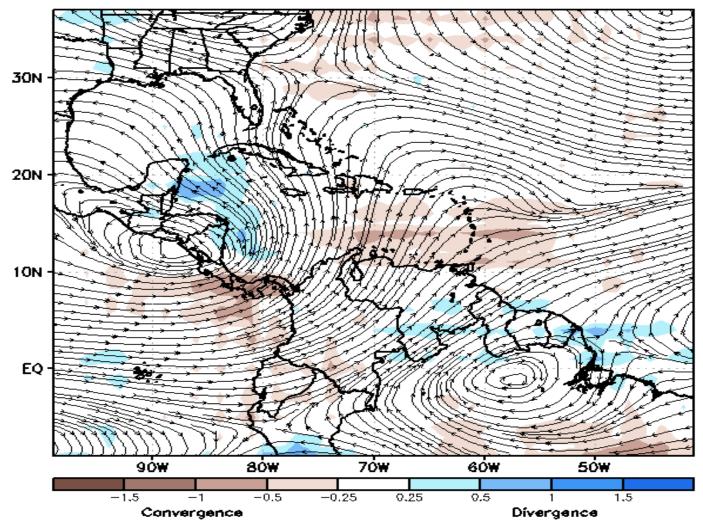
# Second WMO RCC-Washington International Training Workshop

# Real-time week-2 extreme precipitation outlook

8 – 10 November 2021

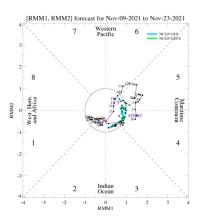
#### **200-hPa Velocity Potential Anomaly**

GEFS Week-2 200-hPa Divergence and Wind Anomaly Valid: 20211117 - 20211123

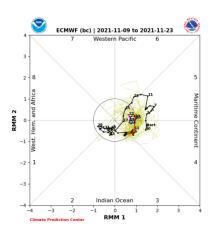


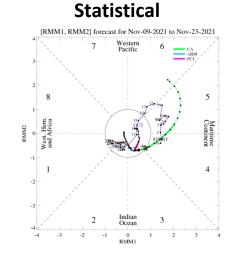
# **Wheeler-Hendon Index – Forecasts**

#### GEFS

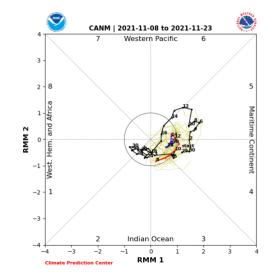


**ECMWF** 

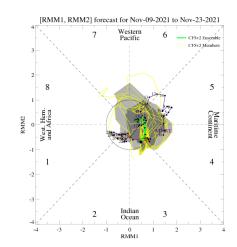




ECC



CFSv2

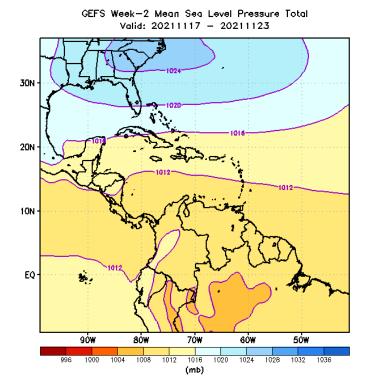


The various models depict a great deal of uncertainty in the MJO forecast. That is some model forecast indicates a possibility of a high amplitude event reaching the western Pacific. However the confidence level remains low since the SST Analysis over the eastern Pacific seem to be trending towards La Niña type conditions.

