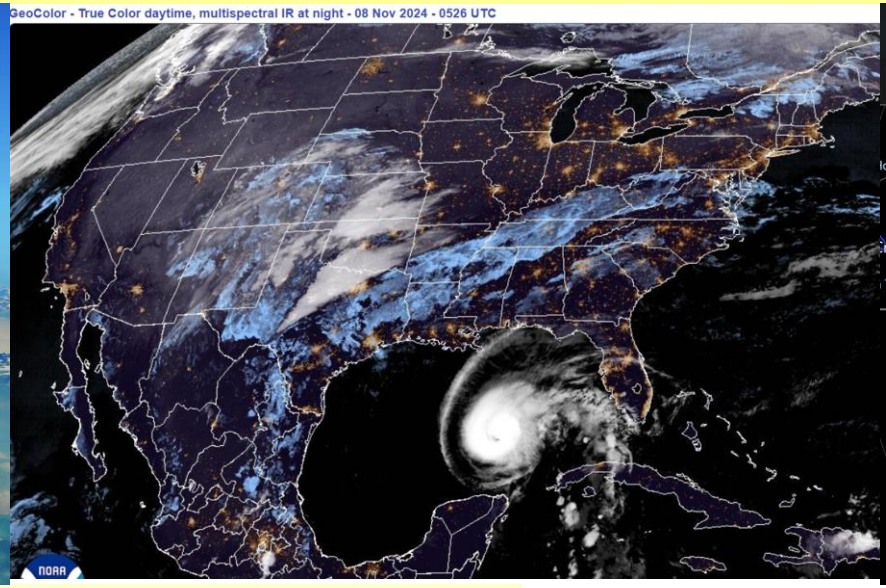
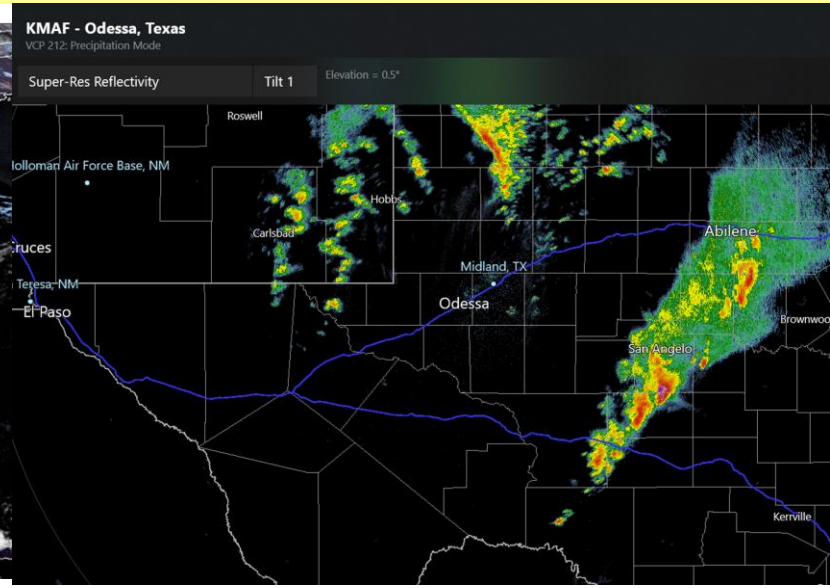
The Delingpole Conversion: Skeptic, but…now…he's an Alarmist? …over Contrails?





Bob Endlich

bendlich@msn.com

Cruces Atmospheric Sciences Forum

16 Nov 2024

I will be joined by these members:

Bernie McCune

Dave Tofsted: Jet non-water emissions

Bill Gutman: Loops

The column that brings today's topic:

Valencia: Man Made Climate Change is REAL

Or: Why I No Longer Talk to Climate Sceptics, by James Delingpole

https://delingpole.substack.com/p/valencia-man-made-climate-change excerpt below:

Below pertains to Delingpole's previous book **Watermelons**

But there was one key detail I got wrong which I now intend to correct. **In the original version, I claimed that man-made climate change wasn't real. Of course it is, though. Look at Valencia…**

Or, indeed, look at North Carolina after Hurricane Helene. Or Florida after Hurricane Milton. Or, come to that, look out of your window right now, if it's daylight, and admire all those white lines criss-crossing your skies and marvel at the gobsmacking fact that even now, even after all this evidence so blatant they might have got one of those skywriting aeroplanes to scrawl in rainbow smoke **"This is what chemtrails look like, you morons!"**, most people in the world still think this is normal.

INTRODUCTION to **The Delingpole Conversion**

First, we go over two previous presentations, Edited for this presentation. They are:

EDITED “Comments on the GeoEngineering Watch video, ‘The Dimming,’ ” originally from 2022

EDITED “2024’s Hurricanes Helene & Milton and claims their power was juiced by “Human-Caused Climate Change”

New Today…
My analysis of flooding rains around Valencia, Spain, ~31 October 2024 is that these floods resulted from a deep cyclonic storm, a **Cut-Off Low** (pressure system), which formed. It is a synoptic weather type for this region that has repeated itself over the years and centuries.

I will show that James Delingpole’s newfound belief that common aircraft contrails are a secret conspiracy to dim the sun and control earth’s weather as a nefarious methodology to control Earth’s Populations **is without merit**.

The hypothesis that chemicals are accumulating in the sky to dim the sun’s energy received at the surface **is not borne out by measurements**.

EDITED Comments on

GeoEngineering Watch's video, "The Dimming"

Bob Endlich

bendlich@msn.com

Cruces Atmospheric Sciences Forum

15 Oct 2022, Edited 15 NOV 2024

Outline

We'll watch the first minutes of "The Dimming."

As we get into the video, we find egregious errors. We illustrate the basics of contrail formation and contrail forecasting used by military forecasters.

- Introductory graphics from the video "The Dimming."
- My Cold War experiences as a SAC B-52 Forecaster, providing weather support to Crew Training Missions, SAC Ground Alert & Airborne Alert Missions, and Information Security, protection of Classified Defense Information.
- The Skew-T, Log-P diagram for plotting upper atmosphere variables.
- AWS Tech Reports and the Appleman Curves for Contrail Forecasting
- Dust, frequently clay minerals, transported vertically and horizontally, frequently trans-continentally.
- Mountain Wave Clouds frequently indicate vertical motions in stable atmospheres when lifting brings the air to saturation.
- At times, mountain wave clouds and contrails co-exist: the dead give-away that Contrail appearance and disappearances are linked to vertical motions in the atmosphere giving GeoEngineering Watch the Wrong Answers.

Geoengineering

Geoengineering is the artificial modification of Earths climate systems through two primary ideologies, Solar Radiation Management (SRM) and Carbon Dioxide Removal (CDR)

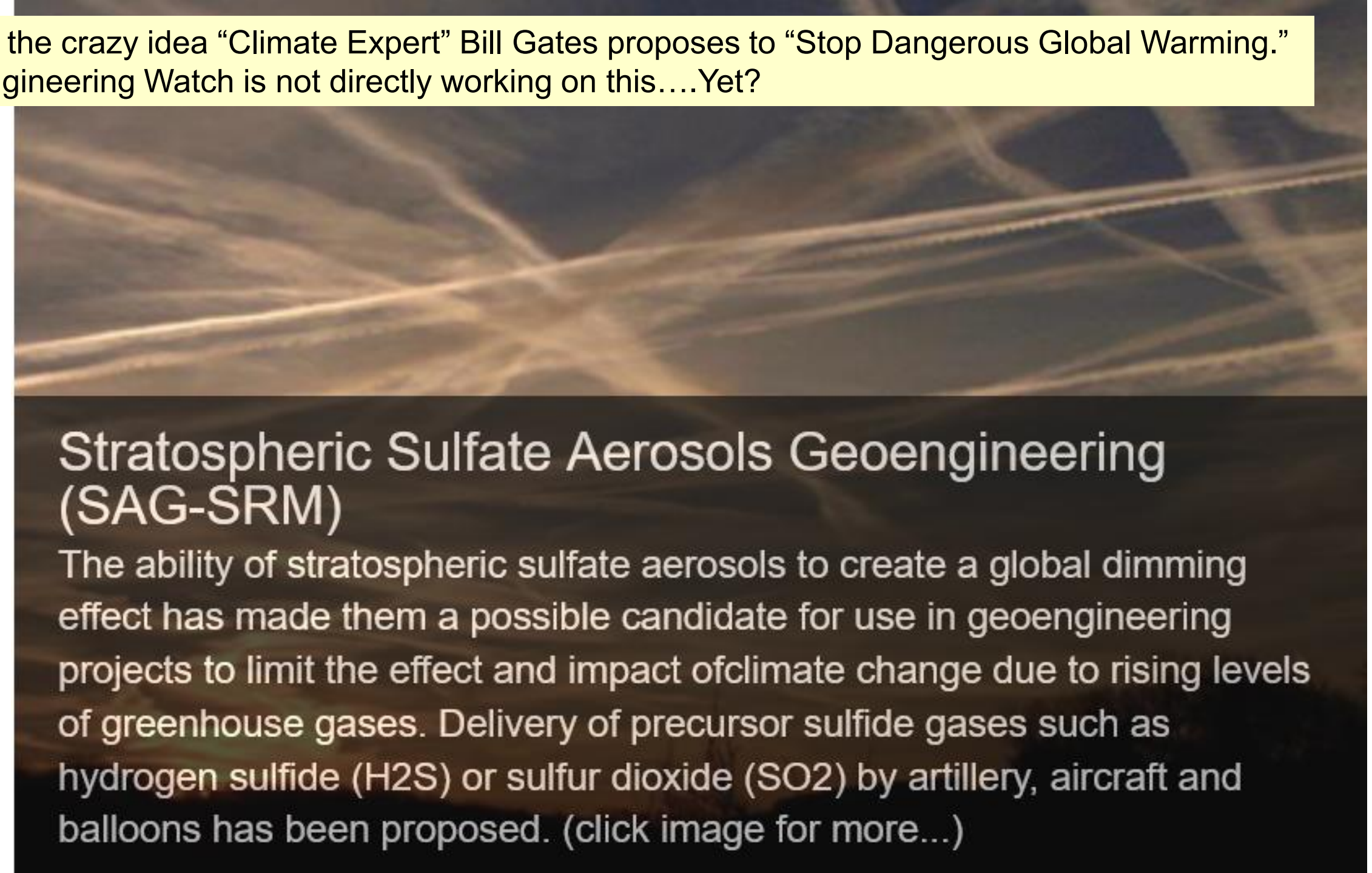
Chemtrailing

Chemtrailing is the publics term for the CLASSIFIED ONGOING artificial modification of Earths climate systems using reflective nano-materials (aerosols) to reflect sunlight. The aerosols are dispersed via jet aircraft trails that expand into reflective artificial clouds.

Solar Radiation Management (SRM)

Solar Radiation Management (SRM), controlling sunlight before it reaches the planet.

This is the crazy idea “Climate Expert” Bill Gates proposes to “Stop Dangerous Global Warming.” Geoengineering Watch is not directly working on this….Yet?



https://www.geoengineeringwatch.org/the-dimming-full-length-climate-engineering-documentary/

Experience: Duty Forecaster and Chief Forecaster: Glasgow AFB, Montana, 3 yrs

Additional Duty: Unit Security Officer.

13th Fighter Interceptor Sq

Alert Tankers, other birds, here

Alert Bombers in the “Christmas Tree”

91st Bombardment Wing (H) (SAC)

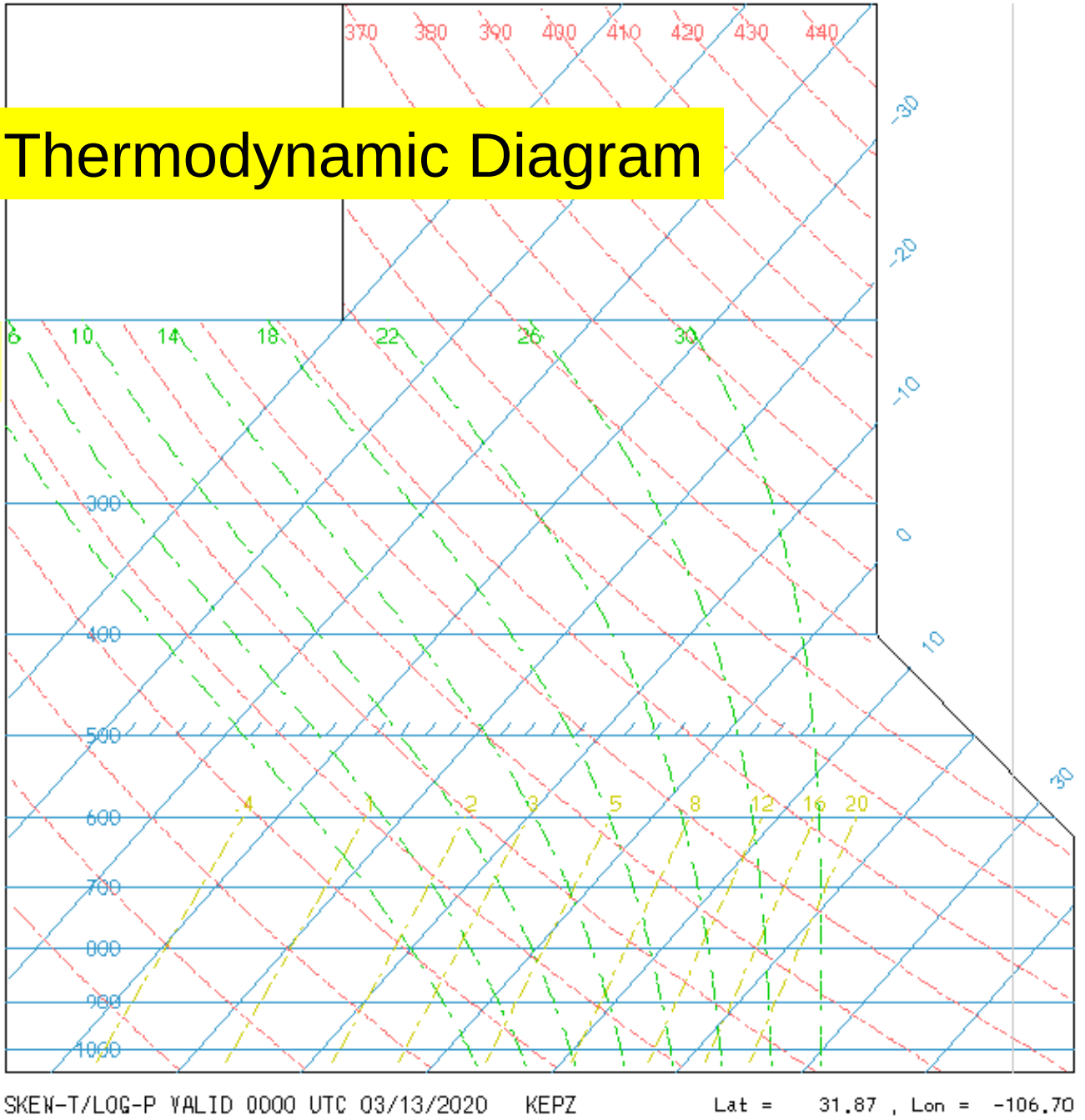
SAC B-52 bombers on Ground Alert. In the 1960s, we provided alert crews paper Alert Flimsies, weather planning & execution forecasts from Glasgow AFB to their Emergency War Order targets, and their recovery bases. We provided explicit winds aloft and contrail forecasts in these Alert Packages which went to the Alert Force twice every day.

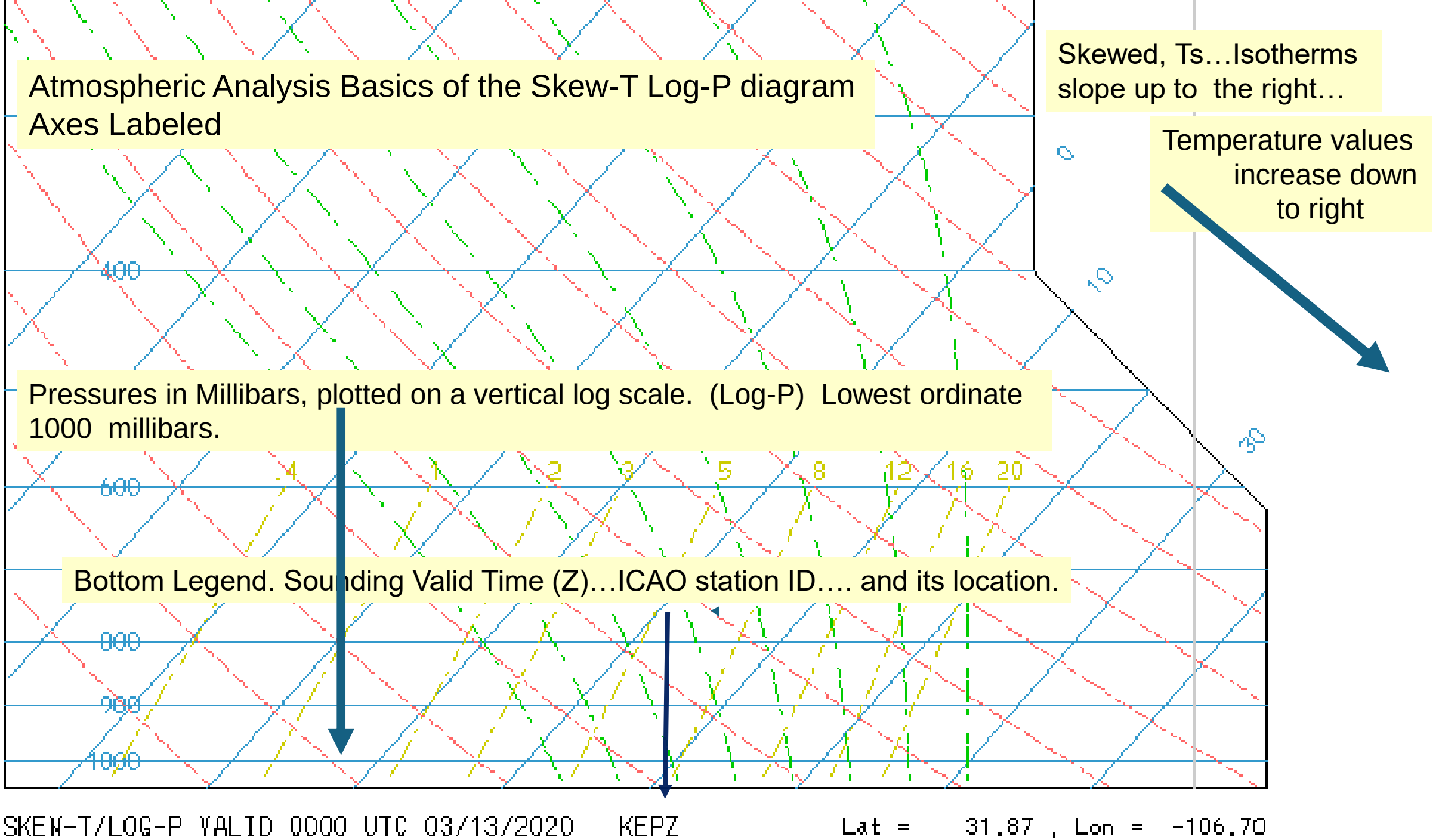
SAC B-52 bomber and Airborne Alert

SAC scheduled us for six-week periods, two B-52s <with nuclear weapons on board, crews fully briefed on routes to and details of, their specific targets> to fly Chrome Dome Missions, 24-hour missions, forty-five days in a row. There were two refuelings on these missions, one off Labrador, the other over Alaska.

Basics of the Skew-T, Log P Thermodynamic Diagram

"Graph Paper for Meteorologists"

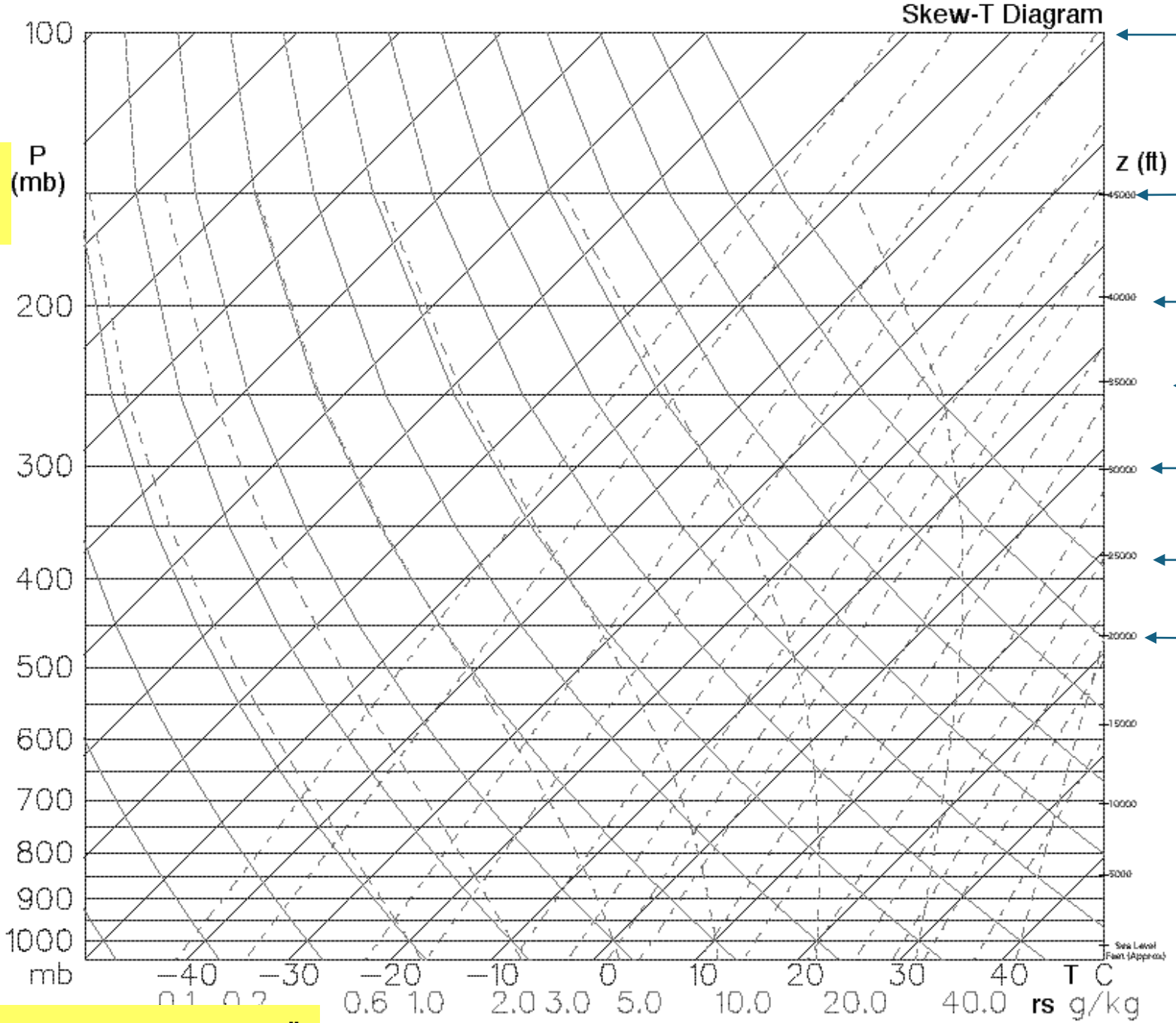



Atmospheric Analysis Basics of the Skew-T Log-P diagram
Axes Labeled
Skewed, Ts…Isotherms slope up to the right…
Temperature values increase down to right
Pressures in Millibars, plotted on a vertical log scale. (Log-P) Lowest ordinate 1000 millibars.
Bottom Legend. Sounding Valid Time (Z)…ICAO station ID…. and its location.
400
600
000
900
1000
-4
1
2
3
5
8
12
16
20
0
10
30
SKEW-T/LOG-P VALID 0000 UTC 03/13/2020 KEPZ
Lat = 31.87 , Lon = -106.70

B-52 Service Ceiling when very light

KC-135 Service Ceiling when very light

Y-Axis Pressure, mb, Log Scale, “Log-P”



53,000 Ft

45,000 Ft

40,000 Ft

35,000 Ft

30,000 Ft

25,000 Ft

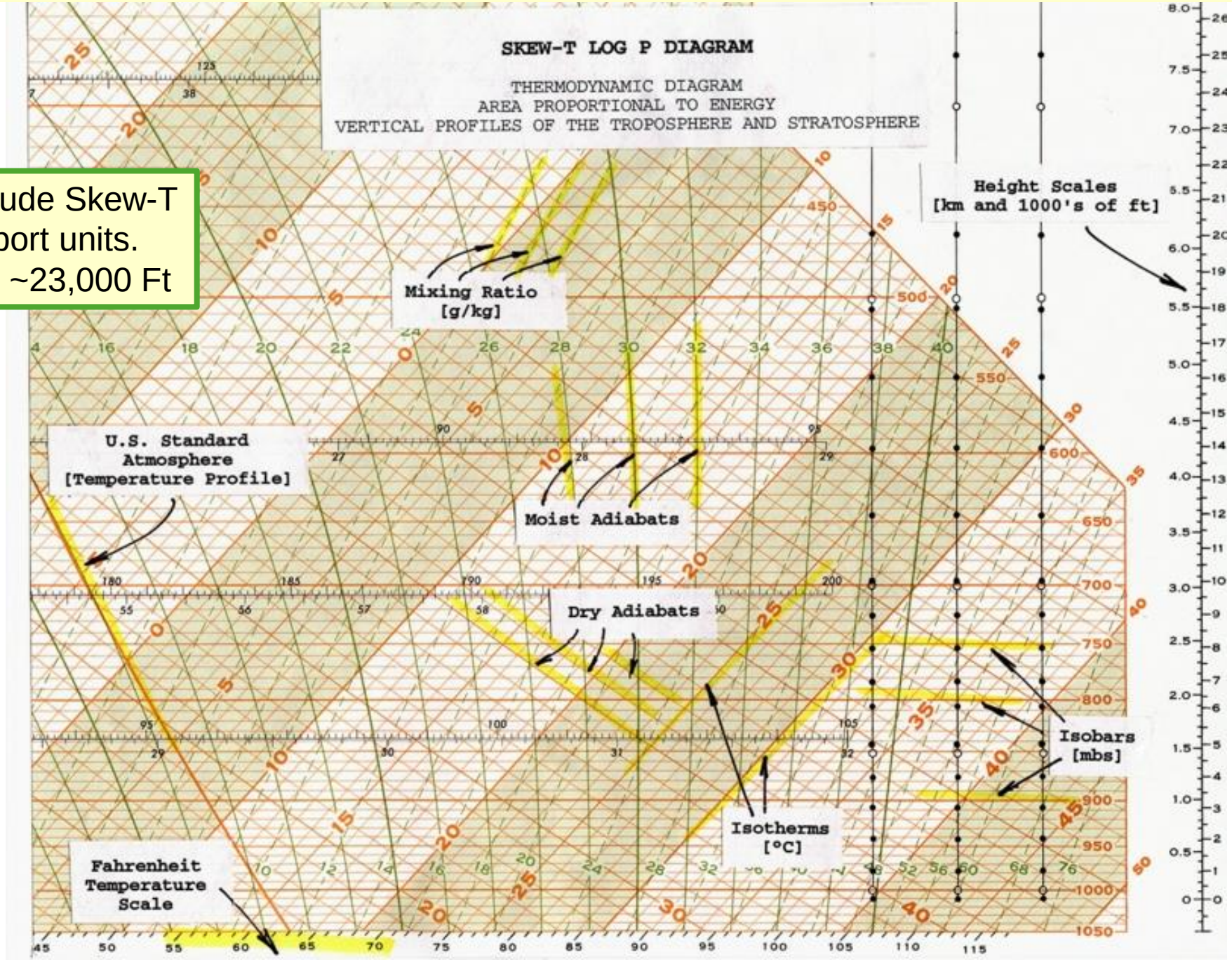
20,000 Ft

Y-Axis, geometric height.

X-Axis **Temperature--- but skewed aloft. “Skew-T”**

https://pielkeclimatesci.files.wordpress.com/2010/05/skew_t.jpg

This is the low altitude Skew-T used by Army support units. Top only ~400 mb. ~23,000 Ft



http://weather.rap.ucar.edu/upper/epz.gif **Plotted Skew-T Log-P diagram**

Pw = 1.83

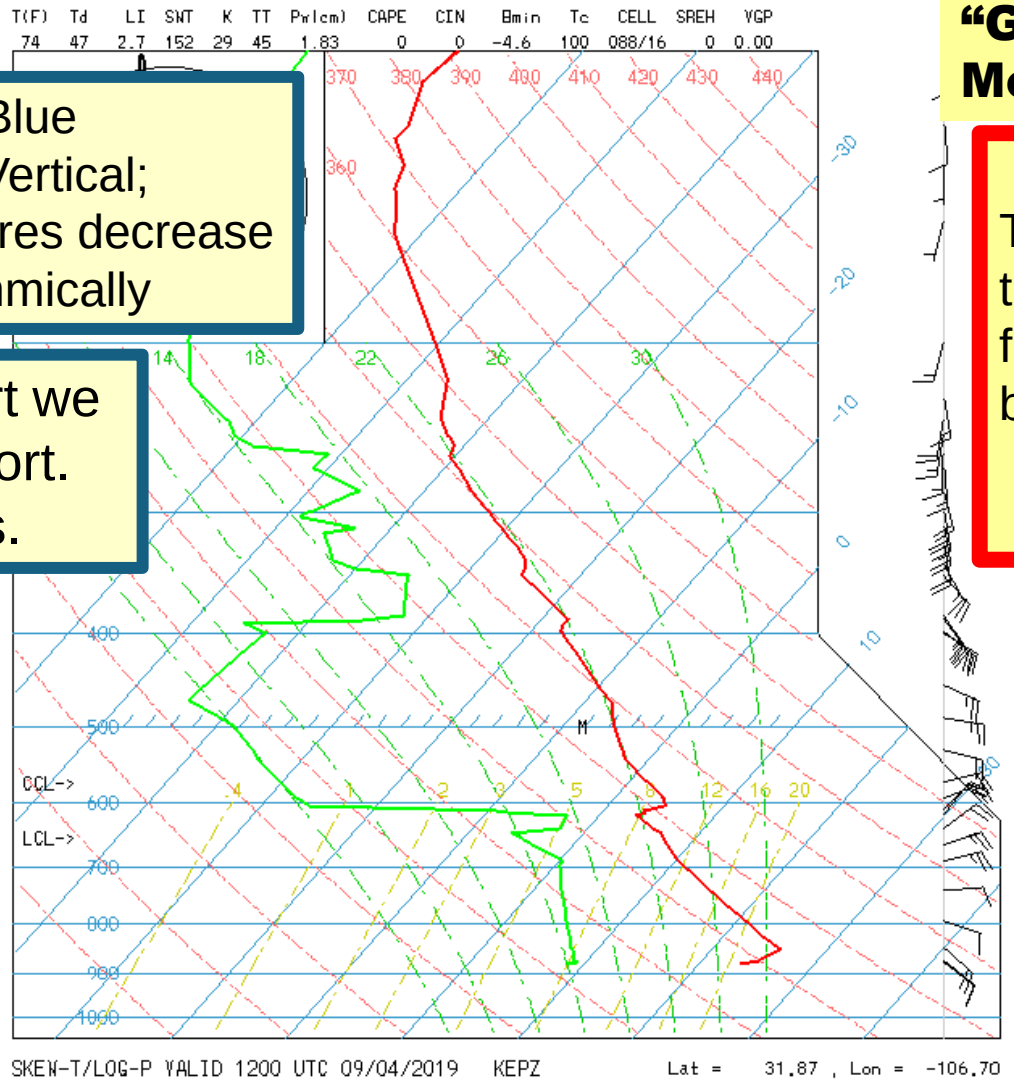
Also, Blue in the Vertical; Pressures decrease logarithmically

"Graph paper" for Meteorologists

The RED line is the Temperature from the weather balloon sounding

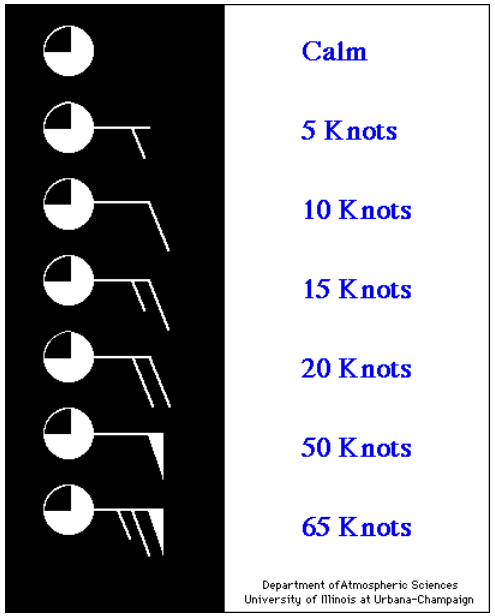
This is the high-altitude chart we used for SAC Weather Support. Goes to 100 mb or ~10 miles.

The GREEN LINE is the Dew Point Temperature from the same sounding.



4 Sep 2019/1200Z

Skewed Temperatures in Blue



The Skew-T allows easy calculation of dozens of thermodynamic variables

A NASA science lesson for students teaching through demonstration. Students learn about properties and changes of properties of matter, as they witness firsthand how contrails are formed.

Non-Persistent Contrails

https://www.nasa.gov/sites/default/files/atoms/files/contrails_k-12.pdf

Persistent Contrails

"They (trails behind aircraft engines) shouldn't be there.
Jet Engines burn clean."

Just wrong. Spectacularly Wrong!
Engines extract work through of fuel combustion. Below, from FL State U Chemistry Dept.

https://www.chem.fsu.edu/chemlab/chm1020c/Lecture

"Whenever we complete a combustion reaction a hydrocarbon (compound of C and H) there are generally the same products formed: CO_2 and H_2O." <Water (H_2O) is a product of combustion!>

"The fuel you burn in your car's engine contains octane, C_8H_{18}. When octane is burned, the products are CO_2 & H_2O.
$2C_8H_{18}(l) + 25O_2(g) \rightarrow 16CO_2(g) + 18H_2O(g)$" (l is liquid, g is gas)
(In my Torino, the carburetor mixes the liquid gasoline, the Octane, with the Oxygen in the air, the O_2)

You don’t need to be in an aircraft at 30,000 ft to see water droplets coming from the exhaust of a combustion engine.

Here, the fuel is combusted, yielding CO2, invisible, and H2O vapor, normally invisible. But when a vehicle first starts, exhaust’s heat is lost to a cold exhaust system and cold air, especially on a winter’s morning. Under those circumstances, water vapor in the exhaust condenses, visible in the form of a water droplet cloud, obvious here.

https://www.facebook.com/TheAlaskaLife/photos/a/

If and when the water droplets freeze, an ice cloud forms.

