

# ATOMIC Briefing Summary

1/23/2020

# Summary

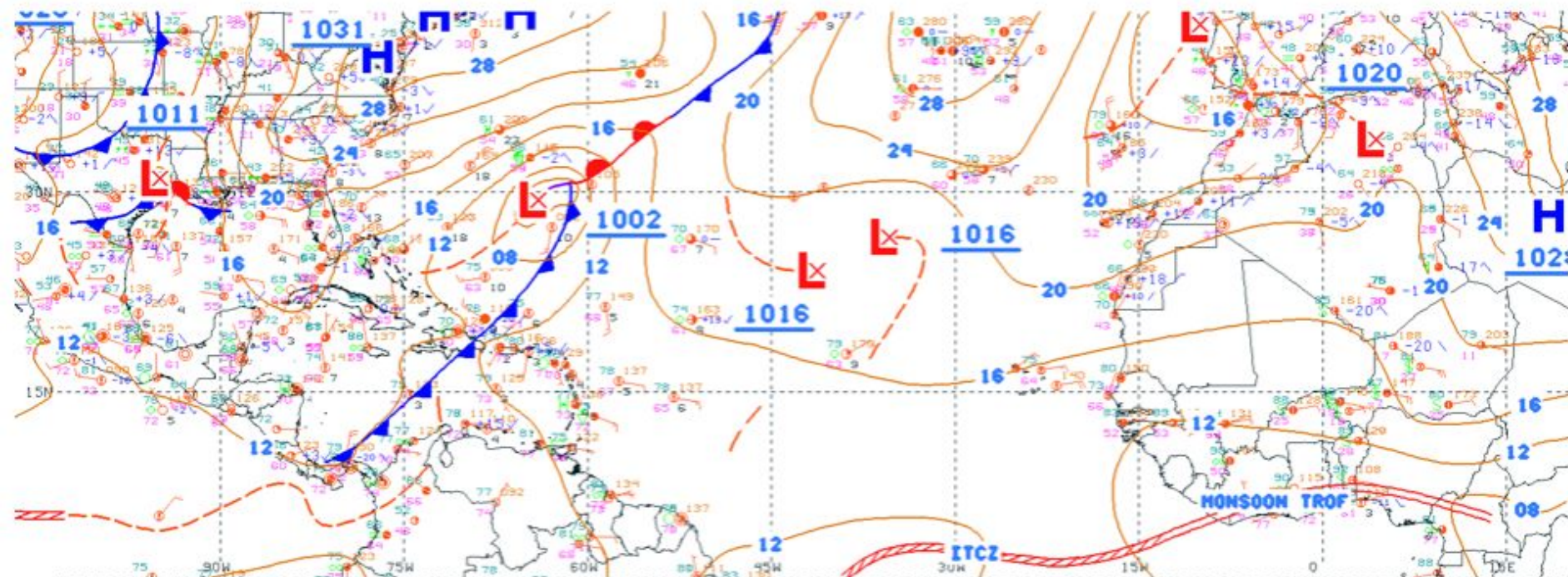
- Our main sources are:

<https://www.esrl.noaa.gov/psd/atomic/briefing/>

<https://observations.ipsl.fr/aeris/eurec4a/#/>

- Latest ATOMIC weather briefing from Caribbean forecasters can be found here:

[http://eurec4a.uk/forecast\\_testbed/](http://eurec4a.uk/forecast_testbed/)

