

Summary of Key Briefing Points
1030-1130am MST Tuesday February 2, 2016

Current Conditions as of Tuesday 12Z-15Z February 2

Tropics and Mid-latitudes

Over the Tropical Pacific:

- Convection: An area of active Convection in region 165W-157W, 1-4°N this morning.
- Convection developed on SW corner of flight domain overnight, intensifying
- Isolated Convection is also appearing this morning 155W, 5N.
- Cloud track upper level winds indicate strong poleward 170W-160W, 4-7°N.
- Light (~10 kt) upper level easterlies south of 8N
- Upper level northwesterly 10-20kt in NE corner of domain to 7N, 155-150W suppressing convection there
- Water vapor image at 14Z Tues shows dry intrusion to 6N in 160W-150W band.

Tropical Outlook

- Convection for Tuesday aftn HNLT to be active mainly west of 155W, and south of 5N.
 - Confidence is high based on EC/GFS model agreement
 - Confidence is high based on consistency of forecasts among successive Initializations
 - Convection to be more active in a zonal band between 3N-5N, 165W to 155W Tues aftn HNLT
- By 00Z Thu 4 FEB (Wednesday aftn HNLT), convection to remain active 167W-157W, mostly north of EQ.
 - New EC fcst continues to indicate convection in SW quadrant of mission region Wed aftn HNL time.
 - Convection may extend to 5S near 160W
 -
- Convection to diminish and be weak by 00Z Fri (2PM Thu HNLT).
 - *in summary, the indication from Tues forecasts is for active convection Tues aftn in SW quadrant of FD*
 - *Convection to reduce considerably by Thursday, and perhaps stay inactive Fri/Sat per EC guidance.*

Midlatitude Conditions/Outlook

Short Term:

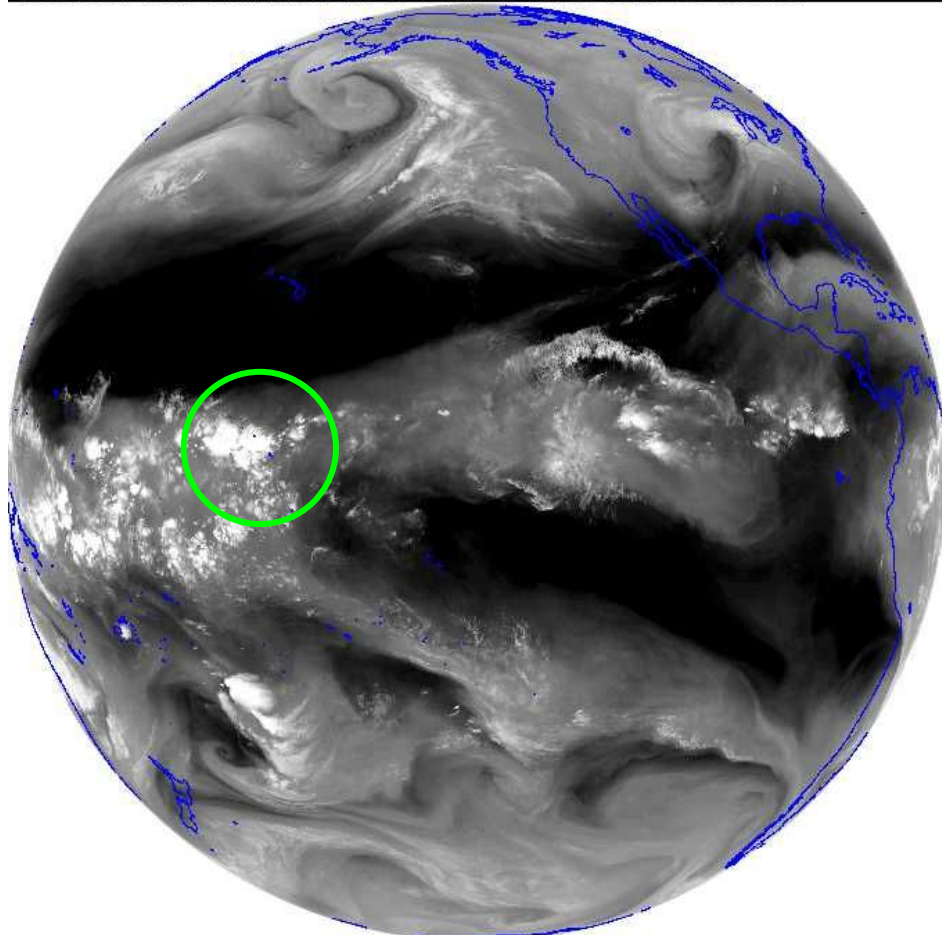
- CA mostly quiet
- Weak frontal rains in north mid-week, otherwise dry
- 8-station NSierra index on 1 Feb is 121%, 5-station CSierra index is 124%, Tulare Basin Index: 128%

Medium - Long Term:

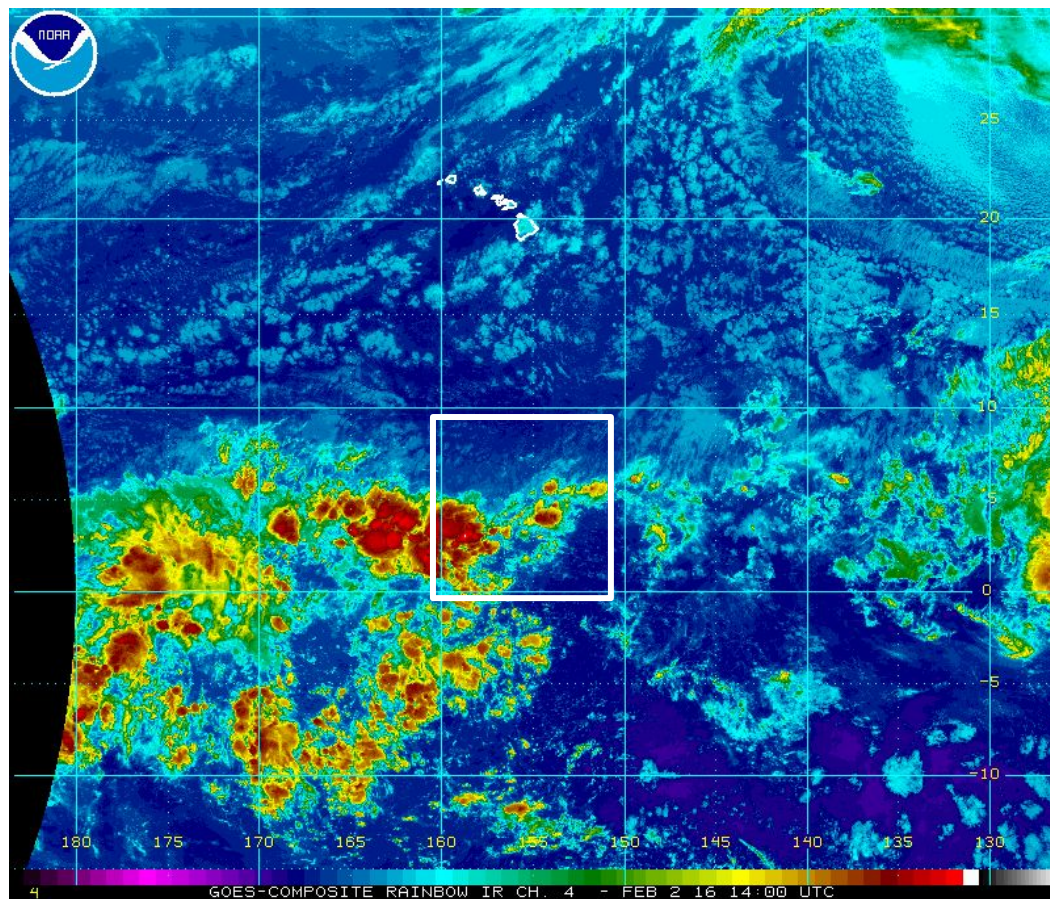
- Day 0-7 accumulated pcpn for CA shows little pcpn
- CPC 6-10 day (Feb 7-11) pcpn probabilities have high probabilities of below normal statewide
- Days 7 -10 fcsts from 00 TUE 2 Feb runs indicate sharp WCOAST Ridge
----confidence high (strong model agreement) that Tue 9 Feb thru Fri 12 Feb to be quiet in CA and NE Pacific
- Day 8-15 Calibrated Pcpn for CA (00Z Mon 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.

15Z Tue 2 Feb Water Vapor Image

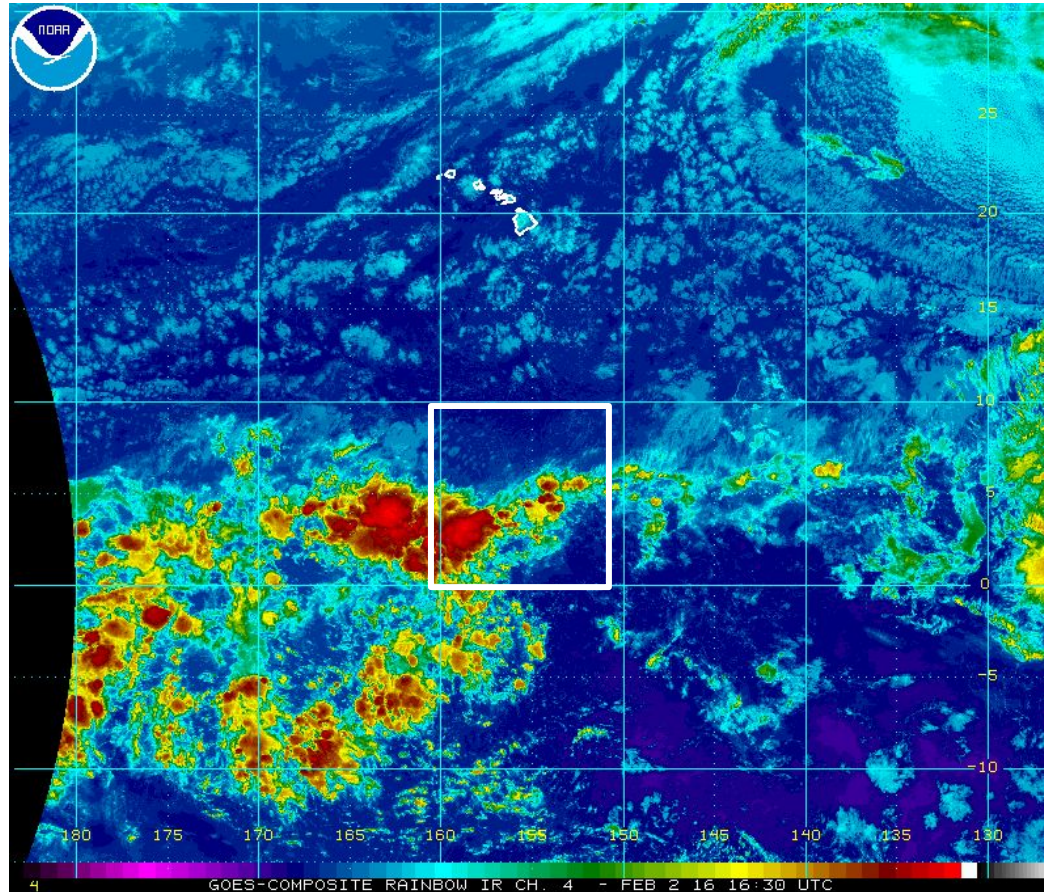
GOES WEST FULL DISK WATER VAPOR 2 FEB 16 15:00 SSEC: UW-MADISON



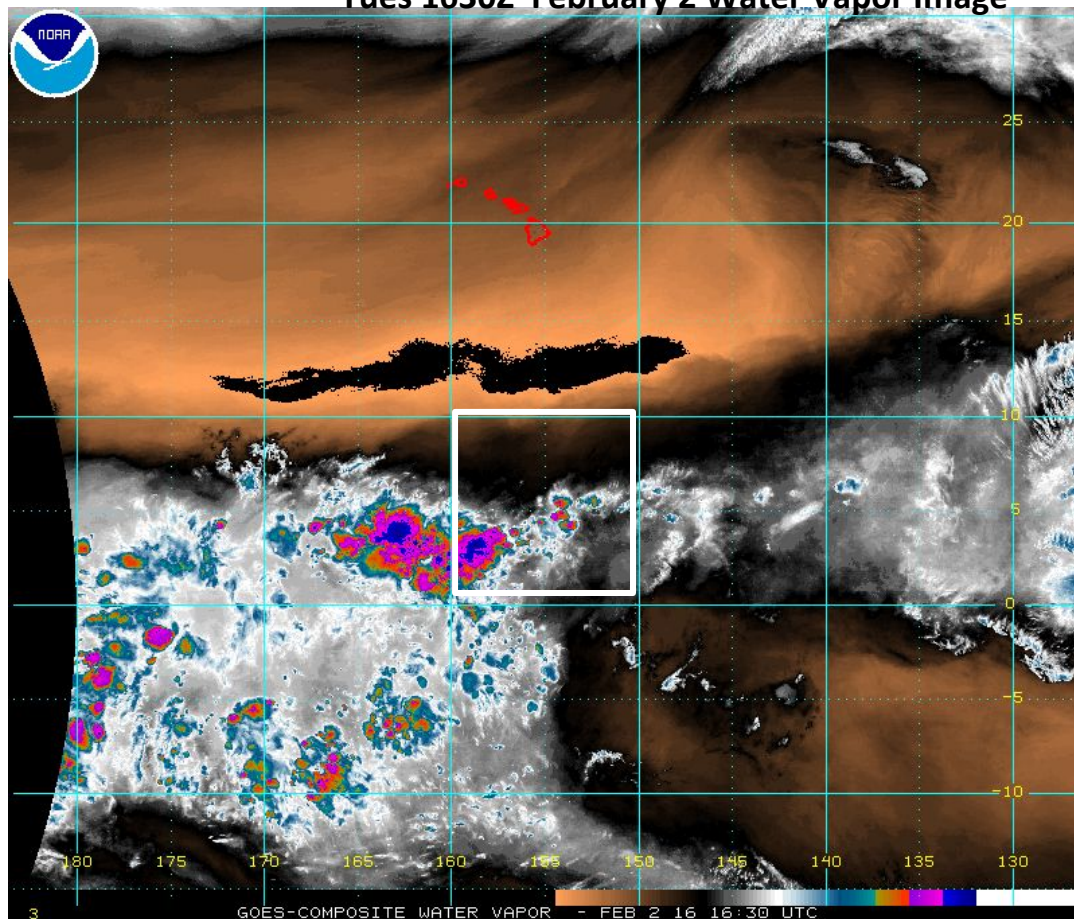
Tuesday 14Z February 2 Enhanced IR Image



