

Summary of Key Briefing Points

1030-1130am MST Mon Feb 15, 2016

Current Conditions as of MON 12Z-15Z February 15

Tropics and Mid-latitudes

Over the Tropical Pacific:

- Convection: narrow w-e line of weak convection 165-155W, 1-3N this morning
- Complex interaction with cyclonic flow around Borg remnant---it drifted a bit west overnight
- Most intense convection and resulting jet interaction occurring west of Dateline

Tropical Outlook

- GFS EC models agree on quite convection Monday aftn
- 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
- Poleward outflow from convection expected to feed entrance region of jet affected WCOAST Tues-Thur

Midlatitude Conditions/Outlook

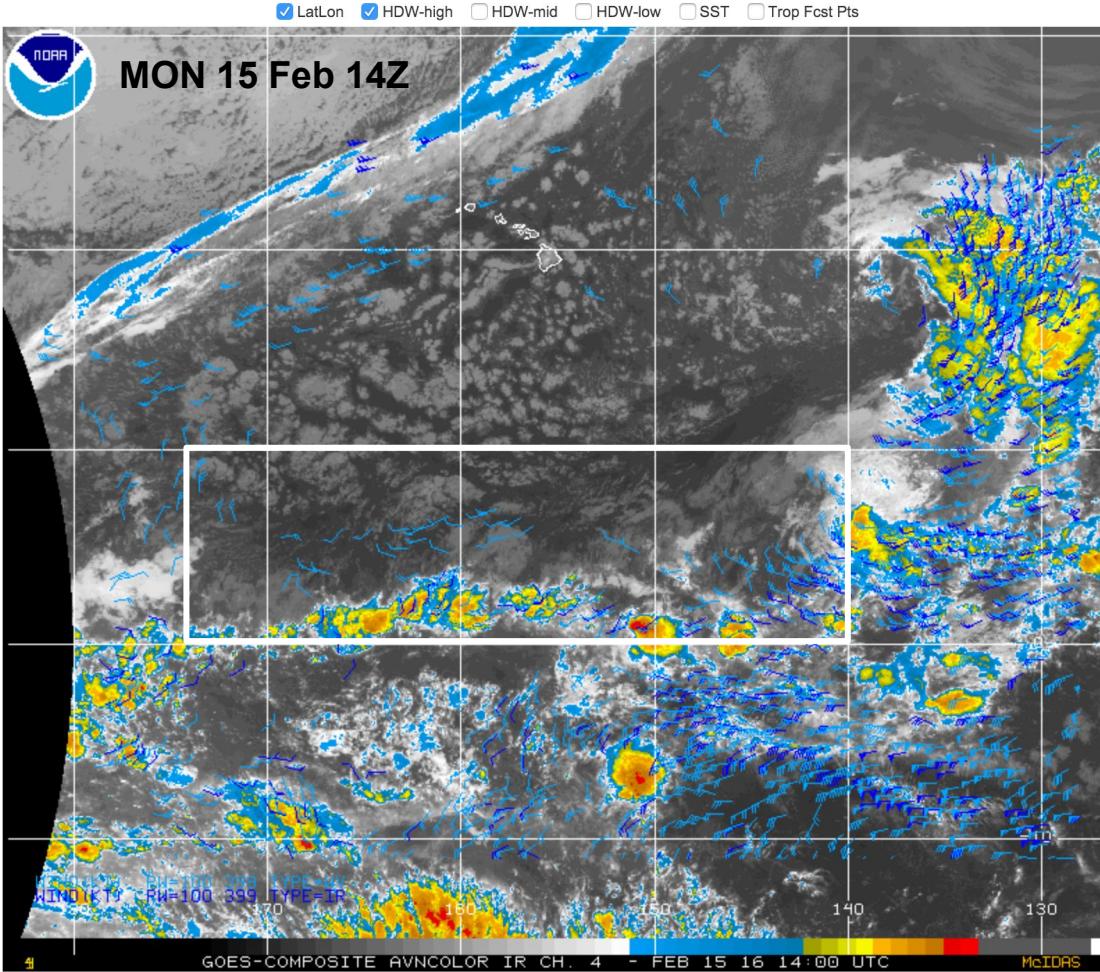
Short Term:

- CA to be mostly dry through Tuesday 16 Feb
- Several inches more rain progged for PNW (WA)

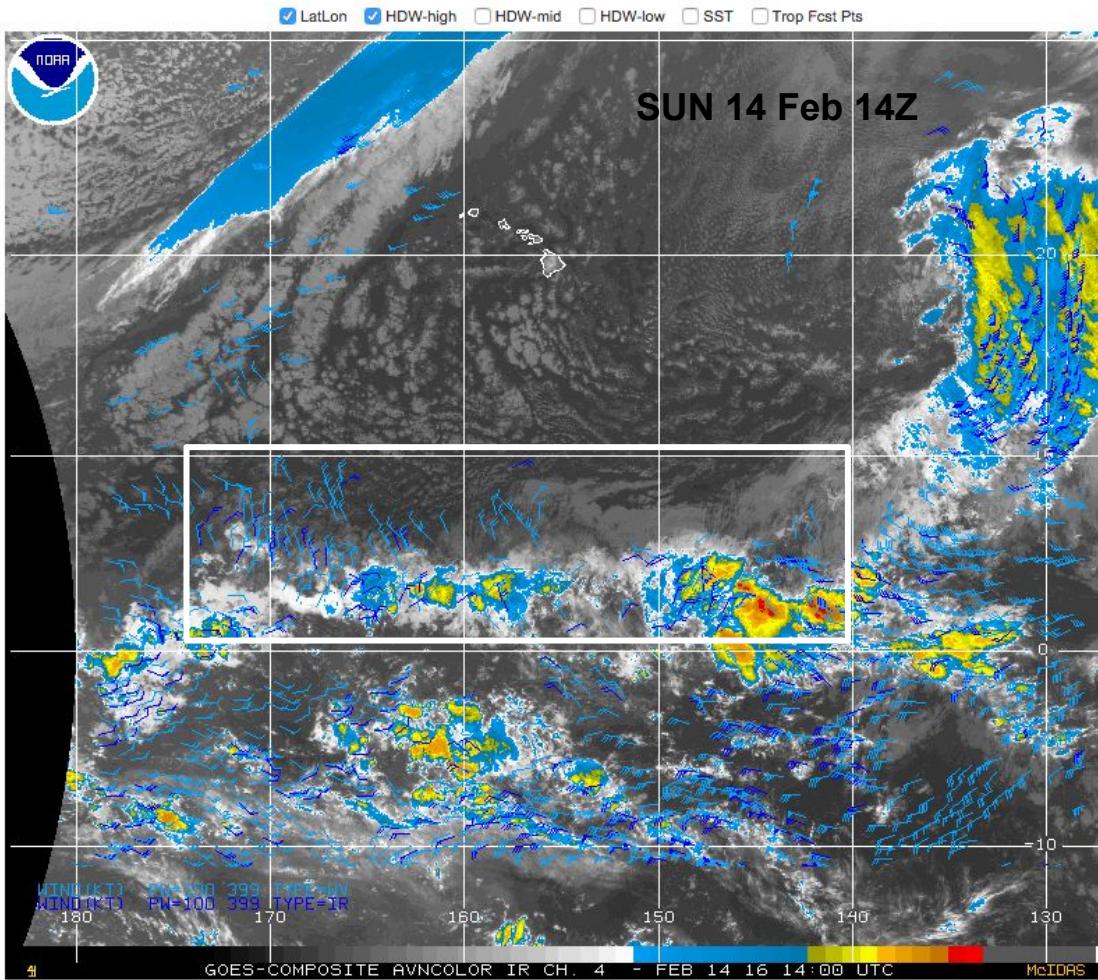
Medium - Long Term:

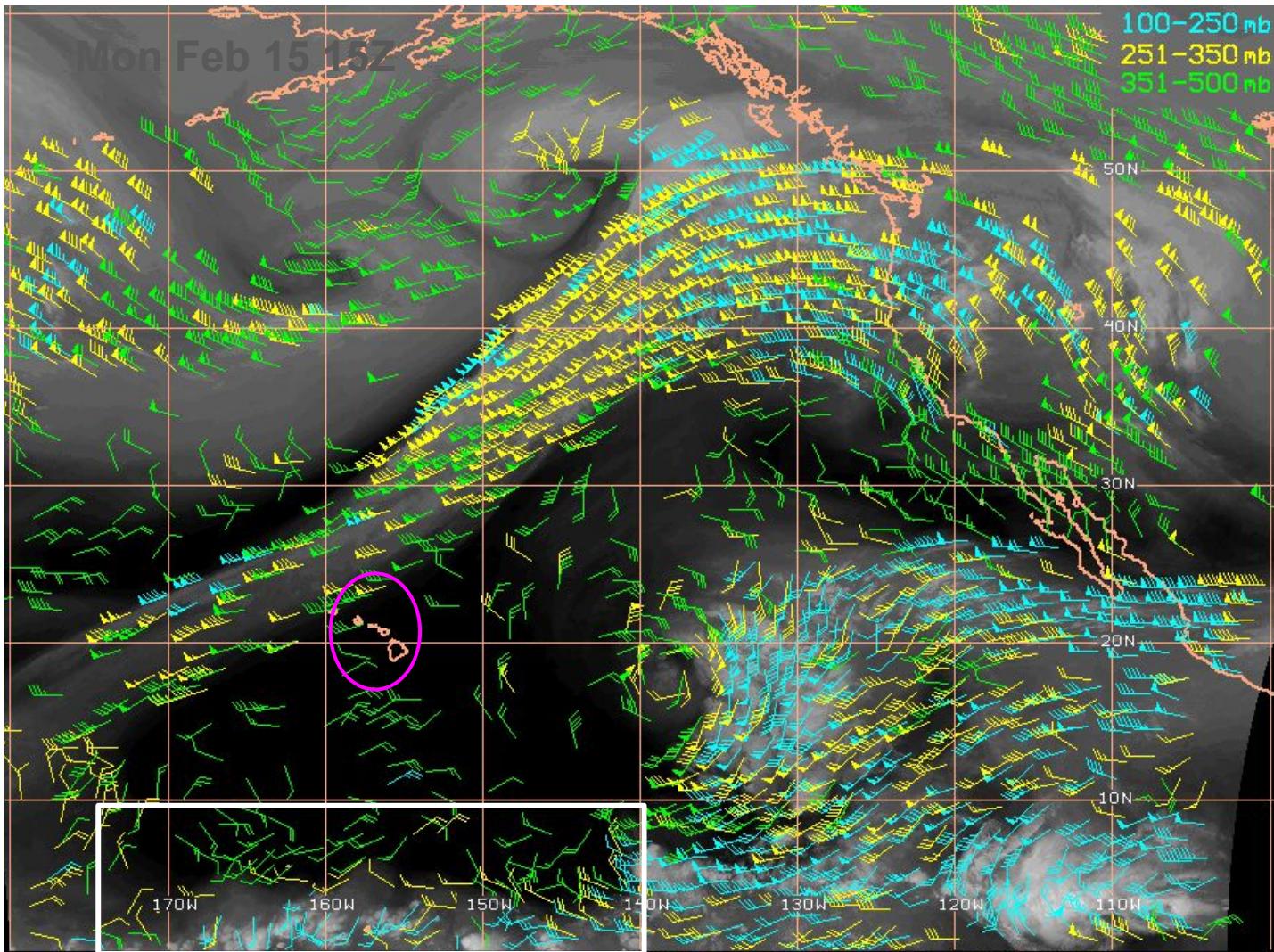
- Next event progged to move through north central CA around Thursday
 - Nothing exceptional - basically keep up with climatology-2-3" in Sierra
- Reforecasts suggest only minor rains in Southern CA for the next week -
- WCOAST ridge Fri-early mid next week
- Week 2 in EC and GFS indicate major change in the Pacific circulation
 - * Cross-equatorial mass flow from SH, as SPCZ convection intensifies
 - * Westerly jet near 30-35N, intensifies east of Hawaii
 - * Deep sfc low pressure begins to take shape in east NPacific

GOES Composite - El Niño Support – AVN Color Infrared Loop

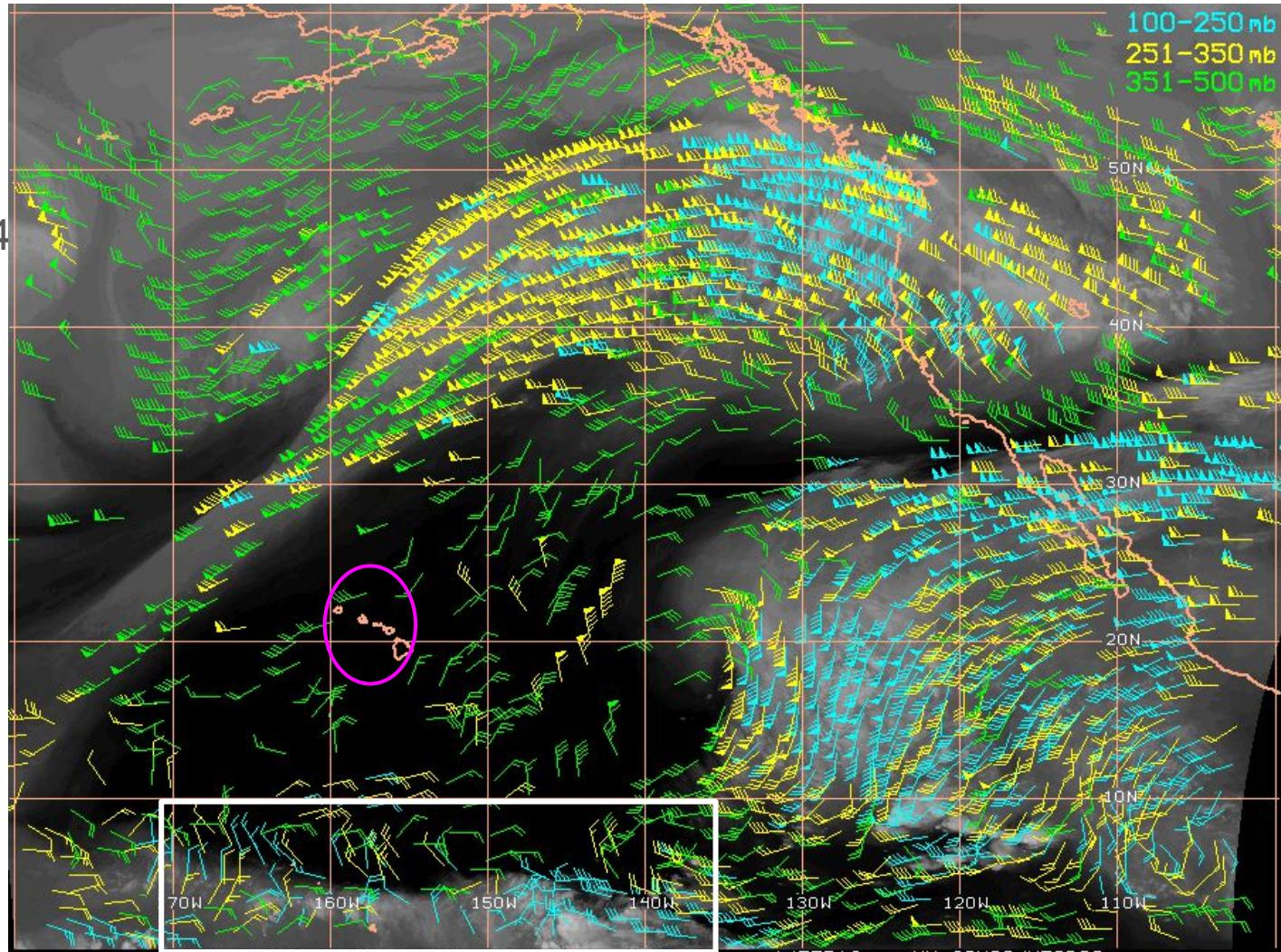


GOES Composite - El Niño Support – AVN Color Infrared Loop





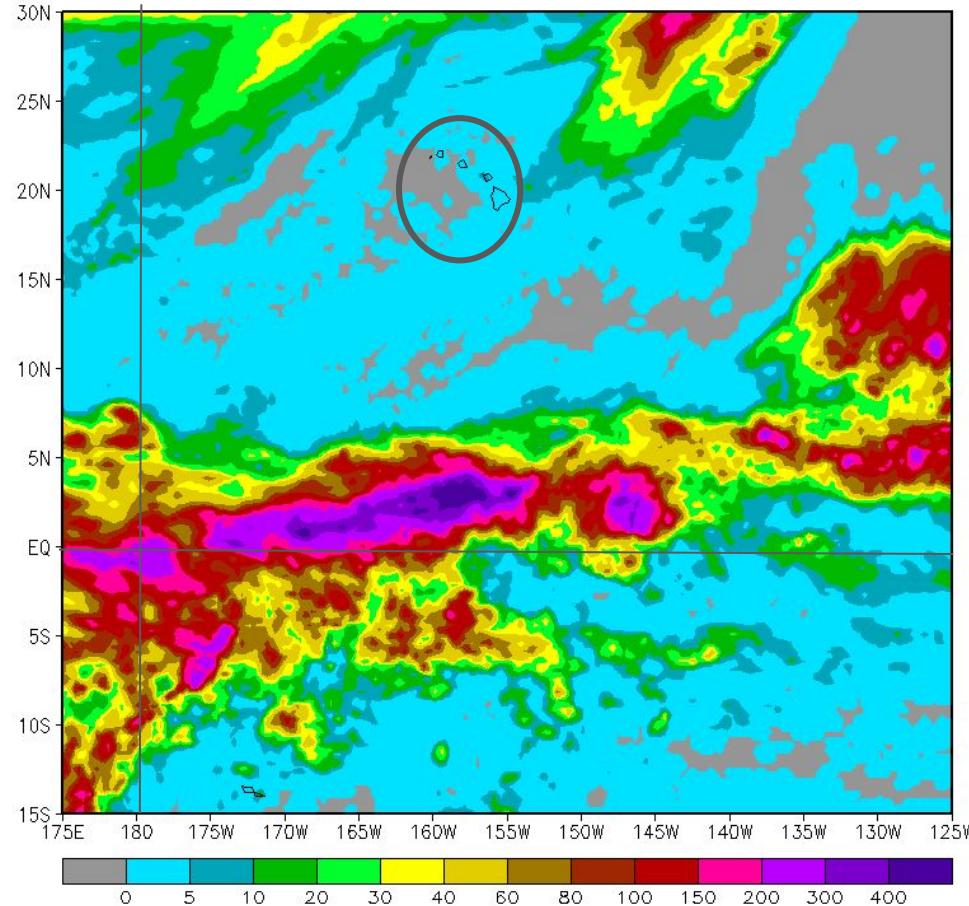
Sun Feb 14
12Z



CMORPH 7-day Rainfall Accumulation (mm)

(07Feb2016 12Z – 14Feb2016 12Z)

