TRANSCRIPT

Media Briefing - NOAA's 2023 Atlantic Hurricane Season Outlook August Update

August 10, 2023 at 11 am via GoToMeeting

Hosted by NOAA National Weather Service Public Affairs

Media advisory about briefing

NOAA to update 2023 Atlantic Hurricane Season Outlook

Hurricane Outlook news release

NOAA forecasters increase Atlantic hurricane season prediction to 'above normal'

0:16

Good morning, everyone. We'll get started here in about another minute.

0:58

Thank you, and good morning. My name is John Moore, and I'm the media contact for today's Hurricane Outlook Mid-season Update.

1:04

Before we get started, I would like to go over a few housekeeping items with you.

1:08

This webinar is being recorded, so if you do not wish to be recorded, please disconnect at this time.

1:16

Today, you will hear from Matthew Rosenkrans, lead, Seasonal Hurricane Forecaster, for NOAA's Climate Prediction Center. He is going to deliver NOAA's updated 2023 Atlantic Hurricane Season Outlook.

1:27

Mister Rosenkrans and his team update the seasonal hurricane Outlook, initially issued in May, each year, in early August as the peak months of the season gets underway.

1:37

You will be able to find a news release and graphics related to today's release posted to noaa.gov momentarily.

1:44

And the link that will be provided via chat later on in this broadcast.

1:49

Also later in the webinar, following mister Rosenkrans remarks, you will have an opportunity to ask questions about the outlook.

1:57

If you have any additional questions about the outlook, or would like to schedule a follow up interview with mister Rosenkrans, Please contact me at john.moore at NOAA dot gov, that J-O-H-N dot M-O-O-R-E, at NOAA dot gov, or by phone at 2 0 2, 603, 25 23.

2:17

And with that, I would like to turn it over to Matt to deliver the updated outlook.

2:24

Thank you, John, and thank you, everyone, for joining us for today's announcement.

2:29

The Atlantic Hurricane Season officially extends from the first of June through the end of November.

2:33

So far this season, there have been five named storms, including one hurricane in the Atlantic Basin.

2:41

We're now entering the peak months of the Atlantic hurricane season, August through October.

2:46

Historically, this is what about 90% of all tropical storm activity occurs in the Atlantic.

2:52

Which is why we issue an updated outlook in early August.

2:56

and now onto the updated 2023 Outlook.

3:01

Atmospheric and oceanic conditions now slightly favor and above normal 2023 Atlantic hurricane season.

3:08

We have increased the chances for above normal activity, to 60%, from 30%.

3:15

The likelihood of near normal activity has now decreased from decrease to 25% from 40%.

3:23

The chances of a below normal season are now at 15%.

3:27

We're now predicting the likely ranges of tropical storm and hurricane activity to be 14 to 21 named storms, of which 6 to 11 could become hurricanes.

3:40

And 2 to 5 of those could become major hurricanes.

3:44

Major hurricanes are hurricanes that reach Category 3, 4, or 5, with winds of 111 miles per hour or greater.

3:53

These ranges take into account the five named storms, including one hurricane, that already formed this season.

4:02

Please keep in mind that NOAA's Hurricane Season Outlook is a general guide to the overall seasonal activity and does not predict landfilling storms.

4:13

Landfalls are currently only predictable within about one week of a storm potentially reaching a coastline.

4:20

In making this outlook, there are several climate factors we analyzed that contributed to our prediction of an above average hurricane season the main climate factors expected to influence the 2023 Atlantic Hurricane Activity, the ongoing El Nino, and the warm phase of the Atlantic Multi-decadal Oscillation, which includes: record warm Atlantic sea surface temperatures.

4:47

More specifically, odds are at excess of 95% that the ongoing El Nino will continue through the autumn of 2023.

4:57

Typically, El nino related changes to the atmosphere inhibit tropical activity in the Atlantic, especially in the Western Caribbean, and the Gulf of Mexico.

5:07

This year, the changes typically associated with El Nino appear to be emerging a bit later than initially anticipated.

