

Summary of Key Briefing Points
1030-1130am MST Sat, Mar 5, 2016

Current Conditions as of Thu 12Z-15Z Mar 4

Tropics and Mid-latitudes

Over the Tropical Pacific:

- Active in west part of FD today
- PW maximum moving NWard out of domain

Tropical Outlook

- Main convection west of FD

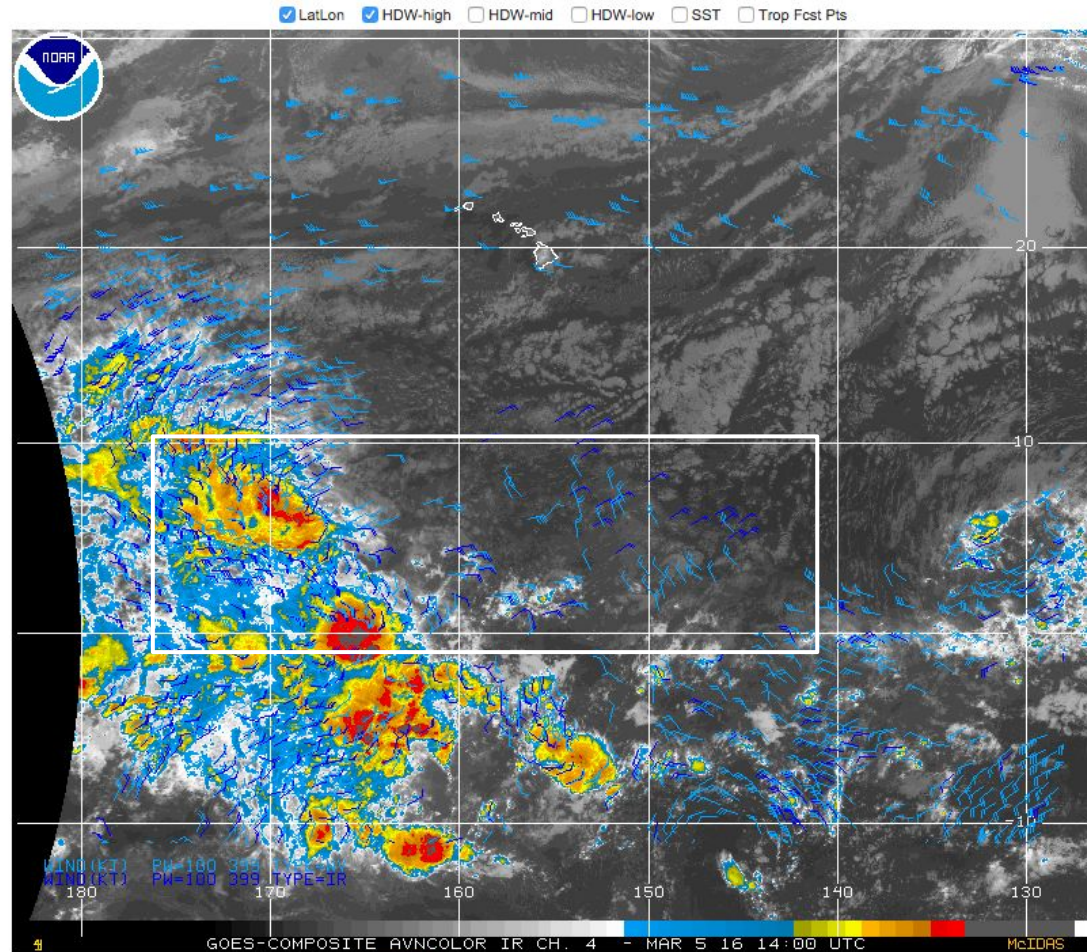
Midlatitude Conditions/Outlook

Short Term:

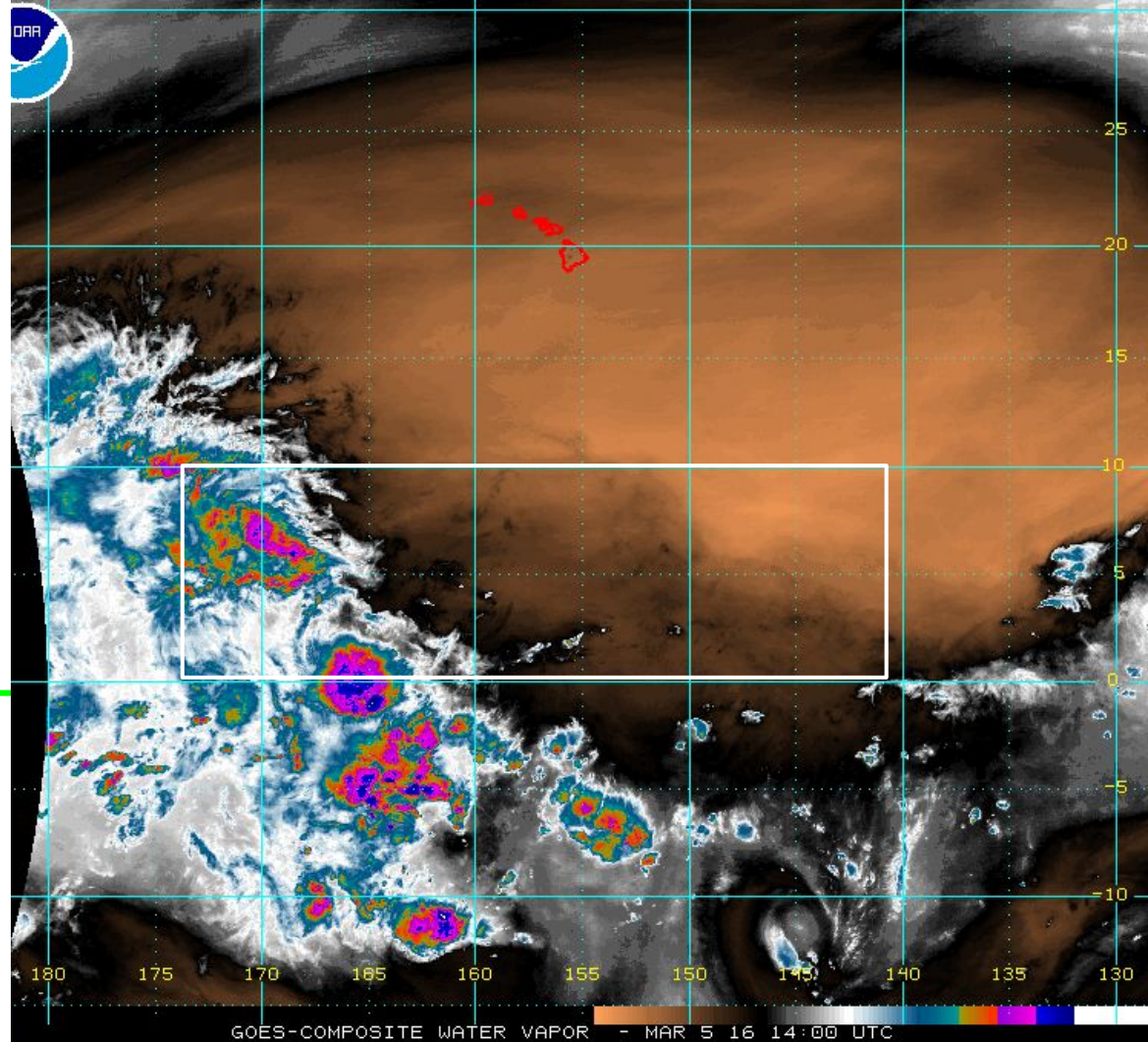
- Rains poised for NCAL this weekend, total in Sierra 13 forecast over next week"
- **Medium - Long Term:**
- Heavy rains likely over weekend, and then again mid/late next week: 10" total for Sierra likely
- Major rain event for lower MS Valley, >10" rains in Ozarks
- Day 10-15 to be mostly dry for CA. i