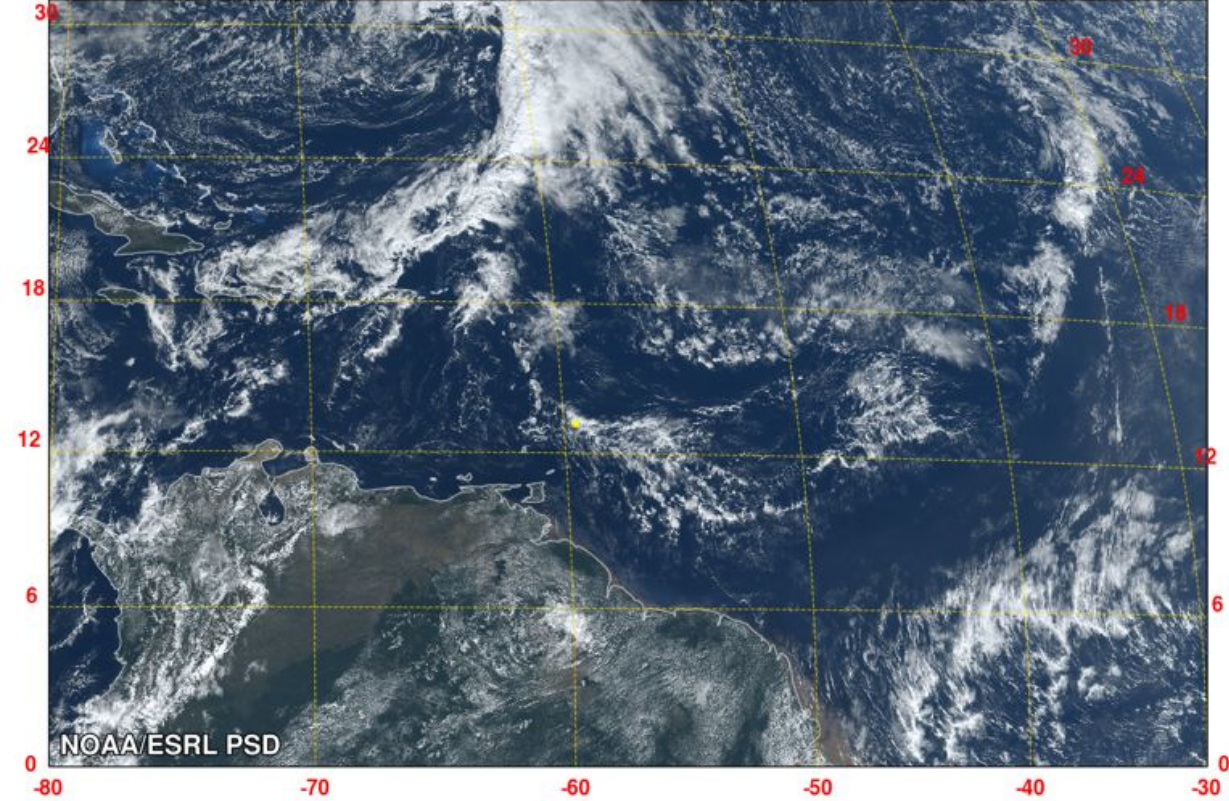


12 UTC JANUARY 23 2020 - NATIONAL WEATHER SERVICE

# Today's GOES-16

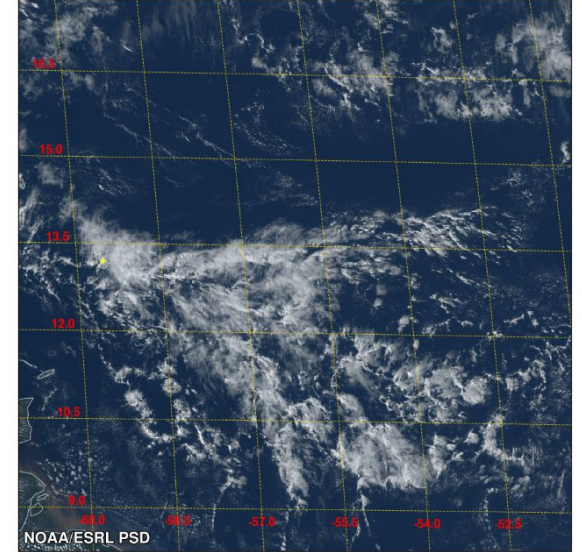
GOES-16 True Color + IR (ATOMIC regional)

23 January 2020 15:50 UTC

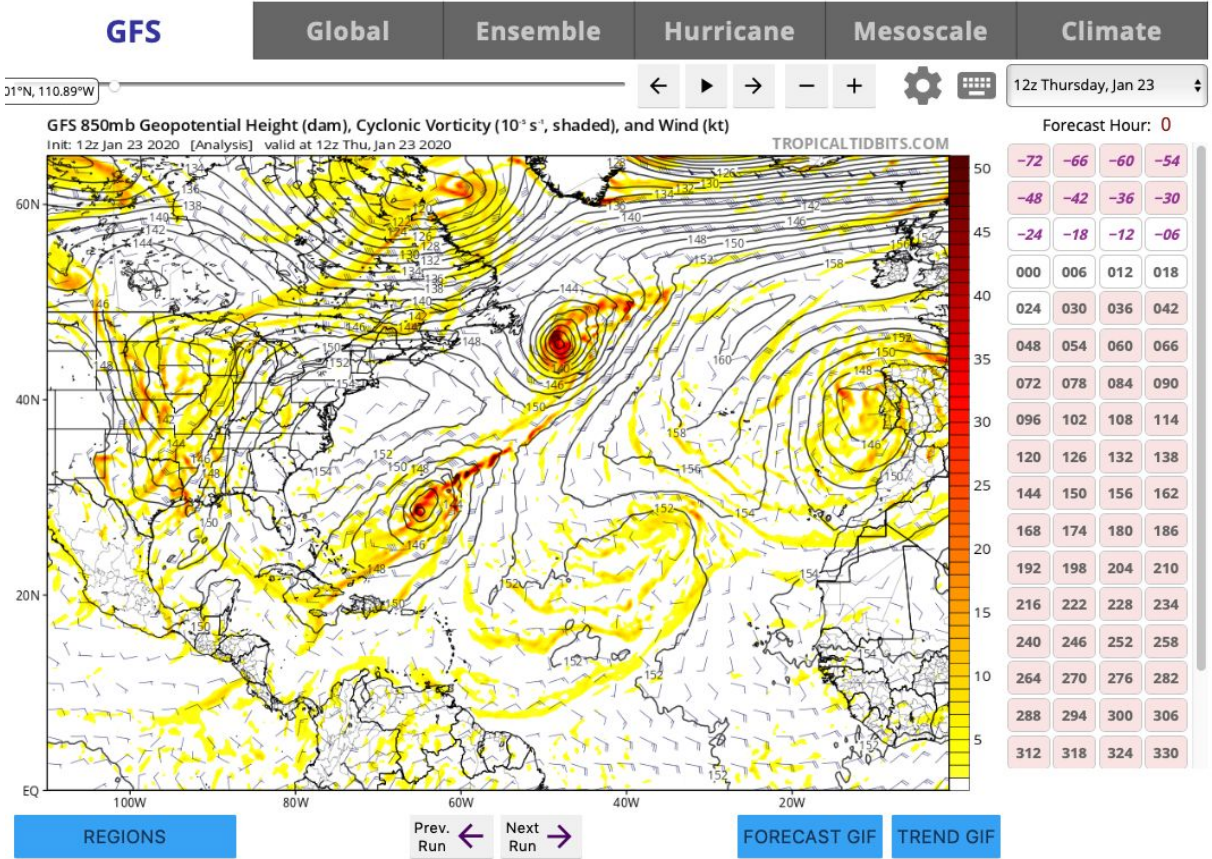


GOES-16 True Color + IR (ATOMIC mesoscale)

