

## Seasonal Forecast Overview

Note that all temperature and precipitation anomalies are relative to the 1991-2020 period averages.

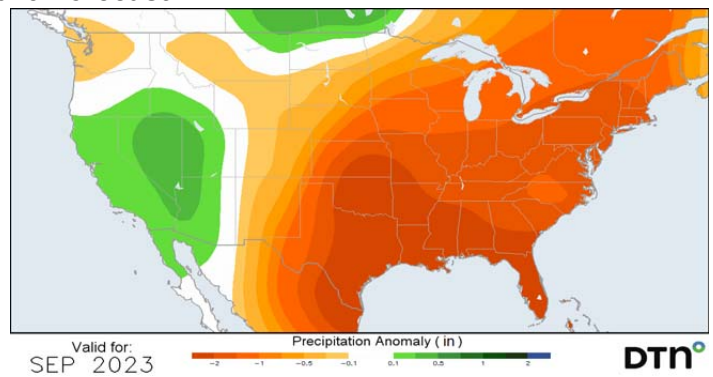
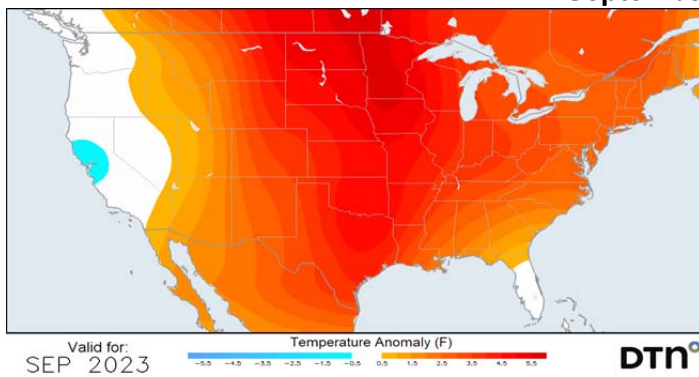
## Summary

- ▶ September should feature above normal to well above normal temperatures across the Central/Eastern US. Summer will be slow to leave. This will come with well below normal precipitation.
- ▶ The 2023 Hurricane Season forecast been increased by 1 across the board. Tropical activity should slow down by mid-September, but should pick back up very late September and into October. Anomalously warm water temperatures suggest that rapid intensification and close-in development will be risks with some storms.
- ▶ Above normal to well above normal temperatures should occur across most of the Northern US during the winter season, especially in December. Below normal snowfall is expected as a result. The Southwest US could see another banner year for rain/mountain snow. The East/South will see above normal precipitation.

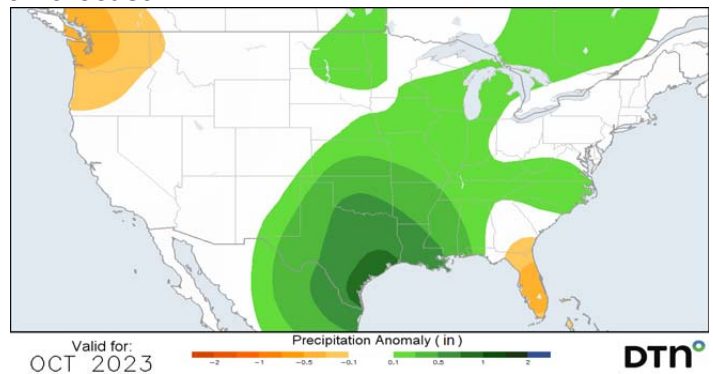
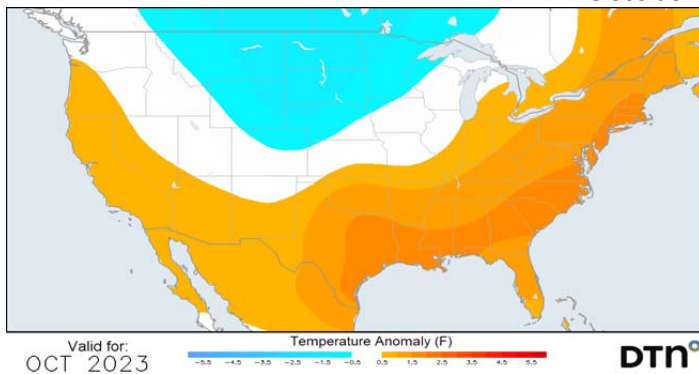
## Temperature Anomaly (°F) Forecast

## Precipitation Anomaly (in) Forecast

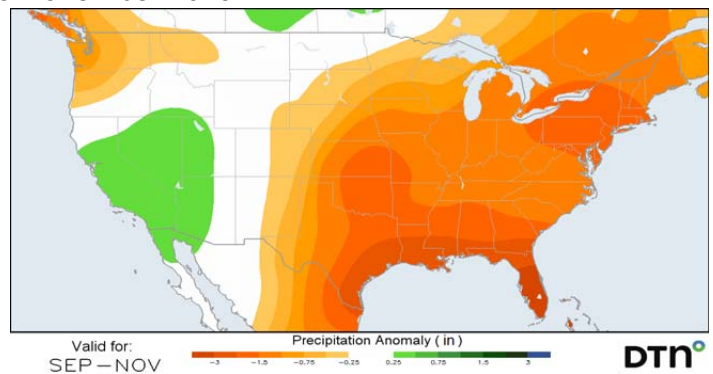
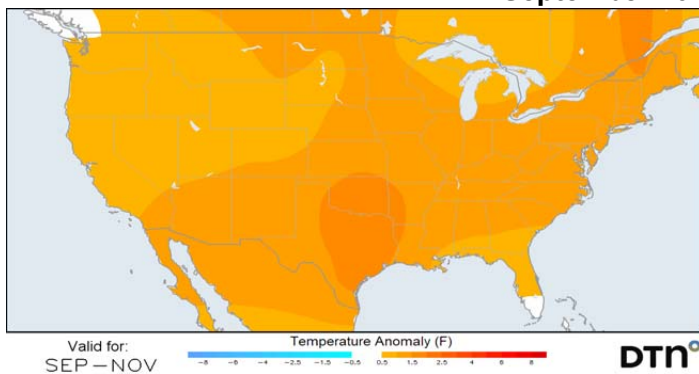
## September 2023 Forecast



## October 2023 Forecast



## September 2023 to November 2023



## Heating Degree Day Summary

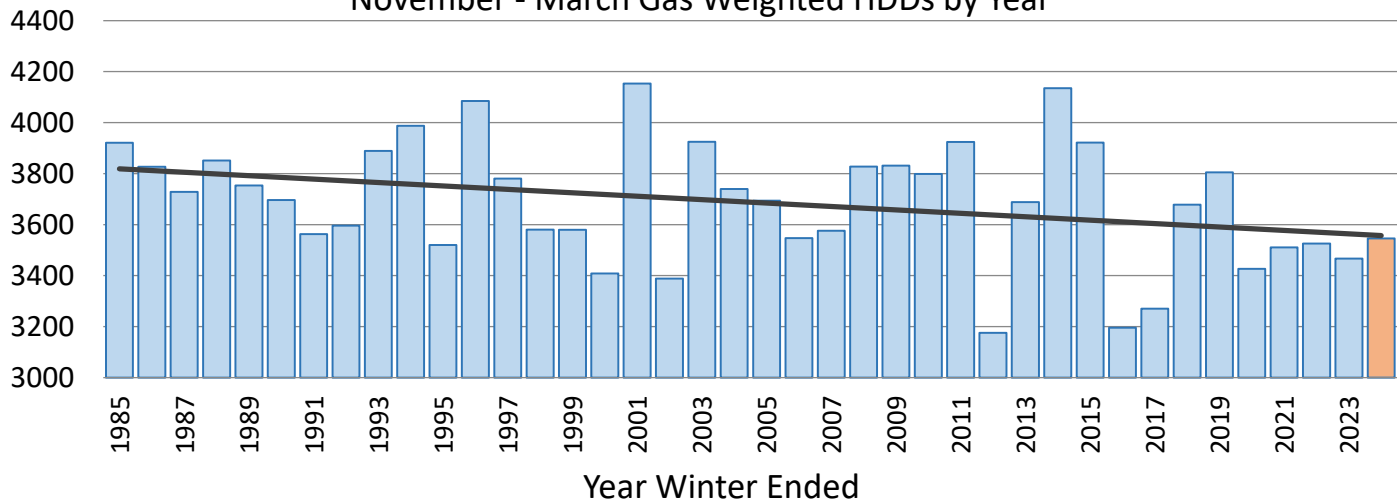
Observed and Forecast U.S. Residential Gas Weighted HDDs and Percent of 30 Year Avg (NOAA Weights)

Month/Season	Obs/Forecast*	Previous**	Change	Last Year	5-YR Average	30-YR Normal
Aug - 2023	6 (82.9%)	4 (55.9%)	2	4 (50.2%)	6 (72.3%)	8
Sep - 2023	30 (47.5%)	38 (60.2%)	-8	52 (83%)	46 (73.2%)	63
Oct - 2023	254 (92.3%)	249 (90.5%)	5	264 (95.8%)	262 (95.2%)	275
Nov - 2023	559 (100.9%)	553 (99.8%)	6	549 (99.1%)	562 (101.4%)	554
Dec - 2023	750 (90.4%)	757 (91.2%)	-7	841 (101.3%)	768 (92.6%)	830
Jan - 2021	857 (92.7%)	857 (92.7%)	0	768 (83.1%)	866 (93.8%)	924
Feb - 2024	750 (98%)	749 (97.9%)	1	674 (88%)	766 (100.1%)	765
Mar - 2024	608 (98.8%)	609 (99%)	-1	636 (103.4%)	585 (95.2%)	615
Apr - 2024	362 (103.5%)	372 (106.6%)	-11	323 (92.3%)	340 (97.3%)	350
Sep 2023 - Nov 2023	843 (94.5%)	839 (94.1%)	3	865 (97%)	870 (97.5%)	892
Dec 2023 - Feb 2024	2379 (94.5%)	2394 (95.1%)	-15	2282 (90.6%)	2400 (95.3%)	2518
Nov 2023 - Mar 2024	3546 (96.2%)	3556 (96.4%)	-10	3467 (94%)	3547 (96.2%)	3687

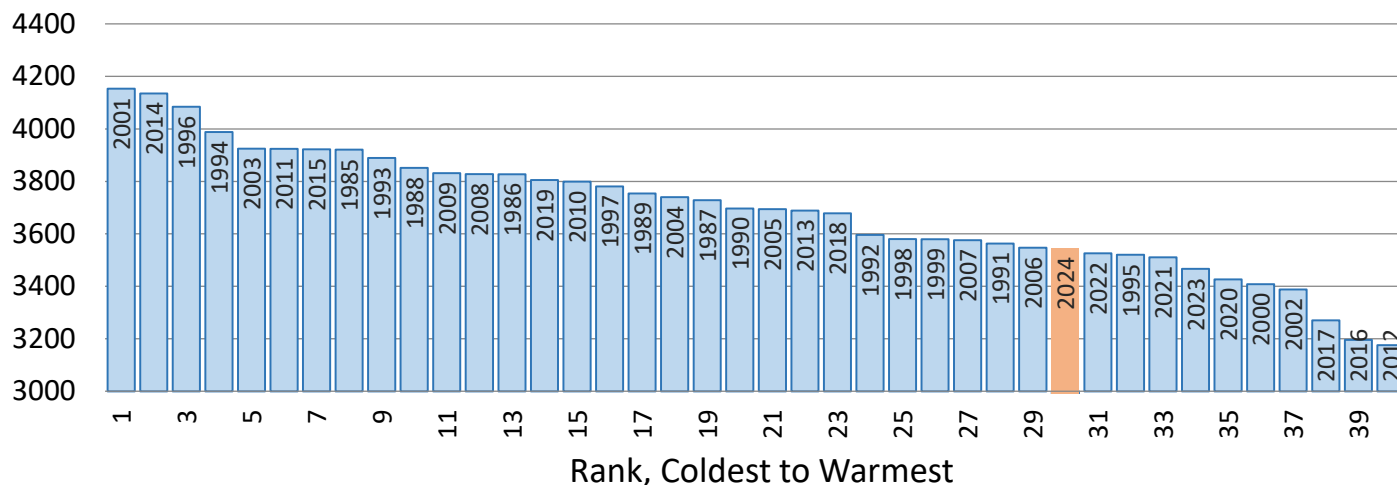
\*HDD value plus percent of normal

\*\*Previous forecast is from the last long-range forecast report

November - March Gas Weighted HDDs by Year



November - March Gas Weighted HDDs in Rank Order (Last 40 Years)



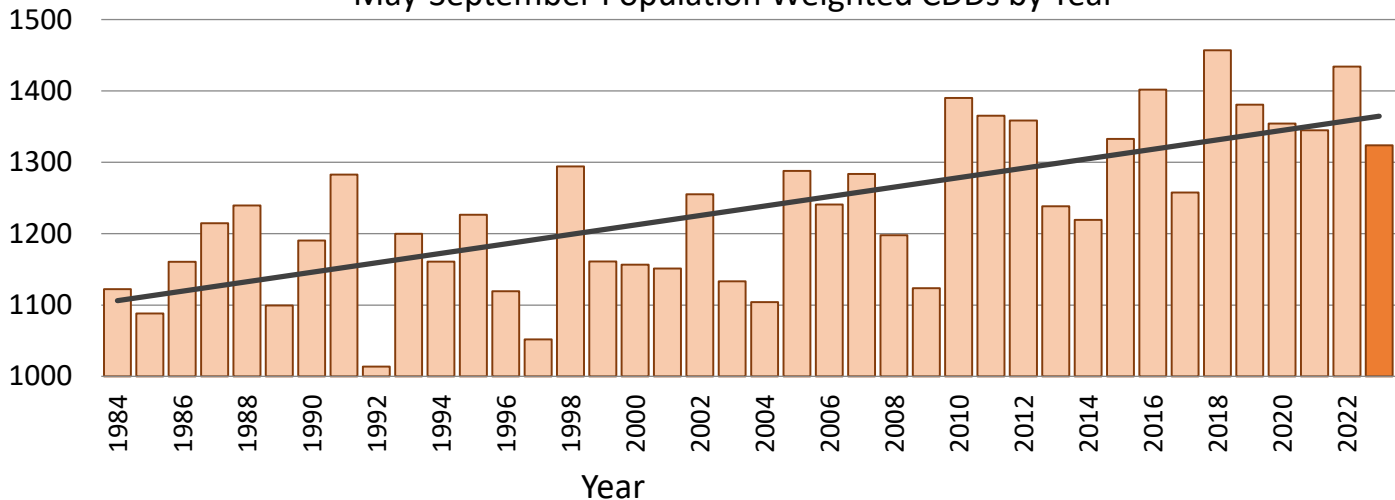
## Cooling Degree Day Summary

Observed and Forecast U.S. Population Weighted CDDs and Percent of 30 Year Avg (NOAA Weights)

