

**Summary of Key Briefing Points**  
**1030-1130am MST SAT February 6, 2016**

# Current Conditions as of FRI 12Z-15Z February 5

## Tropics and Mid-latitudes

### *Over the Tropical Pacific:*

- Convection: Isolate convection 2-4N in Mission domain 156W-163W this morning.
- An area of active ITCZ-like Convection in region 149W-125W, 2-4°N this morning.
- An large quasi-circular area of active convection centered near 2S, 175W
- The near-dateline convection driving the mass outflow regime this morning
- Westerly upper level flow to 5N along a zonal swath 170W-130W

# Tropical Outlook

- Convection for SAT in SW regio of Flight domain,
- By 00Z MON 8 FEB (Sat afth HNL), some convection expected in FD  
---- Moderat confidence on the expected location of active convection in FD....

*--- in summary, the indication from FRI/SAT forecasts is for isolated to scattered Convection in FD*

*--- mass flux in FD to be driven by intense convection near 2S, 175W*

# Midlatitude Conditions/Outlook

## Short Term:

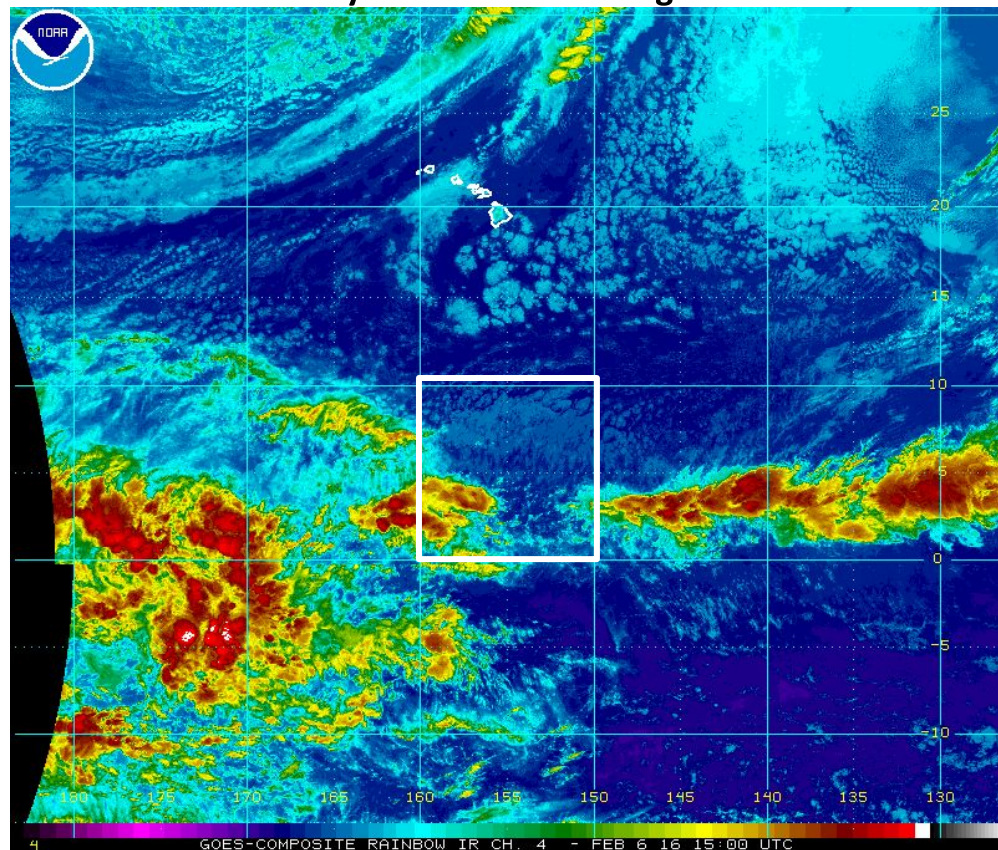
- CA mostly quiet

## Medium - Long Term:

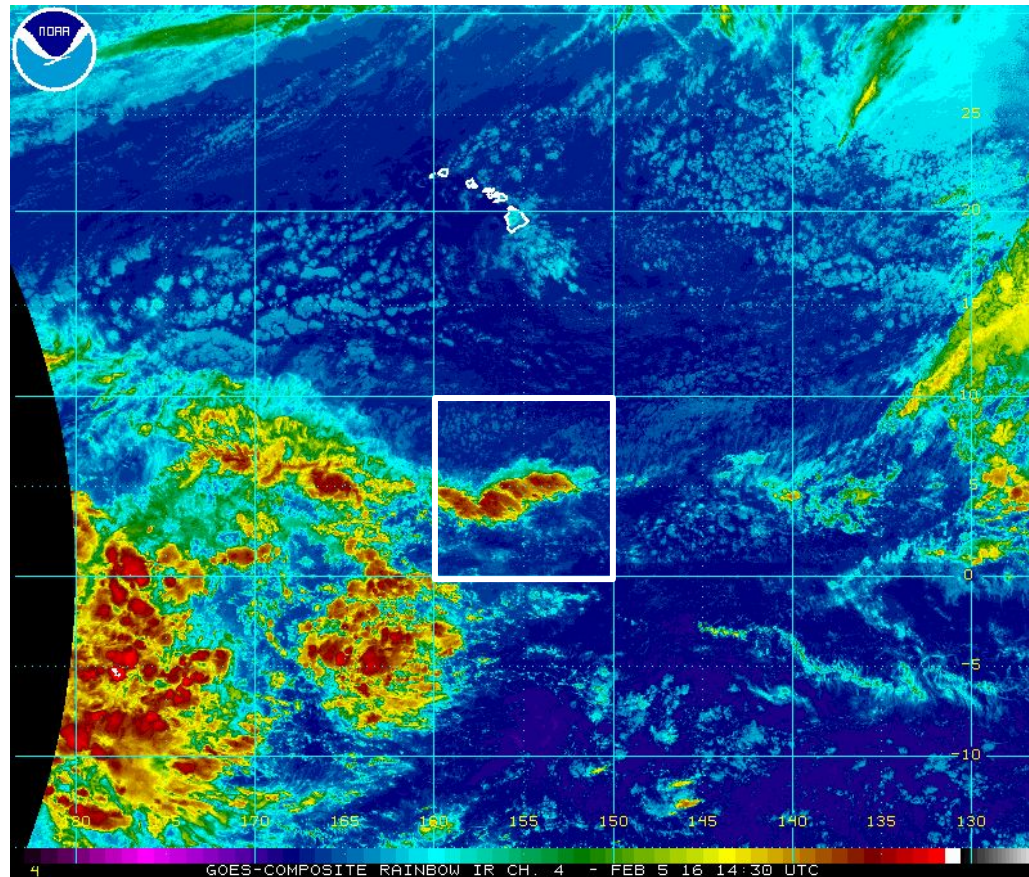
- Day 0-7 accumulated pcpn for CA shows little pcpn
- CPC 6-10 day (Feb 10-14) pcpn probabilities have high probabilities of below normal statewide
- Days 7 -10 fcsts from 00 SAT 5 Feb runs indicate reduced or absent anomalous WC Ridge
- ----confidence low ( deterministic model disagreement)
- Day 8-15 Calibrated Pcpn for CA (00Z SAT fcst) indicates a change, with above normal risks for >2" rainfall in region from SFO to SAN.  
--- confidence low given poor model performance in prior long lead predictions.



## SAT 15Z February 6 Enhanced IR Image

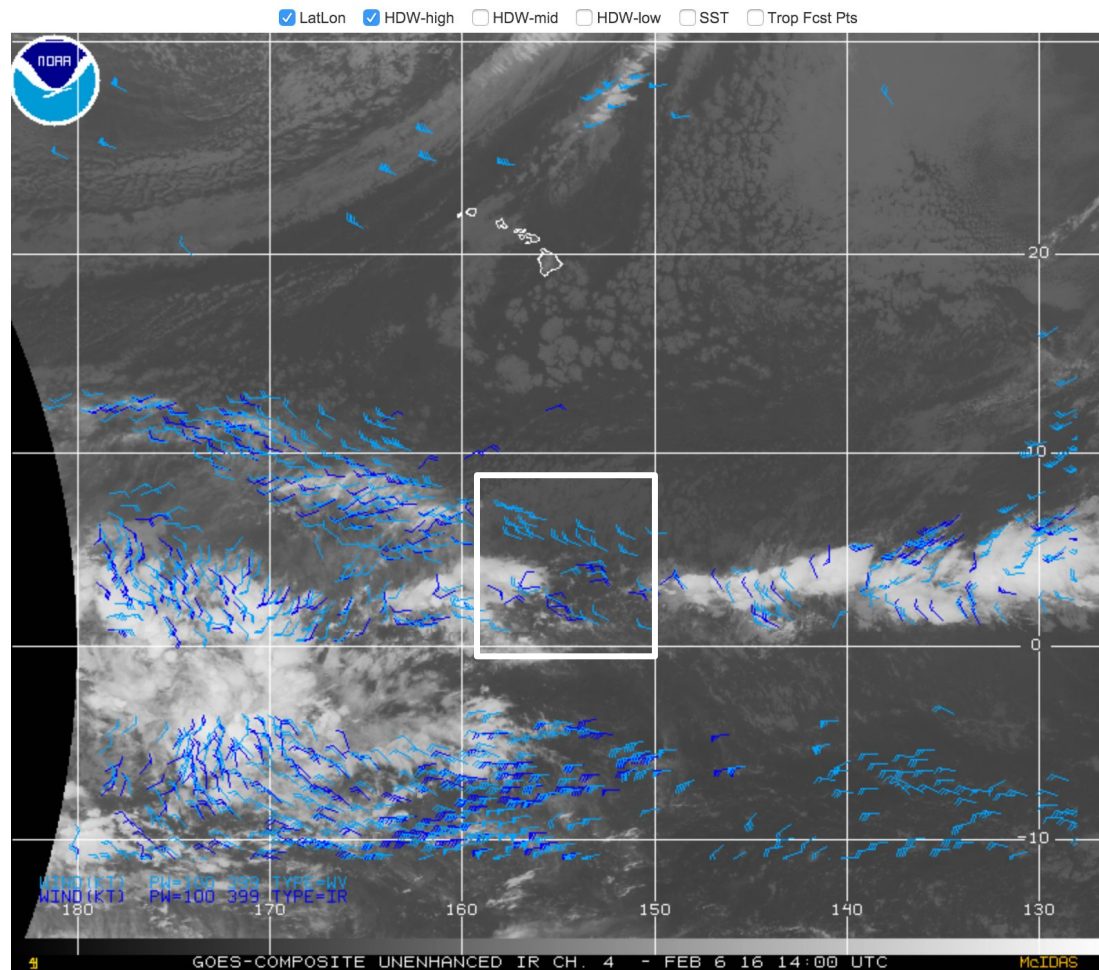


# FRI 1430Z February 5 Enhanced IR Image

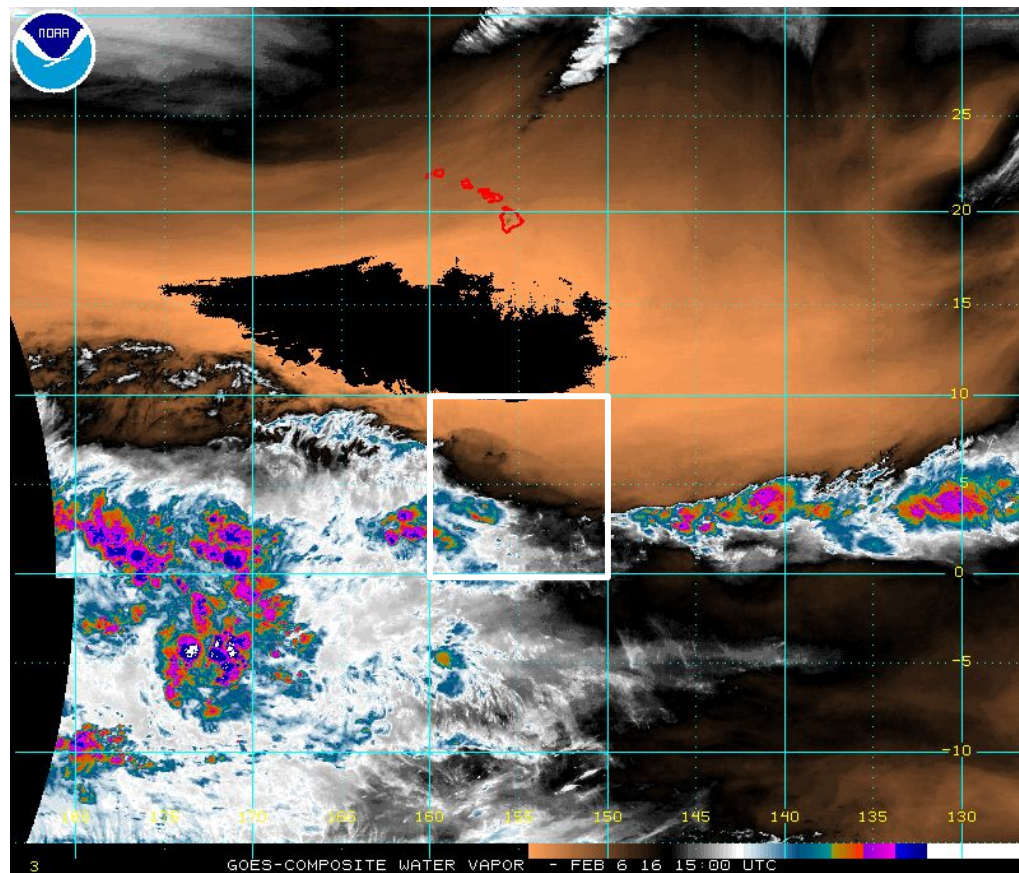




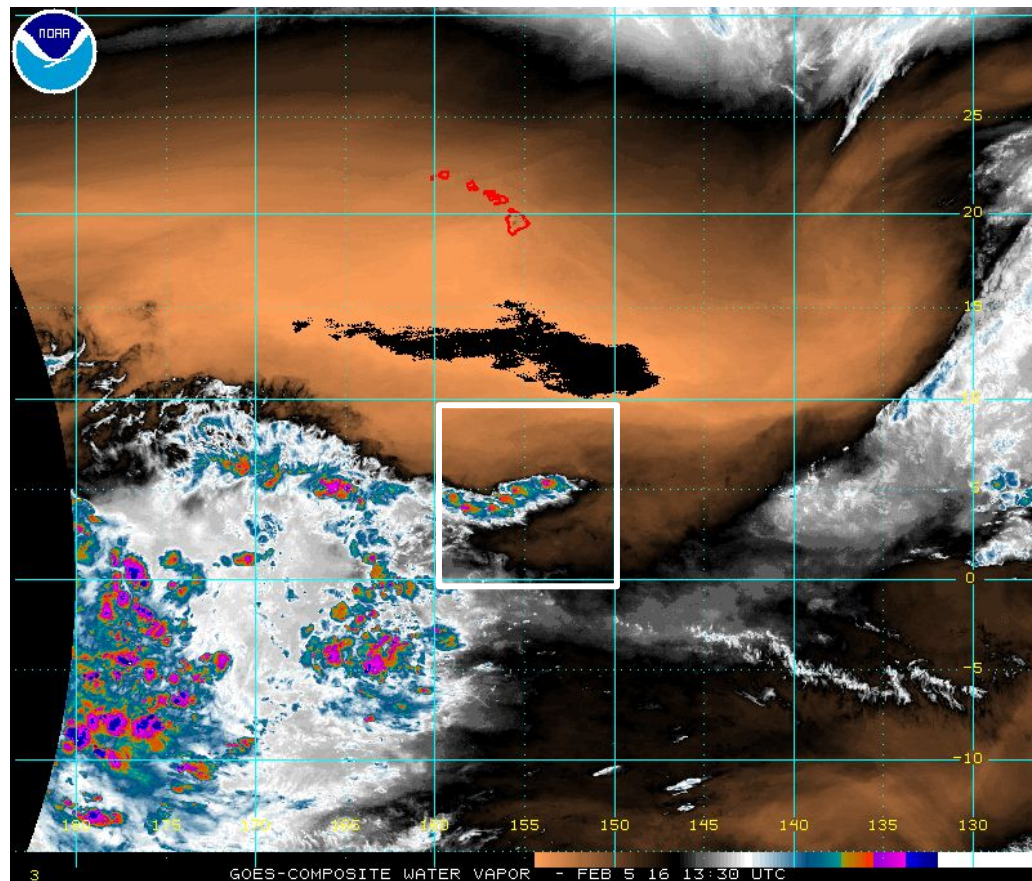
# GOES Composite - El Niño Support – Infrared Channel 4 Loop