23 January 2020 18:56 UTC



# GFS analysis



# GFS analysis

GFS

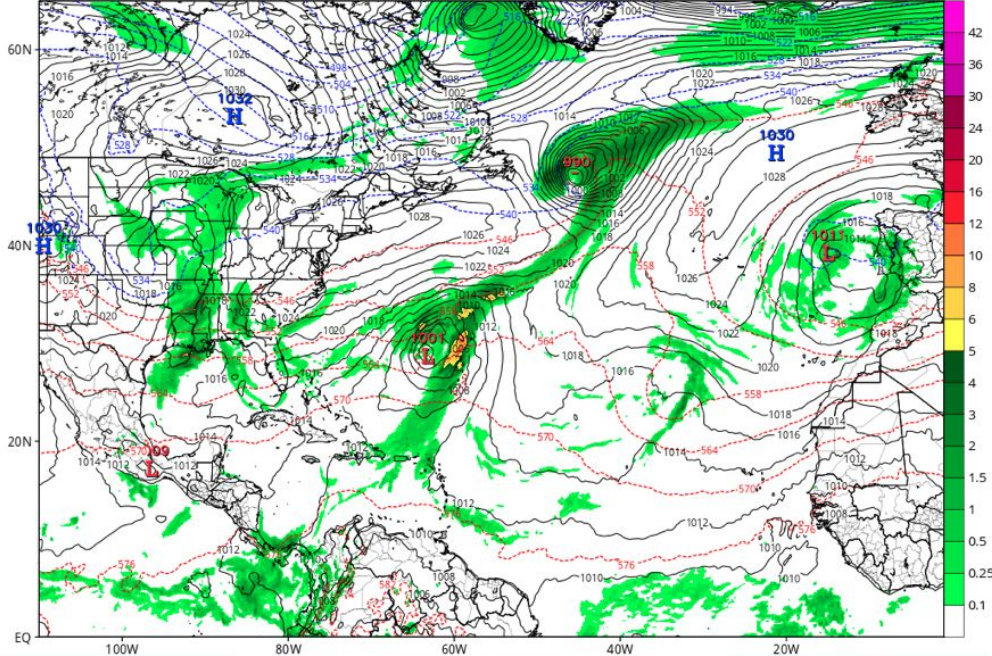
- Global
- Ensemble
- Hurricane
- Mesoscale
- Climate

Navigation controls: back, forward, zoom in, zoom out, settings, and keyboard shortcuts icons.

12z Thursday, Jan 23

GFS 6-hour Averaged Precip Rate (mm/hr), MSLP (hPa) & 1000-500mb Thickness (dam)  
Init: 12z Jan 23 2020 Forecast Hour: [6] valid at 18z Thu, Jan 23 2020

TROPICALTIDBITS.COM



Forecast Hour: 6

006	012	018	024
030	036	042	048
054	060	066	072
078	084	090	096
102	108	114	120
126	132	138	144
150	156	162	168
174	180	186	192
198	204	210	216
222	228	234	240
246	252	258	264
270	276	282	288
294	300	306	312
318	324	330	336
342	348	354	360
366	372	378	384

REGIONS

Prev. Run ← Next Run →

FORECAST GIF TREND GIF

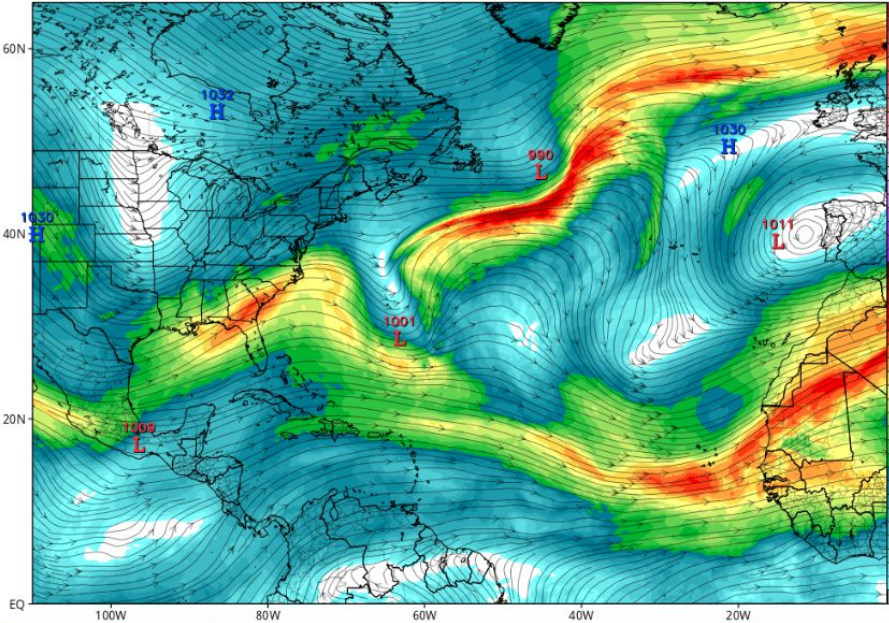
# GFS analysis

GFS
Global
Ensemble
Hurricane
Mesoscale
Climate

← ▶ → − + ⚙️ ☰ 12z Thursday, Jan 23

GFS 200mb Wind Speed/Streamlines (kt) & MSLP Extrema (mb)  
 Init: 12z Jan 23 2020 Forecast Hour: [6] valid at 18z Thu, Jan 23 2020