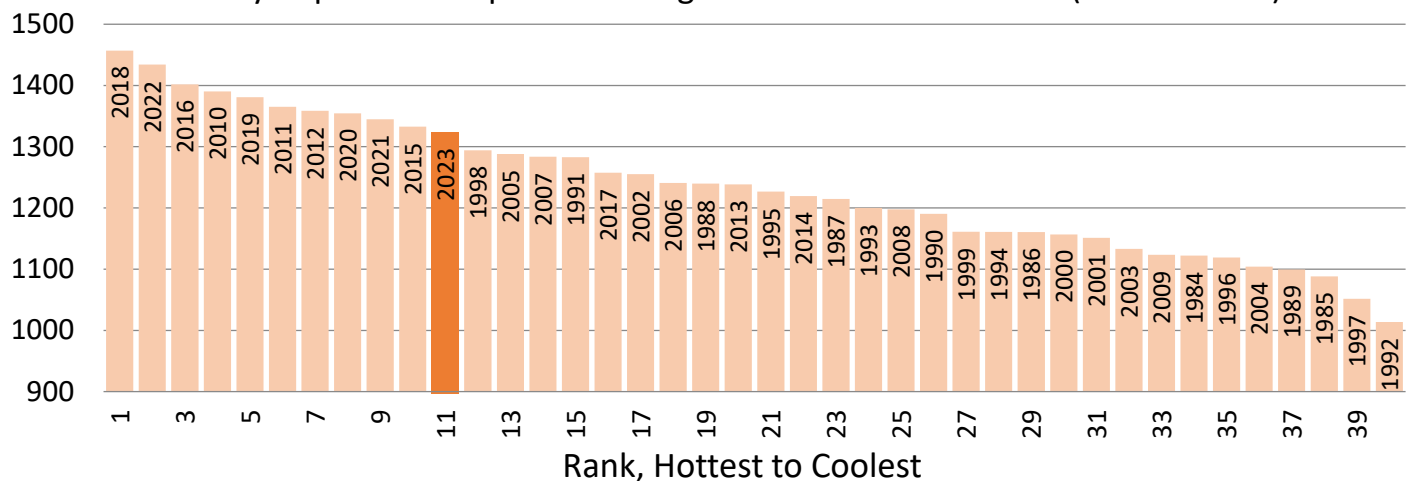
Month/Season	Obs/Forecast	Previous*	Change	Last Year	5-YR Average	30-YR Normal
Feb - 2023	19 (236.3%)	19 (236.3%)	0	10 (128.9%)	14 (175.7%)	8
Mar - 2023	28 (155.8%)	28 (155.8%)	0	23 (124.6%)	23 (126.5%)	18
Apr - 2023	50 (114.2%)	50 (114.2%)	0	55 (125.8%)	45 (103.9%)	44
May - 2023	113 (93.4%)	113 (93.4%)	0	159 (131.7%)	142 (117.3%)	121
Jun - 2023	225 (91.5%)	225 (91.5%)	0	280 (114%)	273 (111.2%)	246
Jul - 2023	394 (110.4%)	394 (110.4%)	0	408 (114.3%)	392 (110%)	357
Aug - 2023	360 (110%)	362 (110.6%)	-2	369 (112.8%)	363 (111%)	327
Sep - 2023	232 (122.6%)	216 (113.7%)	17	218 (115%)	224 (117.9%)	190
Oct - 2023	69 (103.4%)	56 (83.9%)	13	59 (88.6%)	82 (124.1%)	66
Jun 2023 - Aug 2023	978 (105.2%)	981 (105.5%)	-2	1057 (113.7%)	1029 (110.7%)	930
Sep 2023 - Nov 2023	314 (115.2%)	285 (104.4%)	29	303 (111%)	326 (119.4%)	273
May 2023 - Sep 2023	1324 (106.8%)	1309 (105.6%)	15	1434 (115.7%)	1394 (112.4%)	1240

\*Previous forecast is from the last long-range forecast report

May-September Population Weighted CDDs by Year



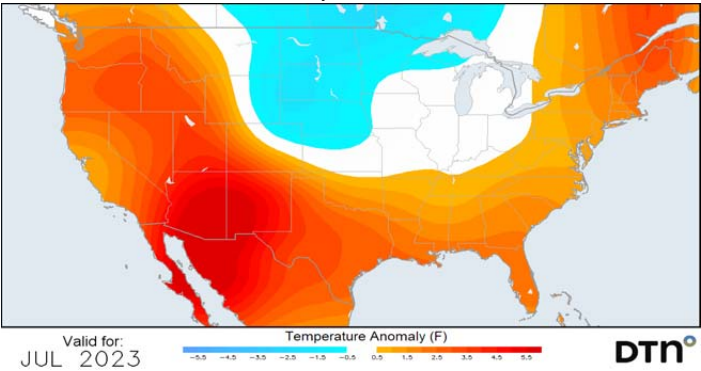
May-September Population Weighted CDDs in Rank Order (Last 40 Years)



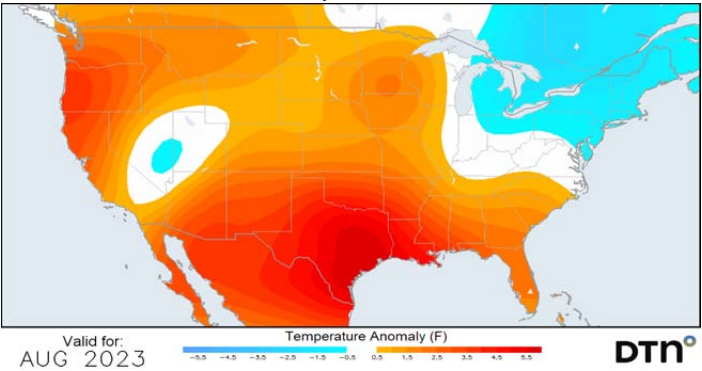
## Recent Trends and Next Few Weeks

Record heat set up across the Desert Southwest in July. Well above normal temperatures impacted most of the West and along the Gulf Coast in July. Warmer temperatures also occurred along the East Coast. Below normal temperatures were common across the North Central US. Major heat impacted the South Central US in August. Above normal temperatures occurred across the West Coast, the North Central US, and the Southeast. Below normal readings occurred across the Northeast. Most of September will feature above normal temperatures across the Central and Eastern US, warmest across the Plains/MS Valley. More seasonable conditions are expected along the West Coast. There are no signs of early fall weather.

Last Month Temperature Anomalies

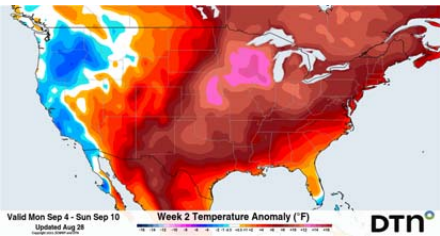


This Month Temperature Anomalies

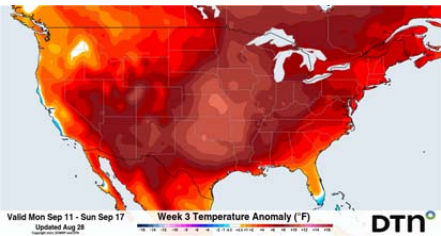


ECMWF Weekly Temperature Anomaly Forecast for Next Three Weeks

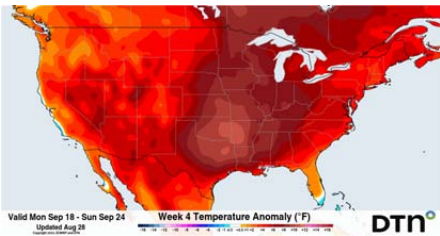
Week 2 Forecast



Week 3 Forecast

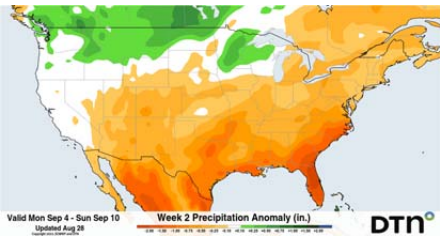


Week 4 Forecast

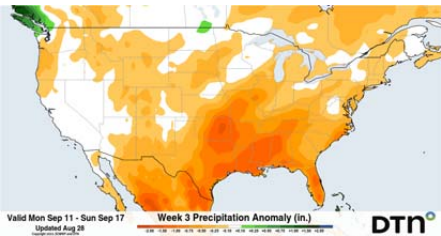


ECMWF Weekly Precipitation Anomaly Forecast for Next Three Weeks

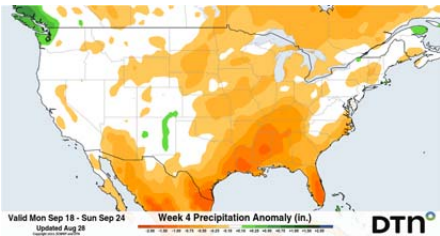
Week 2 Forecast



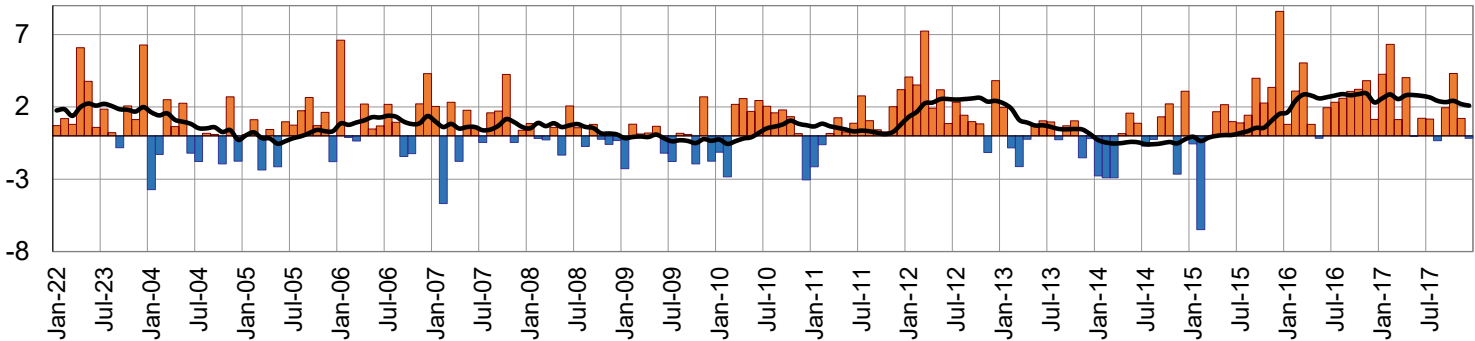
Week 3 Forecast



Week 4 Forecast



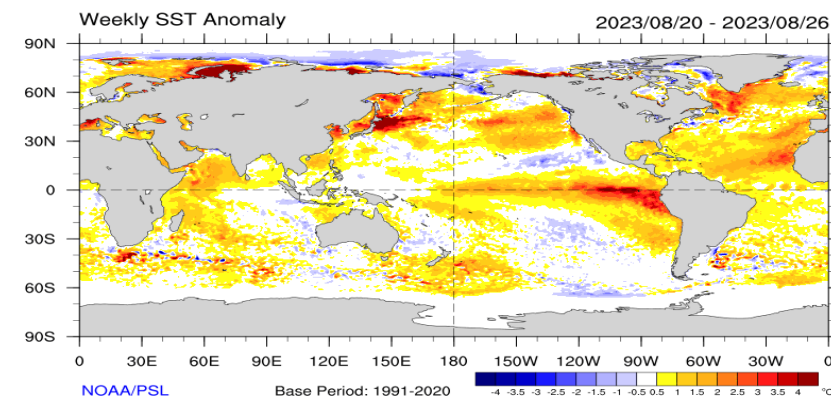
Historical U.S. Average Population Weighted Monthly Temperature Anomalies