GOES Composite - El Niño Support – AVN Color Infrared Loop

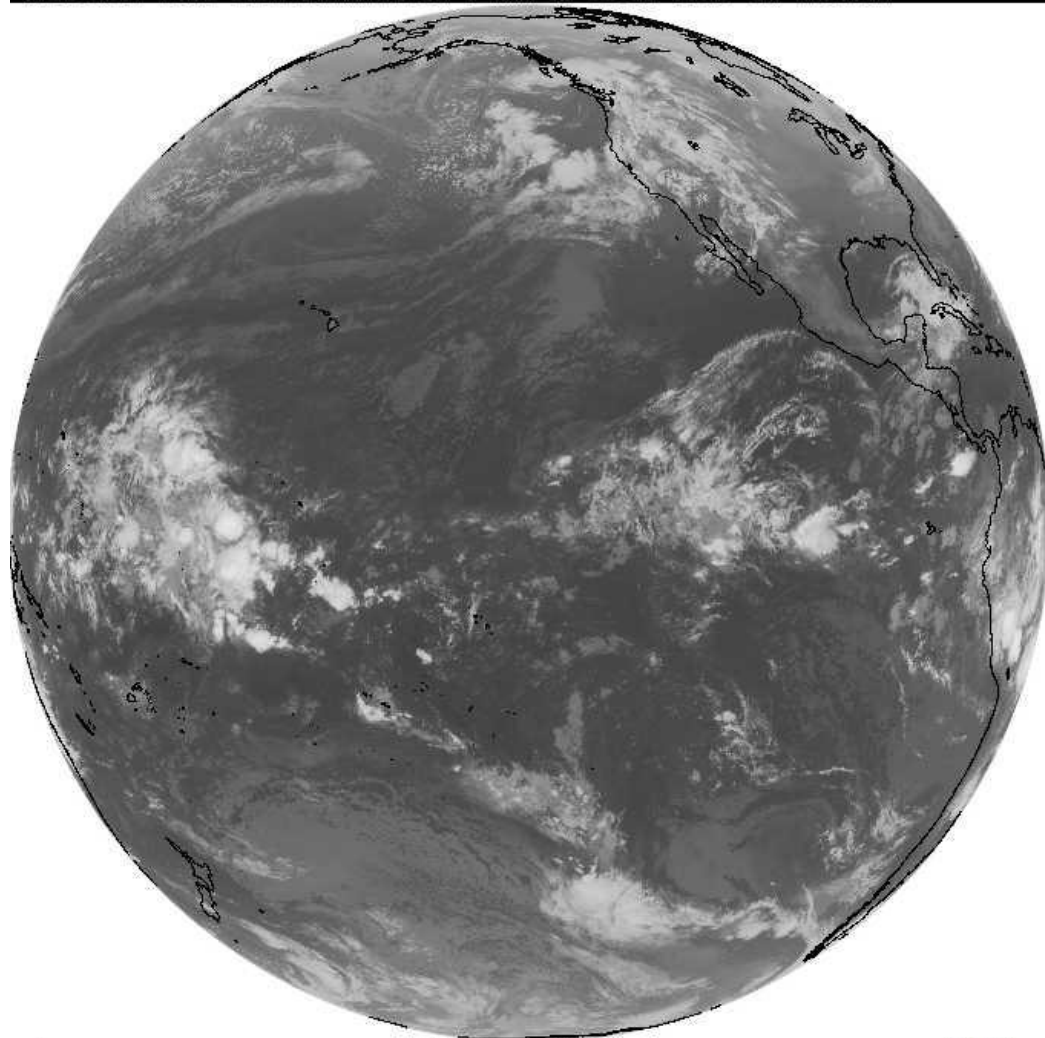
Sat 14Z



Sat 14Z

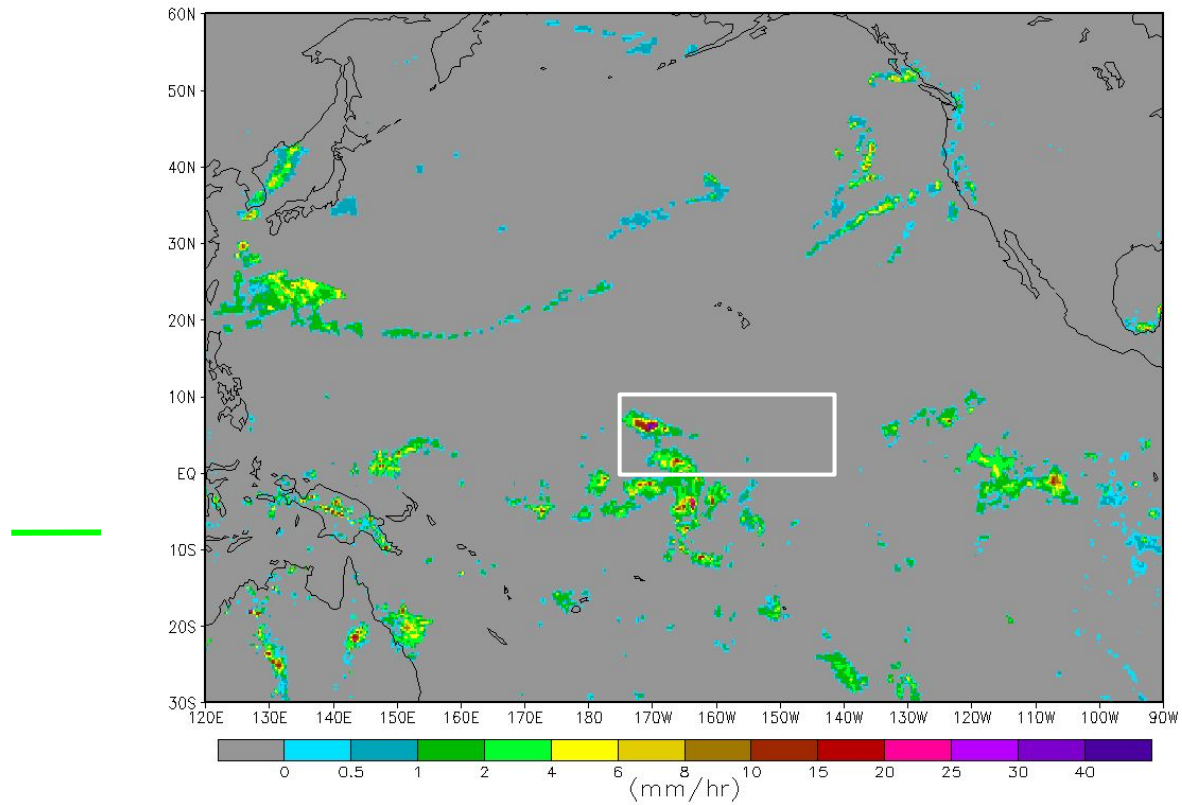


Sat 12Z



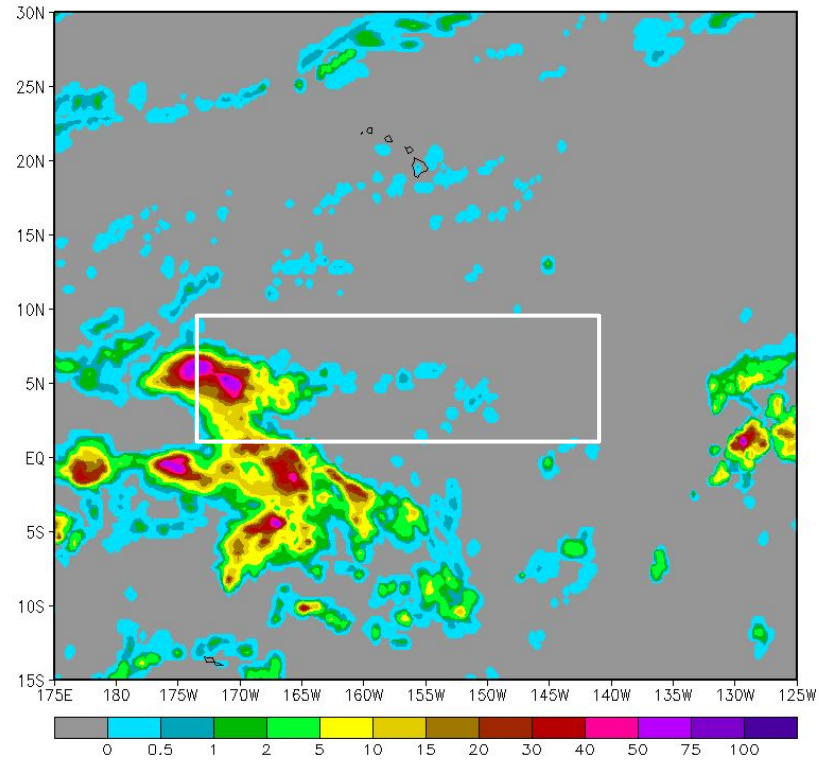
Sat 12Z

CMORPH_RAW_RT @ 2016-Mar-05 12:00Z

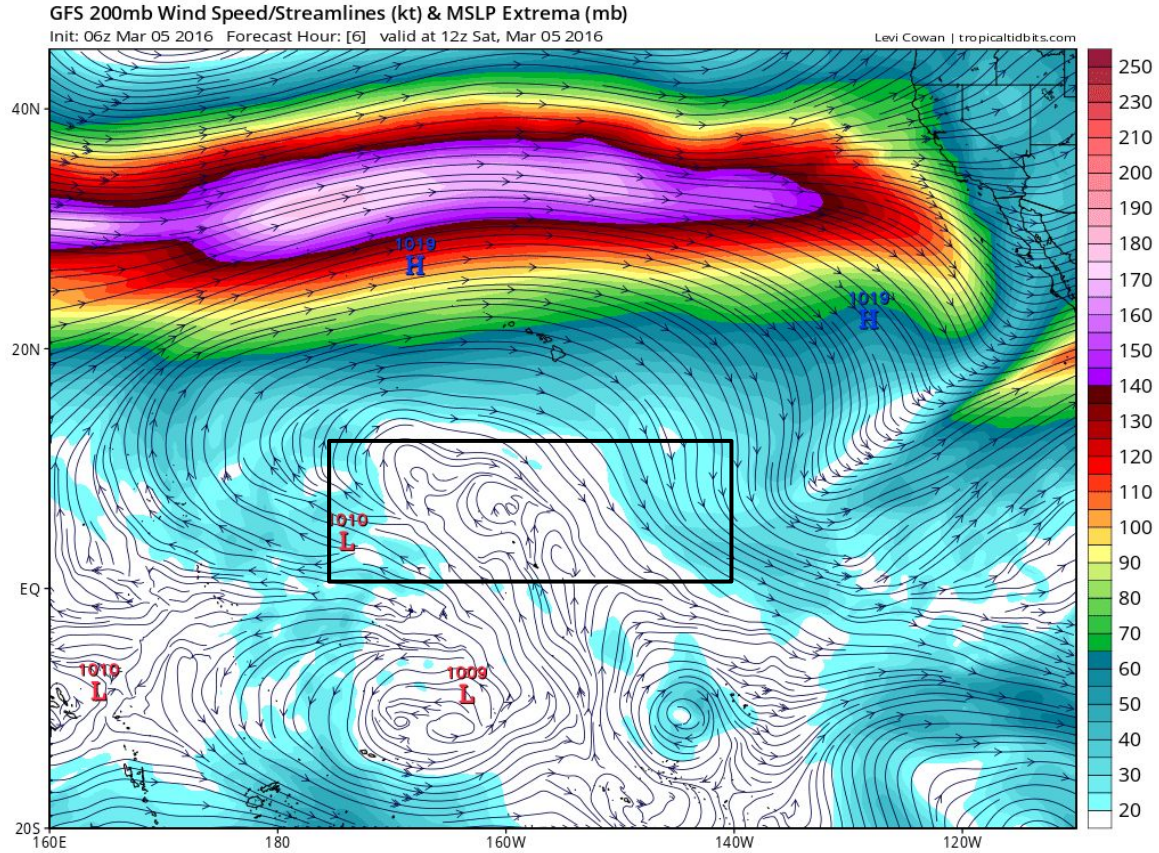


CMORPH 6-hour Rainfall Accumulation (mm)

(04Mar2016 18Z – 04Mar2016 24Z)



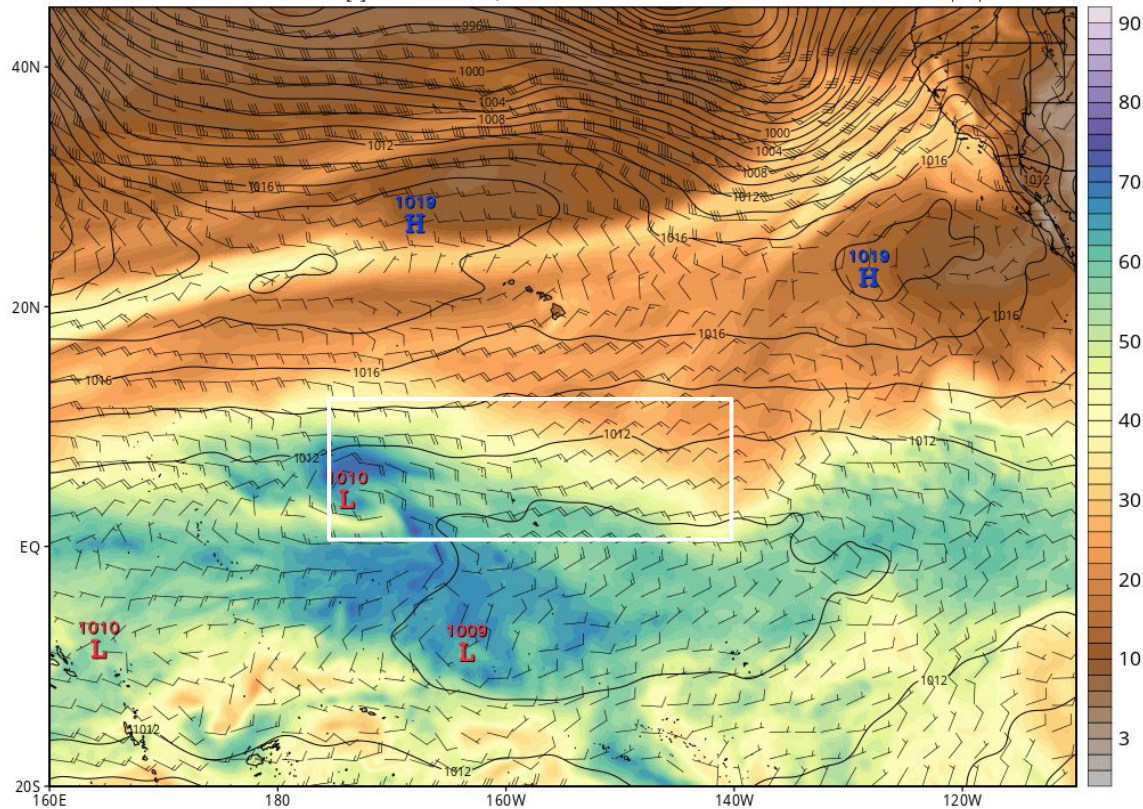
GFS Analysis: 200 mb Winds



GFS MSLP (mb), Total Precipitable Water (mm), and 850mb Wind (kt)

Init: 06z Mar 05 2016 Forecast Hour: [6] valid at 12z Sat, Mar 05 2016

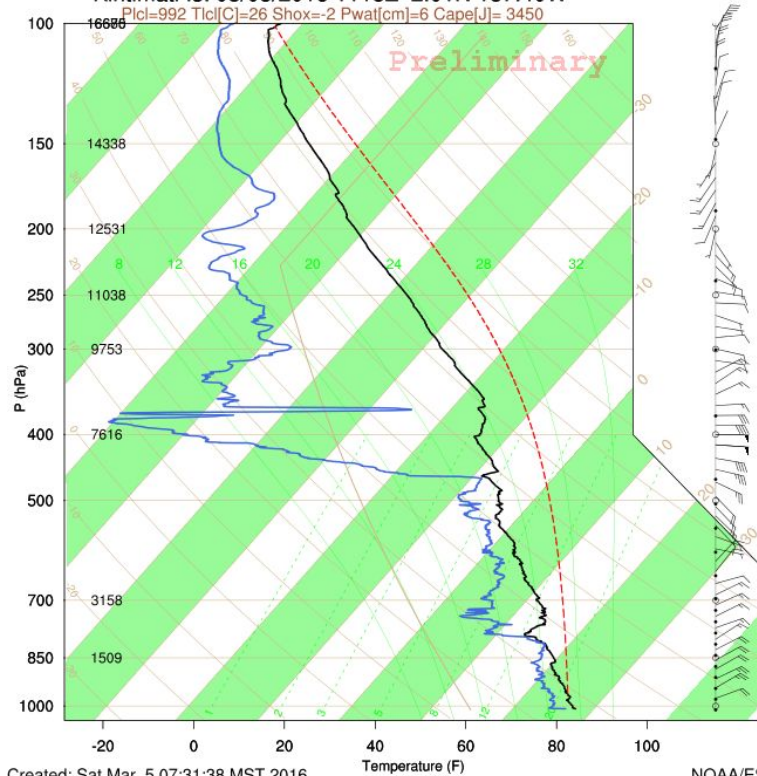
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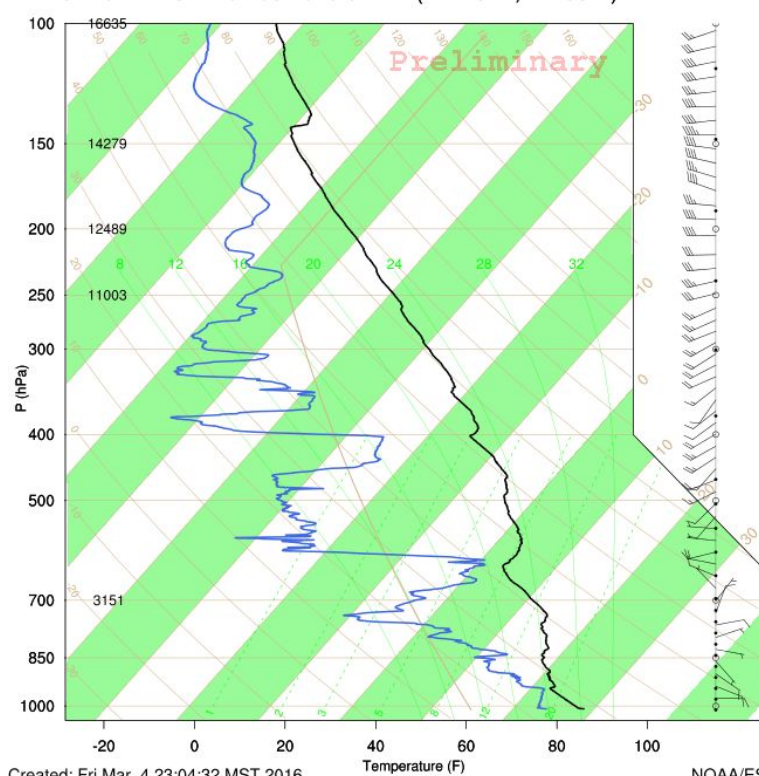
GFS Analysis: 06Z
PW and 850 mb
winds