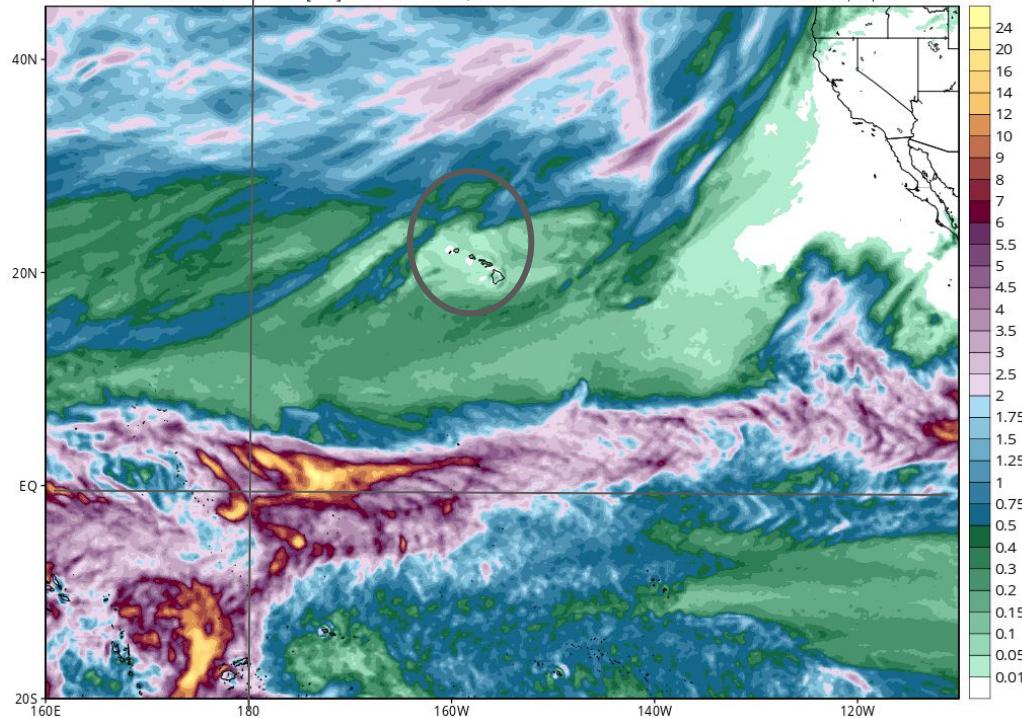
CMORPH: 7-Day
7 - 14 Feb



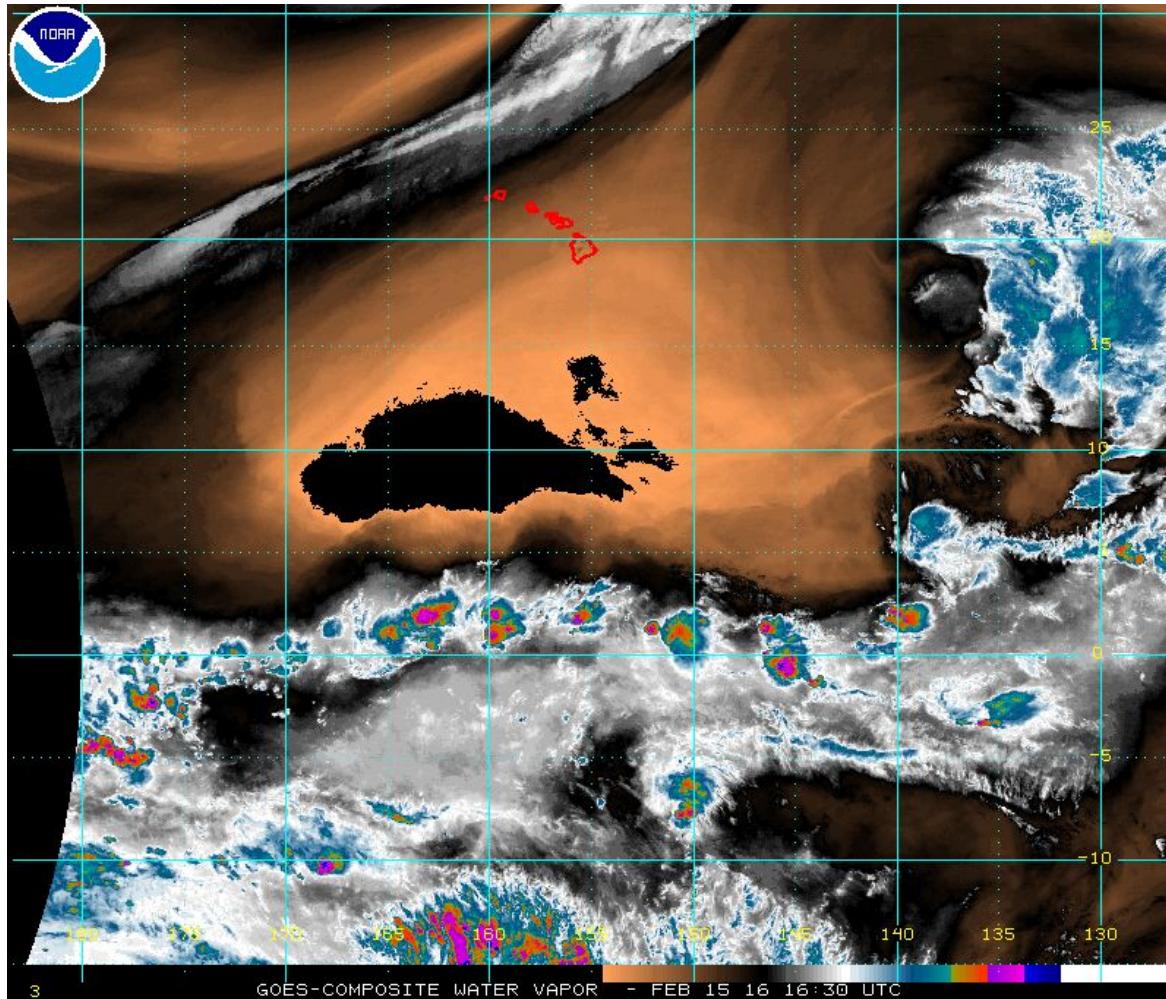
GFS Total Accumulated Precipitation (inches) from 06z08Feb2016 to 00z15Feb2016