5:15

So this season could have more activity than foreseen and the May outlook.

5:21

If those El nino related changes move in quickly, activity could be near the lower end of our ranges.

5:30

If the local conditions in the Atlantic prevail for longer than anticipated activity, could be near the upper end of our predicted ranges. One of the local conditions in the Atlantic that we monitor is the sea surface temperature.

5:45

The June July Sea Surface Temperature in the main development region of the North Atlantic were the warmest since 19 50 at 1.23 degrees centigrade above normal.

5:58

Warm waters are conducive to more development.

6:02

Those warm waters likely contributed to the development of two tropical storms in the deep tropics during June.

6:09

Tropical storm development in the deep tropics during June and July is usually a harbinger of a busy season to follow.

6:18

We also monitor and predict the West African monsoon.

6:22

As a stronger West African monsoon is typically related to more tropical Atlantic activity.

6:29

During 2023, the West African monsoon rains have been robust, but the related wind patterns have been nearer to normal.

6:38

Giving a bit of a mixed signal into the outlook.

6:43

The ongoing El Nino, potentially competing with local conditions in the Atlantic increase the uncertainty in the outlook.

6:51

The increased uncertainty relative to years when climate factors, such as El Nino and the sea surface temperatures in the Atlantic align or reinforce each other, is reflected in the relatively lower probabilities and slightly wider ranges.

7:10

No matter the overall activity, we urge you to prepare now for the upcoming core of the hurricane season, as a single storm can have catastrophic impacts.

7:21

FEMAs ready dot gov and your local Emergency management office are key resources to helping you prepare.

7:29

prepairing now, makes for a safer and more resilient community should a storm strike your area.

7:35

Additionally, in recent years, we've seen the threats from hurricanes expand beyond, damaging winds, and dangerous storm surge to torrential rain, and inland flooding, threatening life and property far from the landfall location.

7:50

If you are in any region prone to inland flooding, stay tuned to the National Hurricane Center, And your Local weather forecast office or their latest watches and warnings.

8:01

Also, be sure to adhere to advice from your local emergency managers during a storm or evacuation and safety information.

8:11

And now, I'll be happy to take questions about the outlook.

8:20

Thank you, Matt, Thanks for those remarks. At this time, Matt, We'll take questions about those 2023 mid-season Hurricane Outlook update. If you have any questions that are not related to the Outlook, please reach out to me following the call. To ask verbal questions. Please use the raise hand feature.

8:36

You can also submit text questions through the question box.

8:40

We will start by taking a few verbal questions before we begin to alternate until our time is up.

8:48

So well, wait until we call you. And once we call on your name, please unmute yourself, then state your affiliation and ask your question.

9:04

First off, we have Seth Bornstein with the AP.

9:08

I'll unmute you, Please unmute yourself as well.

9:15

Thank you, I assume you can hear me. Thanks for doing a seth borenstein AP. 2 questions, Matthew.

9:22

First, just, when I look at the hurricane center archive, it's got a through D, that's four of them.

9:31

So, can you explain why there are five named storms, but we only go through Don, which is, you know, four and second more, importantly, in terms of how this compares to the, you know, your earlier May forecast.

9:49

Is it fair to say that the Atlantic Sea surface temperatures are worse?

9:55

Not only are they warmer than ever, but are they warmer than you thought? And in other words, this battle that we talked about two months ago, between El Nino and sea surface temperature for control of the hurricane season is it fair to say?

10:11

The sea surface temperatures are winning?

10:14

The hot Atlantic is winning versus El Nino?

10:22

I can't hear you.

10:26

Yeah, so you mentioned these four named storms that we had, oh, can you hear me?

10:34

Yes, yes.

10:38

So if you hear me thefour names, stars have been mentioned.

10:42

You know, the names A through D, there was a unnamed truck subtropical storm in January, and the name of the record is officially unnamed.

10:53

So that's its name.

10:56

So there have been five storms this calendar year.

11:00

As far as the rest of it, yeah, a lot of the predictions from May did not forecast a continuation of record warm sea surface temperatures.