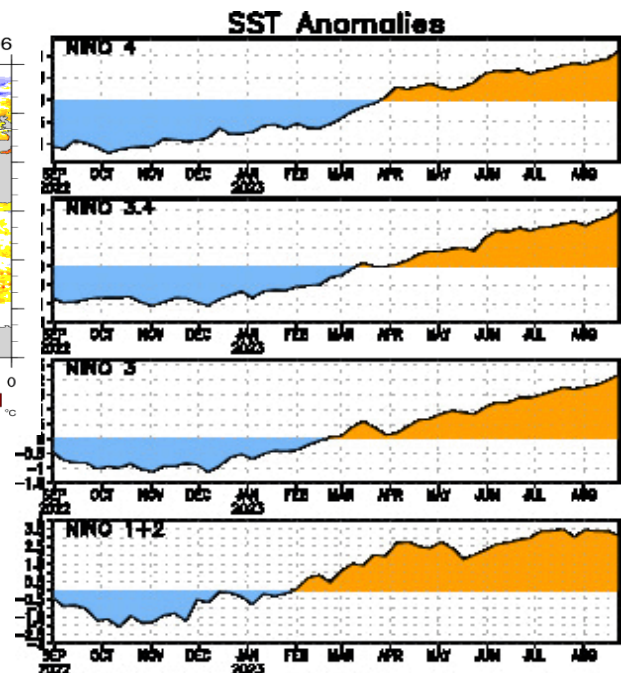


## ENSO and the MJO

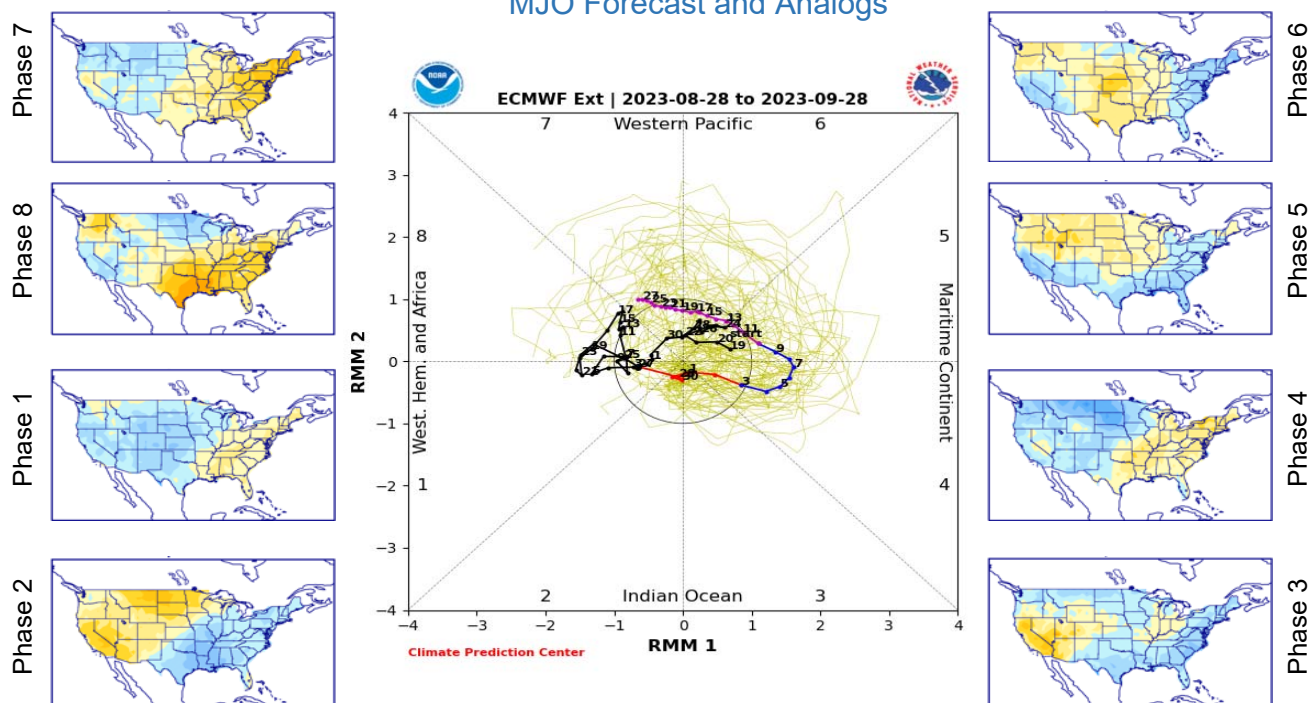
El Niño will persist through the fall and upcoming winter season. This event will be east-based, meaning the warmest anomalies will be closer to South America. This event should peak during the late fall as a strong El Niño, but it may come up a little short of the extreme 1997 and 2015 events. The MJO should push past phase 5 and end up in phases 6-7 through a good chunk of September. Analogs strongly suggest that Central US ridging will occur as a result. This will mean a warmer pattern and a continued summer temperature regime across a good portion of the Central/East through most of September. Analogs also suggest a trough along the West Coast.



Index	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23
Nino 3.4	-0.44	-0.01	0.19	0.47	0.88	1.07
SOI	2.30	0.30	0.40	-1.70	0.40	-0.40
PDO	-1.00	-1.67	-2.12	-1.61	-2.01	-1.75
AMO						
QBO	9.80	10.93	12.89	9.26	0.72	-5.96



## MJO Forecast and Analogs

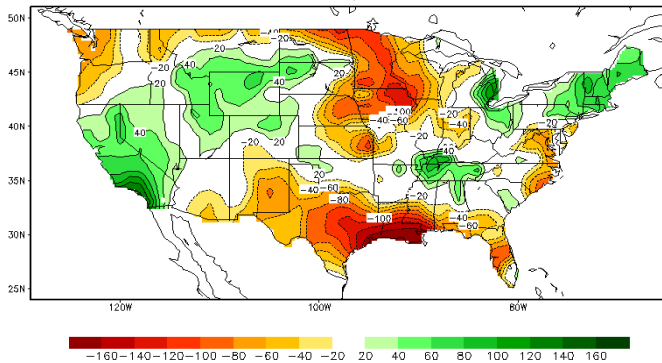


## Drought and Soil Moisture Status

Soil moisture deficits remain significant across the Upper Midwest with little help over the last month. Soil moisture has improved across the northern Plains, along with MO through the TN Valley. In some cases, they are more than adequate. Deficits still are in play across IA, northern IL, and IN. The next two to four weeks should feature drier than normal conditions, which will cause a trend toward decreased soil moisture by the time we get into mid-September. Soil moisture has increased markedly from CA through the Great Basin and central Rockies. Soil has dried out across the Mid-Atlantic and the next two weeks won't help much. The Northeast US has abundant soil moisture and this won't change through early September. Idalia will bring abundant moisture to the Southeast Coast.

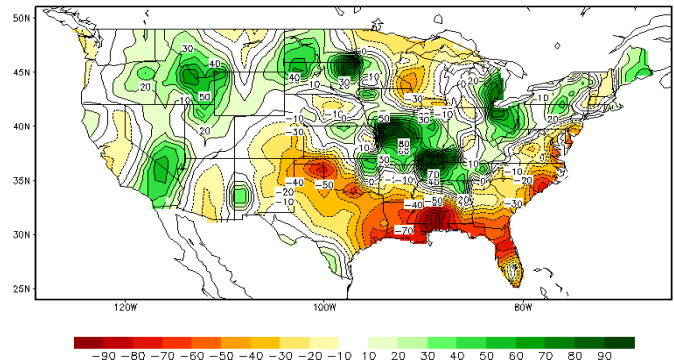
### Current Soil Moisture Anomalies

Calculated Soil Moisture Anomaly (mm)  
AUG 29, 2023

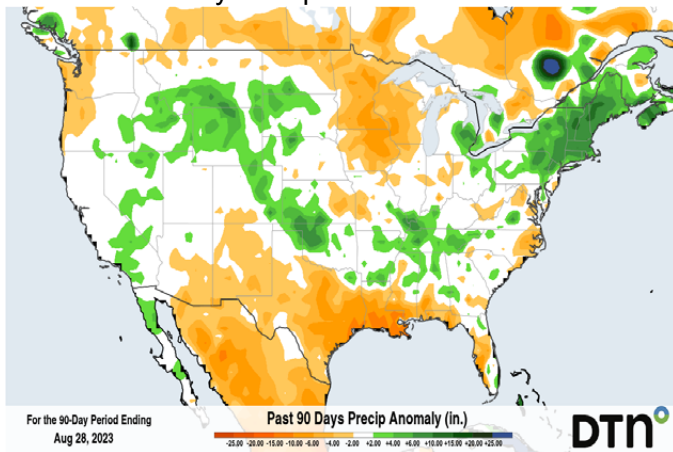


### Change in Soil Moisture Last 30 Days

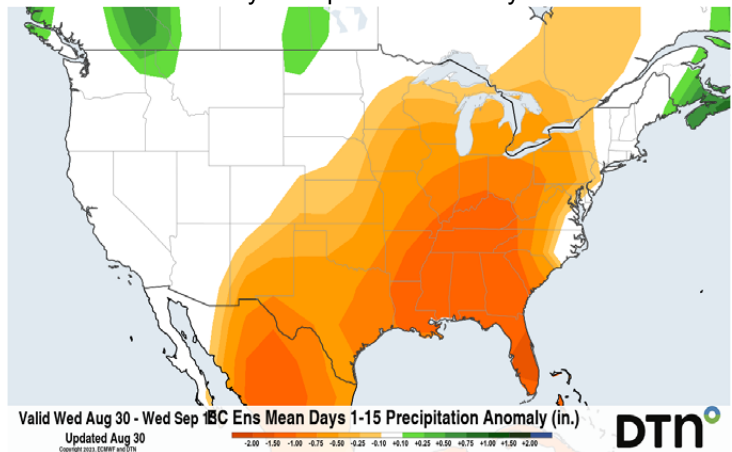
Calculated Soil Moisture Anomaly Change  
AUG 29, 2023 from JUL.31



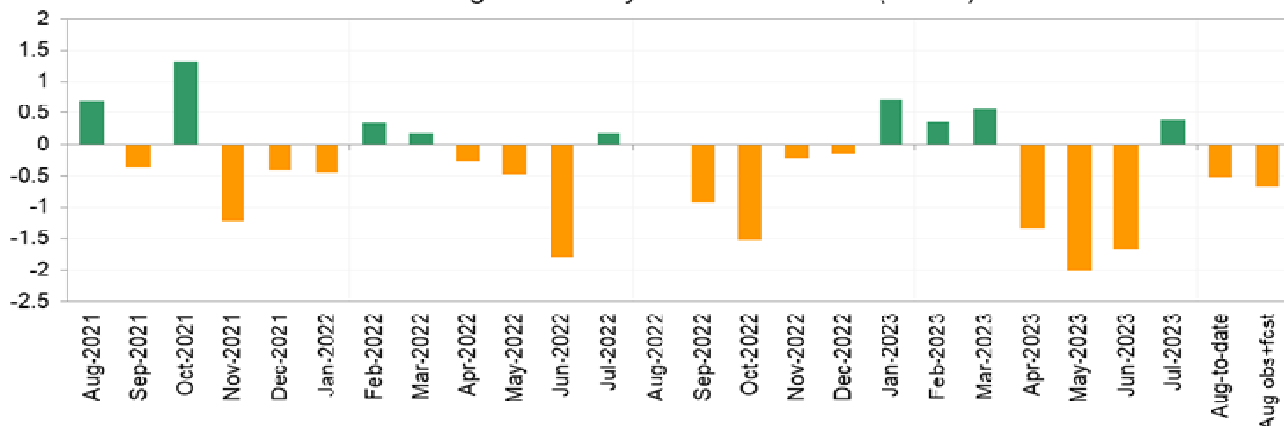
### 90-Day Precipitation Anomalies



### ECMWF 15-Day Precipitation Anomaly Forecast



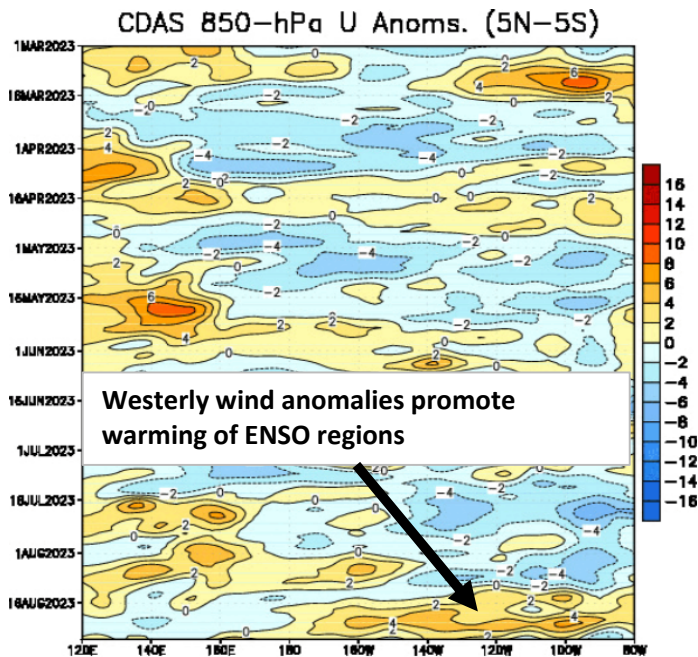
### Corn Weighted Monthly Rainfall Anomalies (inches)



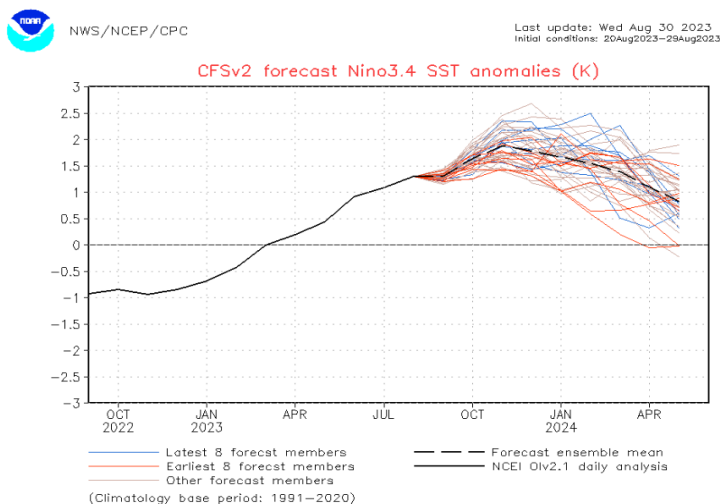
## ENSO Update

El Niño has been established across the Pacific Basin. This has largely been the result of four consecutive downwelling Kelvin waves across the Pacific. They are noted in longer dashed lines in the Upper-Ocean heat anomalies graphic on the top right. When these waves pass by, the sea surface temperatures generally trend warmer. The latest in the series has crossed into the eastern Pacific and will continue its push during the next few weeks. This will result in continued warming of the Pacific Basin. In addition, a westerly wind burst has occurred recently across the central/eastern Pacific, which slows down the trade winds. This allows warmer water to splash eastward, which also warms up the ENSO regions. ENSO 3.4 has warmed to +1.5C as of last week, which is already in strong El Niño territory. The CFS agrees with most other guidance that ENSO will continue to warm through most of the upcoming fall season. We believe a peak tri-monthly reading may end up close to +2.0C. This would be a strong El Niño, but it may fall just short of the extreme 1997 and 2015 "super" El Niños. The CFS also agrees with other guidance that this event is east-based, meaning the warmest anomalies are located closer to South America. As long as it stays this way, the DTN forecast of a warm US winter should verify well. However, if the warmest anomalies shift toward the Dateline later this winter, it will open up the possibility of February and March colder anomalies across the Central/Eastern US. So far, no model guidance is suggesting this will occur.

