

GREENLAND JUST GAINED A RECORD-SMASHING 7 GIGATONS OF SNOW/ICE; + A MAJOR STRATOSPHERIC COOLING EVENT IS UNFOLDING ACROSS THE ENTIRE SOUTHERN HEMISPHERE...

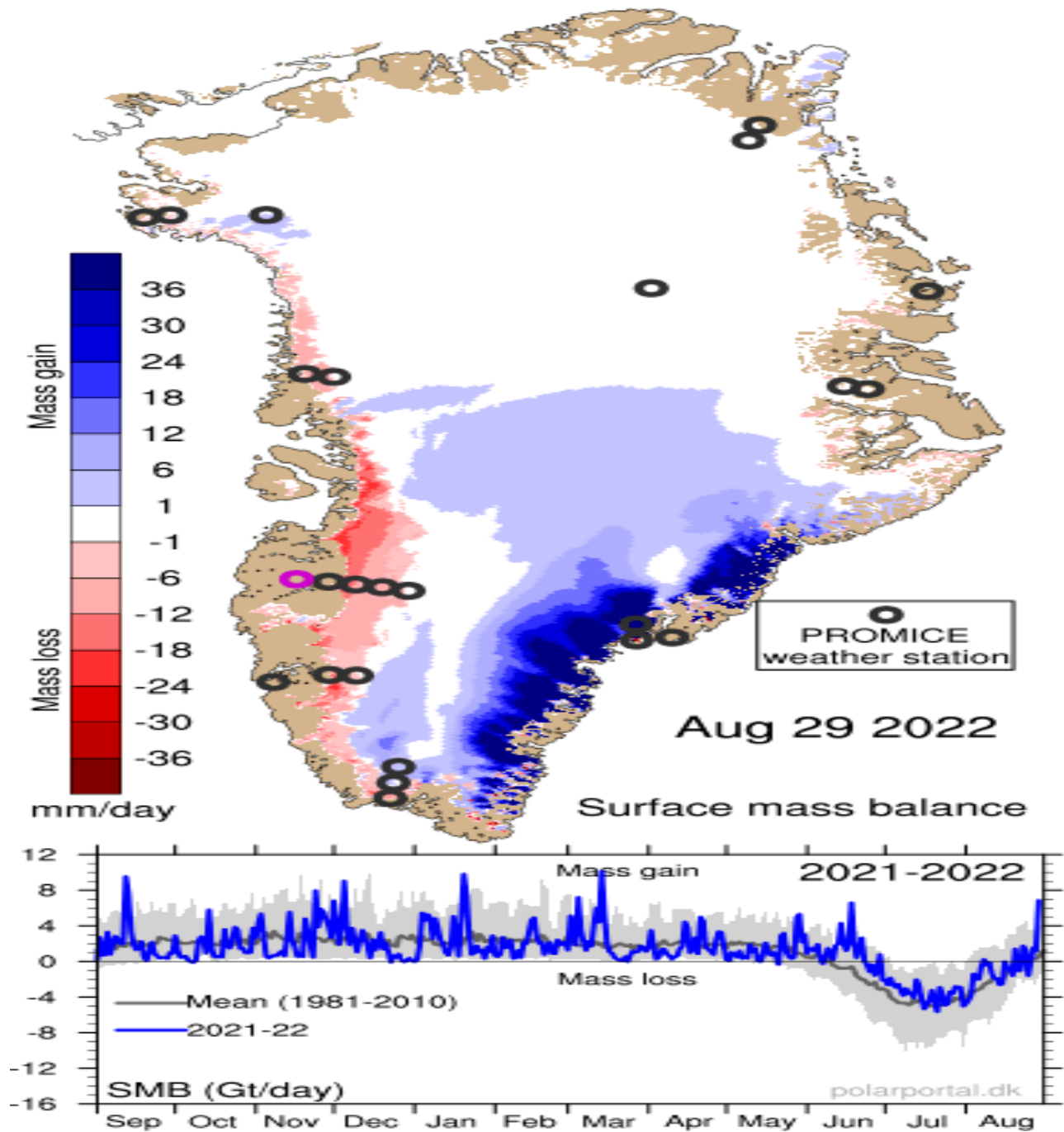
ELECTROVERSE DOCUMENTING EARTH CHANGES DURING THE NEXT GRAND SOLAR MINIMUM

AUGUST 30, 2022 CAP ALLON

GREENLAND JUST GAINED A RECORD-SMASHING 7 GIGATONS OF SNOW/ICE

Impressive surface mass balance (SMB) readings—a calculation to determine the ‘health’ of a glacier—have been posted across the Greenland ice sheet all season, particularly during the so-called summer ‘melt’ season.

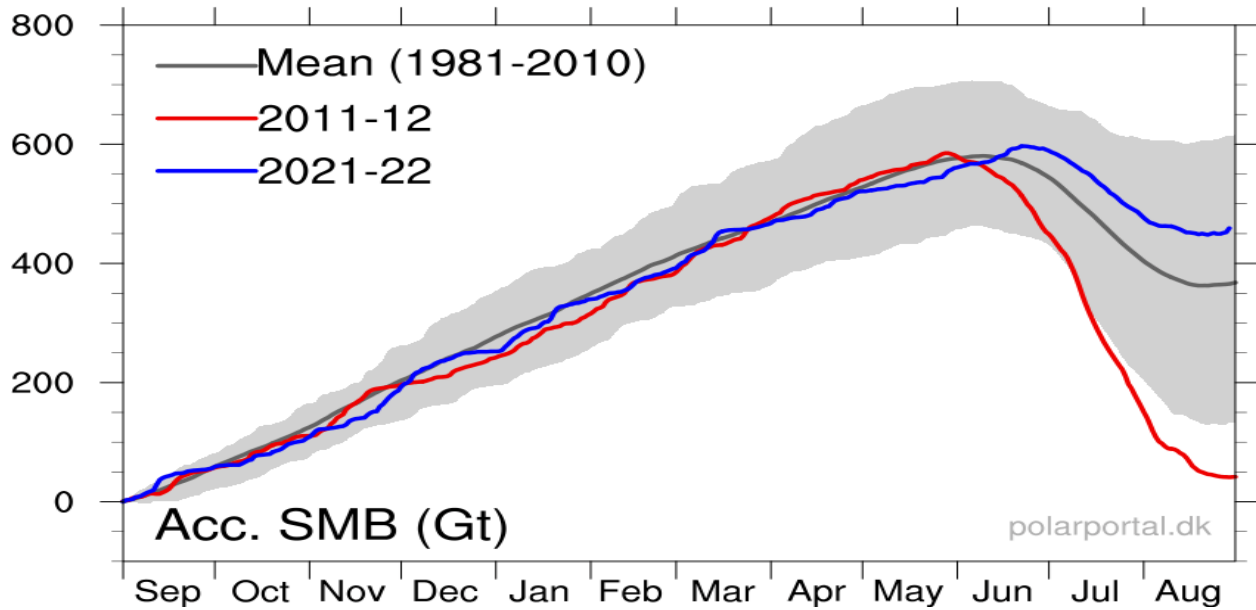
Case in point is yesterday’s (Aug 29’s) record-smashing **7 Gigaton GAIN** — a reading that would be impressive and at time of year, but one that has entered the books as the largest ever daily gain during the summer (with data extending back to the 1980s).



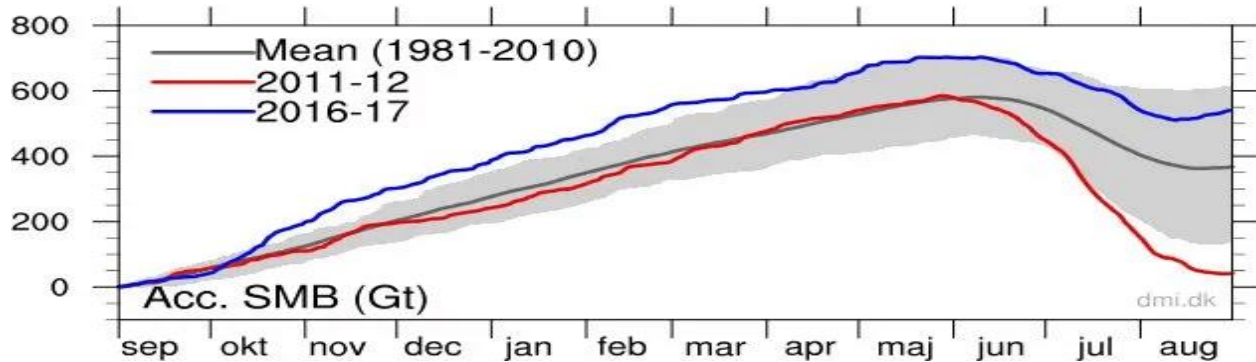
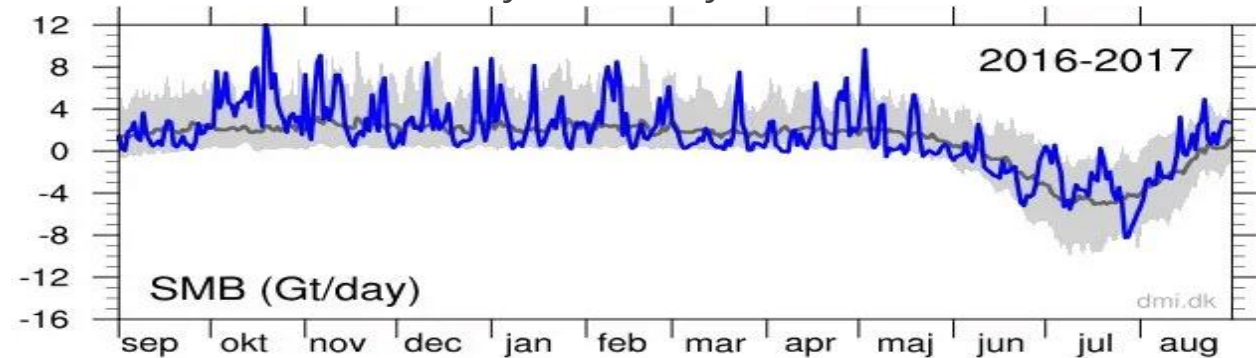
This unprecedented August GAIN has advanced the ice sheet's SMB further-above the 1981-2010 mean (grey line):