11:09

Its very rare for most models to forecast continuations of records, but the observations have come in, where we continue to record conditions in the Atlantic.

11:18

So, they are slightly warmer than what we had initially anticipated in May, as far as winning.

11:25

I don't really describe it. is winning or losing is just that the impacts of El Nino have been slower to emerge over the Atlantic.

11:34

Whether that's directly related to just the sea surface temperatures, the local Atlantic circulation, or are the El nino related changes that we typically see around the globe being impacted and ameliorated through other mechanisms, Something in Asia, some mid-latitudes circulation. But we wouldn't be able to say that until kind of the end of the season. When we do an attribution modeling study.

12:00

When you're saying impacts, I just want to be clear are you talking about the wind shear is what we're not seeing mostly.

12:09

Wind shear and changes to the vertical stability and moisture profiles in the Atlantic. Those are the two main impacts from El Nino.

12:19

Thank you.

12:25

All right, thank you, Seth.

12:26

Next, we'll go to Roshaun Higgins, you can unmute yourself.

12:31

And ask your question.

12:38

Yes, I just wanted to ask, if you all are considering warm temperatures in the Gulf of Mexico and, like, the loop current, and if that's gonna affect how strong hurricanes or tropical storms are going to be.

13:02

So, specifically, none of the forecast tools take into specific account, the sea surface temperatures, of just the Gulf of Mexico.

13:10

They are looking at sea surface temperatures in the tropical Atlantic, and the main development region, which includes part of the Gulf of Mexico.

13:17

Yeah, and the loop current, that evolves with warming cold patterns on time periods of weeks.

13:26

So, that'll go through a warm and cold phase, shedding off warm or cold gyres a few times throughout the core months of the hurricane season. And it has typically has more of an impact on individual storms or a couple of storms

13:40

So through that region, when there's a warm Eddy or Cool Eddie: So we don't explicitly predict the loop current on a seasonal timescale.

13:54

Thank you for your question. Next, we will go to our question box with our first question is from Chase Kane.

14:00

With NBC Universal.

14:02

Matt, Chase wants to know, How might the extremely warm sea surface temperatures impact both rapid intensification of storms as well as their range?

14:11

Do we worry about storms impacting further north along the East coast?

14:17

So during active years, there was a doubling of the chance of a hurricane making landfall on the east coast of the US relative to normal or inactive years.

14:28

The warmer waters and rapid intensification, that's the rapid intensification, is really a short-term phenomena.

14:37

You know, when it happens, by definition, with you know 24 millibars within 24 hours.

14:43

There's formal definitions for rapid intensification with winds or pressures.

14:48

And those short-term fluctuations are best addressed with the National Hurricane Center products and the team there that focuses on short-term variations in tropical cyclone and hurricane activity.

15:02

Alright, thank you, Matt. Next we'll go to 10 Merrill Lynch and please state your affiliation before you ask your question I'm unmuted now.

15:16

Well, yes. I am with the ABC Affiliate in southern West Virginia, the ITV, I'm the chief meteorologists there.

15:24

My two questions were: First, when do you expect the Saharan dust likely dissipate under the Saharan Desert, has been a factor in inhibiting tropical development?

15:37

And the storm that was off the coast, Memorial Day Weekend, I know that there was some indication, the reason I, with that particular storm, is that one that you're diagnosed after the season to see if potentially it was a sub tropical storm.

15:56

So, Saharan Air outbreaks typically peak in the month of July.

16:02

So, we should start to see them wain.

16:05

We saw a lot of this last year where there was very little activity in July and maybe in the first part of August most of August, we ended up with 14 named storms and eight hurricanes in the second half of the hurricane season.

16:20

Then, when you look back through data going back to the mid nineties so 20, 30 years of data Saharan era outbreaks do peak in early July and then they typically will fade off in both their intensity and frequency as the season goes on.

16:36

Um, National Hurricane Center, as far as the second part of your question, National Hurricane Center does review last years, or the activity during the past year.