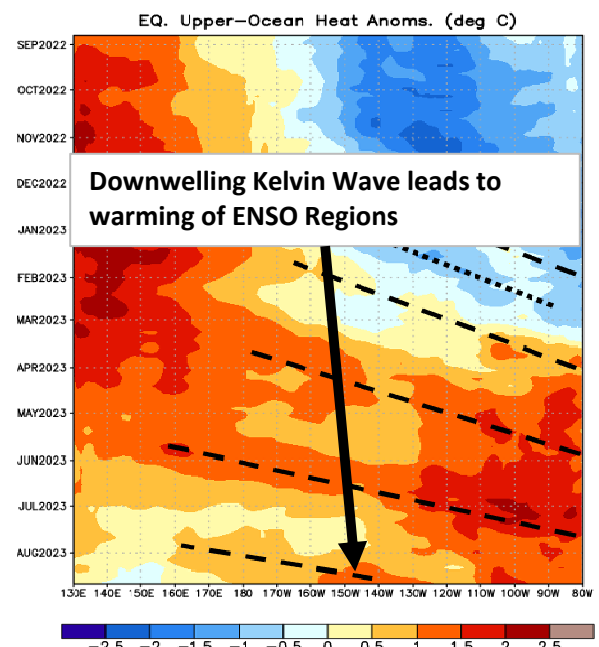
### Observed Trade Winds



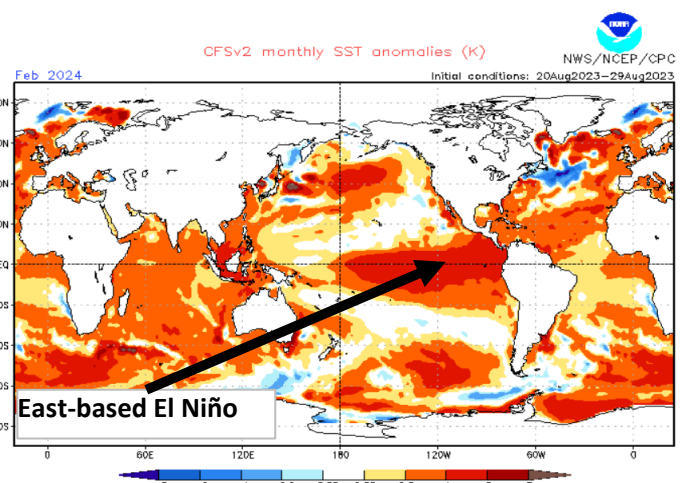
### CFSv2 ENSO Forecast



### Observed Upper-Ocean Heat Anomalies



### CFSv2 Feb 2024 Sea Surface T Anomalies

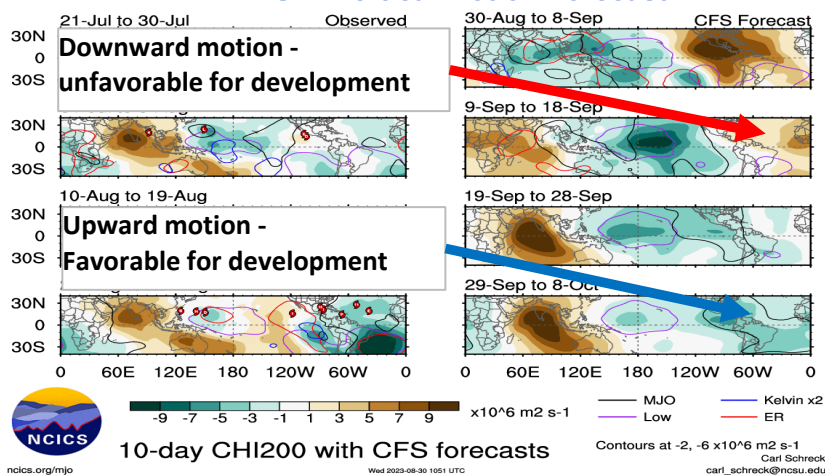




### 2023 Hurricane Season Update

DTN raised the 2023 Hurricane Season forecast by 1 across the board. DTN is predicting 18 Named Storms, 8 Hurricanes, and 4 Major Hurricanes (Category 3 or higher) during the season. There have been 10 named storms, 3 Hurricanes, and 2 Major Hurricanes to date. Late August saw a burst of tropical activity in the Atlantic. This was in association with a strong wave of upward motion that crossed the Atlantic. This wave will depart during the next 10 days and a potent area of downward motion will cross the Atlantic during the middle third of September, as shown on the CFS forecast below. The result will be a significant reduction in tropical activity. This may not shut it off completely, but it will likely slow it down. Another area of upward motion is forecast by the CFS and other guidance to push across the Atlantic very late in September and early in October. DTN believes this will result in another surge of tropical activity. Wind shear settled down with this past wave and it is likely to do so again with the next one. Given what occurred with this last wave, the forecast was raised. The pattern should generally feature a ridge across the Central US and a trough near or just off the East Coast. This should cause most storms that develop in the main development region to re-curve northward and out to sea. We can't rule out development closer to the US, perhaps in the Gulf of Mexico or western Caribbean. If this activity develops, the odds of another landfall will be higher. As the El Niño strengthens later in the fall, the associated increased shear should eventually cause below normal tropical activity. This could easily happen in late October into November. However, given how much warmth there is in the Caribbean, Gulf of Mexico, and off the Southeast US Coast, close-in development will continue to be a risk. The East Coast trough should largely protect the Northeast US. One important thing to remember is that all it takes is one storm to hit a populated and vulnerable region to make the season impactful and memorable, regardless of what happens the rest of the season. The other thing is that reduced risk doesn't mean zero risk. Given the risk of close-in intensification due to abnormally warm sea surface temperatures, vigilance is needed more than ever this fall.

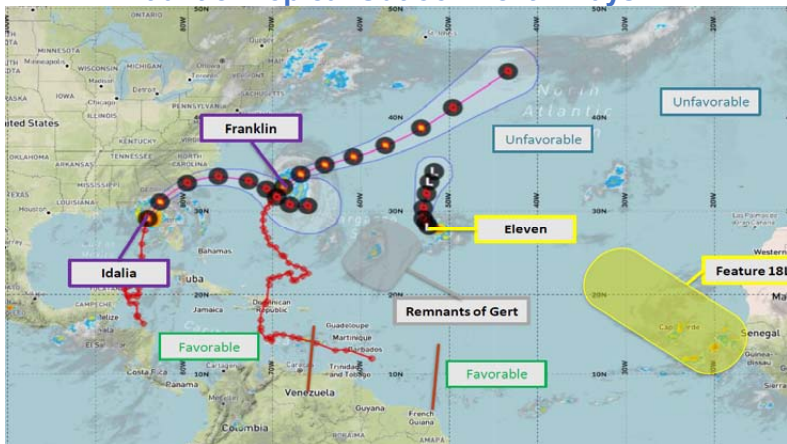
#### CFSv2 Vertical Motion Forecast



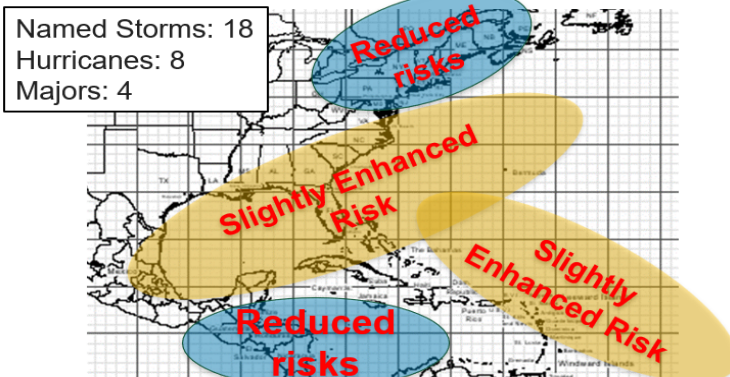
#### 2023 Atlantic Storm Names

One	Lee
Arlene	Margot
Bret	Nigel
Gindy	Ophelia
Don	Philippe
Emily	Rina
Franklin	Sean
Gert	Tammy
Harold	Vince
Idalia	Whitney
Jose	
Katia	(+supplemental)

#### Atlantic Tropical Outlook Next 7 Days



#### 2023 DTN Tropical Outlook



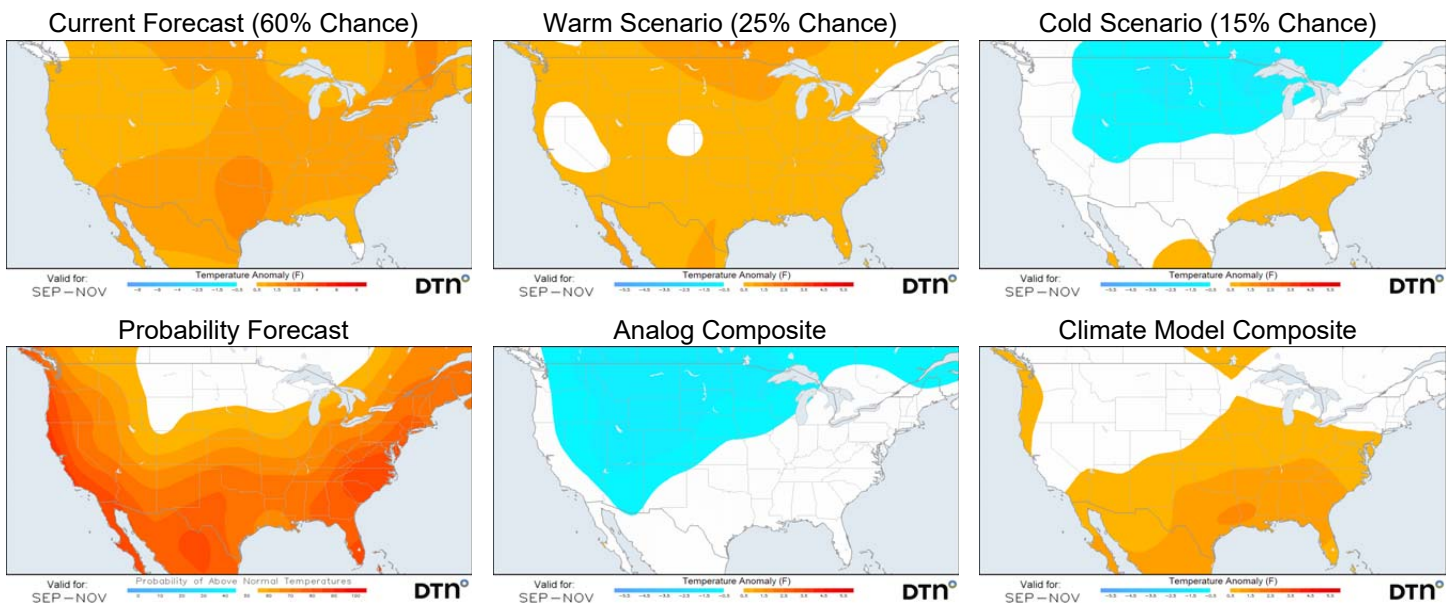


## Fall Forecast Summary

El Niño should strengthen further during the fall season, likely peaking in November or December as a strong event. There is no change to this expectation with this update. The forecast trended warmer in September and somewhat cooler in November.

September looks to be a very warm month across the Central and Eastern US with the risks of significant summer-like periods. Between September and into October, almost 30 CDDs were added with this update. This is primarily due to MJO/ENSO related tropical forcing getting stuck in the phase 6-7 region for most of the month. This will be the primary mode of variability. Analogs from past events suggest Central US ridging will be dominant. This will turn September into a drier month for most of the Central/East, save for occasional thunderstorm activity closer to the Canadian Border in the North Central US. Also, any landfalling tropical systems would skew areas wetter along the track. More seasonable weather is expected along the West Coast. There are cold risks in October. Analogs and model guidance show the potential, especially the analogs. The best chances for these will come across the North Central US through the northern Rockies. We can't rule out some cooler air pushing across the East briefly, even though warm anomalies are forecast for the month as a whole. Early freeze/frost potential is still on the table for parts of the Midwest.

November can be a wild card during El Niño autumn seasons. Risks for colder periods appear to be increased. The analogs certainly suggest this risk. For example, November 1997, one of our top analogs, featured widespread cold in the East. November 2015/1982 featured warmth in the East, but both seasons had an active MJO rotation through the Indian Ocean, which changed the outcome. It is too early to know if this will occur this season. The 10-year trends show that cold has shown up during this month in the eastern half of the US. The analog composite for November will be too cold. This is because most individual analogs show a shot of colder air, but differ on which part of the country it will impact. October and especially November should see increased rainfall across the southern US. This will begin to eat away at drier soils that developed this summer. November should see above normal precipitation across the Midwest into the Northeast as well. If any of that precipitation can coincide with colder periods, early season snow could easily result.



Period	Forecast	Cold Scenario	Warm Scenario	Normal	Last Year
Sep 2023 - Nov 2023	314 (115.2%) CDDs	289 (106.1%)	319 (117.1%)	273	303 (111%)
May 2023 - Sep 2023	1324 (106.8%) CDDs	1300 (104.9%)	1330 (107.2%)	1240	1434 (115.7%)

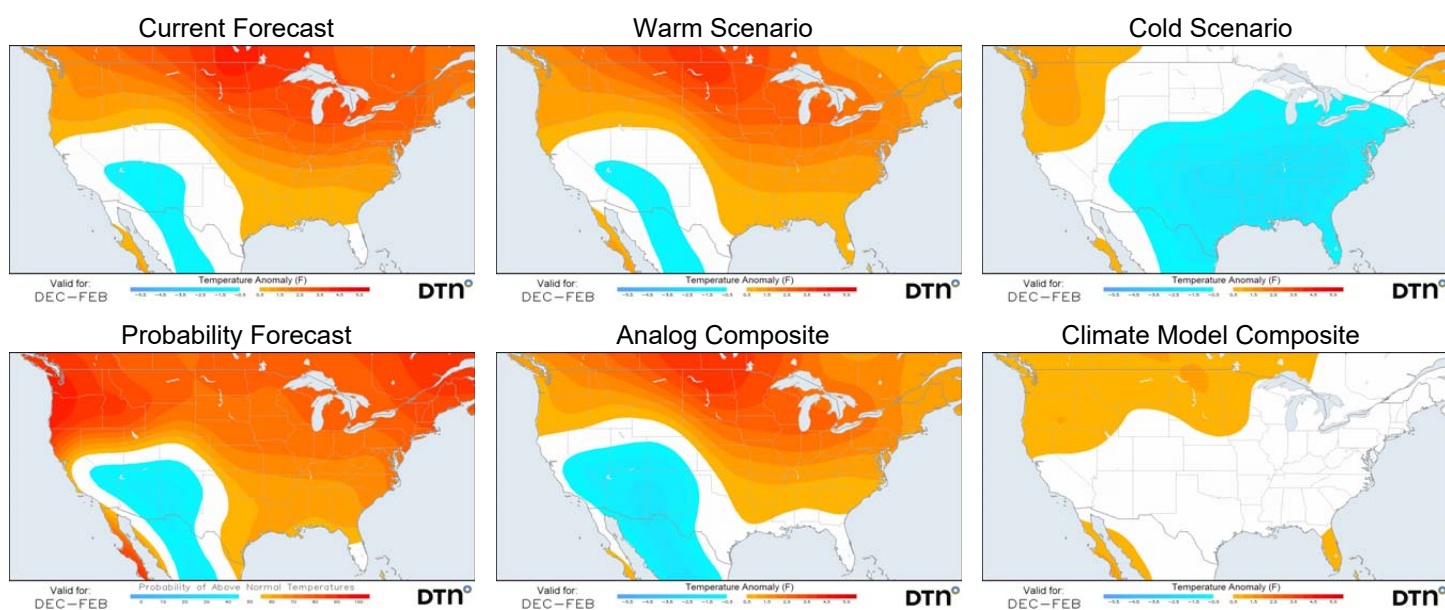
## Winter Forecast Preview

The winter forecast trended only modestly warmer with this update. The main climate driver will continue to be a strong El Niño, which should gradually weaken in early 2024. Warm sea surface temperatures in the Pacific and the Atlantic will occur simultaneously. While this is quite a signal for warmth, it doesn't mean cooler periods can't occur.

