

# **NAAMES Afternoon WX Discussion**

Wednesday, May 25, 2016

# Forecast Summary

## **Day 1 (Thursday) – May 26 – Ship at S4**

**Recommendation: Fly over S3 and cloud module over S4**

St. John's: Mostly cloudy with periods of heavy rain, chance of 80%. Winds N 10-20 mph. Temps falling from 55 to 45F.

## **Day 2 (Friday) – May 27 - Ship leave S4 for S5**

**Recommendation: Fly, possible northern survey over S0, S1, S2, along with cloud modules**

St. John's: Mostly cloudy with decreasing clouds throughout the day. Winds NNE 15-25 mph. High 44F.

## **Day 3 (Saturday) – May 28 – Ship at S5**

**Recommendation: Fly**

St. John's: Partly cloudy with some light afternoon rain showers. Winds S 15-25 mph. High 49F.

## **Day 4 (Sunday) – May 29 – Ship at S5?**

**Recommendation: Not likely, big storm in North Atlantic**

St. John's: Partly cloudy and windy. Winds NNW 25-35 mph. High 43F.

## **Day 5 (Monday) – May 30 – Ship leave S5 for S6**

**Recommendation: Questionable, storm remnants still in domain**

St. John's: Mix of sun and clouds. Winds N 15-25 mph. High 48F.

## **Day 6 (Tuesday) – May 31 – Ship at S6**

**Recommendation: Fly**

St. John's: Mostly cloudy with afternoon rain showers. Winds SSE 10-15 mph. High 51F.

**CALIPSO tracks through domain on 27<sup>th</sup> and 30<sup>th</sup>.**

# Planned Ship Route & Forecast

## Option 1

Depart S4 Friday morning, S5 for Saturday and Sunday,  
Depart S5 Monday morning

### Thursday, 5/26 S4 Ops

Waves: E 5-7 ft  
Winds: SSW 10-15 kts  
Clouds: Partly to mostly cloudy  
Precip: afternoon rain showers

### Friday, 5/27 Transit to S5

Waves: E 5-7 ft  
Winds: N 5-10 kts  
Clouds: overcast  
Precip: heavy AM showers

### Saturday, 5/28 S5 Ops

Waves: N 8-12 ft  
Winds: NNW 12-18 kts  
Clouds: mostly cloudy  
Precip: AM scattered showers

### Sunday, 5/29 still at S5

Waves: NE 5-7 ft  
Winds: SW 15-20 kts, shifting to W 22-28 ft  
Clouds: overcast  
Precip: heavy rain showers

### Monday, 5/30 transit to S6

Waves: NNE 7-12 ft  
Winds: NW 35-40 kts  
Clouds: mostly to partly cloudy  
Precip: rain showers

### Tuesday, 5/31 S6 Ops

Waves: NNE 7-9 ft  
Winds: NW 10-15 kts  
Clouds: partly to mostly cloudy  
Precip: none

Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image Landsat  
N37°

Google



# Planned Ship Route & Forecast

## Option 2

Depart S4 Friday morning, S5 for Saturday, Depart S5 Sunday morning

### Thursday, 5/26 S4 Ops

Waves: E 5-7 ft  
Winds: SSW 10-15 kts  
Clouds: Partly to mostly cloudy  
Precip: afternoon rain showers

### Friday, 5/27 Transit to S5

Waves: E 5-7 ft  
Winds: N 5-10 kts, increasing to 15-20 kts  
Clouds: overcast  
Precip: heavy AM showers

### Saturday, 5/28 S5 Ops

Waves: N 8-12 ft  
Winds: NNE 12-18 kts  
Clouds: mostly cloudy  
Precip: AM scattered showers

### Sunday, 5/29 transit to S5

Waves: NE 5-7 ft  
Winds: SW 20-25 kts, shifting W increasing to 30 kts  
Clouds: mostly cloudy  
Precip: light scattered showers

### Monday, 5/30 S6 Ops

Waves: NNE 12-15 ft  
Winds: NW 30-35 kts  
Clouds: overcast  
Precip: isolated AM shower