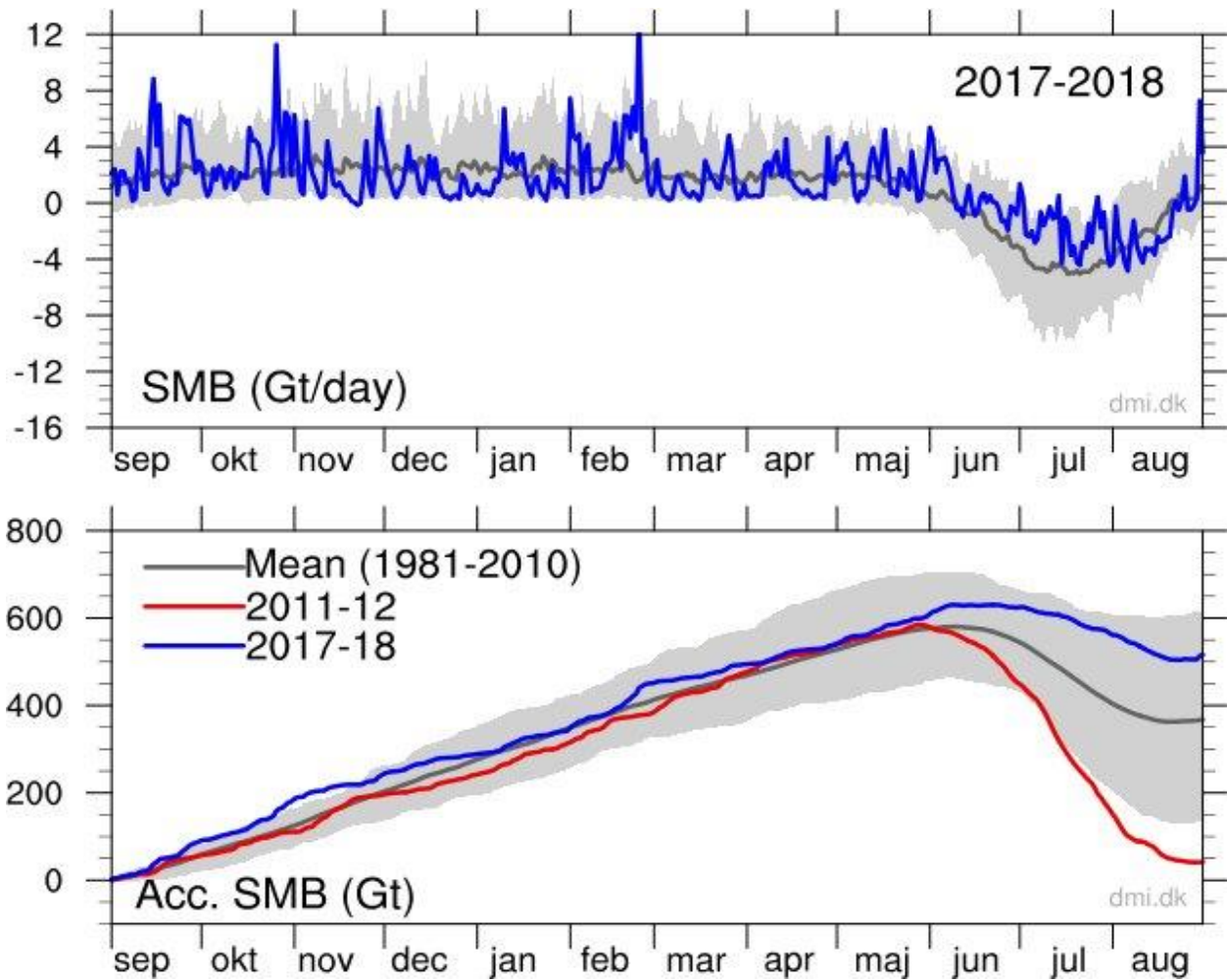
Greenland continues to defy AGW Party orders, refusing to melt as prophesied.

And this year is far from an anomaly — since 2016, an overall net gain has been observed:



Greenland continues to defy AGW Party ord

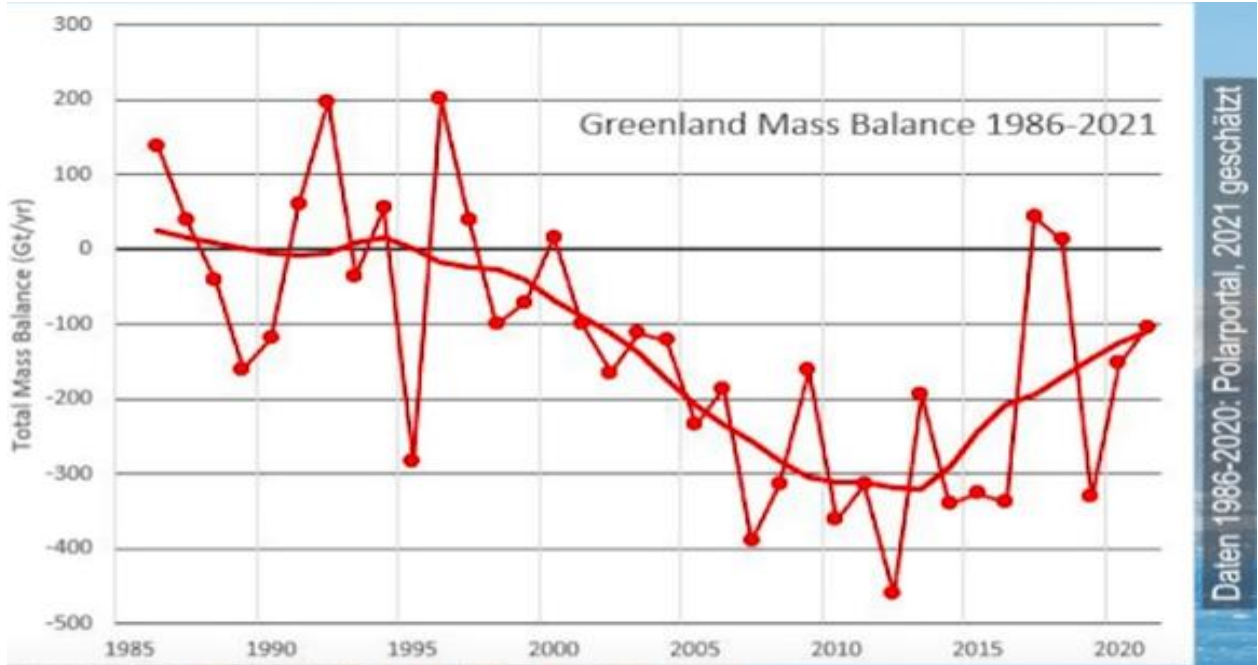




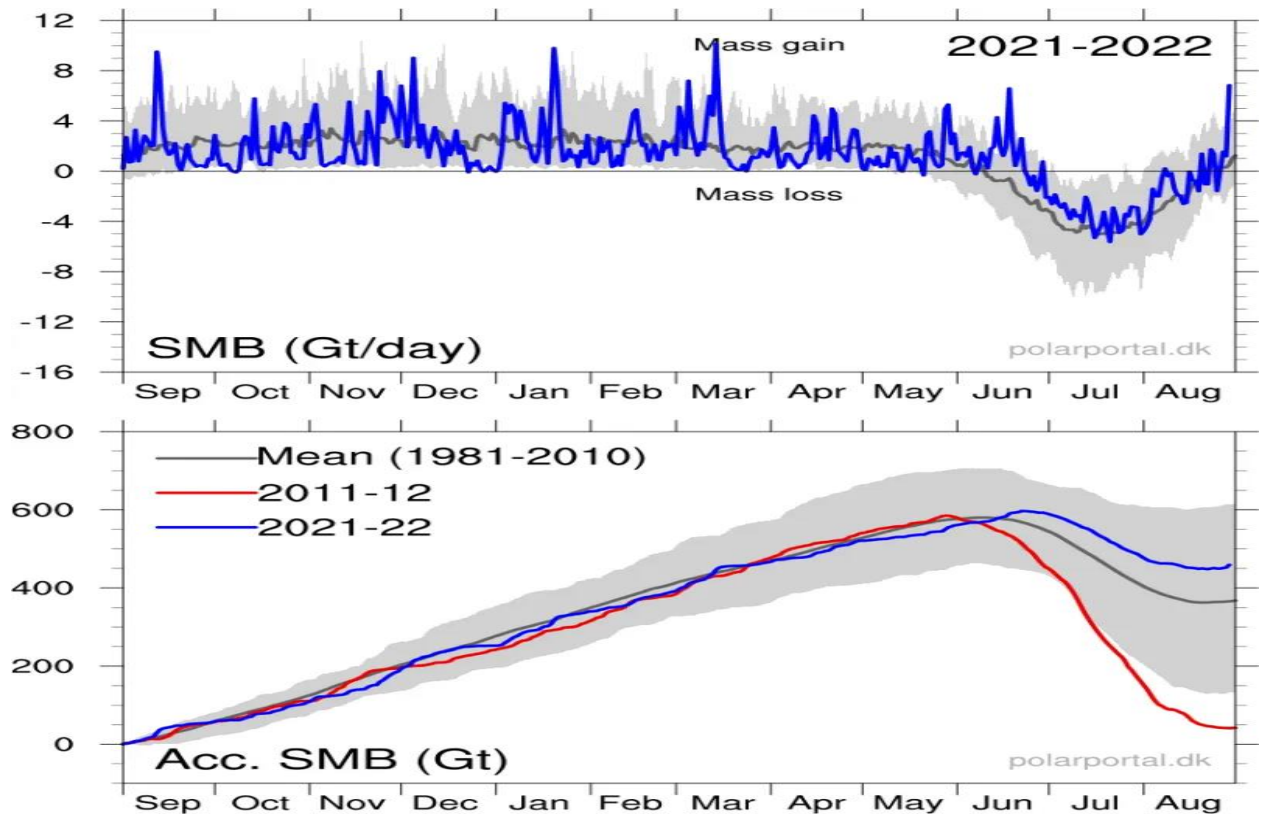
Despite decades of reliable satellite measurements—resulting in unambiguous and unalarming data—the official narrative remains one of fire and brimstone, one hellbent on pushing a suicidal demonizing of affordable and reliable fossil fuels:

Greenland Is *GAINING* Ice In The Middle Of Summer

And while it is true that the Greenland ice sheet lost mass from around 1995 to 2012, that trend of loss has now reversed, almost completely. Like the gradual turning of a vast ship, from the year's 2010 to 2015 Greenland's SMB changed course and has been on an upward trajectory ever since:

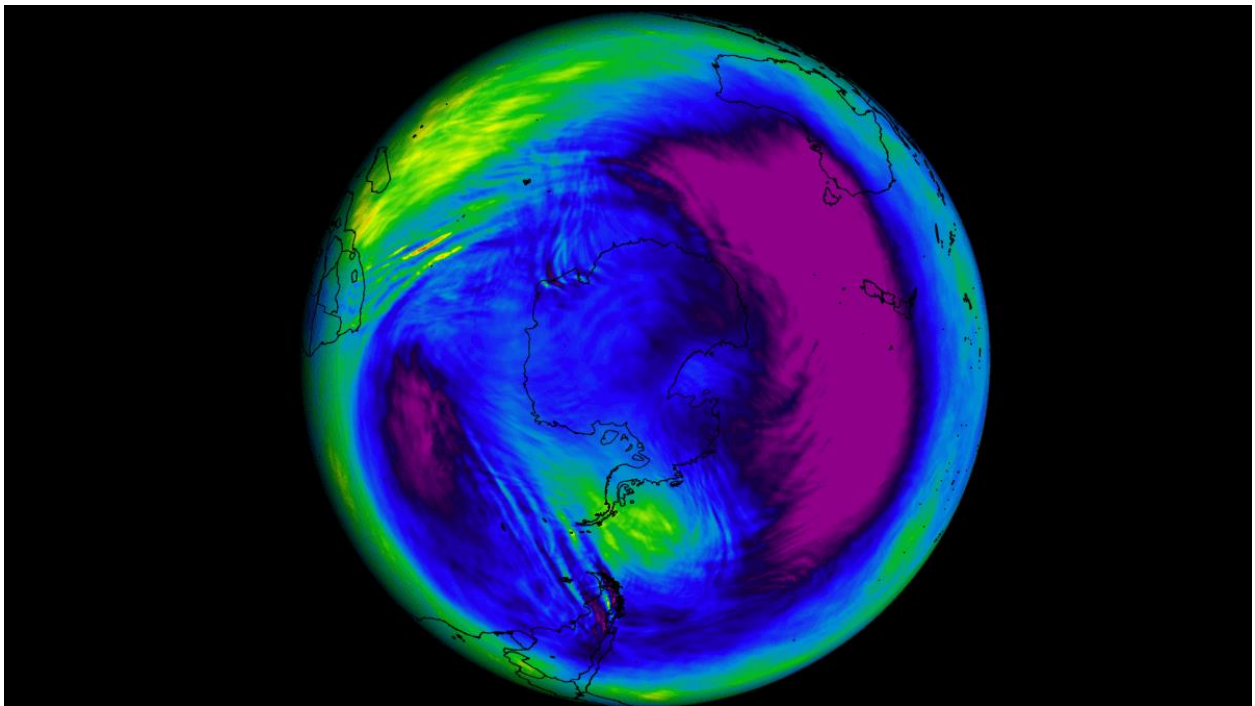


And now we have 2021/2022 season ending with a *bang* and advancing that trend of growth further still:



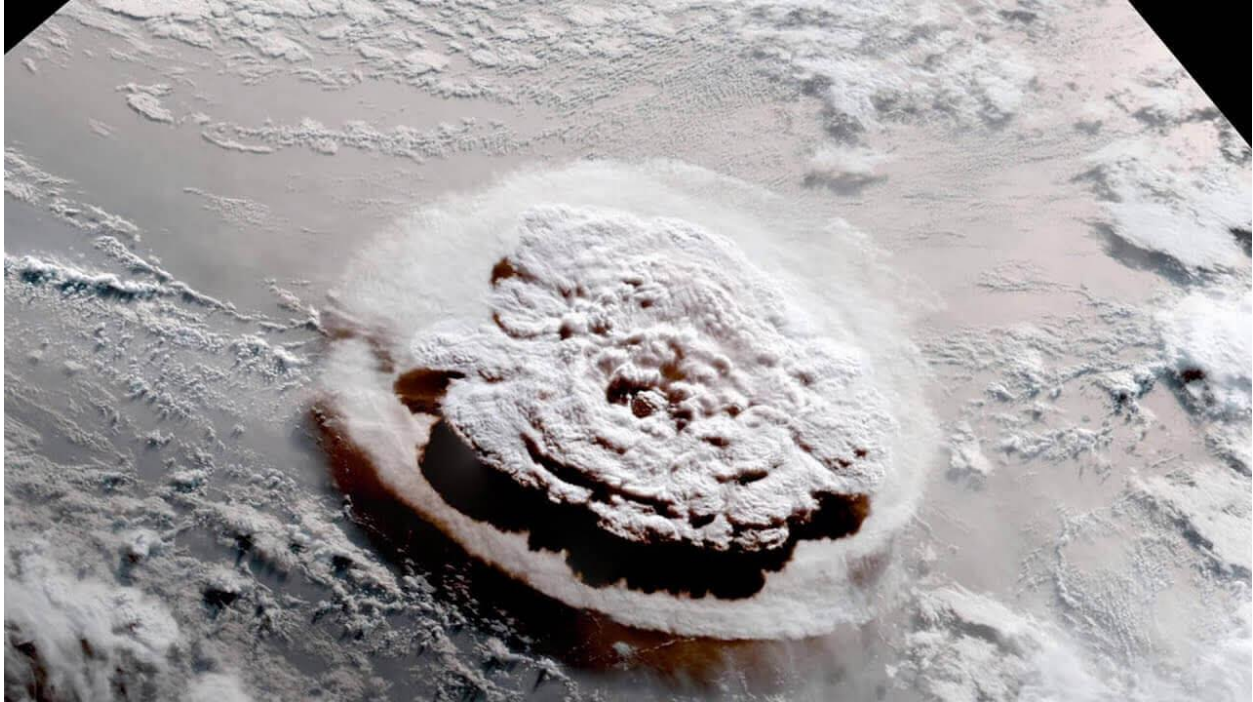
A MAJOR STRATOSPHERIC COOLING EVENT IS UNFOLDING ACROSS THE ENTIRE SOUTHERN HEMISPHERE

Fierce cold anomalies are being detected in the stratosphere over the Southern Hemisphere, cooling on a scale that has never been witnessed before in modern satellite records. The culprit? Hunga Tonga's January 15th eruption.

