



Weather Briefing, 2023 Marion Bermuda Race  
Prepared for Skipper's Meeting  
June 15, 2023, 2030 GMT (1630 EDT)

Ken McKinley, Locus Weather  
[www.locusweather.com](http://www.locusweather.com)

## **ORGANIZATION OF BRIEFING:**

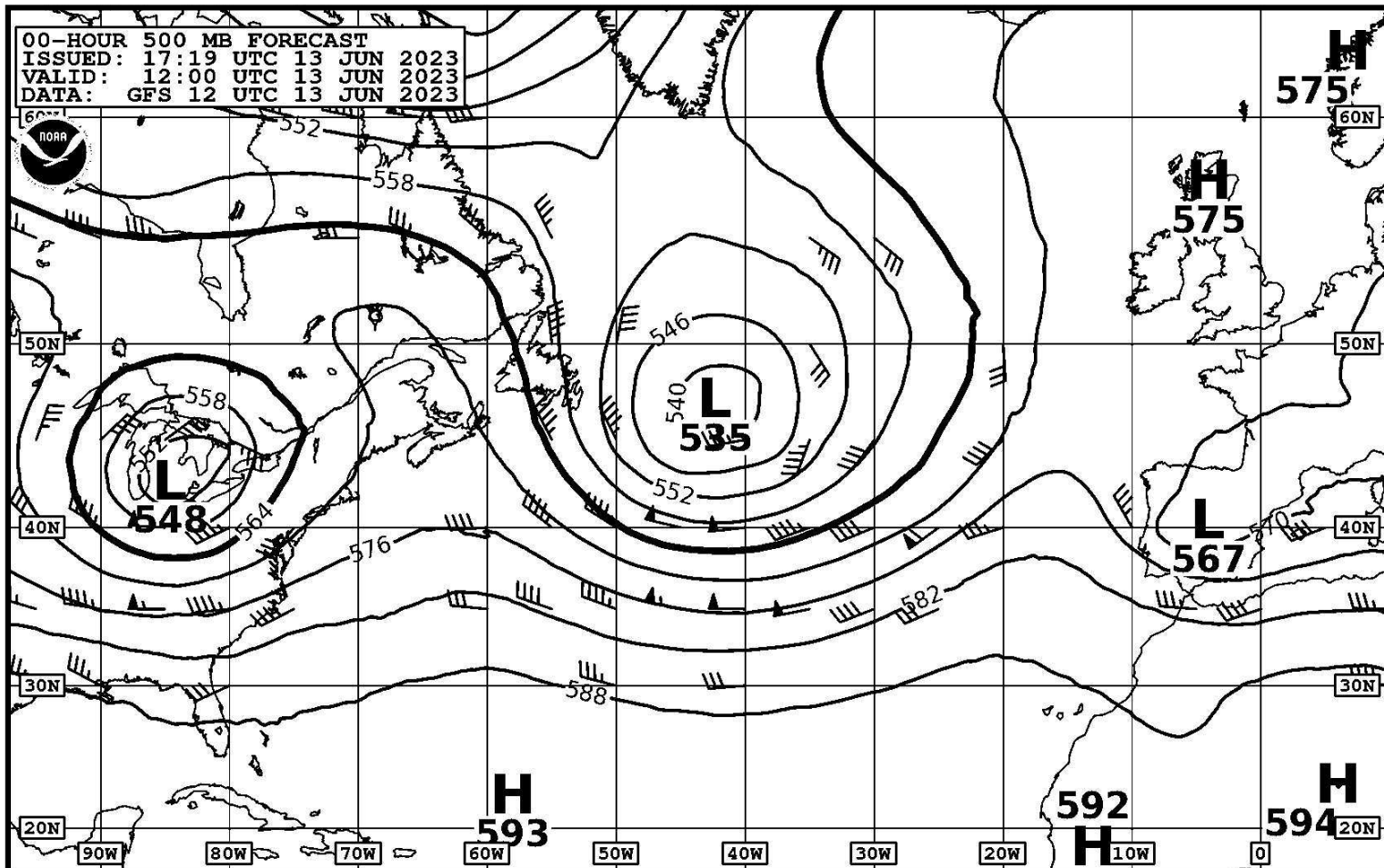
1. Recent weather history
2. Current weather situation
3. Weather forecast information for the next 6 days.
4. Possible different weather patterns which could develop.
5. Discussion of sources of publicly available information which will be useful during the race.

*I will present information about conditions at upper levels and at the surface for numbers 1 through 3 above.*

# RECENT WEATHER HISTORY

*Tuesday morning 1200 UTC (0800 EDT)*

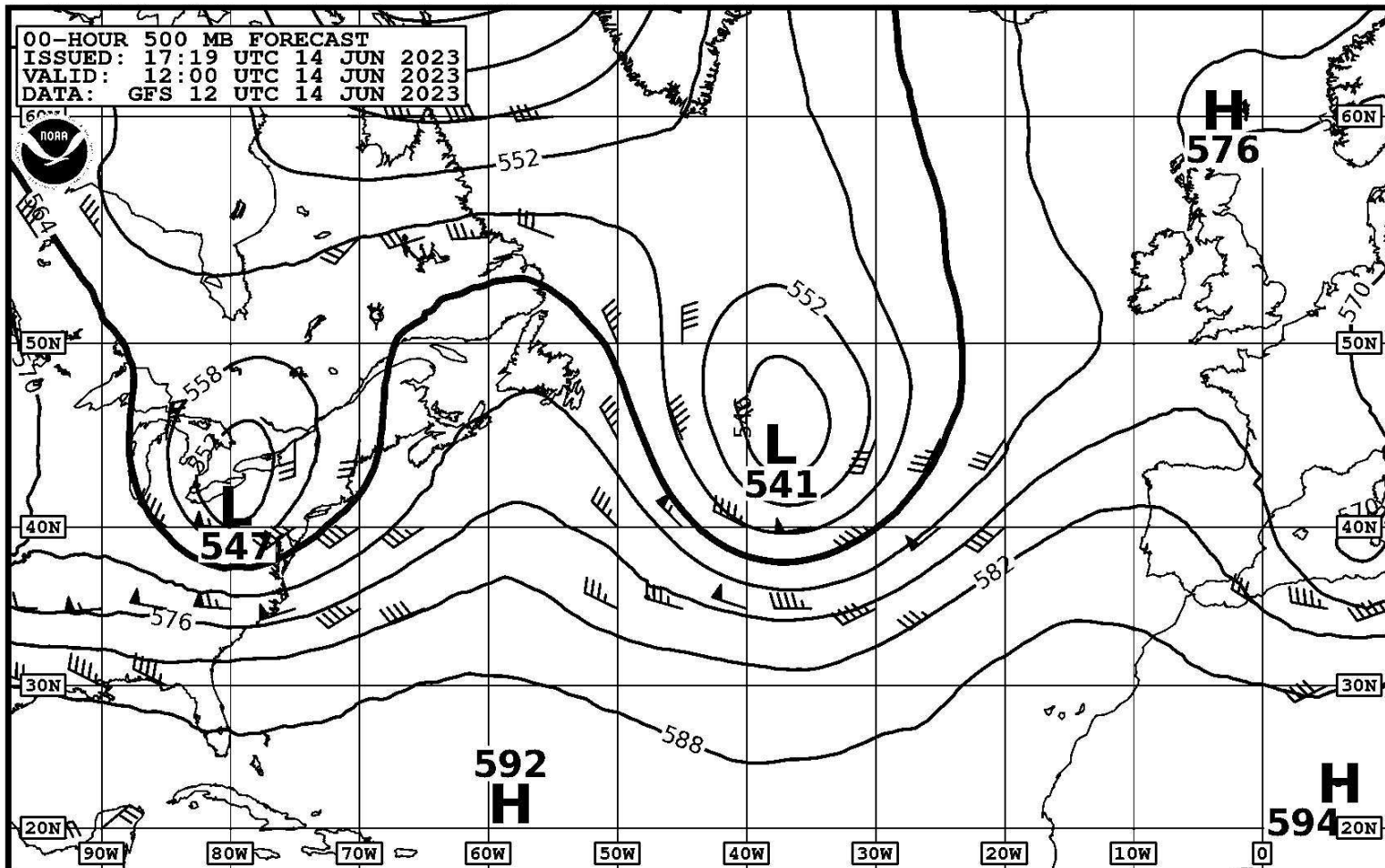
*500 millibar chart*



# RECENT WEATHER HISTORY

Wednesday morning 1200 UTC (0800 EDT)

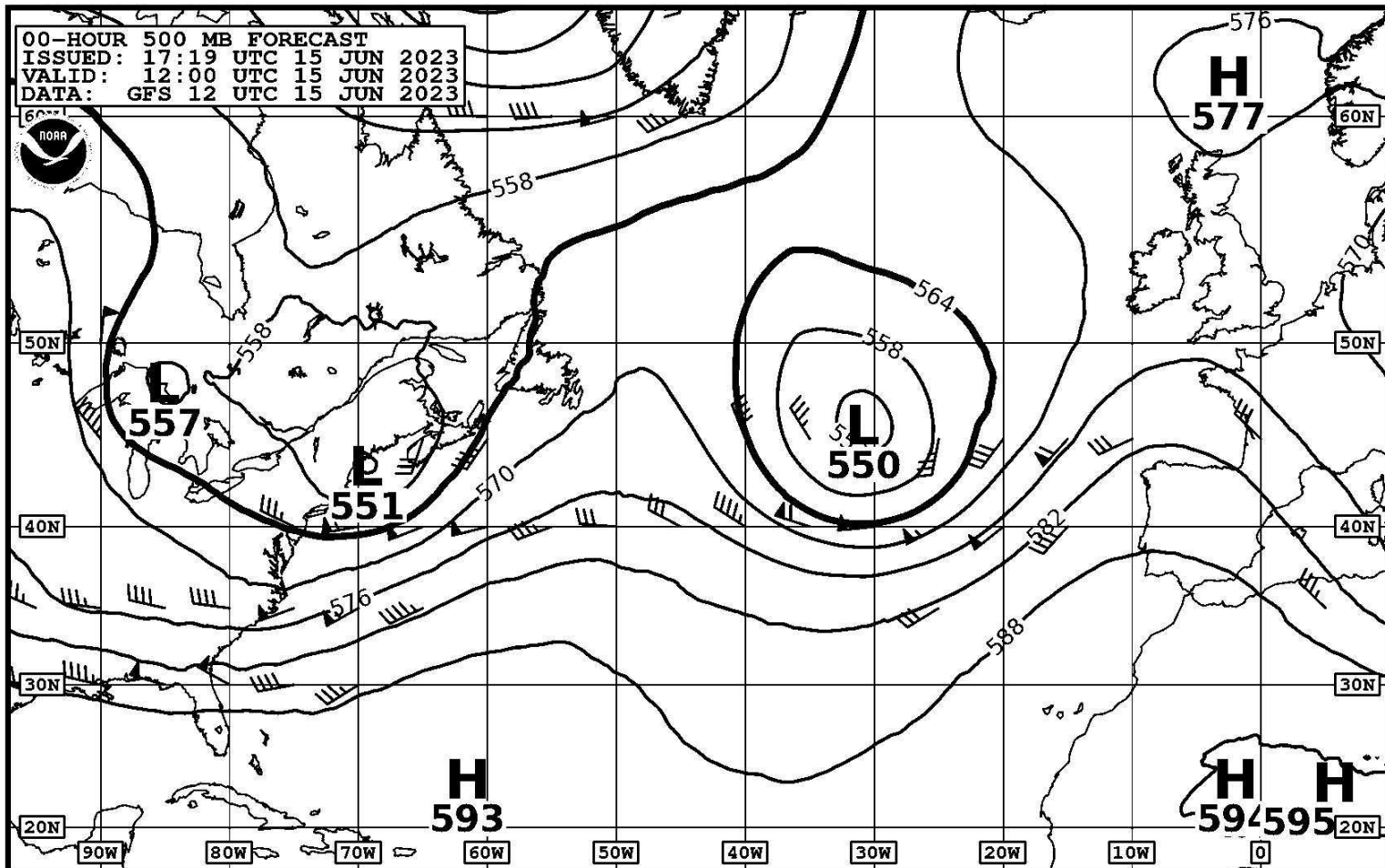
500 millibar chart



# RECENT WEATHER HISTORY

*Thursday morning 1200 UTC (0800 EDT)*

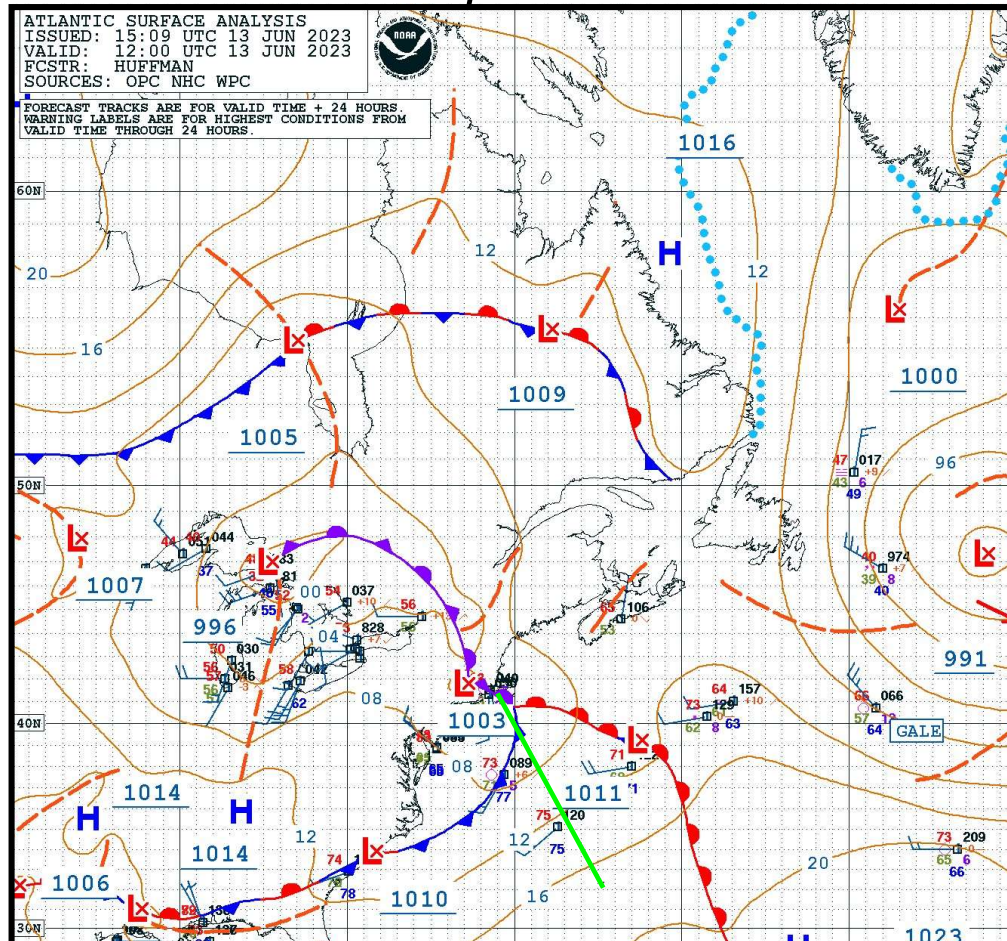
*500 millibar chart*



# RECENT WEATHER HISTORY

Tuesday 1200 UTC (0800 EDT)

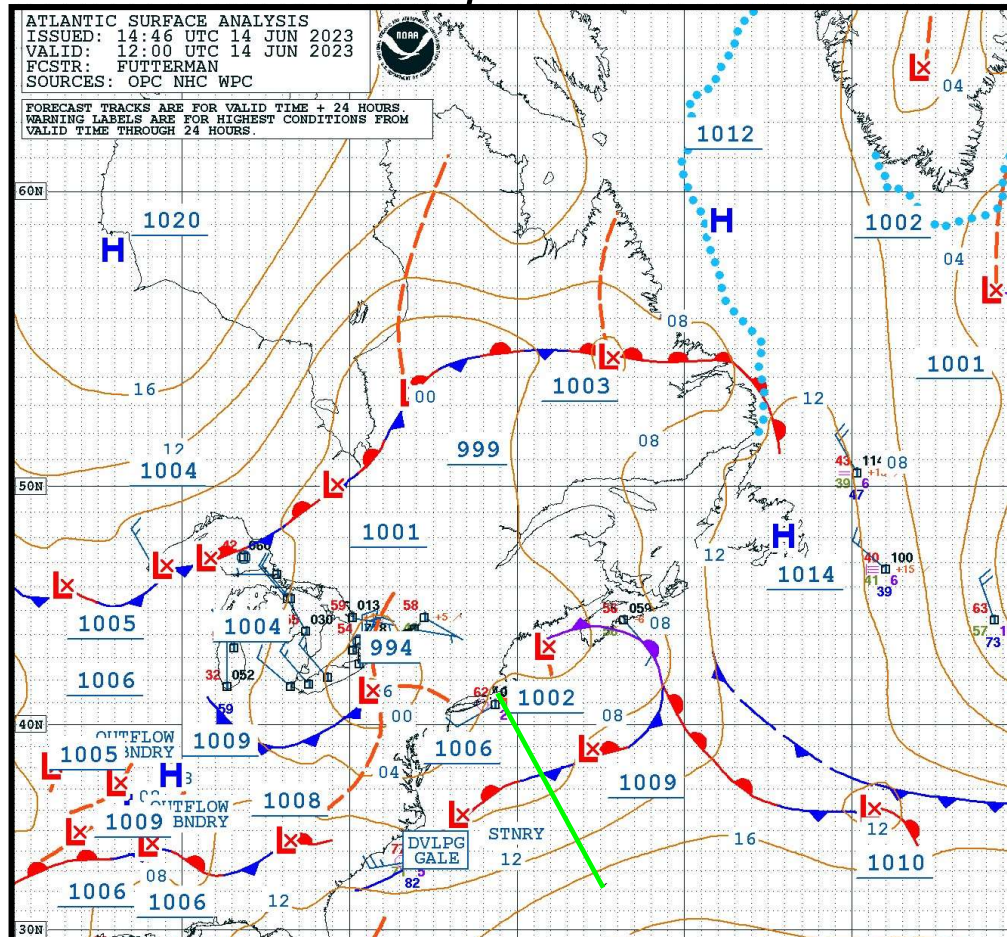
Surface pressure chart



# RECENT WEATHER HISTORY

Wednesday 1200 UTC (0800 EDT)

