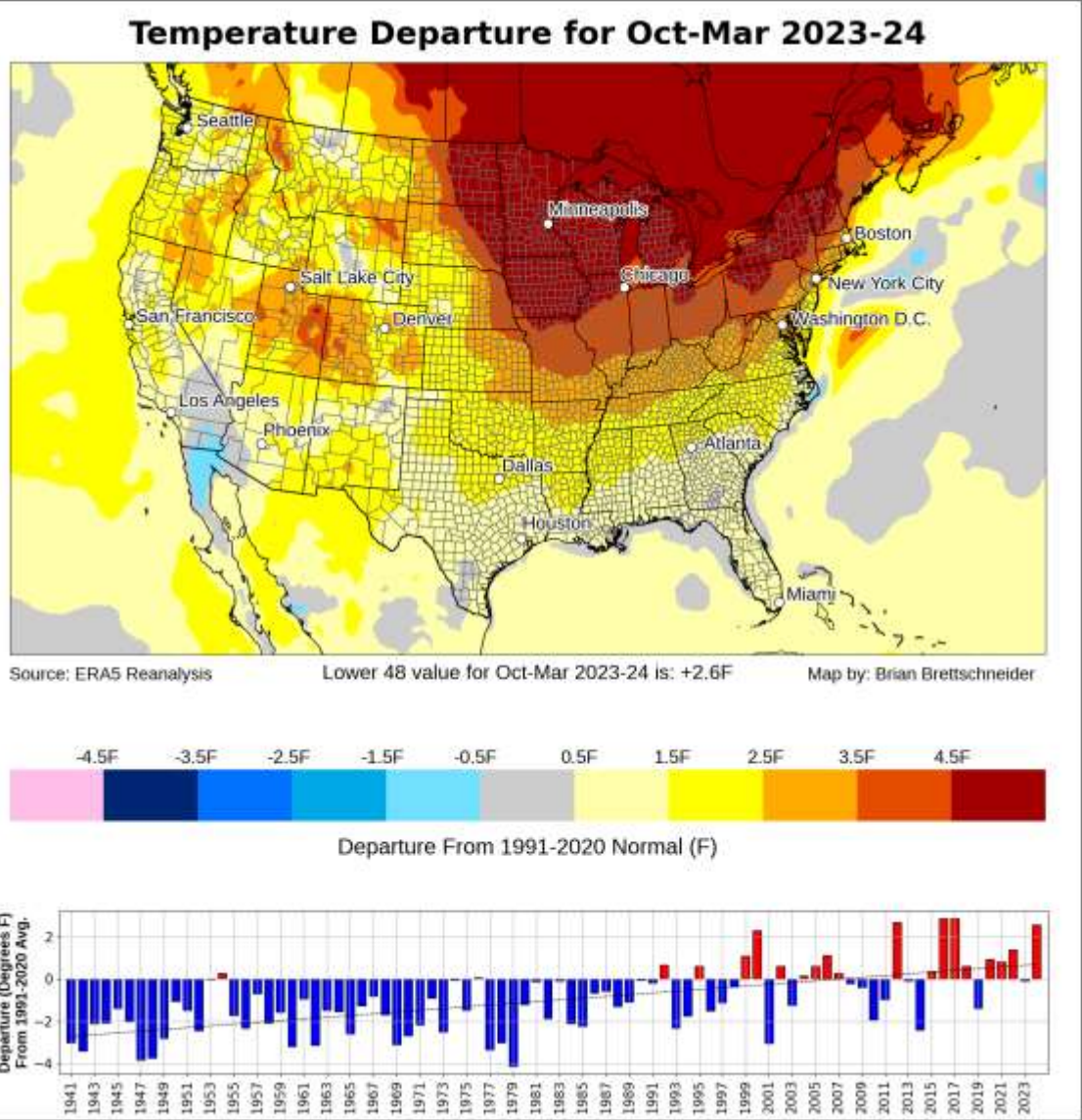# Departure Map Examples

Note: Temperature, Dew Point, SST, and wind (no sea ice) display departure in metric/imperial units. Clouds uses Percent (0%-100%). Precipitation and snowfall display Departure as a percent of the normal value and the ranges Are pre-defined.

