the San Diego Freeway. (14:45)

Sundown, 6 Dec 1961, the Northerly Santa Ana Winds diminish. (15:50)

Suddenly the winds shift, becoming very strong from the East, and the fire blasts its way to Mandeville Canyon. (16:50)

Finally, the fires are contained (17:50) 6090 Acres were incinerated. No one died.

Two years previously, in **1959 The National Fire Protection Association visited Los Angeles:**
Shake roofs, closely-spaced houses, brush-covered canyons, serviced by narrow roads...

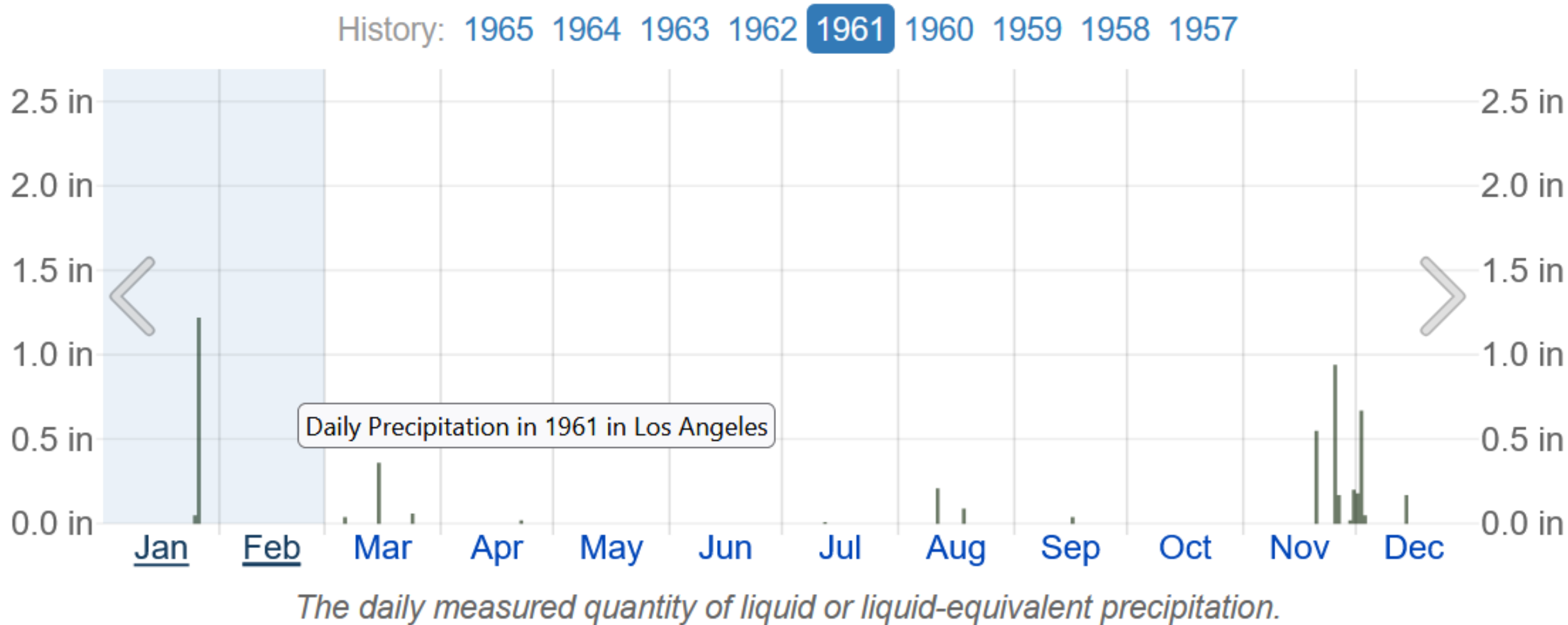
They called this part of Los Angeles a “Design for Disaster.”

CONCLUDING REMARKS

1961, the year when the Bel Air fire occurred, on 6 Dec 1961.

Daily Precipitation in 1961 in Los Angeles

<https://weatherspark.com/h/y/1705/1961/Historical-Weather-during-1961-in-Los-Angeles-California-United-States#Figures-Rainfall>



There are fire lessons going back before 1961. Beginning in 1958, there were three years of below average rainfall, next chart.

**The Bel Air Fire was 6-7 Nov 1961. Pre-1961 rainfall deficits were: 6.39" (58-59) 2.83" (59-60) and 7.51 (60-61)
On 6 Dec 1961 the Los Angeles Fire Department Forward Deployed engines preparing for the fire danger.
In 2025 the Fire Department did NOT Forward Deploy engines, equipment, to areas of great danger.**

1965-1966	12.62	+0.63
1964-1965	10.27	-1.72
1963-1964	7.51	-4.48
1962-1963	9.29	-2.70
1961-1962	18.22	+6.23
1960-1961	4.48	-7.51
1959-1960	9.16	-2.83
1958-1959	5.60	-6.39
1957-1958	18.91	+6.92
1956-1957	8.93	-3.06

A Sequence of Events and suggested fixes....

