

Summary of Key Briefing Points
1030-1130am MST Sun Feb 14, 2016

Current Conditions as of SUN 12Z-15Z February 14

Tropics and Mid-latitudes

Over the Tropical Pacific:

- Convection: Remnants of yesterday's activity (140W-150W, 0-5N) this morning.
 - Complex interaction with cyclonic flow around Borg remnant
- Most intense convection and resulting jet interaction occurring west of Dateline
- Strong upper level north and westerly flow across most of the FD, based on cloud track winds
 - Irrotational wind shows a somewhat different story - fairly strong poleward flow across FD
 - CIX Sounding shows general moistening of lower troposphere (exception is dry, stable layer near 800 mb) - 2200J Cape this morning

Tropical Outlook

- GFS EC models disagree on activity over FD today, with GFS being more “ambitious” in convective activity in eastern part of FD
- Monday convection looks somewhat more active in both EC and GFS, with GFS continuing to be more robust over south-central part of domain
- Both EC and GFS continue trend of convection in the FD gradually increases through the week: details differ but both models drape an active region oriented SW-NE across the central part of the FD
- Complicated jet structure with Borg remnant continuing to feed a sub tropical jet, moving moisture over Mexico and Central America
- Poleward outflow from convection west of dateline continues to feed entrance region of polar jet

Midlatitude Conditions/Outlook

Short Term:

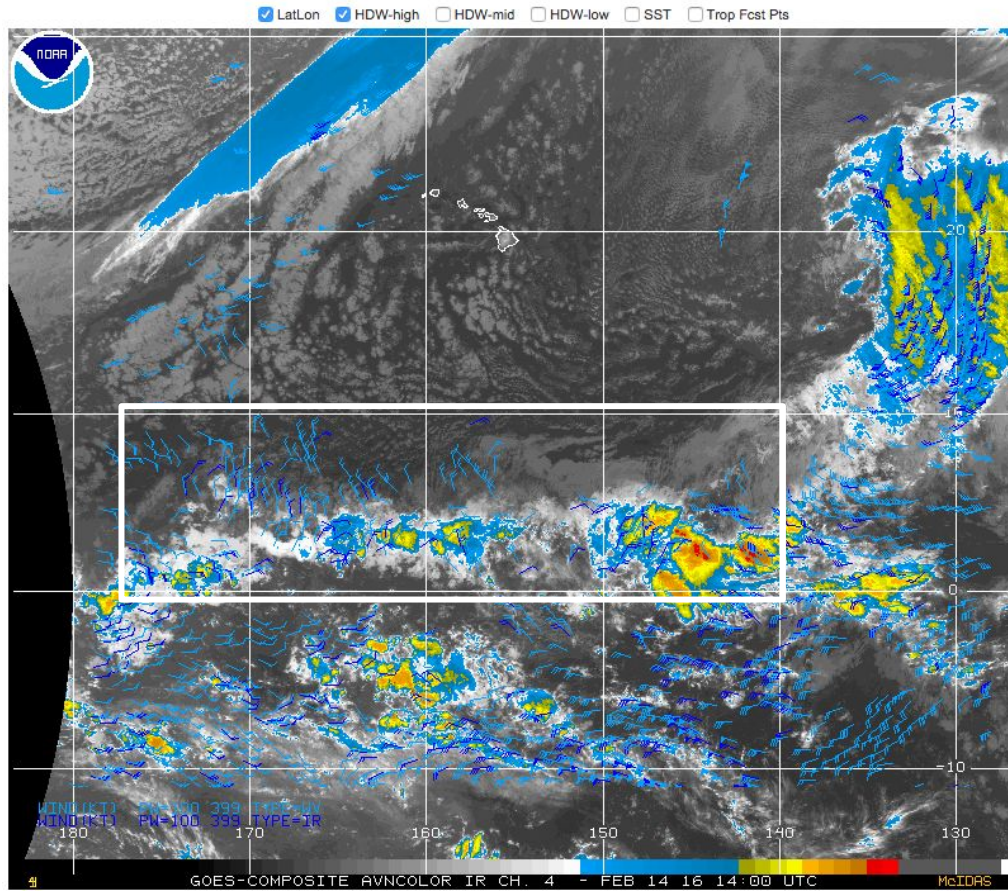
- Cold air in place over eastern seaboard - many low records set
- CA to be mostly dry through Tuesday 16 Feb
- Several inches more rain progged for PNW (WA)
- Low sets over south Central US on Monday - moving up eastern seaboard Tuesday-Wed
 - Probably mostly rain in DC area
 - Storm likely to move up Appalachia - less impact to NY-Boston

Medium - Long Term:

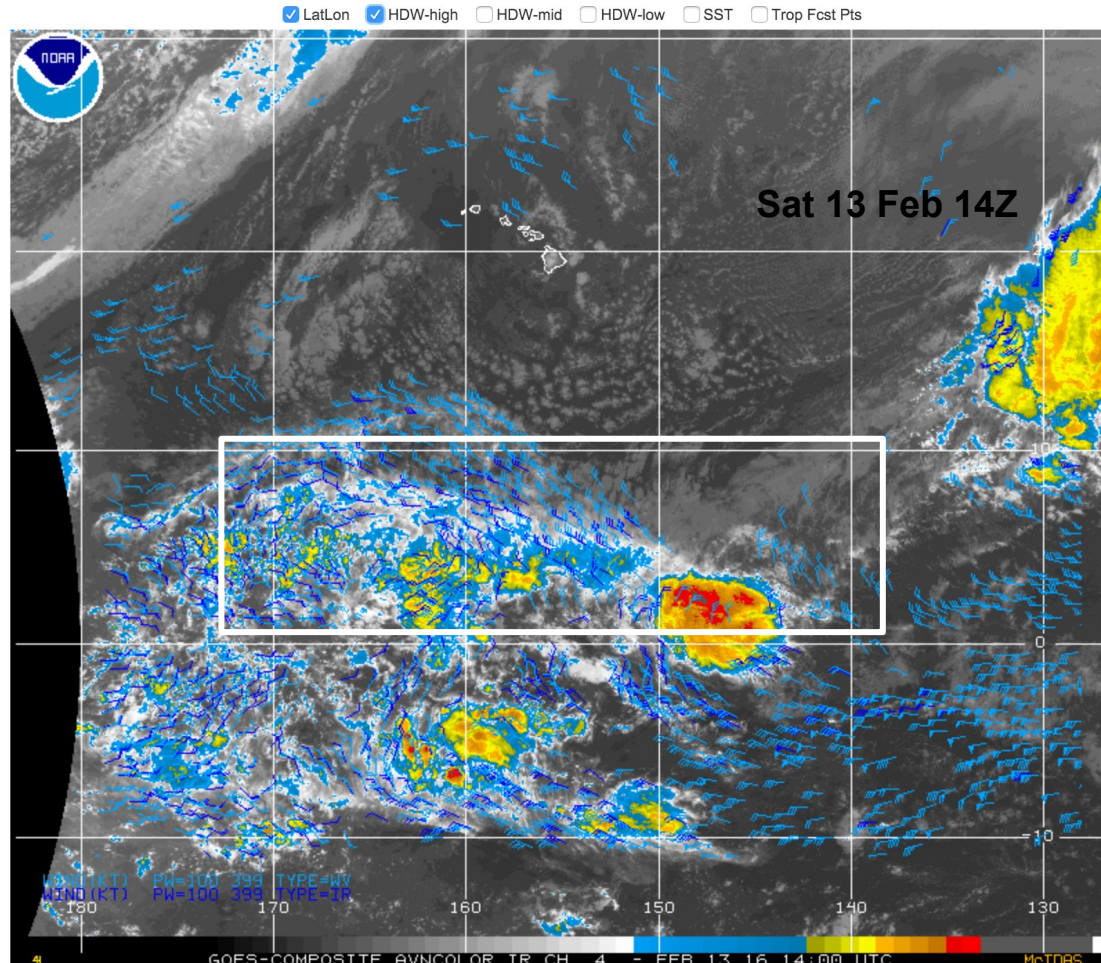
- Next event progged to move through north central CA around Thursday
 - Nothing exceptional - basically keep up with climatology
- Reforecasts suggest nothing in Southern CA for the next week - even week 2 looks uninteresting
- Ridge appears to be reaffirming itself over west after system moves through on Thursday

Sun Feb 14 14Z

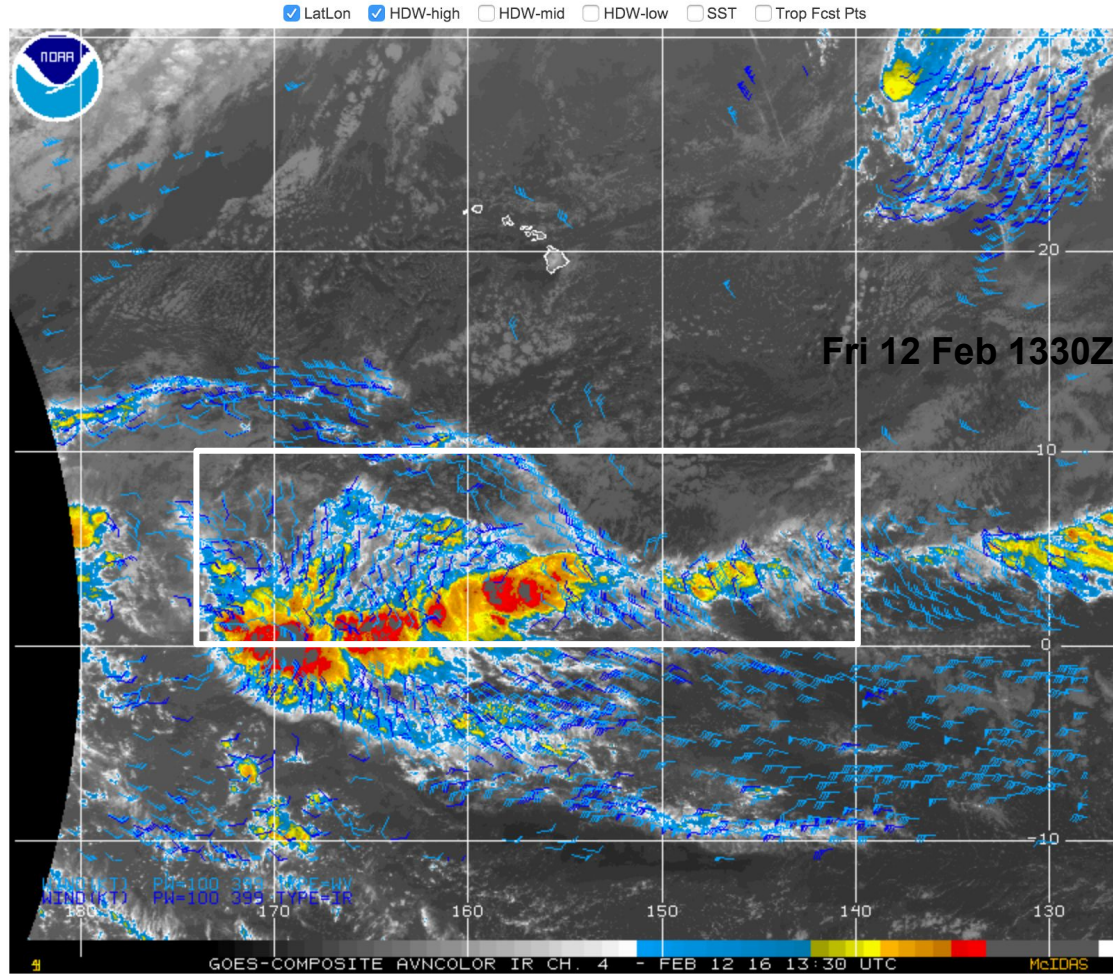
GOES Composite - El Niño Support – AVN Color Infrared Loop



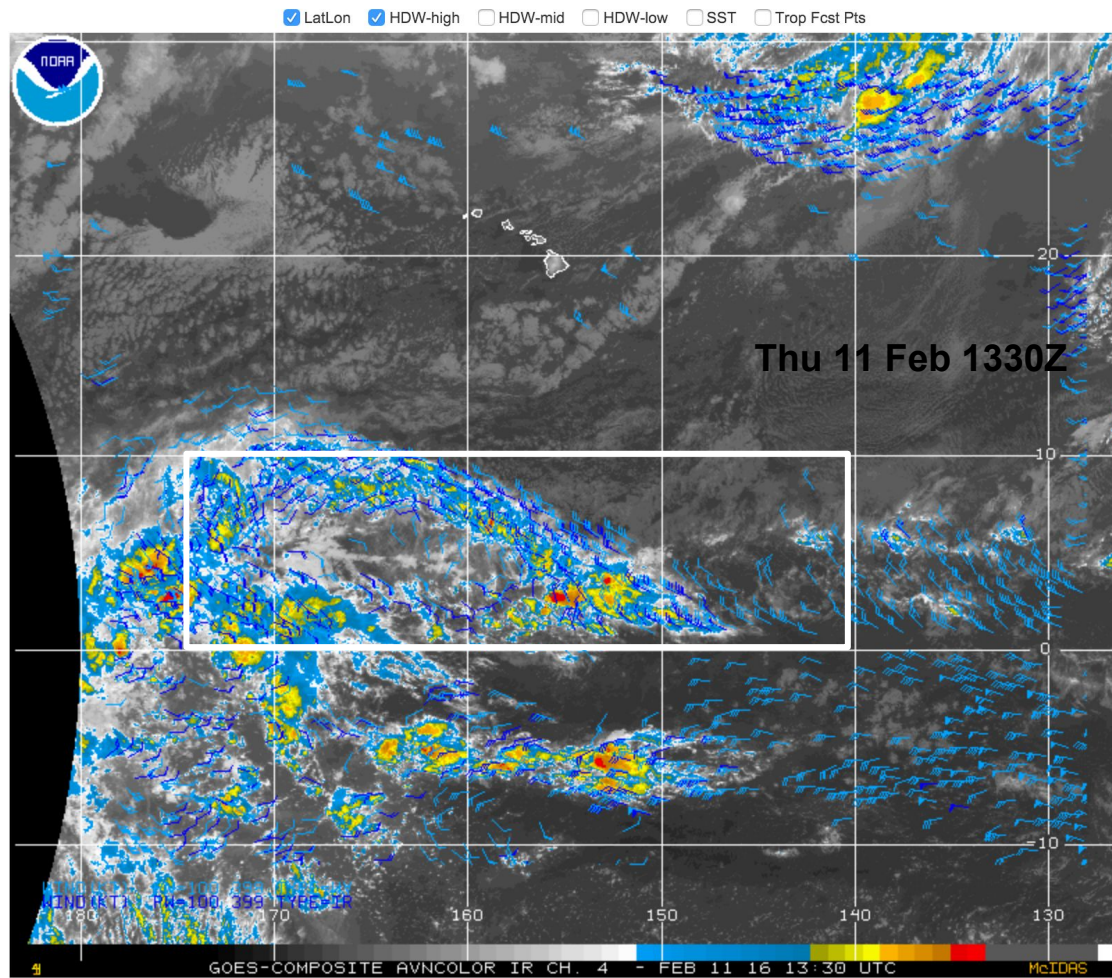
GOES Composite - El Niño Support – AVN Color Infrared Loop



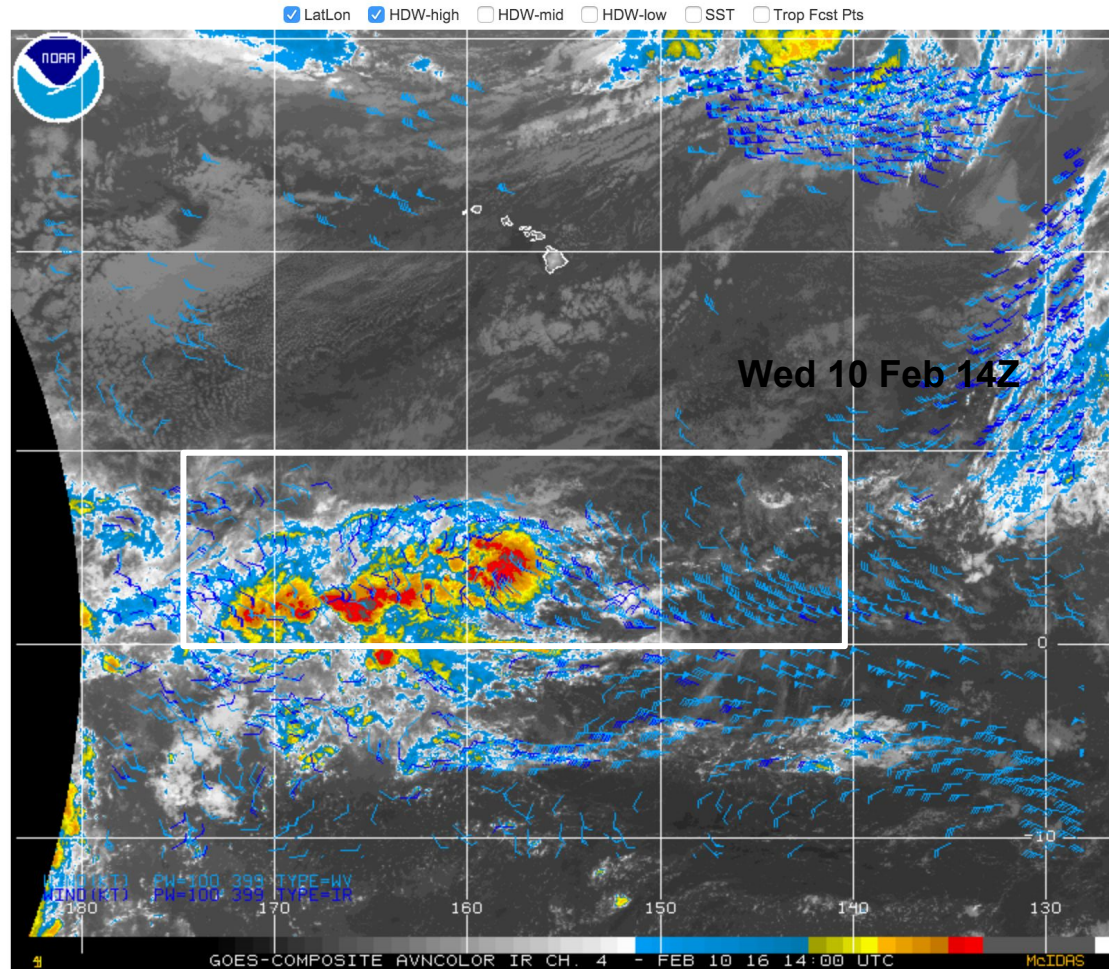
GOES Composite - El Niño Support – AVN Color Infrared Loop



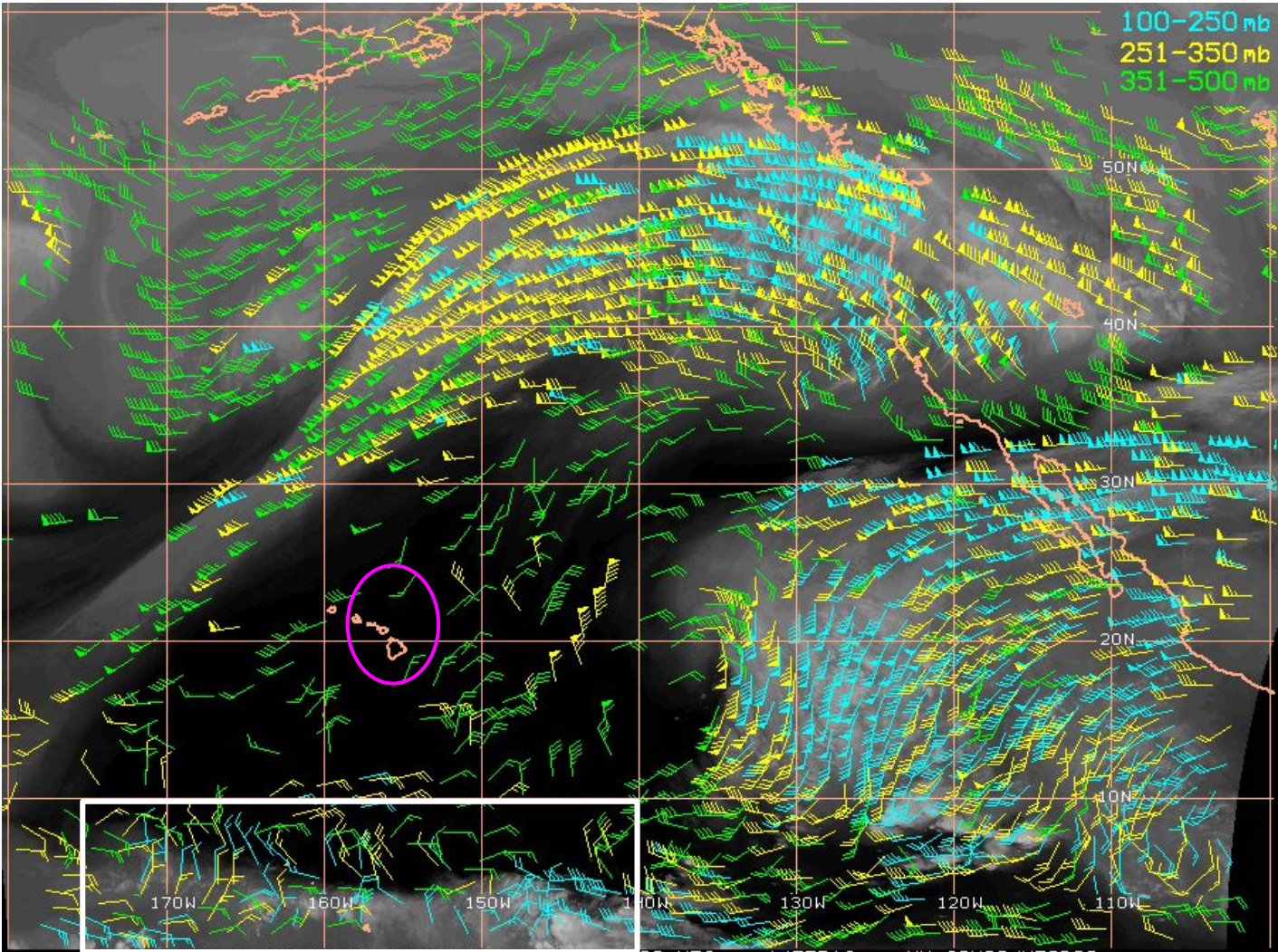
GOES Composite - El Niño Support – AVN Color Infrared Loop