## SAT 15Z February 5 Water Vapor

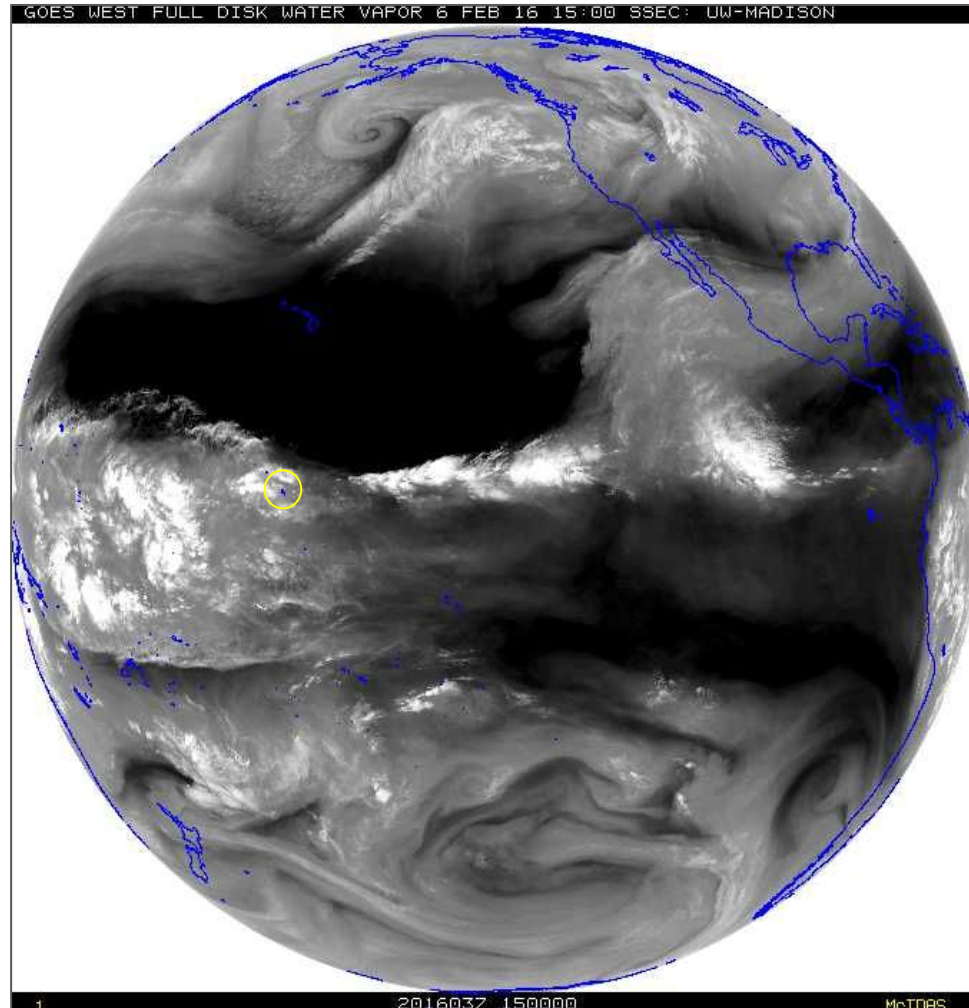


## FRI 14Z February 5 Water Vapor

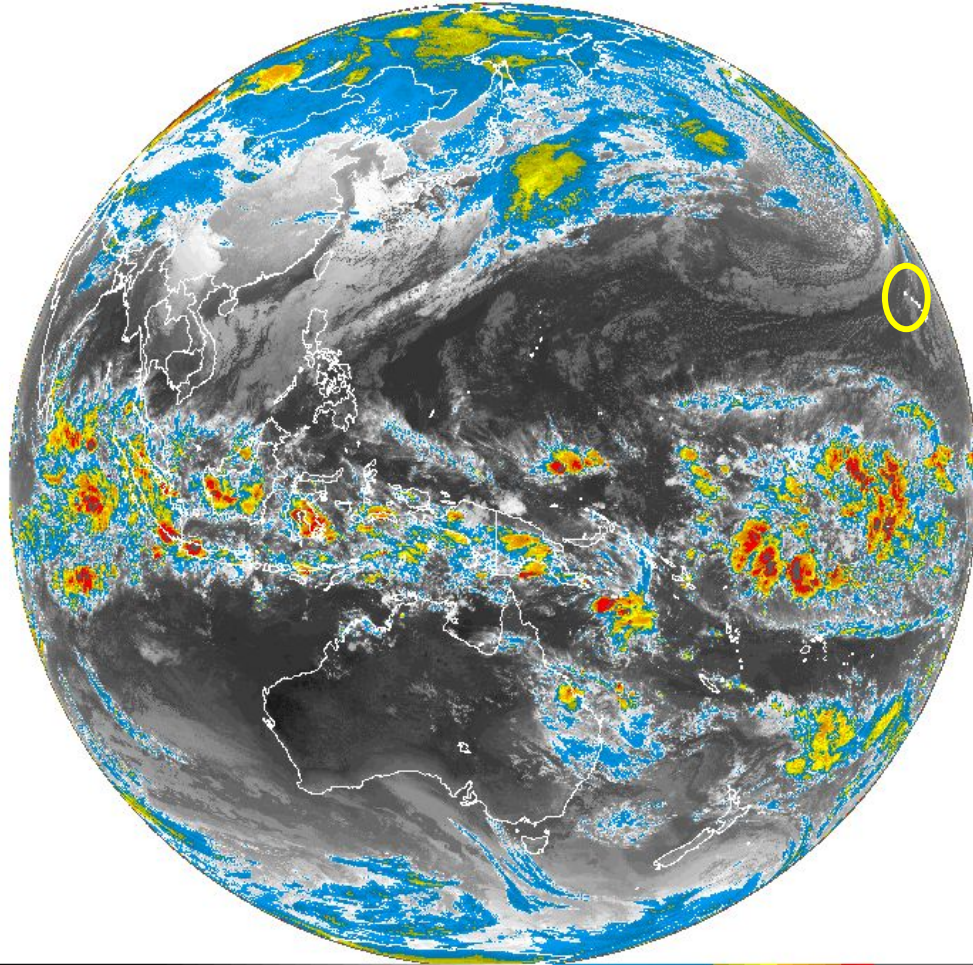




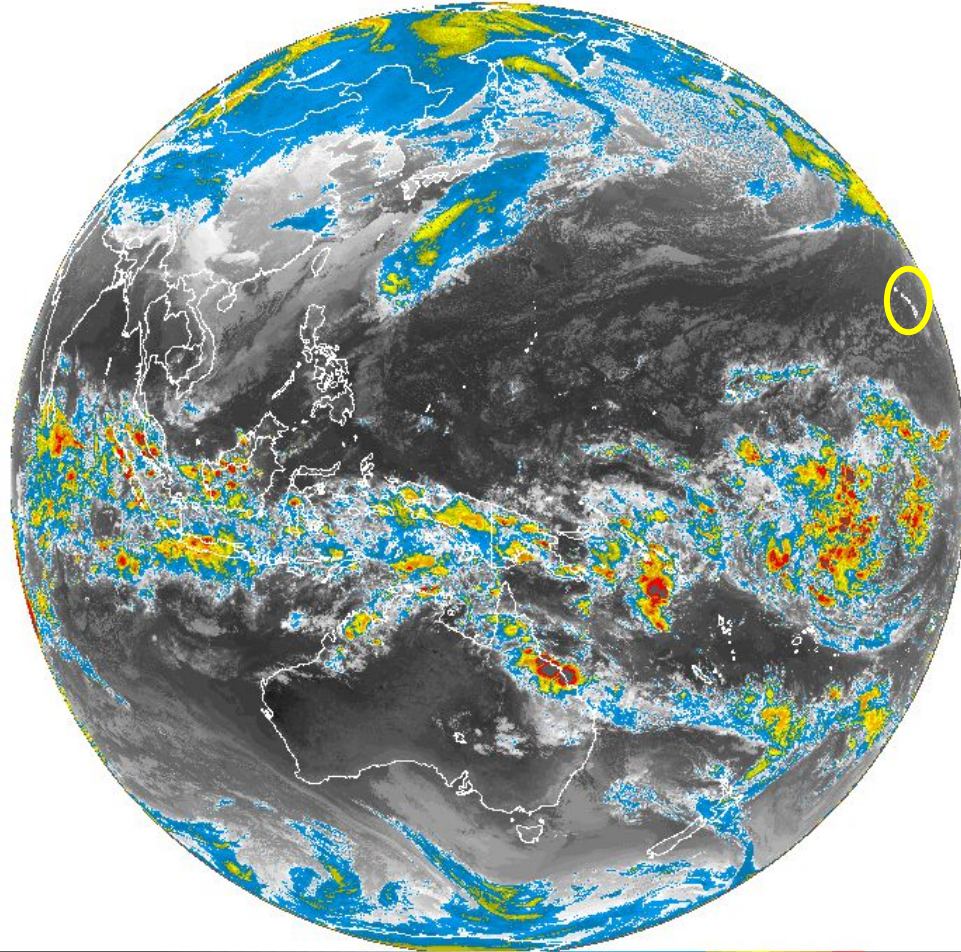
# SAT 15Z February 6 GOES West Water Vapor Image



SAT 14Z February 6 GOES West Pacific

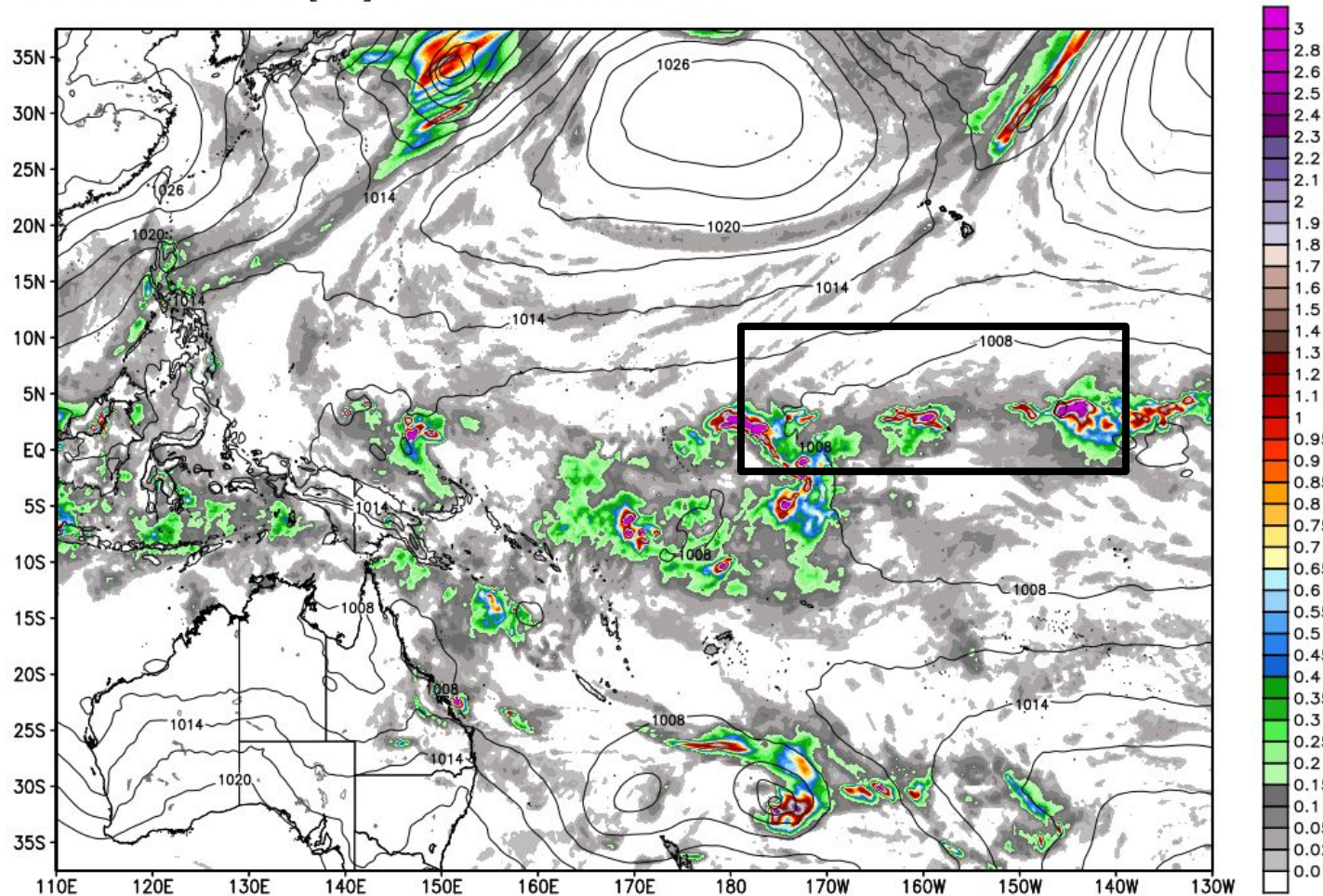


FRI 14Z February 5 GOES West Pacific

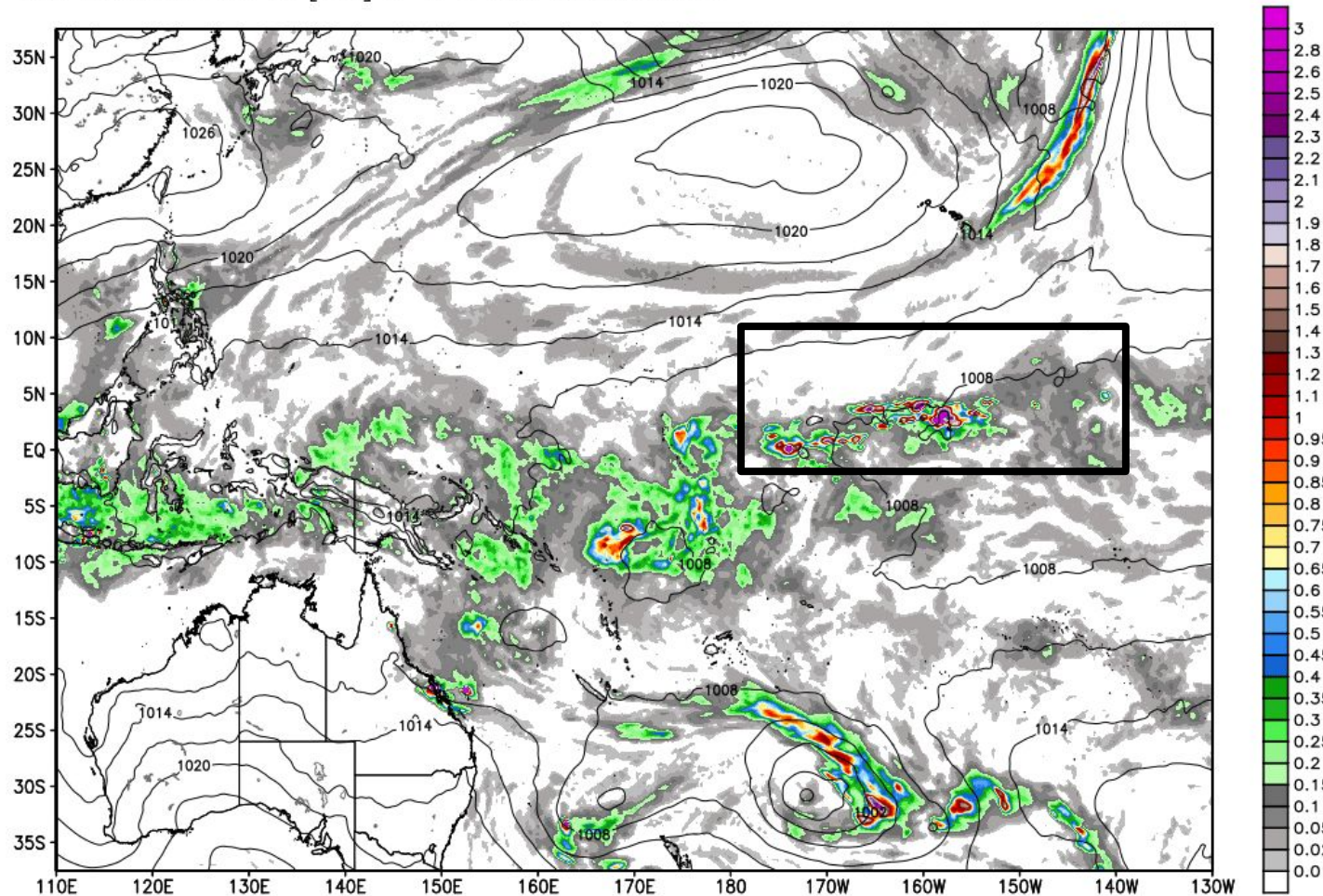




ECMWF 6-hourly Precipitation [inches] between 18Z06FEB2016 -- 00Z07FEB2016 & MSLP [hPa]  
INIT: 12Z06FEB2016 fx: [012] hr --> Sun 00Z07FEB2016