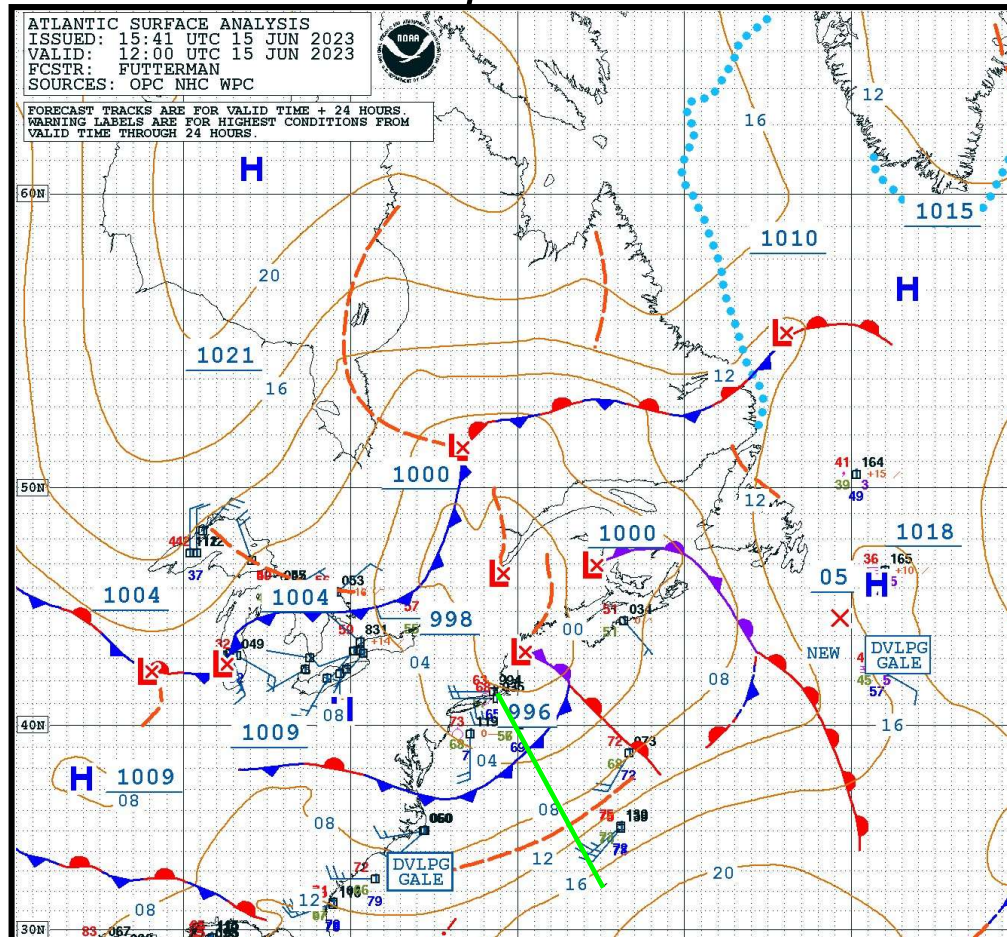
Surface pressure chart



# RECENT WEATHER HISTORY

Thursday 1200 UTC (0800 EDT)

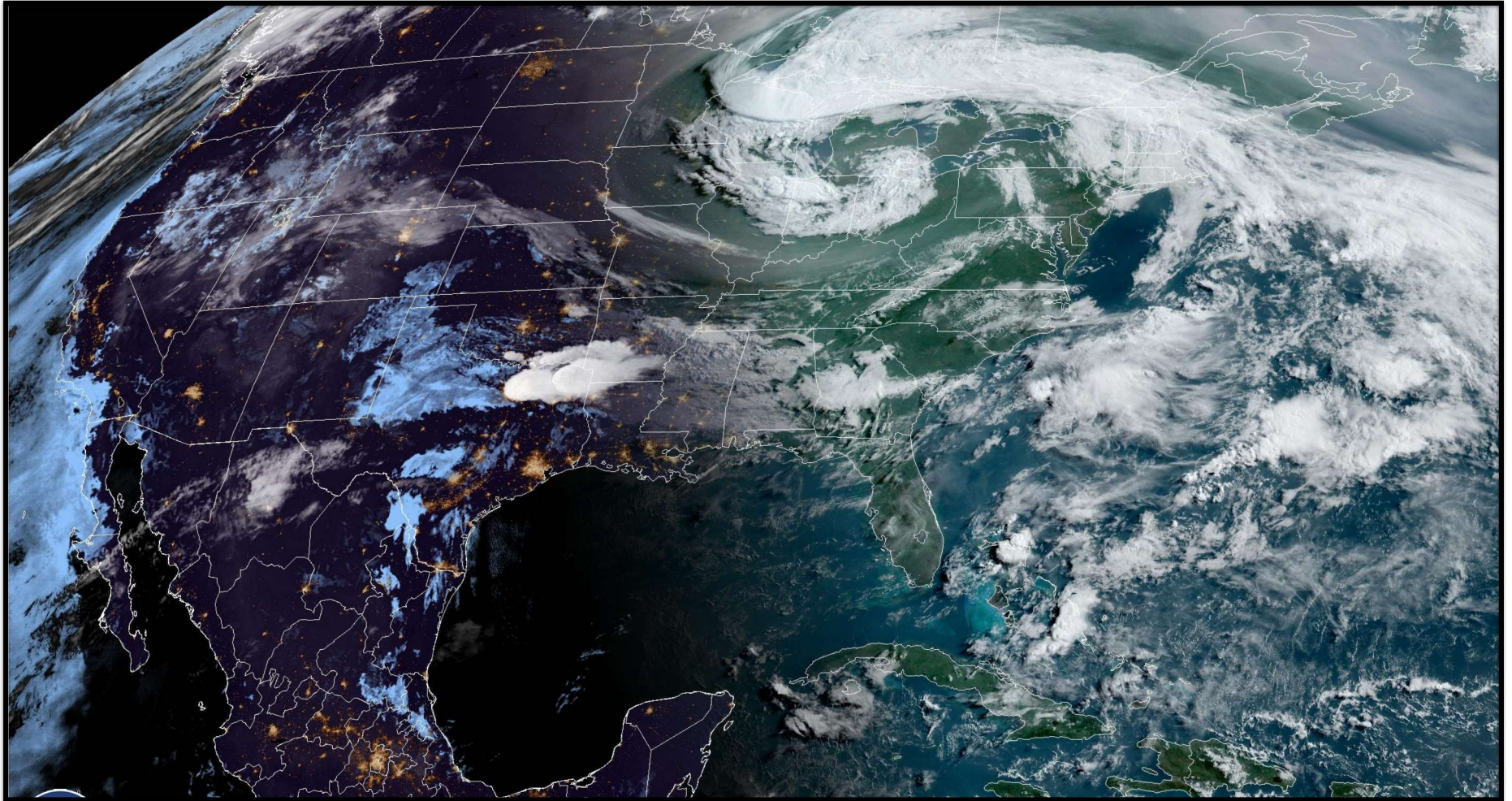
Surface pressure chart





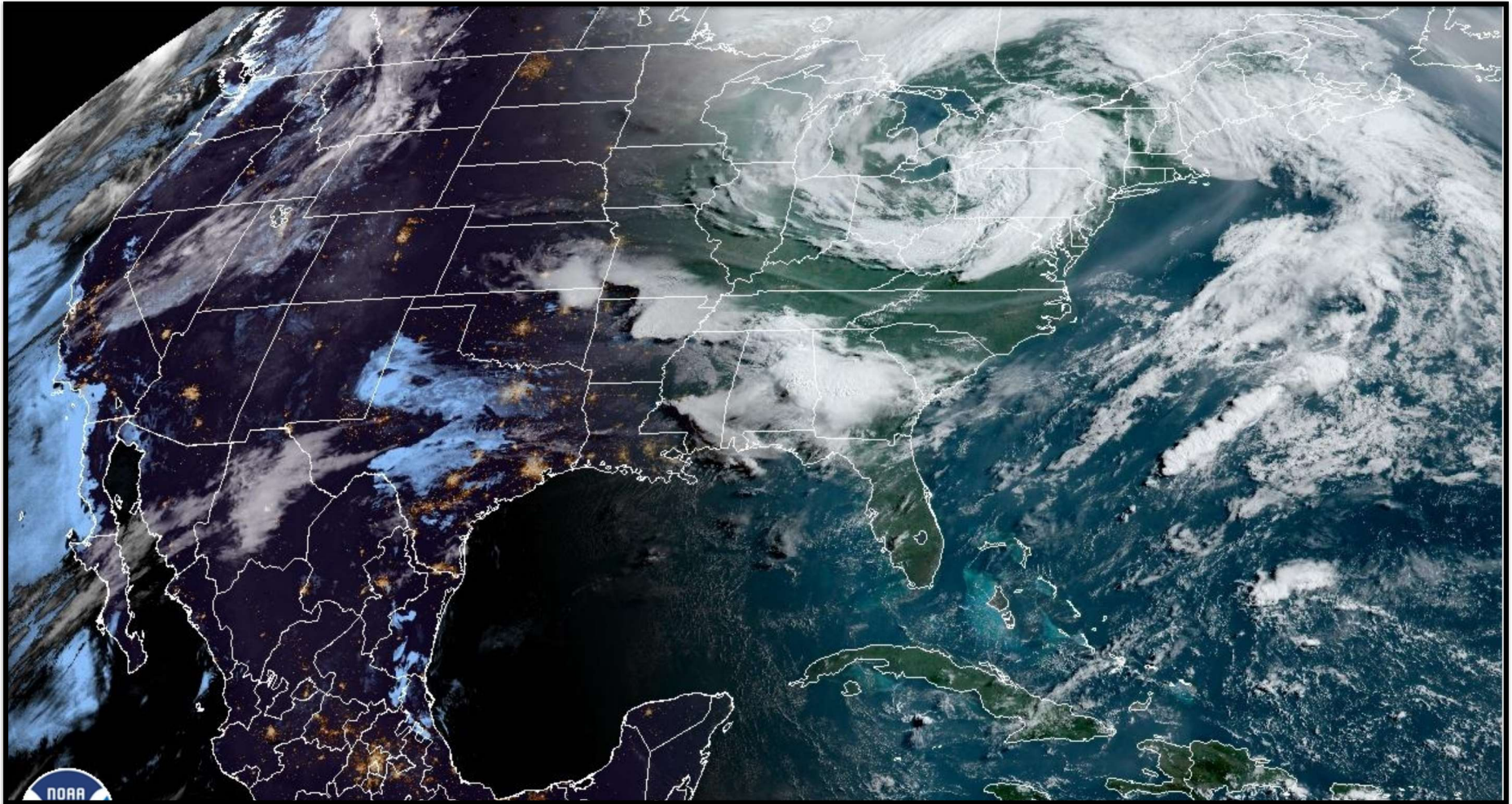
# RECENT WEATHER HISTORY

*Satellite Image Tuesday morning 1156 UTC (0756 EDT)*



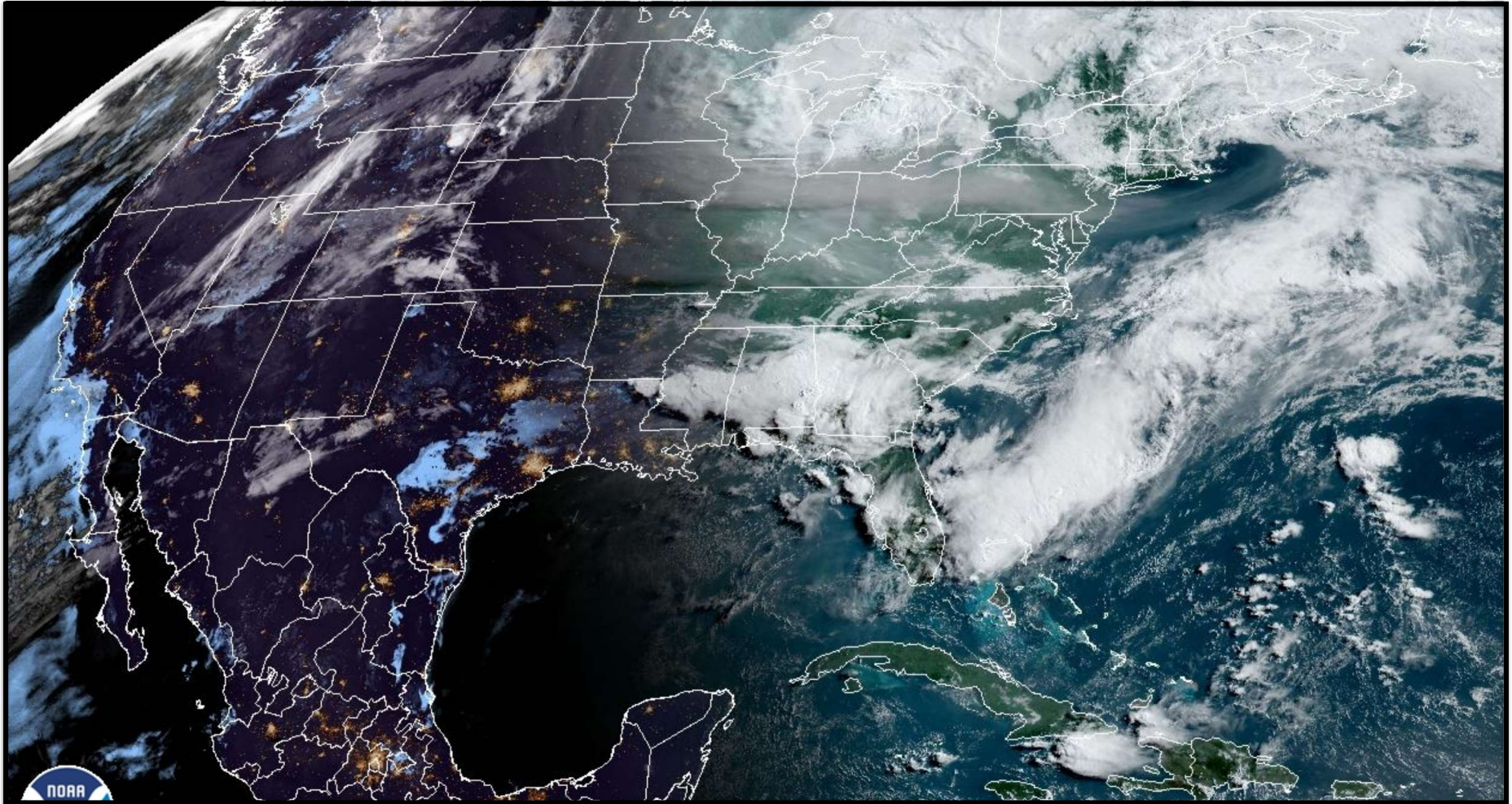
# RECENT WEATHER HISTORY

*Satellite Image Wednesday morning 1156 UTC (0756 EDT)*



# RECENT WEATHER HISTORY

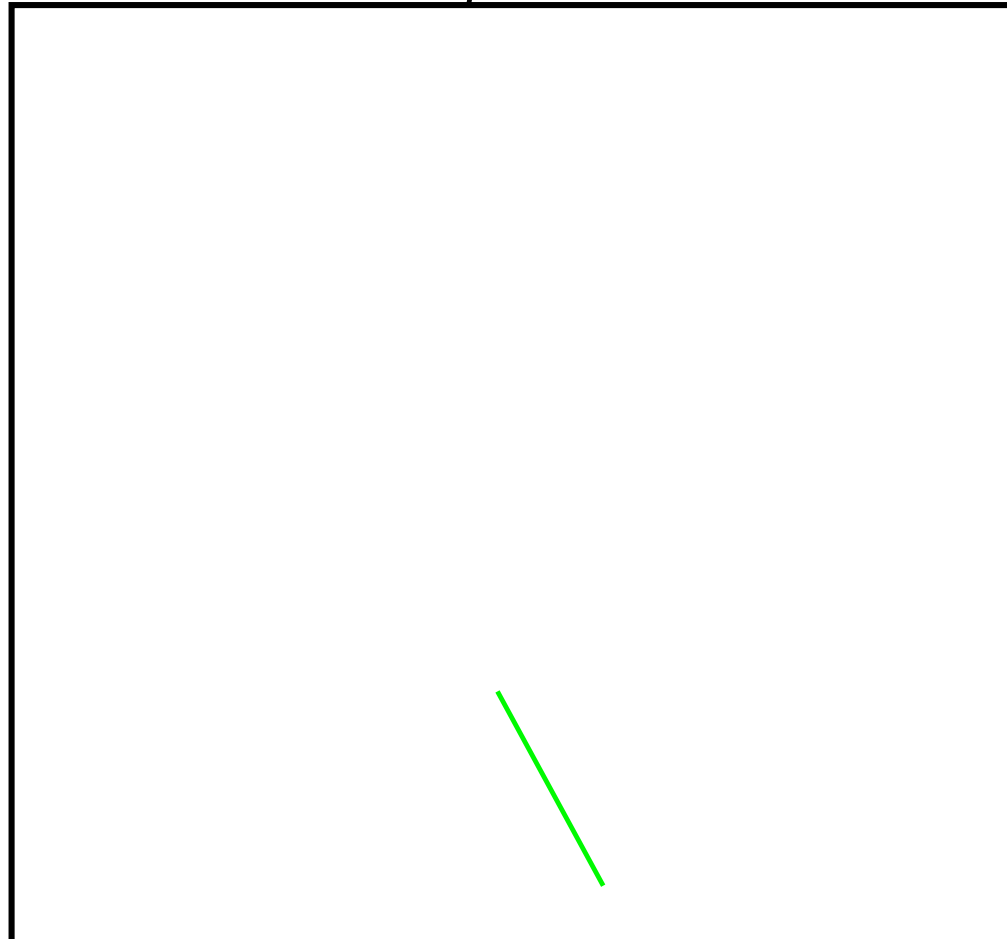
*Satellite Image Thursday morning 1156 UTC (0756 EDT)*