Aloft, this is a cirrus cloud.

“This is what 40° below and ice fog looks like at high noon at Fairbanks, Alaska," wintertime.

Analyzing for and Forecasting for Engine Contrails

The original Appleman Contrail Forecast Nomogram from Herbert Appleman, 1953.

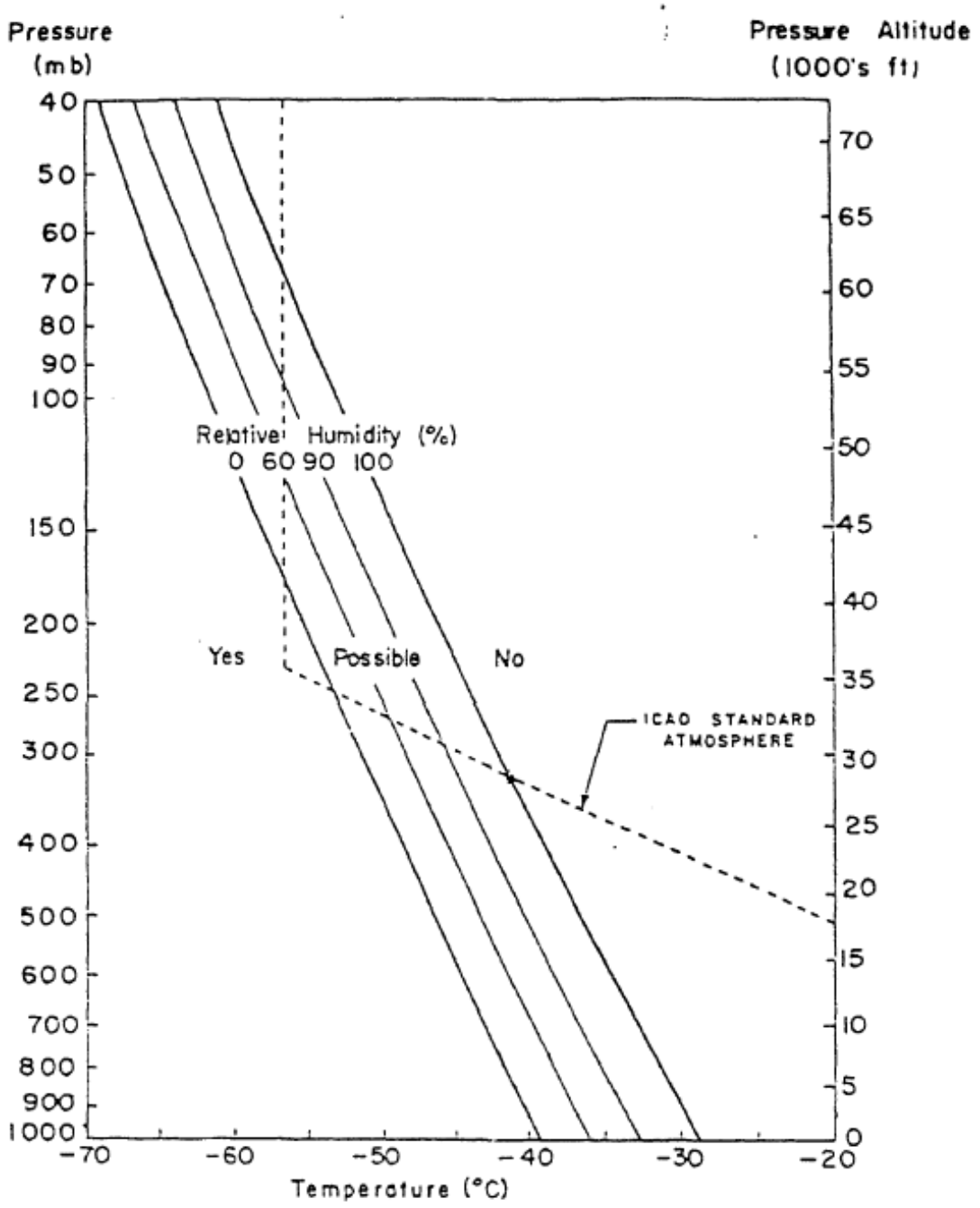


Figure 1. The Appleman Contrail Forecast Nomogram (1953).

Some Basics of using the Appleman Chart to forecast Aircraft Exhaust Contrails

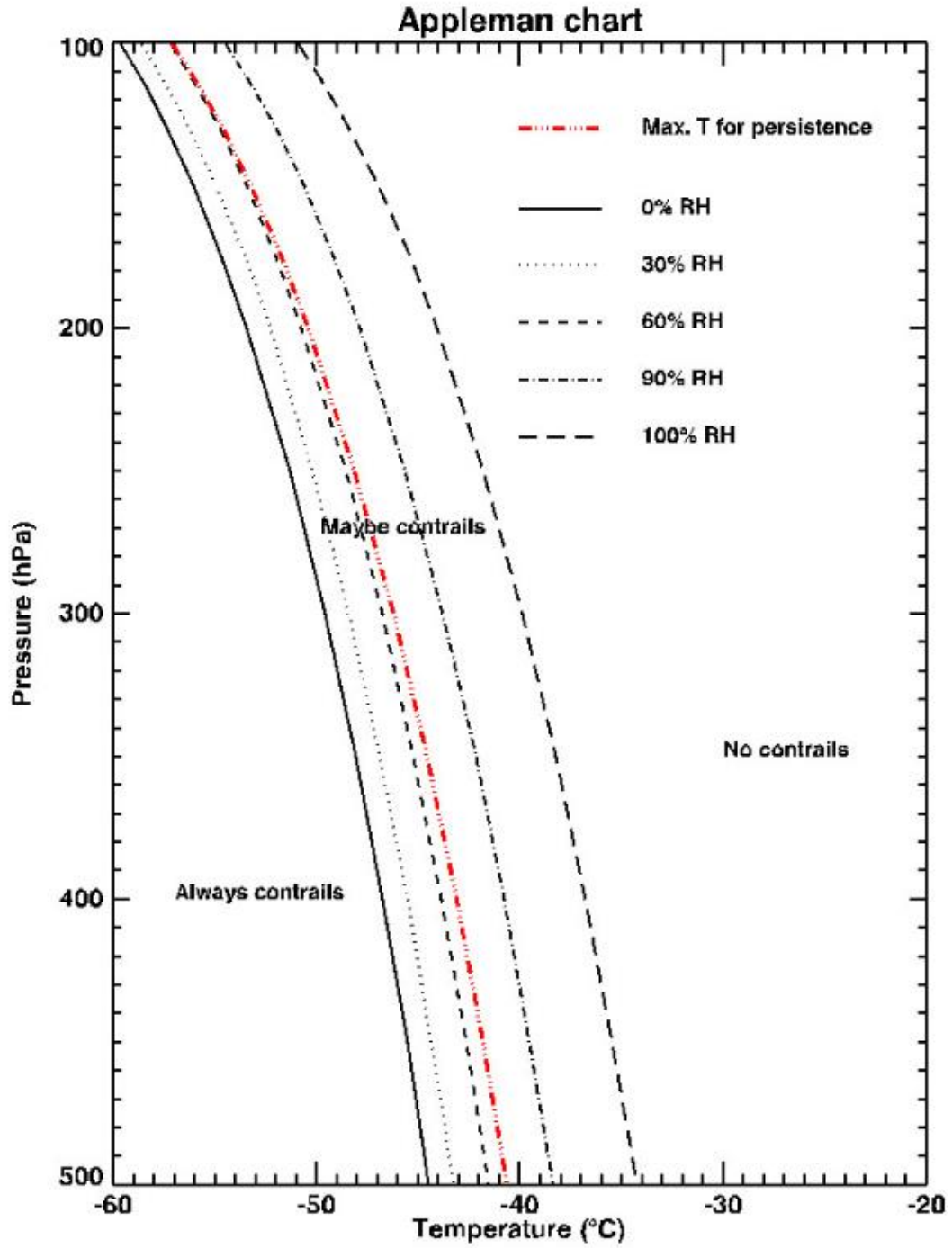
53,000 Ft

39,000 ft

30,000 Ft

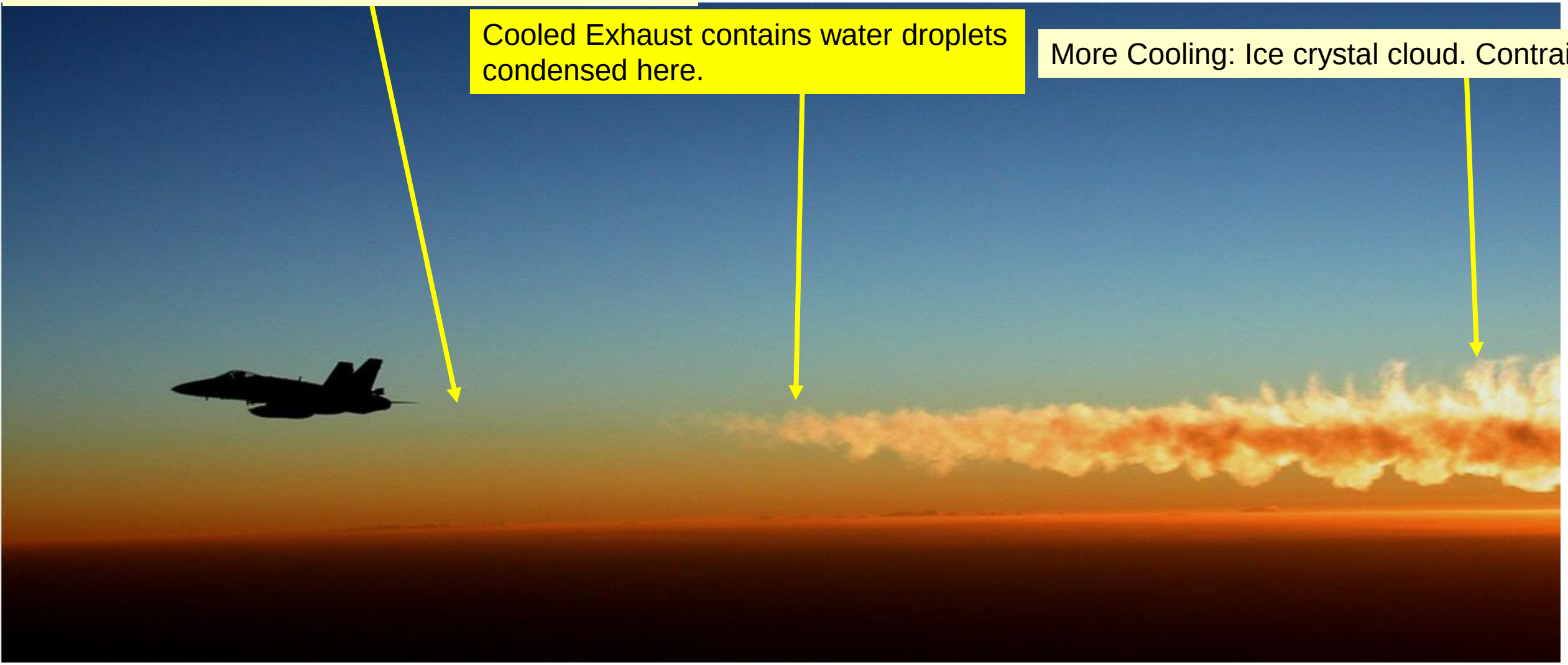
23,000 Ft

18,504 Ft



https://www.nasa.gov/sites/default/files/atoms/files/contrails_k-12.pdf
Navy photo of F/A-18 in flight.

Hot engine exhaust contains CO2 and H2O vapor.



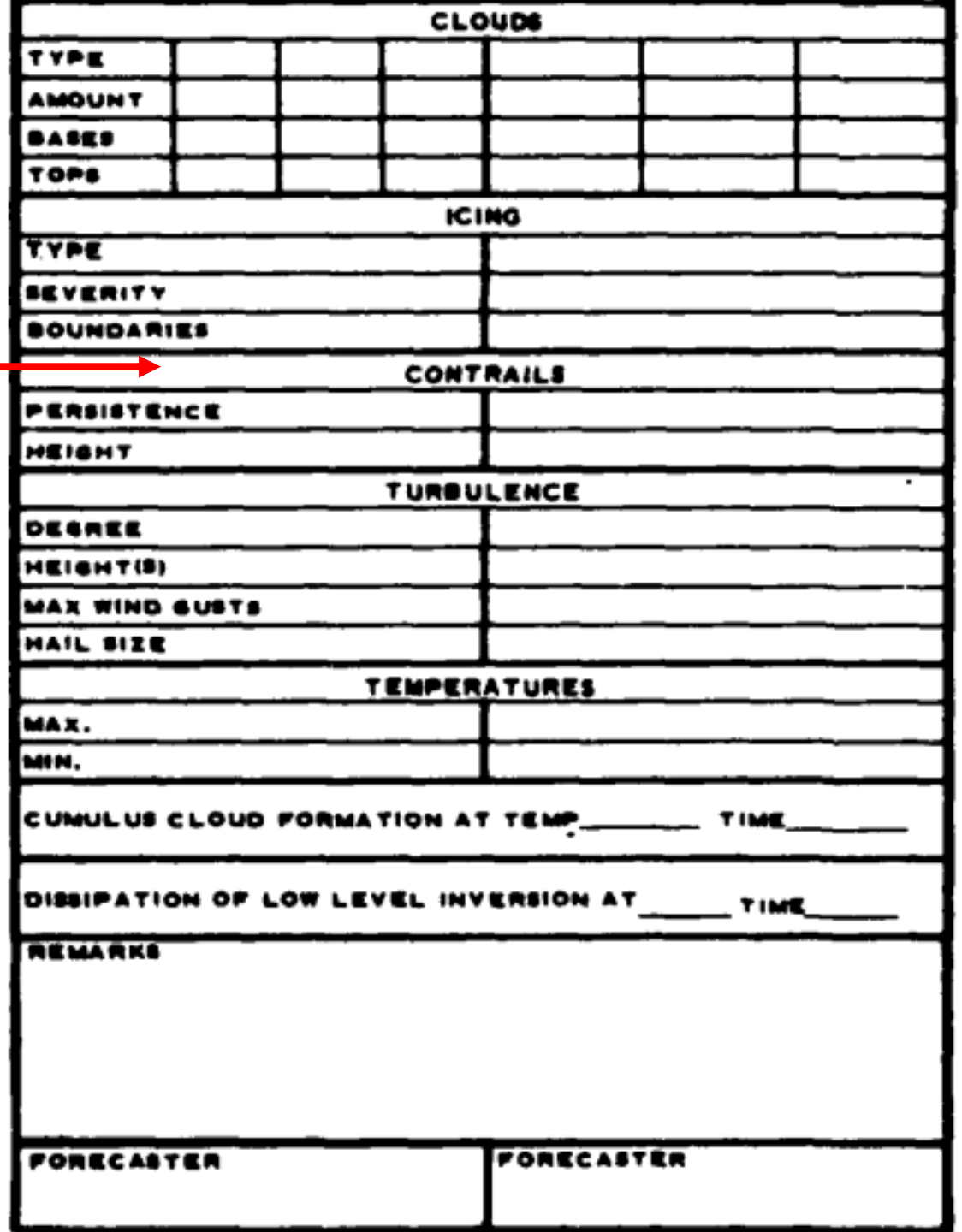
SKEW T - LOG P ANALYSIS

TIME	TIME
AIRMASS ANALYSIS	
TYPE BOUNDARY _____ FT. TYPE BOUNDARY _____ FT. TYPE	_____ FT. _____ FT.
FREEZING LEVEL(S)	
INVERSIONS	
FRONTAL	
RADIATION	
SUBSIDENCE	
TROPOPAUSE	
L.C.L.	
C.C.L.	
L.F.C.	
SIGNIFICANT WIND	
MAX.	
MIN.	
LEVELS OF SHEAR	
STABILITY	
INDEX	INDEX
TO	TO
TO	TO
TO	TO

CLOUDS						
TYPE						
AMOUNT						
BASES						
TOPS						

ICING	
TYPE	
SEVERITY	
BOUNDARIES	
CONTRAILS	
PERSISTENCE	
HEIGHT	
TURBULENCE	
DEGREE	
HEIGHT(S)	
MAX WIND GUSTS	
HAIL SIZE	
TEMPERATURES	
MAX.	
MIN.	
CUMULUS CLOUD FORMATION AT TEMP_____ TIME_____	
DISSIPATION OF LOW LEVEL INVERSION AT _____ TIME_____	
REMARKS	
FORECASTER	FORECASTER

In some Weather units, Contrail Analysis was part of the Local Analysis and Forecast program



CLOUDS

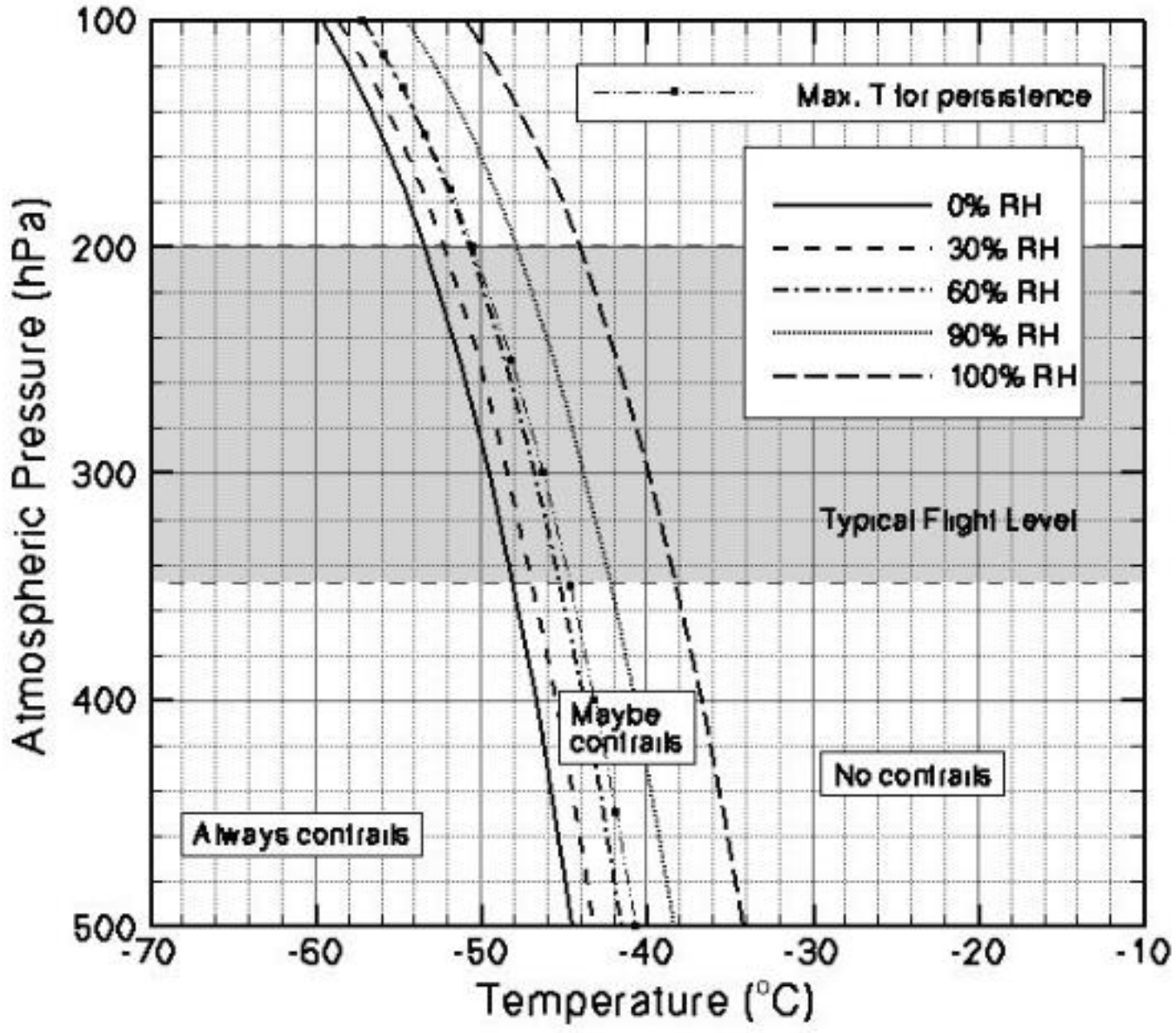
TYPE						
AMOUNT						
BASES						
TOPS						

ICING	
TYPE	
SEVERITY	
BOUNDARIES	
CONTRAILS	
PERSISTENCE	
HEIGHT	
TURBULENCE	
DEGREE	
HEIGHT(S)	
MAX WIND GUSTS	
HAIL SIZE	
TEMPERATURES	
MAX.	
MIN.	
CUMULUS CLOUD FORMATION AT TEMP_____ TIME_____	
DISSIPATION OF LOW LEVEL INVERSION AT _____ TIME_____	
REMARKS	
FORECASTER	FORECASTER

https://www.globe.gov/web/s-cool/home/observation-and-reporting/contrails/appleman-chart-teacher

We will see soon that the contrail formation observations and atmospheric relative humidity curves were determined experimentally by direct observation of contrail formation (or non-formation) through specially conducted flights of two Military aircraft very near in space and time to radiosonde balloon ascents.

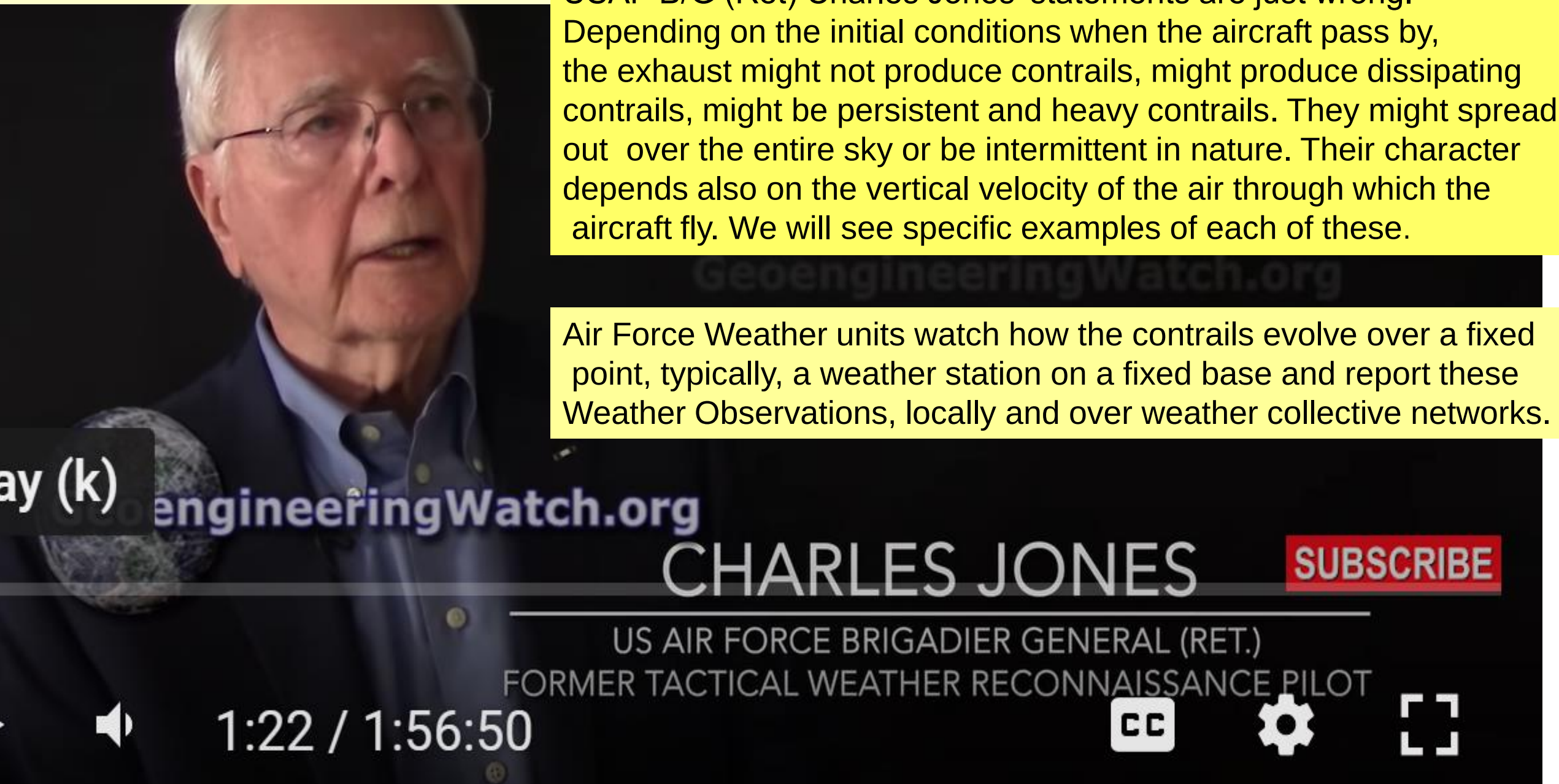
Appleman Chart



“They are absolutely not contrails. Contrails do not linger, dissipate, and go into cloud cover. Period. End of Report!”

USAF B/G (Ret) Charles Jones’ statements are just wrong. Depending on the initial conditions when the aircraft pass by, the exhaust might not produce contrails, might produce dissipating contrails, might be persistent and heavy contrails. They might spread out over the entire sky or be intermittent in nature. Their character depends also on the vertical velocity of the air through which the aircraft fly. We will see specific examples of each of these.

Air Force Weather units watch how the contrails evolve over a fixed point, typically, a weather station on a fixed base and report these Weather Observations, locally and over weather collective networks.



https://apps.dtic.mil/sti/pdfs/AD0125760.pdf

AWS TR 105-145

AIR WEATHER SERVICE TECHNICAL REPORT

DERIVATION OF JET-AIRCRAFT CONTRAIL-FORMATION CURVES

Herbert S. Appleman

JANUARY 1957

Extracted from AWS TR 105-145, January 1957

2.2. Procedure.

Project Cloud Trail was established within the Air Defense Command in conjunction with Air Weather Service, to collect high-level weather information from jet aircraft. The aircraft were to accumulate sufficient data to serve as a basis for improved methods of forecasting contrails, cirrus clouds, haze, and turbulence. Only the contrail portion of the Project is considered here. The observational phase of the Project ran from 1 December 1954 to 15 December 1955. During this period, 36 fighter-interceptor squadrons based in the United States collected data over 23 upper-air sounding stations. The procedure employed was as follows:

a. Each day from approximately one hour before to two hours after 1530 GCT, two aircraft were vectored to a point 25,000 feet above an upper-air sounding station. The aircraft then climbed to the maximum altitude obtainable, maintaining position within 30 miles of the station.

Extract of AWS TR 105-145, January 1957

b. The wingman observed whether or not the lead aircraft produced exhaust trails and whether they were continuous or intermittent, distinct or faint, including bases and tops of layers in which the trails formed.

paraphrased…”we have photographic evidence from WW2 of our B-17’s at altitude turning OFF the sprayed dispersion materials….clearly these bombers were used for Beta Testing. These photographs PROVE it.”

paraphrased…"we have photographic evidence from WW2 of our B-17's, at altitude, turning OFF the sprayed dispersion materials….clearly these bombers were used for Beta Testing. These photographs PROVE it."

Consider the time that these photos were taken, at the height of WW2, with the war against Germany on-going in Europe, and the war's Pacific phase on-going against Japan.

Dean Wigginton proposes that in the midst of these two phases of WW2 that someone, he doesn't say who, is carrying on some concurrent and nefarious third war against Earth, or elements of humanity.

A war whose perpetrators he does not identify.

A Secret War…he says this is <still> CLASSIFIED (!) and whose belligerents are still unknown almost 80 years after the fact? I used to be Unit Security Officer, and Unit Commander. <u>This is not believable.</u>

From the previous slide: “This is not believable.” Here’s Why.

https://www.archives.gov/declassification/iscap/auto-declass-exemptions.html

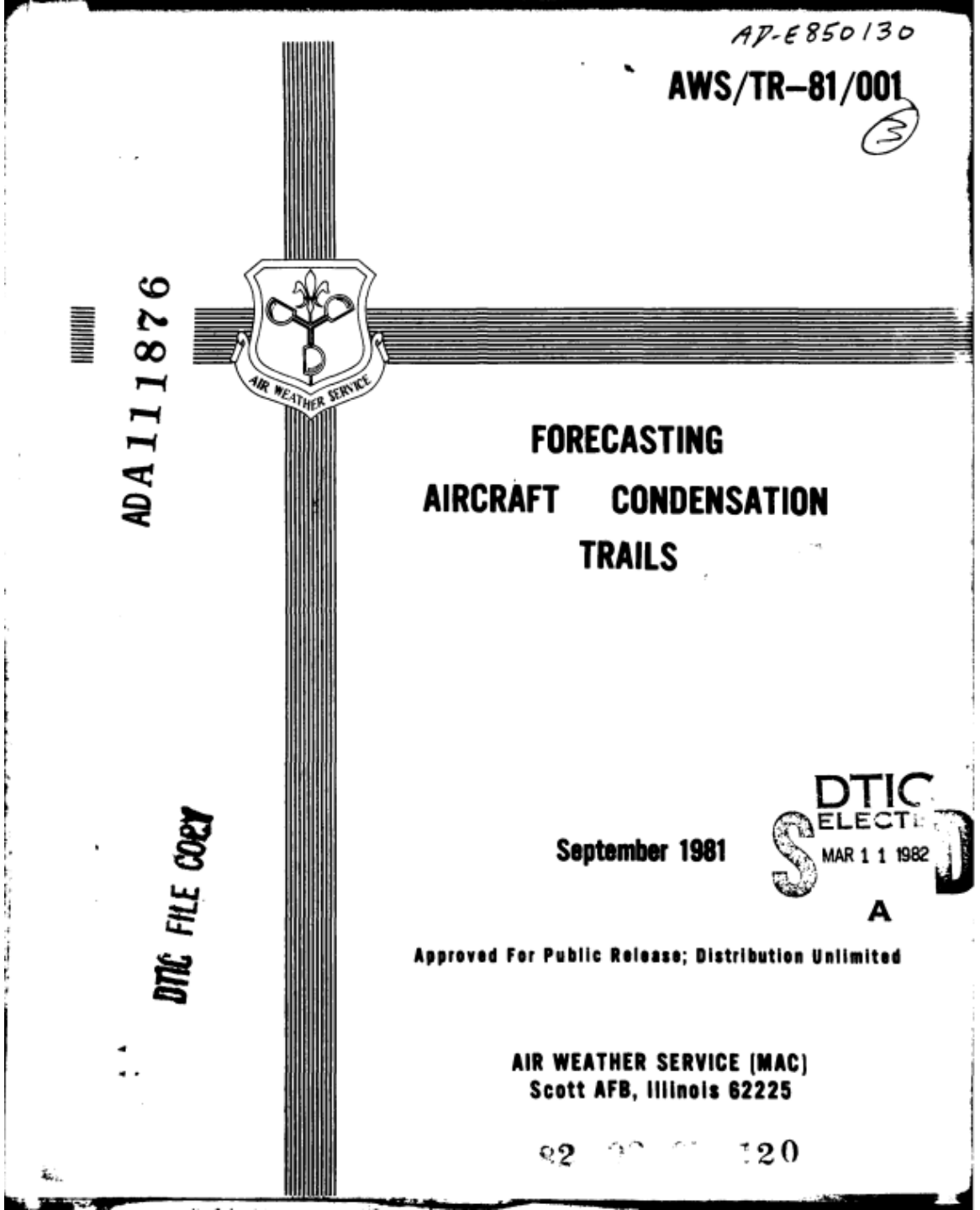
E.O. 13526 prescribes a "uniform system for classifying, safeguarding, and declassifying national security information." The Order declares that the democratic principles of our nation require that the American people be informed of the activities of their Government while it simultaneously acknowledges that "the national interest has required that certain information be maintained in confidence in order to protect our citizens, our democratic institutions, and our participation within the community of nations."

Based on these principals, Executive Order 13526, "Classified National Security Information" **requires the automatic declassification** of records of permanent historical value that are more than 25 years old,

The Order also recognizes that some information might remain sensitive and pose a threat to the national security if released at the 25-year mark such as information which reveals the identity of a confidential human source, human intelligence source, or key design concepts of weapons of mass destruction, which may have a duration up to 75 years.

Therefore, the Order allows agency heads to identify this information & provides for its further protection.
<**Bolds** and underlining added>

This is the newer version, Sept 1981.



AWS/TR-81/001

FORECASTING AIRCRAFT CONDENSATION TRAILS

September 1981

A

Approved For Public Release; Distribution Unlimited

AIR WEATHER SERVICE (MAC)
Scott AFB, Illinois 62225

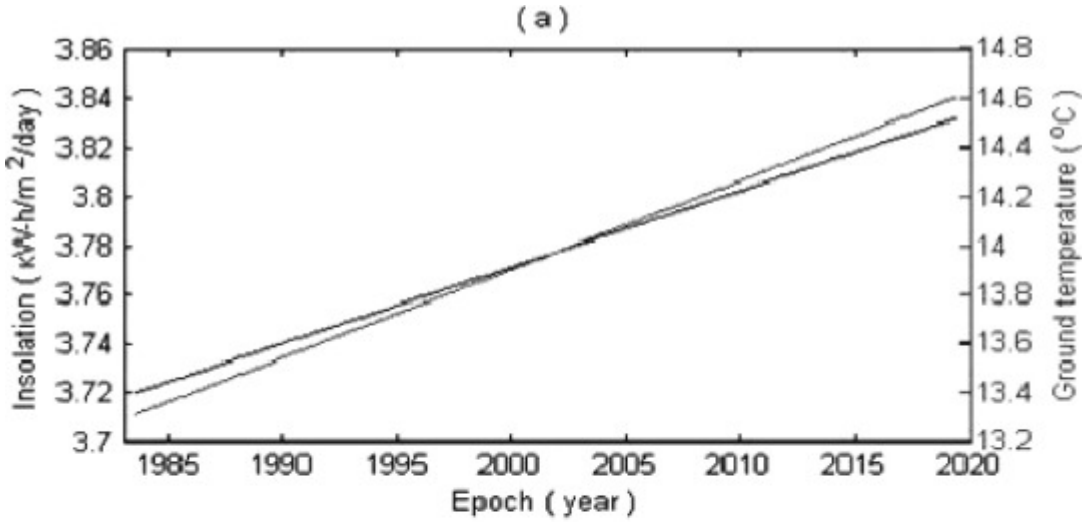
“We have film of aircraft at altitude, nozzles visible, turning on and off. That is the end of the argument.”

Vertical Motions within the atmosphere clearly and plainly explain this behavior.
<u>Wiggonton is wrong</u>!

