Summary of Key Briefing Points
1030-1130am MST Monday February 1, 2016

Current Conditions as of Sunday 12Z-15Z February 1

Tropics and Mid-latitudes

Over the Tropical Pacific:

- Convection: Quiet convection in a 160W-140W, 0-10N region again this Monday morning.
- Convection is most active 0-5N, 180W-160W this morning.
- Convection is also active near 5N, east of 140W
- Anticyclonic upper level circulation centered at 140W, 6N, extending 150W-130W
- Cloud track upper level winds indicate westerly flow in mission region 160-150W, down to ~8N.
- Light (~10 kt)upper level easterlies south of 8N

Tropical Outlook

- Convection to remain mostly quiet in mission region 160W-150W on Monday
  ----- Confidence is high based on EC/GFS model agreement
  ---- Confidence is high based on consistency of forecasts among successive Initializations
  ----- Convection expected to be more active in a zonal band north of the equator, east and west of mission region

- By 00Z Wed 3 FEB, convection and upper level outflow in mission region to continue mostly quiet

  ----- New EC fcst continues to indicate limited convection in mission region Monday aftn HNL time.
  ----- Confidence is moderately high for a quiet Monday based on model consistency/agreement
  ---- Most of the convection to be 0-5N, 145W-125W region

- By 18z Tue, 2 FEB , EC predicts convection in mission domain to increase, details unclear

  --- *in summary, the preliminary indication from Sun forecasts is for much diminished convective activity 160W-150W region SUN/MON, followed by a recovery Tuesday*

Midlatitude Conditions/Outlook

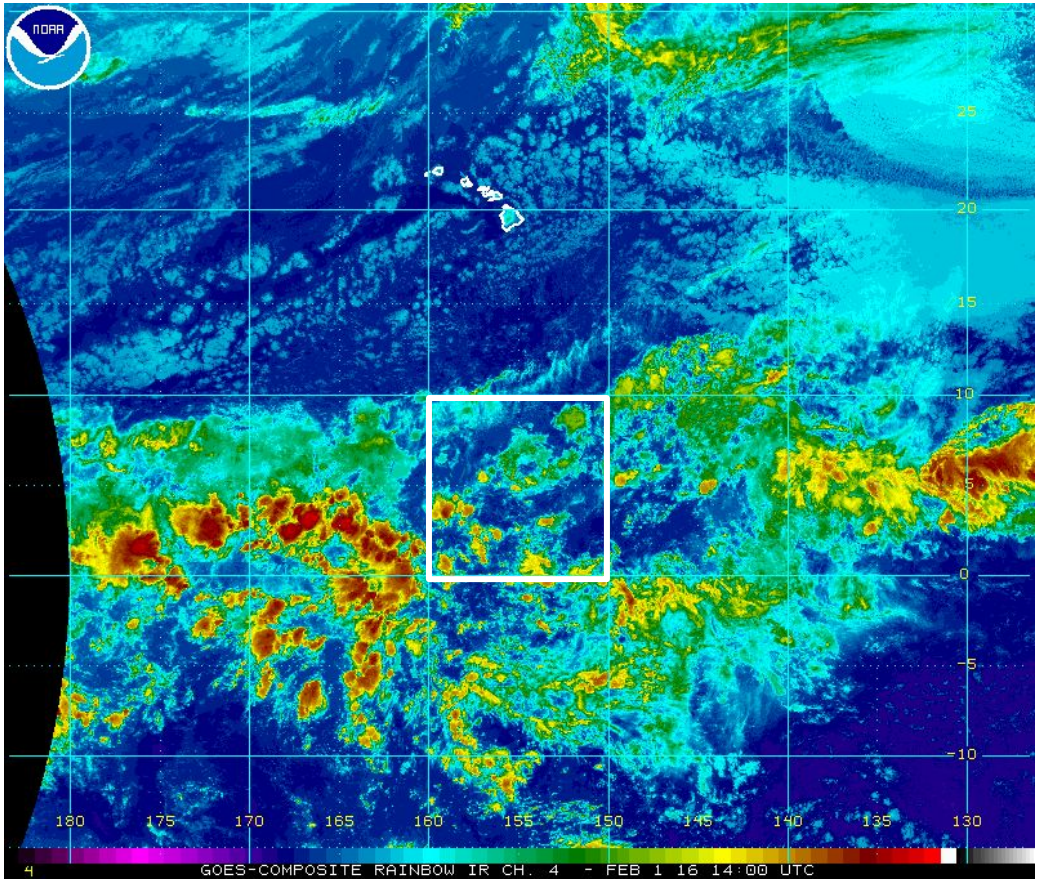
Short Term:

- Sunday rains in SCAL were on the order of 1”, higher in pcpn in mountains.
- Quiet in CA Mon and Tues; weak frontal rains in north Wed.
- 8-station NSierra index on 31 Jan is 122%, 5-station CSierra index is 120%

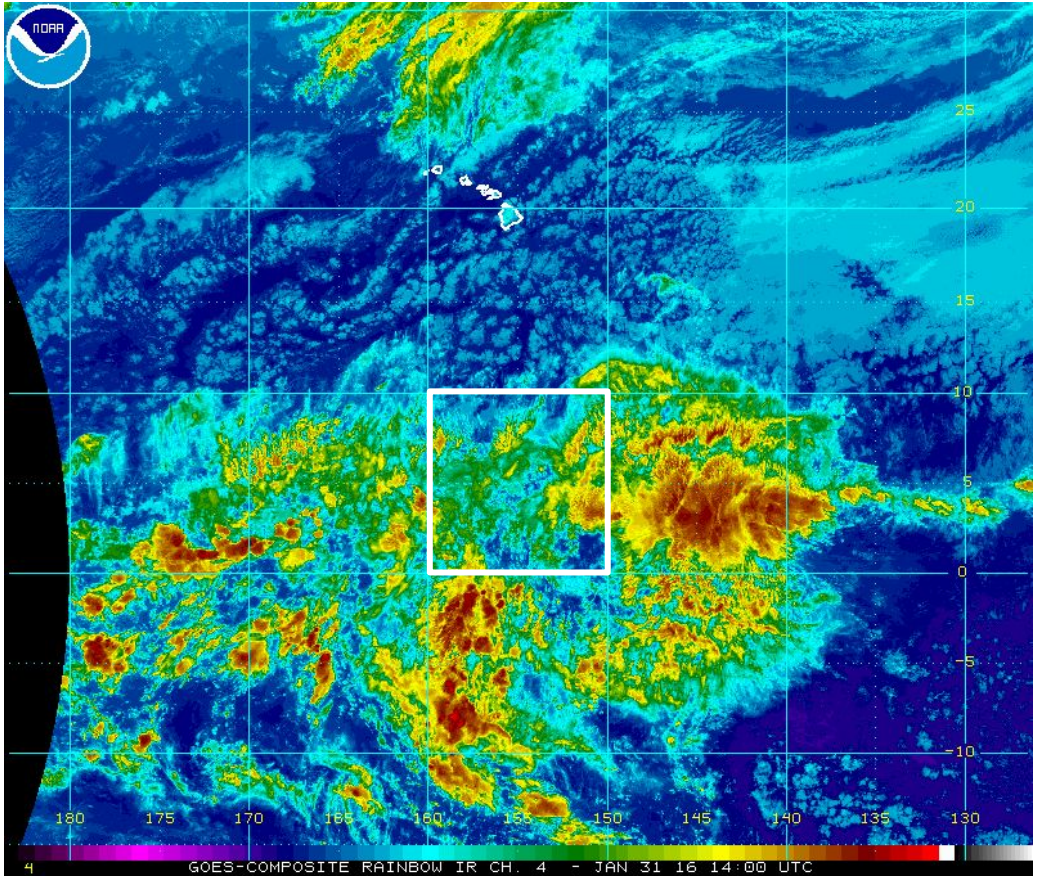
Medium - Long Term:

- Day 0-7 accumulated pcpn for CA shows little pcpn
- CPC 6-10 day (Feb 6-10) pcpn probabilities have high probabilities of below normal statewide
- Days 7 -10 fcsts from 00 MON 1 Feb runs indicate sharp WCOASt Ridge
  ----confidence high (strong model agreement) that Mon 8 Feb thru Thu 11 Feb to be quiet in CA and NE Pacific
- Day 8-15 Calibrated Pcpn for CA 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.