16:48

So they, they may determine that there was another unnamed, subtropical storm out there, but had an eye.

16:54

But it would be, it would depend on many criteria, such as the wind profiles around the storm, was it in many other quadrants of the storm.

17:01

And all of the things that would define it as having tropical characteristics or not, and far as those characteristics, the staff at the National Hurricane Center determines the naming names are not naming of a storm or a system during the review process.

17:19

So, they'd be the best answer, the question, as far as, Are they gonna go back?

17:22

And look at that specific storm, OK. And that probably would be diagnosed until the end of the season, correct?

17:29

Yeah, so, at the end of every season, there, they do go back and analyze every storm that was named, and potentially, other storms that were not named but are of record.

17:41

To create, the best tracks, data would have heard that file that we use that are considered the official record for tropical storm activity in the Atlantic.

17:50

OK, thank you very much, appreciate it.

17:55

Thank you.

17:57

Next, we'll have a, text question from Mary Roelof with Forbes.

18:04

How does this seasonal Outlook compared to the recent years?

18:11

Um, I'm not sure exactly what's meant by that.

18:16

But this seasonal Outlook, now the updated Outlook for 14 to 21 name storms, um, would put us in line with last year's.

18:25

Look, where we had 14 named storms, or last year's observations, where we had 14 named storms.

18:31

2021 had 21 named storms.

18:36

And 2020 had 30 named storms.

18:38

So we've seen some pretty busy years recently are 6 to 11 hurricanes that are forecast.

18:45

Now forecast this year, which we had 5 to 9 forecast earlier, would be in line with the eight hurricanes we had last year, and these seven hurricanes from the year before that.

18:56

Normal for each one of these categories is 14 named storms.

19:02

seven hurricanes and three major hurricanes.

19:10

All right, Thank you.

19:12

Next, we'll go to another question. Text question, this one from Nicolas Spangler with Newsday.

19:20

Nicolas wants to know, can you talk a bit more about the potential impact to the Long Island, New York, and anytime to Long Island in New York City and any changes from the May forecast for that area?

19:35

There are no specific changes to this Outlook related to Long Island or New York City area because these forecasts are for the overall Atlantic Ocean, including the Gulf of Mexico in the Caribbean, an activity for those.

19:52

As far as regional rising these outlooks, it's something we're researching and looking into running numbers and statistics.

20:00

And when we can confidently make outlooks for sub regions, parts of the basin.

20:06

The light basins such as things closer to the coast will start releasing them but we're working on the statistics and iyou really want to make sure that those are very solid statistics before releasing them to the public.

20:27

Thank you.

20:28

Our next question comes from Anthony Wood from The Inquirer.

20:34

And, Anthony wants to know, NOAA research and others have found that clip cleaner air. May be a contributor to the Atlantic Sea surface temperatures.

20:43

Is it possible to feel that effect from a AGW, or Anthropogenic Global Warming

20:51

What are the best estimates of how much AGW is contributing to an enhanced rainfall and storm intensity?

21:02

Sure, so disentangling the aerosols from the anthropogenic Global Forest Global Warming.

21:10

It's that that's still ongoing research as far as which one has a more prominent impact in the Atlantic.

21:16

Um, the being that the aerosol study was released a year or two ago.

21:22

And then fully you know, this decoupling those two methods mechanisms because cleaning up the air and the aerosol part for us was kind of a response to some of the pollution noted that also drives global warming. So they're very intimately tied.

21:37

Latest estimates are that by 2100, the AGW and climate change could impact up to about 7% higher and rainfall, we're seeing about two to 3% of that right now.

21:50

From the higher end of the highest rainfalls and solar storms, we're seeing about 2% higher in the winds as well from the, if you take out all the other factors and run simulations of the other storms with and without anthropogenic warming.

22:12

Thank you.

22:14

Our next question is from Jetson Jones of the New York Times beyond the 60%.

22:19

How would you describe your confidence in the forecast for the season?

22:27

So these outlooks are all given with what we call a 70% confidence range.