“Most are unfamiliar with the Science Term “Global Dimming.” This term refers to the amount of global sunlight that is no longer reaching the surface of the Earth, caused by light scattering particles that are building up in the atmosphere.”

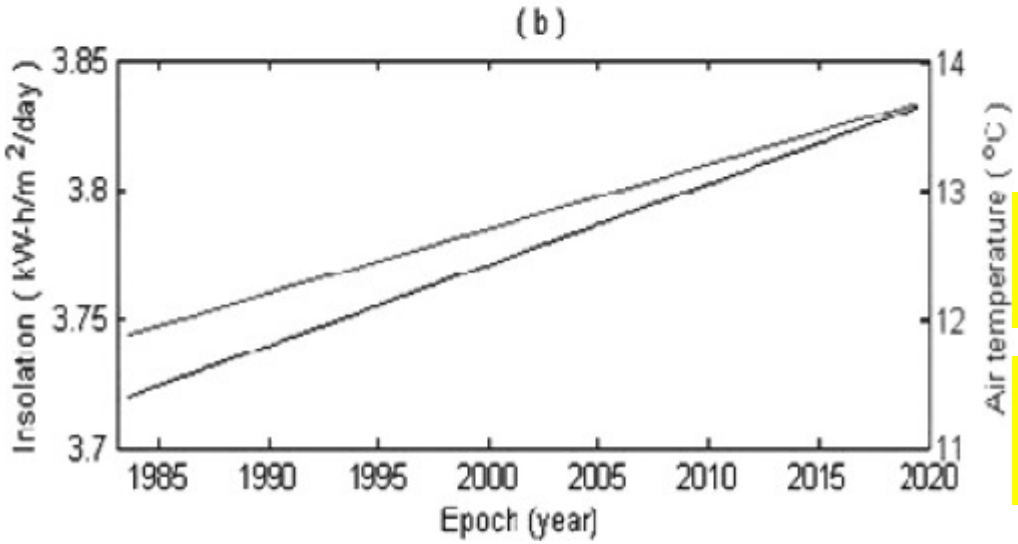
https://reader.elsevier.com/reader/sd/pii/S0273117722002794

"Time series analysis of temperatures and insolation of the Earth's surface at Kara-Dag using satellite observation"



Kara-Dag is a volcanic mountain in Crimea, on the shore of the Black Sea.

Top, insolation and resulting **ground temperature**, 1984-2020.



Bottom, Insolation and resulting **air temperature**, 1984-2020.

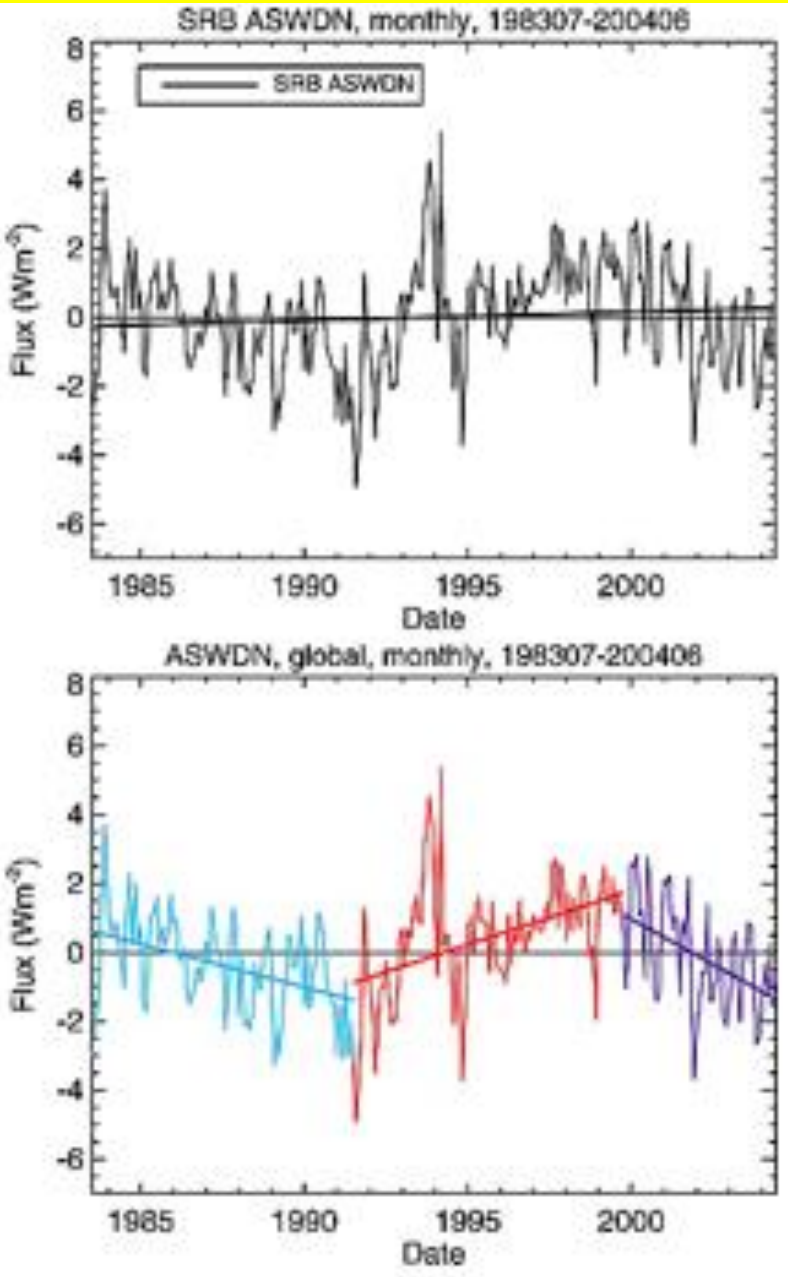
The data & charts show the opposite; insolation is increasing 1984-2020.

These data refute the notion that "light scattering particles are building up in the atmosphere."

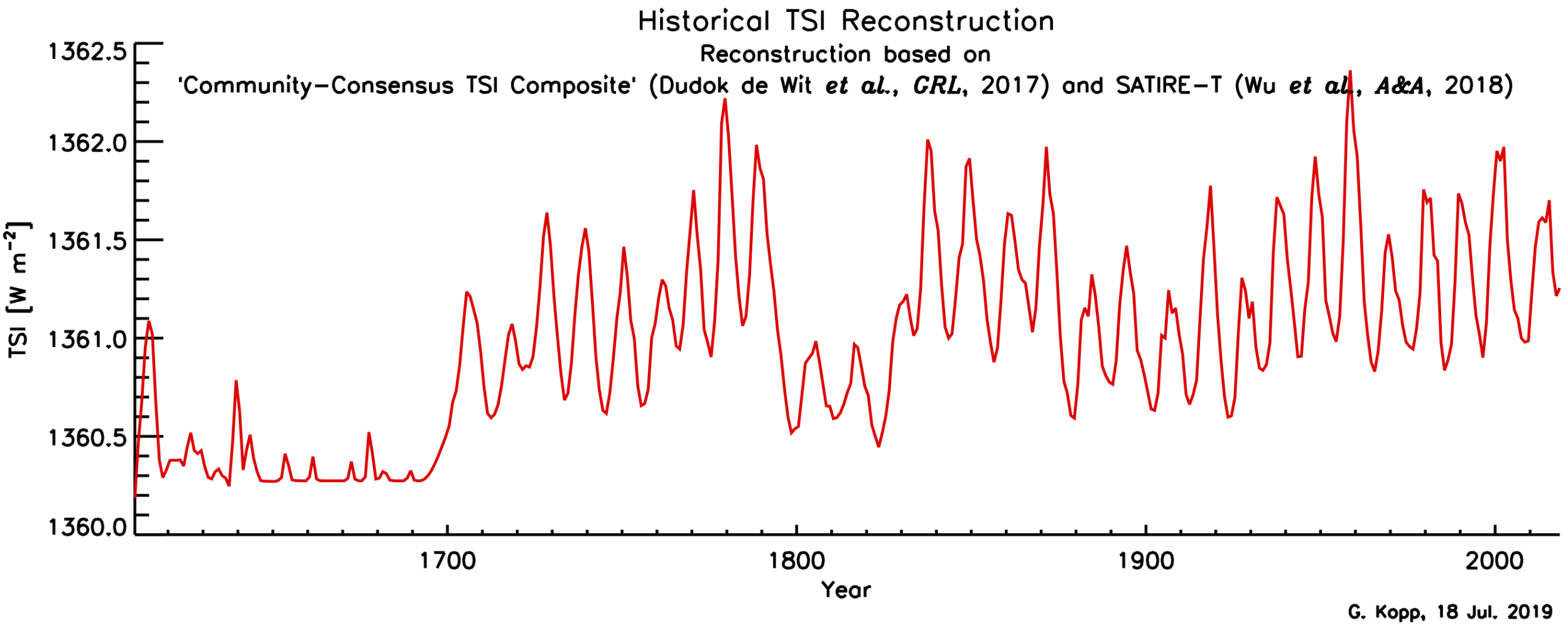
Surface insolation trends from satellite and ground measurements: Comparisons and challenges
Journal of Geophysical Research: https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2008JD011004

Abstract

Global “dimming” and “brightening,” the decrease and subsequent increase in solar downwelling flux reaching the surface observed in many locations over the past several decades, and related issues are examined using satellite data from the NASA/Global Energy and Water Cycle Experiment (GEWEX) Surface Radiation Budget (SRB) product, version 2.8. A 2.51 W m−2 decade−1 dimming is found between 1983 and 1991, followed by 3.17 W m−2 decade−1 brightening from 1991 to 1999, returning to 5.26 W m−2 decade−1 dimming over 1999–2004 in the SRB global mean. (Shortened)



https://spot.colorado.edu/~koppg/TSI/Historical_TSI_Reconstruction.png



TSI, Total Solar Irradiance appears to be increasing since the 1600s, & even from 1950-2020

I found no data showing the CHEMTRAILS HYPOTHESIS,

“global sunlight… is no longer reaching the surface of the Earth, caused by light scattering particles that are building up in the atmosphere.”

is true.

There appear to be no empirical or measured data sets which agree with the notion that “Global Dimming” is ongoing.

The video revisits the Vietnam War weather modification effort in Laos in which I was an active participant

“Weather was a weapon (we) used over Vietnam. Would you expect it to be deleted from the availability? NO! …. ….to be available to your portfolio of weapons to be used, would be a natural process. Therefore, should you expect (us to have) the ability to change the weather on demand? ABSOLUTELY!”

Dust, frequently composed of clay minerals, is transported from the surface, vertically and horizontally, frequently trans-continentally. Specific Examples follow.

Natural Processes frequently raise dust into the atmosphere.

Dust Devils raise surface dust to the top of the planetary boundary layer. This is the top of the "mixed layer," the highest point sailplanes achieve in thermal soaring flight.
I have flown to 22,000 ft MSL soaring in thermals in New Mexico in June.

Blowing Dust Huge amounts of dust are mixed from the surface well up into the atmosphere during active windstorms. In New Mexico, Arizona and nearby, these frequently occur during the spring, and often in conjunction with Tornado outbreaks.

We now know that these **blowing dust events bring trans-continental movement of dust plumes.**

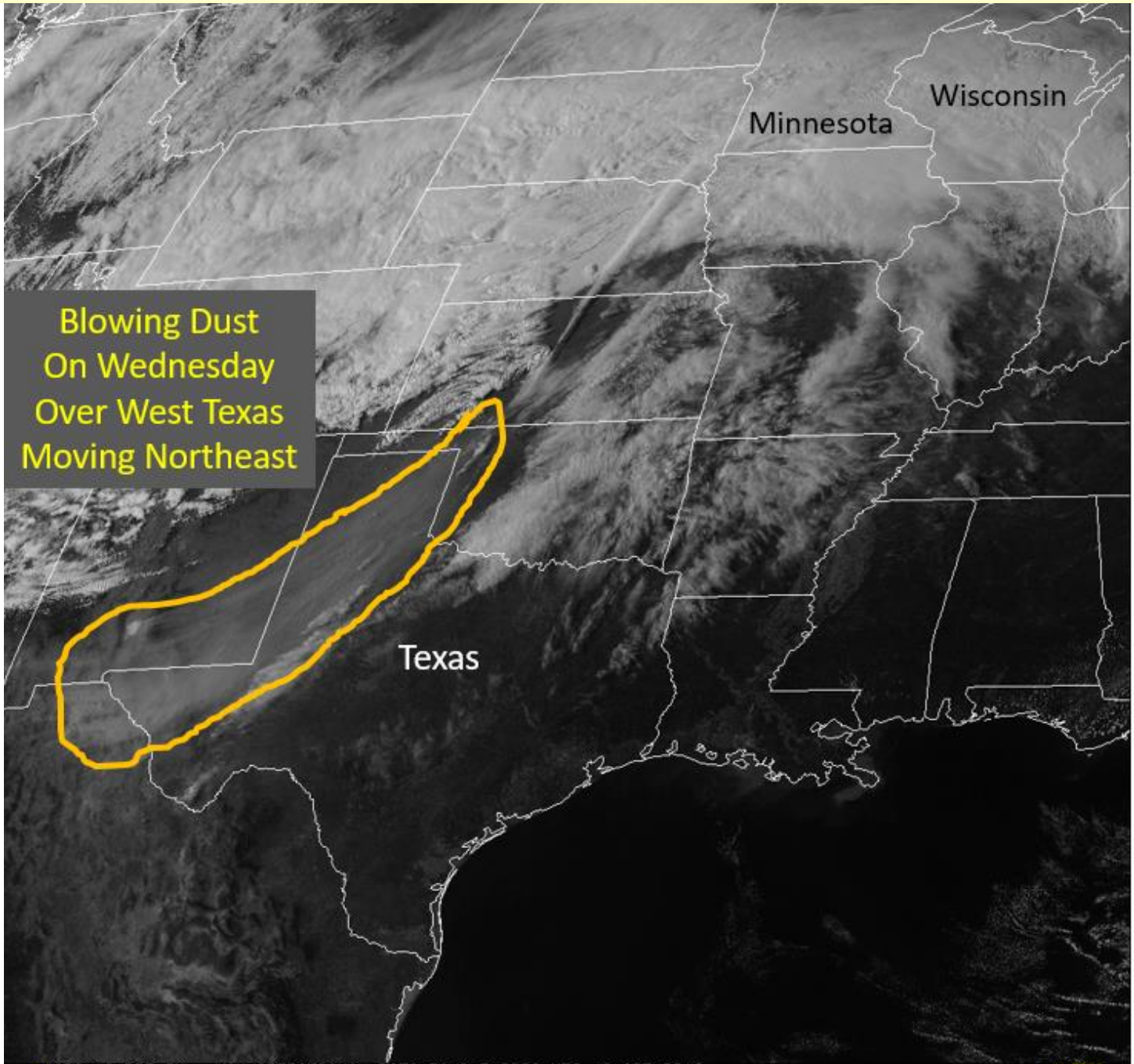
In NH Summer, dust frequently moves from Africa to North and South America.

In NH Winter and Spring storms, Dust is transported from Asia across the Pacific to North America.

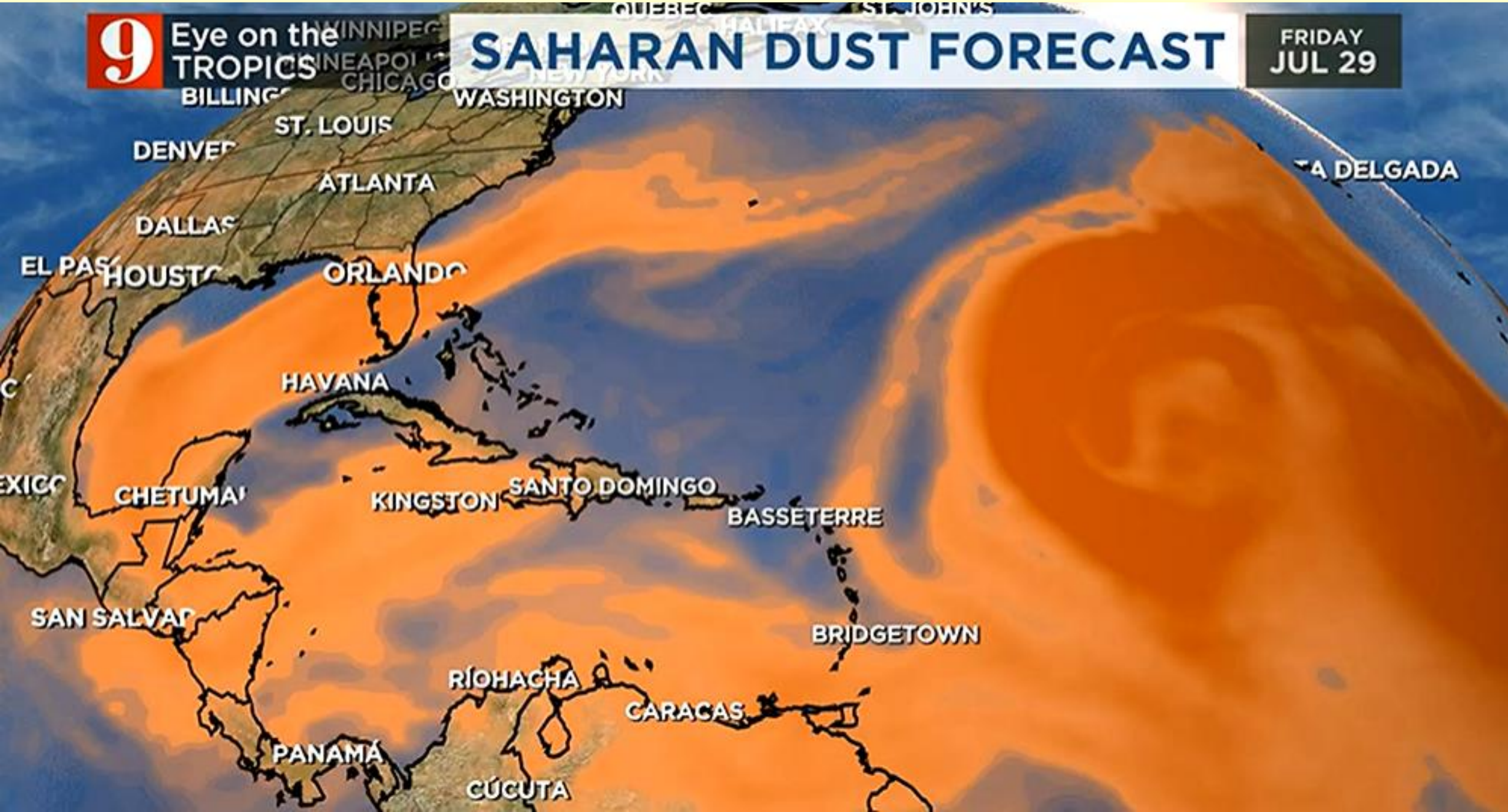
https://activerain.com/blogsview/3742339/dust-devil-s-in-new-mexico--they-are-just-like-a-tornado-

https://www.lcsun-news.com/story/news/local/new-mexico/2017/04/21/state-warns-dust-storms-southern-new-mexico/100765560/

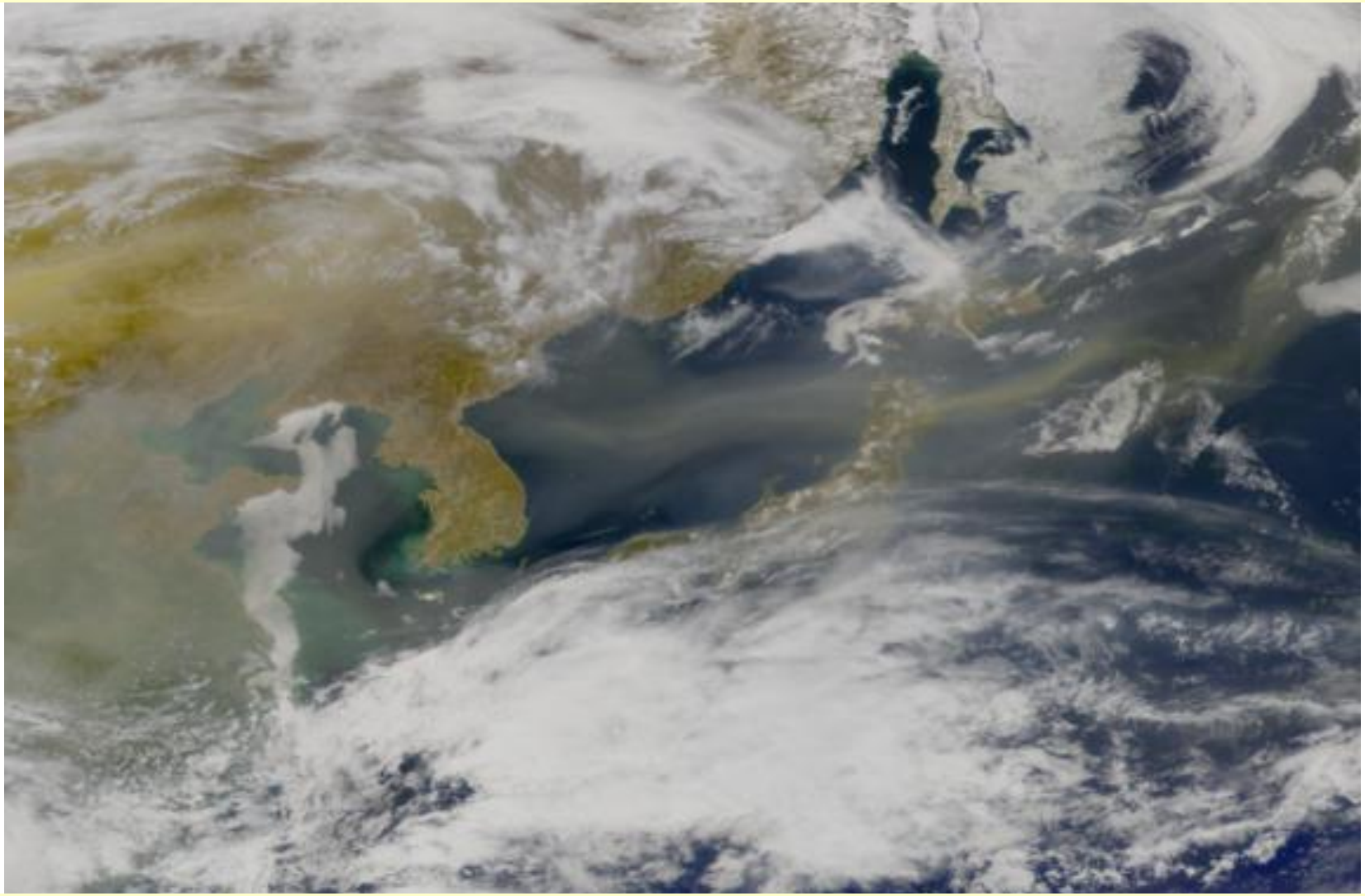
https://www.facebook.com/photo/?fbid=2388369887863126&set=a.209333942433409



https://www.wftv.com/weather/video-saharan-dust-is-here-heres-how-it-will-affect-central-florida/



https://science.nasa.gov/science-news/science-at-nasa/2001/ast17may_



“May 17, 2001 -- Springtime. Time for…..gargantuan trans-continental dust clouds!
Scientists recently used NASA satellites to track a cloud of dust up to 2,000 km long as it left Asia, drifted across the Pacific Ocean, and traversed North America from Alaska to Florida, raining dust and possibly pollutants over the continent.”

Another word from the Arabic, HABOOBS

During warm or hot seasons especially, thunderstorm outflow winds frequently bring blowing dust to dry or desert areas. These are not as widespread as the blowing dust episodes from strong winter and spring storms but do bring impressive images of walls of dust, whether viewed from the surface or from aloft.

They are called ***Haboobs.***

From *Wikipedia*:
"…When this downdraft of cold air, or downburst, reaches the ground, it blows dry, loose silt and clay (collectively, dust) up from the desert, creating a wall of airborne sediment that precedes the storm cloud.
This wall of dust can be up to 100 km (62 mi) wide and several kilometers in elevation. At their strongest, haboob winds often travel at 35–100 km/h (22–62 mph), and they may approach with little or no warning."

<underlining added>

https://www.azcentral.com/story/news/local/arizona/2020/03/09/whats-haboob-definition-arizona-lexicon/4928664002/

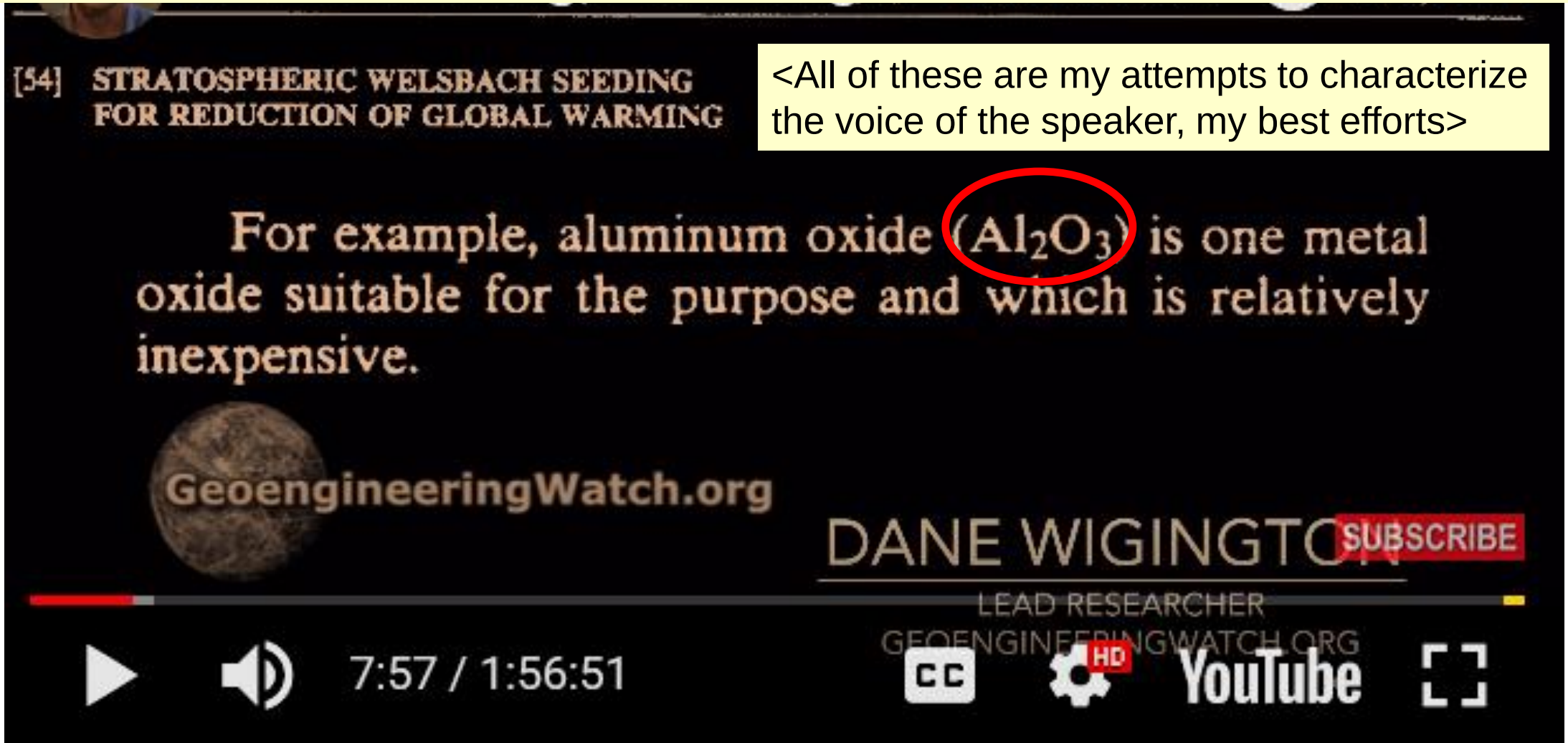
https://en.wikipedia.org/wiki/Haboob#/media/File:Haboob_in_Big_Spring,_TX.jpg

https://www.mesacc.edu/sites/default/files/pages/section/academicdepartments/culturalscience/meteorology/images/haboob-pielage.jpg


Pinterest
https://www.pinterest.com/pin/425730970997234499
PHOTOS: Massive Haboob Barrels Through Western Texas | Dust storm, Aerial view, Aerial photo

“We were able to test at altitude, to confirm the elements that were showing up at the surface….”
… (Speaking of the NOAA flying lab) “We sampled below the cloud layer, we sampled in the (*inaudible*, *presumably cloud*) layer, and above the cloud layer.”

“We found exactly the same elements that we found at countless surface measurements from precipitation we found all over the globe.”



<All of these are my attempts to characterize the voice of the speaker, my best efforts>

"…it (the haboob) blows dry, loose silt **and clay** (collectively, dust) up from the desert, creating a wall of airborne sediment that precedes the storm cloud." (bold added)

Kaolin is a common component of ordinary clay, which forms from the weathering of rocks, especially in hot, humid conditions. The most common mineral in kaolin is **Kaolinite**

Let's look at https://en.wikipedia.org/wiki/Kaolinite

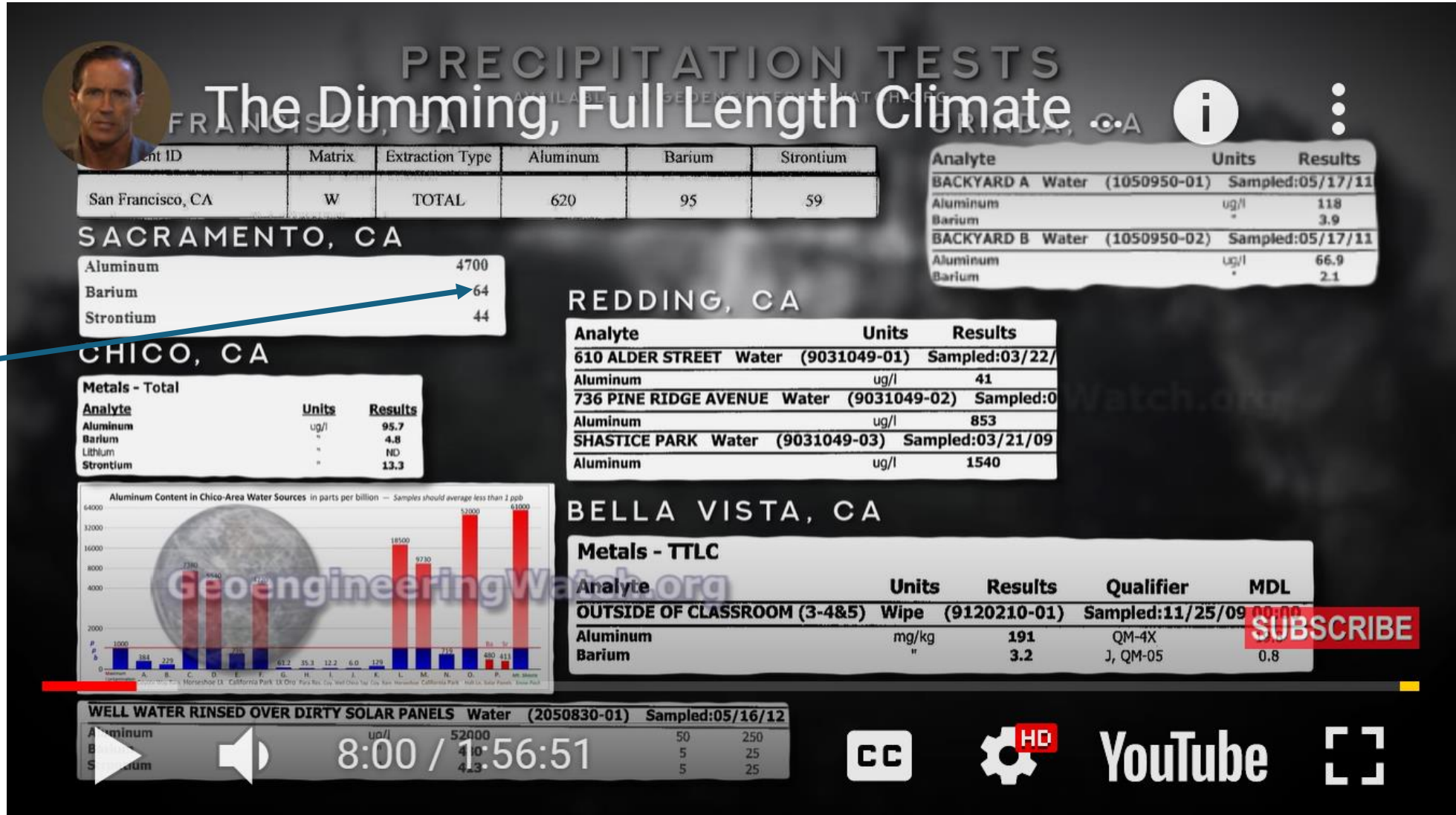
"The chemical formula for kaolinite as used in mineralogy is $Al_2Si_2O_5(OH)_4$, however, in ceramics applications the formula is typically written in terms of oxides, thus the formula for kaolinite is **Al_2O_3**$\cdot 2SiO_2 \cdot 2H_2O$." (Aluminum Oxide, 2 quartz, 2 water) (Bold added)

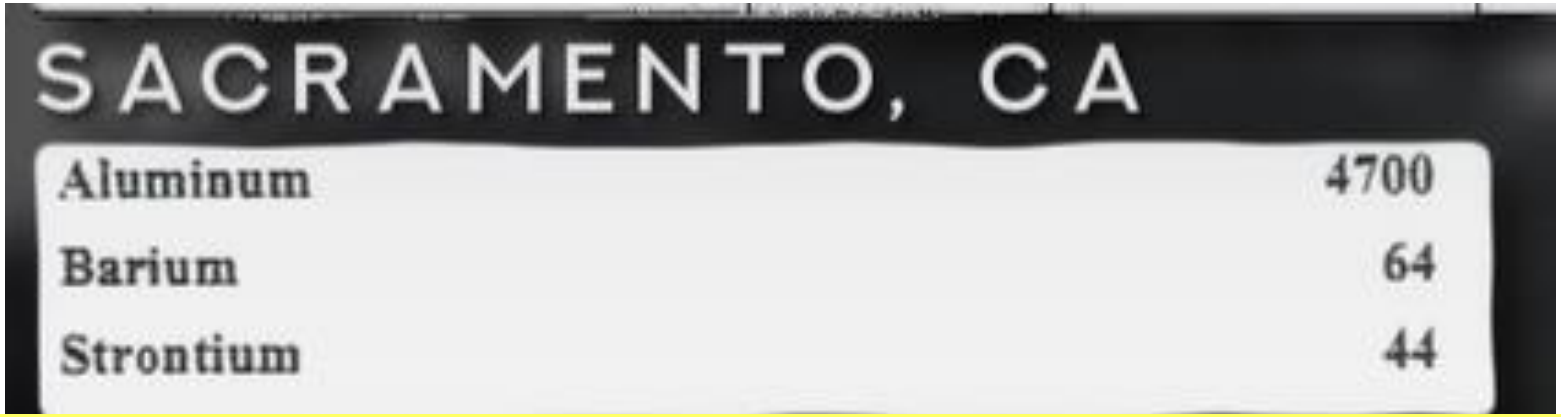
That Geoengineering Watch finds Aluminum Oxide (AL2 O3) in the environment as indication that there is harmful geoengineering on-going seems woefully ignorant of the chemical composition of blowing dust we see in dry environments, common here, and in many continental interiors.
We see clay minerals in the air when weathered rock is exposed to strong winds, such as the spring winds we have in the Desert Southwest. Kaolinite is the substance which gives rain the earthy smell when it first rains, or in light rain showers out here in the desert.