Kiritimati Is: 03/05/2016 1118Z 2.01N 157.40W

Ptcl=992 Tlcl[C]=26 Shox=-2 Pwat[cm]=6 Cape[J]= 3450



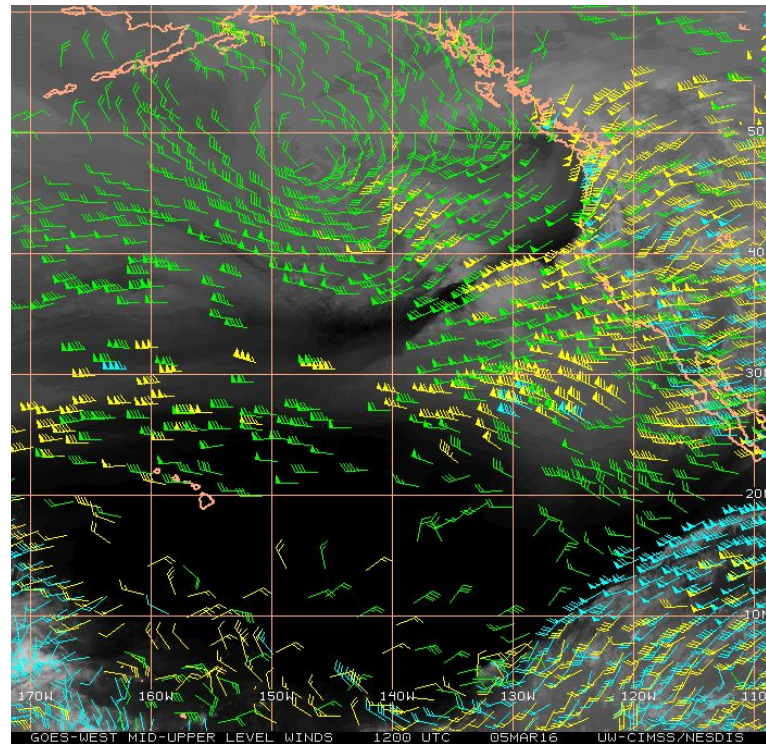
Ronald H. Brown: 03/05/2016 0214Z (-7.4184S,124.98W)



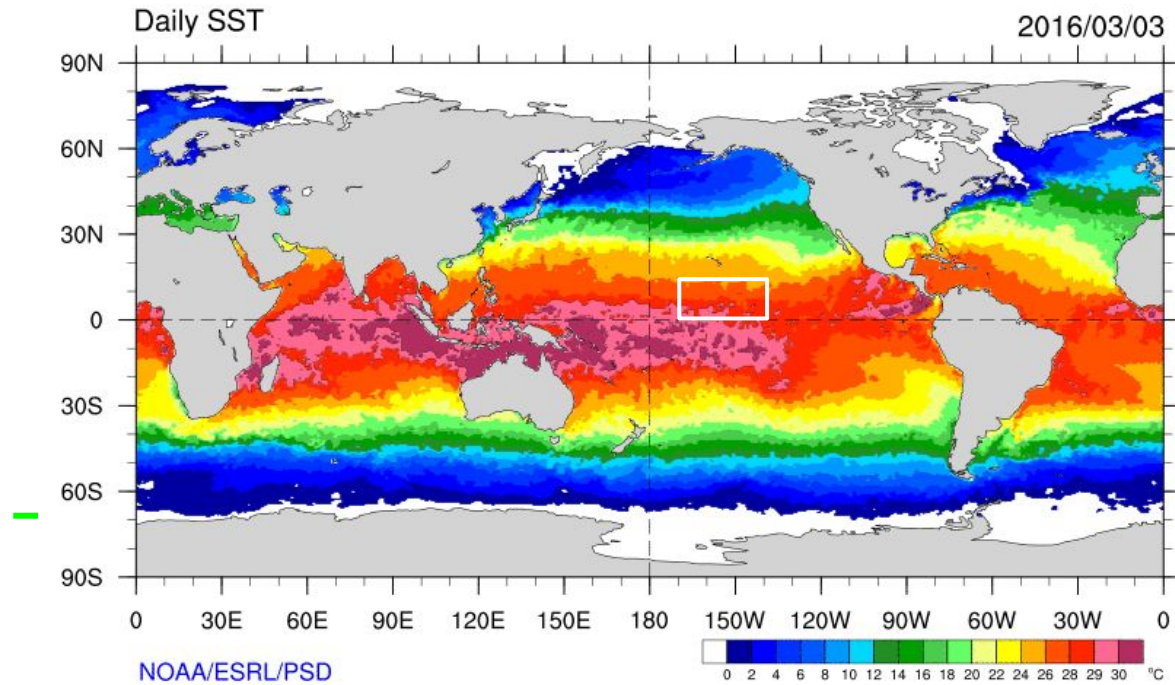
NOAA/ESRL PSD

NOAA/ESRL PSD

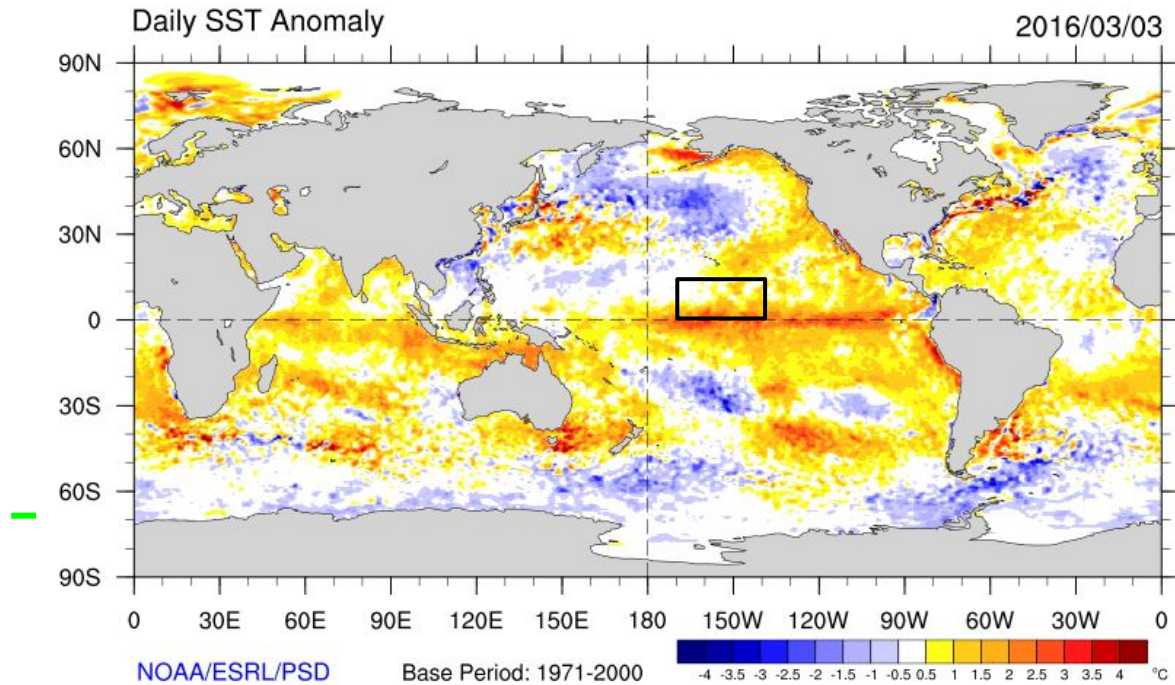
12Z Satellite Winds



Mar 3: SST



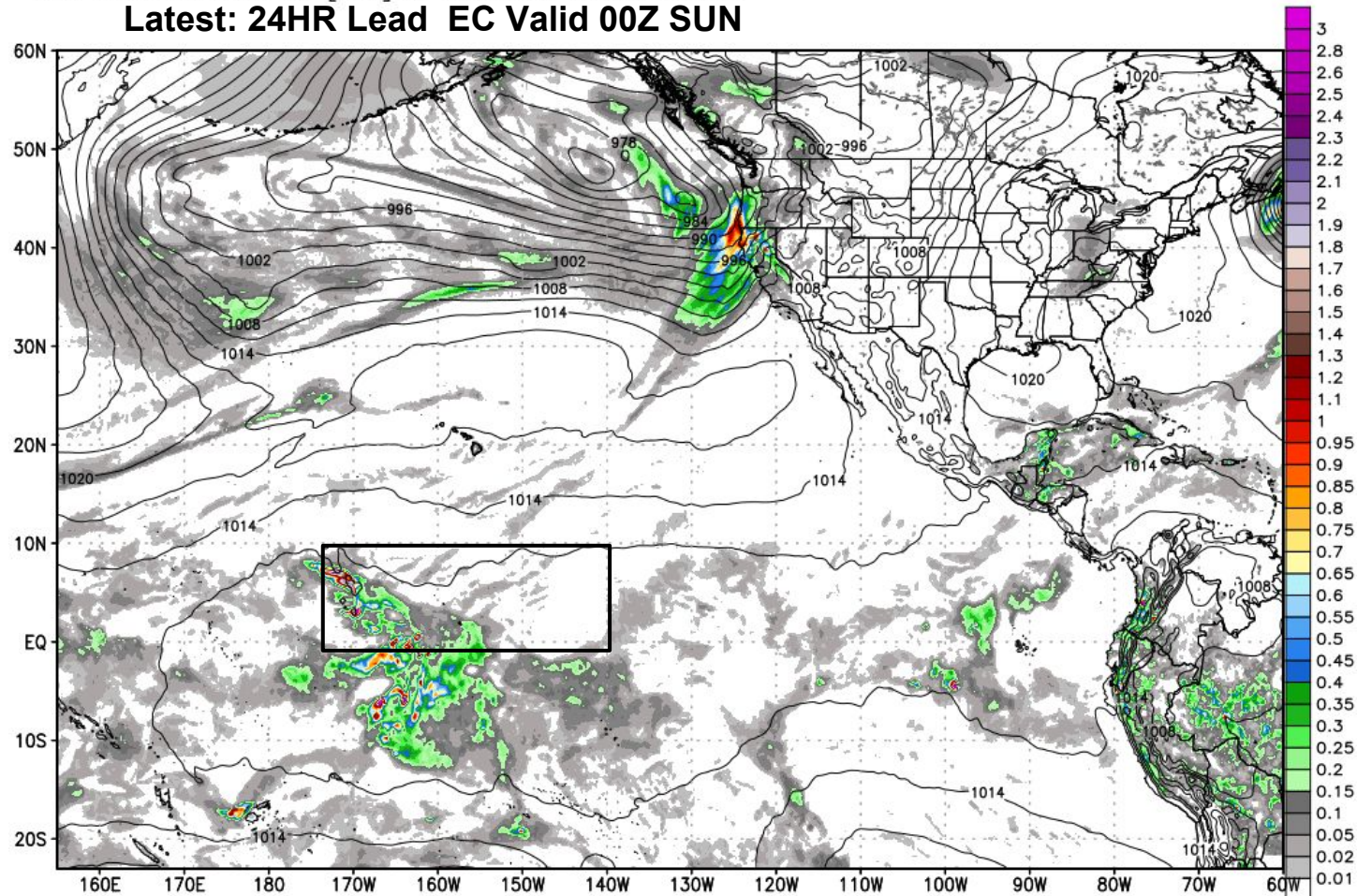
Mar 3: SST Anomaly



EC vs GFS Precip Forecasts:
Mar 6 00z - Mar 11 00z

ECMWF 6-hourly Precipitation [inches] between 18Z05MAR2016 -- 00Z06MAR2016 & MSLP [hPa]
INIT: 00Z05MAR2016 fx: [024] hr --> Sun 00Z06MAR2016

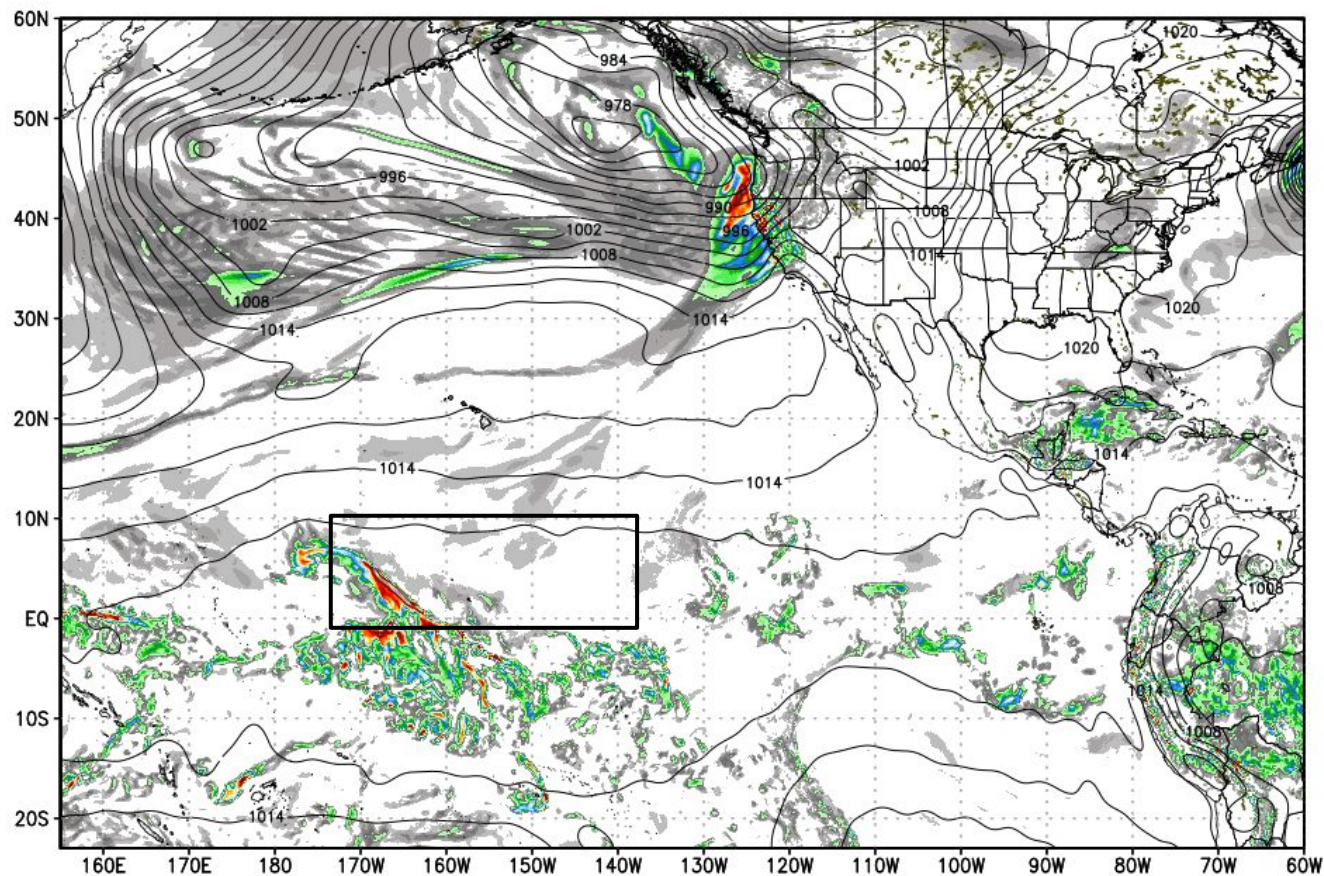
Latest: 24HR Lead EC Valid 00Z SUN



NCEP GFS 6-hourly Precipitation [inch] & MSLP [hPa]
INIT: 06Z05MAR2016 fx: [018] hr --> Sun 00Z06MAR2016