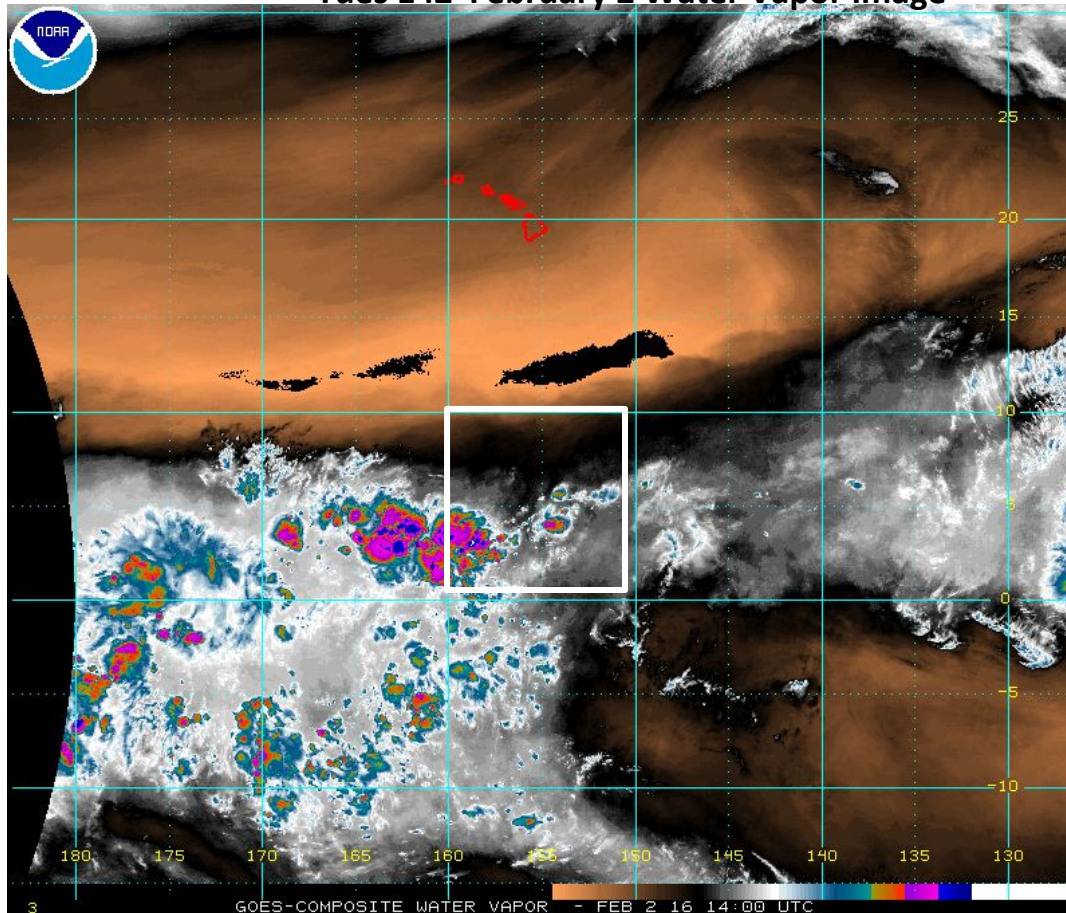
Tues 1630Z February 2 Enhanced IR Image

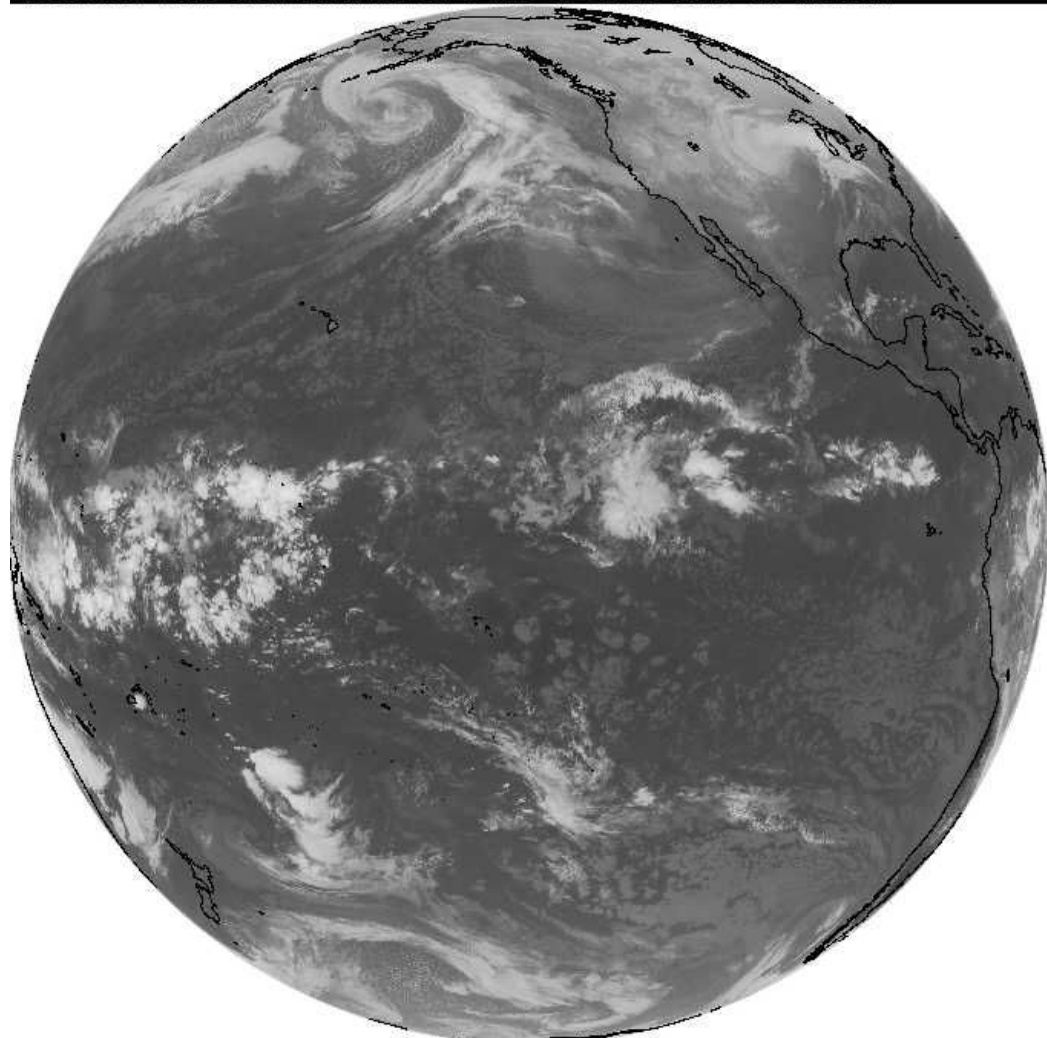


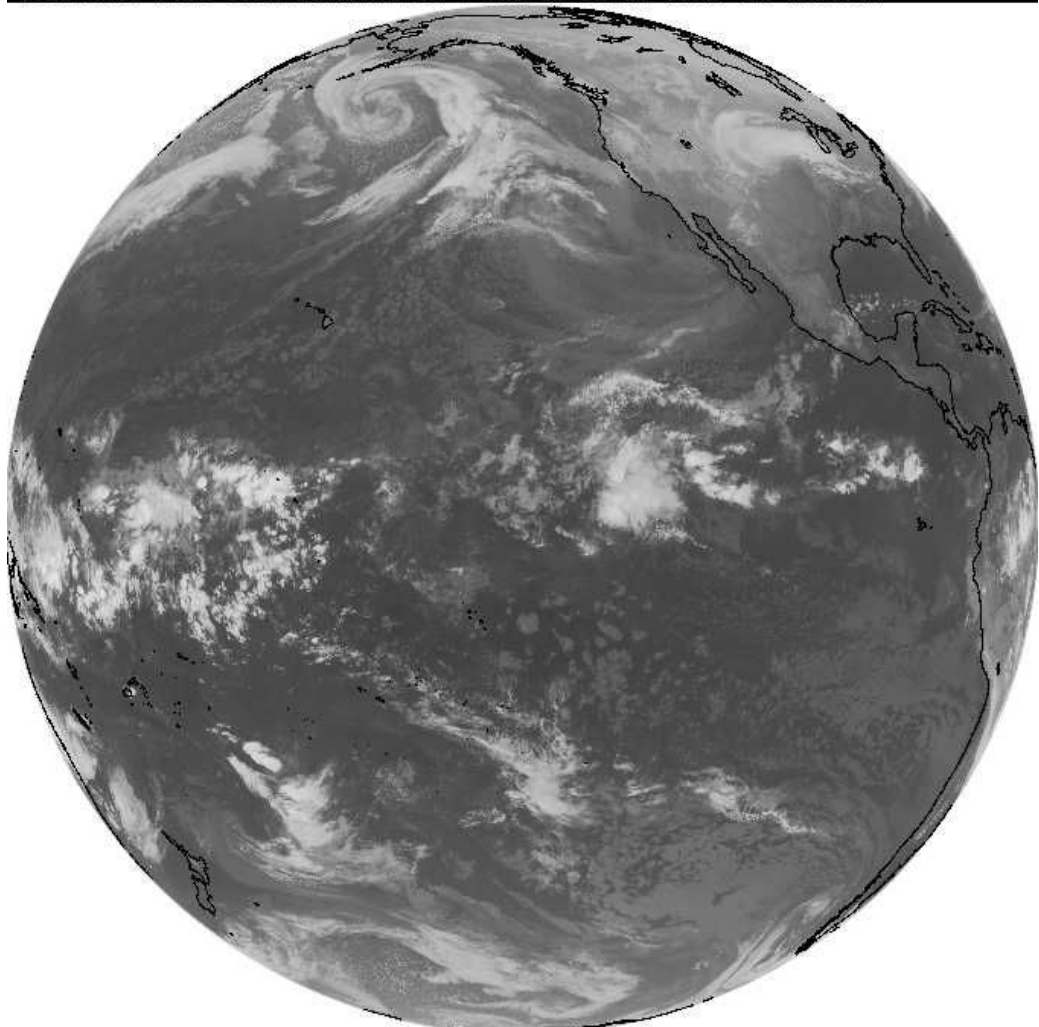
Tues 1630Z February 2 Water Vapor Image



Tues 14Z February 2 Water Vapor Image

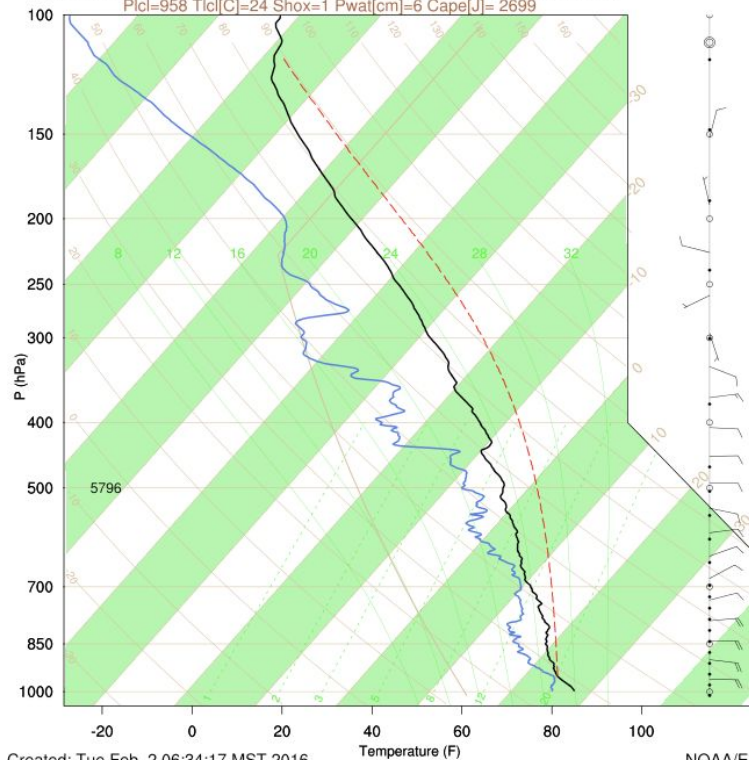






Kiritimati Is: 02/02/2016 1127Z Downward 2.01N 157.40W

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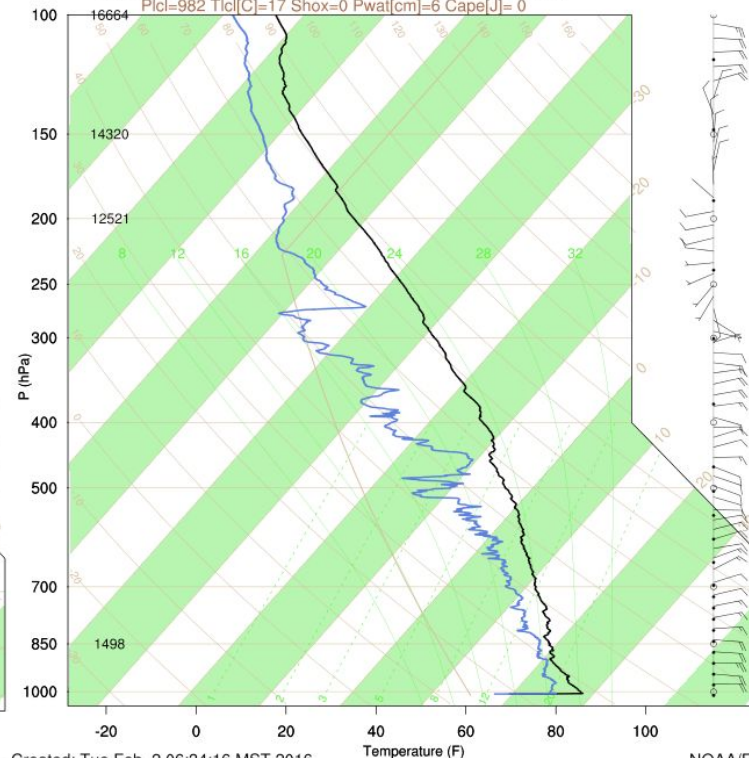


Created: Tue Feb 2 06:34:17 MST 2016

NOAA/ESRL PSD

Kiritimati Is: 02/02/2016 1127Z 2.01N 157.40W

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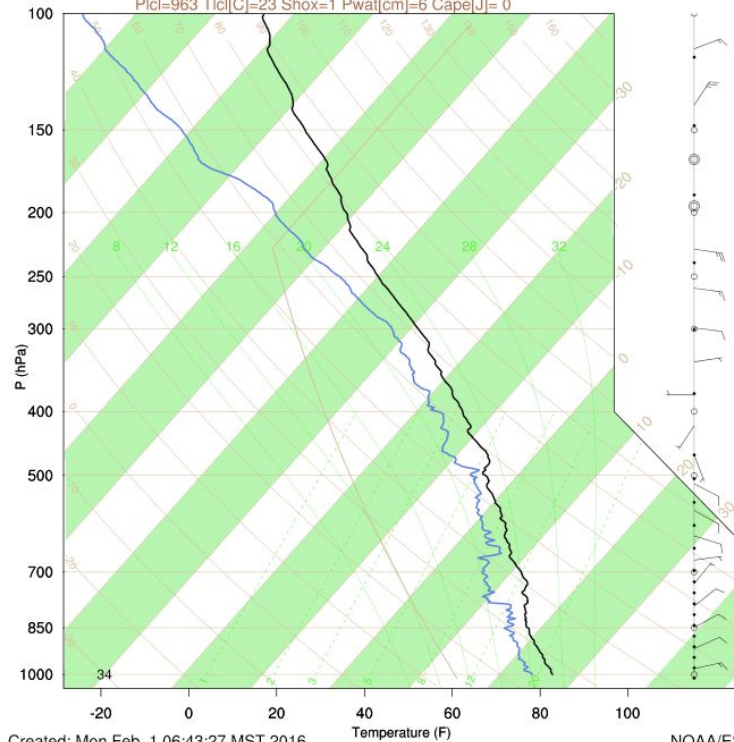


