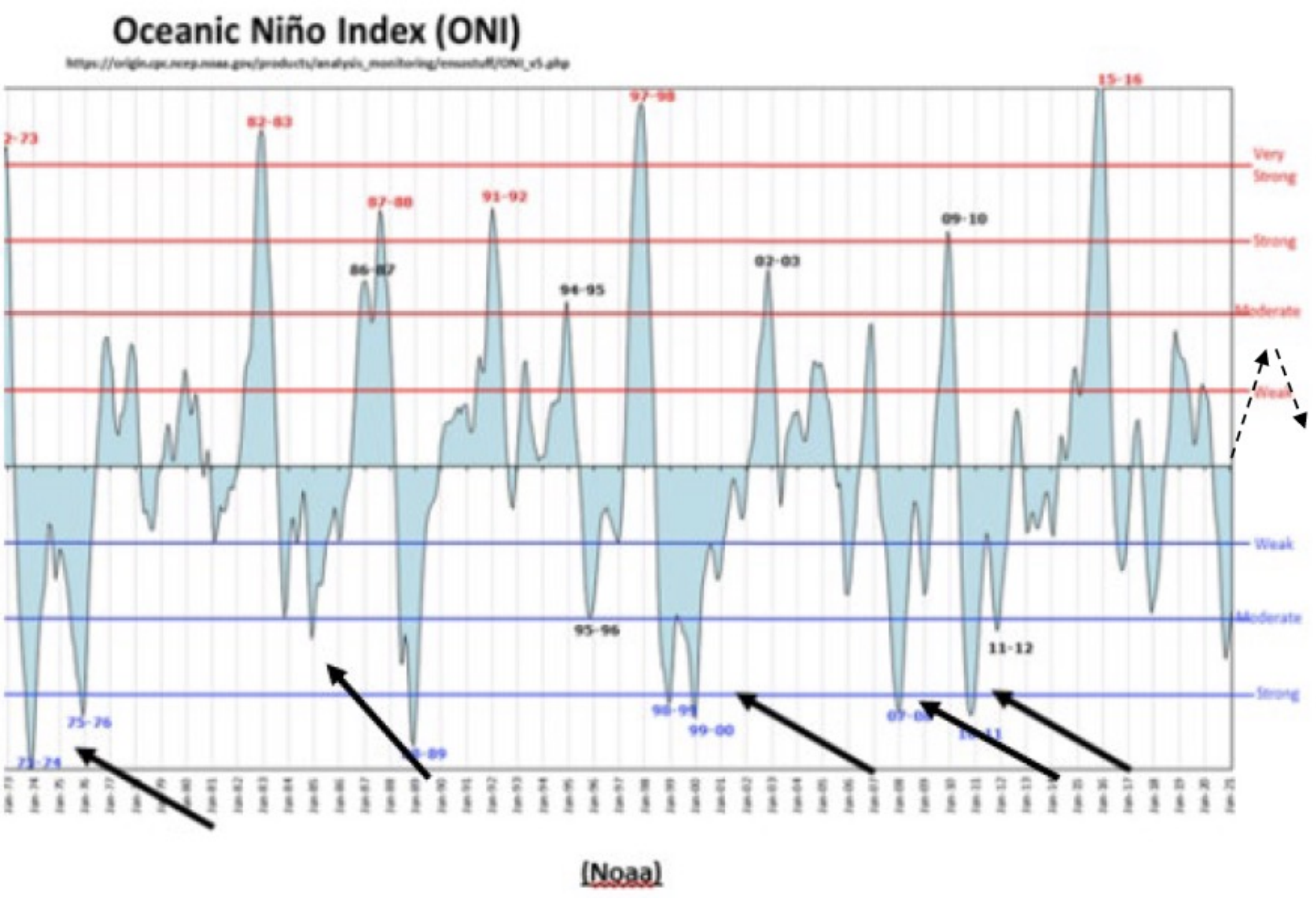
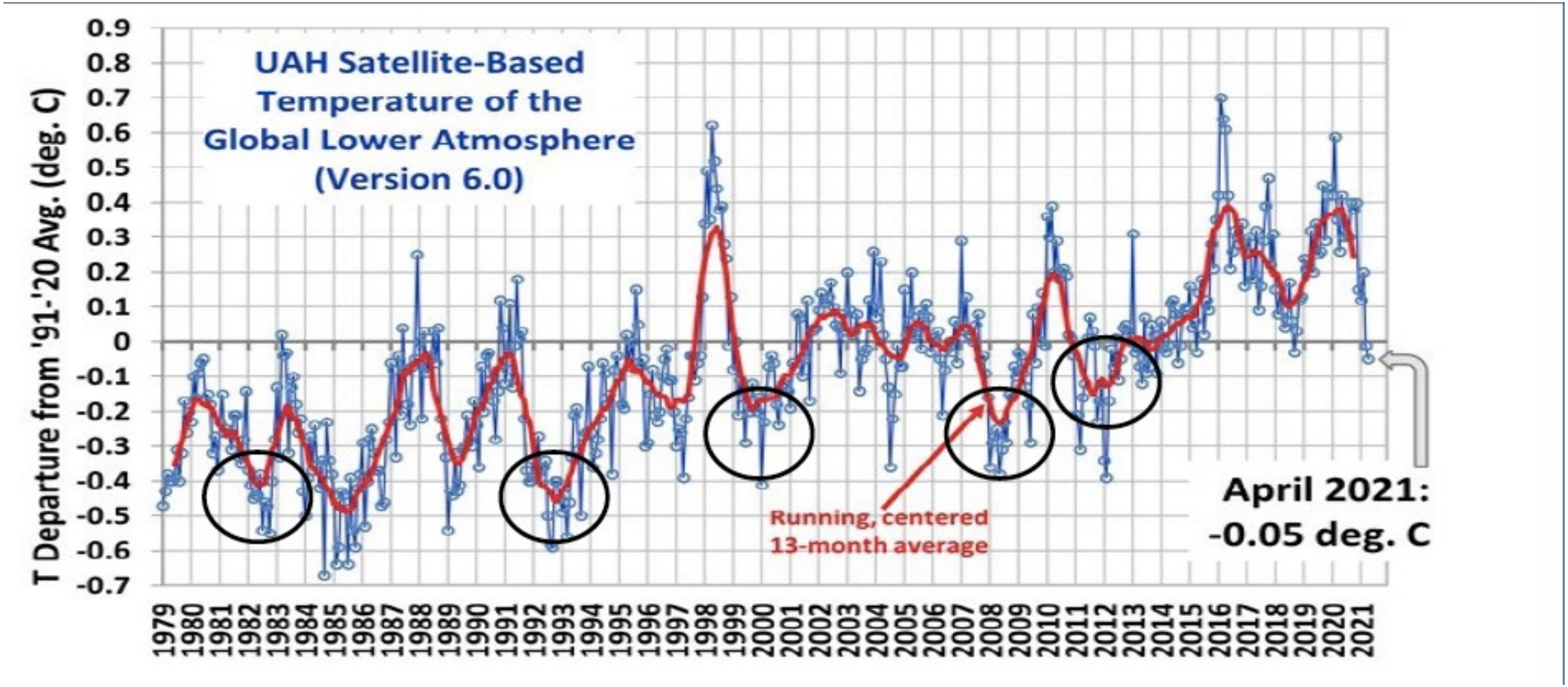
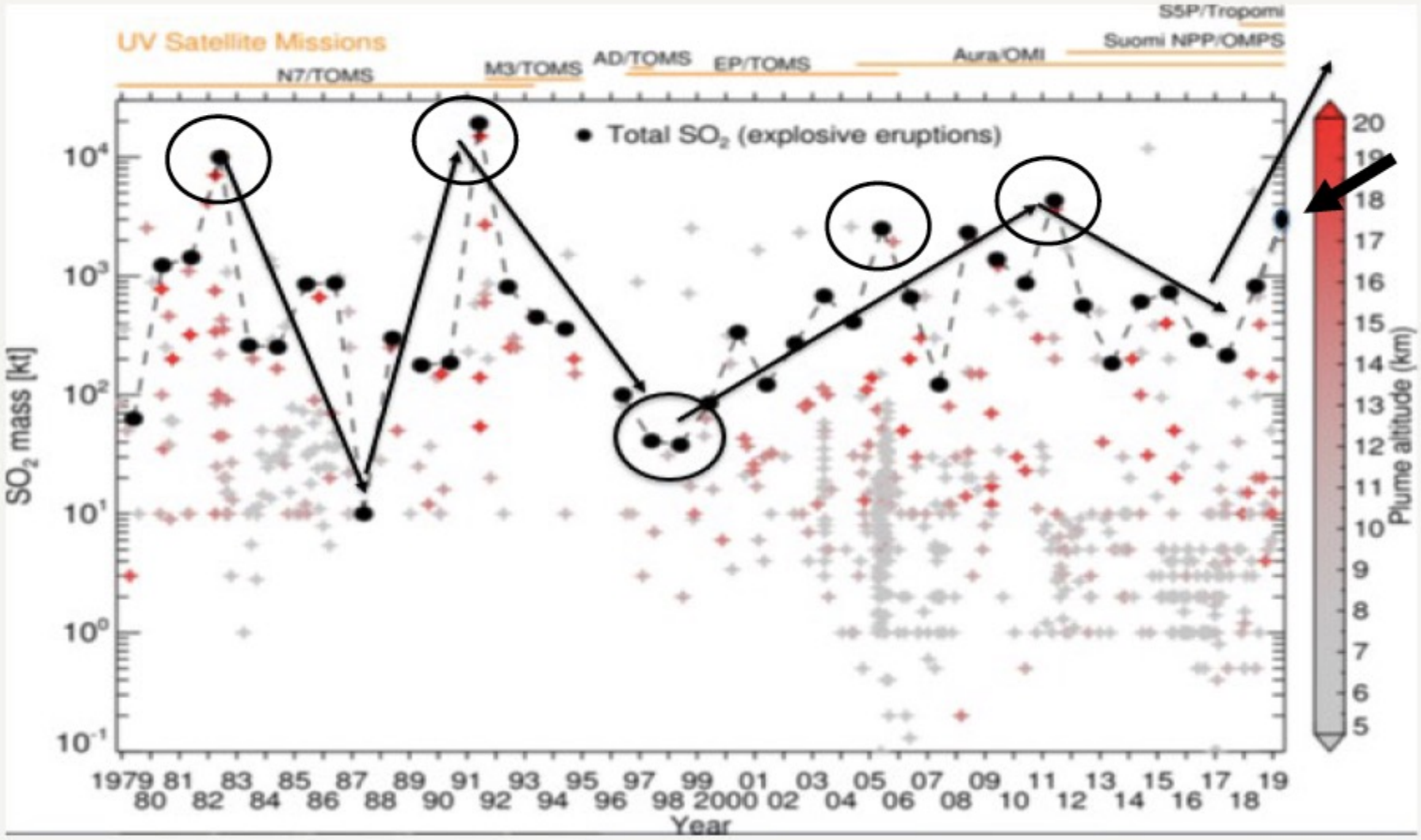

