Extended Hydrologic Outlook
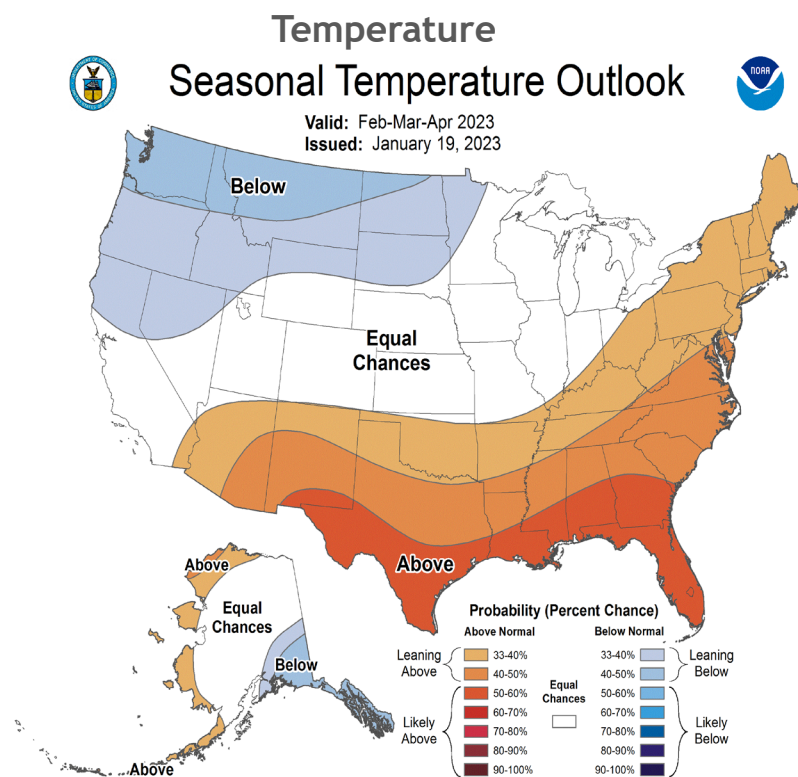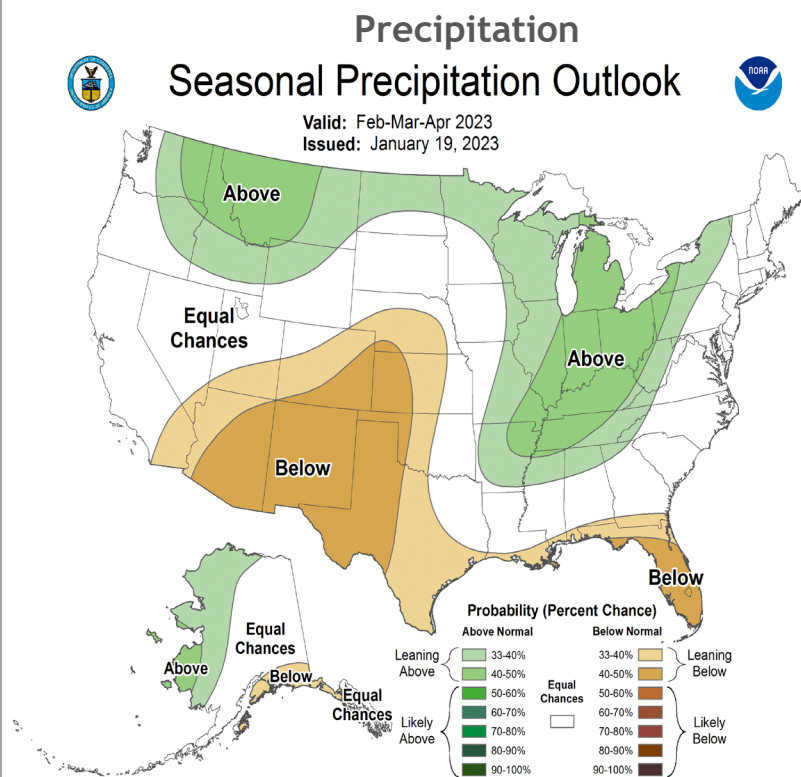## February 7, 2023