GOES Composite - El Niño Support – AVN Color Infrared Loop

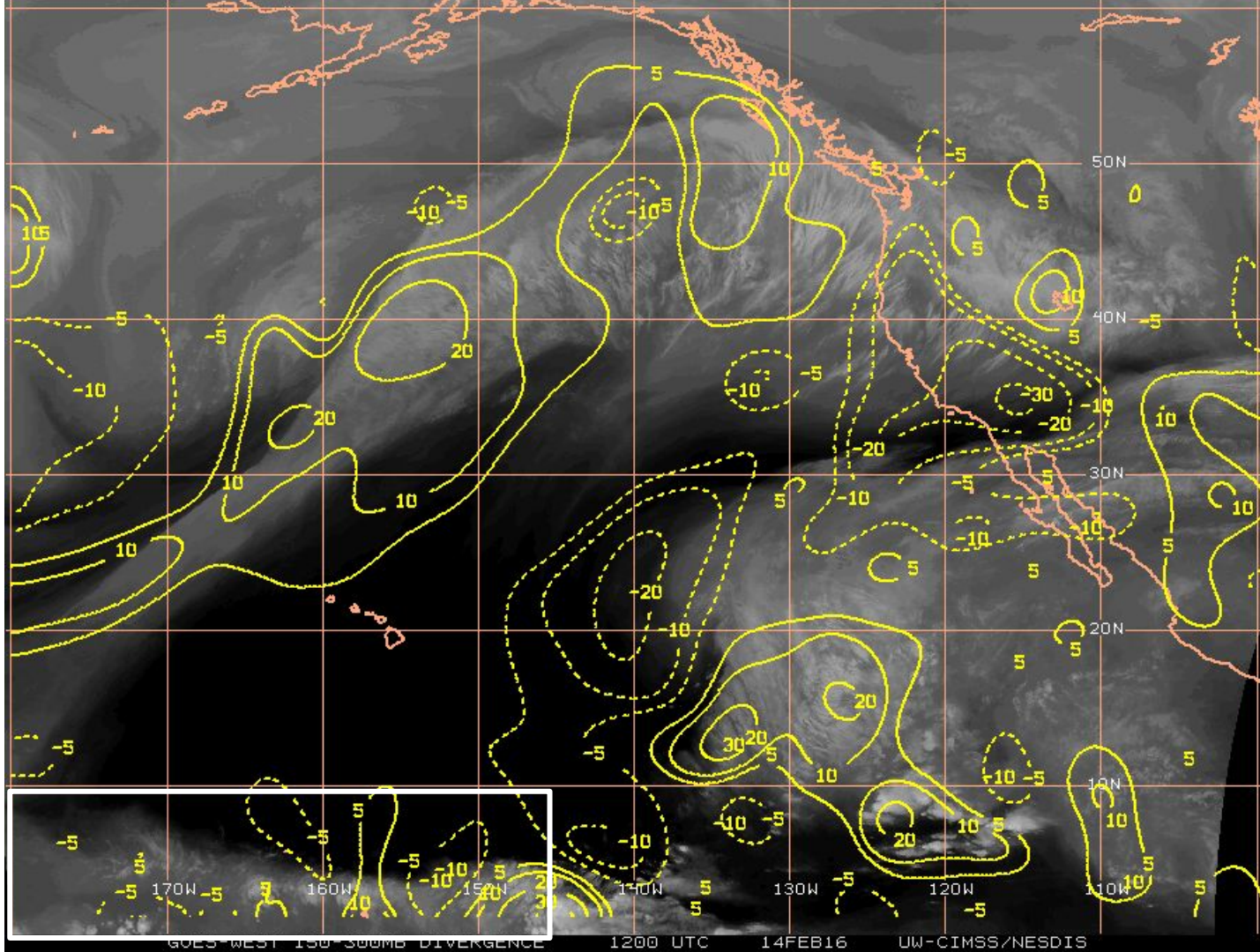


Sun Feb 14
12Z

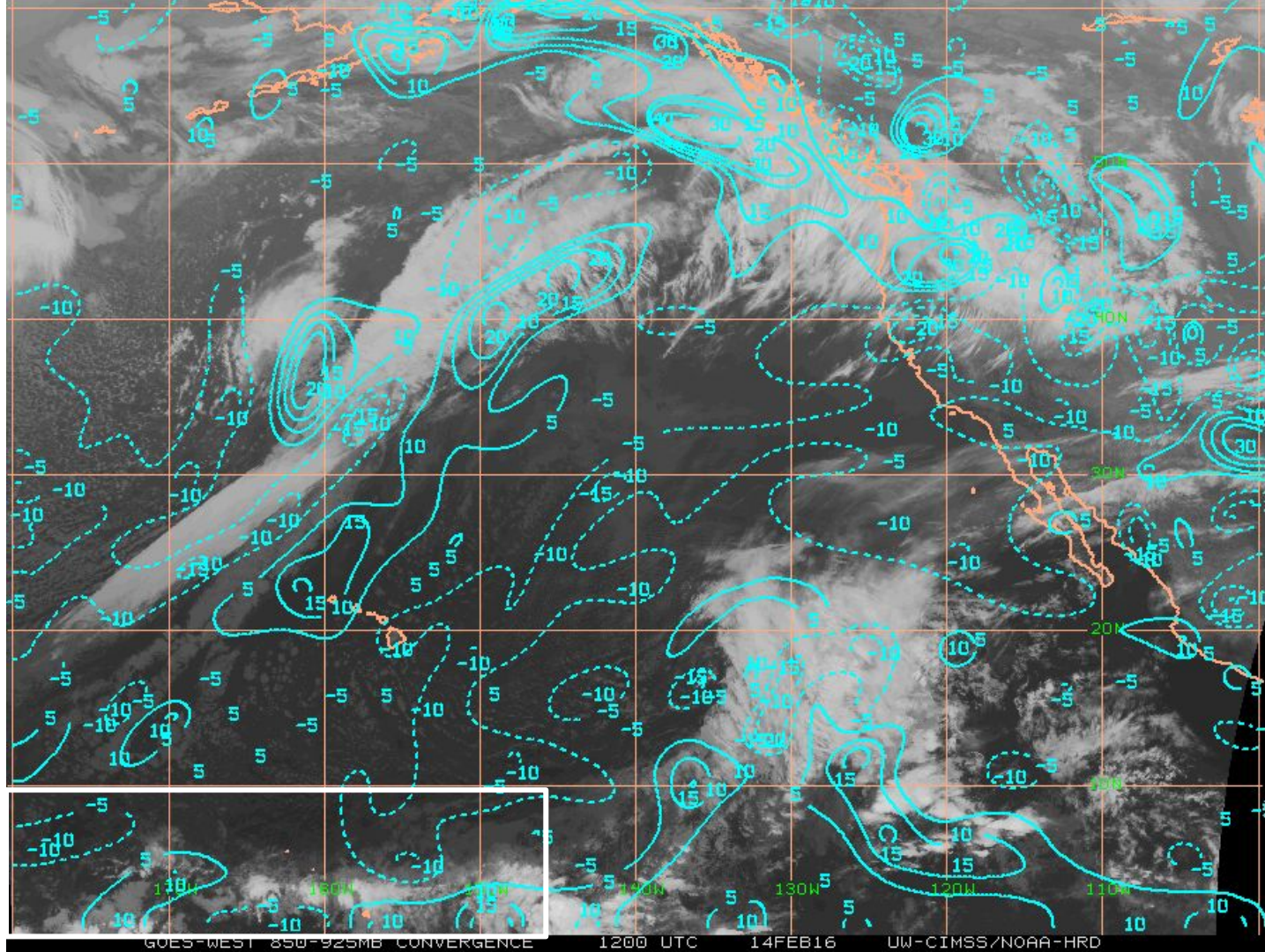


Sun 12Z

Upper Level
Divergence
(solid)

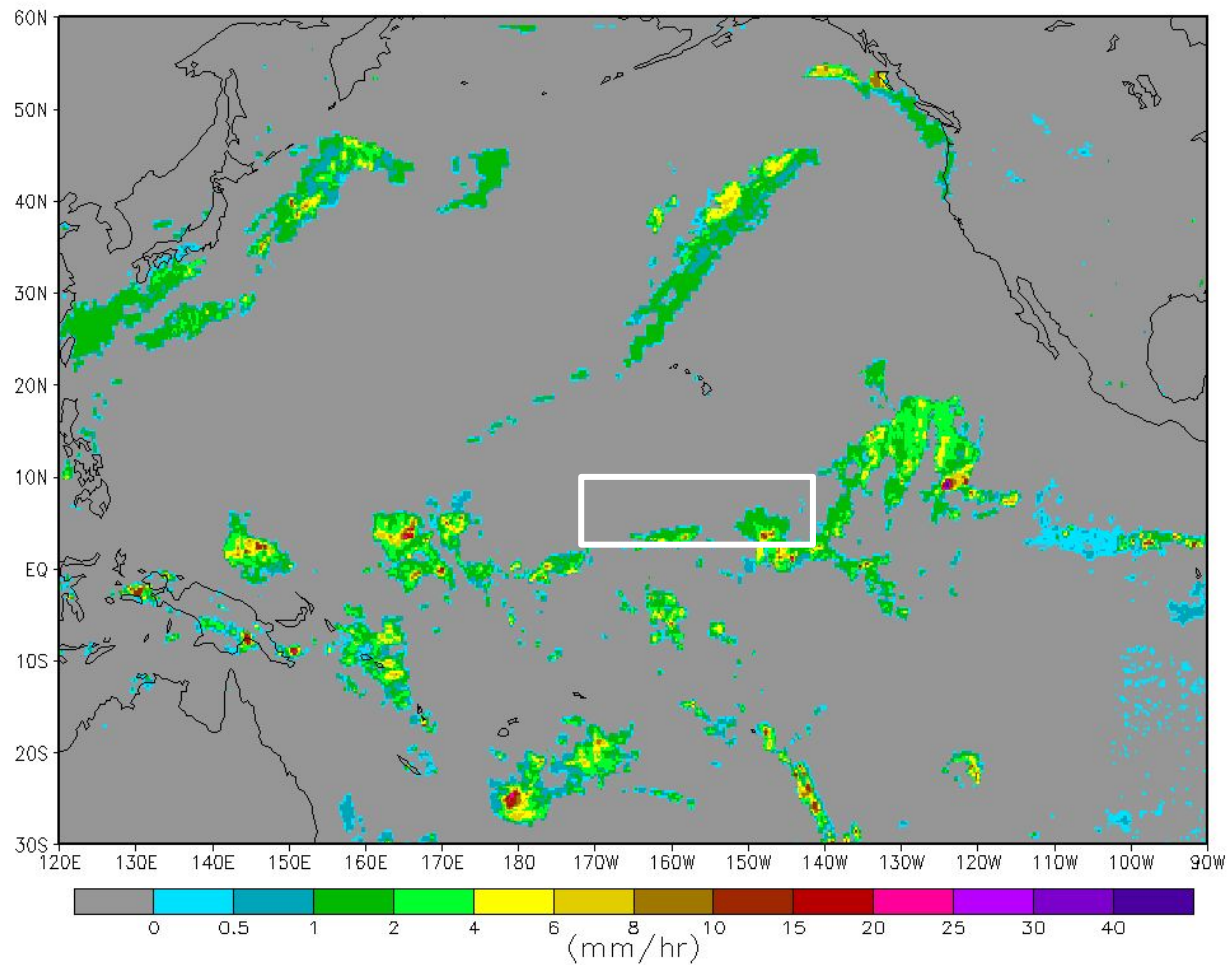


12Z Low Level
Convergence
(Solid)



CMORPH_RAW_RT @ 2016-Feb-14 13:00Z

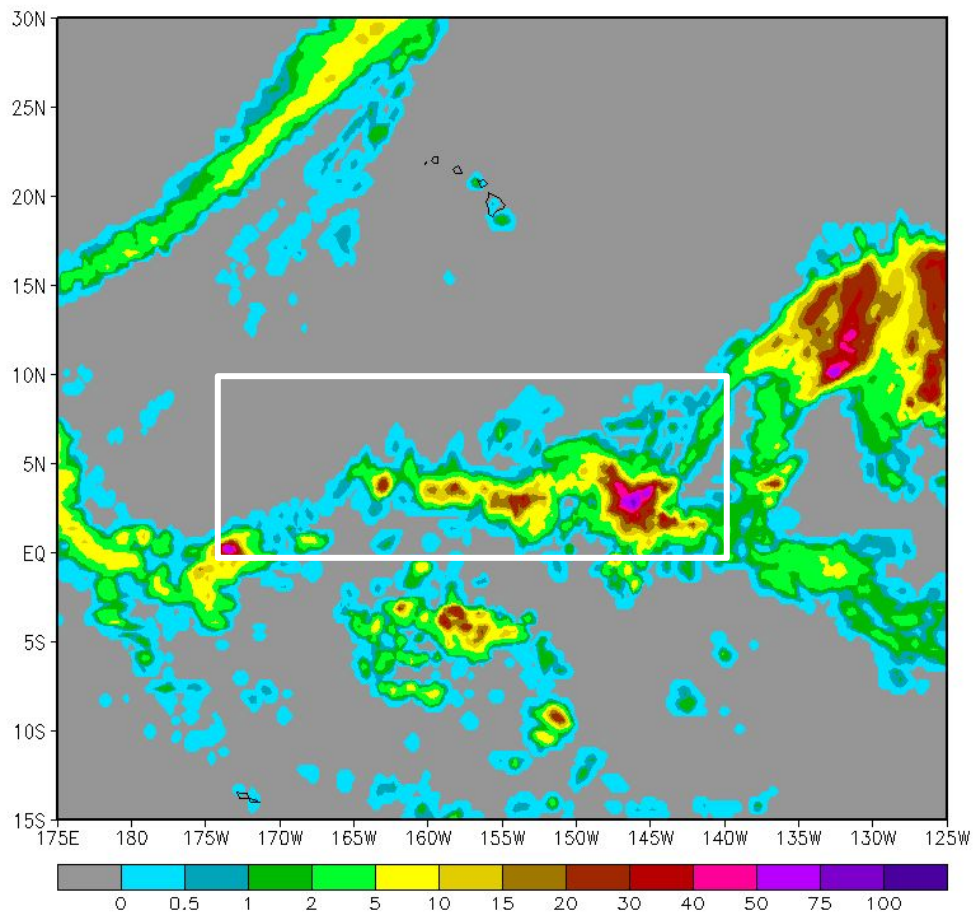
QMORPH Rain
Rates 13Z



CMORPH 6-hour Rainfall Accumulation (mm)

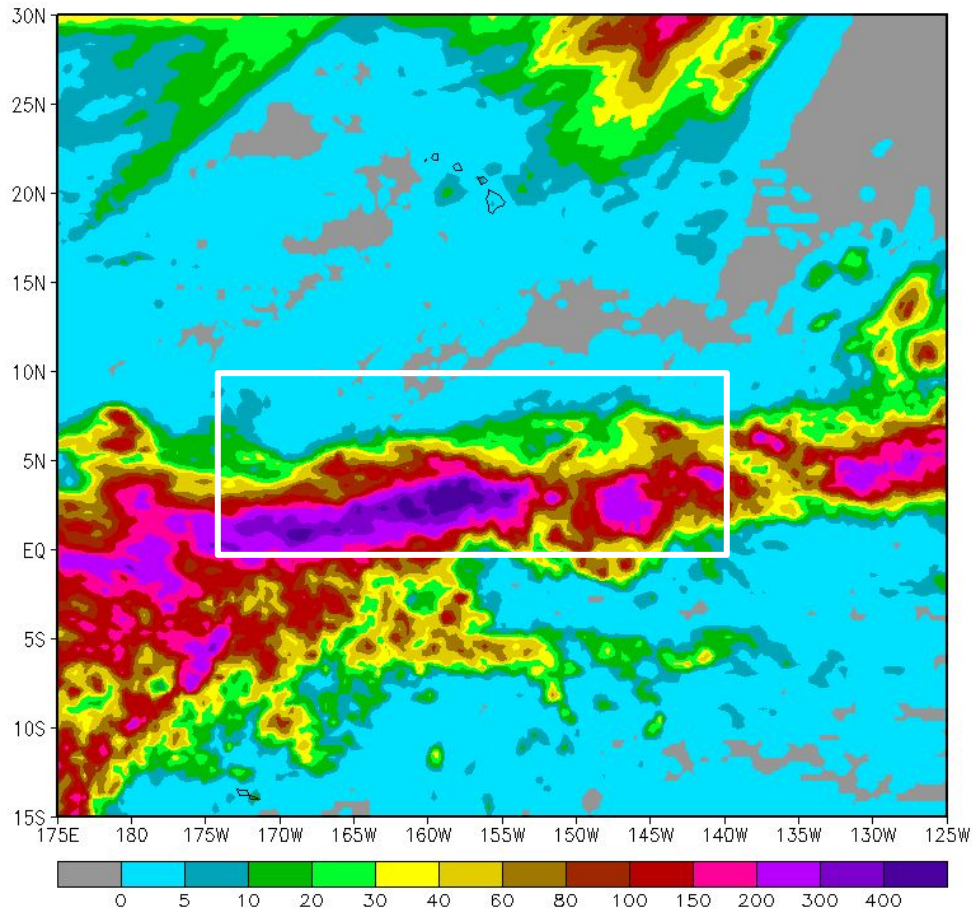
(14Feb2016 00Z – 14Feb2016 06Z)

CMORPH: 6 Hr
accumulation 00-06Z
14 Feb



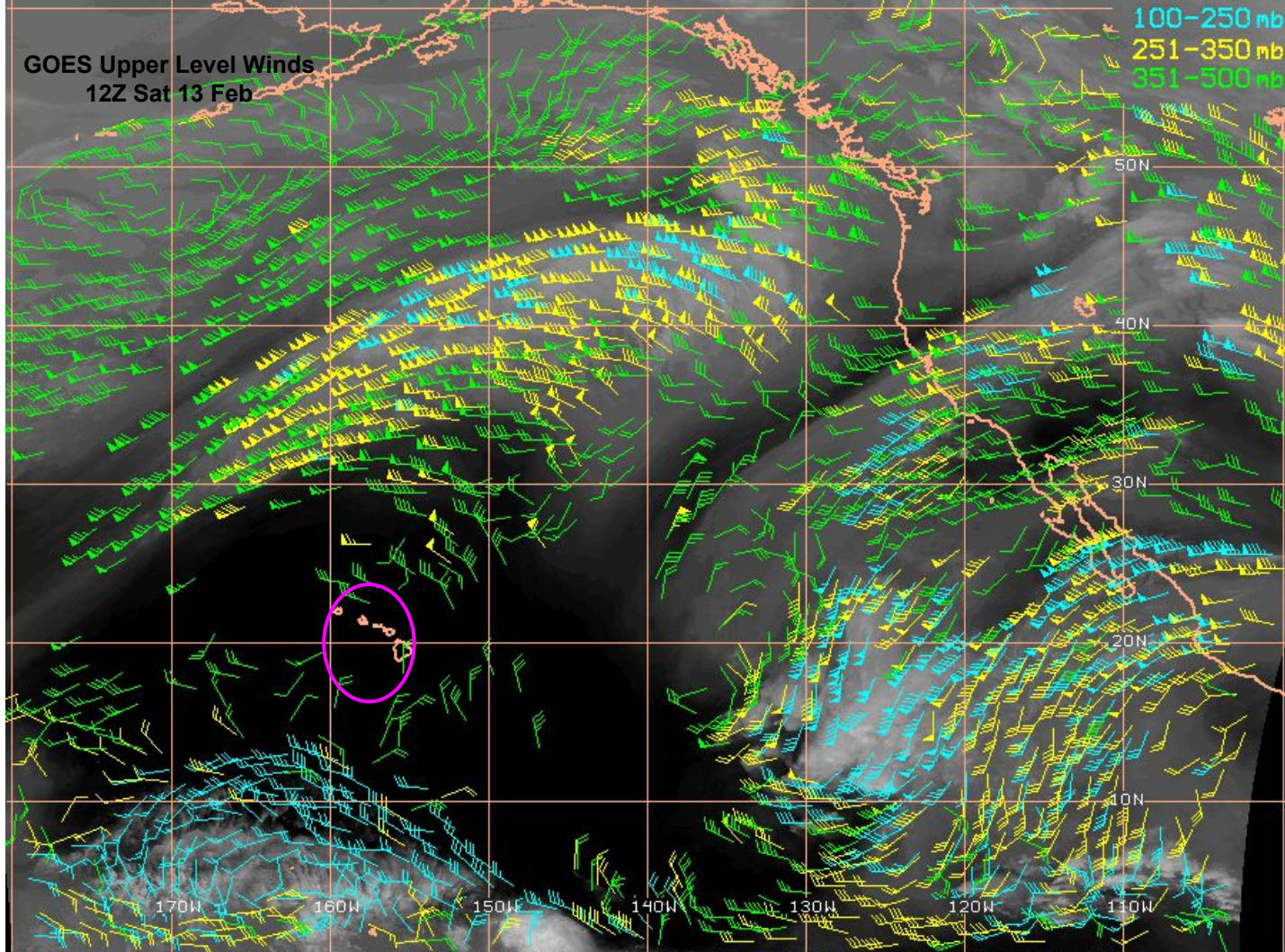
CMORPH 7-day Rainfall Accumulation (mm)
(06Feb2016 12Z - 13Feb2016 12Z)