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Forecast Hour: 6

-72	-66	-60	-54
-48	-42	-36	-30
-24	-18	-12	-06
000	006	012	018
024	030	036	042
048	054	060	066
072	078	084	090
096	102	108	114
120	126	132	138
144	150	156	162
168	174	180	186
192	198	204	210
216	222	228	234
240	246	252	258
264	270	276	282
288	294	300	306
312	318	324	330

REGIONS
Prev. Run ←
Next Run →
FORECAST GIF
TREND GIF

# GFS 48hr forecast

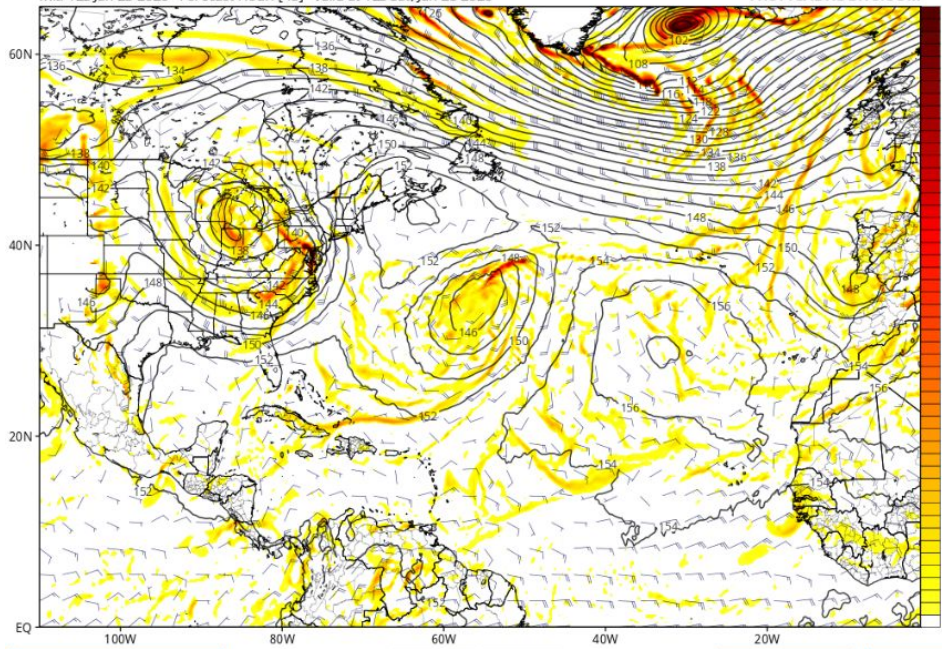
GFS
Global
Ensemble
Hurricane
Mesoscale
Climate

← ▶ → − + ⚙️ ☰

12z Thursday, Jan 23 ▾

GFS 850mb Geopotential Height (dam), Cyclonic Vorticity ( $10^3 s^{-1}$ , shaded), and Wind (kt)  
 Init: 12z Jan 23 2020 Forecast Hour: [48] valid at 12z Sat, Jan 25 2020

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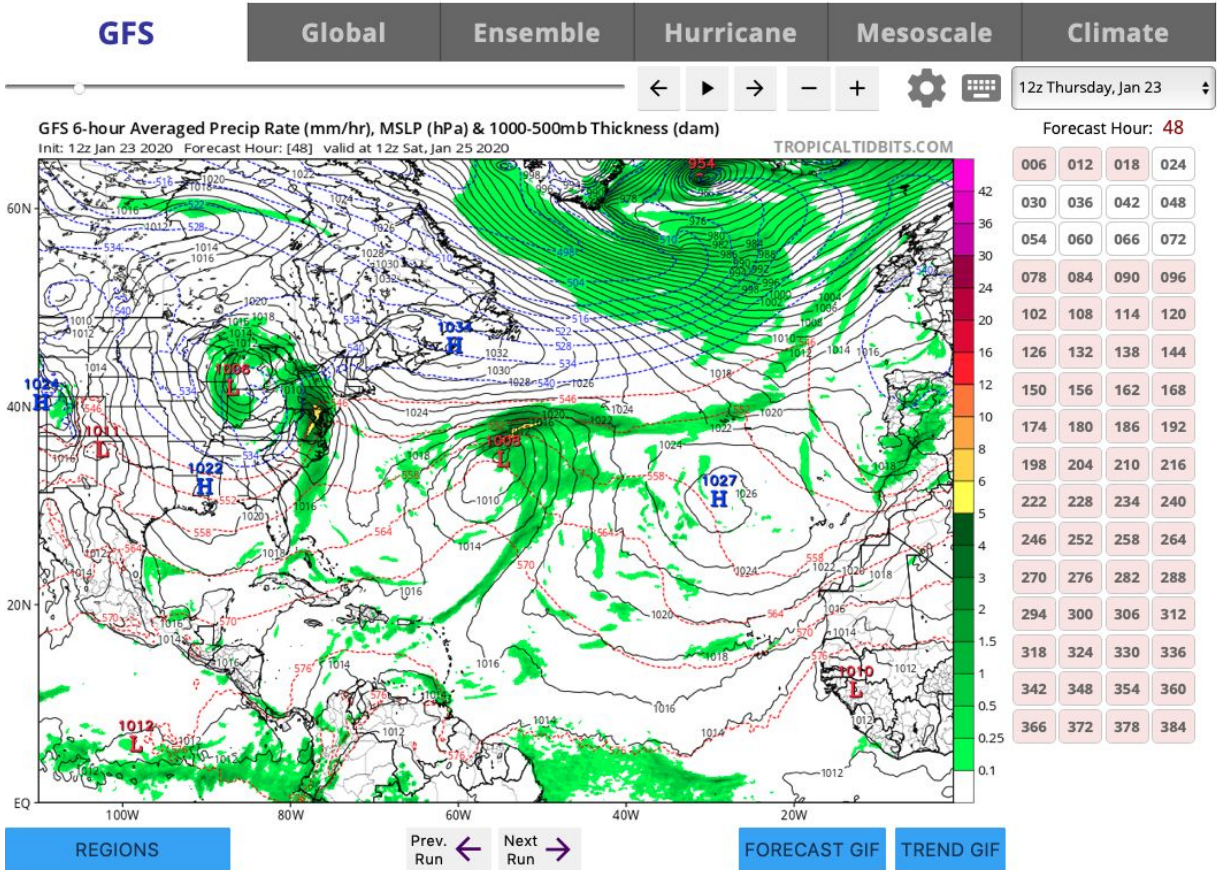
Forecast Hour: 48