By 2017's Thomas Fire, there had been at least three extensive fire episodes in California which showed the pattern of El Nino, then changeover to La Nina:

Wet winter, lush vegetation, but no Fall onset of the winter rainy season: 1991, 2007, and 2017.

In Jan 2025, Los Angeles National Weather Service Office forecast the Specific Onset of extreme fire danger with this progression of products:

2 Jan 25 Fire Weather Statement

3 Jan 25 Fire Weather WATCH

4 Jan 25 Fire Weather WARNING

5 Jan 25 RED FLAG Fire Weather WARNING

6 Jan 25 EXTREME FIRE RISK Statement

The **Palisades Fire** started 1030 on **7 Jan 2025**, the **Eaton Fire** Started at 1830 on 7 Jan 2025, and the **Hurst Fire** began at 2230 on 7 Jan 2025

Despite a history of extensive, even catastrophic previous fire events in Coastal California, no one appears to have presented the fire danger to Mayor Karen Bass... Nor had she requested this..

Elected and appointed leadership had no “fingers on the pulse” on either the insufficiency of the water supply to significant residential areas of Los Angeles, or the number of fire fighting vehicles dead-lined for maintenance.

Indeed, there appears to be a practice of using the Fire Department's budget as a "piggy bank," convenient to use these funds for non-fire non-emergency purposes.

There appears to have been no City Staff Organization to present the City's Operational Capability to respond to emergency conditions. Nor is one in the making....

BRIEF SIDEBAR

- The US Army has a subject area that teaches middle-grade officers, typically Majors: "Military Decision-Making Process," MDMP for short, to present leaders with problems and solutions for decision making. These lessons are usually put into Army Field Manuals, so the lessons become doctrine.
- The US Army also has an organization, Center for Army Lessons Learned, CALL, to institutionalize lessons to insure there is no repeat of serious blunders.

END SIDEBAR

Los Angeles seems to have no organized leadership methodology to incorporate lessons learned from previous Los Angeles Area fire disasters.

Los Angeles did not learn the lesson of 6 Dec 1961, to Forward Deploy resources in the face of dire fire weather forecasts, despite, the early Jan 2025 National Weather Service repeated dire warnings.

My Opinion, seems to reek of Criminal Negligence, but my guess is no one will take or be assigned the blame for this woeful lack of preparedness, and, as of now, to take action to insure this does not recur.

Other thoughts...

The Military has a way to ensure that someone is in charge, to take command, to direct Operations.

Line Officers are ordered by Rank and Date of Rank, so there always will be someone in charge, available to make decisions. The principles of Rank, Precedence and Command are instilled in Basic Training...because... it is basic to the military's mission.

During Market Garden, when the British Paratroops were on the North (East) side of the Rhine, the British effort fell apart in part because two British Colonels could not agree who had command. Many died. Market Garden failed miserably.

The Army Organization with which I served was VII Corps, during the Cold War, 1979-1982.
<Later they were the Army Corps deployed to Saudi Arabia and were part of Desert Storm in 1991.>

Many military organizations tasked with continuous operations, typically commanded by a Colonel or Navy Captain, have a Vice Commander or Executive Officer, who takes over when the Commander is temporarily absent.

These principles are extant in the military, as are the Operations Briefing, when troops are in the field.

While the City Council is not a military organization, there appears to have been no similar organizing and operating principles in Los Angeles. There was no one in charge when this Fire Catastrophe occurred.

Concluding Comments

In my career, with many years as an Operational Meteorologist, I'm drawn to the Back Story, one of managerial and technical ignorance, and operational ineptitude of Los Angeles' Mayor, Karen Bass.

It is not difficult to put into words the seemingly in-plain-sight management failures within the leadership of the City of Los Angeles that led to this catastrophe:

- Many firetrucks were dead-lined for maintenance.
- Large portions of the Water Supply were nearly empty because a cover to prevent bird poop from landing in Santa Ynez Reservoir was torn, not repaired.

Concluding Comments Pg 2

- No one in the Water Department told the Fire Department that the Water Supply was low, and the water supply could not provide the water needed to fight a large fire
- The Mayor had not organized her staff to tell her of these management deficiencies.
- Evidently there was no daily or several times weekly Ops Briefing to tell her of City capabilities for emergency response to catastrophic events such as wildfire.
- The Deputy Mayor was suspended; there was no one in charge when Mayor Bass left for Ghana.

How does Los
Angeles get well from
this calamity?

Here is how it starts...

This video, “How California's First Wildfire Cleanup Works” is 24 Minutes long.

There is an ordered sequence of events in cleanup. Lessons learned in earlier fires, Camp Fire, Woolsey Fire, others, are applied.

Heavy equipment is brought to each site, property. Starts with burned schools; house lots are cleaned, one at a time.

How California's First Wildfire Cleanup Works

Water Buffalos bring lots of water to the site

Water is pumped onto the ash residue so that the ash does not spread while scooping, digging and dumping operations are on-going.

There are even machines which grab, cut, and dump trees or tree segments into the dump boxes



Cleanup, first step towards reconstruction. <https://www.youtube.com/watch?v=2k2xoQt2Gm0>



40,000 Acres

15,000 Structures

29 Fatalities