- **The Climate Prediction Center (CPC) is forecasting <u>below normal</u> rainfall for <u>February through April</u>.**
- **La Niña is present. A transition from La Niña to ENSO-neutral is anticipated during the February-April 2023 season. By spring (March-May 2023), the chance for ENSO-neutral is 82%.**
- **Atlantic Multidecadal Oscillation (AMO) is <u>currently in the warm phase</u>:**
  - **Average annual inflow to Lake Okeechobee is nearly 50% greater during the warm phase compared to the cold phase**
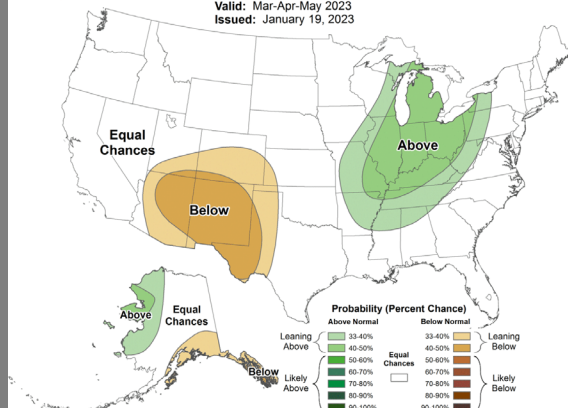
U. S. Seasonal Outlooks

February – April 2023

The seasonal outlooks combine the effects of long-term trends, soil moisture, and, when appropriate, ENSO.
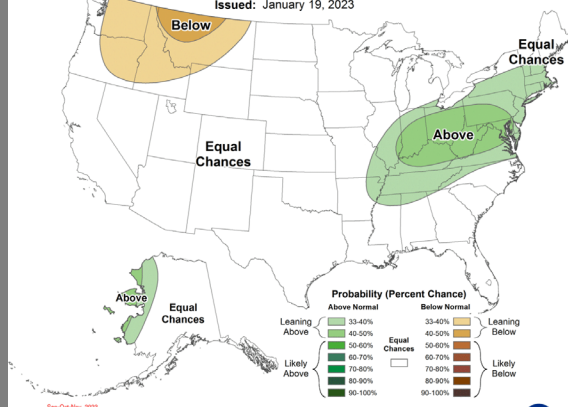
Seasonal Precipitation Outlook
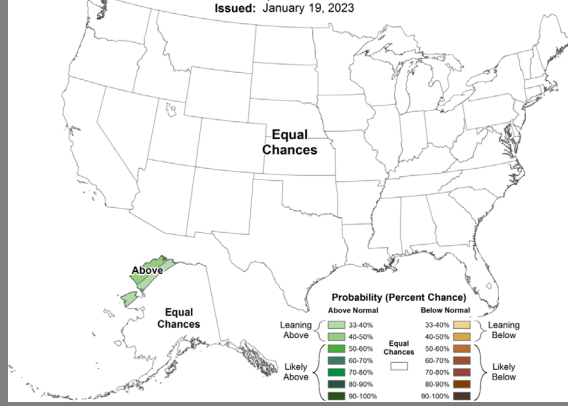Valid: Mar-Apr-May 2023
Issued: January 19, 2023

Equal Chances
Above
Below
Above
Equal Chances
Below

Probability (Percent Chance)
Above Normal / Below Normal
Leaning Above — Leaning Below
33-40%
40-50%
50-60% Equal Chances
60-70%
70-80%
80-90%
90-100%
Likely Above — Likely Below