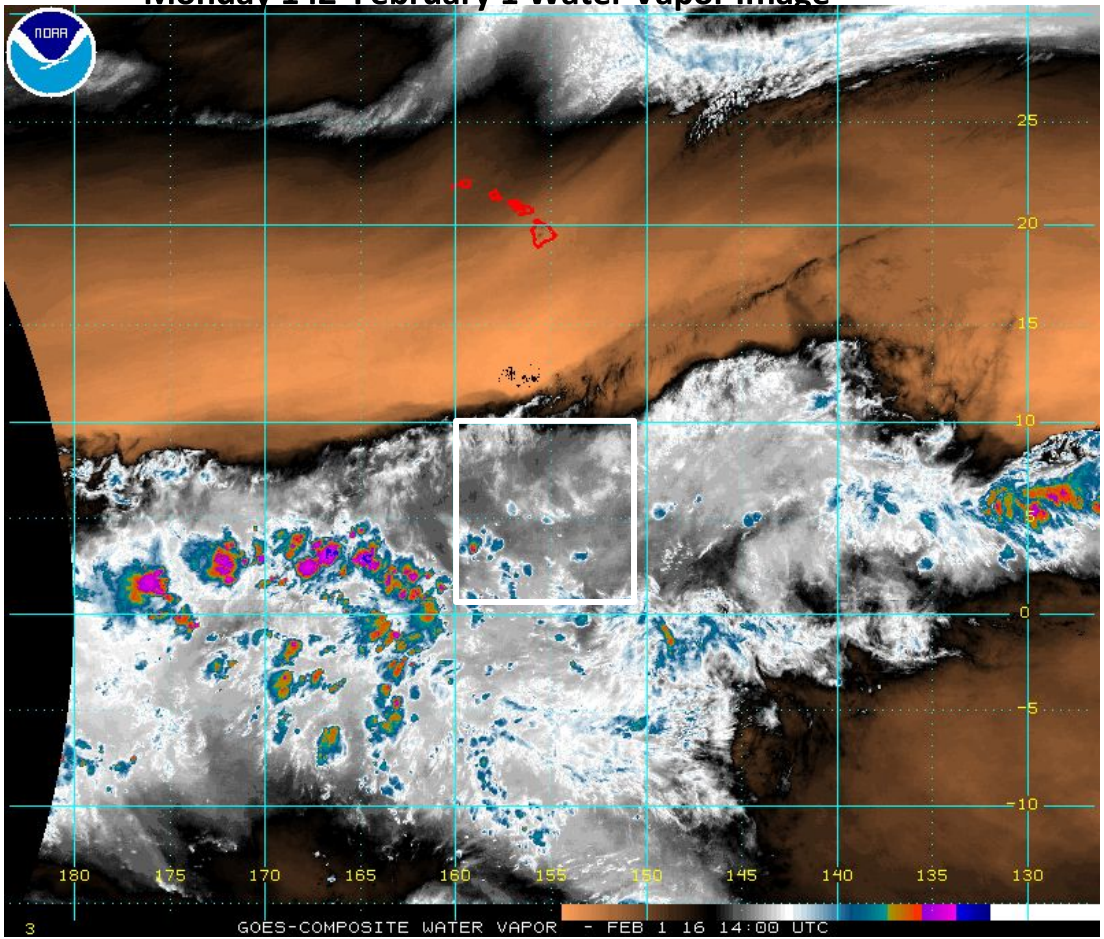
Monday 14Z February 1 Enhanced IR Image



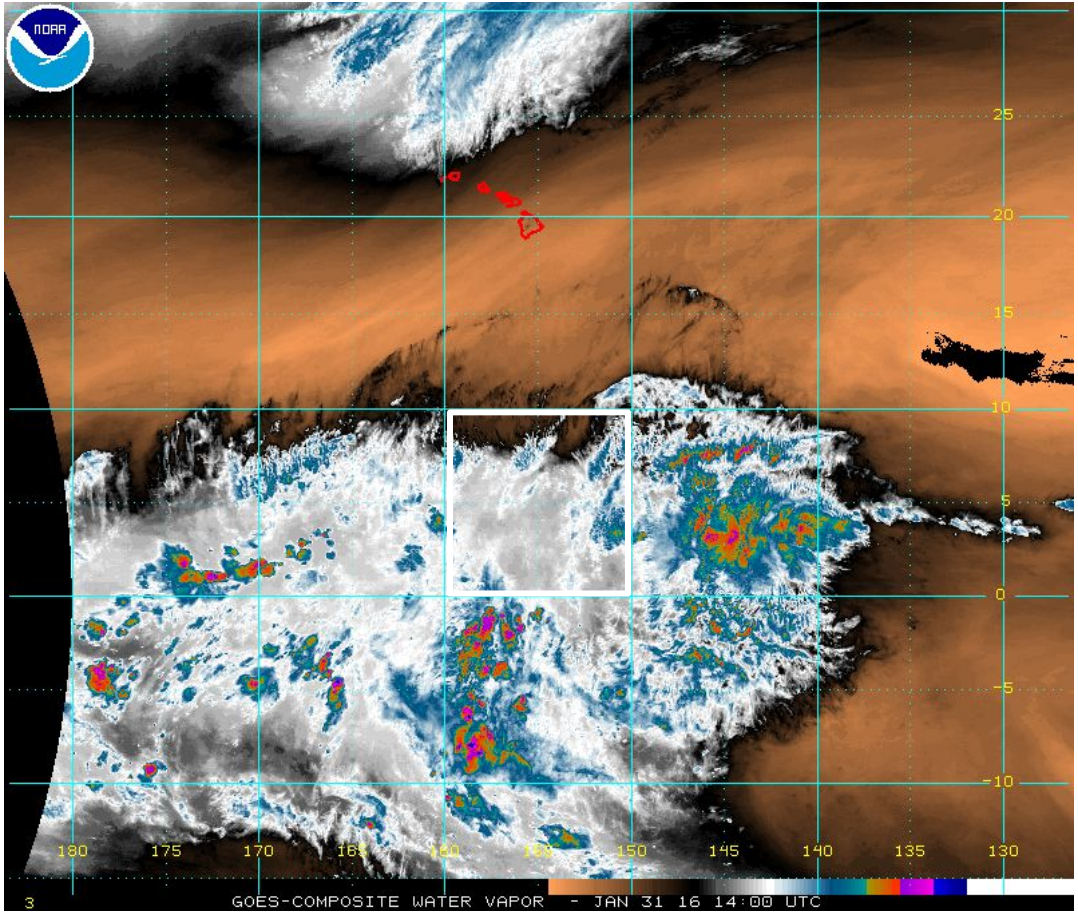
Sunday 14Z January 31 Enhanced IR Image



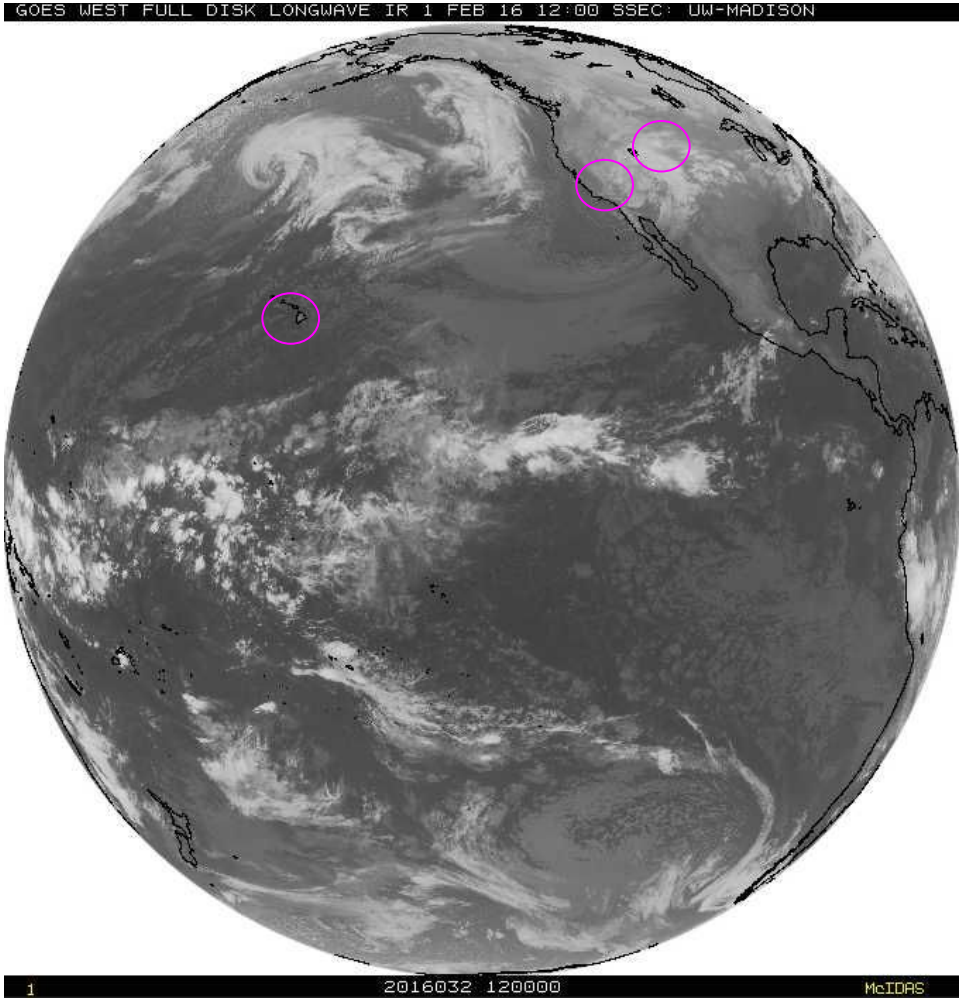
Monday 14Z February 1 Water Vapor Image

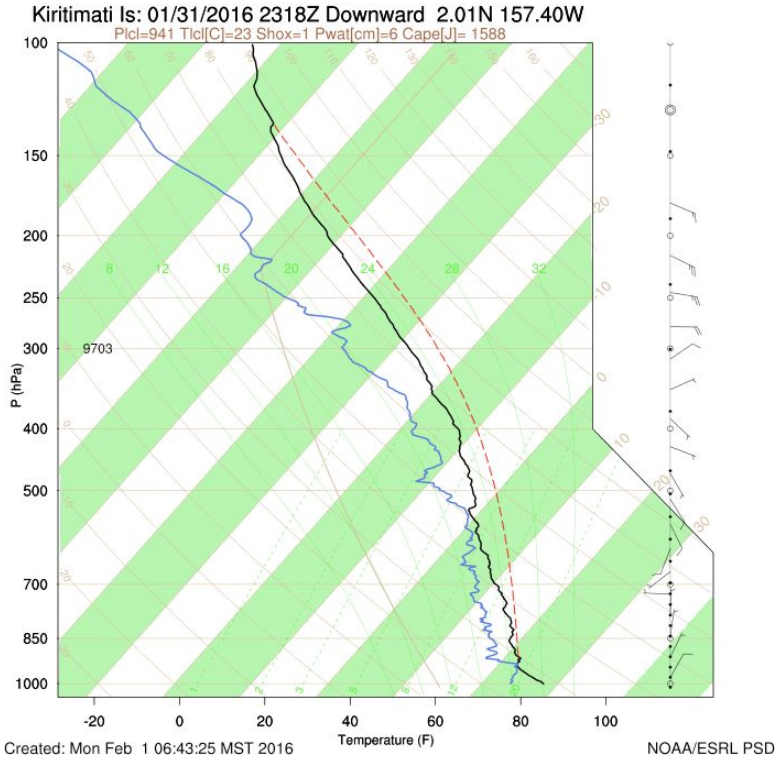


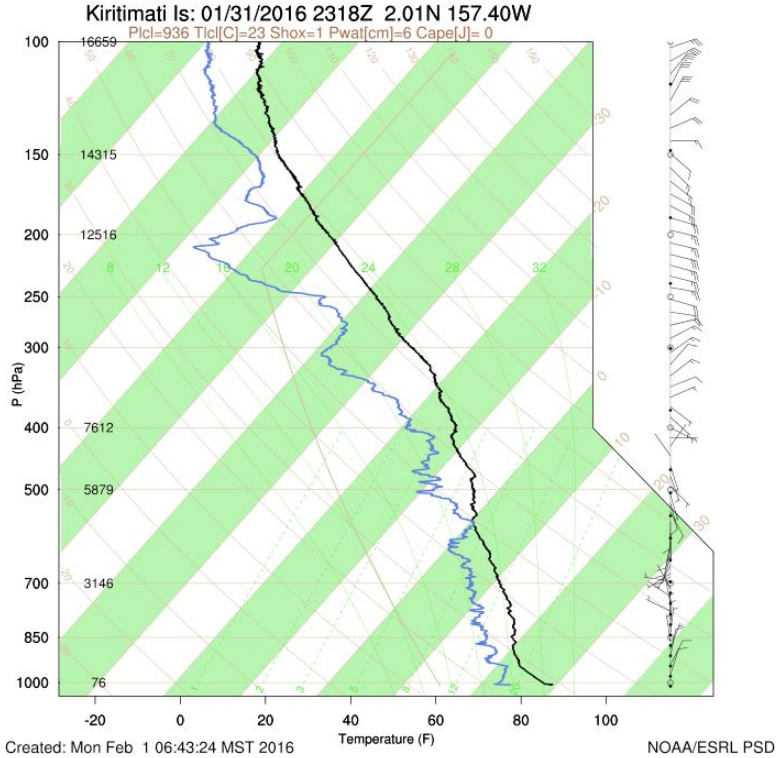
Sunday 14Z January 31 Water Vapor Image

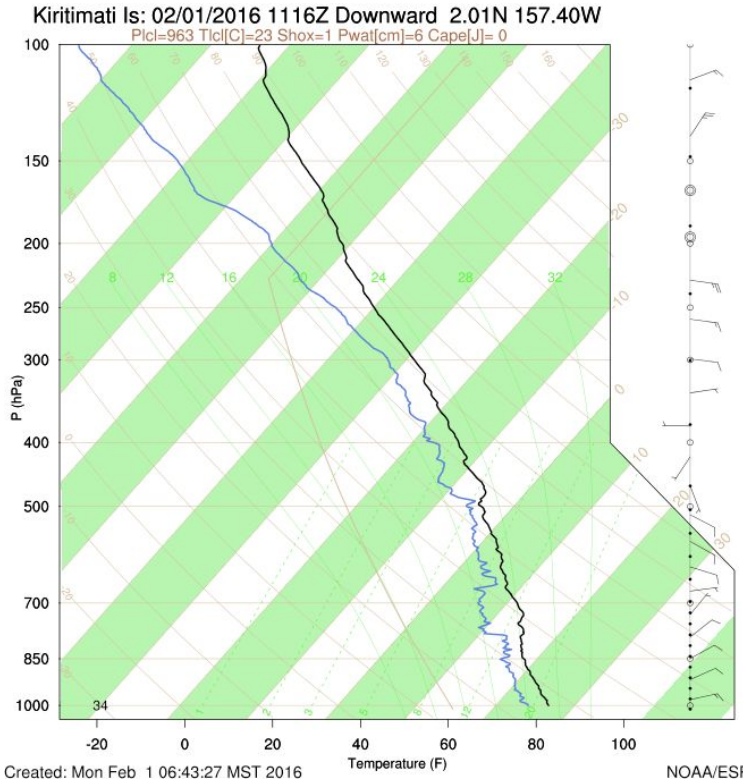


Sun 12Z February 1 GOES West IR Image




Kiritimati Is: 01/31/2016 2318Z Downward 2.01N 157.40W
Plcl=941 Tlcl[C]=23 Shox=1 Pwat[cm]=6 Cape[J]= 1588
P (hPa)
Temperature (F)
9703
Created: Mon Feb 1 06:43:25 MST 2016
NOAA/ESRL PSD


Kiritimati Is: 01/31/2016 2318Z 2.01N 157.40W
Plcl=936 Tlcl[C]=23 Shox=1 Pwat[cm]=6 Cape[J]= 0
P (hPa)
Temperature (F)
16659
14315
12516
7612
5879
3146
76
Created: Mon Feb 1 06:43:24 MST 2016
NOAA/ESRL PSD


Kiritimati Is: 02/01/2016 1116Z Downward 2.01N 157.40W
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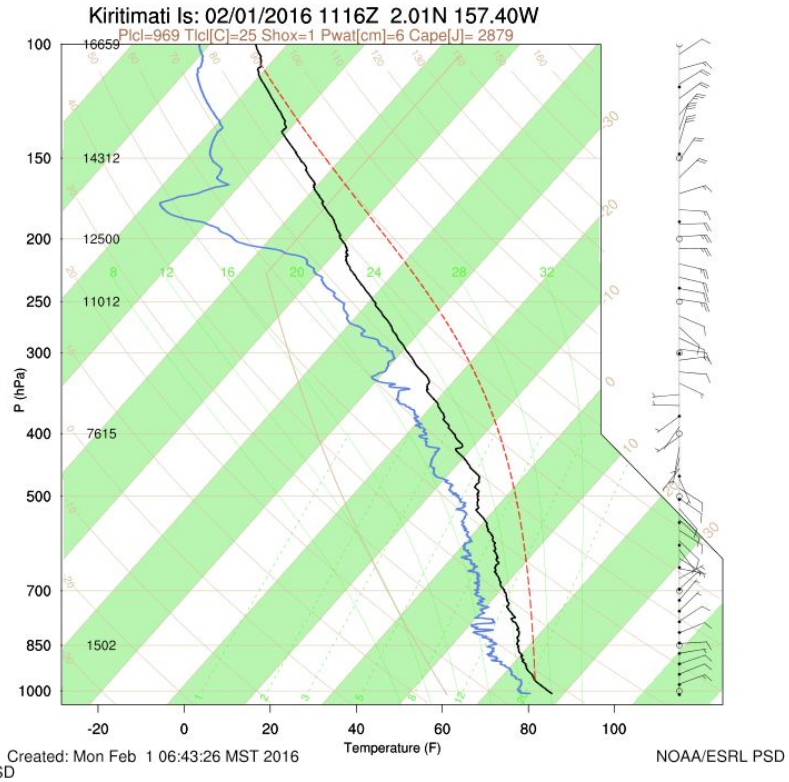
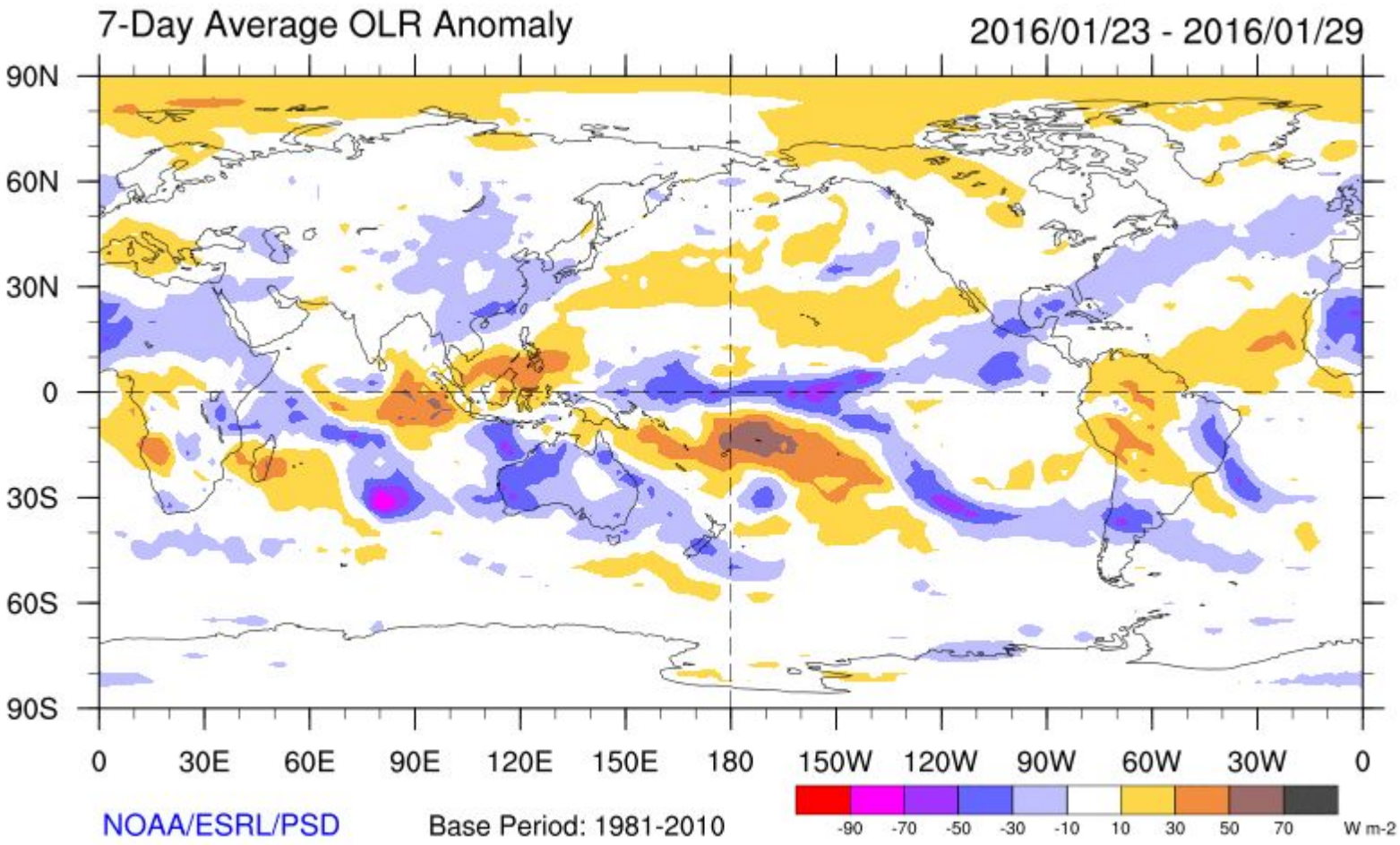
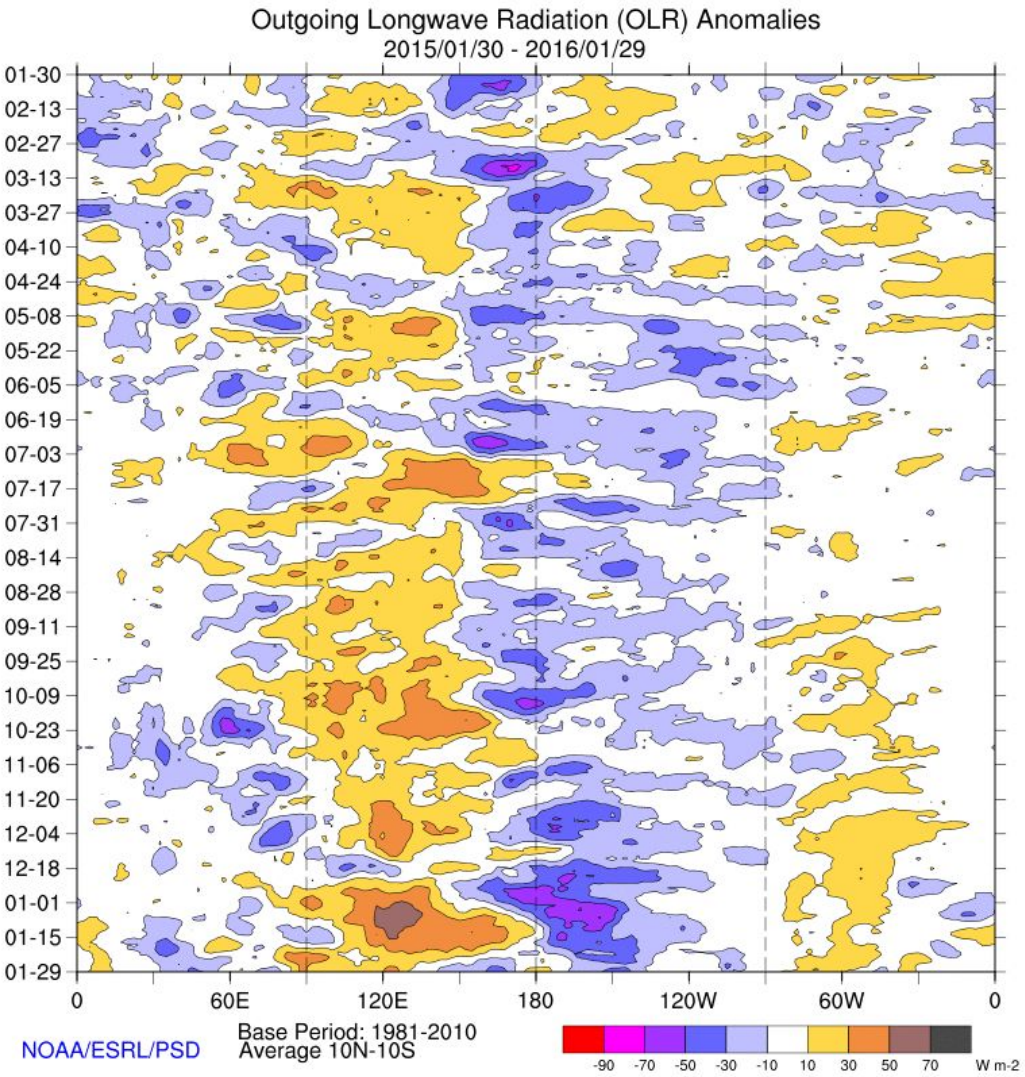
P (hPa)
Temperature (F)
Created: Mon Feb 1 06:43:27 MST 2016
NOAA/ESRL PSD