### Tuesday, 5/31 S6 Ops

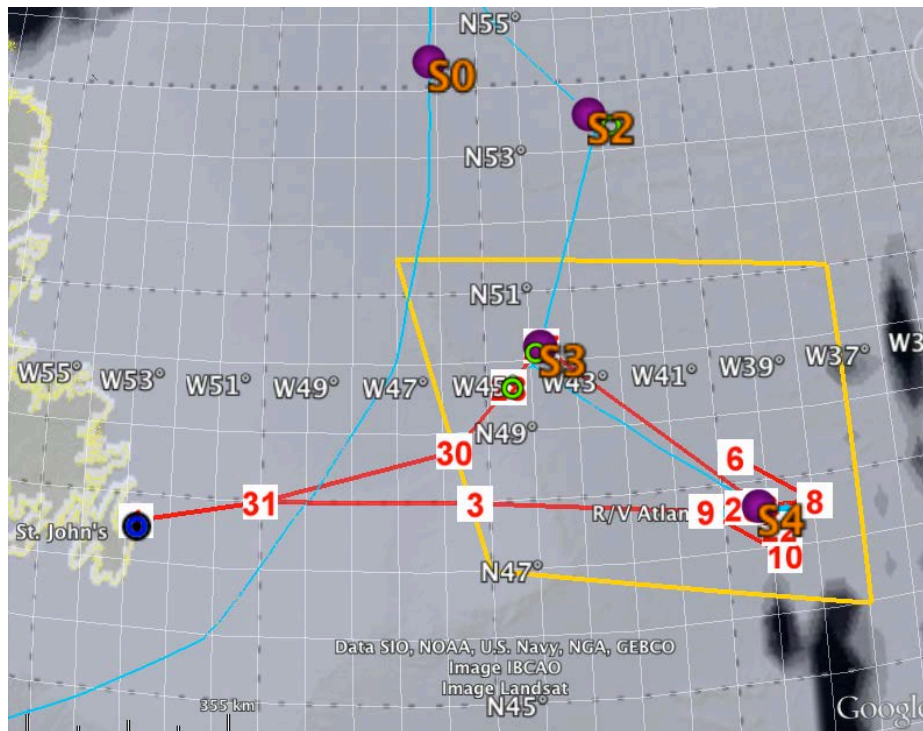
Waves: NNE 7-9 ft  
Winds: NE 10-15 kts  
Clouds: partly to mostly cloudy  
Precip: none

Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image Landsat  
N37°

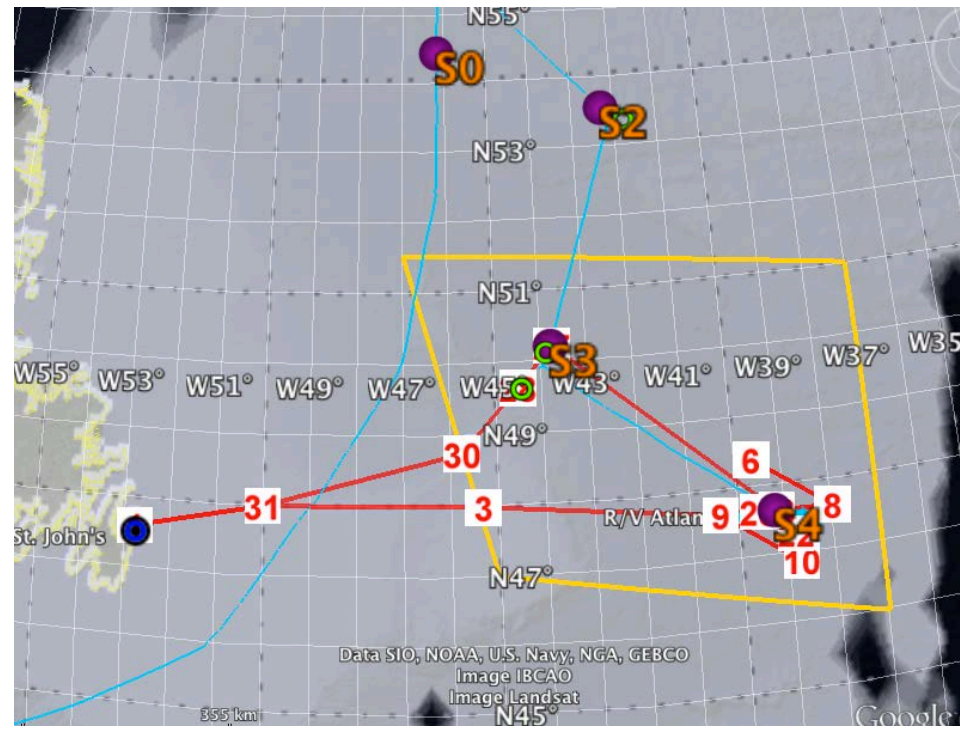
Google

# Thursday Flight Plan

## 12z Clouds



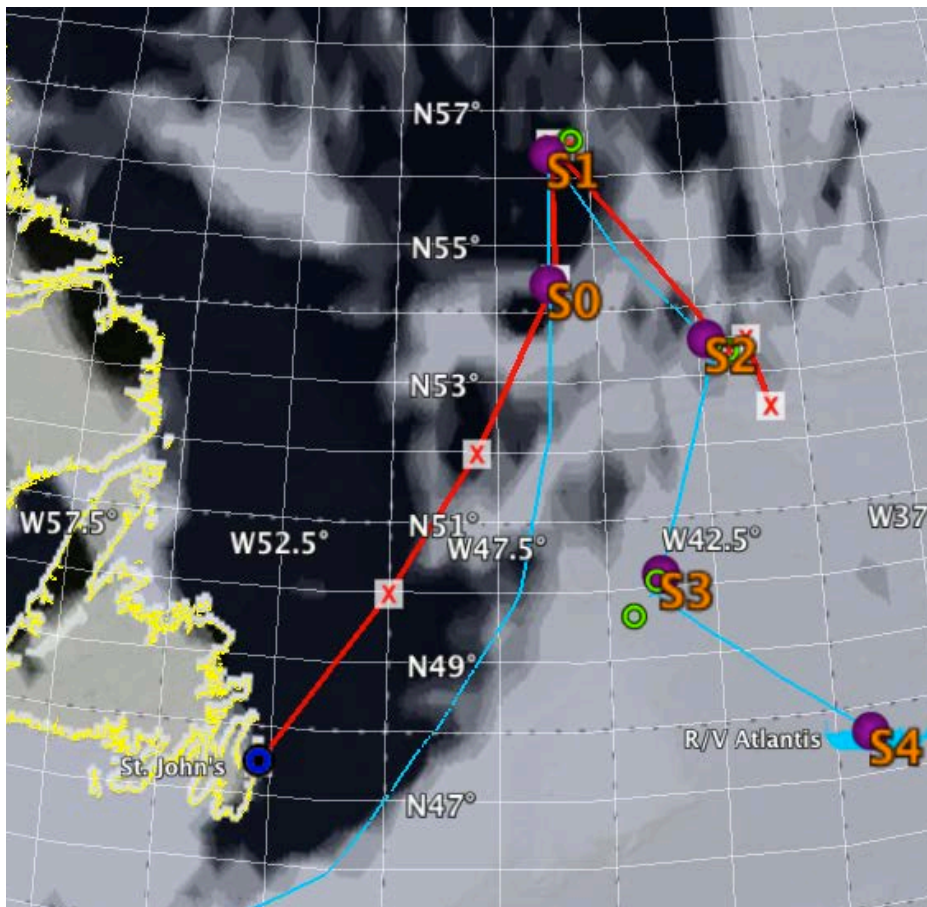