22:32

Um, that means for all of these outlooks that we put out, 70% of the time, the actual number of storms and hurricanes and major hurricanes activity will fall directly within our predicted ranges, 15% of the time it should be below and 15% of the time would be above our predictive pages for a total of 100%.

22:53

So, we calibrate all of our outlooks and our model outlooks.

22:57

two, give us a range of outlooks that will encompass 70% of the historic, you know, over that, those tools over the historical time, where we create the statistics behind all these tools.

23:09

So, our confidence, now, it's higher than it was in May because we're closer to the season, Right? So that's why we have slightly higher probability for some of these categories.

23:19

Um, but overall, these entire outlooks, everything is given with the 70% confidence range.

23:28

Thank you, Matt.

23:30

Our next question comes from Katherine Morn, from axios, Just a follow up question about the Gulf of Mexico.

23:36

Can you describe roughly, which part of the Gulf is part of the main development region?

23:41

So, it would be the south-east portion of the Gulf.

23:44

Um, the main development region runs from about nine degrees north up to 21 to 20 or 21 degrees north latitude, and then runs West all the way to 80 degrees west, basically the coast of Central America. So it won't be the very small southeastern portion of the Gulf of Mexico.

24:02

That's in the main development region.

24:09

Thanks.

24:11

Our next question comes from Maichelle Ma of Bloomberg.

24:16

What would you say is the biggest change in this Outlook compared to May?

24:21

Um, the biggest single change is, uh, that we've increased the odds for it above normal, hurricane season overall, upping our ranges a little bit.

24:35

And that's really to account for their prior activity and the continued, warm, record, warm sea surface temperatures in the Atlantic.

24:49

Thank you again, Matt.

24:50

Our next question comes from Shira Moulton of the Sun Sentinel, she wants to know, do you have any sense of when El Ninos impact might begin to emerge, and when these effects would be after the peak of hurricane season.

25:06

So right now some of the models we look at, show some of those impacts really starting to emerge and September.

25:13

We're seeing some changes in the wind patterns over the Pacific that we hadn't really seen. During June, we started to see some of those emerge during July and the early parts of August.

25:26

So if they're starting to consolidate over the Pacific, very, you know, 30 days or so after that, you'll start to see them emerge in more remote locations from the Pacific. where El Nino changes the circulations and wind patterns on the entire planet.

25:39

It's not instantaneous so it kind of spreads out from the Central Pacific moving around the planet. In a few different ways.

25:54

Well, thank you.

25:56

Our next question comes from Janet Babin.

26:00

Janet wants to know, How typical is it for revisions to happen to the season probability?

26:05

So is a 30% increase in an above normal season, atypical? So is a 30% increase in an above normal season, atypical?

26:16

I mean we revised the forecast every year.

26:19

The ranges that we have forecast this year, the changes in those ranges, are not record changes. They're not the largest changes we've ever made in the past.

26:30

The changes in named storms is only the fifth largest change.

26:35

We've been doing this Outlook about 20 years, so five of them have been larger changes.

26:40

We've got a few changes or revisions in the ACEthe total ACE for the season that were larger 20052020. Stand out above it.

26:52

So these changes are well in line with many of the prior outlooks that we've made.

27:02

Thank you, Our next question comes from Victor Rodriguez of Amazon.

27:07

Are there any stand out anomalies in the Model Analysis?

27:09

For example, heavier flood risks or signals indicating unusual activity.

27:20

Signals in the models, one of the biggest changes that we saw was the forecast wind shear over the Atlantic is forecast by many of the models to be lower.

27:30

That it was which lower wind shear is conducive to more tropical cyclone or tropical storm formation.

27:38

So now, most of the models are forecasting either near or below average wind shear.

27:42

But in May some of the models had forecast the above Average Wind shear, which was consistent with an El Nino forecast back in May and those impacts coming in. But we're starting, we're seeing a little bit less of that wind shear than we thought we wanted to this time.

27:55

So it makes sense, with models are forecasting as well.

28:03

Thank you.