Seasonal Precipitation Outlook
Valid: Apr-May-Jun 2023
Issued: January 19, 2023

Equal Chances
Below
Above
Equal Chances
Below

Seasonal Precipitation Outlook
Valid: May-Jun-Jul 2023
Issued: January 19, 2023

Below
Equal Chances
Equal Chances
Above
Equal Chances

Seasonal Precipitation Outlook
Valid: Jun-Jul-Aug 2023
Issued: January 19, 2023

Below
Equal Chances
Above
Equal Chances
Above
Equal Chances

Seasonal Precipitation Outlook
Valid: Jul-Aug-Sep 2023
Issued: January 19, 2023

Below
Equal Chances
Above
Above
Equal Chances
Above
Equal Chances

Seasonal Precipitation Outlook
Valid: Aug-Sep-Oct 2023
Issued: January 19, 2023

Equal Chances
Equal Chances
Above
Equal Chances
Equal Chances

Seasonal Precipitation Outlook
Valid: Sep-Oct-Nov 2023
Issued: January 19, 2023

Equal Chances
Above
Equal Chances
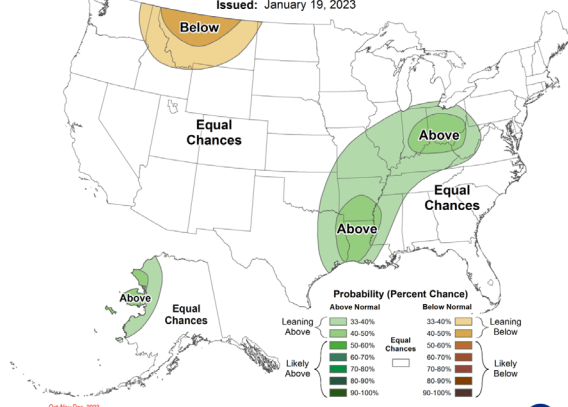
Seasonal Precipitation Outlook
Valid: Oct-Nov-Dec 2023
Issued: January 19, 2023

Equal Chances
Above
Above
Equal Chances
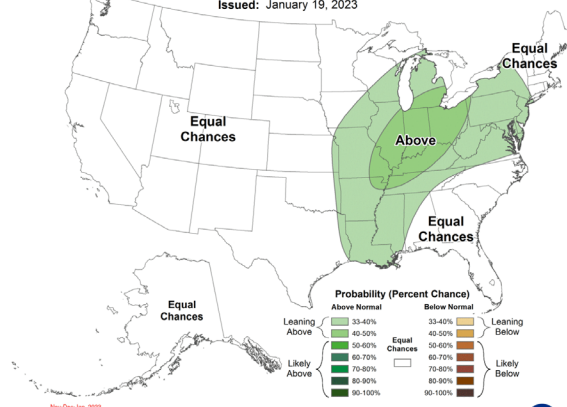
Seasonal Precipitation Outlook
Valid: Nov-Dec-Jan 2023-24
Issued: January 19, 2023

Below
Equal Chances
Above
Above
Equal Chances
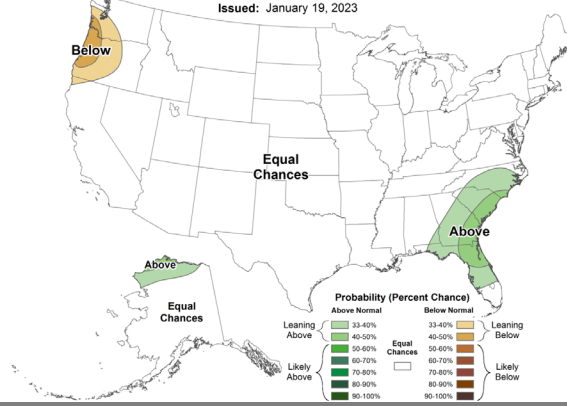
Teleconnections to South Florida

Climate anomalies being related to each other at large distances:

El Niño Southern Oscillation (ENSO)

El Niño increases the chances of a wetter-than-normal dry season and decreased tropical activity, La Niña increases the chances of a drier-than-normal dry season and increased tropical activity (both have most influence in south Florida from November through March)

Pacific Decadal Oscillation (PDO)

