

THE TRUTH ABOUT HEAT THIS SUMMER

In the last 7 and 30 days, there were more US record lows than highs. The heat wave in what has been a cool and wet spring and summer was intense but brief and mainly notable for the elevated nighttime temperatures. That nighttime warmth is consistent with the very wet first 6 months of 2019. Water vapor is by volume by far the most significant and potent greenhouse gas. Note the large number under HIGH MIN the last 30 days. There were also more DAILY and MONTHLY record lows than highs year to date.

U.S. Daily Records Summary

PERIOD	HIGH MAX	HIGH MIN	LOW MAX	LOW MIN	PRECIPITATION	SNOWFALL	SNOW DEPTH
Last 7 Days	57	182	179	435	269	0	0
Last 30 Days	731	2499	524	754	1576	9	0
Last 365 Days	13487	27199	23102	12537	29685	8706	0
Month to Date	674	2362	510	738	1495	9	0
Year to Date	6977	13481	14327	8510	17302	5405	0

U.S. Monthly Records Summary

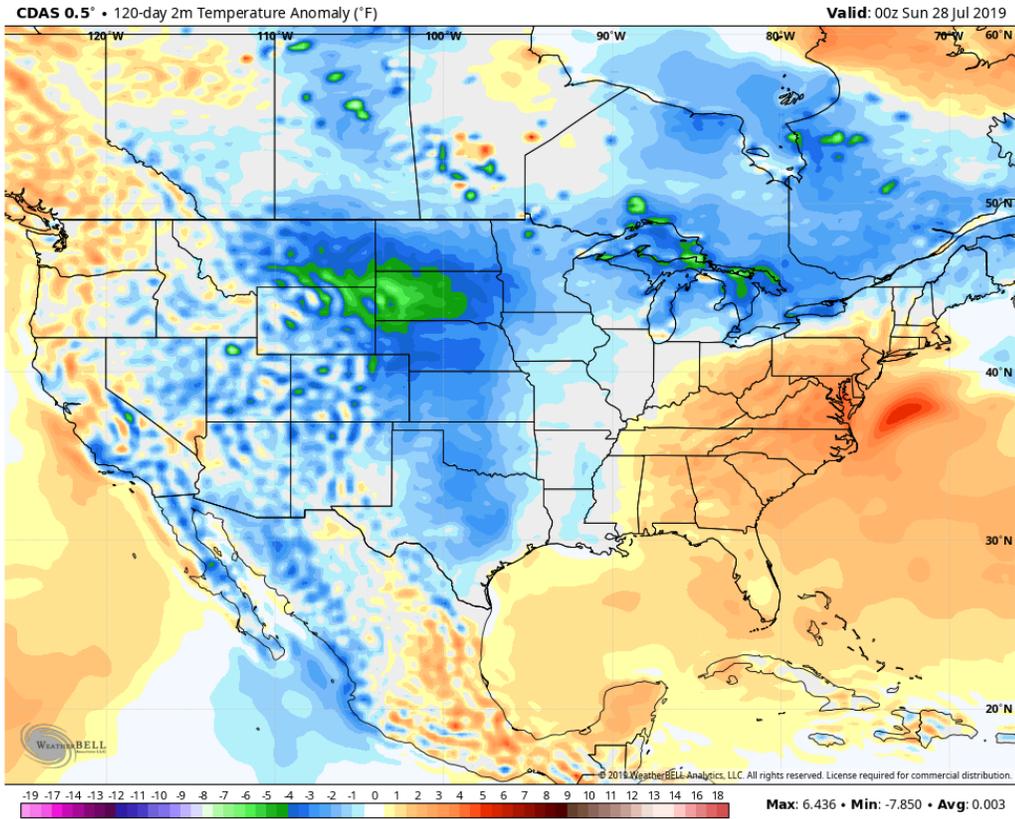
PERIOD	HIGH MAX	HIGH MIN	LOW MAX	LOW MIN	PRECIPITATION	SNOWFALL	SNOW DEPTH
Last 7 Days	0	9	0	11	9	0	0
Last 30 Days	38	124	7	18	57	9	0
Last 365 Days	645	1264	734	524	964	436	0
Month to Date	35	111	7	18	54	9	0
Year to Date	353	643	497	391	552	247	0