CMORPH: 7-Day
accumulation 12Z 06
Feb - 12Z 13 Feb



GOES Upper Level Winds
12Z Sat 13 Feb

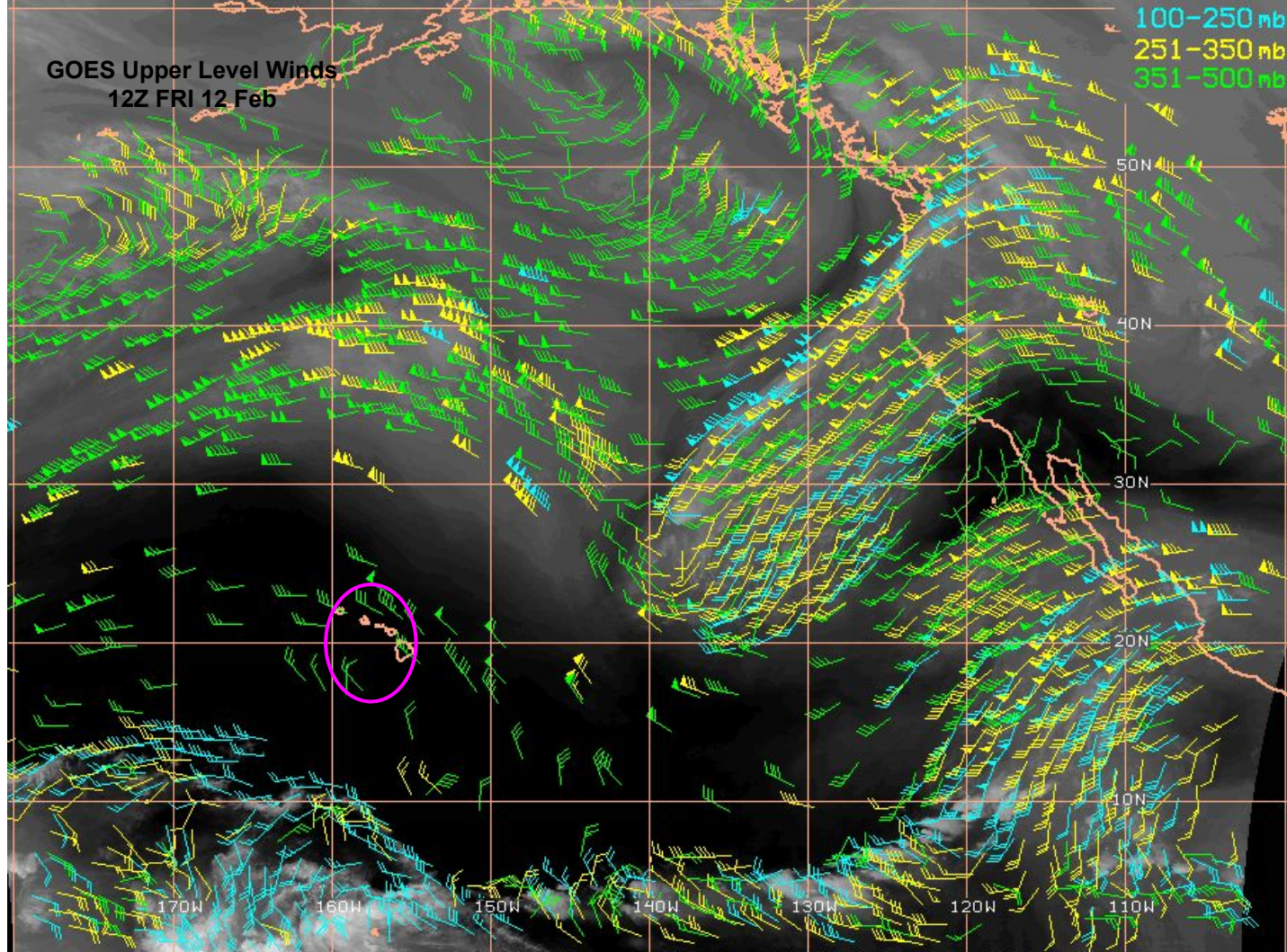
100-250 mb
251-350 mb
351-500 mb



GOES-WEST MID-UPPER LEVEL WINDS 1200 UTC 13FEB16 UW-CIMSS/NESDIS

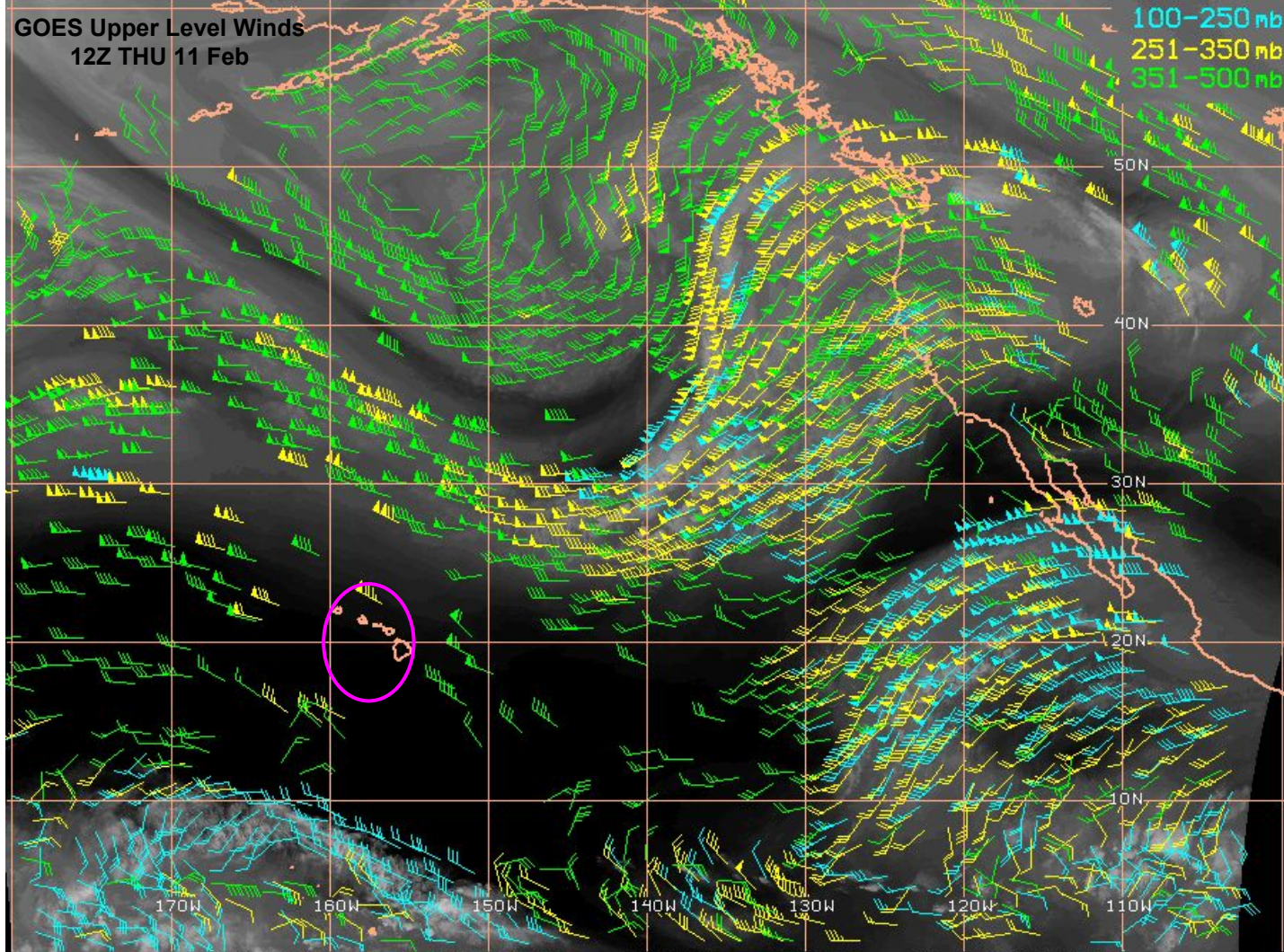
GOES Upper Level Winds
12Z FRI 12 Feb

100-250 mb
251-350 mb
351-500 mb



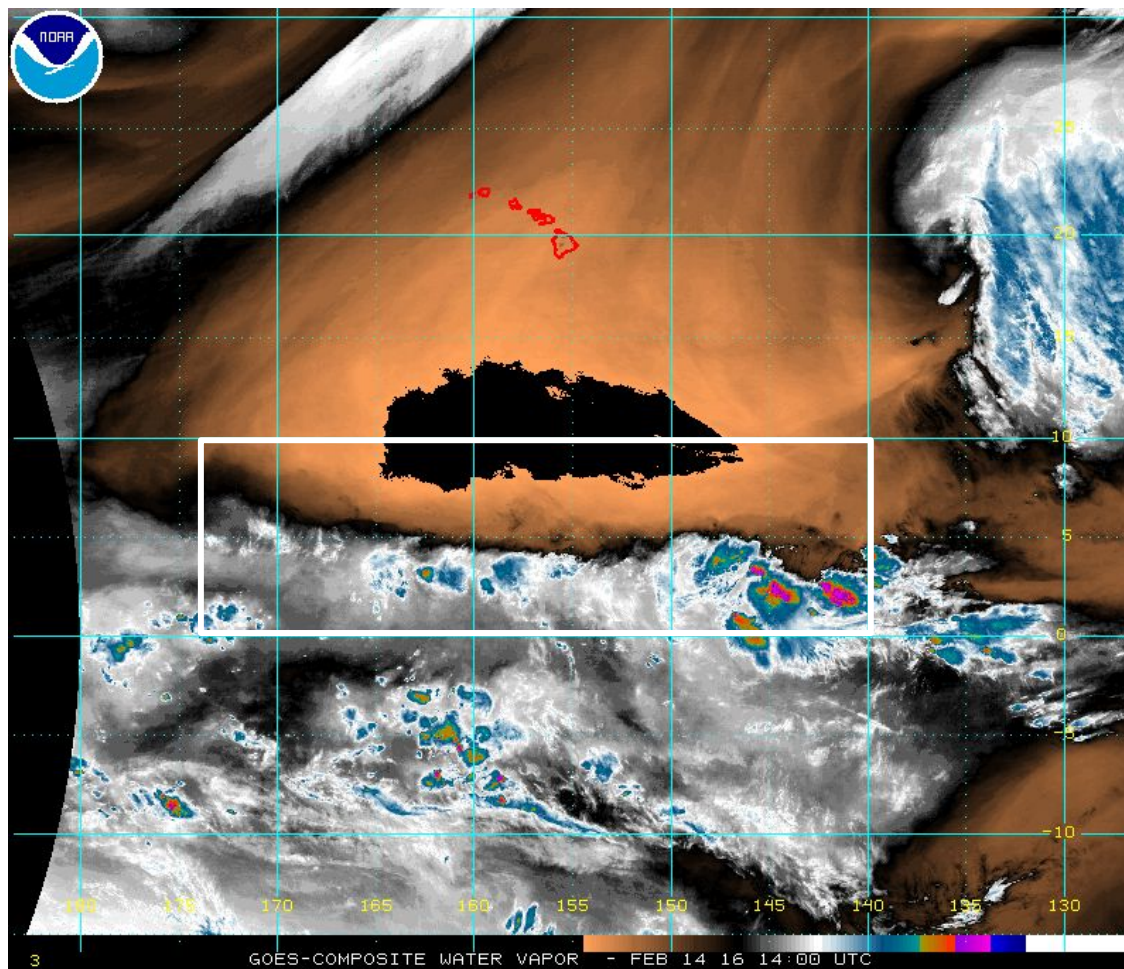
GOES Upper Level Winds
12Z THU 11 Feb

100-250 mb
251-350 mb
351-500 mb

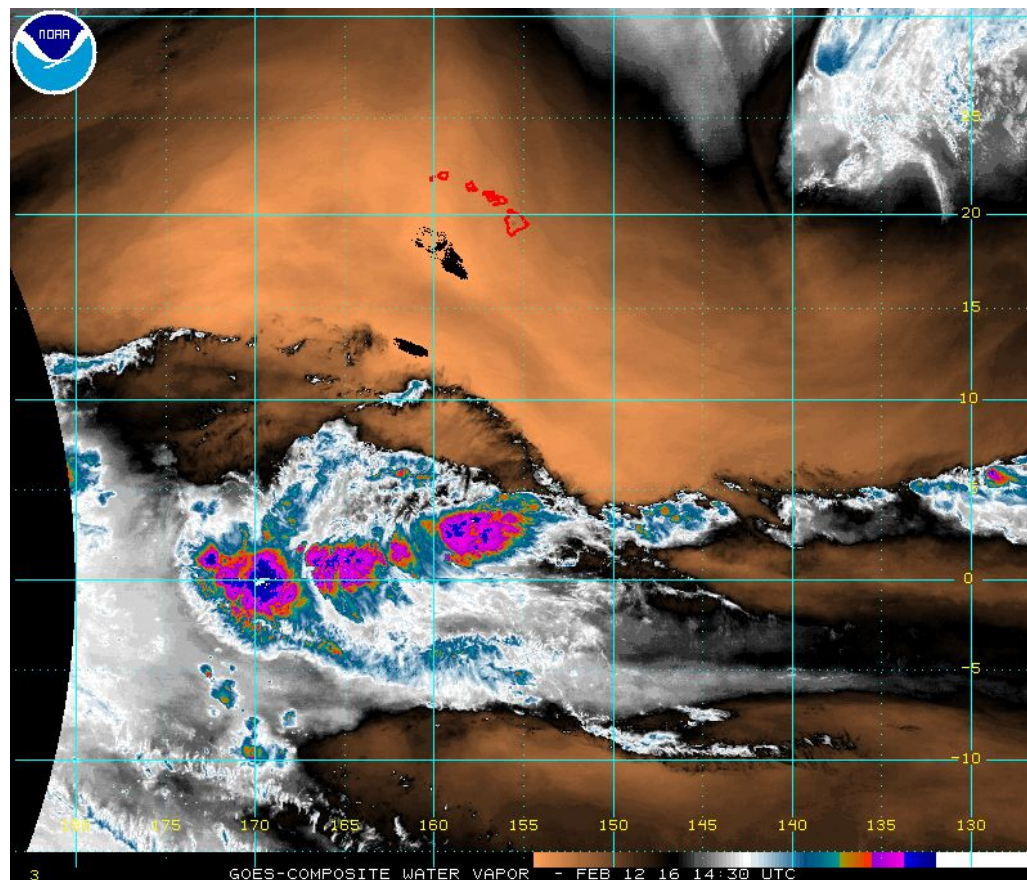


GOES-WEST MID-UPPER LEVEL WINDS 1200 UTC 11FEB16 UW-CIMSS/NESDIS

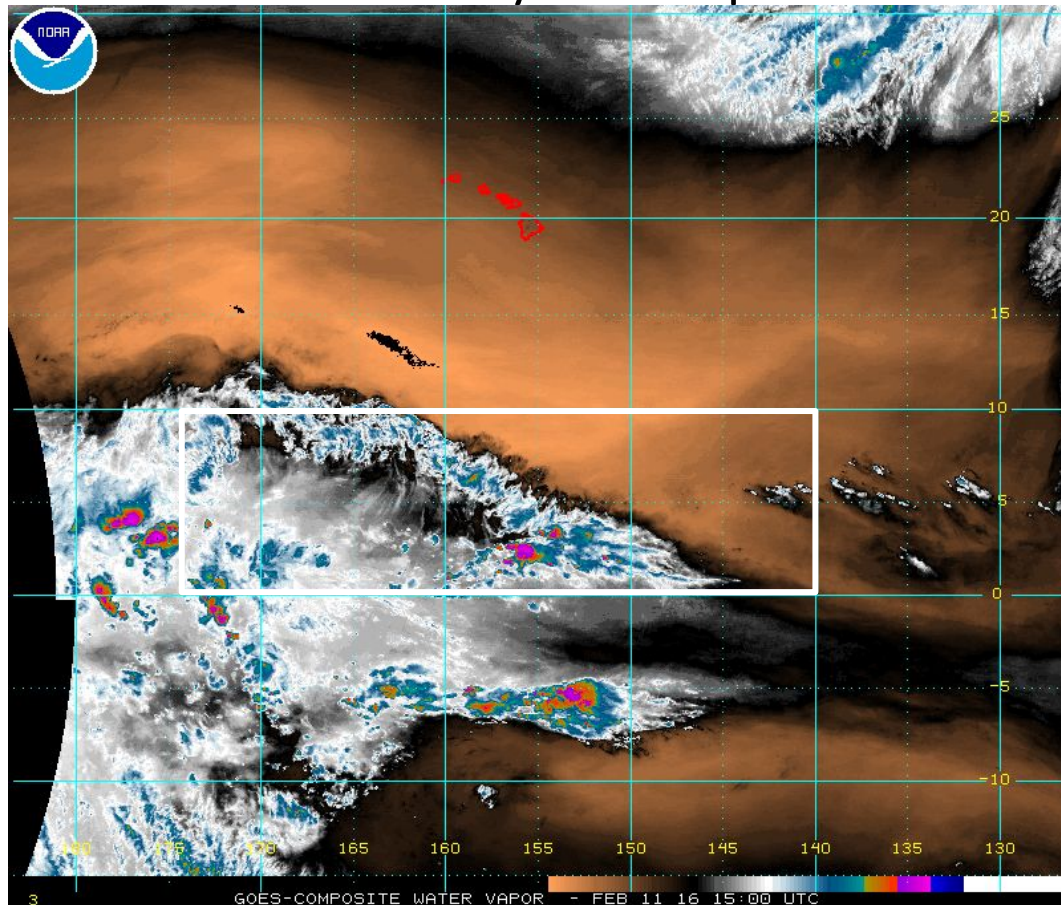
SUN 14Z February 14 Water Vapor



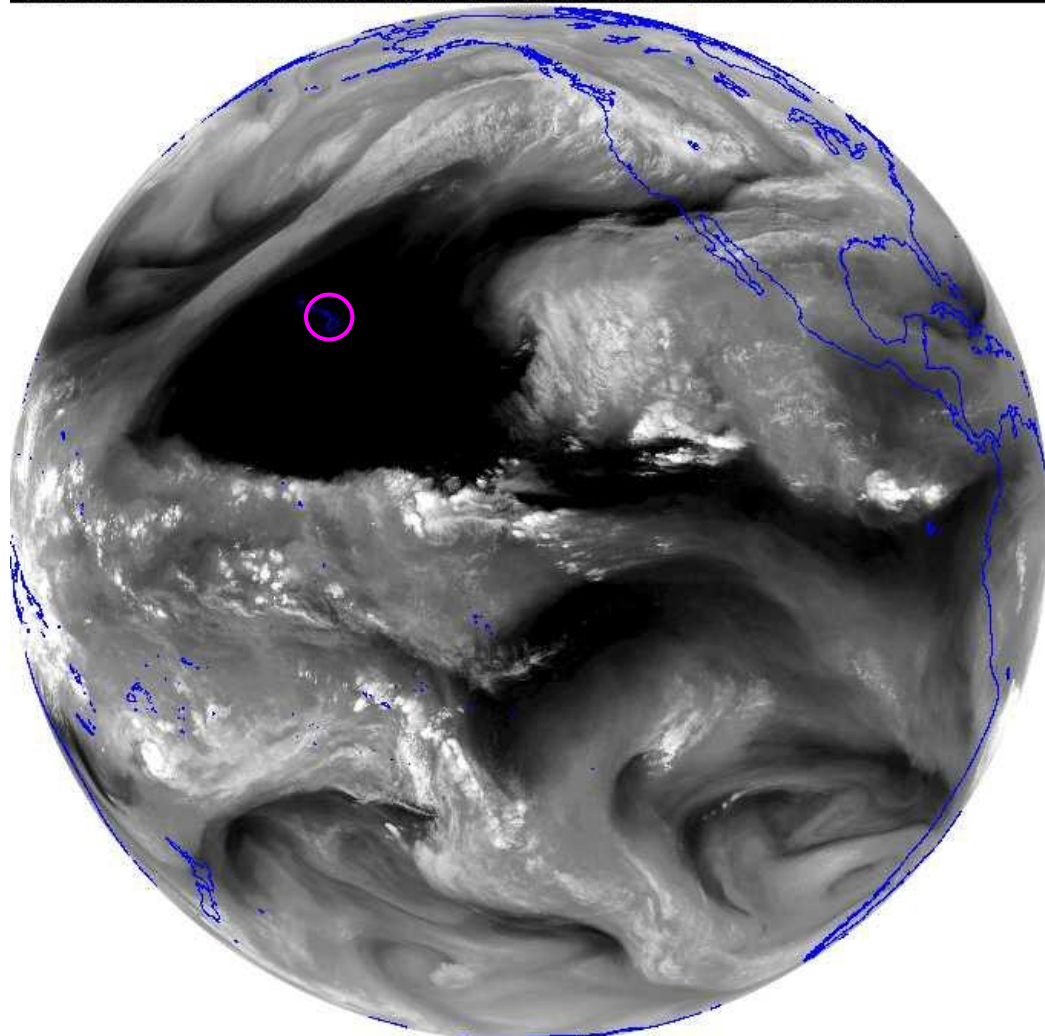
FRI 1430Z February 12 Water Vapor



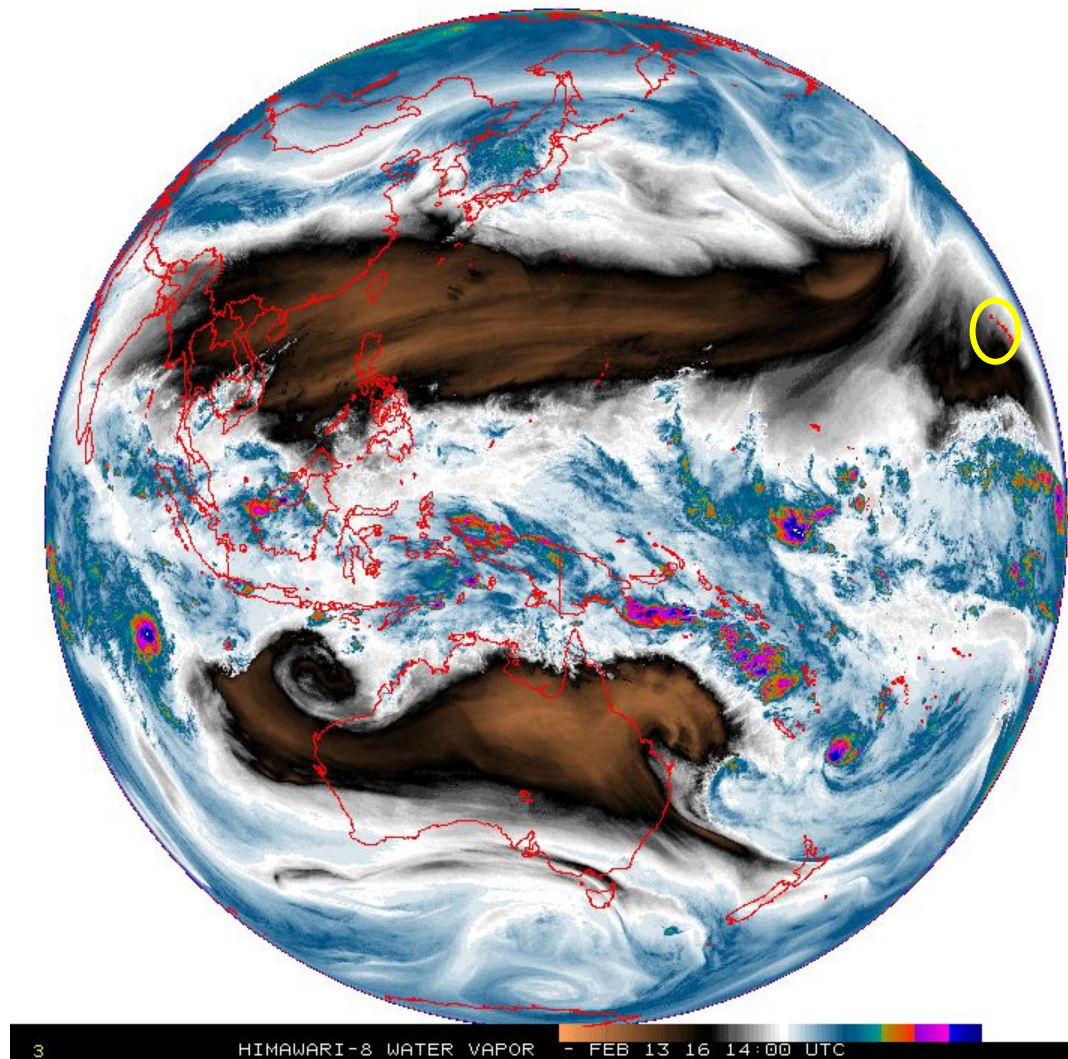
THU 15Z February 11 Water Vapor



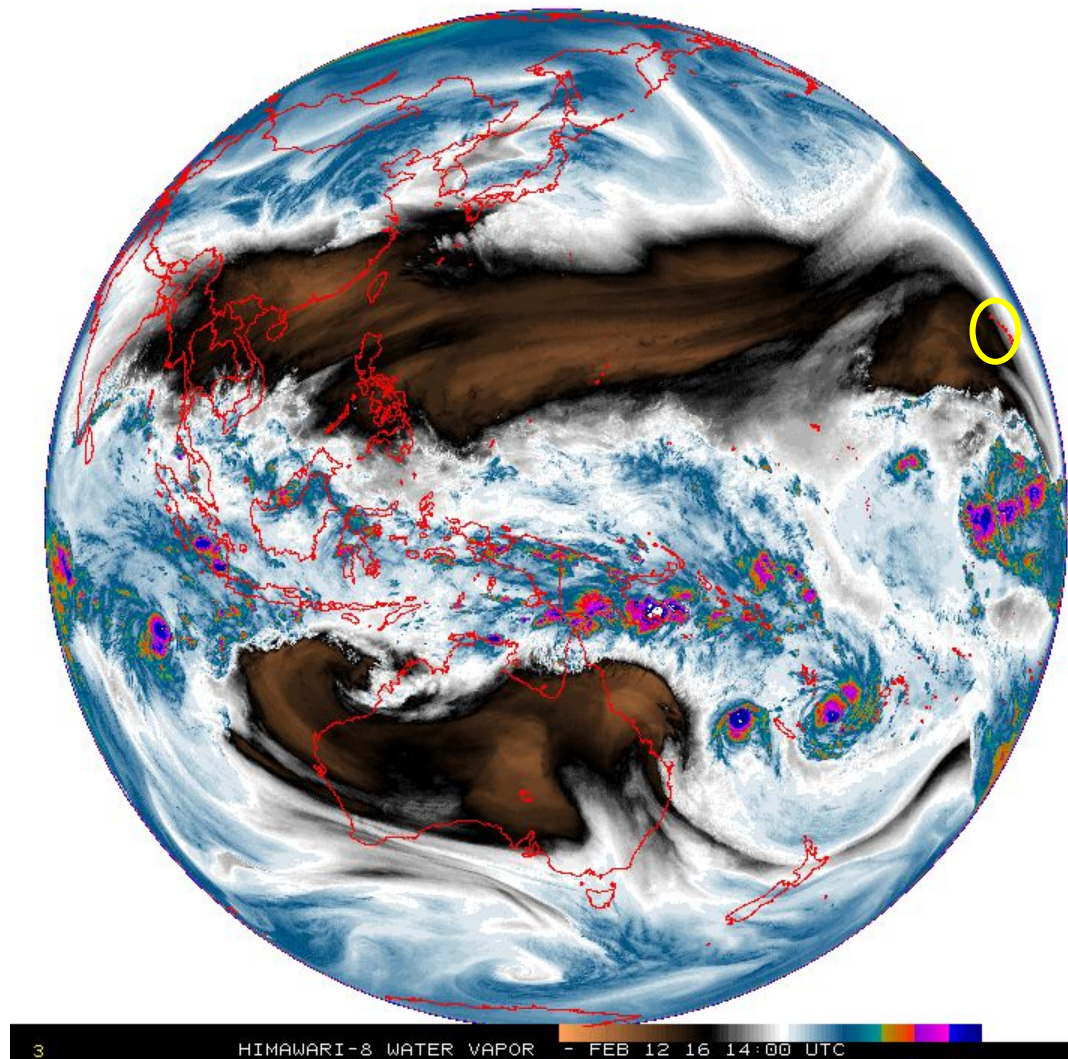
Water Vapor 12Z SUN



Sat 14Z



Fri 14Z

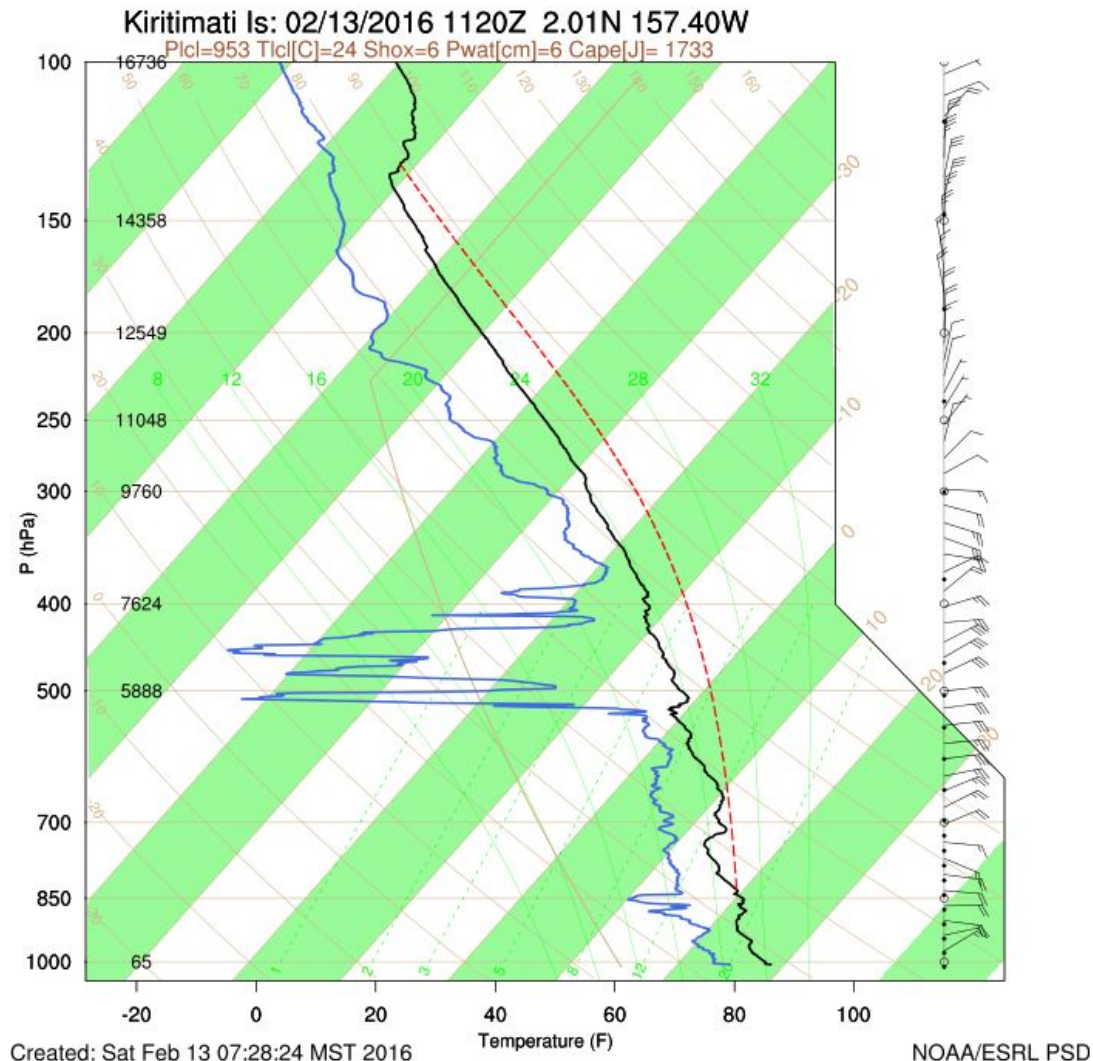


Kiritimati Is: 02/14/2016 1125Z 2.01N 157.40W

[illegible]