## 18z Clouds



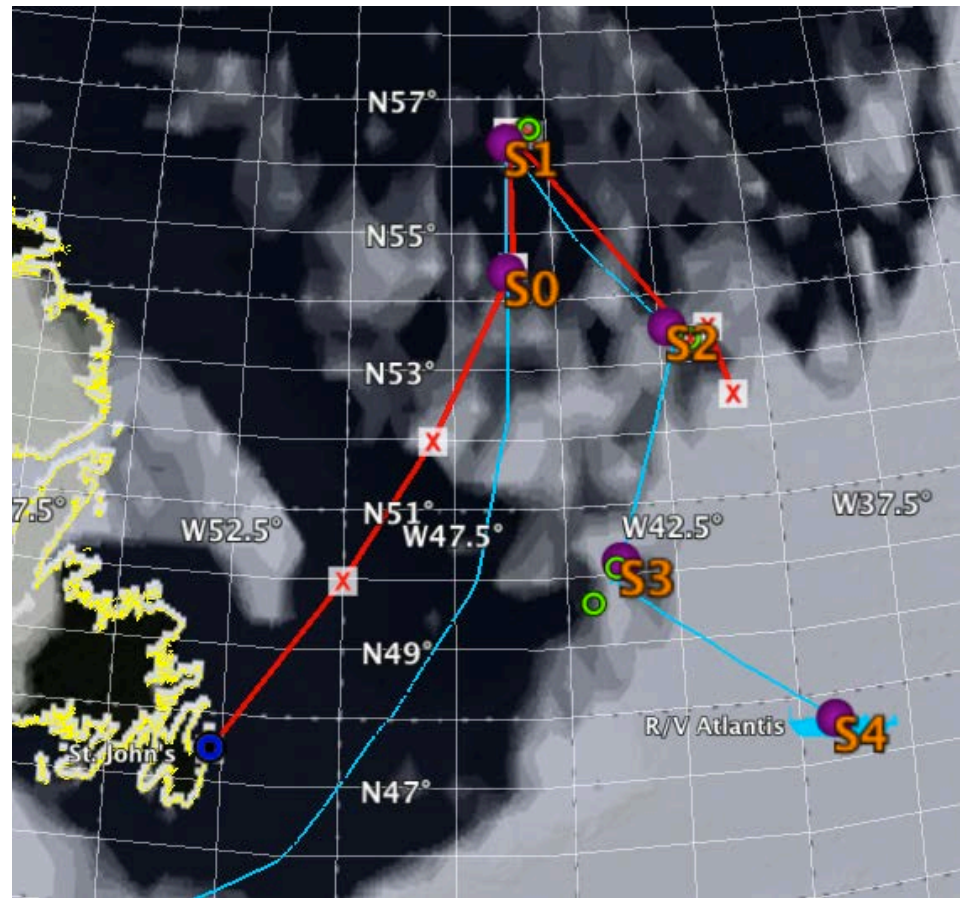


# Potential Friday Flight Plan

## 12z Clouds

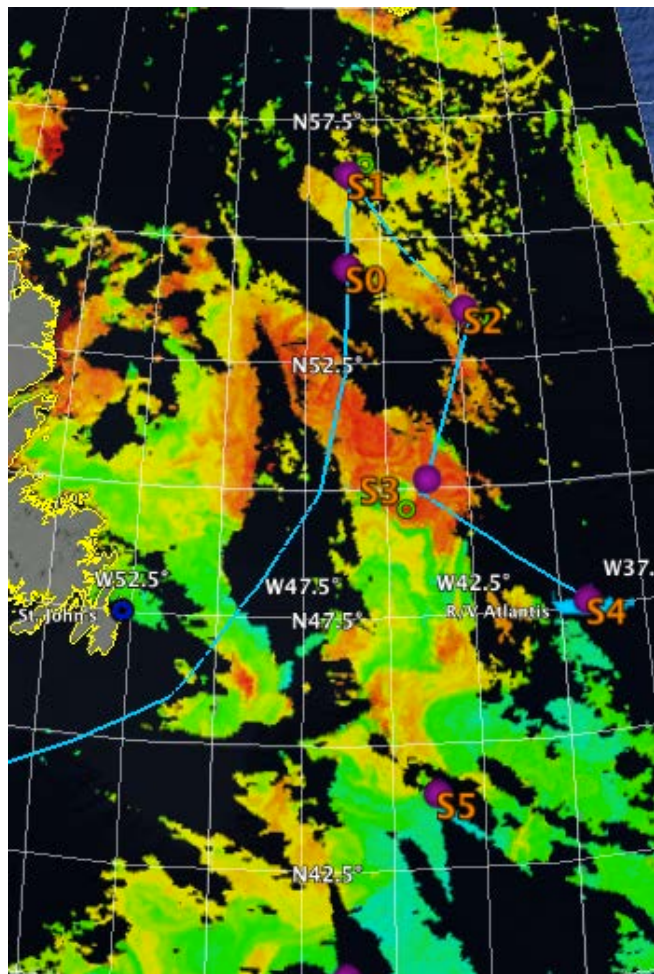


## 18z Clouds

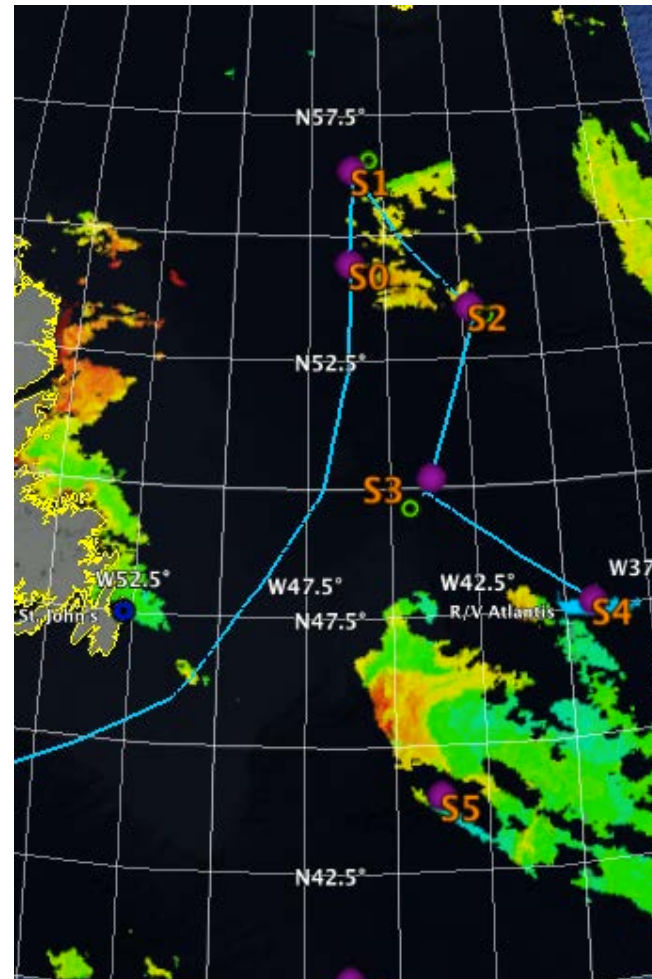