Oceanic Niño Index (ONI)
https://origin.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ONI_v5.php
2-73
82-83
87-88
91-92
97-98
15-16
86-87
94-95
02-03
09-10
95-96
11-12
99-00
75-76
Very Strong
Strong
Moderate
Weak
Weak
Moderate
Strong

(Noaa)


UAH Satellite-Based
Temperature of the
Global Lower Atmosphere
(Version 6.0)
T Departure from '91-'20 Avg. (deg. C)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021
Running, centered
13-month average
April 2021:
-0.05 deg. C

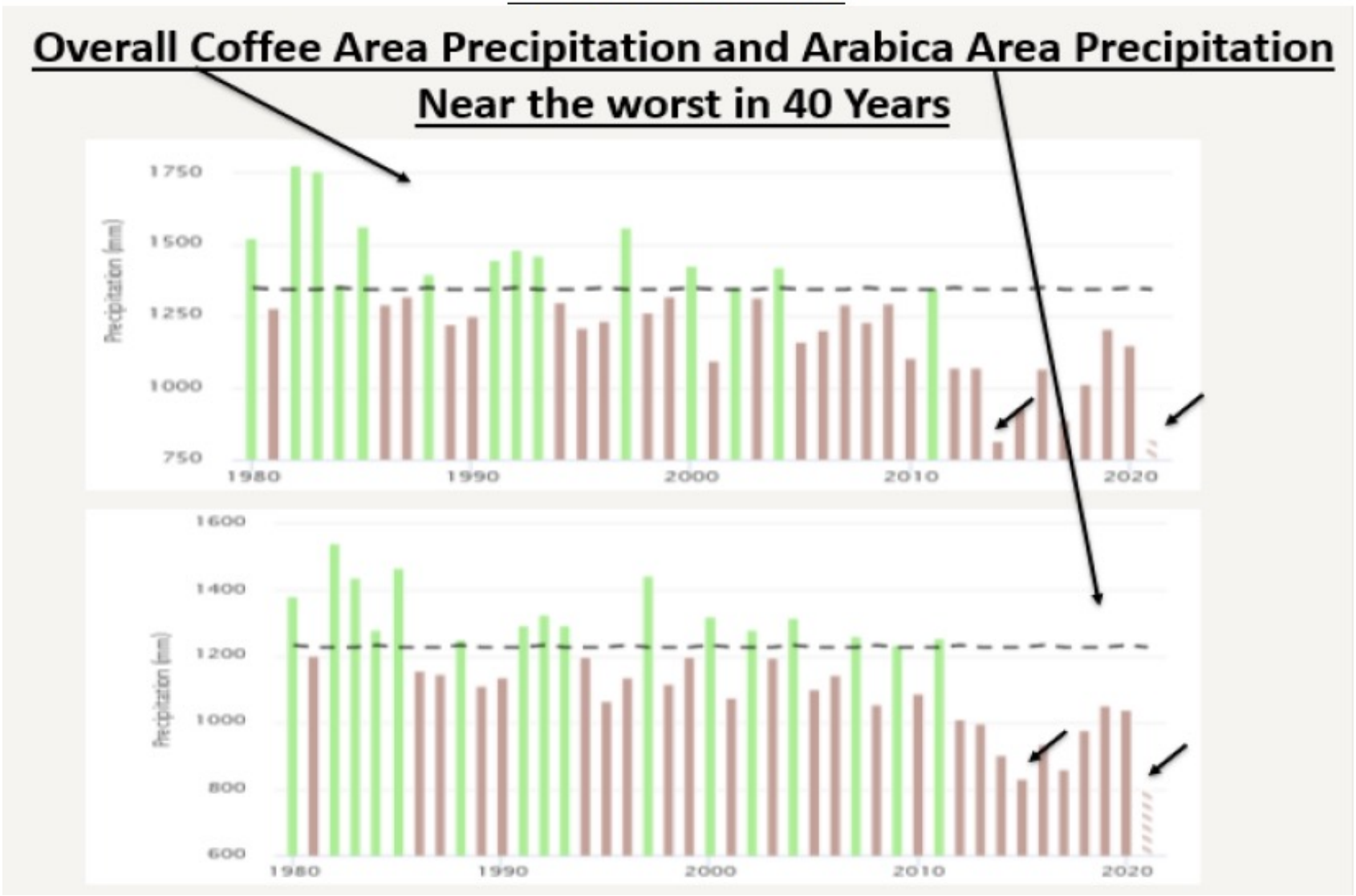
Volcanic Sulfur Dioxide Aerosols in the Stratosphere on the Rise