Often, when we examine a rock, say by picking it up and breathing on it, that earthy smell from the complex clay minerals released from the rock is observed.

“We were able to test at altitude, to confirm the elements that were showing up at the surface….”
(Speaking of the NOAA flying lab) “We sampled below the cloud layer, we sampled in the (inaudible) layer, and above the cloud layer.”
“We found exactly the same elements that we found at countless surface measurements from precipitation we found all over the globe.”

Note the Aluminum and Barium in the samples





At the 7:59 mark: In addition to aluminum compounds, (Aluminum's atomic number is 13) the video lists barium, whose atomic number is 56. The common barium mineral is Barite, now Baryte; it is quite heavy.

"Worldwide, 69–77% of baryte is used as a weighting agent for drilling fluids in oil and gas exploration to suppress high formation pressures and prevent blowouts. As a well is drilled, the bit passes through various formations, each with different characteristics. The deeper the hole, the more baryte is needed as a percentage of the total mud mix. An additional benefit of baryte is that it is non-magnetic and thus does not interfere with magnetic measurements taken in the borehole, either during logging-while-drilling or in separate drill hole logging."

Geoengineering Watch finds the presence of Barium troubling, but commonly barium is found as Baryte, $BaSO_4$.

From Wikipedia, https://en.wikipedia.org/wiki/Baryte

"Although baryte contains the toxic alkaline earth metal barium, it is not detrimental for human health, animals, plants and the environment because barium sulfate is extremely insoluble in water." <underlining added>

"Baryte is commonly found in shallow clay and mud deposits formed by the weathering of limestone." barite | mineral | Britannica <underlining added>

Baryte is the principal component of drilling mud poured down wells to keep high pressure gas and crude oil from blowing out.

Drilling mud is the light-colored mud found around almost all drilling sites.

When ordinary mud or drilling mud dries out and it gets windy, or a dust devil passes, the barite becomes airborne, to fall out when atmospheric turbulence subsides, or captured by rain droplets or drops.

ANALYSIS

Geoengineering Watch is alarmed over the presence of finding Al_2O_3, a common hydro-alumino-silicate found in Clay and Kaolinite, above and below the clouds, and at the surface.

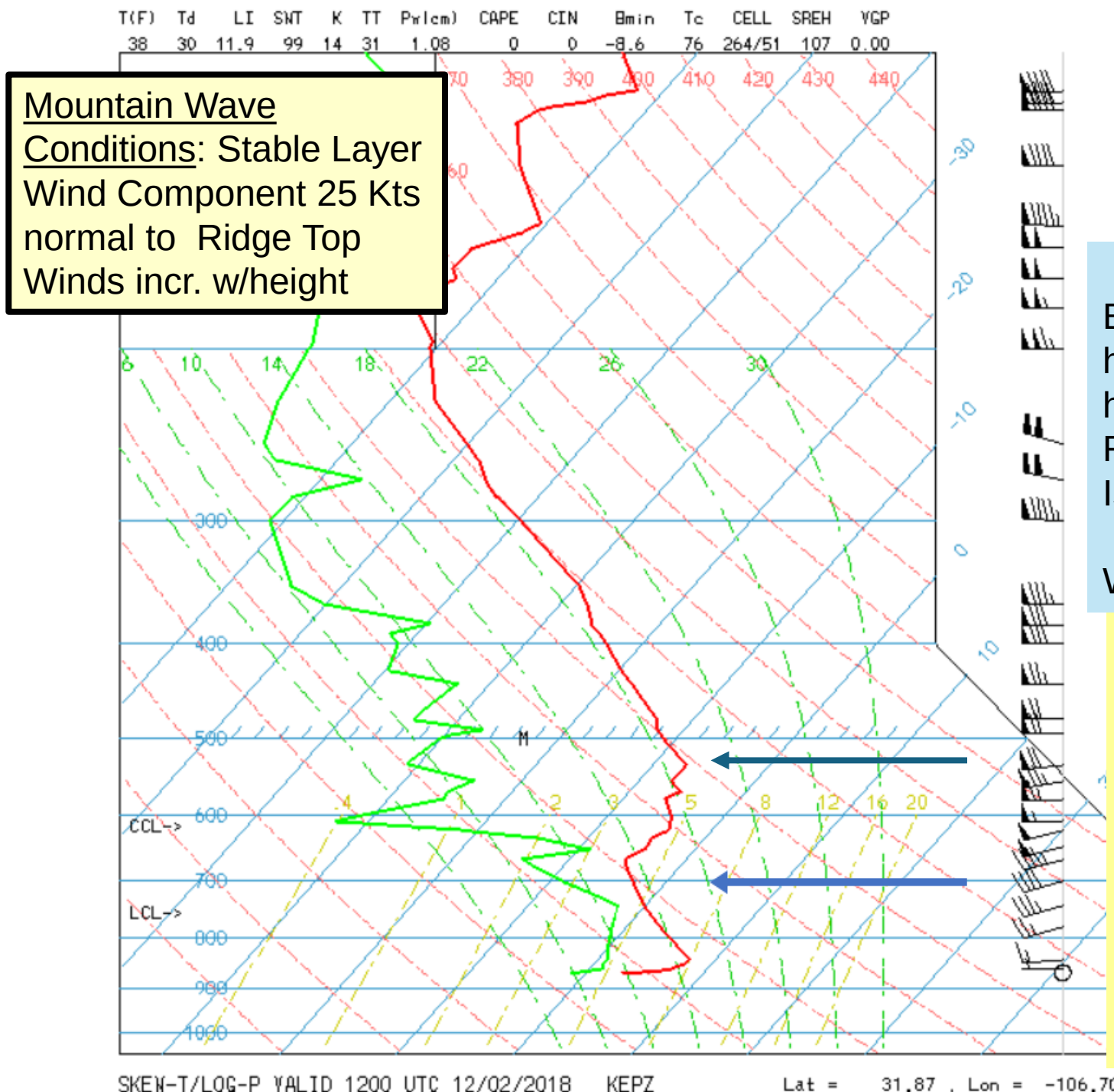
That clay and kaolinite, components of common blowing dust, which is observed being transported regionally and trans-continentally, and which can and does fall out to the surface has never occurred to them.

Remember, although Geoengineering Watch claims small solid particles are accumulating in the atmosphere, **measurements show this is not occurring**, or at least has not been commonly observed, and the opposite was found in Crimea.

Have they never cleaned their car windshields after leaving their vehicle outside overnight and examined the crud on the paper towels?

Mountain Wave Clouds frequently are indicators of vertical motions in stable atmospheres when lifting brings the air to saturation.

Vertical Motions in the atmosphere are important because these motions determine if clouds form (upward vertical motion) or if the clouds dissipate as happens when vertical motion is down.



Mountain Wave Conditions: Stable Layer
Wind Component 25 Kts normal to Ridge Top
Winds incr. w/height

El Paso radiosonde (sounding) balloon plot

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

2 Dec 2018 1200Z or 0500 MST

Skew-T log P diagram.
Blue horizontal lines are equal pressure, highest pressure at the surface, decreases with height logarithmically, like in atmosphere.
Red line is temperature sounding, Green line Is dewpoint sounding, the measure of water vapor

Wind barb vectors are to the right

Cold Stable Air Mass 700 to 520 millibars, between Blue arrows.

Mountain ridge tops are about 10,000 ft MSL or 700 millibars, with winds from 250 at 40 knots.

Winds increase with height, from 270 degrees
At 70 knots at 500 mb about 18,000 ft

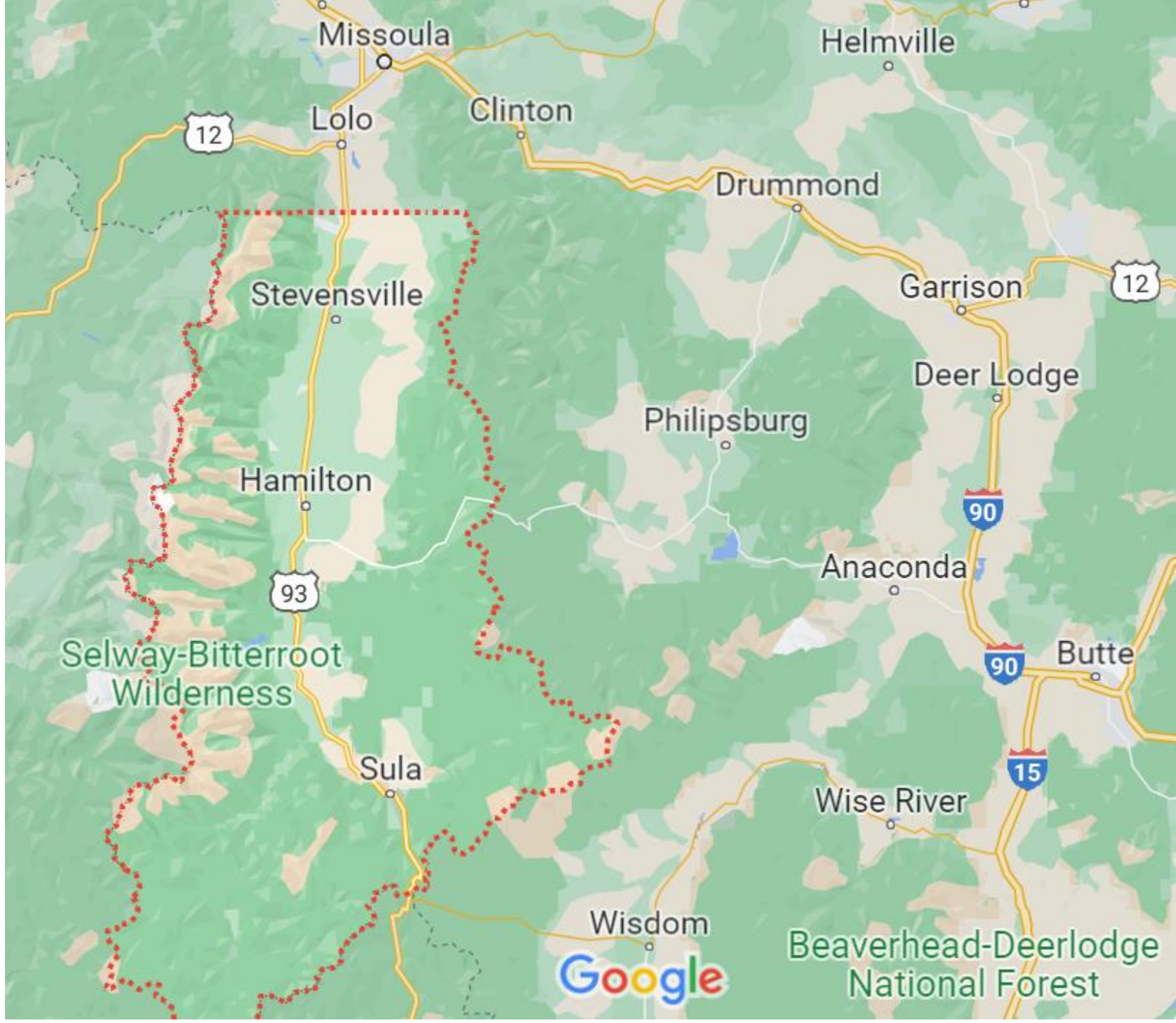
Max winds from 275 degrees at 200 mb 39,000 ft

https://www.weather.gov/media/rev/IWAWS/PDFs/Kleiner_IWAWS2020.pdf

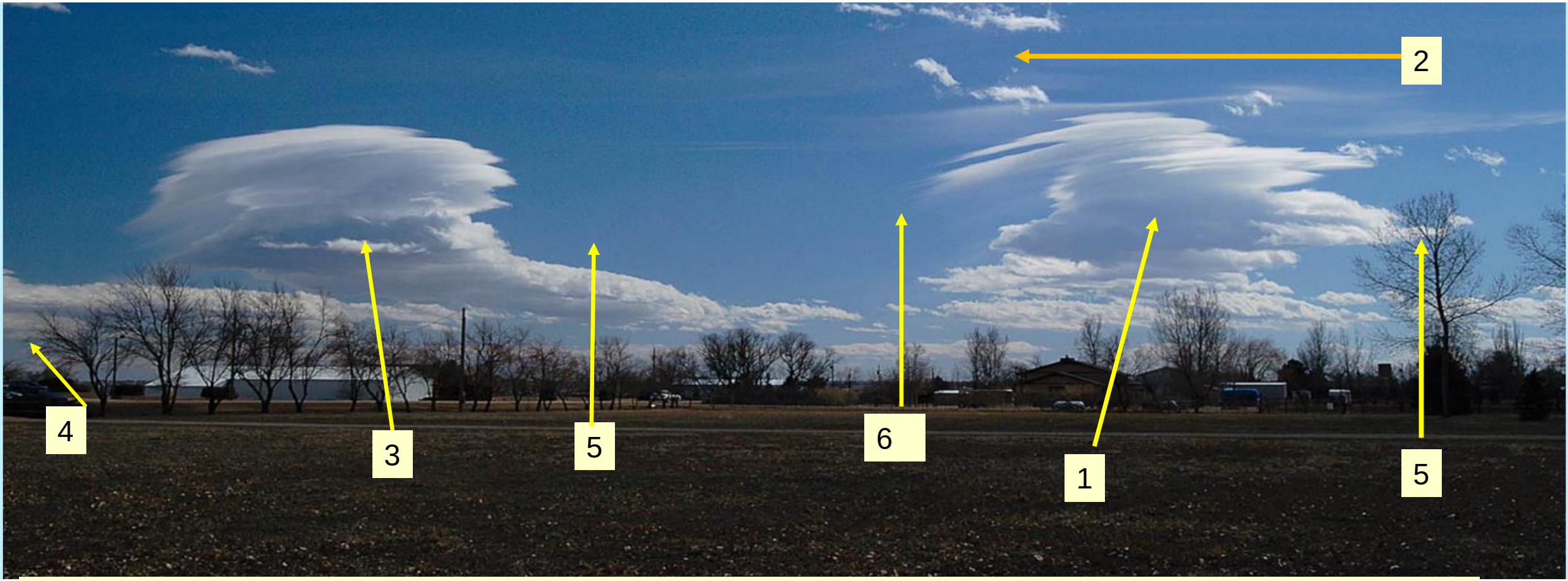
Photo was shot in the Bitterroot Valley Montana,

South of Stevensville, north of Hamilton.

After mid-day, looking South from the light and shadows visible.



https://www.weather.gov/media/rev/IWAWS/PDFs/Kleiner_IWAWS2020.pdf



Bob interpretation, based on email from Kurt Kleiner. Photo from Bitterroot Valley looking south. Bitterroot Mountains well to the right and not visible in this picture, foreground in flat valley land.

1. Primary Wave, in the lee of the Bitterroot Range
2. Strong Winds Aloft from the west.
3. Secondary Wave, long wave extending south
4. Sapphire Mts, E side of Valley, own wave structure
5. Strong Lift Area
6. Strong Sink Area

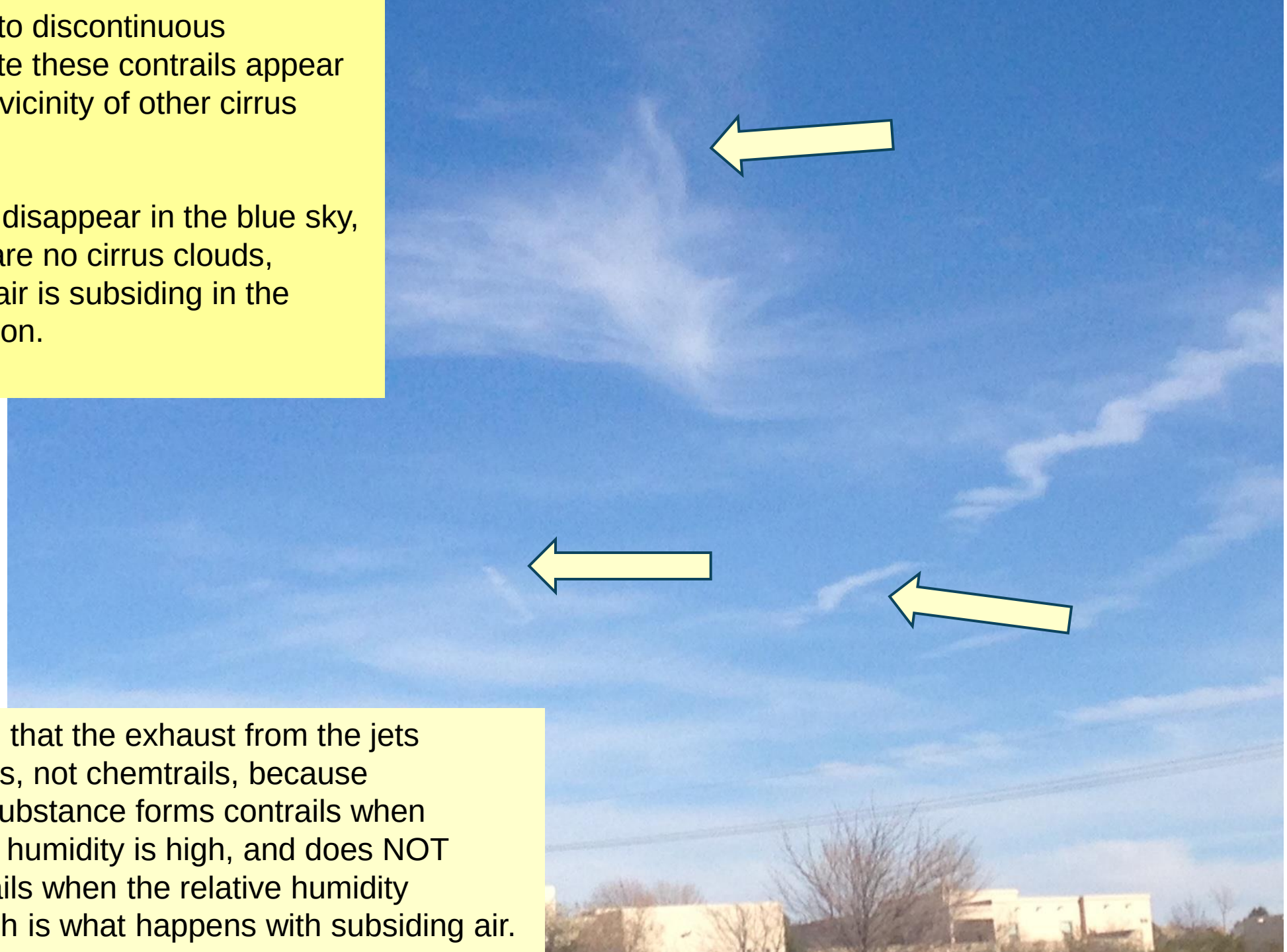
Image I shot in Las Cruces, NM
in February 2017.

There are plain cirrus, mountain wave clouds and contrails visible.

Arrows illustrate the contrail fragments.

Arrows point to discontinuous contrails. Note these contrails appear ONLY in the vicinity of other cirrus clouds.

The contrails disappear in the blue sky, where there are no cirrus clouds, because the air is subsiding in the blue-sky region.



This shows that the exhaust from the jets are contrails, not chemtrails, because the water substance forms contrails when the relative humidity is high, and does NOT form contrails when the relative humidity is low, which is what happens with subsiding air.

Another instance where there are sharp-edged contrails, dense near clouds, presumably with ascending air, and no contrails or clouds with descending air and deeper blue cloud-free air.

Summary

- “The Dimming” is a well-produced 2-hour video bringing the message that our weather and climate is being geoengineered to decrease the amount of solar radiation by accumulating aerosols in the air.

- Geoengineering Watch is sadly ignorant of many basics of Chemistry, Geochemistry, Atmospheric Fluid Dynamics and Thermodynamics. They can’t/won’t find easily searchable explanatory info.

- Their errors in not understanding: Chemistry of Combustion and the enormous amounts of water liberated in combustion engines. Geochemistry of weathered rocks, yielding clays, dried and blown to great heights, transcontinental distances. This explains their observing minerals aloft and at the surface.

- For decades, military forecasters have used empirical in-flight data collected from contrail and no-contrail observations, compared with radiosonde data, to achieve good predictive capabilities for contrail appearances for Military Advantage in Flight.

- If air is stable, and humid enough, mountain waves of various wavelengths can show areas of positive & negative atmospheric motion. Rising air cools, water condenses, becomes visible droplets or ice crystals. Subsiding air warms, evaporating clouds;dry air warms at the “Dry Adiabatic Lapse Rate

- The sudden appearance and disappearance of supposed Chemtrails are only Contrails **whose appearance and disappearance are governed by vertical motions of the atmosphere.**

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

Hurricane Helene

Helene at peak intensity just prior to landfall in the Big Bend region of Florida on September 26

Meteorological history	
Formed	September 24, 2024
Extratropical	September 27, 2024
Dissipated	September 29, 2024
Category 4 major hurricane	
1-minute sustained (SSHWS/NWS)	
Highest winds	140 mph (220 km/h)
Lowest pressure	938 mbar (hPa); 27.70 inHg

Overall effects	
Fatalities	≥252
Missing	93
Damage	>$39.8 billion (2024 USD)
Areas affected	Yucatán Peninsula, Honduras, Cayman Islands, Cuba, Southeastern United States (especially Florida, the Carolinas and Georgia, but also including Alabama, Tennessee, Kentucky, Virginia and West Virginia), Midwestern United States (Illinois, Indiana, Ohio)

Part of the 2024 Atlantic hurricane season

Meteorological history [edit]

Map plotting the storm's track and intensity, according to the Saffir–Simpson scale

Map key [hide]

Saffir–Simpson scale

- Tropical depression (≤38 mph, ≤62 km/h)
- Tropical storm (39–73 mph, 63–118 km/h)
- Category 1 (74–95 mph, 119–153 km/h)
- Category 2 (96–110 mph, 154–177 km/h)
- Category 3 (111–129 mph, 178–208 km/h)
- Category 4 (130–156 mph, 209–251 km/h)

https://casf.me/a-new-look-at-noaas-alleged-cat-5-strength-for-2018s-hurricane-michael/

I posited in this post that the peak wind for Hurricane Michael at landfall was 94 knots, nowhere near the 160 knots claimed by NOAA.

Strongest landfalling tropical cyclones in the U.S. state of Florida† as of 2024				
Rank	Hurricane	Season	Wind speed	
			mph	km/h
1	"Labor Day"	1935	185	295
2	Andrew	1992	165	270
3	Michael	2018	160	260
4	"Florida Keys"	1919	150	240
	Charley	2004		
	Ian	2022		
7	"Miami"	1926	145	230
	"Okeechobee"	1928		
	Donna	1960		
10	Helene	2024	140	220
Source: HURDAT,[148] Hurricane Research Division,[149] NHC[150]				
†Strength refers to maximum sustained wind speed upon striking land.				

Some Images from Asheville, NC, and nearby areas after Helene’s visit.

THE CITY OF ASHEVILLE

https://www.ashevillenc.gov/news/100-years-after-the-flood-of-1916-the-city-of-asheville-is-ready-for-the-next-one/

100 years after the Flood of 1916, the City of Asheville is ready for the next one

Posted on June 27, 2016 by Web Editors - CAPE

First, this unfortunate post…

https://www.citizen-times.com/story/news/local/2024/10/01/asheville-nc-flooding-see-helene-devastation-in-videos-photos/75471456007/

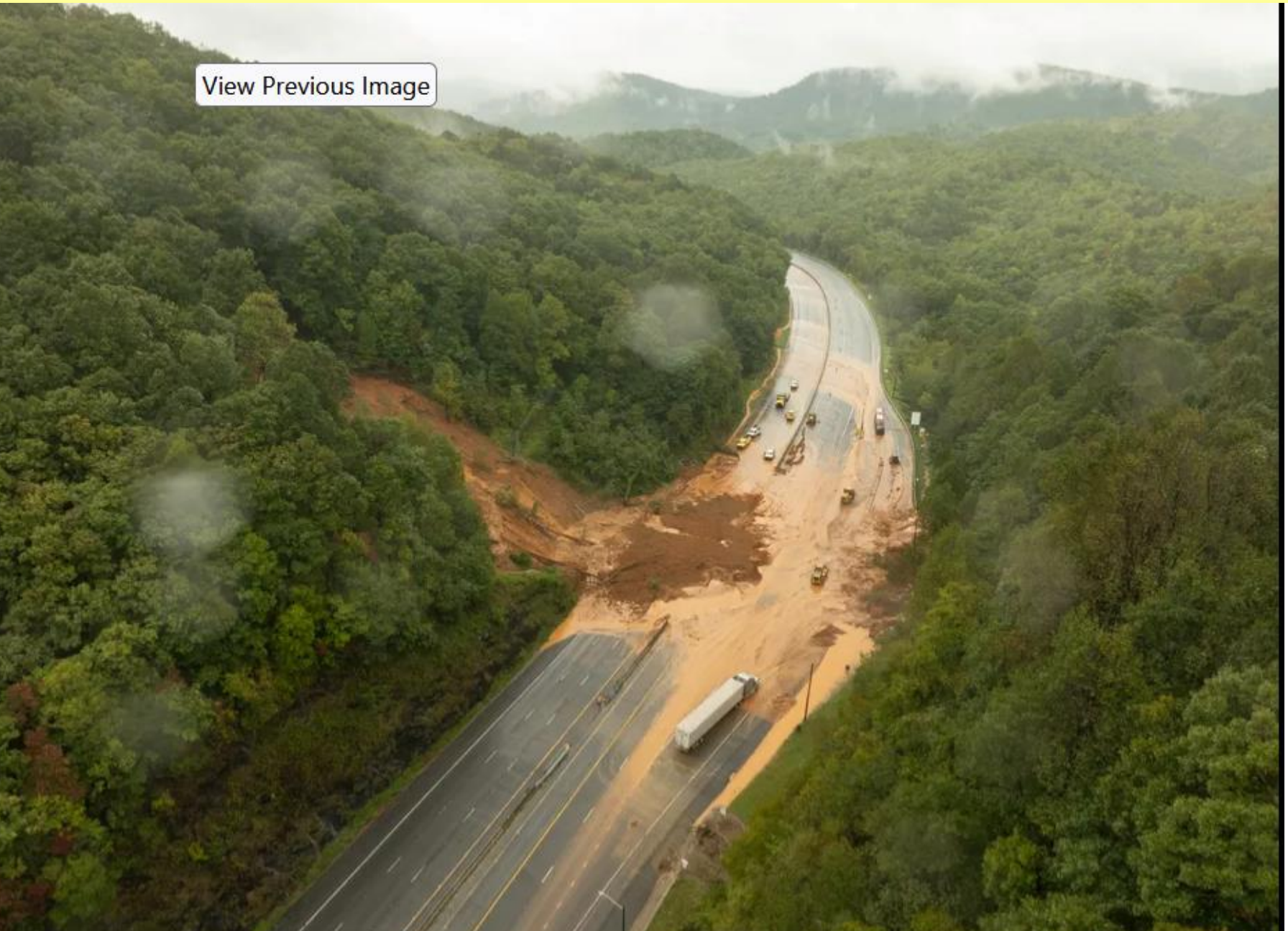
A local resident helps free a car that became stranded in a stretch of flooded road as Tropical Storm Helene strikes, on the outskirts of Boone, North Carolina, U.S. September 27, 2024.

Note the large rocks on the roadway.

https://www.citizen-times.com/story/news/local/2024/10/01/asheville-nc-flooding-see-helene-devastation-in-videos-photos/75471456007/

The French Broad River reached over 16 feet by 11 am on Sept. 27, flooding most of the River Arts District, seen here from the Haywood Road bridge.

https://www.citizen-times.com/story/news/local/2024/10/01/asheville-nc-flooding-see-helene-devastation-in-videos-photos/75471456007/



Drone images show
a landslide near Old Fort.

https://yaleclimateconnections.org/2024/10/climate-change-made-hurricane-helene-and-other-2024-disasters-more-damaging-scientists-find/

EYE ON THE STORM

Climate change made Hurricane Helene and other 2024 disasters more damaging, scientists find

Rising global temperatures are amplifying deadly extreme weather events.

https://yaleclimateconnections.org/2024/10/climate-change-made-hurricane-helene-and-other-2024-disasters-more-damaging-scientists-find/

Climate change increased Hurricane Helene's and Milton's potential destructiveness

Hurricane Milton, which formed in the Gulf of Mexico in early October, offers an example of how climate change amplifies extreme weather. As a result of high water temperatures, the storm rapidly intensified from a tropical storm to reach Category 5 status. The scientists at Climate Central estimated that those unusually warm sea surface temperatures were made up to 400 to 800 times more likely by climate change.

Whoa!

Let's FIRST widen our horizon to include:

Higher water temperatures.
Let's look at the physics of the wavelengths that heat ocean (and other) water

Closely related, how changes in global cloud cover are part of recent warming

Let's check weather history and physical science before "Blaming America (and the developed world) First!" (adapted from Jeanne Kirkpatrick)

Most damage seems to be from high rainfall rates and flooding, so let's look at historical record rainfall from NOAA….

The physics of solar wavelengths that heat ocean (and other) waters

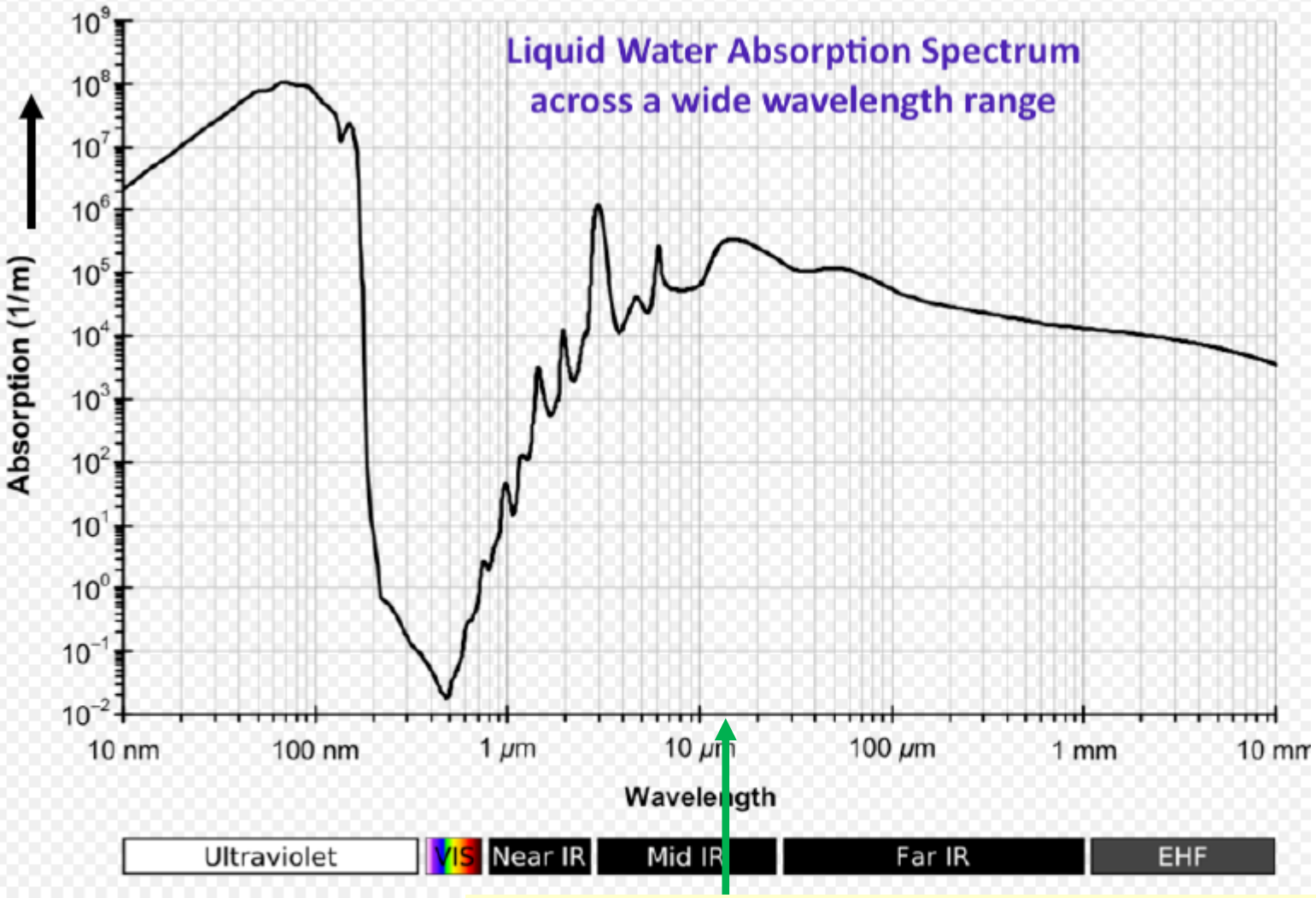
Explanation: At visible wavelengths, the colored portion of the spectrum shown with the red arrow in the diagram, the sun's radiation penetrates well into the water, because the absorption coefficient is low in the visible portion of the spectrum.

Britannica explains this as follows:
"Water is transparent to the wavelengths of electromagnetic radiation that fall within the visible spectrum and is opaque to wavelengths above and below this band."

Water is heated by the sun's rays.

Reduced cloudiness allows more sunlight to heat the water over time.

More atmospheric carbon dioxide, emitting in the infrared, IR, can not and does not heat river, lake, or ocean waters.



The green arrow shows the 15-micron peak of CO2 absorption and emission. Such radiation does not enter and warm the water.

https://water.lsbu.ac.uk/water/water_vibrational_spectrum.html

Additional thought on the subject:

Sunlight (NOT, e.g., infrared energy in the CO2 band) Heats Seawater

Alarmists claim increasing <CO2> causes increasing Sea Surface Temperatures.

This is incorrect.

It is **only visible sunlight** which **penetrates sea water** (and other water surfaces) and heats the water.

Infrared radiation does not penetrate sea water, or any water.

A simple validation of this is viewing into a pool. Visible Solar Radiation penetrates the water and illuminates the bottom of the pool.

A percentage of that light reflects from the bottom and comes back through the water and into the air.