NOAA/ESRL PSD

Kiritimati Sonde 1120Z Sat

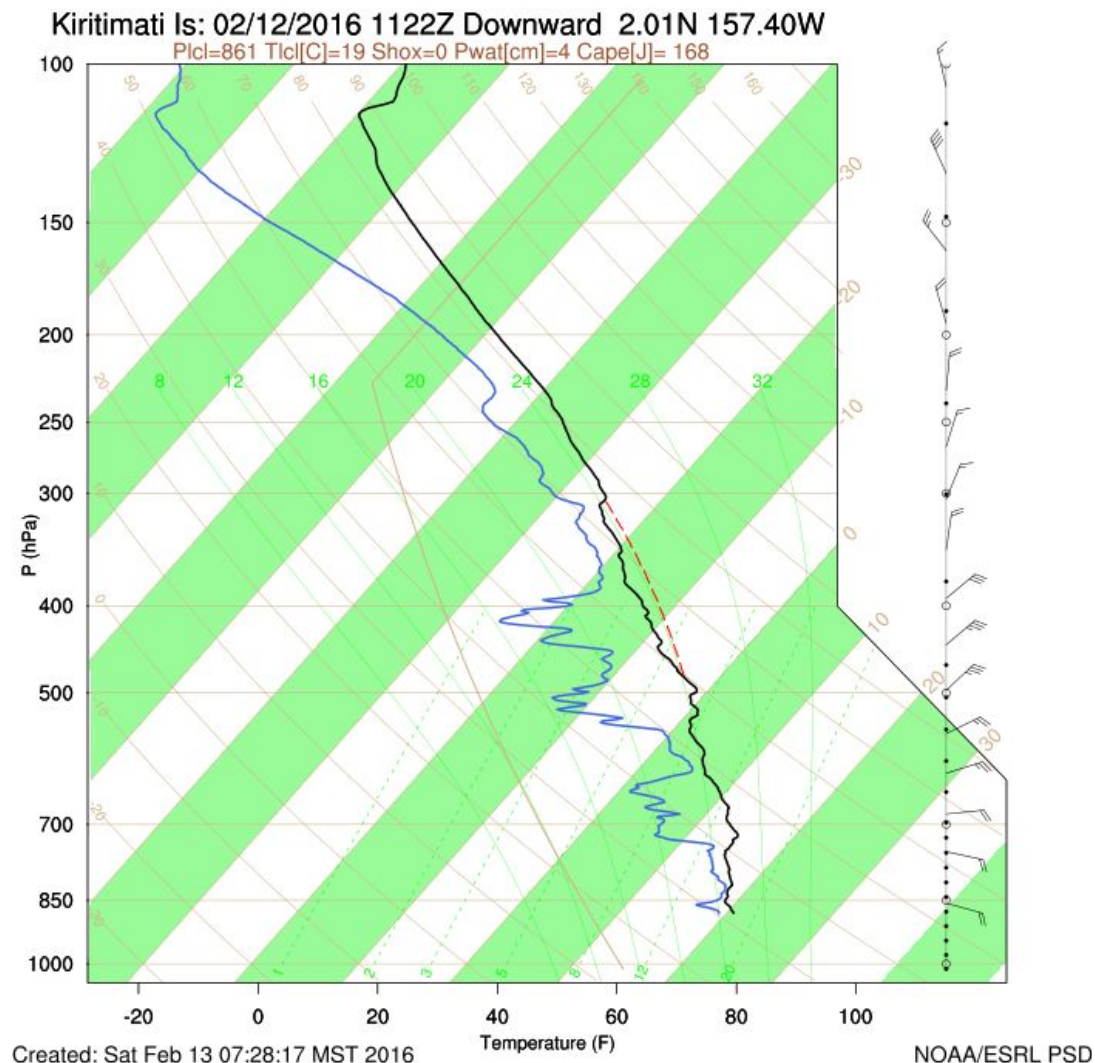


Kiritimati Is: 02/13/2016 1120Z Downward 2.01N 157.40W

Temperature (F)

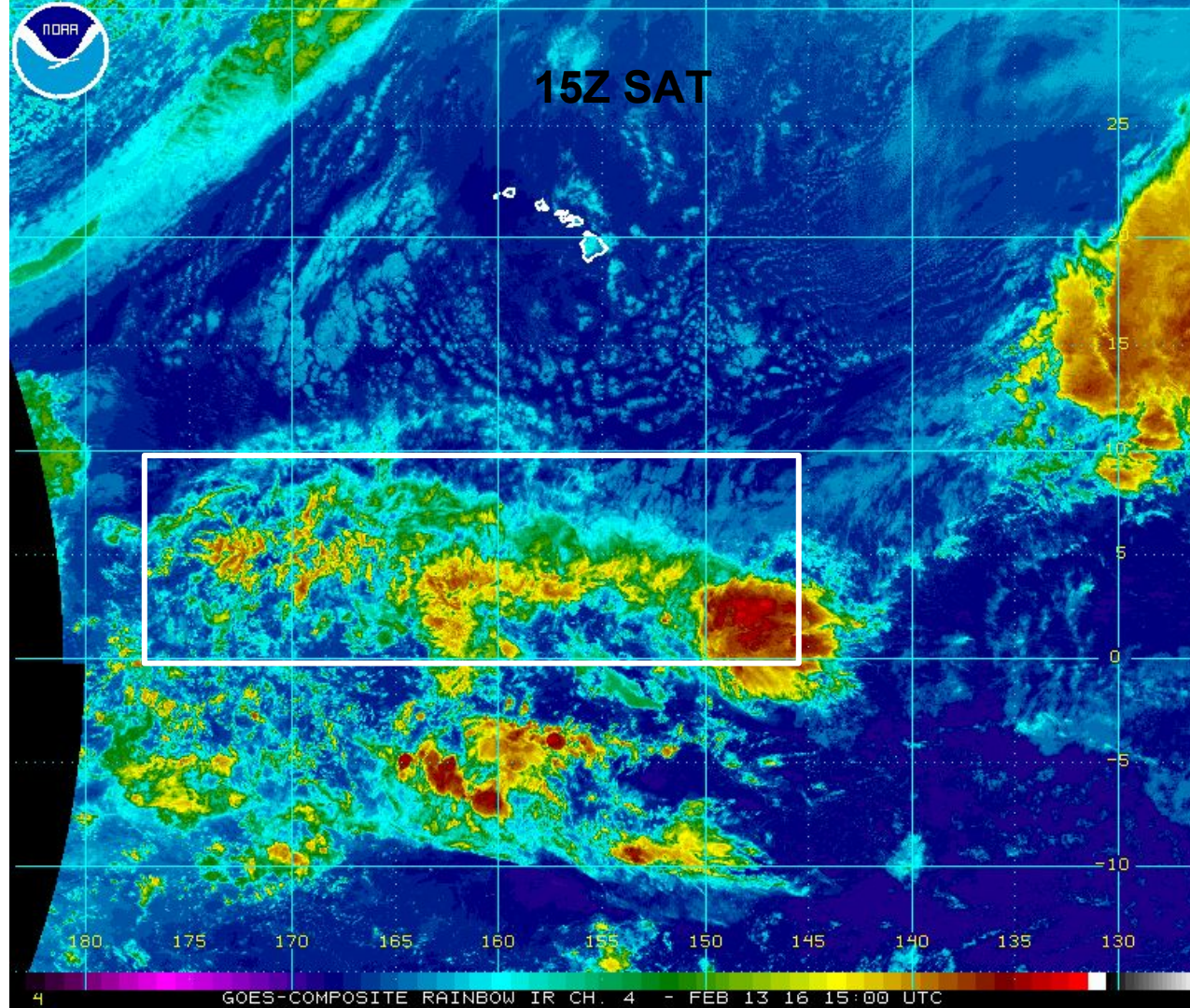
NOAA/ESRL PSD

Kiritimati Sonde 1122Z Fri



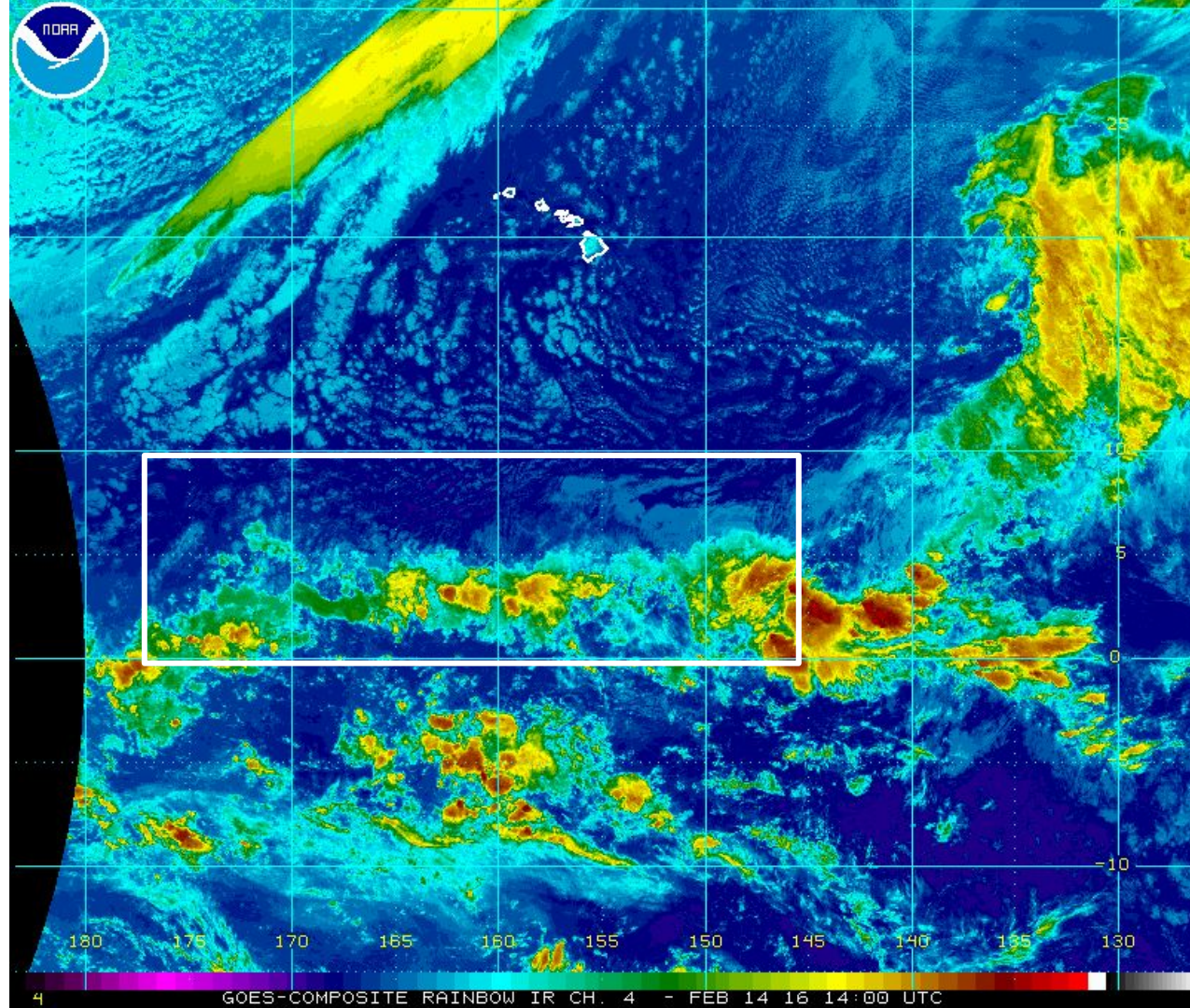


15Z SAT





14Z SUN

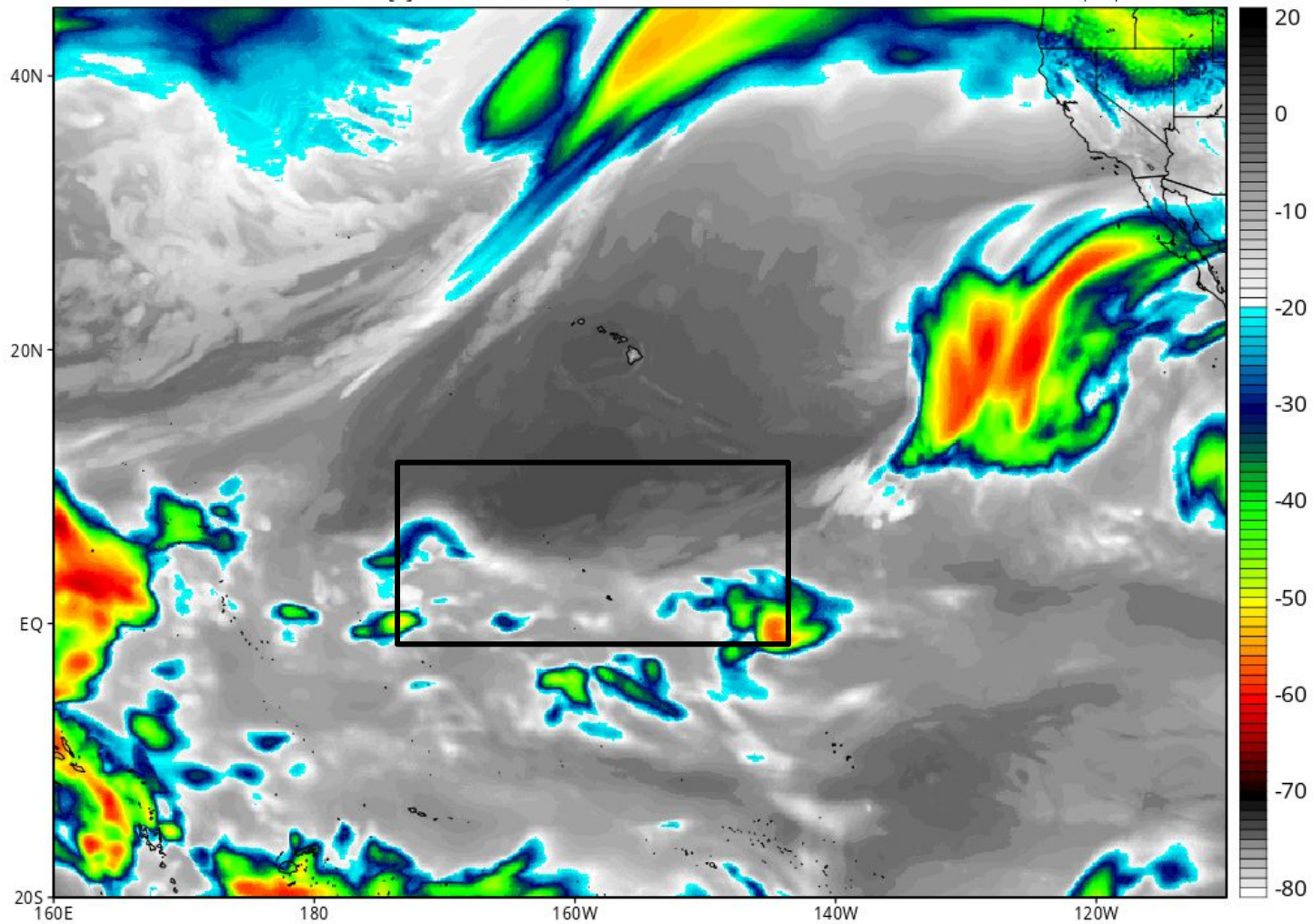


GFS Simulated IR Brightness Temperature (°C)

Init: 06z Feb 14 2016 Forecast Hour: [6] valid at 12z Sun, Feb 14 2016

Latest GFS Valid 12Z SUN

Levi Cowan | tropicaltidbits.com

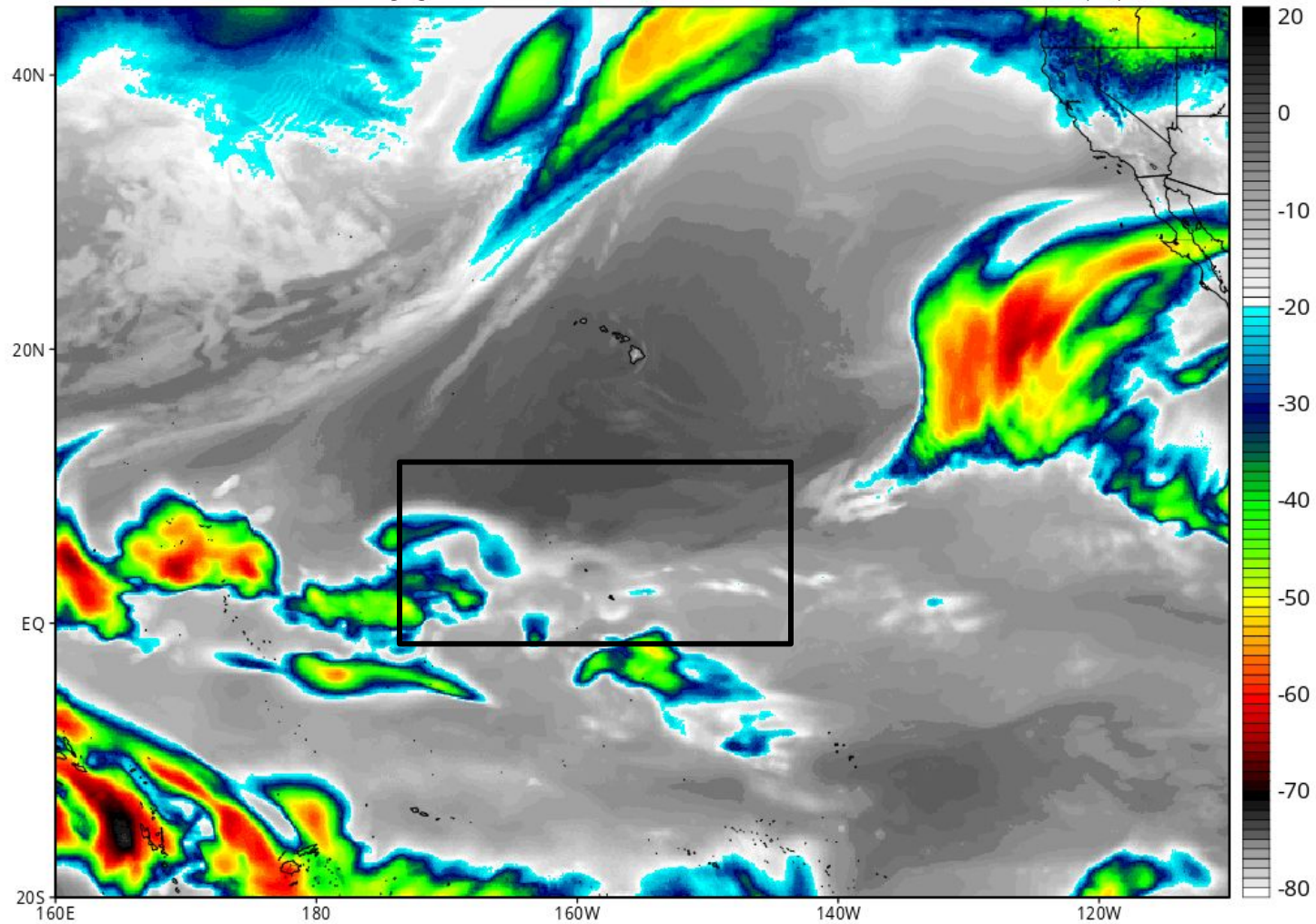


GFS Simulated IR Brightness Temperature (°C)

Init: 06z Feb 13 2016 Forecast Hour: [30] valid at 12z Sun, Feb 14 2016

Prior GFS Valid 12Z SUN

Levi Cowan | tropicaltidbits.com

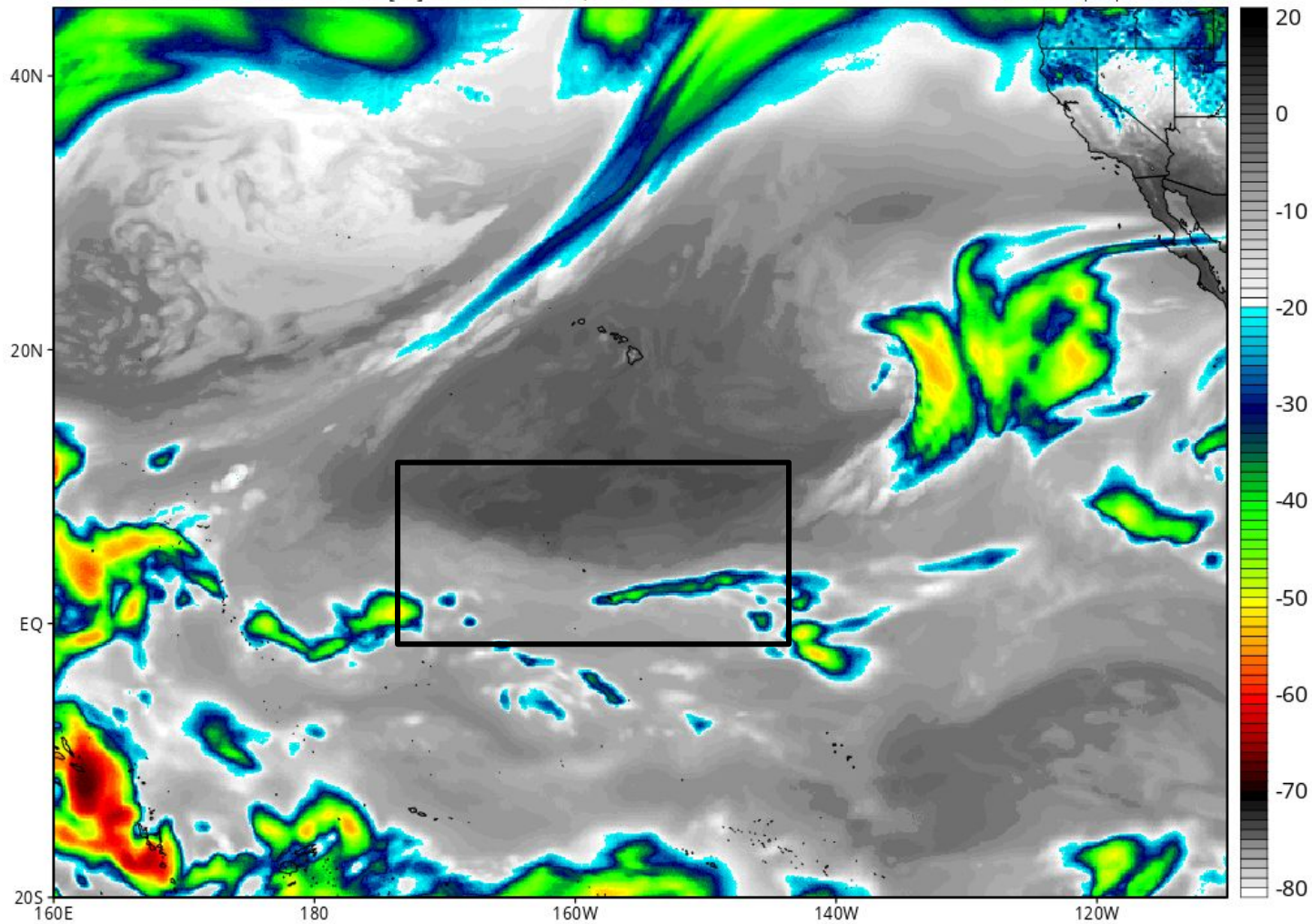


GFS Simulated IR Brightness Temperature (°C)