# CURRENT WEATHER SITUATION

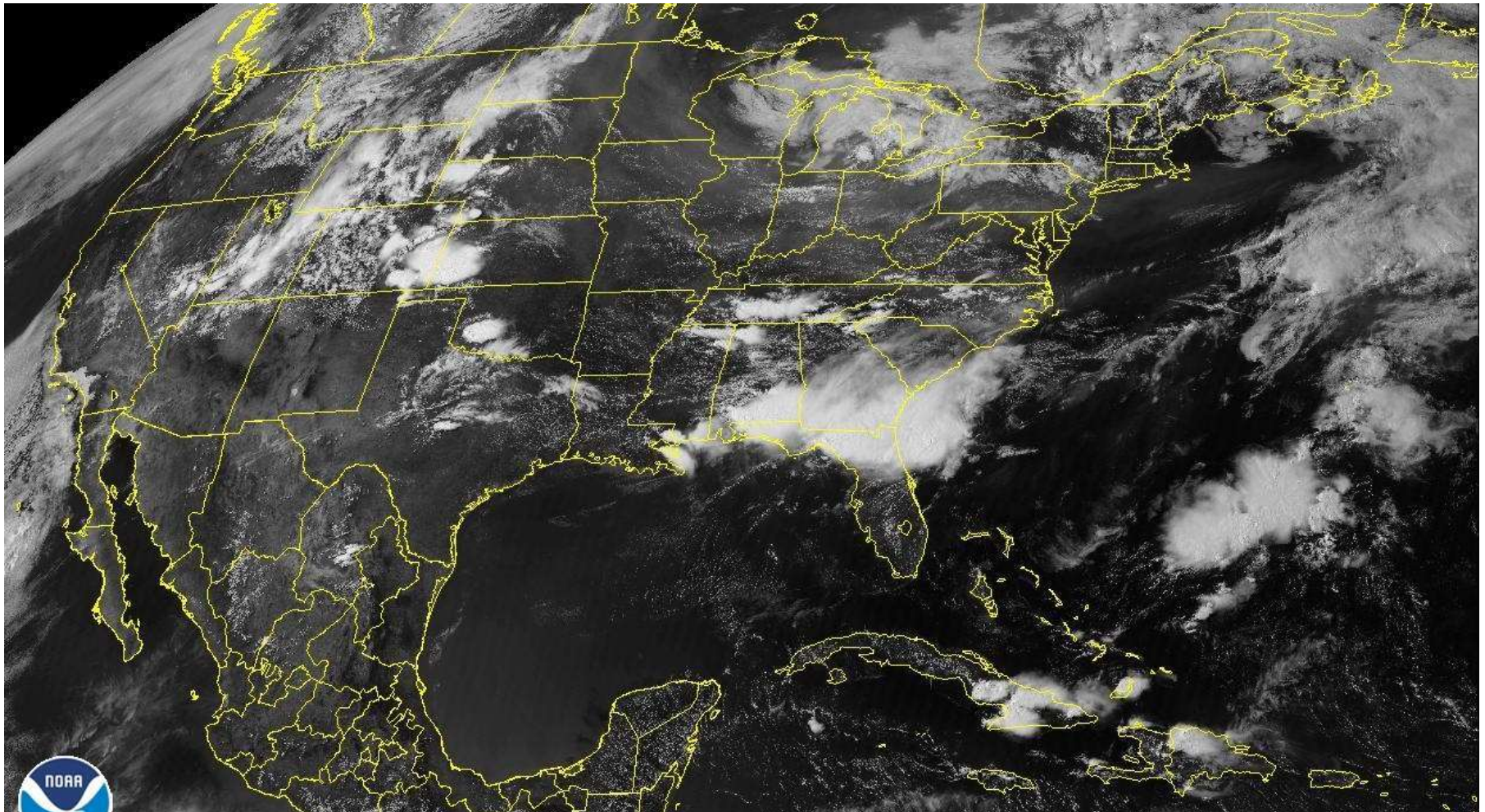
*Thursday 1800 UTC (1400 EDT)*

*Surface pressure chart*



# CURRENT WEATHER SITUATION

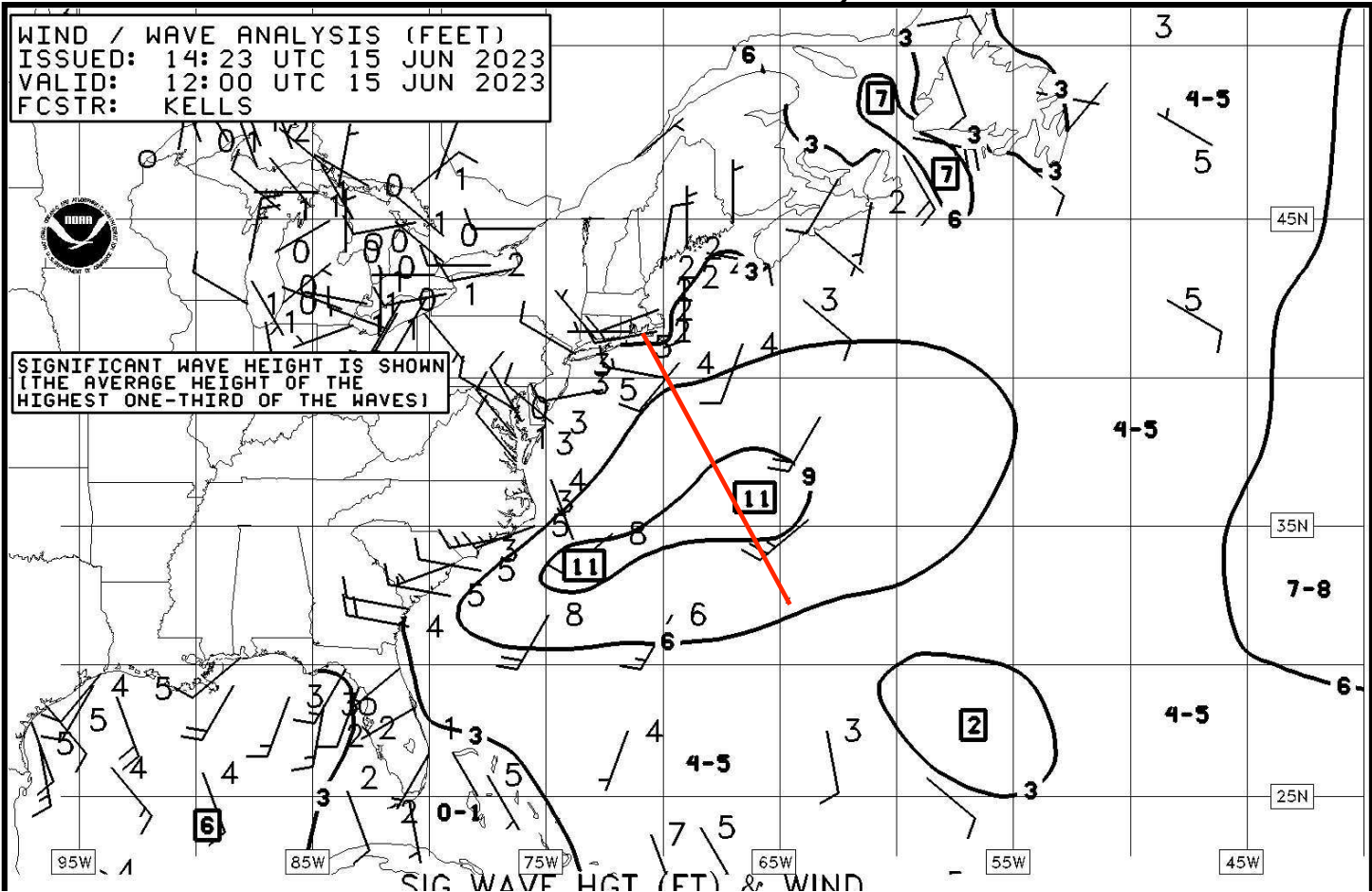
*Thursday 2016 UTC (1616 EDT) Visible satellite image*



# CURRENT WEATHER SITUATION

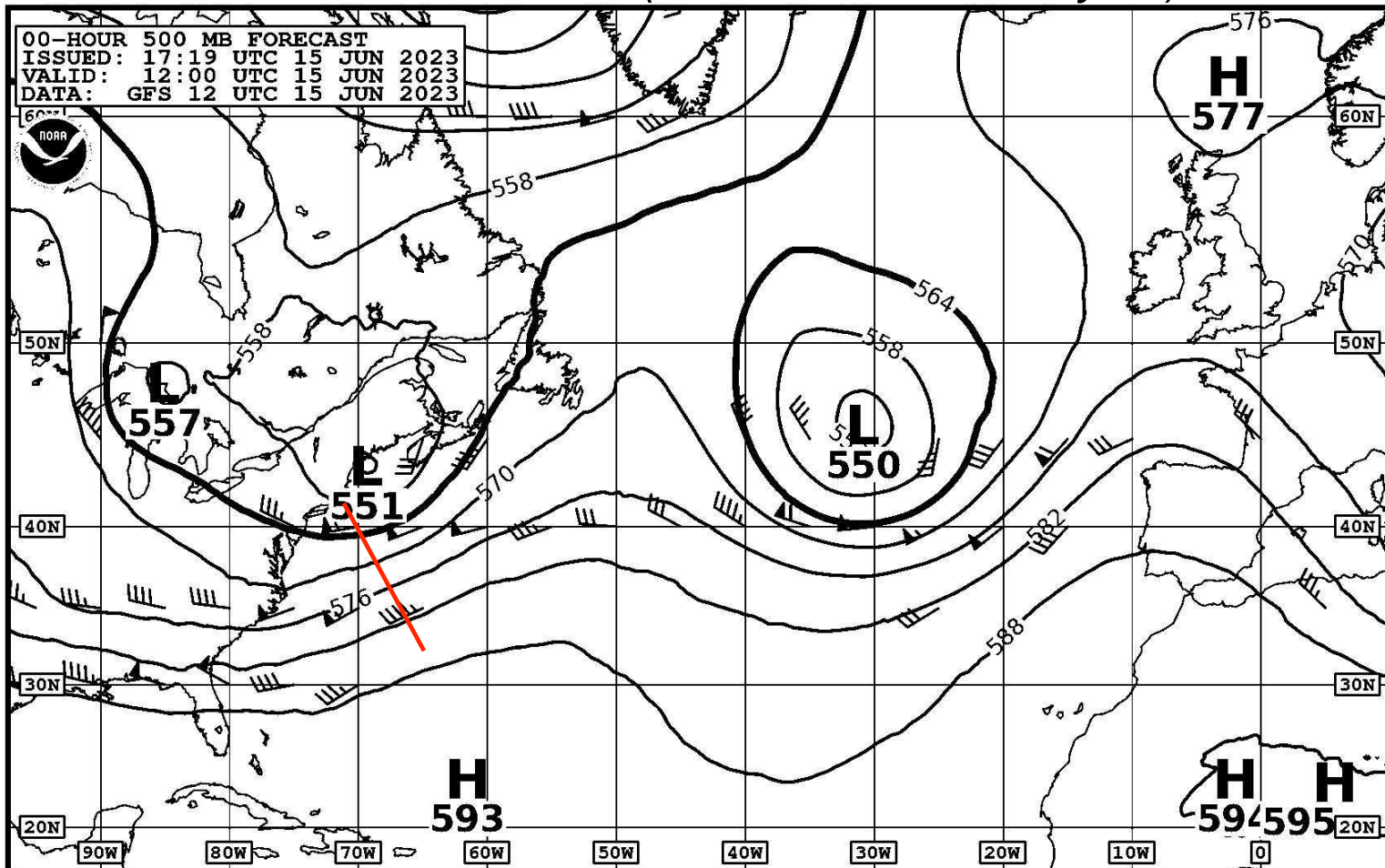
Thursday 1200 UTC (0800 EDT)

## Wind/Wave Analysis



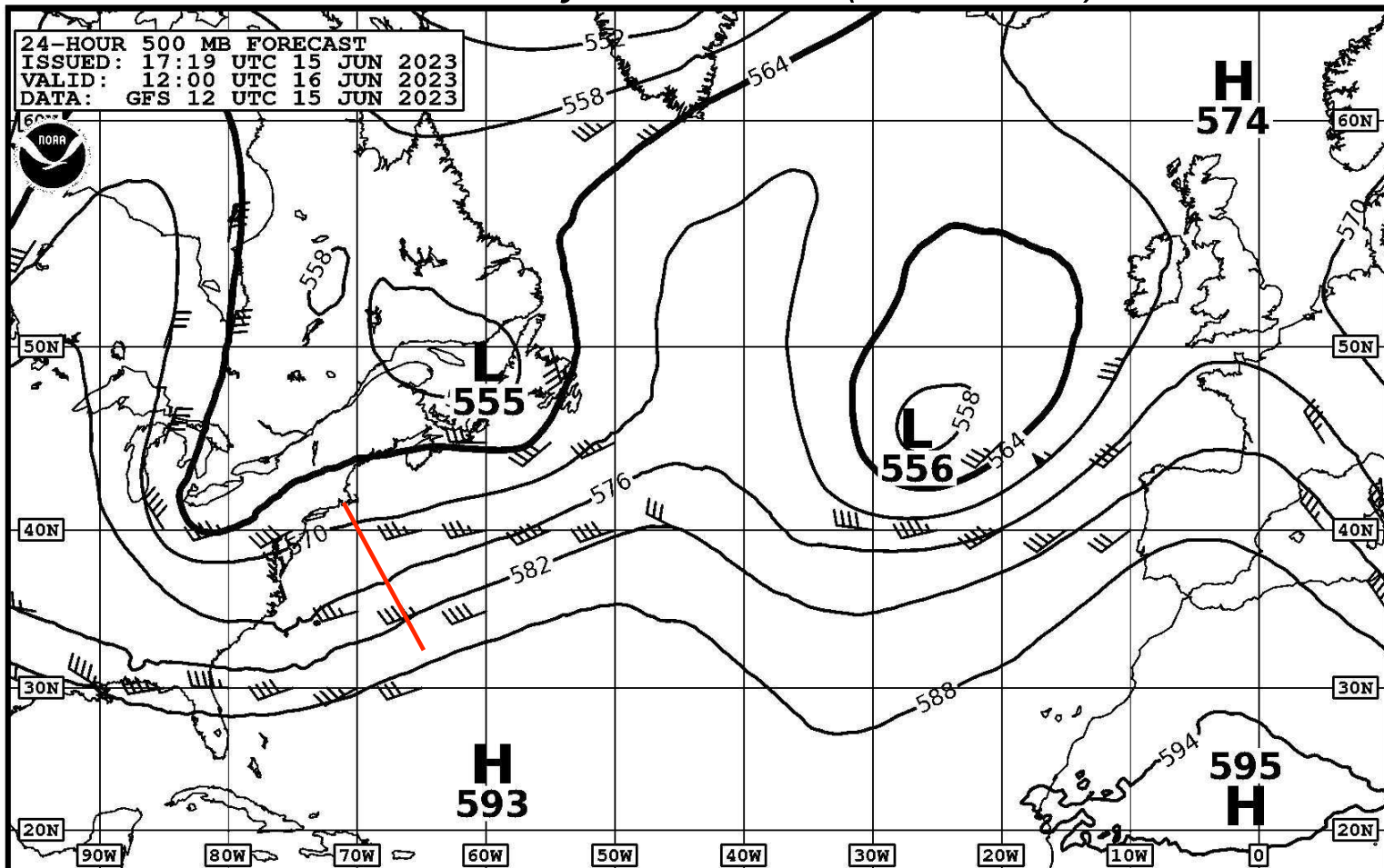
# WEATHER FORECAST INFORMATION

*Thursday morning 1200 UTC (0800 EDT)  
500 millibar chart (Start of Forecast Cycle)*



# WEATHER FORECAST INFORMATION

24 hour forecast: 500 millibar chart  
Valid Friday 1200 UTC (0800 EDT)