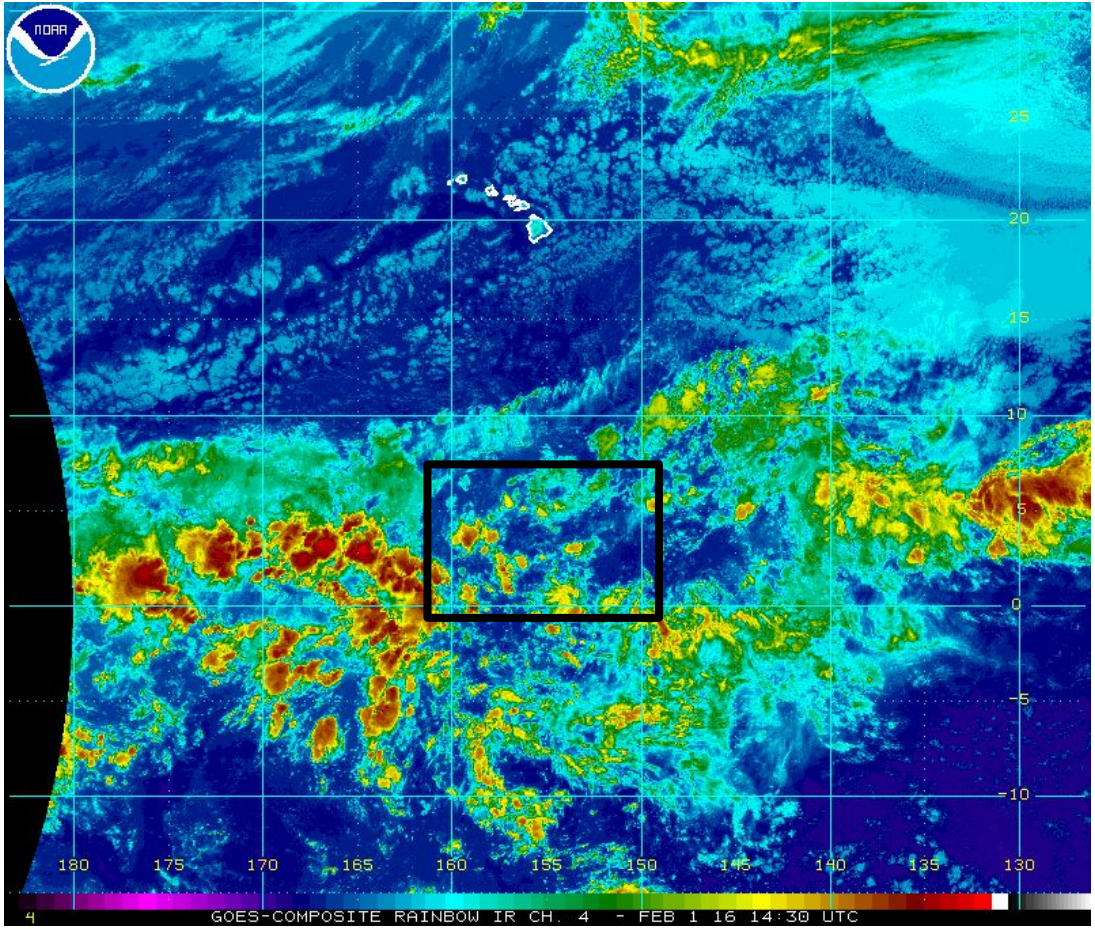

Kiritimati Is: 02/01/2016 1116Z 2.01N 157.40W
Plcl=969 Tlcl[C]=25 Shox=1 Pwat[cm]=6 Cape[J]= 2879
16659
14312
12500
11012
7615
1502
P (hPa)
Temperature (F)
Created: Mon Feb 1 06:43:26 MST 2016
NOAA/ESRL PSD

Weekly Avg OLR Anomaly: Saturday 23 Jan thru Friday 29 Jan




Outgoing Longwave Radiation (OLR) Anomalies
2015/01/30 - 2016/01/29
01-30
02-13
02-27
03-13
03-27
04-10
04-24
05-08
05-22
06-05
06-19
07-03
07-17
07-31
08-14
08-28
09-11
09-25
10-09
10-23
11-06
11-20
12-04
12-18
01-01
01-15
01-29
0
60E
120E
180
120W
60W
0
NOAA/ESRL/PSD
Base Period: 1981-2010
Average 10N-10S
-90 -70 -50 -30 -10 10 30 50 70
W m-2

Mon 1430Z February 1 Enhanced IR Image



GFS MSLP (mb), Total Precipitable Water Normalized Anomaly, & 850mb Wind (kt)

Init: 12z Feb 01 2016 Forecast Hour: [0] valid at 12z Mon, Feb 01 2016

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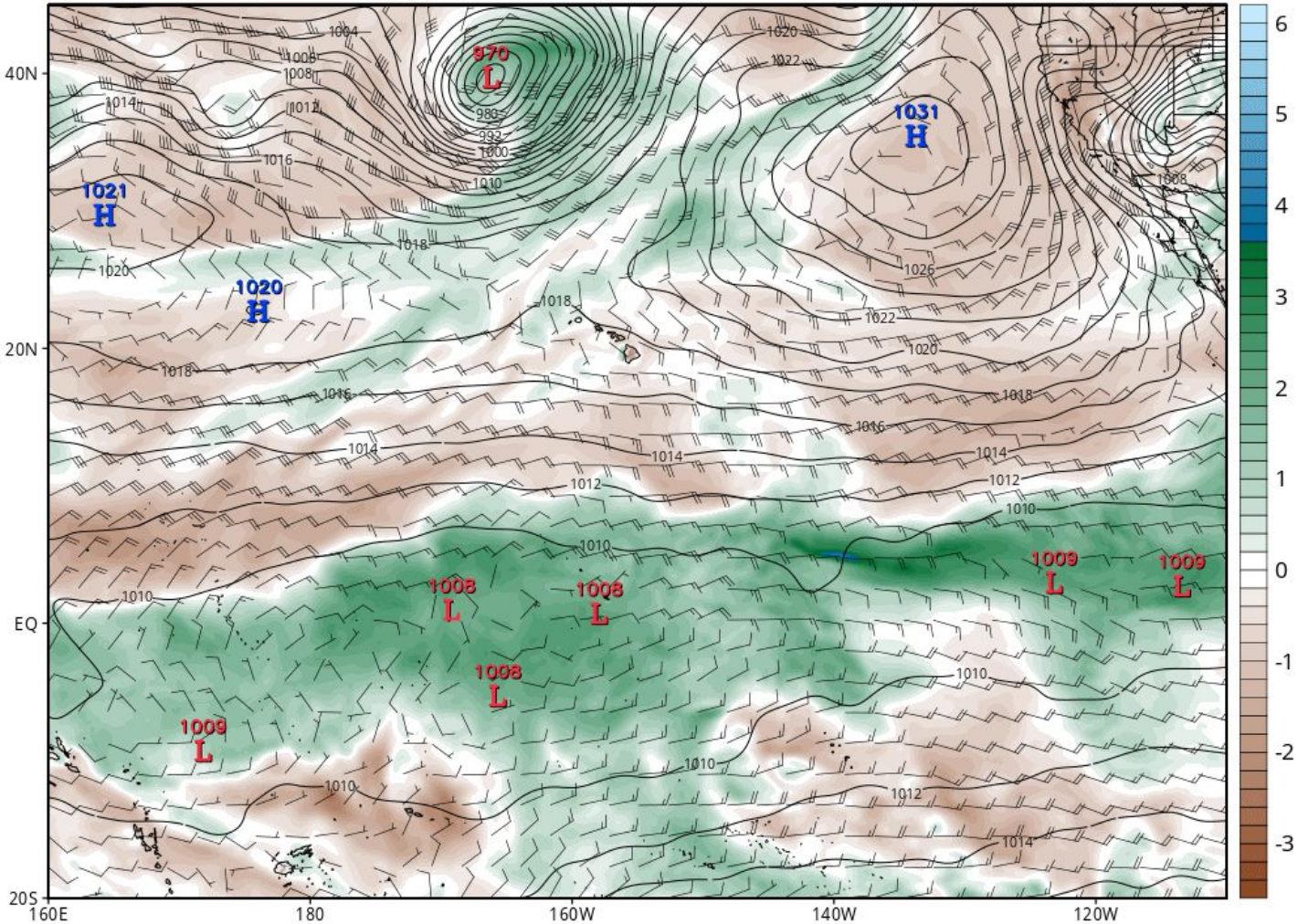
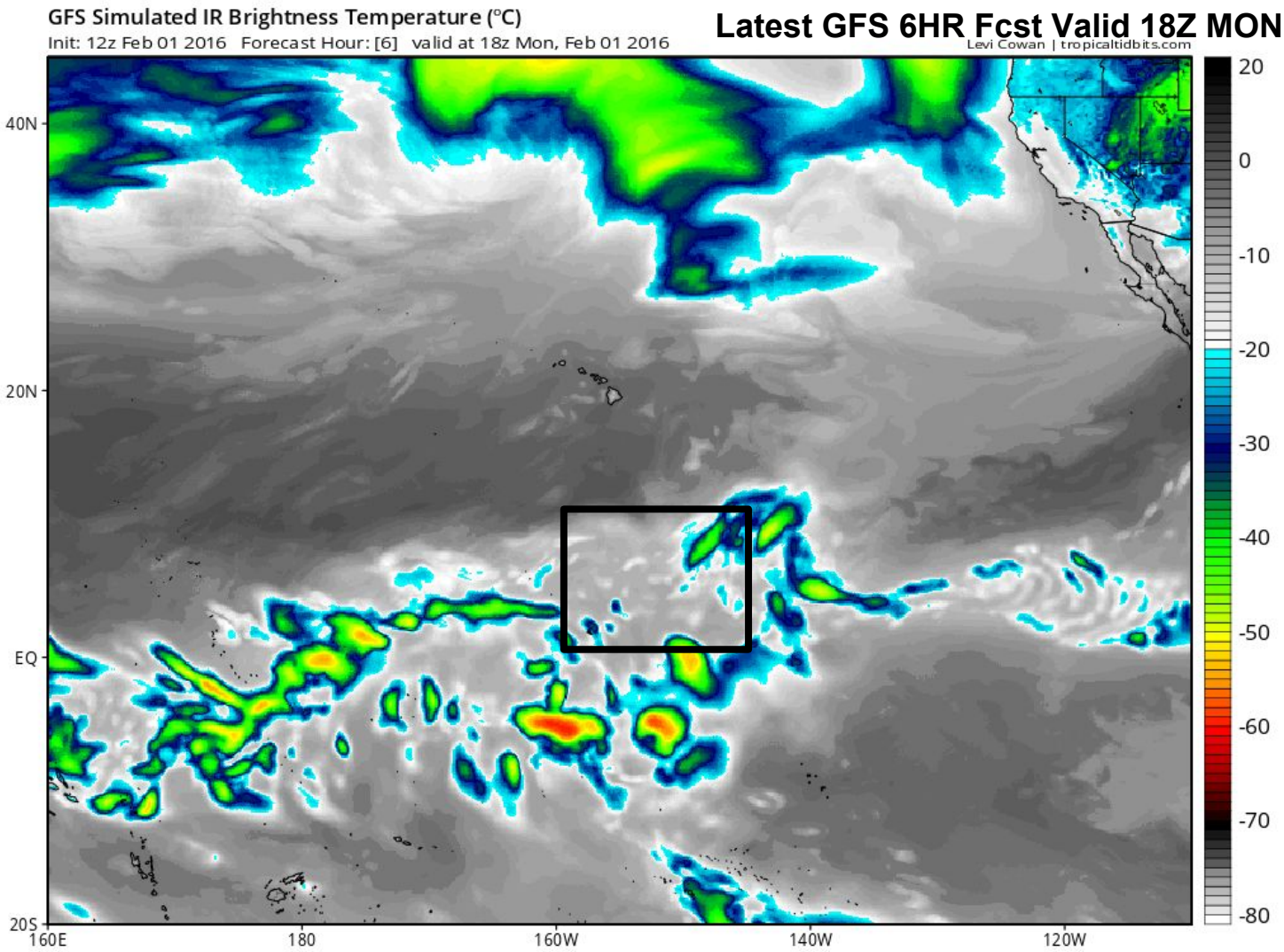
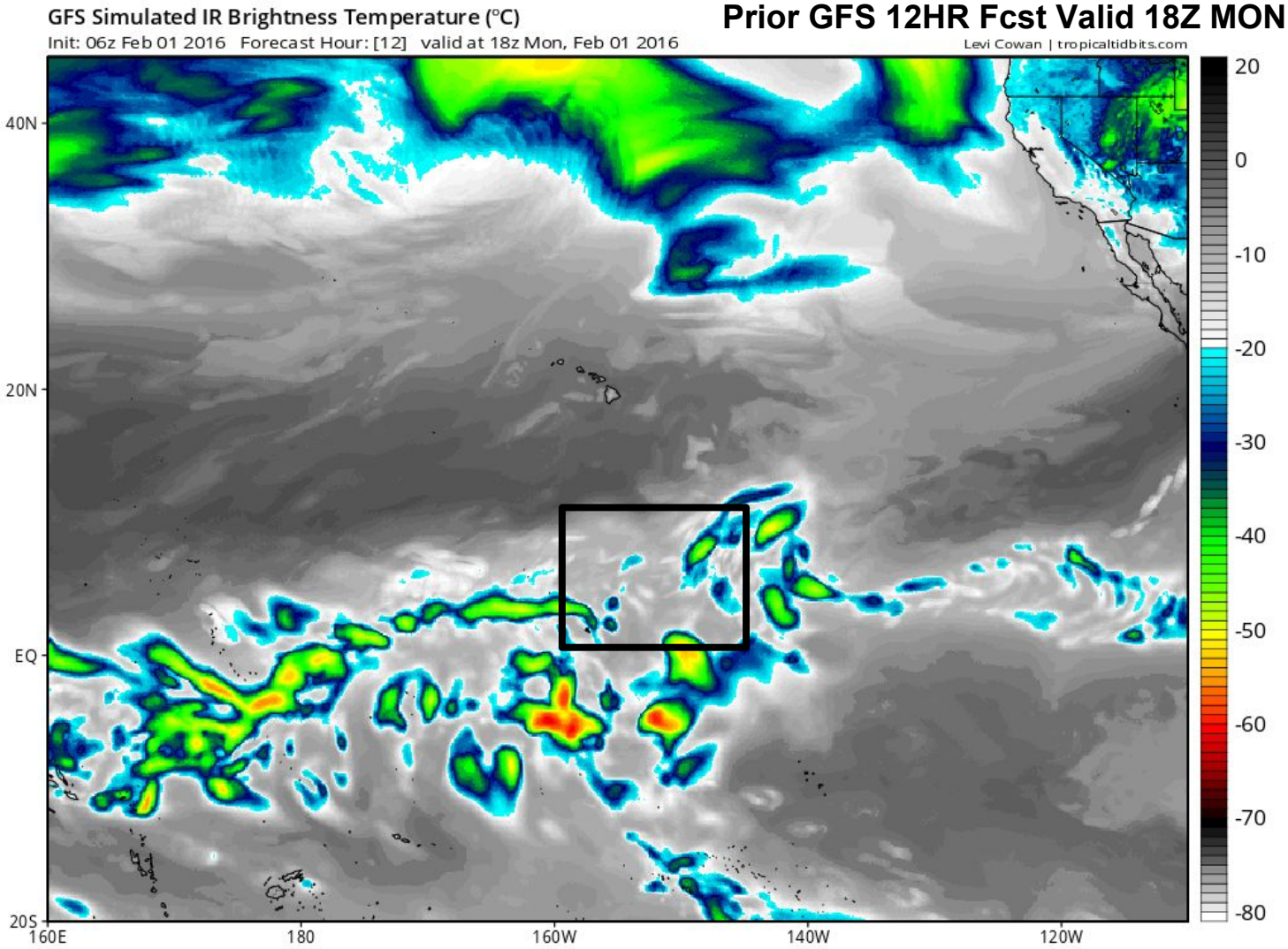