# MODIS Aqua Chlorophyll

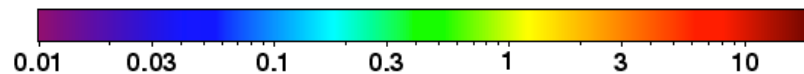
May 22-24, 2016



May 24, 2016

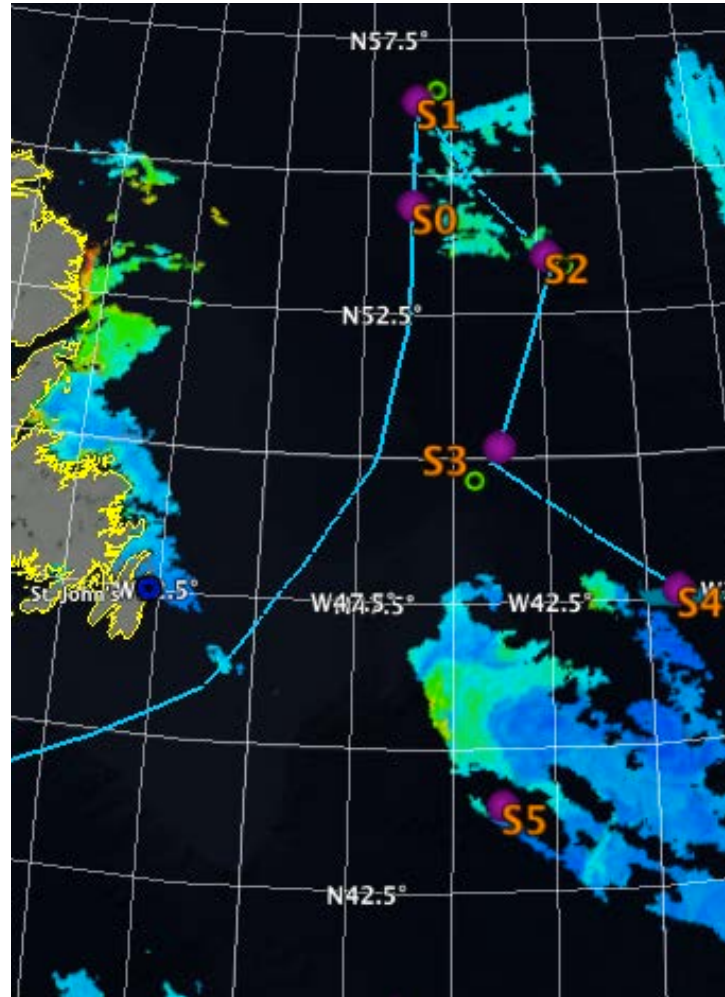


Chlorophyll a concentration ( mg / m<sup>3</sup> )