Created: Tue Feb 2 06:34:16 MST 2016

NOAA/ESRL PSD

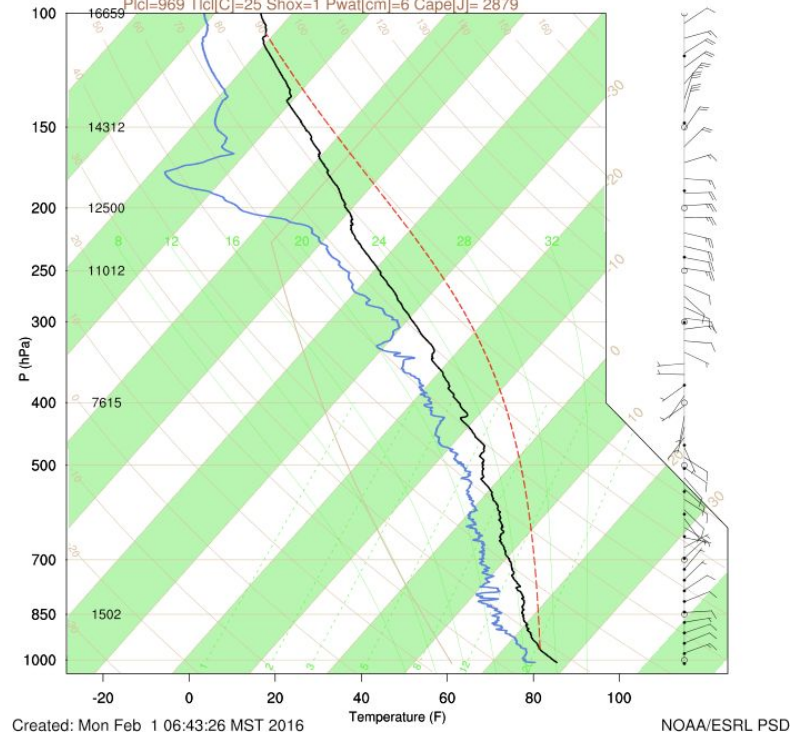
Kiritimati Is: 02/01/2016 1116Z Downward 2.01N 157.40W

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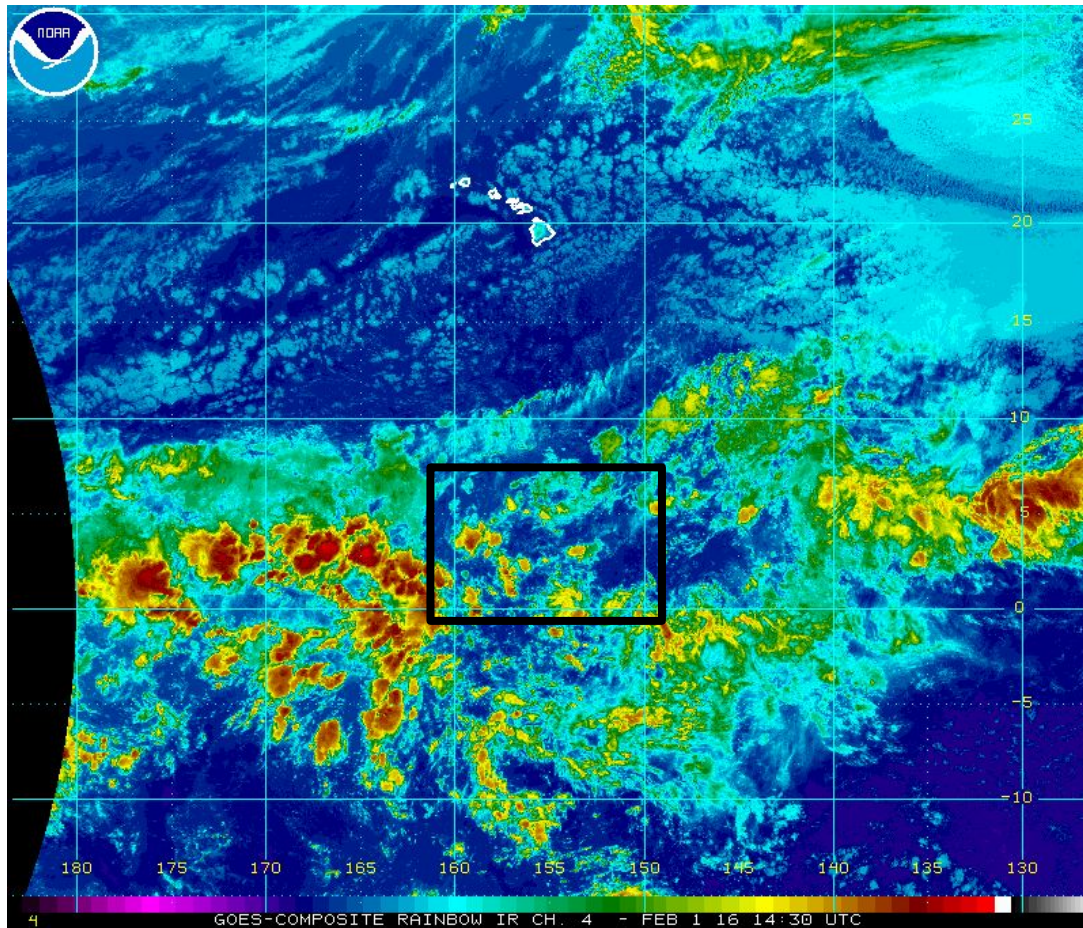


Kiritimati Is: 02/01/2016 1116Z 2.01N 157.40W

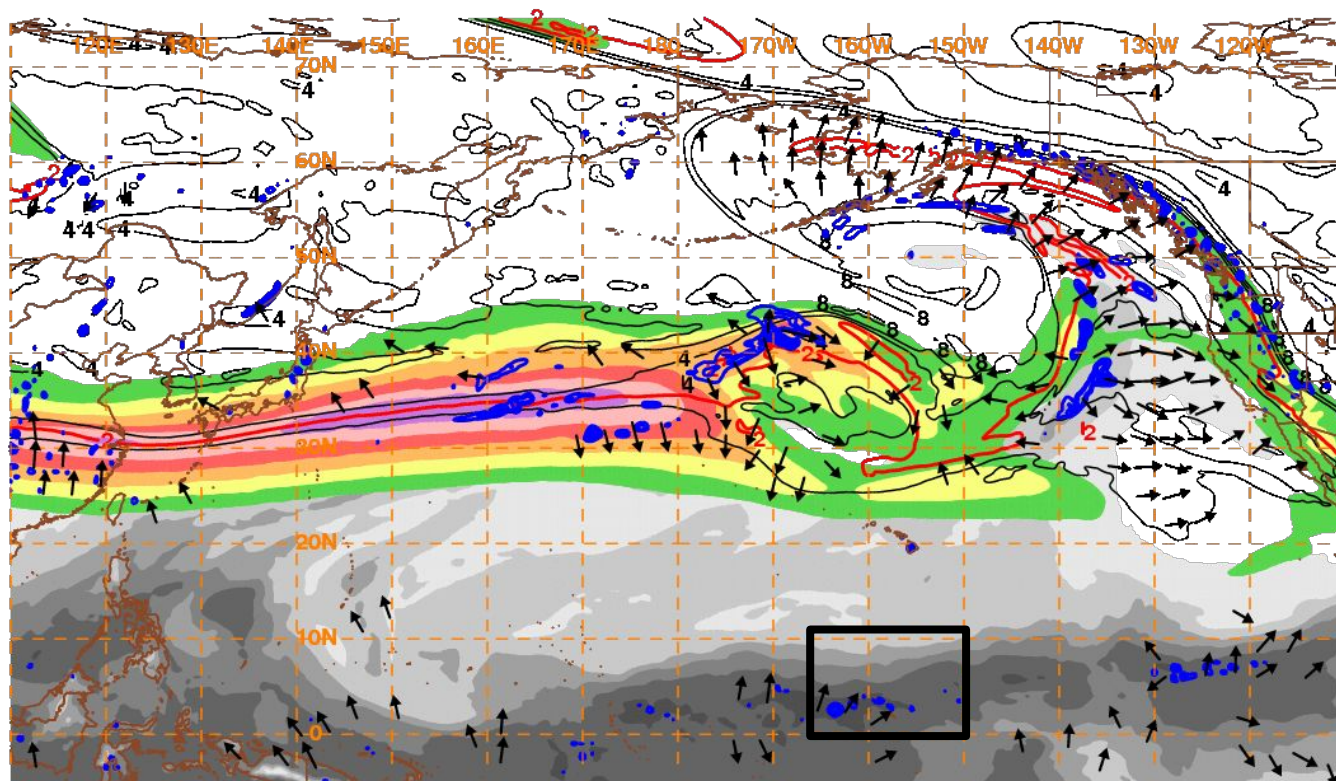
Ptcl=969 Tlcl[C]=25 Shox=1 Pwat[cm]=6 Cape[J]= 2879



Mon 1430Z February 1 Enhanced IR Image



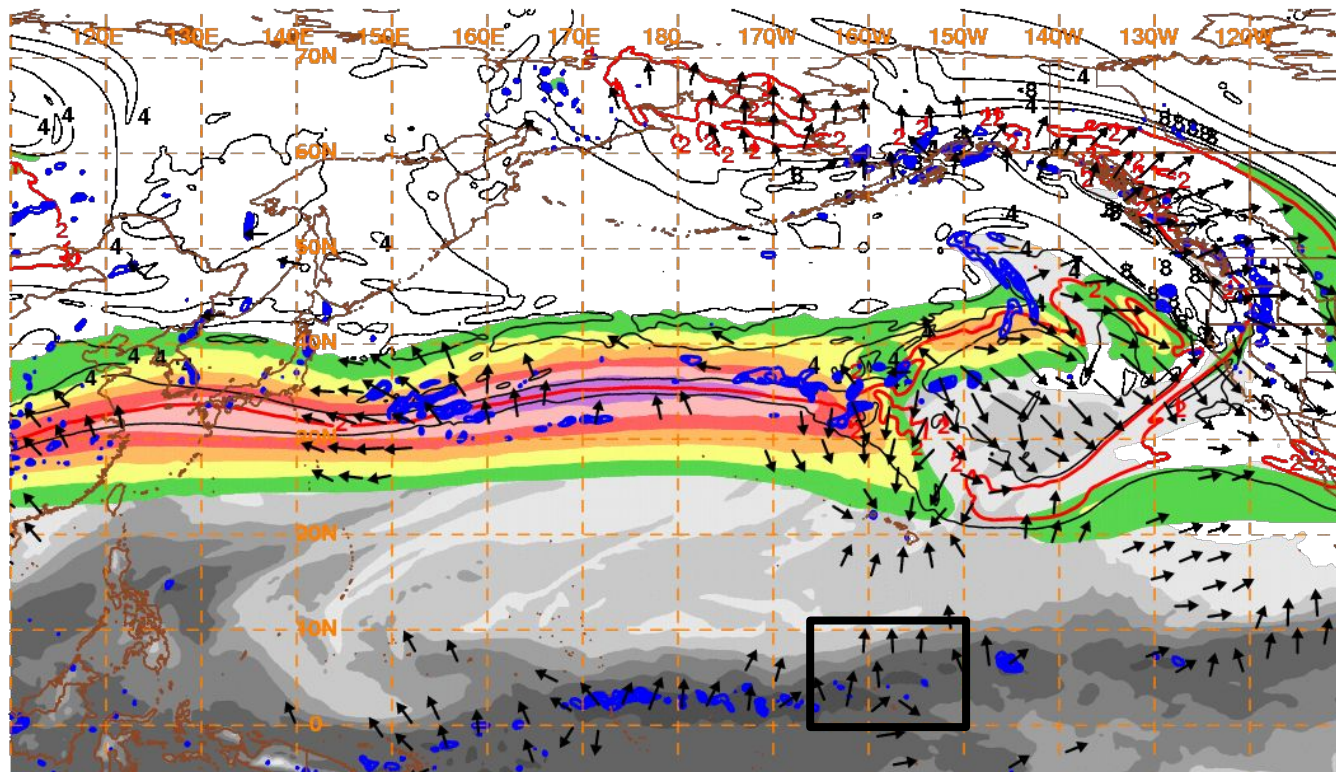
GFS 18 HR FCST Valid 00Z Wed Feb 3: 200 mb DIV Wind Vectors



10 m/s → **160203/0000V018 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel**



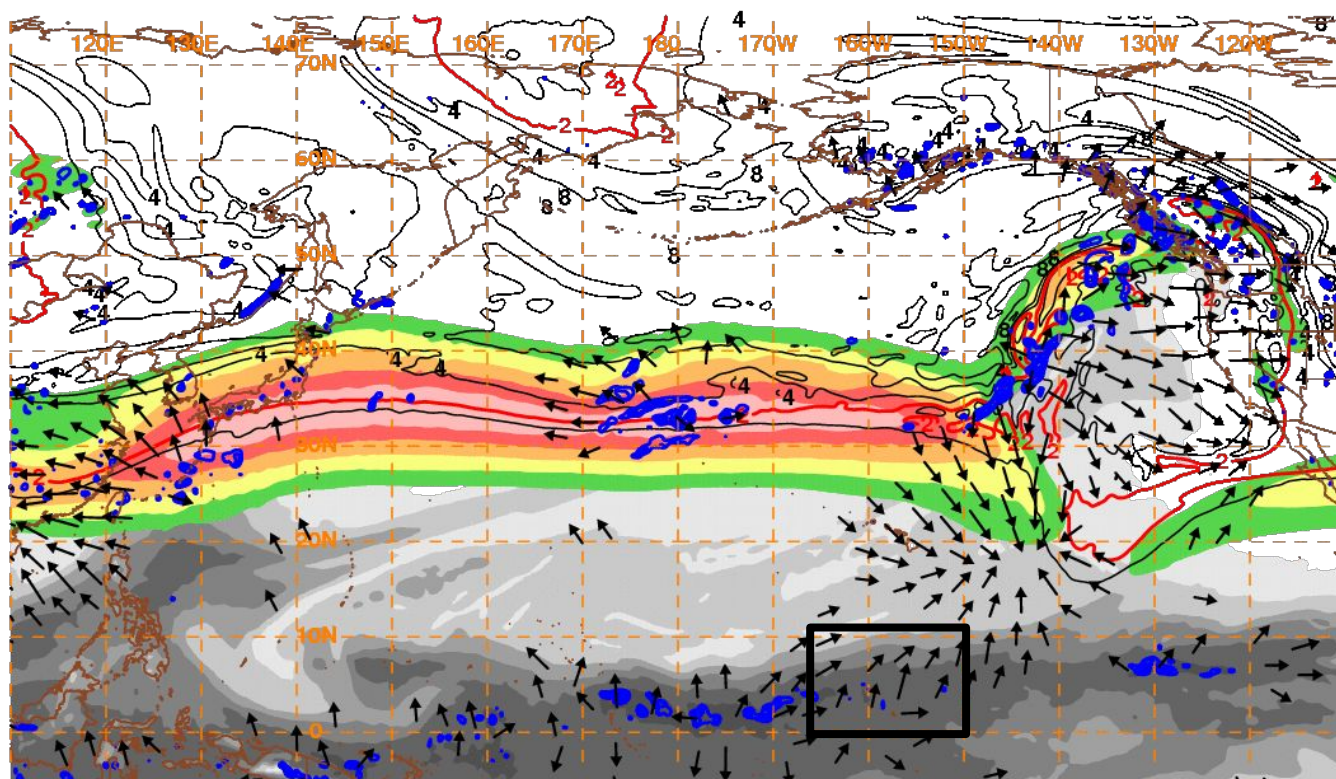
GFS 42 HR FCST Valid 00Z THU Feb 4: 200 mb DIV Wind Vectors