Init: 06z Feb 08 2016 Forecast Hour: [162] valid at 00z Mon, Feb 15 2016

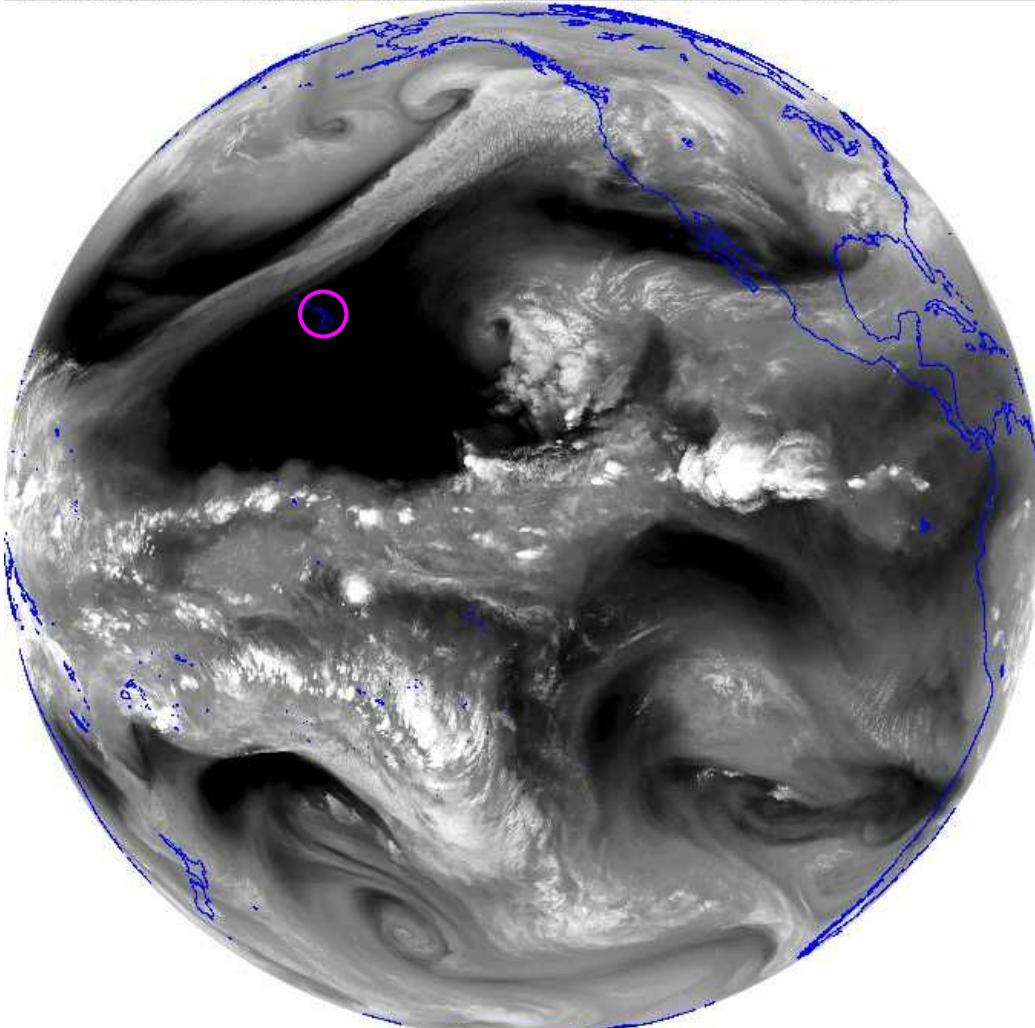
Levi Cowan | tropicaltidbits.com



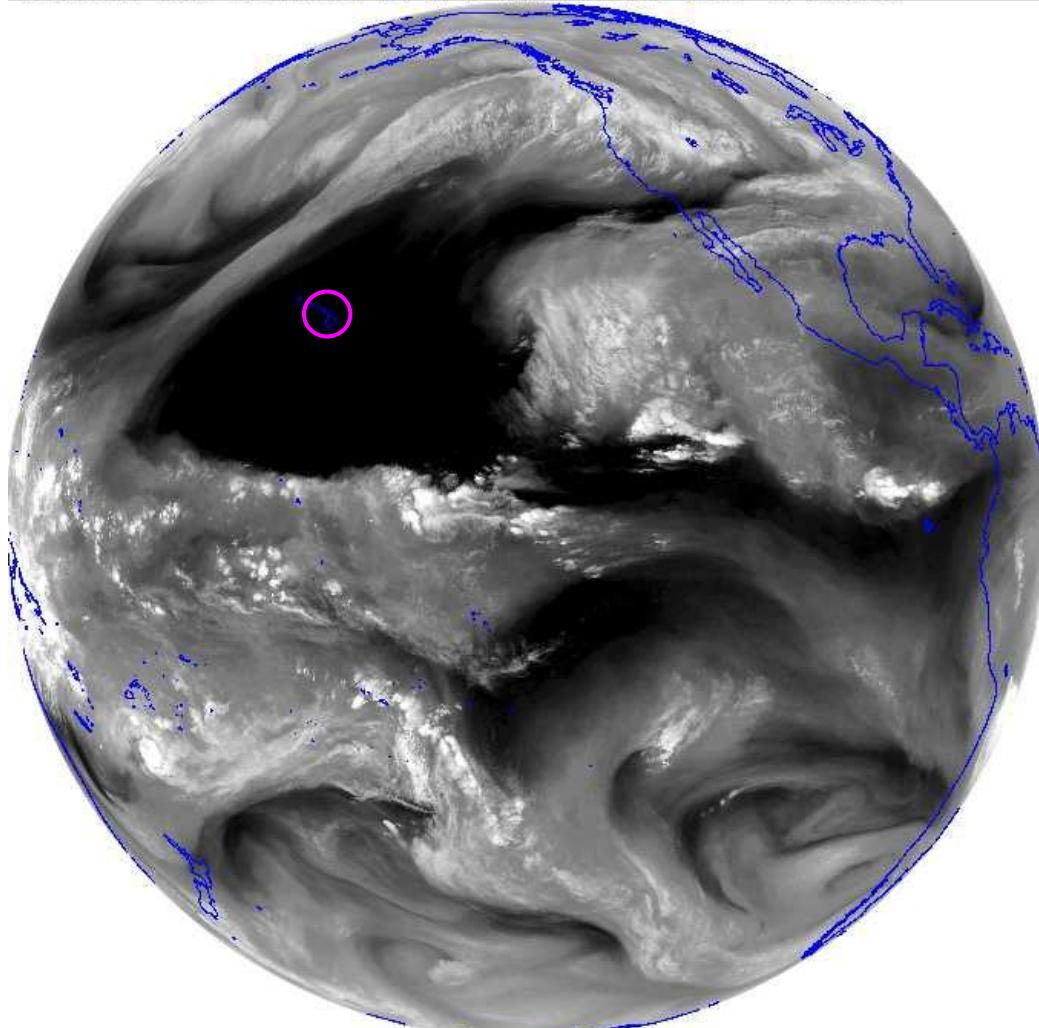
MON 16Z February 15 Water Vapor



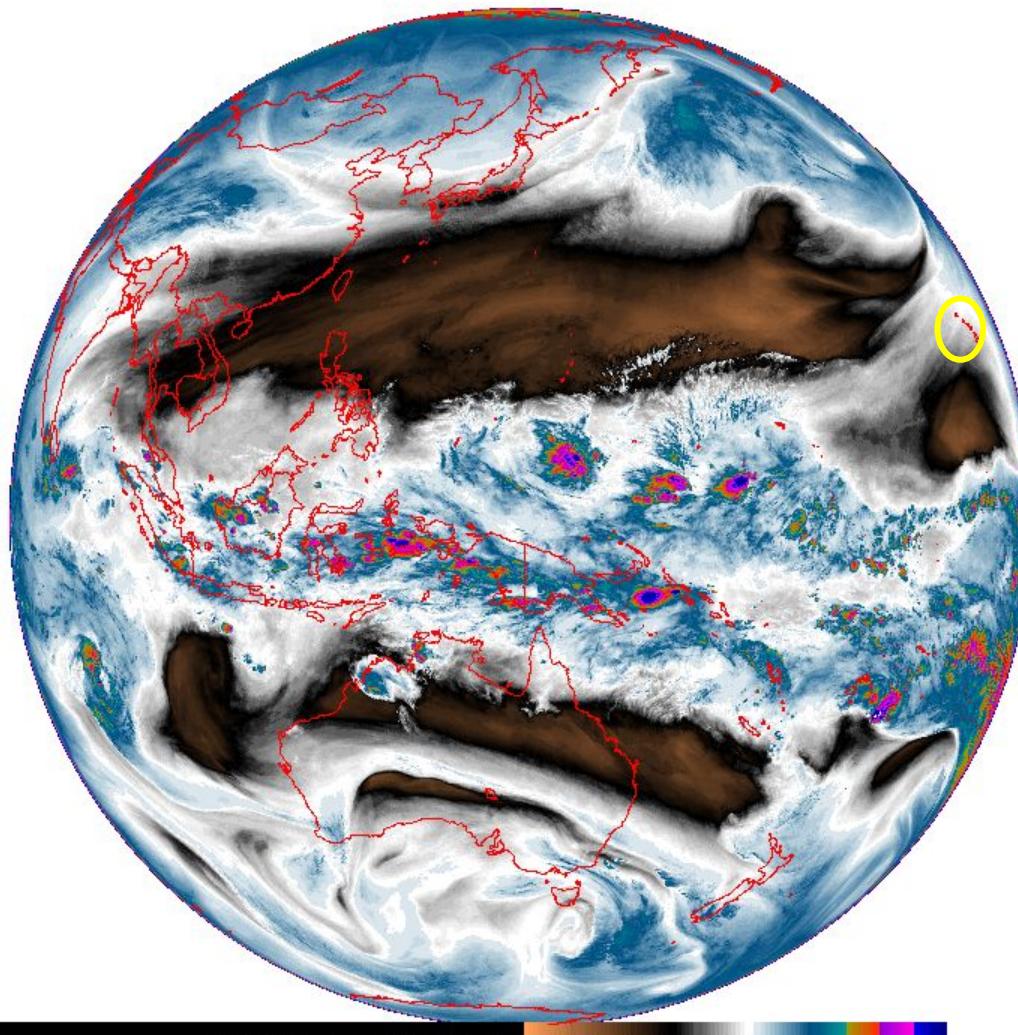
Water Vapor
12Z MON



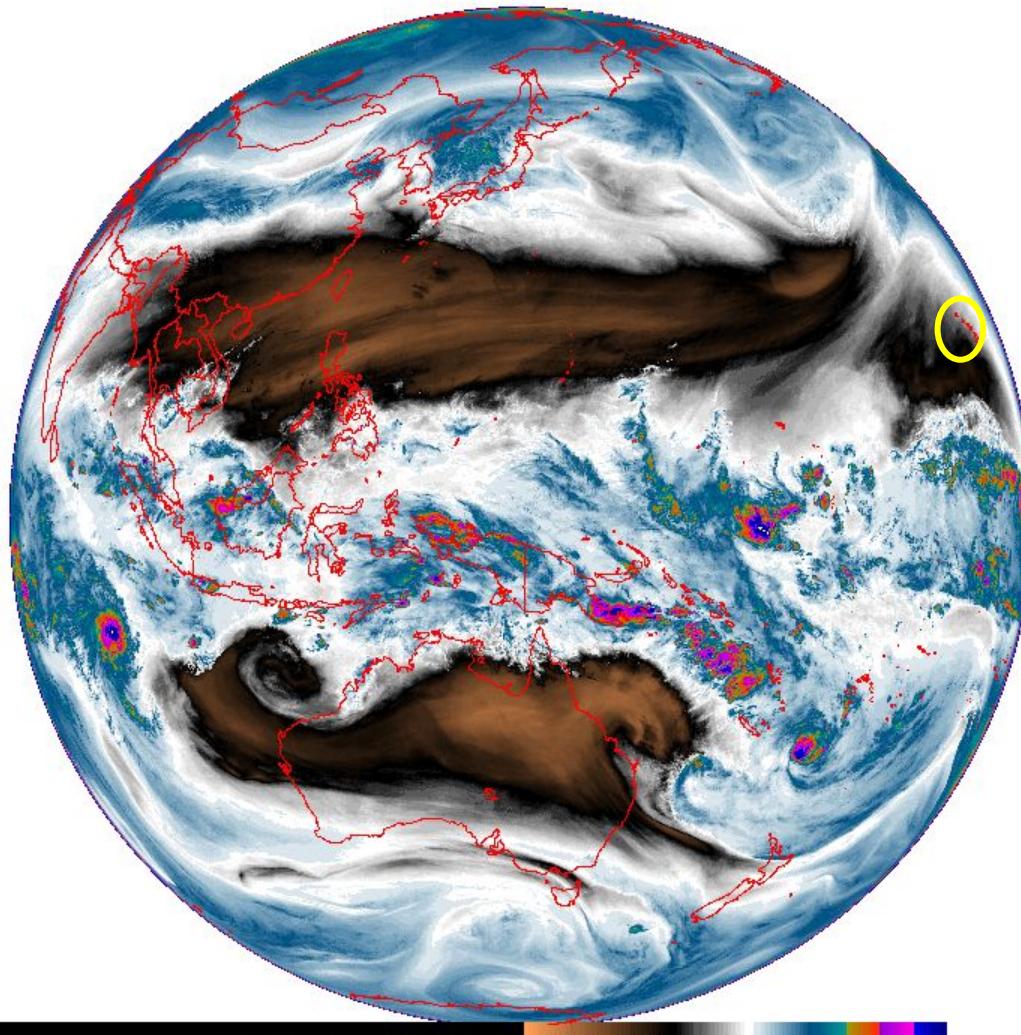
Water Vapor
12Z SUN



MON 1330Z



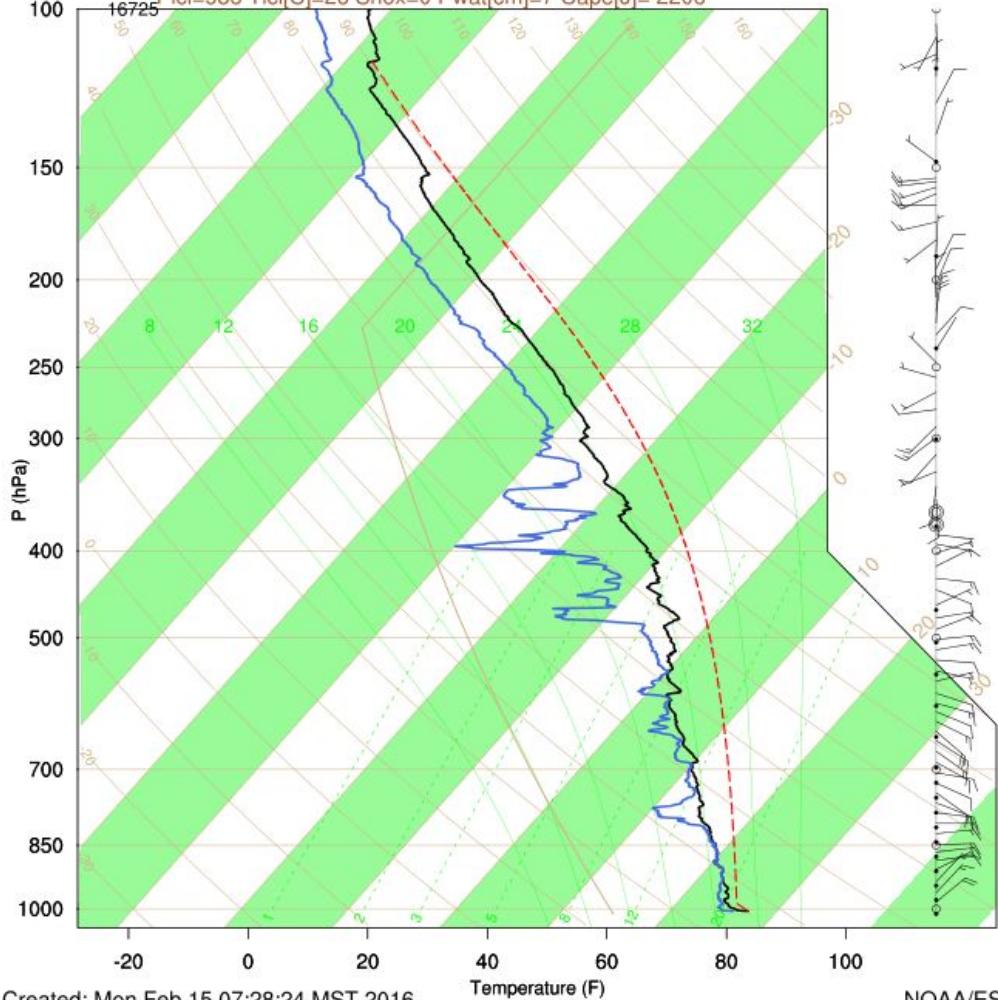
Sat 14Z



Kiritimati Is: 02/15/2016 1121Z 2.01N 157.40W

Pcl=986 Tl[C]=26 Shox=0 Pwat[cm]=7 Cape[J]= 2206

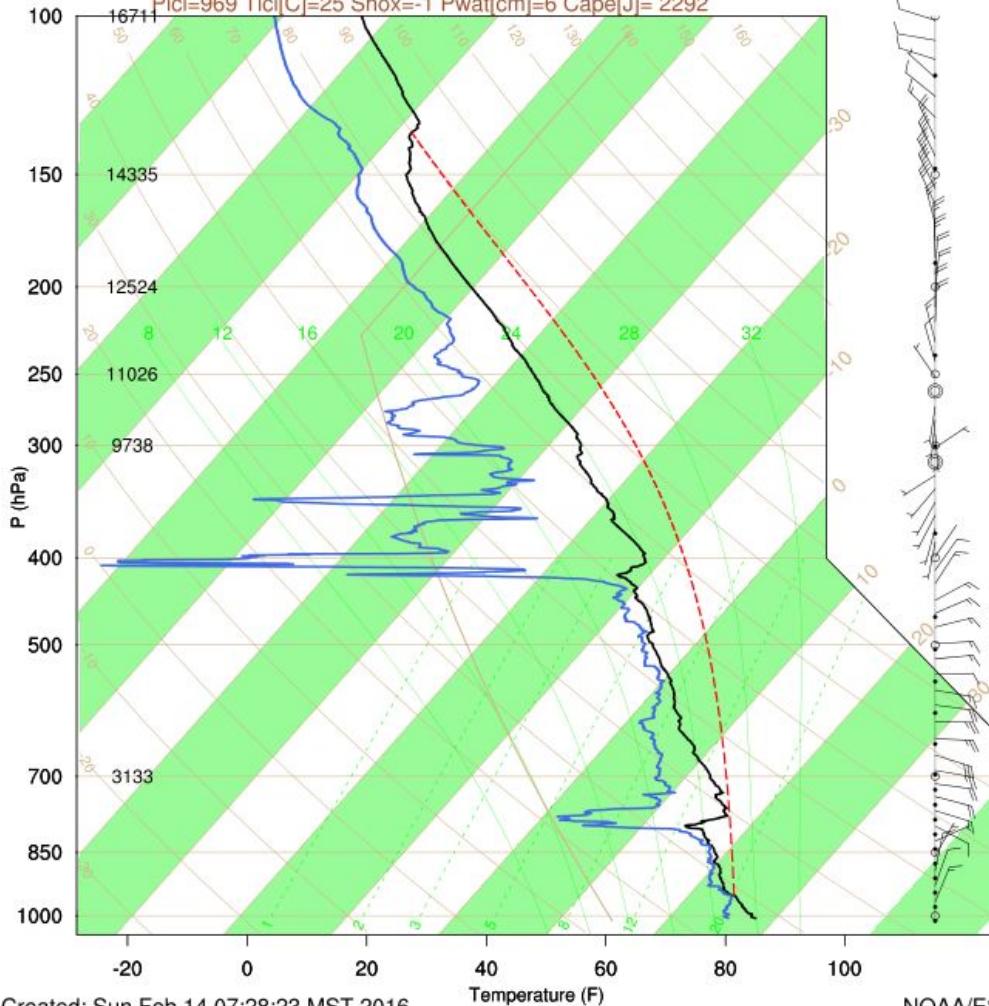
Kiritimati Sonde 1121Z MON



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

Pcl=969 Tlc[C]=25 Shox=-1 Pwat[cm]=6 Cape[J]= 2292

Kiritimati Sonde 12Z SUN

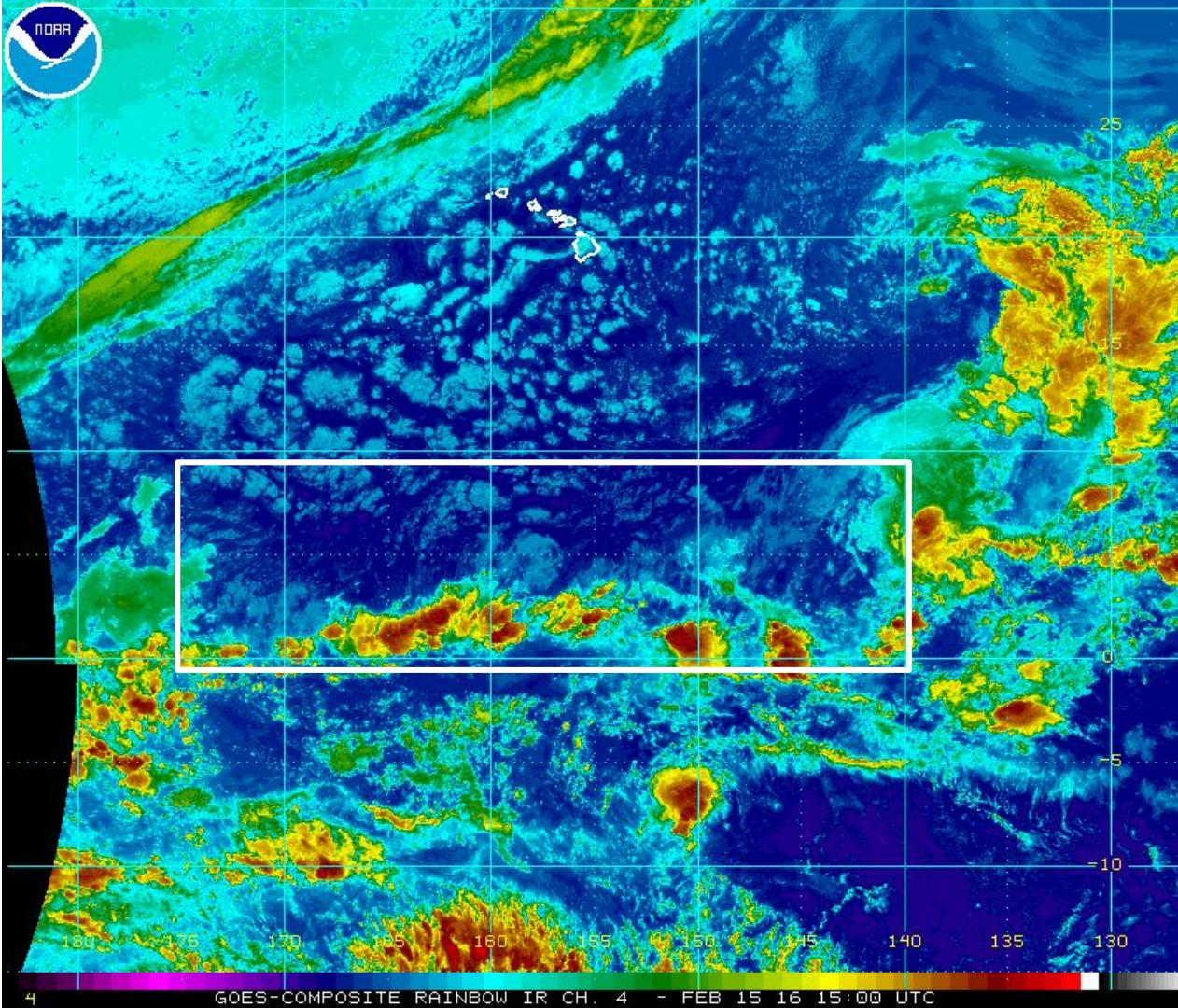


Created: Sun Feb 14 07:28:23 MST 2016

NOAA/ESRL PSD



15Z MON



4

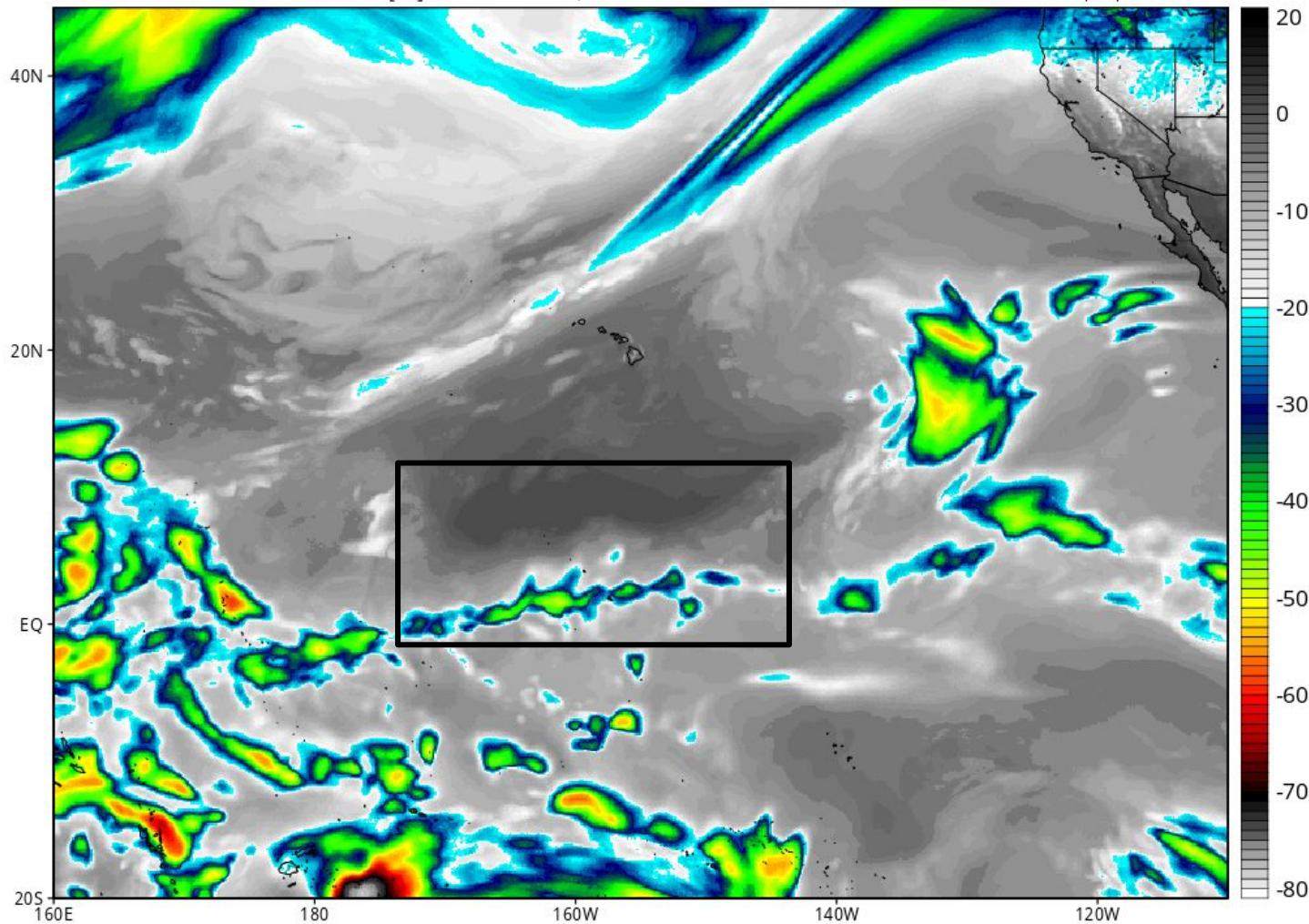
GOES-COMPOSITE RAINBOW IR CH. 4 - FEB 15 16 15:00 UTC

GFS Simulated IR Brightness Temperature (°C)

Init: 12z Feb 15 2016 Forecast Hour: [12] valid at 00z Tue, Feb 16 2016

Latest GFS Valid 00Z TUE

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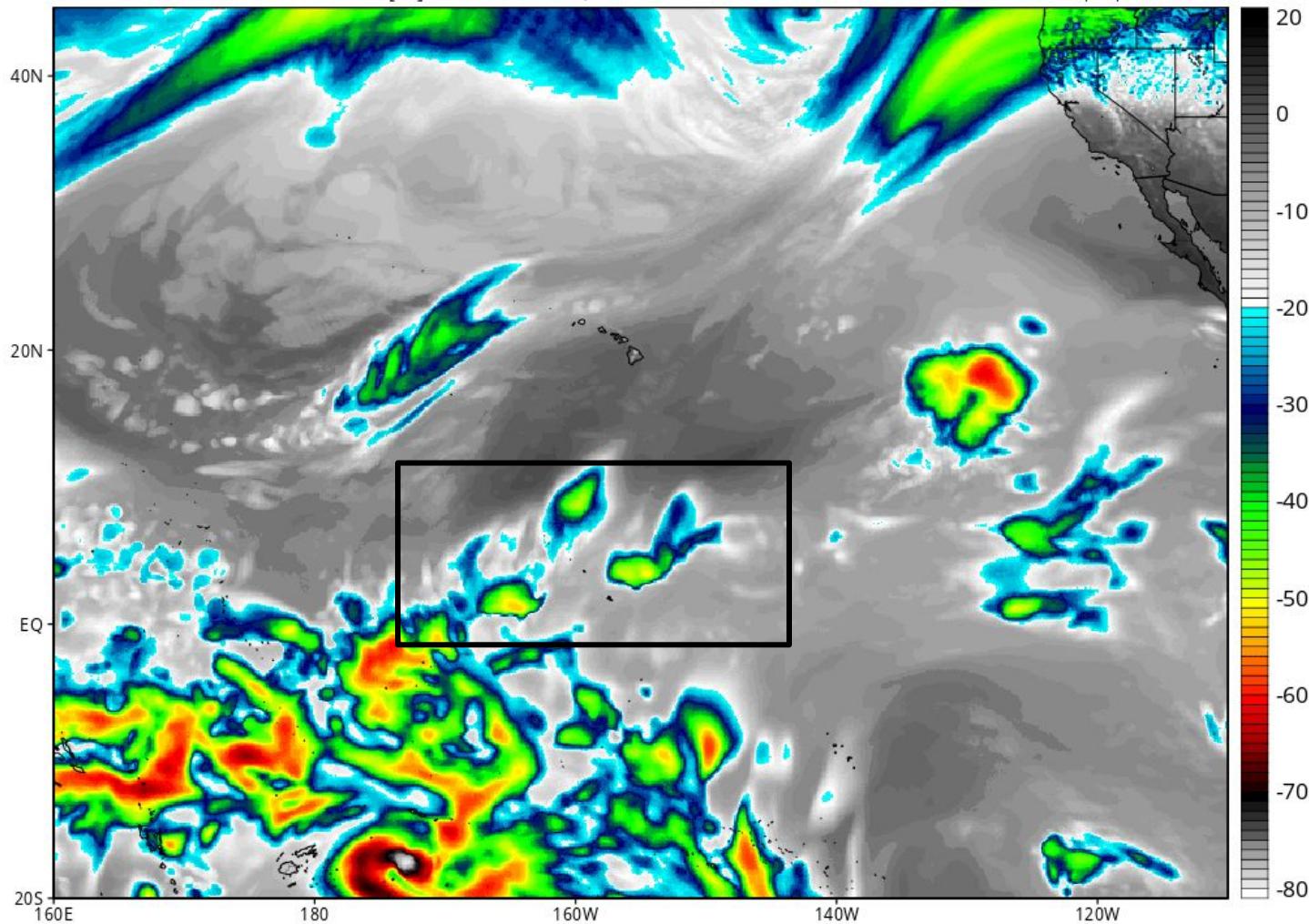


GFS Simulated IR Brightness Temperature (°C)

Init: 12z Feb 15 2016 Forecast Hour: [36] valid at 00z Wed, Feb 17 2016

Latest GFS Valid 00Z WED

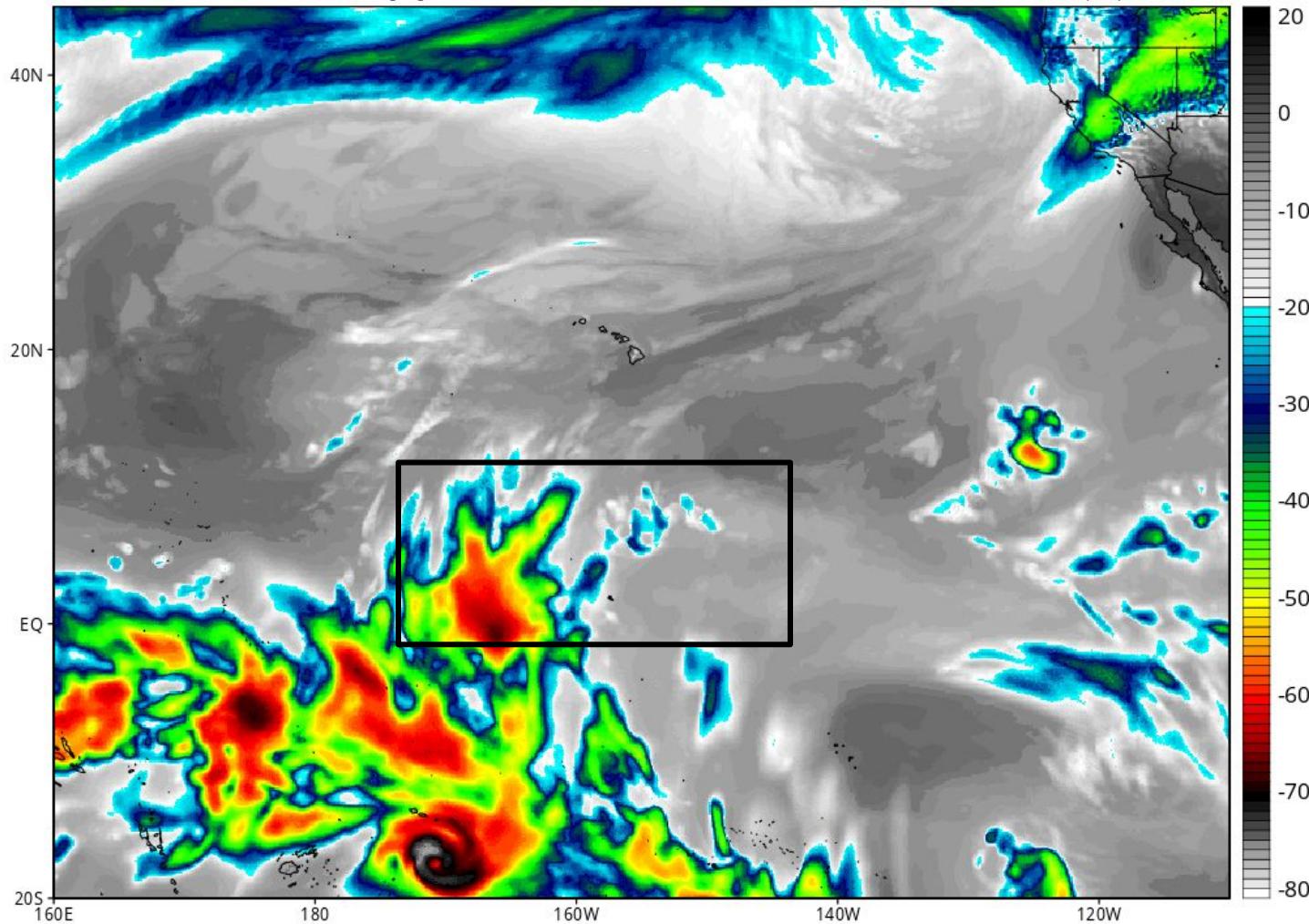
Levi Cowan | tropicaltidbits.com



GFS Simulated IR Brightness Temperature (°C)