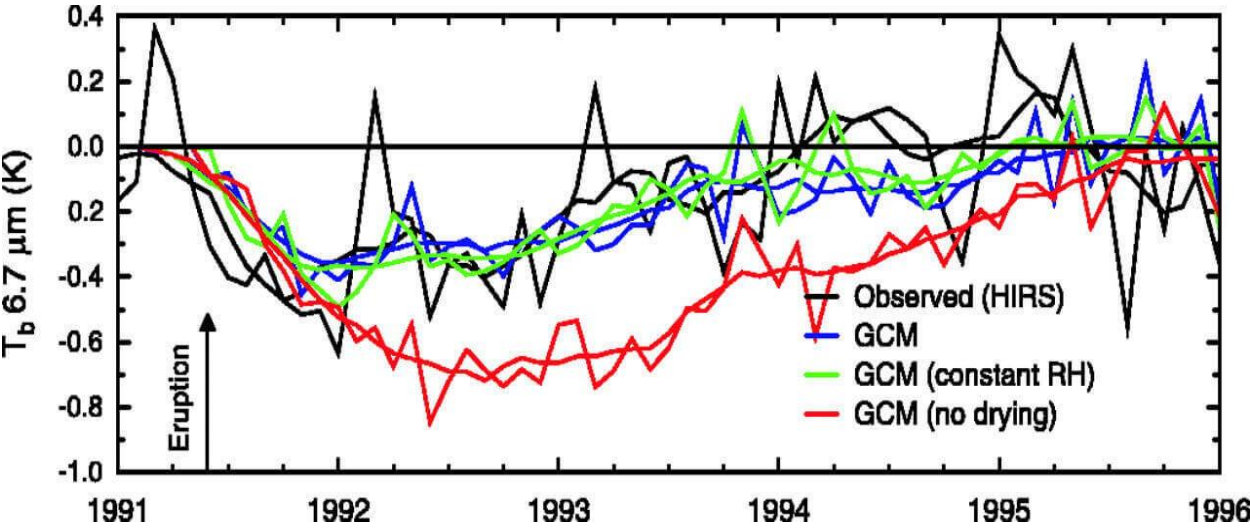


Powerful volcanic eruptions are capable of firing different gasses and materials into the stratosphere, and beyond. Depending on the type of particles and the volume of ejecta, this can lead to different regional and global atmospheric effects.

Hunga Tonga is a submarine volcano located under the South Pacific. Its violent eruption on Jan 15, 2022 produced a massive volcanic plume consisting of **sulfur** and **water vapor** that touched the mesosphere. It was the highest eruption ever recorded.

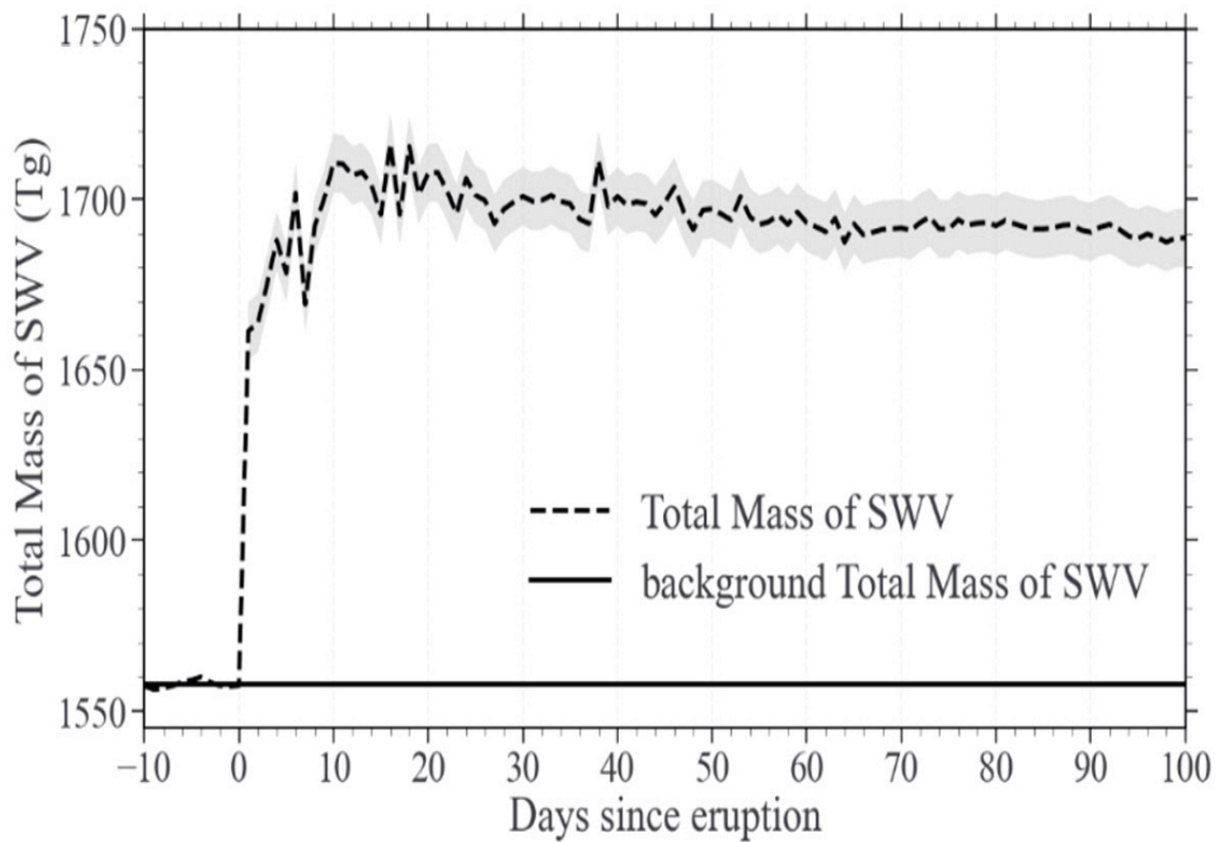


Sulfur sent to such lofty atmospheric levels has a global cooling effect. Pinatubo's 1991 eruption is recent evidence of this. As shown below, Pinatubo's VEI-6 'pop' cooled the entire planet for approximately 3 years, and by a substantial margin, too:

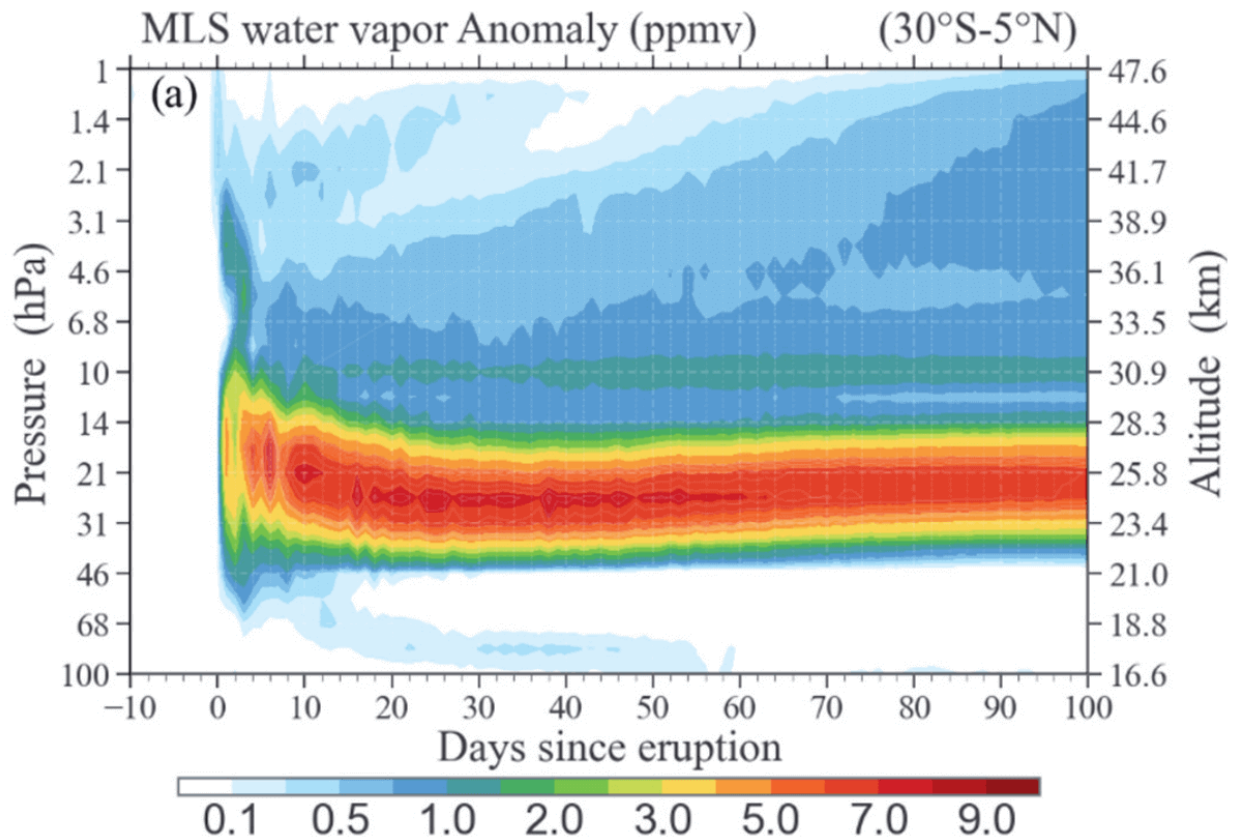


Similar to sulfur, water vapor also has a cooling effect, although not at the surface, rather in the stratosphere — cooling that is achieved in the same manor to sulfur; that is, by reflecting incoming solar radiation.