10 m/s → 160204/0000V042 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel



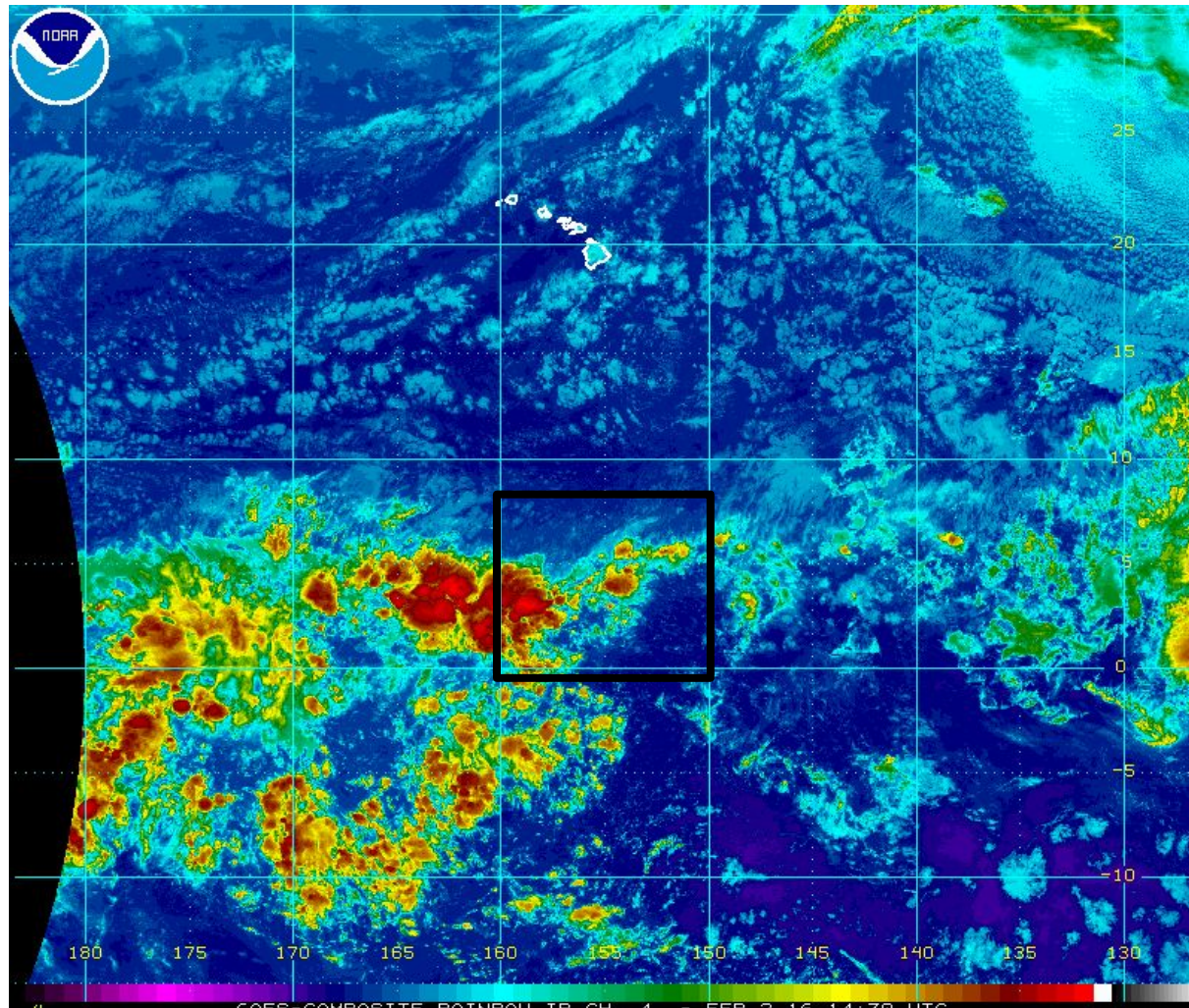
GFS 66 HR FCST Valid 00Z FRI Feb 5: 200 mb DIV Wind Vectors



10 m/s → 160205/0000V066 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel



TUE 1430Z February 2 Enhanced IR Image

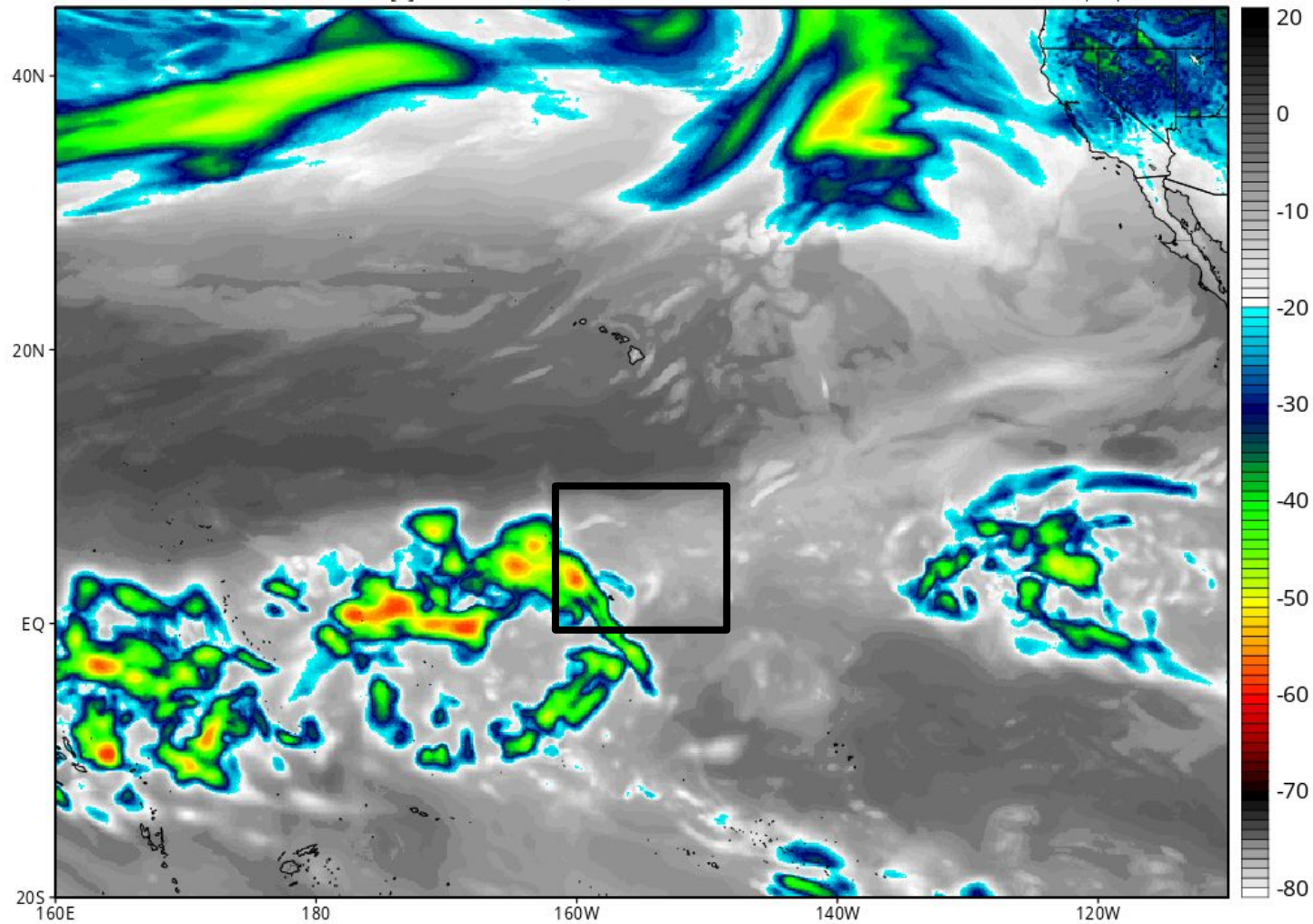


GFS Simulated IR Brightness Temperature (°C)

Init: 12z Feb 02 2016 Forecast Hour: [6] valid at 18z Tue, Feb 02 2016

Latest GFS 6HR Fcst Valid 18Z TUES

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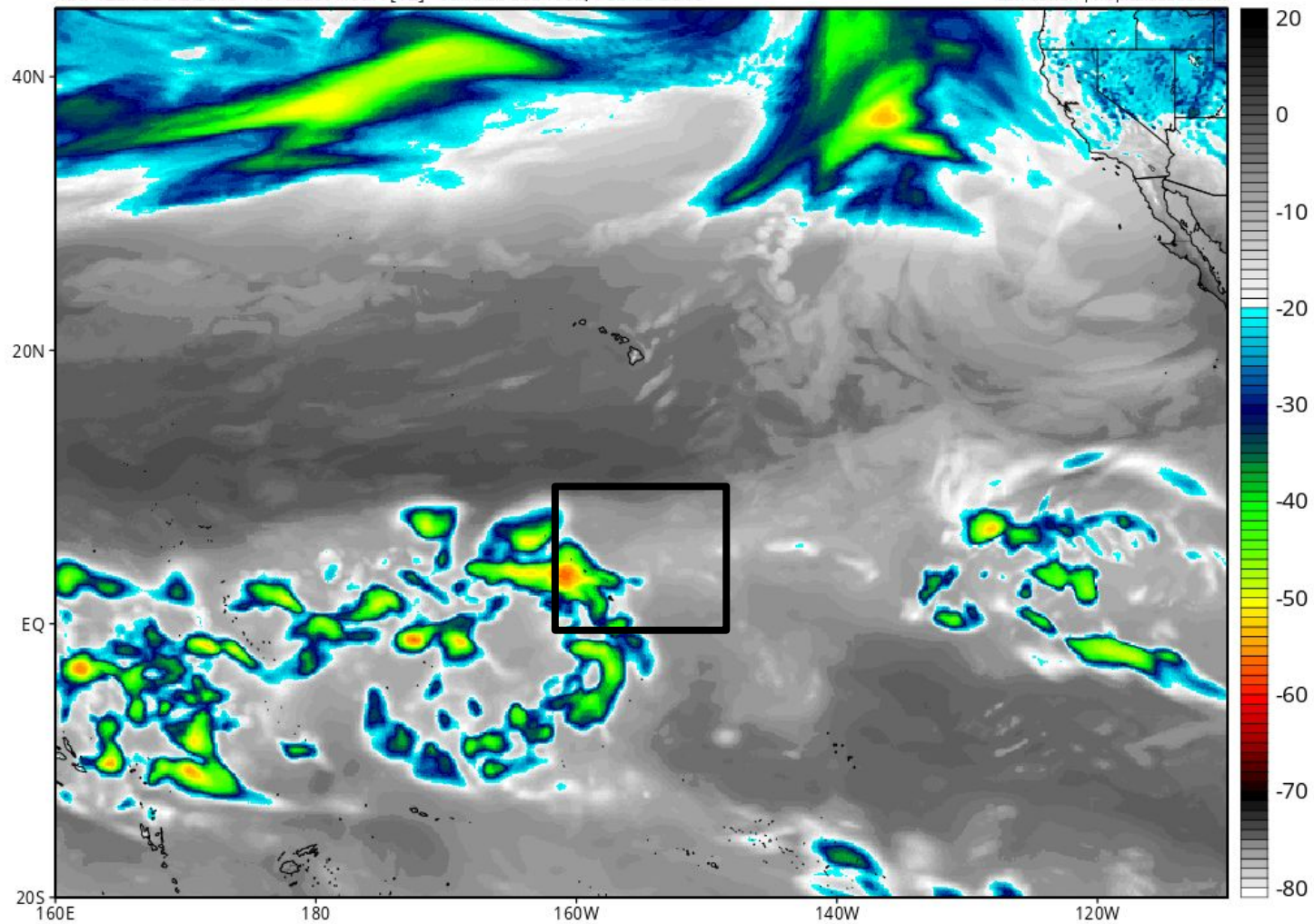
GFS Simulated IR Brightness Temperature (°C)

Latest GFS 12HR Fcst Valid 00Z WED

ON

Init: 12z Feb 02 2016 Forecast Hour: [12] valid at 00z Wed, Feb 03 2016

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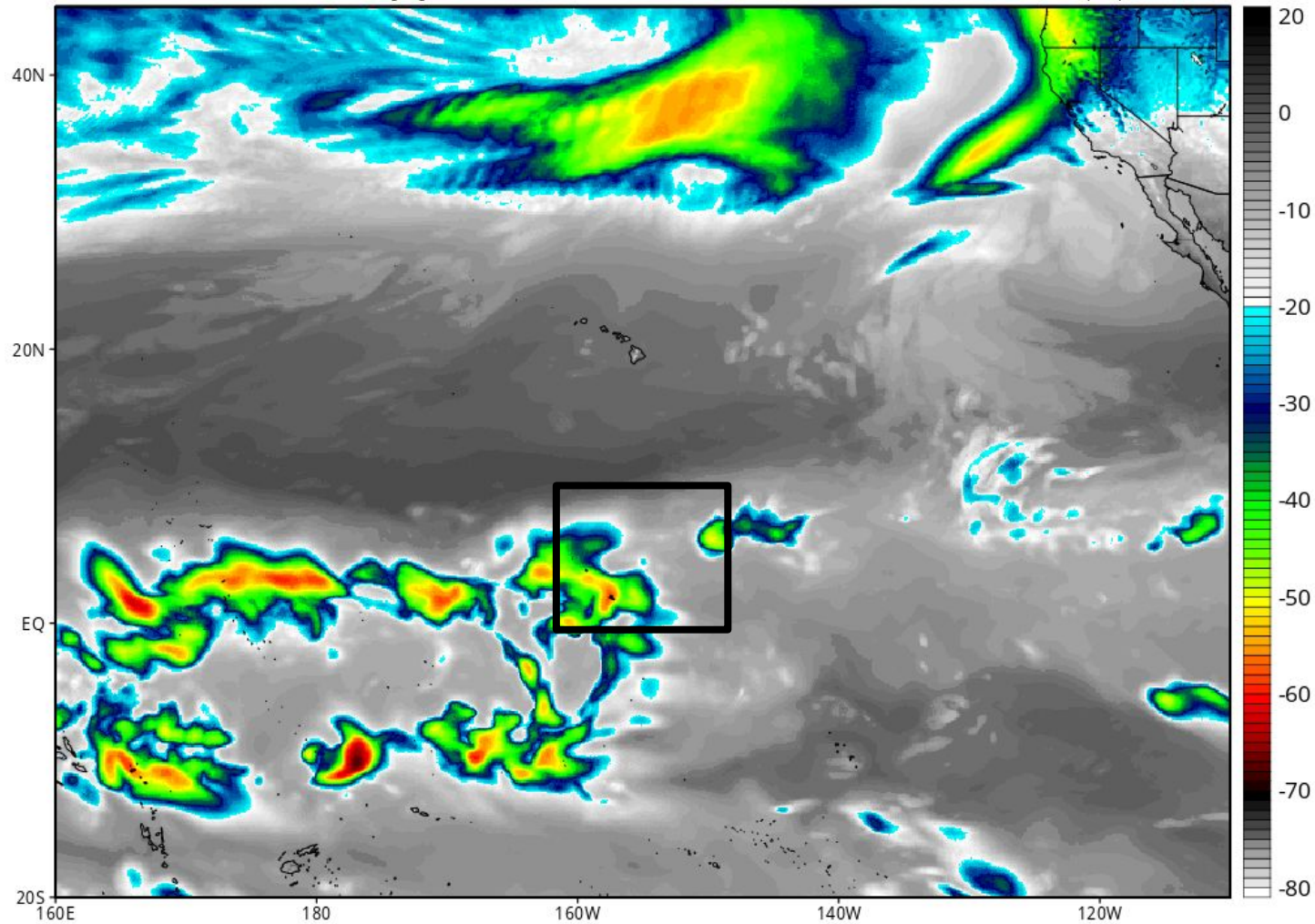
GFS Simulated IR Brightness Temperature (°C)