Init: 12z Feb 15 2016 Forecast Hour: [60] valid at 00z Thu, Feb 18 2016

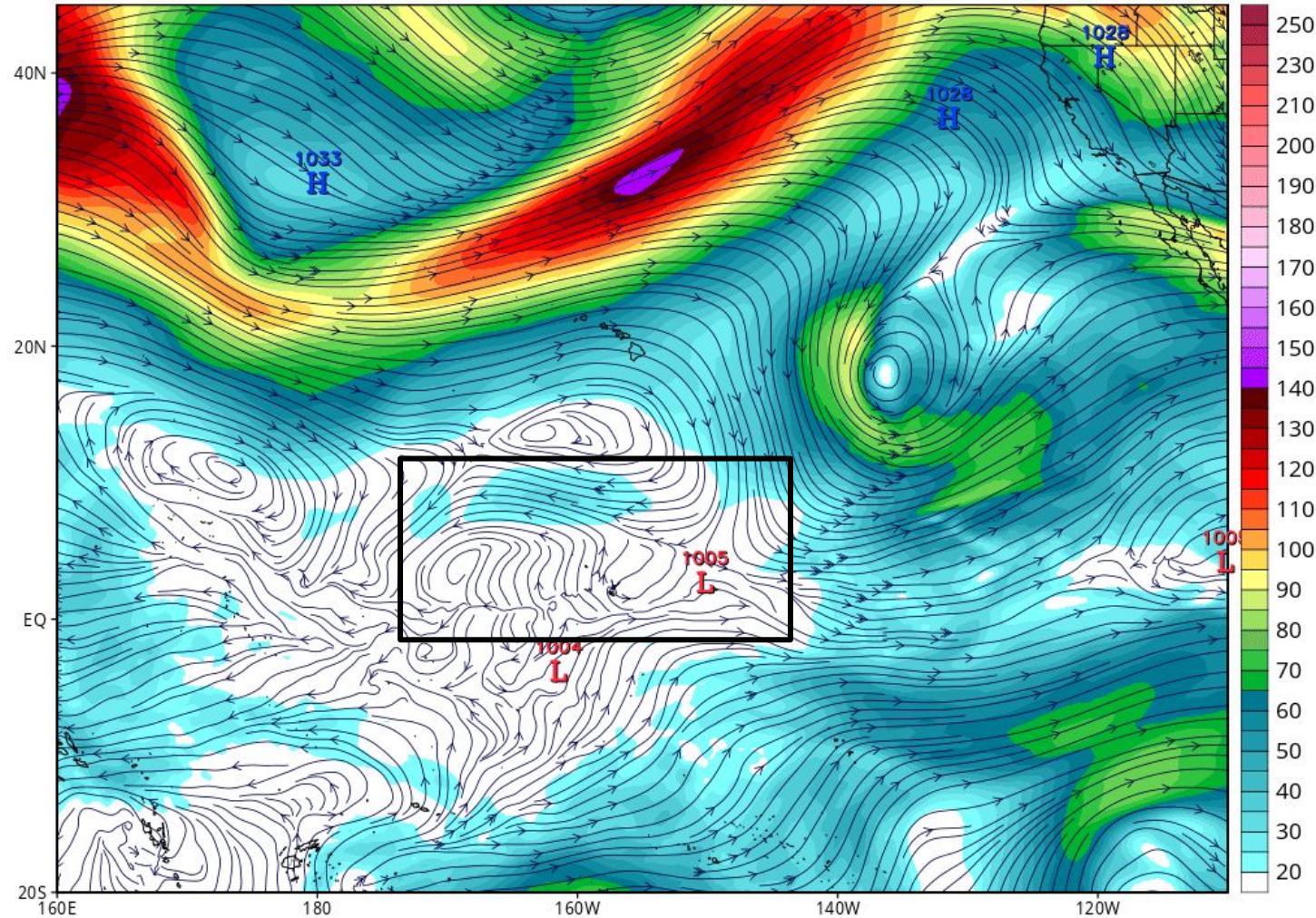
Latest GFS Valid 00Z THU



GFS 200mb Wind Speed/Streamlines (kt) & MSLP Extrema (mb)

Init: 12z Feb 15 2016 Forecast Hour: [0] valid at 12z Mon, Feb 15 2016

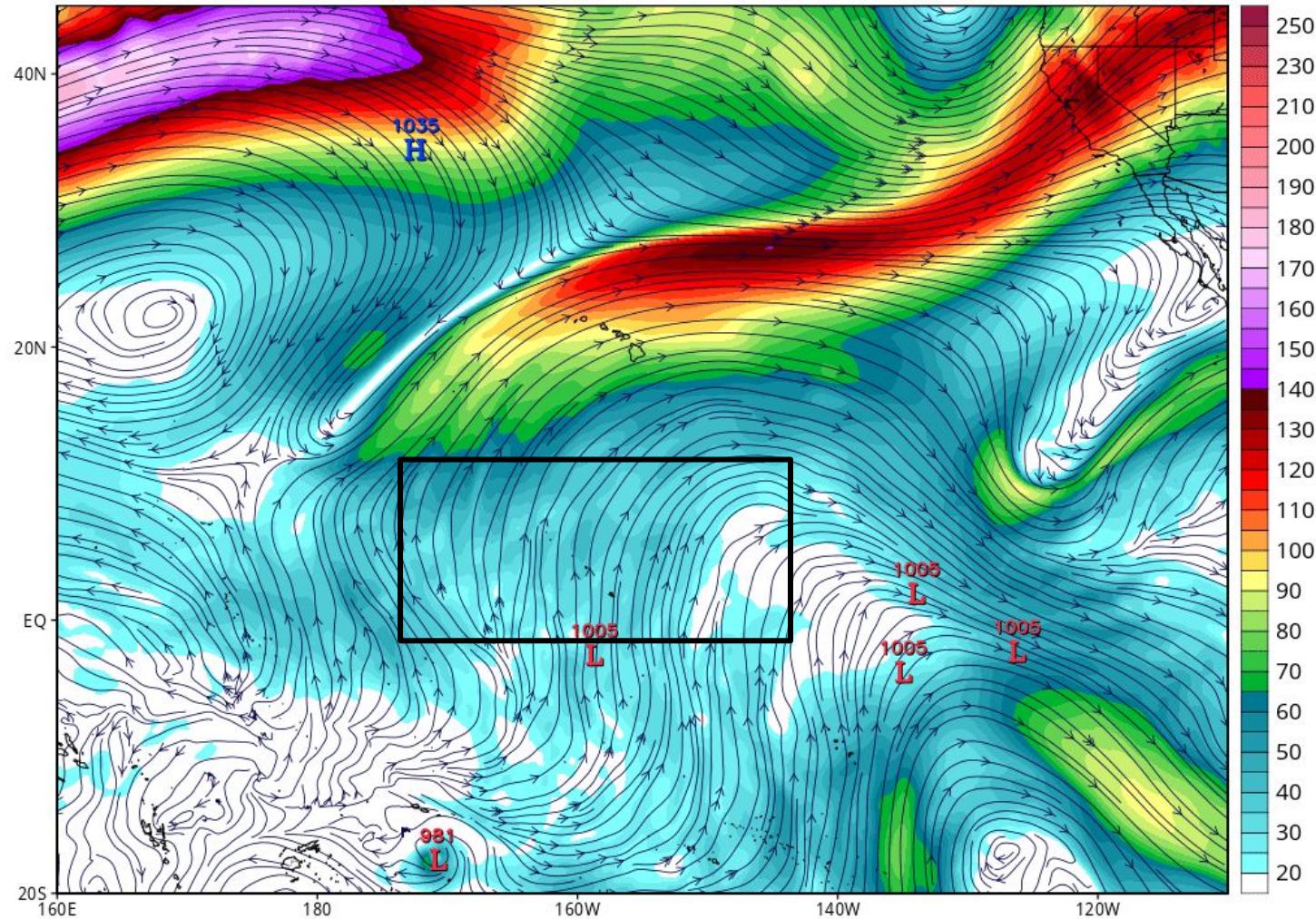
Levi Cowan | tropicaltidbits.com



GFS 200mb Wind Speed/Streamlines (kt) & MSLP Extrema (mb)

Init: 12z Feb 15 2016 Forecast Hour: [60] valid at 00z Thu, Feb 18 2016

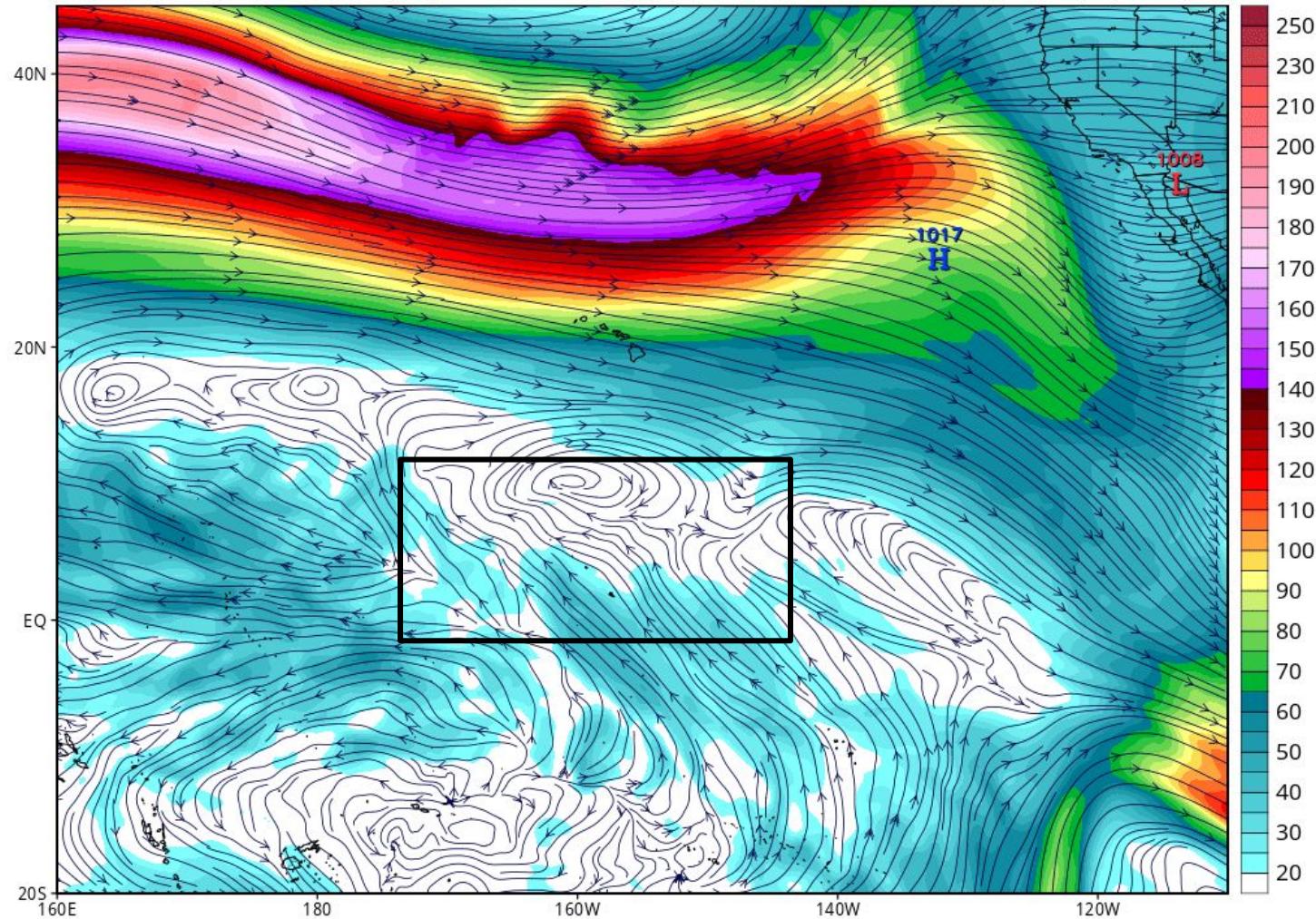
Levi Cowan | tropicaltidbits.com



GFS 200mb Wind Speed/Streamlines (kt) & MSLP Extrema (mb)

Init: 06z Feb 15 2016 Forecast Hour: [240] valid at 06z Thu, Feb 25 2016

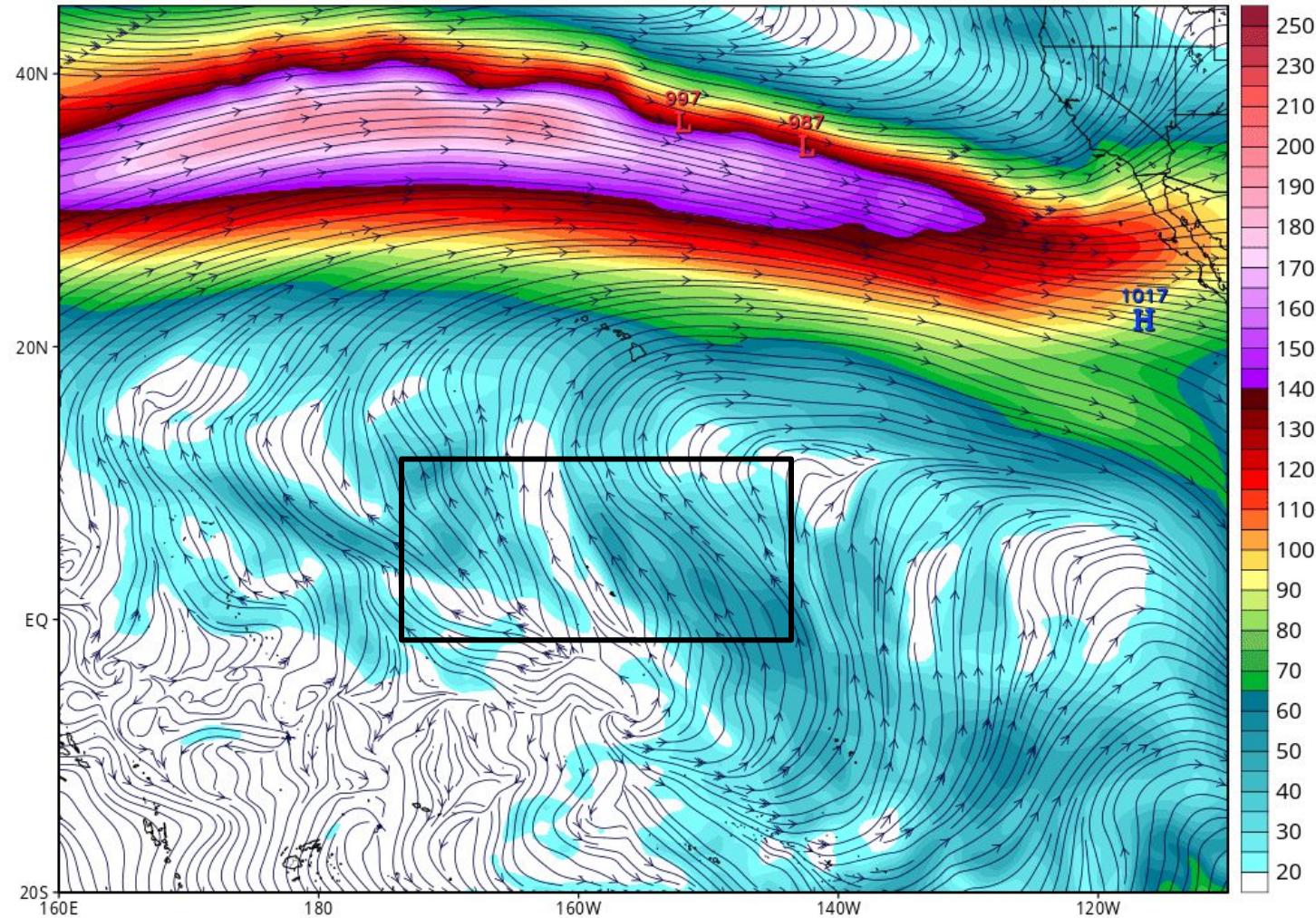
Levi Cowan | tropicaltidbits.com



GFS 200mb Wind Speed/Streamlines (kt) & MSLP Extrema (mb)

Init: 06z Feb 15 2016 Forecast Hour: [360] valid at 06z Tue, Mar 01 2016

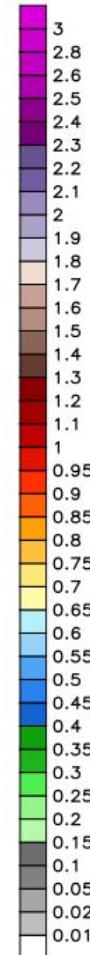
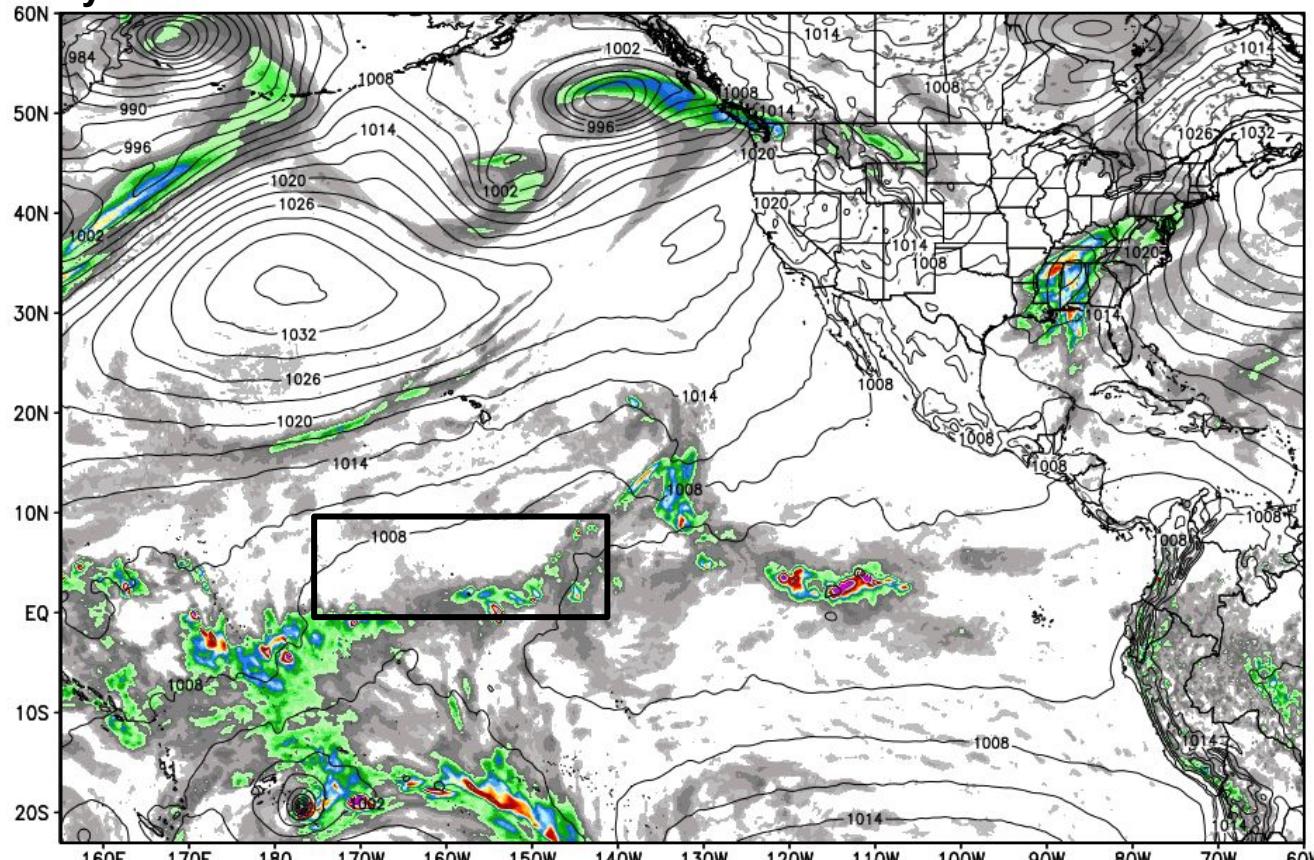
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ECMWF 6-hourly Precipitation [inches] between 18Z15FEB2016 -- 00Z16FEB2016 & MSLP [hPa]
INIT: 00Z15FEB2016 fx: [024] hr --> Tue 00Z16FEB2016