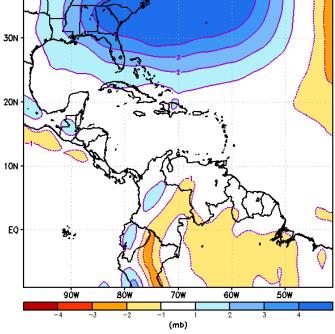
#### **Mean Sea Level Pressure**

**Total** 

#### Anomaly

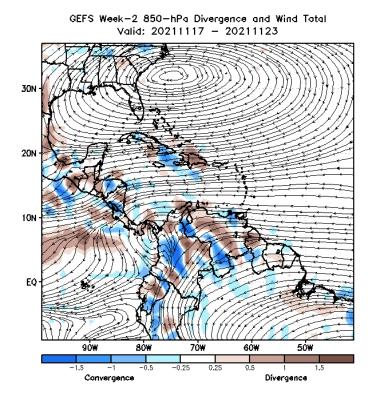


GEFS Week-2 Mean Sea Level Pressure Anomaly Valid: 20211117 - 20211123



**Total** 

#### Anomaly

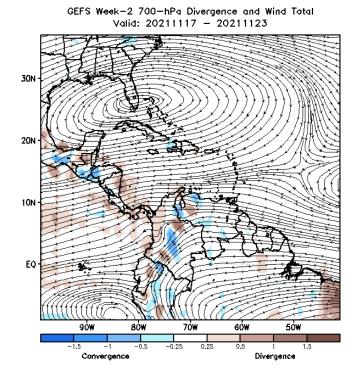


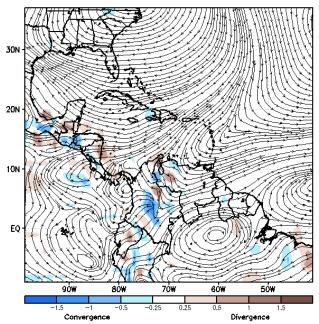
GEFS Week-2 850-hPa Divergence and Wind Anomaly Valid: 20211117 - 20211123 30N 20N 10N ΕQ 9ÓW 8ÓW 6ÓW 5ÓW 7Ó₩ -0.250.25 -1.5 -1 -0.50.5 1 1.5 Convergence Divergence

Total

#### Anomaly

GEFS Week-2 700-hPa Divergence and Wind Anomaly Valid: 20211117 - 20211123

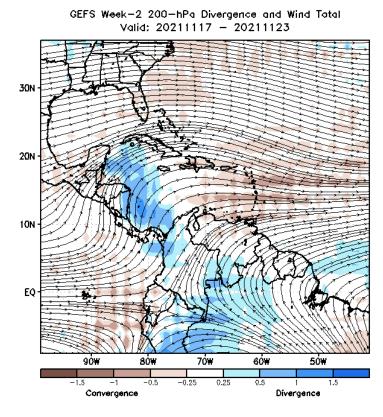


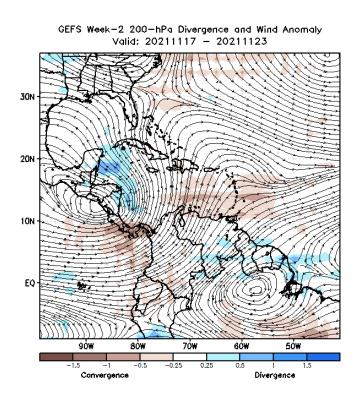


**Total** Anomaly GEFS Week-2 500-hPa Divergence and Wind Anomaly Valid: 20211117 - 20211123 GEFS Week-2 500-hPa Divergence and Wind Total Valid: 20211117 - 20211123 30N 30N -20N 20N 10N 10N EQ EQ 8 9ÓW 8ÓW 7Ó₩ 60W 5ÓW 5ÓW 7ÓW 9ÓW 8ÓW 6ÓW -1.5 -1 -0.5-0.250.25 0.5 1.5 -1.5 -0.5-0.250.25 0.5 1.5 Convergence Divergence -1 Convergence Divergence

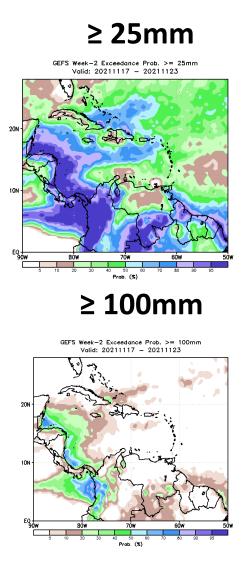
**Total** 

#### Anomaly



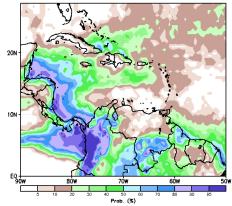


# **Precipitation Exceedance Probability**



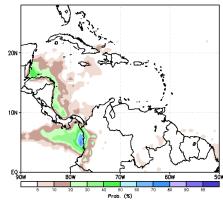
#### ≥ 50mm

GEFS Week-2 Exceedance Prob. >= 50mm Valid: 20211117 - 20211123



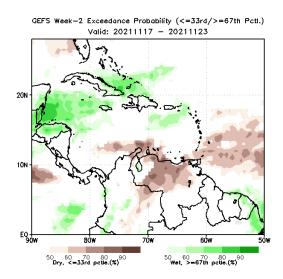
≥ 150mm

GEFS Week-2 Exceedance Prob. >= 150mm Valid: 20211117 - 20211123

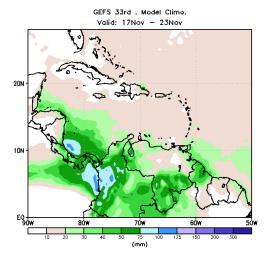


# Precipitation Exceedance Probability (≤ 33<sup>rd</sup> & ≥ 67<sup>th</sup> percentiles)

#### $\leq$ 33<sup>rd</sup> & $\geq$ 67<sup>th</sup> percentiles



#### 33<sup>rd</sup> percentile climo



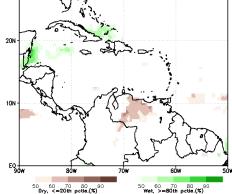
#### 67<sup>th</sup> percentile climo

GEFS 67th . Model Climo. Valid: 17Nov - 23Nov

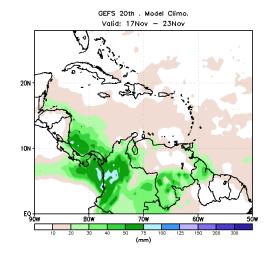
# Precipitation Exceedance Probability (≤ 20<sup>th</sup> & ≥ 80<sup>th</sup> percentiles)

