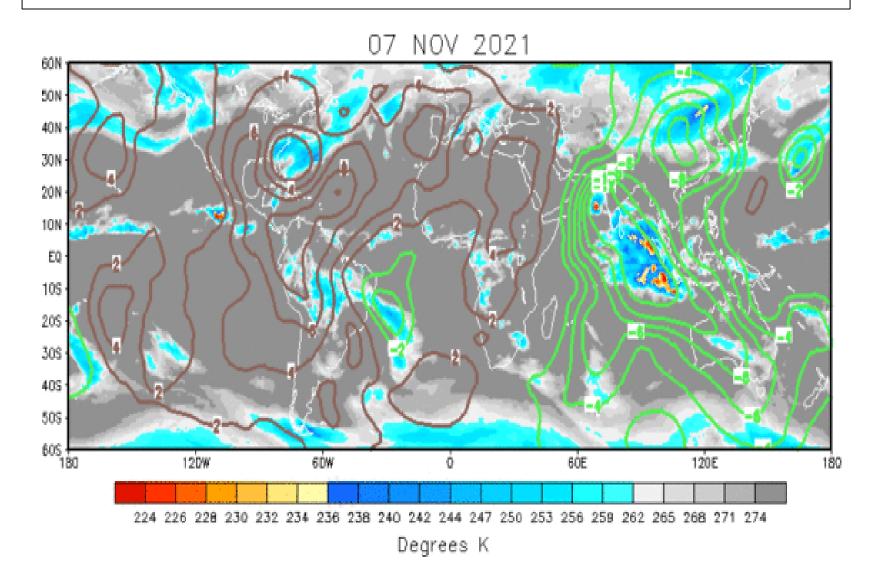
# Second WMO RCC-Washington International Training Workshop