Courtesy WeatherBell

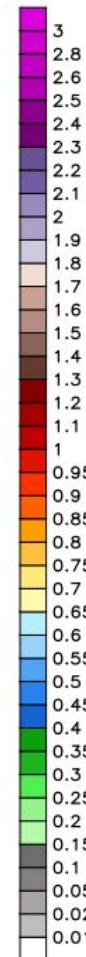
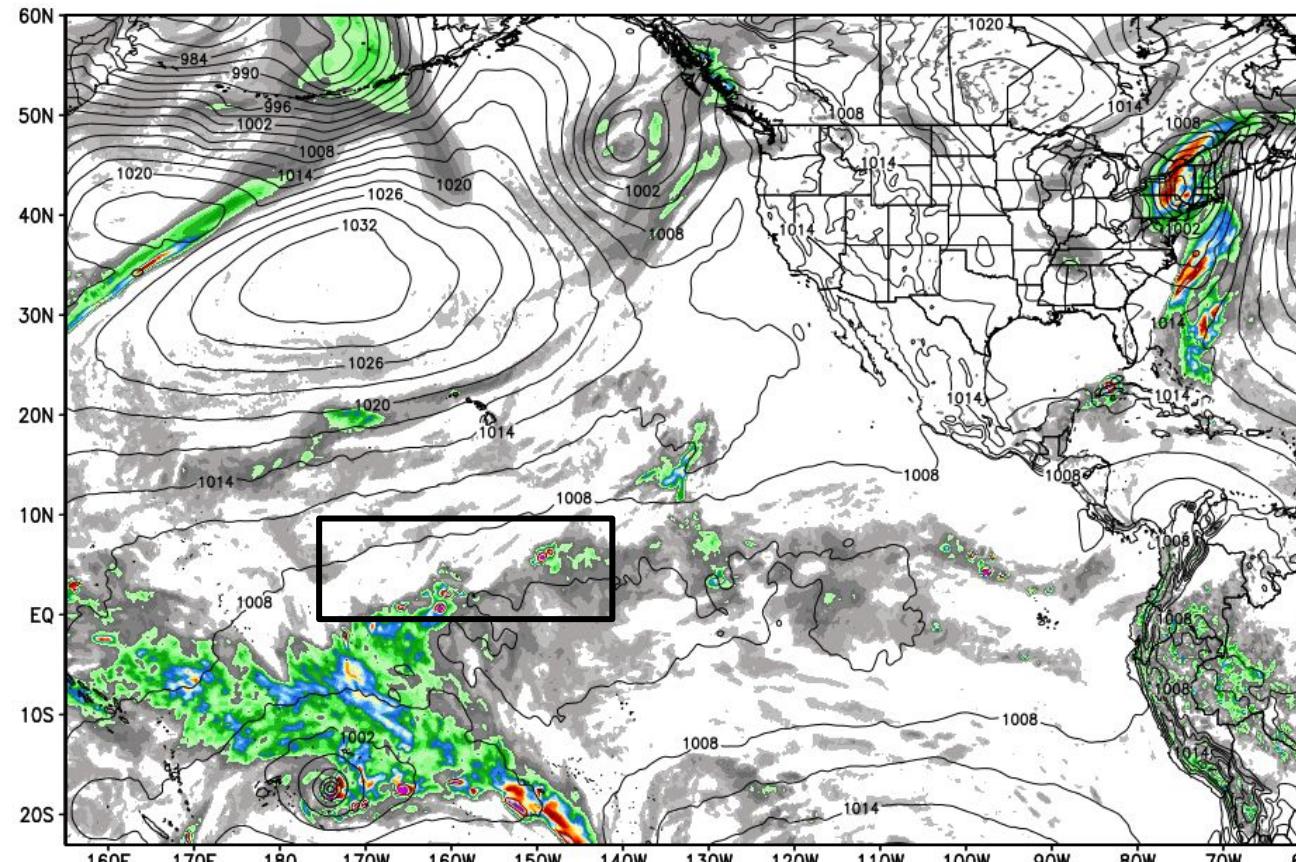
Latest 24 HR ECMWF Valid 00Z TUE Feb16



ECMWF 6-hourly Precipitation [inches] between 18Z16FEB2016 -- 00Z17FEB2016 & MSLP [hPa]
INIT: 00Z15FEB2016 fx: [048] hr --> Wed 00Z17FEB2016

Courtesy WeatherBell

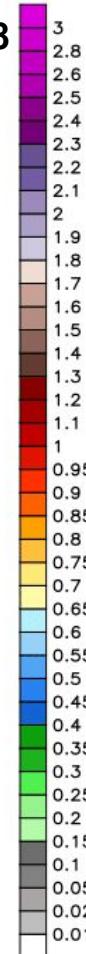
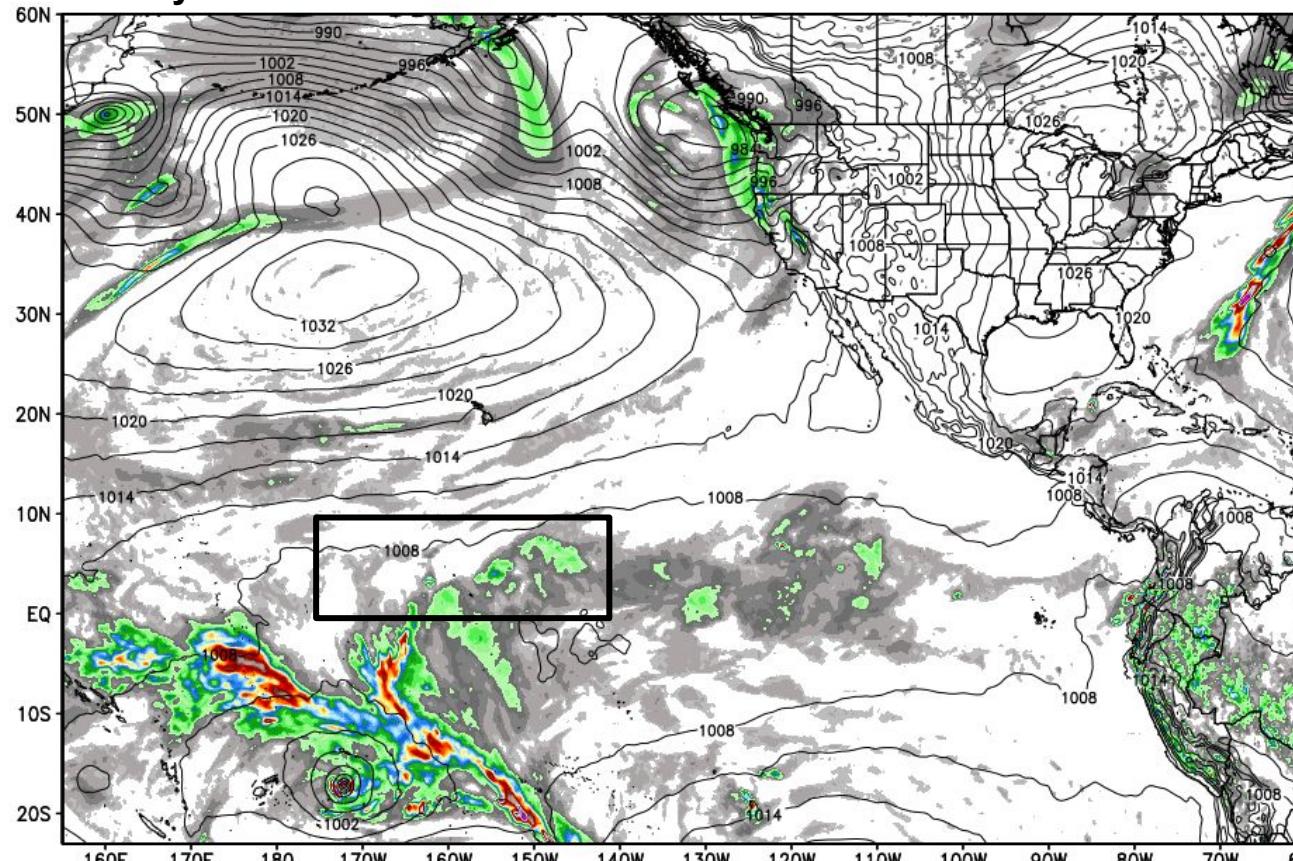
Latest 48 HR ECMWF Valid 00Z WED Feb17



ECMWF 6-hourly Precipitation [inches] between 18Z17FEB2016 -- 00Z18FEB2016 & MSLP [hPa]
INIT: 00Z15FEB2016 fx: [072] hr --> Thu 00Z18FEB2016

Courtesy WeatherBell

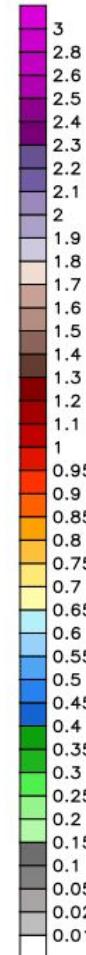
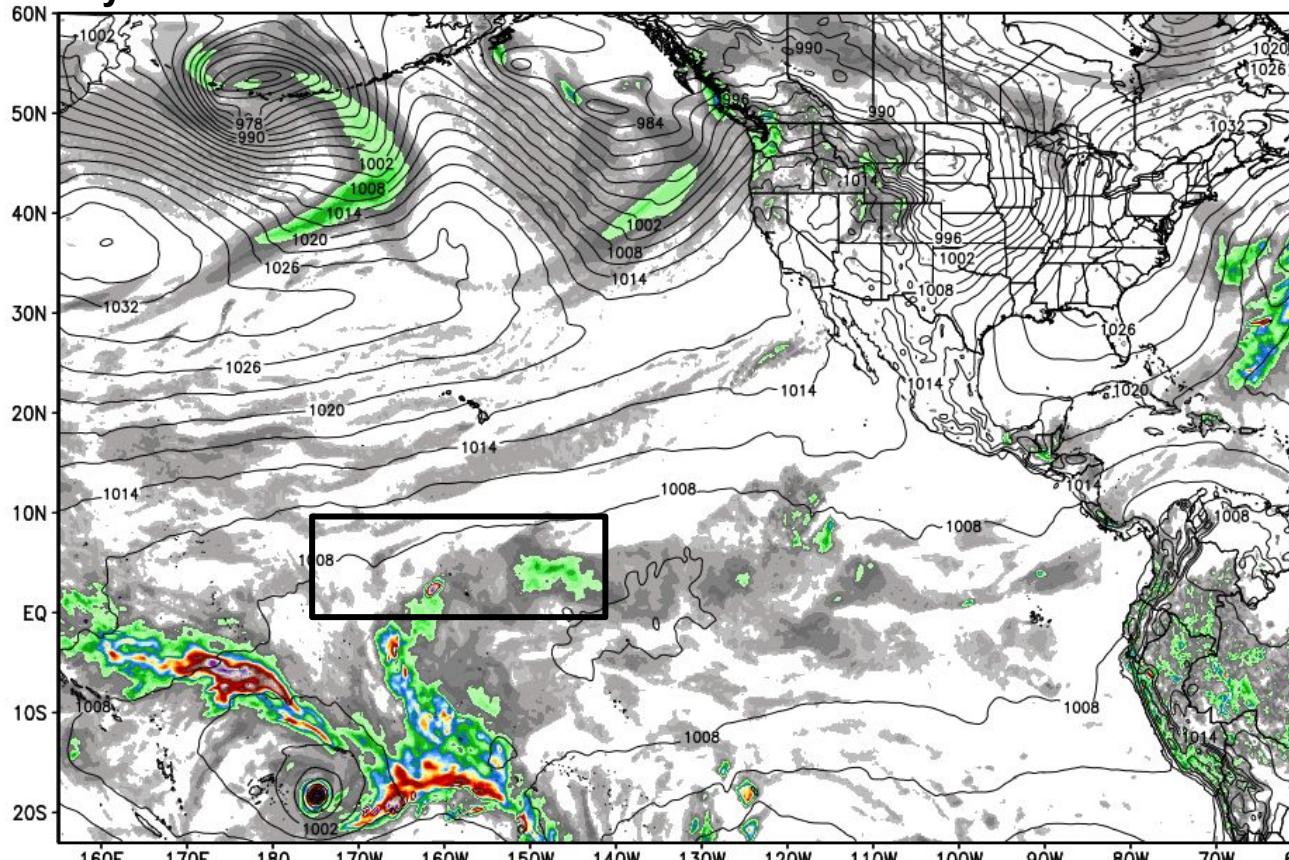
Latest 72 HR ECMWF Valid 00Z THU Feb18



ECMWF 6-hourly Precipitation [inches] between 18Z18FEB2016 -- 00Z19FEB2016 & MSLP [hPa]
INIT: 00Z15FEB2016 fx: [096] hr --> Fri 00Z19FEB2016

Courtesy WeatherBell

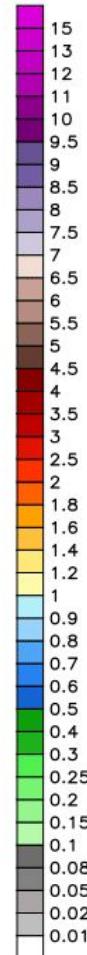
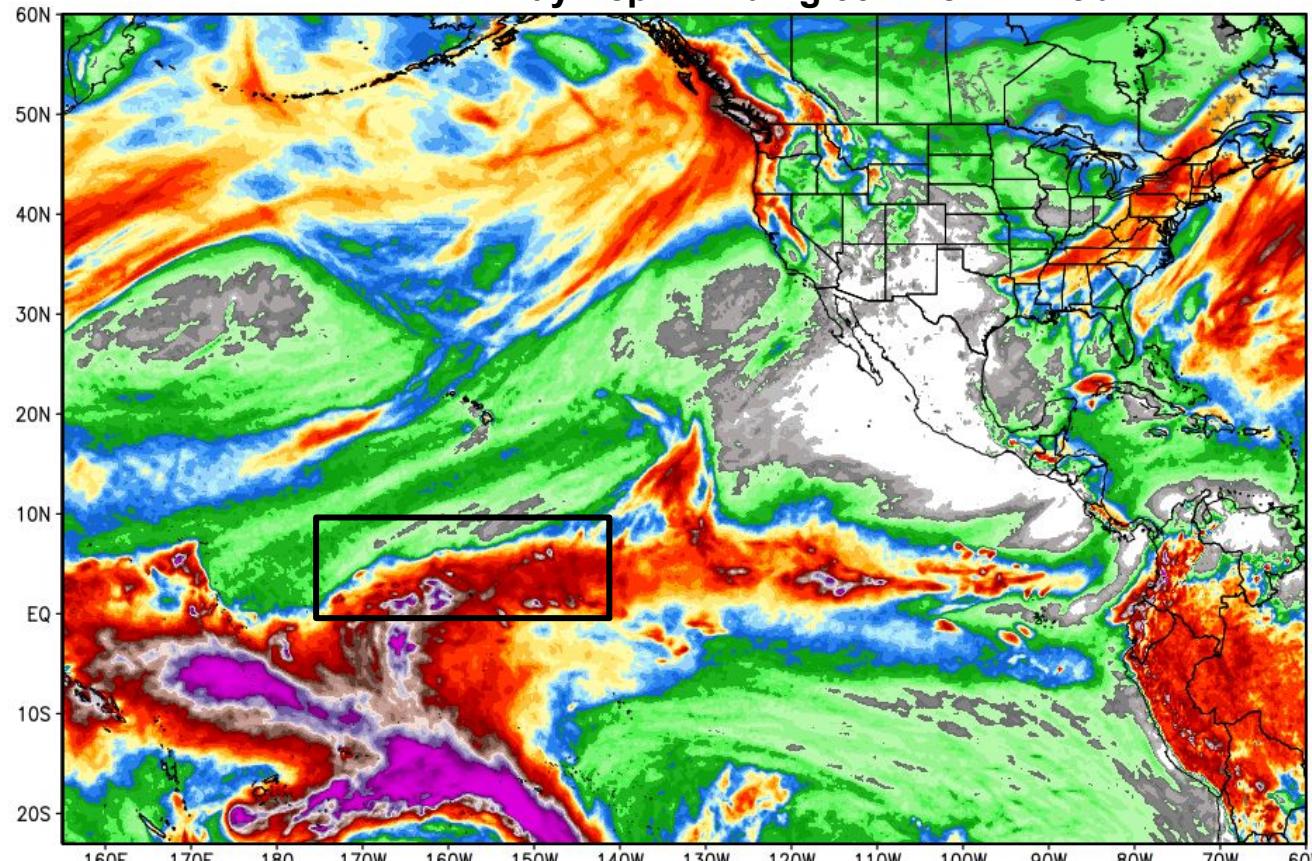
Latest 96 HR ECMWF Valid 00Z FRI Feb19



