TRANSCRIPT

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Kate (Operator):

Welcome and thank you for standing by. Your lines are in listen only mode until today's question and answer session. If you would like to queue up to enter that question queue, you may do so by pressing star one. Today's conference is being recorded. If you have any objection, you may disconnect at this time. I would now like to turn the call over to John Bateman. You may begin.

John Bateman:

All right, thanks Kate. Good morning and thank you for joining this monthly climate update call, part of the suite of climate services that NOAA provides, the government, business, academia, and the public to support inform decision making. I'm John Bateman with NOAA Communications and I'll be facilitating the call today. If you have any additional questions after the conclusion of today's call, my colleague John Leslie and I can both be reached by email and I will spell it N-E-S-D-I-S.P-A@N-O-A-A.G-O-V. That is nesdis.pa, the PA stands for public affairs@noa.gov. Today's update will feature three short presentations followed by an operator assisted question and answer session. A copy of the presentation our speakers will follow, can be downloaded from the link in the media advisory. And with that, I will introduce our speakers. The first presenter is Karin Gleason, Monitoring Section Chief at NOAA's National Centers for Environmental Information who will provide a summary of the April, 2023 US and Global Climate Reports, as well as the latest drought monitor update.

Our second presenter is Robert Molleda, the Warning Coordination meteorologist at NOAA's National Weather Service Forecast office in Miami, Florida, who will review the record breaking rainfall that inundated parts of South Florida last month, bringing more than two feet of rain to Fort Lauderdale. And our third speaker is Johnna Infanti, a meteorologist at NOAA's Climate Prediction Center who will provide the latest El Nino/La Lina update, as well as the US temperature, precipitation, and drought outlook for June, July and August. Our first speaker will be Karin from NOAA NCEIN.

Karin Gleason:

Thank you John, and thanks to everyone for joining our call today. Let's begin by turning our attention to slide number two and the global temperatures for April, 2023. The April, 2023 global surface temperature departure was the fourth highest for April in the 174 year record. With the global land and ocean departure value at one degree Celsius or 1.8 degrees Fahrenheit above the 20th century average. Global ocean temperatures set a record high for April at 0.86 six degrees Celsius above the long-term average. This marks the second highest monthly ocean temperature for any month

on record, and is just a hundredth of a degrees Celsius shy of the warm record ocean temperature set in January of 2016. The Northern Hemisphere ranked as the ninth warmest April on record, but ocean only temperatures in the northern hemisphere tied with 2020 as the warmest on record for the month.

As you can see from the temperature departure map on the left hand side of the slide, with the red shades denoting warmer than average and blue shades cooler than average temperatures. April was characterized by warmer than average conditions throughout most of the Northeastern North America and Greenland, parts of Central and South America, Africa and Antarctica. In addition, above average temperatures covered parts of Western Europe, Eastern and Western Asia, as well as Oceania. Sea surface temperatures were above average across much of the Northern western and Southwestern Pacific Ocean, the Central and Southern Atlantic and the Indian Ocean. Temperatures were near to cooler than average across parts of Western North America and Alaska, Central and Eastern Europe, India, Central China, Central Russia, as well as Western Australia. The map on the right hand side of the slide shows how the departure values on the left compared to the 174 years of record for each specific grid box.

And as you can see from the bright red colors on the map, much of the ocean surface ranked much warmer than average to record warm during the month of April. Exceptions to this occurred across parts of the Southeastern and Eastern Pacific Ocean, as well as portions of the Northern Atlantic Ocean. Record warm temperatures covered just over 5% of the world's surface in April, while less than a percent of the world's surface had a record cold April. Moving on to slide number three, and taking a closer look at those record warm sea surface temperatures that were observed during April. Looking at the plot on the left, we see that multiple international sea surface temperature products confirmed rapid ocean warming near the start of 2023 after the long-lived La Lina began to wane. And several of these products, including NOAA's quarter degree daily optimum interpolated sea surface temperature or OISST dataset, indicated record sea surface temperature warmth at the end of March and early April.