It has been calculated that Hunga Tonga's eruption resulted in a 10% increase in total stratospheric water vapor content (*from 1560 Teragrams to over 1700 Teregrams*) which is an immense achievement for a single volcanic event:

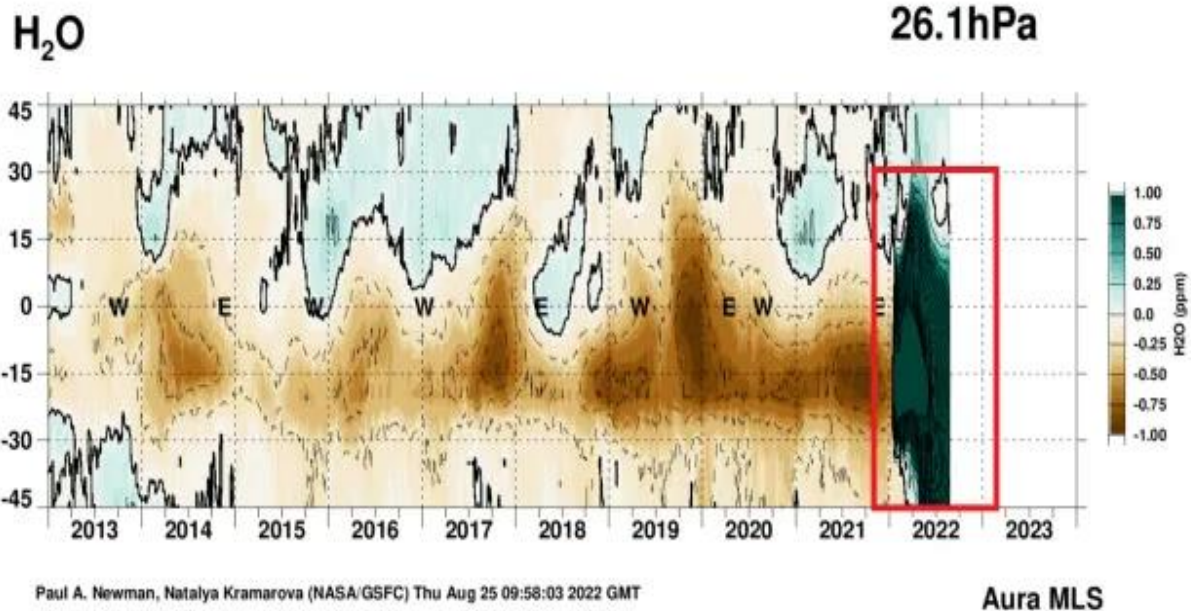


The injected water vapor reached the upper stratosphere with the main concentration holding between 20-30km (12-18 miles):



Below is NASA's analysis of the water vapor anomaly at approx 25km (15.5 miles) up.

Visible is the significant increase following the eruption, but also worth noting is the 'overlap' from the Southern Hemisphere into the Northern Hemisphere — the ejecta isn't confined to one region, it spreads:

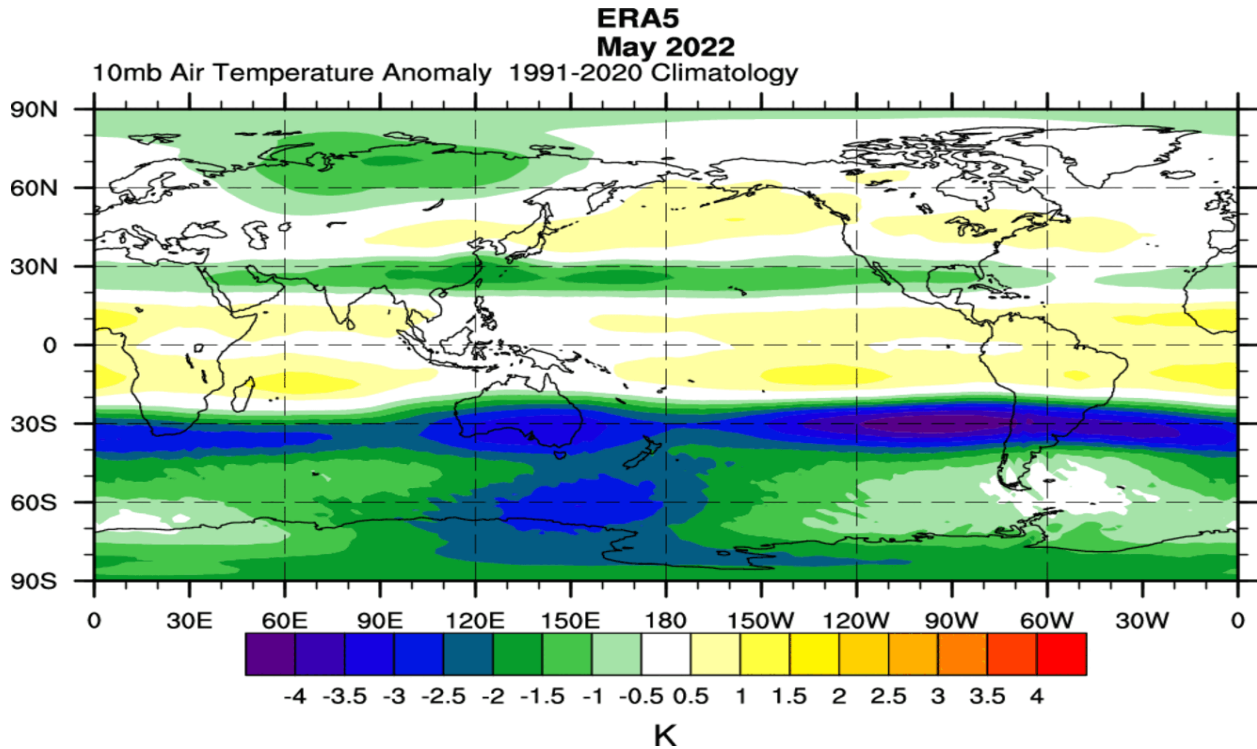


The cooling related to this event can be tracked using the reanalysis data from NOAA's Physical Sciences Laboratory.

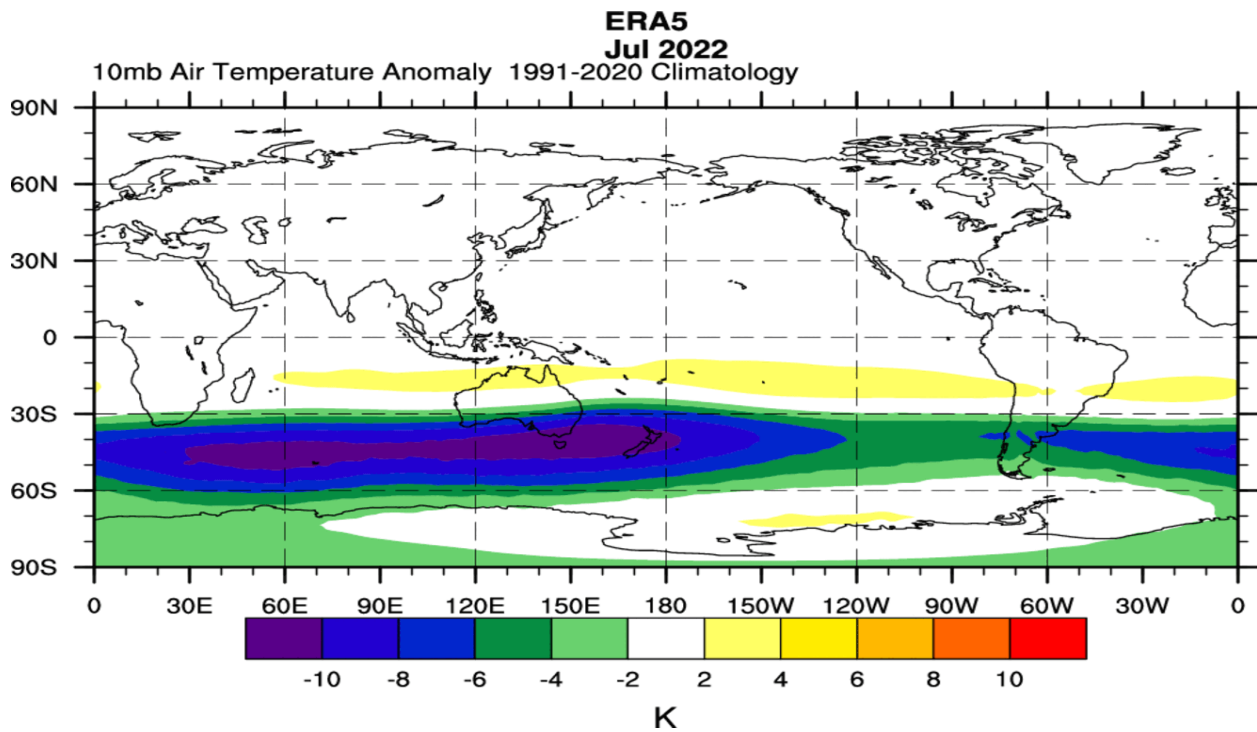
Below is May 2022's mid-stratosphere temperature anomaly (so approx. 4 months after the eruption). Clear to see, by May there was already significant cooling afoot *across* the Southern Hemisphere with the strongest cold anomalies around 30S:

Below is NASA's analysis of the water vapor anomaly at approx 25km (15.5 miles) up.