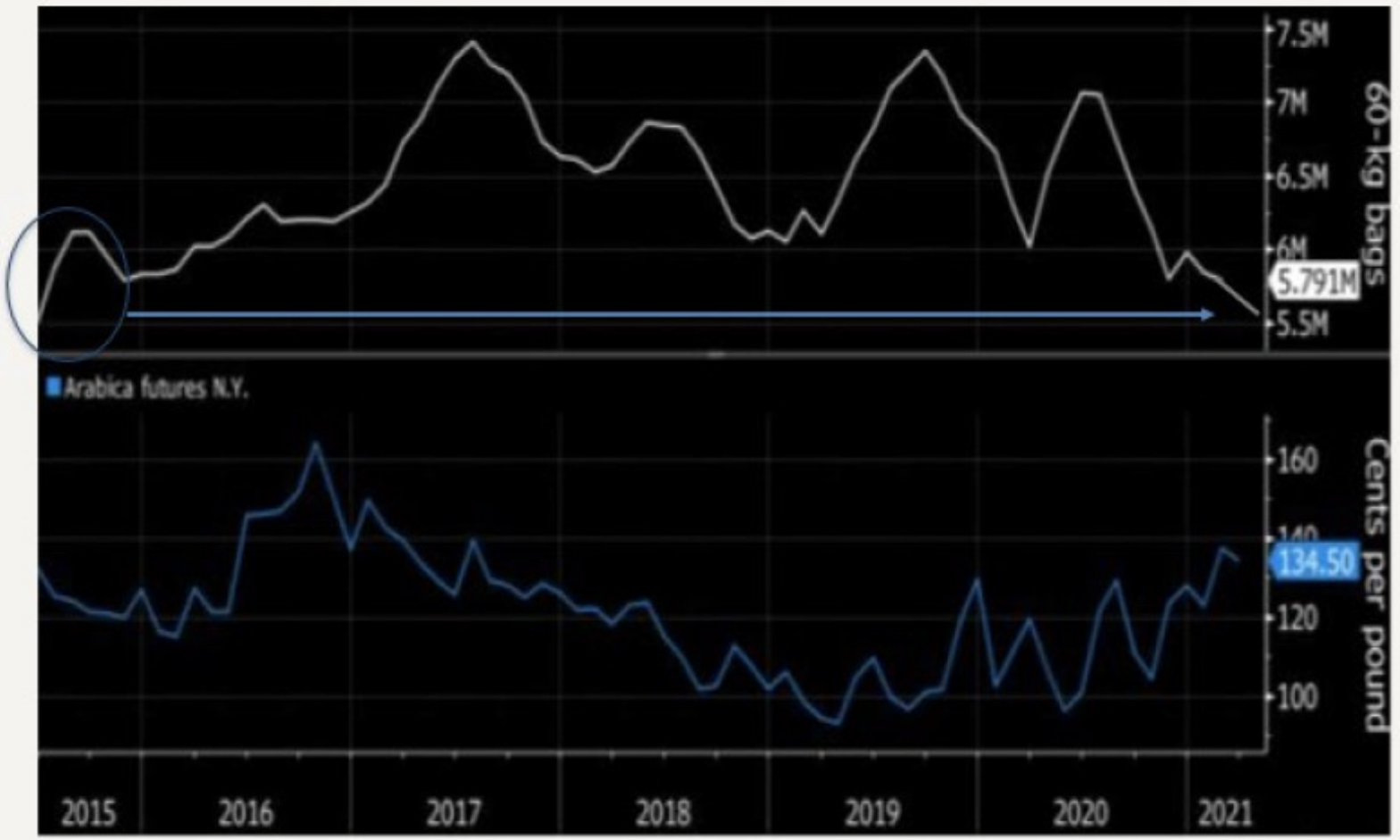
Spot Brazilian Real Bottoming and Could Unleash Currency Inflation into Many Ag Markets Heading into 2022