Increases variations in south Florida dry season rainfall, positive leads to more El Niño events, negative leads to more La Niña events
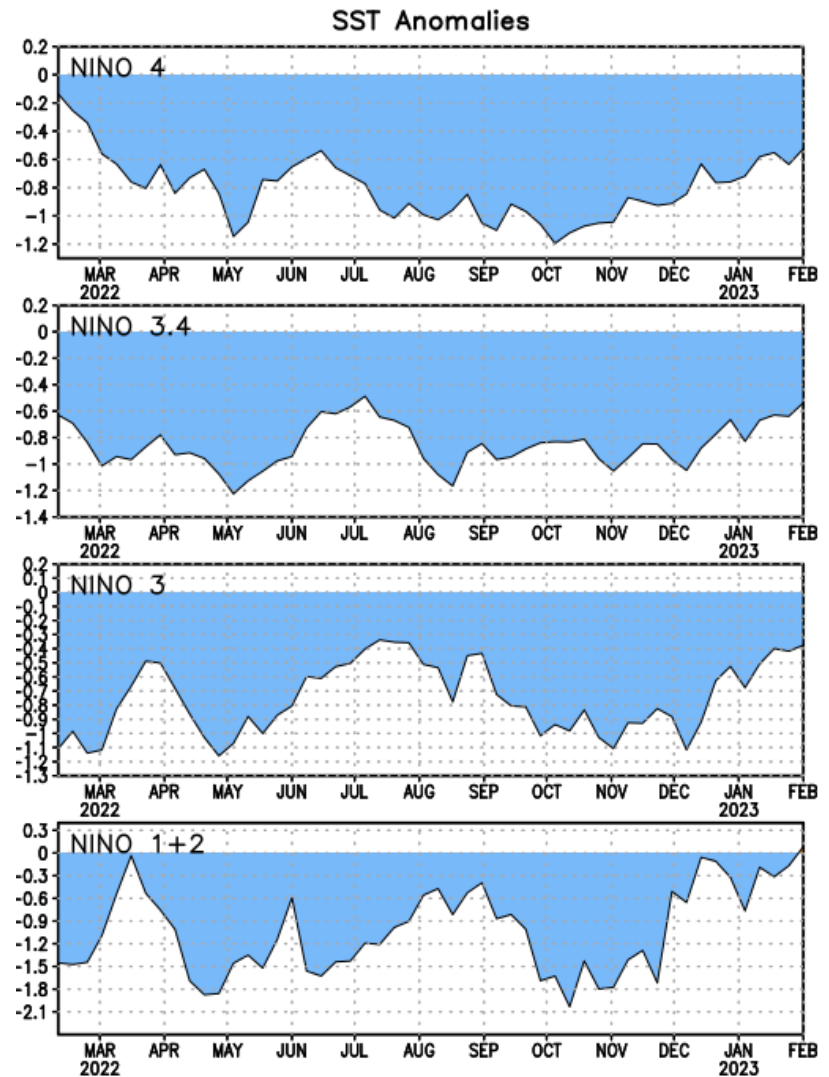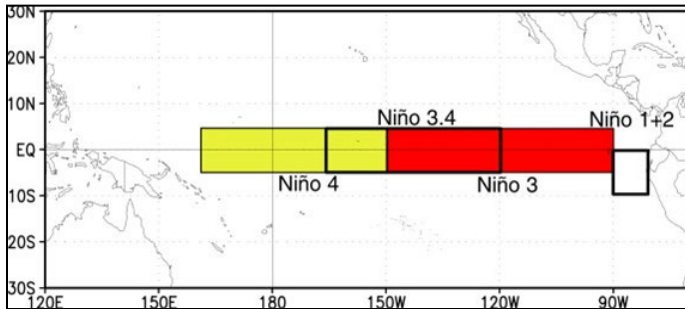
Atlantic Multidecadal Oscillation (AMO)