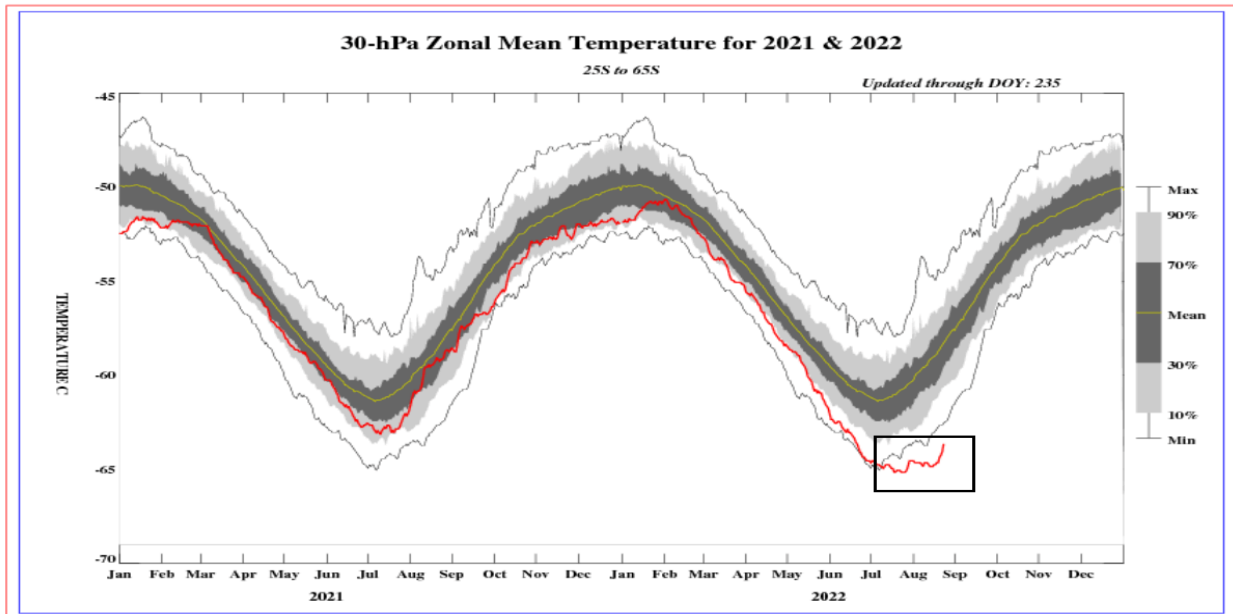
Visible is the significant increase following the eruption, but also worth noting is the 'overlap' from the Southern Hemisphere into the Northern Hemisphere — the ejecta isn't confined to one region, it spreads:



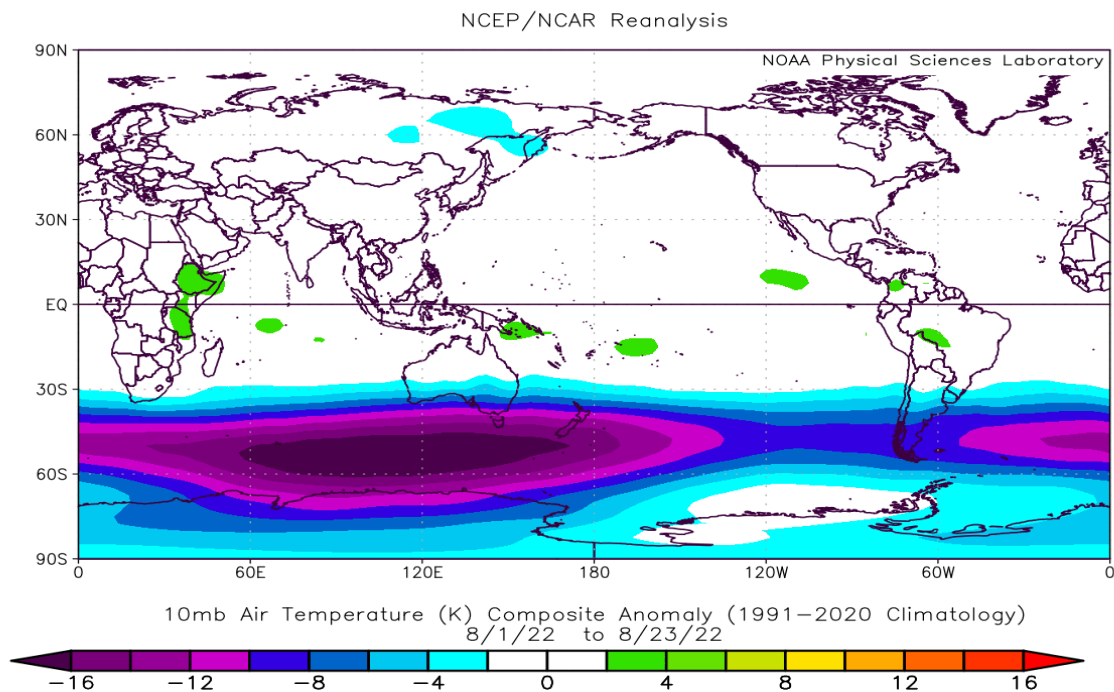
By July 2022 the cooling effect was even stronger. The cold anomalies were substantial (10 degrees below the norm). And not only had they intensified but they had spread further towards the south pole, too:



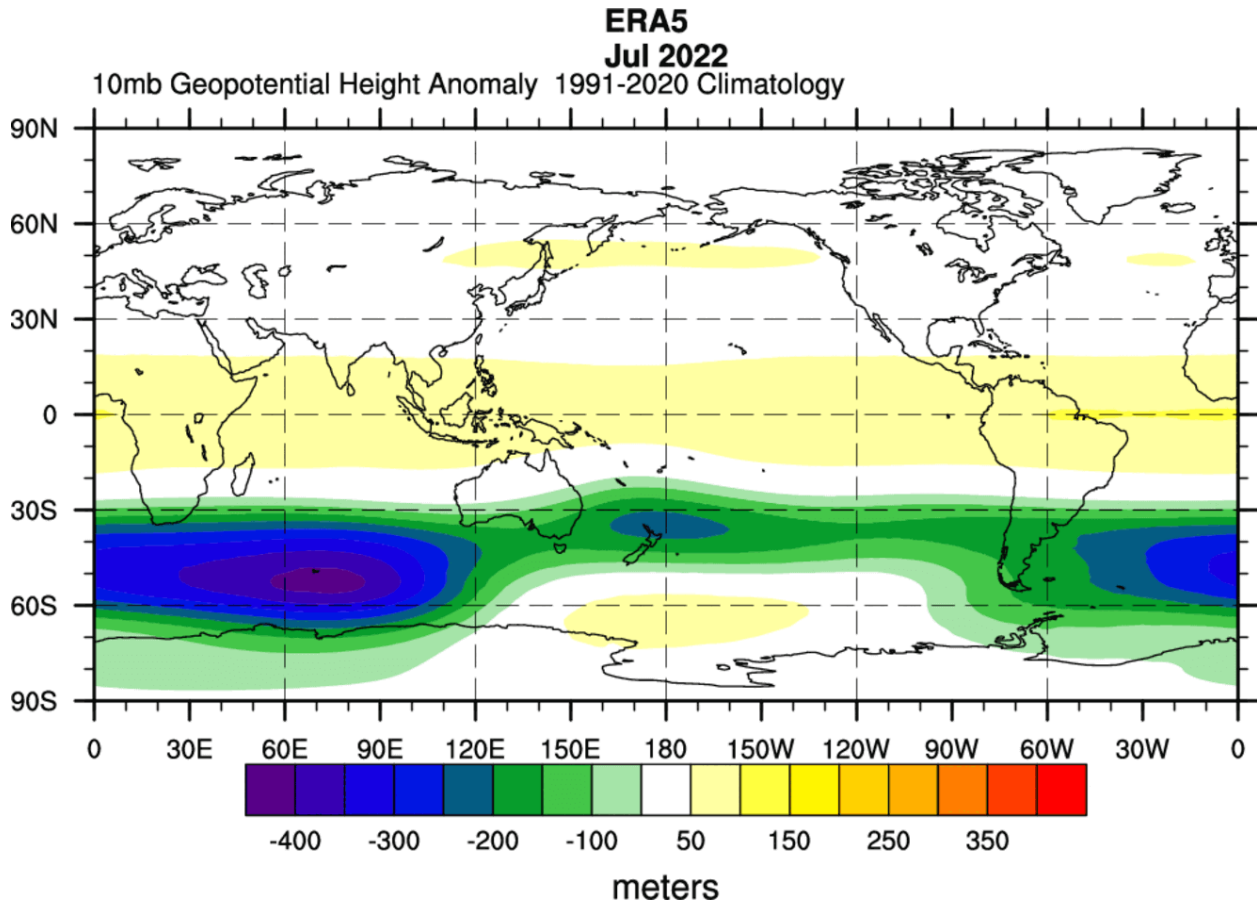
NOAA's mid-stratosphere temperature graph also shows the unprecedented level of cooling:



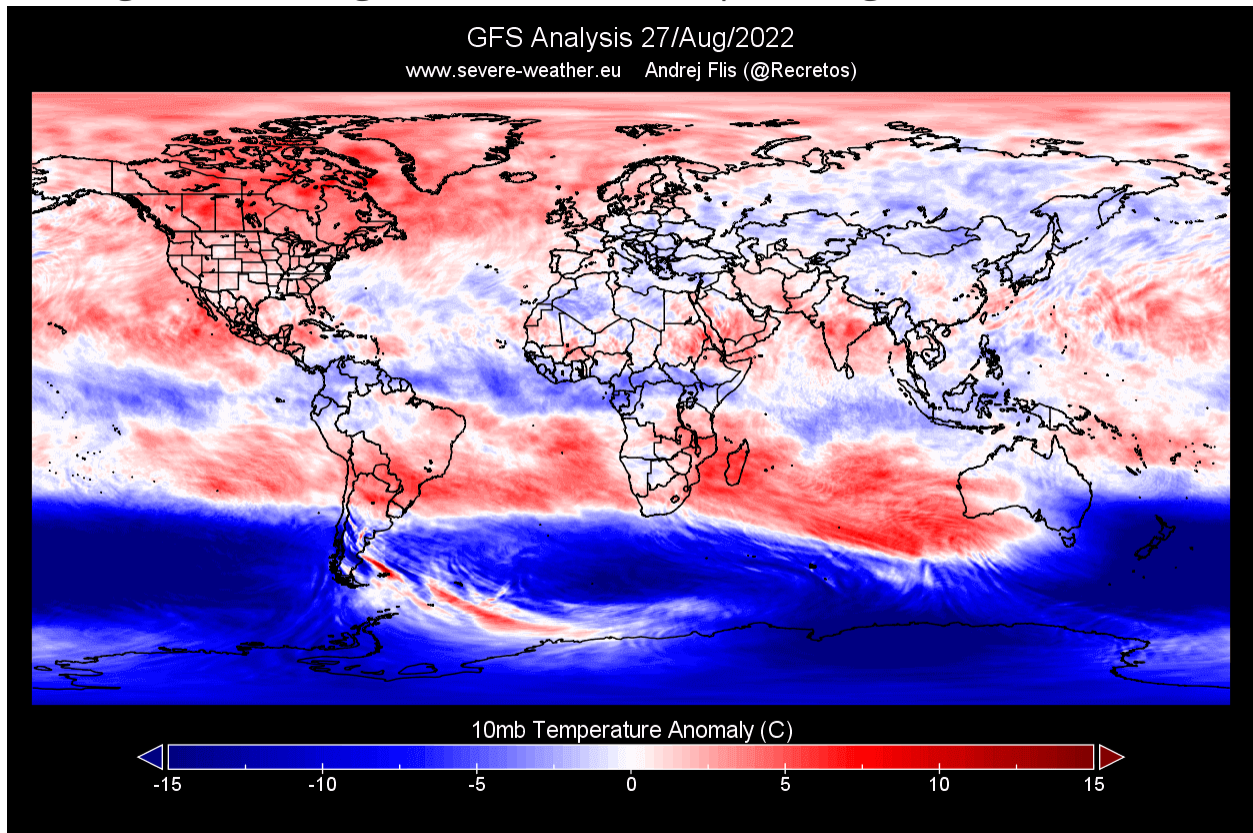
According to the latest analysis (Aug 2022), the stratospheric cooling has continued to intensify with the temperature anomalies expanding even further towards the South Pole...



...where they're also seen to be influencing the polar vortex dynamics more directly — along with the temperature, the **pressure** is also seen to be decreasing:



The very latest analysis (Aug 27) speaks for itself — the stratospheric cooling has now engulfed the southern polar regions:



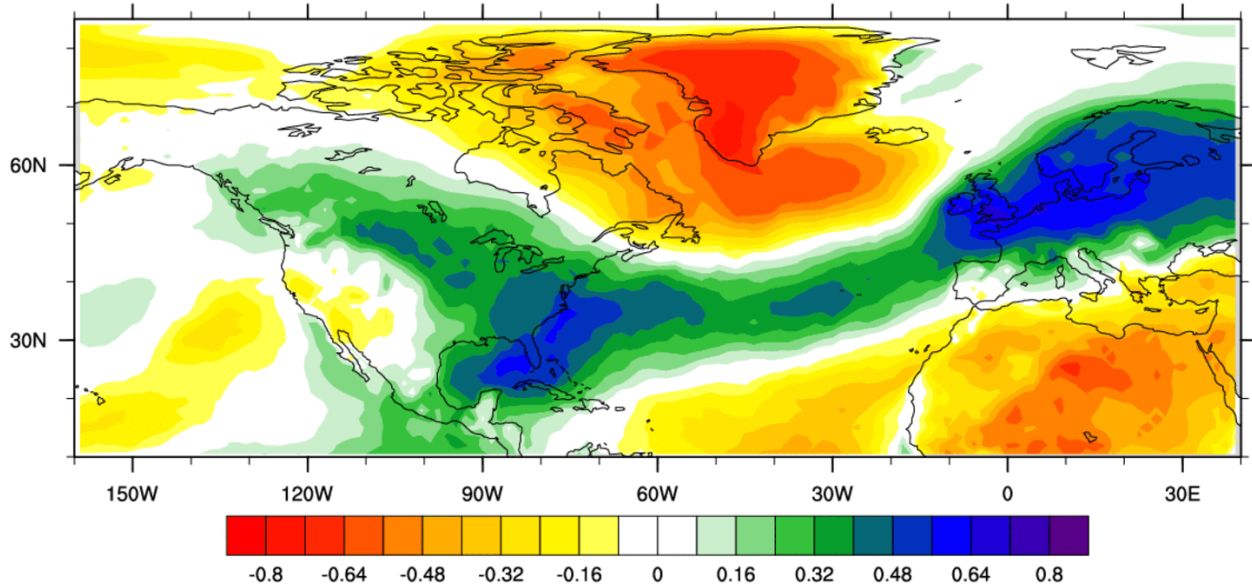
IMPLICATIONS FOR THIS COMING NORTHERN HEMISPHERE WINTER

More often than not, southern stratospheric cooling results in a negative NAO pressure pattern (*North Atlantic Oscillation: the pressure pattern affecting North America and Europe*). A negative NAO means higher pressure over the north Atlantic and Greenland and, conversely, lower pressure to the south.

The below image is an example of this, it shows the temperature pattern of a negative NAO winter season. Note the colder temperatures over the northern and eastern half of the United States and Europe:

Correlation

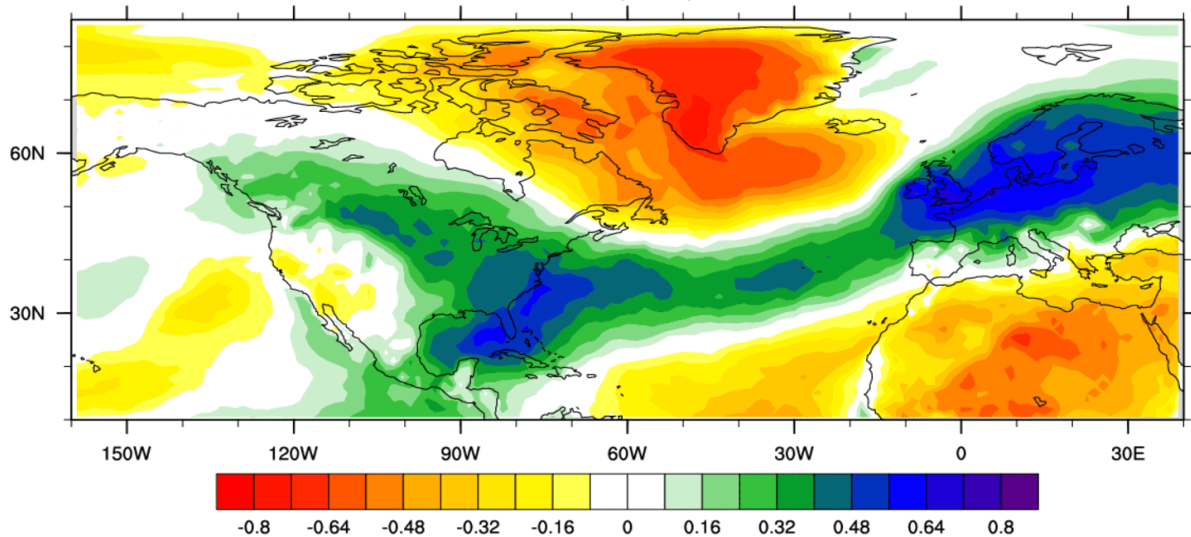
Nov to Feb 1980-2021 ERA5 2m Air Temperature vs
Nov to Feb NAO: North Atlantic Oscillation (CRU)