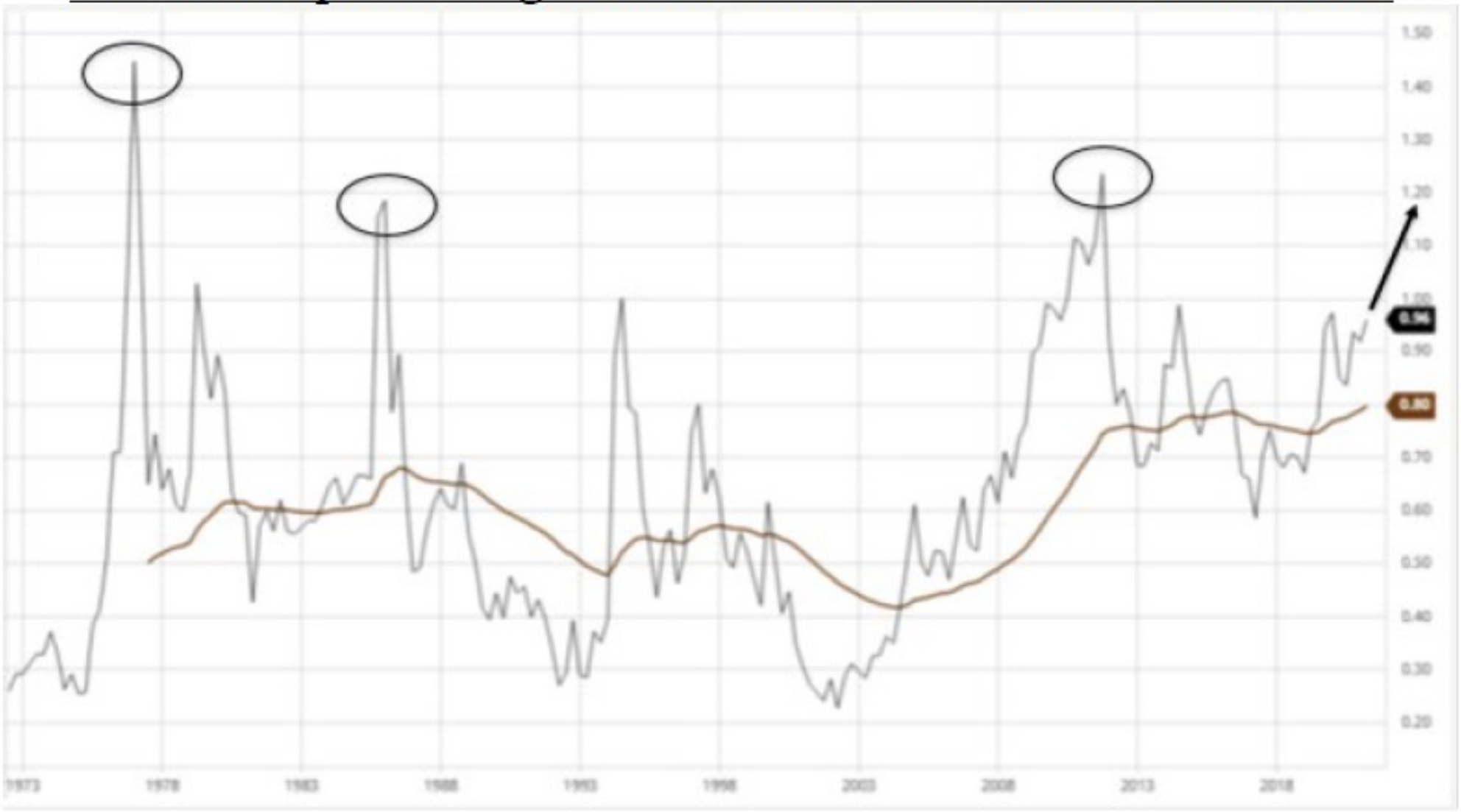
The Coffee Market



Green Coffee Stocks at 6-Year Lows



Arabica Outperforming Robusta Is a Trend that Should Accelerate



Brazil Coffee Cash Differentials Breaking Out Showing Brazil Tightness Starting



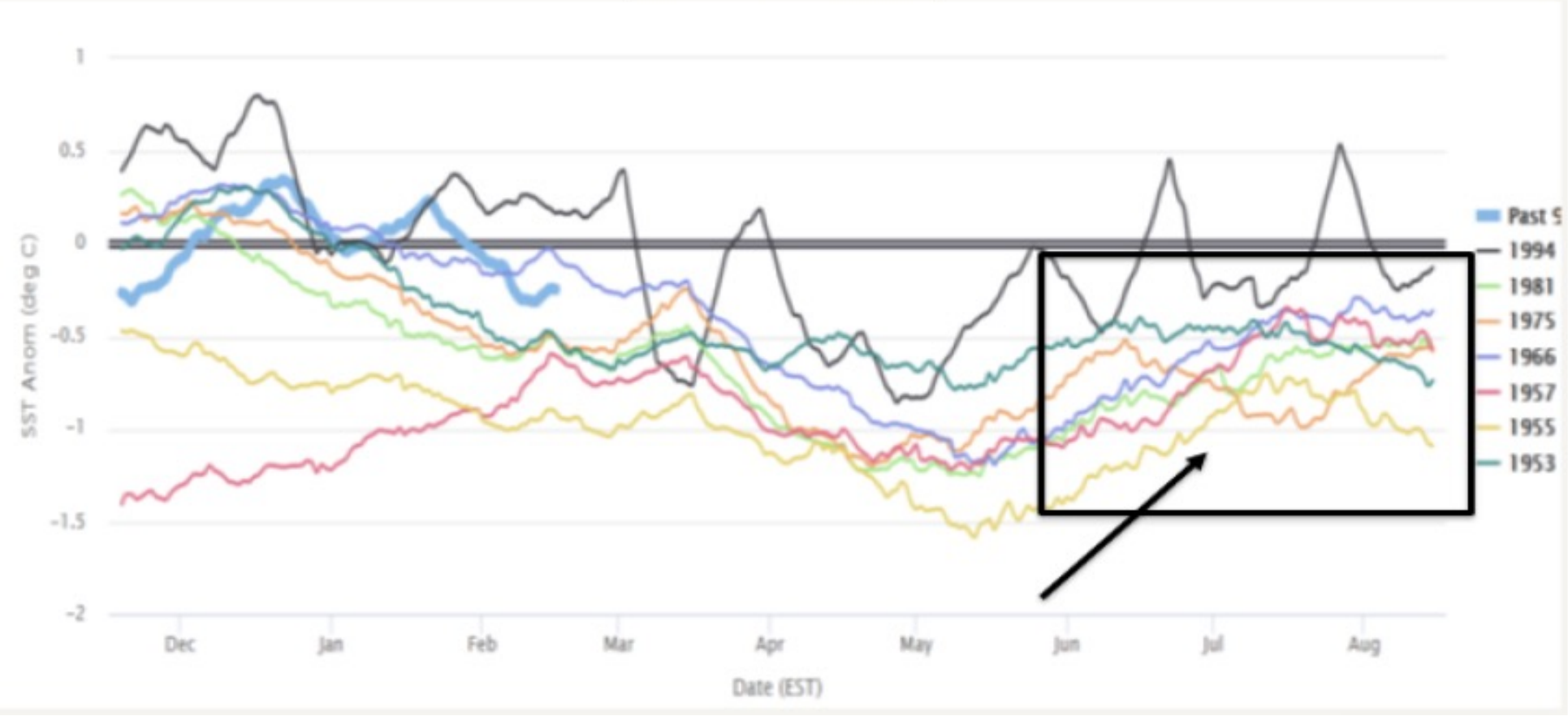
While It is True that More Coffee Production Has Migrated to the North Since 1994 Frost, Central to Southern MG still Remains the Core Coffee Areas and Was Deeply Impacted in 1994

	Year						
State	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96[a]	1995–96[b]
Minas Gerais	9.1	13.5	9.5	13.0	13.0	15.5	8.0–9.0
São Paulo	9.5	4.0	5.2	5.5	4.0	5.0	2.0–2.5
Esprito Santo[c]	5.2	5.5	5.0	4.5	4.0	5.0	3.0–3.5
Paraná	4.0	2.5	1.8	3.0	2.0	2.0	0.2
Others	3.2	3.0	2.5	2.5	3.0	2.5	2.5
Total Brazil	31.0	28.5	24.0	28.5	26.0	30.0	15.7–17.7

[a] Prefrost estimate.
[b] Postfrost estimates as speculated during December 1994.
[c] Most of the reduction in Espirito Santo was caused by drought conditions rather than frost.