#### $\leq 20^{\text{th}} \& \geq 80^{\text{th}}$ percentiles

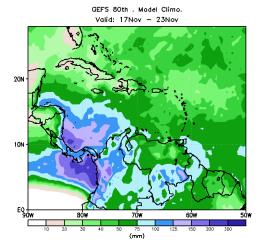




#### 20<sup>th</sup> percentile climo



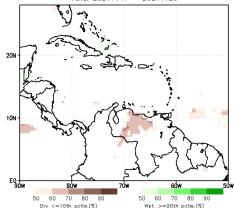
#### 80<sup>th</sup> percentile climo



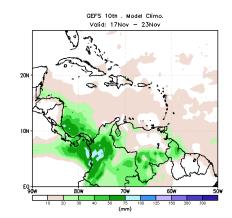
# Precipitation Exceedance Probability (≤ 10<sup>th</sup> & ≥ 90<sup>th</sup> percentiles)

#### $\leq 10^{\text{th}} \& \geq 90^{\text{th}}$ percentiles

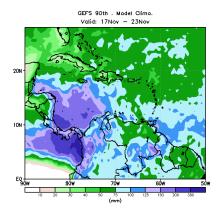
GEFS Week-2 Exceedance Probability (<=10th/>=90th Pctl.) Valid: 20211117 - 20211123



# 10<sup>th</sup> percentile climo



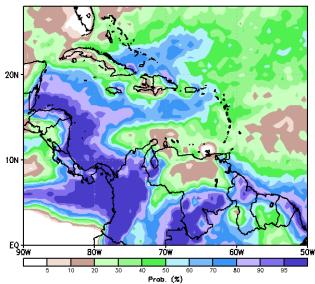
#### 90<sup>th</sup> percentile climo



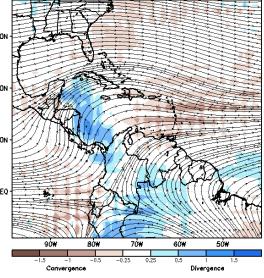
# Summary

GEFS Week-2 Mean Sea Level Pressure Total Valid: 20211117 - 20211123 30N -20N 5.00-10N -ΕQ· у. 90W 70W 60W 50W 8ów 996 1000 1004 1008 1020 1024 1028 1032 1036 1012 1016 (mb)

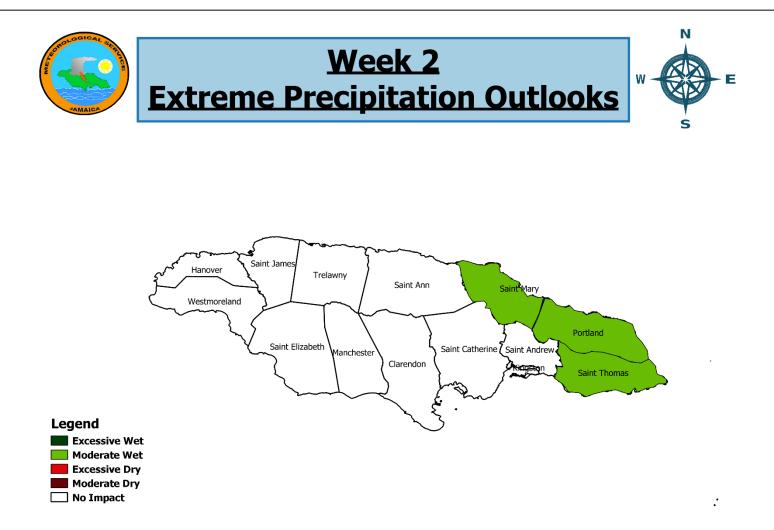
GEFS Week-2 Exceedance Prob. >= 25mm Valid: 20211117 - 20211123



GEFS Week-2 200-hPa Divergence and Wind Total Valid: 20211117 - 20211123



# **Extreme Precipitation Outlooks**



A weak surface trough southwest of the island coupled with moderate upper level divergence over the region are likely to produced rainfall in excess of 25mm over the eastern end of the island. The GEFS exceedance forecast give the areas a 70-90% of the eastern end of the island exceeding 25mm in week 2.