Almost every El Niño winter features a warm December across the northern tier of the US and across the East. This is true even if the El Niño isn't very strong. Sometimes the warmth can be extreme. 2015 was a great example. Even the cold scenario shows above normal temperatures. Although the forecast leans hard on the warm scenario, even greater warmth is possible. If December turns out to be warm, January typically follows for most of the northern areas. Above normal temperatures are highly probable. However, the southern US can be a different story. January 2016/1983 ended up cooler across the Southeast through Texas. However, 1998 kept the warmth going. The wild card months are February and March. This depends on how the ENSO event is configured. East-based El Niño typically continues the warmer trend across the North, although the largest anomalies tend to shift to the northern Plains through the Northwest. Central-based events can turn a bit colder with arctic air potential. All indications are that this will be an east-based event, as described in the El Niño page above. However, if the guidance is wrong and the warmth trends toward the Dateline, cold risks will increase. Overall, forecast HDDs are close to what has occurred each of the last four years. Warm risks outweigh cold risks at this time.

Below normal snowfall is anticipated across most of the northern US with the warmer temperatures in mind. That said, February and March could produce a higher risk of coastal systems. If there is enough cold around, snow events can occur. December into January may not contain very much snow relative to normal. California and the Desert Southwest should see another winter with enhanced rain/mountain snow. The Pacific Northwest should join them this time, although the heaviest activity may be further south. Some locations in the Mid-Atlantic may see more snow potential than last winter, although the overall warmer look will tuck these events into tight windows.

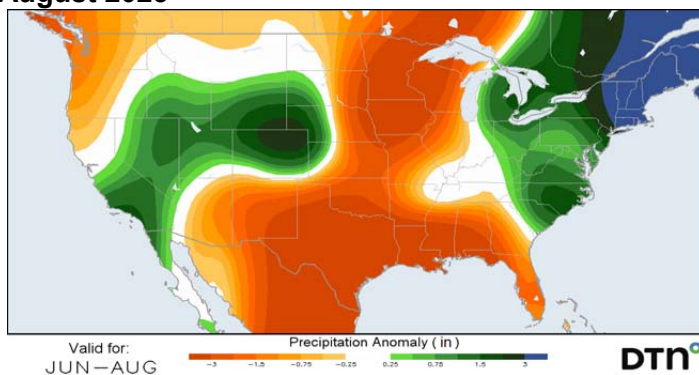
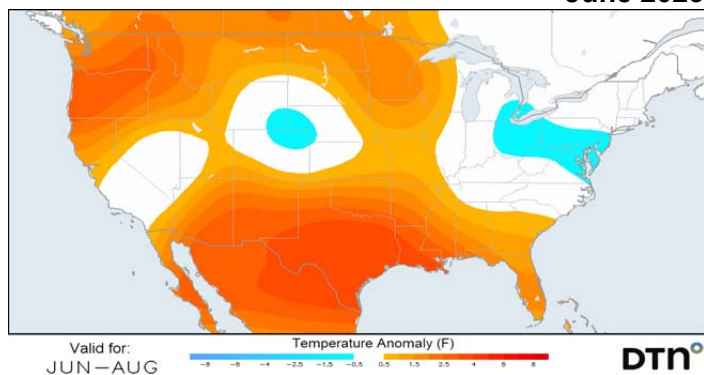
The next seasonal forecast will be issued on Wednesday, September 13th.



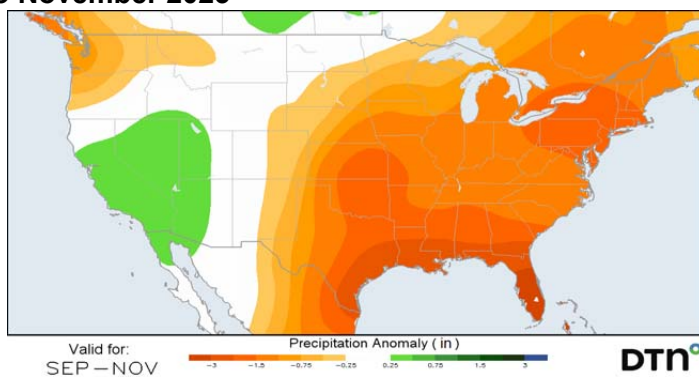
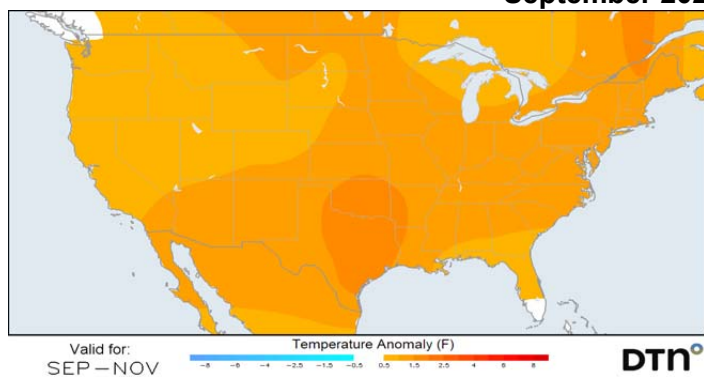
Period	Forecast	Cold Scenario	Warm Scenario	Normal	Last Year
Dec 2023 - Feb 2024	2379 (94.5%) HDDs	2552 (101.3%)	2356 (93.6%)	2518	2282 (90.6%)
Nov 2023 - Mar 2024	3546 (96.2%) HDDs	3728 (101.1%)	3461 (93.9%)	3687	3467 (94%)

## US Seasonal Forecast Graphics

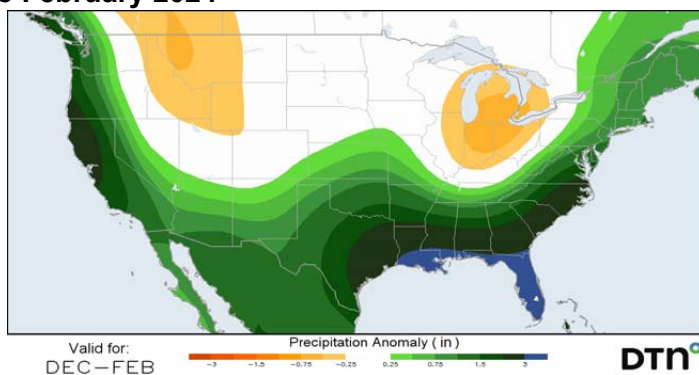
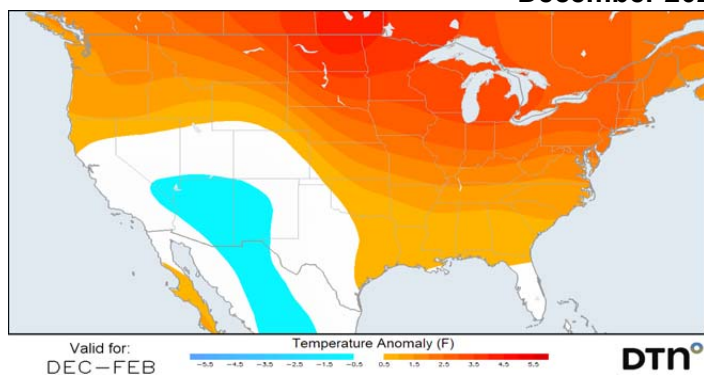
## June 2023 to August 2023



## September 2023 to November 2023



## December 2023 to February 2024



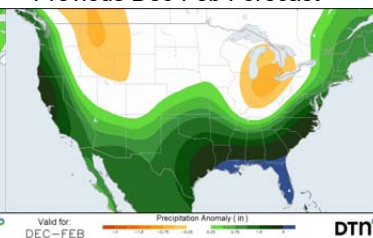
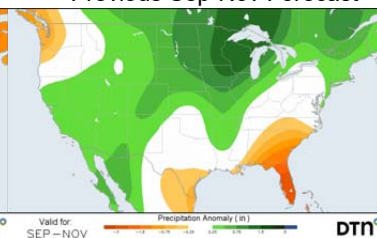
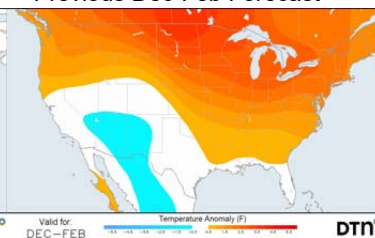
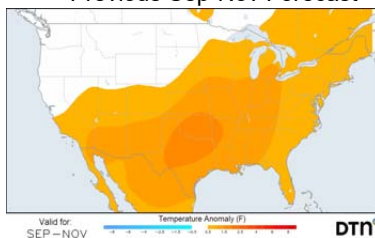
## Previous Forecasts