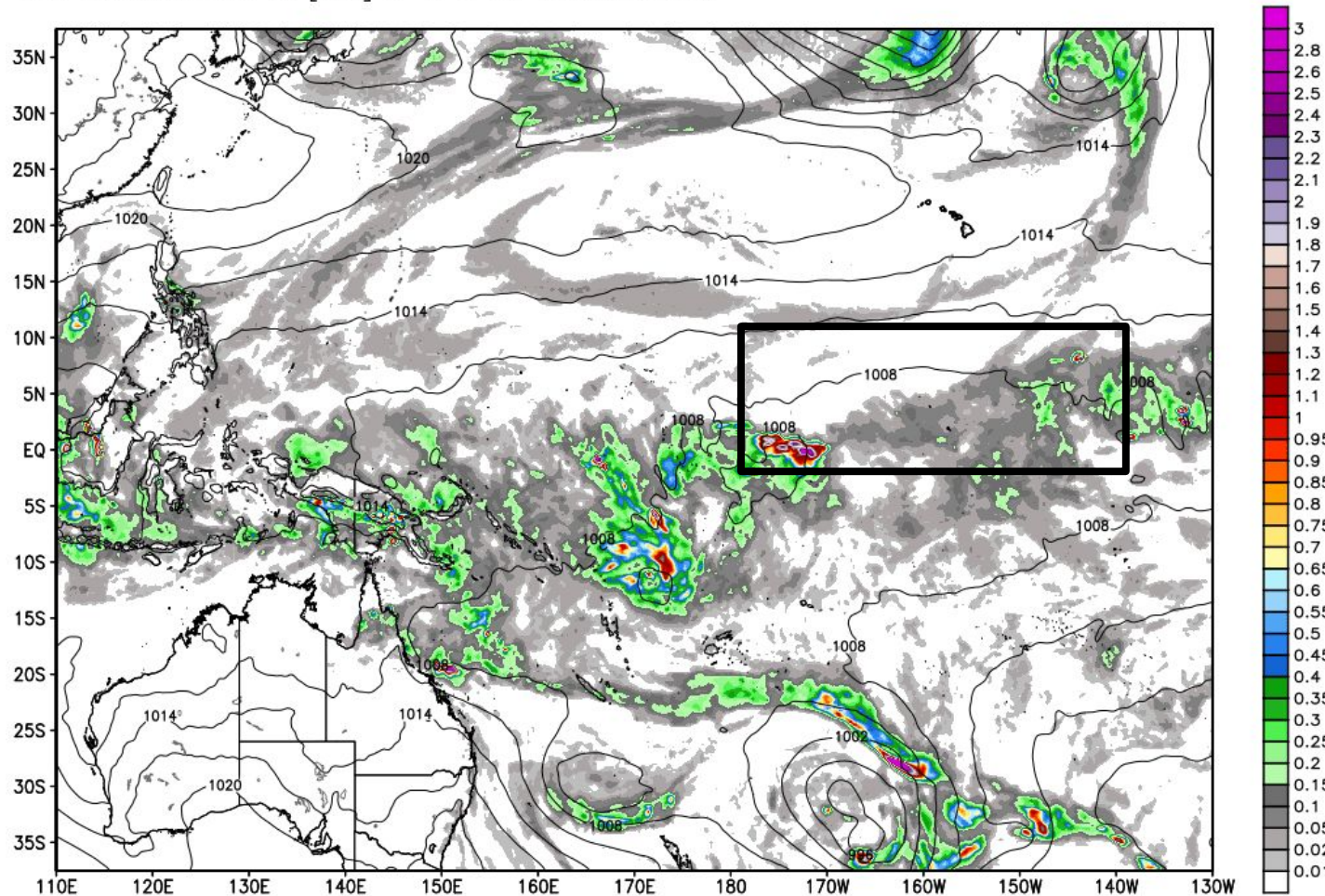


ECMWF 6-hourly Precipitation [inches] between 18Z07FEB2016 -- 00Z08FEB2016 & MSLP [hPa]  
INIT: 12Z06FEB2016 fx: [036] hr --> Mon 00Z08FEB2016





ECMWF 6-hourly Precipitation [inches] between 18Z08FEB2016 -- 00Z09FEB2016 & MSLP [hPa]  
INIT: 12Z06FEB2016 fx: [060] hr --> Tue 00Z09FEB2016





## 630 am email from CXI:

“Stars were out to south of site during filling of balloon. Launched during rain at site. Surface obs. not best, as were made prior to rain, which changed T/RH.

2:10 AM LT: stars visible though haze/thin cloud. Not visible to south, but overhead and to north.

3:35 LT, just after balloon burst, stars visible overhead, but atmosphere is optically thick, and stars not visible below about 60 degrees above horizon.

”

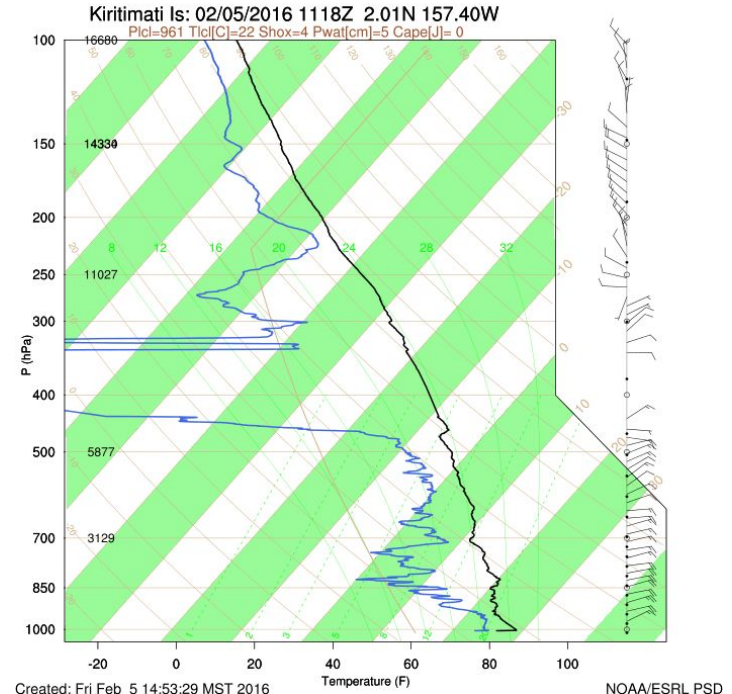
.

Paul

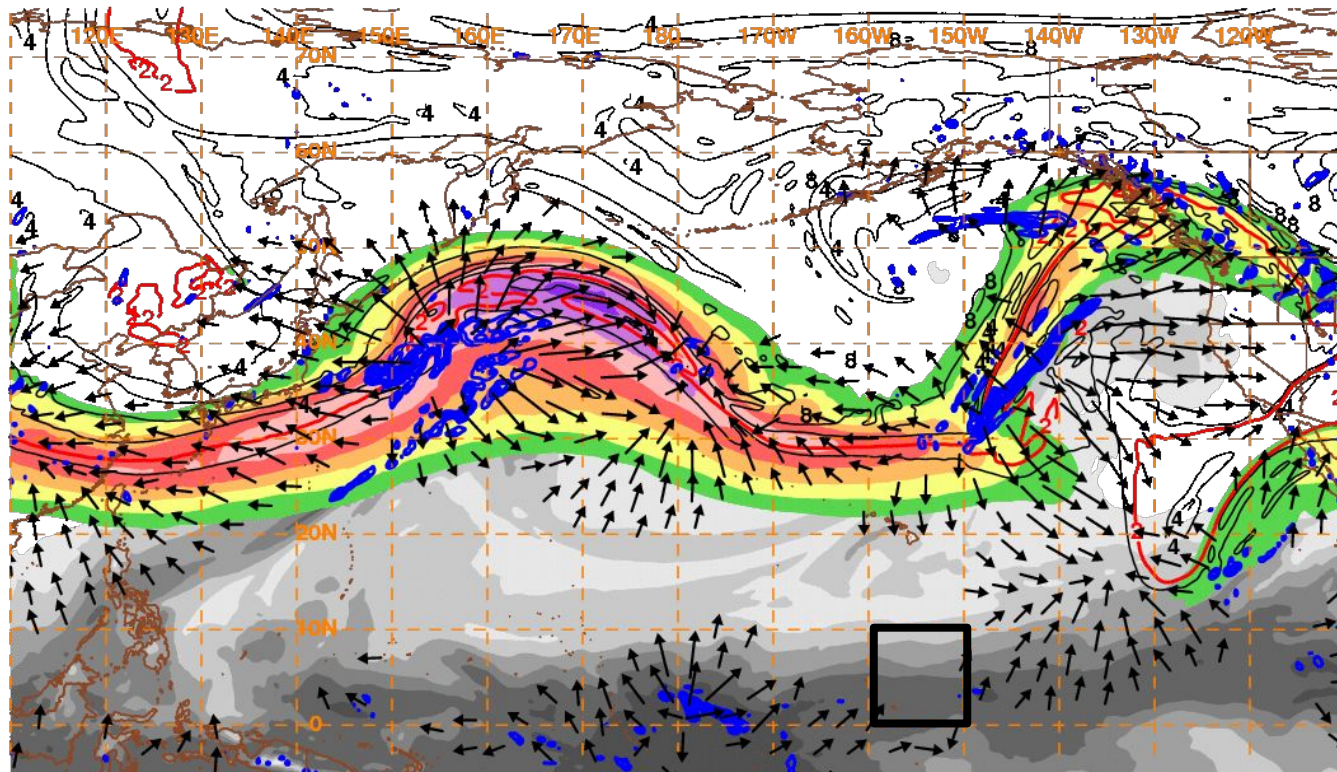
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Paul E Johnston

## Friday Morning Sonde...



# GFS 18 HR FCST Valid 00Z SUN Feb 8: 200 mb DIV Wind Vectors

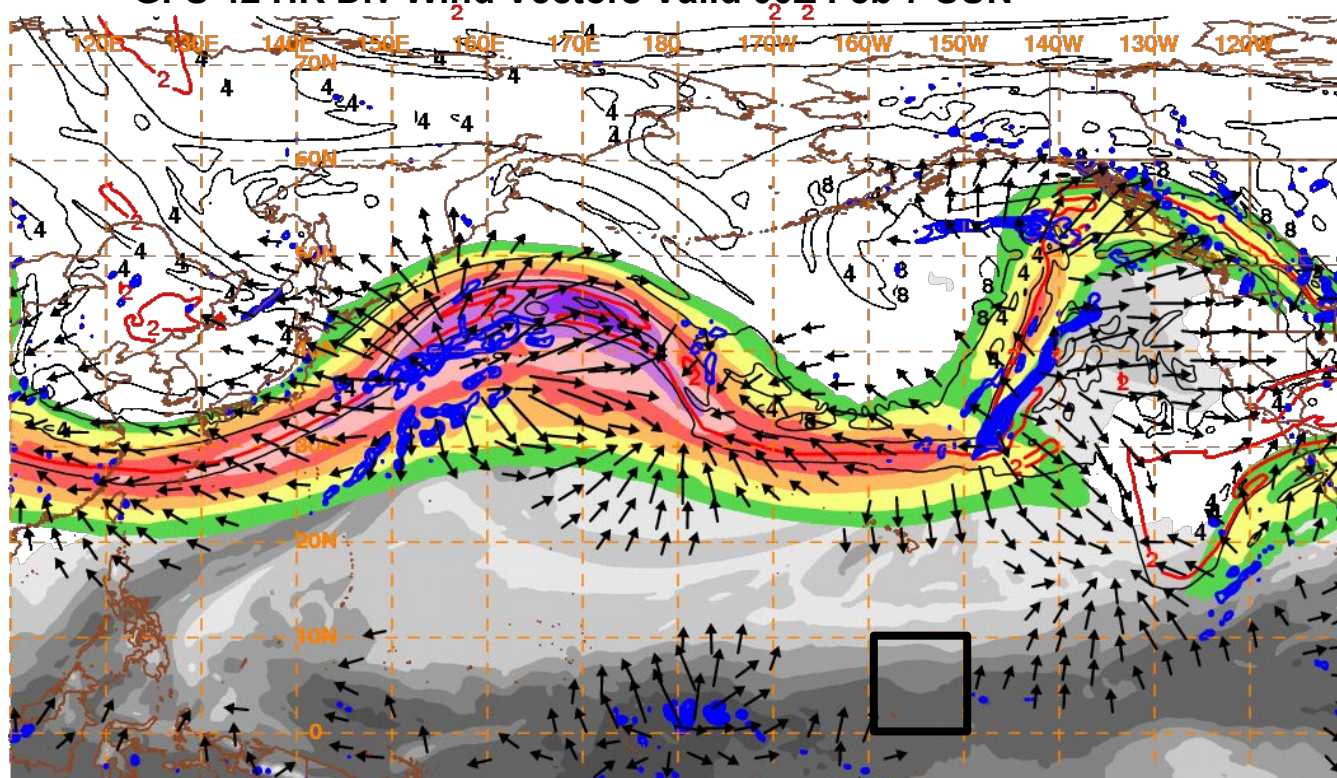


10 m/s → 160207/0000V018 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel





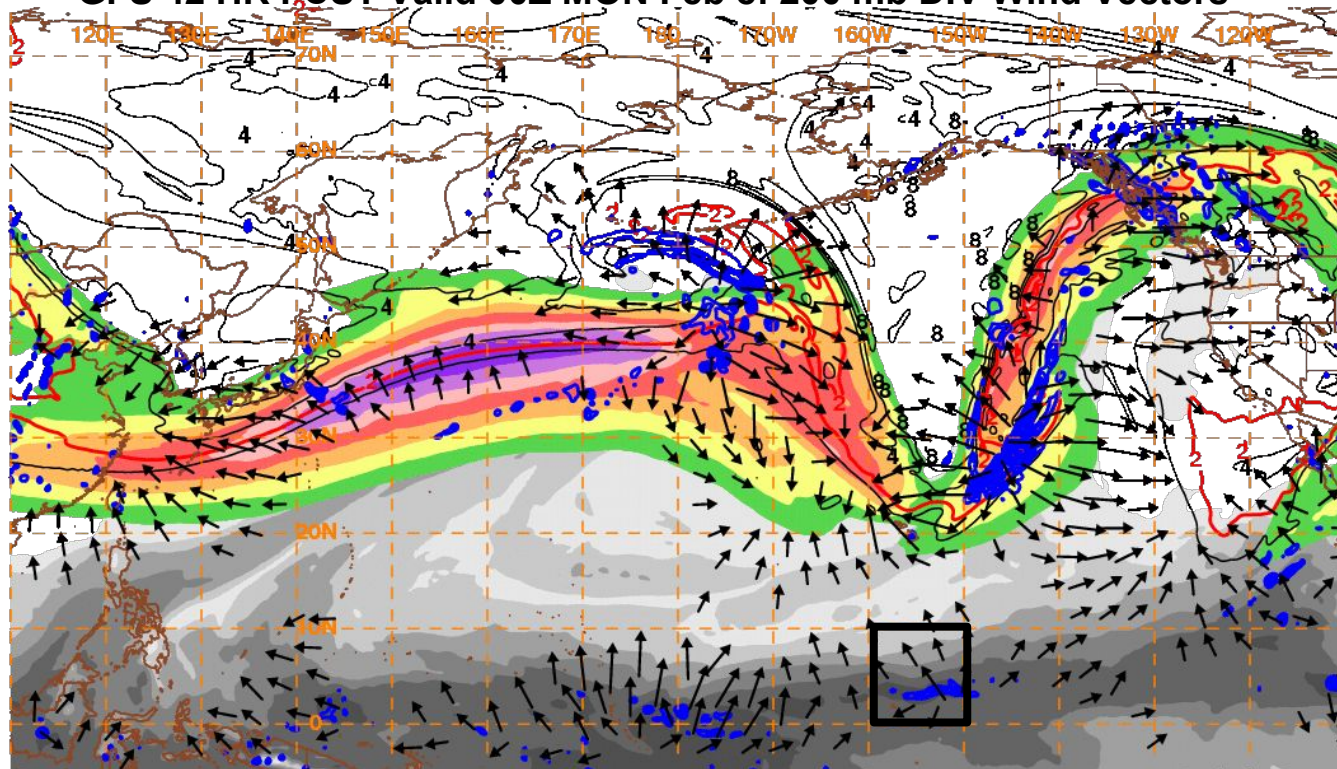
# GFS 42 HR Div Wind Vectors Valid 00Z Feb 7 SUN