Init: 12z Feb 02 2016 Forecast Hour: [36] valid at 00z Thu, Feb 04 2016

Latest GFS 36HR Fcst Valid 00Z THU

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ION



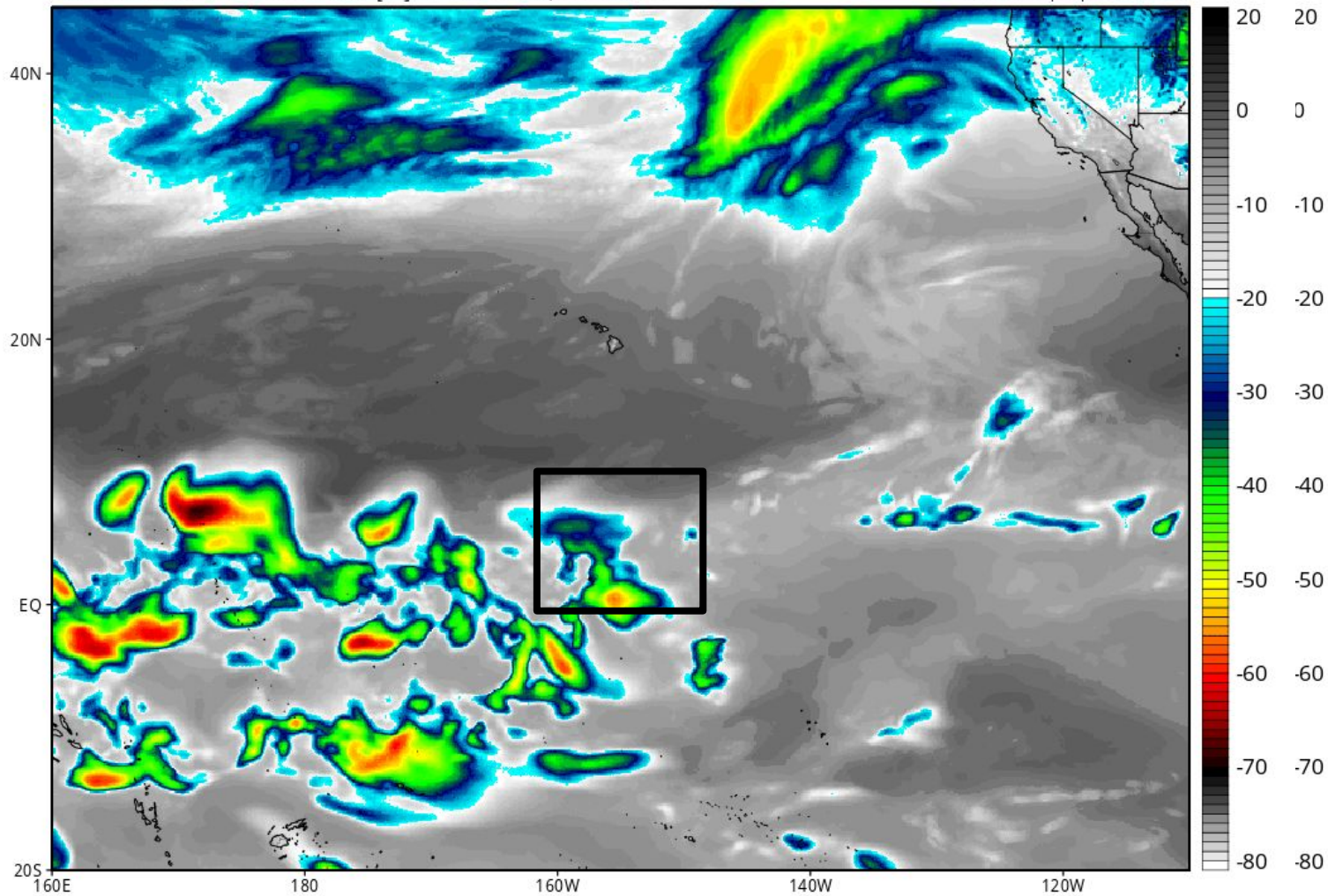
GFS Simulated IR Brightness Temperature (°C)

Latest GFS 60HR Fcst Valid 00Z FRI

Init: 12z Feb 02 2016 Forecast Hour: [60] valid at 00z Fri, Feb 05 2016

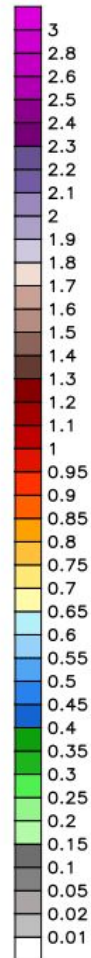
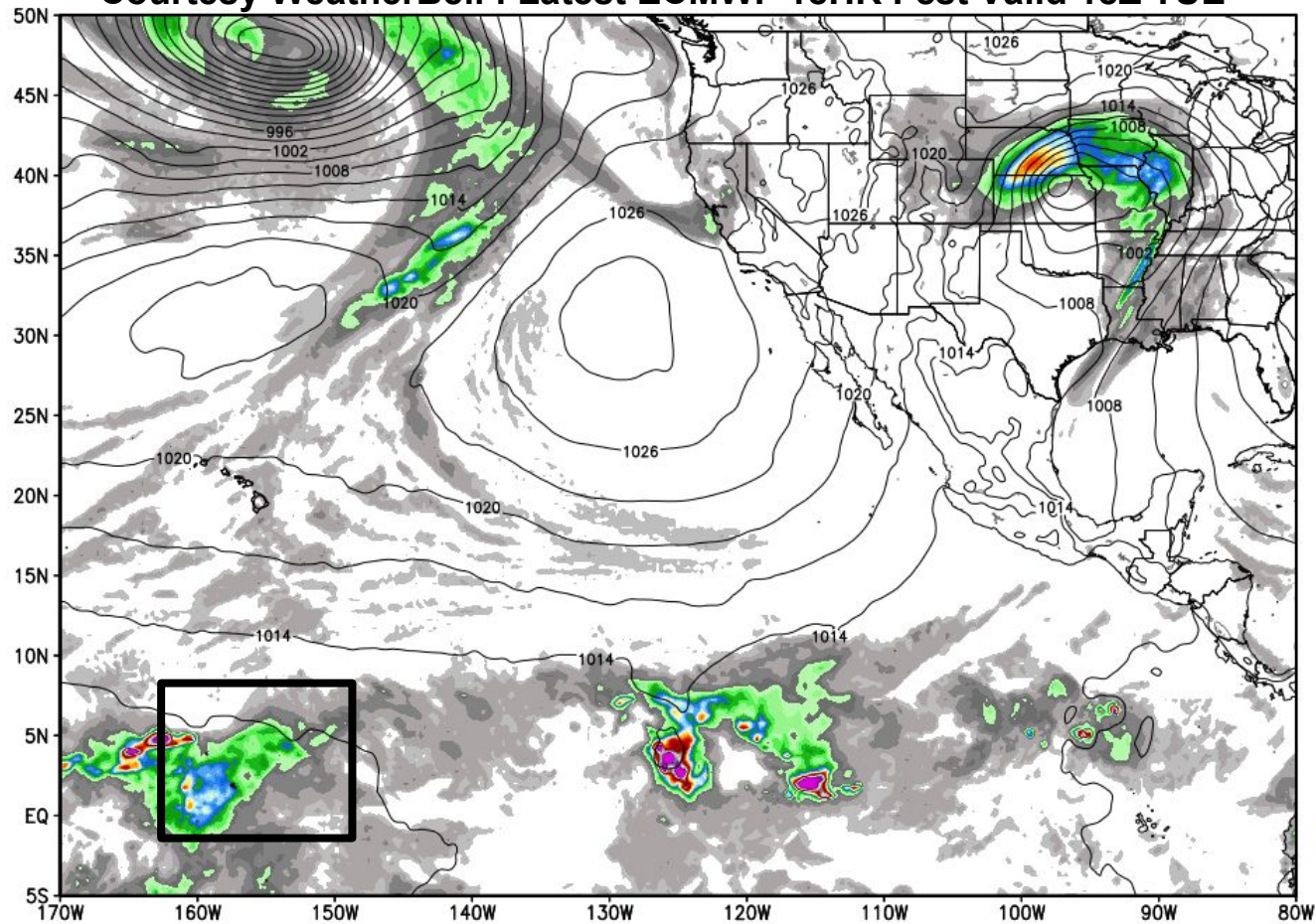
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MON



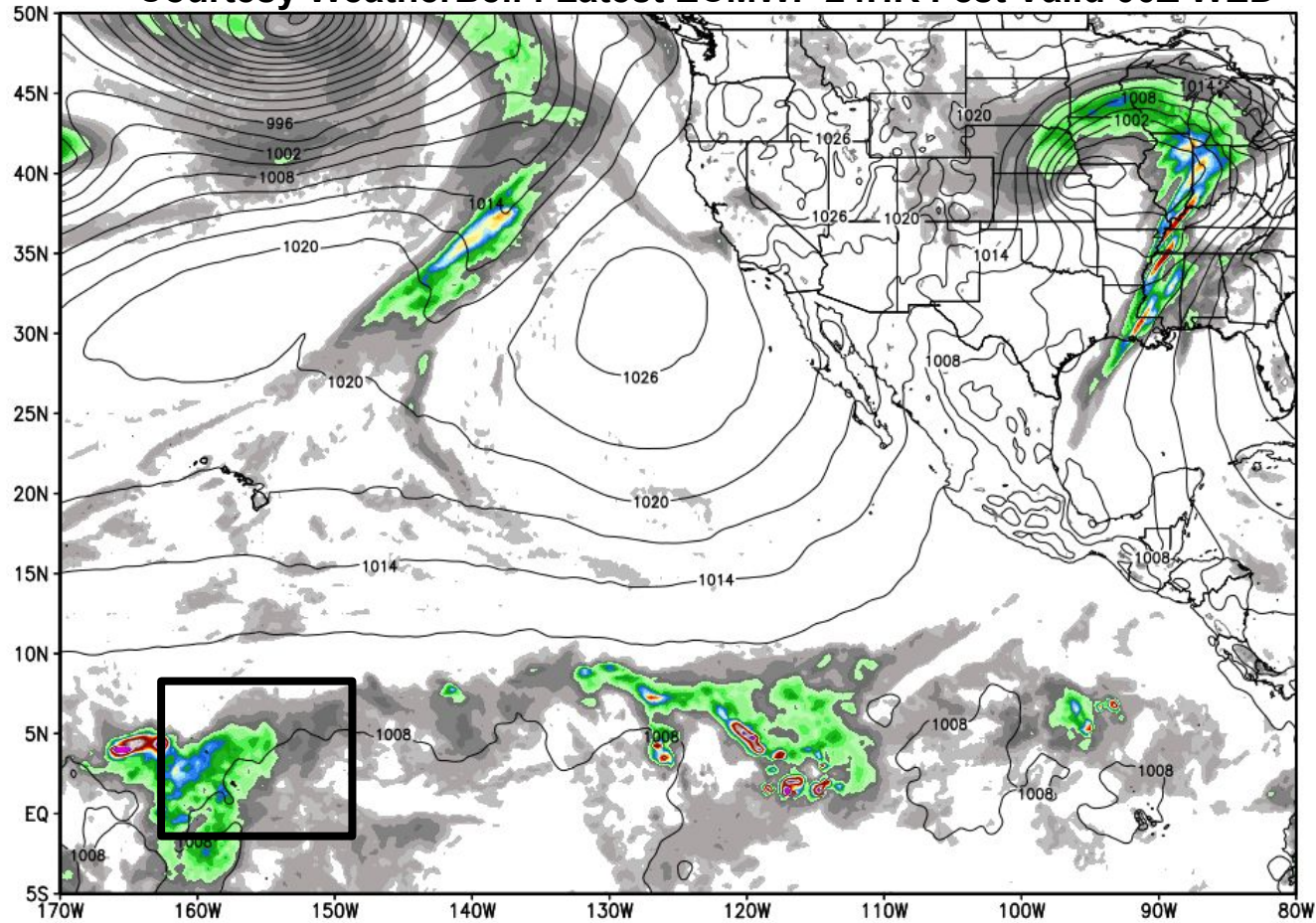
ECMWF 6-hourly Precipitation [inches] between 12Z02FEB2016 -- 18Z02FEB2016 & MSLP [hPa]
INIT: 00Z02FEB2016 fx: [018] hr --> Tue 18Z02FEB2016

Courtesy WeatherBell : Latest ECMWF 18HR Fcst Valid 18Z TUE



ECMWF 6-hourly Precipitation [inches] between 18Z02FEB2016 -- 00Z03FEB2016 & MSLP [hPa]
INIT: 00Z02FEB2016 fx: [024] hr --> Wed 00Z03FEB2016