16.8 actual

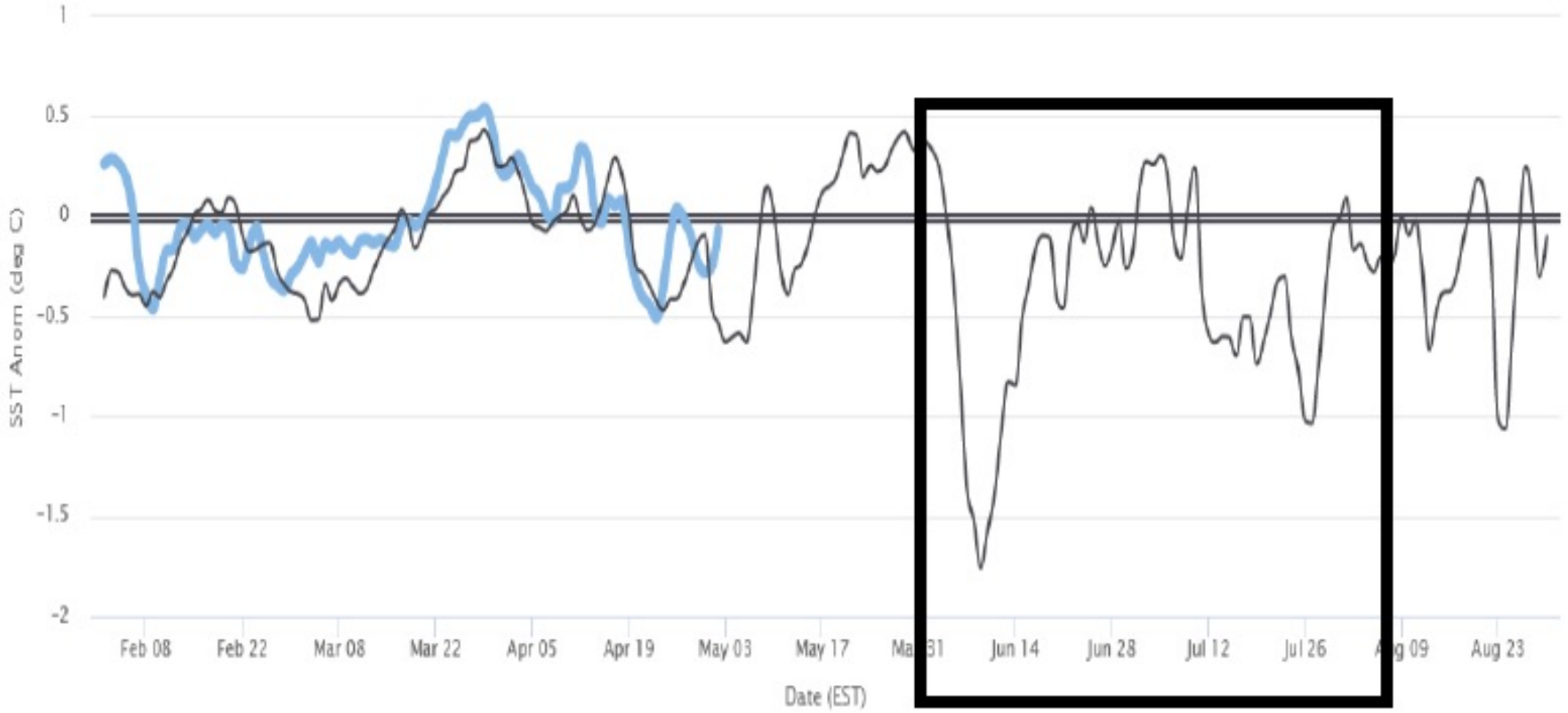
The Severe Brazil Coffee Frosts of 1953, 1955, 1957, 1966, 1975, 1982 and 1994 all Had Below Normal Sea Surface Temperatures Off of North Central Brazil Coast During the Key June/July/August Frost Window



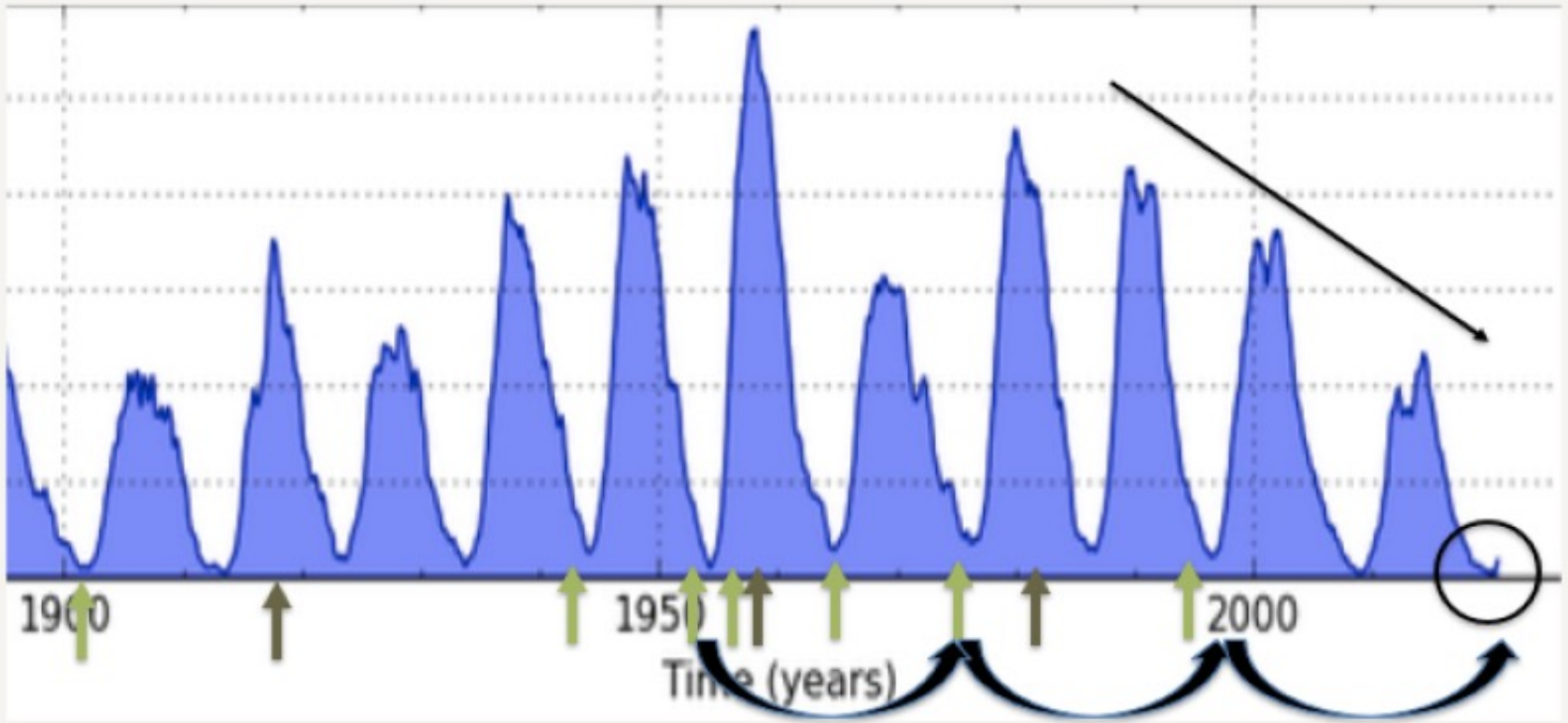
The Severe Brazil Coffee Frosts of 1902, 1918 and 1942 all Had Below Normal Sea Surface Temperatures off of North Central Brazil Coast During the Key June/July/August Frost Window