10 m/s → 160207/0000V042 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel



# GFS 42 HR FCST Valid 00Z MON Feb 8: 200 mb DIV Wind Vectors

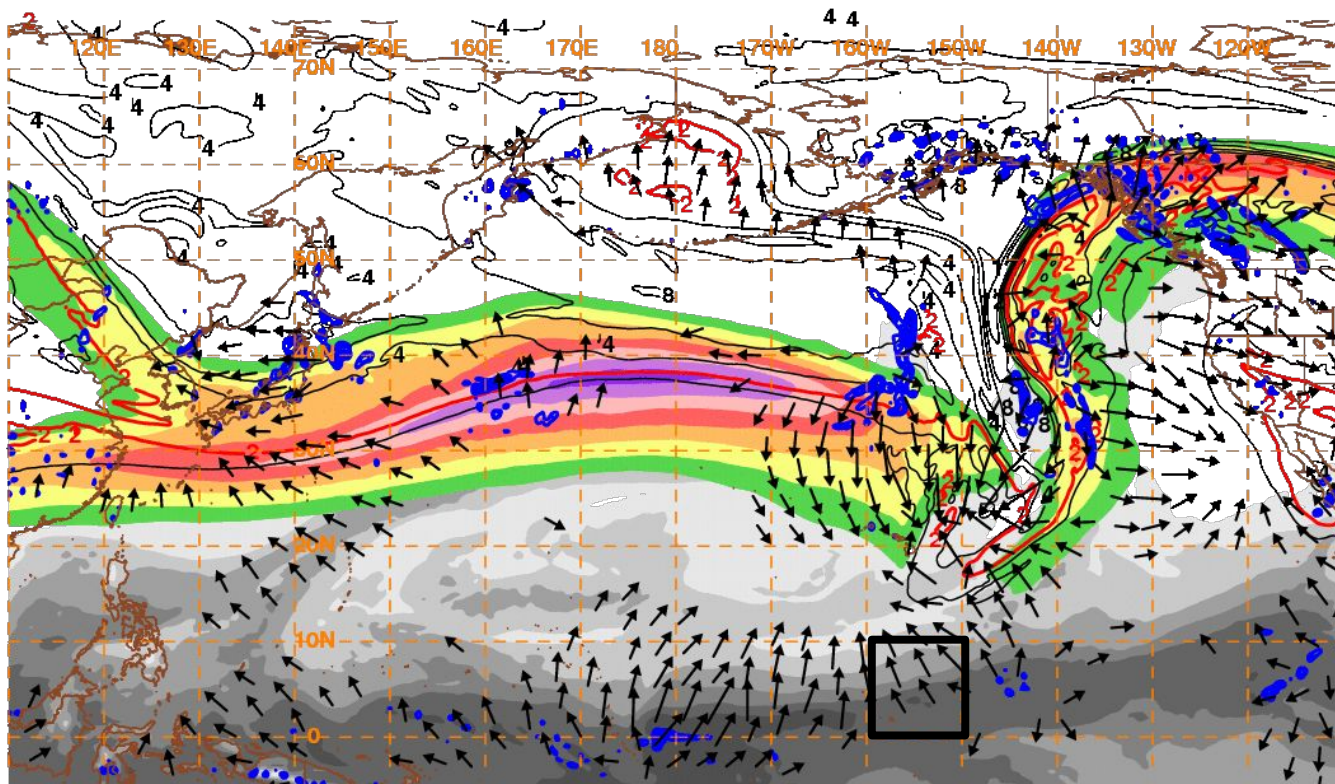


10 m/s → 160208/0000V042 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel





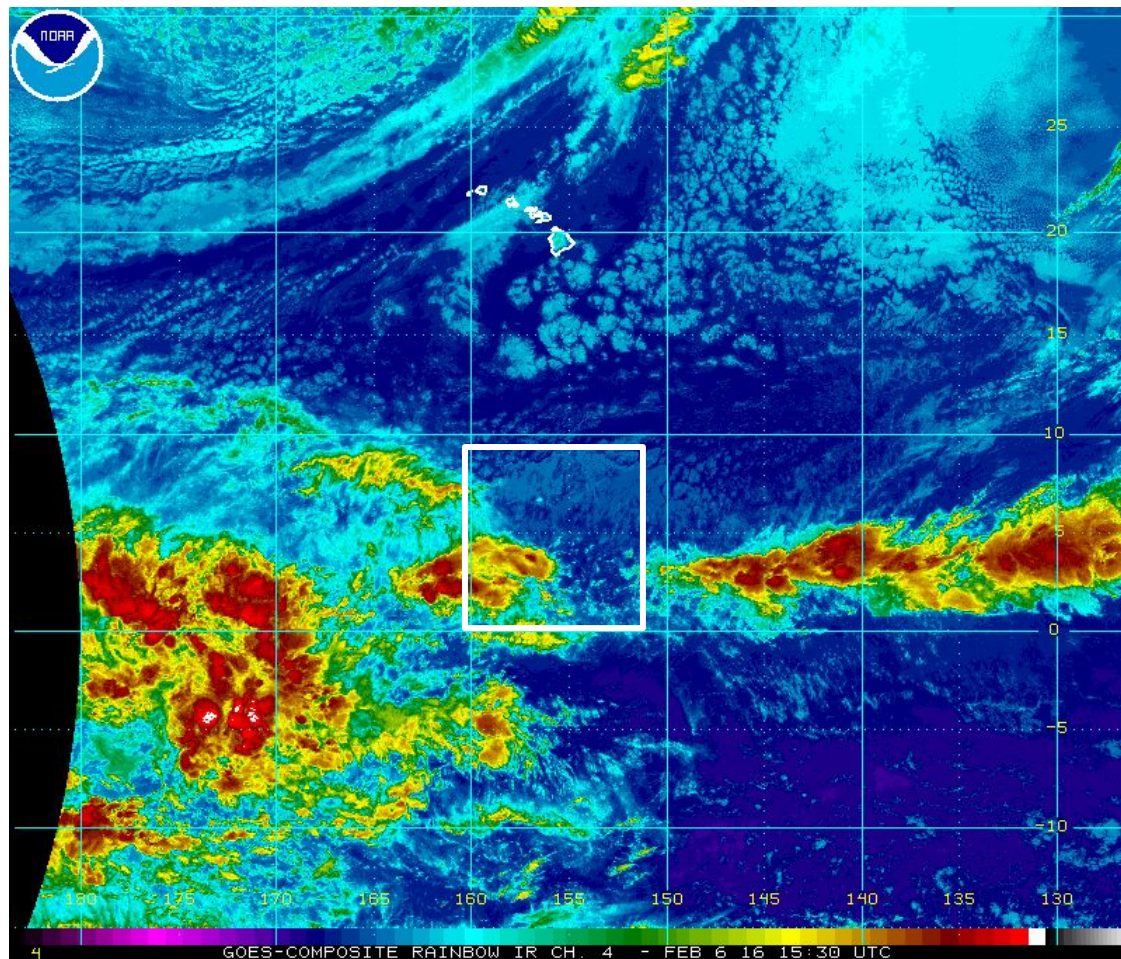
# GFS 66 HR FCST Valid 00Z TUE Feb 9: 200 mb DIV Wind Vectors



10 m/s → 160209/0000V066 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel



# SAT 1530Z February 6 Enhanced IR Image

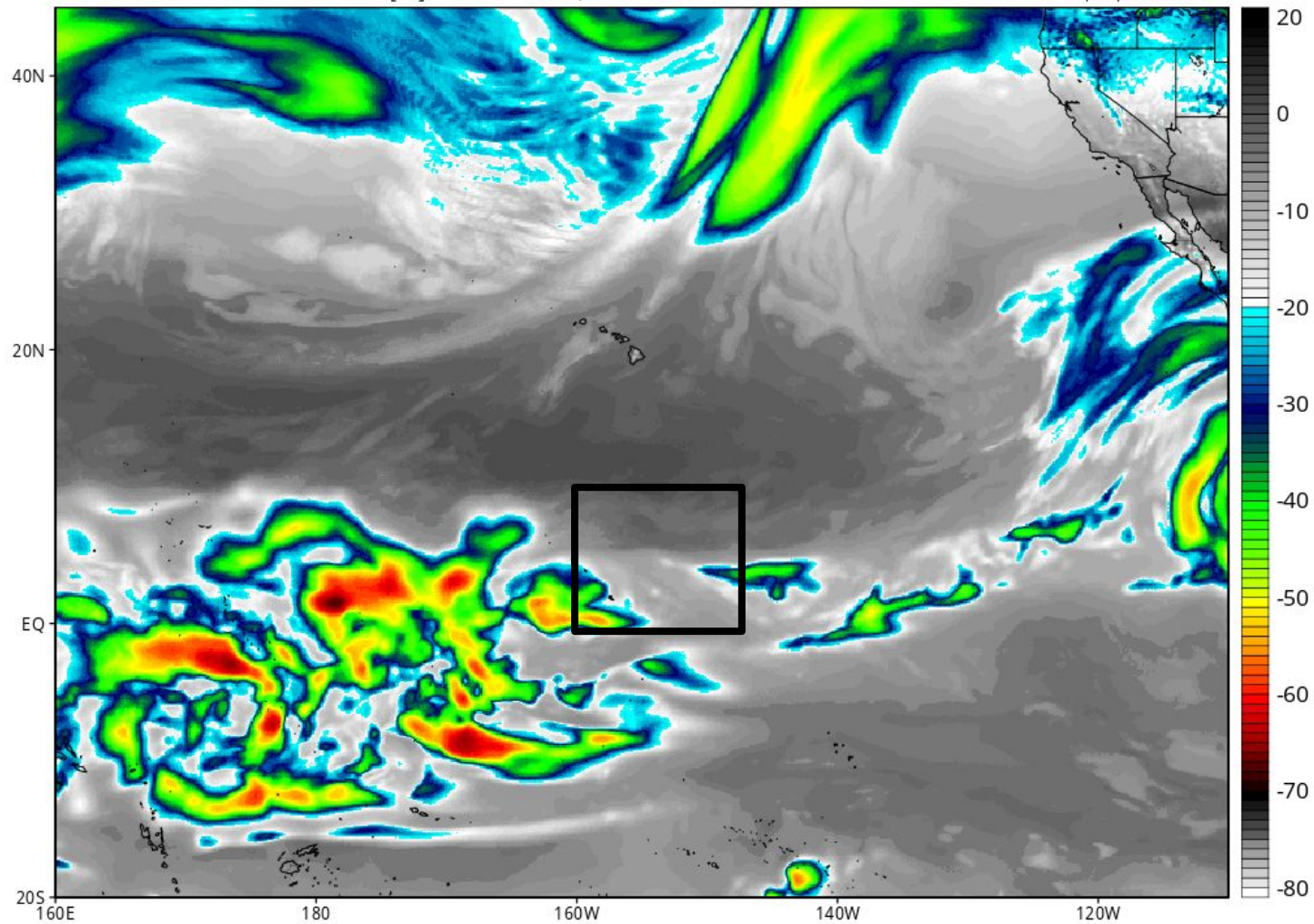




# GFS Simulated IR Brightness Temperature (°C)

Init: 12z Feb 06 2016 Forecast Hour: [12] valid at 00z Sun, Feb 07 2016

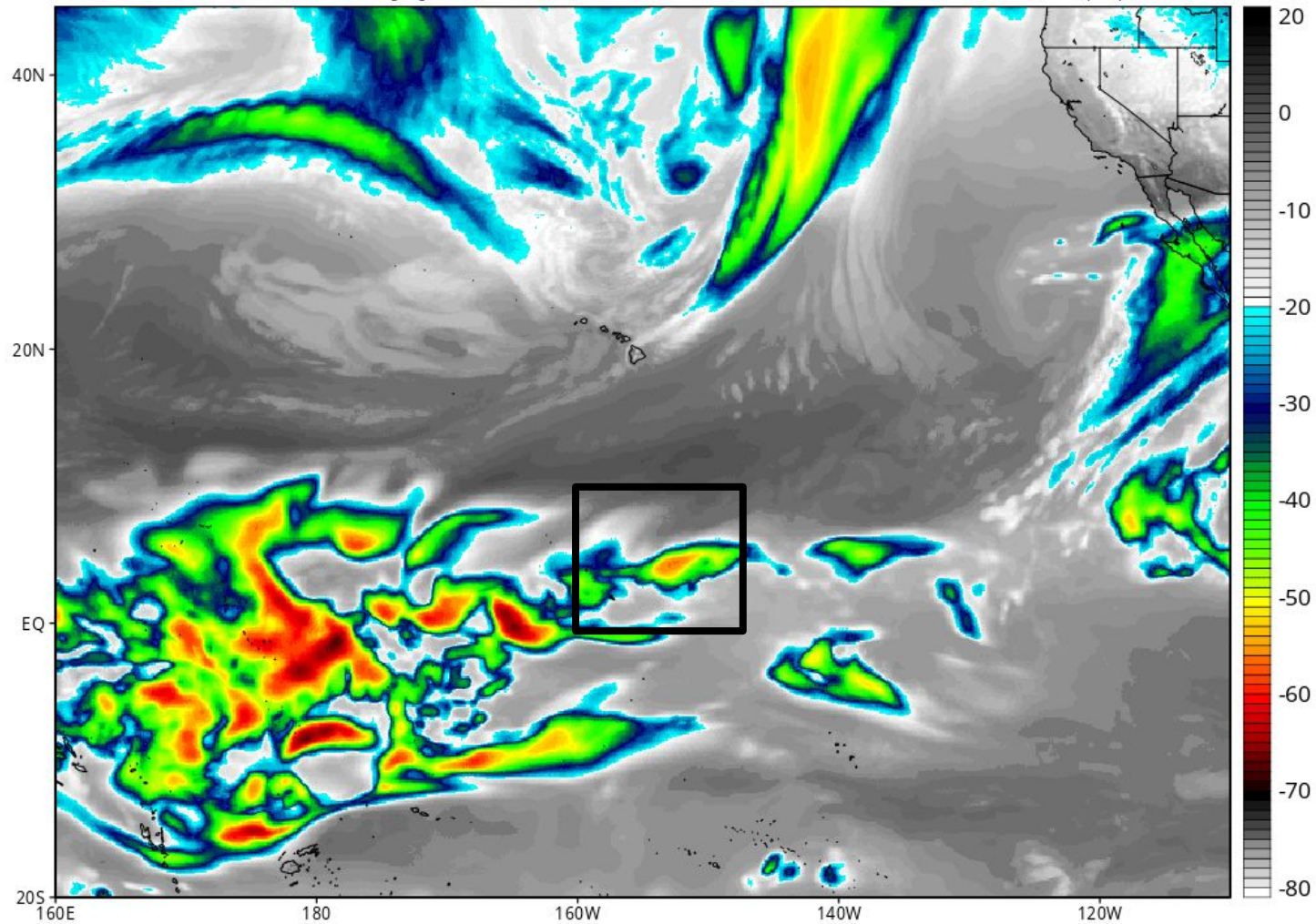
Levi Cowan | [tropictidbits.com](http://tropictidbits.com)



# GFS Simulated IR Brightness Temperature (°C)

Init: 12z Feb 06 2016 Forecast Hour: [36] valid at 00z Mon, Feb 08 2016

Levi Cowan | [tropicaltidbits.com](http://tropicaltidbits.com)