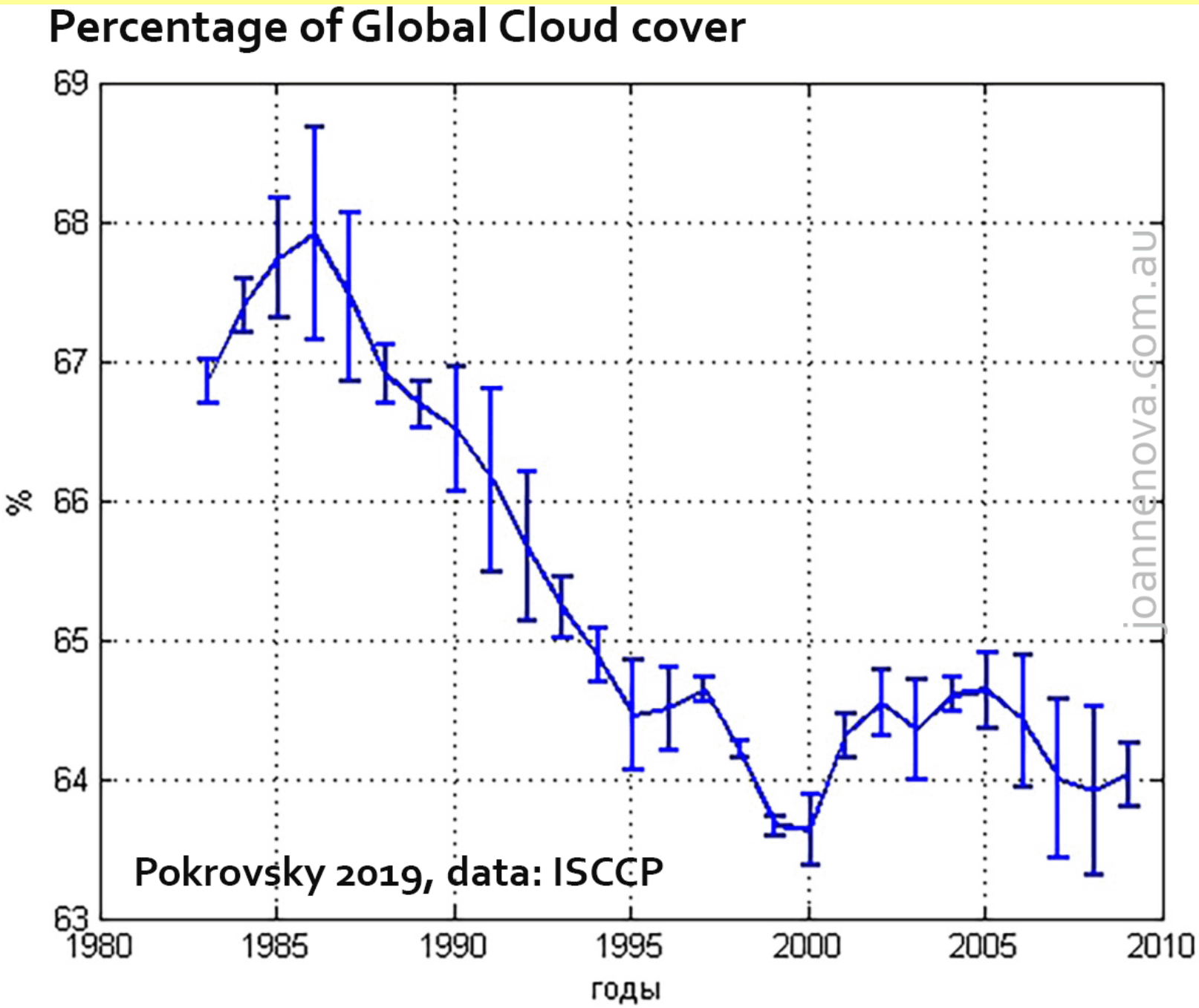
The fact that we see the structures on the sides and bottom of the pool is evidence that visible sunlight penetrates water…(and heats it.)

http://joannenova.com.au/2019/11/new-study-settles-it-global-warming-and-the-pause-was-driven-by-changes-in-cloud-cover-not-co2/

International Satellite Cloud Climatology Project: ISCCP
https://isccp.giss.nasa.gov

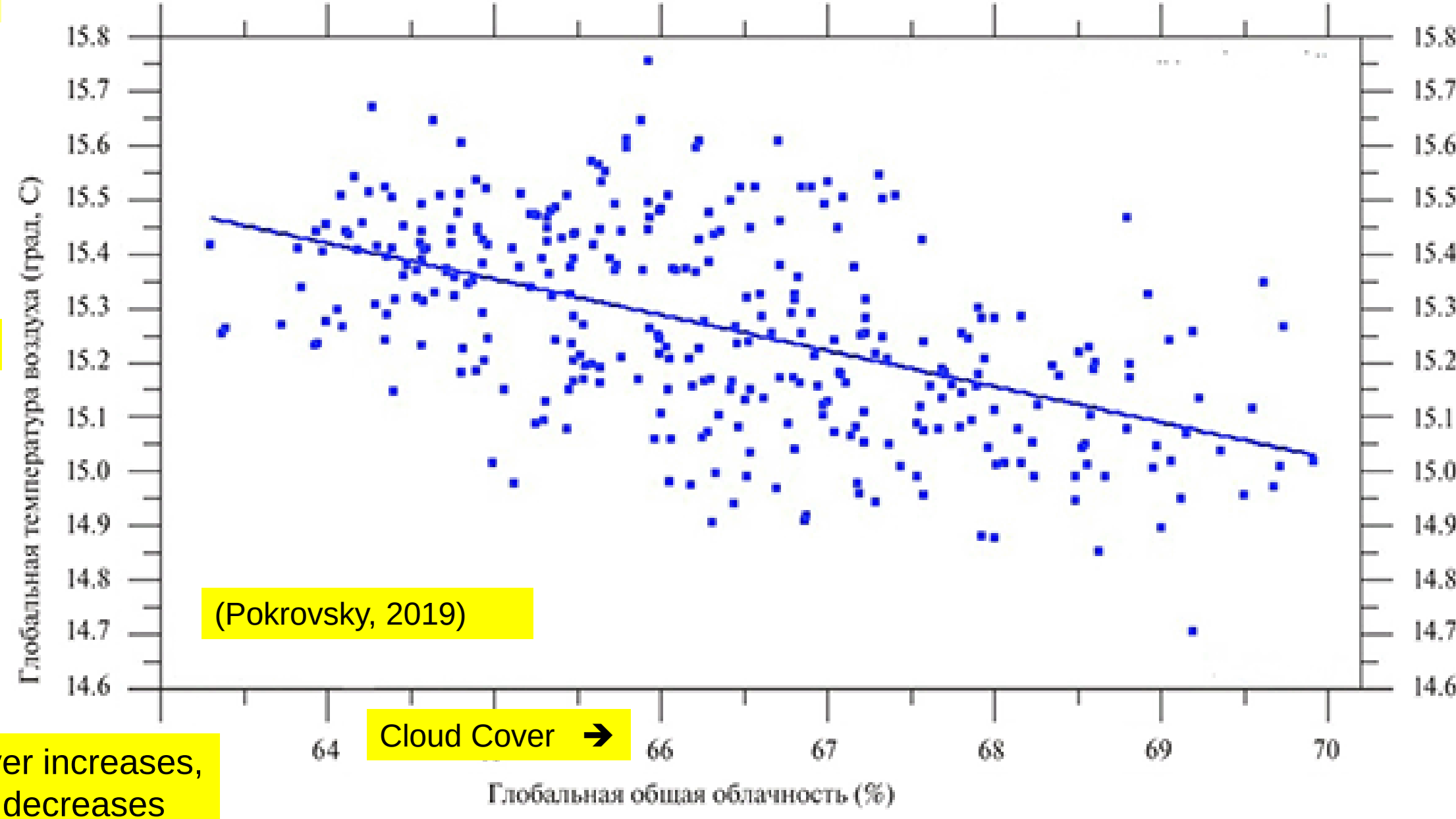
"The focus of the International Satellite Cloud Climatology Project is to collect weather satellite radiance measurements and to analyze them…"

Message:
Global Cloud Cover decreased from 1986-2000



http://joannenova.com.au/2019/11/new-study-settles-it-global-warming-and-the-pause-was-driven-by-changes-in-cloud-cover-not-co2/

Note Cyrillic Alphabet used in the original



Temp C

(Pokrovsky, 2019)

Cloud Cover ➔

As Cloud Cover increases, Temperature decreases

Results of regression analysis of the series of global clouds (ISCCP) and surface air temperature (CRUTEM3).

If we look at US Rainfall Records for up to 24 hours, the most recent is 24 Hours, 43in, Alvin, TX, between Houston and Galveston, 25 July 1979.
45 Years ago!

There's no indication that modern warming or recent increases of <CO2> cause record rainfall.

Notice the cluster of record rainfall occurrences in Pennsylvania, SE Ohio, (near WV mts) and in West Virginia.

There is a propensity of flooding rain occurrences in and around the Appalachian Mountains, in the warm season.

NOTICE! Flooding rain records are set in and around the Appalachian Mountains!

U.S. Record Point Rainfalls

Time	*Rainfall*	*Location*	*Date*
1 minute	1.23"	Unionville, MD	7/4/1956
5 minutes	2.03"	Alamogordo Creek, NM	6/5/1960
12 minutes	2.30"	Embarrass, WI	5/28/1881
15 minutes	3.95"	Galveston, TX	6/4/1871
30 minutes	7.00"	Cambridge, OH	7/16/1914
40 minutes	9.25"	Guinea, VA	8/24/1906
42 minutes	12.00"	Holt, MO	6/22/1947*
1 hour	13.80"	Central WV	5/4-5/1943
1 hour 30 minutes	14.60"	Central WV	5/4-5/1943
2 hours	15.00"	Woodward Ranch, (D'Hanis) TX	5/31/1935
2 hours 30 minutes	19.00"	Rockport, WV	7/18/1889
2 hours 45 minutes	22.00"	Woodward Ranch, (D'Hanis) TX	5/31/1935*
3 hours	28.50"est.	Smethport, PA	7/18/42*
4 hours 30 minutes	30.70"	Smethport, PA	7/18/42*
12 hours	34.30"	Smethport, PA	7/17-18/1942
18 hours	36.40"	Thrall, TX	9/9/1921
24 hours	43.00"	Alvin, TX	7/25-26/1979
4 days	62.00"	Kukaiau, Hamakua, HI	2/27-3/2/1902
8 days	82.00"	Kukaiau, Hamakua, HI	2/27-3/6/1902
1 month	148.83"	Mt. Waialeale, Kauai, HI	3/1982
1 month (mainland)	71.54"	Helen Mine, CA	1/1909
1 year	704.83"	Kukui, Kauai, HI	1982
1 year	332.29"	MacLeeod Harbor, AK	1976
1 year (mainland)	204.12"	Laurel Mountain, OR	1996

*constitutes a world record

Note the dates of occurrence.

The newest CONUS Rainfall record was 43 Inches in 24 hours, 1979, Alvin, Texas.

Next newest CONUS record was 1960, 61 years ago, 2 Inches in 5 minutes, in NM.

There is no modern rainfall record newer than 42 years ago.

<u>Higher <CO2> is not setting modern rainfall accumulation records.</u>

U.S. Record Point Rainfalls

Time	*Rainfall*	*Location*	*Date*
1 minute	1.23"	Unionville, MD	7/4/1956
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40 minutes	9.25"	Guinea, VA	8/24/1906
42 minutes	12.00"	Holt, MO	6/22/1947*
1 hour	13.80"	Central WV	5/4-5/1943
1 hour 30 minutes	14.60"	Central WV	5/4-5/1943
2 hours	15.00"	Woodward Ranch, (D'Hanis) TX	5/31/1935
2 hours 30 minutes	19.00"	Rockport, WV	7/18/1889
2 hours 45 minutes	22.00"	Woodward Ranch, (D'Hanis) TX	5/31/1935*
3 hours	28.50"*est.*	Smethport, PA	7/18/42*
4 hours 30 minutes	30.70"	Smethport, PA	7/18/42*
12 hours	34.30"	Smethport, PA	7/17-18/1942
18 hours	36.40"	Thrall, TX	9/9/1921
24 hours	43.00"	Alvin, TX	7/25-26/1979
4 days	62.00"	Kukaiau, Hamakua, HI	2/27-3/2/1902
8 days	82.00"	Kukaiau, Hamakua, HI	2/27-3/6/1902
1 month	148.83"	Mt. Waialeale, Kauai, HI	3/1982
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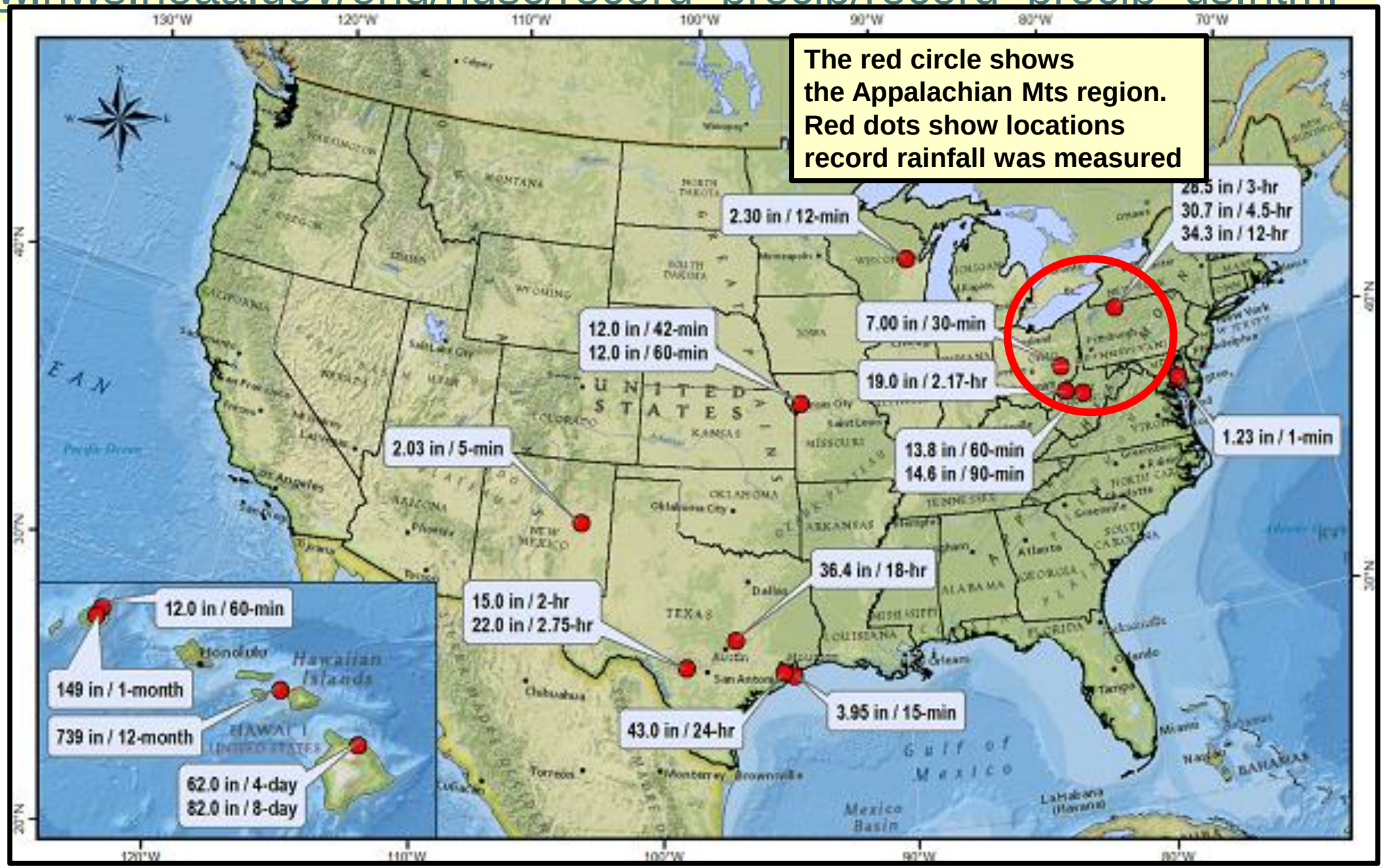
https://www.nws.noaa.gov/ohd/hdsc/record_precip/record_precip_us.html



It is not new news that when hurricanes or their remnants get into, especially the Appalachian Mountains, that severe flooding often occurs.

Hurricane Milton

Hurricane Milton

Milton near peak intensity just north of the Yucatán Peninsula on October 7

Meteorological history	
Formed	October 5, 2024
Extratropical	October 10, 2024
Dissipated	October 12, 2024
Category 5 major hurricane	
1-minute sustained (SSHWS/NWS)	
Highest winds	180 mph (285 km/h)
Lowest pressure	897 mbar (hPa); 26.49 inHg

Overall effects	
Fatalities	≥33
Missing	≥6
Damage	>$30 billion (2024 USD)
Areas affected	Mexico (Gulf Coast of Mexico and northern Yucatán Peninsula) · Greater Antilles (Western Cuba) · Southeastern United States (especially Florida and Georgia) · Lucayan Archipelago (The Bahamas) [1]

Part of the **2024 Atlantic hurricane season**

Map plotting the storm's track and intensity, according to the Saffir–Simpson scale

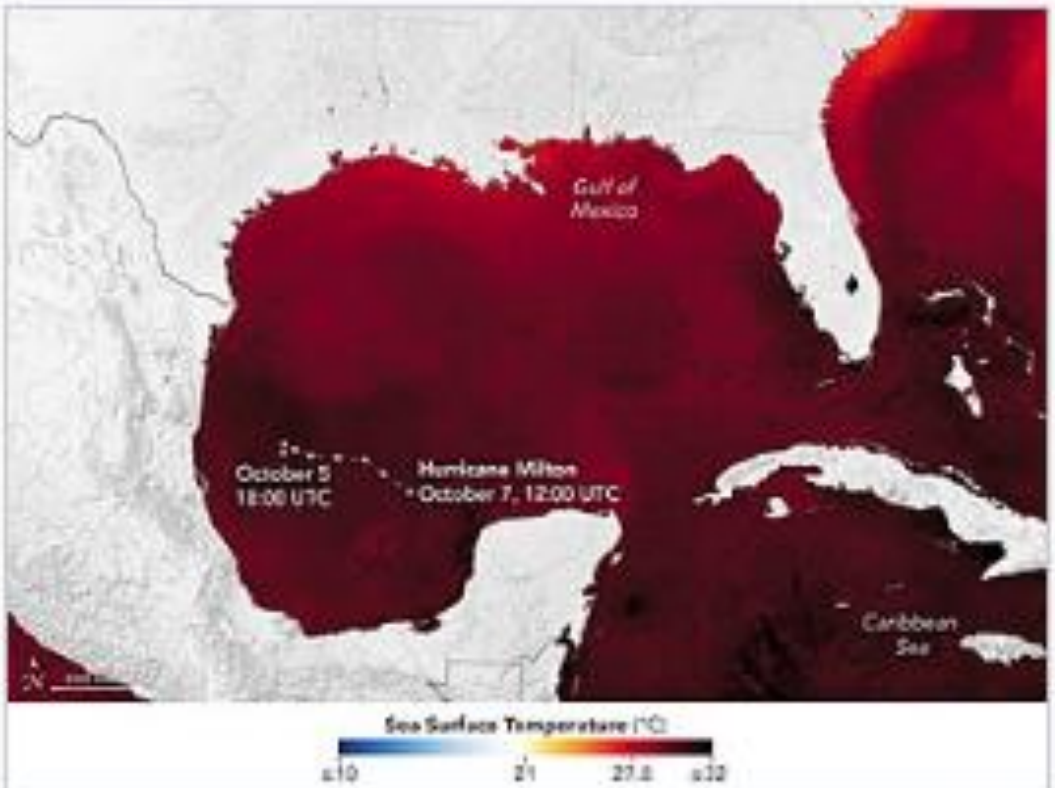
Map key [hide]

Saffir–Simpson scale

- Tropical depression (≤38 mph, ≤62 km/h)
- Tropical storm (39–73 mph, 63–118 km/h)
- Category 1 (74–95 mph, 119–153 km/h)
- Category 2 (96–110 mph, 154–177 km/h)
- Category 3 (111–129 mph, 178–208 km/h)
- Category 4 (130–156 mph, 209–251 km/h)
- Category 5 (≥157 mph, ≥252 km/h)

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

Most intense Atlantic hurricanes (v · t · e)				
Rank	Hurricane	Season	Pressure	
			hPa	inHg
1	Wilma	2005	882	26.05
2	Gilbert	1988	888	26.23
3	"Labor Day"	1935	892	26.34
4	Rita	2005	895	26.43
5	**Milton**	2024	897	26.49
6	Allen	1980	899	26.55
7	Camille	1969	900	26.58
8	Katrina	2005	902	26.64
9	Mitch	1998	905	26.73
	Dean	2007		
Source: HURDAT[19]				



Map of the extremely warm sea surface temperatures that enabled Milton's rapid intensification, overlayed with its path through 12:00 UTC on October 7

https://en.wikipedia.org/wiki/Great_Hurricane_of_1780

SIDEBAR
The Great Hurricane of 1780

The hurricane stripped the bark off trees and left none standing on Barbados.

Cuban meteorologist José Carlos Millás has estimated that this damage could be caused only by winds exceeding 200 miles per hour (320 km/h). Every house and fort on Barbados was destroyed.

According to British Admiral George Brydges Rodney, the winds carried their heavy cannons aloft 100 feet (30 m).

Warehouses on the beach of St. Eustatius were destroyed by the hurricane.

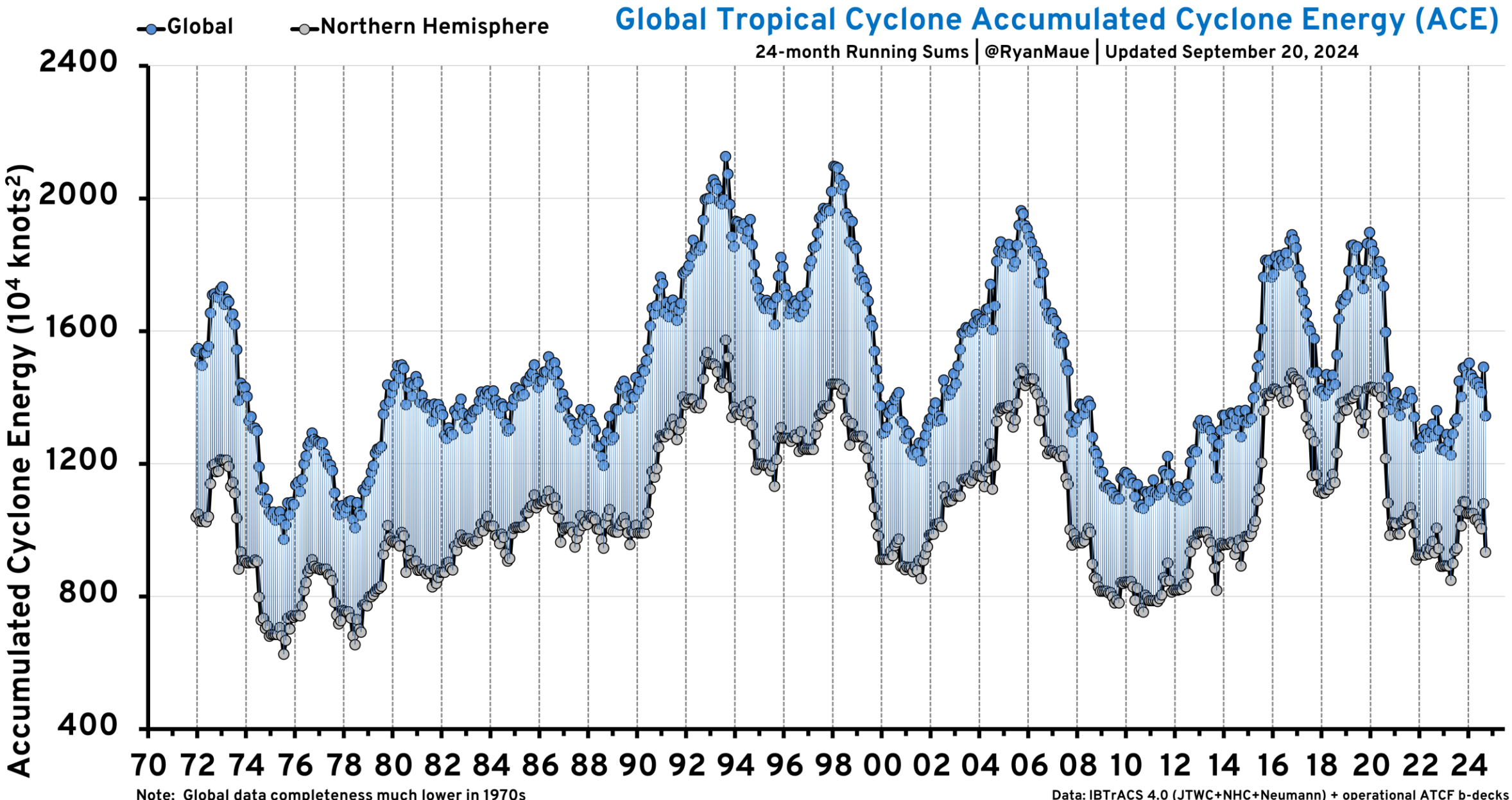
The historic decline of global tropical cyclone activity.

https://www.met.nps.edu/~rwmoor1/abstracts/Maue.pdf

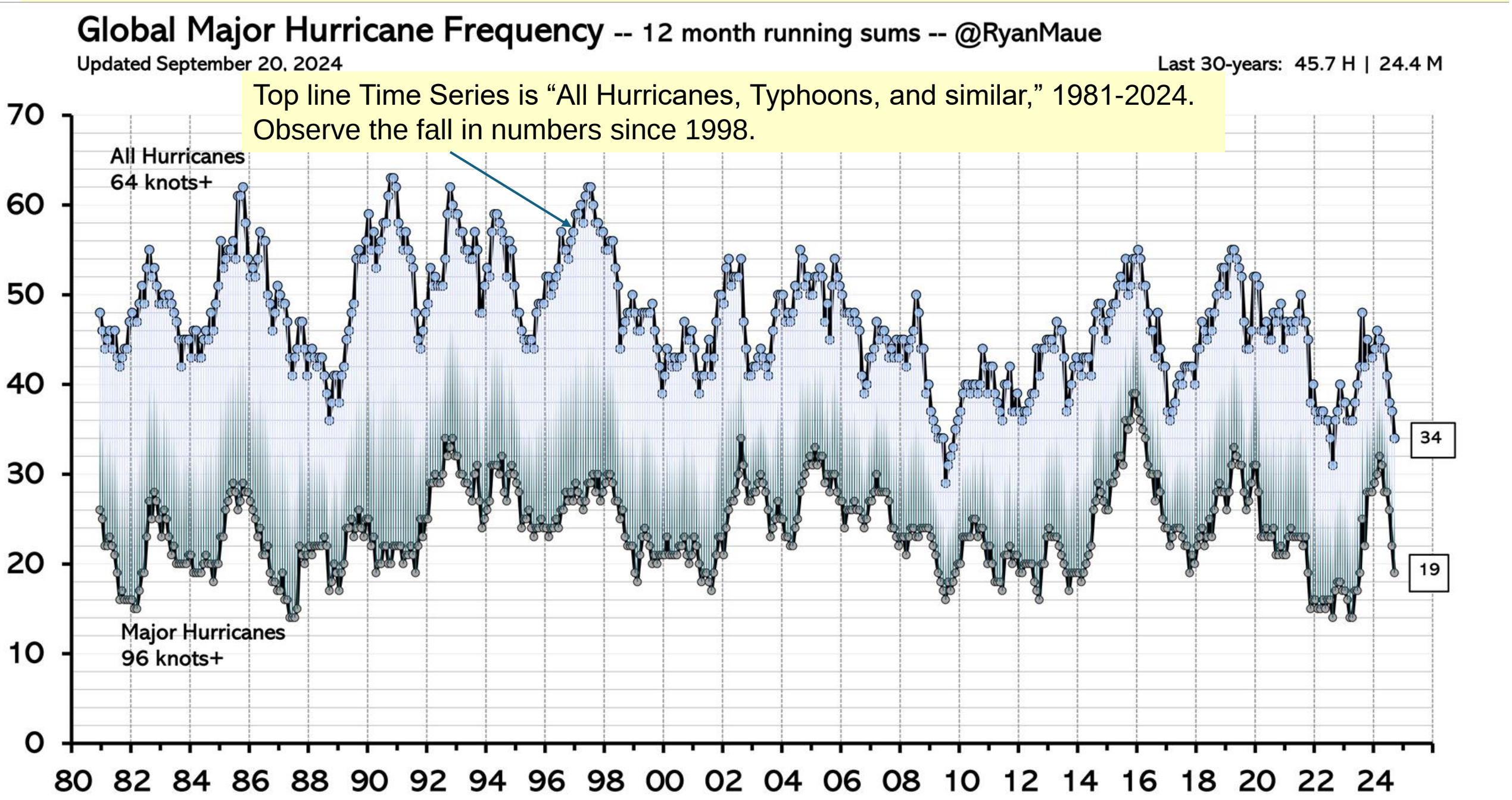
Ryan N. Maue
NRL Monterey

Since 2006, overall global tropical cyclone (TC) activity as measured by integrated energy metrics has declined dramatically. During 2009 and 2010, analysis showed that 12 and 24-month running sums of global accumulated cyclone energy (ACE) fell to some of the lowest levels recorded during the satellite era. This inactivity continued both below--normal ACE in the Northern and Southern Hemisphere as a whole. As integrated metrics such as ACE and PDI (power dissipation index) include the duration, intensity, and frequency information of historical TCs, the correlation between the separate components of the convolution also has evolved through time. Indeed, the ACE per storm distribution in the past 5 years is exemplified by weaker, shorter--lived storms.

https://climatlas.com/tropical/global_running_ace.png



https://climatlas.com/tropical/global_major_freq.png



BOB’S EDITORIAL COMMENTS….seem to apply at least in part to James Delingpole….

There is much material in MSN references that seems just BS thrown about by arts majors with little math, physics, chemistry, or meteorology backgrounds, or the analytical skills to find time series from proxy data available from the Ice Cores or comparable data.

There is obviously no reasonable Literature Search before conducting the interview or sitting before the keyboard.

Seems as if they want to play with the Big Kids who do only Consensus Science.

Hard Science seems to be too hard for them.

There are the data from the overwash from Very Strong Hurricanes in the historic past on the Gulf Coast which showed these very strong storms occurred in the past, with a lot less CO2.

Next.

https://www.researchgate.net/publication/268357390_Holocene_History_of_Catastrophic_Hurricane_Landfalls_along_the_Gulf_of_Mexico_Coast_Reconstructed_from_Coastal_Lake_and_Marsh_Sediments

Section 3.2

Holocene History of Catastrophic Hurricane Landfalls along the Gulf of Mexico Coast Reconstructed from Coastal Lake and Marsh Sediments

Kam-biu Liu
Department of Geography and Anthropology
Louisiana State University, Baton Rouge, LA

Miriam L. Fearn
Department of Geology and Geography,
University of South Alabama, Mobile, AL

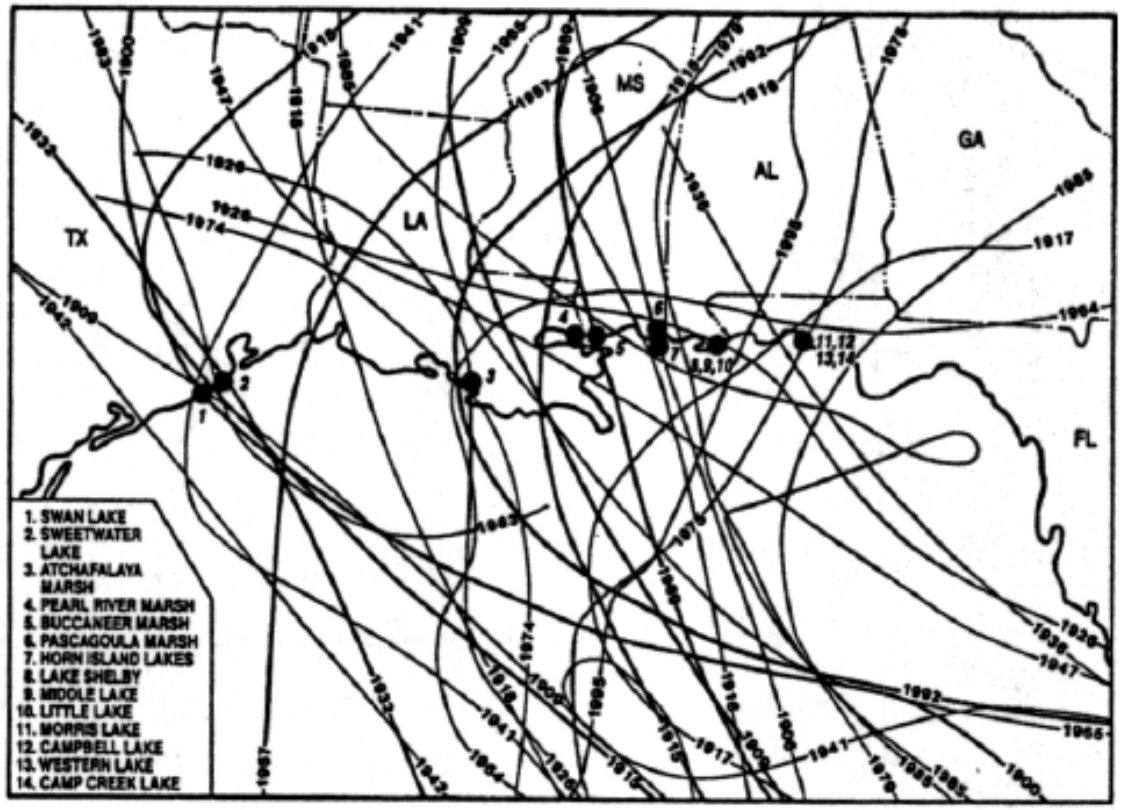


Fig. 1. Location of lakes and marshes along the northern Gulf of Mexico coast cored for the hurricane paleoclimate study, in relation to the storm tracks of major landfalling hurricanes (categories 3, 4, 5) recorded in this century.

NOTE: Published in 2000, so the tracks are for the 20th Century.