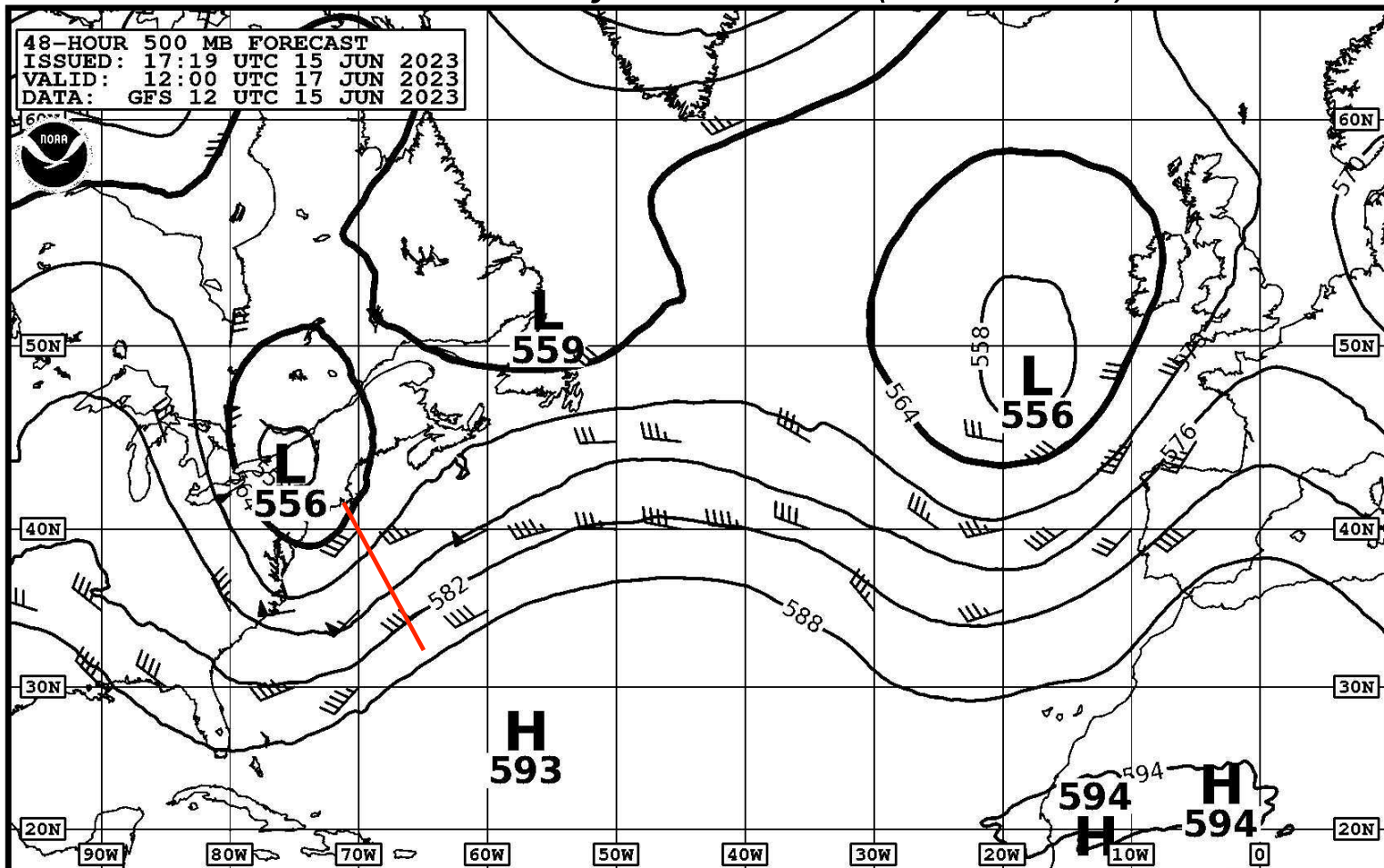




# WEATHER FORECAST INFORMATION

48 hour forecast: 500 millibar chart

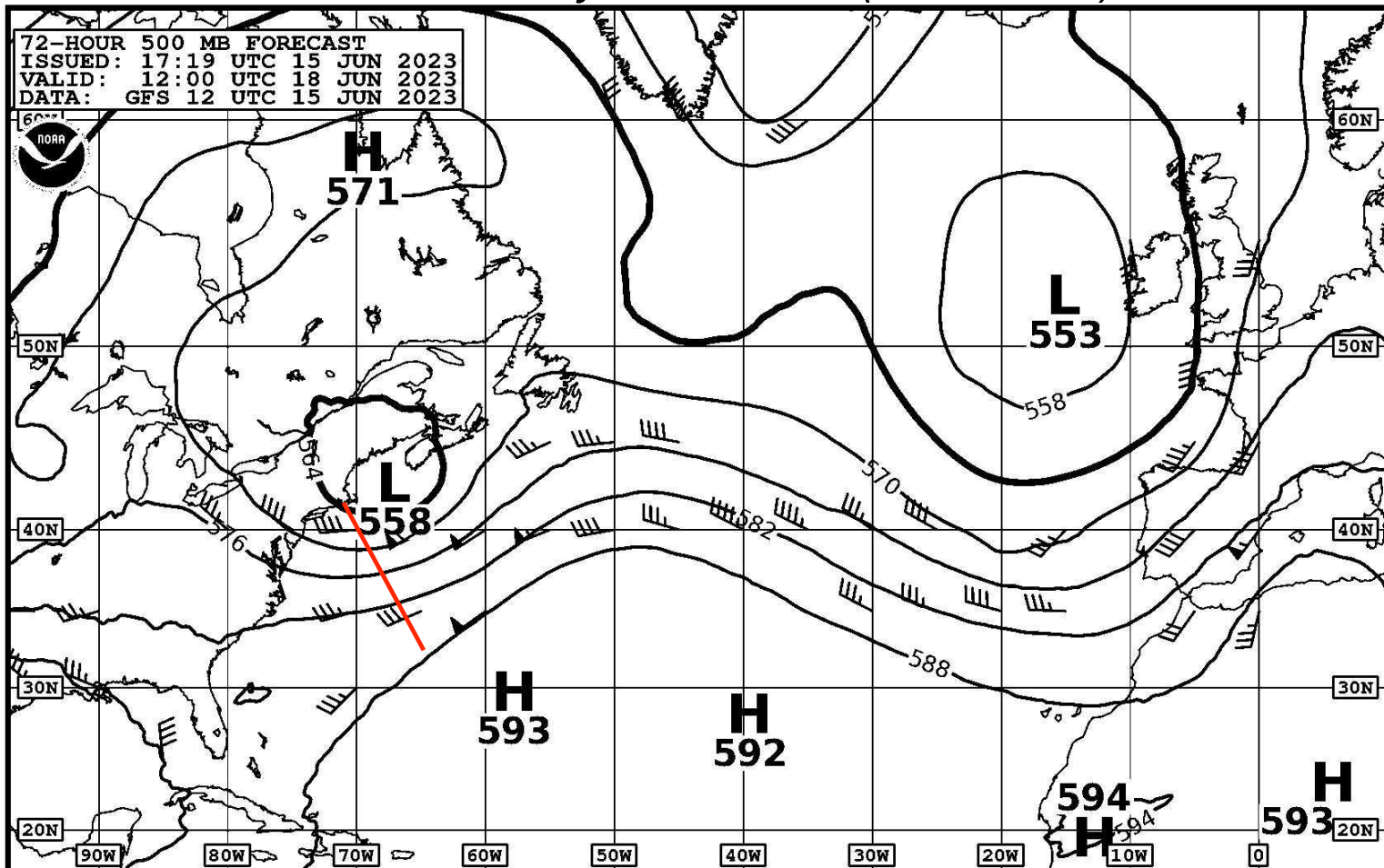
Valid Saturday 1200 UTC (0800 EDT)



# WEATHER FORECAST INFORMATION

72 hour forecast: 500 millibar chart

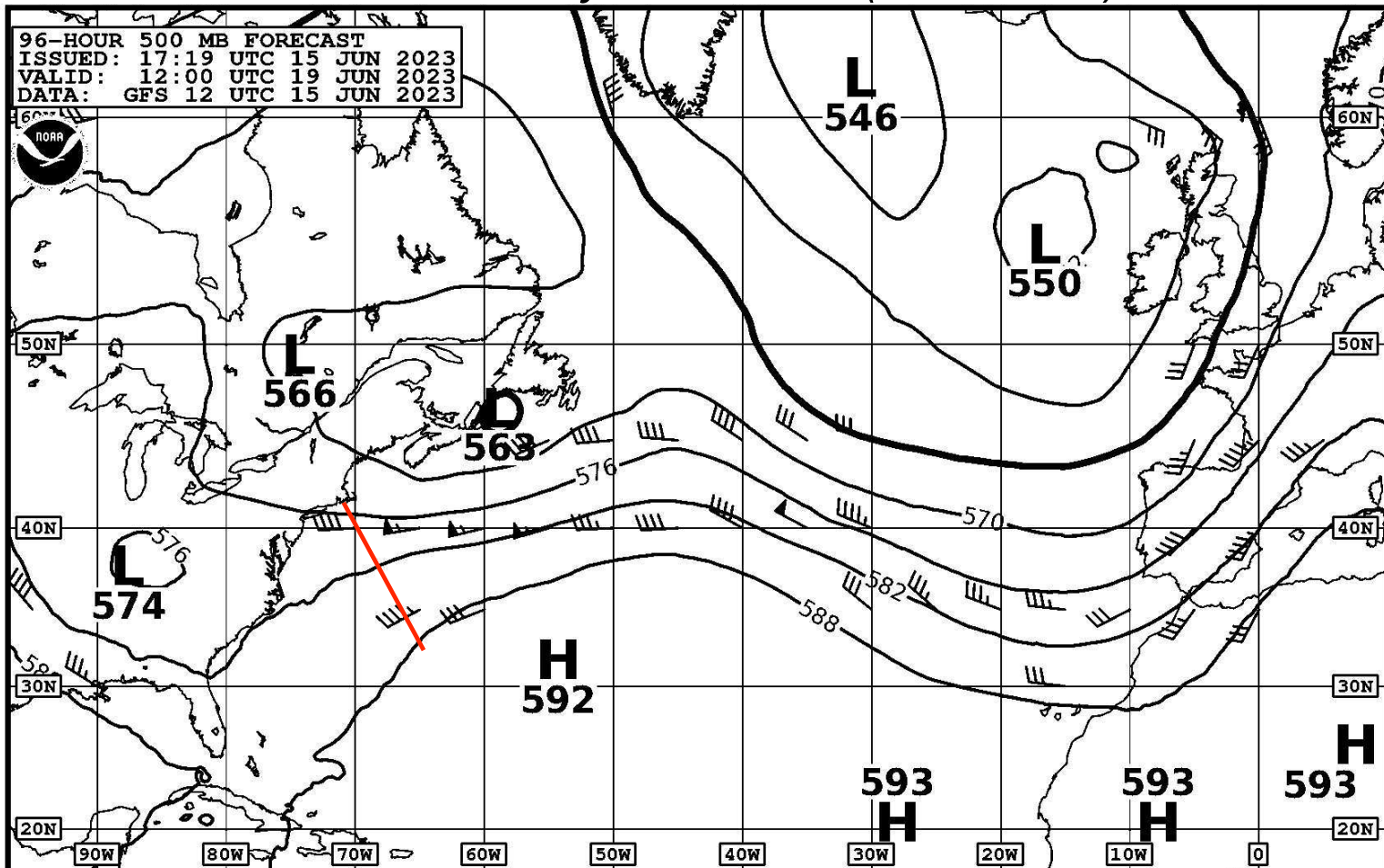
Valid Sunday 1200 UTC (0800 EDT)



# WEATHER FORECAST INFORMATION

96 hour forecast: 500 millibar chart

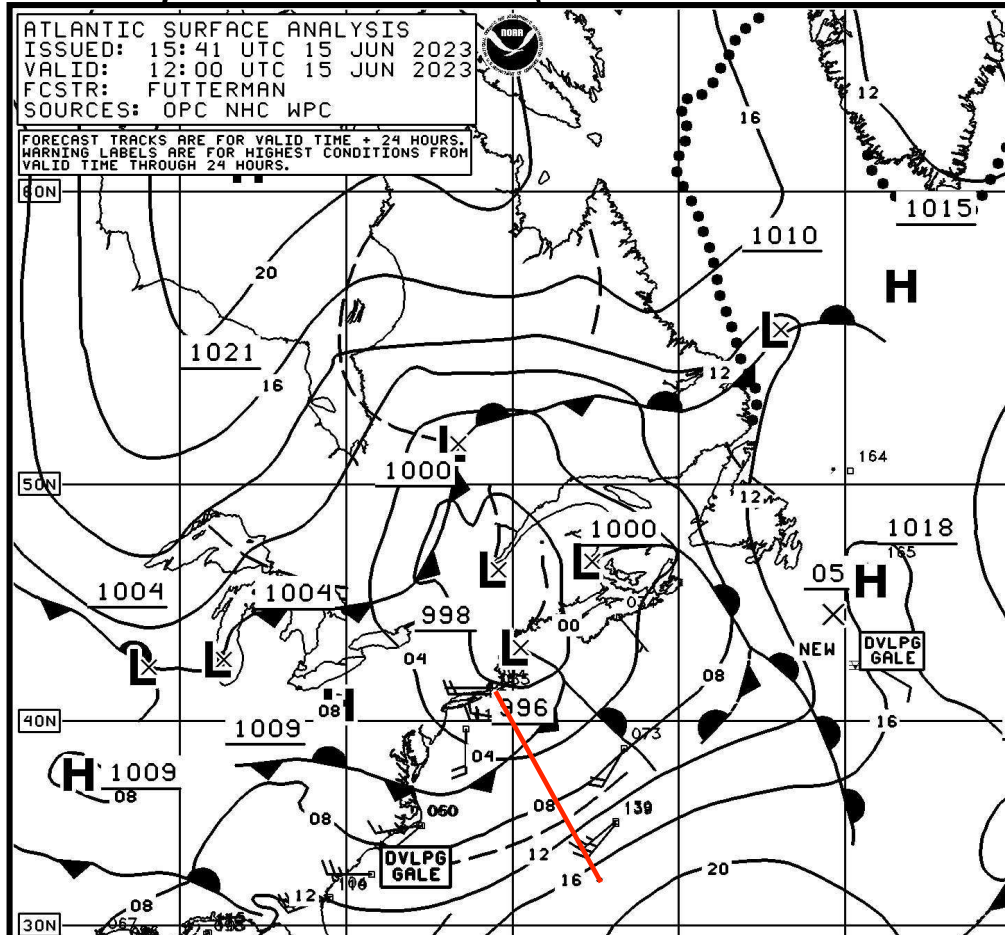
Valid Monday 1200 UTC (0800 EDT)



# WEATHER FORECAST INFORMATION

Thursday 1200 UTC (0800 EDT)

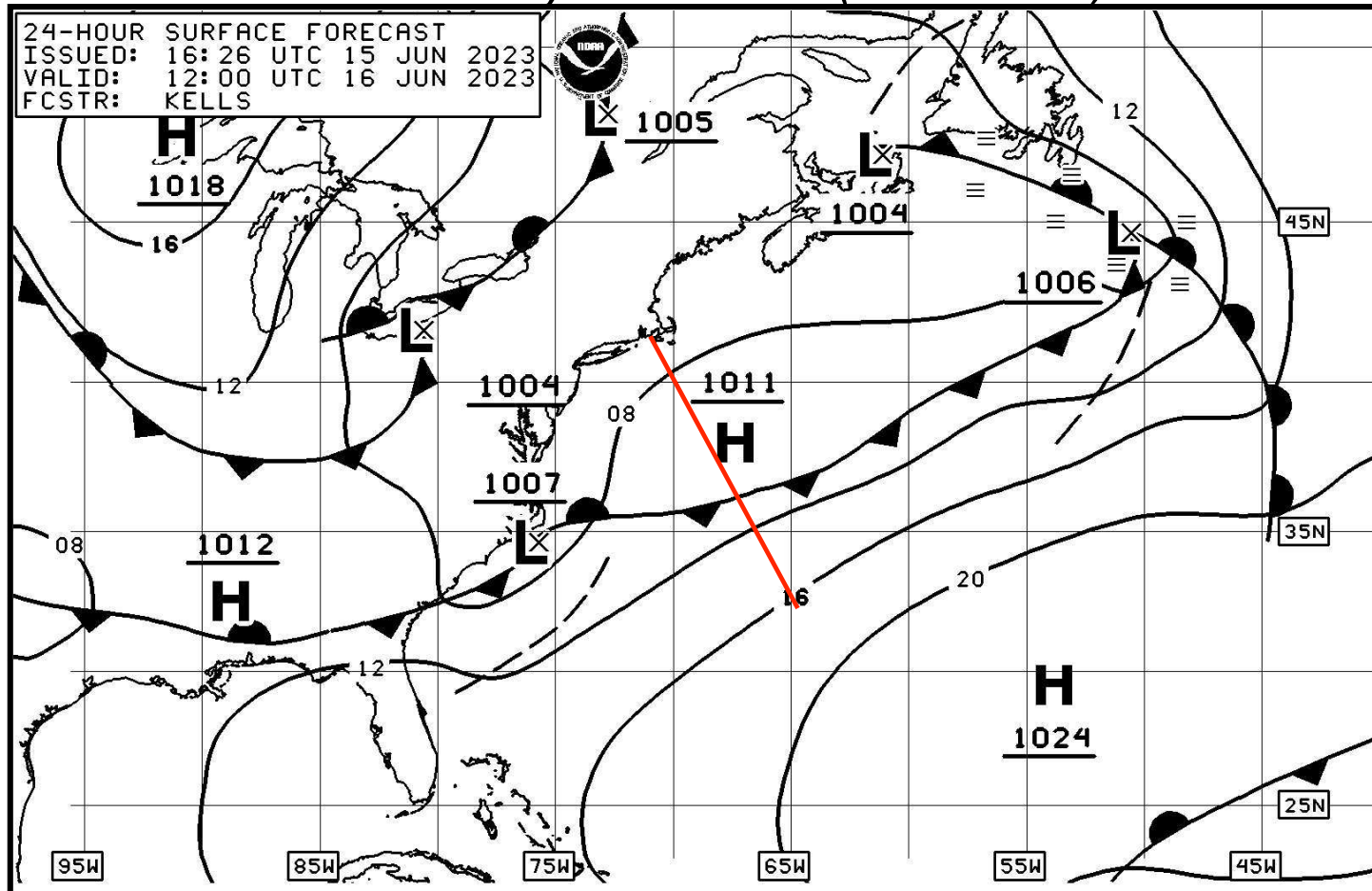
Surface pressure chart (Start of Forecast Cycle)