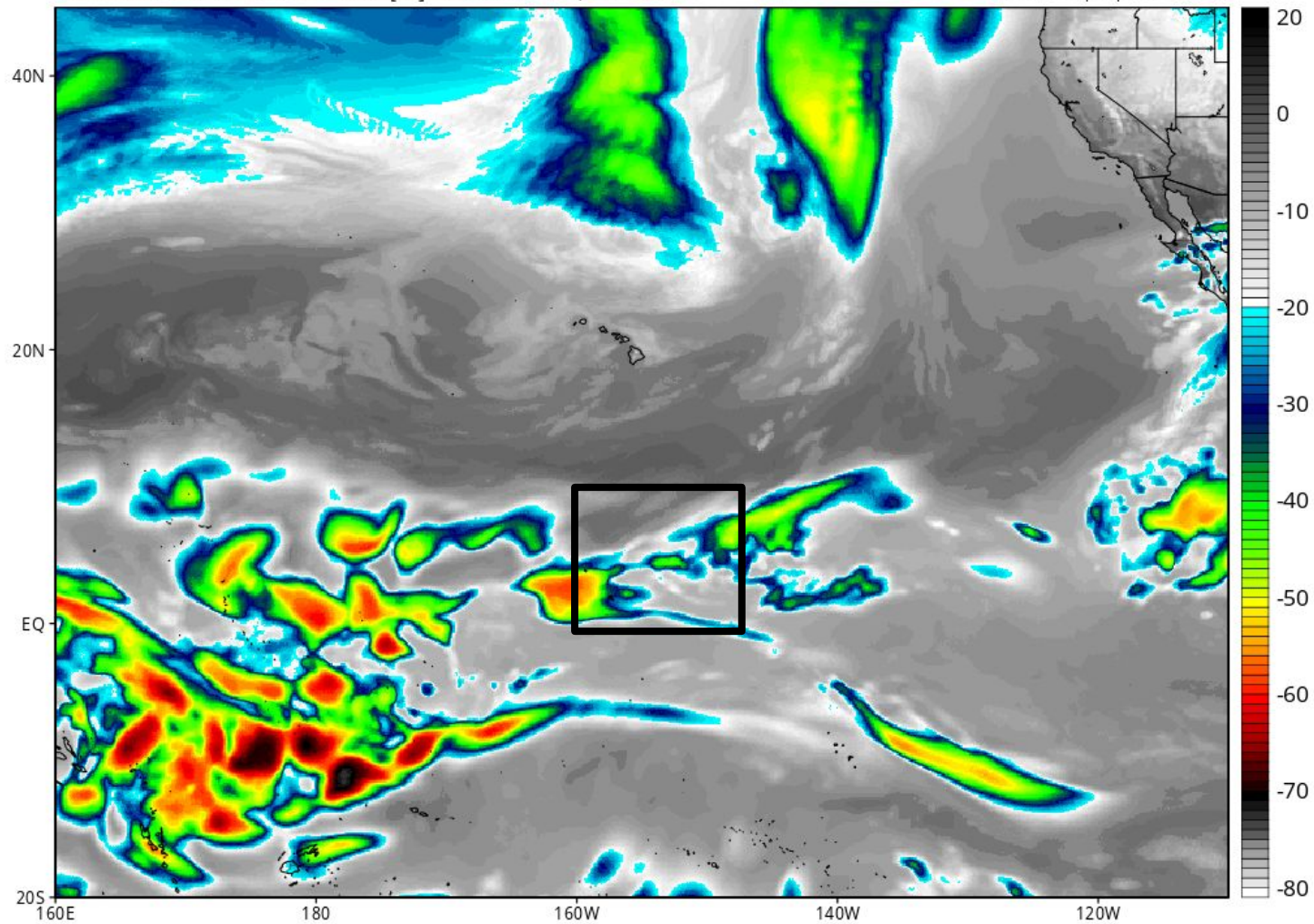




# GFS Simulated IR Brightness Temperature (°C)

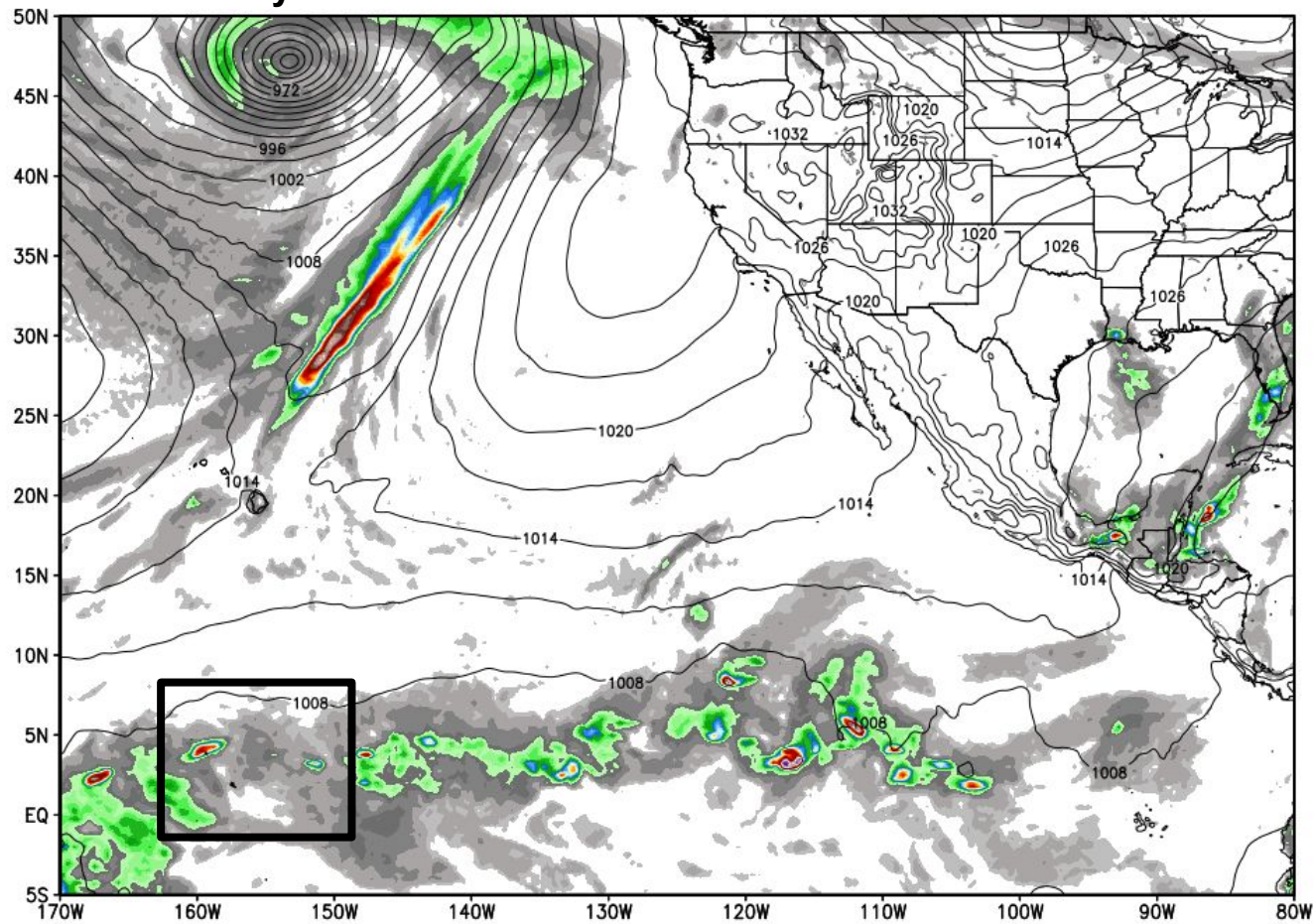
Init: 12z Feb 06 2016 Forecast Hour: [60] valid at 00z Tue, Feb 09 2016

Levi Cowan | [tropictidbits.com](http://tropictidbits.com)



ECMWF 6-hourly Precipitation [inches] between 18Z06FEB2016 -- 00Z07FEB2016 & MSLP [hPa]  
INIT: 00Z06FEB2016 fx: [024] hr --> Sun 00Z07FEB2016

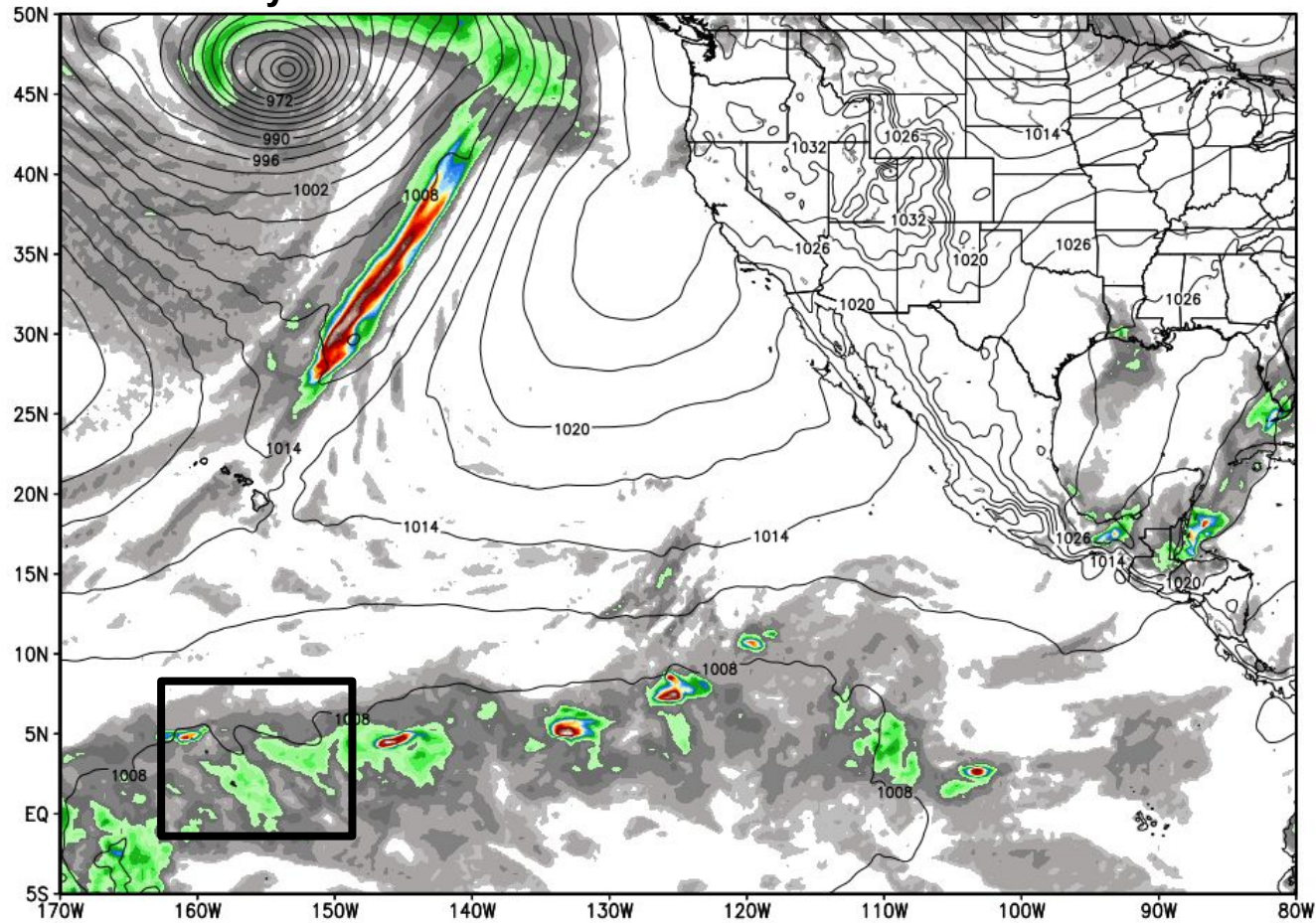
**Courtesy WeatherBell : Latest ECMWF 24 HR Fcst Valid 00Z SUN**





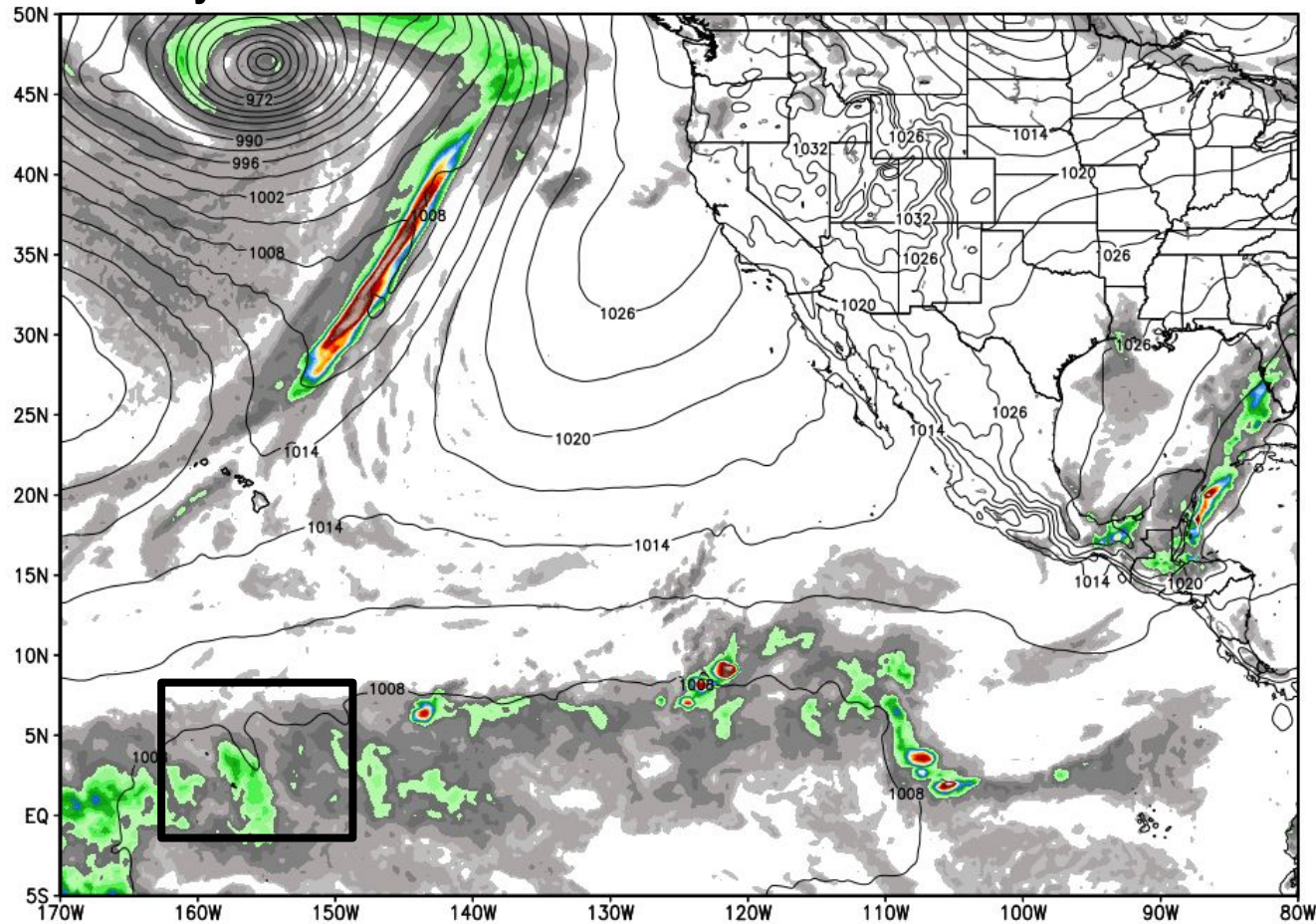
ECMWF 6-hourly Precipitation [inches] between 18Z06FEB2016 -- 00Z07FEB2016 & MSLP [hPa]  
INIT: 00Z05FEB2016 fx: [048] hr --> Sun 00Z07FEB2016

## Courtesy WeatherBell : Prior ECMWF 48 HR Fcst Valid 00Z SUN



ECMWF 6-hourly Precipitation [inches] between 18Z06FEB2016 -- 00Z07FEB2016 & MSLP [hPa]  
INIT: 00Z04FEB2016 fx: [072] hr --> Sun 00Z07FEB2016