For all-time records - year to date there were more than 3 times as many all time record lows than highs

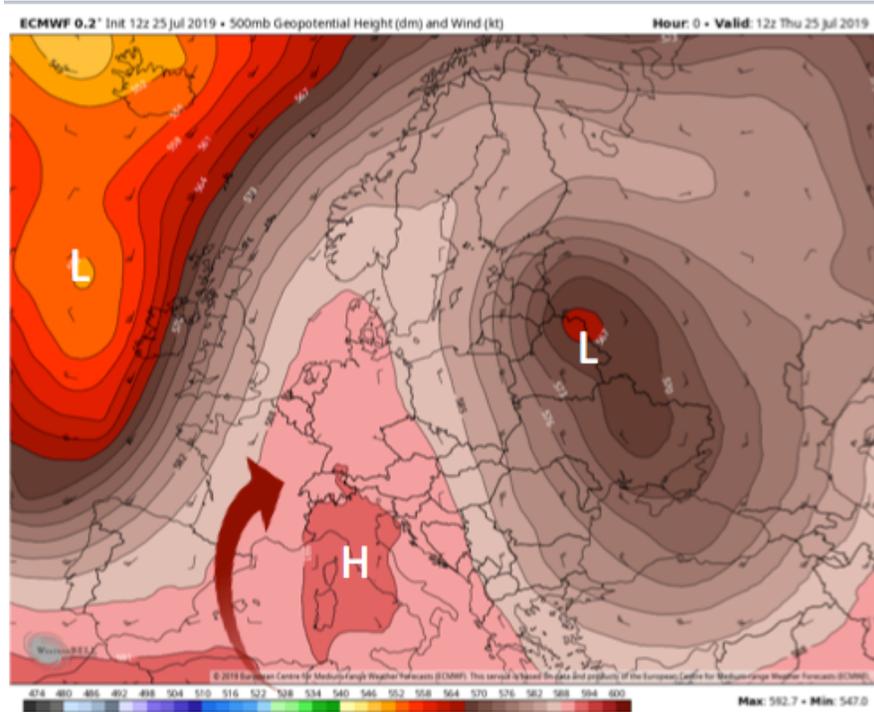
U.S. All Time Records Summary

PERIOD	HIGH MAX	HIGH MIN	LOW MAX	LOW MIN	PRECIPITATION	SNOWFALL	SNOW DEPTH
Last 7 Days	0	3	0	0	1	0	0
Last 30 Days	16	47	0	0	10	0	0
Last 365 Days	59	111	51	61	95	26	0
Month to Date	14	45	0	0	10	0	0
Year to Date	19	73	51	60	44	14	0

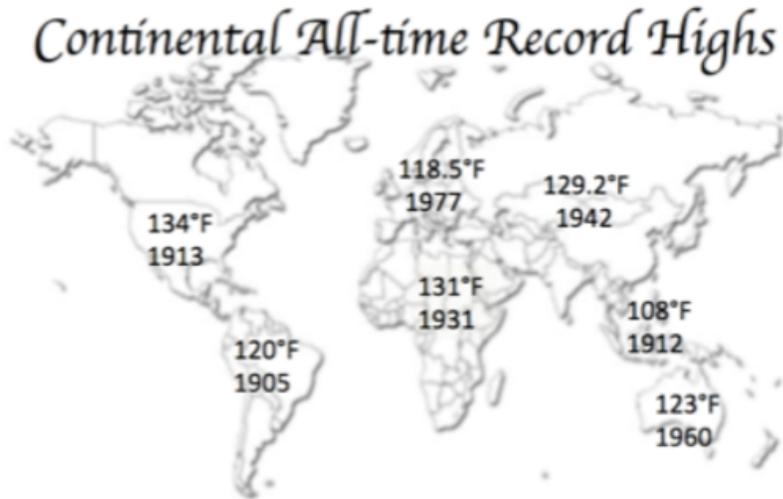
The last 4 months have been colder than normal for much of the United States and Canada.