# WEATHER FORECAST INFORMATION

*24 hour forecast: Surface pressure chart*

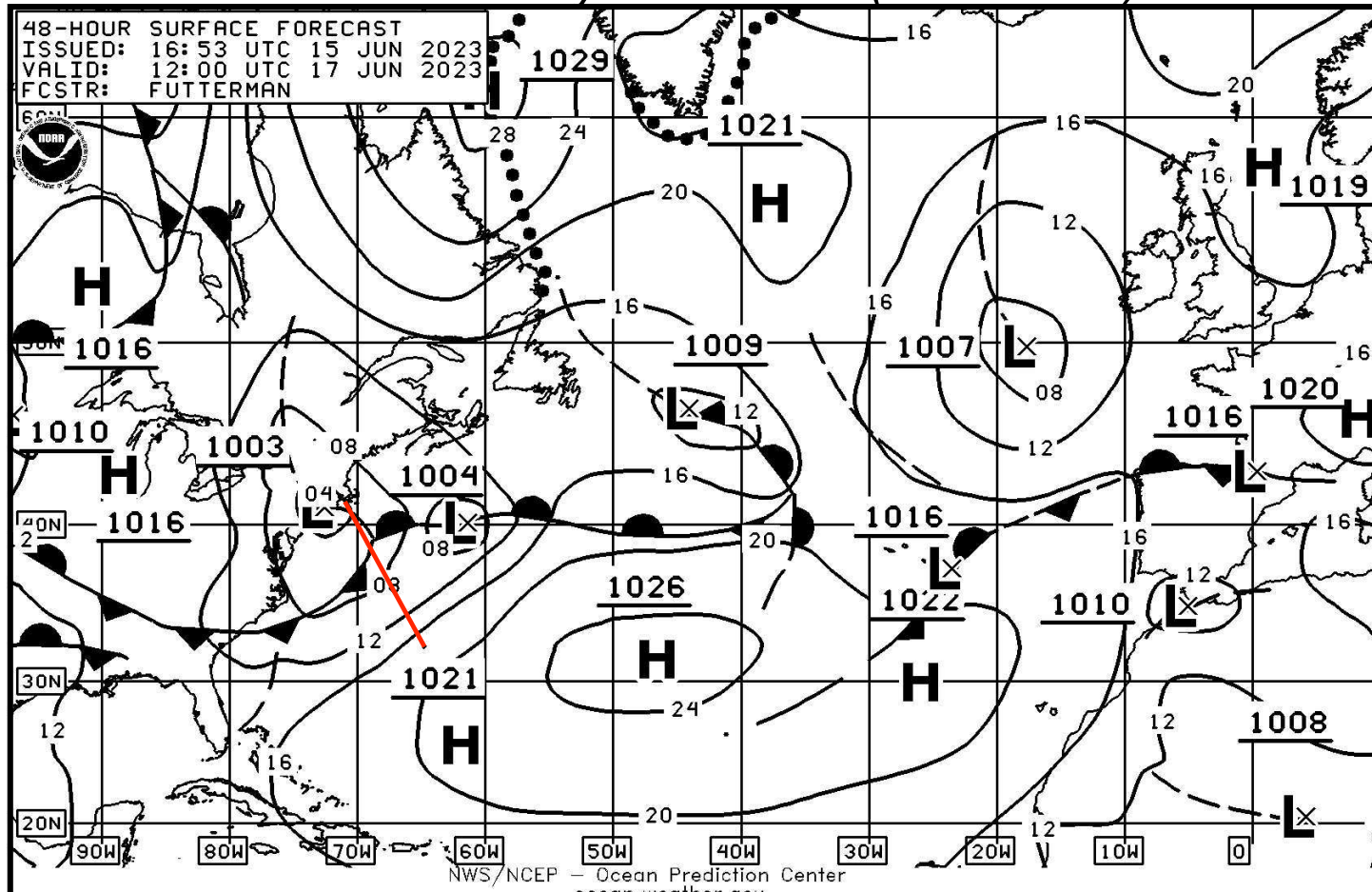
*Valid Friday 1200 UTC (0800 EDT)*



# WEATHER FORECAST INFORMATION

48 hour forecast: Surface pressure chart

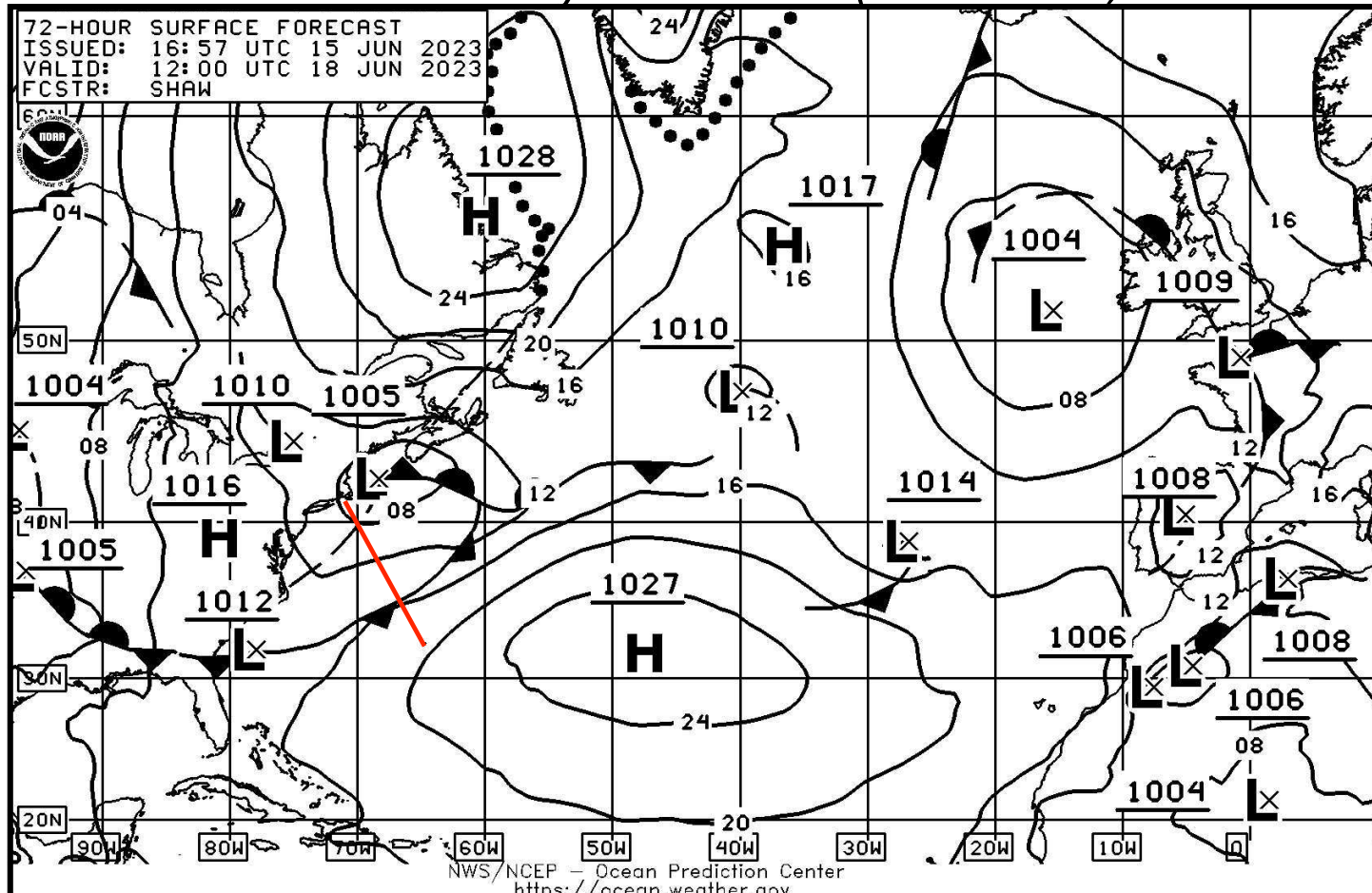
Valid Saturday 1200 UTC (0800 EDT)



# WEATHER FORECAST INFORMATION

72 hour forecast: Surface pressure chart

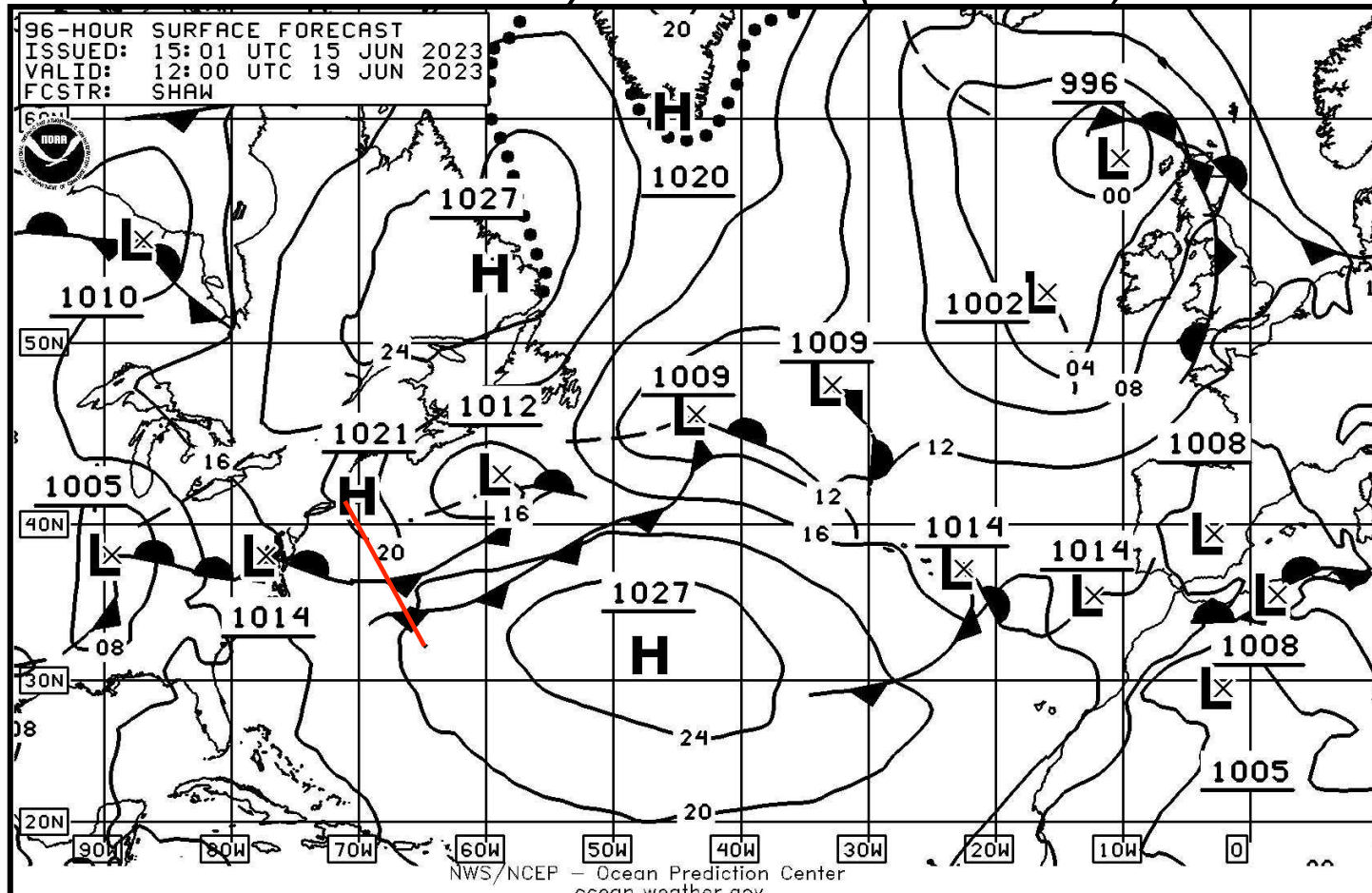
Valid Sunday 1200 UTC (0800 EDT)



# WEATHER FORECAST INFORMATION

*96 hour forecast: Surface pressure chart*

*Valid Monday 1200 UTC (0800 EDT)*

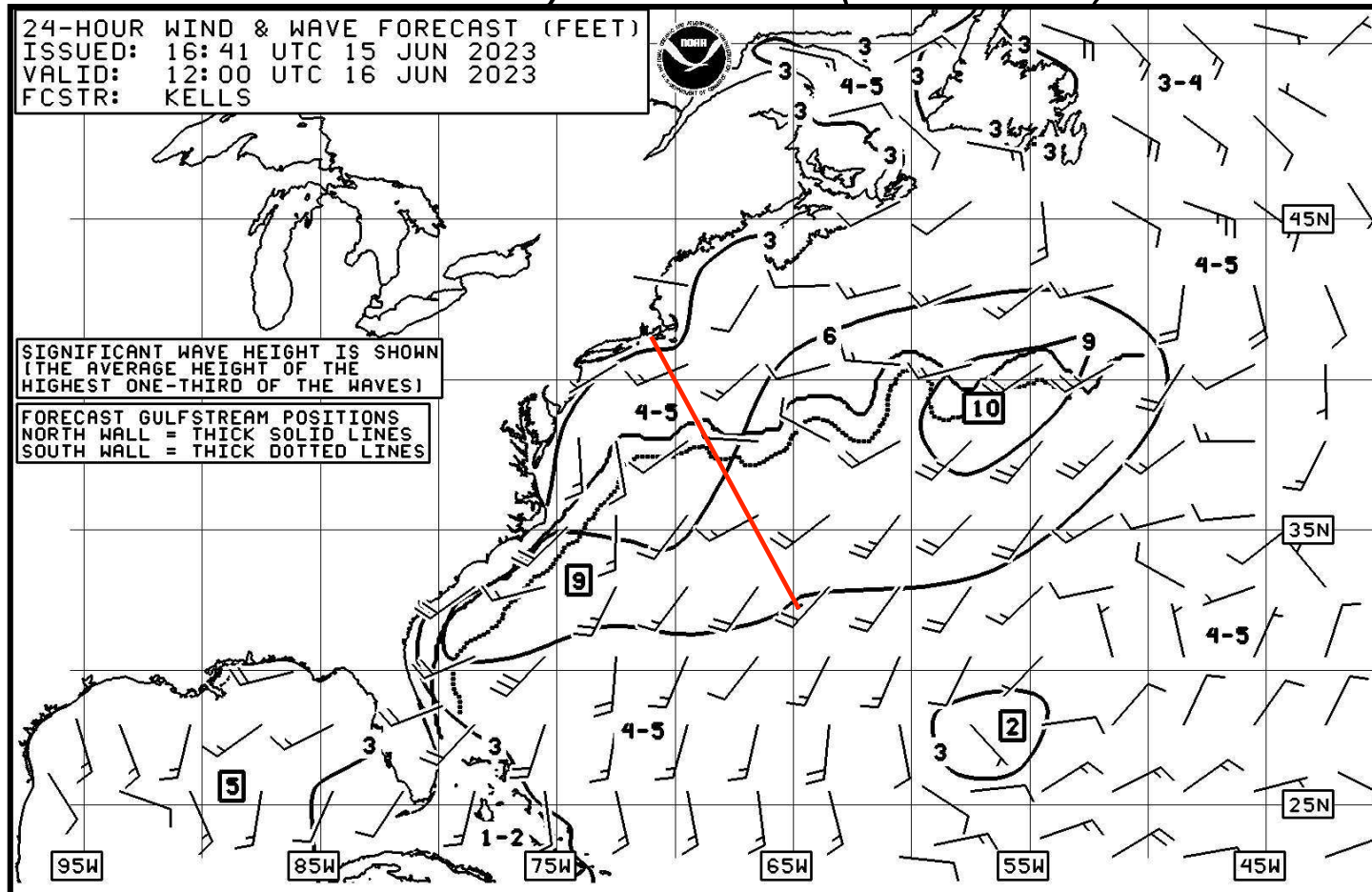




# WEATHER FORECAST INFORMATION

24 hour forecast: Wind/Wave chart

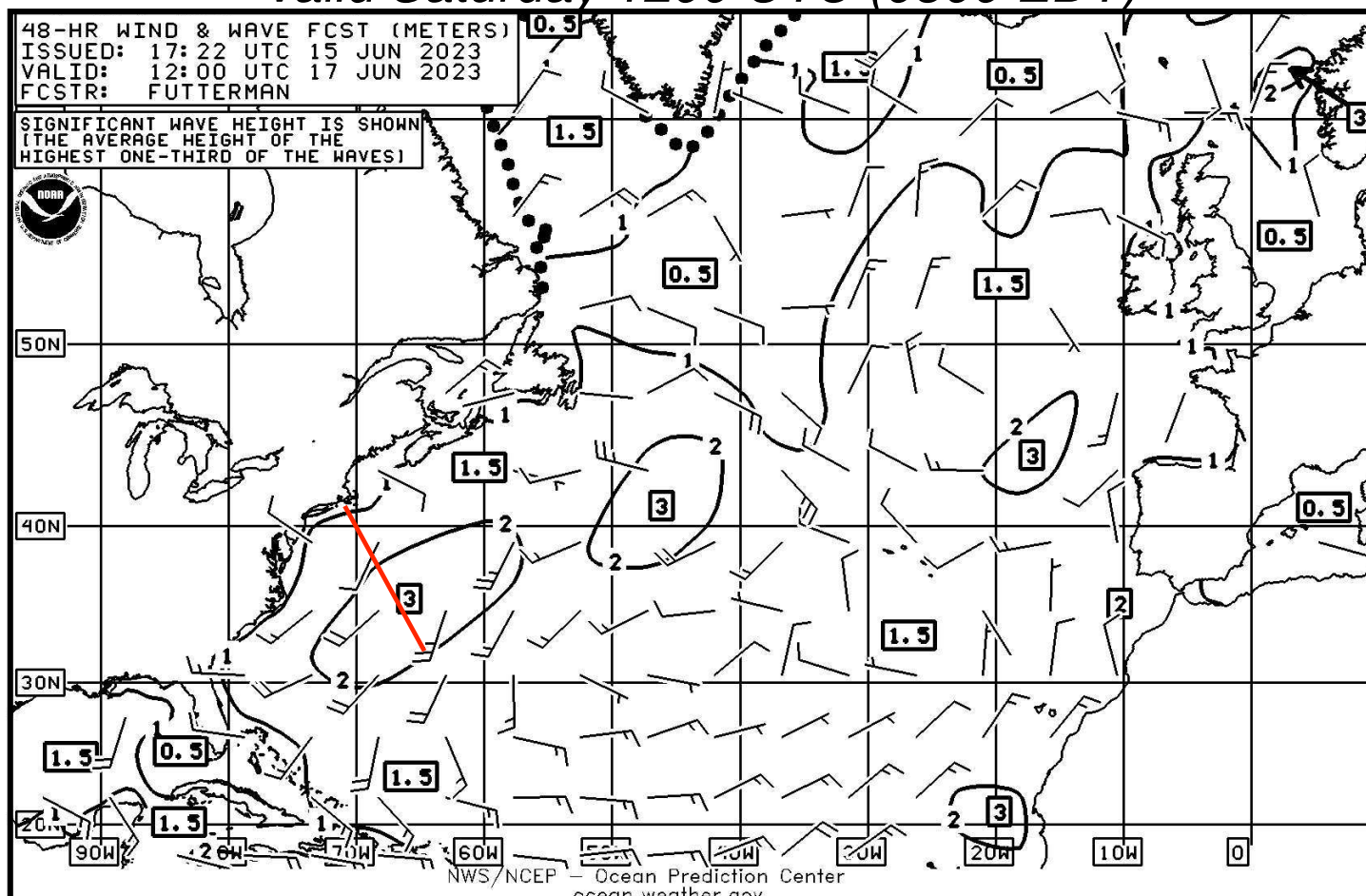
Valid Friday 1200 UTC (0800 EDT)



# WEATHER FORECAST INFORMATION

48 hour forecast: Wind/Wave chart

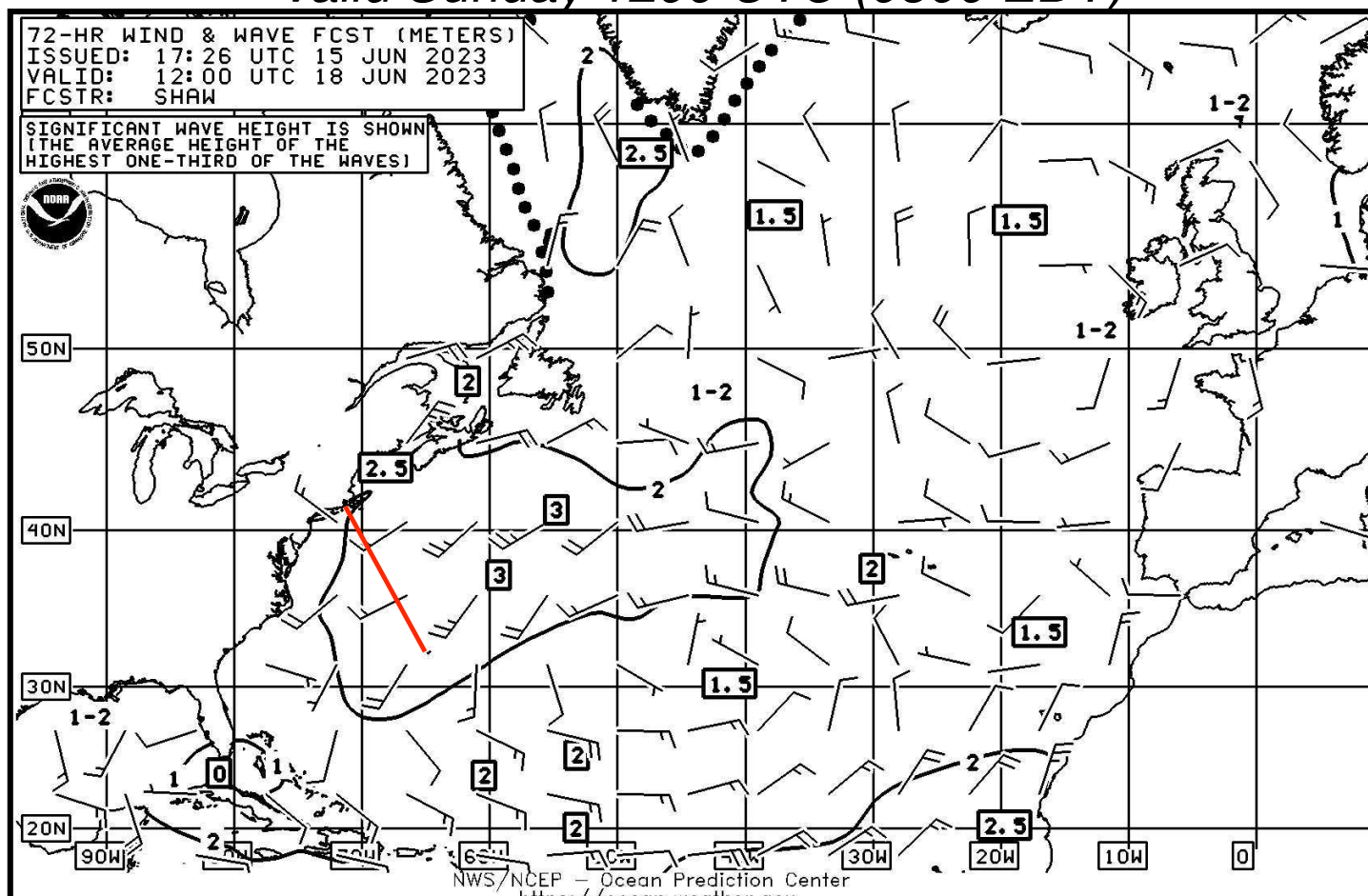
Valid Saturday 1200 UTC (0800 EDT)