# Real-time week-2 extreme precipitation outlook

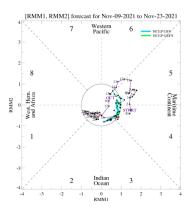
8 – 10 November 2021

## 200-hPa Velocity Potential Anomaly

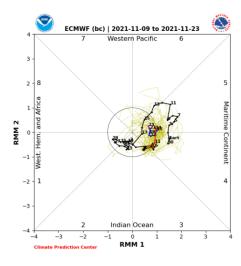


#### Wheeler-Hendon Index – Forecasts

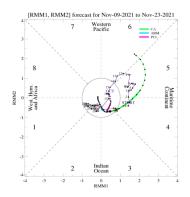
**GEFS** 



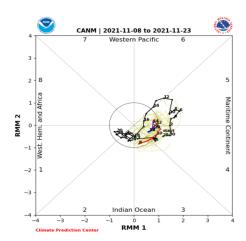
#### **ECMWF**



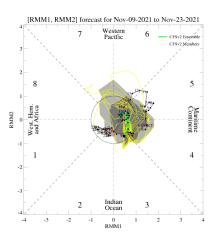
#### **Statistical**



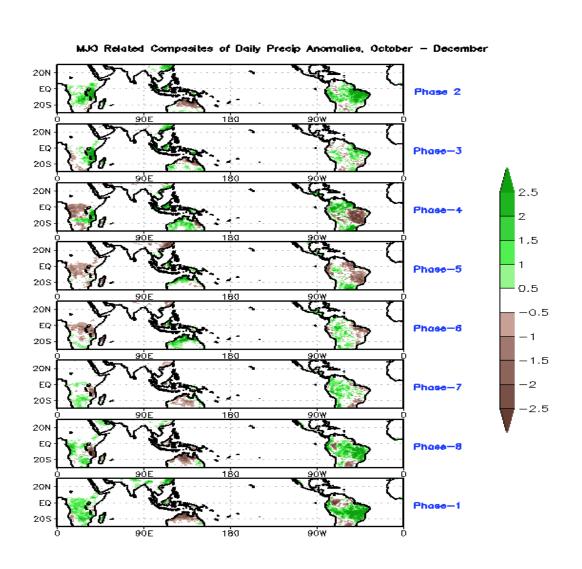
#### **CMET**



#### CFSv2



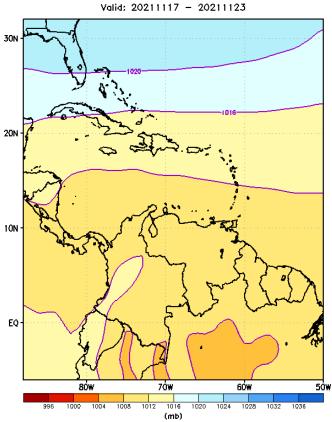
#### **Evolution of MJO-related Anomalies**