Init: 06z Feb 14 2016 Forecast Hour: [18] valid at 00z Mon, Feb 15 2016

Latest GFS Valid 00Z MON

Levi Cowan | tropicaltidbits.com

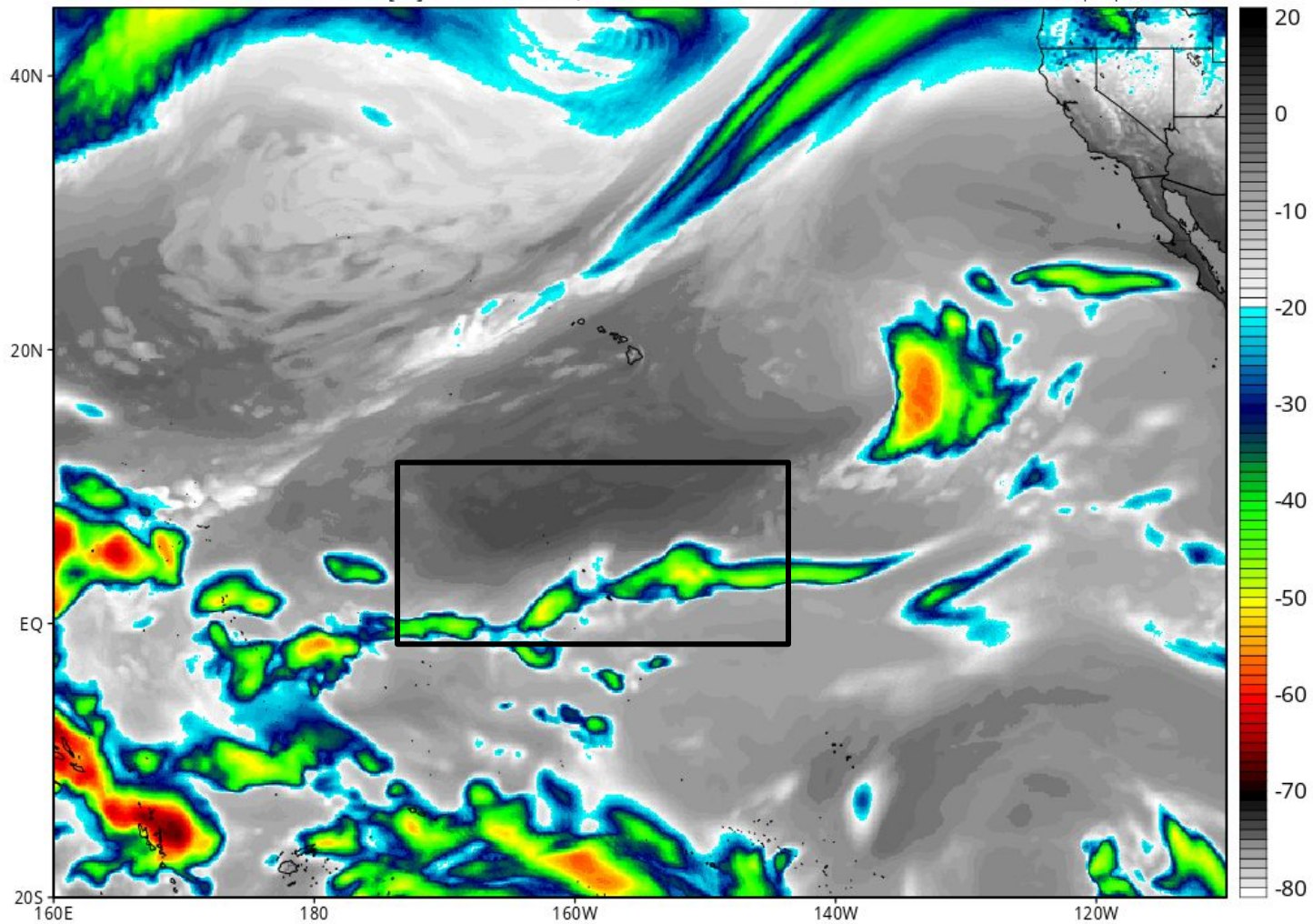


GFS Simulated IR Brightness Temperature (°C)

Init: 06z Feb 14 2016 Forecast Hour: [42] valid at 00z Tue, Feb 16 2016

Latest GFS Valid 00Z TUE

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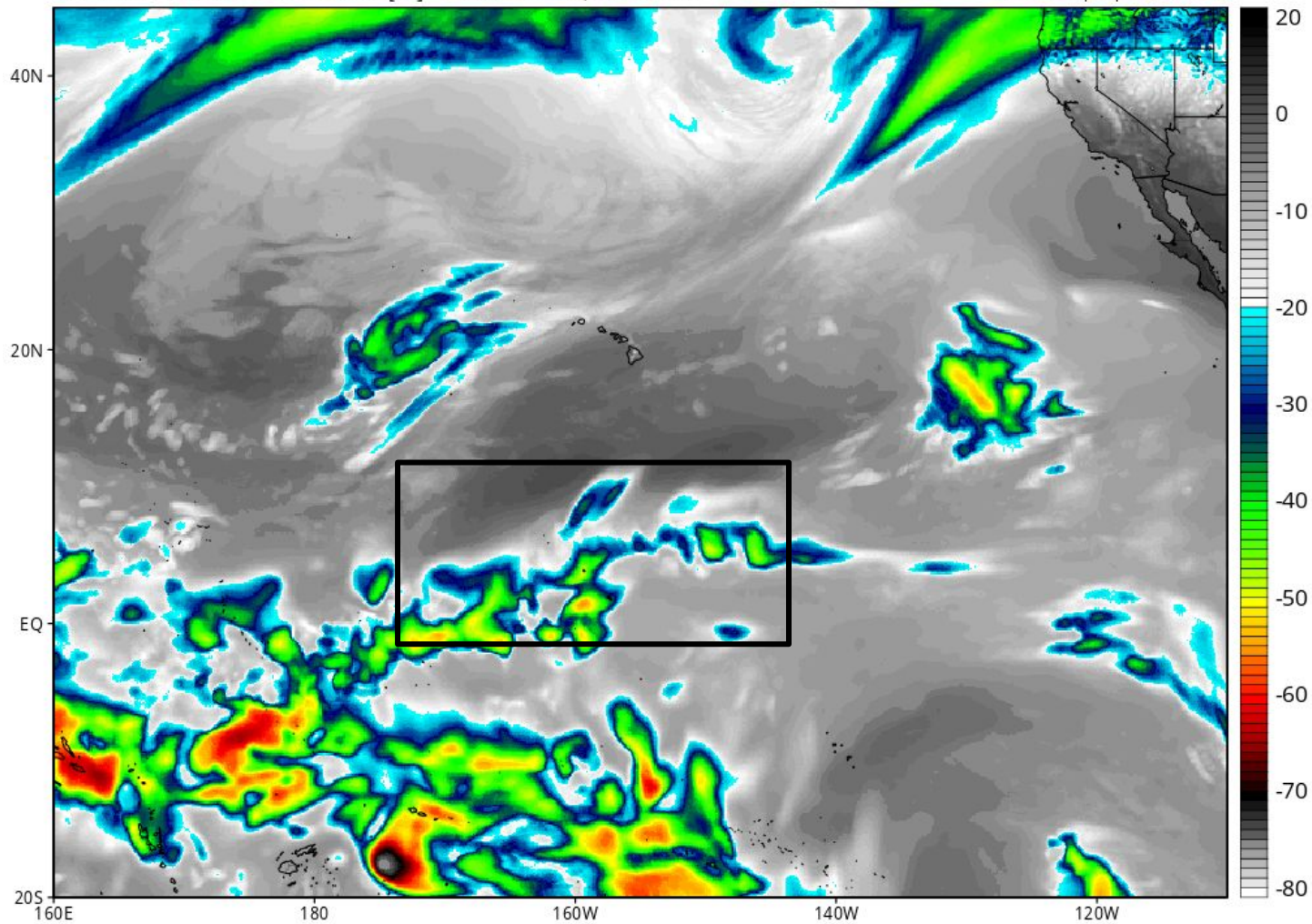


GFS Simulated IR Brightness Temperature (°C)

Init: 06z Feb 14 2016 Forecast Hour: [66] valid at 00z Wed, Feb 17 2016

Latest GFS Valid 00Z WED

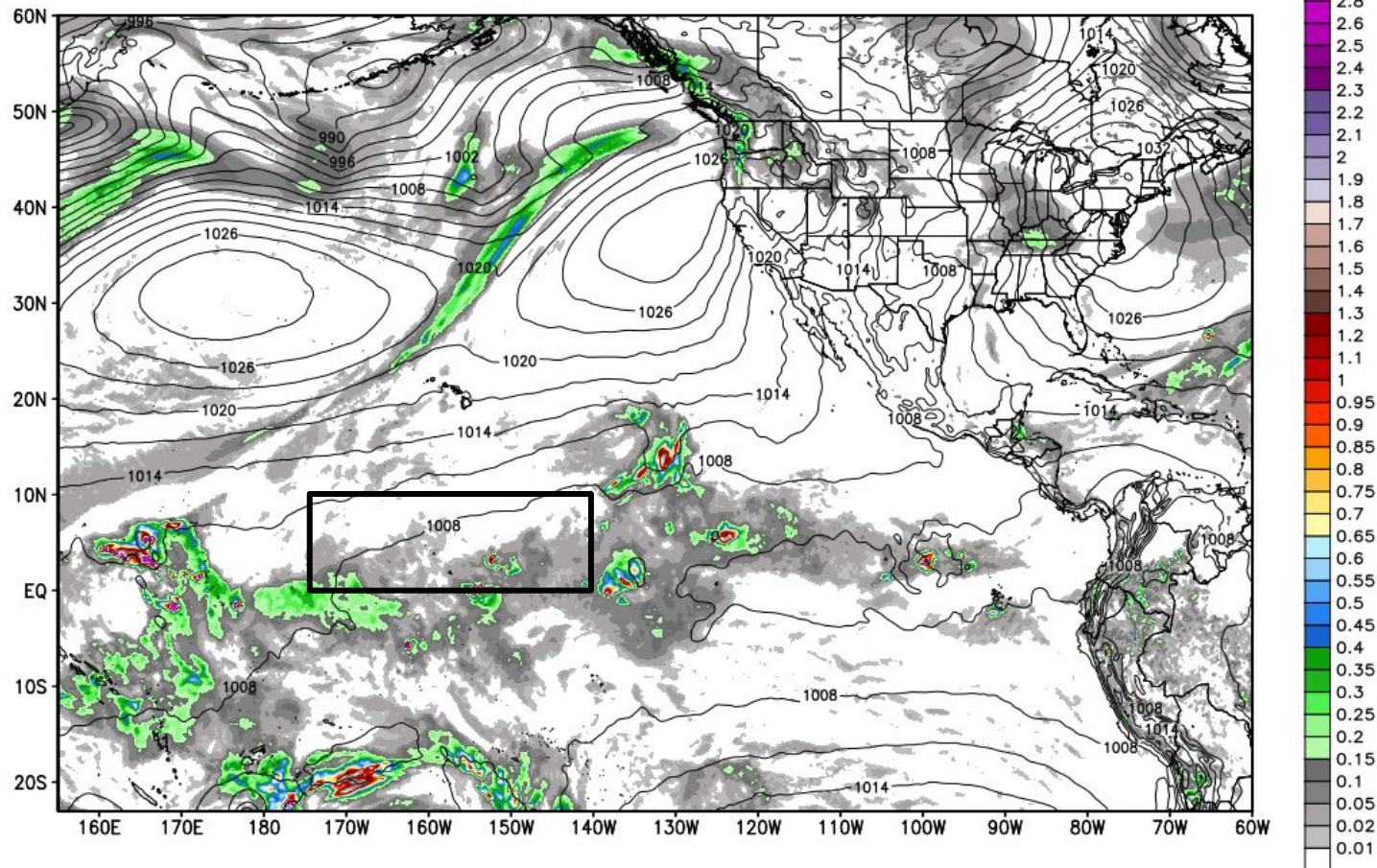
Levi Cowan | tropicaltidbits.com



ECMWF 6-hourly Precipitation [inches] between 18Z14FEB2016 -- 00Z15FEB2016 & MSLP [hPa]
INIT: 00Z14FEB2016 fx: [024] hr --> Mon 00Z15FEB2016

Courtesy WeatherBell

Latest 24 HR ECMWF Valid 00Z MON Feb15

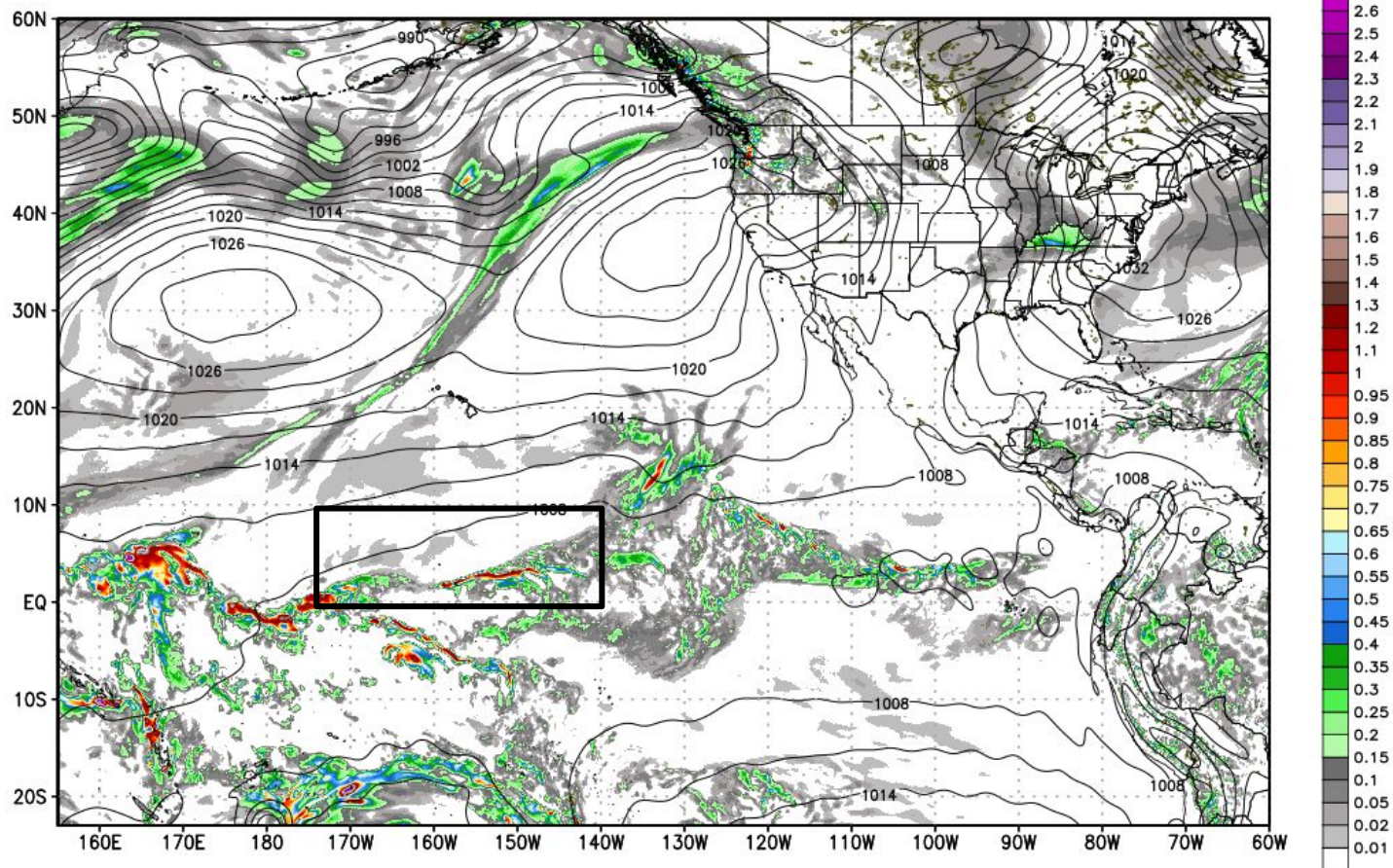


NCEP GFS 6-hourly Precipitation [inch] & MSLP [hPa]
INIT: 06Z14FEB2016 fx: [018] hr --> Mon 00Z15FEB2016

Max: 3.8 in.

Courtesy WeatherBell

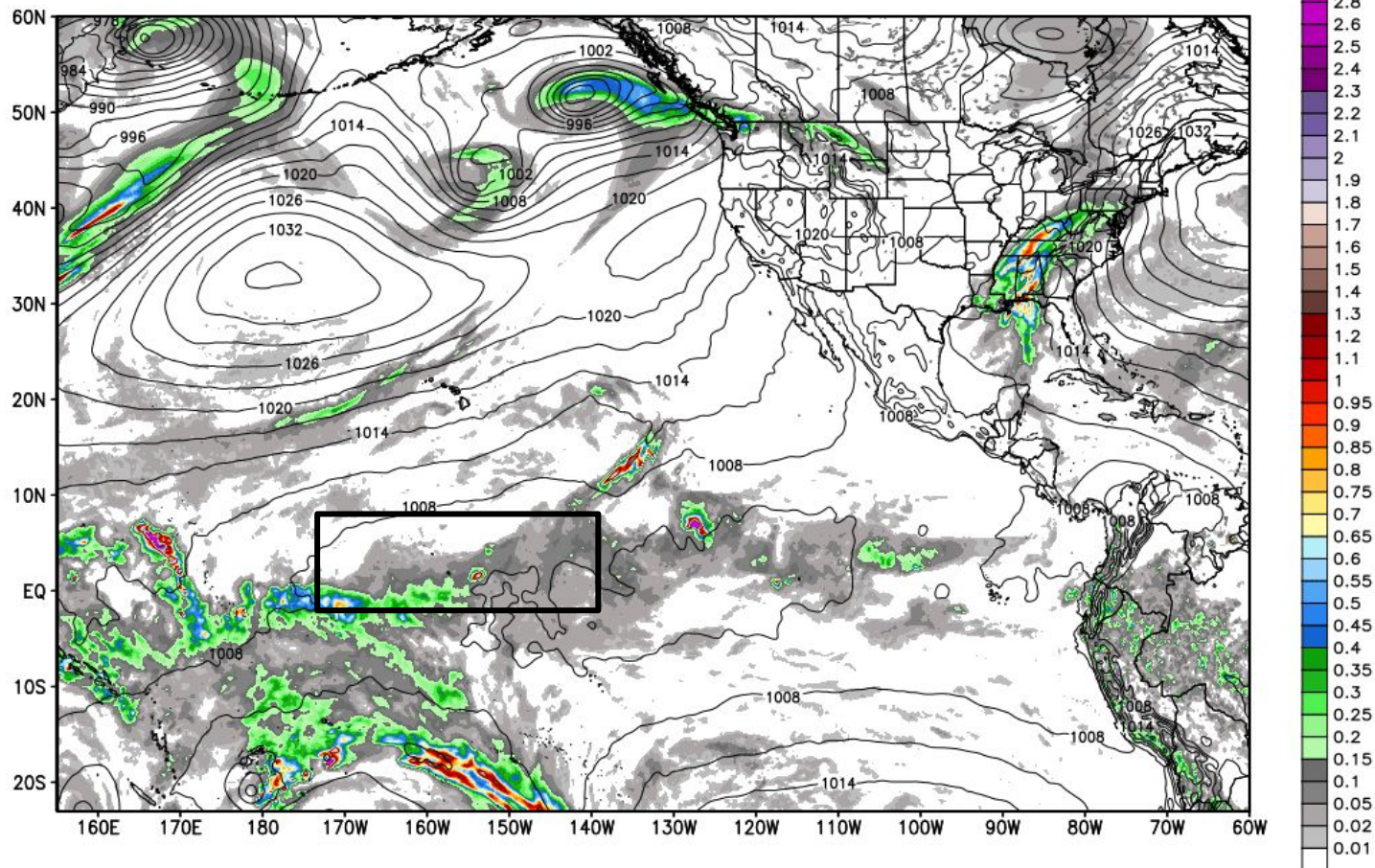
Latest 18 HR GFS Valid 00Z MON Feb15



ECMWF 6-hourly Precipitation [inches] between 18Z15FEB2016 -- 00Z16FEB2016 & MSLP [hPa]
INIT: 00Z14FEB2016 fx: [048] hr --> Tue 00Z16FEB2016

Courtesy WeatherBell

Latest 48 HR ECMWF Valid 00Z TUE Feb16

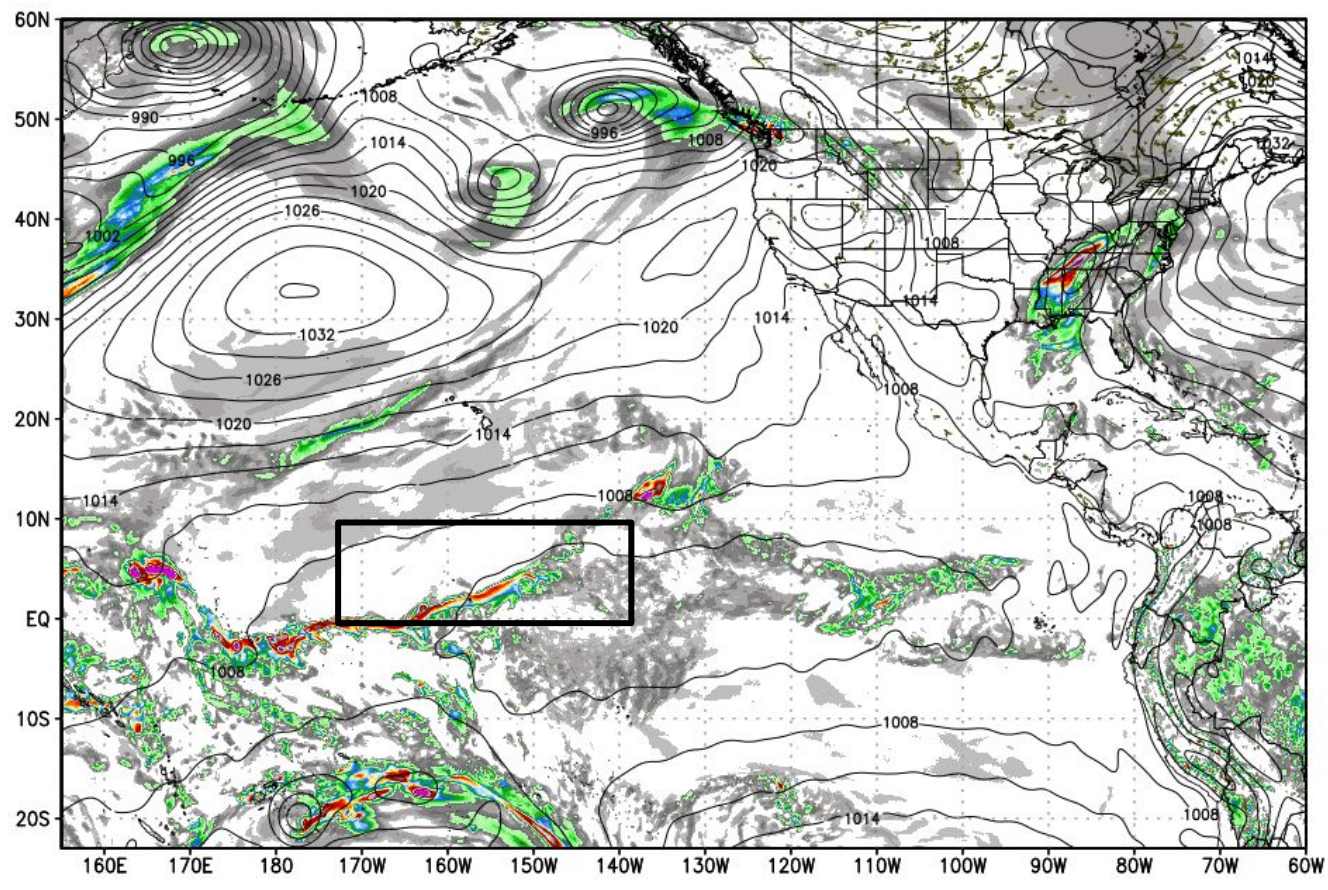


NCEP GFS 6-hourly Precipitation [inch] & MSLP [hPa]
INIT: 06Z14FEB2016 fx: [042] hr --> Tue 00Z16FEB2016

Max: 7.5 in.