# WEATHER FORECAST INFORMATION

72 hour forecast: Wind/Wave chart

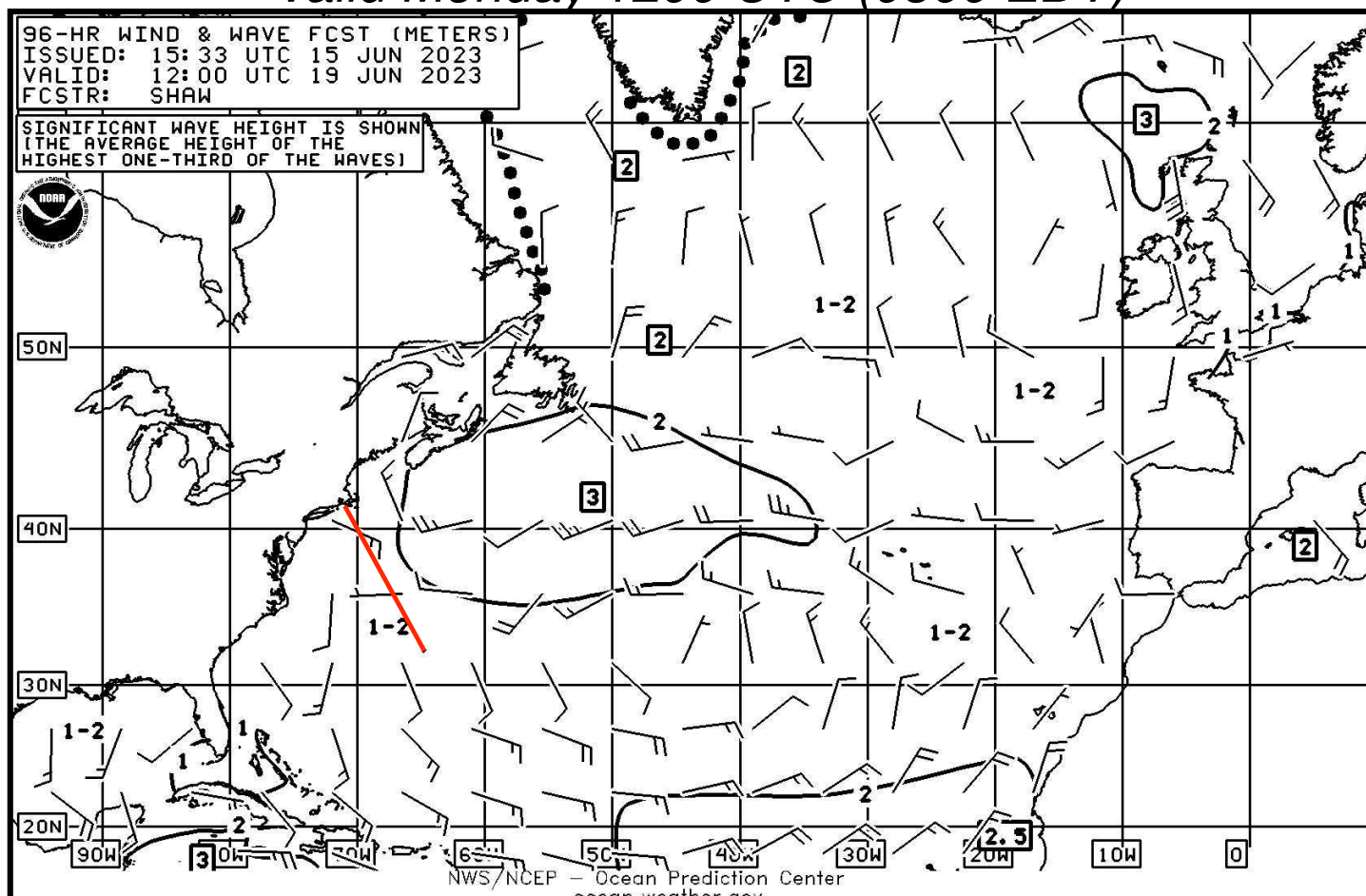
Valid Sunday 1200 UTC (0800 EDT)



# WEATHER FORECAST INFORMATION

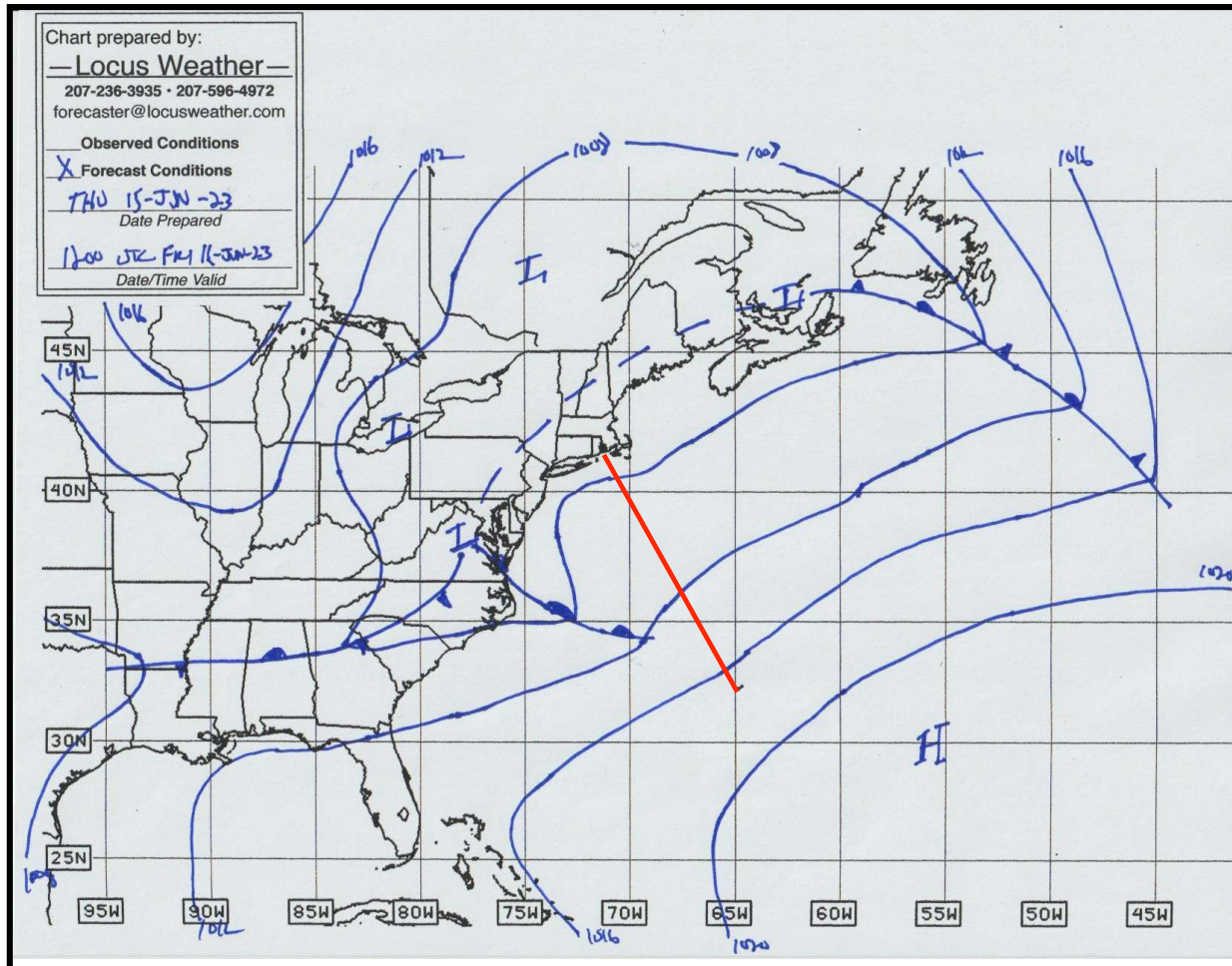
96 hour forecast: Wind/Wave chart

Valid Monday 1200 UTC (0800 EDT)



# WEATHER FORECAST INFORMATION

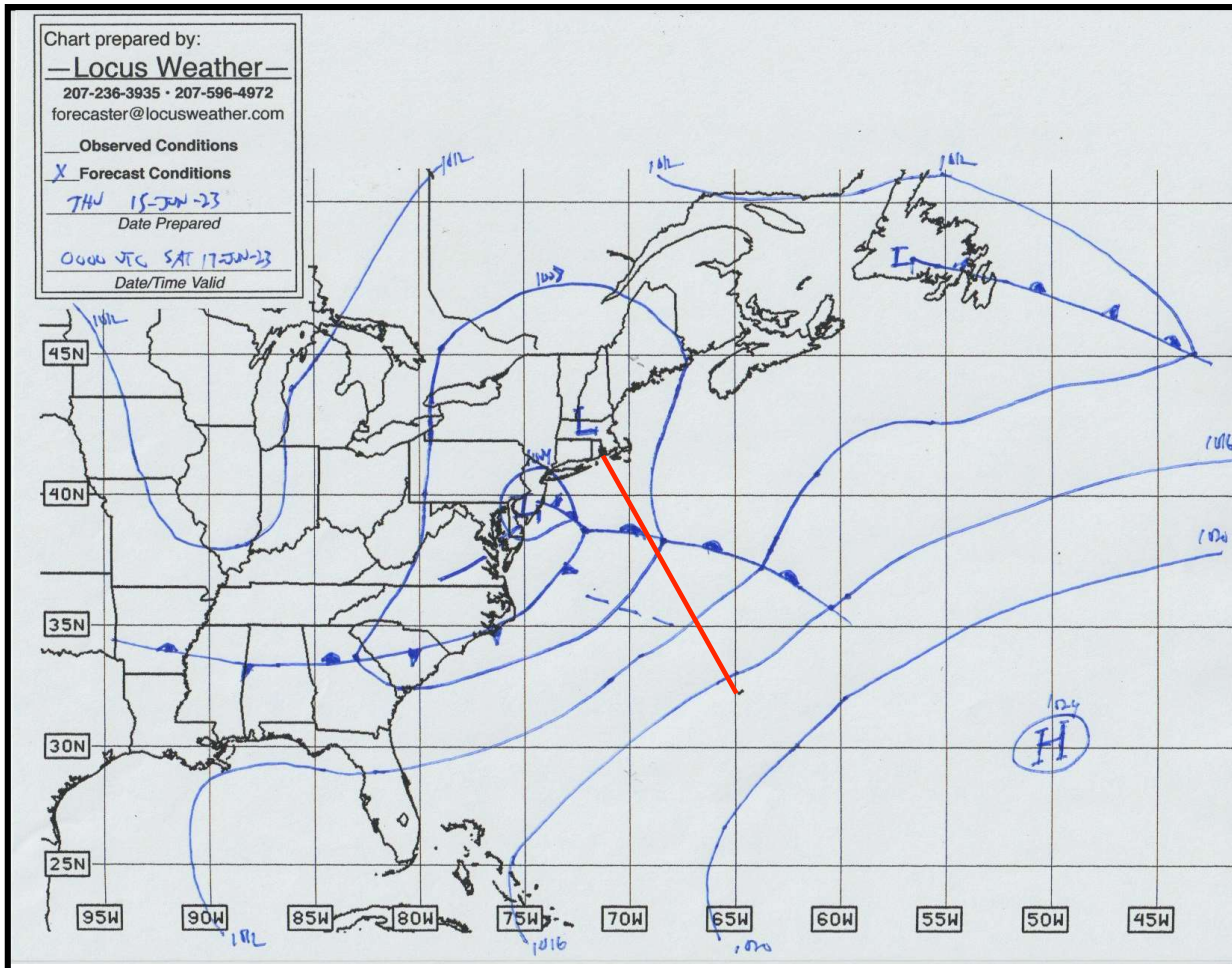
24 hour surface forecast: Valid Friday 1200 UTC (0800 EDT)



Wind SW at the start 9-13 knots.  
Winds backing to SSW later in the  
day over the open Atlantic.  
Seas fairly quiet.

# WEATHER FORECAST INFORMATION

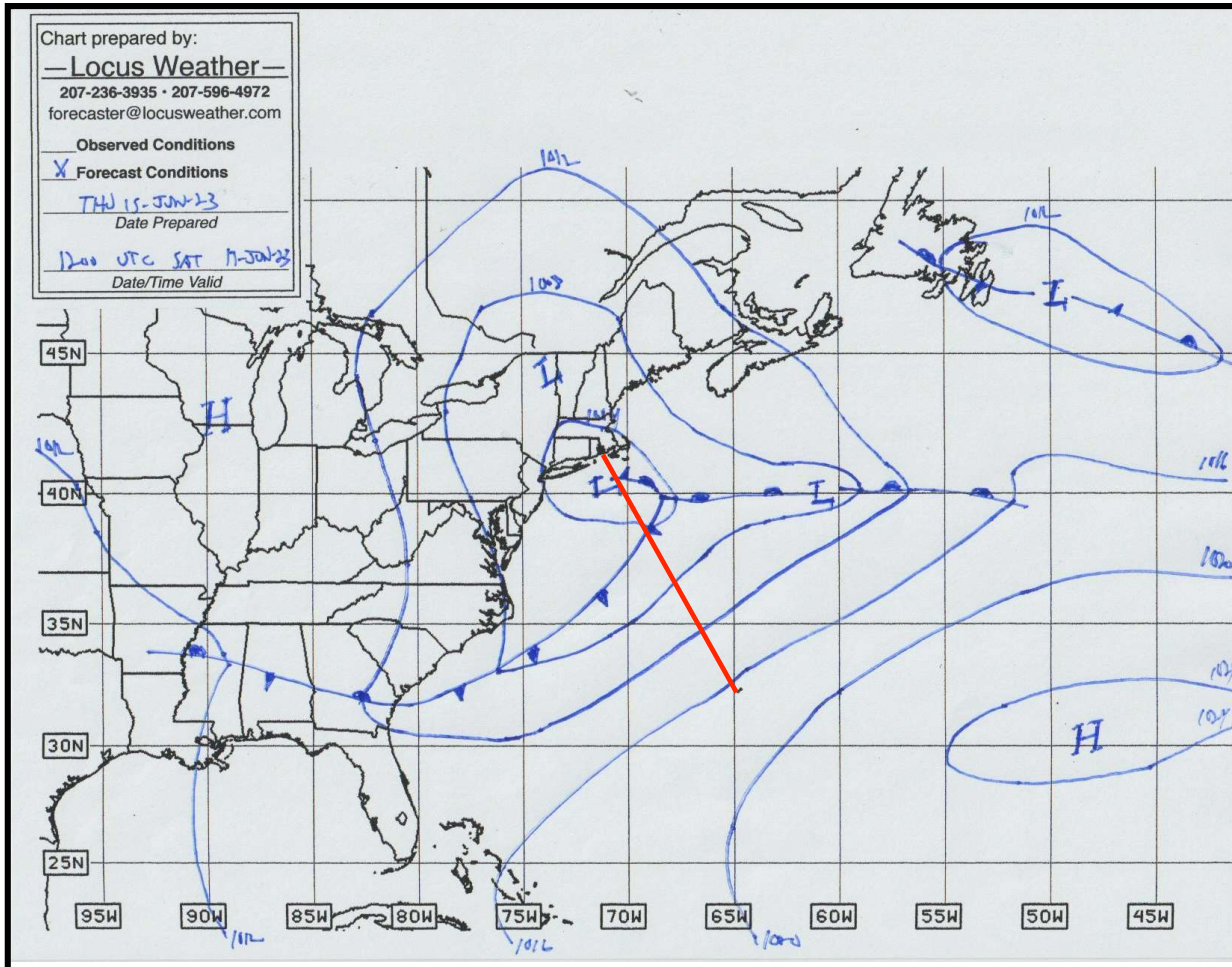
36 hour surface forecast: Valid Saturday 0000 UTC (2000 EDT Friday)



Winds SSW early in the evening, backing to SSE later in the evening, then shifting to SW toward daybreak closer to 40N. Wind speeds around 10 knots most of the night, stronger after the wind shift.

# WEATHER FORECAST INFORMATION

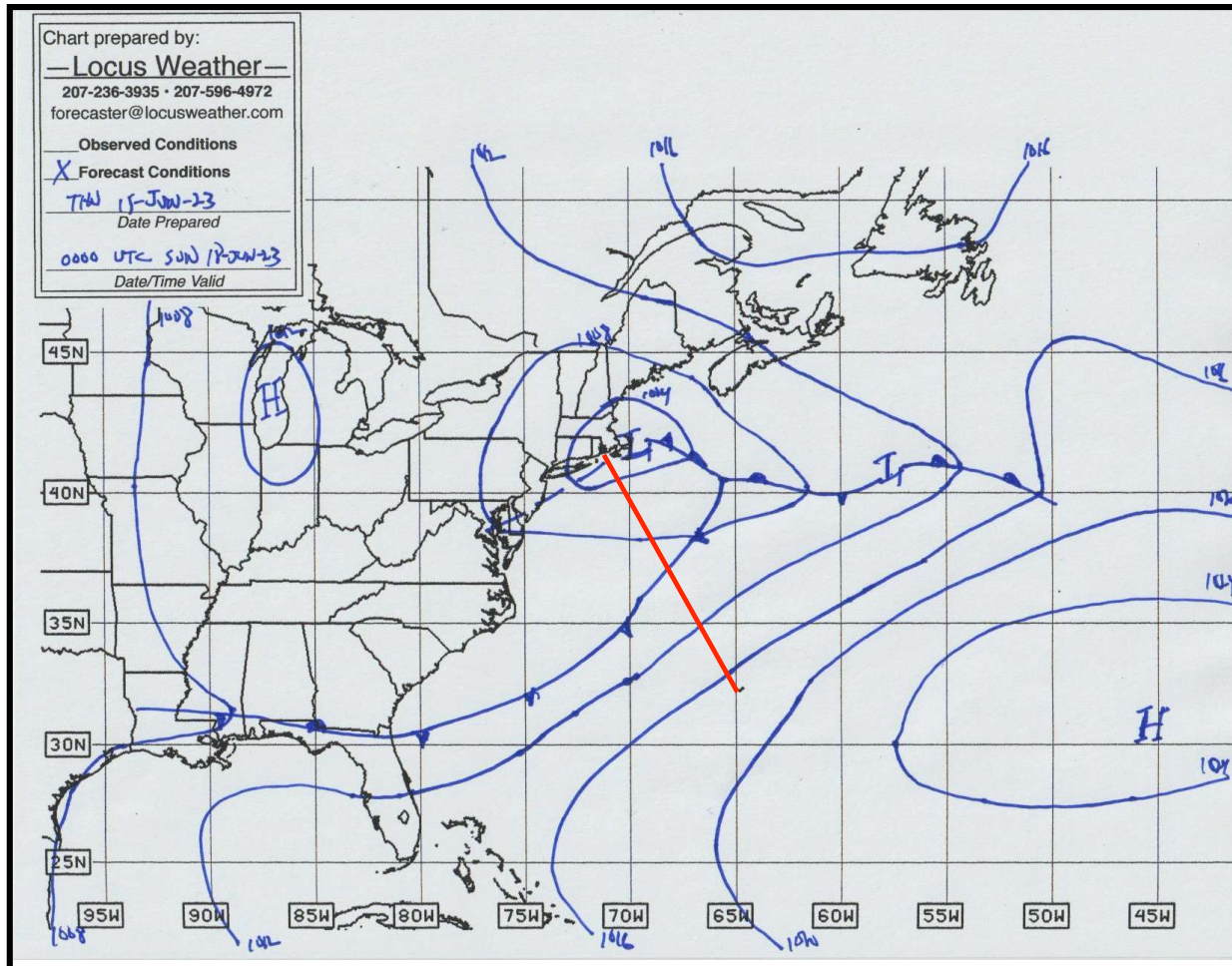
48 hour surface forecast: Valid Saturday 1200 UTC (0800 EDT)



Winds SW in the morning south of the low, near 15 knots, backing to WSW by afternoon and becoming a bit stronger.