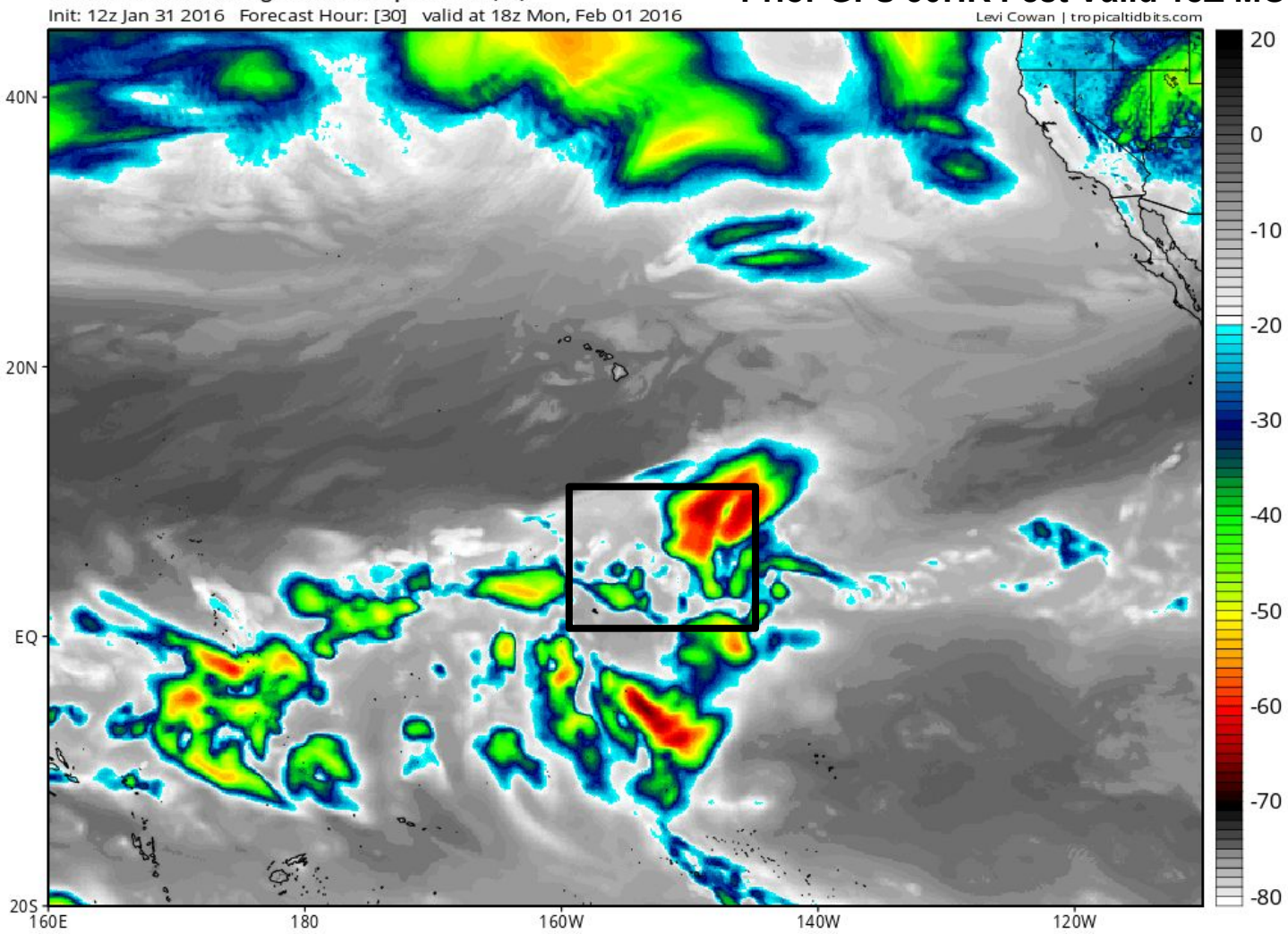
Latest GFS 6HR Fcst Valid 18Z MON

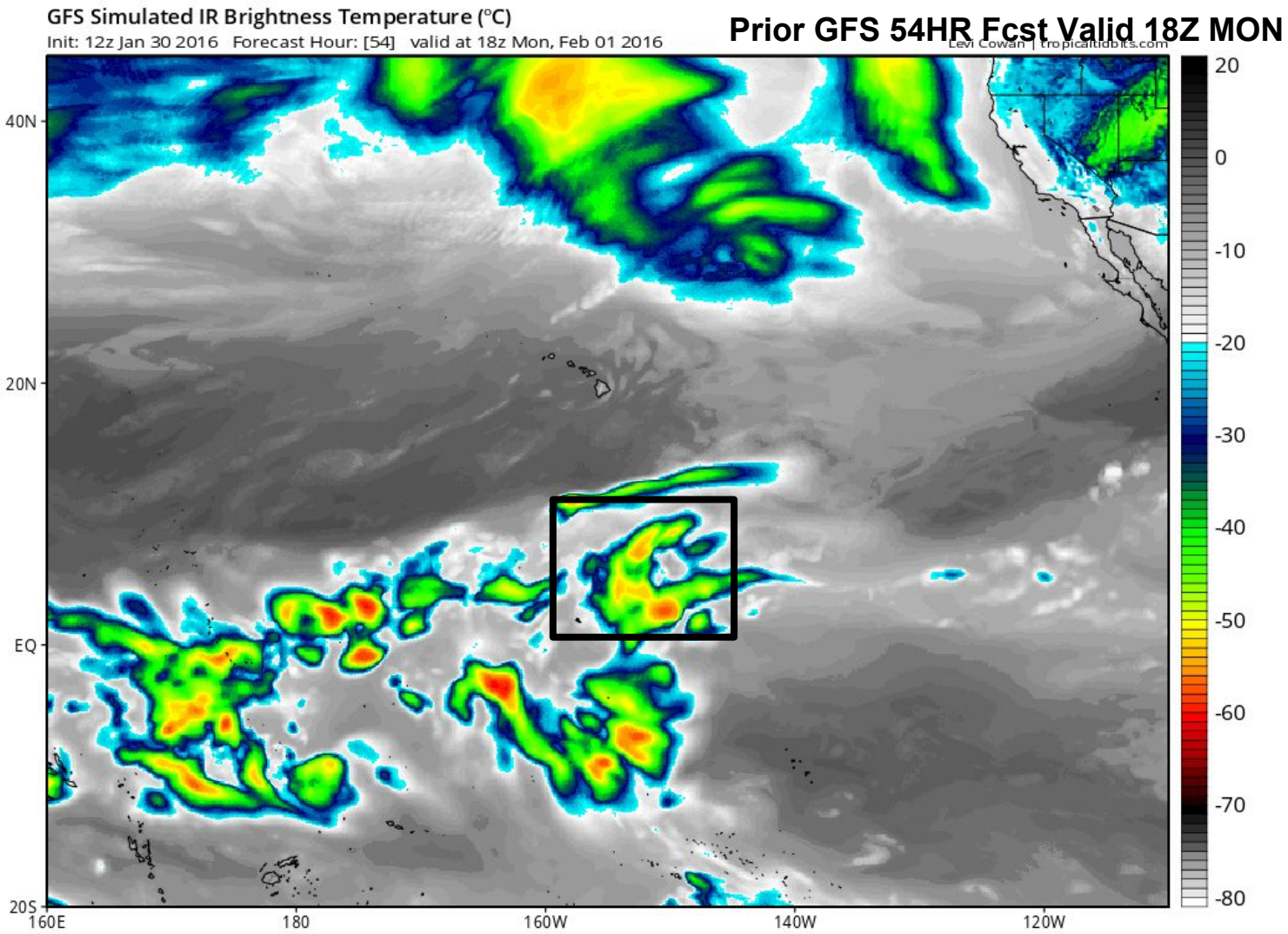


Prior GFS 12HR Fcst Valid 18Z MON



Prior GFS 30HR Fcst Valid 18Z MON




GFS Simulated IR Brightness Temperature (°C)
Init: 12z Jan 30 2016 Forecast Hour: [54] valid at 18z Mon, Feb 01 2016
Prior GFS 54HR Fcst Valid 18Z MON
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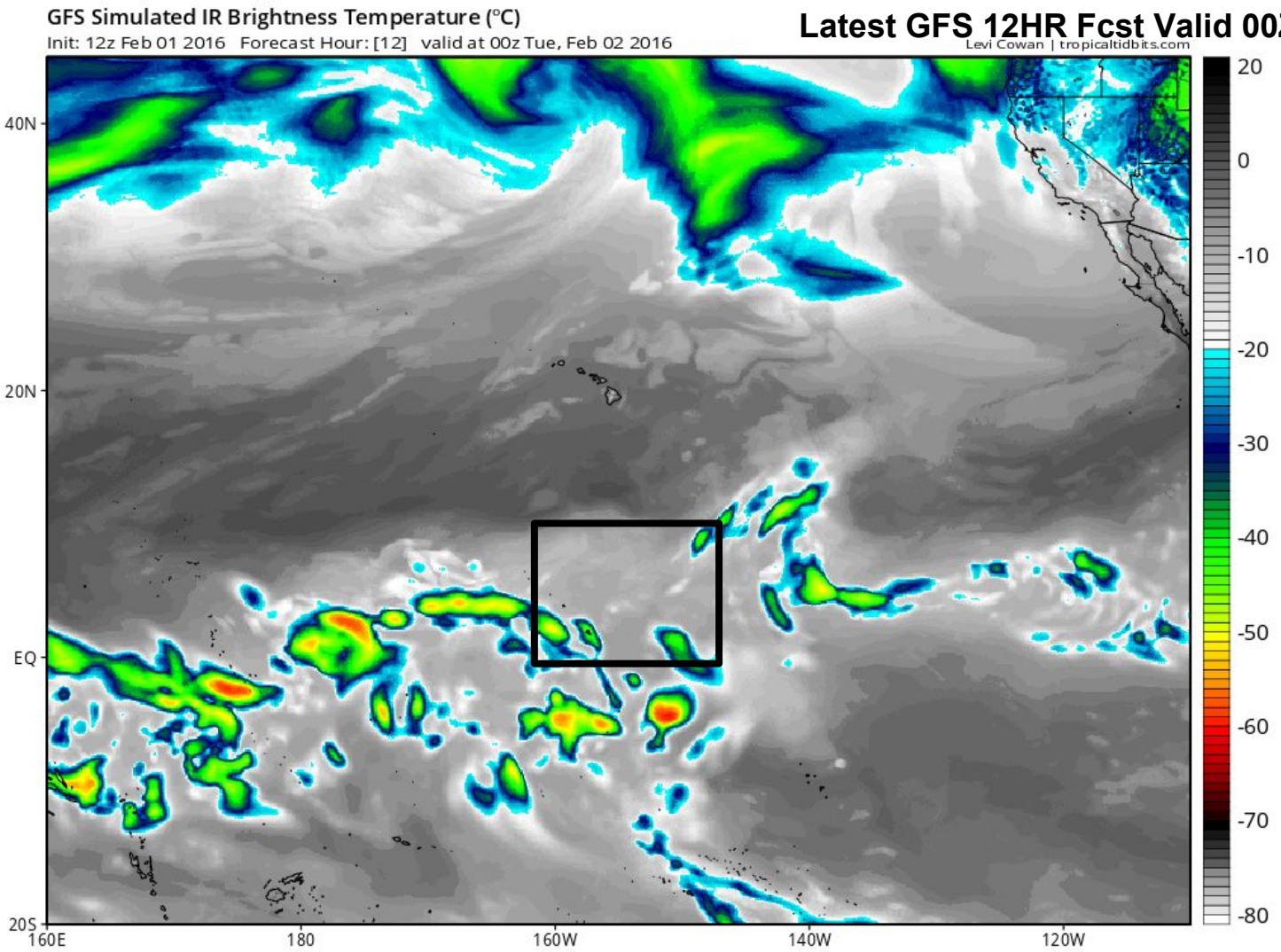
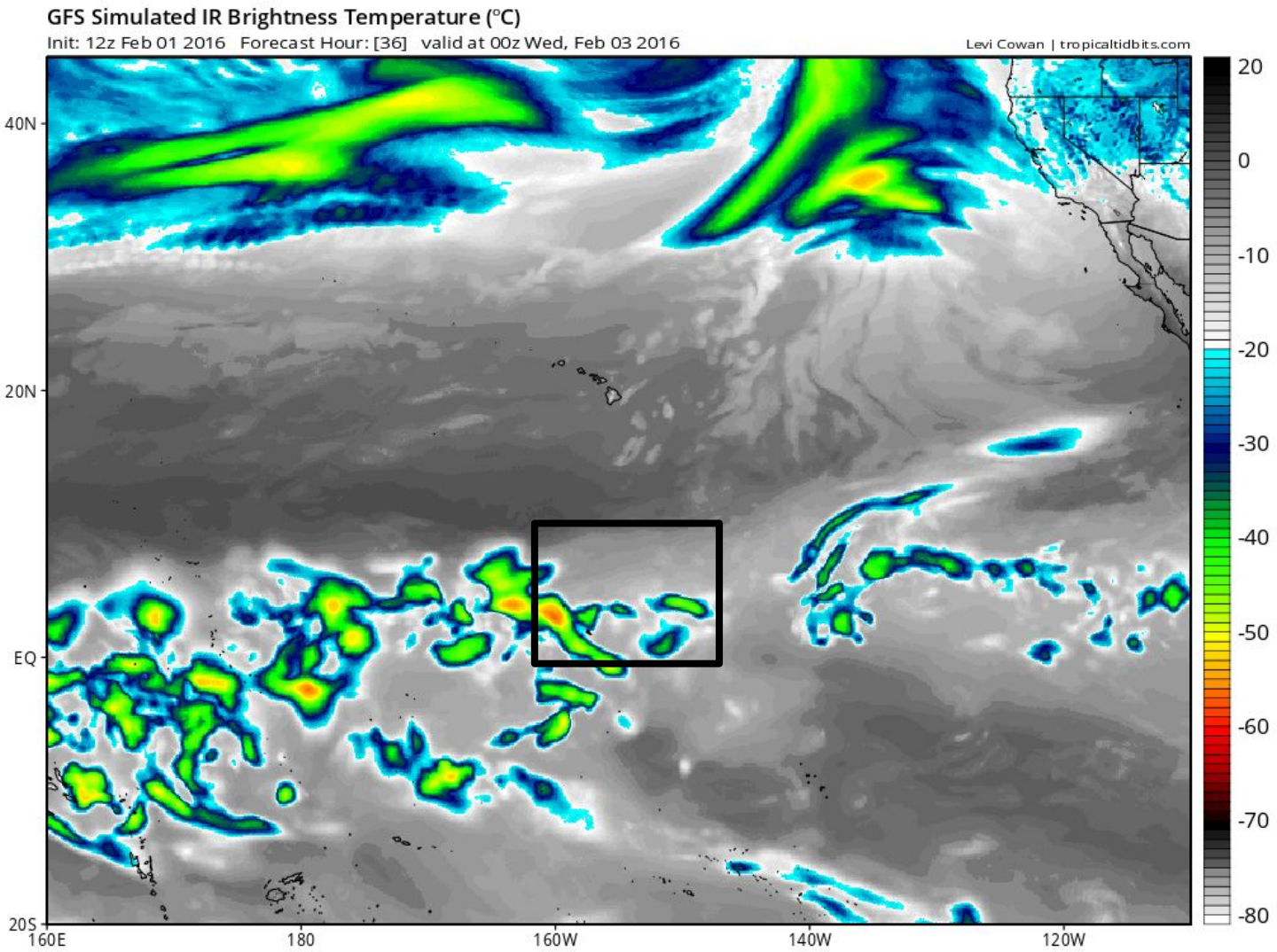
40N
20N
EQ
20S
160E
180
160W
140W
120W
20
0
-10
-20
-30
-40
-50
-60
-70
-80