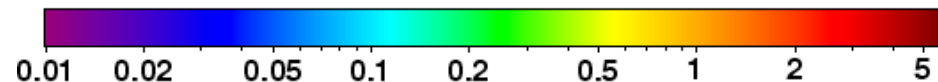


# MODIS Aqua Kd

## May 24, 2016



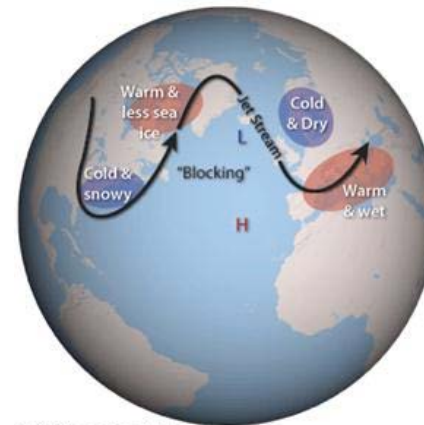
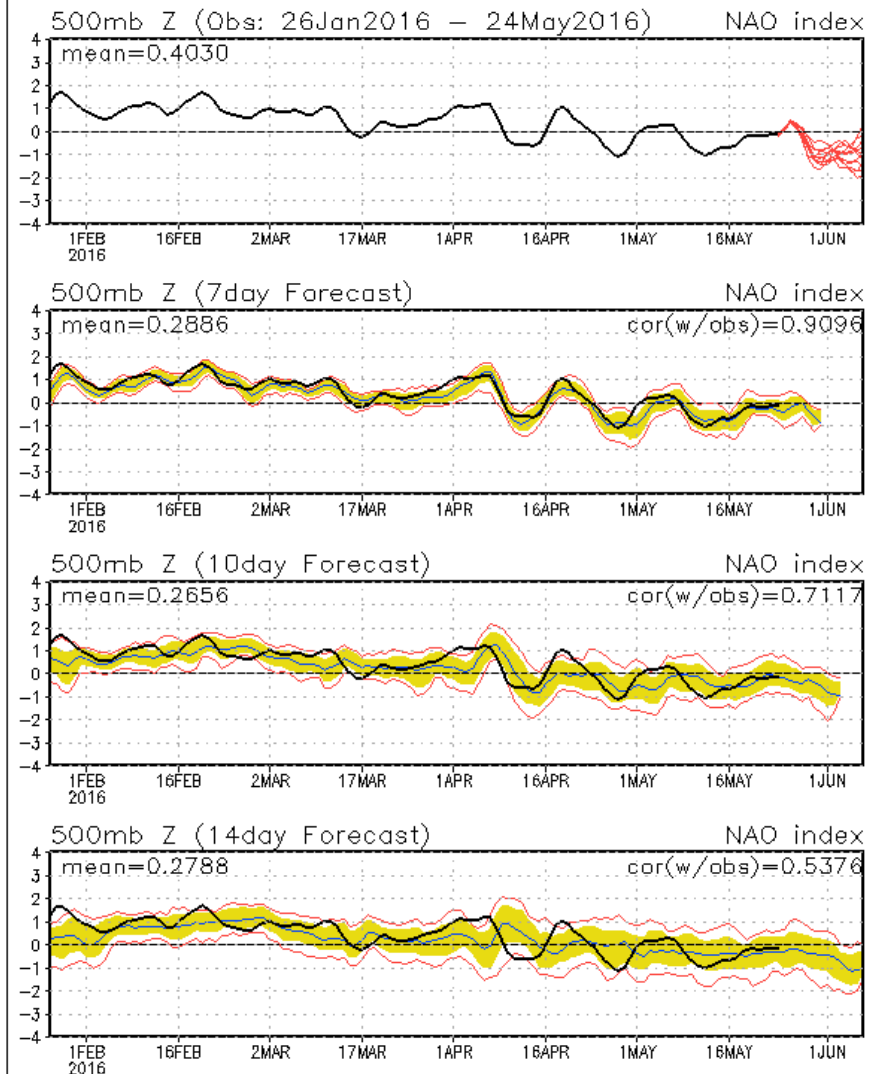
Diffuse attenuation coefficient at 490 nm ( $\text{m}^{-1}$ )