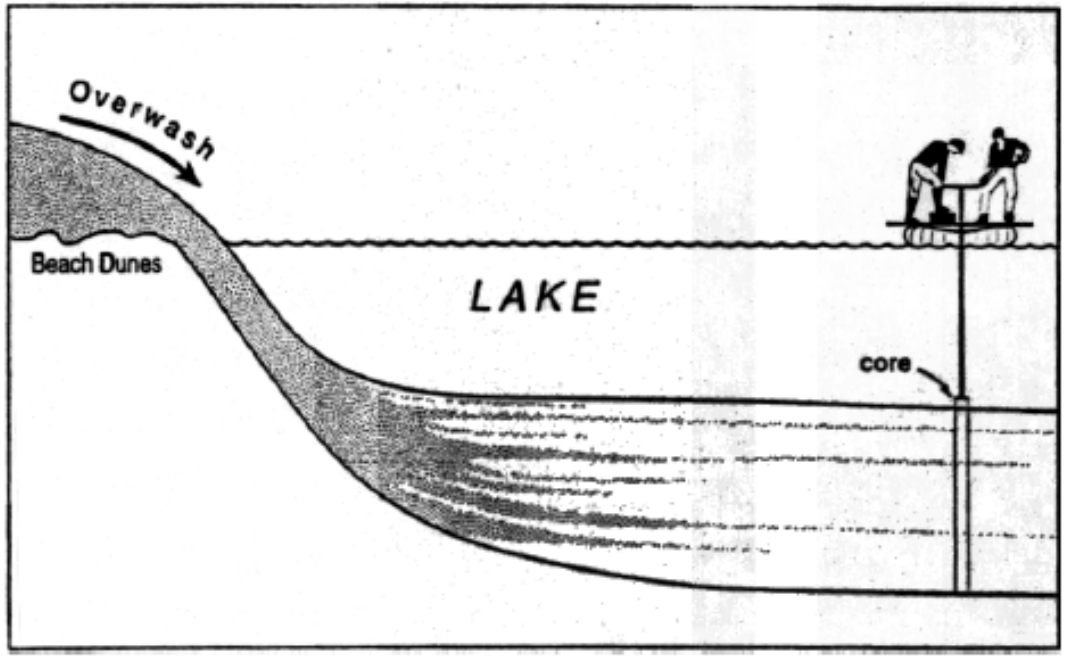
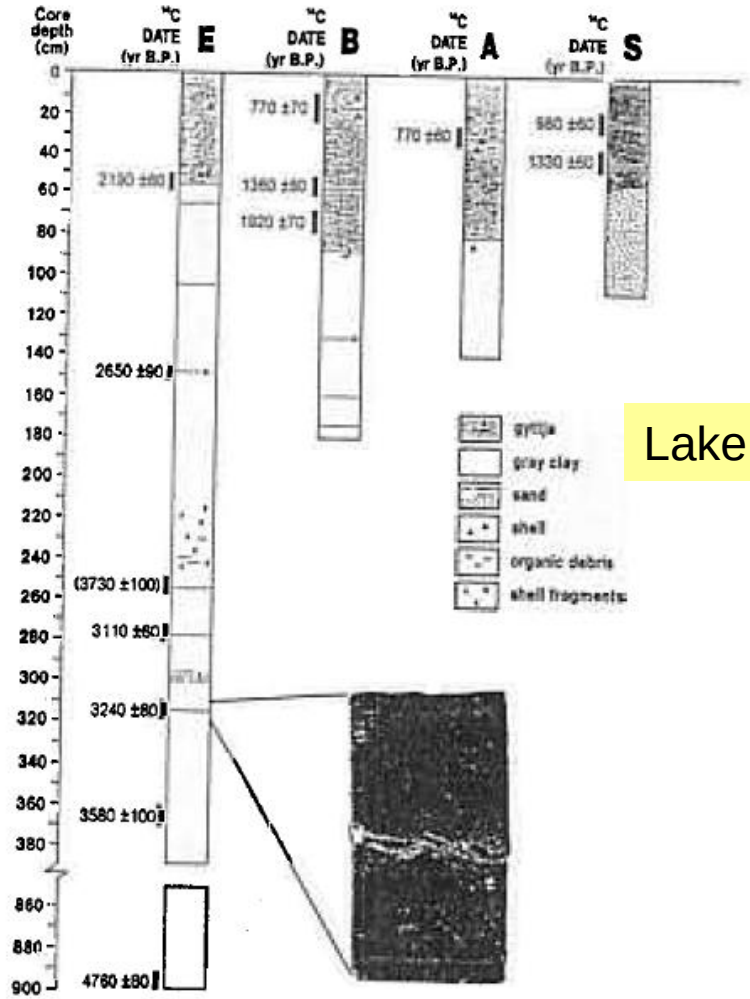
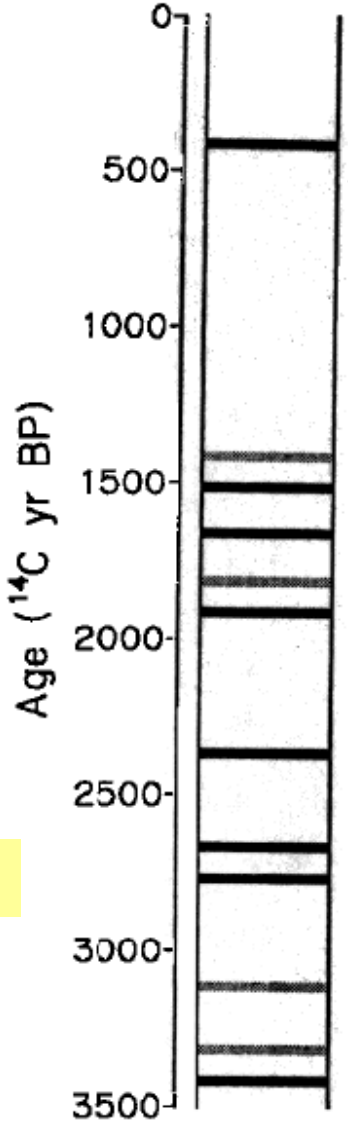


Fig. 2. A model of sediment stratigraphy in a coastal lake containing multiple sand layers representing overwash events caused by past catastrophic hurricane strikes. These sand layers can be identified in sediment cores taken from different parts of the lake. Cores taken from nearshore sites should contain more and thicker sand layers than those taken farther away from shore. Only sand layers that are the most widespread, probably reflecting the severest overwash caused by the strongest hurricanes, are likely to be recorded in cores taken from the lake center. However, sand layers may coalesce to form a massive sand unit at sites too close to shore, so that individual overwash events may not be distinguishable in the core.



Lake Shelby

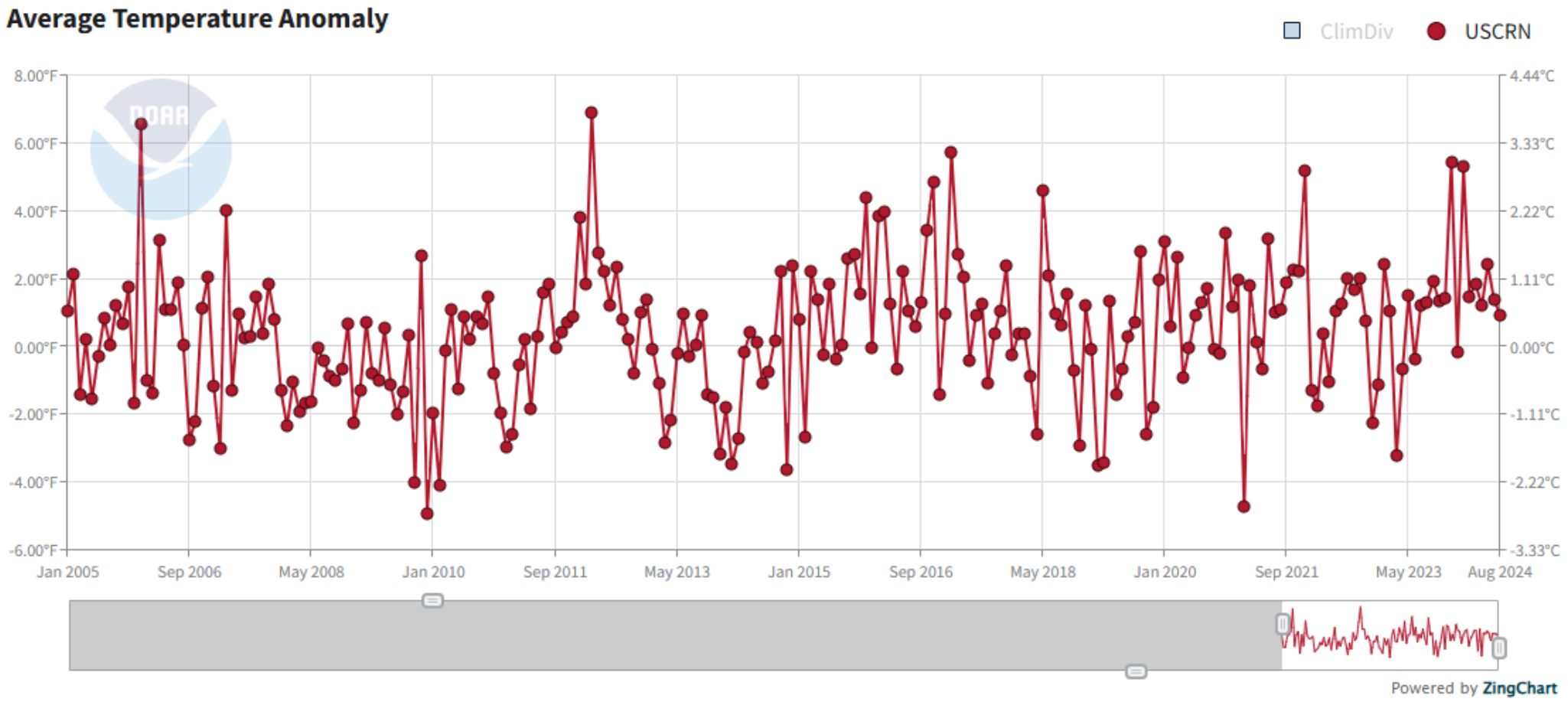
Fig. 4. Stratigraphic columns of Lake Shelby cores E, B, A, S, and L showing the occurrence of overwash sand layers. Core L is a short core taken from a nearshore site where the Hurricane Frederic sand layer was deposited. Core E is a 9 m long core taken from the center of the lake. The most prominent sand layers in these cores were radiocarbon-dated. The date in brackets was rejected as being too old due to contamination by shell fragments. All dates shown are uncalibrated ^{14}C ages (After Liu and Fearn, 1993a). Inset photograph shows an overwash sand layer in core E.



Western Lake

Fig. 5. Abbreviated chronostratigraphic column of Western Lake core I for the past 3500 years showing the radiocarbon-dated ages of the major sand layers (solid lines) and minor sand layers (stippled lines). The vertical axis is time measured in uncalibrated ^{14}C years before present. At least 12 sand layers occur within the past 3400 years.

https://www.ncei.noaa.gov/access/monitoring/national-temperature-index/time-series/anom-tavg/1/



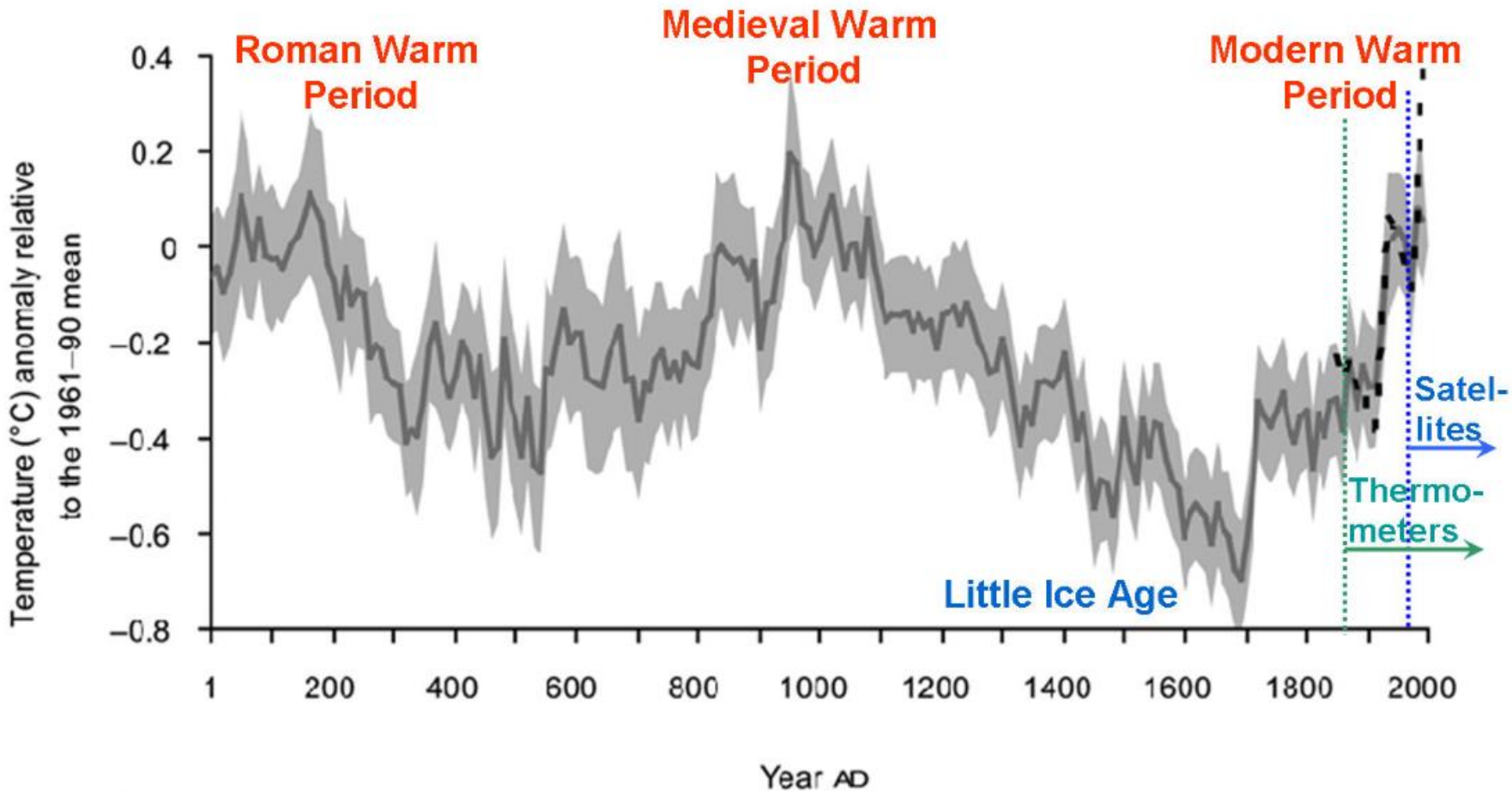
This is the temperatue time series from the US Climate Reference Network, the USCRN, which measures surface temperatures seemingly unaffected by Urban Heat Island and poor exposure which plague other data sets. USCRN covers the entire USA. The so-called rapid increase of surface temperatures is not happening IF YOU LOOK AT THE DATA. There is no climate emergency.

https://notrickszone.com/2021/09/17/scientists-find-surprising-and-statistically-significant-cooling-trend-over-entire-continental-antarctica/

Puzzlement:

https://www.drroyspencer.com/wp-content/uploads/Spencer_EPW_Written_Testimony_7_18_2013_updated.pdf

Temperature Reconstruction* for N. Hemisphere, 1 - 2000 AD
Shows Modern Warm Period Not Exceptional



*Ljungqvist, F.C. 2010. A new reconstruction of temperature variability in the extra-tropical Northern Hemisphere during the last two millennia. Geografiska Annaler: Physical Geography, Vol. 92 A(3), pp. 339-351, September 2010. DOI: 10.1111/j.1468-0459.2010.00399.x

Remarks:

Late in the 2024 Hurricane season, powerful Hurricanes Helene and Milton slammed into the southeast USA.
Many in the Alarmist Press and their allies proclaimed the power of the storms on human activities, principally Western Civilization which uses fossil fuels, which emit CO2, for transport, electricity, heating, cooling lighting, communications, in short civilization.
The US Climate Reference Network shows little change in surface temperatures since the Network began in 2005.
Stronger Hurricanes have been observed within the historic record with smaller amounts of CO2 in the atmosphere.
Sediment cores from lakes near the southeastern US coast reveal overwash deposits from the last several thousand years with stronger hurricane effects, during periods with a lot less atmospheric CO2.

There is no climate crisis.

Valencia: Man Made Climate Change is REAL

Or: Why I No Longer Talk to Climate Sceptics, by James Delingpole

https://delingpole.substack.com/p/valencia-man-made-climate-change

Below, Delingpole writes about his book, **Watermelons…**

But there was one key detail I got wrong which I now intend to correct. **In the original version, I claimed that man-made climate change wasn't real. Of course it is, though. Look at Valencia…**

Or, indeed, look at North Carolina after Hurricane Helene. Or Florida after Hurricane Milton. Or, come to that, look out of your window right now, if it's daylight, and admire all those white lines criss-crossing your skies and marvel at the gobsmacking fact that even now, even after all this evidence so blatant they might have got one of those skywriting aeroplanes to scrawl in rainbow smoke **"This is what chemtrails look like, you morons!"**, most people in the world still think this is normal.

I assert Delingpole is wrong!

We discussed Hurricanes Helene and Milton in October 2024
https://casf.me/2024s-hurricanes-helene-milton/

We discussed “Chemtrails” in October 2022:
https://casf.me/comments-on-geoengineering-watchs-video-the-dimming/

We’ll next analyze the heavy rains/flooding in late October 2024 in Valencia, Spain, and nearby areas…

https://en.wikipedia.org/wiki/2024_Spanish_floods

On 29 October 2024, torrential rain caused by an isolated low-pressure area at high levels brought over a year's worth of precipitation to several areas in eastern Spain, including the Valencian Community, Castilla–La Mancha, and Andalusia. The resulting floodwaters caused the deaths of 223 people,[1] with 93 missing[2][3] and substantial property damage.[4][5] It is one of the deadliest natural disasters in Spanish history.[6]

Though similar torrential rain events had happened in the past in the region, the flooding was likely more intense due to climate change, and the poor disaster response of the local government likely aggravated the human cost of the event. After the flooding, both the national government and volunteer and nonprofit organizations mobilized to help with cleanup and recovery.

https://cloudappreciationsociety.org/cloud-library/contrail/

About Contrail

https://cloudappreciationsociety.org/cloud-library/contrail/

Before the start of the First World War and the advent of high-altitude flight, our skies appeared very different from the way they do today – there were no condensation trails, or contrails, which form in the exhaust of aircraft.

There's no confusing these man-made clouds with the natural ones. Following the aircraft's path, contrails tend to appear as long, straight slashes of white across the blue. In the vicinity of airports, however, they can sometimes form large loops, due to the stacking formation of aircraft waiting to land.

The length of time contrails remain in the sky – or indeed whether they form at all – varies greatly depending on the air conditions up at cruising altitude. When it's cold enough and moist enough, the water vapour contained in the plane's hot exhaust gases mixes with the very cold air to condense and form ice crystals. In some conditions, these soon evaporate. In others, they can persist for hours, the ice crystals absorbing water vapour from the surrounding air to grow in size and spread out in the high winds. In this way, contrails often encourage the formation of Cirrus, Cirrocumulus and Cirrostratus ice-crystal clouds.

Image: Spotted over Churánov, Jihočeský, Jihočeský, Czechia by Jero.

Cirrus at Sunset
https://scool.larc.nasa.gov/images/Ci10.jpg

This is a great shot of feathery cirrus turned pink by the setting sun, and with some very distinct persistent contrails running through
h the sky.
Photo by Ed Donovan, South Carolina, July 2003

Valencia’s Floods

https://en.wikipedia.org/wiki/2024_Spanish_floods

2024 Spanish floods

Article Talk

From Wikipedia, the free encyclopedia

COMMENT:
A LOW-PRESSURE AREA ALOFT
CUT OFF FROM THE MAIN JET STREAM
IS A “CUT OFF LOW”

IN SPAIN, THE TERM IS “COLD DROP”

For other floods in Spain in 2024, see 2024 European floods § Spain.

On 29 October 2024, torrential rain caused by an isolated low-pressure area at high levels brought over a year's worth of precipitation to several areas in eastern Spain, including the Valencian Community, Castilla–La Mancha, and Andalusia. The resulting floodwaters caused the deaths of 222 people,[1] with 23 missing[2][3] and substantial property damage.[4][5] It is one of the deadliest natural disasters in Spanish history.[6]

https://www.weatheronline.co.nz/reports/wxfacts/Cut-off-low.htm

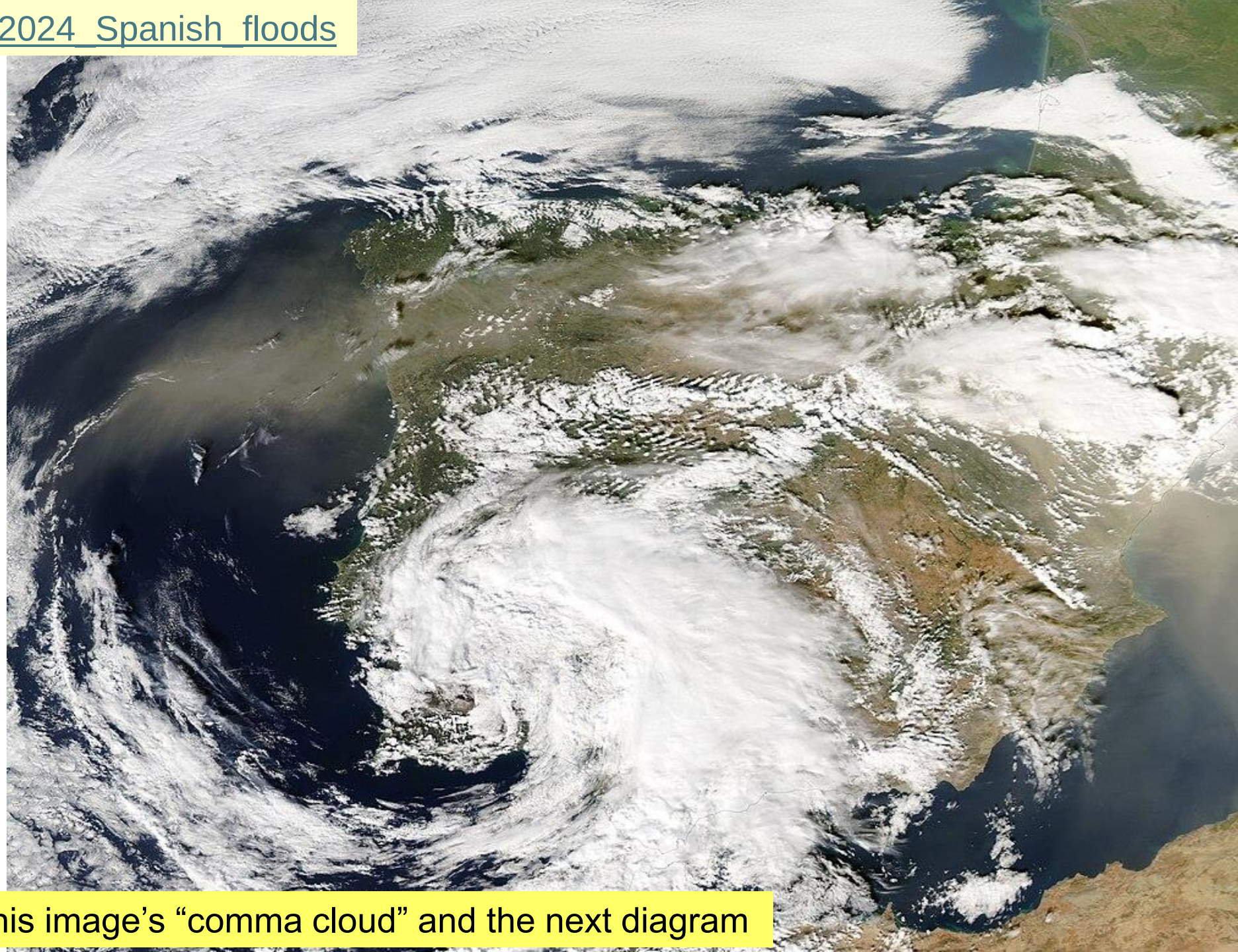
Cut-off low

The **cut-off low** is a **cold low** (depression) in mid-latitudes (occasionally almost in subtropical latitudes) where air of polar origin is cut off from the main subpolar belt of low pressure and cold air, the normal track of depressions.

A cut-off low usually begins as a **trough in the upper-air flow**, which becomes a closed circulation and then extends down to the **surface**. Also known as **closed low** or **cold pool**. A cut-off low is marked by more or less concentric **isotherms** around the core of the low.

Cut-off lows are most frequent in periods of **low index circulation** . Sometimes a cut-off low occurs with a cut-off high over the higher latitudes, typically in blocking situations. Such slow-moving lows are associated with unsettled weather and, in summer, with thunderstorms.

https://en.wikipedia.org/wiki/2024_Spanish_floods

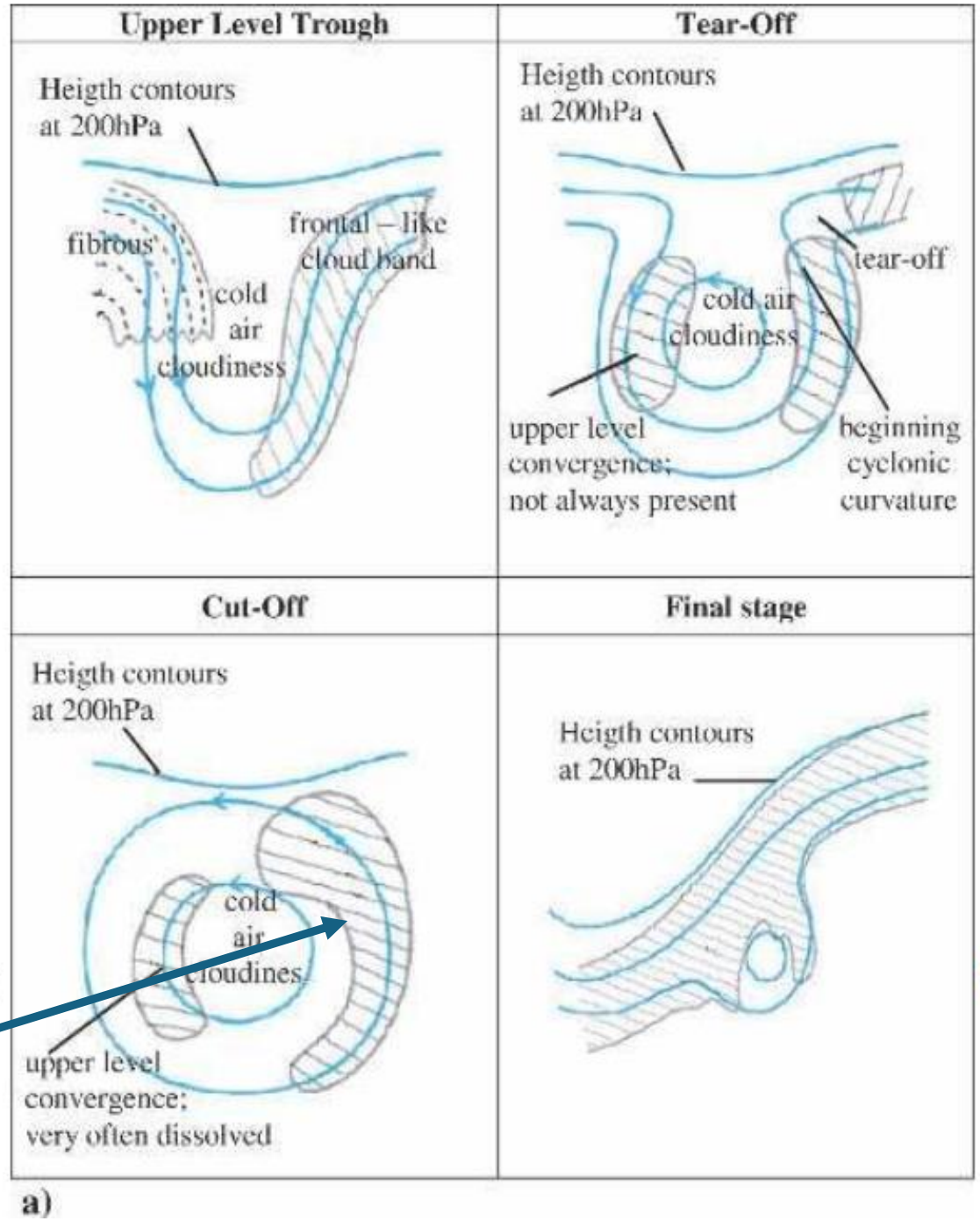


Note similarity between this image's "comma cloud" and the next diagram

https://www.researchgate.net/figure/Diagram-of-the-typical-synoptic-situation-of-a-cutoff-low-showing-a-the-different_fig1_249611502

I have no idea why this author can not spell “HEIGHT”!

Comma Cloud



https://www.noaa.gov/jetstream/upper-air-charts/basic-wave-patterns

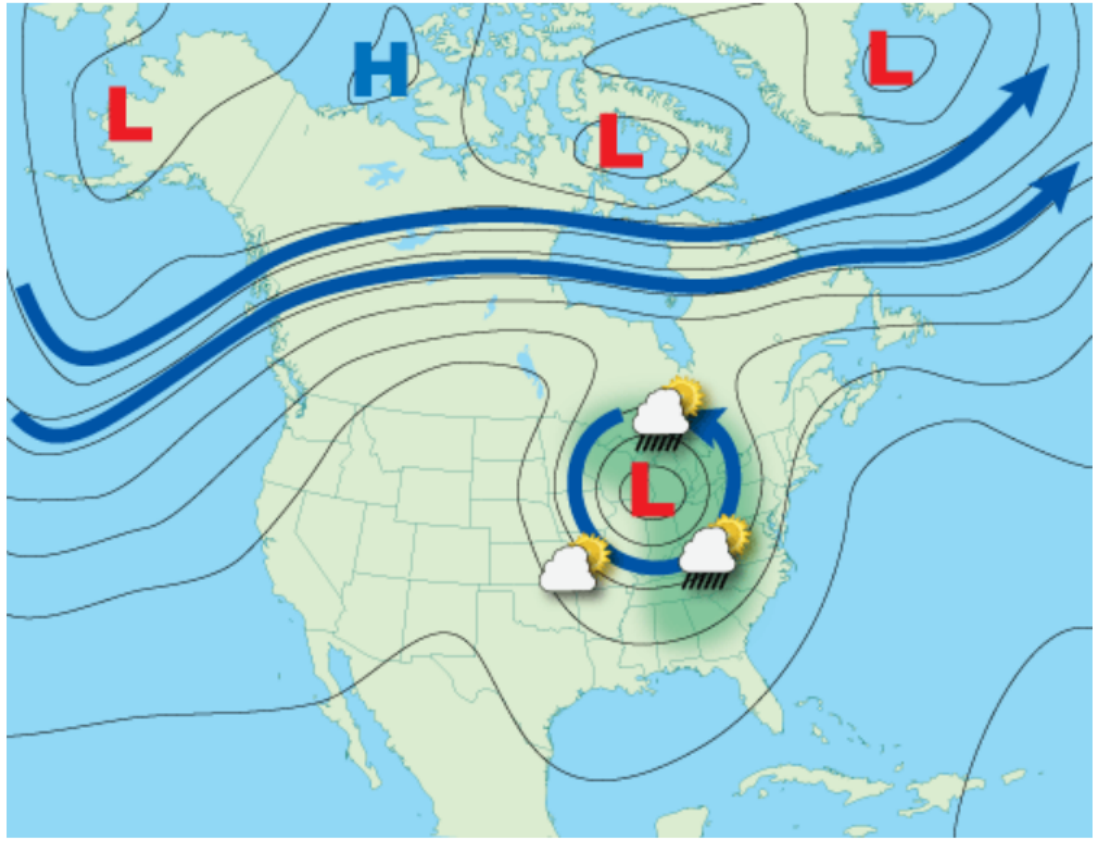
Cut-off Low

"Cut-off low, weatherman's woe." These are persistent low-pressure areas that have become isolated or "cut-off" from the main airflow.

They usually result from a strong shortwave moving south on the west side of troughs that extended toward the equator. The momentum of the shortwave pulls the trough out of the main airflow and forms a closed, low pressure, circulation.

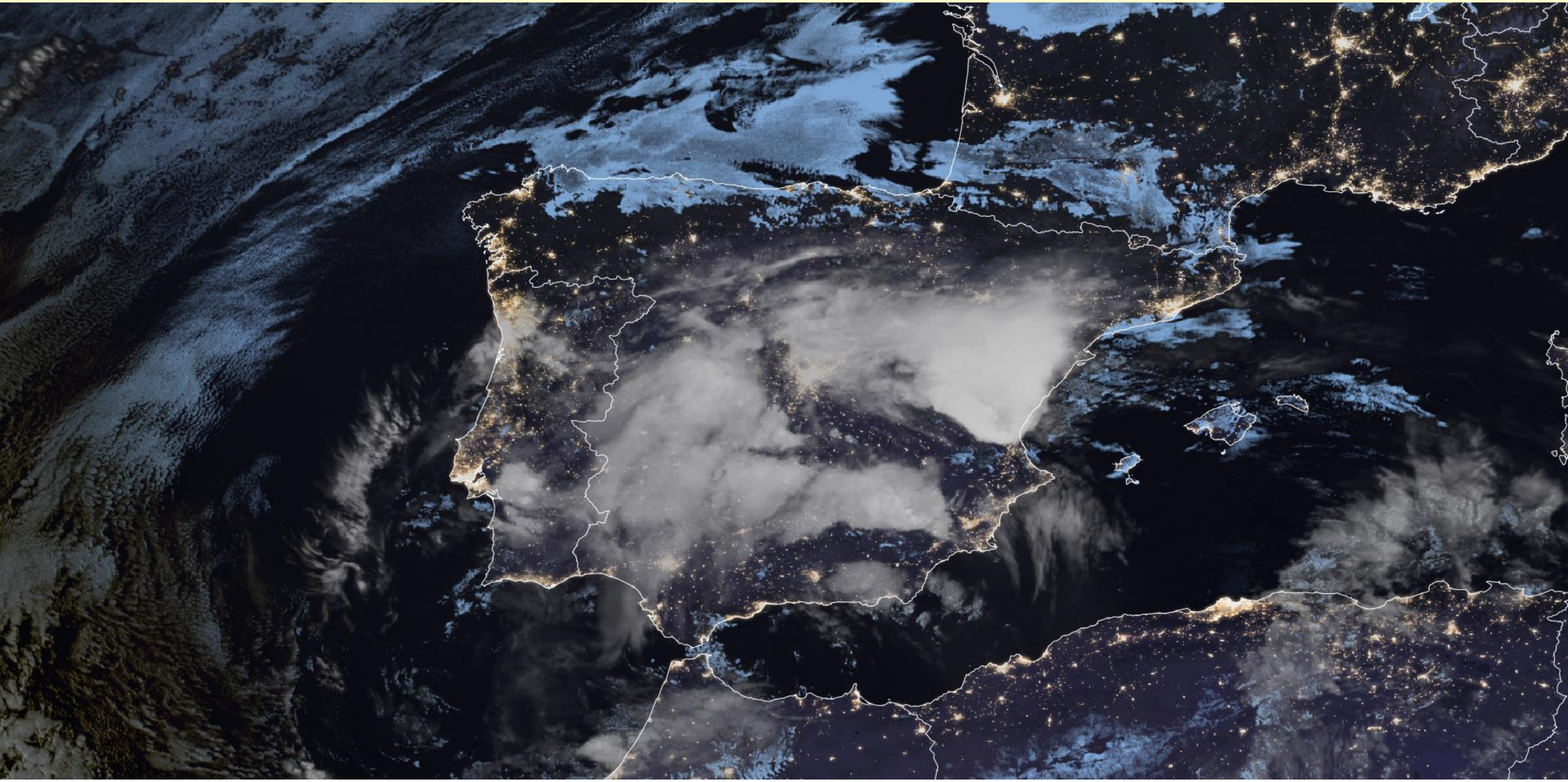
The "woe" comes for their agonizingly slow motion as they can drift for many days. While modern weather computer models forecast their drift rather well, they still tend to forecast the closed low pressure to "open up" and rejoin the main airflow aloft too quickly.