Although the sea surface temperature started decreasing by late April, which you can see in the plot on the right hand side of the slide. Short term sea surface temperature fluctuations which result from changes in weather patterns are normal. And in the case of early 2023, all major global sea surface temperature products showed rapid ocean and surface warming, but not all of them showed that the warming was record breaking. It still remains to be seen whether this warmth will continue through the next few months or whether a moderate or strong El Nino event will develop later this year. As we know, El Nino events do have a tendency to enhance global sea surface temperature warming, so we will be monitoring and tracking this closely as the year progresses. All right. Looking at slide number four now, we see that the global temperature percentile map for the most recent year to date period January through April, April, as well as the 2023 year to date temperature comparison to the top 10 warmest years on record. And the January to April global surface temperature was 1.03 degrees Celsius or 1.85 degrees Fahrenheit above average.

This is also the fourth warmest January to April in the 174 year record. The period January to April was characterized by warmer than average conditions across much of the Northern and Eastern North America, South America, Europe, Africa, Asia, and the Arctic, as well as across parts of Antarctica and Northern and Southwestern Oceania. Sea surface temperatures were warmer than average across much of the Northern, Eastern and Southwestern Pacific, the Central and Southern Atlantic and parts of the Indian Ocean. We see near two coolers in average temperatures present across parts of the Central, Western North America and Southeastern Greenland and Iceland, Antarctica, and portions of Northeastern Asia The Central Eastern Tropical and Southeastern Pacific experience near to cooler than average sea surface temperatures during this year-to-date period. And according to NCEI's temperature ranking outlook statistical analysis at the bottom of the slide, we see that 2023 is very likely to rank among the 10 warmest years on record and currently has a reasonable chance of ranking among the five warmest years on record.

All right, zooming in a little closer to home and slide number five, we see that April temperatures averaged 51.4 degrees Fahrenheit, which was 0.3 degrees Fahrenheit above the long-term average, and that ranked in the middle third of the 129 year record. Looking at the temperature map on the left, we see that in general temperatures were below average from the Northwest, the central Rockies and northern Plains. And temperatures were above average from the central

Plains to the Great Lakes and along the East and Gulf Coast as well as parts of the Southwest. For the month of April, Maryland and Delaware each ranked second warmest on record while New Jersey ranked third warmest. Looking at precipitation for the contiguous US at average 2.40 inches for the month, which was 0.12 inch above the long term mean that also ranked in the middle third of the historical distribution. Looking at the precipitation map on the right hand side of the slide, precipitation was above average across portions of the northwest along the Gulf and East Coast and upper Midwest and below average from California to the Ohio River Valley and in parts of the northern Rockies and Maine.

Arizona, Missouri, Nebraska, and New Mexico ranked through sixth driest on record respectively. Looking at year to date temperatures now on slide number six, we see that for the contiguous US, the average temperature was 40.9 degrees Fahrenheit or 1.8 degrees Fahrenheit above the long term mean. This ranked in the warmest third of the 129 year record. The temperature map on the left shows that temperature ranks for this year to date, and we see that temperatures were above average across much of the eastern US with near to below average temperatures from the Westcoast to the northern Plain. Pennsylvania, New Jersey, Maryland, Delaware, Virginia, North Carolina, and Florida each experienced their warmest January, April period on record. And New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, West Virginia and South Carolina had their second warmest such period on record with 14 additional states ranking among their warmest 10 such year-to-date periods on record.

Precipitation for this year-to-date average 10.22 inches, which was nearly three quarters of an inch above average and that ranked in the wettest third of the historical record. Looking at the precipitation map on the right, we see precipitation was above average across much of the Southwest and Great Lakes, parts of the southern Mississippi Valley, Southeast and Northeast during this period, Wisconsin ranked wettest on record while Michigan ranked fourth and Utah ranked seventh wettest. Precipitation was below average across parts of the northwest, central and northern Plain, the mid Atlantic and Florida during the January to April period. And Maryland ranked as the 13th driest on record. Turning our attention now to slide number seven and the latest US drought monitor map that was released this morning, we see that approximately 20% of the contiguous US is currently in drought. This is about 5% less than it was at the middle of last. We see that drought conditions lessened or diminished across the mid-Atlantic as well as the plains.