Courtesy WeatherBell

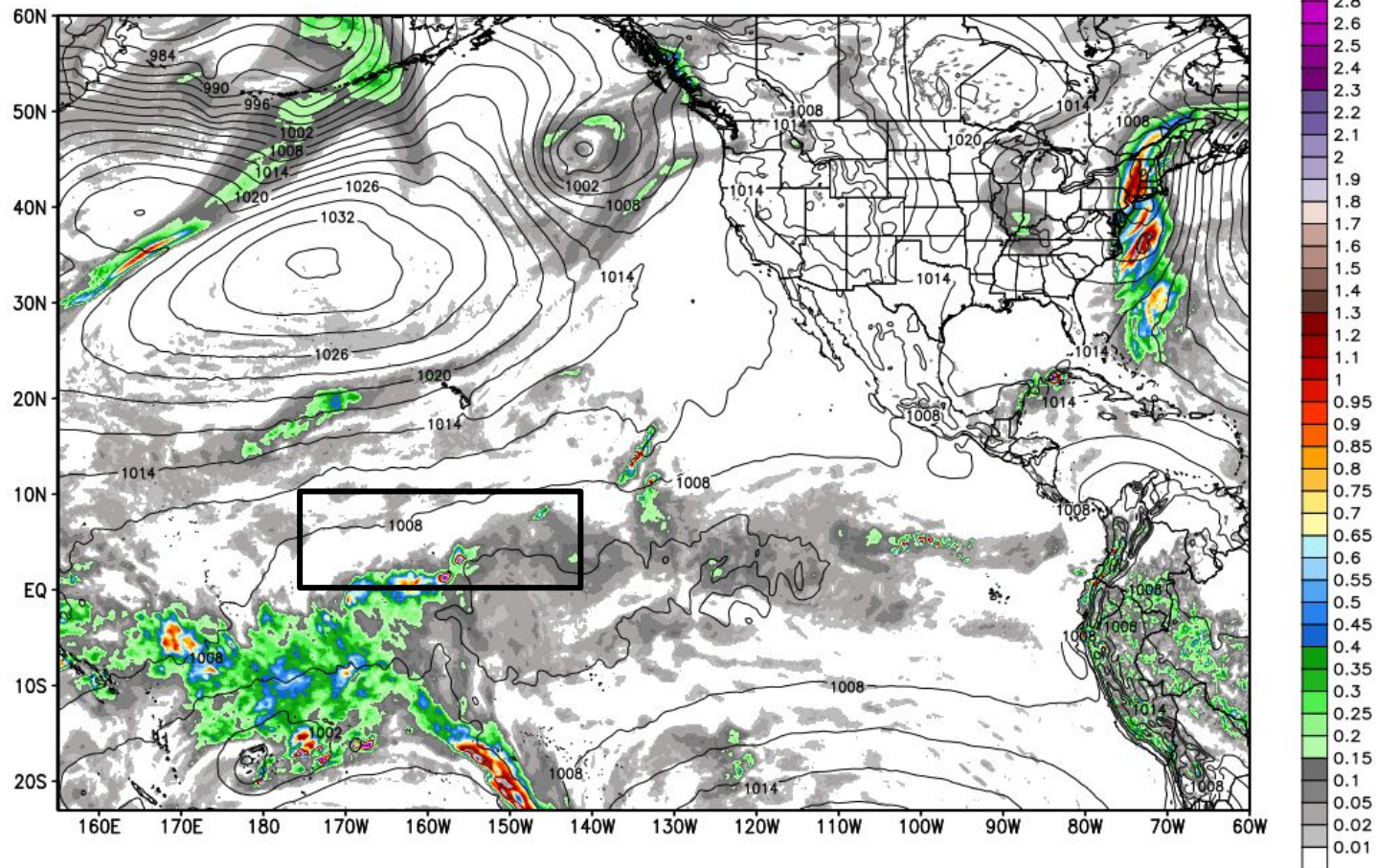
Latest 42 HR GFS Valid 00Z TUE Feb16



ECMWF 6-hourly Precipitation [inches] between 18Z16FEB2016 -- 00Z17FEB2016 & MSLP [hPa]
INIT: 00Z14FEB2016 fx: [072] hr --> Wed 00Z17FEB2016

Courtesy WeatherBell

Latest 72 HR ECMWF Valid 00Z WED Feb17

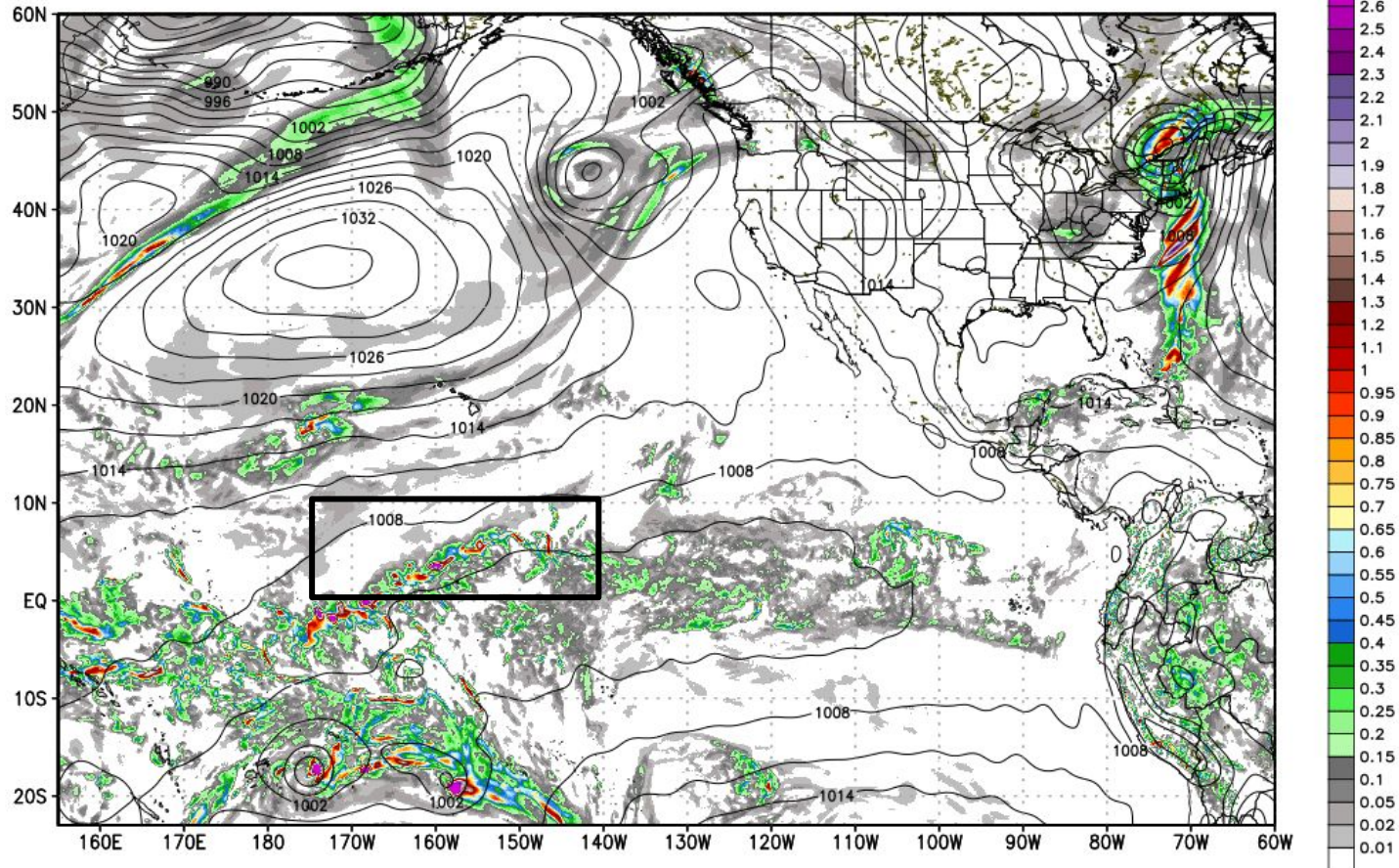


NCEP GFS 6-hourly Precipitation [inch] & MSLP [hPa]
INIT: 06Z14FEB2016 fx: [066] hr --> Wed 00Z17FEB2016

Max: 11.9 in.

Courtesy WeatherBell

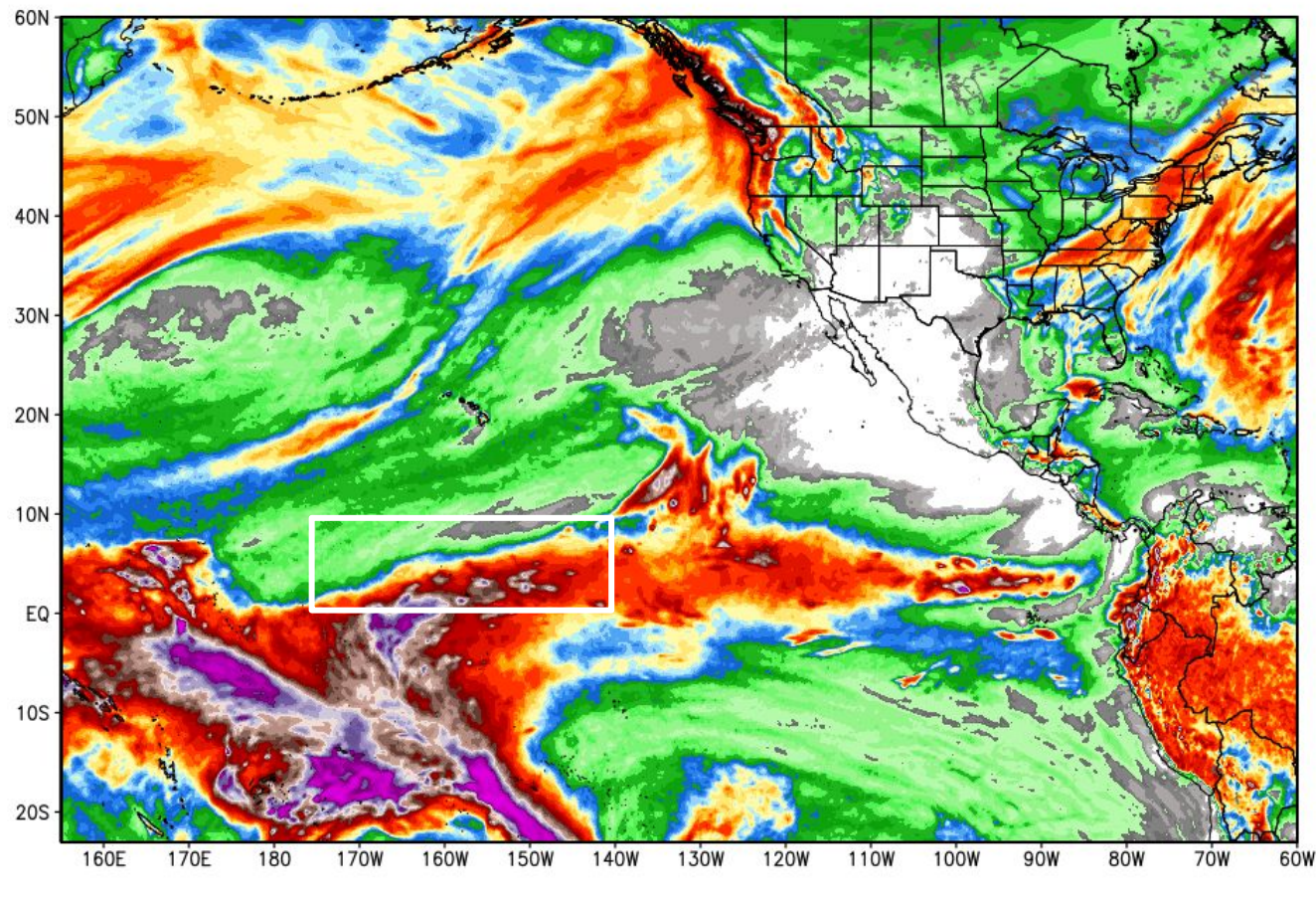
Latest 66 HR GFS Valid 00Z WED Feb17



ECMWF Total Precipitation [inches] between 00Z14FEB2016 -- 00Z21FEB2016
INIT: 00Z14FEB2016 fx: [168] hr --> Sun 00Z21FEB2016

Max 53.2 in

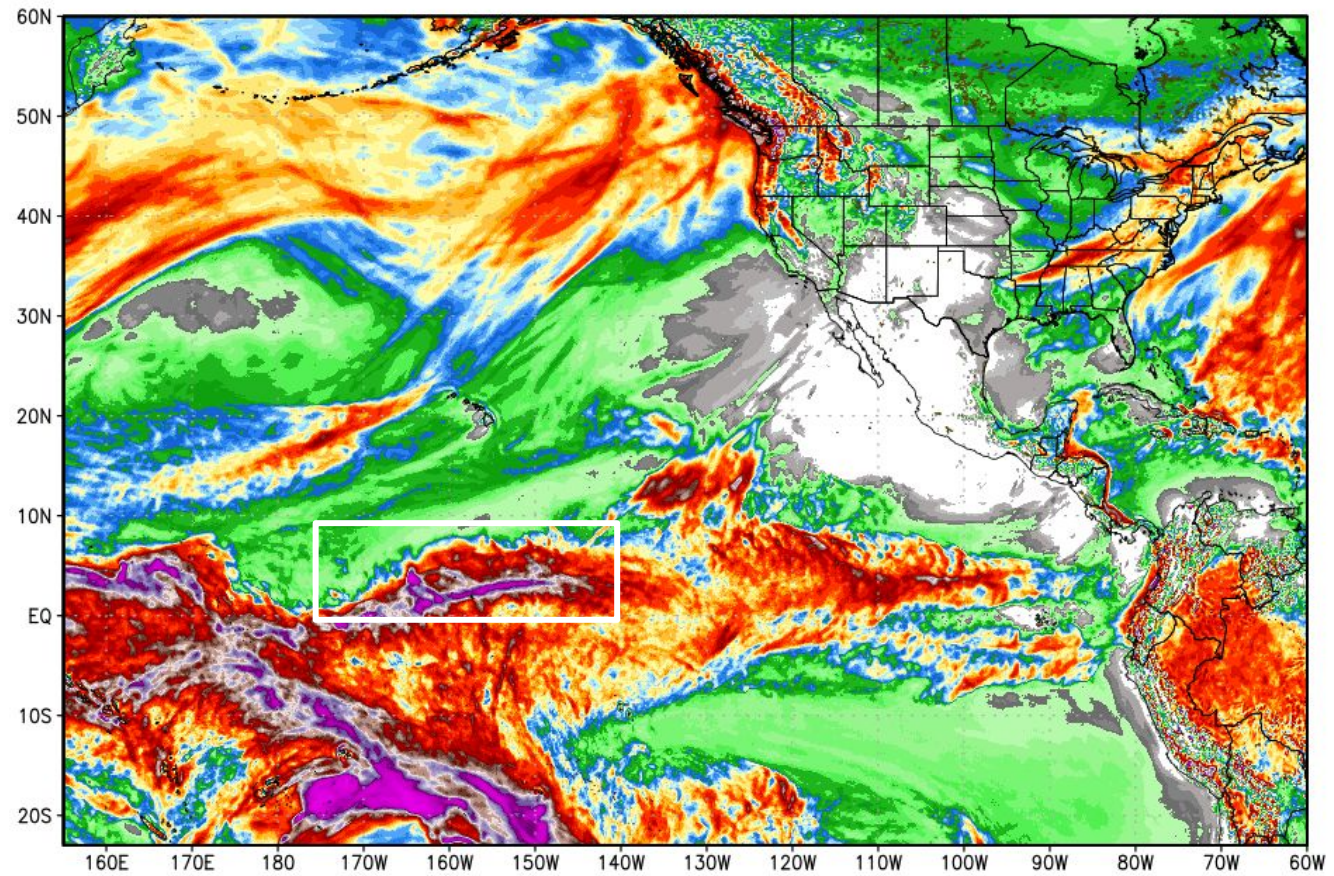
EC - 7 Day Precip
Forecast:
00Z 14FEB - 00Z 21Feb



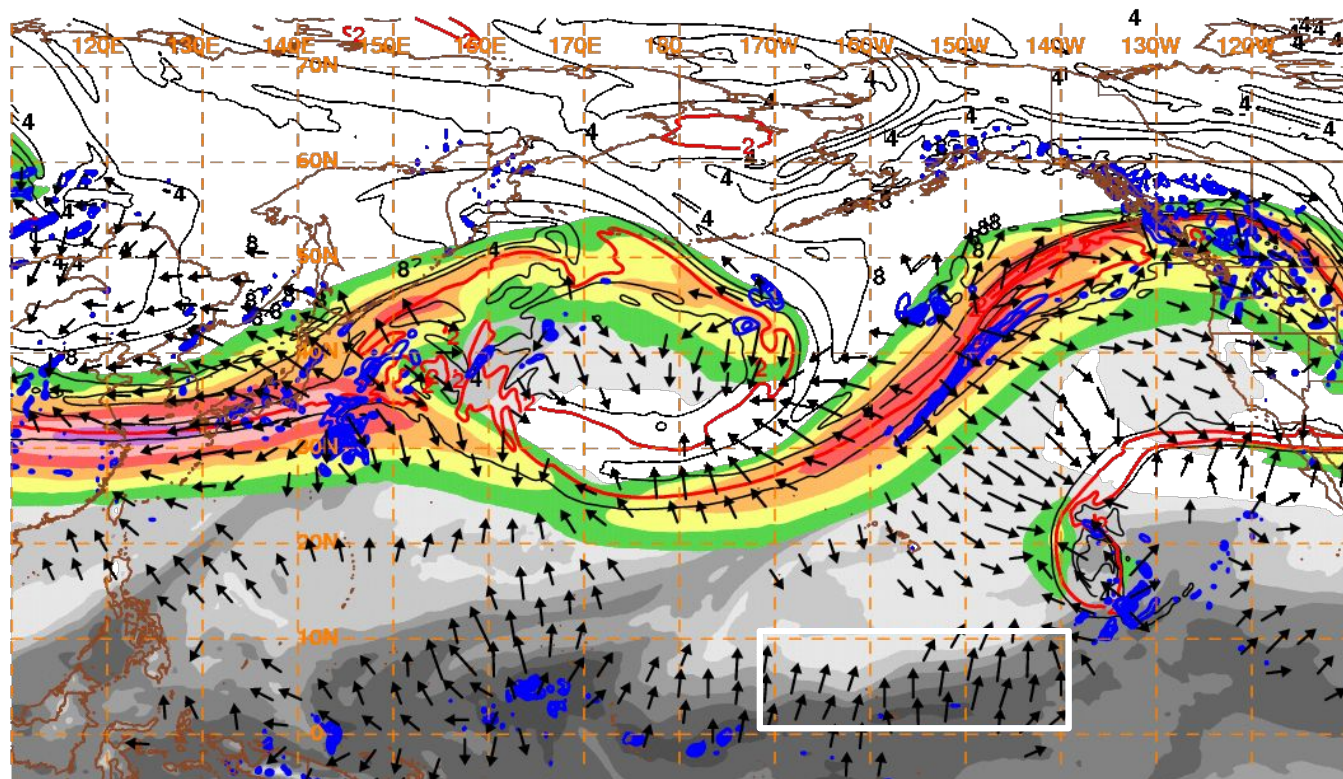
NCEP GFS Accum Precip [inch]
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Max: 51.0 in.

GFS - 7 Day Precip
Forecast:
00Z 14FEB - 00Z 21Feb



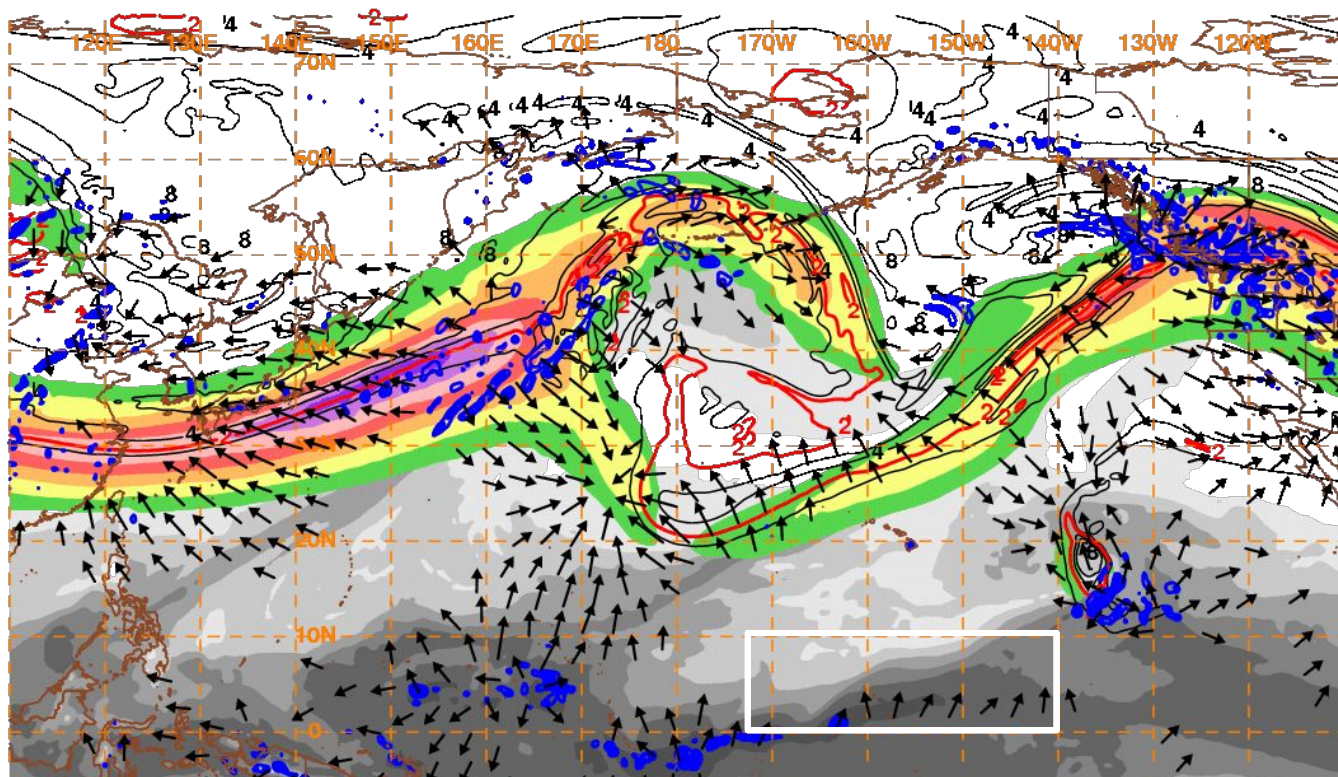
GFS 18HR FCST Valid 00Z MON Feb 15: 200 mb DIV Wind Vectors



10 m/s → 160215/0000V018 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel



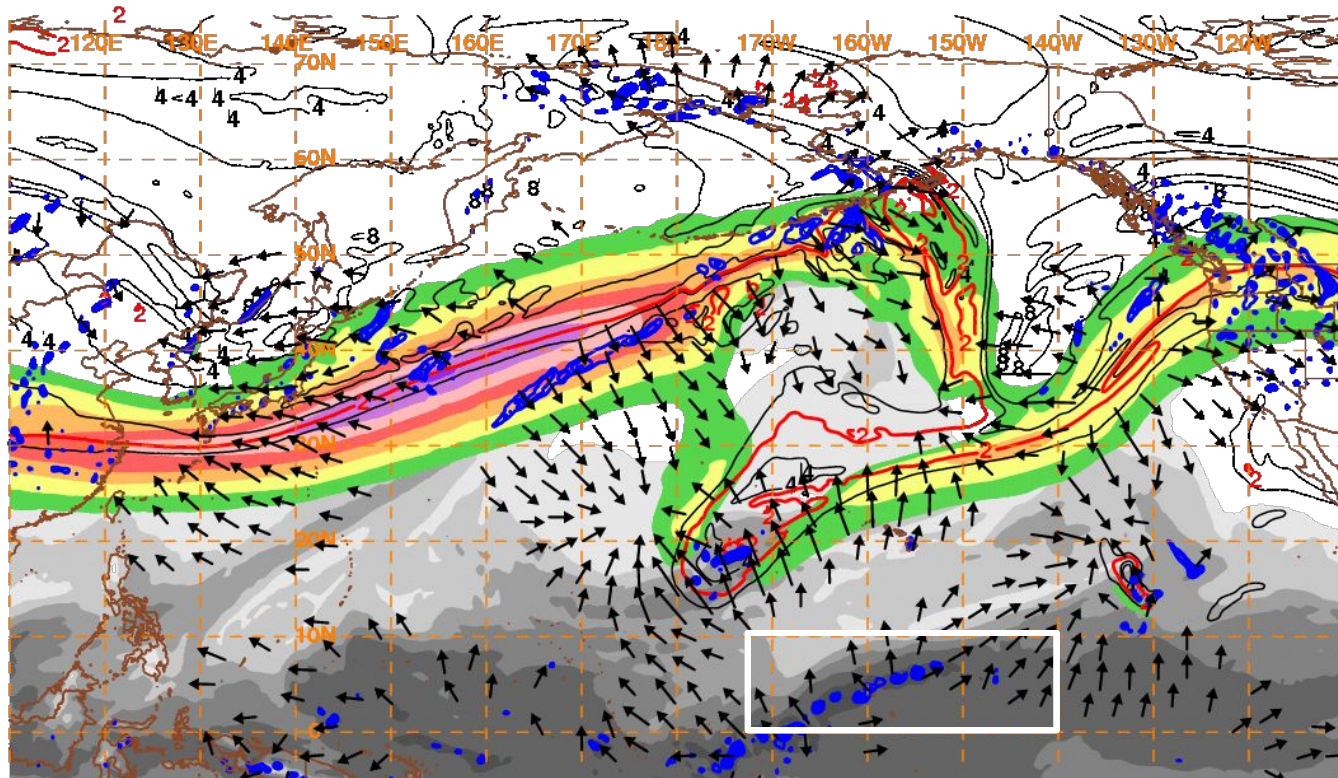
GFS 42HR FCST Valid 00Z Tue Feb 16: 200 mb DIV Wind Vectors