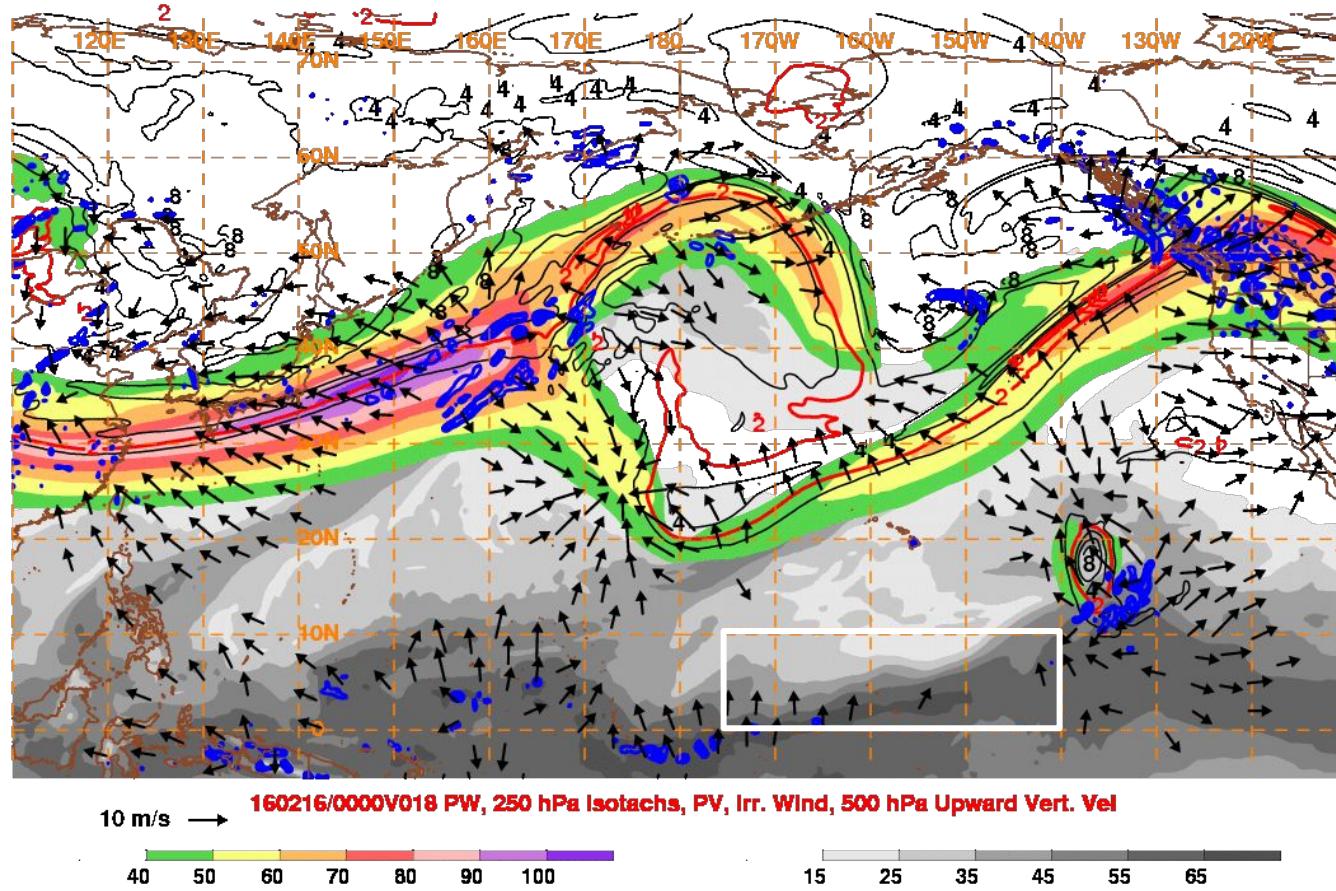
ECMWF Total Precipitation [inches] between 00Z15FEB2016 -- 00Z22FEB2016
INIT: 00Z15FEB2016 fx: [168] hr --> Mon 00Z22FEB2016

Max 30.4 in

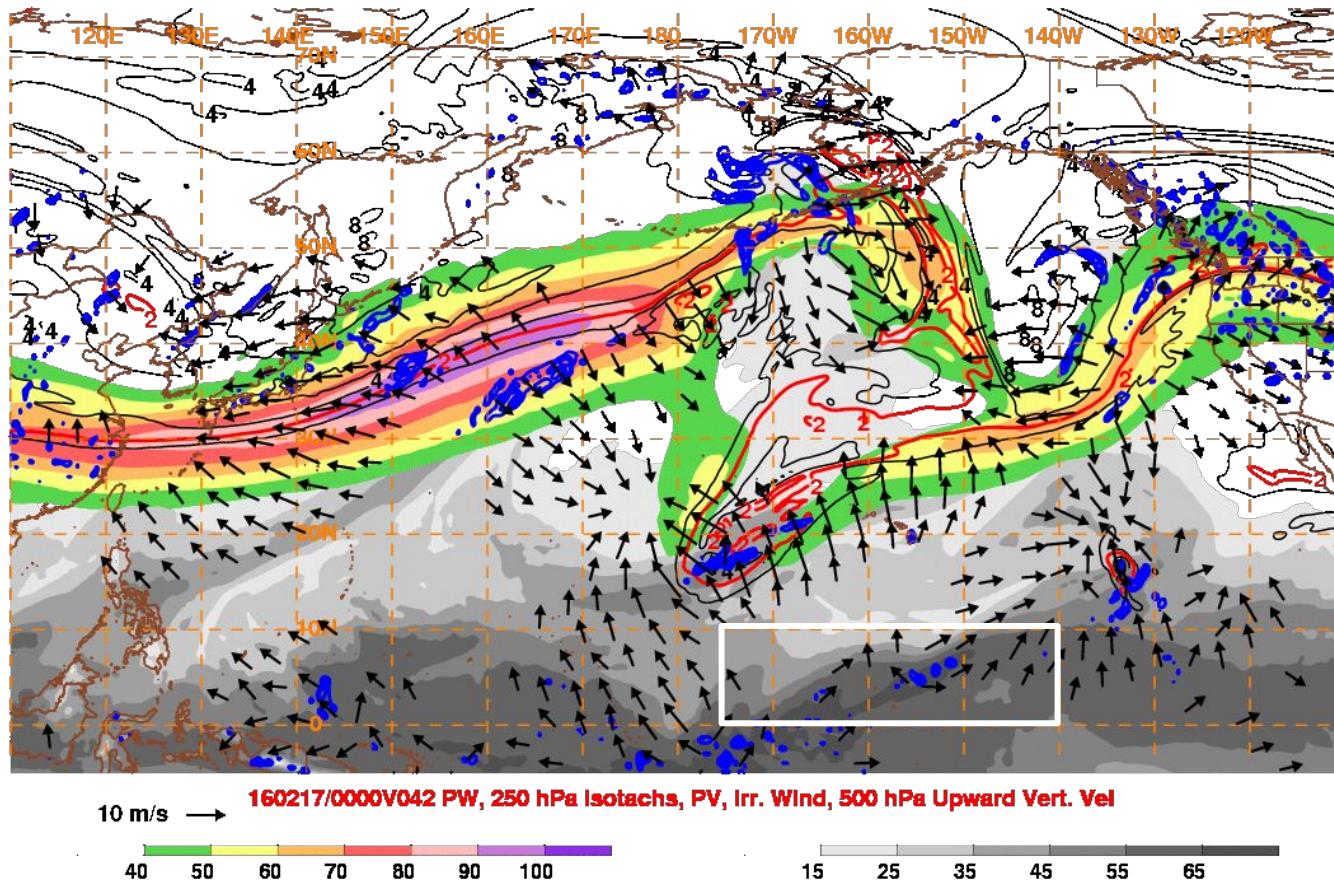
ECMWF 7 Day Pcpn: Ending 00Z Mon 22 Feb



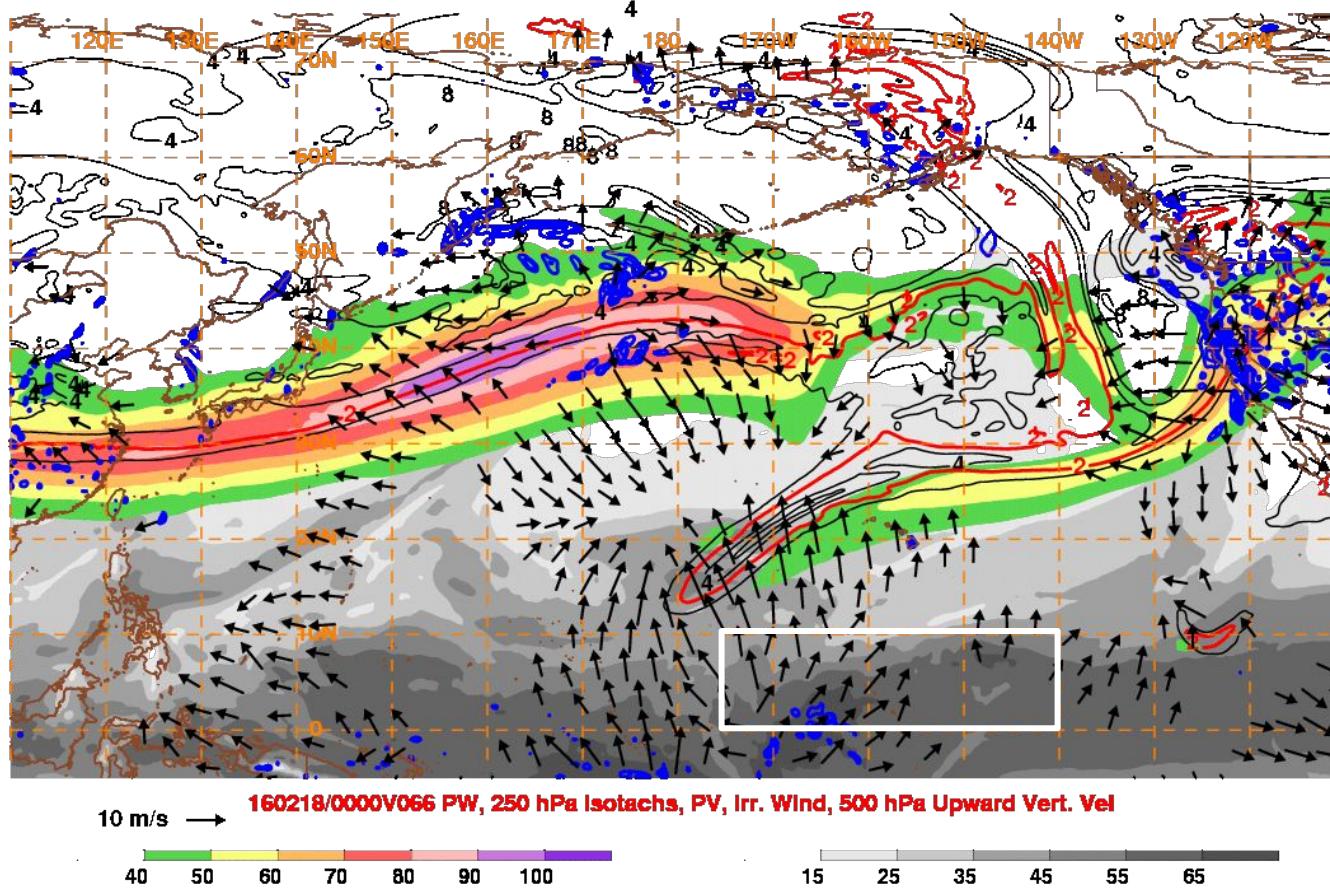
GFS 18HR FCST Valid 00Z TUE Feb 16: 200 mb DIV Wind Vectors



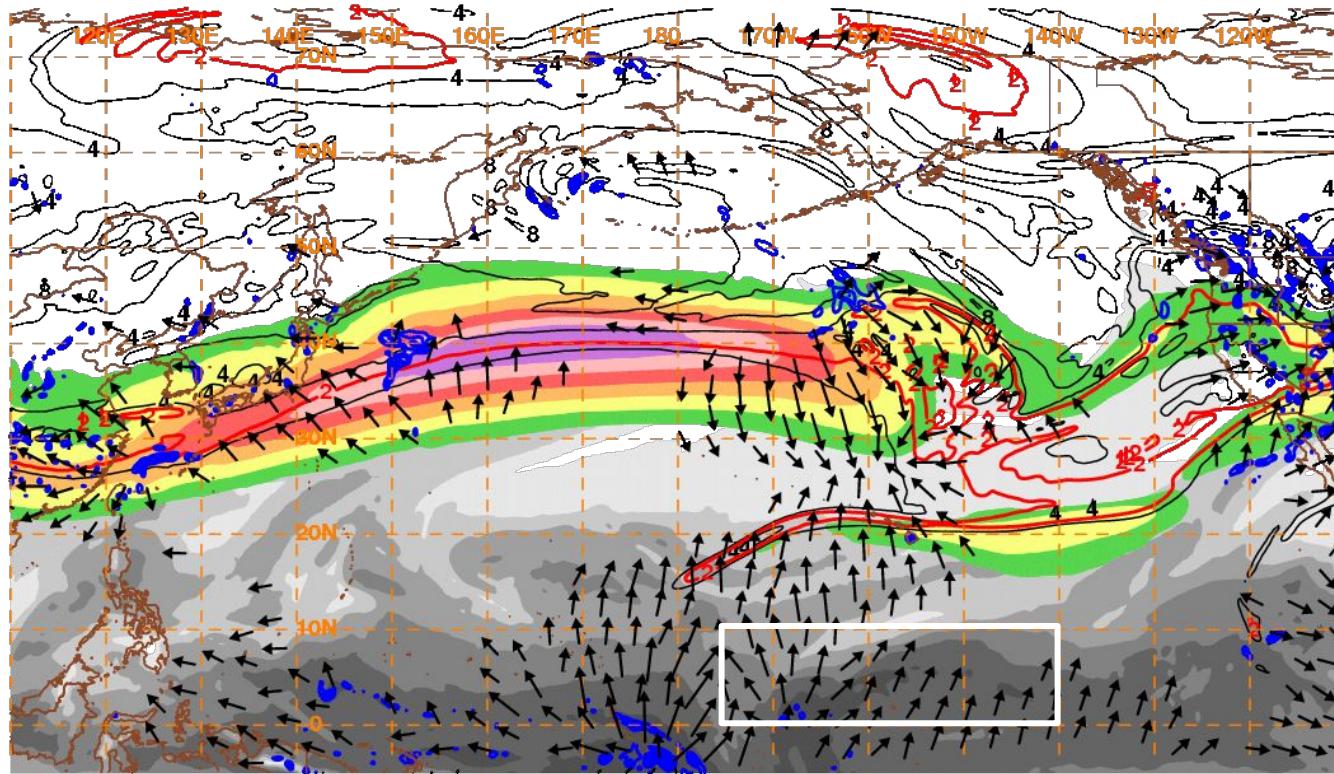
GFS 42HR FCST Valid 00Z Wed Feb 17: 200 mb DIV Wind Vectors