28:03

Our next question is from Kimberly Miller, of the PB Post.

28:08

You mentioned the West African monsoon and how the rains have been robust. But I missed what was happening with the winds. Have there been fewer tropical waves coming off the coasts?

28:21

So, the rains in Western Africa during June.

28:26

More about the 90th percentile from the historical observations, which we have pretty good observations that I'm going back at least to the early eighties.

28:38

So those rains were robust.

28:40

The wind patterns that we look at are low-level flow, about 5000 feet off the ground, from the Atlantic Ocean into Western Africa. A lot of those winds were near normal.

28:52

And then the outflow at the top of the monsoon up at about 40,000 feet.

28:59

Those winds were not only near normal inactivity, in strength.

29:05

But the direction of those winds was not really supportive of us, in reinforcing the monsoon. So there have been some local features in the monsoon that maybe could have created some of those heavier rains.

29:21

But when we look at month long averages and real top of the atmosphere, bulk measures of it, they did not reflect in those statistics that well.

29:30

We have seen a couple of stronger waves come off of Africa.

29:34

The African waves typically peak in late August and into September.

29:40

So though, we haven't seen that, many waves come off.

29:43

Not that surprising, some have moved West off the West coast of Africa, and have been been impacted by the drier air in the Saharan Air layer, that is there.

29:53

But two of them were able to form into tropical storms earlier this year. So those two stars that form the deep tropics have their origins as waves moving, back up.

30:07

Thank you, qw have a few more questions to go.

30:09

Next one is from Kat Clifford. NBC Universal.

30:14

Without a record warming ocean, what is the usual impact of El Nino on the hurricane season?

30:21

Without the record sea surface temperatures, the typical impact of El Nino on the Atlantic hurricane season would be a season that only had about nine named storms.

30:33

Um, and only about four hurricanes and two major hurricanes.

30:37

So when I run the analysis of the past years, just starting out on Nino years, you get a reduced activity.

30:44

Um, so if we were to just have a normal El Nino year from now on out, normal would have been you about two named storms a normal year during any year around the El Nino or not.

30:57

But we've already had five have the rest of a normal Nino year, um, nine.

31:03

That means, but maybe they're there at two, that’s imply that we have at least seven more to go.

31:11

And we've had five already, so that would put 12 total for us.

31:15

If I consider nothing else, than the record, warm sea surface temperatures, the models for taking the reduced shear, it has added a couple of those terms as we went on.

31:25

And making this outlook.

31:31

Thank you. And our next question is about one of the new tools that NOAA developed and deployed this year. So it's from Rose Naval, did the new hurricane analysis, hurricane analysis and forecasts systems, known as HAFS, which was implemented in June influence the confidence of these predictions?

31:49

NO, the HAFS is used more for individual storms, storm tracks.

31:54

And shorter term forecasts. It's not really set up to do seasonal and longer scale forecasts.

32:07

Thank you.

32:08

We're gonna go back to a question about record warm sea surface temperatures.

32:14

This time is from Alex Harel excuse me, Alex Harris' with the Miami Herald.

32:19

You put it into context for us how unusual the season is would record warm sea surface temperatures potentially an historic strong El Nino happening simultaneously.

32:32

Almost by definition, that we have record warm sea surface temperatures.

32:37

Um, there are no analogs.

32:39

So, putting it in context is, by saying that it's its record, and that record that I use goes back to 1950.

32:47

Um, I haven't done an analysis that goes further back than that, because I don't have the corresponding hurricane data that's reliable as well.

32:55

So, 1950 is about when we started doing most of this hurricane period more recent hurricane analysis periods.

33:04

When I do look at analogs years and past we have warm sea surface temperature the Atlantic and an El Nino during the hurricane season.

33:13

I only really found one pretty good analog and that was 2004.

33:18

Um, there's some analogs in the late 150s and early sixties that also showed the warm sea surface temperature Atlantic annual activity, but they were not on par with the magnitude of this event.

33:38

Thank you again, Matt.