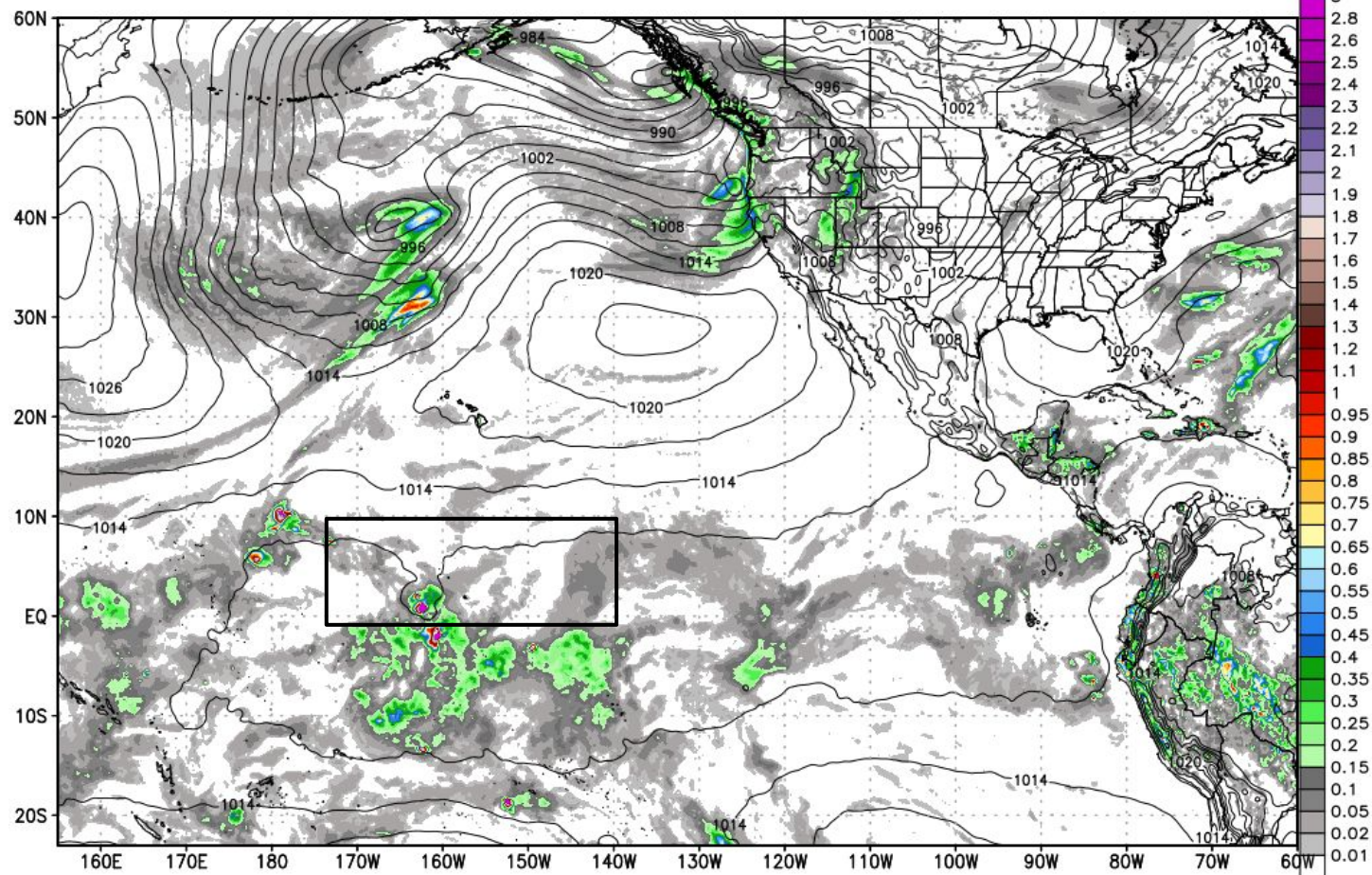
Max: 4.1 in.

Latest: 18HR Lead GFS Valid 00Z SUN



ECMWF 6-hourly Precipitation [inches] between 18Z06MAR2016 -- 00Z07MAR2016 & MSLP [hPa]
INIT: 00Z05MAR2016 fx: [048] hr --> Mon 00Z07MAR2016

Latest: 48HR Lead EC Valid 00Z MON

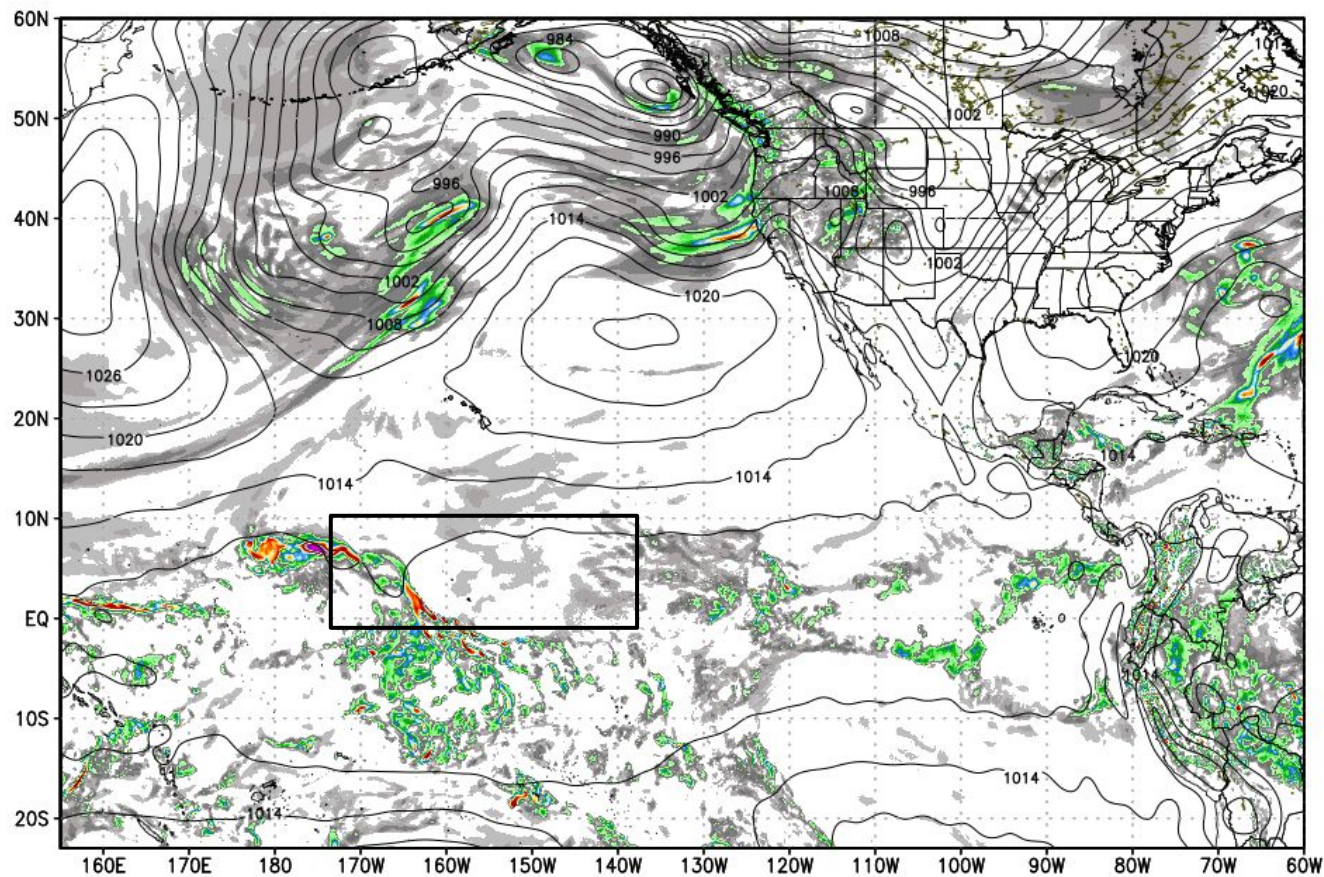


NCEP GFS 6-hourly Precipitation [inch] & MSLP [hPa]

INIT: 06Z05MAR2016 fx: [042] hr --> Mon 00Z07MAR2016

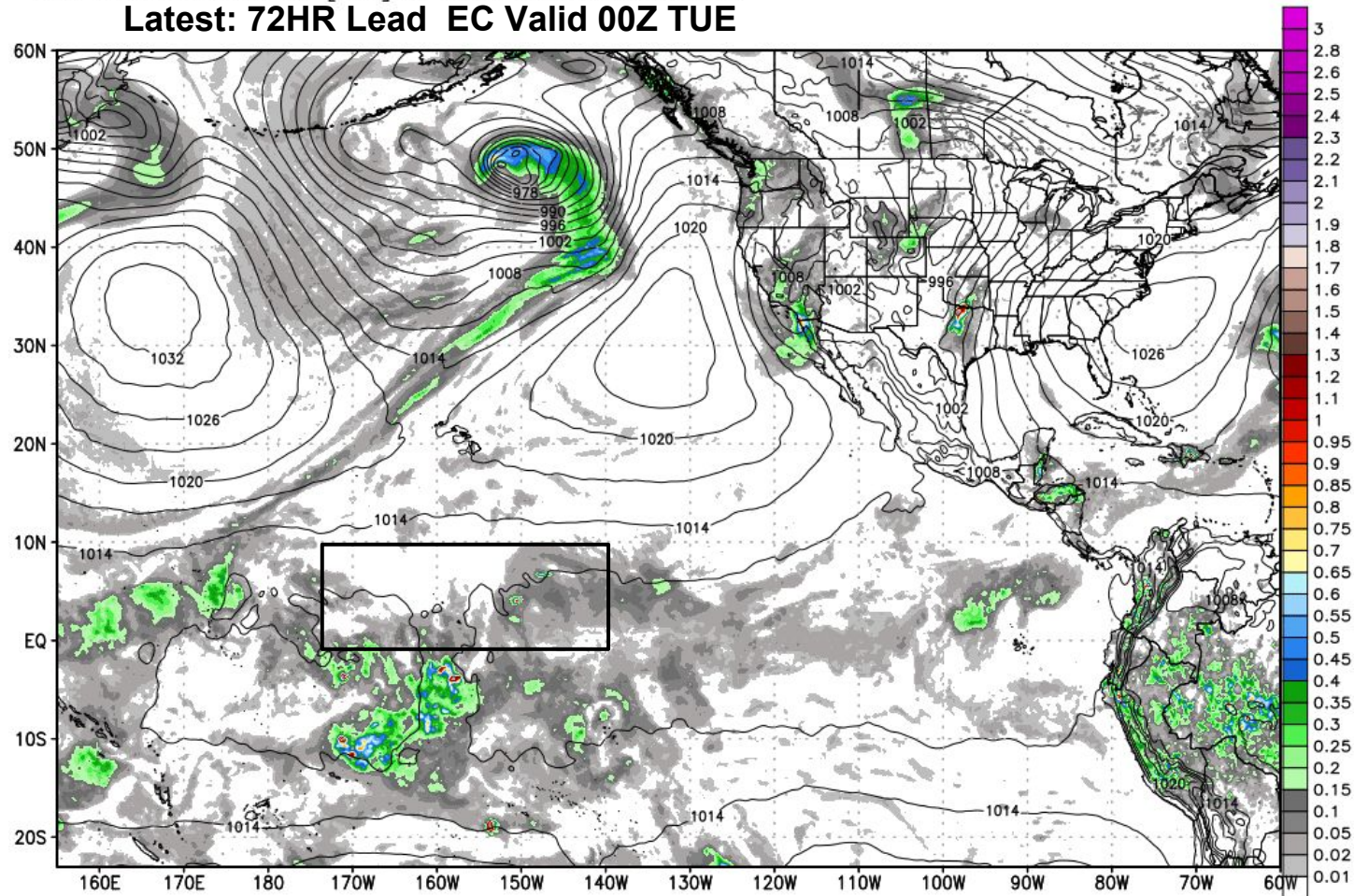
Max: 4.0 in.