Contiguous U.S. Oct 2023-Mar 2024 Temperature Departure

Units are imperial and the map categories are 1 unit (1F) apart
Imperial departure from 1991-2020 normal time series strip on bottom
States, Canadian Provinces, and counties added to map.

U.S. and Canada Feb-Mar 2024 Precipitation Departure

Percent of 1991-2020 normal precipitation. Fixed categories
Metric values time series strip on bottom
States and Canadian Provinces added to map

Ukraine Oct 2023-Apr 2024 Snowfall Departure

Percent of 1991-2020 normal snowfall. Fixed categories
Metric departure time series strip on bottom
No other map elements added

Snowfall Departure for Oct-Apr 2023-24

Country: Ukraine

Source: ERA5 Reanalysis   Ukraine value for Oct-Apr 2023-24 is: 96%   Map by: Brian Brettschneider

25%   50%   75%   95%   105%   125%   150%   175%   200%   250%

Percent of 1991-2020 Normal

Select Map Area (1-10): [10 ▼]

1 = Global (time: 0:30 to 1:20)
2 = U.S./Canada (time: 0:30 to 1:40)
3 = Contiguous U.S. (time: 0:30 to 1:50)
4 = Alaska (time: 0:30 to 1:30) ☑ Indigenous names
5 = Alaska and NW Canada (time: 0:30 to 1:15)
6 = Polar (time: 0:30 to 1:30) ([60] to 90) North ☑
7 = Europe (time: 0:30 to 1:20)
8 = Pacific Northwest (time: 0:30 to 1:35)
9 = U.S. Pacific Islands (time: 0:30 to 1:25)
10 = Country, State, Province, or Box (all Plate Carree)

[Country Ukraine]

Countries (e.g., Country New Zealand)
States (e.g., State New York)
Canada provinces/territories (e.g., Canada Manitoba)
Box, N. Lat, S. Lat, W. Lon, E. Lon (Example: Box,45,25,-120,-50)

Select Map Type (1-9): [2 ▼]

1 = Ranks (since 1940)
2 = Departure From Normal (not clouds/wind)
3 = Below, Near, Above Normal (slower)
4 = Target Year Values (not wind)
5 = Normal Values (not wind)
6 = 50 or 75-Year trend (8-10 mins for new run)
7 = 50-Year ENSO Season Correlation (6-10 mins for new run)
8 = SPI (precip auto selected; 8-mins for new run)
9 = Composite ENSO or List of Years (6-mins for new run)

Ranks / trend start year [1940 ▼]

Note: For periods that wrap around New Year,
the start year should by the year at the start
of the period. For 1974-75 to 2023-24, (50 years),
enter 1974 here (end year should be most current year).

Choose Map Theme (1-8): [3 ▼]

Available themes: 1 = t2m, 2 = precip, 3 = snow, 4 = sst ,
5 = dewpt, 6 = clouds, 7 = wind, 8 = seaice

Map Elements (Check top row for most N. American maps)
Lower 48 States ☐ U.S. Counties ☐ Canada Provinces ☐
Major Rivers ☐ U.S. Interstates ☐ Gridlines ☐
NWS WFOs ☐ NPS Units ☐ Climate Divs ☐
Major World Cities ☐ World Roads (adds 1:00) ☐

Last month to start evaluation (e.g., 2 for Feb): [4 ▼]

Number of months (up to 12) to evaluate (e.g., 3 for Dec-Feb): [7 ▼]

Year of last month for assessment: [2024]

Note 1: Do not select a date in the future!
Note 2: Make sure that your period is not 1939-40. There is no 1939 data.
Note 3: Even when generating normals, make sure not to pick a date in the future.

Values or Departure strip (1=Values, 2=Departure): [2 ▼]
Show Values or Departure strip (1=Yes, 2=No): [1 ▼]

Begin Climo [1991]   End Climo [2020]

Central Longitude (Arctic Only) [0]
(Used for Map Type options 2 and 3 above)

ENSO Section Only ONI Min [-5.0]   ONI Max [5.0]   [Use to select from a range of average ONI val; or enter list of years manually below.]