33:39

This time, we'll switch it up and go to the hand raise for a verbal question from Seth Bornstein with the AP when meeting? You can unmute yourself, sir.

33:50

Thank you. A couple of very quick questions. You refer to your ACE forecast, but I don't see what, what number ASE or what percentage ace you've used? And it's not in the press release. What is the forecast for the ACE and what is the percentage compared to normal?

34:09

Also, the, in terms of the main development region, is it fair to say it stretches all? You know, you gave the good North South. Is it fair to say it stretches from Central America all the way to Africa?

34:22

And finally, is it fair to say that what we see now, the two names, storms that are right? Yep, that normally it's two named storms, and we've had five already by this point. Is that considered above normal or very much above normal?

34:41

I know you guys have that gradation. Thank you.

34:47

So, the ace forecast for this upcoming season has also been revised upwards to 105 to 200% of normal.

34:57

Normal is our median statistic.

34:59

We use median for our normal statistic, OK.

35:07

The second question you had. Does the MDR stretch all the way to acid?

35:15

The MDR is formally defined as 20 degrees West, longitude to 80 degrees West longitude, and 10 degrees north to 20 degrees north.

35:26

That's formal definitions. A lot of the detailed analysis we do happens on grid points. So you'll take into account 1 or 2 grid points north and south. As so often. The analyzes go from about nine degrees latitude to 21.5 degrees latitude.

35:43

And official characterization of activity up till now is that considered above normal?

35:54

I know ou don't use way. There's another word you use, much above normal, more hyperactive, those decisions are made at the end of the season, we don't really clarify with such granularity during the season.

36:09

To date, activity in the Atlantic has been above normal.

36:13

Thank you.

36:18

Thank you, sir. I will go back to text questions now.

36:22

We have a question from Sam Walker from WOEX. With higher sea surface temperatures in the Atlantic, is there any data to suggest that tropical activity could increase outside of the current season window?

36:36

Warmer sea surface temperatures in the Atlantic and the typically associated wind patterns with those warmer sea surface temperatures.

36:47

Do normally favor a bit of broadening of the season into the June and July time period and potentially into the November period.

36:55

Should these warmer waters hold on into later in the season or November it wouldn't be more conducive to having a late season storm.

37:05

This year though we have the ongoing El Nino el Ninos impacts, tend to ramp up as long, longer the even goes. So we shouldn't have started to have some very strong interaction EL Nino later in the season.

37:17

Although that, that kind of pulling of these two factors is really the root of any, most of the uncertainty we have in this Outlook.

37:26

And the forecast team has analyzed numbers, debated the results of these, none of those analysis for hours in making this outlook.

37:42

Thank you again, Matt.

37:44

We have a new question from Daniella Hernandez from the Wall Street Journal.

37:50

Why can't that only, what can't hurricanes Olivia predicted one week out?

37:55

What are the data limiting factors, What are the limiting factors that prevent hurricanes are being predicted?

38:05

So, I think the questioner is referring to Hurricane landfalls, which are best predicted one week out.

38:11

Um, you can predict Hurricane Landfalls, um, at any time period, just that they would be wildly inaccurate. If you do them at further out periods.

38:23

Um, we already know the Hurricane Center has made tremendous improvements and forecasting that tracks of hurricanes over the last 20 or 30 years.

38:34

You know, track errors now at five days are on par with where they were two days in the past, you know, 25, 30 years ago. So they've made tremendous advancements.

38:45

But if I were to do hurricane track forecasts, 90 days from now, they would have what?

38:51

Large error, so large that it would not be useful.

38:55

So there's and then when you sum them up to make landfall predictions you can have very large errors in those.

39:01

So we're researching ways to do it and ways that when we put out information are useful to people who could use that information.

39:15

Though, you asked a question what a limiting factor in that.

39:18

Um, so many factors are observations.

39:21

The forecast state of El Nino and then the impact of the wind shear, that's not certain all the time.

39:29

So the better observations we would have of El Nino to change those wind shear profiles and change the wind patterns around the globe would lead to better, could lead to better forecasts for landfalls.