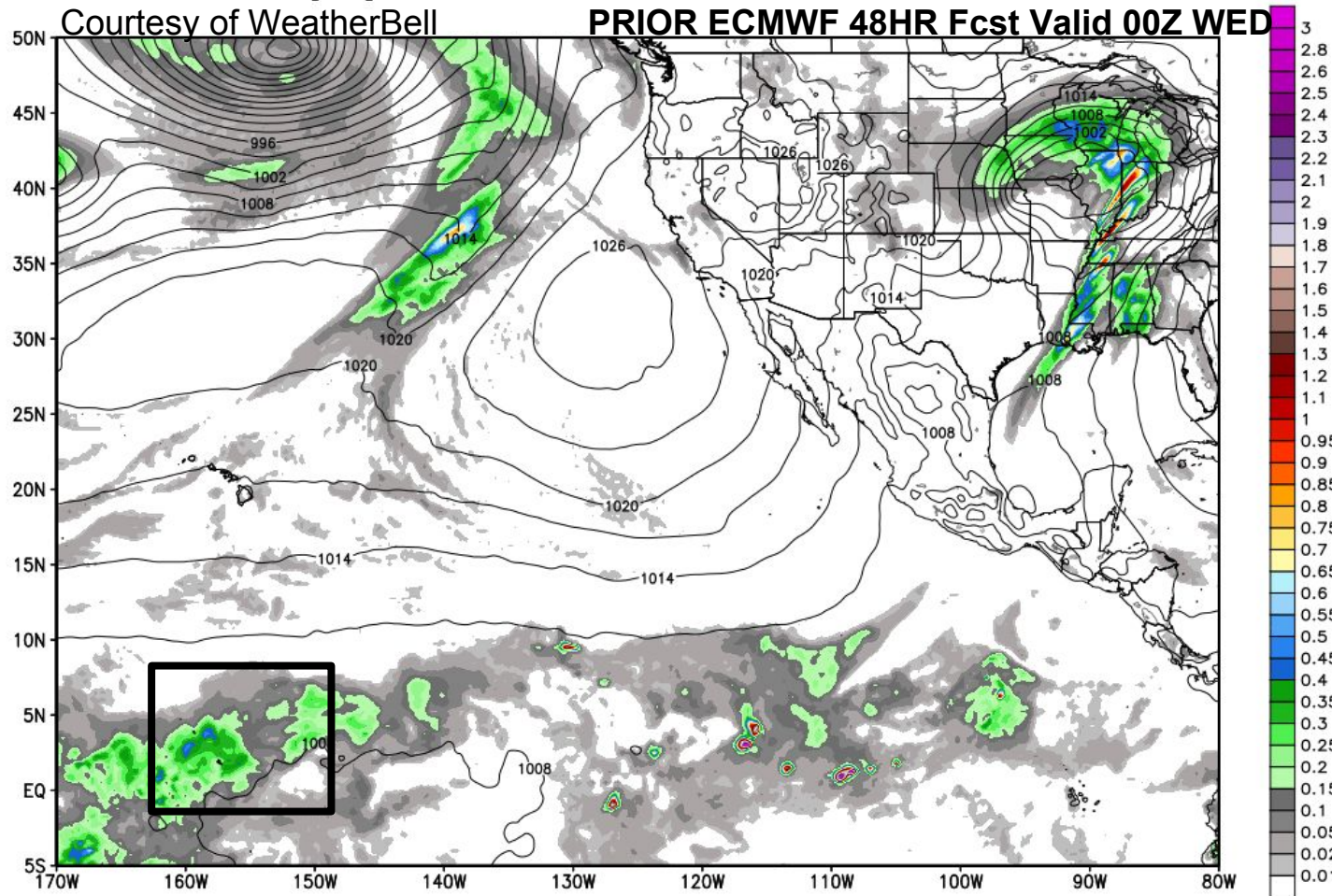
Courtesy WeatherBell : Latest ECMWF 24HR Fcst Valid 00Z WED



ECMWF 6-hourly Precipitation [inches] between 18Z02FEB2016 -- 00Z03FEB2016 & MSLP [hPa]
INIT: 00Z01FEB2016 fx: [048] hr --> Wed 00Z03FEB2016

Courtesy of WeatherBell

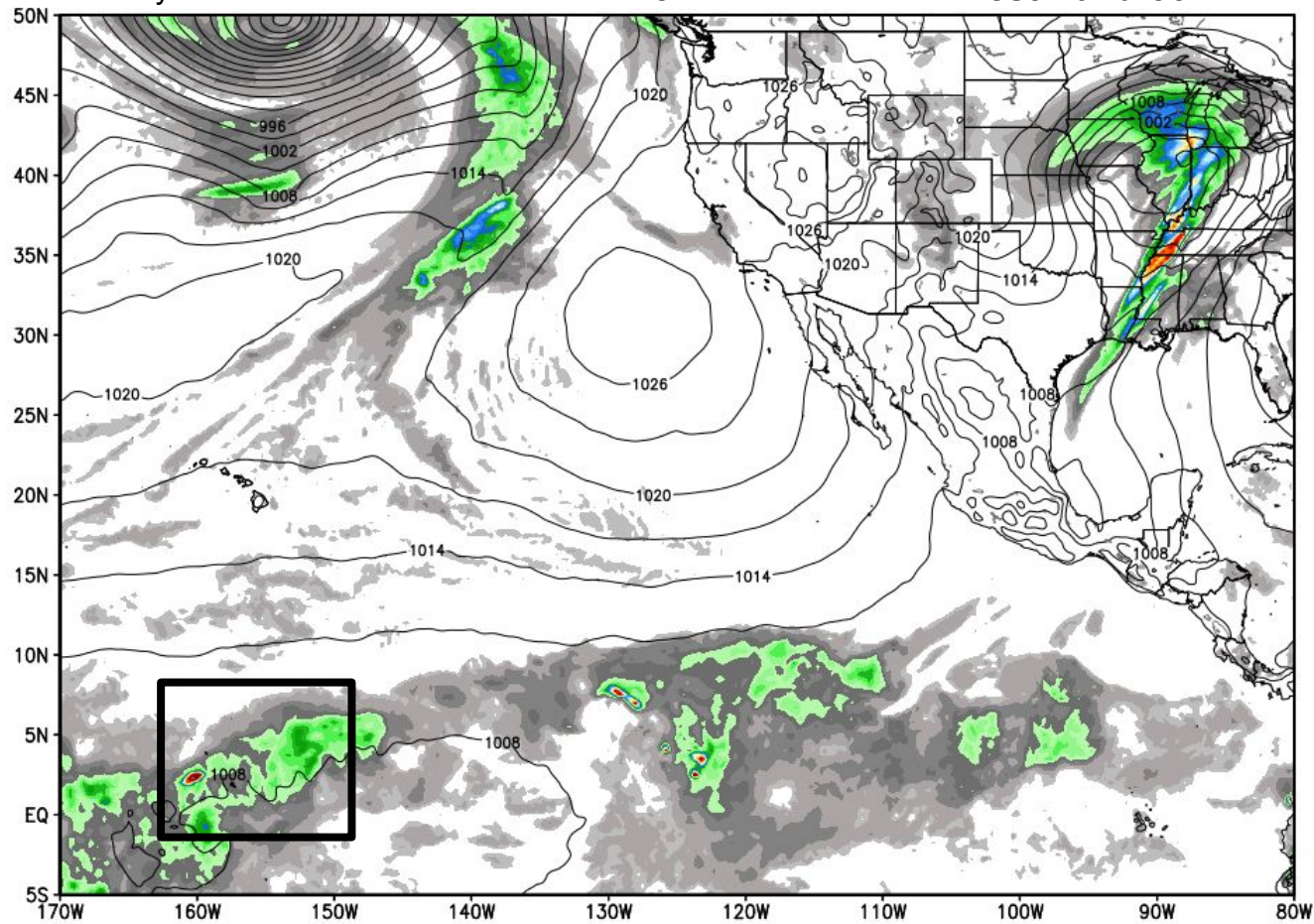
PRIOR ECMWF 48HR Fcst Valid 00Z WED



ECMWF 6-hourly Precipitation [inches] between 18Z02FEB2016 -- 00Z03FEB2016 & MSLP [hPa]
INIT: 00Z31JAN2016 fx: [072] hr --> Wed 00Z03FEB2016

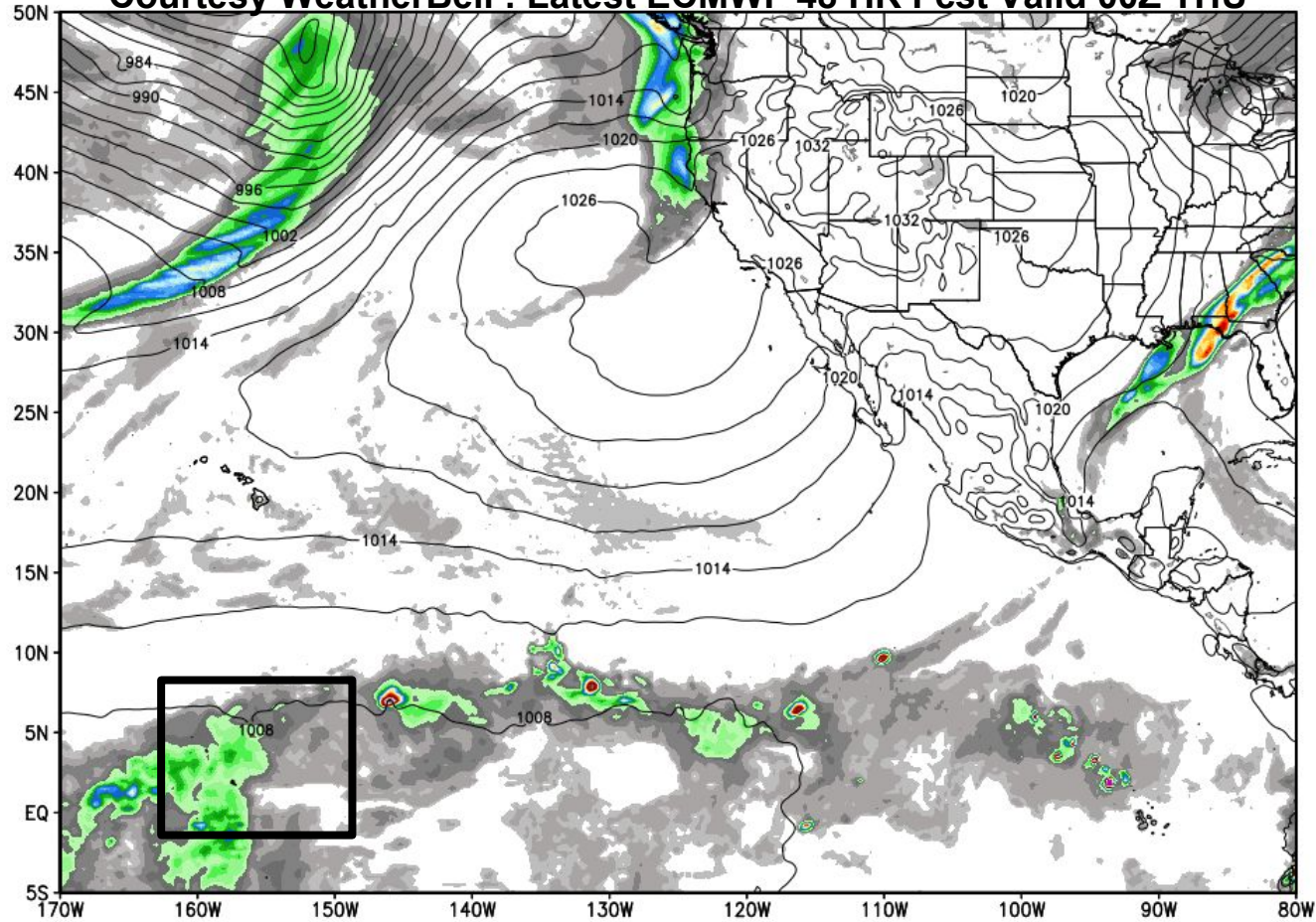
Courtesy WeatherBell

Prior ECMWF 72 HR Fcst Valid 00Z WED



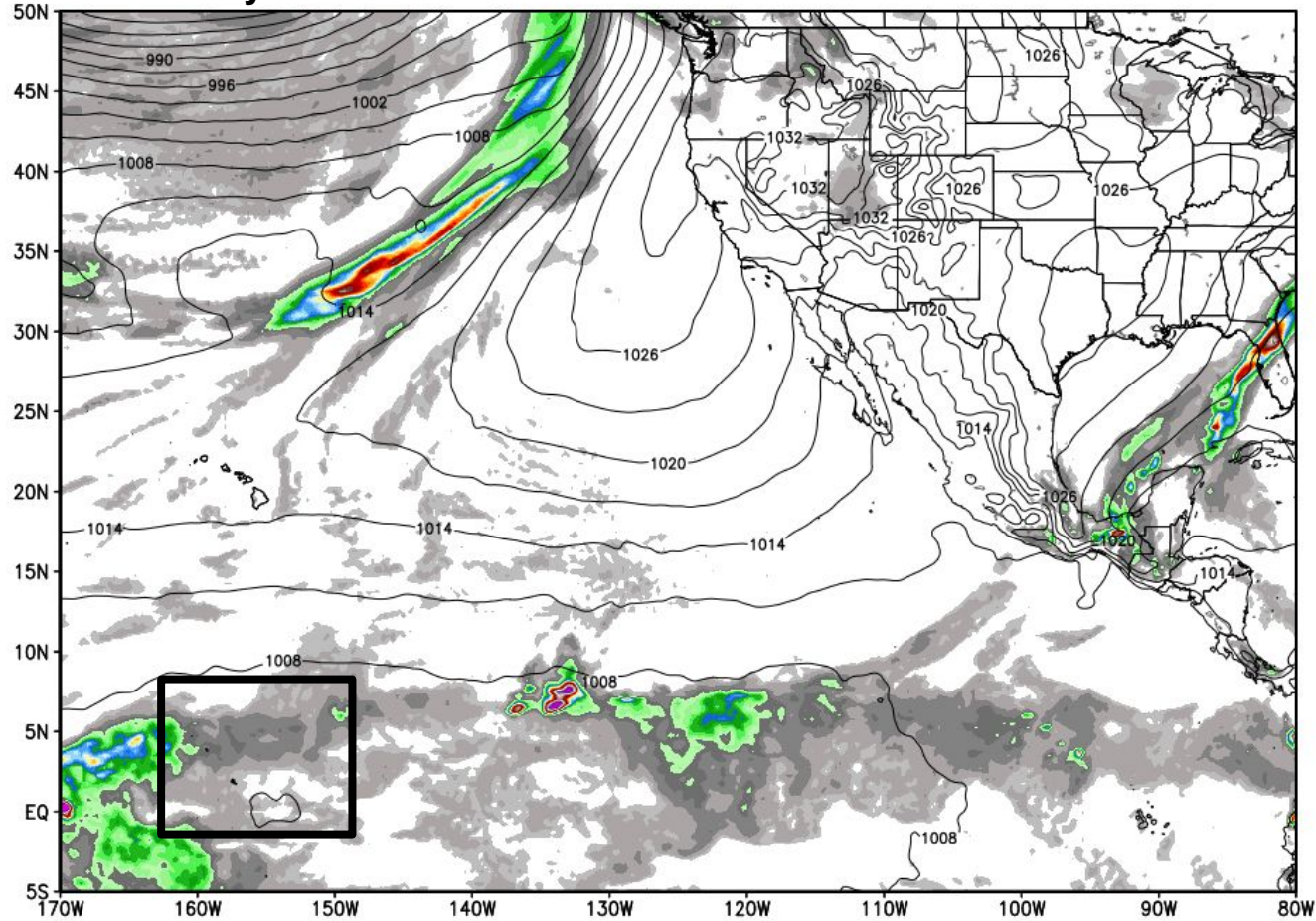
ECMWF 6-hourly Precipitation [inches] between 18Z03FEB2016 -- 00Z04FEB2016 & MSLP [hPa]
INIT: 00Z02FEB2016 fx: [048] hr --> Thu 00Z04FEB2016