Latest GFS 12HR Fcst Valid 00Z TUE




GFS Simulated IR Brightness Temperature (°C)
Init: 12z Feb 01 2016 Forecast Hour: [36] valid at 00z Wed, Feb 03 2016
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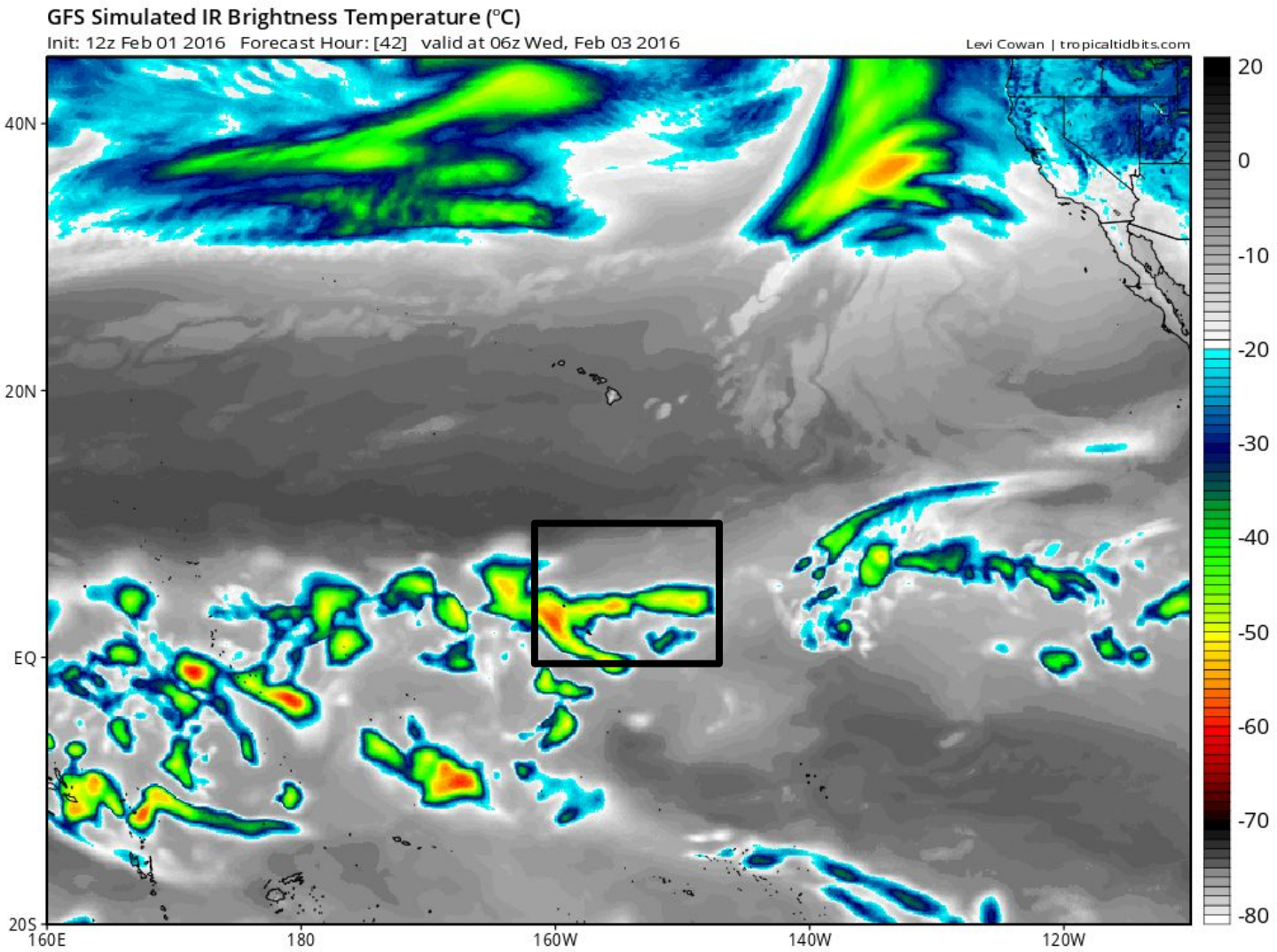
40N
20N
EQ
20S
160E
180
160W
140W
120W
20
0
-10
-20
-30
-40
-50
-60
-70
-80


GFS Simulated IR Brightness Temperature (°C)
Init: 12z Feb 01 2016 Forecast Hour: [42] valid at 06z Wed, Feb 03 2016
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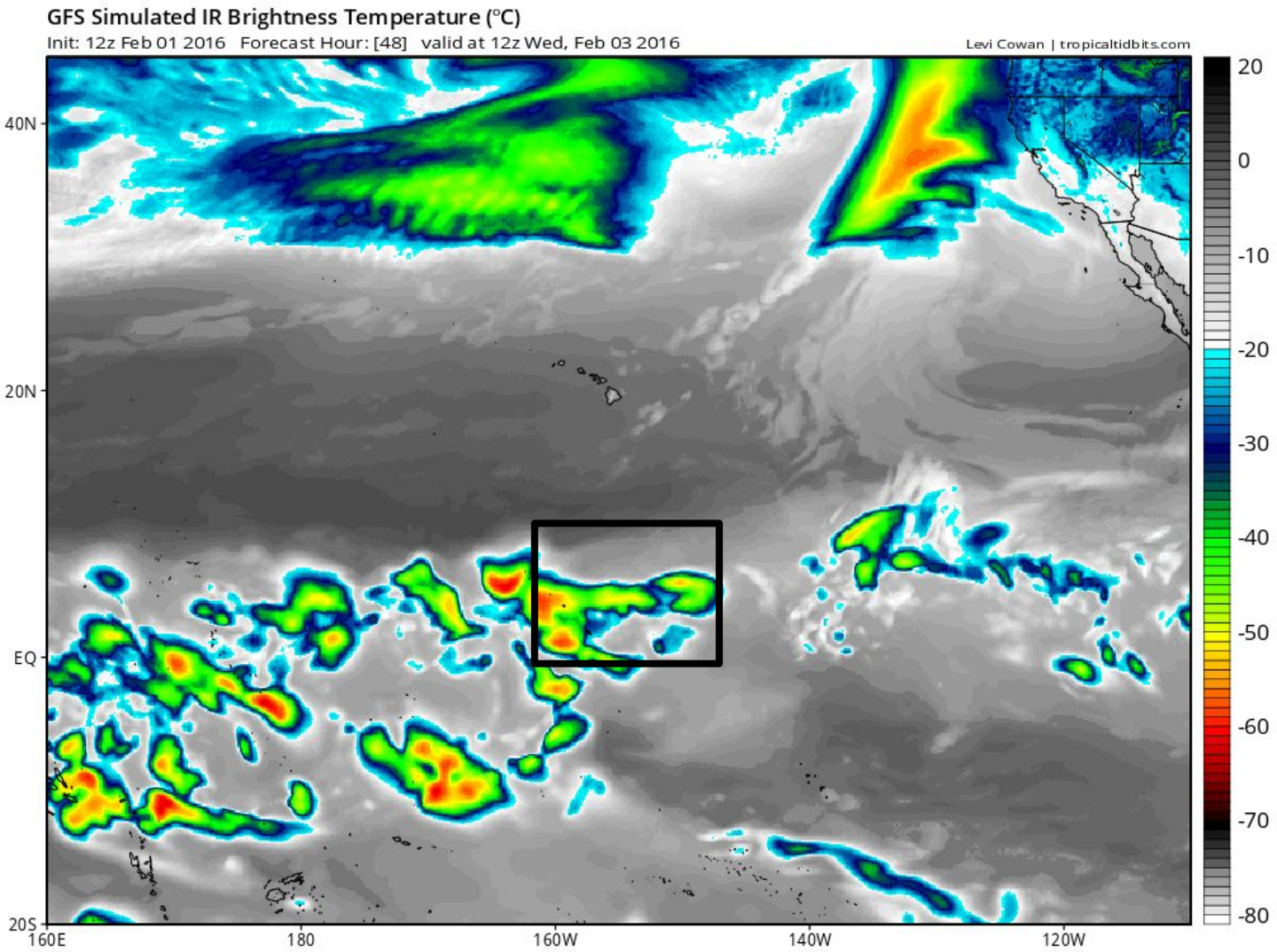
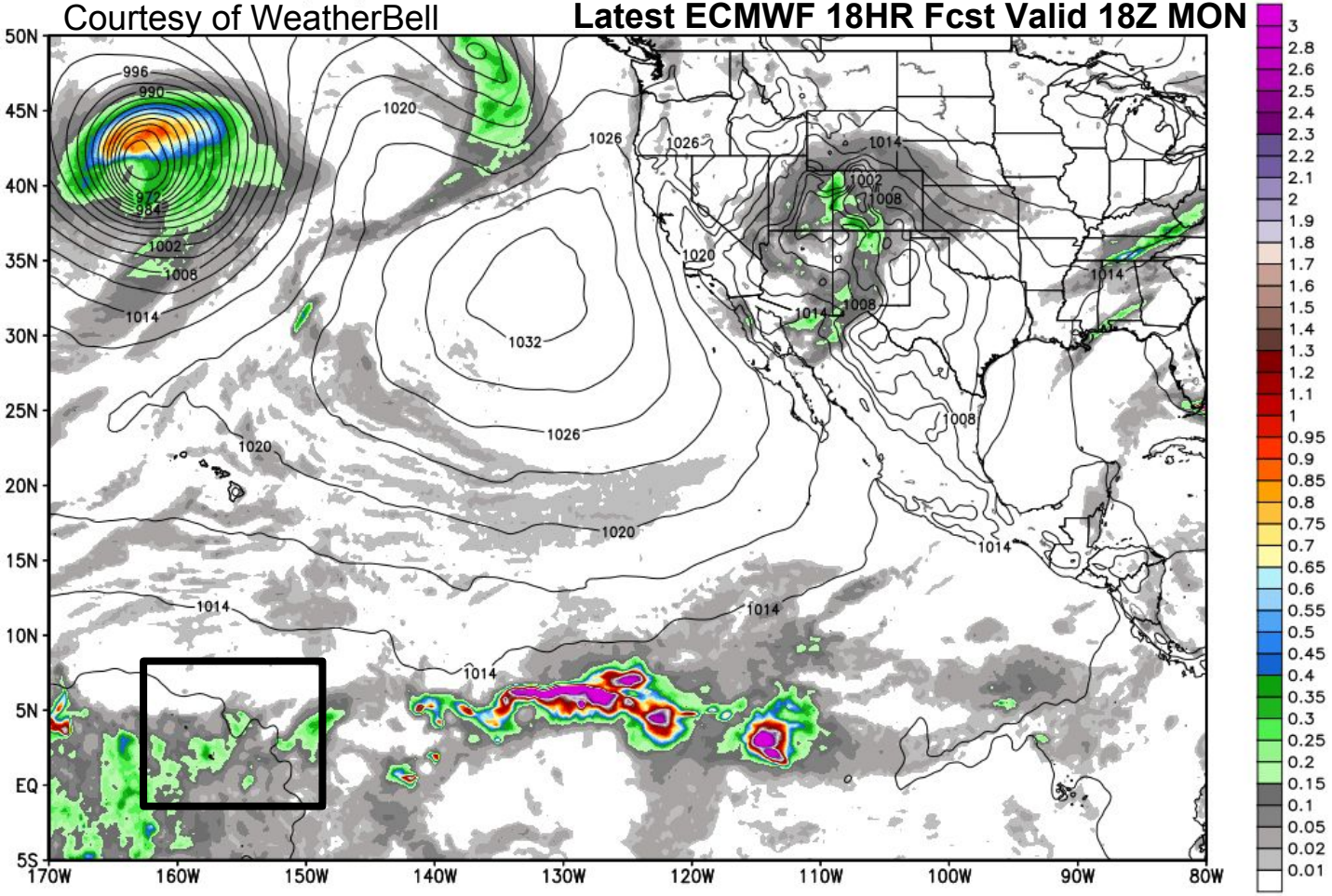
40N
20N
EQ
20S
160E
180
160W
140W
120W
20
0
-10
-20
-30
-40
-50
-60
-70
-80


GFS Simulated IR Brightness Temperature (°C)
Init: 12z Feb 01 2016 Forecast Hour: [48] valid at 12z Wed, Feb 03 2016
Levi Cowan | tropicaltidbits.com
40N
20N
EQ
20S
160E
180
160W
140W
120W
20
0
-10
-20
-30
-40
-50
-60
-70
-80

ECMWF 6-hourly Precipitation [inches] between 12Z01FEB2016 -- 18Z01FEB2016 & MSLP [hPa]
INIT: 00Z01FEB2016 fx: [018] hr --> Mon 18Z01FEB2016