Drought conditions expanded or intensified across portions of the Midwest. And across Florida we saw the overall footprint or spatial extent of drought contract or shrink, but portions of West Central Florida did experience drought intensification and expansion. Outside of the contiguous US we did see some drought coverage lesson across Puerto Rico. And with that I'll turn the presentation over to Robert who will talk about the extreme rainfall that occurred in Florida last month. Robert?

Robert Molleda:

Okay, thanks Karen. Good morning everyone. So yeah, let's talk about the extreme rainfall event that occurred in the Fort Lauderdale Florida area back on April 12th. So just a little bit over a month ago. So right now that the slide eight is the intro slide, so there's my email address if you want to reach me afterwards with any additional questions. We go over to slide nine. What we'll do is we'll start looking at kind of the big picture weather patterns that led to this extreme rainfall. So on the morning of April 12th, what basically what we had was a warm front or a frontal system that initially moved through South Florida a few days prior. Then it stalled out just to our south over the Straits of Florida and then started to move back to the north. So we're looking in that the area of interest, the Fort Lauderdale area, the area inside that blue circle that's preferred to there on that map.

So the front is the red line with the funny circles on it, that's the front was beginning to back up and move back north or across the area. Then at the same time, we had a low pressure system over the Gulf of Mexico and that was also beginning to interact with the front, and that's really what helped the stuff that helped to set the stage for this extreme rainfall event. So this general weather pattern, it's something that does occur from time to time in Florida and in the Florida area and in the Gulf of Mexico. So when we have this type of pattern, it's usually accompanied by at least a

threat of flooding rain if not even the likelihood of it. So based on that as early as the morning before, so really a little bit over 24 hours before the flooding occurred, a flood watch was issued for all of South Florida. So this pattern was identified well in advance, at least the general pattern that could lead to the flooding rainfall.

So we move on to the next slide. So in slide number 10, now we move forward to the early afternoon hours, which that's when the rainfall was beginning to pick up in intensity. So as that warm front was at this point was actually moving over the area. So the warm front acts as a focus where the moisture that's coming in from the east where in this case from the Atlantic ocean is beginning to converge with moisture coming up from the south, well from the southwest from the Gulf of Mexico. So we have some moisture sources and air masses from these moisture sources converging along this front. And as a result, that's when the rains really began to focus and pick up across the area. And the first flash flood warning for the Fort Lauderdale area was issued at 2:35 PM on April 12th.

I guess so moving now to slide 11. So as we move on later in the day, that low pressure area in the Gulf was slowly getting stronger, a little bit more organized. And as a result that warm front was continued or was continuing to move northward. So as it moved northward, it was doing it very slowly so it wasn't moving very quickly. If it had moved fast, we wouldn't have seen this type of rainfall. But the fact that the front was slowly moving northward meant that area of focused moisture, that area where the rain bands were continuing to form and develop, were just kind of sitting over the same area. And so it led to the situation we called back building. So these bands of rain just keep on forming and building back over the same area and moving over the same area. So between 4:00 PM and 10:00 PM that was the period where we had nearly continuous heavy rainfall. Especially in the area right near the airport, Fort Lauderdale Hollywood International Airport, which had the highest recorded rainfall for the event.

In fact, in the timeframe between four and 10:00 PM, one of our weather observing stations from one of our partners networks, WeatherSTEM, they recorded 20 inches of rain just in six hours between 4:00 PM and 10:00 PM. And so the flash flood warnings that we first issued early in the afternoon just after 2:00 PM, those flash flood warnings continued through the afternoon hours. In other words, we just kept on issuing the flash flood warnings because the rain just was not stopping. And in fact the rainfall rates were increasing. And we started then to get the reports of vehicles, of numerous vehicles being stalled and actually even floating on roadways. There were even some areas where some rescues were occurring there in the streets there in the Fort Lauderdale area. So that prompted us to issue a flash flood emergency, which is the highest level flash flood warning. And we issued that just a couple minutes before 8:00 PM, pretty much during the height of the event. And it's actually the first time that the National Weather Service Miami office has issued a flash flood emergency for for metro Southeast Florida. So certainly it takes something highly unusual for us to put out a flash flood emergency, but indeed that's what we did during the evening there of April 12th.