Previous Sep-Nov Forecast

Previous Dec-Feb Forecast

Previous Sep-Nov Forecast

Previous Dec-Feb Forecast



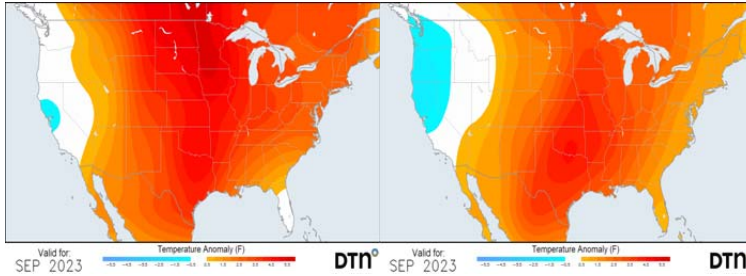


## US Monthly Forecast Graphics

## Temperature Anomaly Forecasts

September 2023 Forecast

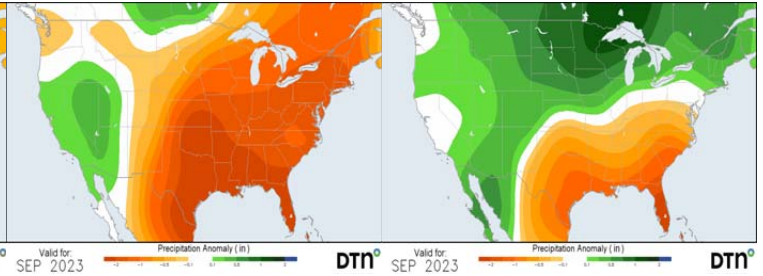
Previous Forecast



## Precipitation Anomaly Forecasts

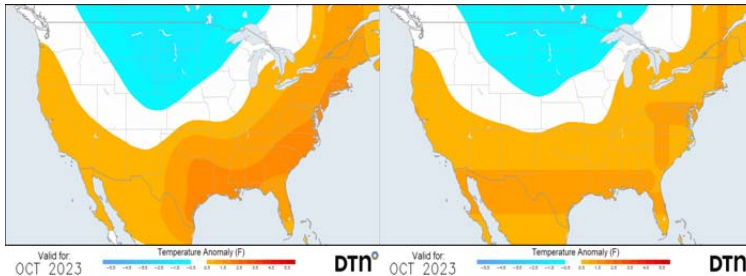
September 2023 Forecast

Previous Forecast



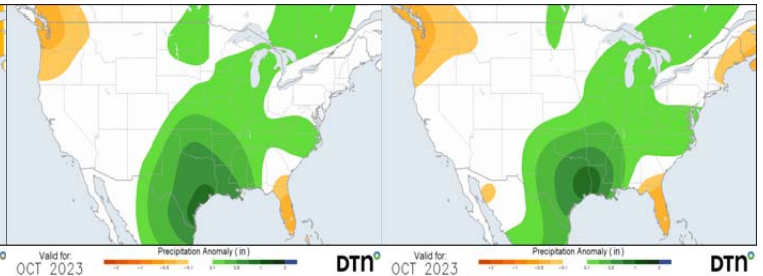
October 2023 Forecast

Previous Forecast



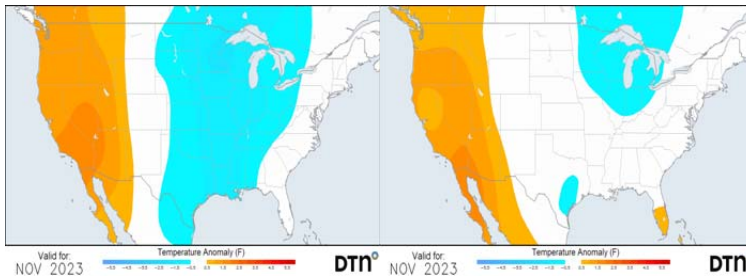
October 2023 Forecast

Previous Forecast



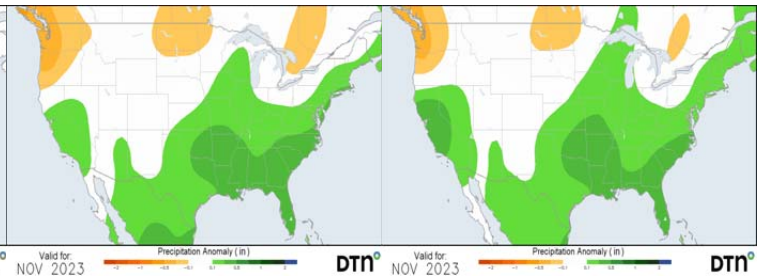
November 2023 Forecast

Previous Forecast



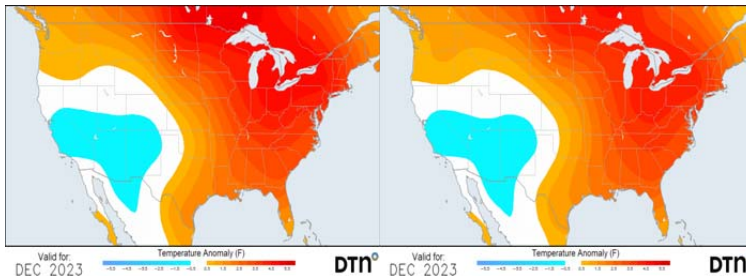
November 2023 Forecast

Previous Forecast



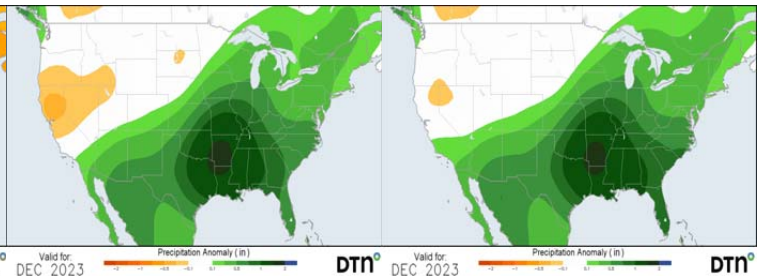
December 2023 Forecast

Previous Forecast



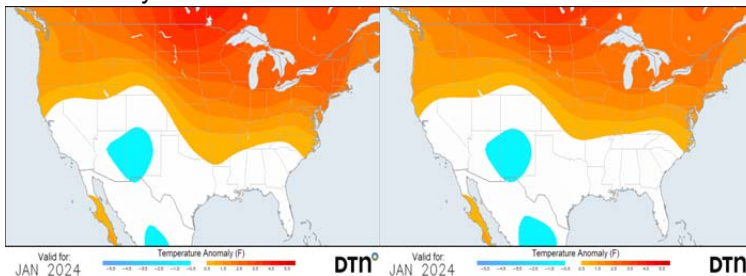
December 2023 Forecast

Previous Forecast



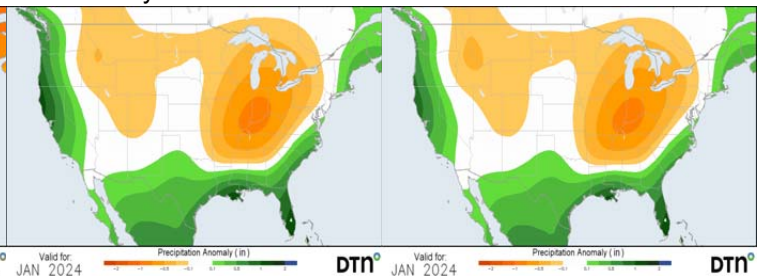
January 2024 Forecast

Previous Forecast



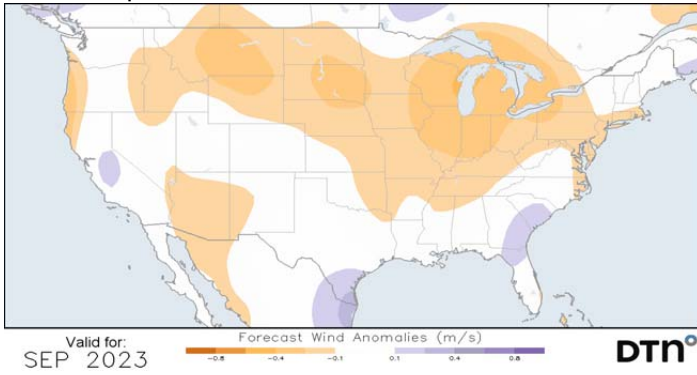
January 2024 Forecast

Previous Forecast

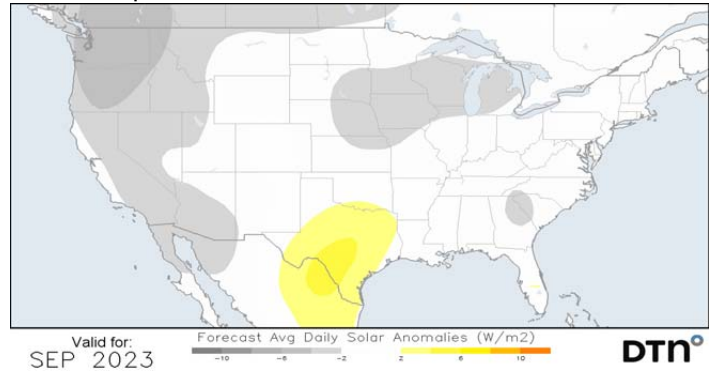


## US Renewables Forecast

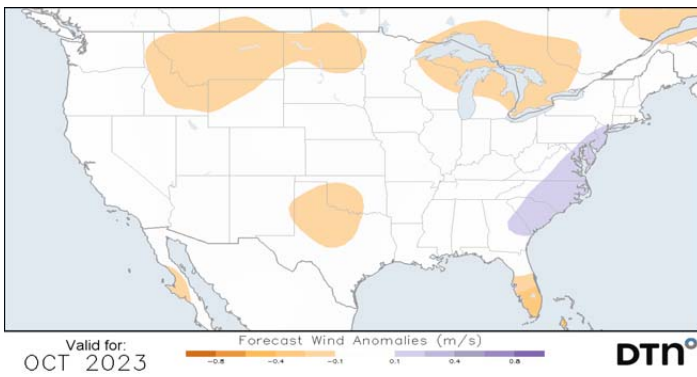
September 2023 Forecast Wind Anomalies



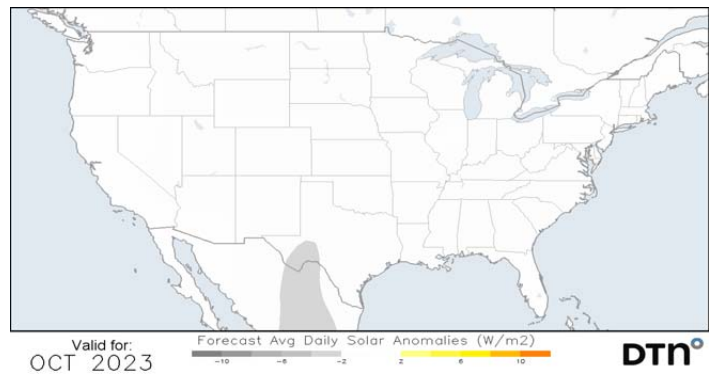
September 2023 Forecast Solar Anomalies



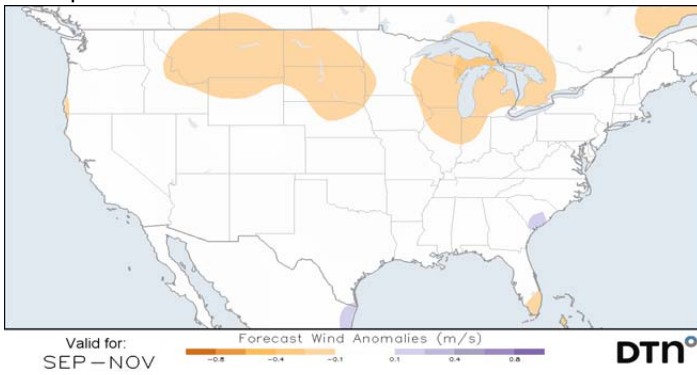
October 2023 Forecast Wind Anomalies



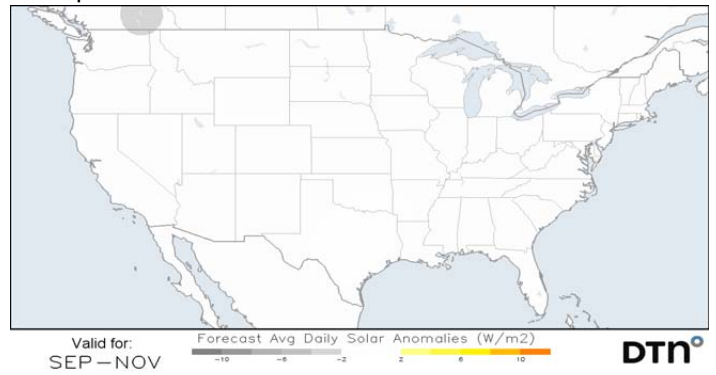
October 2023 Forecast Solar Anomalies



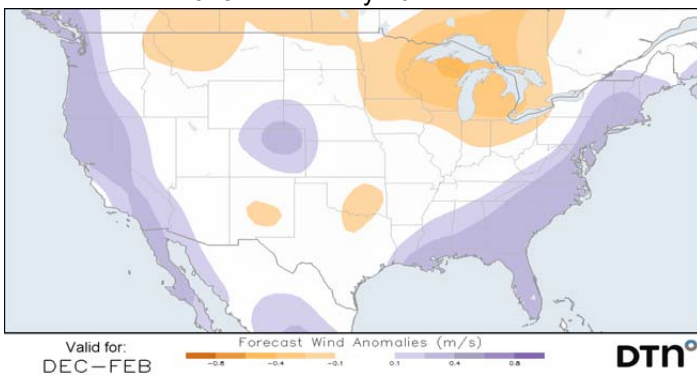
September 2023 to November 2023 Wind Anomalies



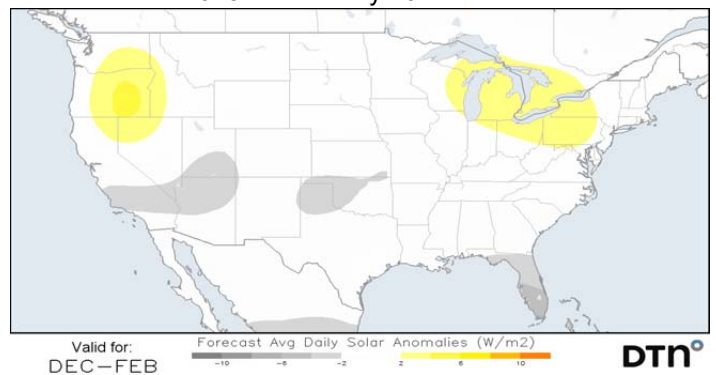
September 2023 to November 2023 Solar Anomalies



December 2023 to February 2024 Wind Anomalies



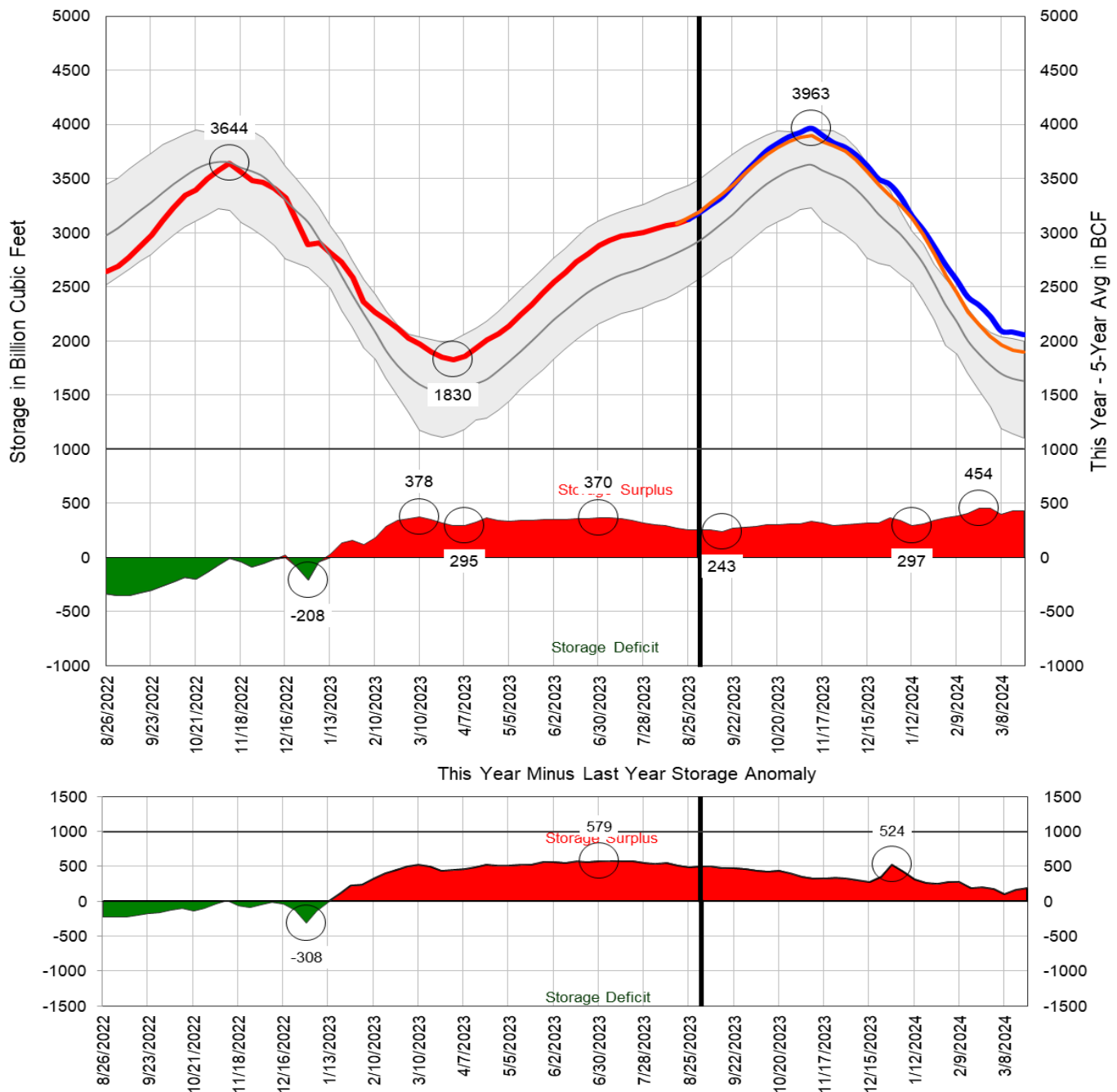
December 2023 to February 2024 Solar Anomalies



## Long Range Natural Gas Storage Projections

The following plots show historical NG storage data for the last year, as well as an 8-month forecast. The top portion of the graph shows forecast storage levels, and the bottom portion the year on five-year surplus, along with the year on year surplus. The orange line represents the projected storage levels using the weekly five-year average storage numbers. Note that the forecast assumes no price response to production and demand levels, with forecast degree days being the only variable changing going forward. As such, large variations in storage levels from the mean may not actually develop, but may serve as an indicator that production, price and/or demand changes are likely.

Observed (red line) and 8 Month Forecast (blue line) Working Gas in Underground Storage Compared with 5-Year Range (grey band) and Year Minus 5-Year Storage Anomaly (Values = Frontier Forecast)  
Orange line uses 5 Year Avg Storage Builds/Draws as Forecast





## Europe Forecast Overview

Note that all temperature and precipitation anomalies are relative to the 1991-2020 period averages.