Courtesy of WeatherBell

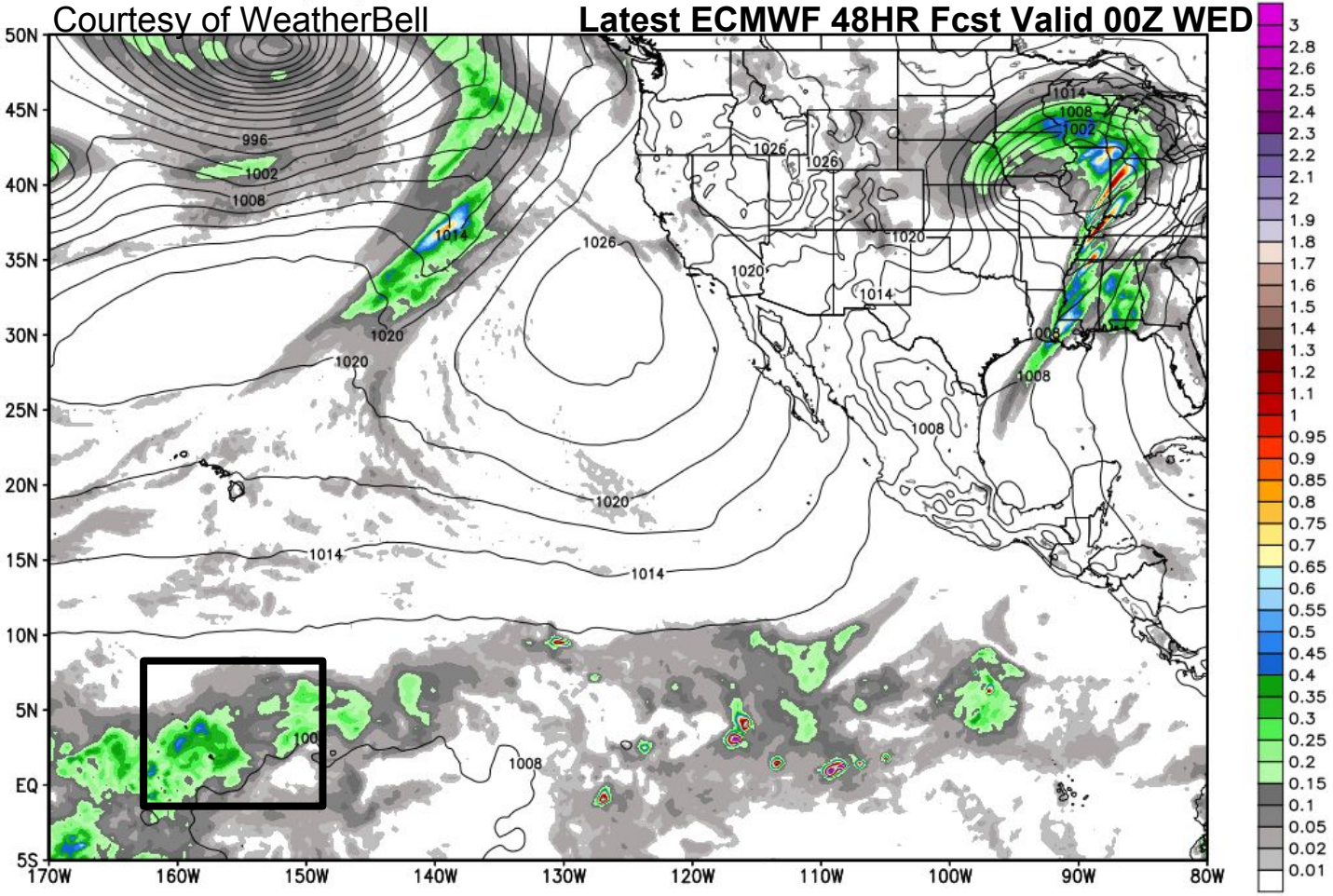
Latest ECMWF 18HR Fcst Valid 18Z MON



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

Courtesy of WeatherBell

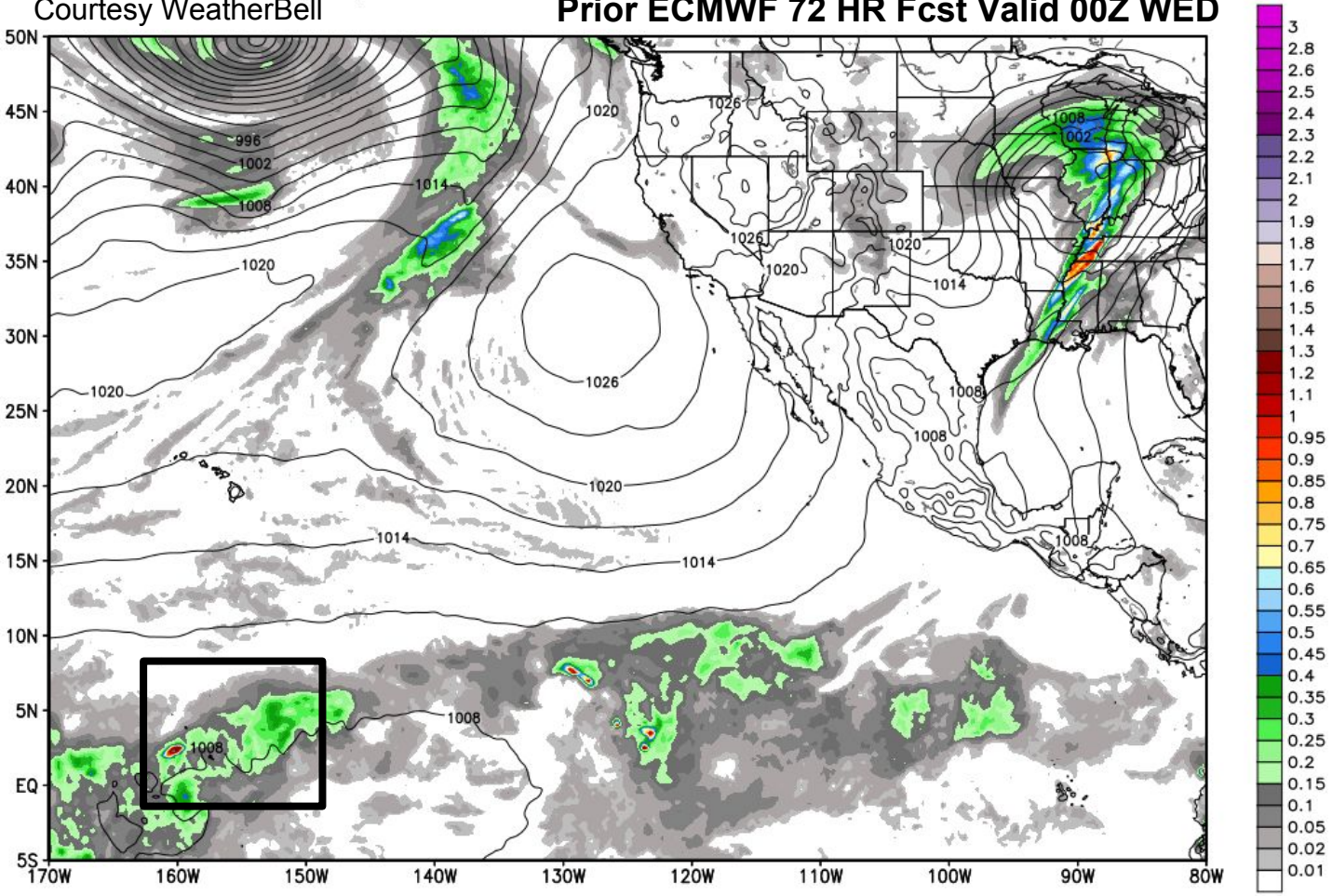
Latest ECMWF 48HR Fcst Valid 00Z WED



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

Courtesy WeatherBell

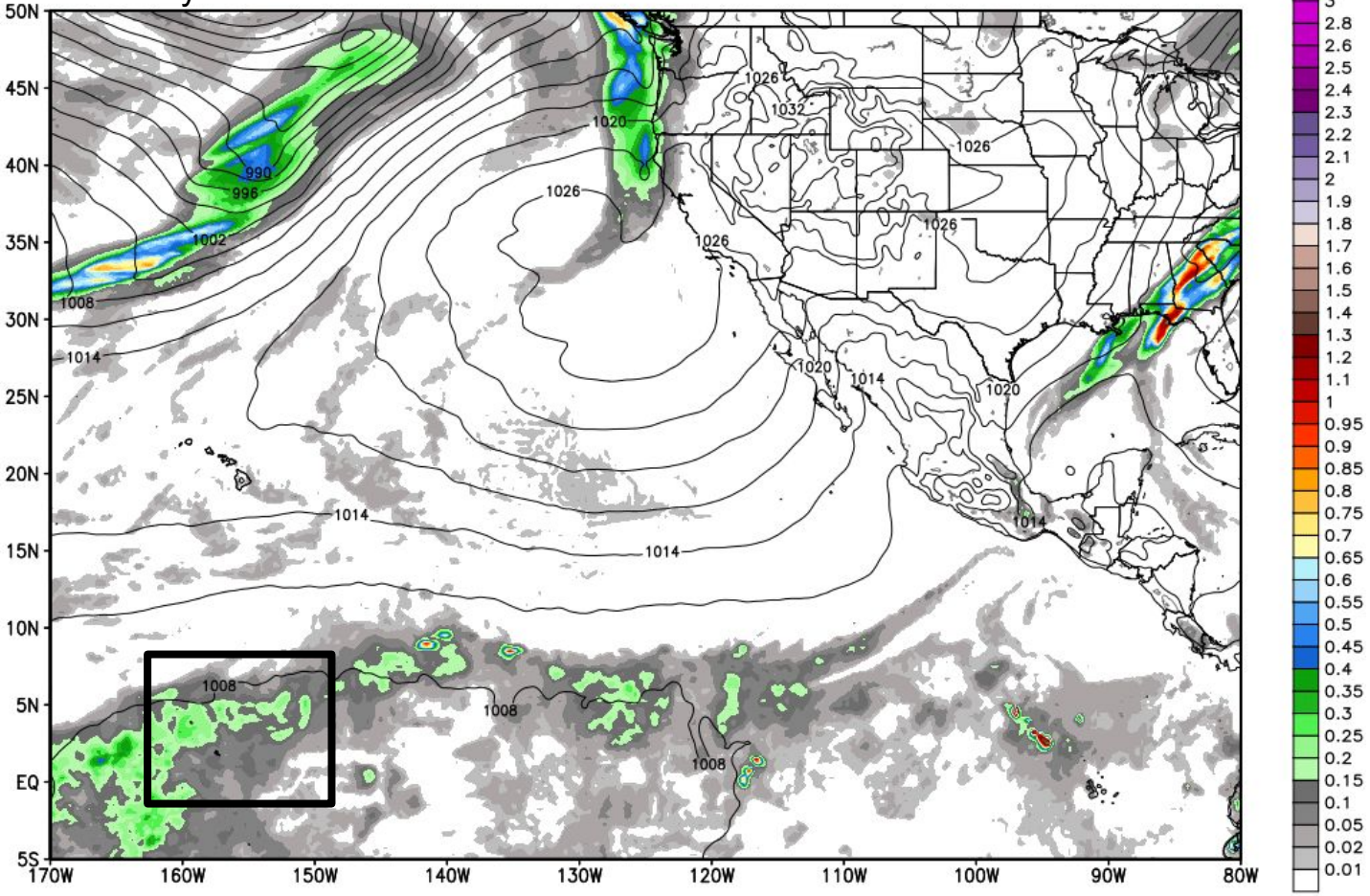
Prior ECMWF 72 HR Fcst Valid 00Z WED



ECMWF 6-hourly Precipitation [inches] between 18Z03FEB2016 -- 00Z04FEB2016 & MSLP [hPa]
INIT: 00Z01FEB2016 fx: [072] hr --> Thu 00Z04FEB2016

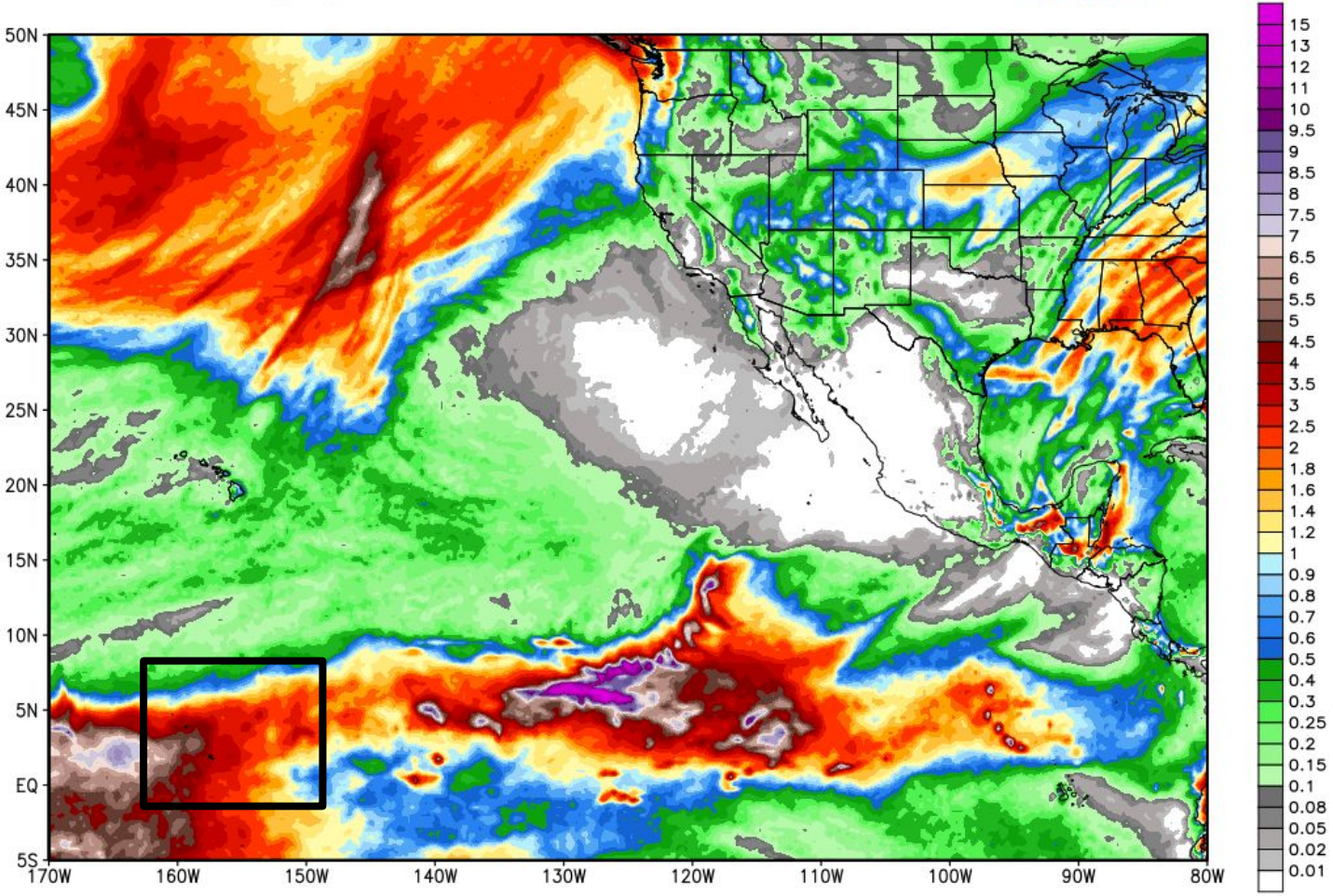
Courtesy of WeatherBell

Latest ECMWF 72HR Fcst Valid 00Z THU



ECMWF Total Precipitation [inches] between 00Z01FEB2016 -- 00Z08FEB2016
INIT: 00Z01FEB2016 fx: [168] hr --> Mon 00Z08FEB2016