10 m/s → 160216/0000V042 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel



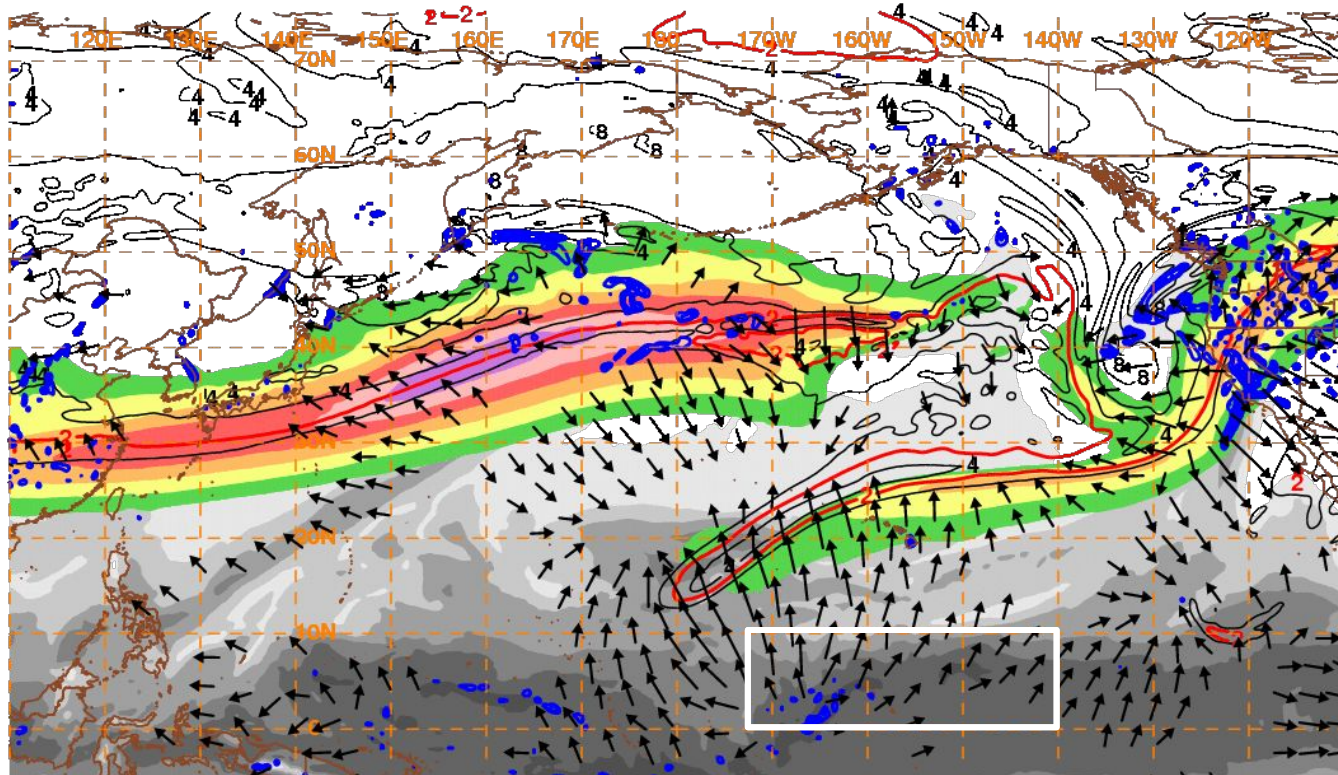
GFS 66HR FCST Valid 00Z Wed Feb 17: 200 mb DIV Wind Vectors



10 m/s → 160217/0000V066 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel



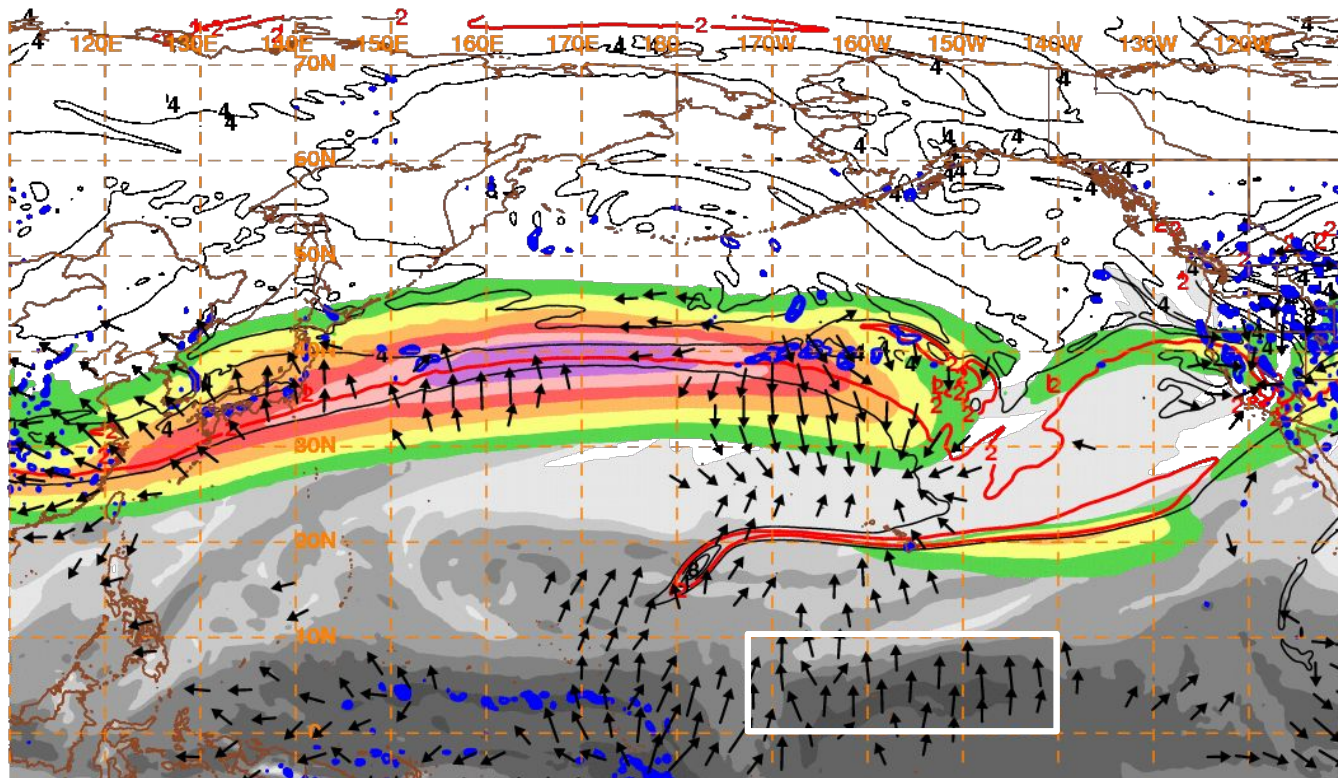
GFS 90HR FCST Valid 00Z THU Feb 18: 200 mb DIV Wind Vectors



10 m/s → 160218/0000V090 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel



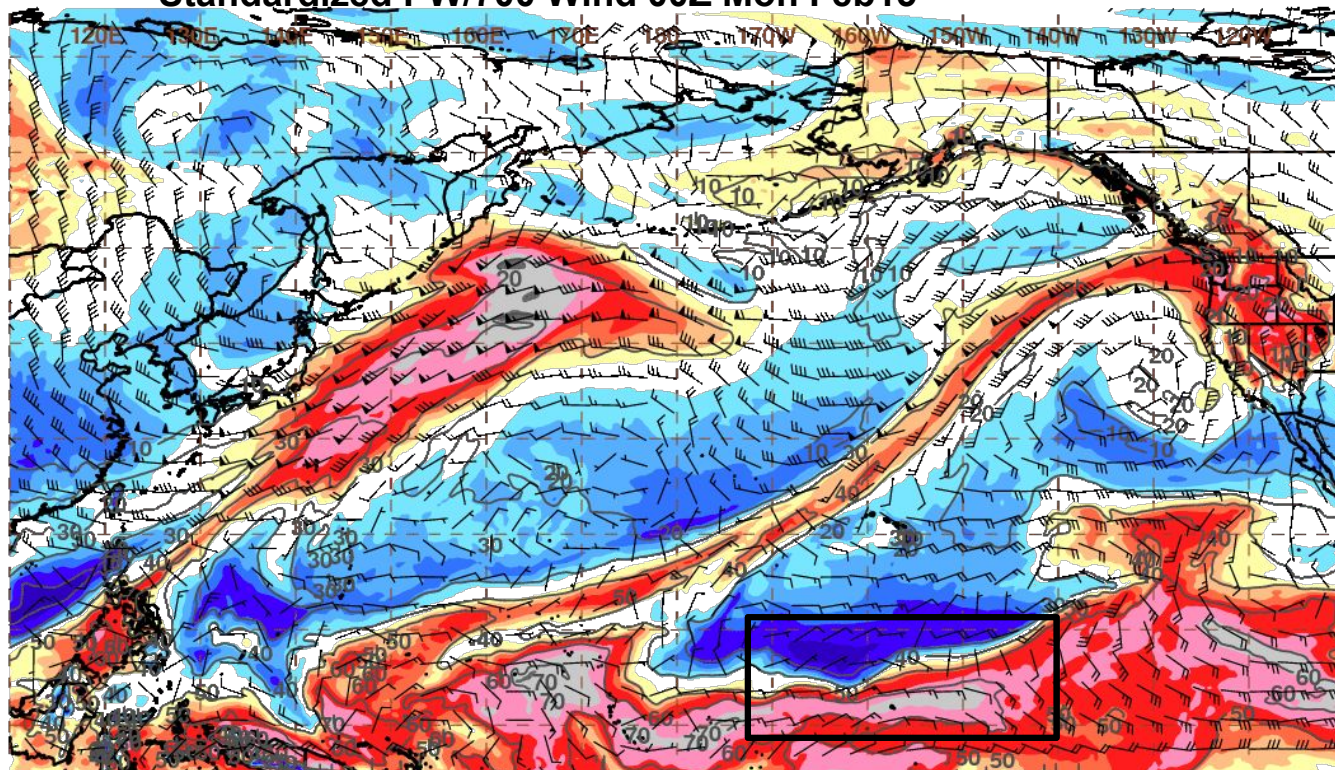
GFS 114HR FCST Valid 00Z FRI Feb 19: 200 mb DIV Wind Vectors



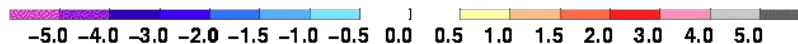
10 m/s → 160219/0000V114 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel



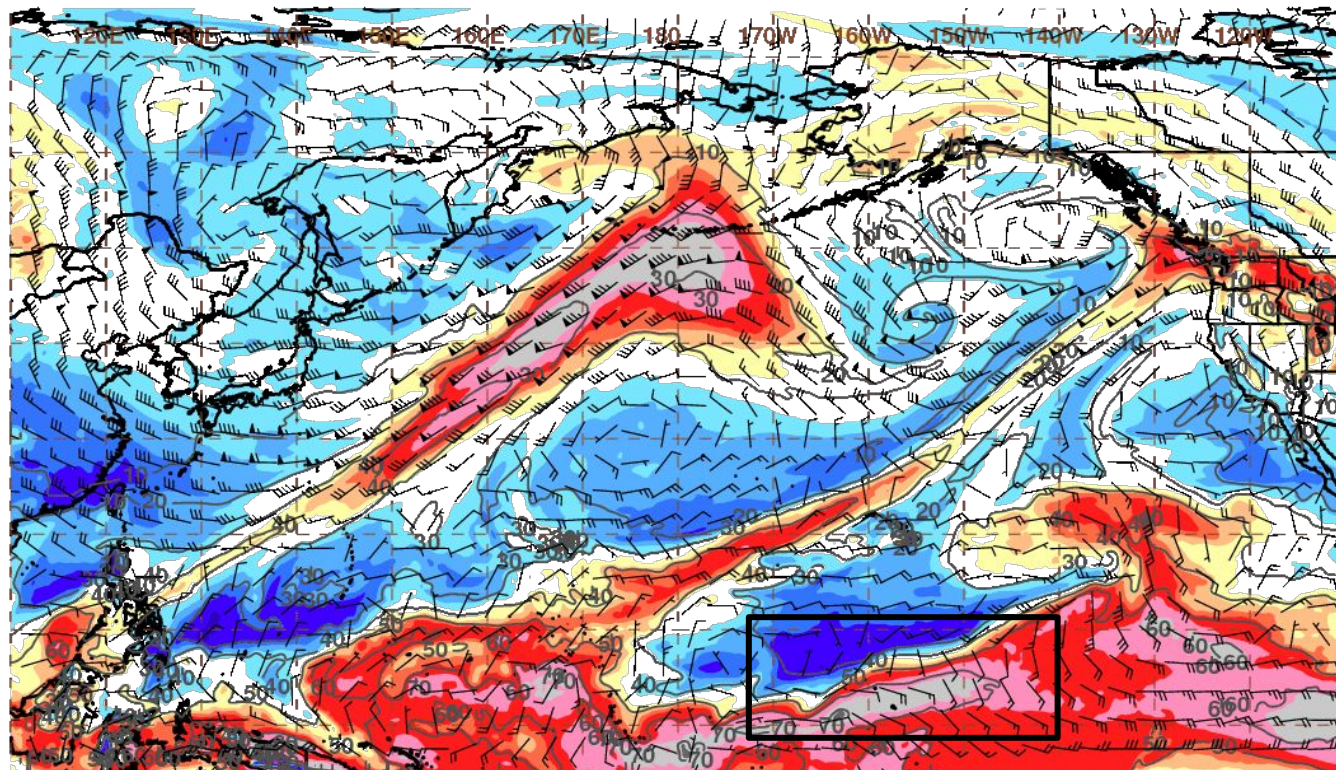
Standardized PW/700 Wind 00Z Mon Feb15



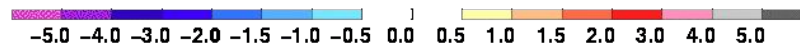
160215/0000F018 Std. Anom of PW; 700 hPa Wind



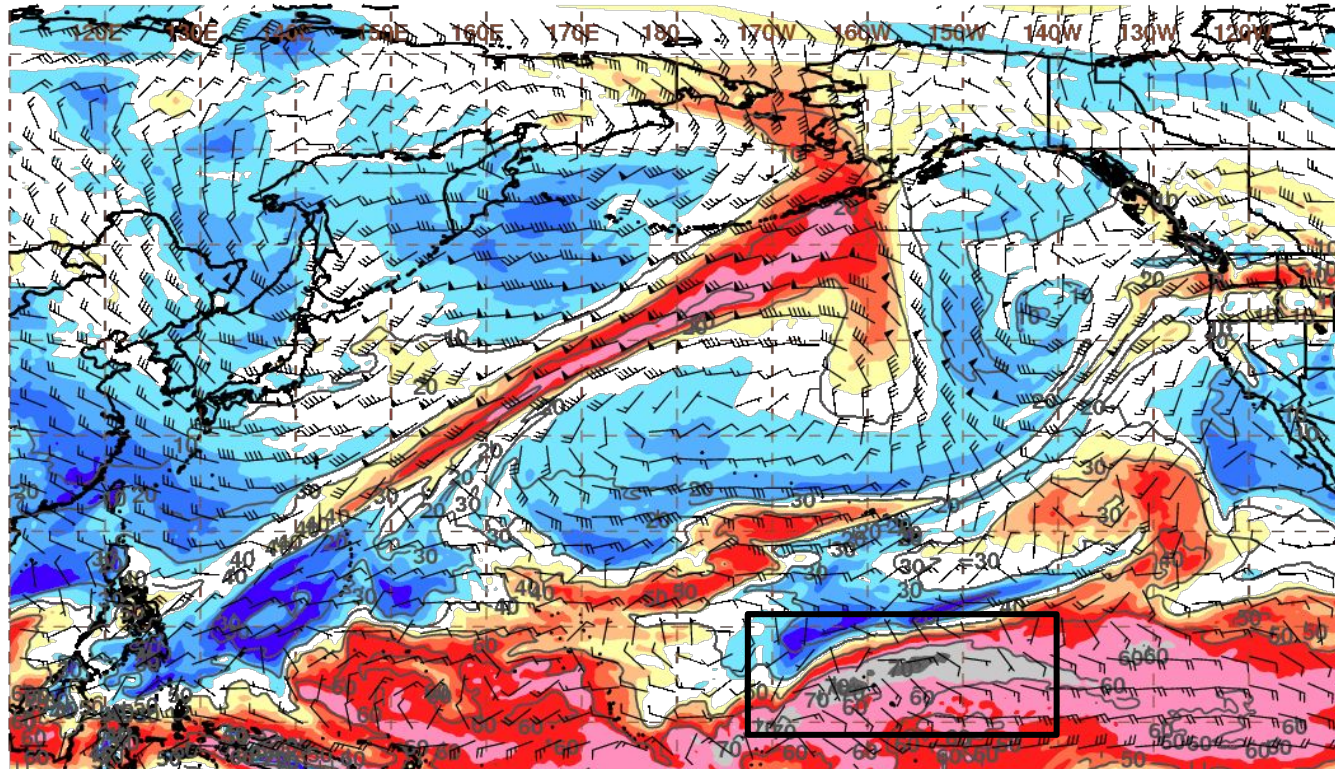
Standardized PW/700 Wind 00Z TUE Feb 16



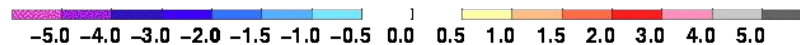
160216/0000F042 Std. Anom of PW; 700 hPa Wind



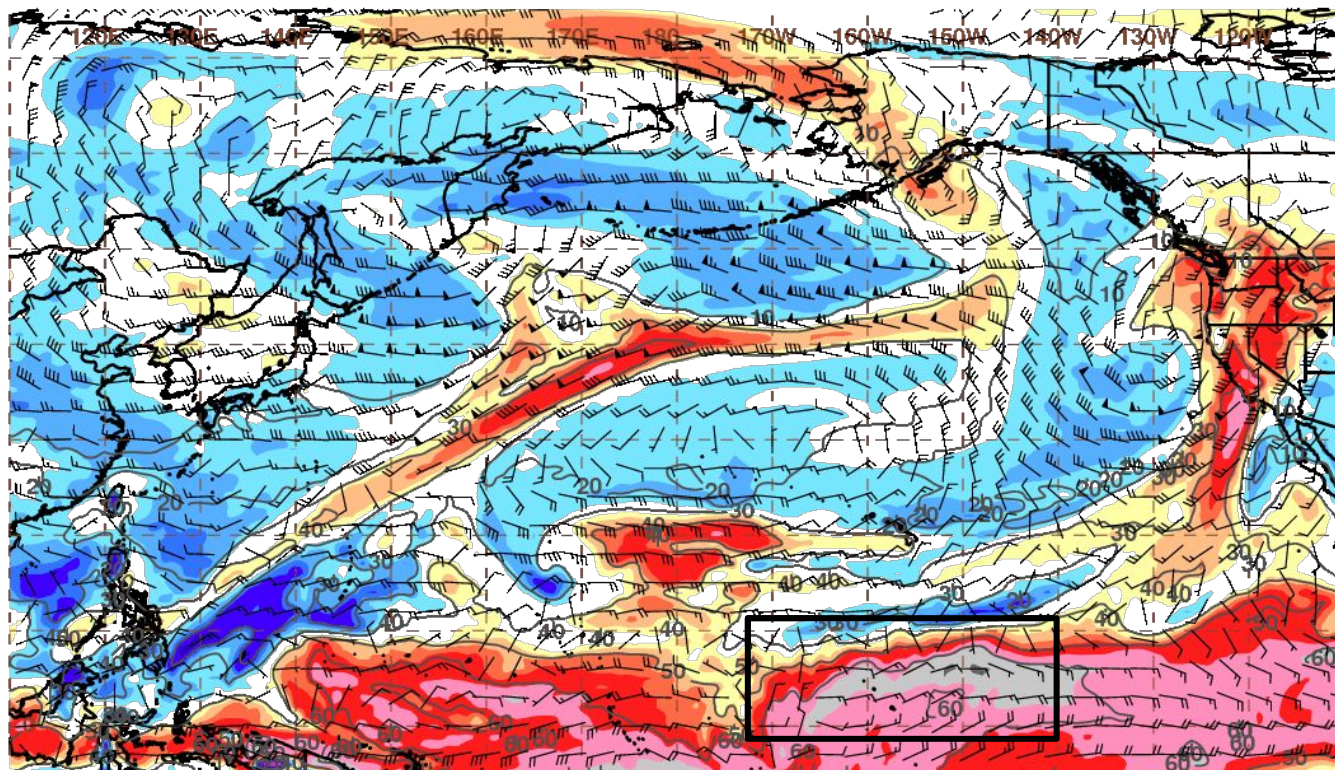
Standardized PW/700 Wind 00Z WED Feb 17



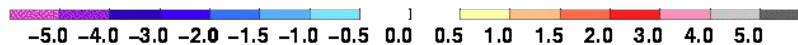
160217/0000F066 Std. Anom of PW; 700 hPa Wind



Standardized PW/700 Wind 00Z THU Feb 18

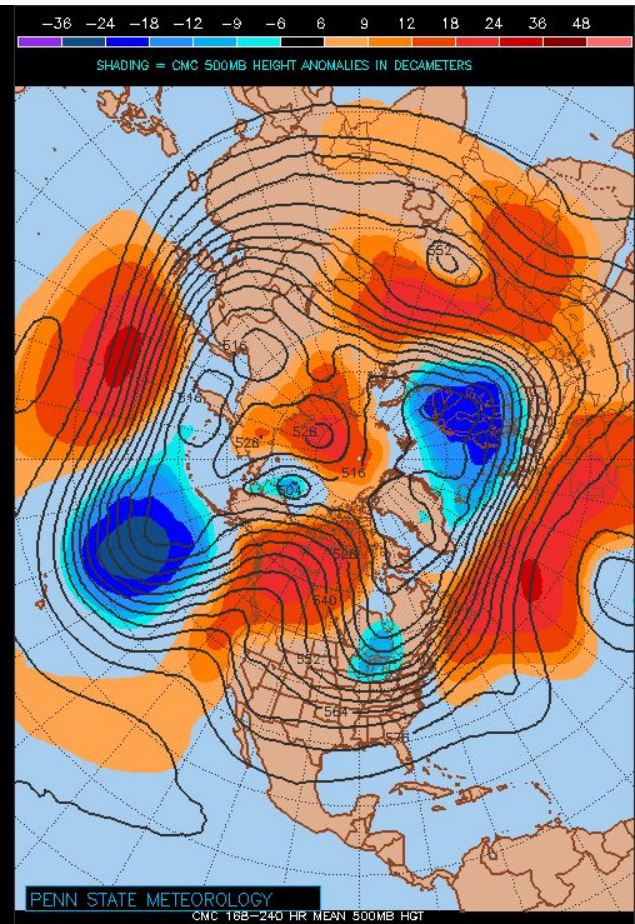
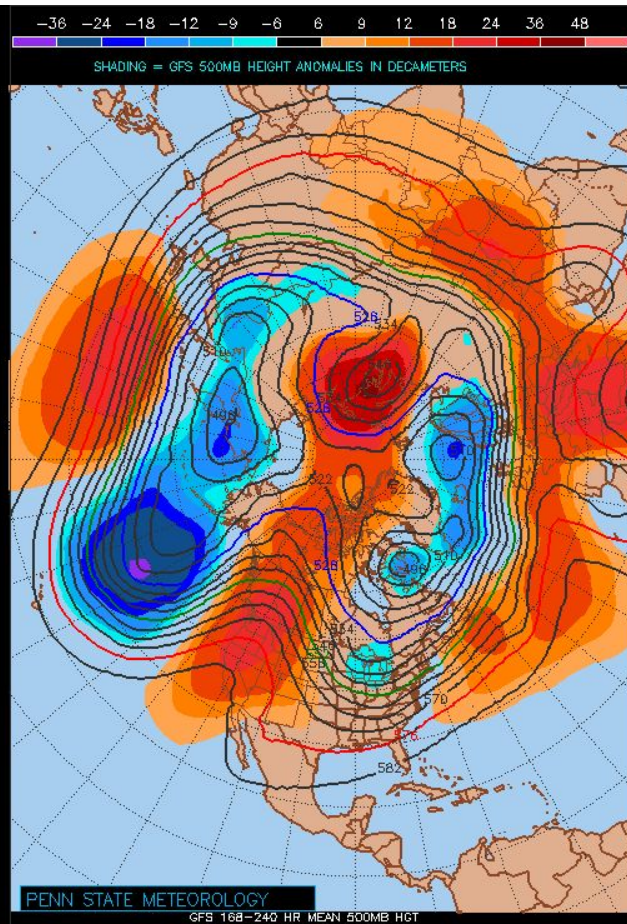
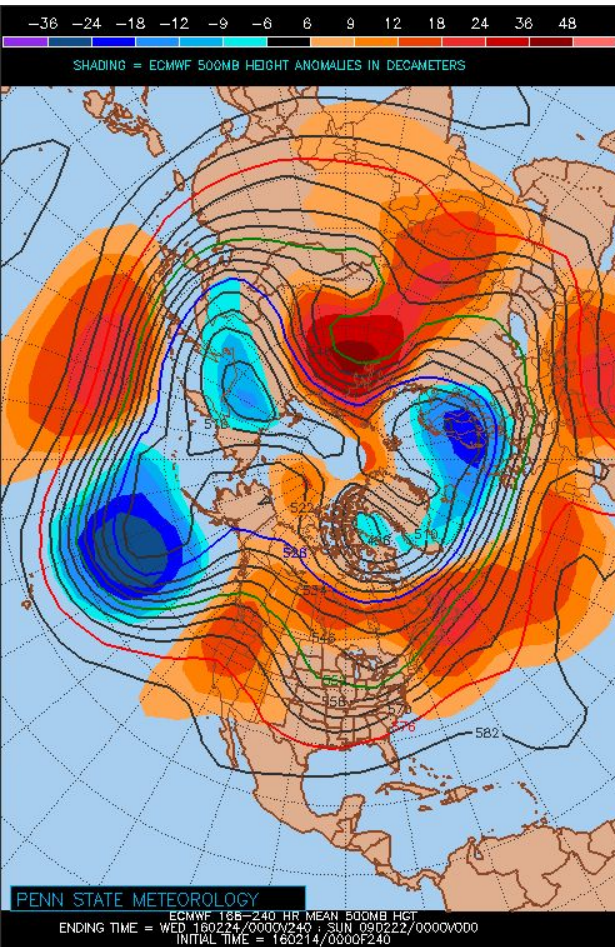