They can occur any time of the year and just about anywhere on the planet. Unsettled weather occurs over the eastern half of cut-off lows, though there can be some precipitation wrapping around the north end of the low, affecting the northwest quadrant.

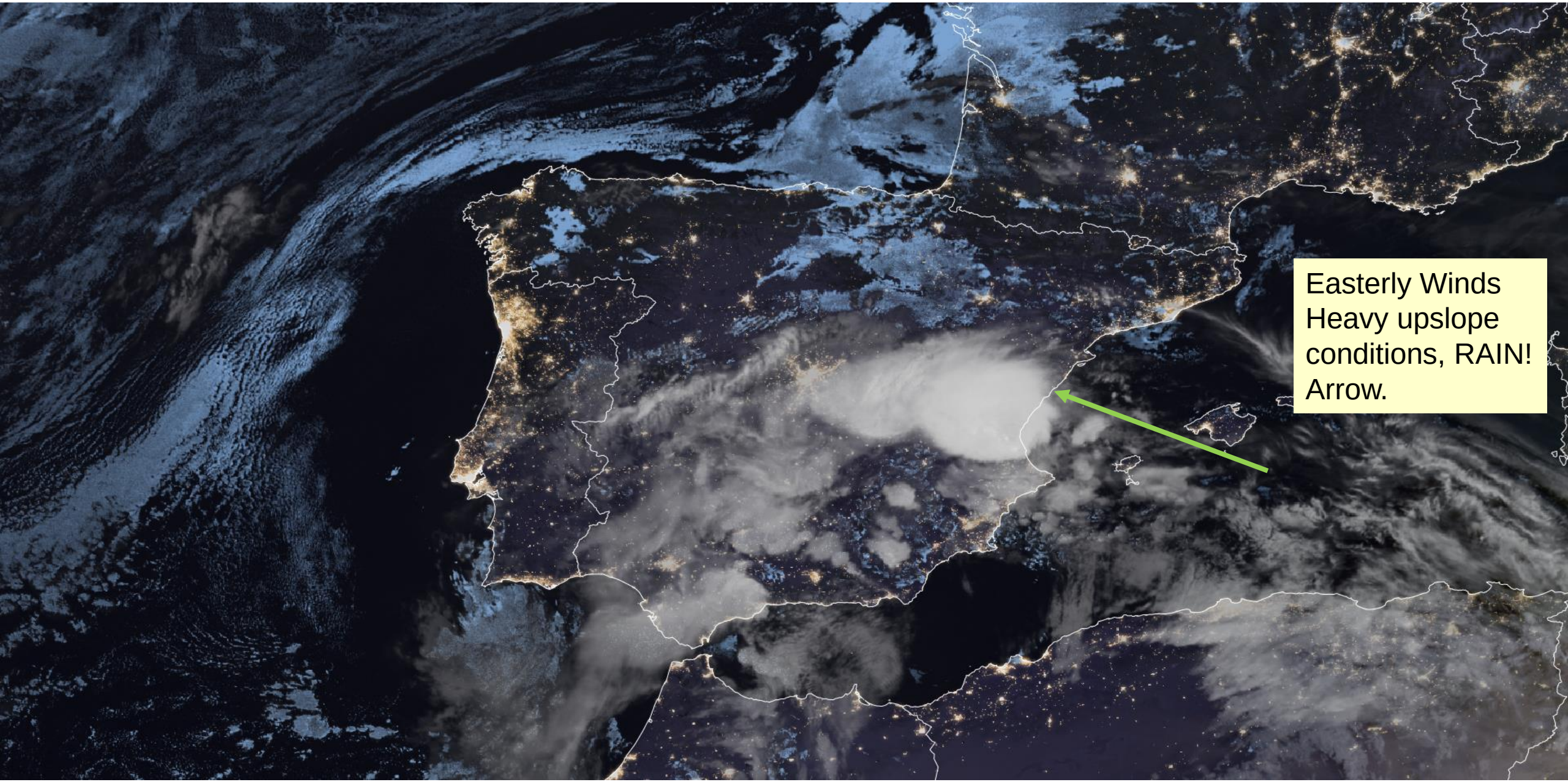


Their movement is problematic. I used to forecast “no change” until it changed.

https://en.wikipedia.org/wiki/2024_Spanish_floods#/media/File:Eumetsat_View_2024-10-29T1730.png

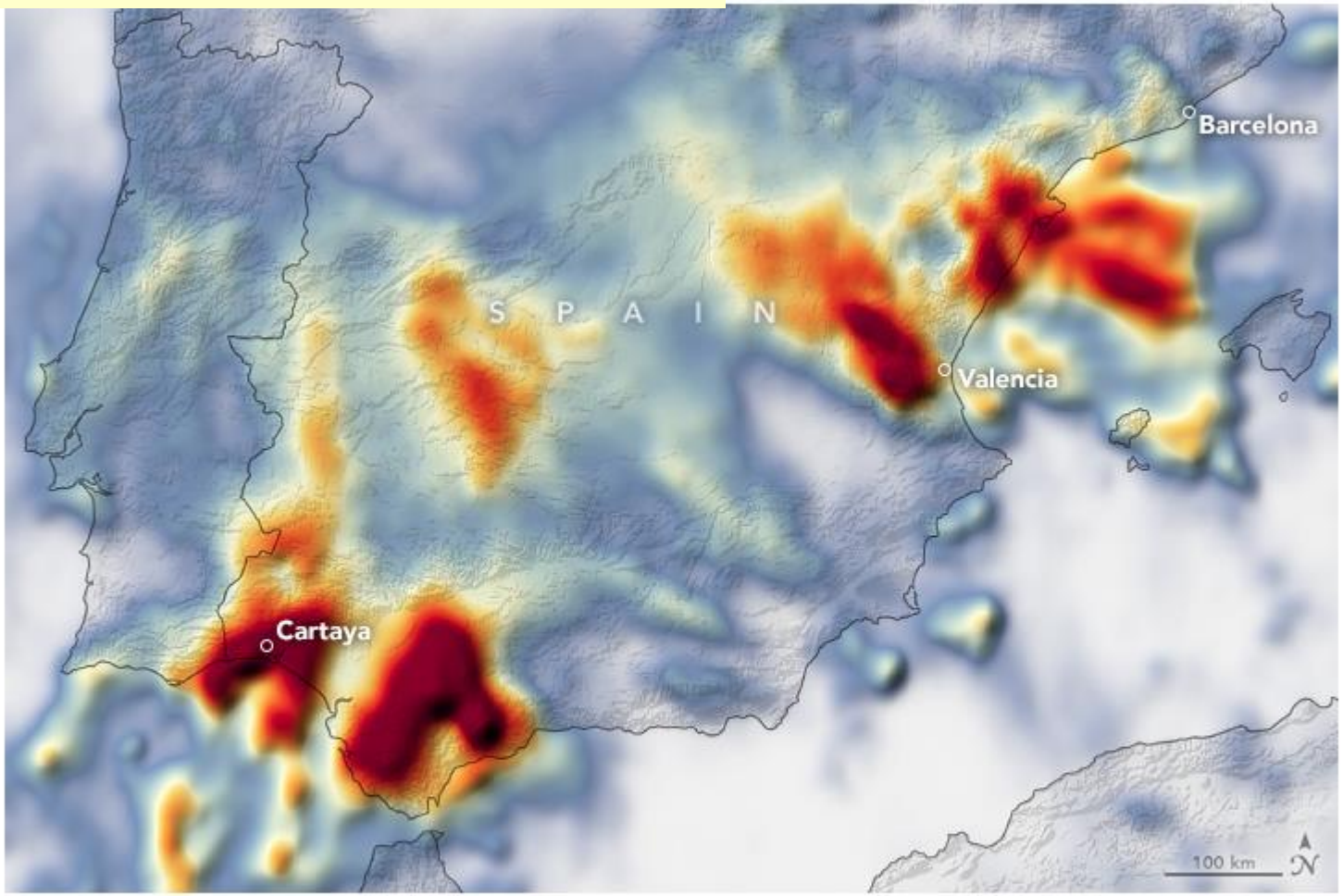


https://en.wikipedia.org/wiki/2024_Spanish_floods#/media/File:Eumetsat_View_2024-10-29T0630.png



A Week of Rain Across Spain

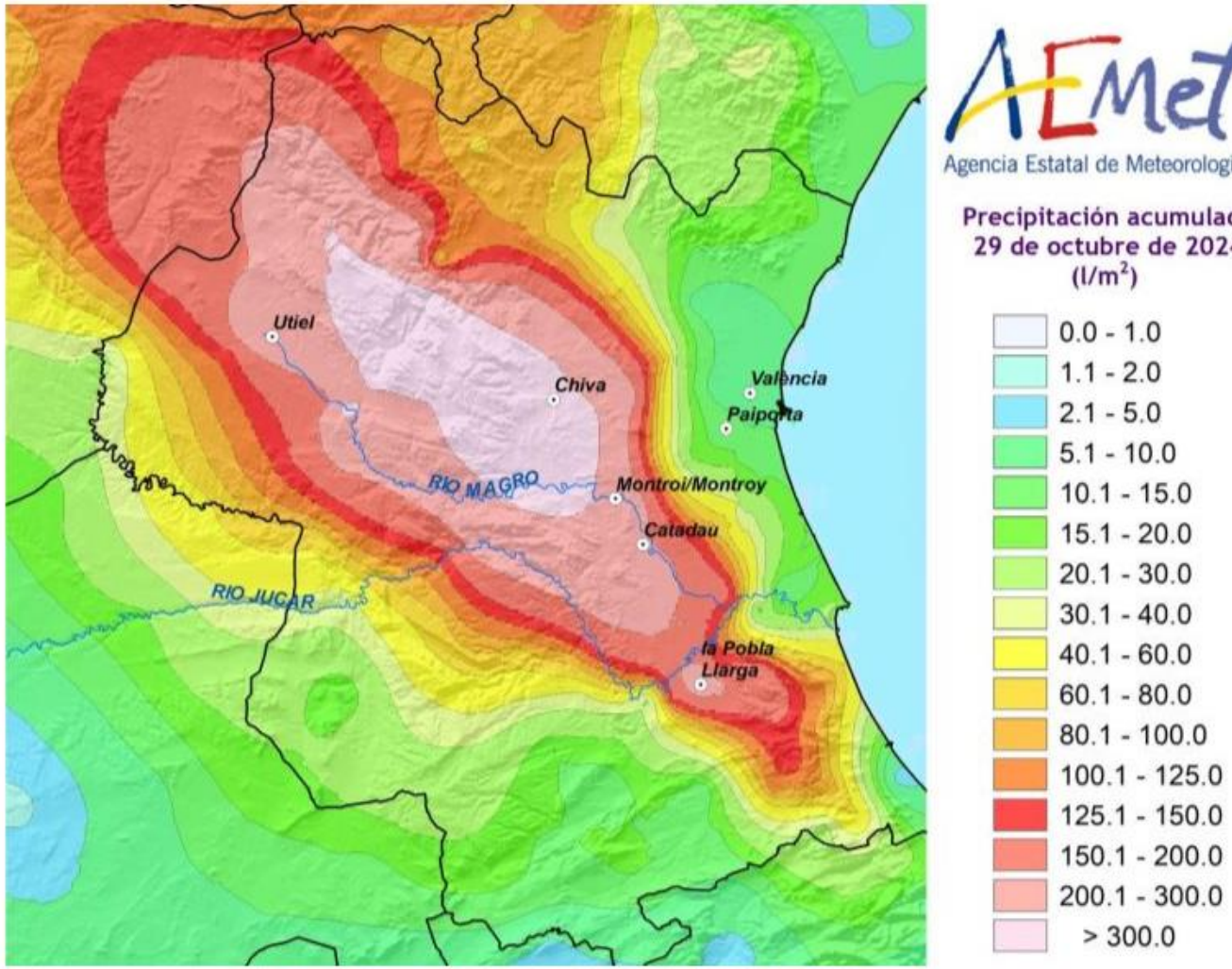
https://earthobservatory.nasa.gov/images/153546/a-week-of-rain-across-spain



October 29 - November 4, 2024

JPEG

https://wmo.int/media/news/devastating-rainfall-hits-spain-yet-another-flood-related-disaster



AEMET: precipitation in Valencia

AEMET

SOURCE OF THESE DATA IN RED: https://www.meteo.psu.edu/ewall/ewall.html

NW NC NE
SW SE
US HRRR FCST

CURRENT DATA
24HR TMP CHANGE
RECENT STRIKES EAST(PSU)
US LIGHTNING HOURLY(PSU)
CURRENT HOUR DEPARTURE FROM 1981-2010 AVG
SST/SST CHANGE
NOAA SST ANOM

PAST DATA
4-PANEL RAP MAPS (5-DAYS)
N. AMER MAX/MIN TEMPS (8-DAYS)
HEMISPHERIC 2-m T ANOM (14-DAYS)
5DAY HEMISPHERIC 500MB/SURFACE

LEGACY US RADAR
NWS-US(24HR)
NW NC NE
SW SC SE
6-HR EAST US
12-HR EAST US

LOW AND MID-LEVEL CLOUDS - NAM/GFS	06	12	18	24	30	36	42	48	54	60	All
24HR TEMP/DEW/WIND CHANGE - NAM/GFS	24	30	36	42	48	54	60	66	72	78	All

SHORT-RANGE ENSEMBLE (21UTC)

500MB-US	700MB-US	850MB-US	PRS/PCN-US	PCNTOT-US	2M TEMP-US	PTYPE-US
500MB-NE	700MB-NE	850MB-NE	PRS/PCN-NE	PCNTOT-NE	2M TEMP-NE	PTYPE-NE

LOW AND MID-LEVEL CLOUDS - NAM/GFS	06	12	18	24	30	36	42	48	54	60	All
24HR TEMP/DEW/WIND CHANGE - NAM/GFS	24	30	36	42	48	54	60	66	72	78	All

SHORT-RANGE ENSEMBLE (09UTC)

500MB-US	700MB-US	850MB-US	PRS/PCN-US	PCNTOT-US	2M TEMP-US	PTYPE-US
500MB-NE	700MB-NE	850MB-NE	PRS/PCN-NE	PCNTOT-NE	2M TEMP-NE	PTYPE-NE

0600 UTC MODELS CURRENT RUN: 12NOV24
U.S. OPERATIONAL

NAM	06	12	18	24	30	36	42	48	54	60	66	72	78	84	All	Select Regional Loop
GFS	06	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	All
NBM 7Z	US	NE	SE	NC	SC	NW	SW														

SHORT-RANGE ENSEMBLE (03UTC)

500MB-US	700MB-US	850MB-US	PRS/PCN-US	PCNTOT-US	2M TEMP-US	PTYPE-US
500MB-NE	700MB-NE	850MB-NE	PRS/PCN-NE	PCNTOT-NE	2M TEMP-NE	PTYPE-NE

1800 UTC MODELS CURRENT RUN: 12NOV24
U.S. OPERATIONAL

NAM	06	12	18	24	30	36	42	48	54	60	66	72	78	84	All	Select Regional Loop
GFS	06	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	All
NBM 19Z	US	NE	SE	NC	SC	NW	SW														

SHORT-RANGE ENSEMBLE (15UTC)

500MB-US	700MB-US	850MB-US	PRS/PCN-US	PCNTOT-US	2M TEMP-US	PTYPE-US
500MB-NE	700MB-NE	850MB-NE	PRS/PCN-NE	PCNTOT-NE	2M TEMP-NE	PTYPE-NE

0000 UTC MODELS CURRENT RUN: 12NOV24
N. AMERICA LONGER RANGE 4-PANEL

NAVY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	All
CMC	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	All
ES	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	All

1200 UTC MODELS CURRENT RUN: 12NOV24
N. AMERICA LONGER RANGE 4-PANEL

NAVY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	All
CMC	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	All
GFS	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	All

0000 UTC MODEL ENSEMBLES CURRENT RUN: 12NOV24
12-16 PANEL MAPS

GFS 500MB HEIGHTS	0	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	All
GFS PRES/THICK/PRECIP	0	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	All
CMC 500MB HEIGHTS	0	24	48	72	96	120	144	168	192	216	240	All	CMC PRES/THICK/PRECIPITATION											0	24	48	72	96	120	144	168	192	216	240	All

1200 UTC MODEL ENSEMBLES CURRENT RUN: 12NOV24
12-PANEL MAPS

GFS 500MB HEIGHTS	0	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	All
GFS PRES/THICK/PRECIP	0	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	All
CMC 500MB HEIGHTS	0	24	48	72	96	120	144	168	192	216	240	All	CMC PRES/THICK/PRECIPITATION											0	24	48	72	96	120	144	168	192	216	240	All

https://www.meteo.psu.edu/ewall/HEMI500/5dayloop.html

NWS 500 millibar Northern Hemisphere upper air forecast
Valid time: 7 Nov 2024 / 00Z

CHART SAYS: “500MB HEIGHTS/ANOMALIES
THU 241107/0000”

FEATURES:

500 MB CONTOURS

5880 Line is a 500 mb height of 5880 Meters MSL, (HIGHER)

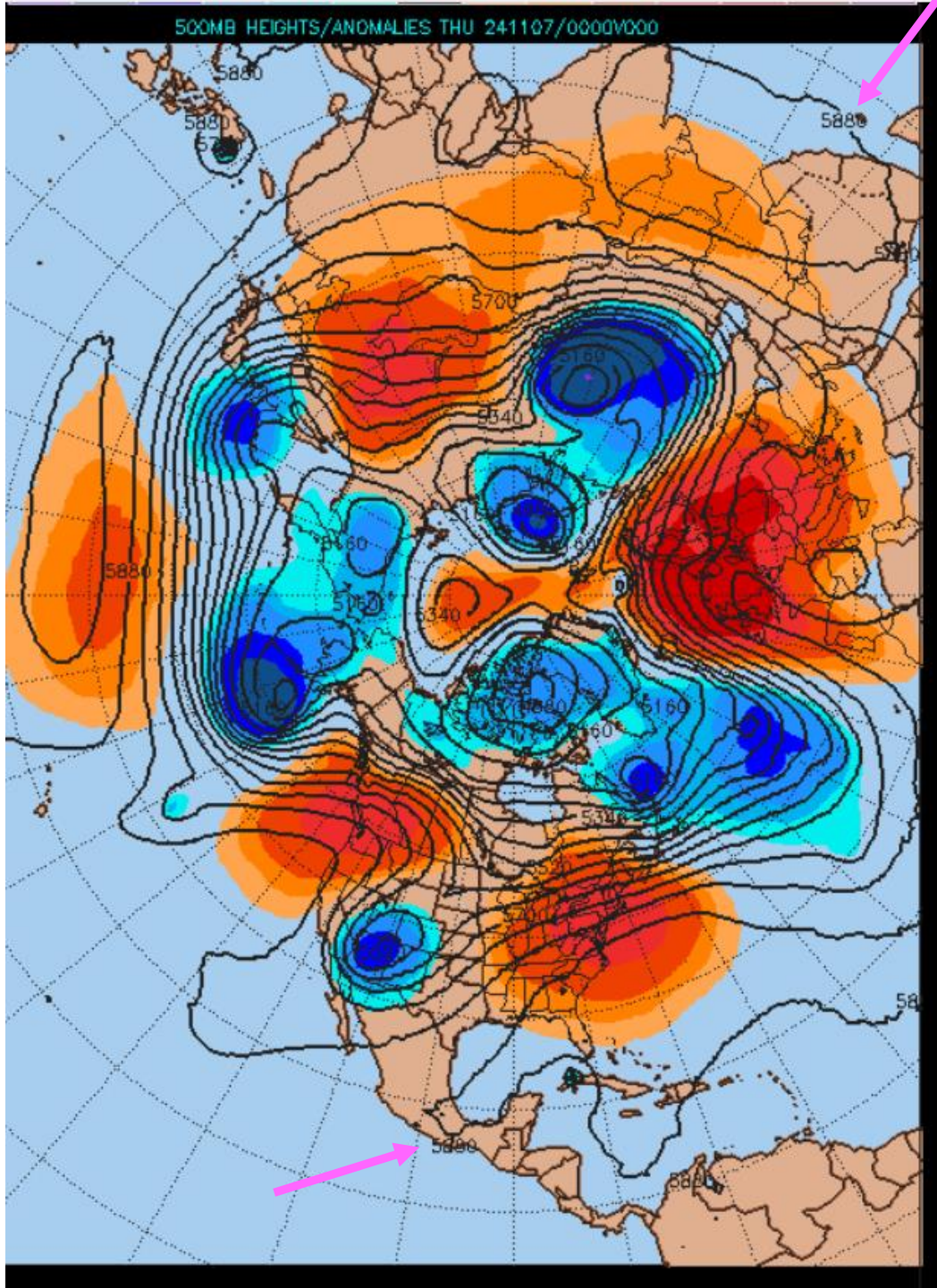
HIGHEST I’VE SEEN IS 6000 Meters, ~ 1 JUL, EL PASO

CONTOURS EVERY 60 METERS

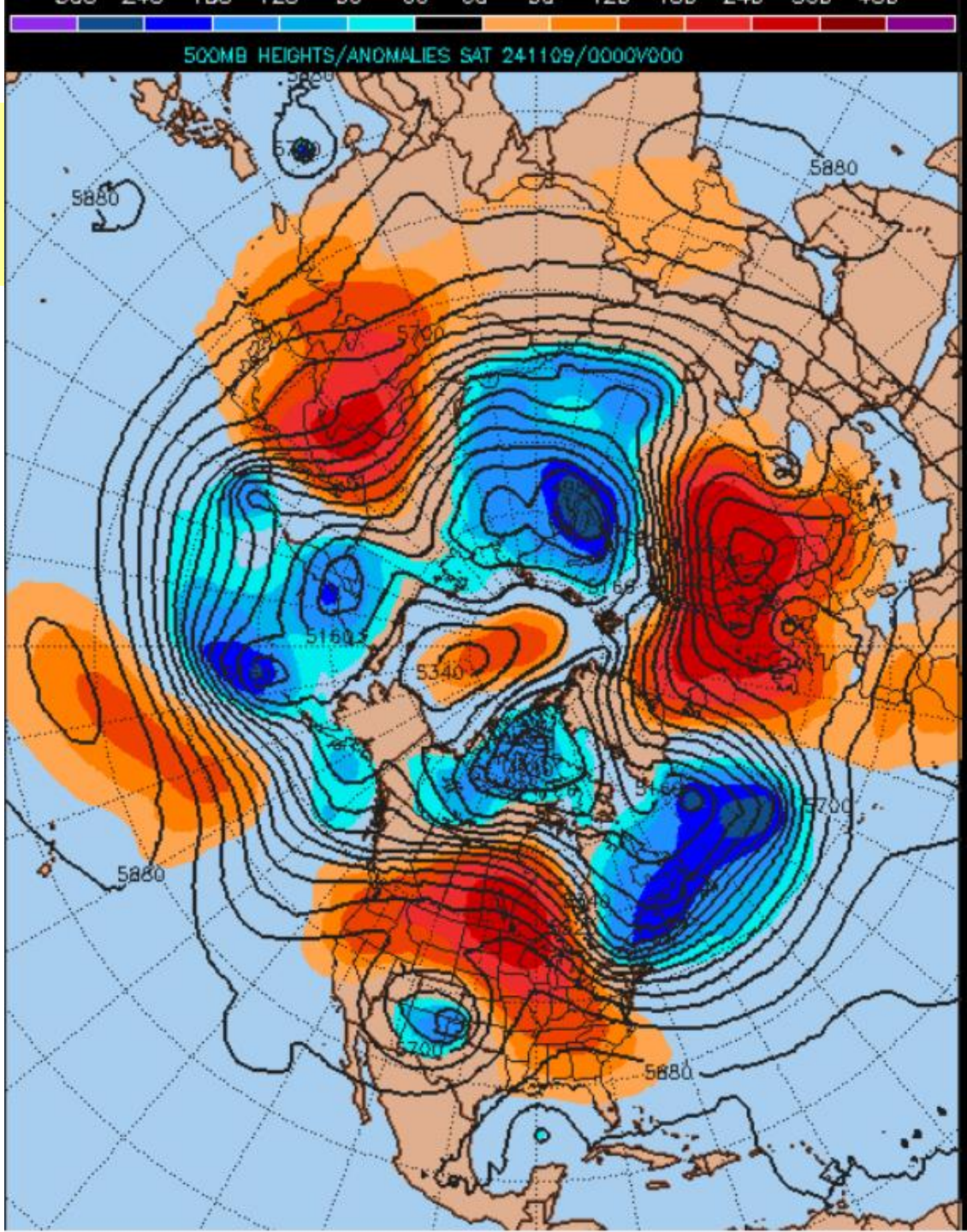
TYPICALLY, THE LOWEST IS 5100 Meters MSL

ONE CUTOFF NEAR FLAGSTAFF AZ ON THIS CHART

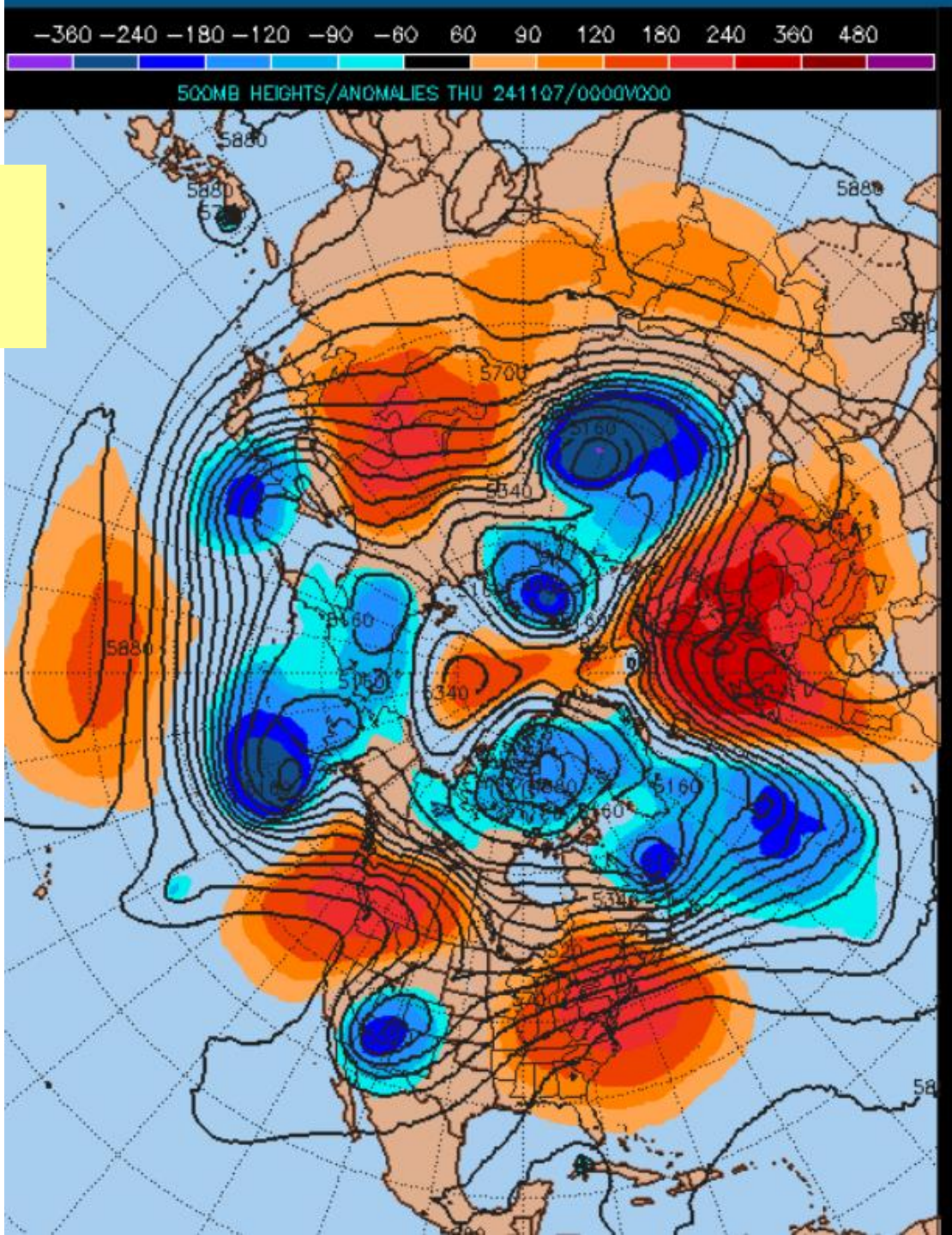
ANOTHER NE OF CASPIAN SEA IN RUSSIA



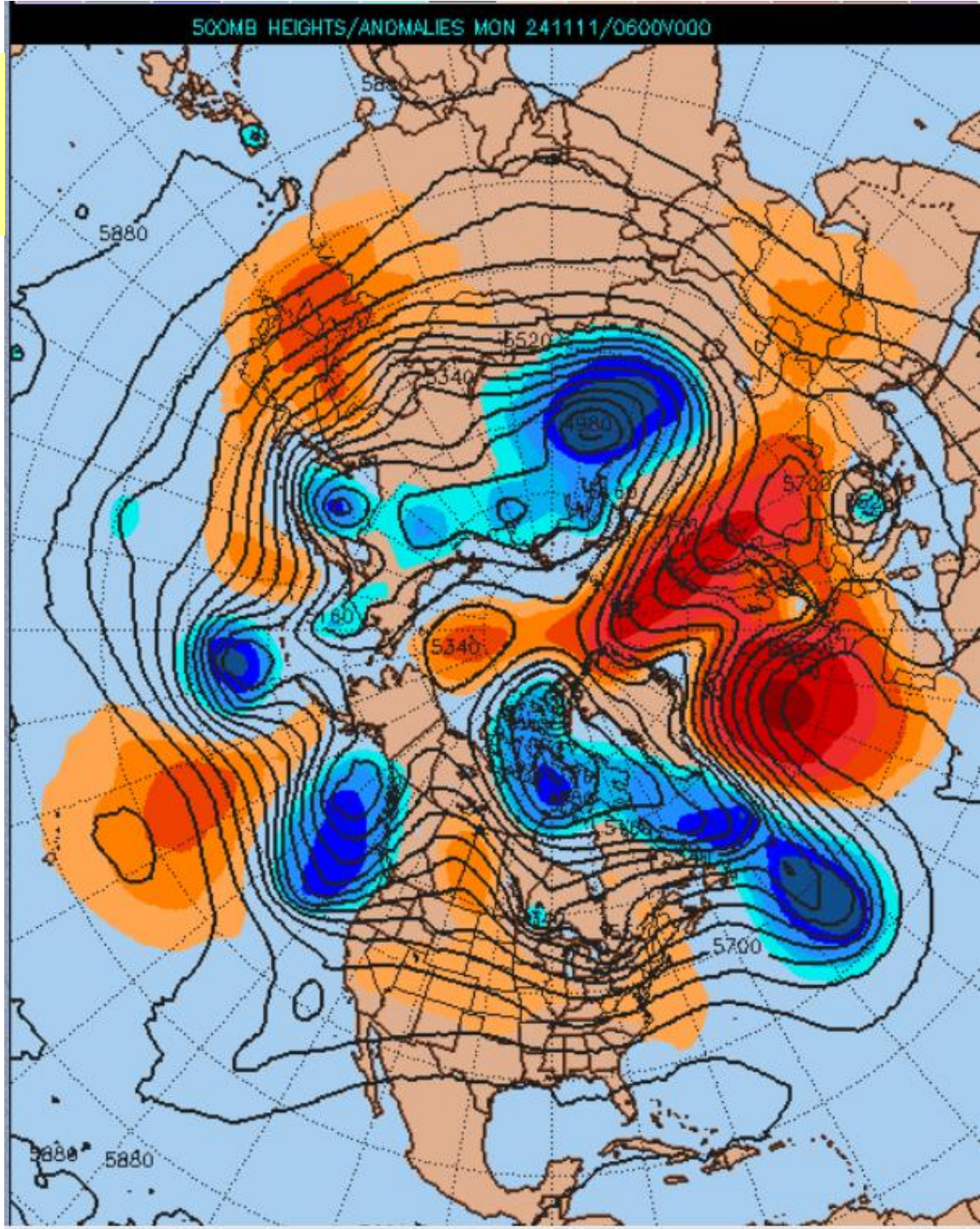
3-WAVE PATTERN



4-WAVE PATTERN



5-WAVE PATTERN



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

List of cold drop events

In the area around Spain, Cut-Off Lows are called Cold Drops

THESE ARE NOT RARE EVENTS

See also: Cold drop

This **list of cold drop events** chronologically compiles the heavy rainfall events caused by cold drops (Spanish: Gota Fría) that have resulted in serious flooding.

In Spain, cold drops often cause intense rainfall and are created by the interaction of upper-level low pressure systems strangled and ultimately detached from the zonal (eastward) circulation displaying stationary or retrograde (westward) circulation with humid and warmer air masses provided by an overheated Mediterranean in the Autumn.[1]

NASA Worldview imaging of a cold drop over the west of the Iberian Peninsula on September 2023

Date	Regions impacted	Event	Effects
August 13, 1356[2]	Valencia	Intense flooding of the Rio Turia, after which a "Council for Walls and Ramparts" was established.	400–500 dead
September 27, 1517[3]	Valencia	Heavy rains caused the Rio Turia to overflow its banks and destroy numerous bridges, mills and other buildings near the riverbed.	Dozens of people and numerous animals died.