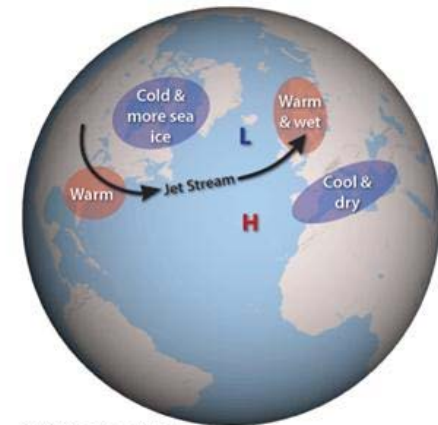


# North Atlantic Oscillation

## NAO: Observed & ENSM forecasts



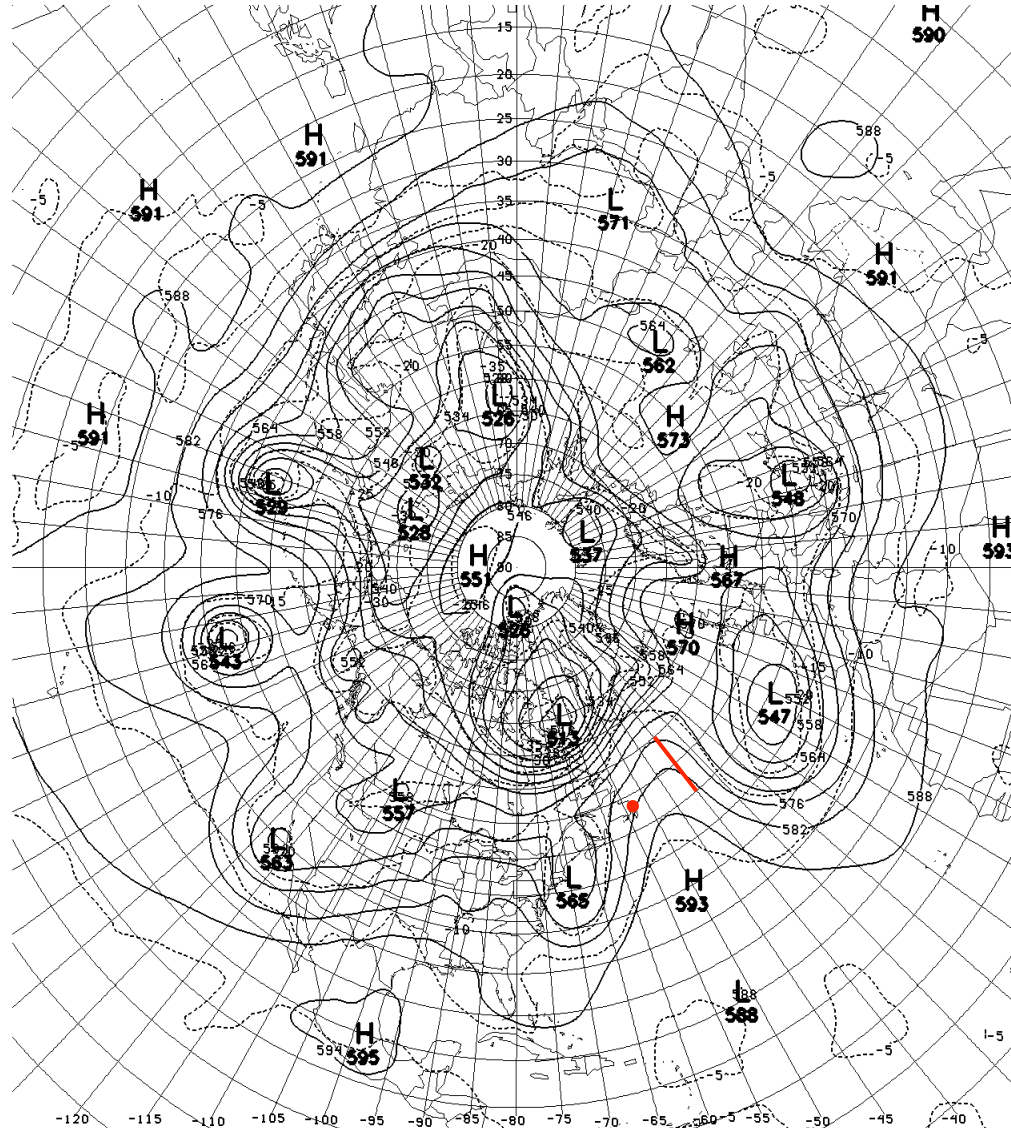
NAO Negative Mode



NAO Positive Mode

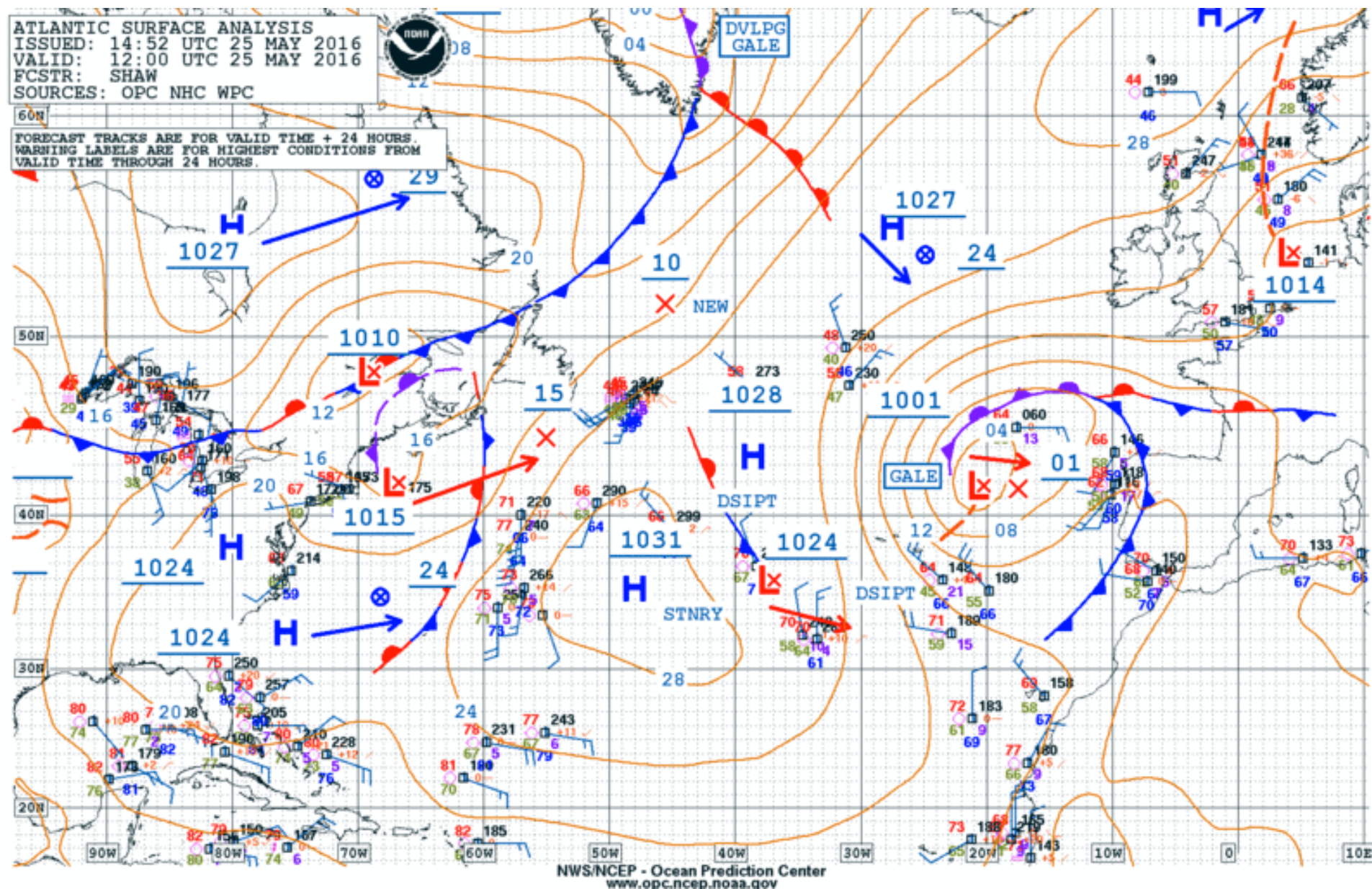
# North Atlantic Oscillation

500MB ANALYSIS HEIGHTS/TEMPERATURE



05/25/2016 06UTC 000HR FCST VALID WED 05/25/2016 06UTC NCEP/NWS/NOAA

# Surface Analysis and Synoptic Forecast





# Satellite (5/25 14:45Z)

Visible

IR