Average annual inflow to Lake Okeechobee is nearly 50% greater during the warm phase compared to the cold phase of the AMO, easterly flow toward south Florida affected by phase
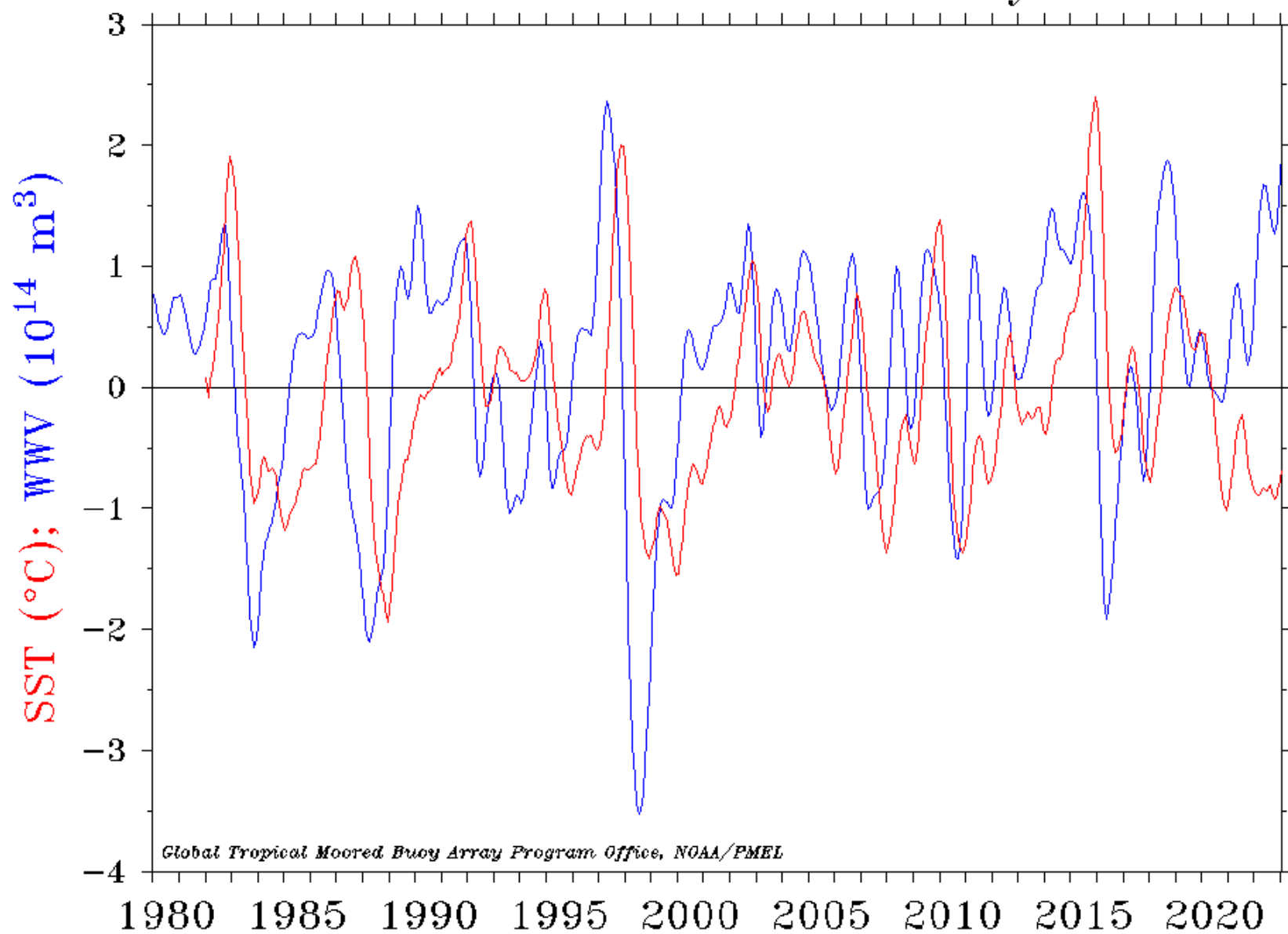
Niño Region SST Departures (ºC) Recent Evolution

The latest weekly SST departures are:

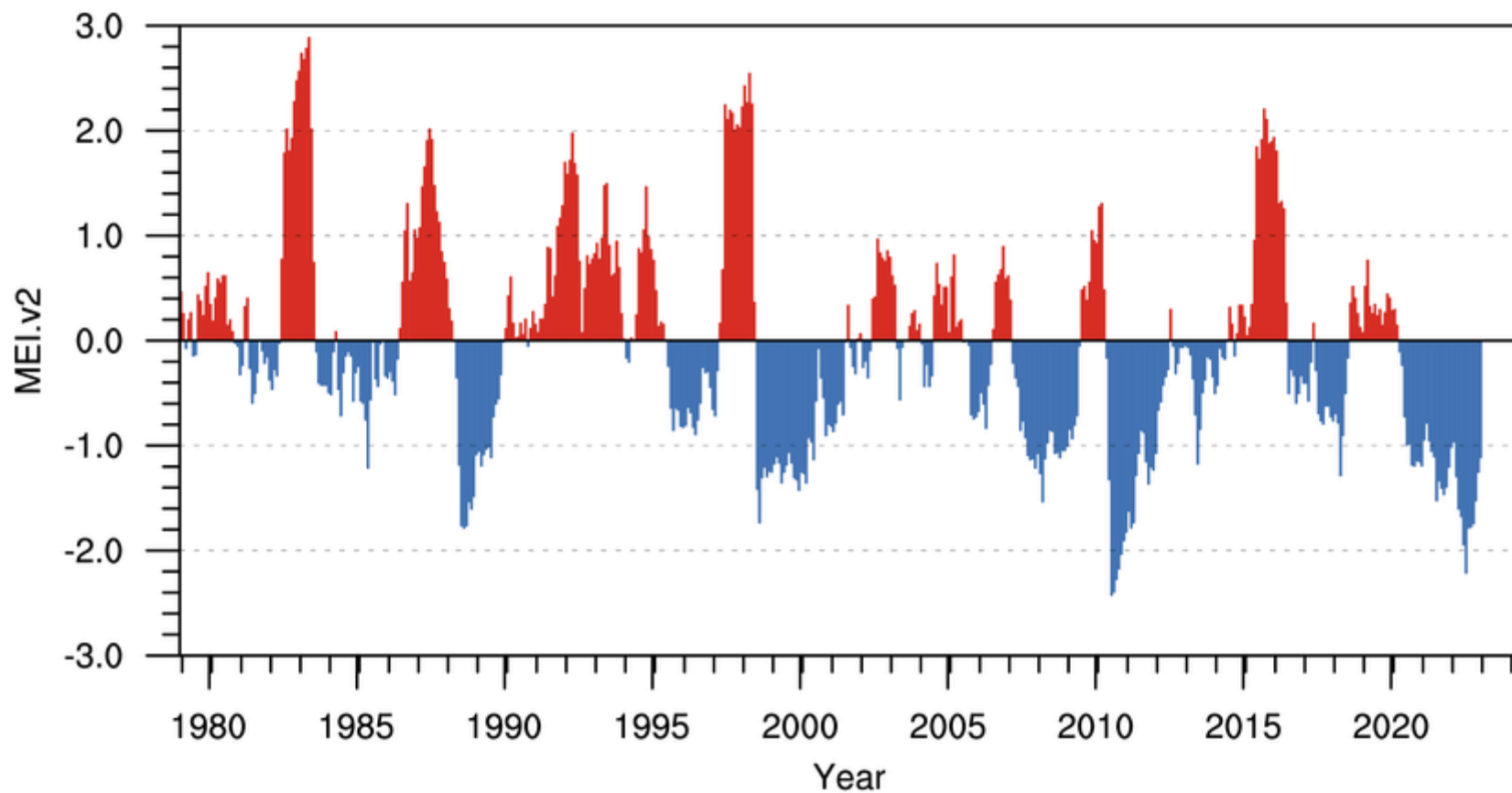|	
Niño 4	-0.5ºC
Niño 3.4	-0.5ºC
Niño 3	-0.4ºC
Niño 1+2	0.1ºC

This weekly sea surface temperature data is based on OISSTv2.1 (Huang et al., 2021).