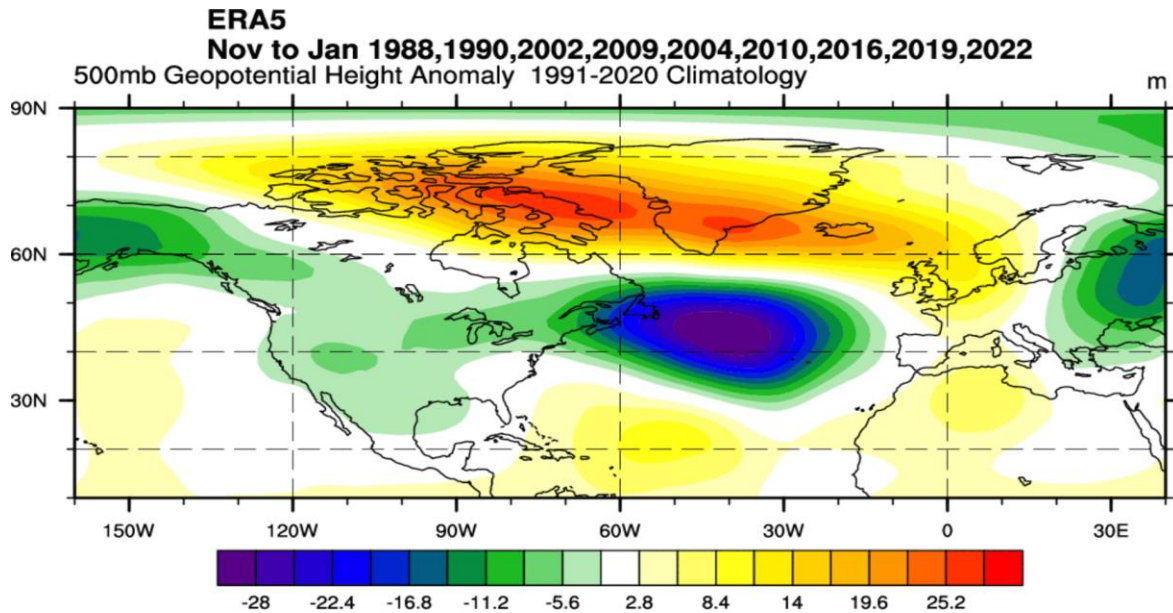


If we take the modern Northern Hemisphere winter seasons that followed anomalously-cold southern stratospheric years, we see a strong correlation with this negative NAO pattern; that is, high pressure over Greenland and lower pressure over the mid-North Atlantic:

Correlation

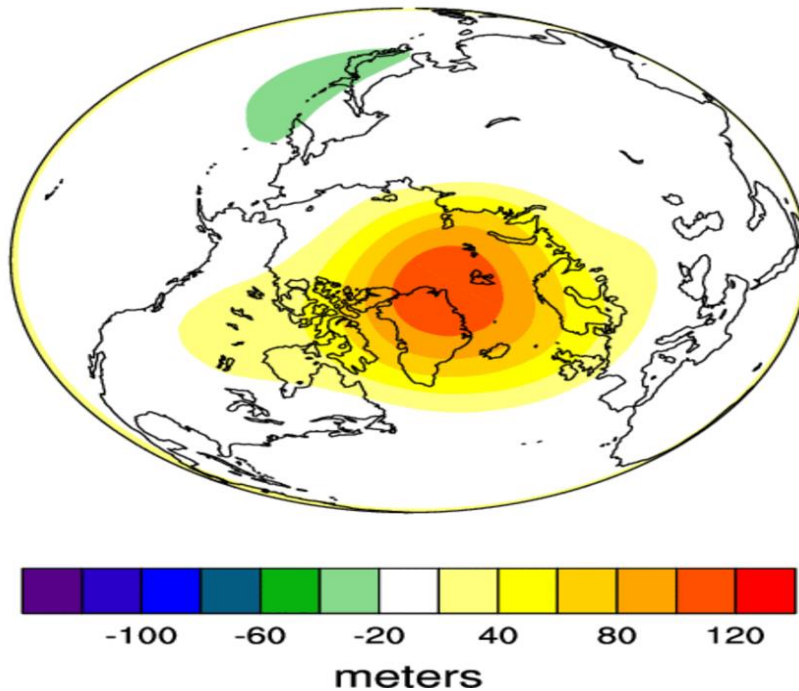
Nov to Feb 1980-2021 ERA5 2m Air Temperature vs
Nov to Feb NAO: North Atlantic Oscillation (CRU)





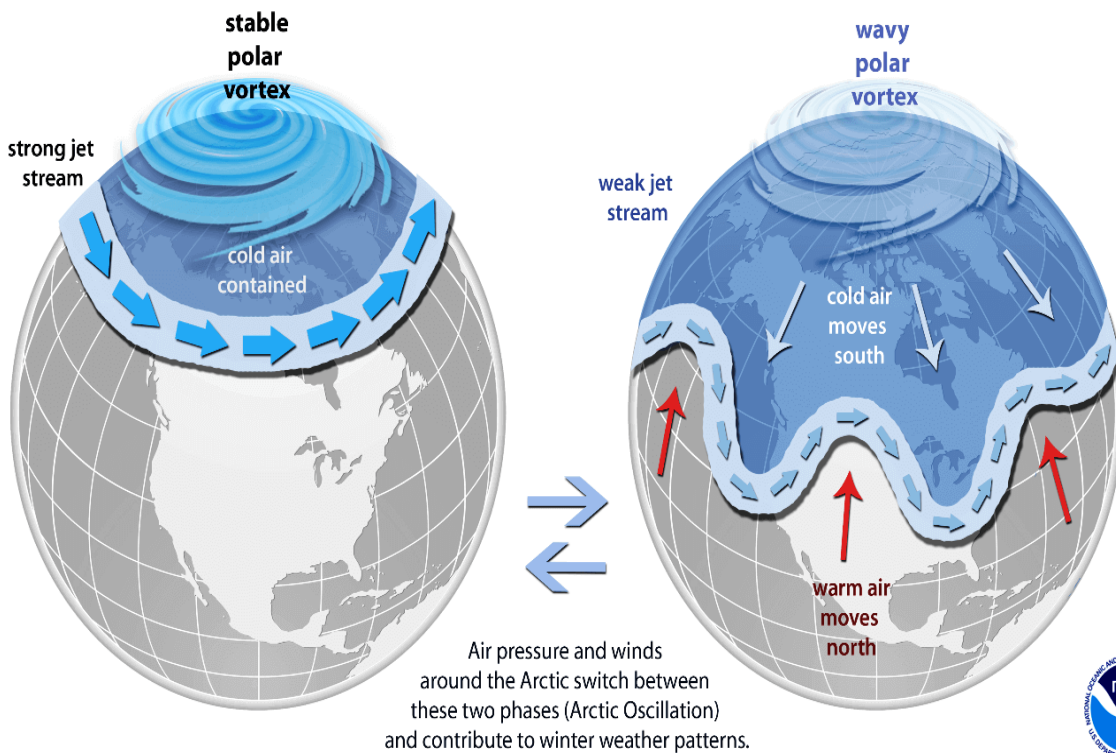
Taking the same years again, we can see that the **pressure pattern** in the northern stratosphere shows a weaker polar vortex (*positive pressure anomalies can indicate weaker polar circulation*):

ERA5
Nov to Jan 1988,1990,2002,2009,2004,2010,2016,2019,2022
 10mb Geopotential Height Anomaly 1991-2020 Climatology



A *strong* Polar Vortex means a strong polar circulation: a setup that keeps cold Arctic air locked at the Polar regions resulting in milder conditions for the United States and Europe; while on the flip side, a *weak* Polar Vortex leads to a wavy jet stream pattern and the vortex has a much harder time containing the cold — Arctic air masses are effectively unlocked and freed to ride anomalously-far south into the United States and/or Europe:

The Science Behind the Polar Vortex



RECAP

January's eruption of Hunga Tonga in the South Pacific injected sulfur and a large amount of water vapor into the stratosphere.

We see that this water vapor is now causing significant cooling of the southern stratosphere, and have also noted a correlation between Southern Hemisphere stratospheric *cooling* and Northern Hemisphere stratospheric *warming* (SSWs).

Stratospheric warming during the Northern Hemisphere winter often leads to a disruption of the Polar Vortex, causing large pressure changes, which, in turn, can result in masses of Arctic air being unleashed into the United States and Europe.

These, at least, are the current lines of thinking, backed up by historical data.

However, there are many other factors and forcings at play. Earth's climate is an impossibly complex system and much more research is needed. This winter will, however, be a great real-world test. Hopefully the season doesn't play out as expected. Simply put, nations are not setup to deal with a harsh winter of unrelenting polar outbreaks, not this year, far from it.

I don't know what else to do but keep my fingers crossed and employ some blind hope.

We humans are powerless against such grand cosmological plays, regardless of what TPTB tell us. No amount of taxing and/or virtue-signaling will impact the climate. Mother Nature rides her cycles and her cycles within cycles regardless. It is sheer folly to think we can knock these ancient, predetermined destinies off course.

As eminent Russian space scientist, Habibullo Abdussamatov says:
"The so-called 'greenhouse effect' will not avert the onset of the next deep temperature drop, the 19th in the last 7500 years, which without fail follows after natural warming.

" Social Media channels are restricting Electroverse's reach: Twitter are purging followers, while Facebook are labeling posts as "false" and have slapped-on crippling page restrictions. And most recently, the CCDH stripped the website of its ability to advertise with Google. Social Media channels are restricting Electroverse's reach: Twitter are purging followers, while Facebook are labeling posts as "false" and have slapped-on crippling page restrictions. And most recently, the CCDH stripped the website of its ability to advertise with Google.

*So, be sure to subscribe to receive new post notifications by email. And also consider becoming a Patron or donating via Paypal (button located in the sidebar >>> or scroll down if on mobile). **The site receives ZERO funding, and never has.***

Any way you can, help me spread the message so others can survive and thrive in the coming times.