OR   List of years [_____]
Map Subtitle (used when a list of years is entered) [20 chars or less]
Above/Below (1=Above/2=Below): [1 ▼] [100.0] From Climo.   Use Detrended Climatology (ONI or list of years) ☑

[Note 1: Only Used if Map Type is 9. Takes 6 mins for new query. Min of 4+ years and separated by commas has priority. For DJF use end year.]
[Note 2: For the count of years above the trendline, units are % avg for snow and precip and clouds. Specify units below for temp, dew pt, and wind.]

Units -> Metric or Imperial (1 = Metric, 2 = Imperial): [1 ▼]

Temp/Wind Departure/Temp Trend Interval [1.0]   (Makes 11 categories of Map Interval size.)
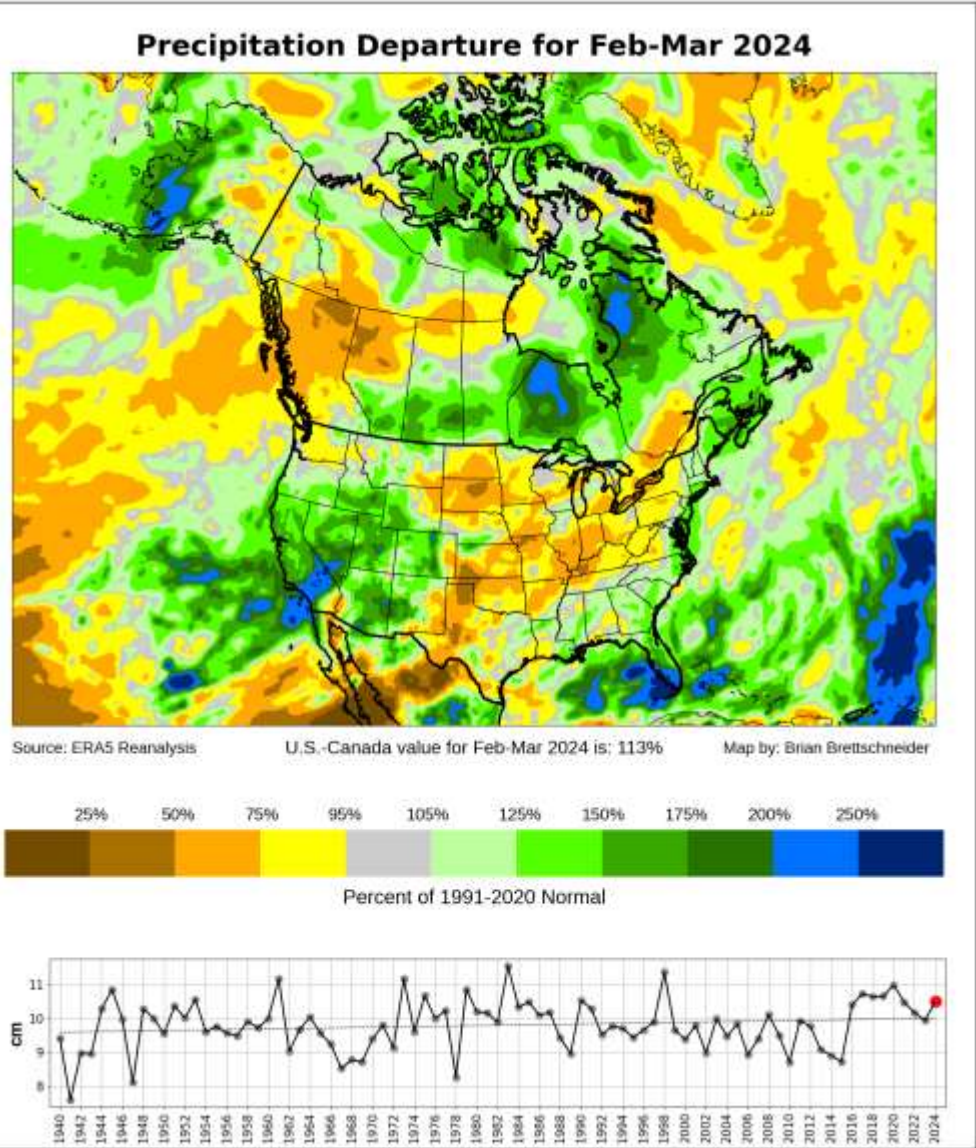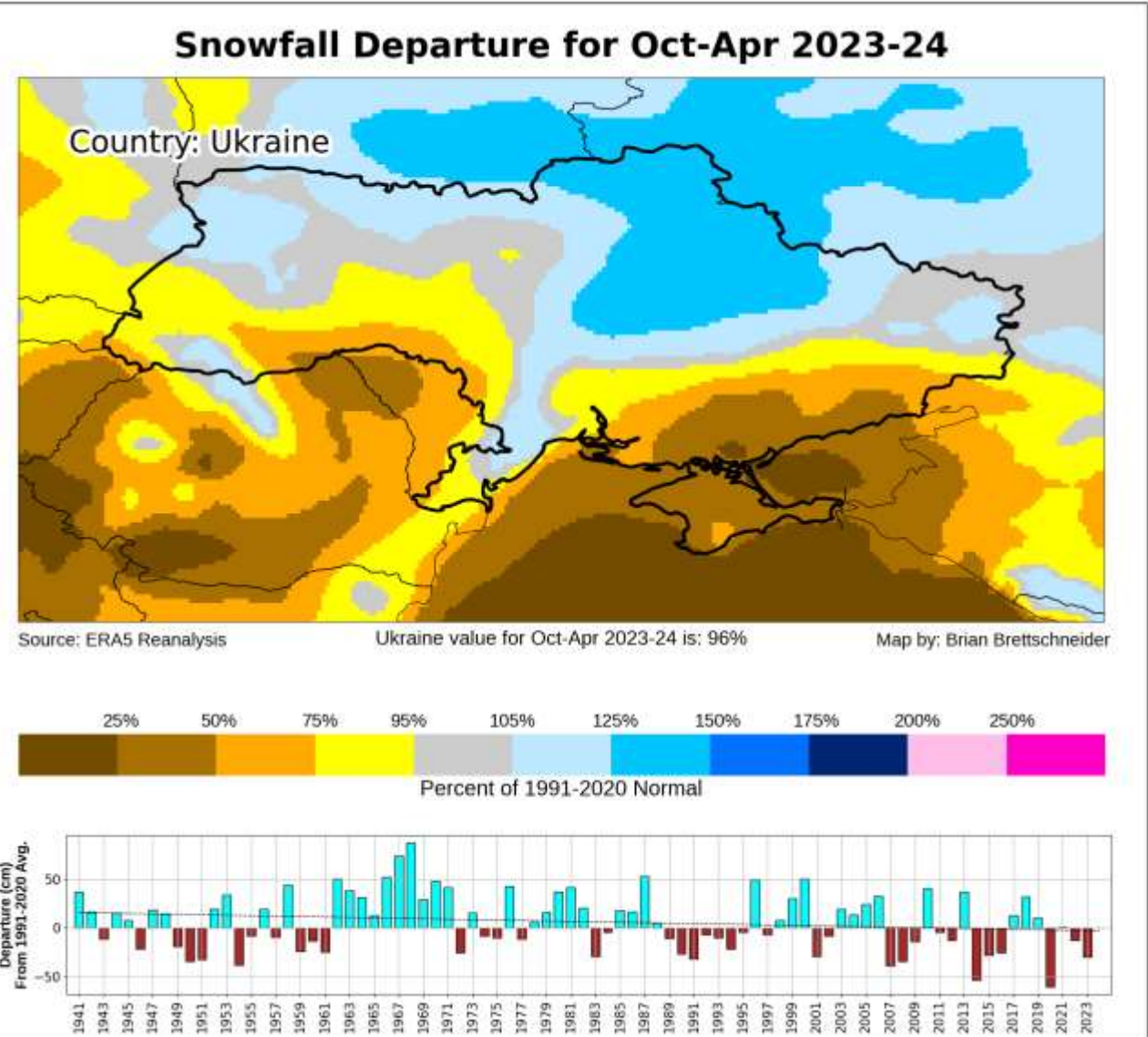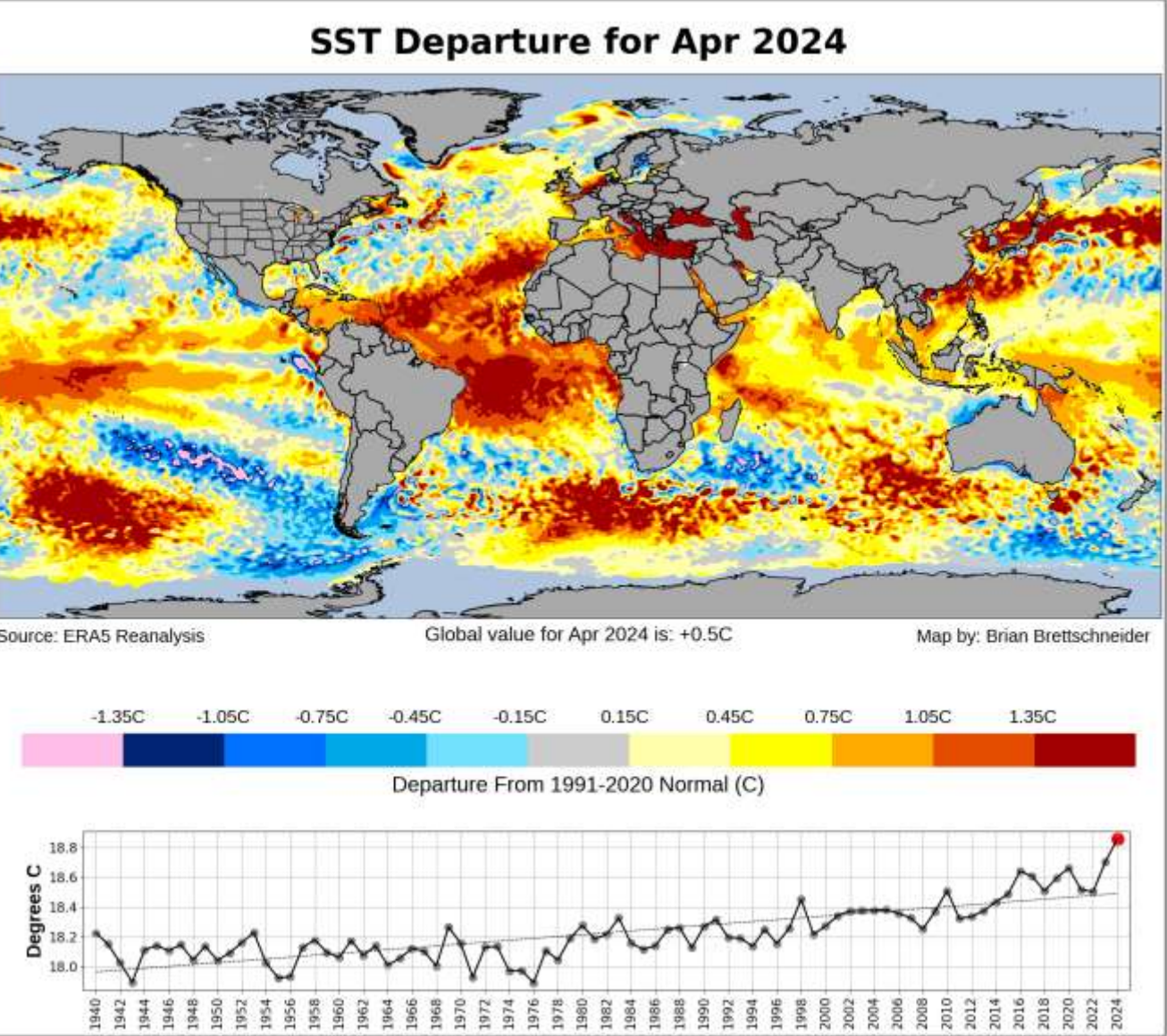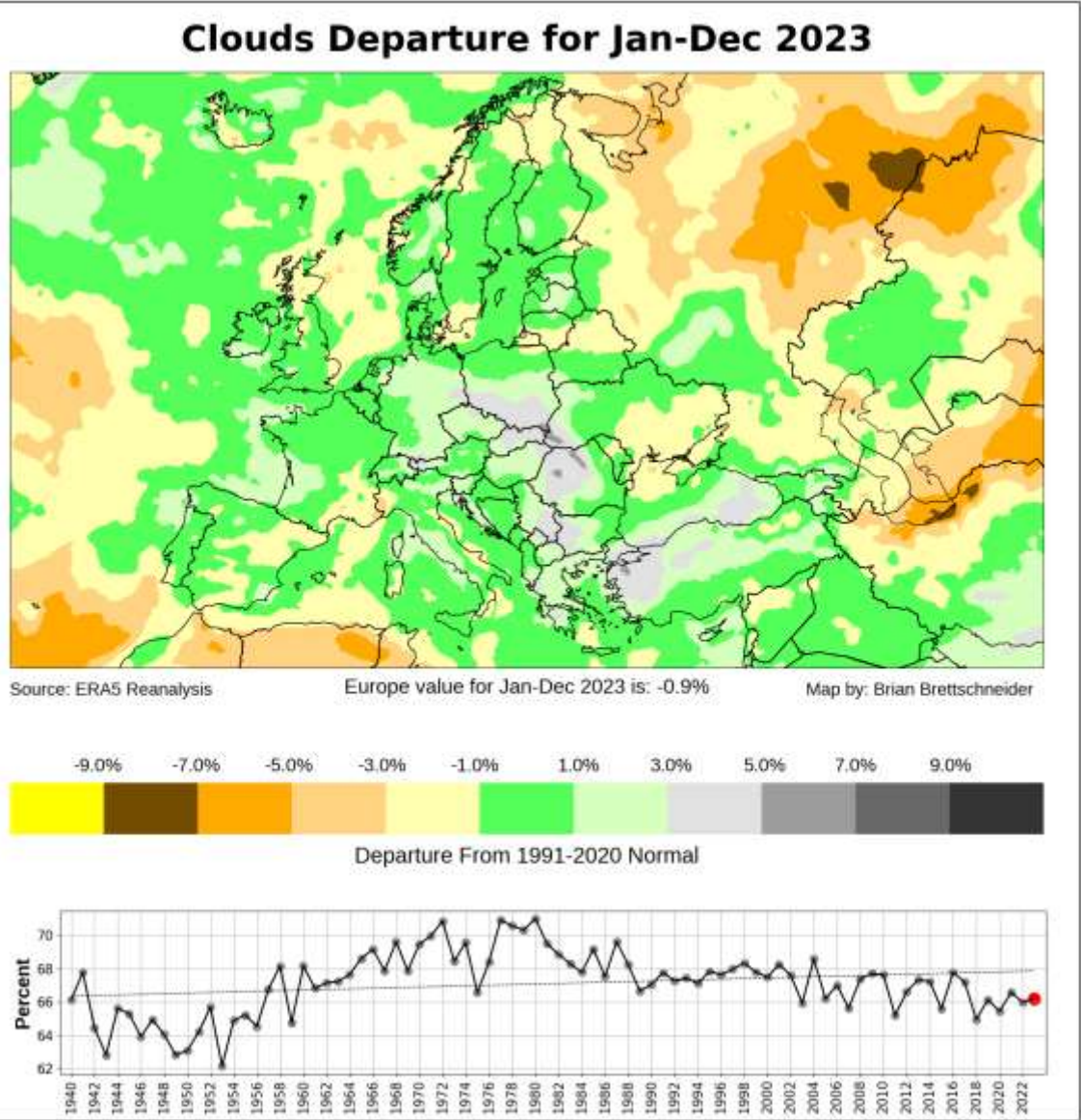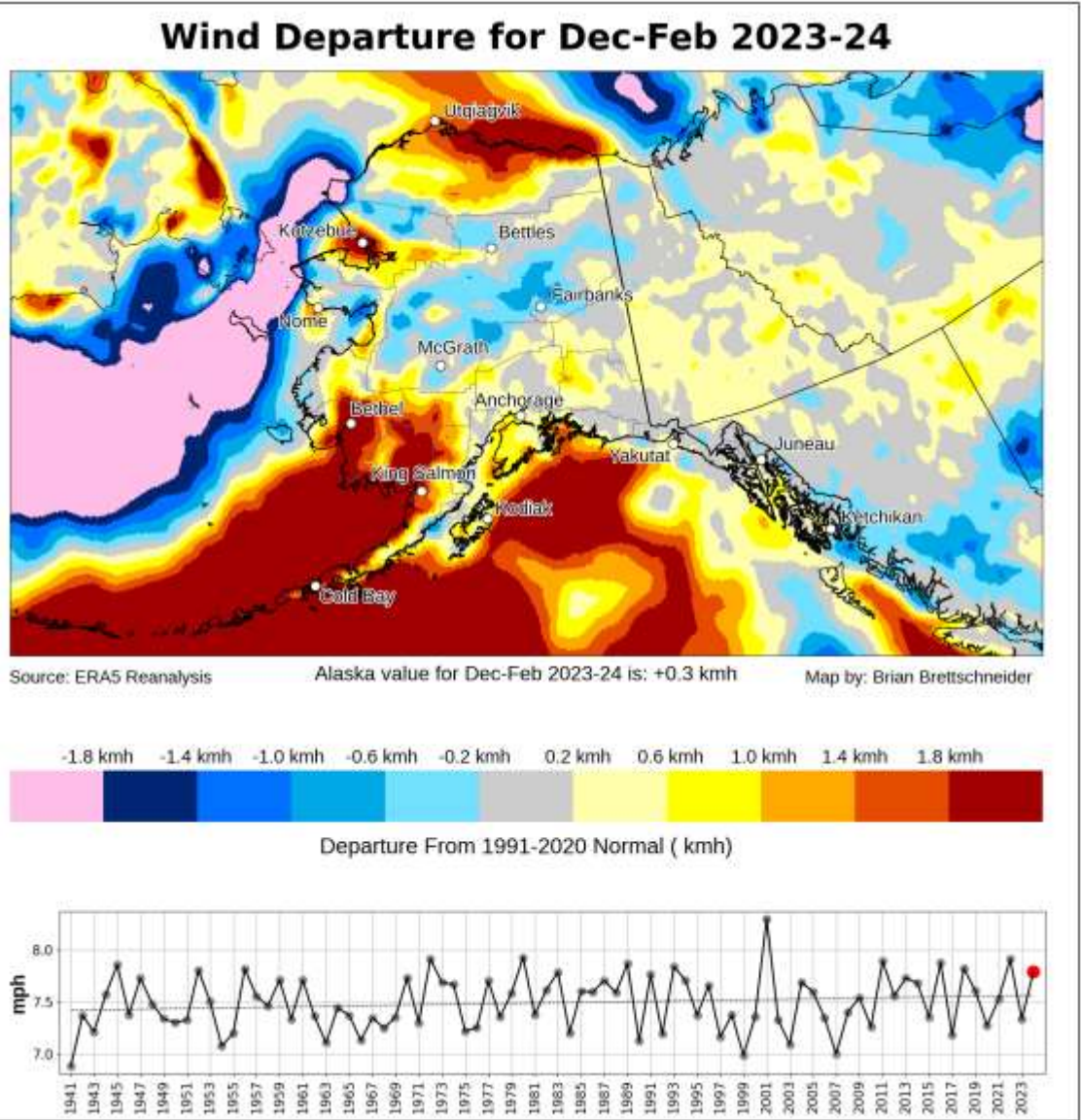
Dark Mode : ☐

Raw data obtained from Copernicus ECMWF Server. Analysis may not be accurate. **Use at your own risk!**

[Generate]   (to reset form, select map area 0 and press button)

Global Apr 2024 SST Departure

Units are metric and the map categories are 0.3 units (0.3C) apart
Metric values time series strip on bottom
Areas with sea ice are not shown.

Europe Jan-Dec 2023 Clouds Departure

Units are percent and the map categories are 2 units (2%) apart
The departure is the measurement percent minus normal percent
Percent time series strip on bottom

Alaska Dec 2023-Feb 2024 Wind Departure

Units are kmh and the map categories are 0.4 units (0.4 kmh) apart
The departure is the departure from 1991-2020 normal
Percent time series strip on bottom