-72	-66	-60	-54
-48	-42	-36	-30
-24	-18	-12	-06
000	006	012	018
024	030	036	042
048	054	060	066
072	078	084	090
096	102	108	114
120	126	132	138
144	150	156	162
168	174	180	186
192	198	204	210
216	222	228	234
240	246	252	258
264	270	276	282
288	294	300	306
312	318	324	330

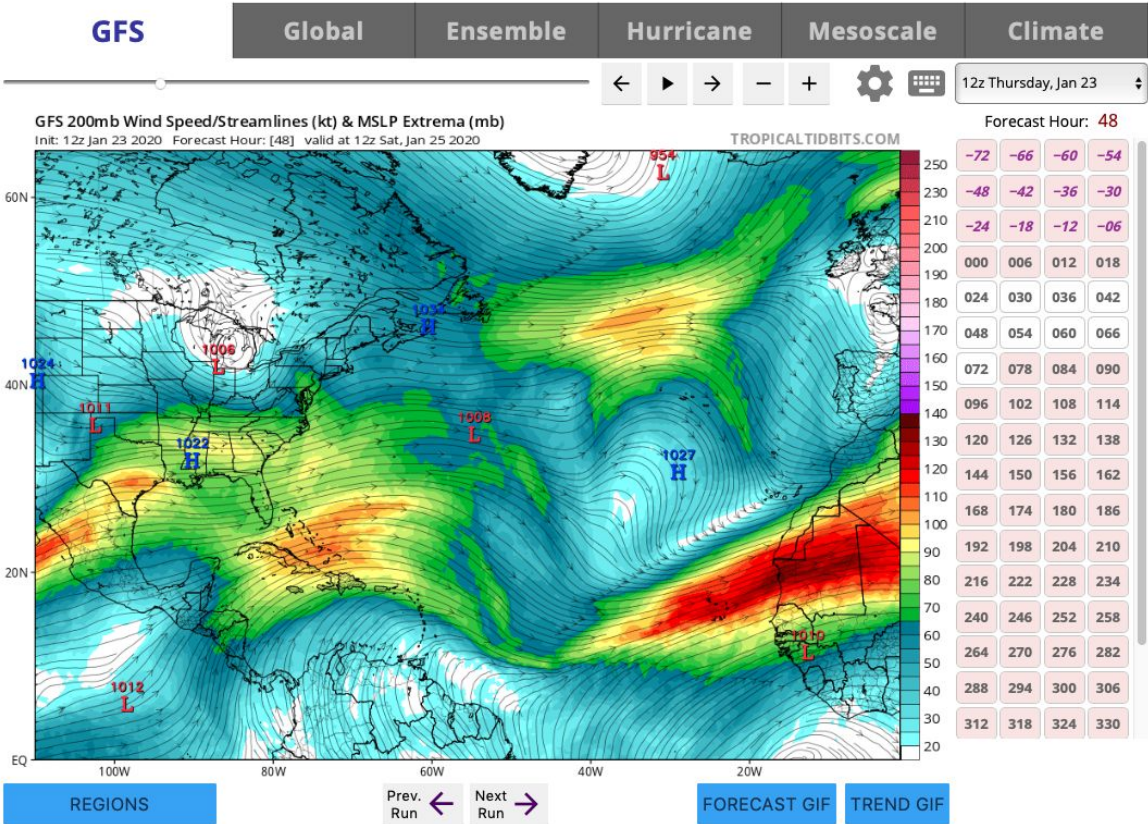
REGIONS
Prev. Run ←
Next Run →
FORECAST GIF
TREND GIF



# GFS 48hr forecast



# GFS 48hr forecast



New tool on: <https://www.esrl.noaa.gov/psd/atomic/briefing/>

## Soundings with GFS Model Comparisons

Selected Platform:

Ron Brown

Selected Sonde:

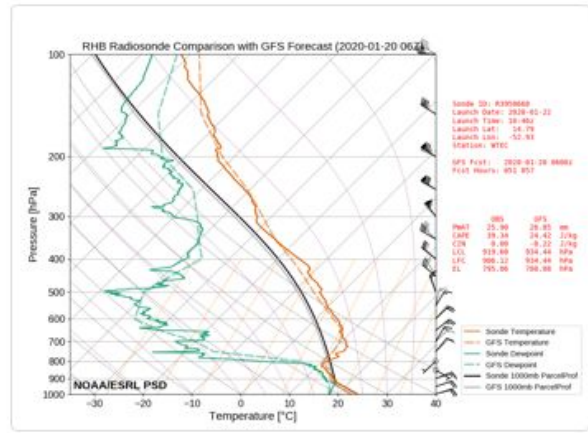
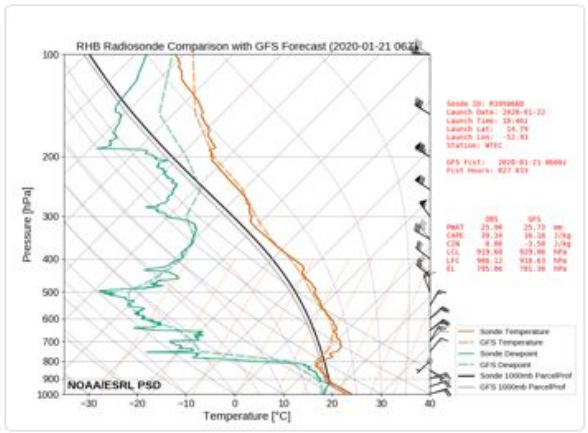
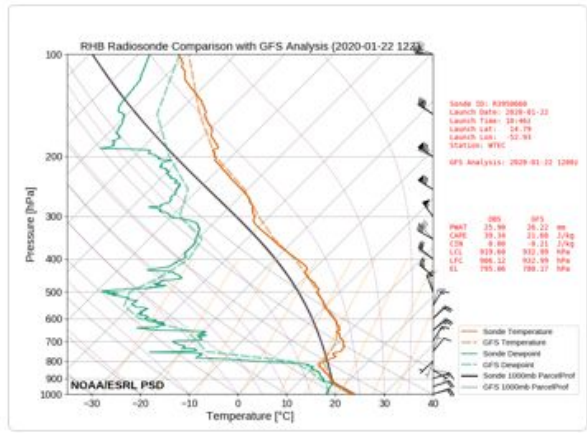
< Prev 2020-01-22 10:46 UTC

Next >

Analysis

~24 Hour Forecast

~48 Hour Forecast



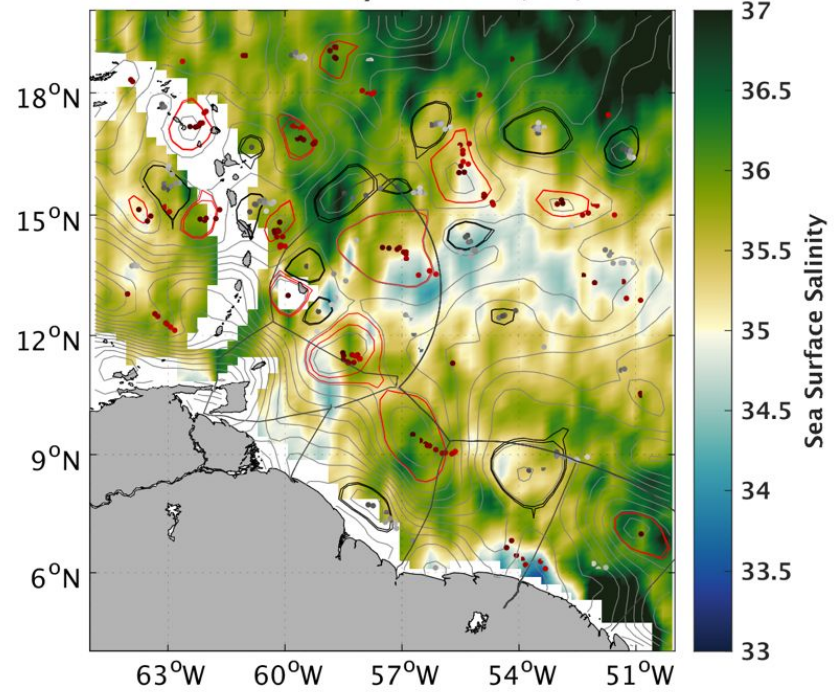
The GFS analysis field is from the closest run time to the sounding time; the 24 & 48 hour forecast data are interpolated from the nearest times to the sounding time (see plot for exact times used). GFS vertical spacing is every 50 hPa.