Latest: 42HR Lead GFS Valid 00Z MON



ECMWF 6-hourly Precipitation [inches] between 18Z07MAR2016 -- 00Z08MAR2016 & MSLP [hPa]
INIT: 00Z05MAR2016 fx: [072] hr --> Tue 00Z08MAR2016

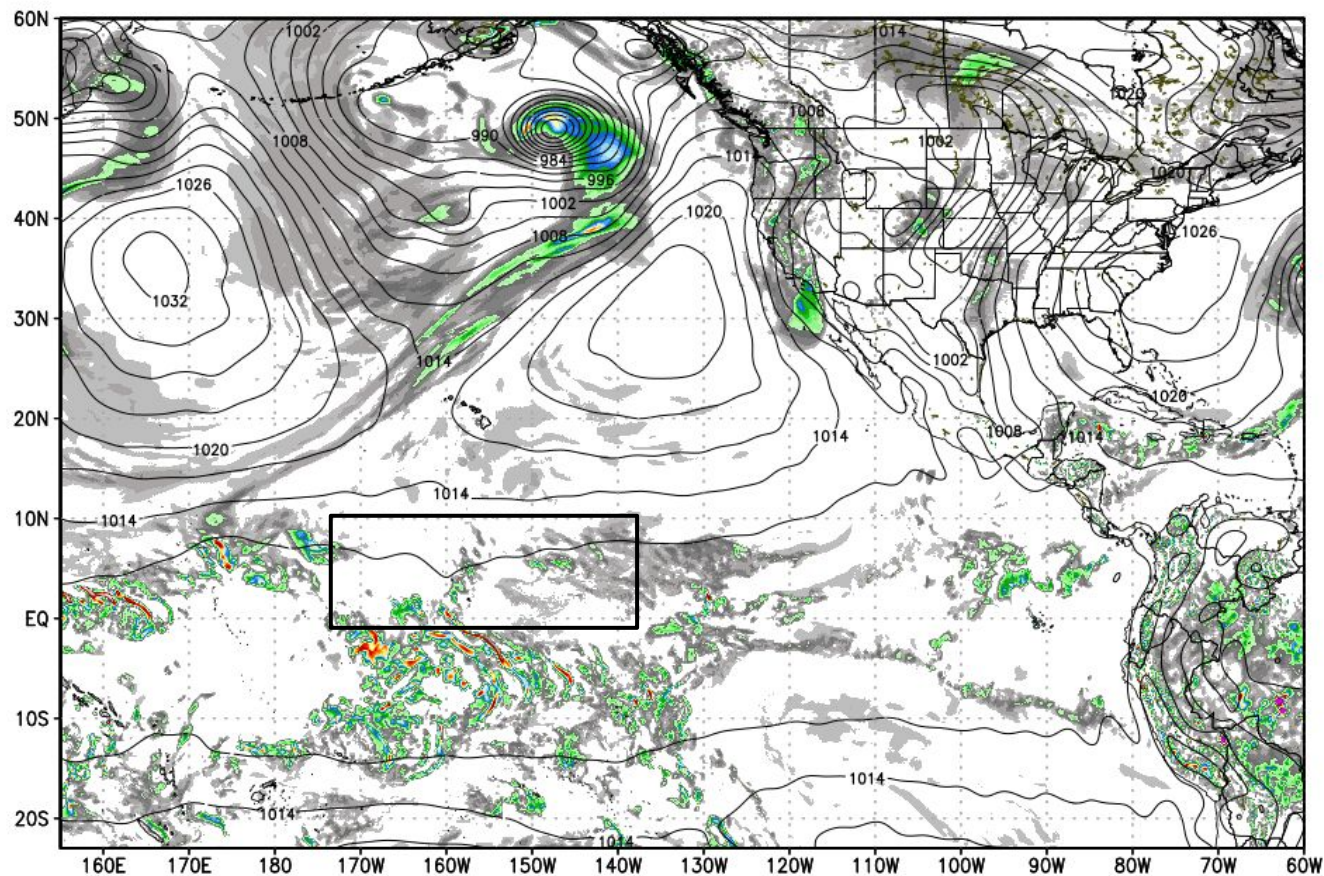
Latest: 72HR Lead EC Valid 00Z TUE



NCEP GFS 6-hourly Precipitation [inch] & MSLP [hPa]
INIT: 06Z05MAR2016 fx: [066] hr --> Tue 00Z08MAR2016

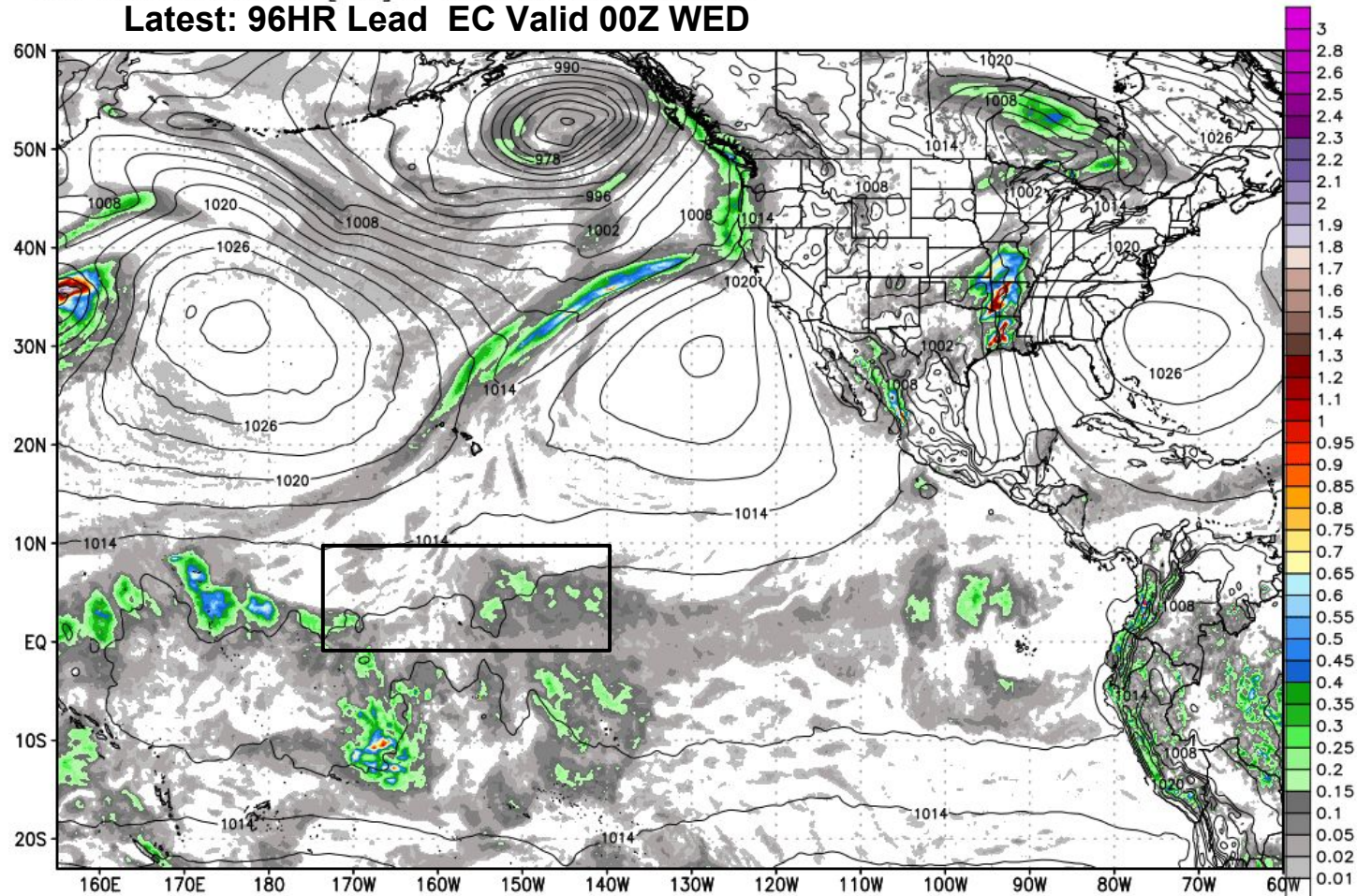
Max: 4.6 in.

Latest: 66HR Lead GFS Valid 00Z TUE



ECMWF 6-hourly Precipitation [inches] between 18Z08MAR2016 -- 00Z09MAR2016 & MSLP [hPa]
INIT: 00Z05MAR2016 fx: [096] hr --> Wed 00Z09MAR2016

Latest: 96HR Lead EC Valid 00Z WED

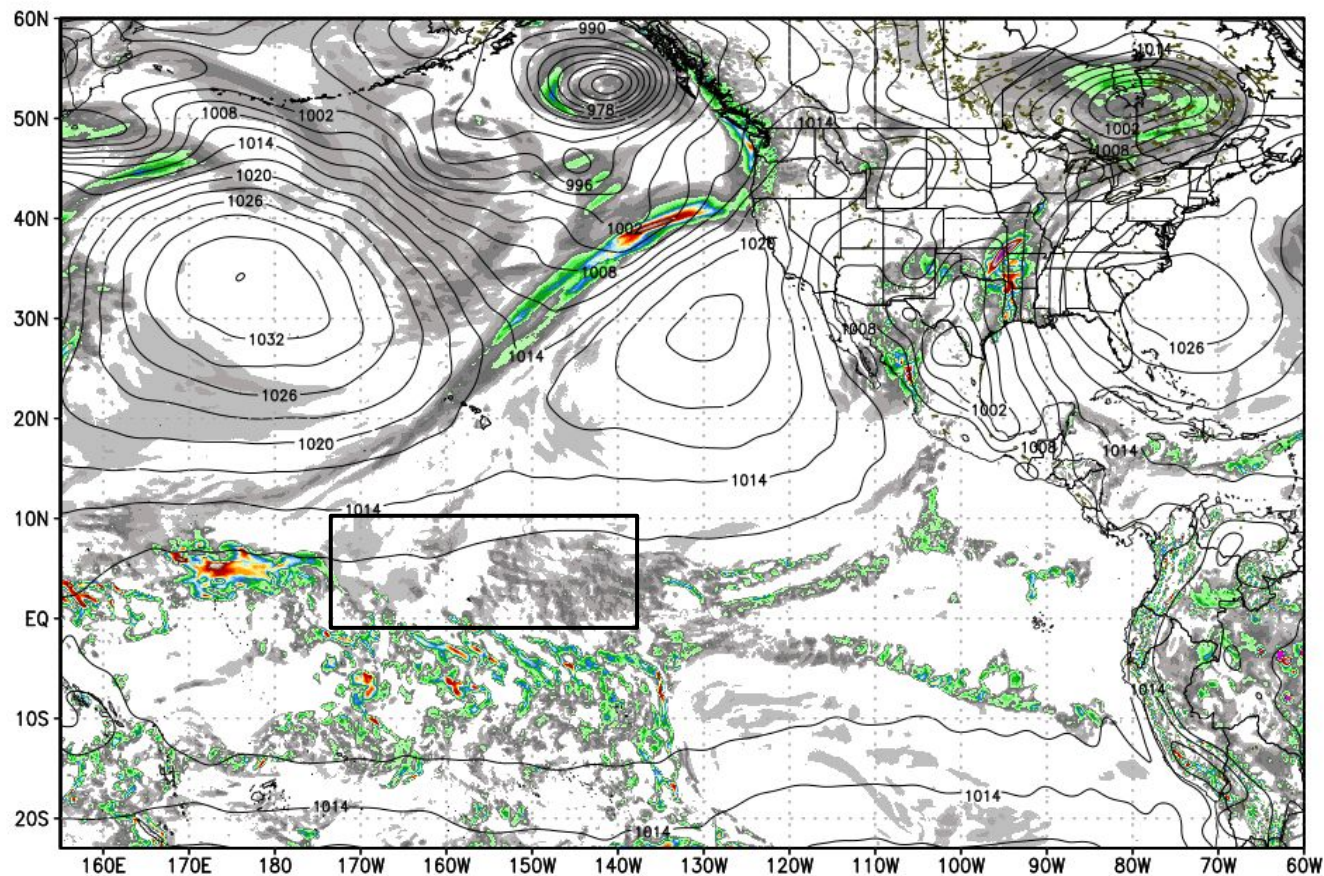


NCEP GFS 6-hourly Precipitation [inch] & MSLP [hPa]

INIT: 06Z05MAR2016 fx: [090] hr --> Wed 00Z09MAR2016

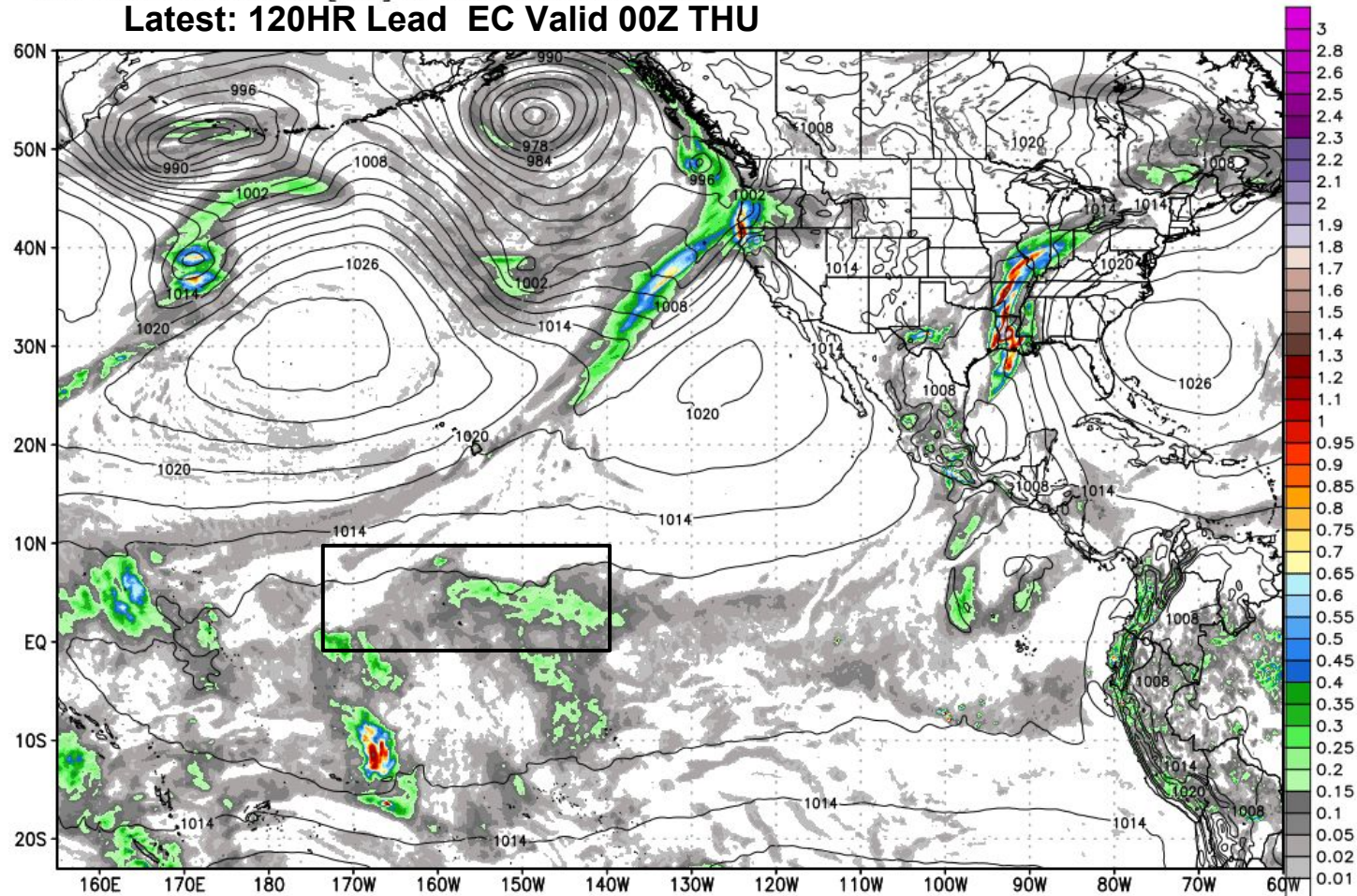
Max: 10.2 in.