GFS 66HR FCST Valid 00Z Thu Feb 18: 200 mb DIV Wind Vectors



GFS 90HR FCST Valid 00Z FRI Feb 19: 200 mb DIV Wind Vectors

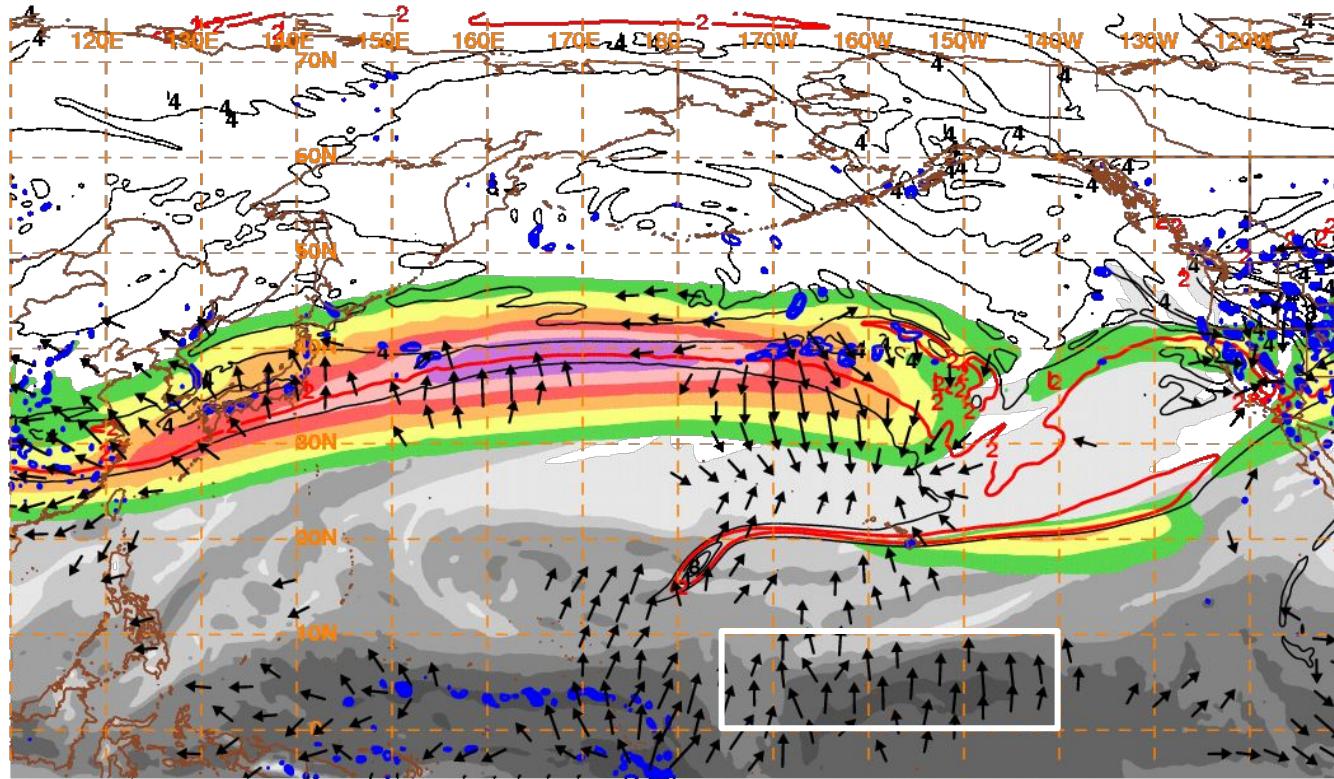


10 m/s →

160219/0000V090 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

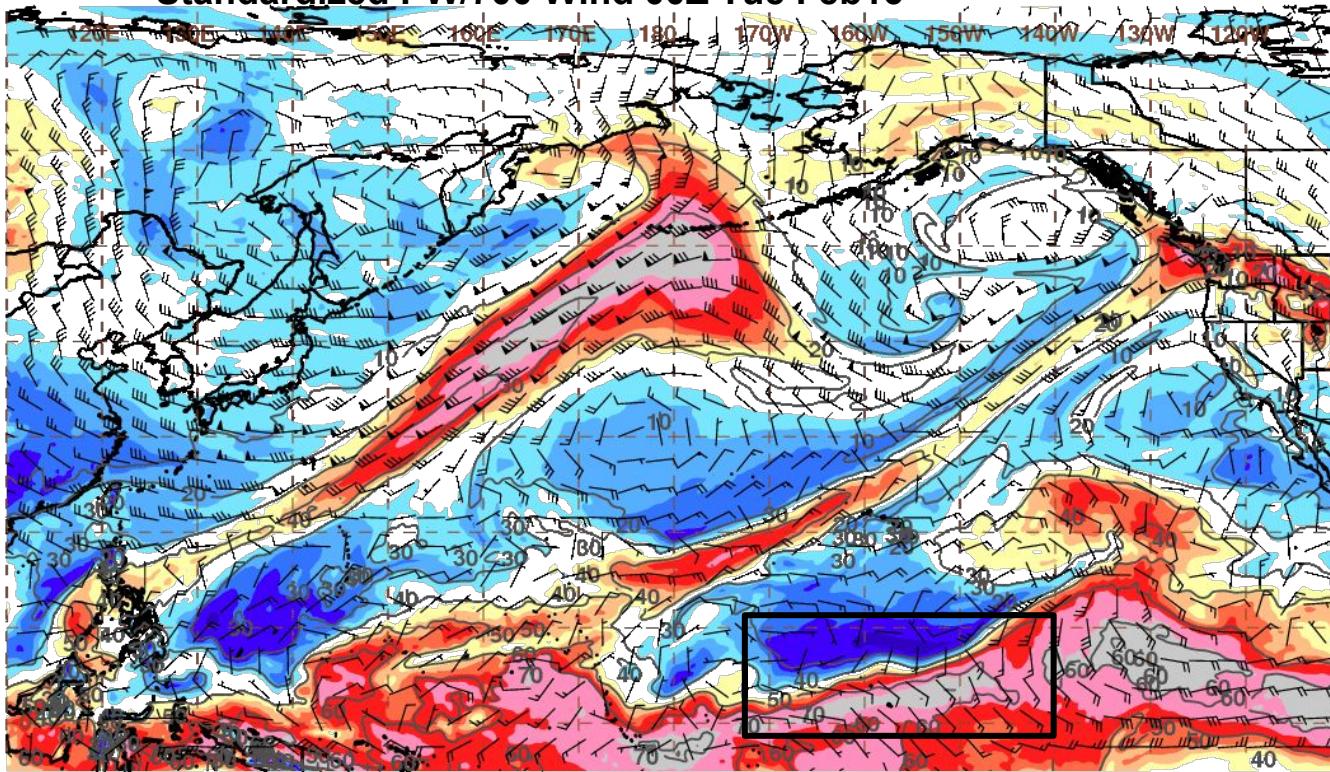


10 m/s →

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



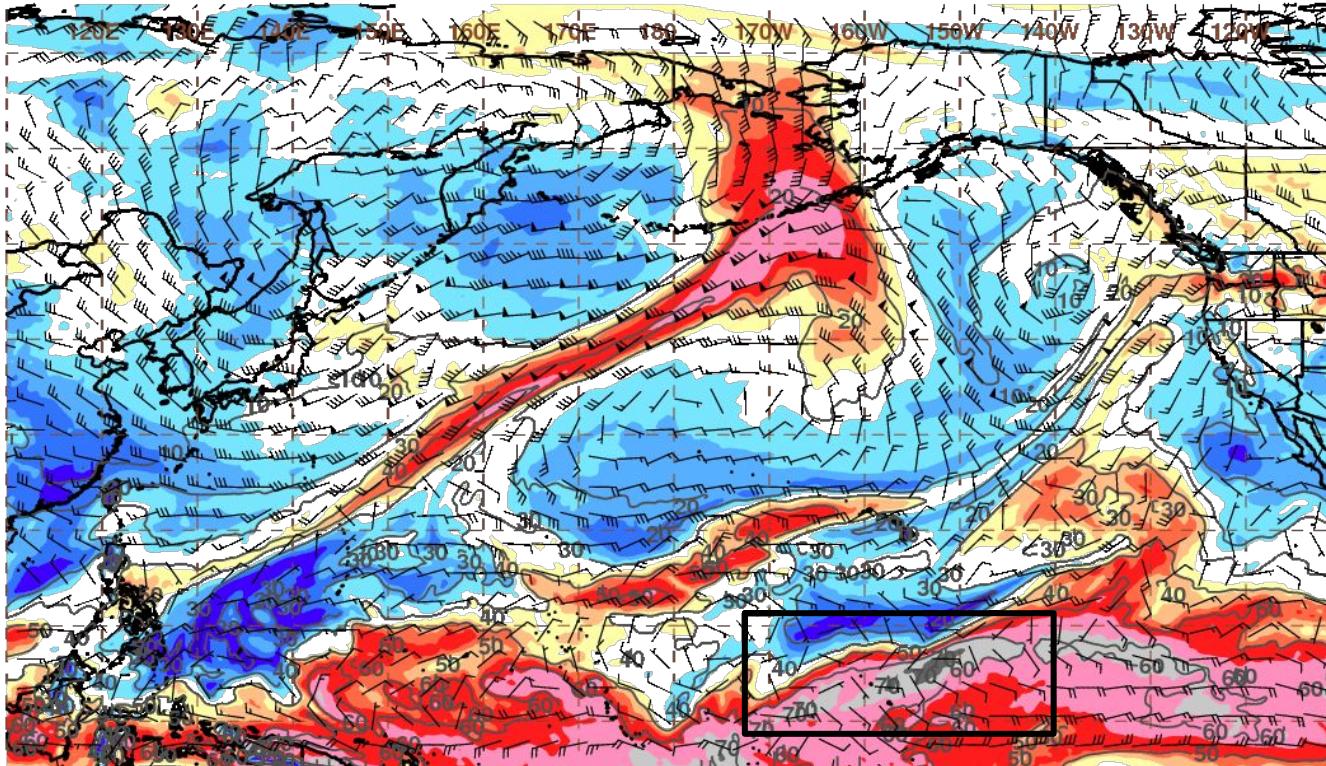
Standardized PW/700 Wind 00Z Tue Feb16



160216/0000F018 Std. Anom of PW; 700 hPa Wind



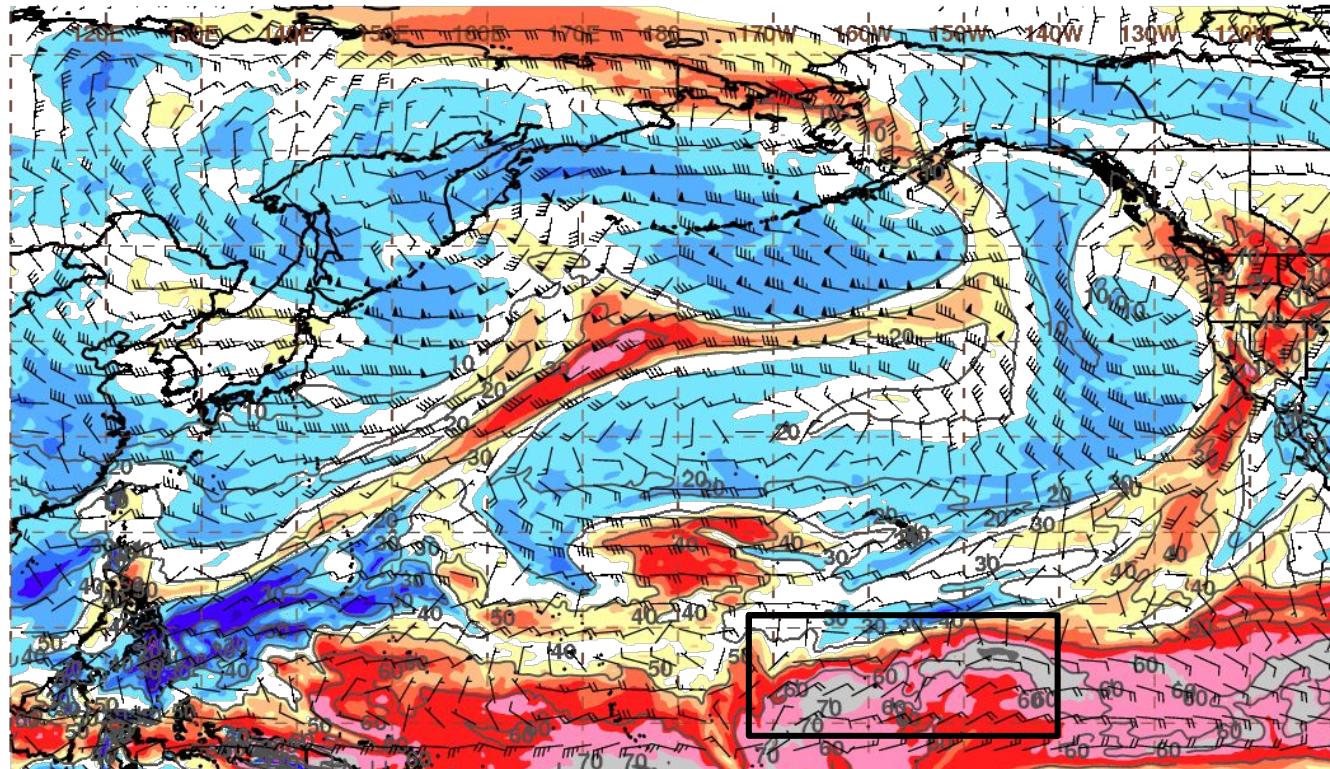
Standardized PW/700 Wind 00Z WED Feb 17



160217/0000F042 Std. Anom of PW; 700 hPa Wind



Standardized PW/700 Wind 00Z THU Feb 18

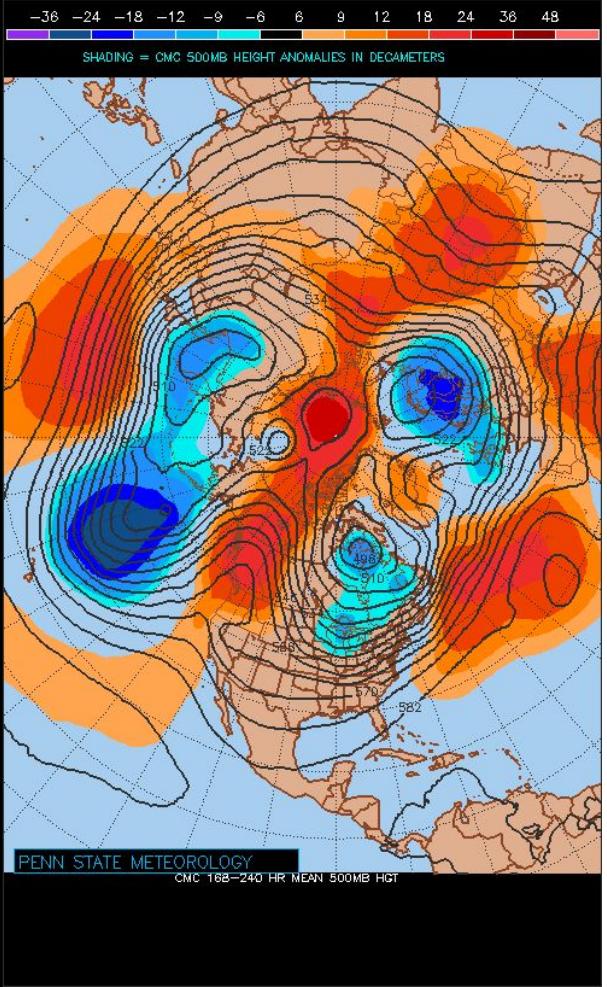
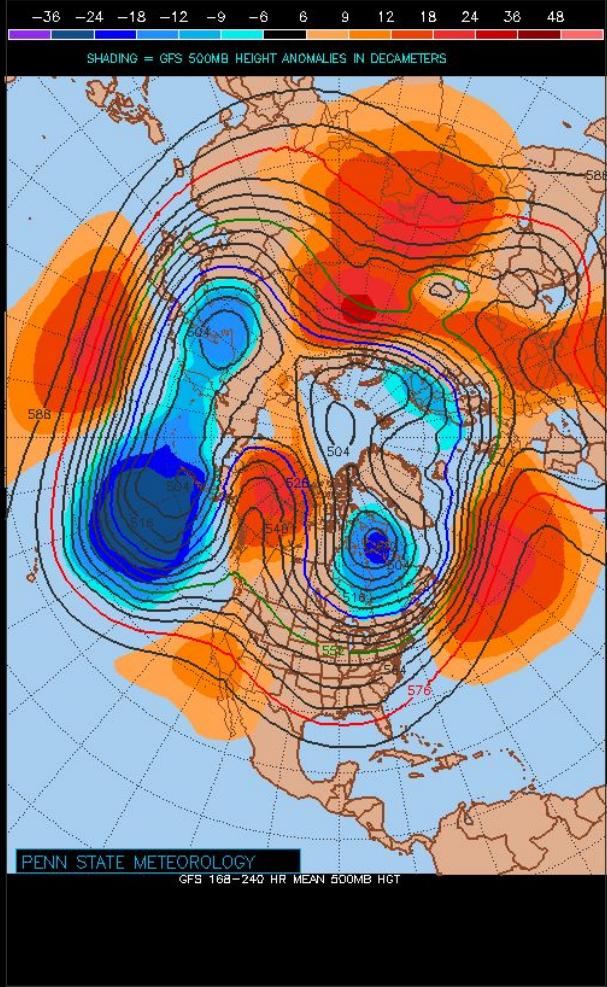
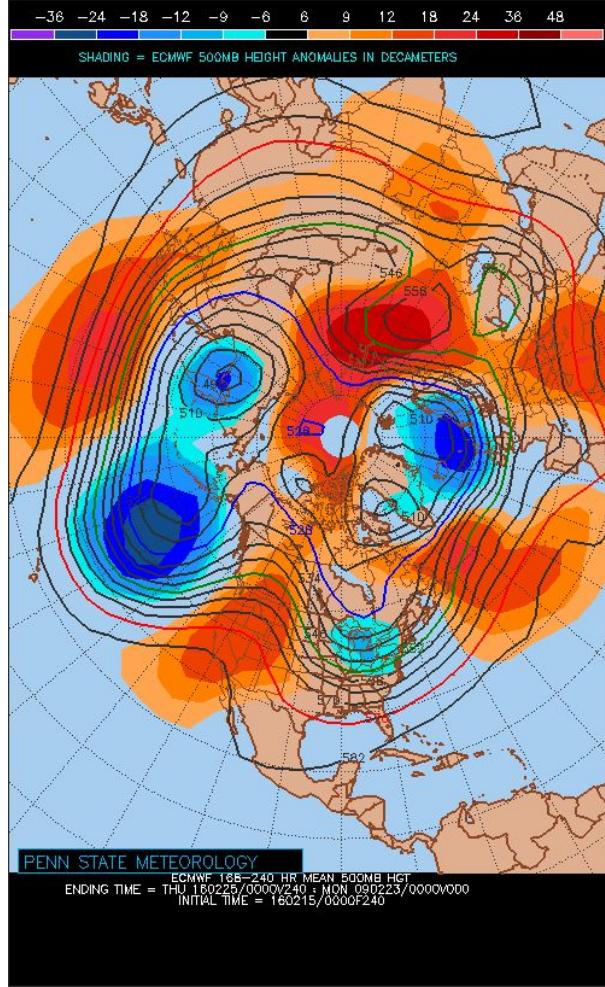


160218/0000F066 Std. Anom of PW; 700 hPa Wind



Medium - Long Range Forecast

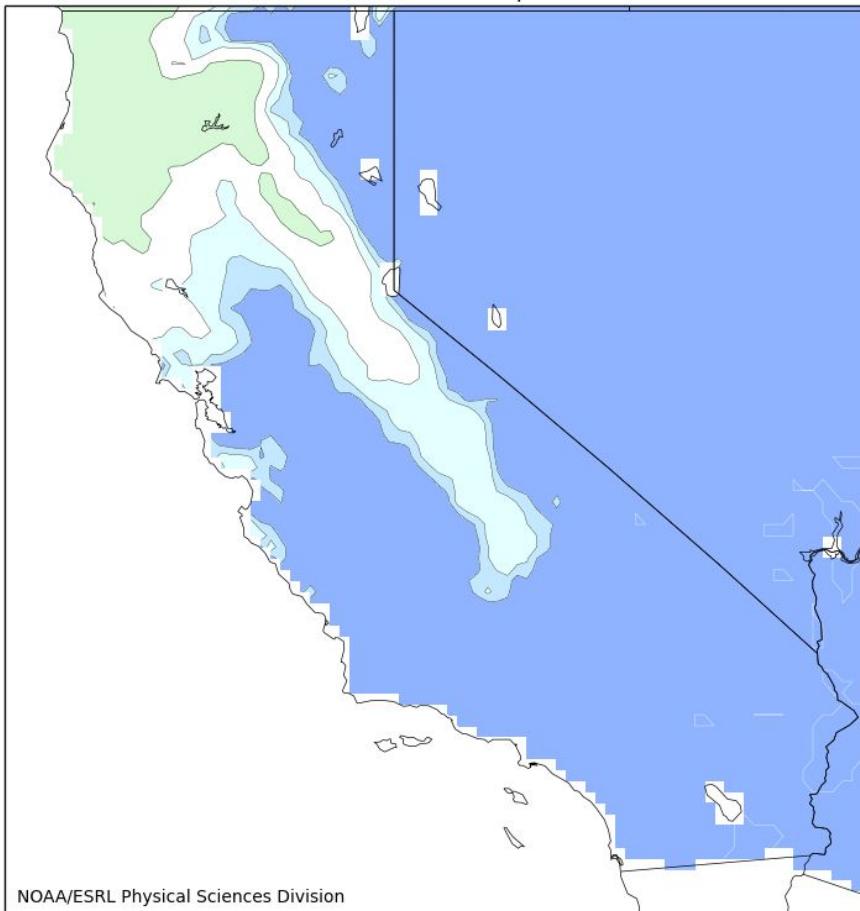
Day 7-10 Initialized 00Z MON 15 Feb



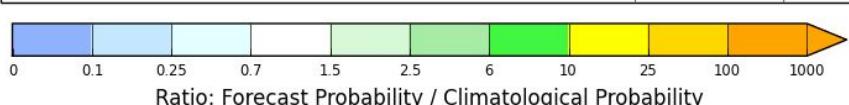
000-168hr fcst from 00Z Mon Feb 15. Valid 00Z Mon Feb 15 - 00Z Mon Feb 22 98-360hr fcst from 00Z Mon Feb 15. Valid 06Z Tue Feb 23 - 00Z Tue Mar 01

Ratio. Forecast/Climo Prob of Precip > 50mm. CSGD.

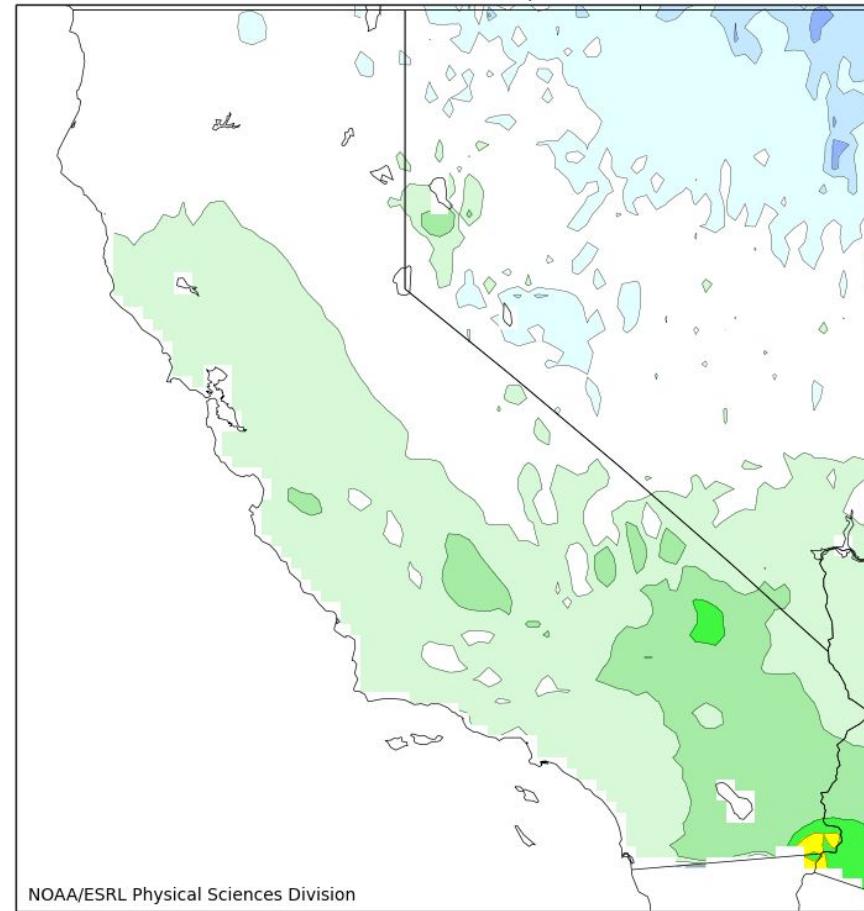
Ratio. Forecast/Climo Prob of Precip > 50mm. CSGD.