# Latest ocean observations: SST/SSS & TOEddies

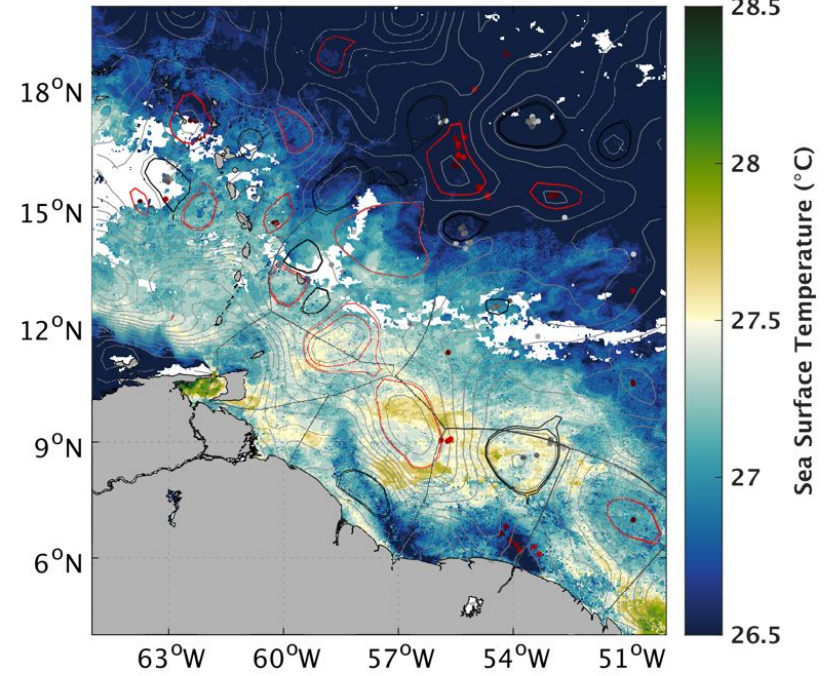
Quicklook « SMOS Ocean Observation » « 10-days SMOS/SSS TOEddies »  
Date « Jan 22 2020 » 00h00 UTC »

Quicklook « CLS Ocean Observation » « CLS/SST TOEddies »  
Date « Jan 22 2020 » 00h00 UTC »