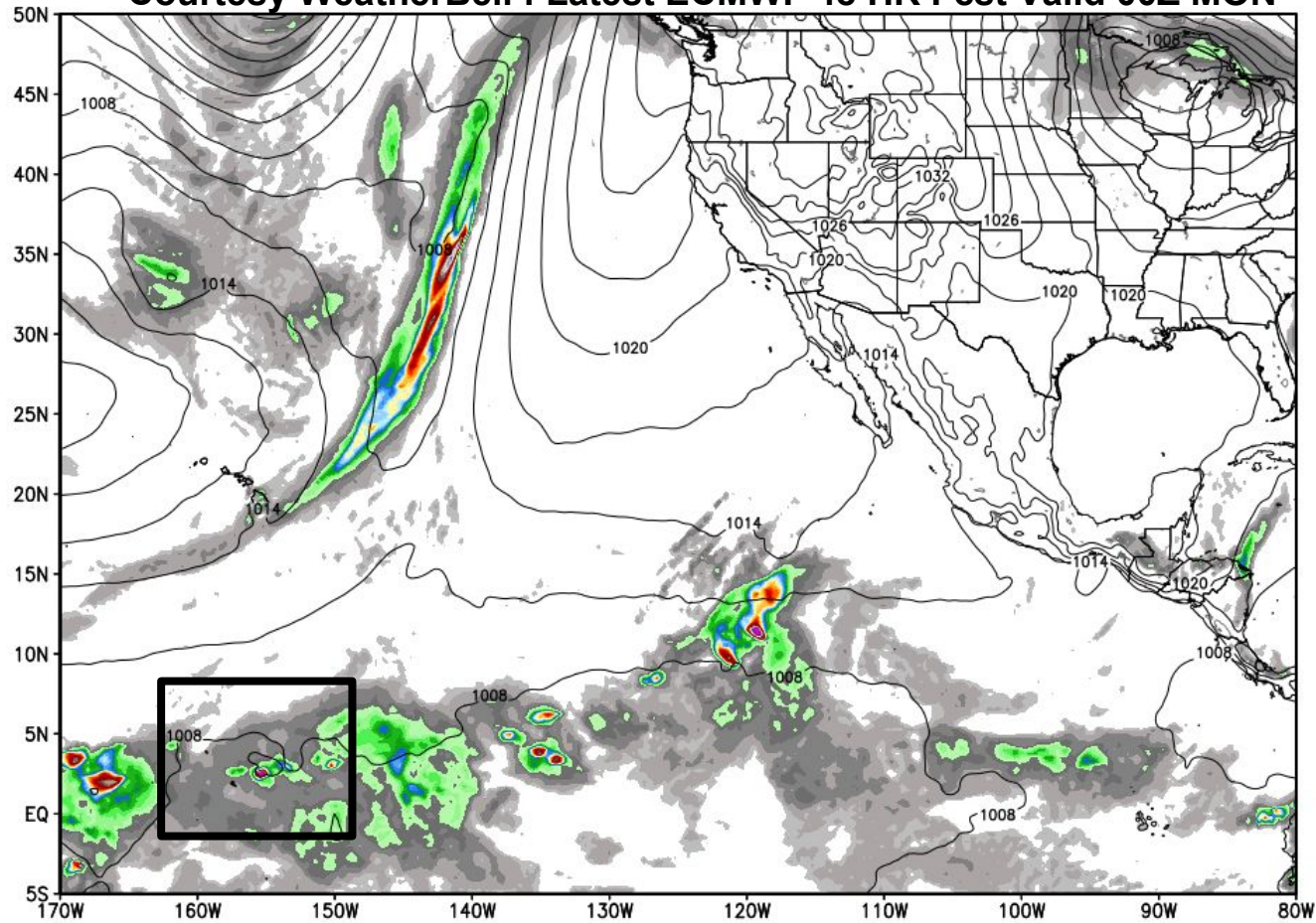
**Courtesy WeatherBell : Prior ECMWF 72 HR Fcst Valid 00Z SUN**





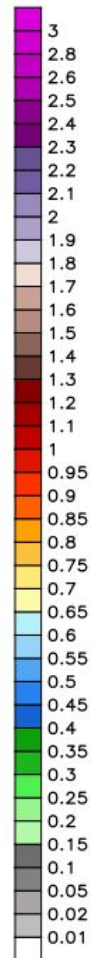
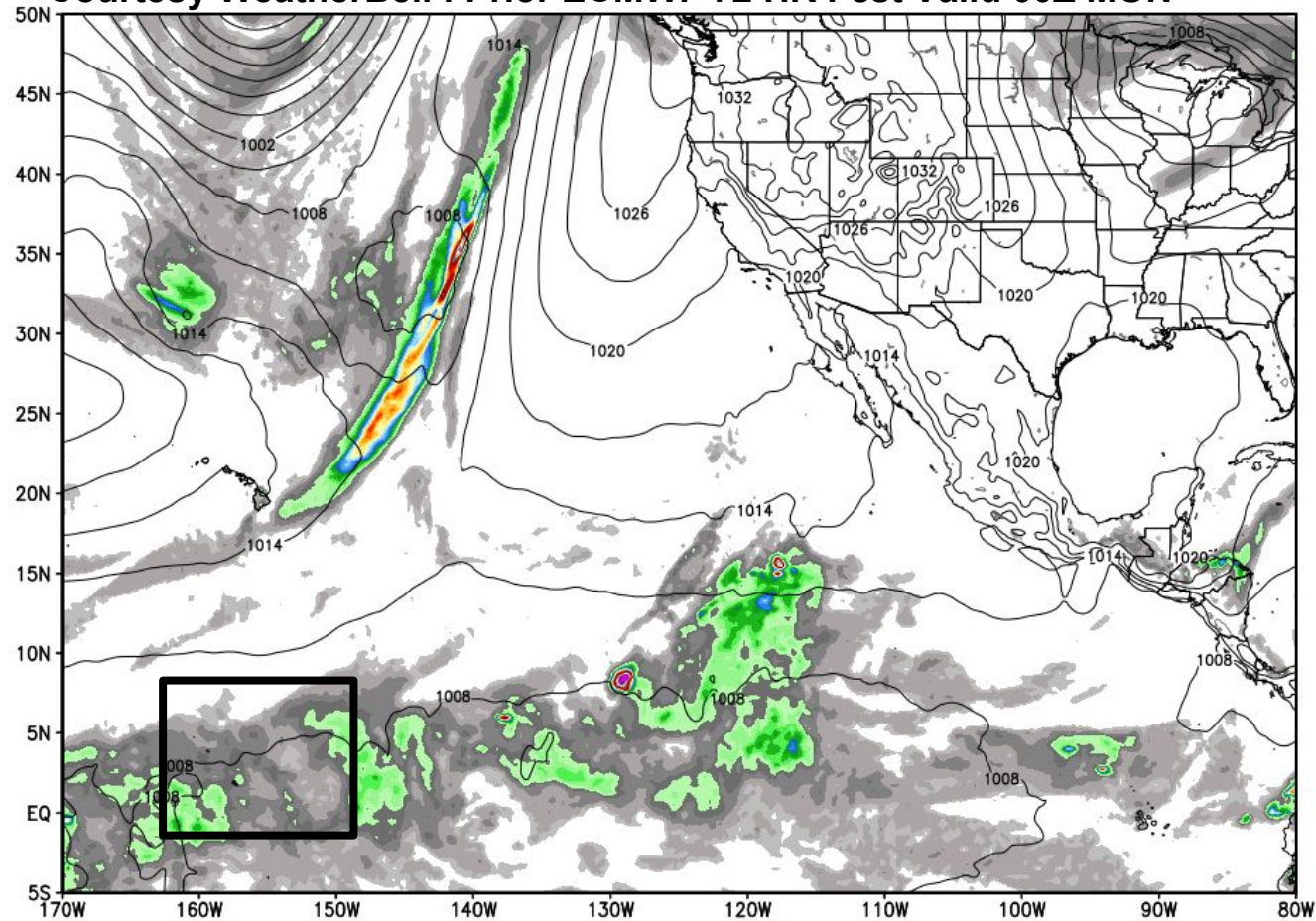
ECMWF 6-hourly Precipitation [inches] between 18Z07FEB2016 -- 00Z08FEB2016 & MSLP [hPa]  
INIT: 00Z06FEB2016 fx: [048] hr --> Mon 00Z08FEB2016

## Courtesy WeatherBell : Latest ECMWF 48 HR Fcst Valid 00Z MON



ECMWF 6-hourly Precipitation [inches] between 18Z07FEB2016 -- 00Z08FEB2016 & MSLP [hPa]  
INIT: 00Z05FEB2016 fx: [072] hr --> Mon 00Z08FEB2016

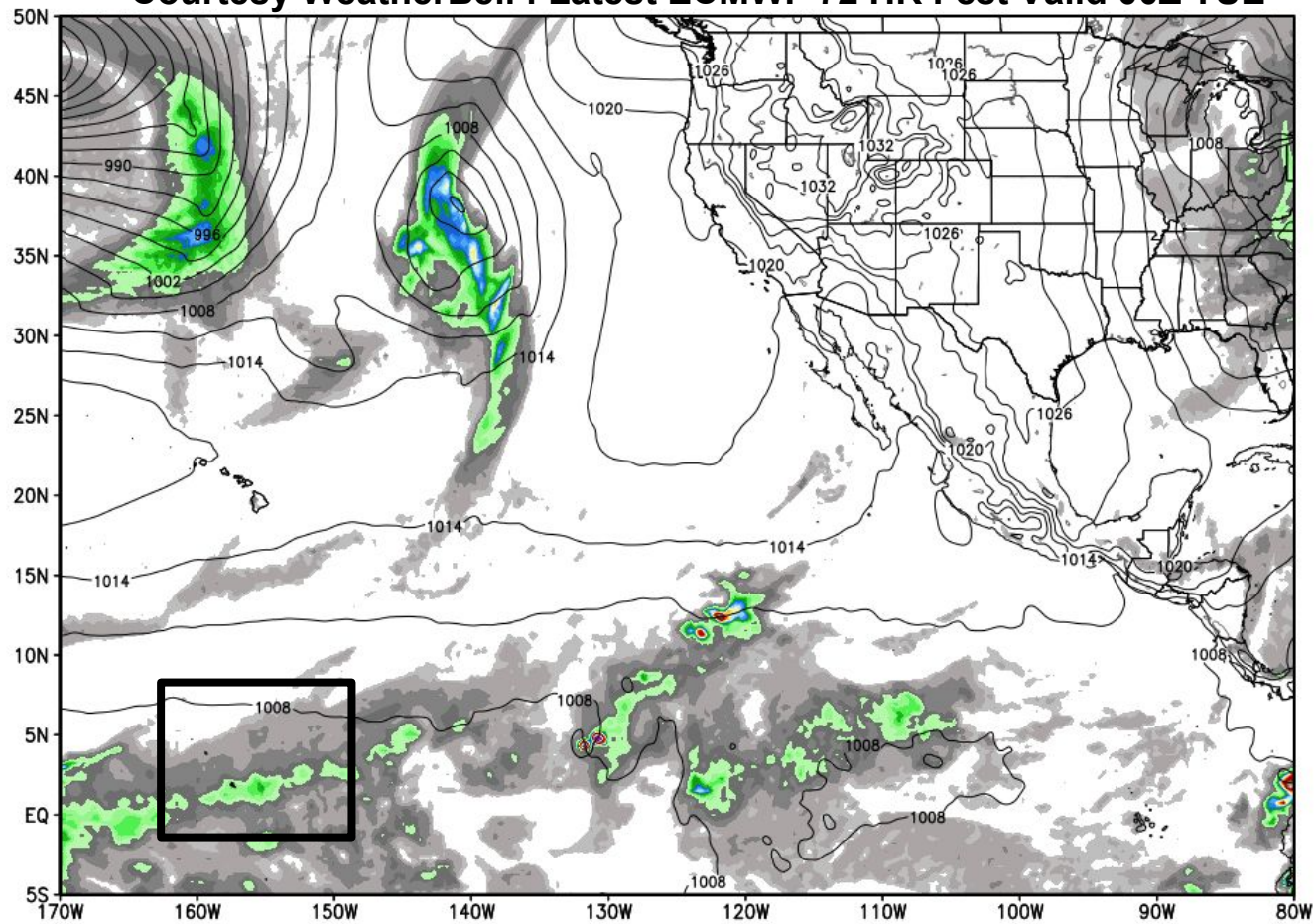
## Courtesy WeatherBell : Prior ECMWF 72 HR Fcst Valid 00Z MON





ECMWF 6-hourly Precipitation [inches] between 18Z08FEB2016 -- 00Z09FEB2016 & MSLP [hPa]  
INIT: 00Z06FEB2016 fx: [072] hr --> Tue 00Z09FEB2016

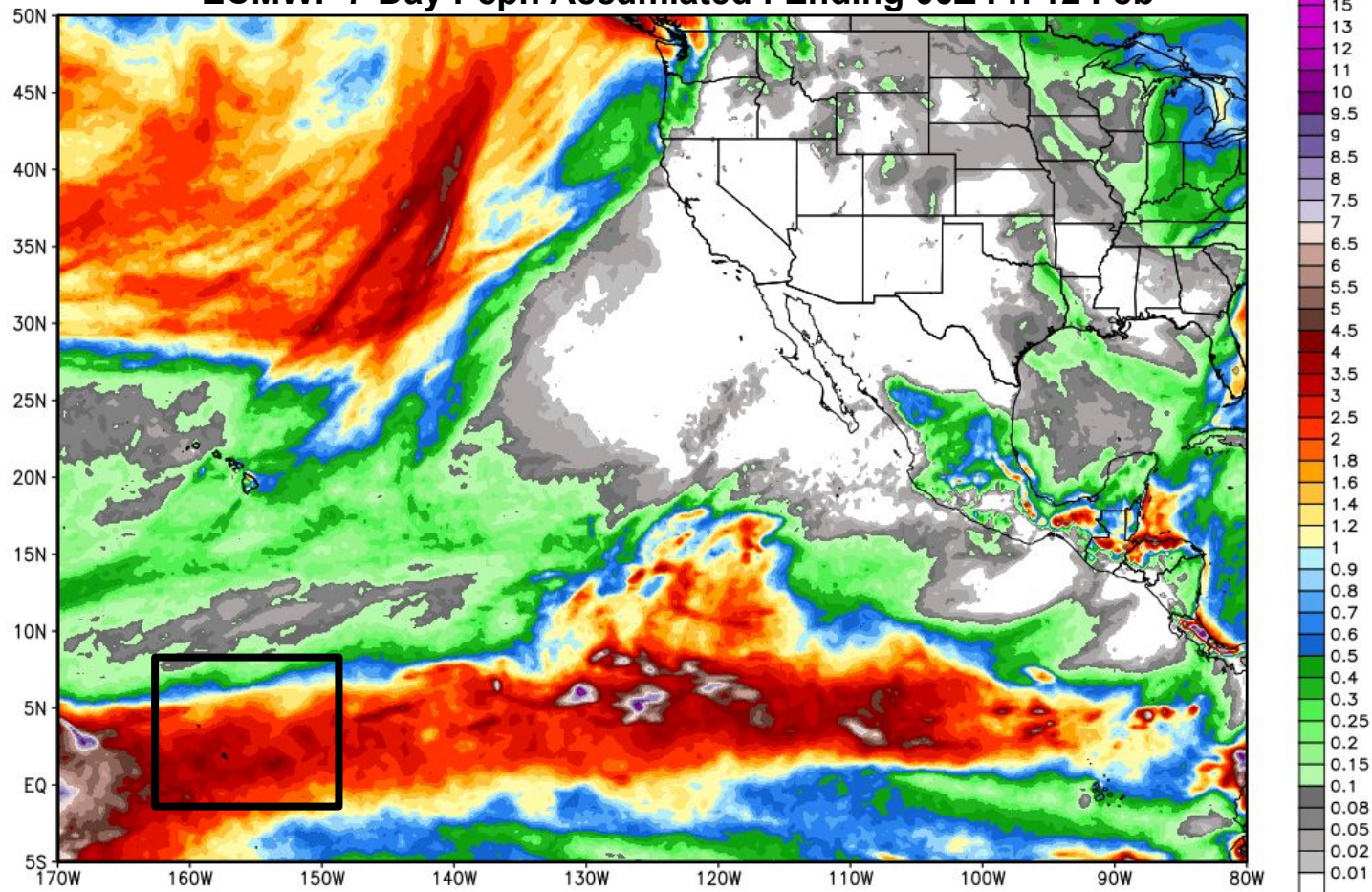
**Courtesy WeatherBell : Latest ECMWF 72 HR Fcst Valid 00Z TUE**



ECMWF Total Precipitation [inches] between 00Z05FEB2016 -- 00Z12FEB2016  
INIT: 00Z05FEB2016 fx: [168] hr --> Fri 00Z12FEB2016