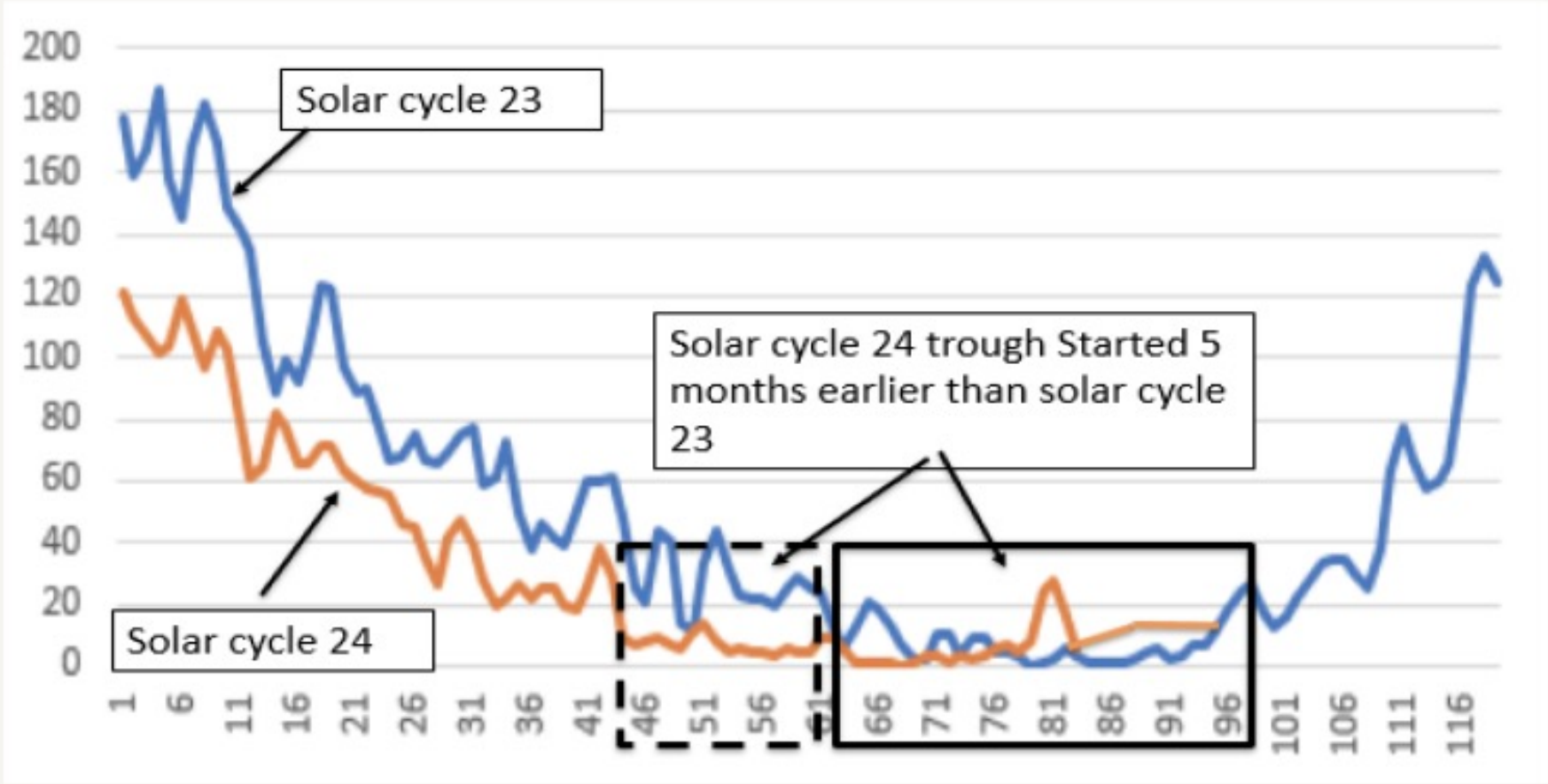
Current Analogs Suggest that These Waters May Be Colder than Normal



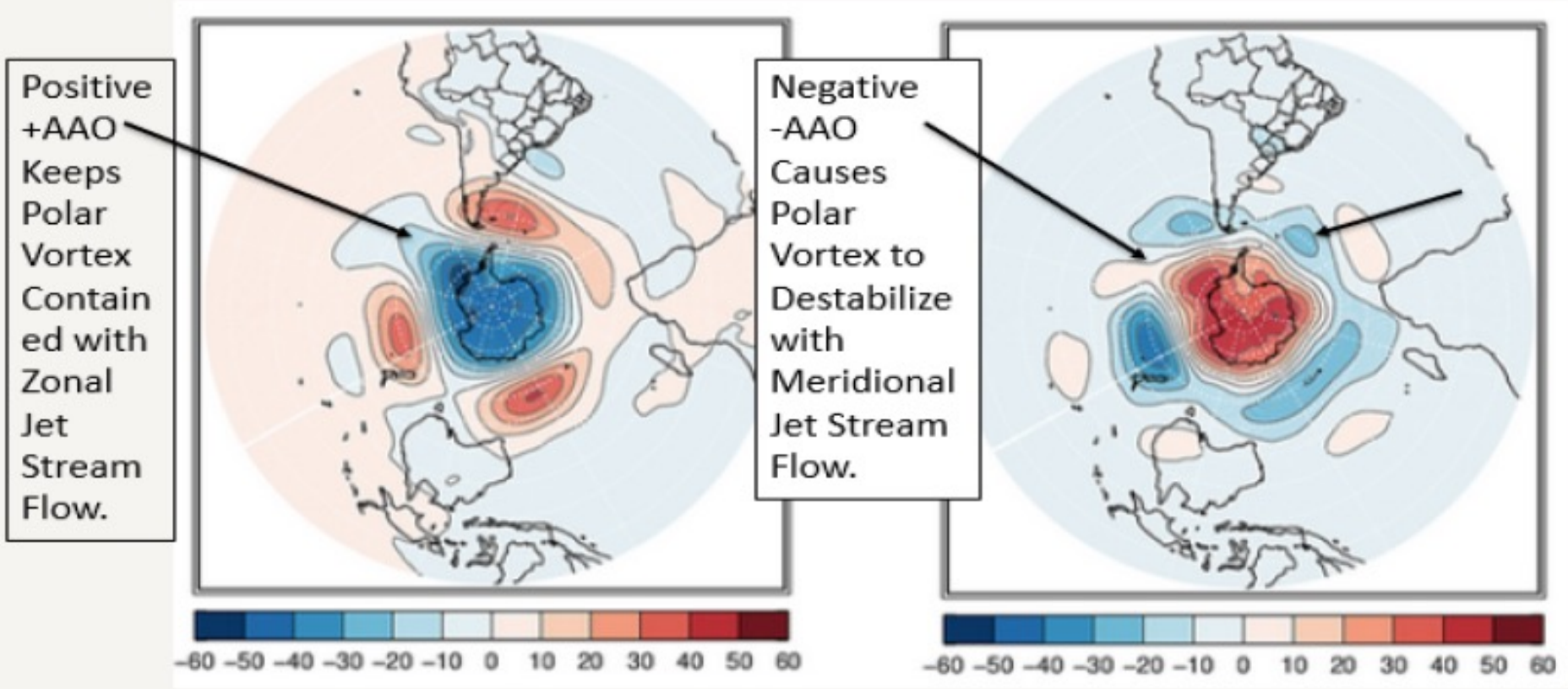
There Have Been 10 Severe Brazil Coffee Frosts Since 1900 and 7 out of 10 Have Occurred Near Solar Cycle Troughs With Last Three Following to 20-25 Year Hale Solar Cycle