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

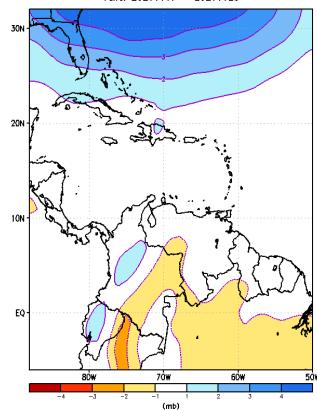
#### **Total**

GEFS Week-2 Mean Sea Level Pressure Total



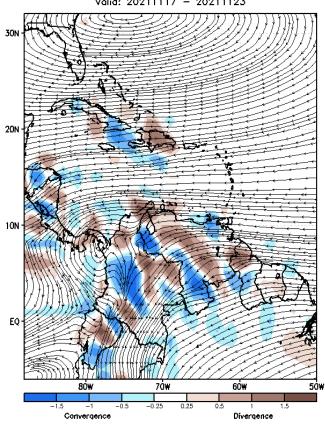
#### **Anomaly**

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



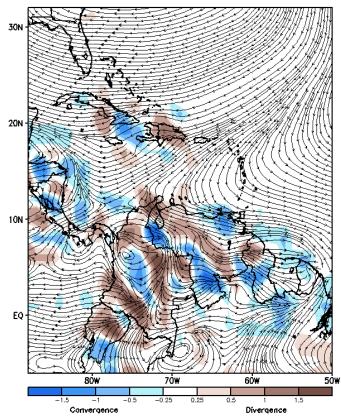
#### **Total**

#### GEFS Week-2 850-hPa Divergence and Wind Total Valid: 20211117 - 20211123



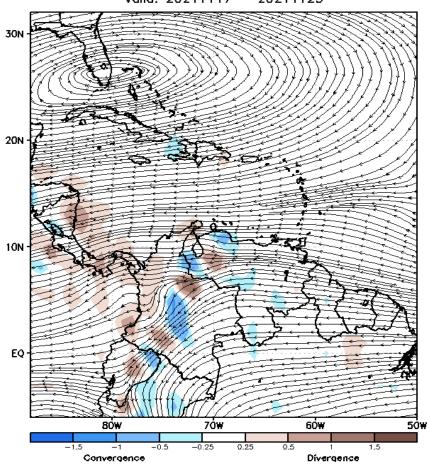
#### **Anomaly**

GEFS Week-2 850-hPa Divergence and Wind Anomaly Valid: 20211117 - 20211123



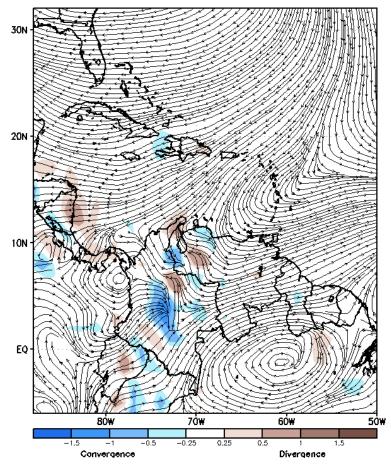
#### **Total**

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



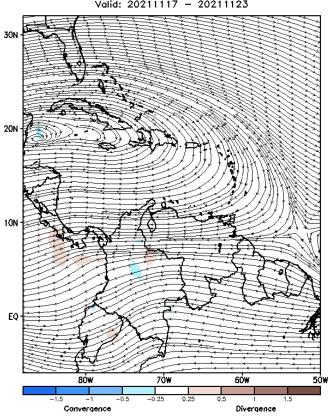
#### **Anomaly**

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



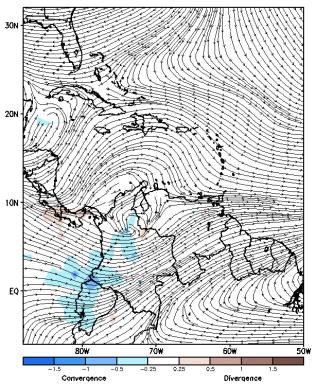
#### **Total**

GEFS Week-2 500-hPa Divergence and Wind Total Valid: 20211117 - 20211123



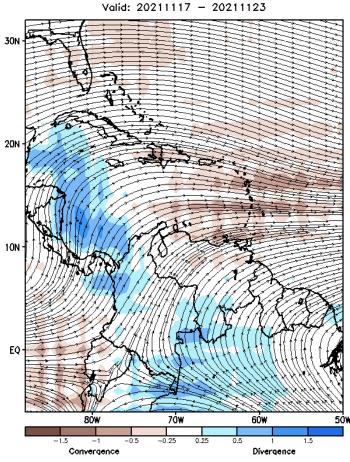
### **Anomaly**

GEFS Week-2 500-hPa Divergence and Wind Anomaly Valid: 20211117 - 20211123



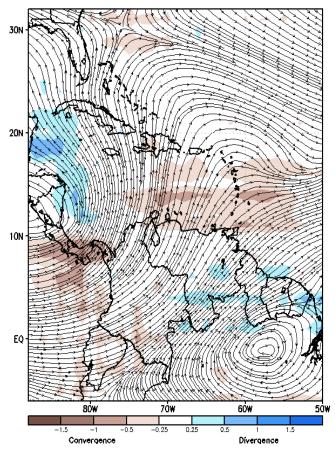
#### **Total**

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



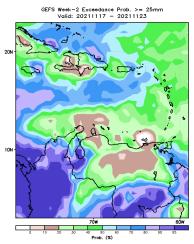
#### **Anomaly**

GEF\$ Week-2 200-hPa Divergence and Wind Anomaly Valid: 20211117 - 20211123

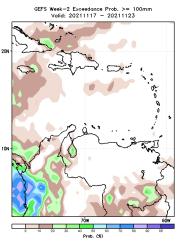


# **Precipitation Exceedance Probability**

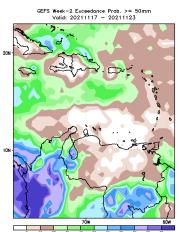
#### ≥ 25mm



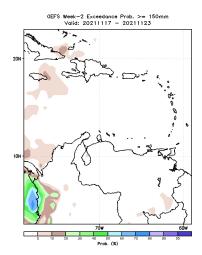
#### ≥ 100mm



#### ≥ 50mm

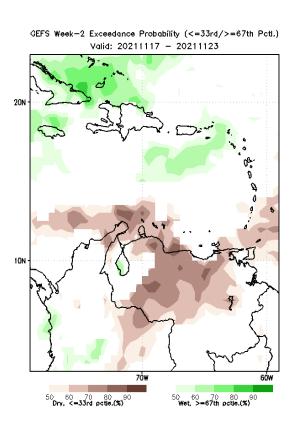


#### ≥ 150mm

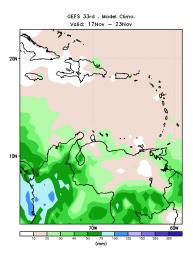


# Precipitation Exceedance Probability (≤ 33<sup>rd</sup> & ≥ 67<sup>th</sup> percentiles)

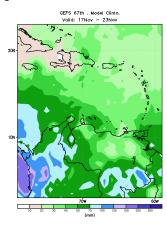
#### ≤ 33<sup>rd</sup> & ≥ 67<sup>th</sup> percentiles