Latest: 90HR Lead GFS Valid 00Z WED



ECMWF 6-hourly Precipitation [inches] between 18Z09MAR2016 -- 00Z10MAR2016 & MSLP [hPa]
INIT: 00Z05MAR2016 fx: [120] hr --> Thu 00Z10MAR2016

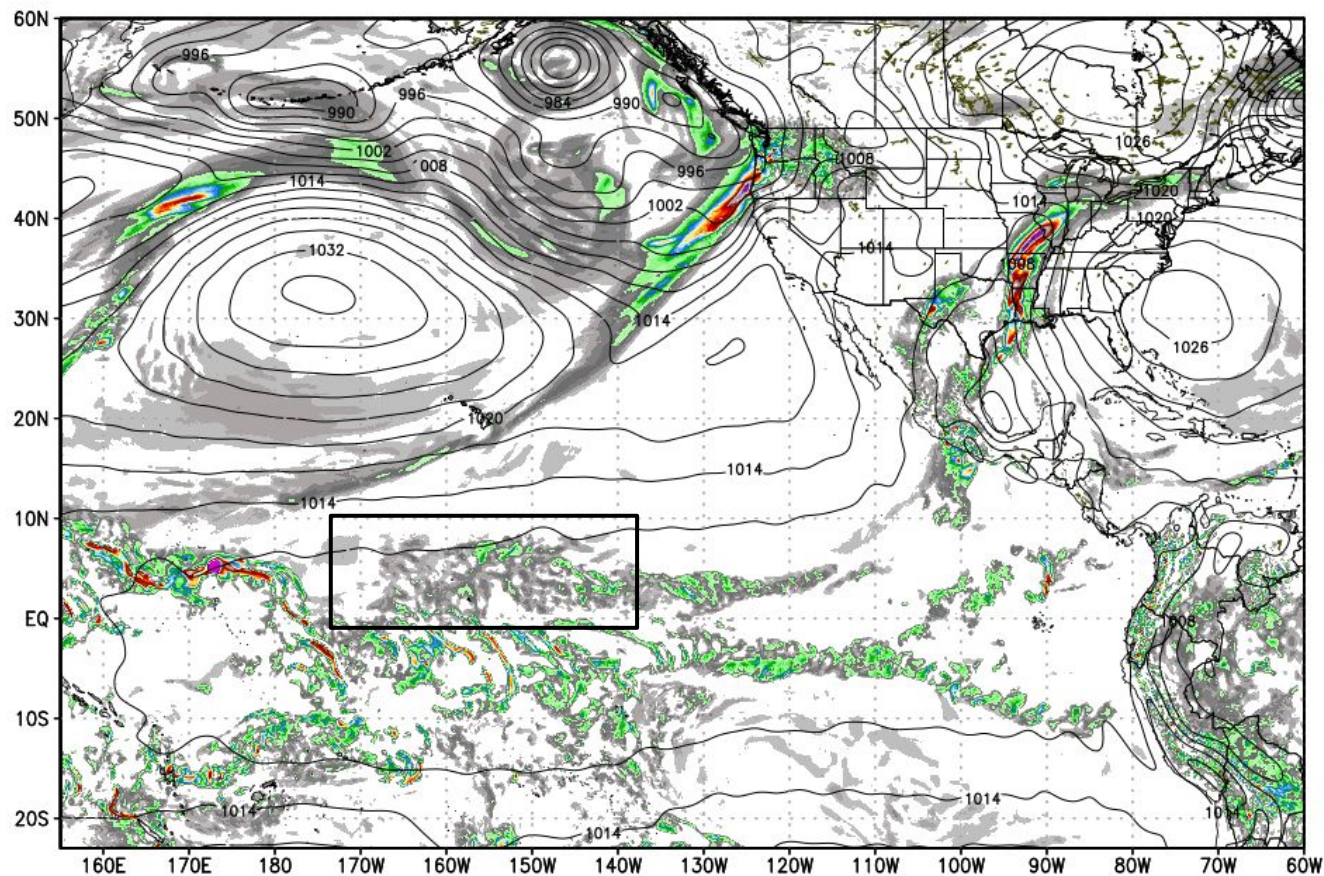
Latest: 120HR Lead EC Valid 00Z THU



NCEP GFS 6-hourly Precipitation [inch] & MSLP [hPa]
INIT: 06Z05MAR2016 fx: [114] hr --> Thu 00Z10MAR2016

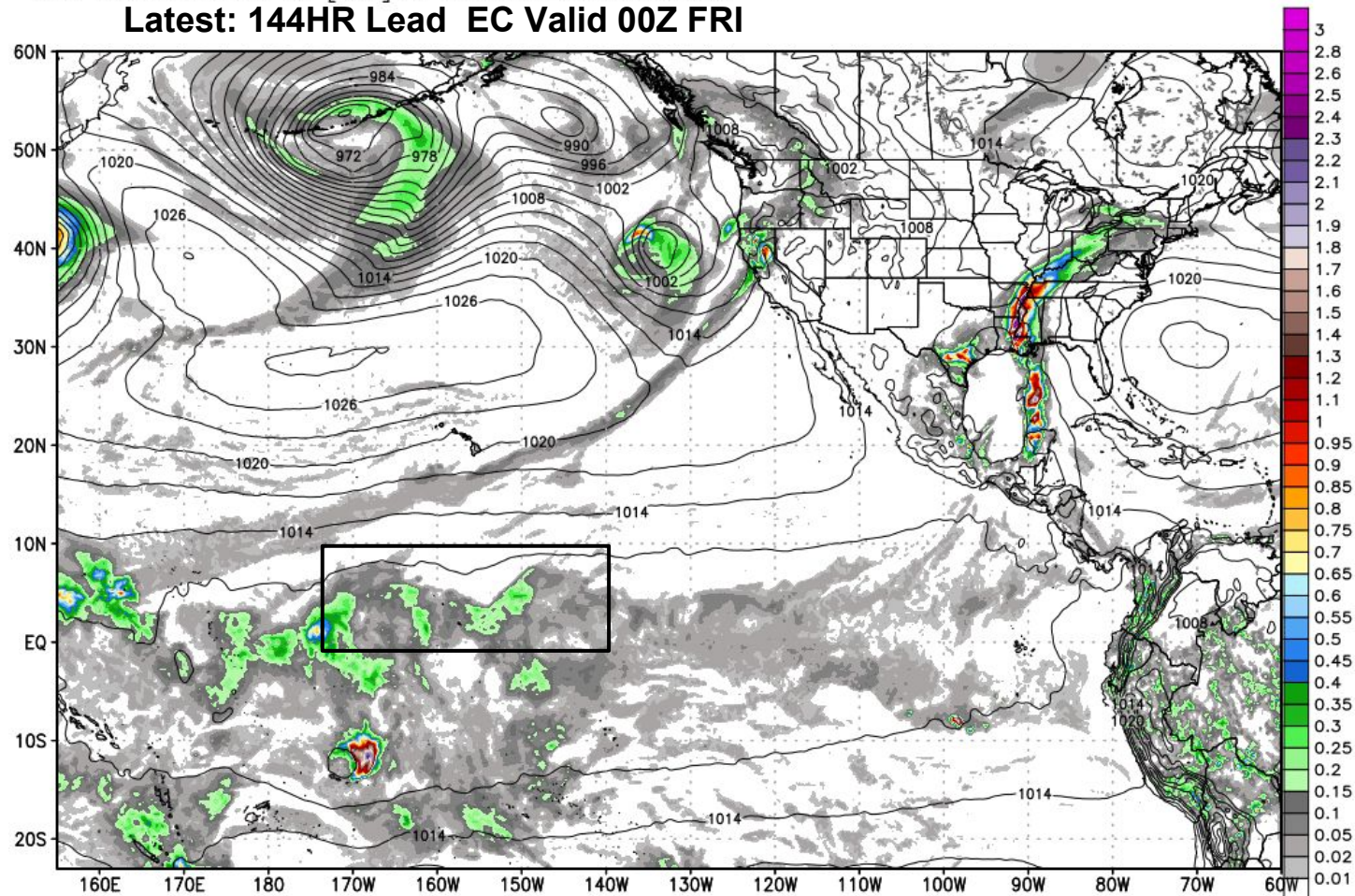
Max: 8.5 in.

Latest: 114HR Lead GFS Valid 00Z THU



ECMWF 6-hourly Precipitation [inches] between 18Z10MAR2016 -- 00Z11MAR2016 & MSLP [hPa]
INIT: 00Z05MAR2016 fx: [144] hr --> Fri 00Z11MAR2016

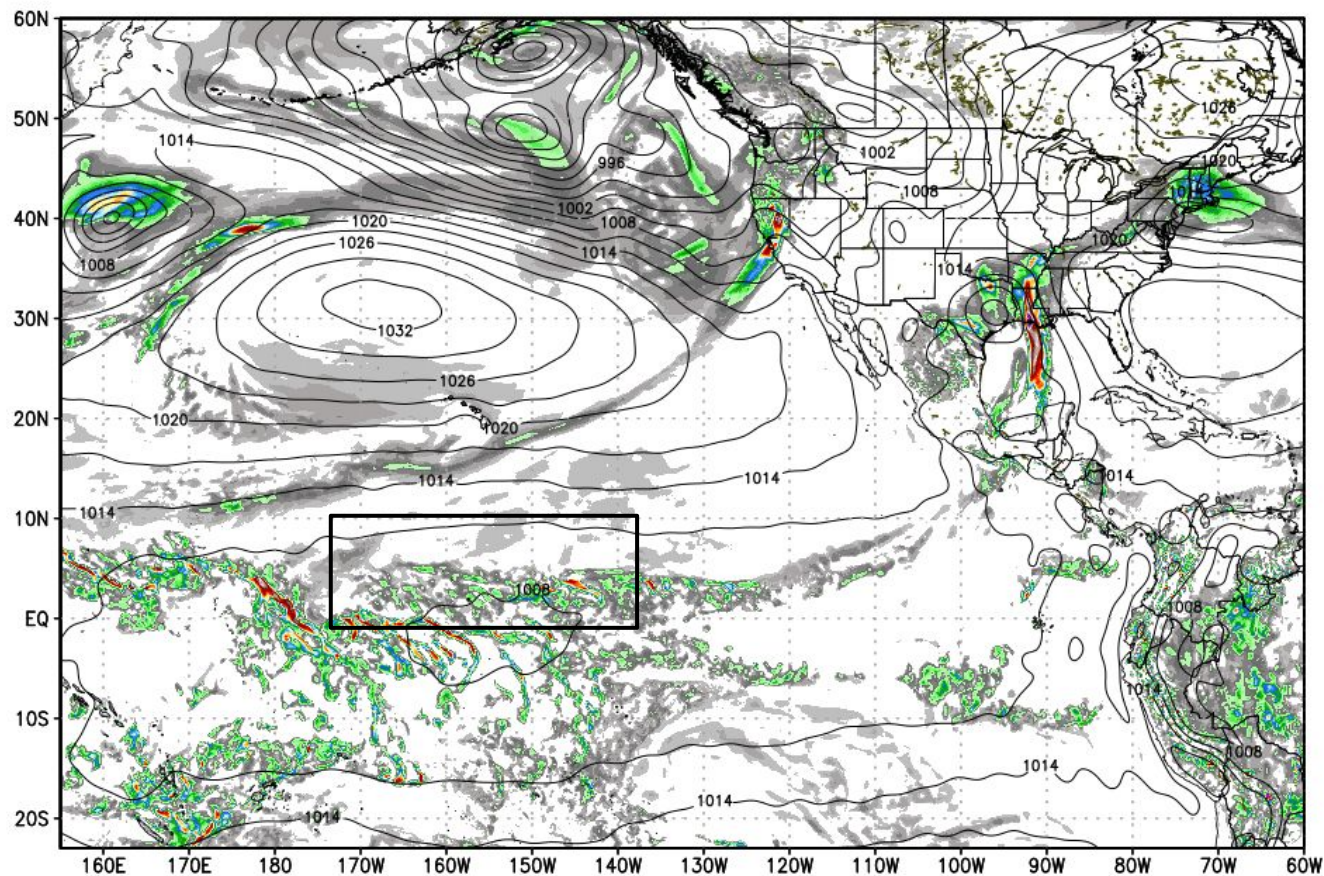
Latest: 144HR Lead EC Valid 00Z FRI



NCEP GFS 6-hourly Precipitation [inch] & MSLP [hPa]
INIT: 06Z05MAR2016 fx: [138] hr --> Fri 00Z11MAR2016

Max: 3.3 in.