Max 13.9 in

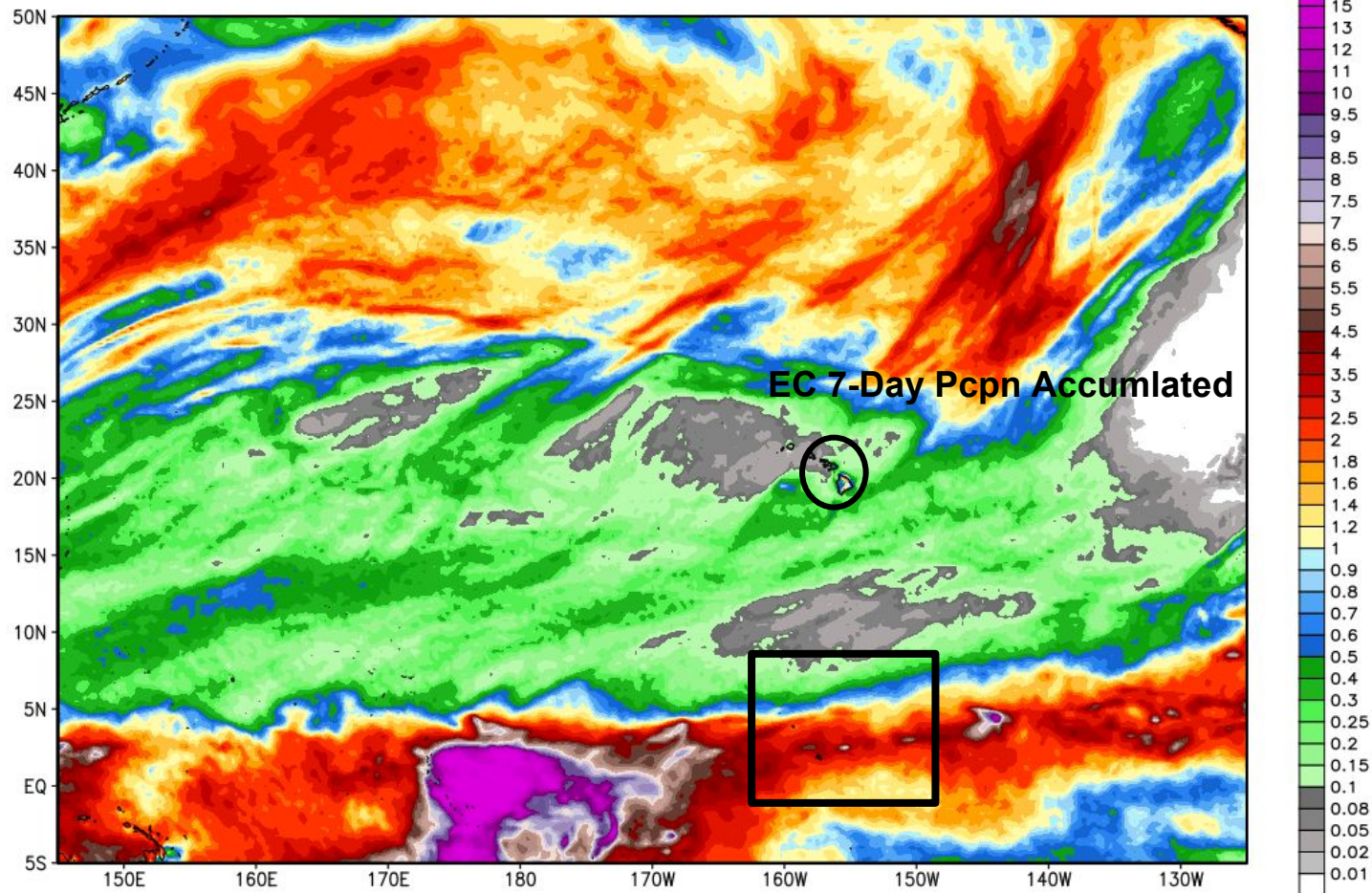
## ECMWF 7-Day Pcpn Accumulated : Ending 00Z Fri 12 Feb





ECMWF Total Precipitation [inches] between 00Z06FEB2016 -- 00Z13FEB2016  
INIT: 00Z06FEB2016 fx: [168] hr --> Sat 00Z13FEB2016

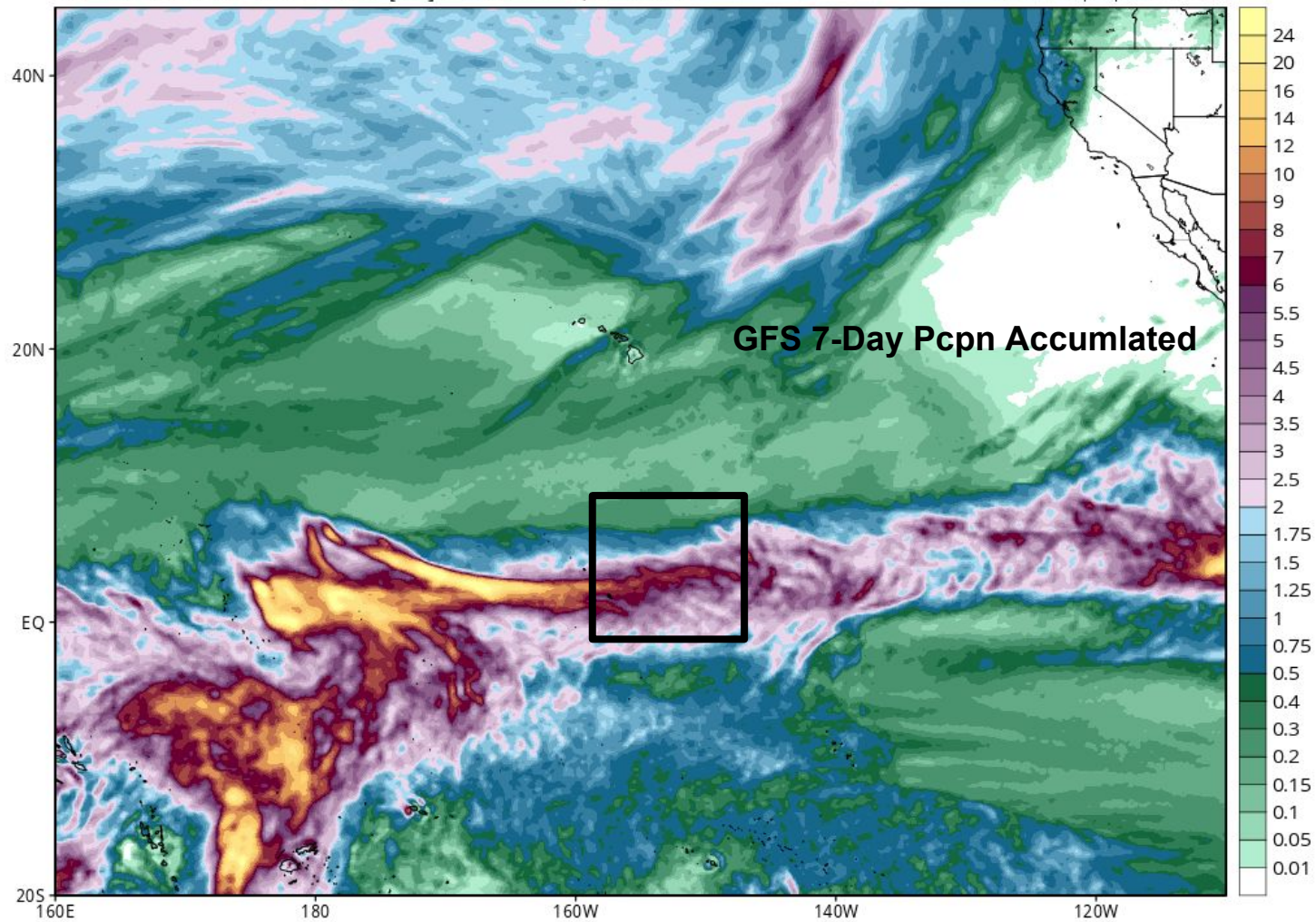
Max 31.7 in



# GFS Total Accumulated Precipitation (inches) from 06z06Feb2016 to 00z13Feb2016

Init: 06z Feb 06 2016 Forecast Hour: [162] valid at 00z Sat, Feb 13 2016

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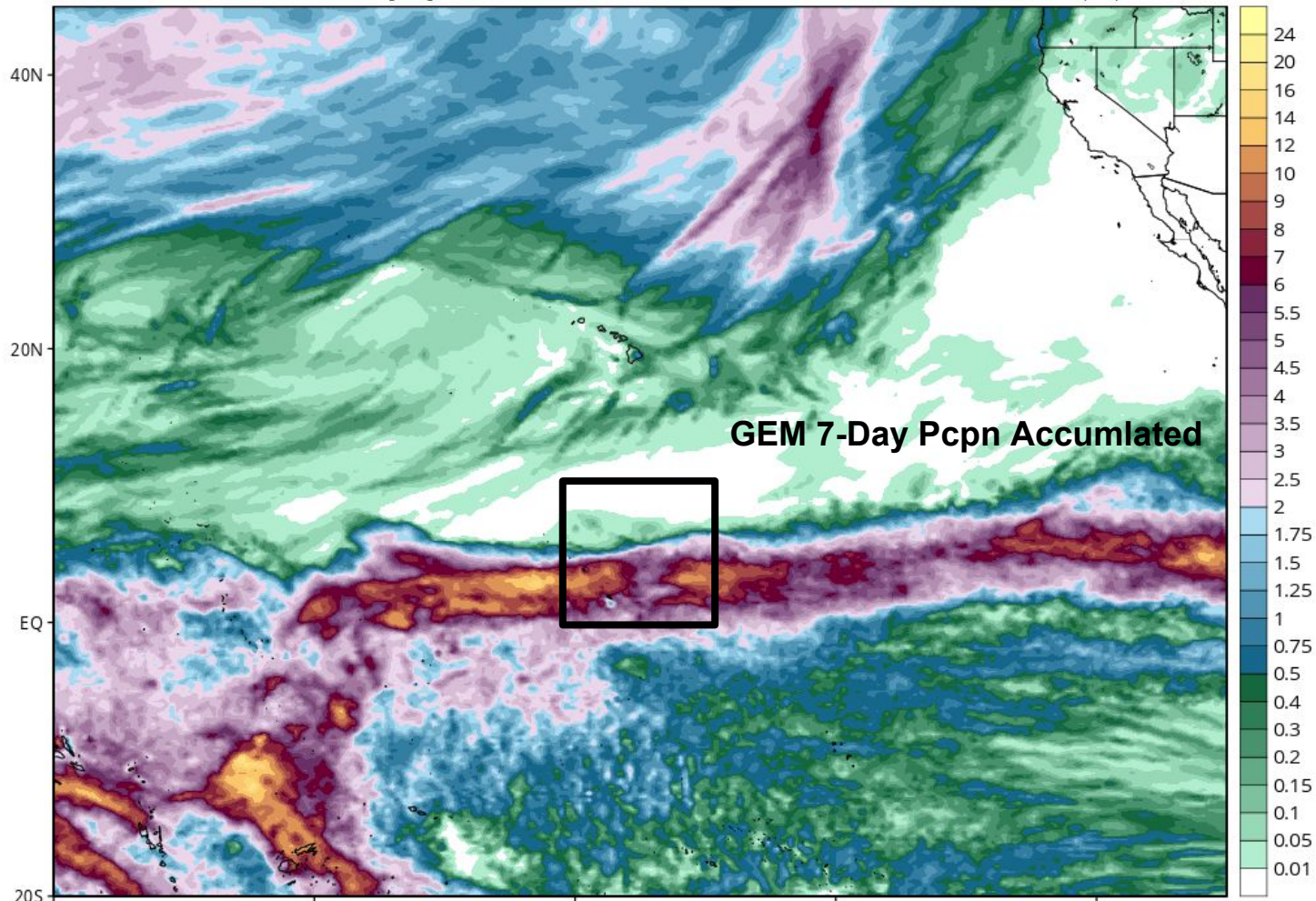




# GEM Total Accumulated Precipitation (inches) from 00z06Feb2016 to 18z12Feb2016

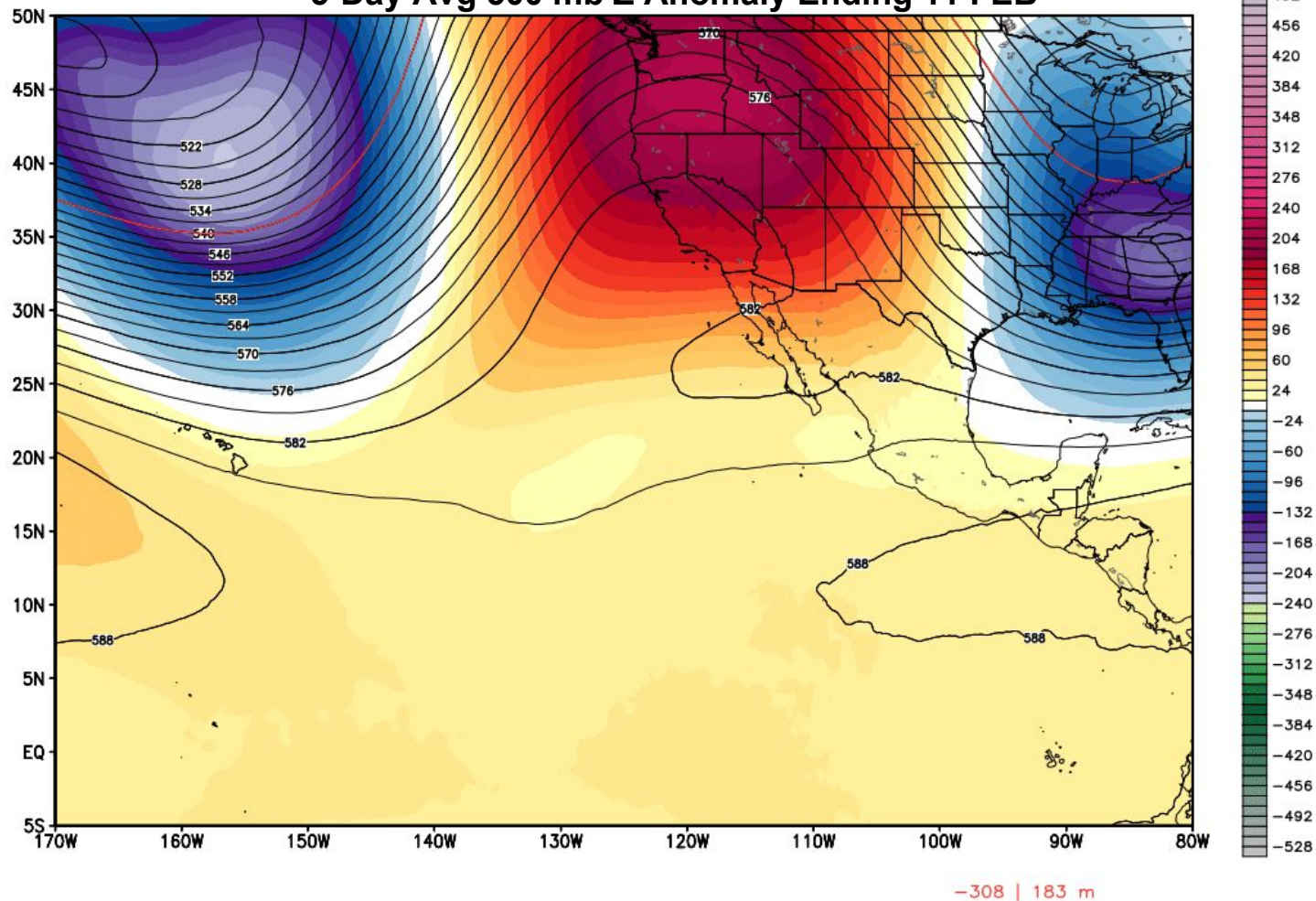
Init: 00z Feb 06 2016 Forecast Hour: [162] valid at 18z Fri, Feb 12 2016

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ECMWF 500 hPa Geopotential Height [dm] & Anomaly [m] fx: [120] hr --> Thu 00Z11FEB2016  
INIT: 00Z06FEB2016 5-day Mean between 00Z06FEB2016 & 00Z11FEB2016 Day 0 - Day 5