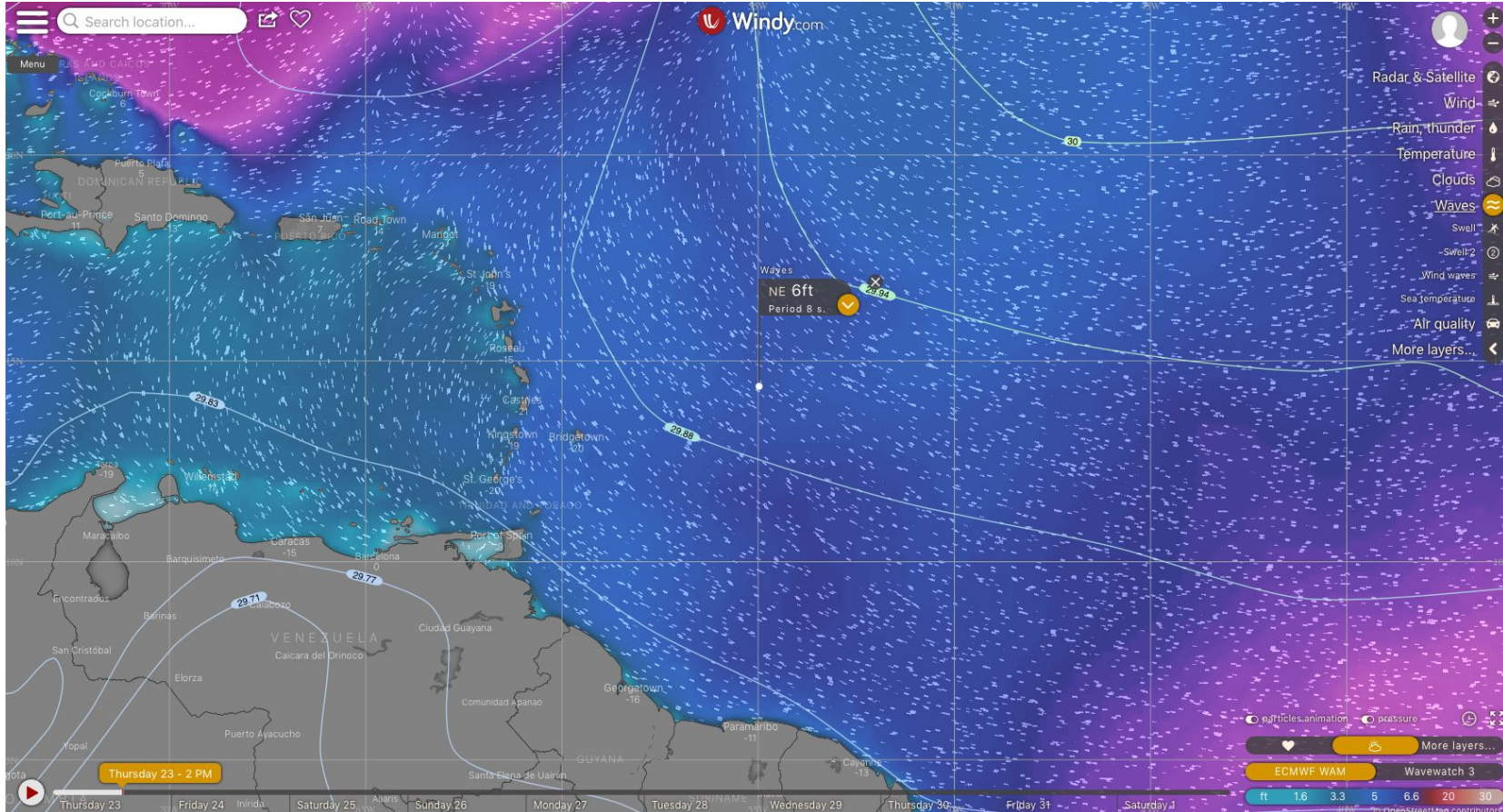
SSS SMOS 10days until 22/01/20



SST CATSAT CLS 22/01/20

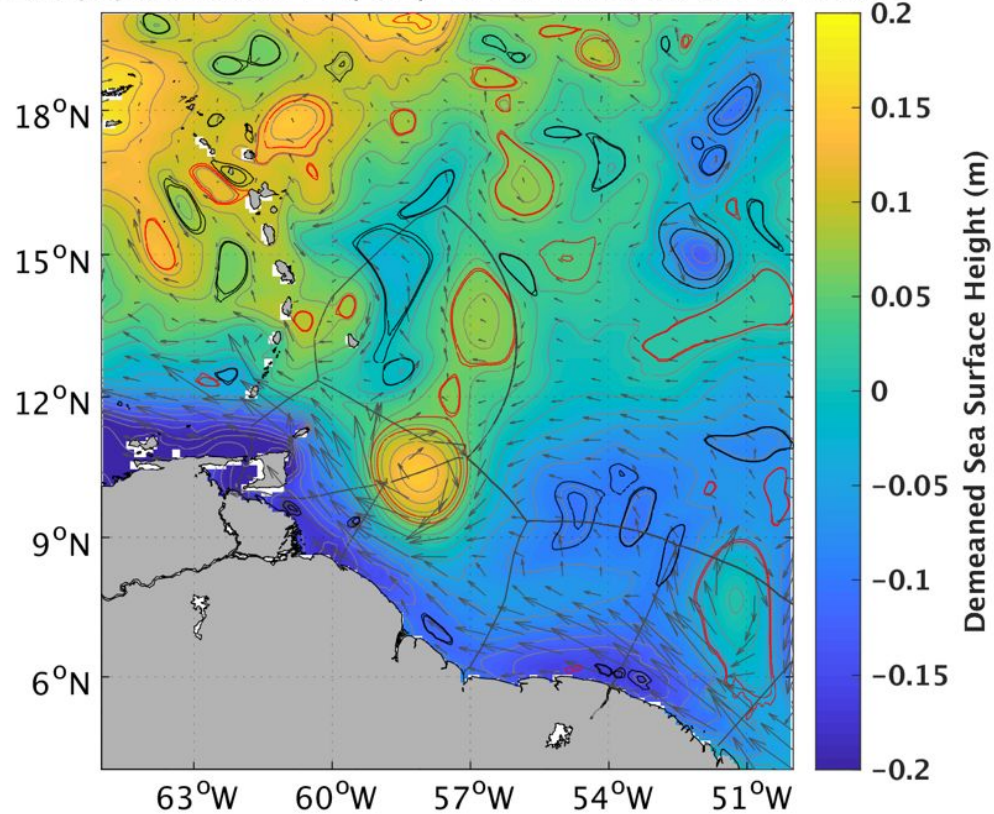


# Waves forecast



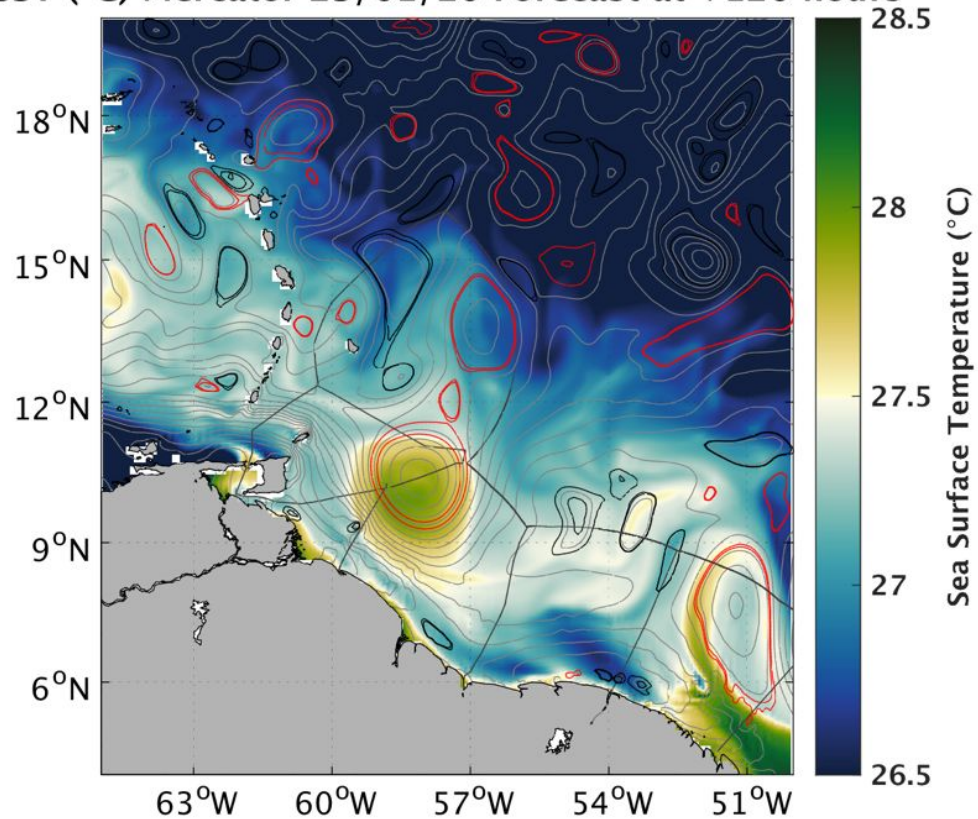
# Ocean Forecasts

SSH (m) Mercator 23/01/20 Forecast at +120 hours



# Ocean Forecasts

SST ( $^{\circ}\text{C}$ ) Mercator 23/01/20 Forecast at +120 hours



# Ocean Forecasts

SSS Mercator 23/01/20 Forecast at +120 hours