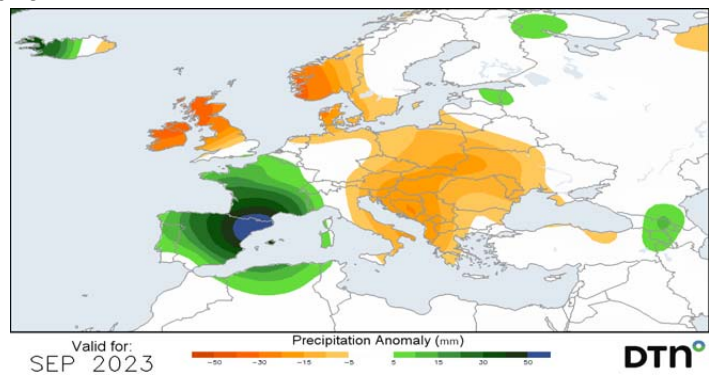
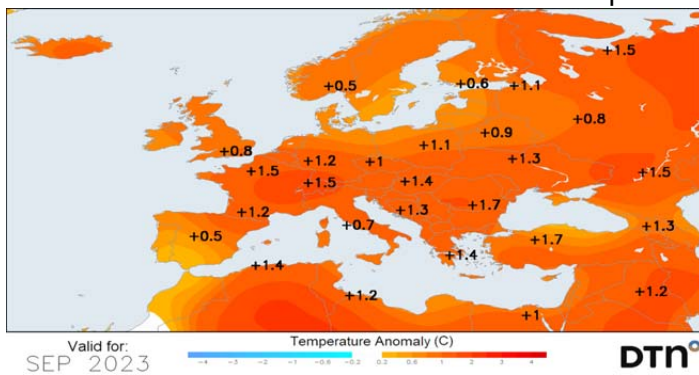
## Summary

- ▶ Widespread above normal temperatures are expected across Europe in September, although occasional cooler periods are possible. The best chance may be near Iberia where wetter conditions are anticipated.
- ▶ Warm anomalies are anticipated across most of Europe in October. Analogs and model guidance suggest that far eastern Europe could see cooler periods, but better chances will be into Russia. Central/eastern Europe will see continued drier than normal weather. Areas closer to the Mediterranean Sea will see wetter conditions.
- ▶ Significant warm anomalies are anticipated in November. Analogs and model guidance show a strong signal for a warmer month. Periods of major warmth can't be ruled out. Above normal rainfall is expected across most of southern Europe. Drier than normal conditions are more likely across northern Europe.

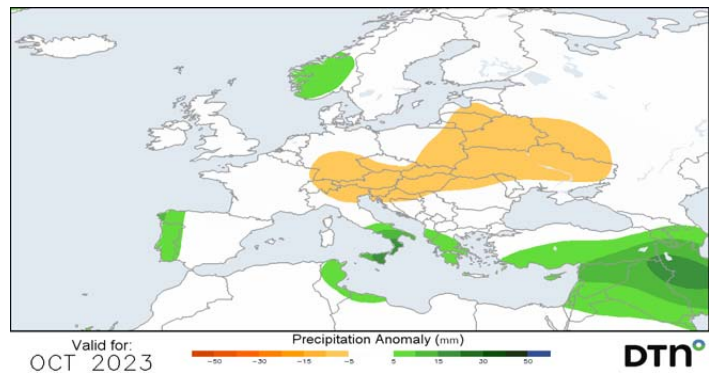
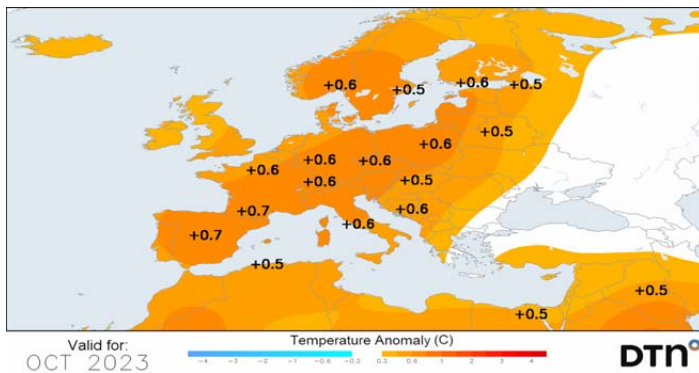
## Temperature Anomaly (°C) Forecast

## Precipitation Anomaly (mm) Forecast

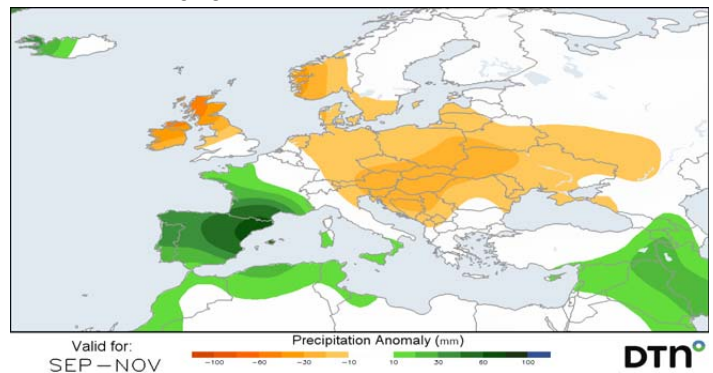
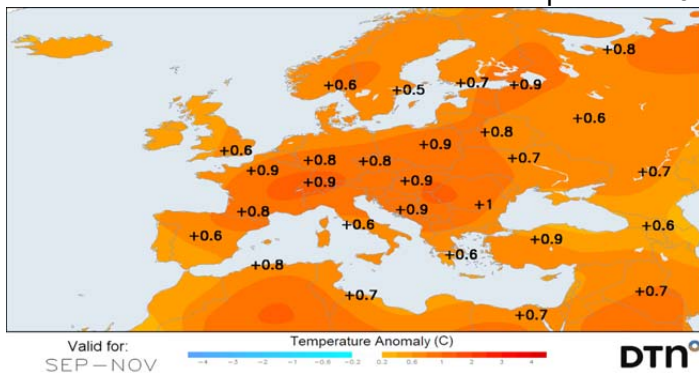
## September 2023 Forecast



## October 2023 Forecast

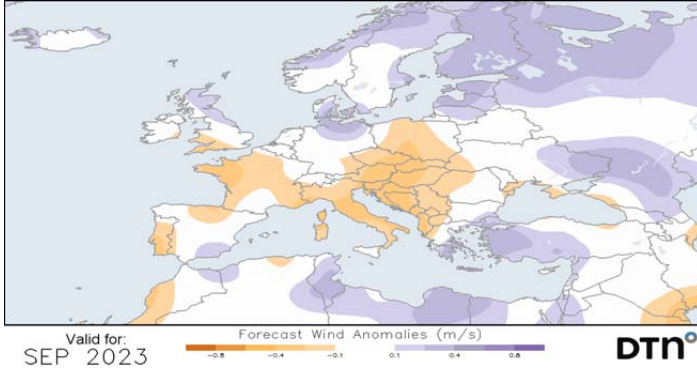


## September 2023 to November 2023

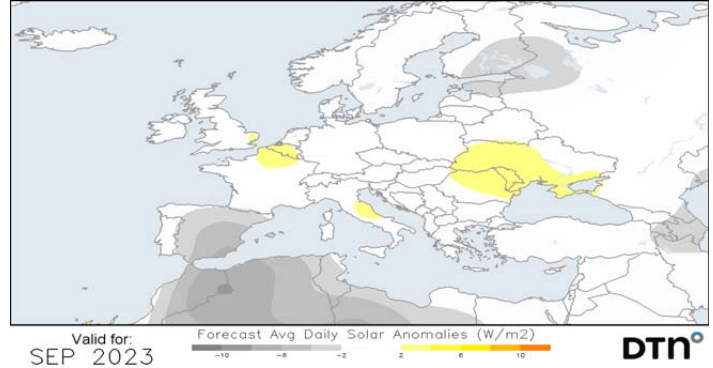


## Europe Renewables Forecast

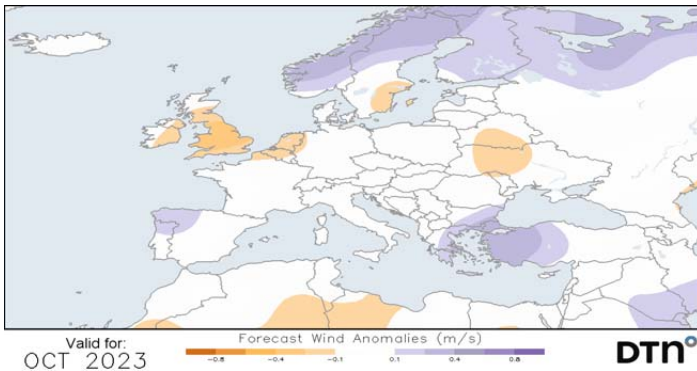
September 2023 Forecast Wind Anomalies



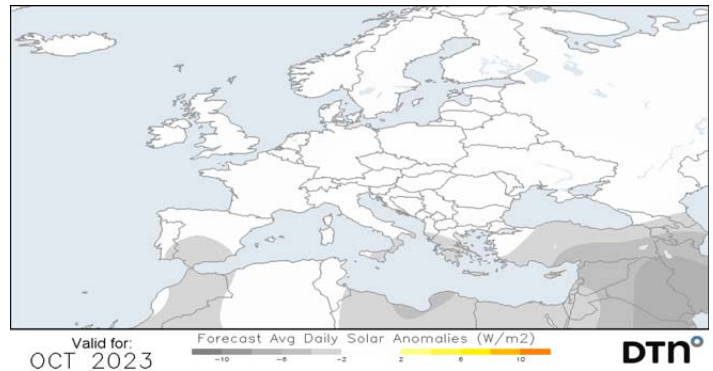
September 2023 Forecast Solar Anomalies



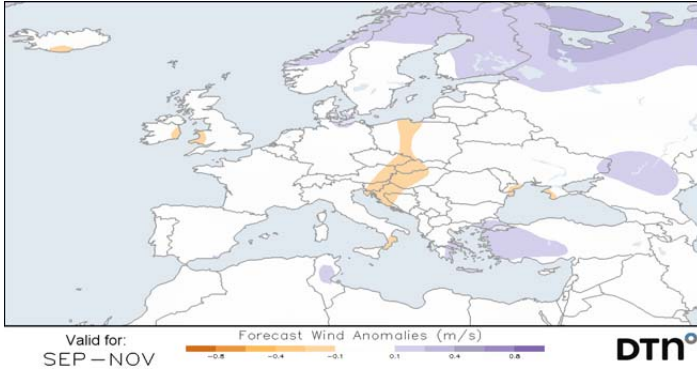
October 2023 Forecast Wind Anomalies



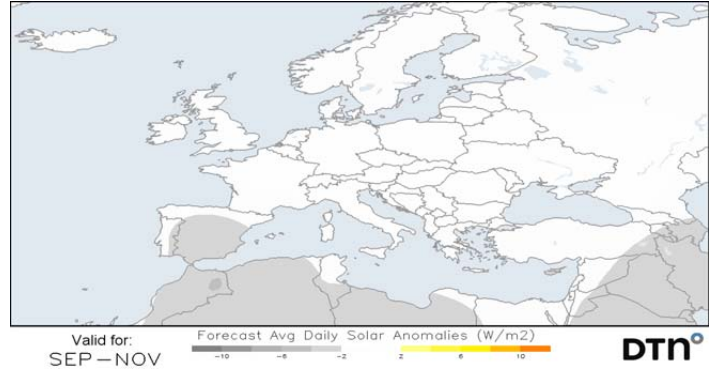
October 2023 Forecast Solar Anomalies



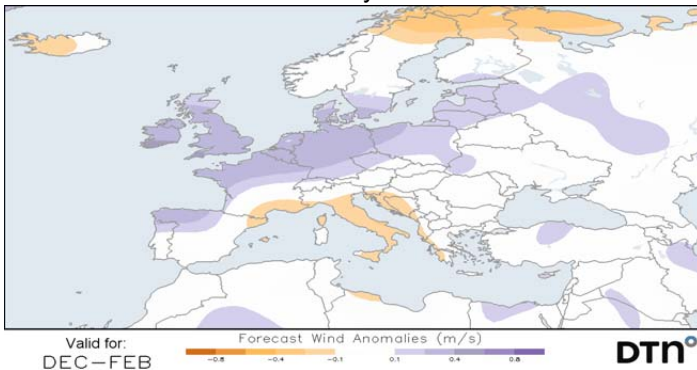
September 2023 to November 2023 Wind Anomalies



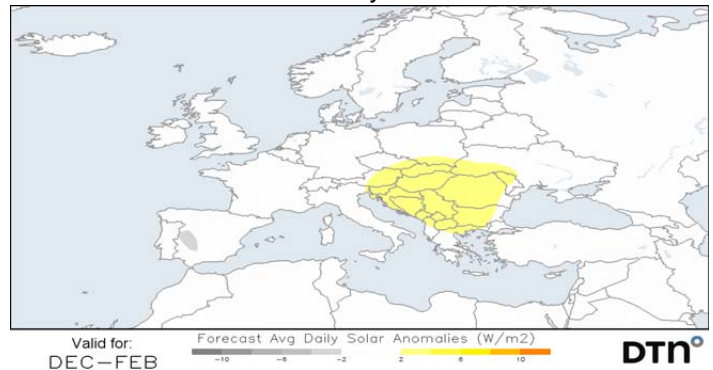
September 2023 to November 2023 Solar Anomalies



December 2023 to February 2024 Wind Anomalies



December 2023 to February 2024 Solar Anomalies

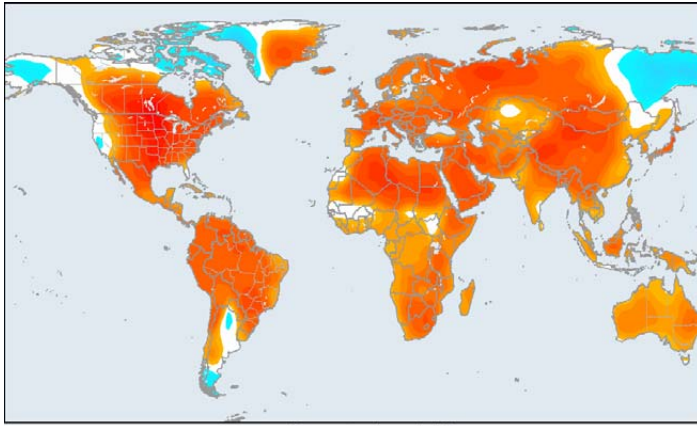




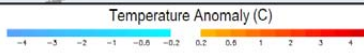
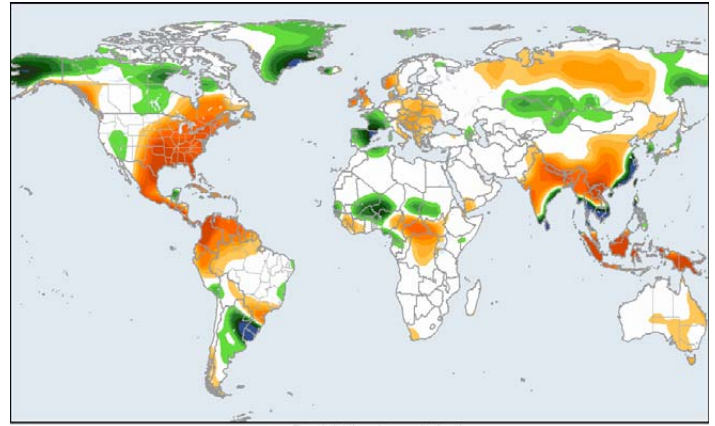
## Global Forecast Overview

Note that all temperature and precipitation anomalies are relative to the 1981-2010 period averages.