NOAA/ESRL Physical Sciences Division



Ratio: Forecast Probability / Climatological Probability



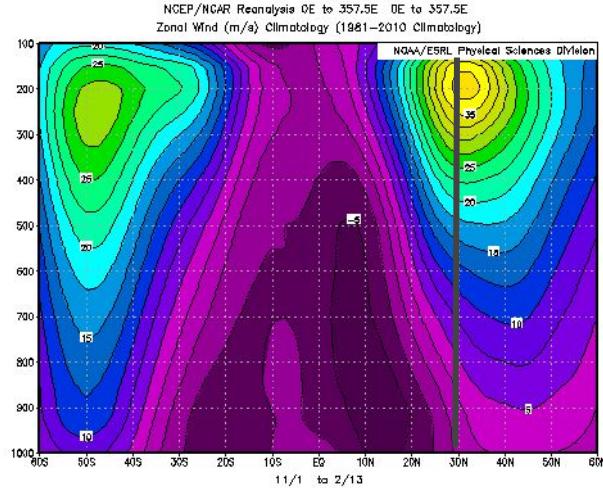
NOAA/ESRL Physical Sciences Division



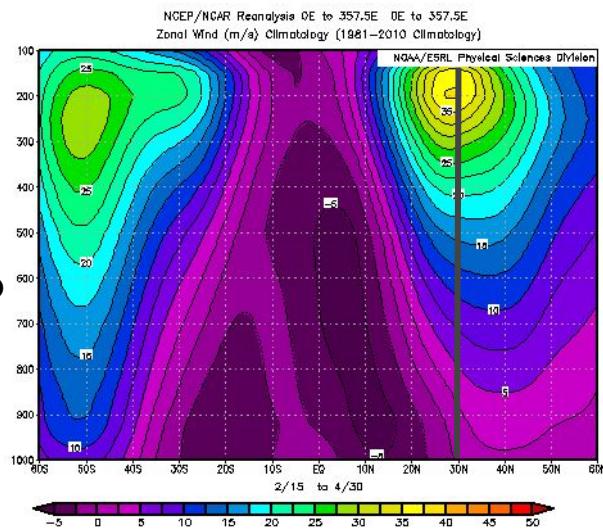
Ratio: Forecast Probability / Climatological Probability

The Curious Incident of the Zonal Mean Zonal Wind in 2016

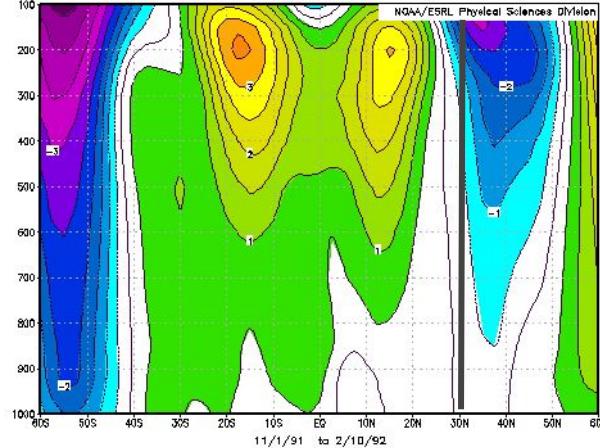
Zonal Mean U
Nov 1- Feb 13 Climo



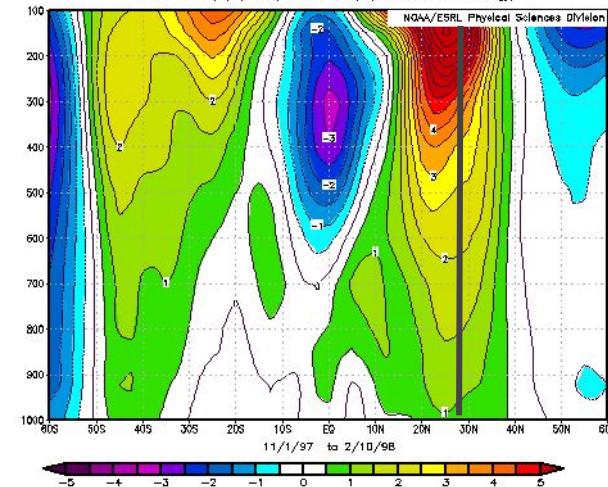
Zonal Mean U
Feb 15 - Apr 30 Climo



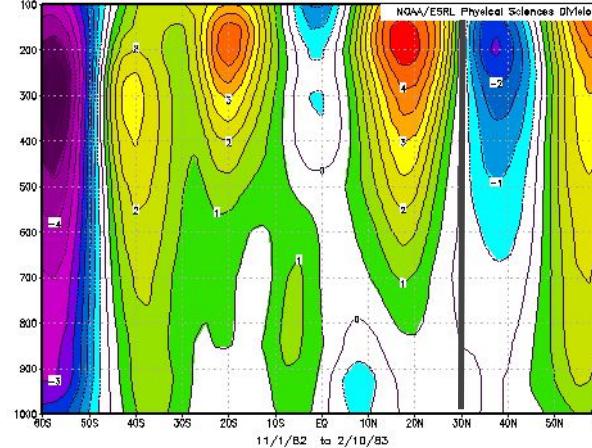
1992 NCEP/NCAR Reanalysis OE to 357.5E
Zonal Wind (m/s) Composite Anomaly (1981–2010 Climatology)



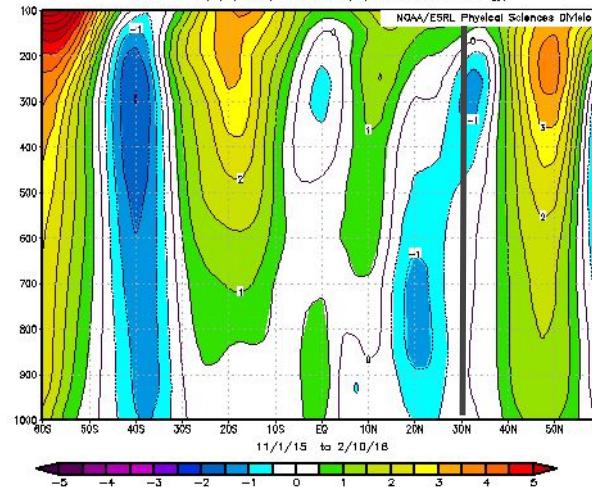
1998 NCEP/NCAR Reanalysis OE to 357.5E
Zonal Wind (m/s) Composite Anomaly (1981–2010 Climatology)



1983 NCEP/NCAR Reanalysis OE to 357.5E
Zonal Wind (m/s) Composite Anomaly (1981–2010 Climatology)

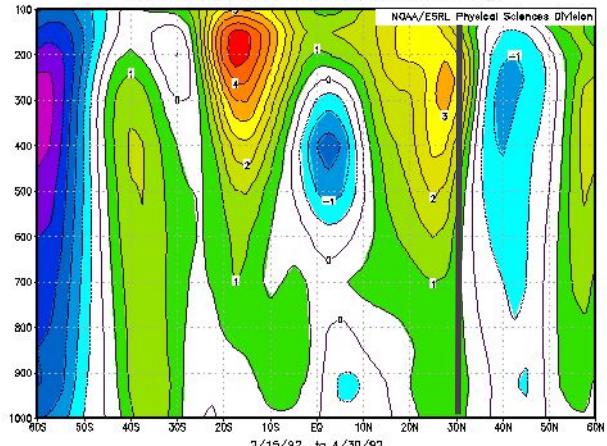


2016 NCEP/NCAR Reanalysis OE to 357.5E
Zonal Wind (m/s) Composite Anomaly (1981–2010 Climatology)



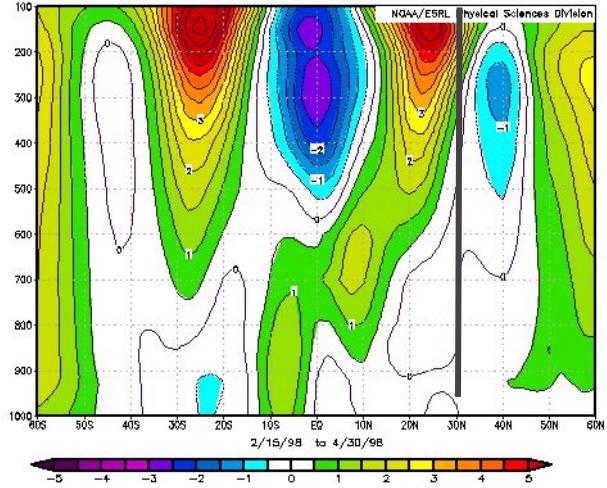
1992

NCEP/NCAR Reanalysis 0E to 357.5E
Zonal Wind (m/s) Composite Anomaly (1981–2010 Climatology)



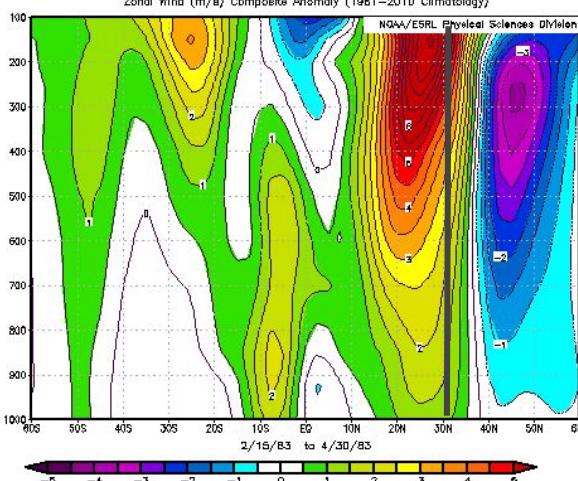
1998

Zonal Wind (m/s) Composite Anomaly (1981–2010 Climatology)

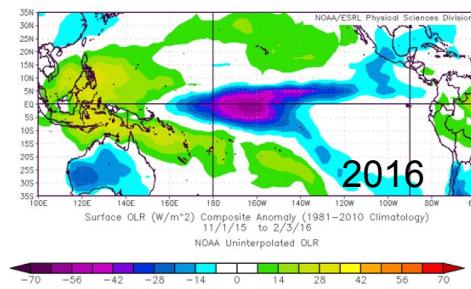
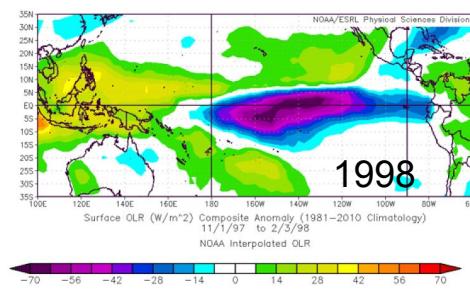
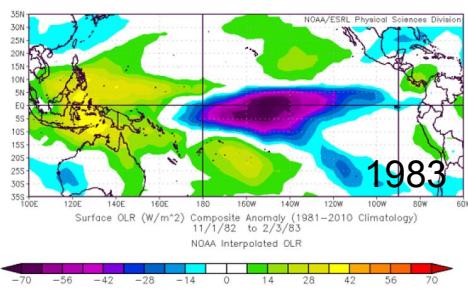
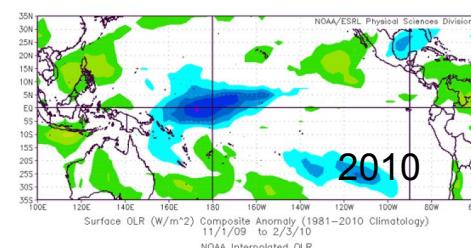
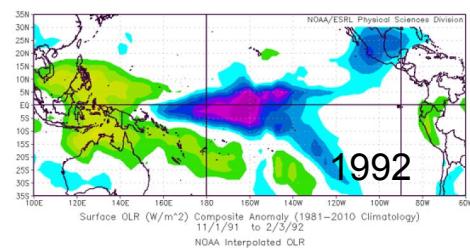
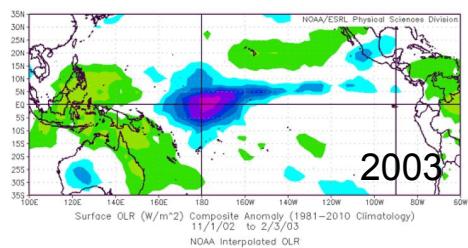
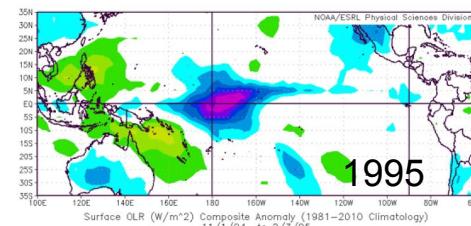
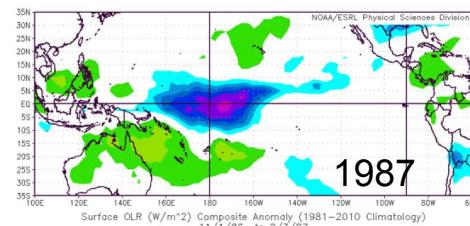
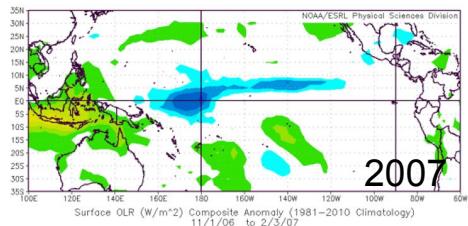


1983

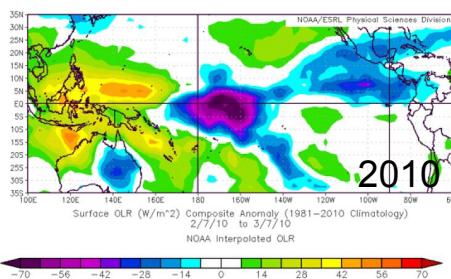
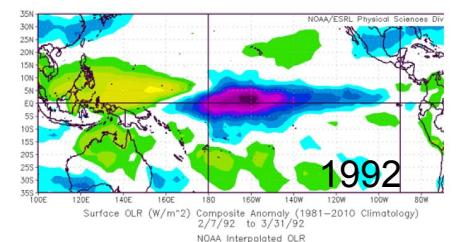
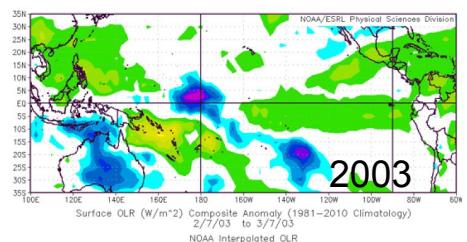
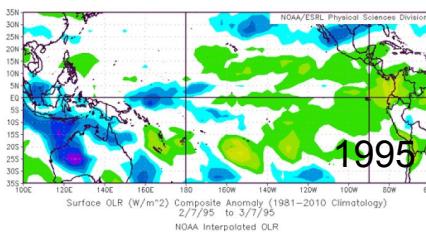
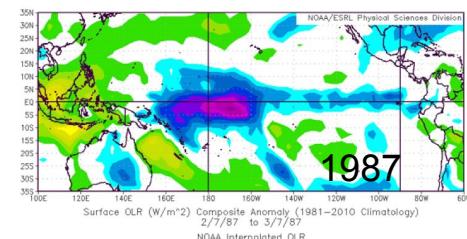
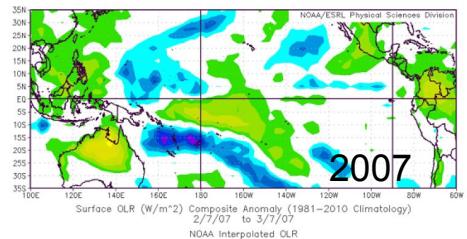
NCEP/NCAR Reanalysis 0E to 357.5E
Zonal Wind (m/s) Composite Anomaly (1981–2010 Climatology)



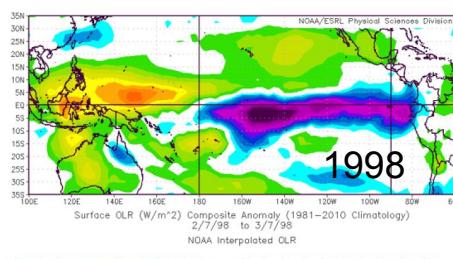
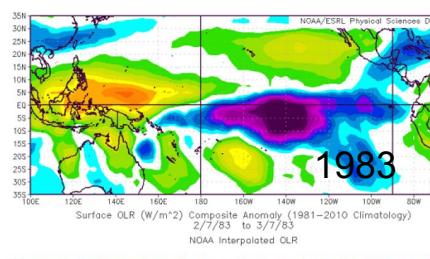
Observed OLR Anomalies : 1 Nov - 3 Feb



Observed OLR Anomalies : 7 Feb - 7 Mar



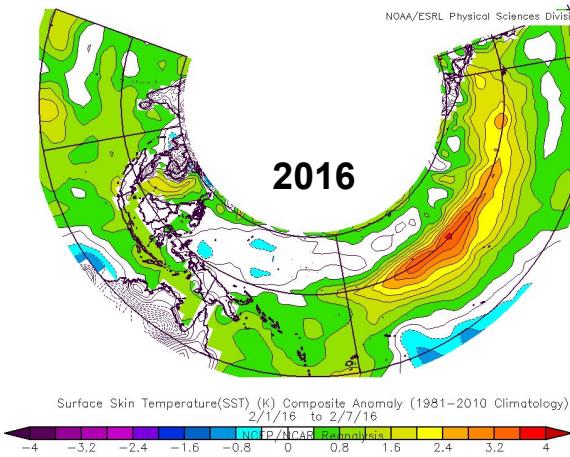
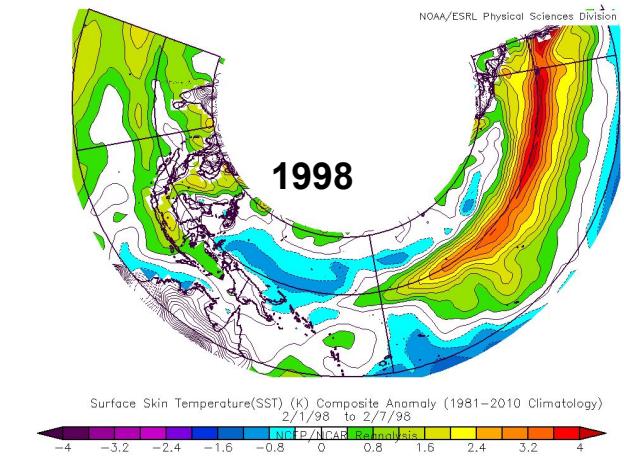
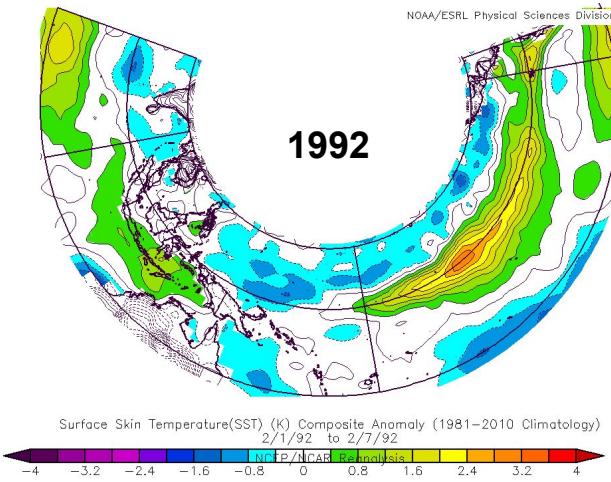
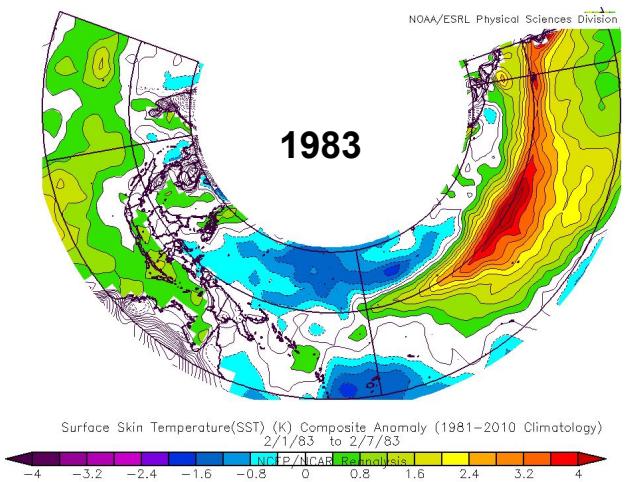
-70 -56 -42 -28 -14 0 14 28 42 56 70



-70 -56 -42 -28 -14 0 14 28 42 56 70

-70 -56 -42 -28 -14 0 14 28 42 56 70

SST ANOM Feb 1-Feb 7



OLR ANOM Feb 1-Feb 7

NOAA/ESRL Physical Sciences Division

NOAA/ESRL Physical Sciences Division

1983

1992

1998

2016