Max 20.4 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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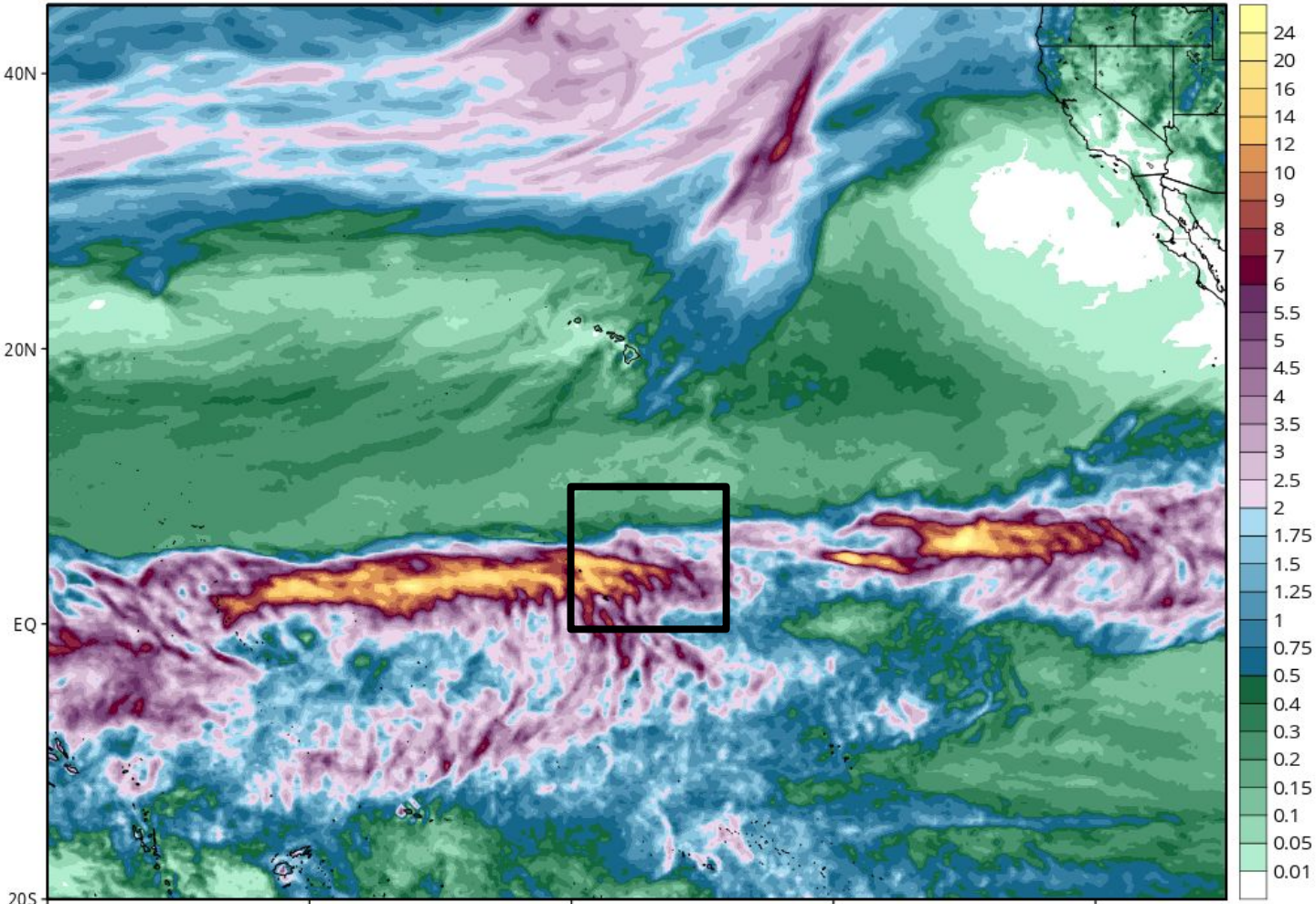
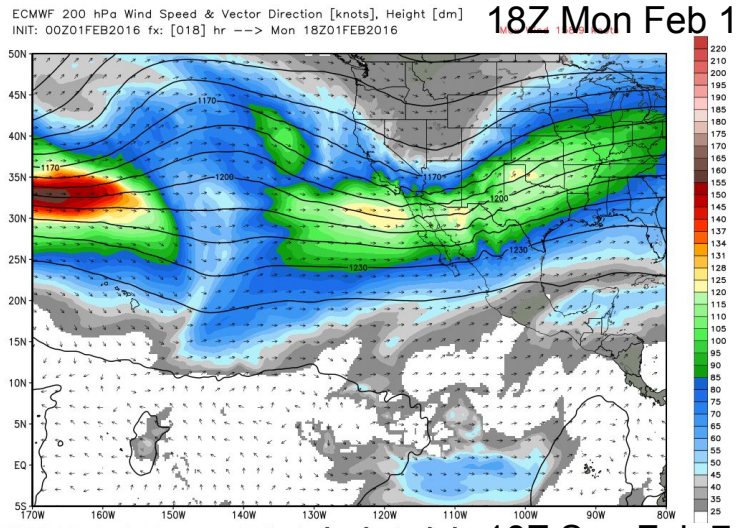
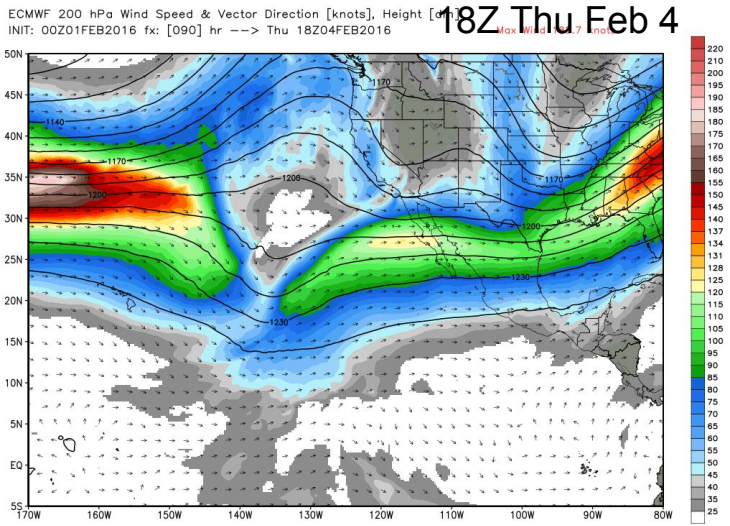
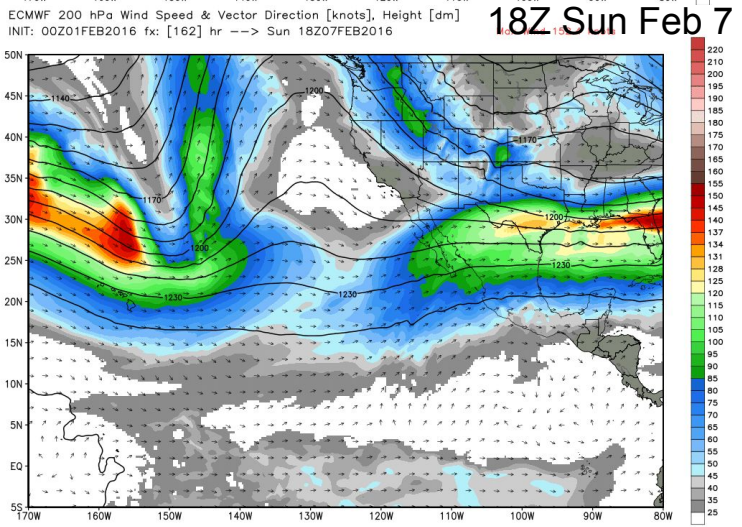
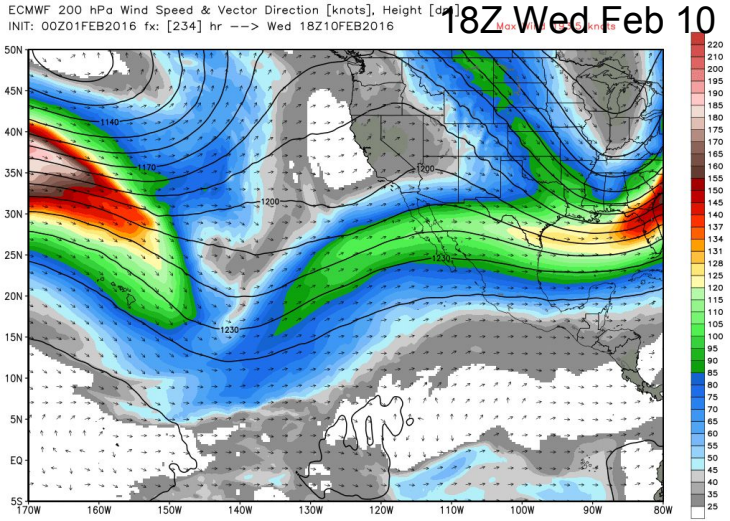



ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]
INIT: 00Z01FEB2016 fx: [018] hr --> Mon 18Z01FEB2016
18Z Mon Feb 1


ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]
INIT: 00Z01FEB2016 fx: [090] hr --> Thu 18Z04FEB2016
18Z Thu Feb 4


ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]
INIT: 00Z01FEB2016 fx: [162] hr --> Sun 18Z07FEB2016
18Z Sun Feb 7


ECMWF 200 hPa Wind Speed & Vector Direction [knots], Height [dm]
INIT: 00Z01FEB2016 fx: [234] hr --> Wed 18Z10FEB2016
18Z Wed Feb 10

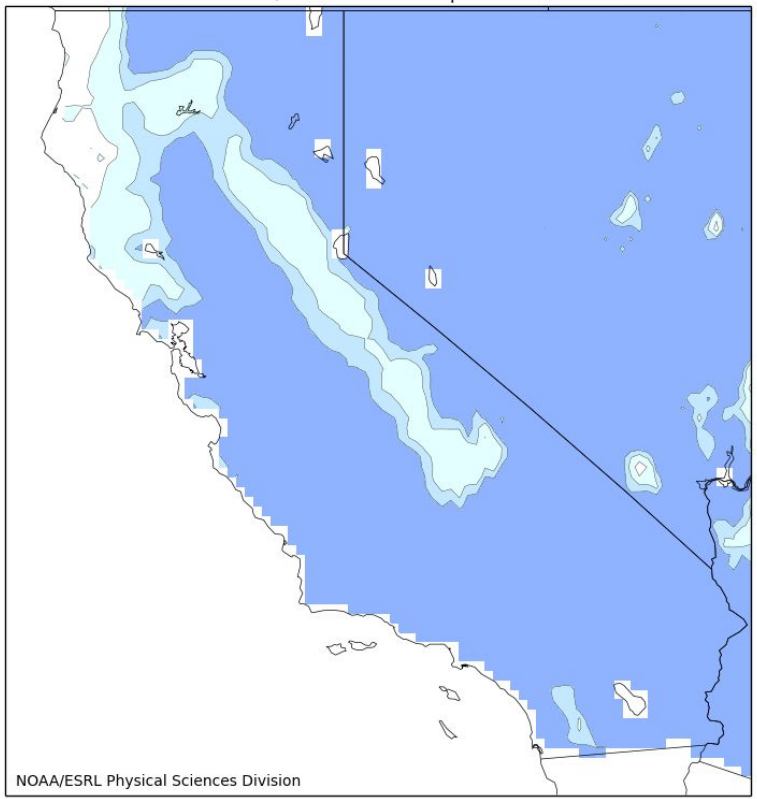
Medium - Long Range Forecast

ESRL-Calibrated Reforecast Pcpn : Day 0-7 and 8-15 Day Fcst

(from the 00Z MON 1 FEB ensembles of the experimental reforecast system)

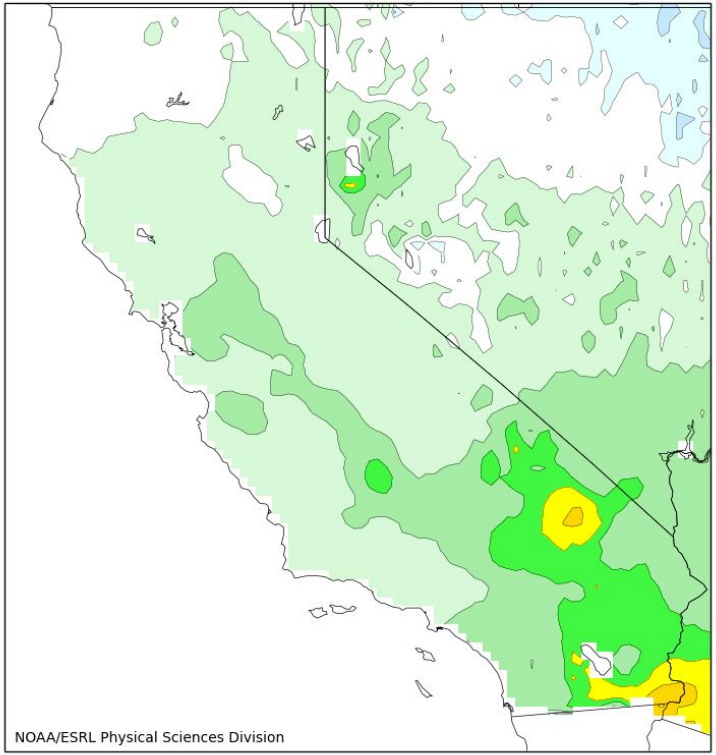
000-168hr fcst from 00Z Mon Feb 01. Valid 00Z Mon Feb 01 - 00Z Mon Feb 08

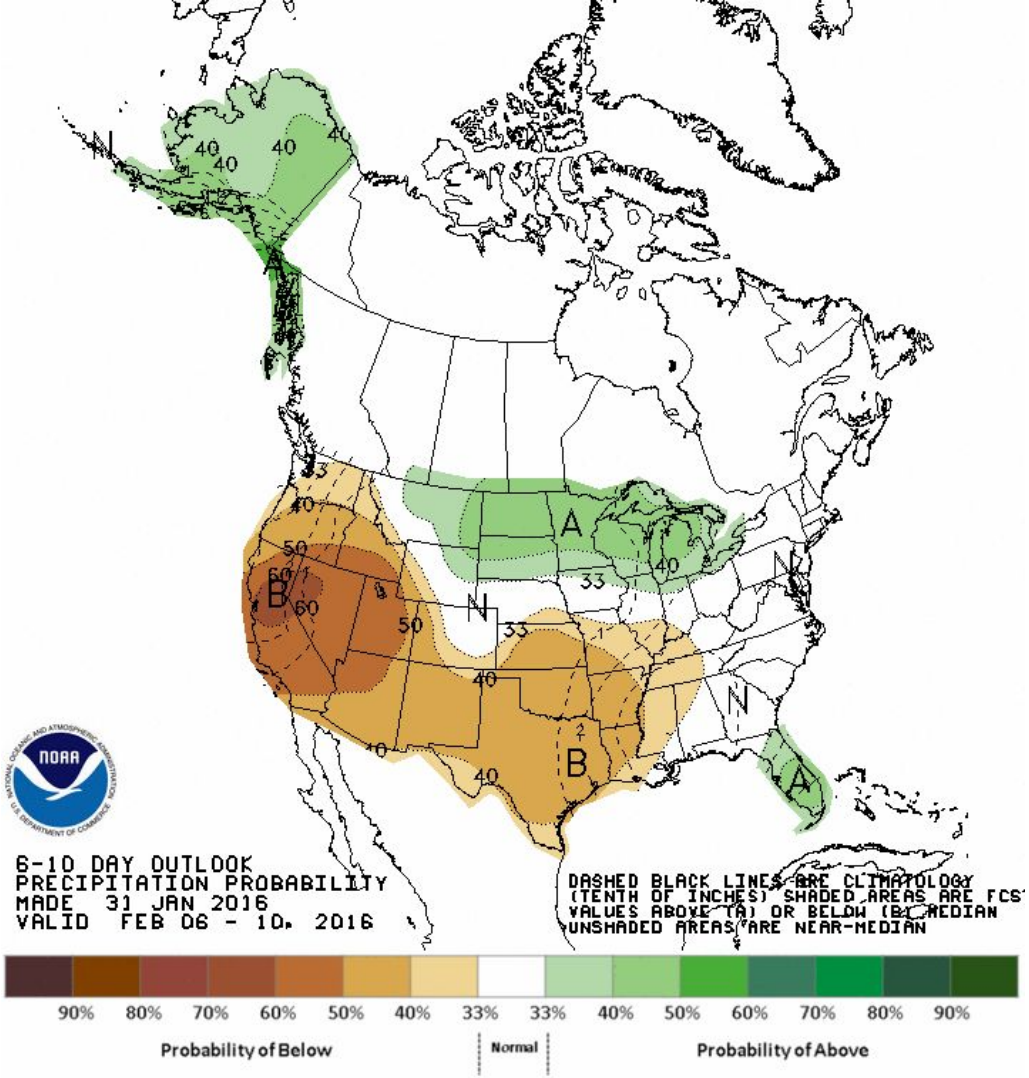
Ratio. Forecast/Climo Prob of Precip > 50mm. CSGD.



198-360hr fcst from 00Z Mon Feb 01. Valid 06Z Tue Feb 09 - 00Z Tue Feb 16

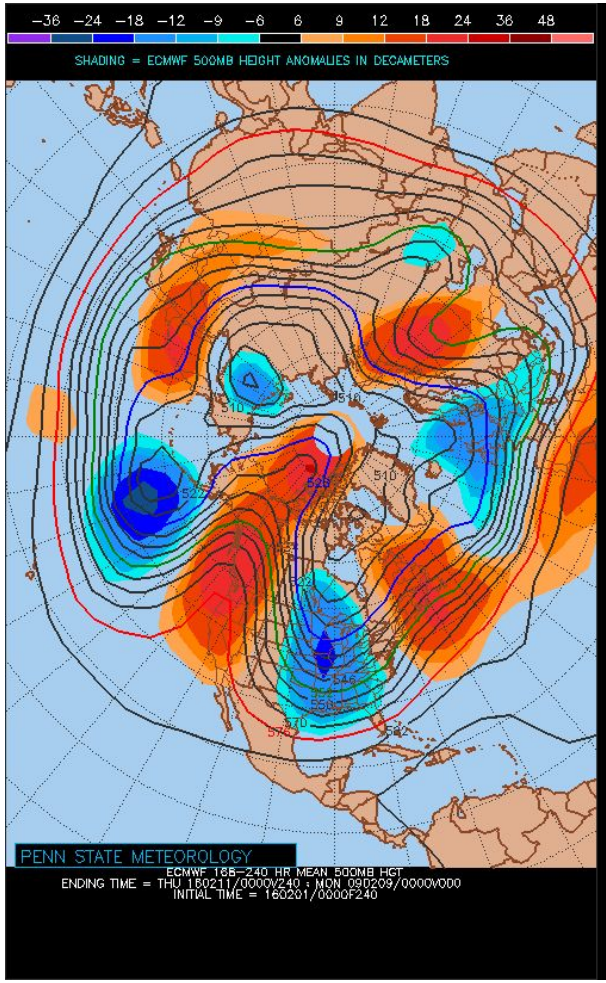
Ratio. Forecast/Climo Prob of Precip > 50mm. CSGD.