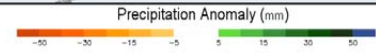
## September 2023 Forecast



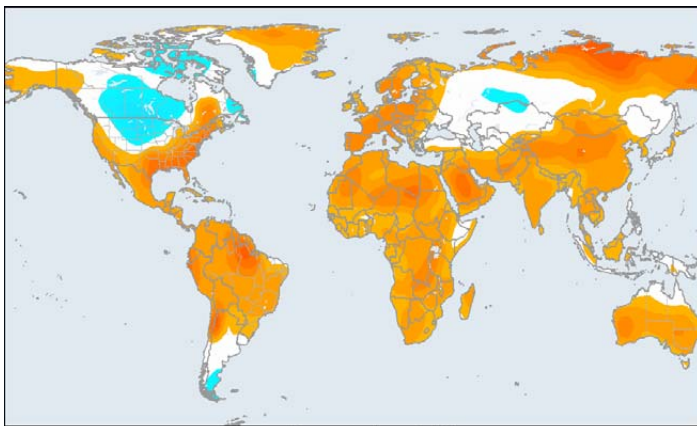
Valid for:  
SEP 2023

DTN<sup>o</sup>

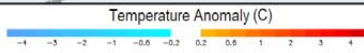
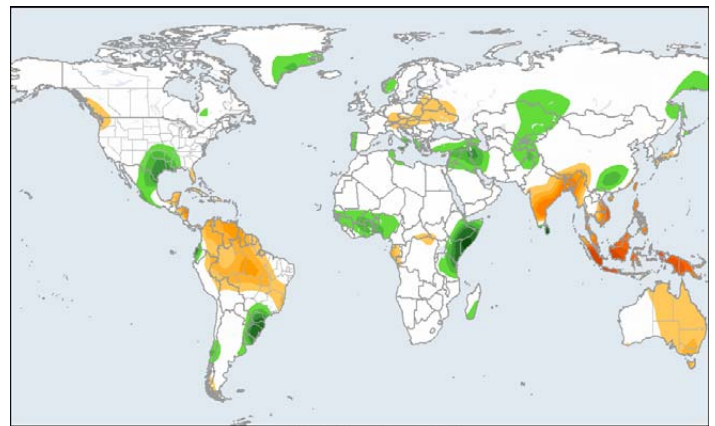
Valid for:  
SEP 2023

DTN<sup>o</sup>

## October 2023 Forecast



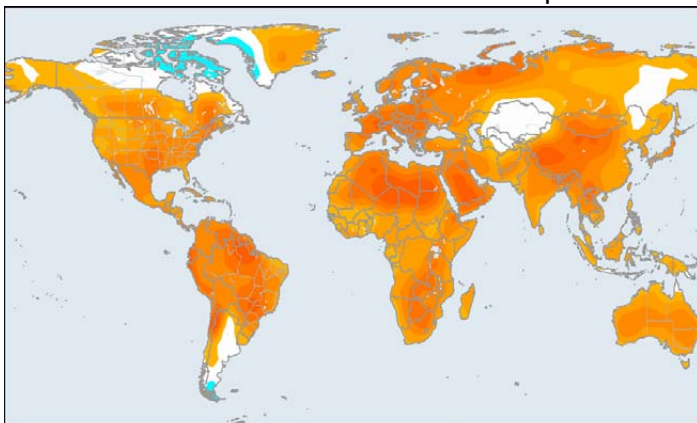
Valid for:  
OCT 2023

DTN<sup>o</sup>

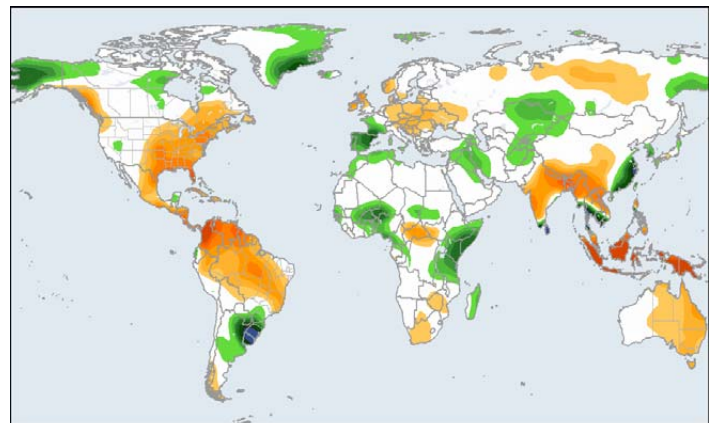
Valid for:  
OCT 2023

DTN<sup>o</sup>

## September 2023 to November 2023



Valid for:  
SEP-NOV

DTN<sup>o</sup>

Valid for:  
SEP-NOV

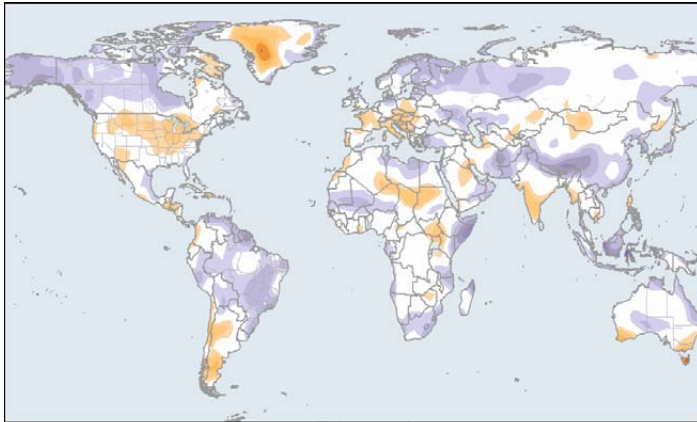
DTN<sup>o</sup>



## Global Renewables Forecast

Note that all anomalies are relative to the 1991-2020 period averages.

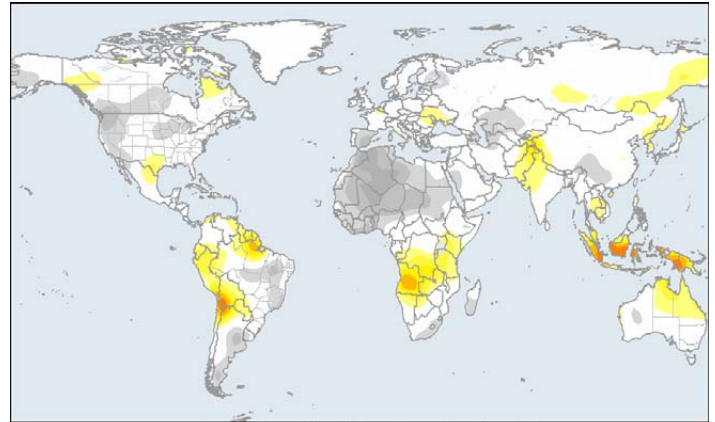
September 2023 Forecast Wind Anomalies



Valid for:  
SEP 2023

DTN<sup>°</sup>

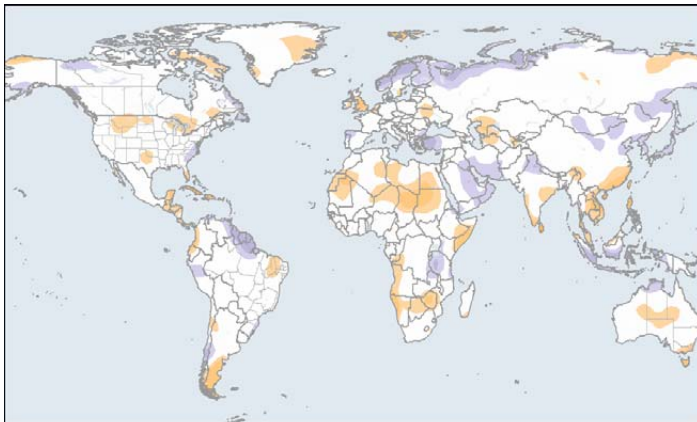
September 2023 Forecast Solar Anomalies



Valid for:  
SEP 2023

DTN<sup>°</sup>

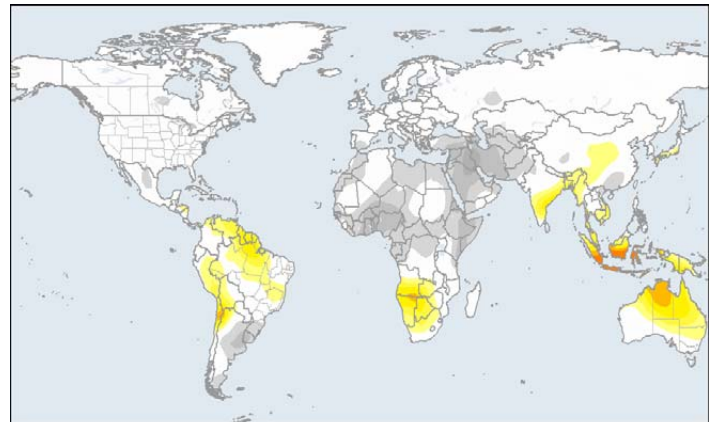
October 2023 Forecast Wind Anomalies



Valid for:  
OCT 2023

DTN<sup>°</sup>

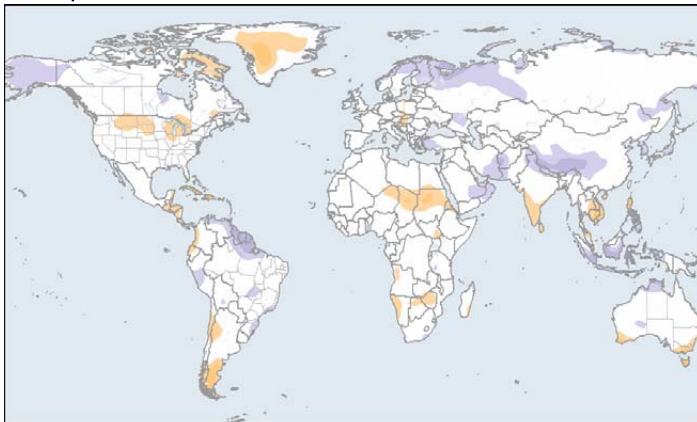
October 2023 Forecast Solar Anomalies



Valid for:  
OCT 2023

DTN<sup>°</sup>

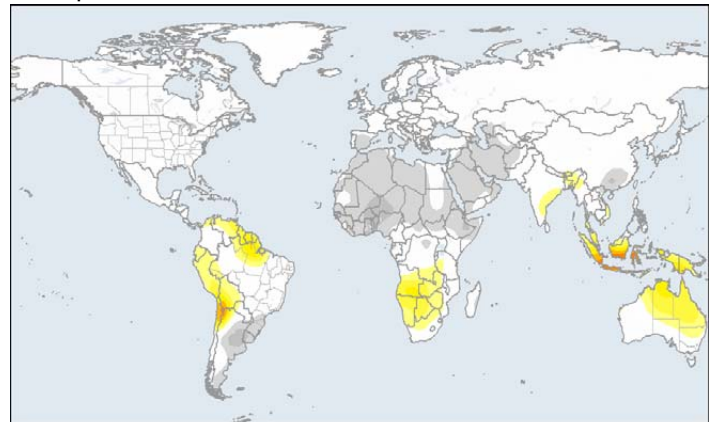
September 2023 to November 2023 Wind Anomalies



Valid for:  
SEP - NOV

DTN<sup>°</sup>

September 2023 to November 2023 Solar Anomalies



Valid for:  
SEP - NOV

DTN<sup>°</sup>

© 2021 DTN. All rights reserved. Any unauthorized reproduction, distribution or disclosure is prohibited and may result in account termination and/or prosecution. Information contained in this report is intended solely for use by the recipient and may not be further distributed without written approval from DTN.

Users of this report agree to the following:

THE REPORT is provided by DTN "AS IS", and "AS AVAILABLE" WITHOUT WARRANTY OF ANY KIND TO USER OR ANY THIRD PARTY, INCLUDING, BUT NOT LIMITED TO, ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OF THE REPORT; ACCURACY OF INFORMATIONAL CONTENT; NON-INFRINGEMENT; QUIET ENJOYMENT; AND TITLE. DTN. SHALL NOT BE LIABLE FOR ANY LOSS, INJURY, CLAIM, LIABILITY OR DAMAGE OF ANY KIND RESULTING IN ANY WAY FROM THE USE OF THIS INFORMATION. THE USER FURTHER AGREES THAT DTN. SHALL NOT BE LIABLE TO USER OR ANY THIRD PARTY FOR ANY LOSS OF PROFITS, LOSS OF USE, INTERRUPTION OF BUSINESS, OR ANY DIRECT, INDIRECT, SPECIAL, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHETHER UNDER THIS AGREEMENT OR OTHERWISE, EVEN IF DTN. WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR WAS GROSSLY NEGLIGENT. In any event, DTN. shall never be liable for any amount in excess of the fees paid by the USER to DTN. hereby. Additionally, DTN. makes no warranty that the information provided in this report will be free from errors or omissions, or defects, human or mechanical.