Latest: 138HR Lead GFS Valid 00Z FRI

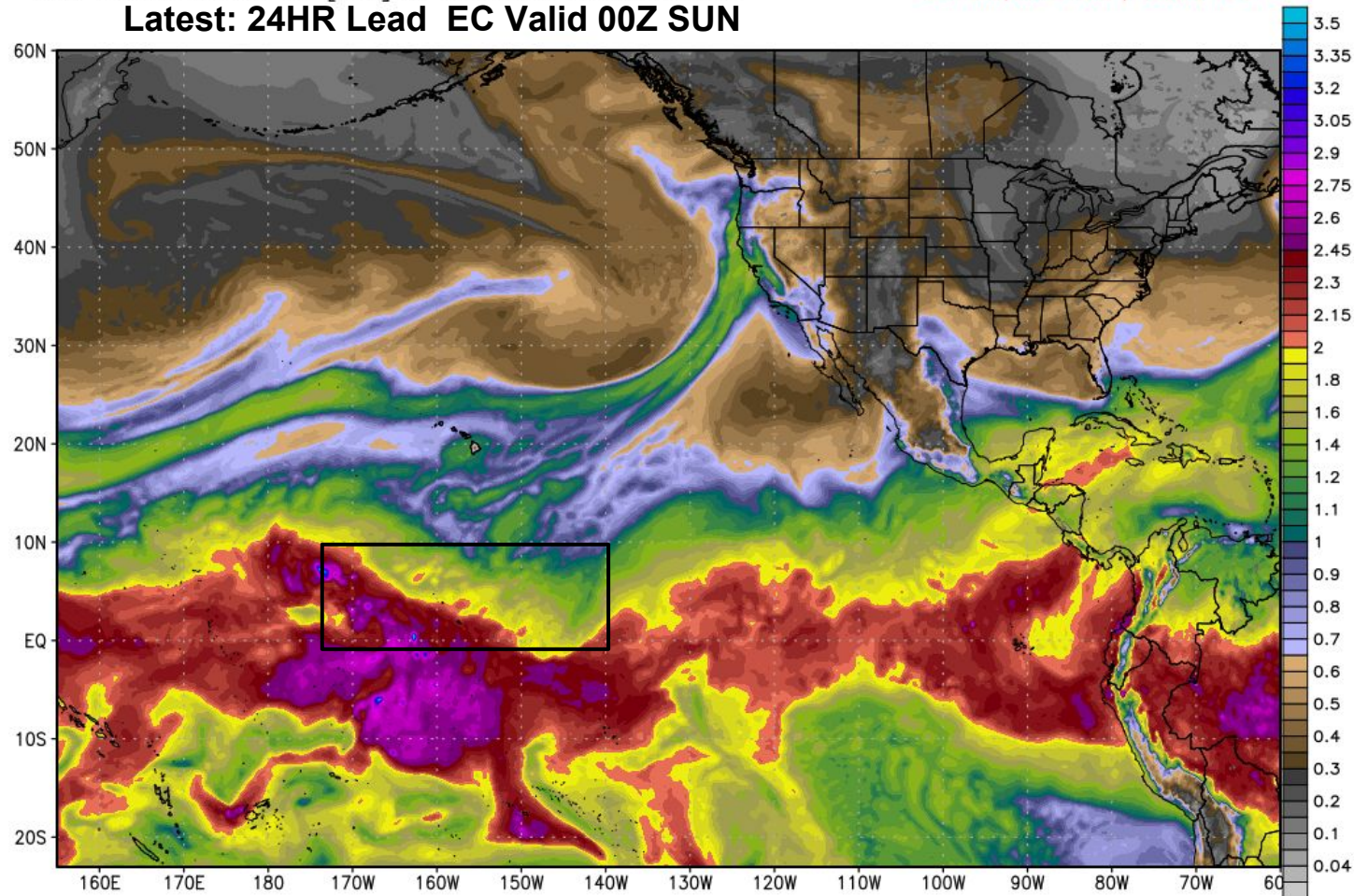


EC vs GFS PWAT Forecasts:
Mar 6 00z - Mar 11 00z

ECMWF Column Water [inch]
INIT: 00Z05MAR2016 fx: [024] hr --> Sun 00Z06MAR2016

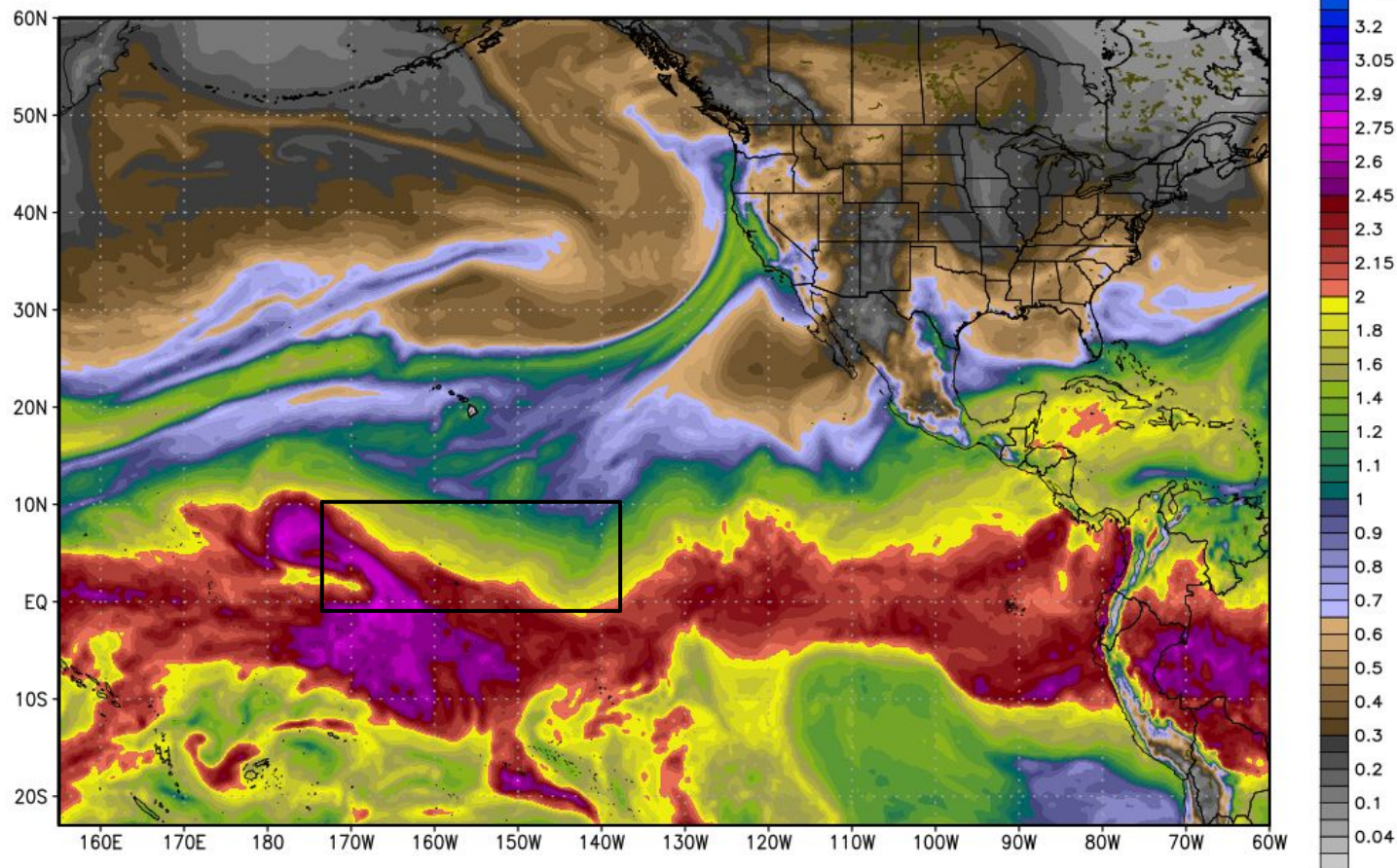
MaxPWAT: 3.73 inch
SLP Min|Max 972.8 | 1032.2 hPa

Latest: 24HR Lead EC Valid 00Z SUN



NCEP GFS Precipitable Water [inch]
INIT: 06Z05MAR2016 fx: [018] hr --> Sun 00Z06MAR2016

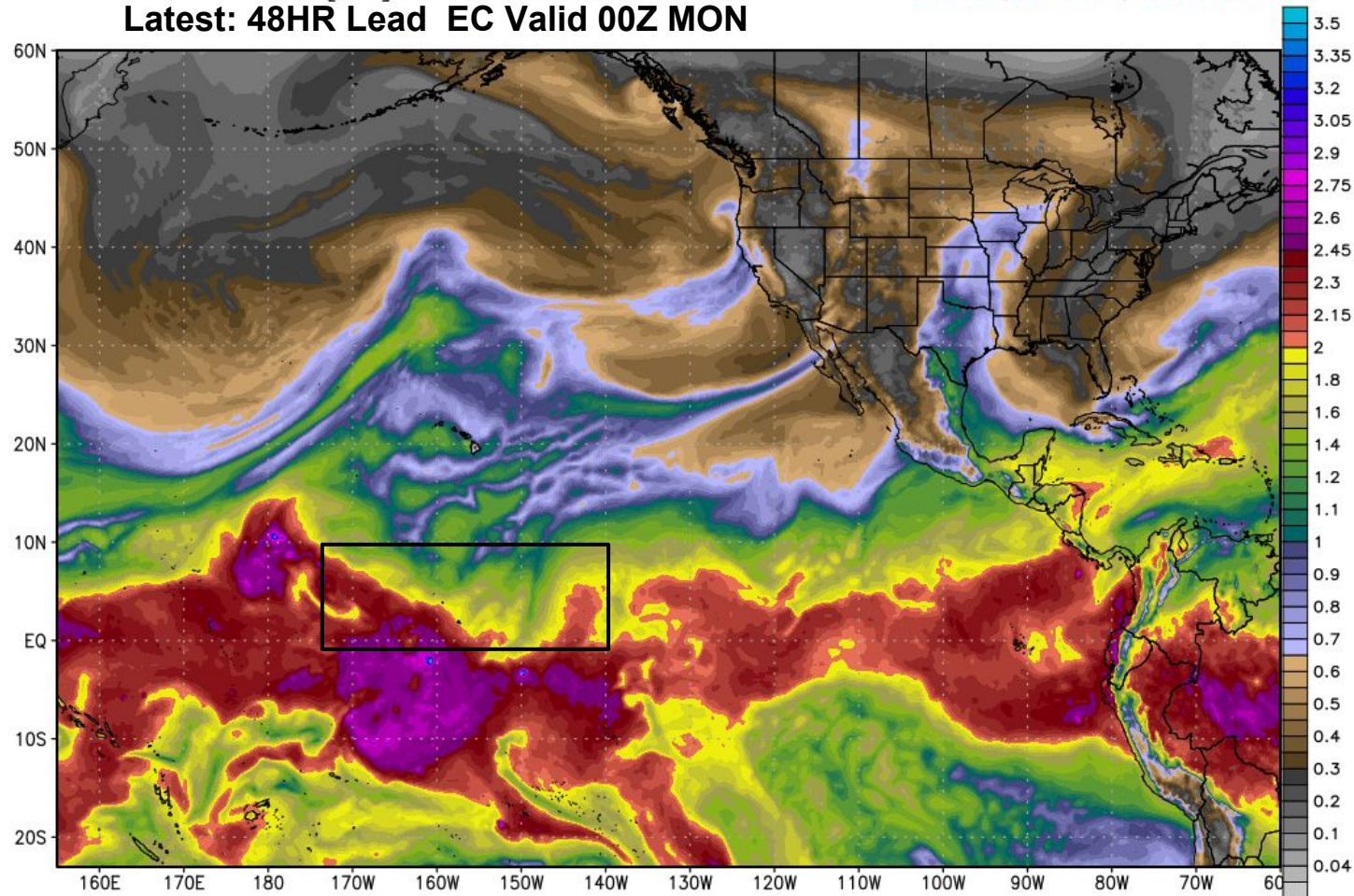
Latest: 18HR Lead GFS Valid 00Z SUN



ECMWF Column Water [inch]
INIT: 00Z05MAR2016 fx: [048] hr --> Mon 00Z07MAR2016

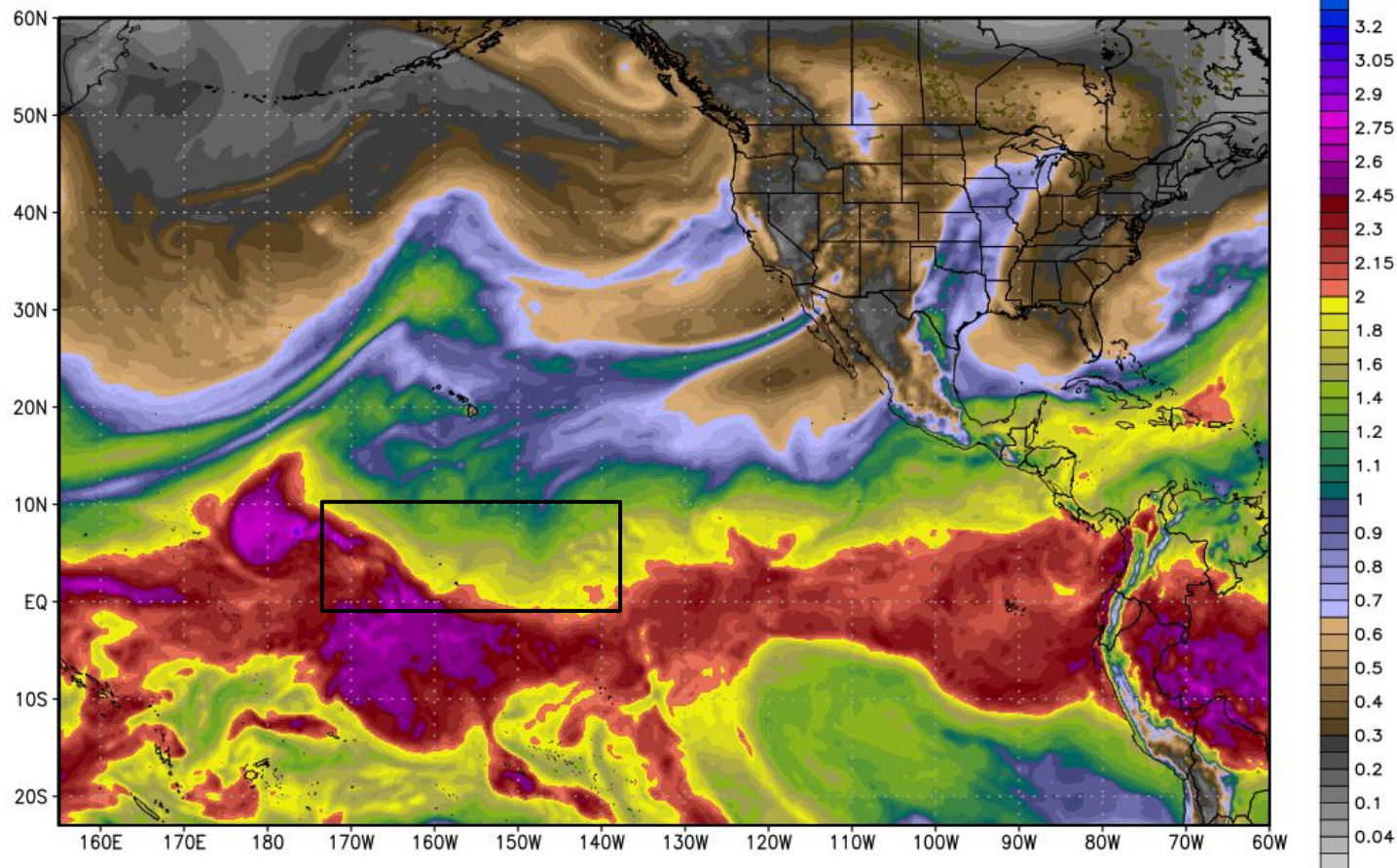
MaxPWAT: 3.69 inch
SLP Min|Max 972.3 | 1033.7 hPa