Courtesy WeatherBell : Latest ECMWF 48 HR Fcst Valid 00Z THU



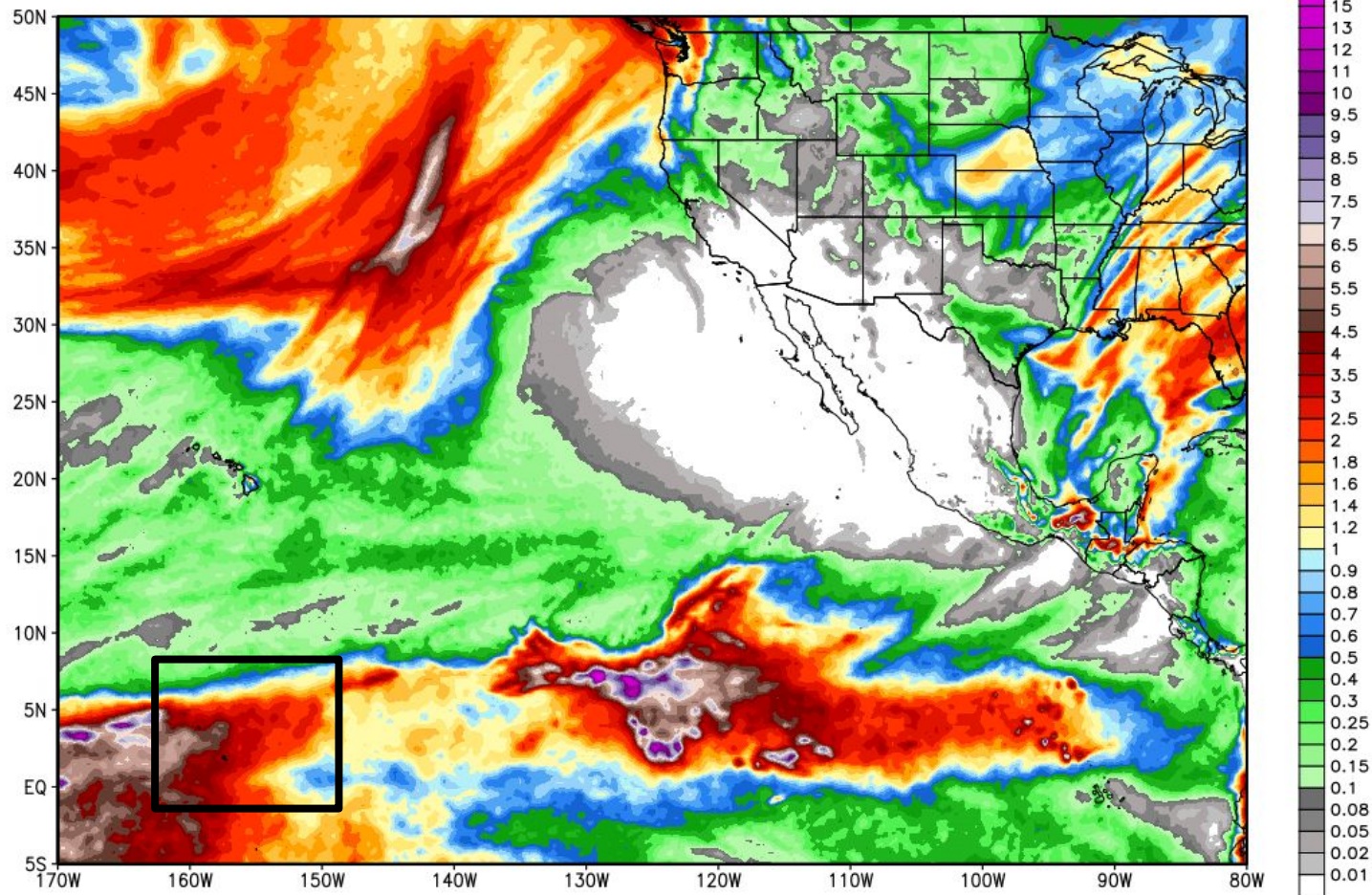
ECMWF 6-hourly Precipitation [inches] between 18Z04FEB2016 -- 00Z05FEB2016 & MSLP [hPa]
INIT: 00Z02FEB2016 fx: [072] hr --> Fri 00Z05FEB2016

Courtesy WeatherBell : Latest ECMWF 72 HR Fcst Valid 00Z FRI



ECMWF Total Precipitation [inches] between 00Z02FEB2016 -- 00Z09FEB2016
INIT: 00Z02FEB2016 fx: [168] hr --> Tue 00Z09FEB2016

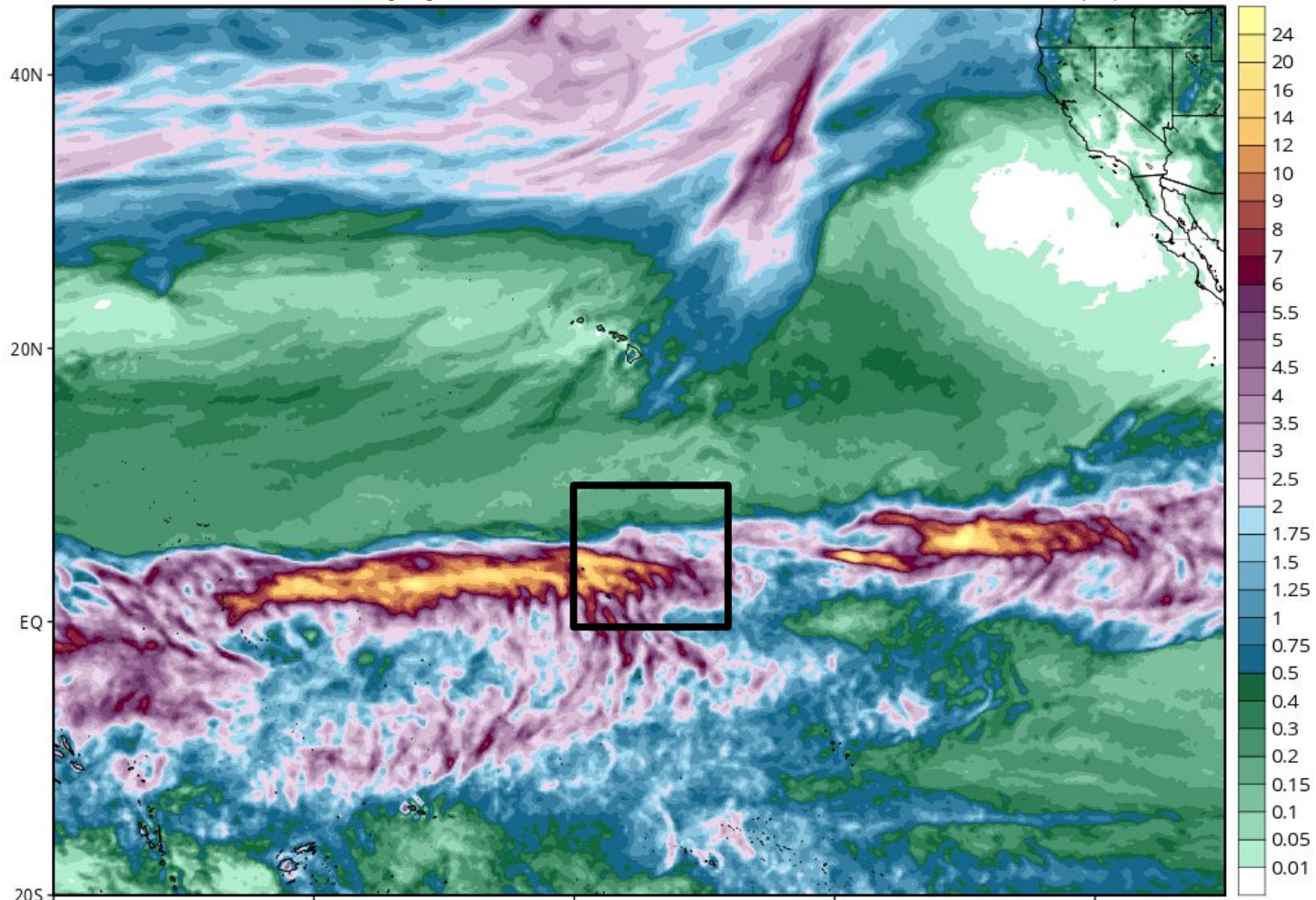
Max 18.1 in



GFS Total Accumulated Precipitation (inches) from 06z01Feb2016 to 00z08Feb2016

Init: 06z Feb 01 2016 Forecast Hour: [162] valid at 00z Mon, Feb 08 2016

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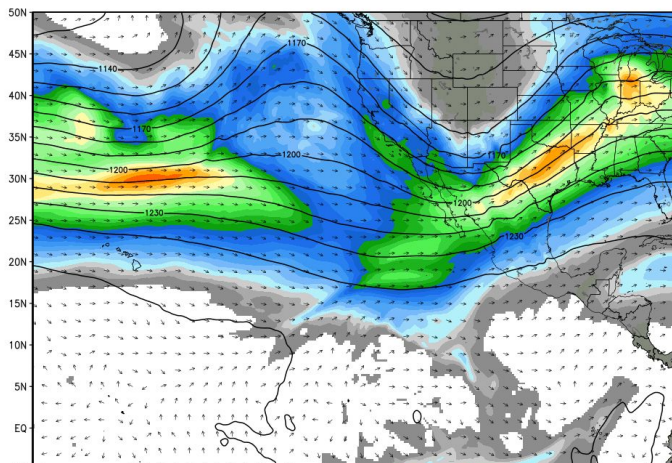


18Z Tues Feb 2

18Z Fri Feb 5

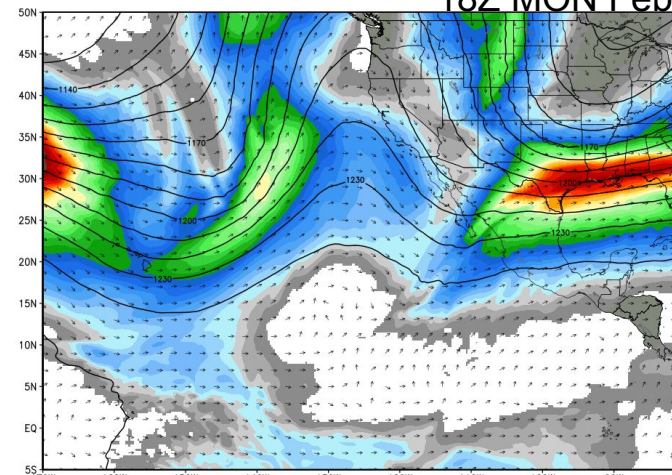
ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]
INIT: 00Z02FEB2016 fx: [018] hr --> Tue 18Z02FEB2016

Max Wind 135.4 knots



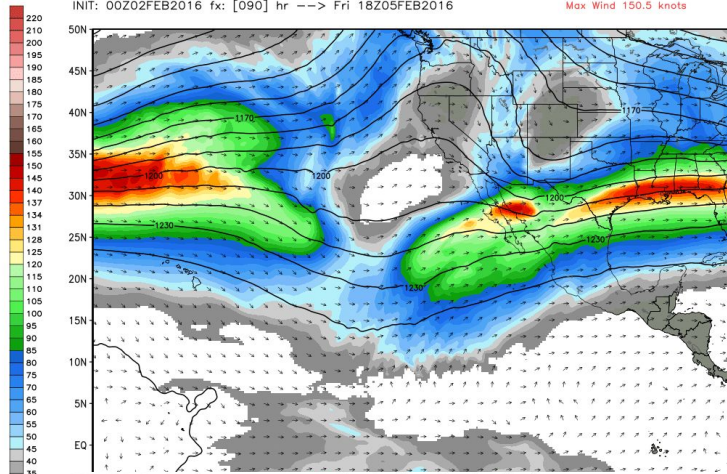
ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]
INIT: 00Z02FEB2016 fx: [162] hr --> Mon 18Z08FEB2016

18Z MON Feb 8



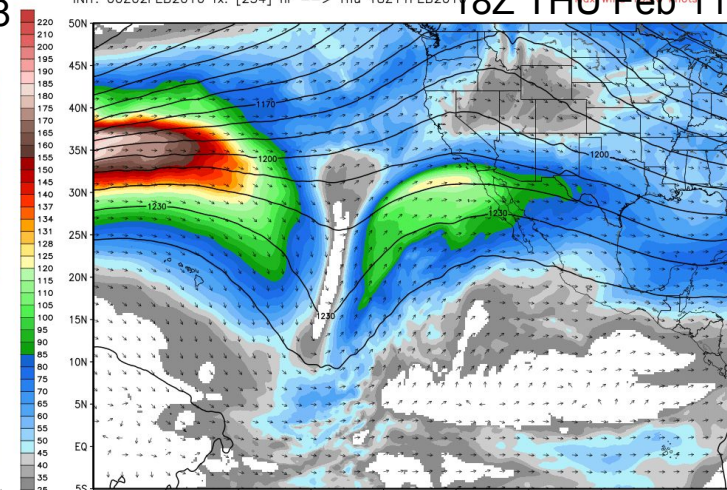
ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]
INIT: 00Z02FEB2016 fx: [090] hr --> Fri 18Z05FEB2016

Max Wind 150.5 knots



ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]
INIT: 00Z02FEB2016 fx: [234] hr --> Thu 18Z11FEB2016

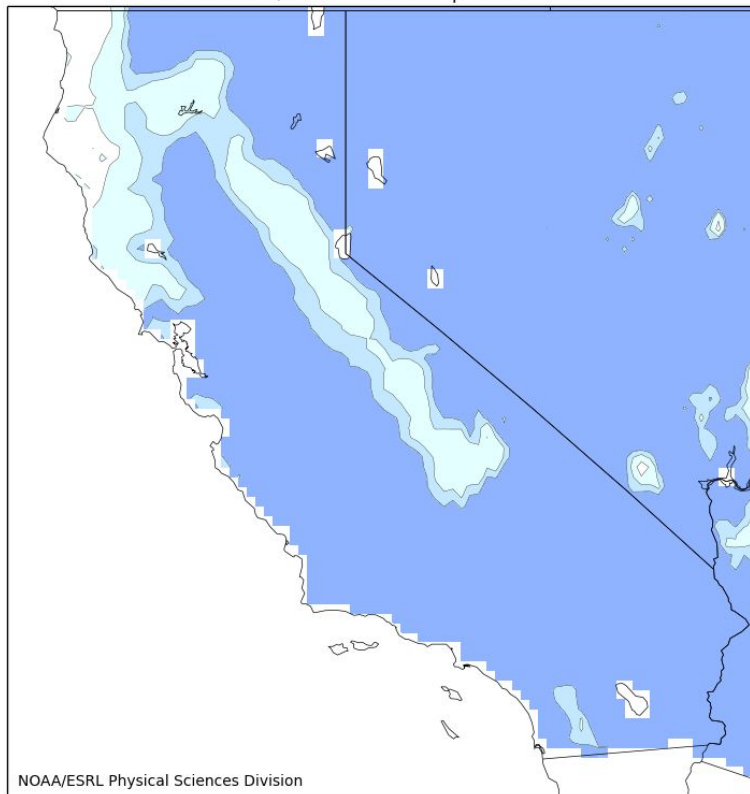
18Z THU Feb 11



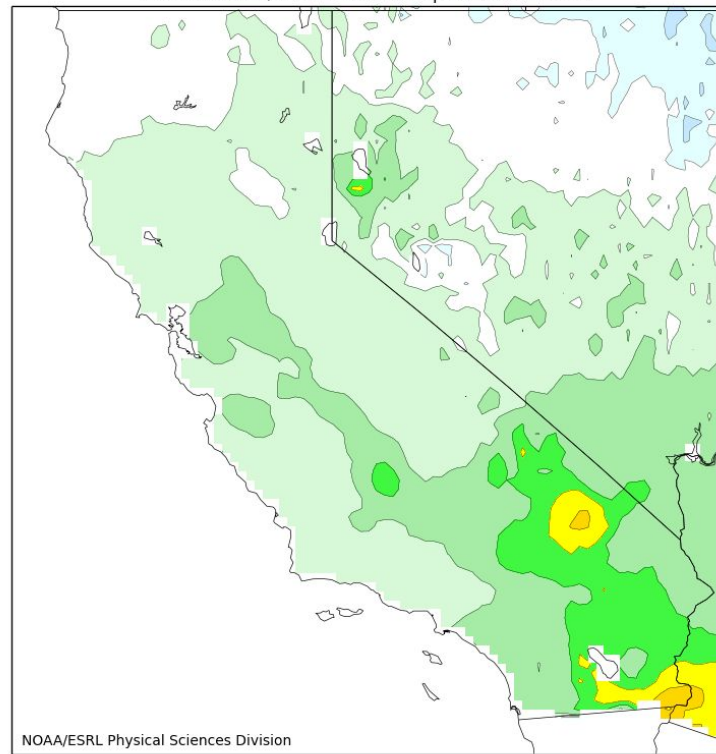
Medium - Long Range Forecast

ESRL-Calibrated Reforecast Pcpn : Day 0-7 and 8-15 Day Fcst
(from the 00Z MON 1 FEB ensembles of the experimental reforecast system)

000-168hr fcst from 00Z Mon Feb 01. Valid 00Z Mon Feb 01 - 00Z Mon Feb 08
Ratio. Forecast/Climo Prob of Precip > 50mm. CSGD.