39:41

Even within some of the climate models that we use, as advanced as they are, there are errors in them.

39:47

We correct them. We bias correct and we do all kinds of things for those.

39:50

The team here at NOAA is always working on ways to improve those models.

39:55

Um, but again, they're their models and their estimates of what we think the future is going to be.

40:01

So with those errors, they would be very large at forecast lengths. So, you know, 40, 50, 60 days out into the future.

40:11

So, we'd wanna make sure that those numbers are both relevant, useful, and as accurate as they can be.

40:20

Alright, Thank you, Matt.

40:21

We have only a few more questions here. Our next question is from Amy Green with InsideClimate News.

40:30

Amy wants to know which is the more important factor in this updated Outlook: was the delayed El Nino impact the most important factor of the Atlantic Sea surface temperatures, or both back as equally important, how would you characterize it?

40:46

Both factors were equally important.

40:49

When you look at history, each one of those factors can be responsible for between 30 and 40% of your tropical cyclone variability in the Atlantic. So, they're kind of both on equal footing.

41:08

Oh, one more question for one question, from Katherine Born from Axios

41:13

When you say that these are the warmest sea surface temperatures since 1950, I just want to make sure, since 19 50 is, how long your analysis goes back, Right?

41:25

1950 didn't have warmer sea surface temperatures.

41:30

Correct.

41:30

The analysis that I run starts in 1950 every year between 1950 and now, was cooler than the temperatures now.

41:42

And second part to our question can you talk a little bit more about 2004 how the sea surface temps and El Nino conditions compare to this year?

41:56

I'd have to get back to you on the details of that, I do have an extensive set of graphics. I just don't have those graphics memorized to be able to be able to alk about 2004.

42:06

Specifically, did you know 2004 ended up with 15 tropical storms?

42:10

nine hurricanes, and six major hurricanes and ASE value of 200% of normal about 200% of normal.

42:23

We have one final question from Romi Avicolom with the Wall Street Journal.

42:29

It sounds pretty concerning.

42:31

How worried did you get when reading this data and how worried should people be about this forecast?

42:39

I don't think people should worry about the forecast.

42:41

People should worry about and prepare for the storms that this forecast implies.

42:47

So go into ready dot gov or your local emergency management website and Reading the tips there.

42:53

getting your, getting your family.

42:56

If you're in a business, can the business prepared for the upcoming season Um, Because you know it's a really it doesn't just take one storm coming through your area.

43:05

The west Coast of Florida found that out last year during a relatively quiet year.

43:10

There was devastating impacts So preparing now.

43:14

preparing early understanding Where you're gonna go what your family is going to do Should an evacuation notice be ordered maybe if an Evacuation notice is not ordered?

43:25

Where would you want to go? What would you want to do?

43:27

How would you want preparer, um, for the upcoming, for an upcoming storm?

43:33

Thinking those things through now, getting some supplies now is much easier than when there's a rush on supplies in the last couple of days, when you're under the crunch for time crunch to make decisions, repair things.

43:49

Having those plans, at least thought through, maybe even written down, maybe even practice with your family, especially if you have a son or daughter off at college.

44:01

And they've got to then make the transit to home, and then you've got to make the transit to evacuate somewhere, designing a plan that maybe you just meet up somewhere else, on the way, thinking those things. that can really help save some time, should a storm impact your area later.

44:21

one final check for questions, I'm not seeing more of that scene, more hands raised.

44:30

So, with that, we're not seeing any further questions. So this will conclude our briefing for today.

44:35

You can find a news release and the related graphics from today's call or NOAA dot, gov.

44:41

This call will also be recorded and posted on NOAA

44:44

dot gov later today, so you'll have access to it.

44:50

If there are any additional questions, please contact me by e-mail at John dot more at NOAA dot gov in its doh H In that M O O R E, at NOAA dot gov.

45:01

All by phone at 2 0 2 603-2523.

45:06

Thank you again for joining us today.

45:09

You may disconnect at this time.

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