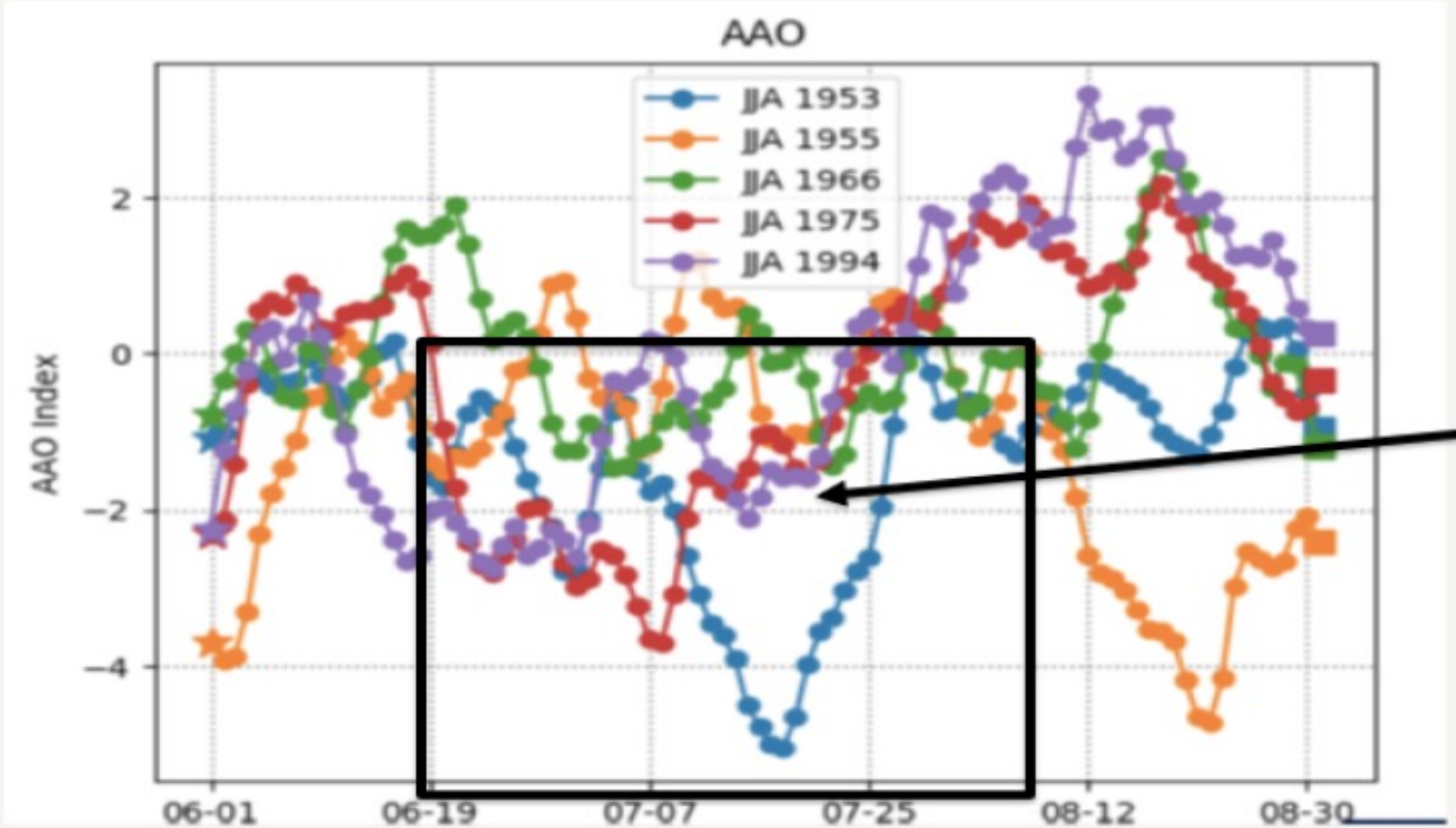
Current 2-month Moving Average Solar Cycle 24 Outperforming the Last Solar Cycle 23 at the Trough Period



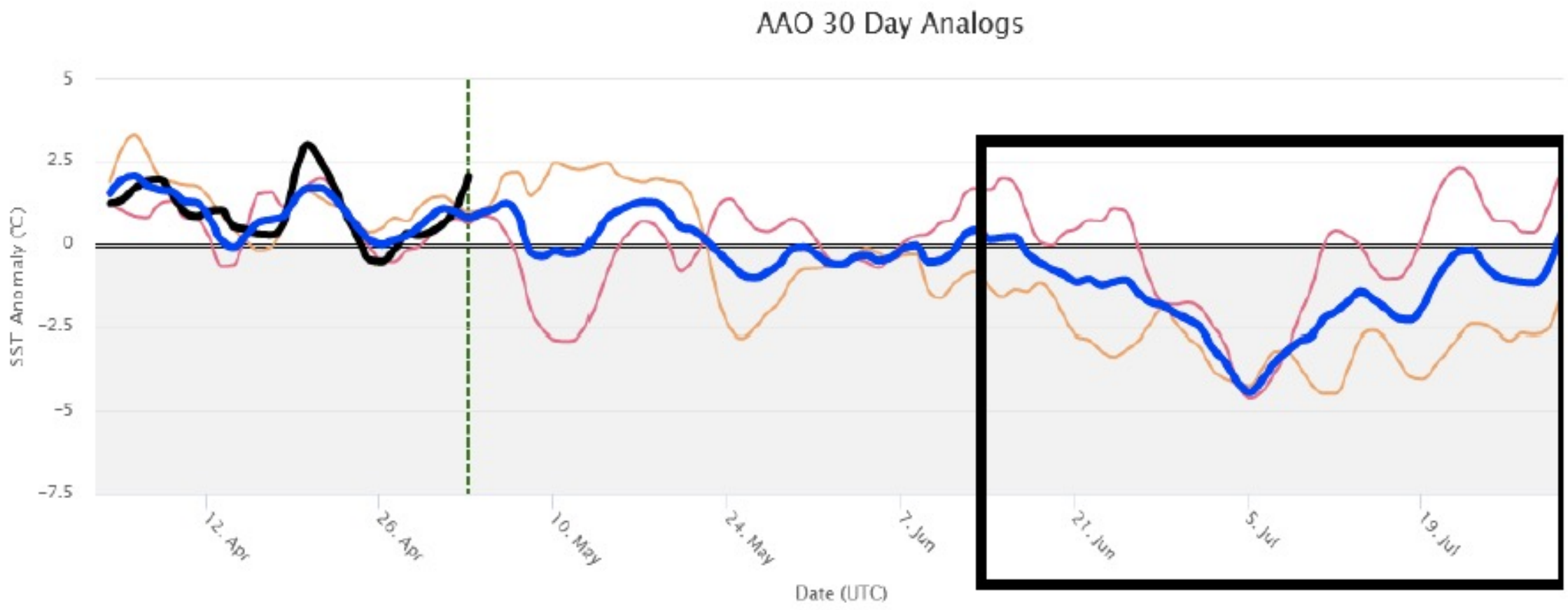
A Negative AAO (Antarctic Oscillation) Has Been a Common Feature For Severe Brazil Coffee Frosts at Solar Cycle Troughs as It Produces a Displaced Southern Polar Vortex and a Meridio Jet Stream and Can Push Antarctic Air Into Brazil Coffee Areas