So move on to slide number 12. Basically this is the maps showing the rainfall amounts that were recorded across the area generally over a 24 hour period. So I know it's hard to see on that map. On the map on right at least there's a value there of 25.91 inches, and that's value is from the Fort Lauderdale Airport. It's not from the National Weather Service Station there. It's actually from that WeatherSTEM network station that's there on the east side of Fort Lauderdale Hollywood Airport. But they're really, there's a fairly large area of 15 to 25 inches of rain, from the city of Fort Lauderdale South over the airport and then south from there to the city's of Hollywood and Venia Beach, which also received again in excess of 15 inches of rain here, which are very high rainfall amounts. And a lot of that fell in less than 12 hours.

I guess, so in slide 13 now. There was quite a bit of talk about this being referred to as a "one in thousand year flood." And I say that in quotation mark because I want to just kind of mention what that means or really the way that it was supposed to be referred to. So that's in reference to the annual exceedance probability. So these are statistics that are based on recorded rainfall over different areas, rainfall rates. And then based on historical rainfall and rainfall rates, we then run it through a statistical models, if you will. And then we come up with these annual exceedance probabilities based on rainfall rates or amount of rain over certain timeframes. So for the area of the highest rainfall, which again was the area right in Fort Lauderdale, the Fort Lauderdale Airport area, the areas I got about 20 to 25 inches, that annual

exceedance probability was 0.1%. So in other words, it's a less than one in 1000 chance of that rainfall, that amount of rainfall in that period of time occurring at that location.

So when you hear that term one in that 1000 year, it's really a one in 1000 chance each year of that event occurring. So obviously we're talking 0.1% here, it's a very, very low chance of occurring in any given year. It's not the same as a 1000 year flood. In other words, the implication when you say 1000 year flood is that it only occurs once in a thousand years. Or it last occurred a thousand years ago. And what this is saying here actually is, there's a 0.1% chance each year. So next year the chance of that this type of rainfall occurring at that location is the same, this 0.1% and it's the same probability each year. Okay. So down to slide 14. So the next two slides just give me some pictures of some the flooding and some of the impacts. These pictures in slide 14 are from the airport. Fort Lawndale Hollywood is a fairly big airport. It serves, it definitely has a lot of flights coming in and out each day. So you can see just the incredible amount of rain, the flooding or just the depth of the water there in the main entry and exit points of the terminals and even on the runway.

So we go down to slide 15. That's the monsoonal pictures of flooding from the city of Fort Lauderdale showing cars completely submerged or almost completely submerged. Cars floating, some neighborhoods where water came into homes two to three feet deep, which is for South Florida that's very rare for rainfall flooding to cause that much water to get into homes. And we did a survey of the flooding the day after. A few of us from the NWS Miami office here and, that picture on the lower of just cars just stranded and just kind of piled up randomly. We saw that in many, many different locations. And I think I saw there, I don't know if I'd seen an actual number of vehicles that were damaged or stranded, but from what I've heard it's in the thousands. It's not just the low thousands maybe. So just really an extremely, extremely impactful rainfall that... South Florida, we do get flooding rains here of course from time to time, but this was definitely on the high end of some of the rainfall events and flooding events that we've seen here over the last few years.

All right, so with that I will pass it over to Johnna from the Climate Prediction Center, who'll be talking about the outlook for the next several months.