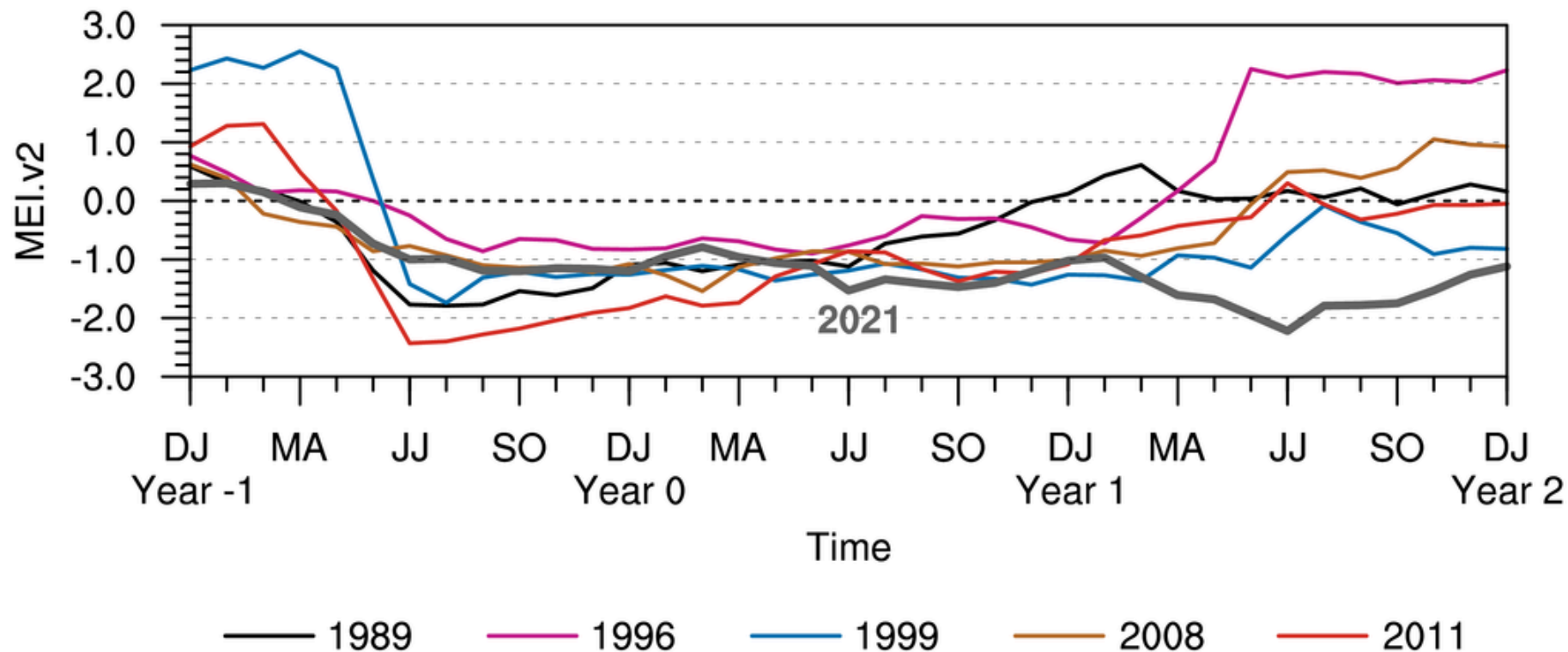Warm Water Volume (5°N–5°S, 120°E–80°W) and NINO 3.4 SST Anomaly