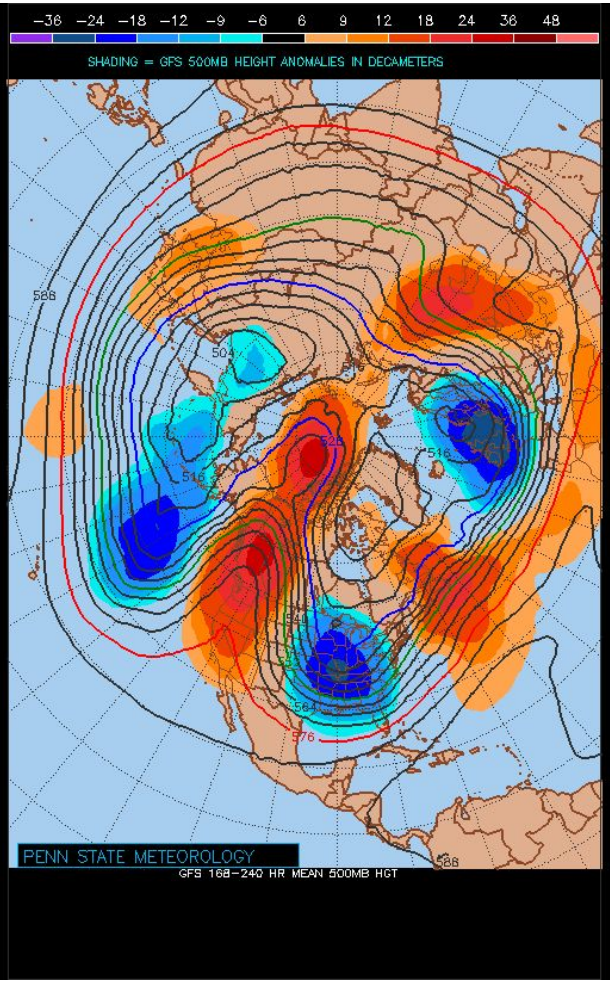


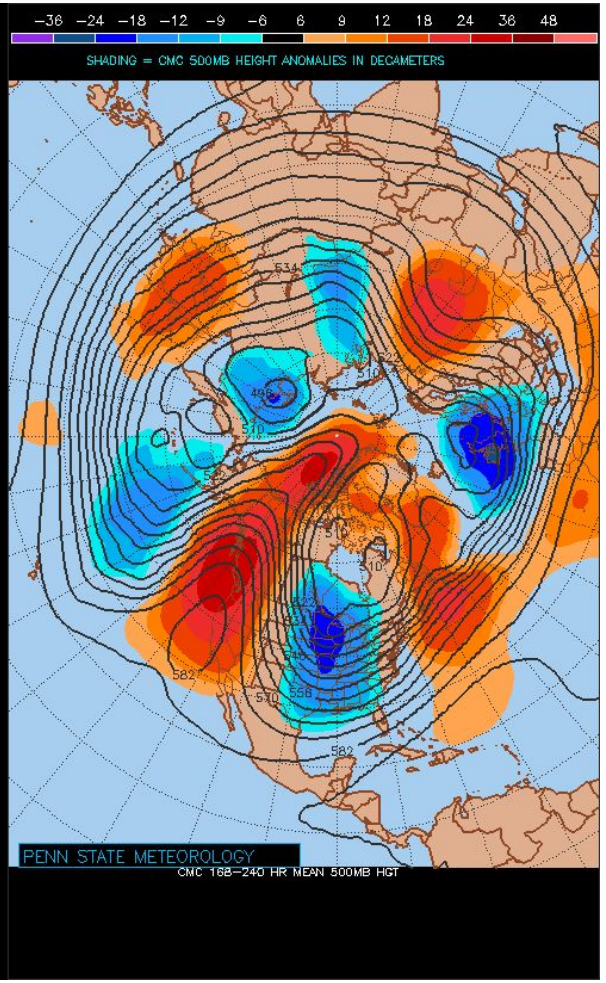

6-10 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 31 JAN 2016
VALID FEB 06 - 10, 2016
DASHED BLACK LINES ARE CLIMATOLOGY
(TENTH OF INCHES) SHADED AREAS ARE FCS
VALUES ABOVE (A) OR BELOW (B) MEDIAN
UNSHADED AREAS ARE NEAR-MEDIAN
90% 80% 70% 60% 50% 40% 33% 33% 40% 50% 60% 70% 80% 90%
Probability of Below
Normal
Probability of Above

Medium - Long Range Forecast

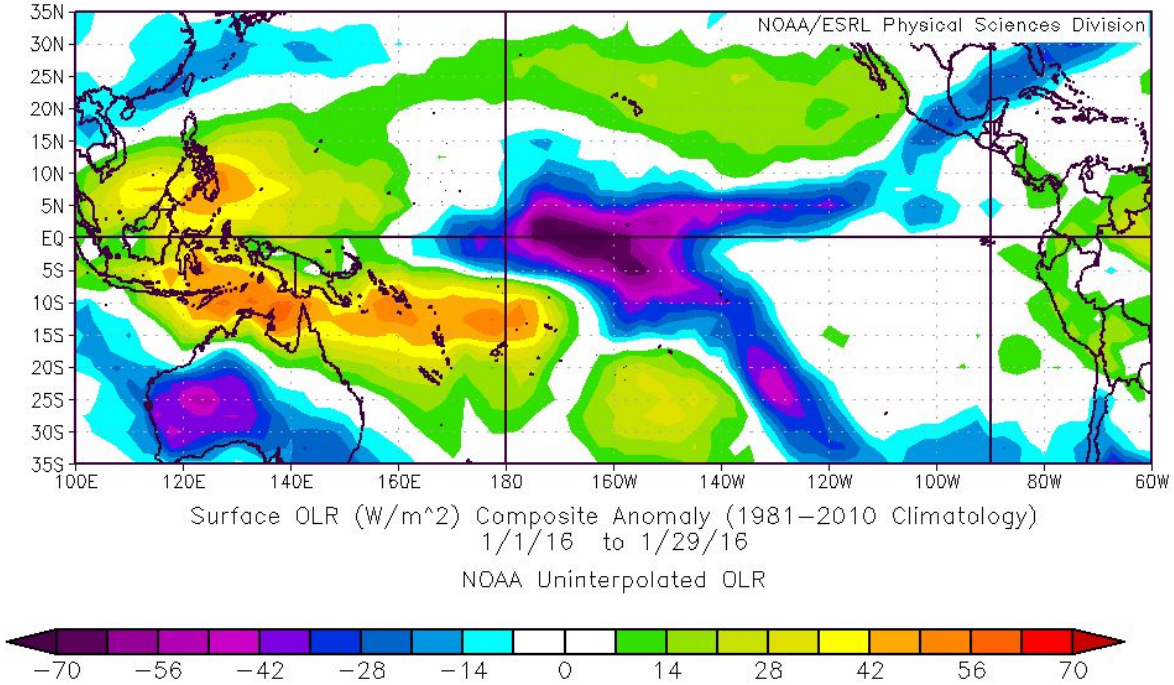
Day 7-10 Initialized 00Z Mon 1 Feb



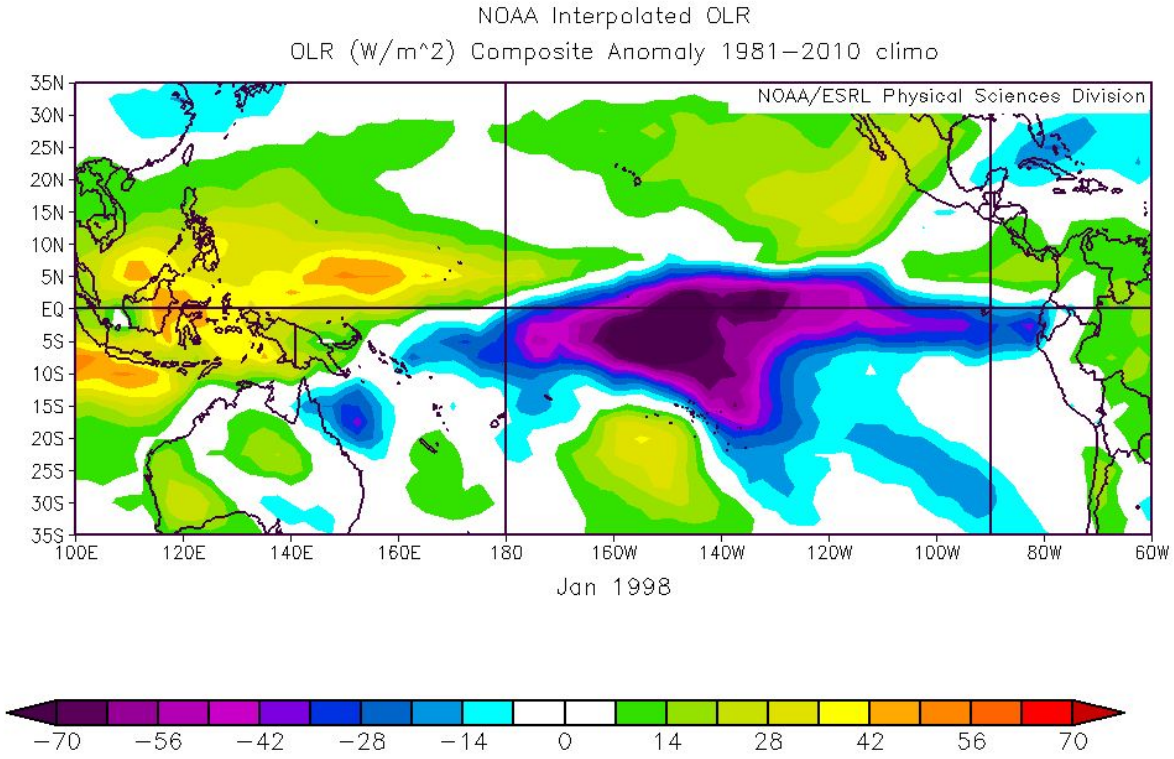




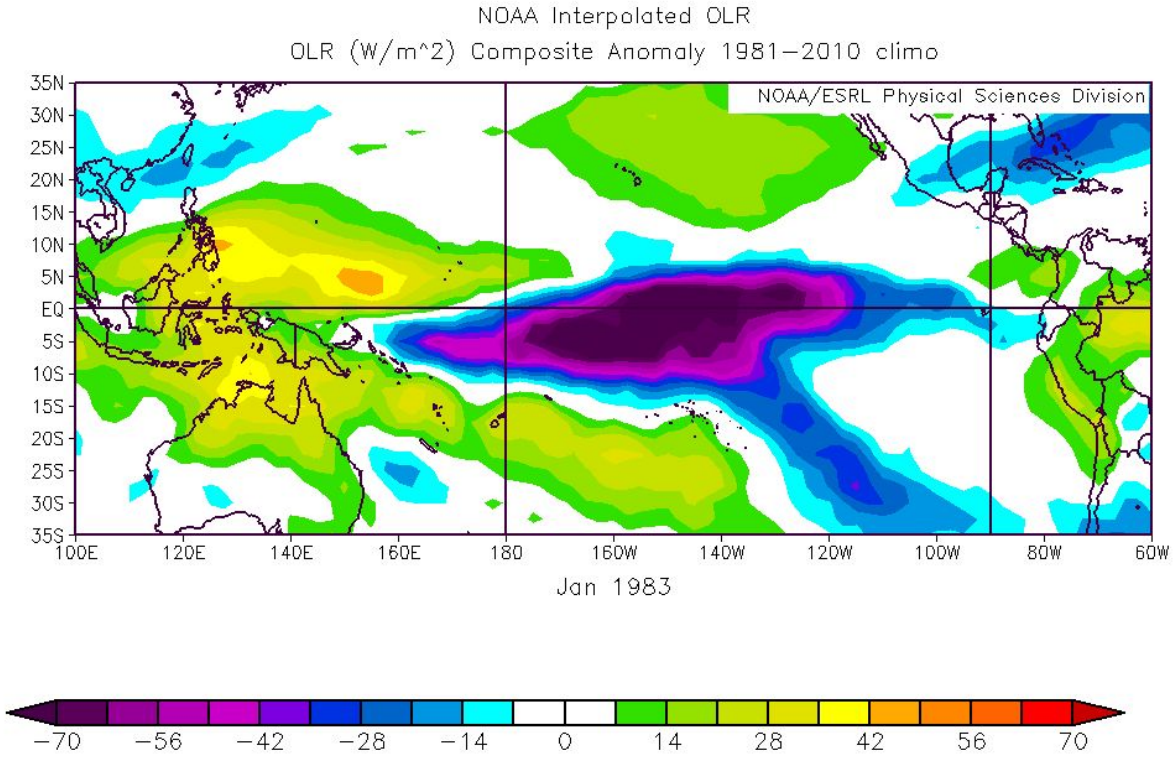
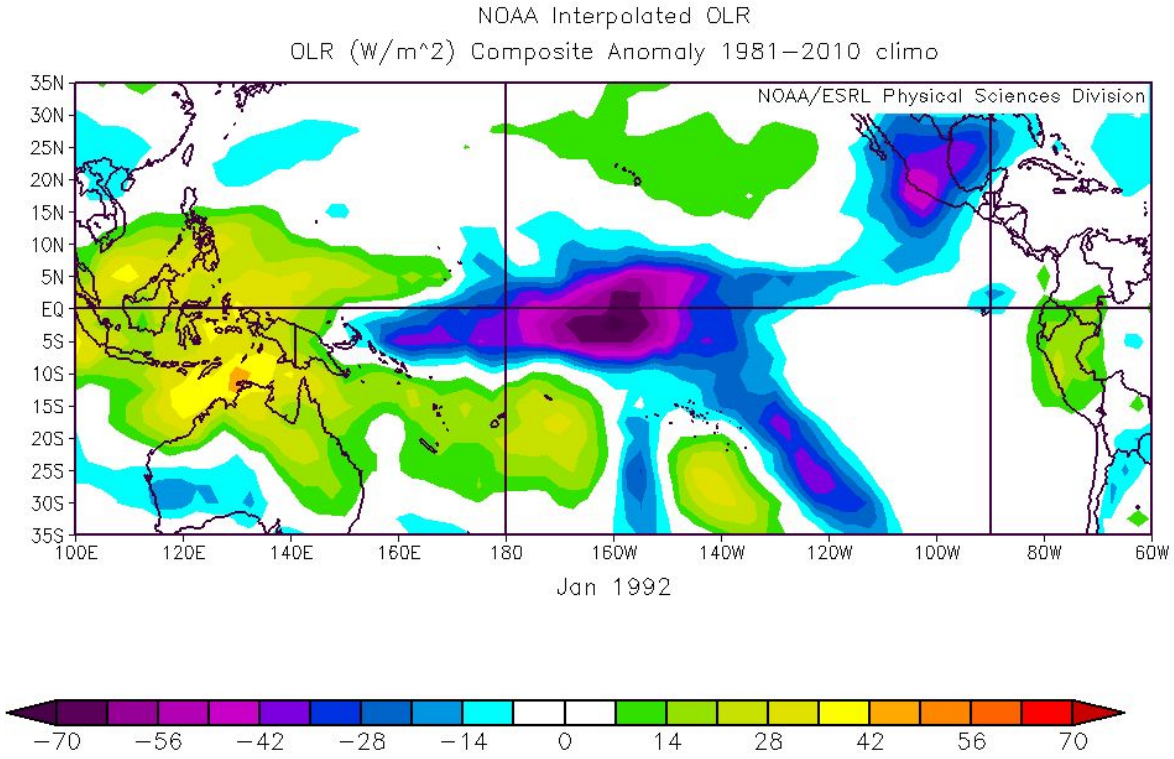
OLR Anomaly Jan 1- 29: 2016



OLR Anomaly Jan 1- 31: 1998



OLR Anomaly Jan 1- 31: 1983



OLR Anomaly Jan 1- 31: 1992