Johanna Infanti:

Thank you very much and good morning everyone. This is Johnna Infanti and I'm a meteorologist from the National Weather Service Climate Prediction Center. I'd like to bring your attention to slide 16 of the presentation, which shows the current sea surface temperature observations and the forecast for the El Nino Southern Osculation or ENSO. The figure on the left shows the average sea surface temperature anomalies over the last month. Blue shading in this figure represents areas where sea surface temperatures are below normal. And the orange to red areas correspond to areas where sea surface temperatures are above normal. The horizontal black line in the center of the plot represents the equator and the vertical black line represents the international date line. Near the center of the map the light orange or yellow shading indicates that sea surface temperatures were near normal during the past four weeks. And the darker red shading in the Eastern and Western Pacific indicates that sea surface temperatures were above average in those regions. Sea surface temperatures in what is called El Nino 3.4 region of the Tropical Pacific have reached 0.5 degrees Celsius above normals in the recent week.

And ENSO neutral conditions are currently observed, meaning that we currently do not have either La Nina or El Nino. However, an El Nino watch has been issued, which is issued when conditions are favorable for the development of El Nino within the next six months. The chart on the right shows the ENSO forecast issued May, 2023 through December, January, February, 2023 to 2024. The chart indicates the probability of El Nino shown at the red bars, neutral conditions shown with the gray bars. Or La Lina shown with blue bars when applicable for sea surface temperatures in the El Nino 3.4 region. The chart indicates that a transition from ENSO neutral to El Nino is favored during May, June, July, 2023 with a greater than 90% chance of El Nino persisting into the northern hemisphere winter. Shifting now to slide 17, which shows our monthly outlooks for the month of June. These outlooks represent the probabilities that the mean

temperature or total precipitation for the month will be below, near or above normal. The red and orange shading on the map to the left indicates areas where above normal temperatures are the most likely outcome. While blue shading if included, would indicate areas where below normal temperatures are most likely.

For precipitation green shading indicates areas where above normal precipitation is most likely and brown shading indicates areas where below normal precipitation is most likely. A warm start to June is favored across the northern United States for the region stretching from the Pacific Northwest East to the northern Great Plains. And that is owing to persistent bridging over Alaska and the Northern two-thirds of the US. The extension of this region of warming southward into the central Great Plains and middle Mississippi Valley is due to the existence of low soil moisture anomalies in the region which are expected to lead to warm surface temperatures. Shifting to the southern part of the map above normal temperatures are also favorite for parts of the southwest, the Rio Grande Valley, Gulf Coast, and Florida, where dynamical models agreed on elevated probabilities of above normal temperatures and decadal trends are warm. New England also tilts warm given agreement among our available tools. And finally, over Alaska, nearly all of the state tilts toward above normal temperatures based primarily on model guidance except for the western coast of Alaska due to below normal SST anomalies across the eastern barring sea.

Moving on to precipitation, which is shown in the figure on the right hand side. The green shading across portions of the high Plain, central Rockies and Great Basin indicates elevator probabilities of above normal precipitation during the month of June, which is primarily based on model guidance. Elevated probabilities for below normal precipitation, our forecast for southeastern Alaska and parts of the Pacific Northwest based on model guidance as well as El Nino composites, while above normal precipitation is forecast over Florida based again on model guidance. A large area of EC was necessary in the June precipitation outlook due to weaker conflicting signals among the guidance and lower predictability associated with convective rainfall during the late spring and early summer. Looking further ahead to the three month period for June, July, August, I'll like to bring your attention to slide 18. The June, July, August, 2023 temperature outlook on the left hand side of the slide favors above normal temperatures over the western United States, the Southwest Southeast, and along the eastern seaboard to New England.

A tilt toward warmer than normal temperatures is also favored over most of Alaska. The largest probabilities of above normal temperatures, 60 to 70% are forecast over the southwest and probabilities reach 50 to 60% along the coast from Texas to New England. Over the southwest, probabilities are increased given that models are consistent on forecasting warmer than normal temperatures. Soil moisture is anomalously dry, decadal temperature trend is above normal and also where precipitation is forecasted tilt towards below normal for this season. 50 to 60% probabilities are indicated from the southwest along the coast of New England where there was strong model agreement as well as support from above normal decadal temperature trends and above normal coastal SFTs. Above normal temperatures are forecast over central and south southern Alaska. Those uncertainty exists over the northern part of the state where guidance was weaker and inconsistent. Uncertainty is also apparent over the northern Plains to the Great Lakes and parts of the Ohio River valley where tools were weaker head into consistent signals.