160218/0000F090 Std. Anom of PW; 700 hPa Wind



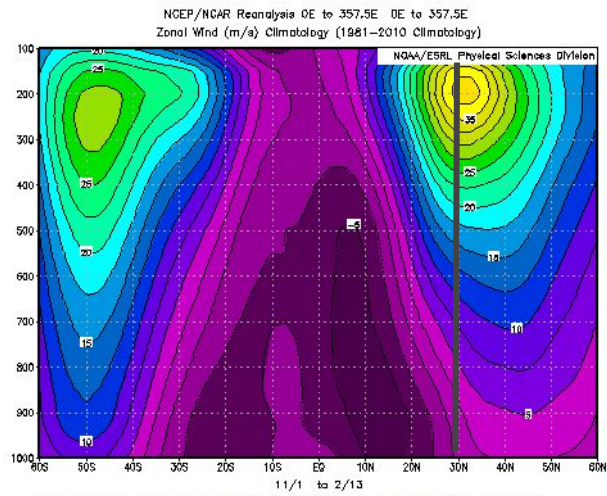
Medium - Long Range Forecast

Day 7-10 Initialized 00Z SUN 14 Feb

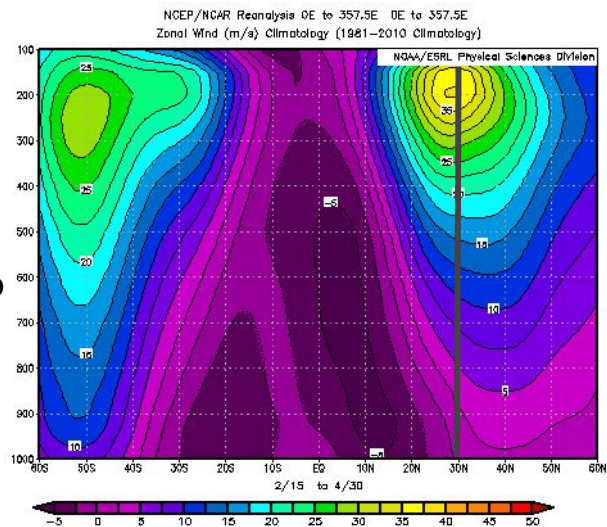


The Curious Incident of the Zonal Mean Zonal Wind in 2016

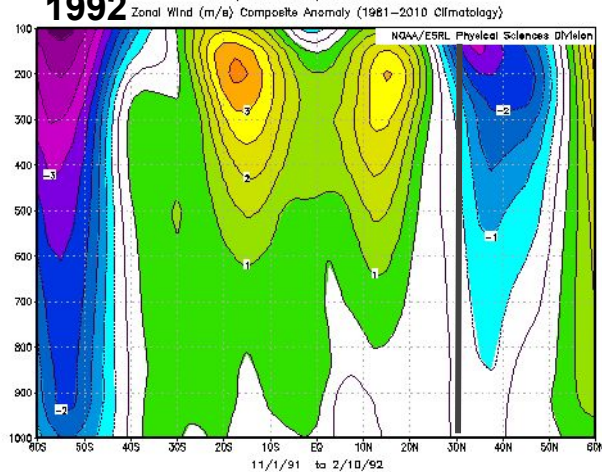
Zonal Mean U Nov 1- Feb 13 Climo



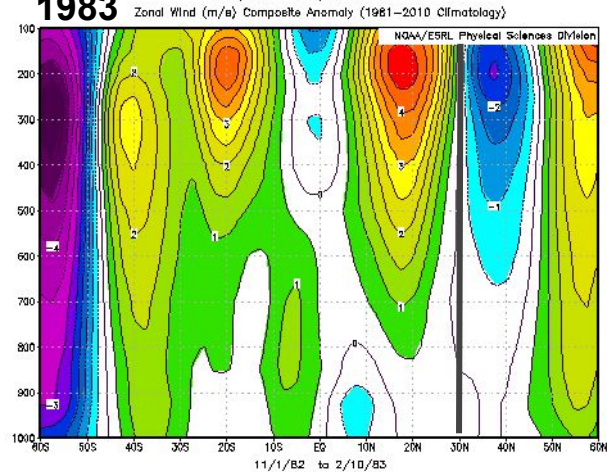
Zonal Mean U Feb 15 - Apr 30 Climo



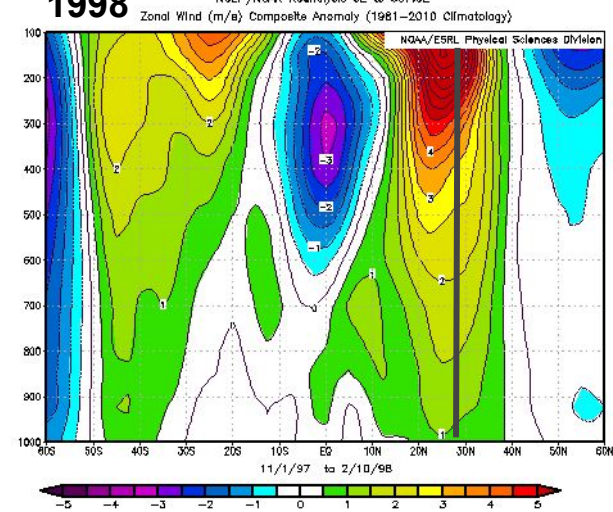
1992 NCEP/NGAR Reanalysis OE to 357.5E



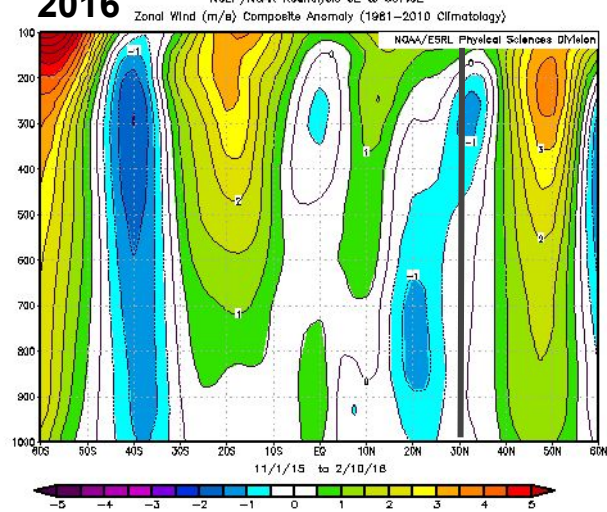
1983 NCEP/NGAR Reanalysis OE to 357.5E

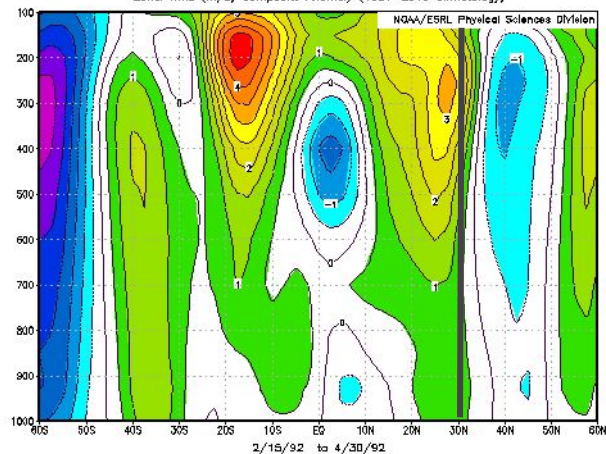
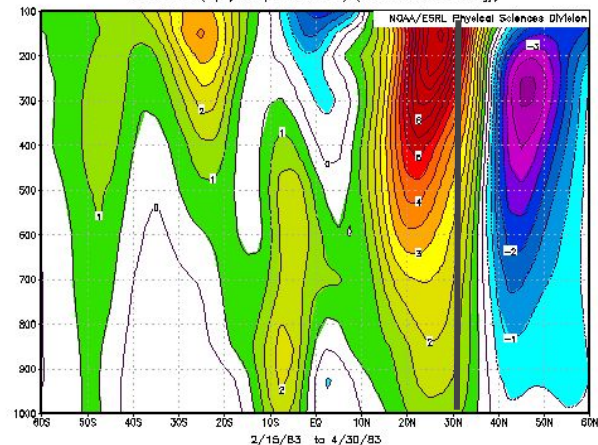
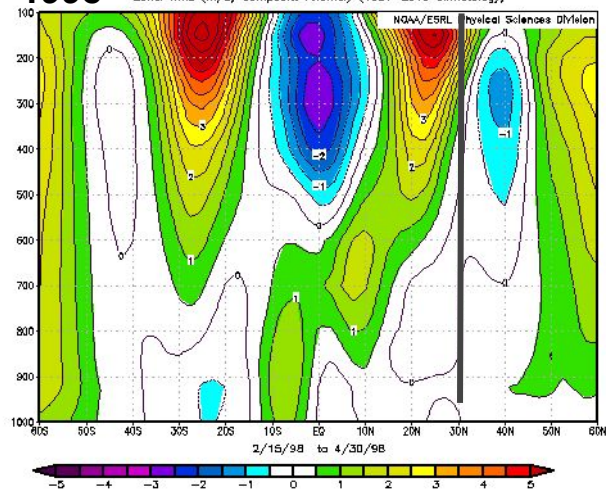


1998 NCEP/NGAR Reanalysis OE to 357.5E

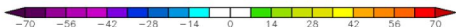
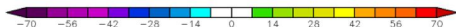
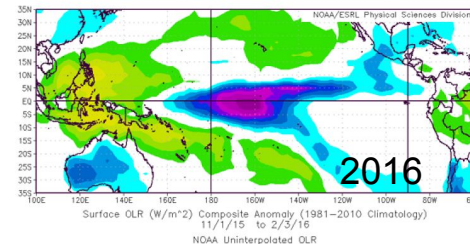
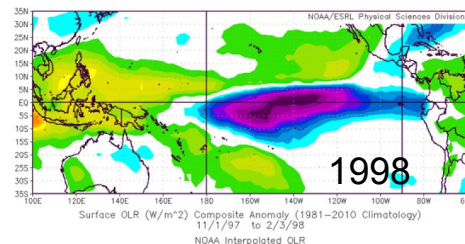
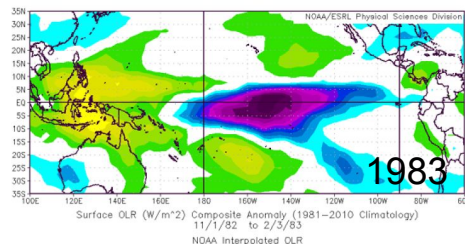
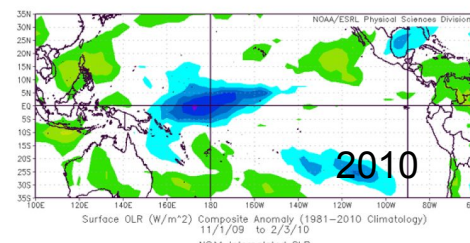
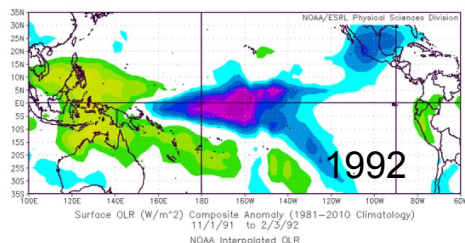
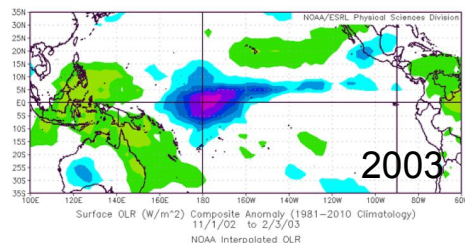
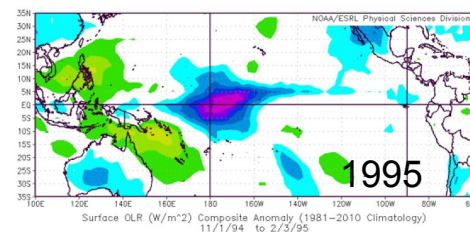
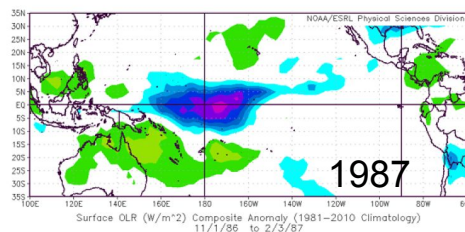
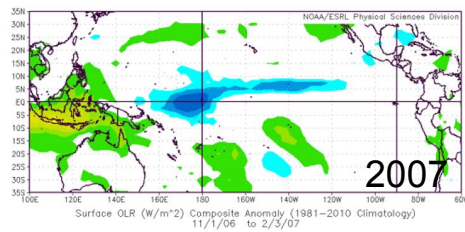


2016 NCEP/NGAR Reanalysis OE to 357.5E

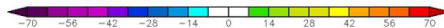
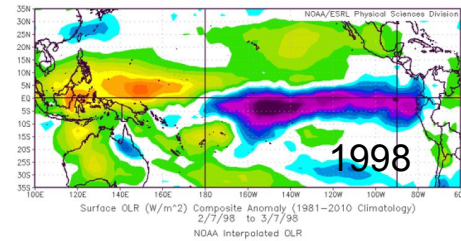
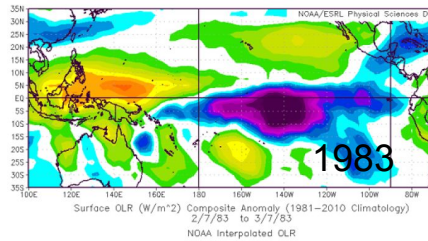
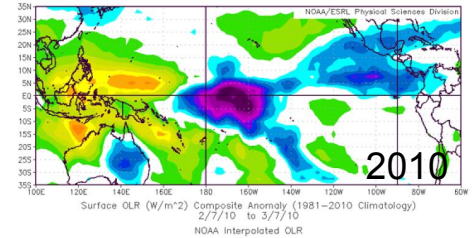
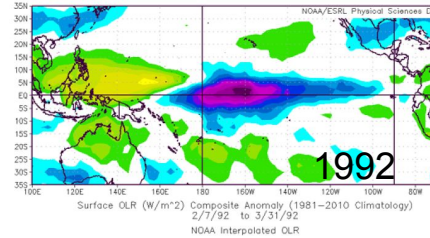
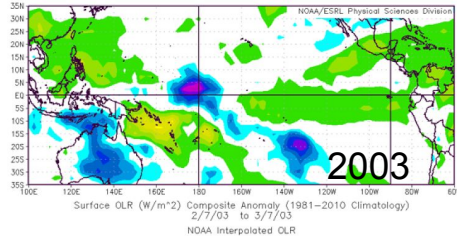
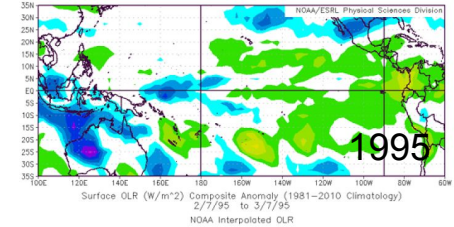
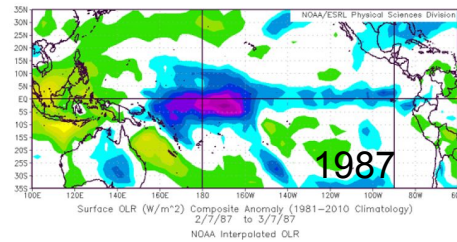
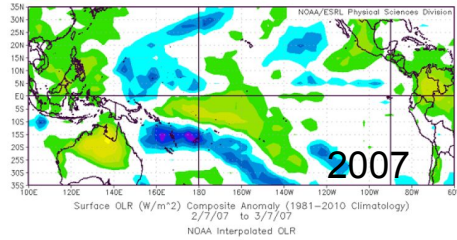


1992NGEP/NGAR Reanalysis 0E to 357.5E
Zonal Wind (m/s) Composite Anomaly (1981–2010 Climatology)**1983**NGEP/NGAR Reanalysis 0E to 357.5E
Zonal Wind (m/s) Composite Anomaly (1981–2010 Climatology)**1998**NGEP/NGAR Reanalysis 0E to 357.5E
Zonal Wind (m/s) Composite Anomaly (1981–2010 Climatology)

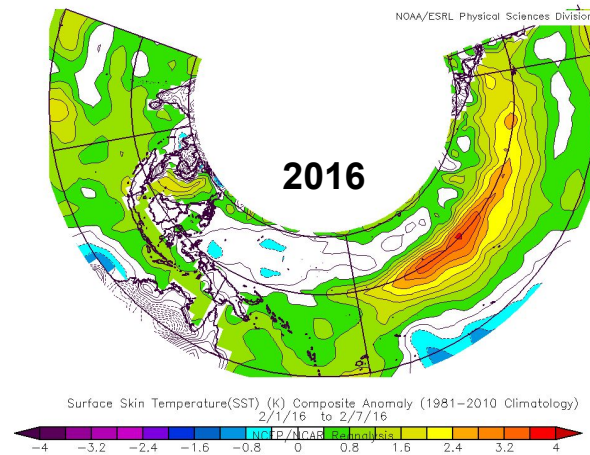
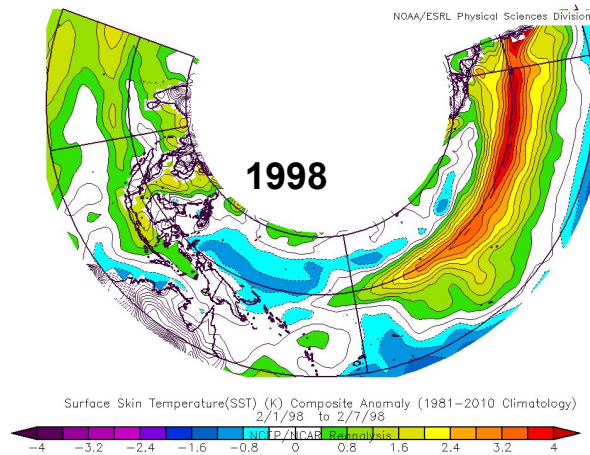
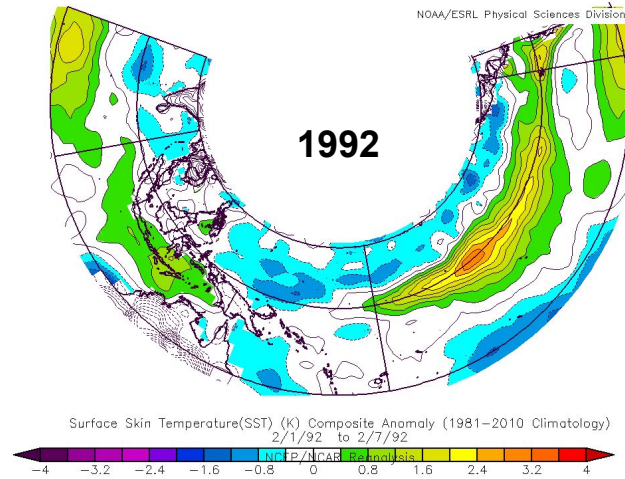
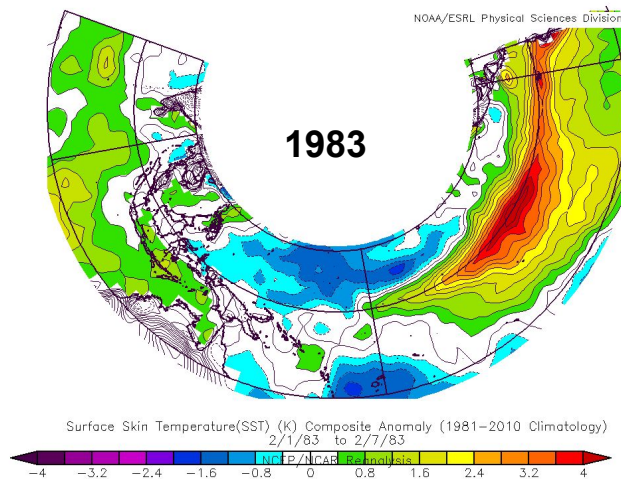
Observed OLR Anomalies : 1 Nov - 3 Feb

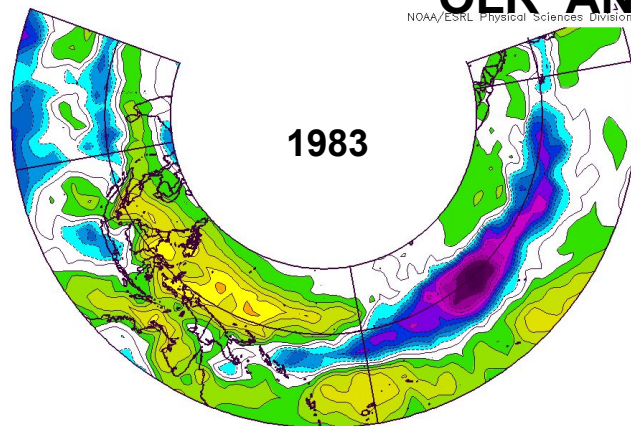


Observed OLR Anomalies : 7 Feb - 7 Mar

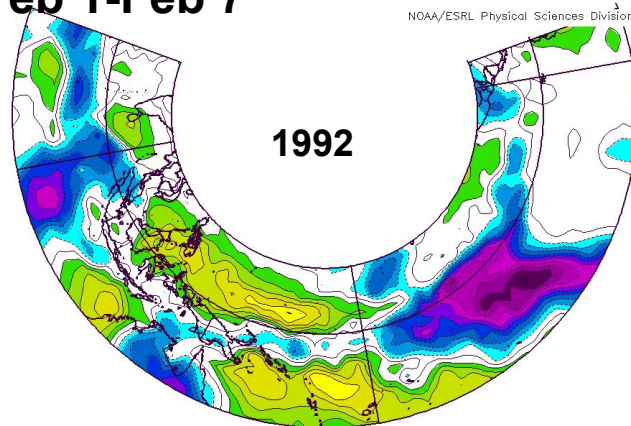
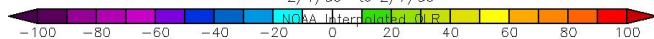


SST ANOM Feb 1-Feb 7

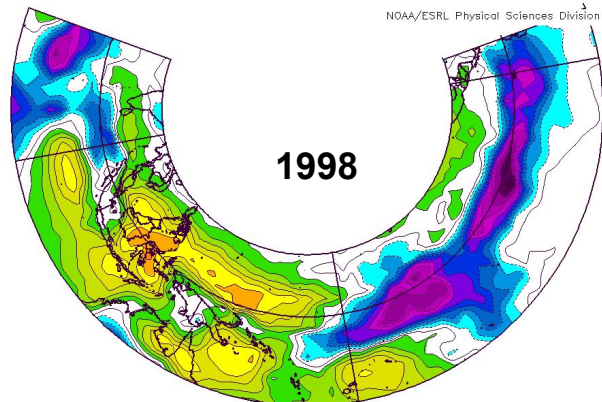
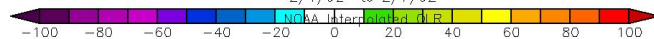




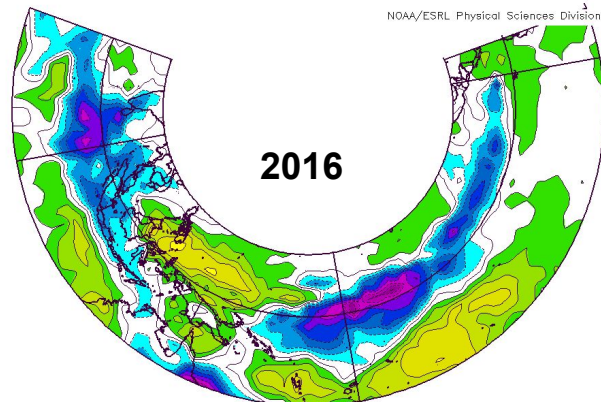
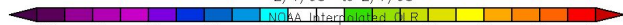
Surface OLR (W/m^2) Composite Anomaly (1981–2010 Climatology)
2/1/83 to 2/7/83



Surface OLR (W/m^2) Composite Anomaly (1981–2010 Climatology)
2/1/92 to 2/7/92



Surface OLR (W/m^2) Composite Anomaly (1981–2010 Climatology)
2/1/98 to 2/7/98



Surface OLR (W/m^2) Composite Anomaly (1981–2010 Climatology)
2/1/16 to 2/7/16