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

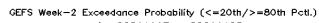


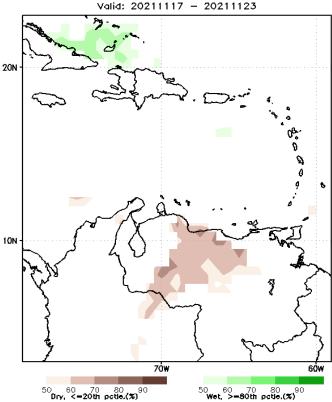
#### 67th percentile climo



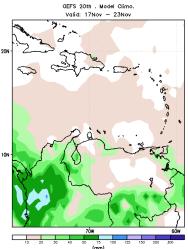
# Precipitation Exceedance Probability (≤ 20<sup>th</sup> & ≥ 80<sup>th</sup> percentiles)

#### ≤ 20<sup>th</sup> & ≥ 80<sup>th</sup> percentiles

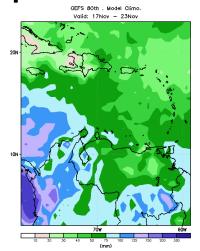




#### 20th percentile climo



## 80th percentile climo

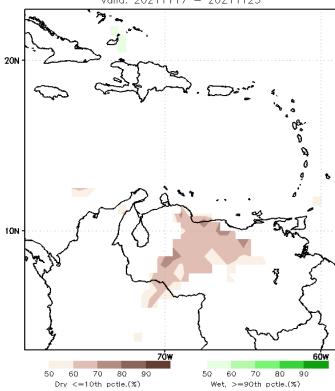


# Precipitation Exceedance Probability (≤ 10<sup>th</sup> & ≥ 90<sup>th</sup> percentiles)

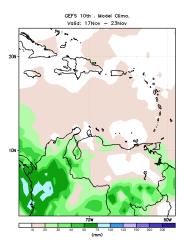
#### ≤ 10<sup>th</sup> & ≥ 90<sup>th</sup> percentiles

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

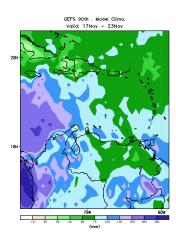
Valid: 20211117 - 20211123



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



#### 90th percentile climo



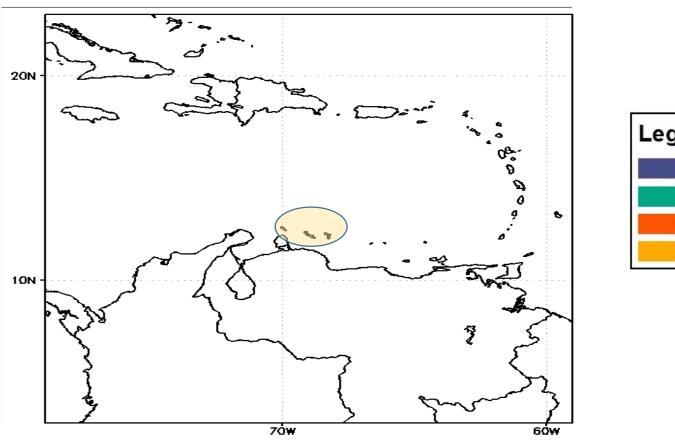
#### **Summary**

MJO not active in the region of Curação. The region will not be influence by this activity.

At 200 hPa and 850 hPa is observed: convergence upper level and divergence lower level (weak). In the area it will actually disrupt cloud development.

The amount of precipitation  $\geq$  25mm will be around 20  $\sim$  30 %

# **Extreme Precipitation Outlooks**





Moderate to dry. There is no cyclonic circulation in the area. Model forecast suggest an increased chance for moderate dryness over the area Curacao. Few local shower activity possible.