The June, July, August, 2023 precipitation outlook on the right hand side of the slide depicts below normal precipitation probability is over the Pacific Northwest and parts of the Northern Rockies, the southwest and south coast Alaska. The tilt toward below normal precipitation over the Pacific Northwest and south coast of Alaska's consisted with expected El Nino teleconnections, as well as the low normal decadal temperature trends, oh I'm sorry, precipitation trends. Dynamical models are in good agreement on below normal precipitation over the southwest, which may provide a sluggish start to the monsoon this summer. On the flip side, model guidance and recent trends favor above normal precipitation across the Ohio and Tennessee Valley, the southeast, the mid-Atlantic region, the middle and lower Mississippi Valley. Above normal precipitation probability is favored over the northern part of Alaska, owing to weak decadal trends and above normal probabilities, and weak decadal trends and some dynamical model forecasts, but probabilities are weak. The center of Alaska is uncertain given inconsistent signals and significant changes from last month's forecast for this month.

And finally, wrapping things up with the drought outlook on slide 19. The brown areas on the map indicate where drought is currently ongoing and expected to continue. Tan indicates that drought will remain but improve. Green indicates drought and removal likely and yellow indicates drought development. Drought coverage and intensity have steadily decreased since October, 2022. And as of early May, drought currently covers about 23% of the conus. Drought is expected to persist over parts of the Pacific Northwest, eastern New Mexico and western Texas. And improvement is indicated for parts of the central United States as the region moves into the wettest time of the year, as well as southern Nevada and central Utah where surplus precipitation of the next few weeks is expected to lead to improve conditions. Above normal precipitation is also favored over Florida in the seasonal outlook and drought removal is anticipated. There are slightly enhanced chances for improved conditions across Western Puerto Rico, but odds favor below normal precipitation statewide across Hawaii, causing persisting or worsening drought conditions in the northern big island and significant areas of drought development across leeward areas of all major islands. And that is it from the Climate Prediction Center and back to you John.

John Bateman:

Thanks Johnna. We will now take specific questions from the call participant, please be sure to identify who you would like to answer the question if possible. And Kate, could you please remind the call participants how they can ask a question and then please queue up the first question.

Kate (Operator):

Certainly, if you would like to ask a question at this time you may do so by pressing star one, you will be prompted to record your name which is used to introduce your question. If you find you would like to withdraw your question, you may do so by pressing star two. Again, please press star one at this time if you would like to ask a question. One moment for our first question. Our first question is from Barbara Moran, your line is open.

Barbara Moran:

Hi there, this is Barbara Moran from WBUR in Boston, and this question is for Johnna Infanti. I'm wondering about the above average temperature predictions for New England, it's a little parochial out here so we're interested in that. And I'm wondering if that is because of the predicted El Nino or does the El Nino even have any real effect on New England weather and rain? Thanks.

Johanna Infanti:

Hey Barbara. Great question. So for this particular forecast for June, July, August, we actually don't see a huge impact from El Nino temperatures overall, and Boston area wouldn't really be included in there either. The reason here for the increased temperatures really is based more on very consistent model guidance, which is showing above normal temperatures as well as above normal coastal sea surface temperatures that have been surrounding New England for quite a while now. And we also have decadal trends that are tilting towards warm, which has increased our confidence in the prediction for New England.

Barbara Moran:

Great, thank you.

Johanna Infanti:

No problem.

Barbara Moran:

All right. Can I ask one quick follow up, is that okay?

Johanna Infanti:

Oh, totally. Go ahead.

Barbara Moran:

I was just wondering if going forward, if the El Nino forms as predicted what effect would that have on overall temperatures and then especially if at all in New England?

Johanna Infanti:

Sure. So for New England, so El Nino can affect our weather pretty significantly. And what will happen is that when the waters warm up in the Pacific, that can cause the jet stream to move south if it's neutral position. So what happens is generally this would be more in the wintertime, you would see the northern US be drier and warmer than usual. But in the US Gulf Coast and Southeast there's usually be wetter and have increased flooding. Over in New England more specifically, I'm actually going to just take a look here. Just give me one second. Over in New England it's looking like in the wintertime we would expect more warming based on some of our results here.