Global Tropical Moored Buoy Array Program Office, NOAA/PMEL

Multivariate ENSO Index Version 2

MEI.v2 Evolution of Current ENSO Event in Historical Context

Prepared by: NOAA Physical Sciences Laboratory

Pacific Decadal Oscillation
Extended Reconstructed Sea Surface Temperature (ERSST) v5 (NOAA)
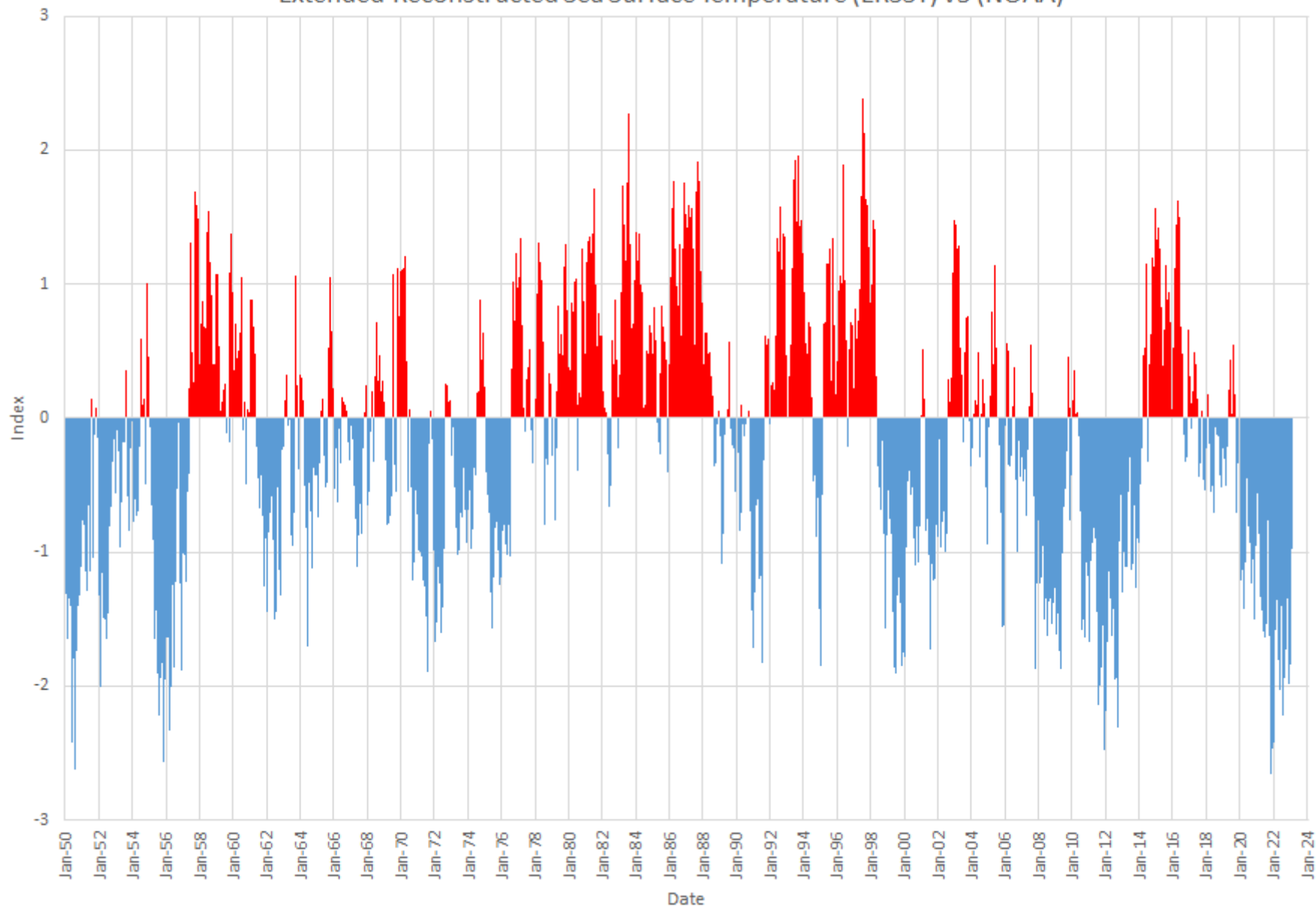
Index of the North Atlantic Temperatures (AMO) from Kaplan Extended SST V2 (NOAA)