As for Europe's heat, it was a surge of Sahara air ahead of an eastern Atlantic trough in a pattern that was very amplified for this time of year (characteristic of cooler regimes earlier this century).

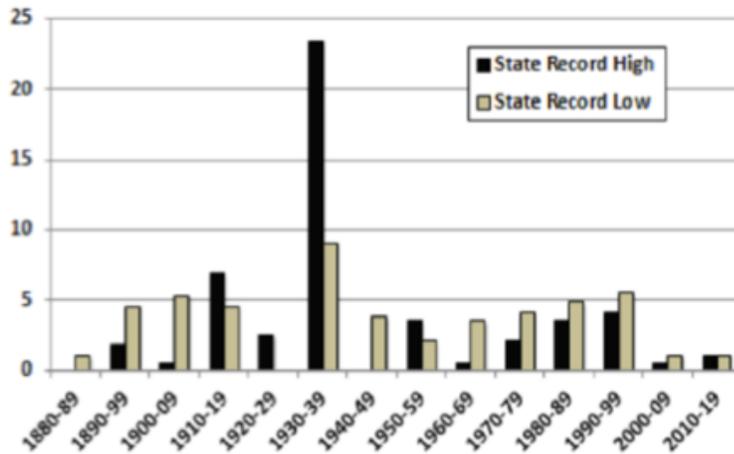


Indeed all the continental all-time records were long ago (source WMO). Europe's all-time heat record was in 1977 (also very hot in the summer in the US but surrounded by two brutal winters that had the media talking ice age). The heat wave of 2003 had a similar jet stream scenario. Though proclaimed to be the new climate norm, they had to wait 16 years to see it repeat.

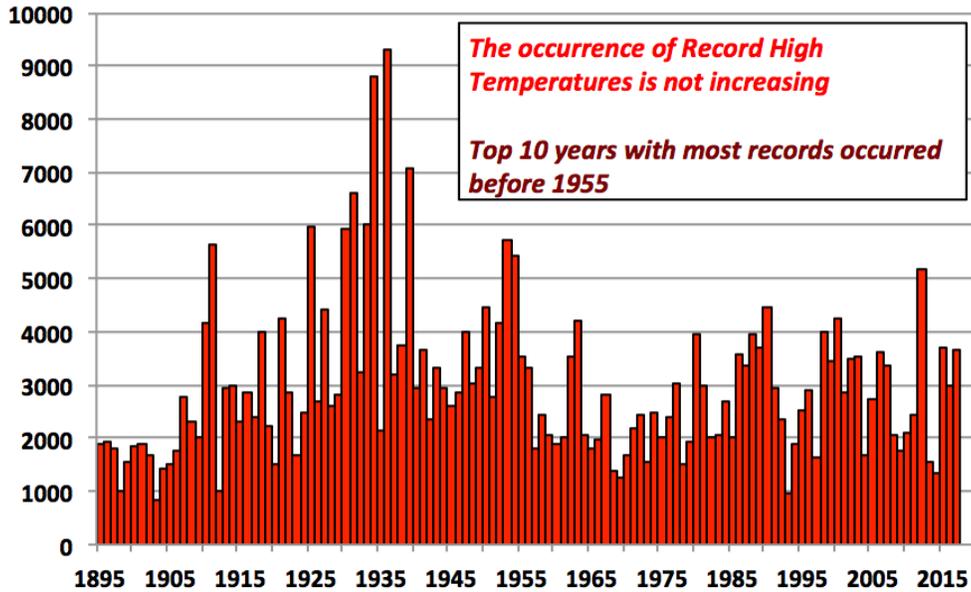


Climatologist Dr. John Christy shows heat has been declining since the 1930s.

Number of State Record High & Low Temperatures by Decade



Number of Daily Record High Temperatures by year for 804 USHCN Stations with at least 100 years of record (1895-2017)



John R. Christy, The University of Alabama in Huntsville
NCEI/NOAA data downloaded 27 Sep 2018

The politically driven NCA boondoggle produced a chart that finessed the issue by doing a ratio of heat records to cold records. Both are declining but nighttime lows are elevated by the urban heat island as most stations are now city or airport and so the record lows have declined faster.

Record Warm Daily Temperatures Are Occurring More Often