Barbara Moran:

Great, thank you very much.

Kate (Operator):

Our next question is from Eric Niiler, your line is open.

Eric Niiler:

Hi, this is Eric Niiler at the Wall Street Journal. Thanks for taking my call and for doing the briefing today. Just trying to get a handle on the ocean temperatures, and we're not in El Nino yet but we're still seeing these really, really high temperatures globally. So I wonder if Karin or someone can discuss that and what may be some of the factors behind that.

Karin Gleason:

Sure. This is Karin Gleason with the National Centers for Environmental Information. It's a great question. The interesting thing is that even during a La Lina, there are other basins that continue to respond to warming. And so basically despite the fact that we've been in La Nina for the last three winters and the waters over the Eastern equatorial Pacific have been cooler than average, other basins have actually been warmer and continued to warm throughout the period. So as the La Lina abates or wanes as it has, and those temperatures kind of neutralize and become warmer, then the overall average for the global oceans increases in response. But likewise, we have seen a number of marine heat waves across of the various basins in the ocean. And those heat waves we do see trends, increasing trends in both frequency and duration of these marine heat waves. And in general, the surface of the ocean does respond to weather. So there are small fluctuations increases in decreases that do happen. Just like land surfaces respond to frontal patterns and cold spells and warm spells.

So all of that kind of combined has kind of brought attention perhaps to the record warming in the optimal inter interpolated SST product as well as the increases in the other global sea surface temperature products that have shown an increase in the last several months, the first part of this year.

Eric Niiler:

Thank you.

Kate (Operator):

As a reminder, you may press star one if you would like to join the queue to ask a question. Our next question is from Drew Can. Your line is open.

Drew Cann

Yeah. Hi there. It's Drew Cann with the Atlanta Journal Constitution. My question is similar to the one about Boston. The forecast for summer in Georgia looks like it's favoring warmer than normal temperatures and a wetter summer, especially for the southern half of the state. I just wanted to see if you could kind of break down what's driving that forecast. Is it the transition to El Nino? Is it more just driven by the longer term warming trend driven by climate change? I just want to get a sense for that.

Johanna Infanti:

Right. So for you, so we're in kind of a transition season right now where we're transitioning from more neutral into El Nino. And what can typically happen is that it takes a bit for the atmosphere to catch up to the warming of the sea surface temperatures in the tropical Pacific. So while we do take into consideration El Nino for this particular outlook, it's not quite as strong of an influence as some of the other things that we might be looking at. So in your case, we do have evidence from our model guidance that is pretty much in agreement on warmer temperatures and wetter precipitation, and as well as some coastal SSTs and in terms of that are warmer than average. And then in terms of the decadal trends question, what we're looking at there is the trend for the last 10 years, whether that is increasing or decreasing. And then if that's all in agreement, that can give us additional confidence in the particular forecast for a given region.

Drew Cann:

Okay, thanks.

Johanna Infanti:

No problem.

Kate (Operator):

There are no other questions in the queue at this time.

John Bateman:

Thanks, Kate. If there are no further questions, I will wrap up the call. First, I'd like to thank all of our speakers for their time and to everyone else for participating in the conference call today. I will end by reminding you guys to mark your calendar for a few upcoming events. The release of the May, 2023 US Climate Report is scheduled for June 8th. The release of the May, 2023 Global Climate Report is scheduled for June 14th. And next week NOAA will hold its 2023 Atlantic Hurricane Season Outlook media briefing at 11:00 AM Eastern Time on May 25th. The media advisory for that can be found on noaa.gov. Lastly, an audio file of this call will be posted on the noaa.gov media advisory site later today. And if you have any further informational needs, please feel free to email me, John Bateman. My contact information is available at the top of the media advisory. Thank you.

Kate (Operator):

This concludes today's conference. Thank you for your attendance. You may disconnect at this time.