A Negative AAO (Antarctic Oscillation) Has Been a Common Feature For Severe Brazil Coffee Frosts at Solar Cycle Troughs



Current Analogs Support that the AAO May Enter Negative Territory During the Frost Season



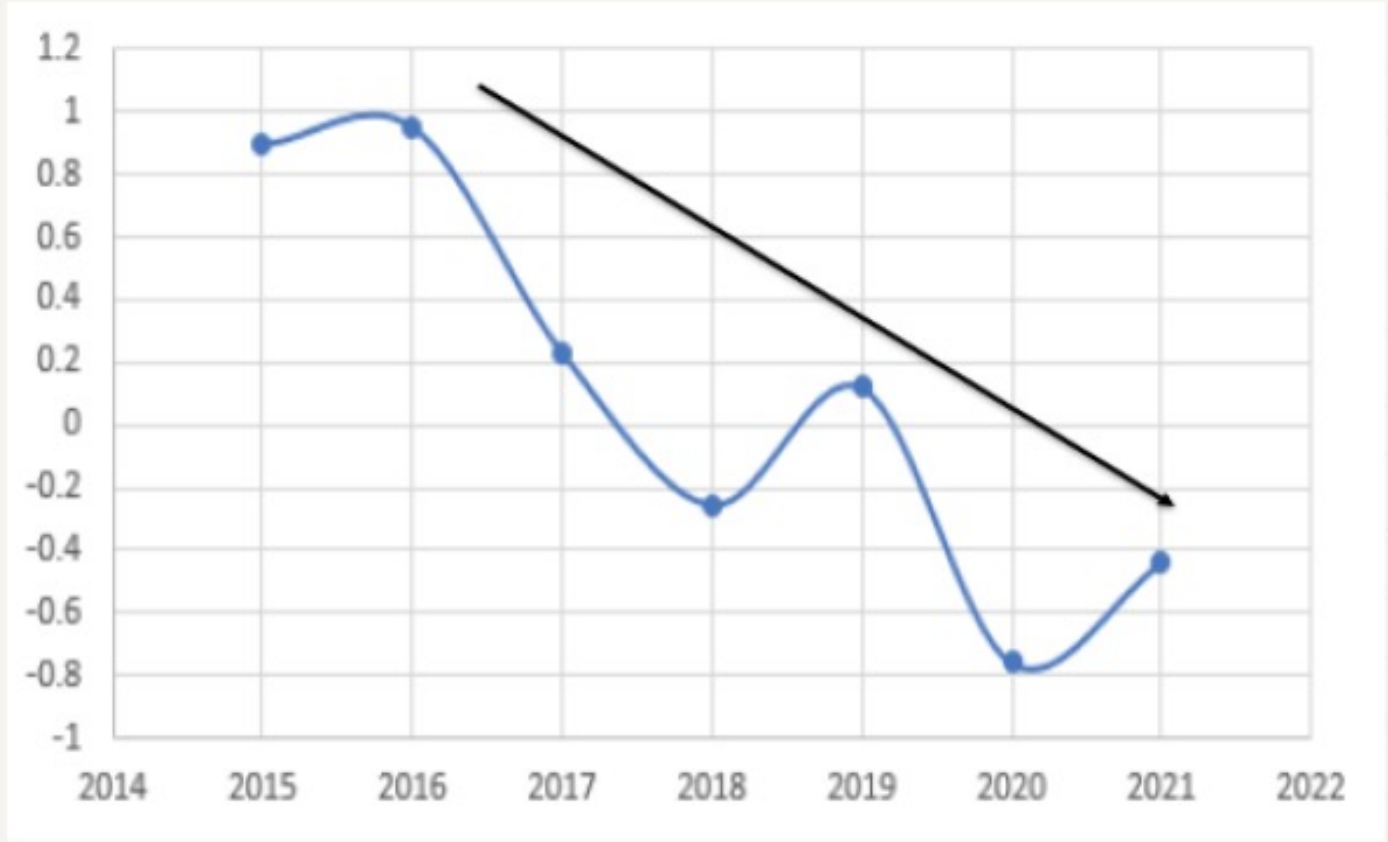
During Severe Brazil Coffee Frosts that Have Occurred at Solar Cycle Troughs the PDO (Pacific Decadal Oscillation) Has Been in the Negative Cold Phase 5 years Out of 7

Low Solar Year	PDO
1902	0.82
1942	0.57
1953	-0.32
1955	-1.54
1966	-0.2
1975	-0.94
1994	-0.21
Current PDO Value	**-.63**

During Severe Brazil Coffee Frosts that Have Occurred at Solar Cycle Troughs the PDO/AMO (Pacific Decadal Oscillation/Atlantic Multi-Decadal Oscillation) Has Been in the Negative Cold Phase 5 Years Out of 7

Low Solar Year	PDO/AMO
1902	0.72
1942	0.75
1953	-0.07
1955	-1.36
1966	-0.212
1975	-1.26
1994	-0.41
Current PDO/AMO Value	**-.42**

The PDO/AMO Combined Chart Has Been Trending Down and Has Moved Squarely Into the More Favorable Negative Cold phase for Brazil Coffee Frosts at Solar Cycle Troughs



Summary-As We Approach End May 2021 This what Our Brazil Coffee Frost Algorithm Will be Looking For:

1) Colder than Normal SST's off of Central North Brazil.
2) Negative Readings for the PDO.
3) Negative Readings for the PDO/AMO Combination.
4) Negative Readings for the –AAO.
5) Persistence of the Current Solar Cycle Trough
6) Looking for Stratospheric Warming Over Antarctica to Verify Meridional Jet Stream Flow and a Possible Polar Vortex Destabilization Event.

Abaxx stock Has Corrected After Breaking Out and Rests Near Good Support