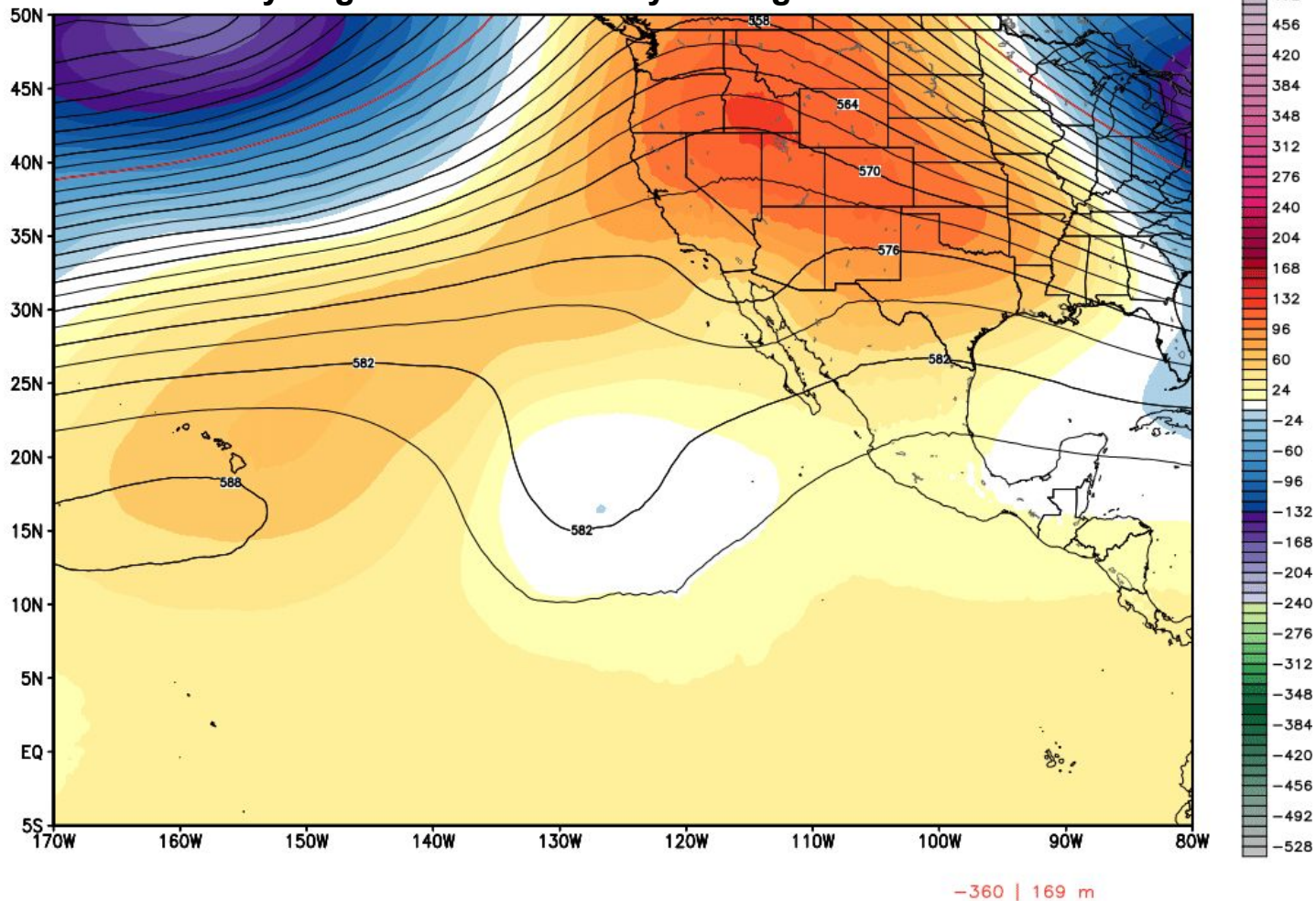
## 5-Day Avg 500 mb Z Anomaly Ending 11 FEB





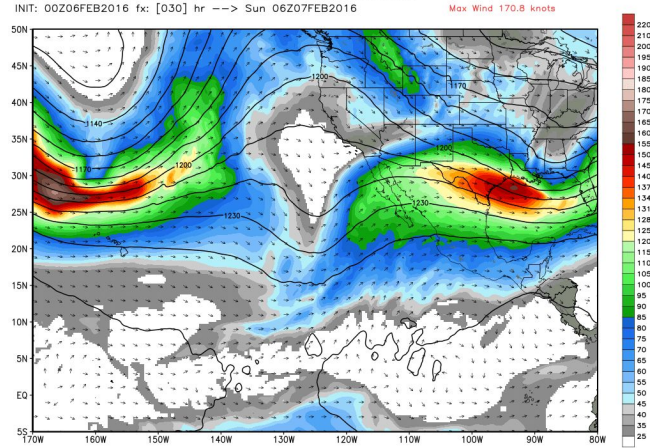
ECMWF 500 hPa Geopotential Height [dm] & Anomaly [m] fx: [240] hr --> Tue 00Z16FEB2016  
INIT: 00Z06FEB2016 5-day Mean between 00Z11FEB2016 & 00Z16FEB2016 Day 5 - Day 10

## 5-Day Avg 500 mb Z Anomaly Ending 16 FEB



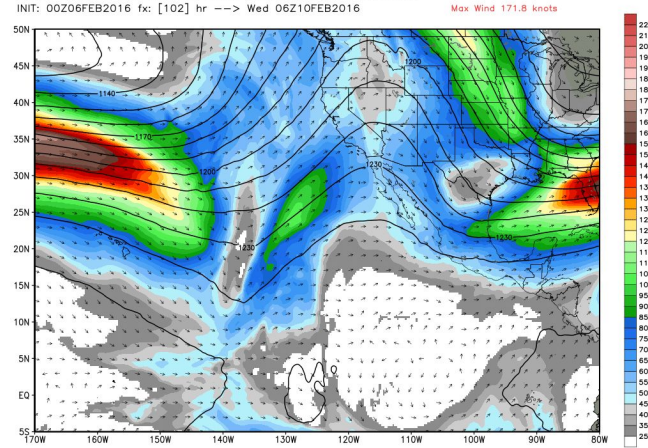
# 06Z SUN Feb 7

ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]  
INIT: 00Z06FEB2016 fx: [030] hr --> Sun 06Z07FEB2016



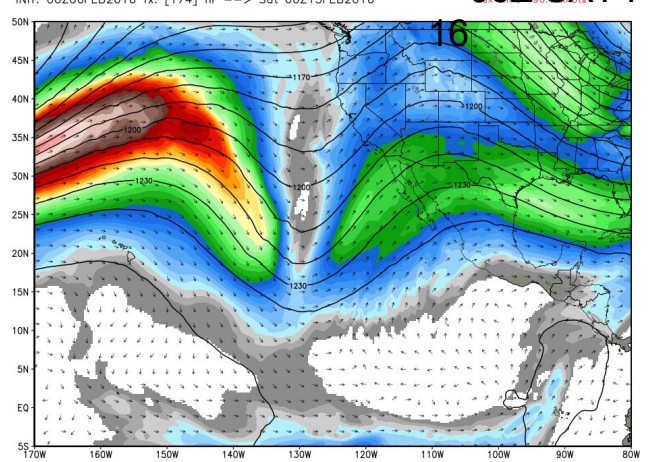
# 06Z WED Feb 10

ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]  
INIT: 00Z06FEB2016 fx: [102] hr --> Wed 06Z10FEB2016



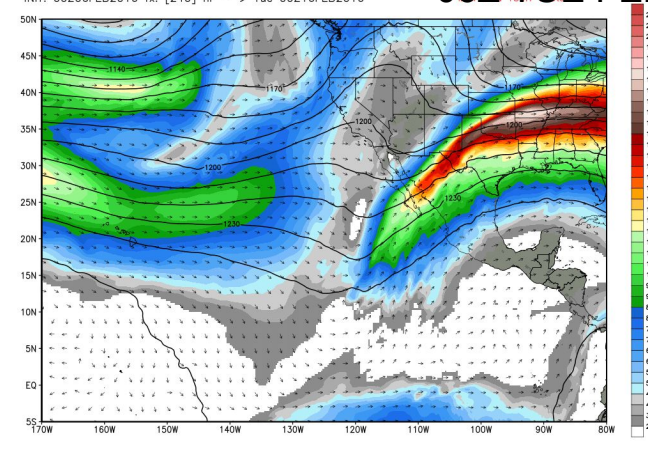
ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]  
INIT: 00Z06FEB2016 fx: [174] hr --> Sat 06Z13FEB2016

# 06Z SAT Feb 13



ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]  
INIT: 00Z06FEB2016 fx: [240] hr --> Tue 00Z16FEB2016

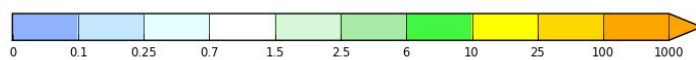
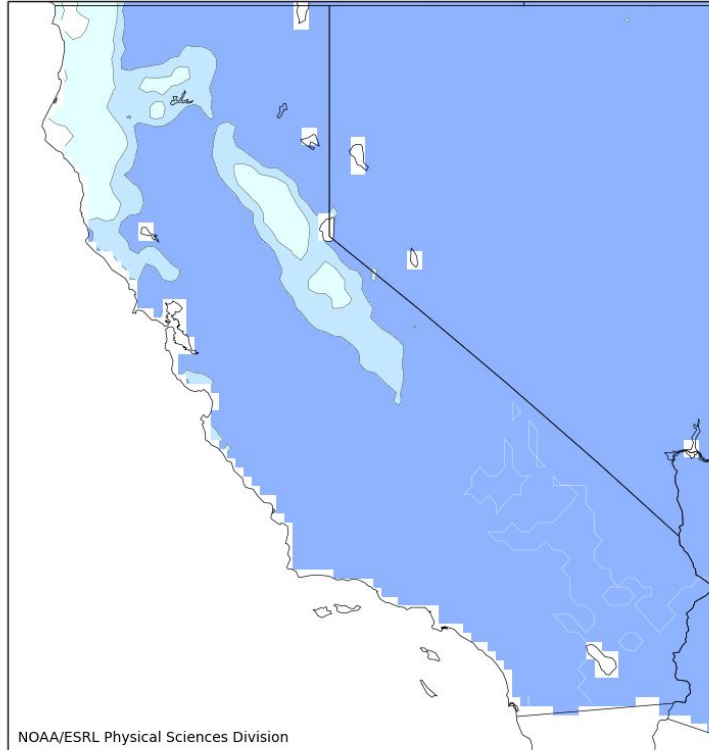
# 06Z TUE FEB



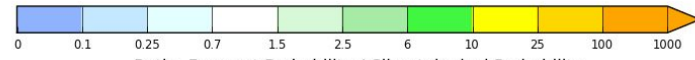
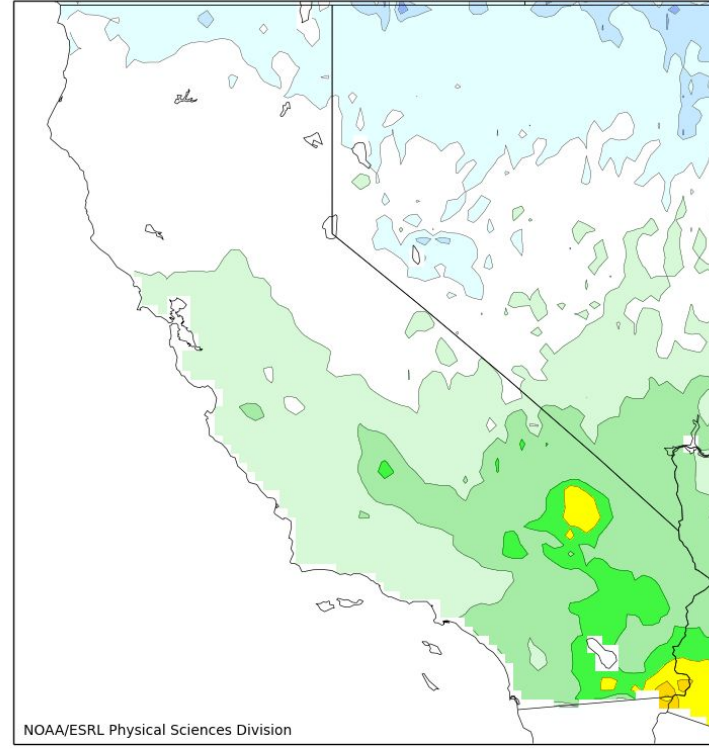
# Medium - Long Range Forecast

## ESRL-Calibrated Reforecast Pcpn : Day 0-7 and 8-15 Day Fcst *(from the 00Z SAT 6 FEB ensembles of the experimental reforecast system)*

**000-168hr fcst from 00Z Sat Feb 06. Valid 00Z Sat Feb 06 - 00Z Sat Feb 13**  
Ratio. Forecast/Climo Prob of Precip > 50mm. CSGD.

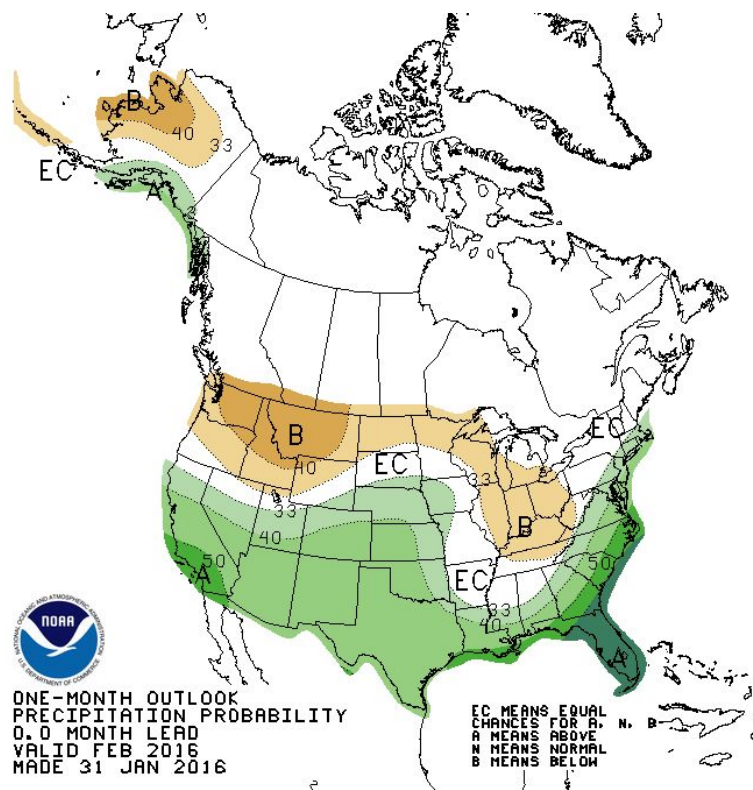


**198-360hr fcst from 00Z Sat Feb 06. Valid 06Z Sun Feb 14 - 00Z Sun Feb 21**  
Ratio. Forecast/Climo Prob of Precip > 50mm. CSGD.

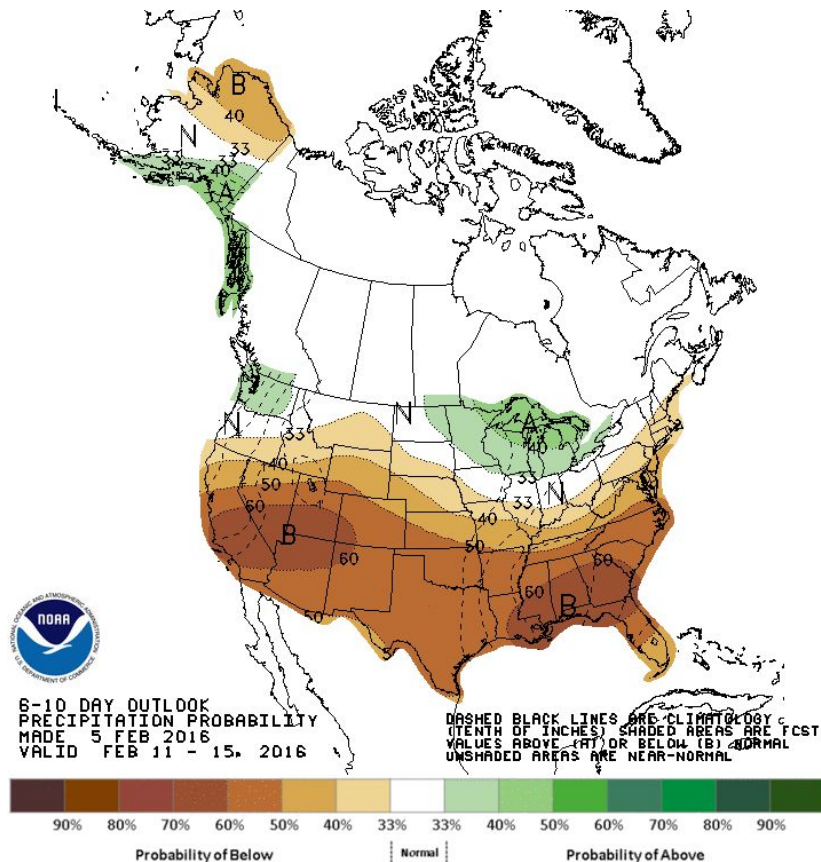




## CPC February Outlook



## CPC 6-10 Day Fcst for 11-15 Feb



# Medium - Long Range Forecast

Day 7-10 Initialized 00Z SAT 06 Feb