# WEATHER FORECAST INFORMATION

60 hour surface forecast: Valid Sunday 0000 UTC (2000 EDT Saturday)

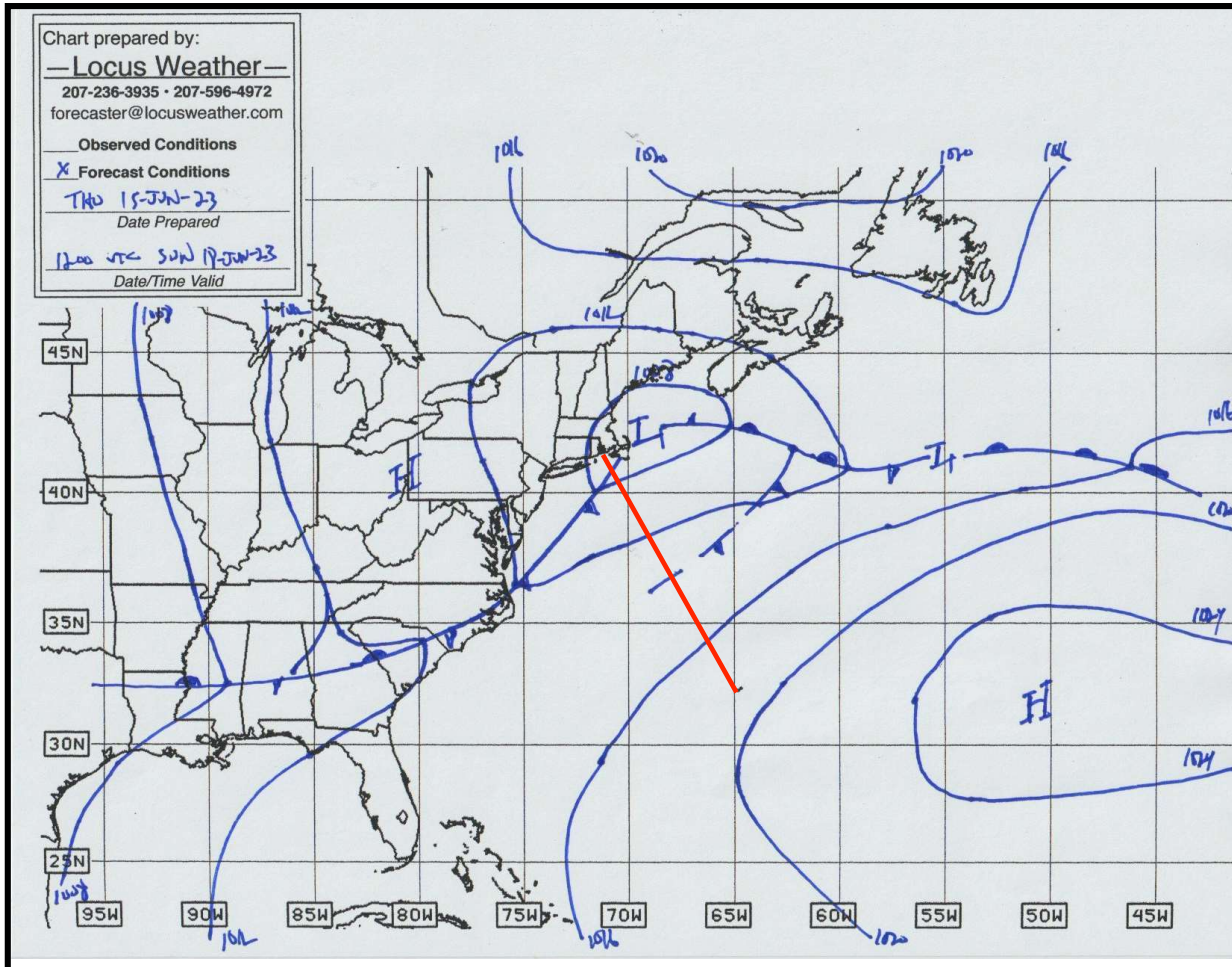


Winds WSW in the 15-20 knot range north of 38N, lighter farther south.  
Winds trending lighter overnight.  
Seas higher farther south.



# WEATHER FORECAST INFORMATION

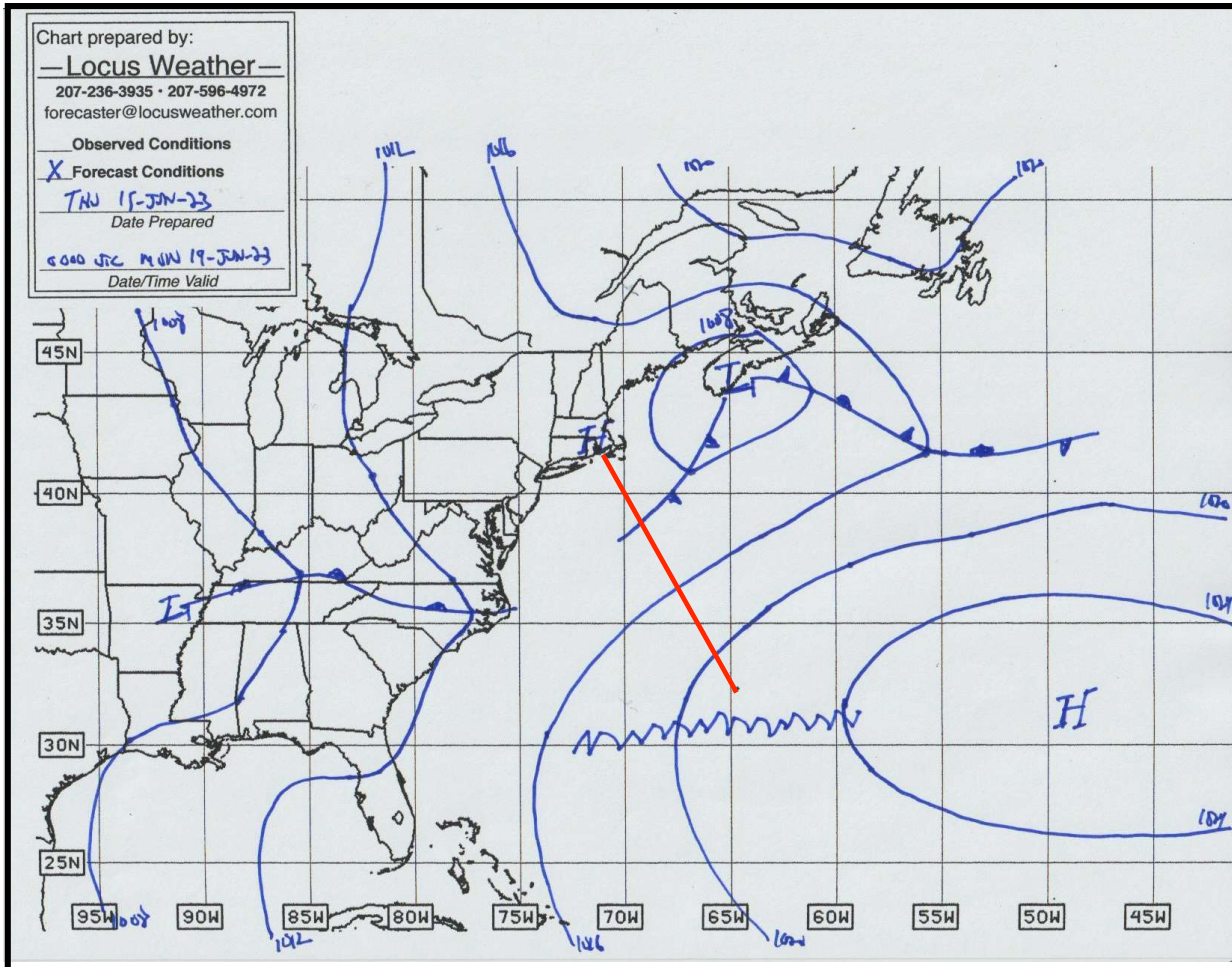
72 hour surface forecast: Valid Sunday 1200 UTC (0800 EDT)



Winds WSW near 15 knots around 37N, a bit stronger farther north, lighter farther south. Seas 5-7 feet.

# WEATHER FORECAST INFORMATION

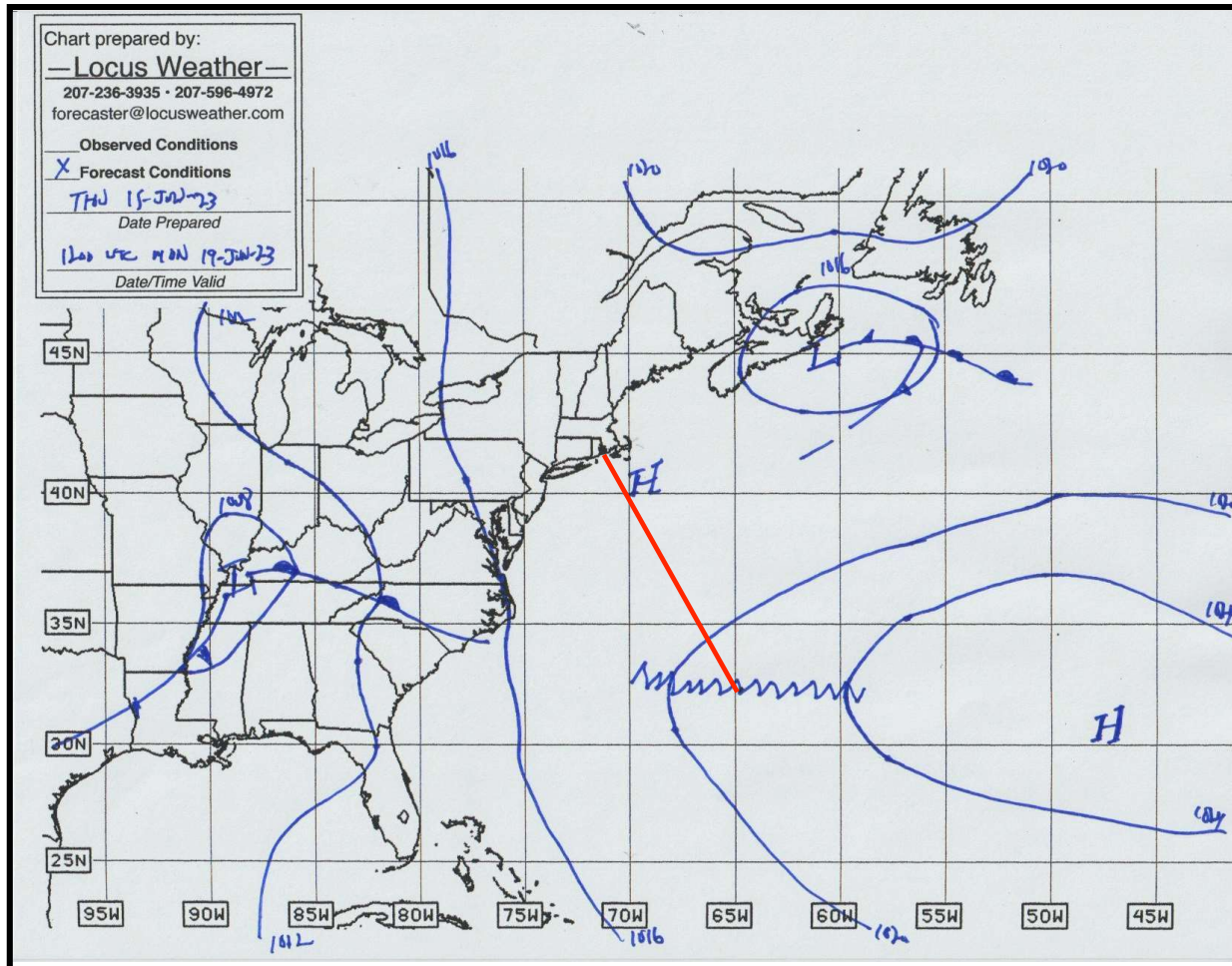
84 hour surface forecast: Valid Monday 0000 UTC (2000 EDT Sunday)



Winds SW in the 9-13 knot range between 36N and 37N, lighter farther north, stronger farther south.

# WEATHER FORECAST INFORMATION

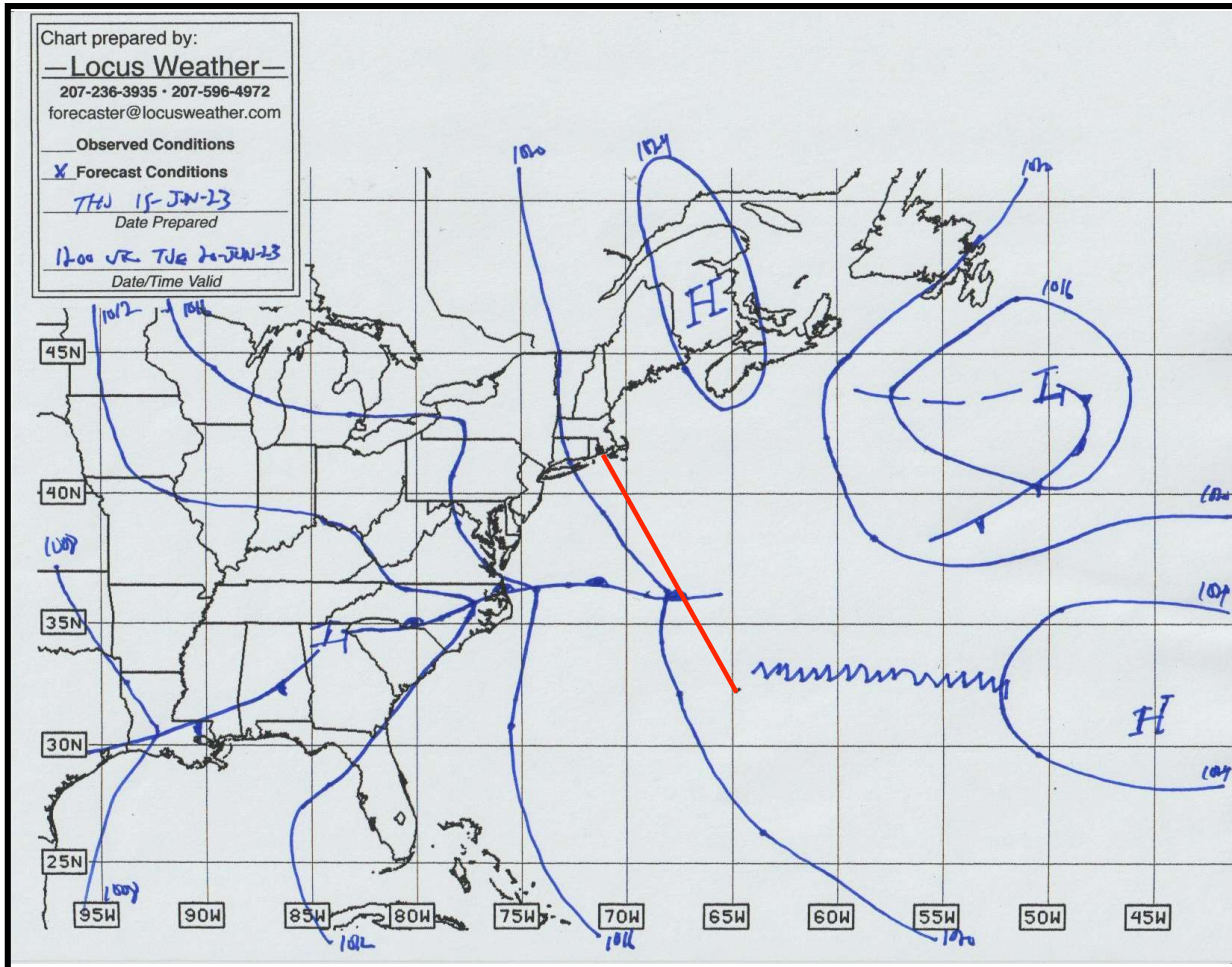
96 hour surface forecast: Valid Monday 1200 UTC (0800 EDT)



Winds SW around 10 knots near 35N, SSW farther south closer to Bermuda, lighter farther north. Winds backing to SSE farther south through the day and becoming much lighter, particularly at night.