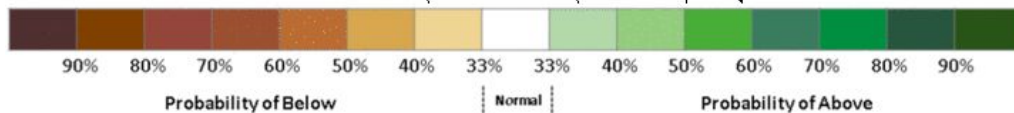
198-360hr fcst from 00Z Mon Feb 01. Valid 06Z Tue Feb 09 - 00Z Tue Feb 16
Ratio. Forecast/Climo Prob of Precip > 50mm. CSGD.





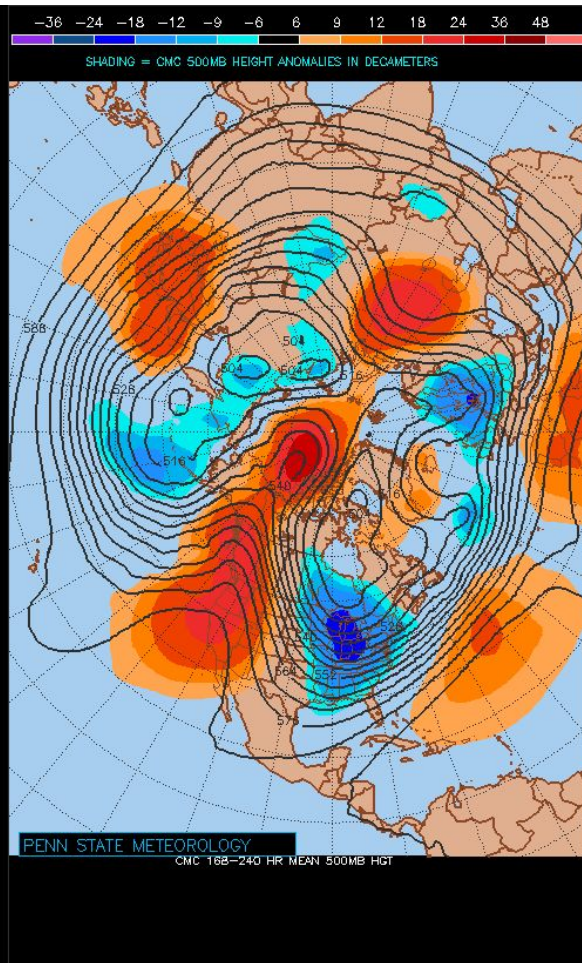
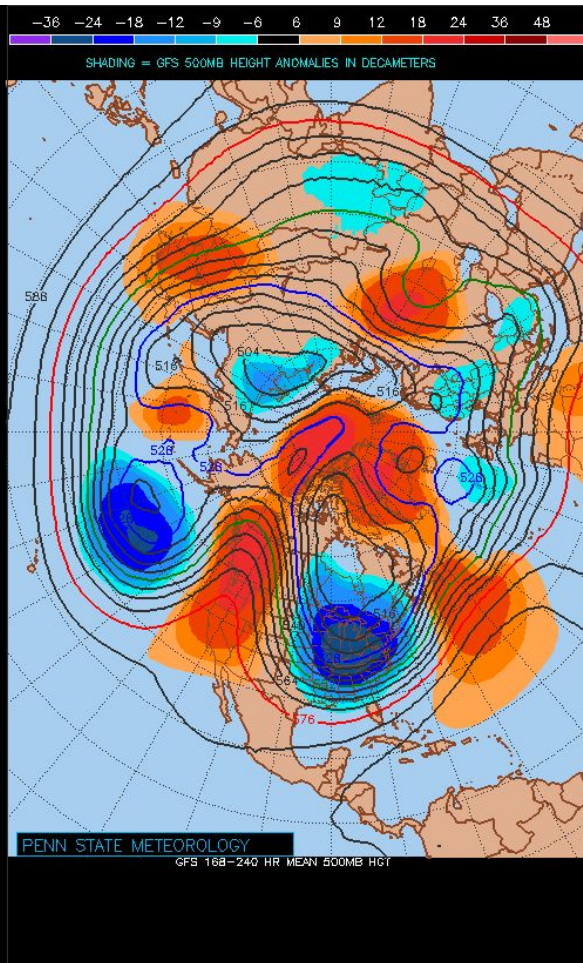
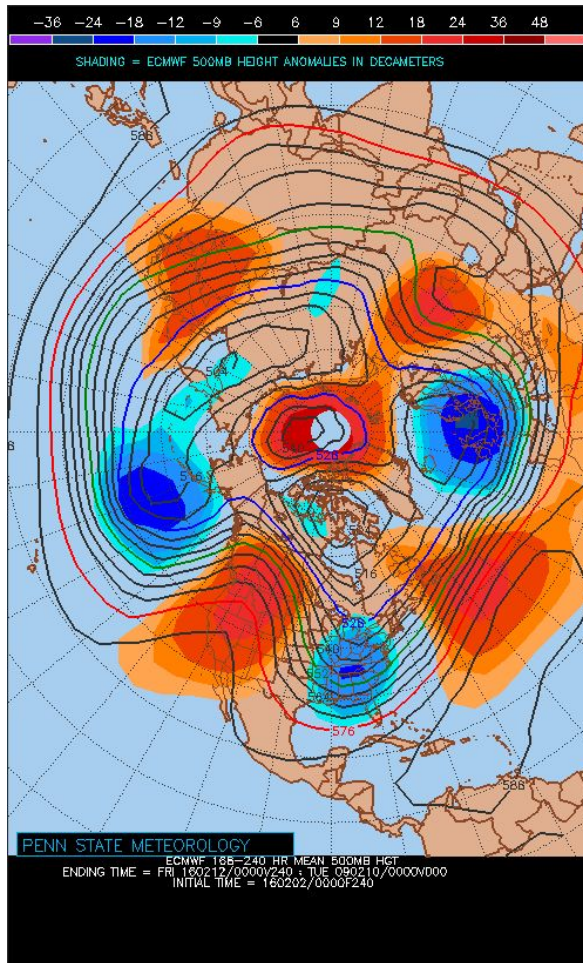
6-10 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 1 FEB 2016
VALID FEB 07 - 11, 2016

DASHED BLACK LINES ARE CLIMATOLOGY
(TENTH OF INCHES) SHADED AREAS ARE FCST
VALUES ABOVE (A) OR BELOW (B) NORMAL
UNSHADED AREAS ARE NEAR-NORMAL



Medium - Long Range Forecast

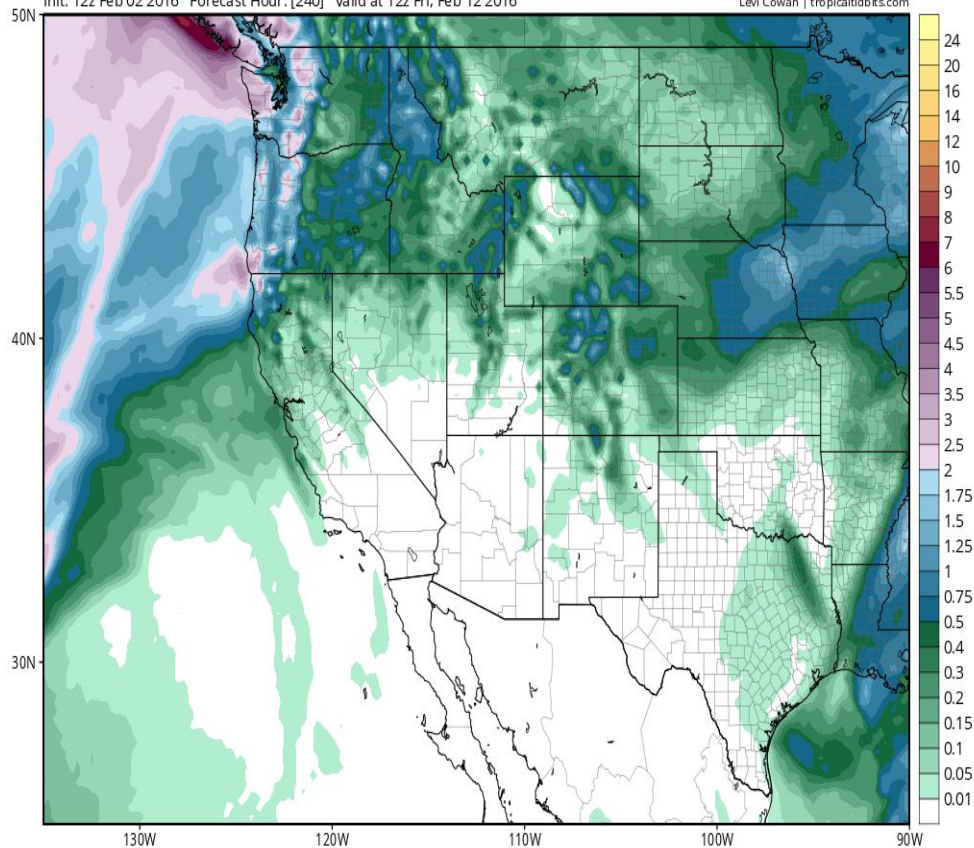
Day 7-10 Initialized 00Z TUES 2 Feb



GFS Total Accumulated Precipitation (inches) from 12z02Feb2016 to 12z12Feb2016

Init: 12z Feb 02 2016 Forecast Hour: [240] valid at 12z Fri, Feb 12 2016

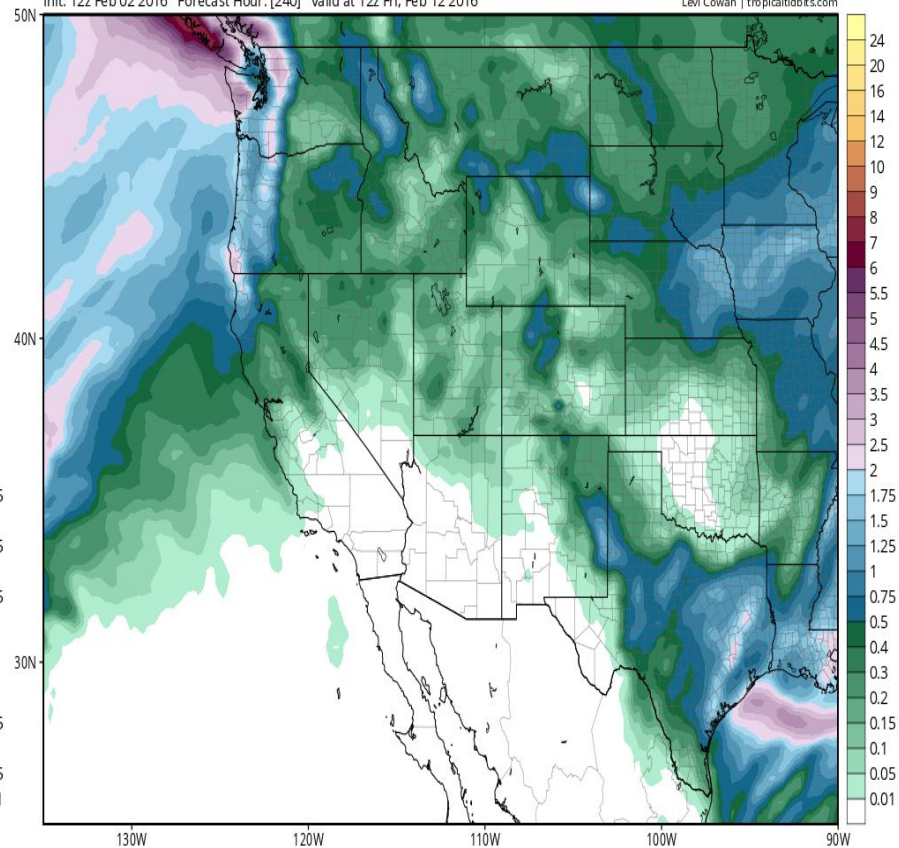
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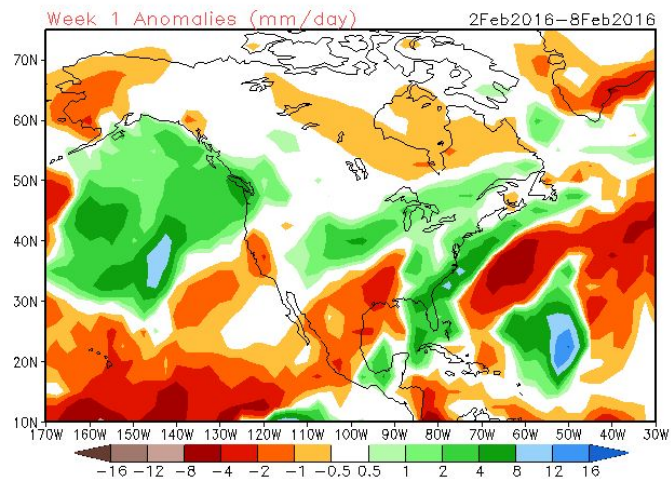
GEM Total Accumulated Precipitation (inches) from 12z02Feb2016 to 12z12Feb2016

Init: 12z Feb 02 2016 Forecast Hour: [240] valid at 12z Fri, Feb 12 2016

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CFSv2 Weeks 1 & 2 Precipitation
16 Member Ensemble Mean Forecast from 01Feb2016



CFSv2 Weeks 1 & 2 Precipitation
16 Member Ensemble Mean Forecast from 25Jan2016