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

Chronology of severe weather events caused by cold drops

Date	Regions impacted	Event	Effects
August 13, 1356[2]	Valencia	Intense flooding of the Rio Turia, after which a "Council for Walls and Ramparts" was established.	400–500 dead
September 27, 1517[3]	Valencia	Heavy rains caused the Rio Turia to overflow its banks and destroy numerous bridges, mills and other buildings near the riverbed.	Dozens of people and numerous animals died.
June 10, 1796[3]	Province of Burgos	A devastating weather event that severely affected grain production.	
October 15, 1879[3]	Province of Murcia, especially the city of Orihuela	Santa Teresa flood: The heavy rains caused the Segura to overflow, acquiring destructive power as it passed through inhabited areas.	More than a thousand dead and significant material losses
September 11, 1891[3]	Southeast Spain, especially the towns of Adra, Gádor, and Benahadux	Sudden flooding of the Almería Rambla and other canals in the region. Local authorities had neither effective warning systems nor adequate infrastructure to manage an event of this magnitude.	Several streets and buildings were destroyed or severely damaged, and more than a hundred people died.
End of September 1949[4]	Valencia	Severe flooding of the Rio Turia, hundreds of houses located in the old Turia canal were razed to the ground.	High number of victims
October 14, 1957[3]	Valencia	1957 Valencia flood: A severe cold snap caused the Turia to burst its banks. In less than 24 hours, the city was completely flooded and in the districts closest to the river, the water level reached five meters. The flooding showed the city's vulnerability to extreme	Death of at least 81 people and destruction of houses and infrastructure

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

September 25, 1962[5]	Barcelona	Floods occurred in the catchment areas of the Llobregat and Besós rivers. Flooding also occurred throughout the Balearic Islands (Palma de Mallorca and Andratx).	Between 600 and 1,000 fatalities.
October 20, 1982[6]	La Ribera	As a result of heavy rainfall, the Tous Reservoir collapsed and the Júcar River flooded the entire La Ribera region, causing great damage and entire towns were flooded up to the first floor.	Eight people died.
August 26, 1983[7][8]	Bilbao	Due to the rains, water in some parts of Bilbao rose to a height of 5 metres.	34 deaths and 5 missing
November 3, 1987[9]	Gandía and Oliva	In Gandía and Oliva, rainfall exceeded 500 l/m^2, devastating the Safor region. In Oliva, the Spanish record for rainfall in 24 hours was reached: 817 l/m^2.	
September 6, 1989[10]	Balearic regions around Manacor and Felanitx	188 l/m^2 in Manacor and 192 l/m^2 in Porto Cristo, Mallorca. Artificial waterways overflowed their banks within a few hours, flooding fields and bays as well as part of the town centre of Manacor.	3 fatalities
September 30, 1997[11]	Alicante and the south of the Province of Valencia	Alicante experienced its worst storm since weather records began, with 270 mm of rain falling within 6 hours, causing flooding.	5 deaths, severe damage to houses and buildings in the city
October 2000[12][13]	Province of Castellón and north of Valencia	A long period of cold weather caused rainfall of more than 600 l/m^2 to accumulate in three days, which flooded rivers such as the Palancia [es], Sonella [es], and Mijares, causing serious damage. Floods in Onda, Nules, Castellón, and Vall de Uxó were close to destroying the María Cristina and Benitandús	

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

October 19–21, 2018[15]	Province of Málaga	Rainfall amounts of 463 mm were recorded in Campillos and 452 mm in Ardales. Alpandeire also recorded high rainfall. More than forty municipalities suffered damage to infrastructure, livestock and crops.	One firefighter died during the rescue efforts.
September 2019[19][20][21]	Province of Murcia, Albacete, and Almería	300 mm or more of rainfall caused the Río Clariano [es] in Ontinyent and the Segura River, as well as the Almansa reservoir, to overflow. Orihuela was the worst affected, with more than 500 mm of rainfall, flooding numerous urban centres and more than 5,000 hectares of orchards.	7 deaths, damages estimated at 170 to 190 million euros.
January 2020[22][23]	Entire Spanish Mediterranean coast, mainly the Balearic Islands, Catalonia, and the Valencian Community.	Storm Gloria: Severe damage caused by waves up to 7 metres high near the coast.	14 fatalities
September 2 and 4, 2023[24]	Much of the Iberian Peninsula, particularly the provinces of Toledo and Madrid, as well as area in the provinces of Tarragona, Segovia, and Cádiz.	Heavy rainfall resulted in up to 215 l/m^2 falling within 24 hours, flooding numerous houses and requiring the closure of roads and railway lines.	6 deaths
October 29 to November 8, 2024[25][26]	Málaga, Albacete, Cuenca and especially Valencia.	2024 Spanish floods: Widespread flooding caused severe damage, particularly in the regions of Valencia, Andalusia and Murcia. Huge amounts of rain fell in a short space of time, reaching up to 491 mm in 8 hours, causing flash floods and mudslides that trapped many people in their homes or cars.	At least 223 deaths, one of the deadliest flood disasters in Spain's modern history.

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

What have the last several charts shown?

Cold Drop events, Spanish name for Cut-Off Lows, are a feature of the Iberian Peninsula and surrounding areas.

Severe events of this type are not especially rare events.

Thousands have been reported killed during these events in the historic past.

* * * * *

I conclude that there is no indication from the data that contrails have made these events significantly stronger.

There appears to be little to confirm James Delingpole's assertions.

Other Delingpole Comments that are not credible in:
https://delingpole.substack.com/p/valencia-man-made-climate-change

Delingpole:
“…. , I definitely don’t remember in my childhood seeing airliners that produced vapour trails which didn’t quickly disappear but which rather lingered in the skies, slowly spreading, before forming a blanket of impenetrable and dispiriting gray cloud.”

ONE: James was born in 1965, so perhaps his childhood years are ~1970. Trans-Atlantic jet flights were common then, as well as plentiful domestic flights in the UK. Delingpole does not appear to have been an observant child who noticed contrails.

TWO: Non-persistent, persistent, and those spreading across the sky were common then; I trained SAC bomber crews on reporting them in the 1960s. Delingpole certainly was not aware of the different TYPES OF CONTRAILS in his childhood years.

Delingpole mentions the “Lynmouth Flood disaster of 1952 which claimed the lives of 32 people in Devon, England. This, it was later admitted, was the result of a cloud-seeding experiment by the Royal Air Force.”

I don’t think this is correct; it can’t be verified from the literature I found….

In https://www.theguardian.com/uk/2001/aug/30/sillyseason.physicalsciences …

Article says only, “…with artificial rainmaking in southern Britain in the same week and could possibly be implicated. <underlining added>

from this article, “…a 50-year-old radio broadcast unearthed by Radio 4 describes an aeronautical engineer and glider pilot, Alan Yates, working with Operation Cumulus at the time and flying over Bedfordshire, spraying quantities of salt. He was elated when the scientists told him this had led to a heavy downpour 50 miles away over Staines, in Middlesex.”

But the article does not state how they observed the results.

My direct experience is with Silver Iodide flares dropped directly into supercooled droplets. We watched the cloud growth, and reported directly on the results into specifically those individual clouds we were seeding.

But this was very experimental 1952, ours was in 1969, 17 years later….

Delingpole:

That’s probably why I no longer talk to climate sceptics. They are brave, decent, principled people but they are doomed by a fatal flaw: their dogged integrity.

Delingpole:
But the truth is that this stuff is man-made, only in a completely different way: generated by the secretive, usually military-linked institutions behind HAARP, NEXRAD, the worldwide Chemtrailing programme and - a specialty of Trump's Space Force, this one - Directed Energy Weapons.

NEXRAD is the US' Operational Weather Radar system operated by the FAA, NWS and the USAF, example right.

HAARP was a military research program given to the University of Alaska by DOD

I found a page from UAF, but it did not yield any useful information

Below is the latest search result.

https://haarp.gi.alaska.edu/haarp/gen.html
I

In a similar instance,
The USAF gave the Sunspot Solar Observatory near Cloudcroft NM to the National Science Foundation…

UNIVERSITY OF ALASKA FAIRBANKS

HAARP

High-frequency Active Auroral Research Program

Home | FAQ | Diagnostic Suite | Research Support Services | Research Campaigns | Observatory Vision | Merchandise | Contact | Submit Experiment Proposal

Page not found

The requested page could not be found.

https://www.ncei.noaa.gov/products/radar/next-generation-weather-radar

National Centers for Environmental Information
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Home Products Services Resources News Contact About

Search NCEI

ucts continue to be updated as a result of the outage caused by Hurricane Helene. We apologize for any inconvenience.

Home / Products / Radar / Next Generation Weather Radar (NEXRAD)

Next Generation Weather Radar (NEXRAD)

The Next Generation Weather Radar (NEXRAD) system is a network of 160 high-resolution S-band Doppler weather radars jointly operated by the National Weather Service (NWS), the Federal Aviation Administration (FAA), and the U.S. Air Force. The NEXRAD system detects precipitation and wind, and its data can be processed to map precipitation patterns and movement. NCEI provides access to archived NEXRAD Level-II data and Level-III products.

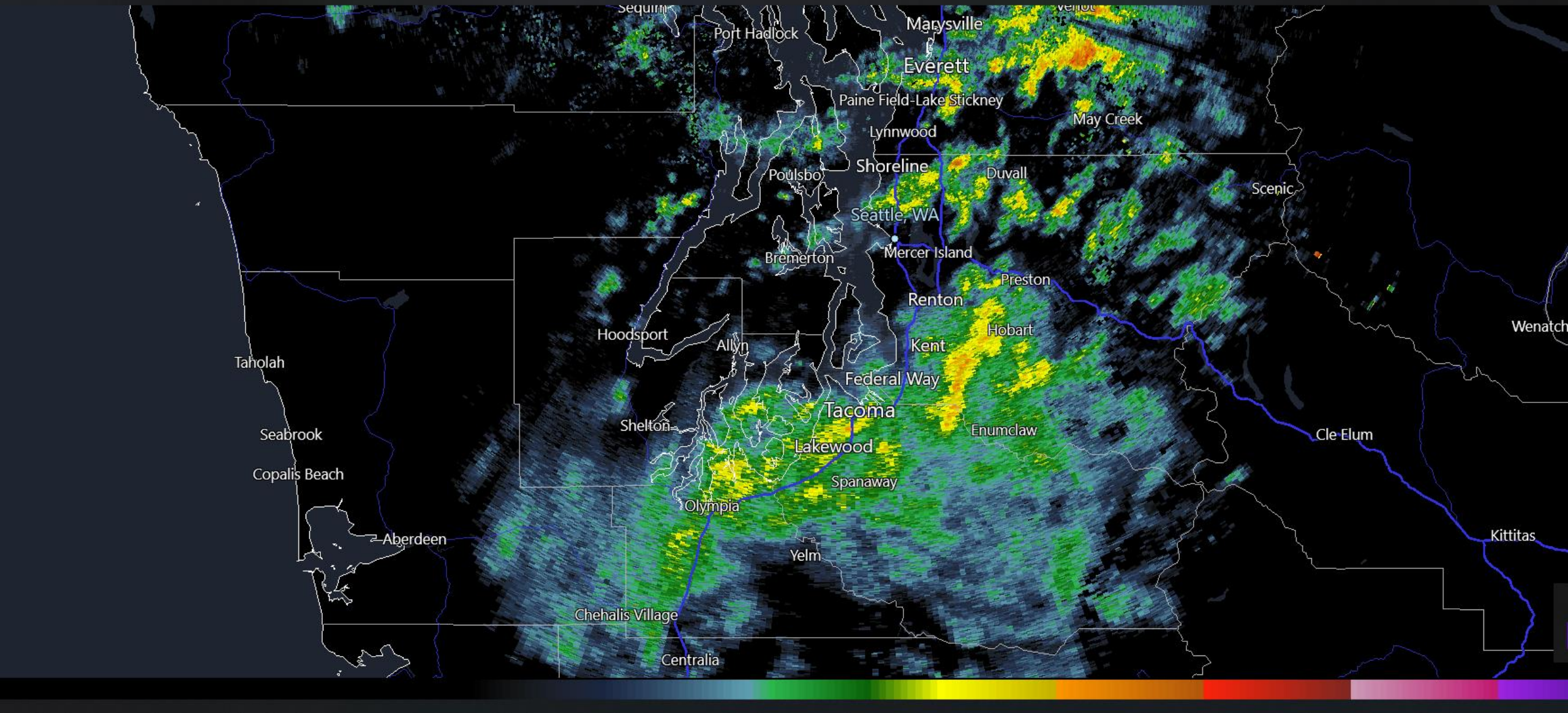
Credit: National Severe Storms Laboratory

They are used to provide safety of flight and weather warning information. Two nearby are at EPZ, NWS at Santa Teresa and HMN, USAF at Holloman AFB, NM
NOTHING SPOOKY about them

Data Access About Help

Access Methods

Here's the NEXRAD display at 1215 on 14 November 2024, as a rain system comes ashore in the Seattle Tacoma Region



https://www.nationaldefensemagazine.org/articles/2024/2/29/editors-notes-directed-energy-weapons-here-now-or-5-years-off#:~:text=Directed%20energy%20weapons%20come%20in,in%20just%20a%20few%20years.%E2%80%9D

Directed Energy Weapons: Here Now? Or 5 Years Off?

2/29/2024

By Stew Magnuson

https://www.nationaldefensemagazine.org/articles/2024/2/29/editors-notes-directed-energy-weapons-here-now-or-5-years-off#:~:text=

However, the days of "overpromising and underdelivering" are coming to an end, he said.

He listed six programs on a slide called "Deployed DE Systems to Date."

They included: the ODIN, Optical Dazzling Interdictor (Navy); HELIOS, High-Energy Laser with Integrated Optical-Dazzler and Surveillance (Navy); Solid State Laser – Technology Maturation (Navy); CLaWS, Compact Laser Weapon System (Marine Corps); HELWS, High Energy Laser Weapon System (Air Force); and THOR, Tactical High Power Microwave Operational Responder (Air Force).

But looking at the smaller print on the slide showed that the weapons — mostly envisioned as counter-drone systems — may have been "deployed," but not in great numbers and mostly for test and evaluation. There are eight ODINs on Navy destroyers, one HELIOS, one Solid State Laser on a landing platform dock, five CLaWs, three HELWS in an undisclosed location and one THOR. That adds up to 19 directed energy weapons.

Underwhelming to say the least.

Delingpole:
they've no time to look up at all those white lines criss-crossing the sky, or the truly bizarre behavior of the weather fronts gathering around those HAARP and NEXRAD facilities, and go: "Wait! This is what REAL man-made climate change looks like. And it's absolutely bloody terrifying!"

Delingpole produces no data, no case studies, nothing to validate his claims: Nothing, zero, nada.

I**t is all BS and hand-waving** without data to validate his claims.

I could find none….

Helene and Milton arose from seasonally very warm water caused by lots of sun on tropical waters.

Only "records" were seemingly for the rainfall/flooding in Western North Carolina.
But similar happened there before, 1916. And it was **not** a new national rainfall record…

Last extreme rainfall events in the USA were: 1979, Alvin, TX, and 1960, Alamogordo Creek, NM.

The 2024 Valencia Spain flooding was caused by the development of a cut off low **pressure system in the autumn. There are decades, even centuries of such storms forming and hammering** this area.
Chemtrails are not needed.

Natural events inject lots of water and dust into the upper troposphere and sometimes the stratosphere.

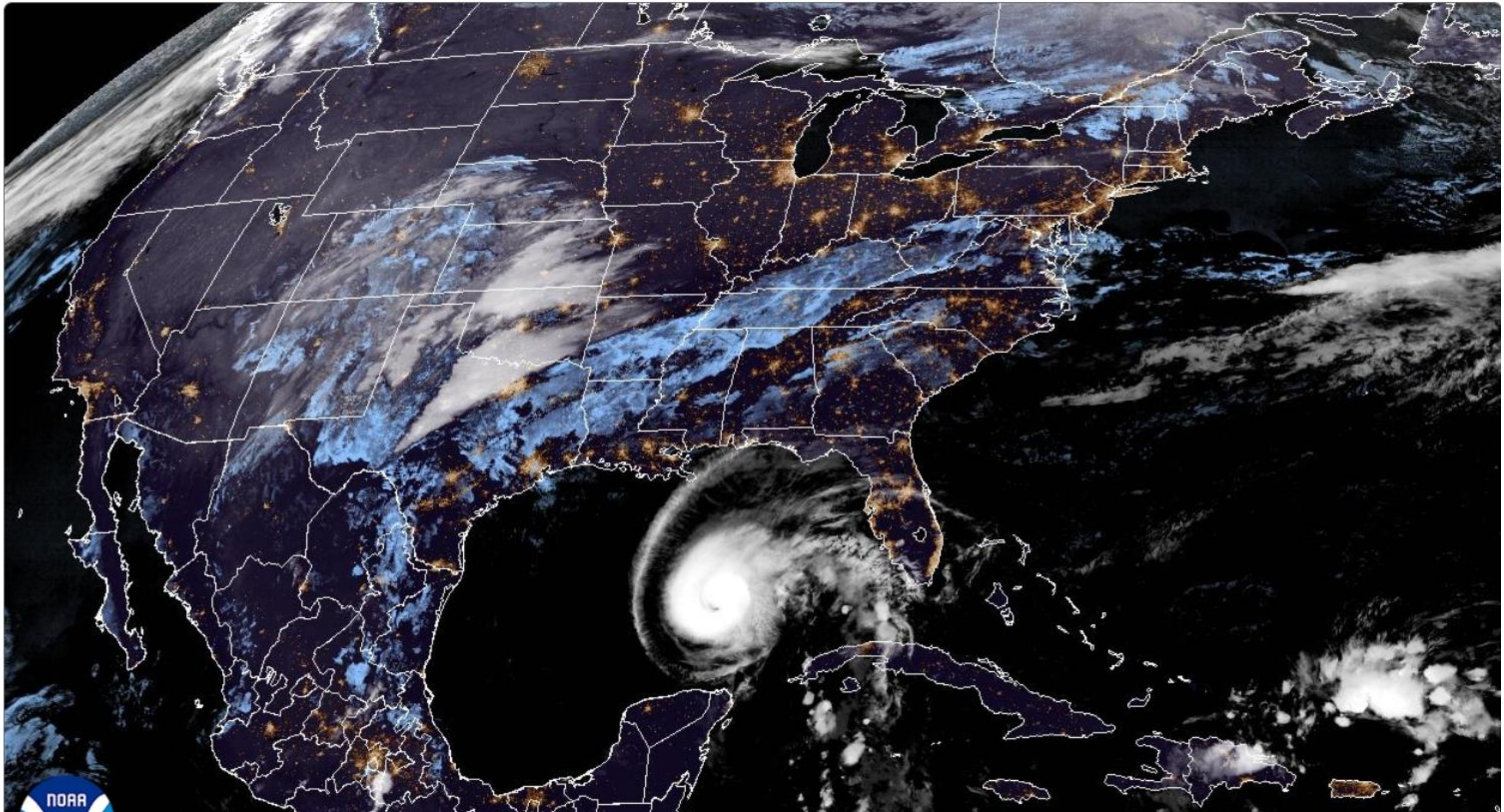
We saw examples in the cover graphic.

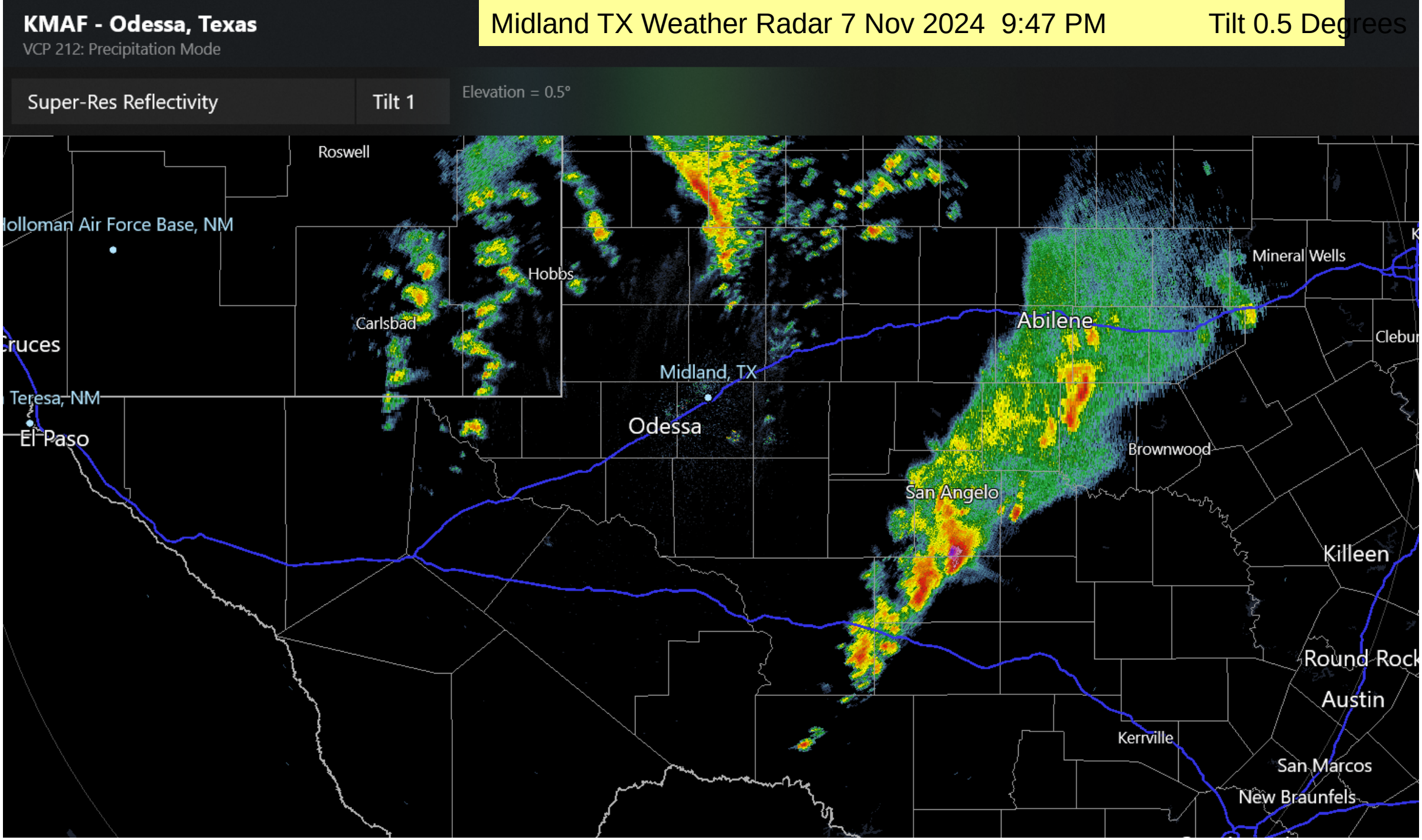
There are more here which follow…

The point is, the massive amounts of water transported Into the upper troposphere naturally, seem (at least to me) to vastly overwhelm the amounts of water vapor injected by aircraft contrails.

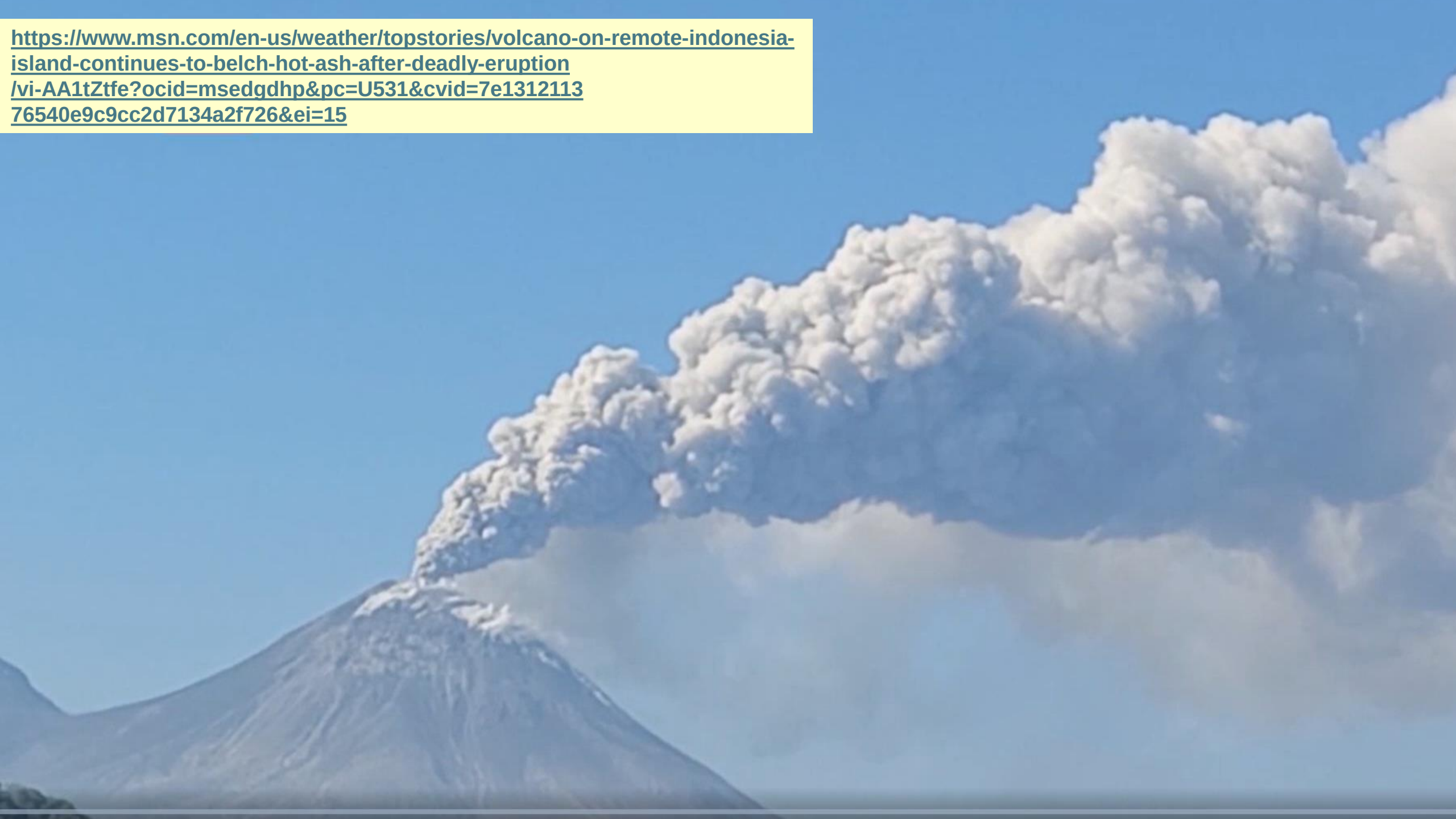
https://en.wikipedia.org/wiki/Cumulonimbus_incus#/media/File:A_Classic_Anvil_Cloud_Over_Europe.jpg

GeoColor - True Color daytime, multispectral IR at night - 08 Nov 2024 - 0526 UTC




KMAF - Odessa, Texas
VCP 212: Precipitation Mode
Midland TX Weather Radar 7 Nov 2024 9:47 PM
Tilt 0.5 Degrees
Super-Res Reflectivity
Tilt 1
Elevation = 0.5°
Roswell
Holloman Air Force Base, NM
Hobbs
Carlsbad
Cruces
Teresa, NM
El Paso
Midland, TX
Odessa
Abilene
Mineral Wells
Brownwood
San Angelo
Killeen
Round Rock
Austin
Kerrville
San Marcos
New Braunfels

https://www.msn.com/en-us/weather/topstories/volcano-on-remote-indonesia-island-continues-to-belch-hot-ash-after-deadly-eruption/vi-AA1tZtfe?ocid=msedgdhp&pc=U531&cvid=7e131211376540e9c9cc2d7134a2f726&ei=15

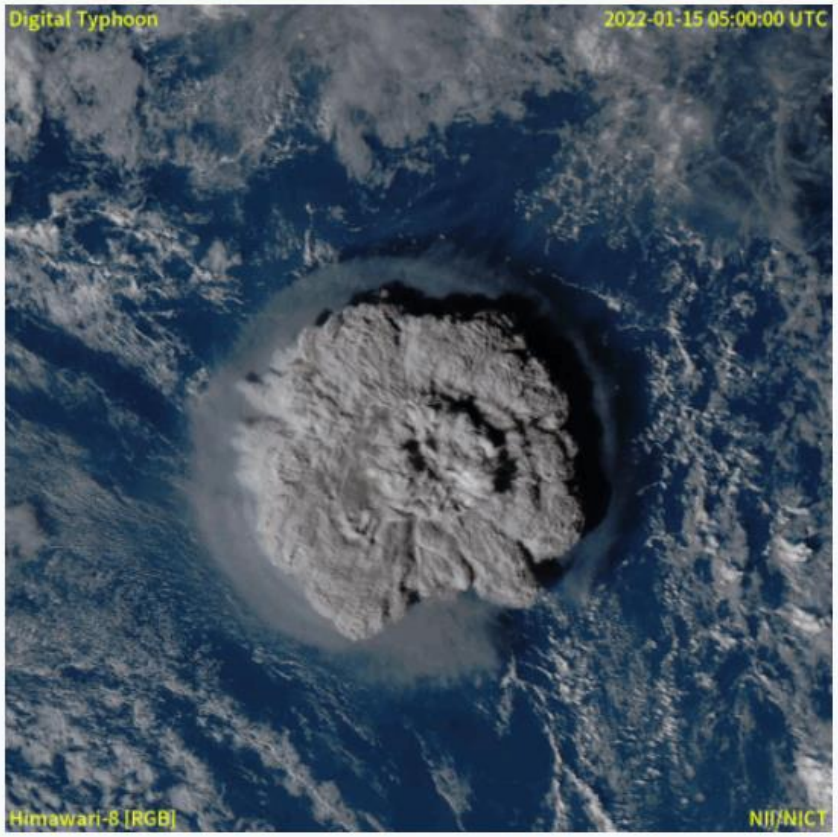


The Hunga-Tonga Eruption was a huge injection of water and dirt into the Troposphere, Stratosphere, even Mesosphere, dwarfing human emissions from aircraft contrails.

https://en.wikipedia.org/wiki/2022_Hunga_Tonga%E2%80%93Hunga_Ha%CA%BBapai_eruption_and_tsunami

In December 2021, an eruption began on Hunga Tonga–Hunga Ha‘apai, a submarine volcano in the Tongan archipelago in the southern Pacific Ocean.[6] The eruption reached a very large and powerful climax nearly four weeks later, on 15 January 2022.[7] Hunga Tonga–Hunga Ha‘apai is 65 kilometres (40 mi) north of Tongatapu, the country's main island,[8] and is part of the highly active Tonga–Kermadec Islands volcanic arc, a subduction

2022 Hunga Tonga–Hunga Ha‘apai eruption and tsunami



Satellite animation of the initial ash plume and shockwave on 15 January 2022

The link below contains a number of loops of the Hunga-Tonga volcano: satellite loops, shockwaves from the GOES 17, the GOES-17 images of the 1- Minute infrared sector views as the volcano eruption was in progress, and the Himawari-8 satellite images of the 15 January 2022 eruption of Hunga Tonga, and still images of the effects.

https://en.wikipedia.org/wiki/2022_Hunga_Tonga%E2%80%93Hunga_Ha%CA%BBapai_eruption_and_tsunami

https://en.wikipedia.org/wiki/2022_Hunga_Tonga%E2%80%93Hunga_Ha%CA%BBapai_eruption_and_tsunami#/media/File:ISS-66_Atmospheric_plume_from_2022_Hunga_Tonga_eruption.jpg

The atmospheric plume from an underwater volcano eruption in the Pacific nation of Tonga is pictured from the International Space Station as it orbited 269 miles above the Pacific Ocean northwest of Auckland, New Zealand.

https://en.wikipedia.org/wiki/2022_Hunga_Tonga%E2%80%93Hunga_Ha%CA%BBapai_eruption_and_tsunami#/media/File:ISS-66_Atmospheric_plume_from_2022_Hunga_Tonga_eruption_(1).jpg

My interpretation of this image is that large white and brownish red component is the eruption's content, with most of it below the tropopause. The bluish white puff structure near center is the content which has bee forced into the stratosphere.

Conclusions:

James Delingpole has been writing about the Climate Scam for years, but he has fallen for the Chemtrails Video, and other such stories.

Delingpole makes many claims about the influence of Chemtrails/Contrails on recent significant weather events….Hurricane Helene…Hurricane Milton, and the October 2024 Flooding Rains near Valencia

Careful Examination of the weather records shows me that there are no facts which back up his claims that Contrails/Chemtrails are making more and stronger weather events. Or, his claims aircraft emissions increase atmospheric burden of “stuff” he calls “dispersions”

Hurricane Helene and Hurricane Milton were strong storms whose strength was fueled by exceptionally warm waters in the Gulf of Mexico and the Caribbean Sea. Global Cloud cover decreased in recent years allowing more sunshine to heat those waters. In 2024, a Sahara Dust Layer further suppressed cloud cover allowing more solar heating of the tropical waters.

The October 2024 flooding in Valencia, Spain and near by areas was caused by the development of a Cut-Off Low, a storm which is typical of the area and season, when the records are examined.
The data show that while the Valencia Storm brought heavy rain and flooding, such events have slammed that area at this time of year. Wikipedia lists 19 of these cut off low storms since 1356.

More conclusions…

Delingpole makes wild statements that Human emissions are “generating extreme weather events,” UNTRUE.
https://casf.me/wp-content/uploads/2022/08/Extreme-Weather-Increasing_24-Apr-2019-updated-20-Aug-2022_.pdf\
He makes wild claims about NEXRAD, HAARP, and Directed Energy Weapons.

NEXRAD is a weather radar. NEXRAD data help NWS forecasters in making short-range predictions of Rainfall, Thunderstorm, Hail occurrences and convective precipitation events, including Tornado forecasts and warnings. NOTHING to do with “generating extreme weather events.”

HAARP was a research program given to the University of Alaska by DOD; I found nothing about possible nefarious use of HAARP, and the U of Alaska reports mention no specific activities regarding HAARP.

I worked on weather’s mostly adverse effects in lasers for Directed Energy Warfare, 1970-1974, and 1984-1994. Recent activity seems to be “fielding” small numbers in engineering and prototype evaluations in missions directed towards defeating drones on the battle zones on land and sea… nothing involving Space Force, yet.

There are no data to confirm assertions that “Military Chemtrails” are being dispersed behind aircraft, and that the alleged “dispersions” are collecting in the atmosphere.

Natural thunderstorms eject huge amounts of water substance into the troposphere and stratosphere, dwarfing aircraft water vapor and contrail emissions. The early 2022 eruption of the Hunga Tonga Volcano emitted/injected tremendous amounts of smoke, dirt and water into the troposphere and stratosphere, some even into the Mesosphere. These natural events dwarf aircraft contrails.