# WEATHER FORECAST INFORMATION

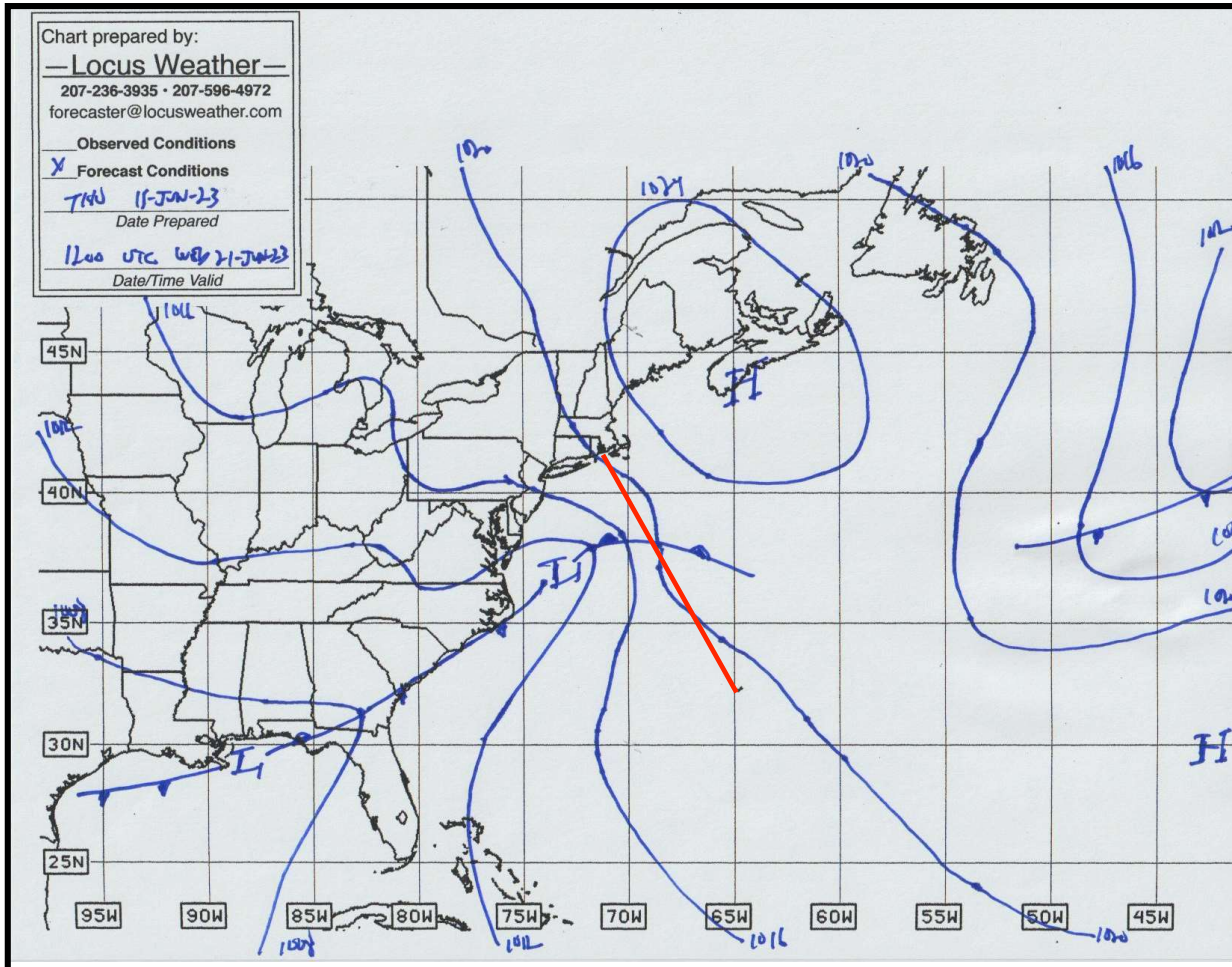
120 hour surface forecast: Valid Tuesday 1200 UTC (0800 EDT)



Winds SSE less than 10 knots near  
Bermuda

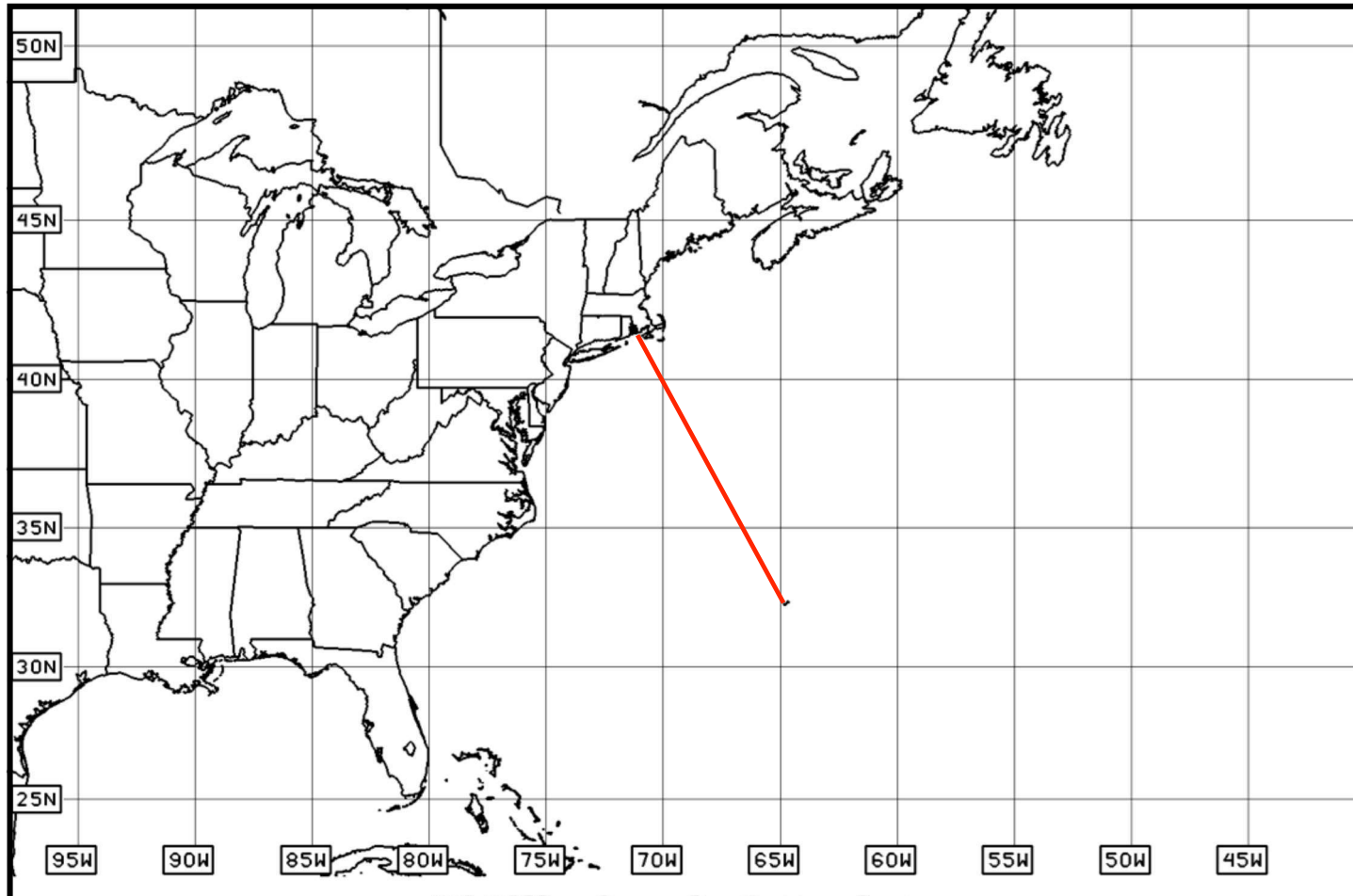
# WEATHER FORECAST INFORMATION

144 hour surface forecast: Valid Wednesday 1200 UTC (0800 EDT)



Winds SE less than 10 knots near Bermuda, veering to S in the afternoon.

# POSSIBLE DIFFERENT WEATHER PATTERNS



NWS/NCEP - Ocean Prediction Center

1. Wind directions and timings of shifts a bit uncertain during the first 18 hours of the race. This will depend on details of the location of the low and the warm front nearing southern New England through this period.

2. Timing of the backing of the wind approaching Bermuda is a bit uncertain. This will depend on the progress of the ridge axis north through the region.

# SOURCES OF PUBLICLY AVAILABLE INFORMATION

*If you have web access:*

**Ocean Prediction Center ([www.ocean.weather.gov](http://www.ocean.weather.gov))**

This is the best source for products produced **by meteorologists** for the region of interest.

Charts you should definitely obtain:

Western Atlantic Surface Analysis. Issued every 6 hours (0000,0600,1200,1800 UTC). Charts typically available around 3 hours after the valid time. By downloading this chart each time it is issued you can track the actual motion of the weather features.

24 hour Surface Forecast. Issued twice per day based on data gathered at 0000 and 1200 UTC. Typically available around 6 hours after forecast initialization.

# SOURCES OF PUBLICLY AVAILABLE INFORMATION

*If you have web access:*

**Ocean Prediction Center ([www.ocean.weather.gov](http://www.ocean.weather.gov))**

Charts you should obtain if you can:

48 hour Surface Forecast. Issued twice per day based on data gathered at 0000 and 1200 UTC. Typically available around 7 hours after forecast initialization. This is a full ocean chart.

Offshore Wind/Wave Analysis Chart. Issued every 3 hours. Getting this chart once or twice per day will keep you advised of significant wave heights. If conditions are changing quickly, you may want to obtain the chart more frequently.

72 and 96 hour Surface Forecasts. Issued once per day based on data gathered at 1200 UTC. Typically available around 8 hours after forecast initialization. This is a full ocean chart.

500 millibar charts, Wind/Wave Forecast Charts, Wave Period/Direction forecast charts



# SOURCES OF PUBLICLY AVAILABLE INFORMATION

*If you have web access:*

**ASCAT wind data**

**(<http://manati.star.nesdis.noaa.gov/datasets/ASCATData.php>)**

This website provides detailed wind data based on satellite observation of ocean surface roughness. The satellite “sees” only a small slice of the earth on each pass, so you have to get lucky. Click on one of the Latitude/Longitude Squares to see detailed wind information for that sector. The time of the pass is shown at the bottom of the image.

# SOURCES OF PUBLICLY AVAILABLE INFORMATION

NOAA NESDIS STAR Center for Satellite Application and Research  
National Environmental Satellite, Data, and Information Service (NESDIS)

Ocean Surface Winds Team.

NOAA | NESDIS | STAR | SOCD OSWT Home | Product Description | Data Products | Research | Contact US

▸ OSWT Home

▸ Product Description

▸ Data Products

- QuikSCAT/SeaWinds
- OSCAT
- RapidSCAT
- **ASCAT (METOP-A) >>**
- ASCAT (METOP-B)
- WindSAT
- Altimeter
- ERS-2
- SSM/I

▸ Research

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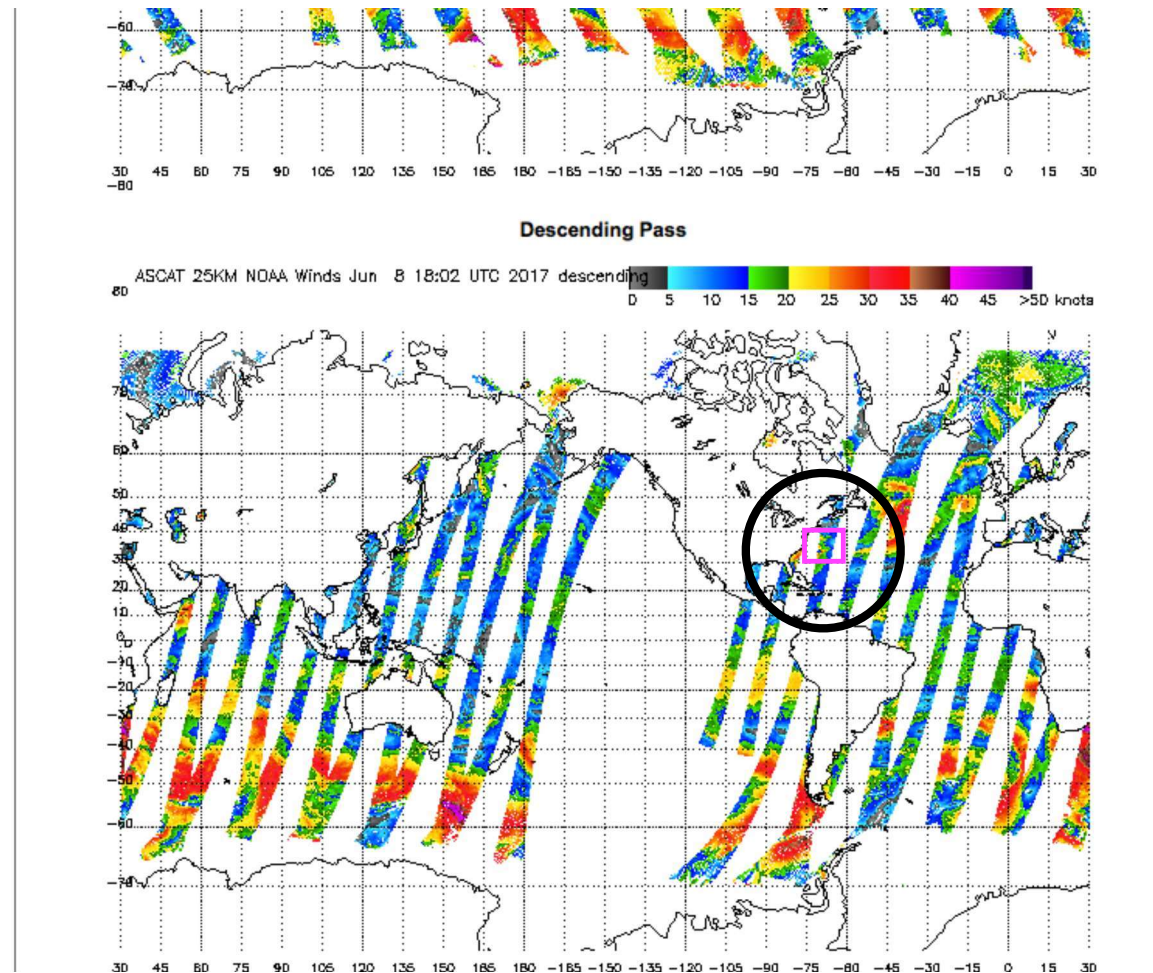
Data from Satellite/Instruments: [Advanced Scatterometer \(ASCAT METOP-A\)](#)

Additional Products: NOAA wind vectors 10x15 (25KM)  Year: 2017  Month: 6  Day: 8   Global(80N80S-180E180W)

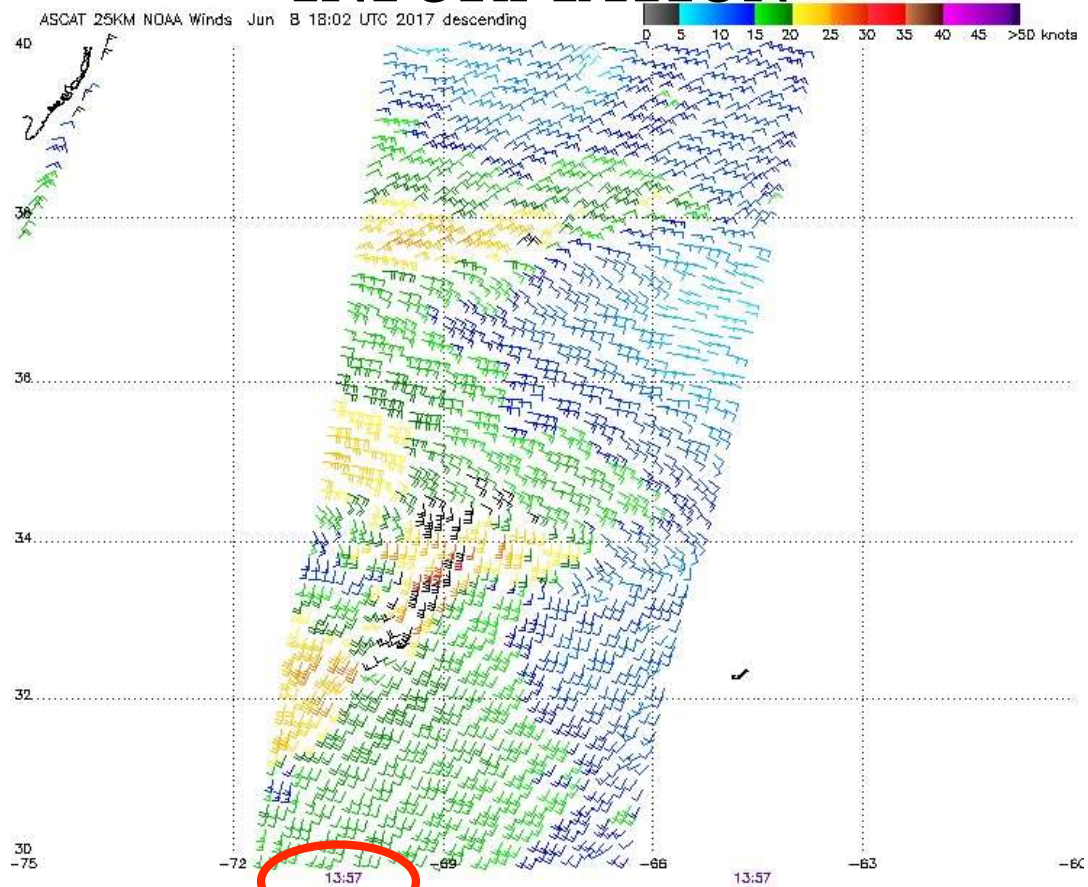
Ascending Pass

ASCAT 25KM NOAA Winds Jun 8 18:02 UTC 2017 ascending

# SOURCES OF PUBLICLY AVAILABLE INFORMATION



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Note: 1) Times are GMT 2) Times along bottom correspond to measurement at 35N  
3) Data built from Jun B 18:02 UTC 2017 4) Black wind barbs indicate possible contamination  
NOAA/NESDIS/Center for Satellite Applications and Research

# SOURCES OF PUBLICLY AVAILABLE INFORMATION

*If you have email, but no web access:*

**Use ftpmail to obtain Ocean Prediction Center Charts**

Instructions available at the following web address:

<https://ocean.weather.gov/ftpmail.php>

If you are not familiar with this method of obtaining charts, you should practice ***tonight*** while you still have a broadband connection.

To use this method, you will need the Atlantic Radiofax schedule:

<https://ocean.weather.gov/shtml/atlsch.php>

Print this schedule so you will have easy access to it while offshore.

***If you are receiving charts through a radiofax receiver, or a computer program that utilizes the HF radiofax signal, you will want the above schedule also.***

# **SOURCES OF PUBLICLY AVAILABLE INFORMATION**

## **WARNING!!**

### ***BEWARE OF GRIB FILE DATA!!!!***

*This includes data from systems like OCENS, MaxSea, Buoyweather.com, PredictWind, Windy, and others.*

*Grib files are pure model output from one computer model.*

*Grib data has not been analyzed or modified by a professional meteorologist.*

*If you rely too heavily on this one tool, you may be misled.*

*If you use grib products, it is strongly suggested that you also obtain products that have been produced by a professional meteorologist. Keep in mind that the meteorologist has much more information at his/her disposal and also has knowledge about the computer models and how they will perform in certain situations.*