Latest: 48HR Lead EC Valid 00Z MON



NCEP GFS Precipitable Water [inch]
INIT: 06Z05MAR2016 fx: [042] hr --> Mon 00Z07MAR2016

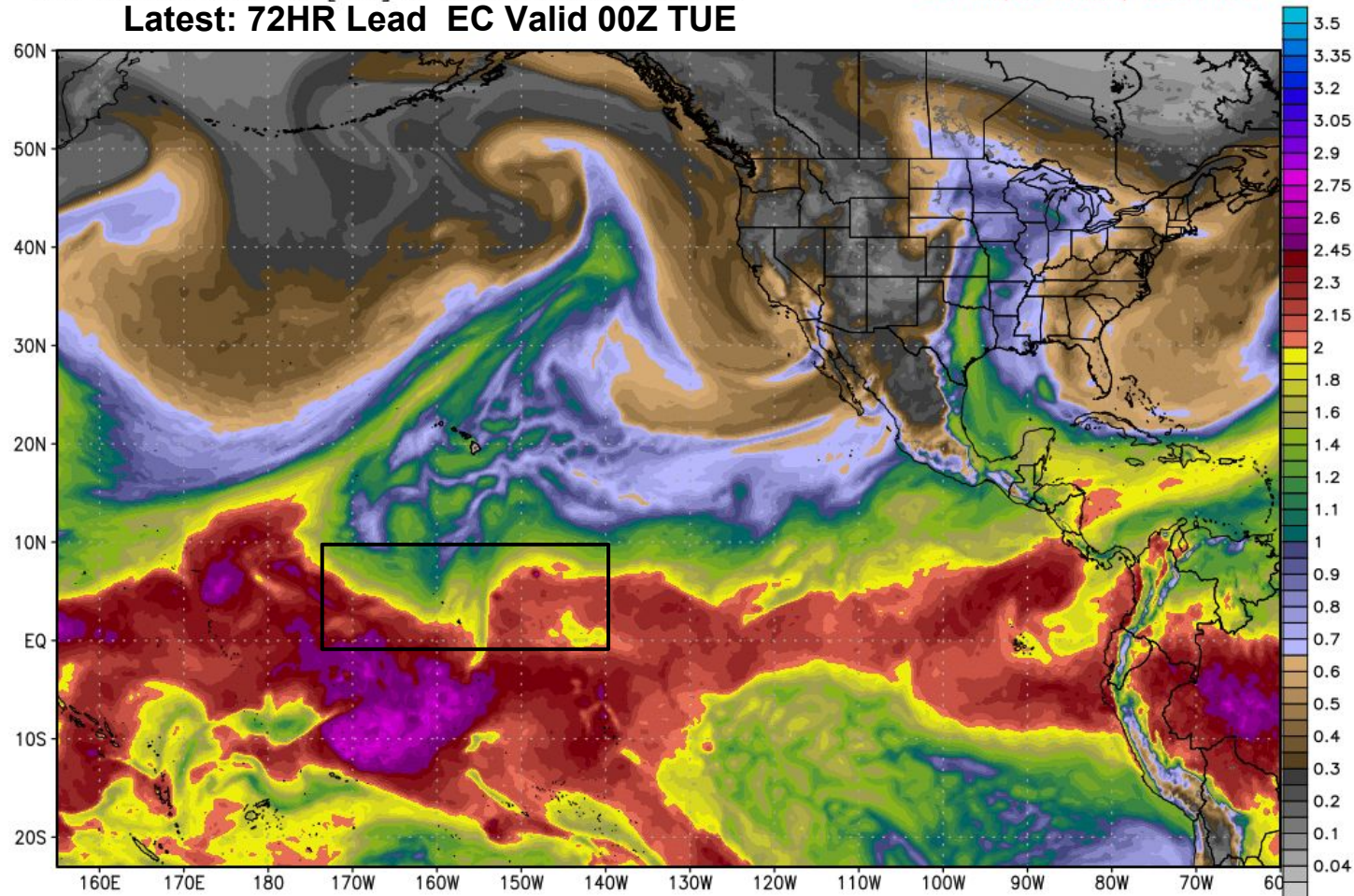
Latest: 42HR Lead GFS Valid 00Z MON



ECMWF Column Water [inch]
INIT: 00Z05MAR2016 fx: [072] hr --> Tue 00Z08MAR2016

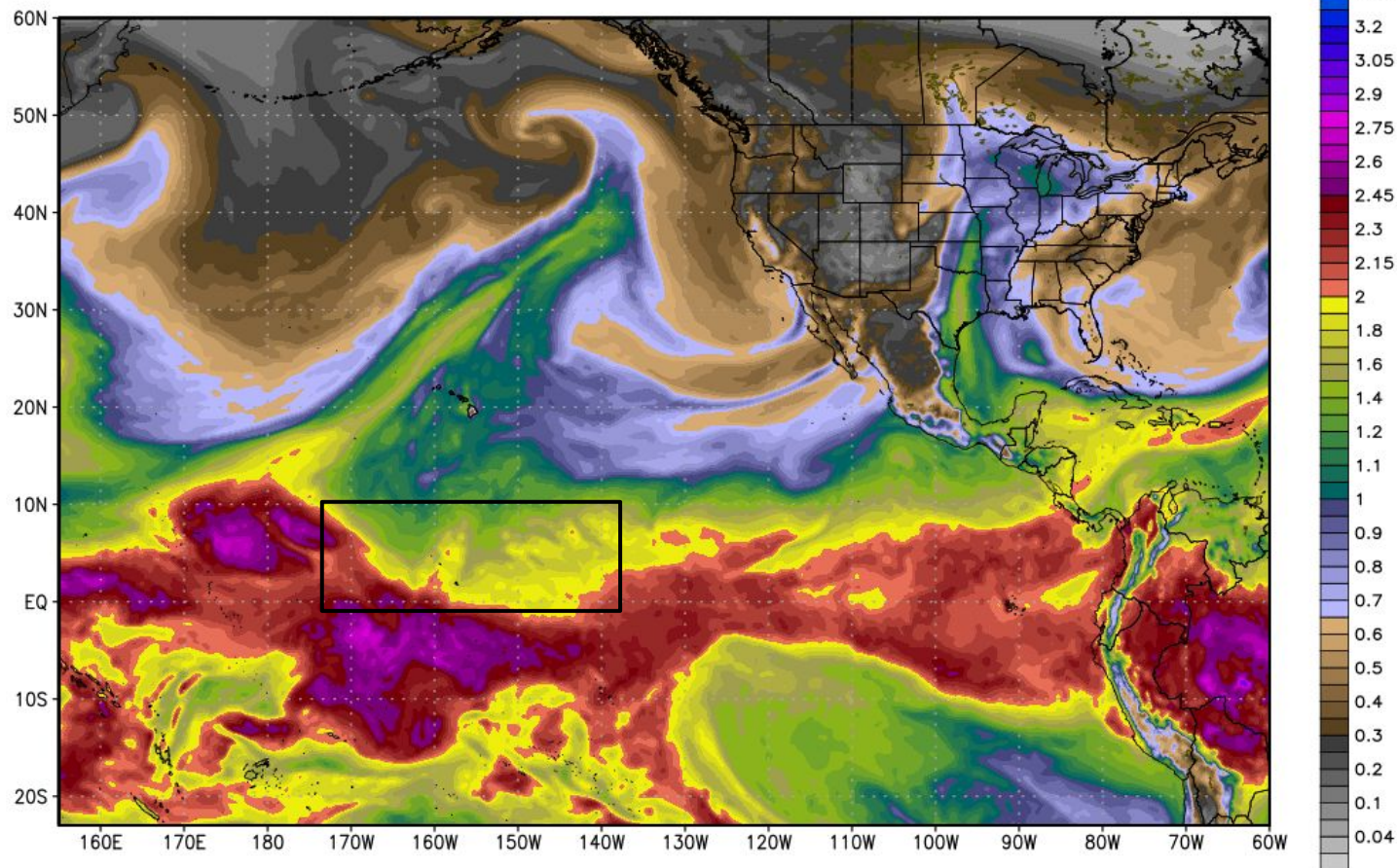
MaxPWAT: 2.98 inch
SLP Min|Max 965.0 | 1034.1 hPa

Latest: 72HR Lead EC Valid 00Z TUE



NCEP GFS Precipitable Water [inch]
INIT: 06Z05MAR2016 fx: [066] hr --> Tue 00Z08MAR2016

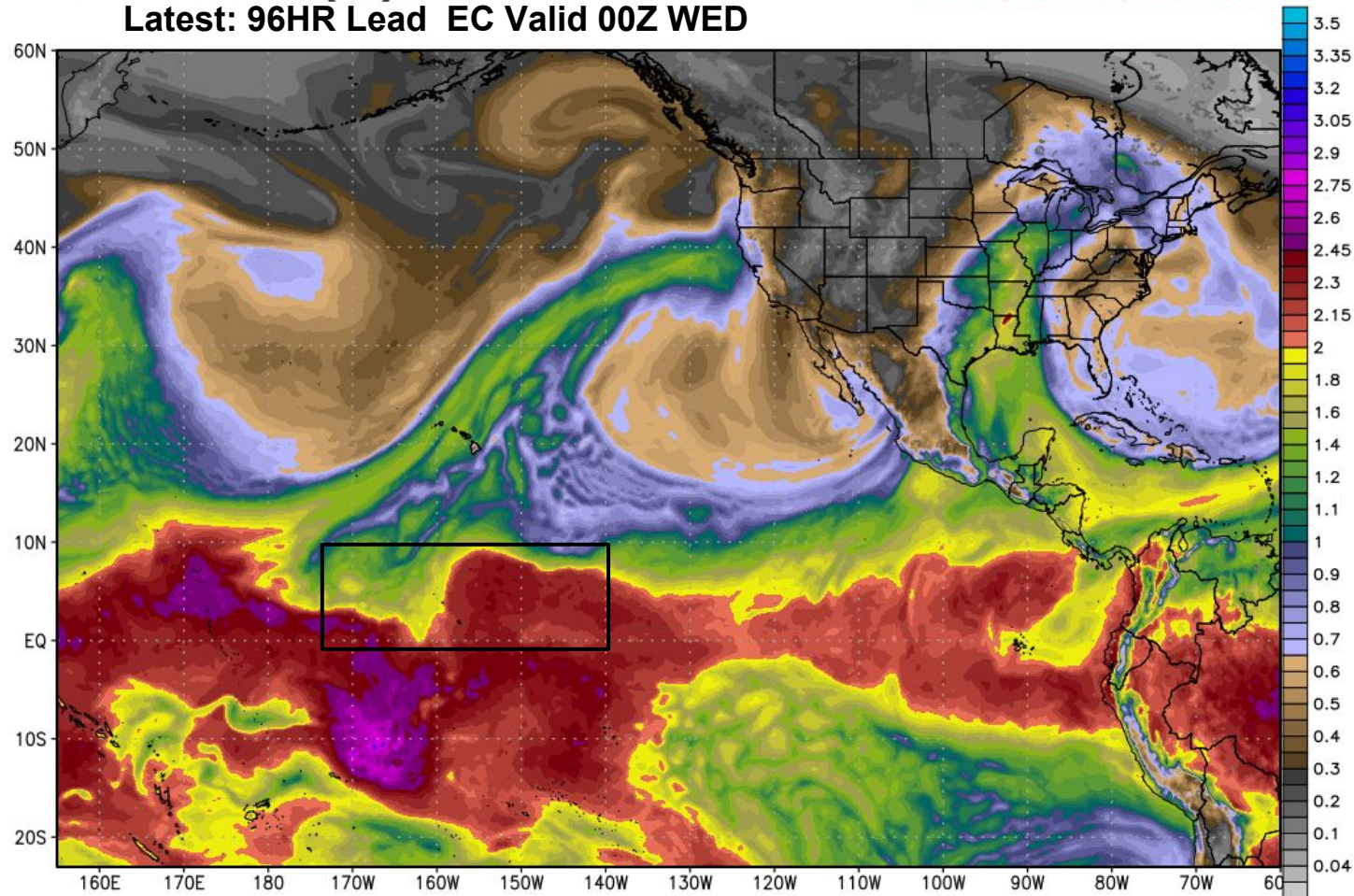
Latest: 66HR Lead GFS Valid 00Z TUE



ECMWF Column Water [inch]
INIT: 00Z05MAR2016 fx: [096] hr --> Wed 00Z09MAR2016

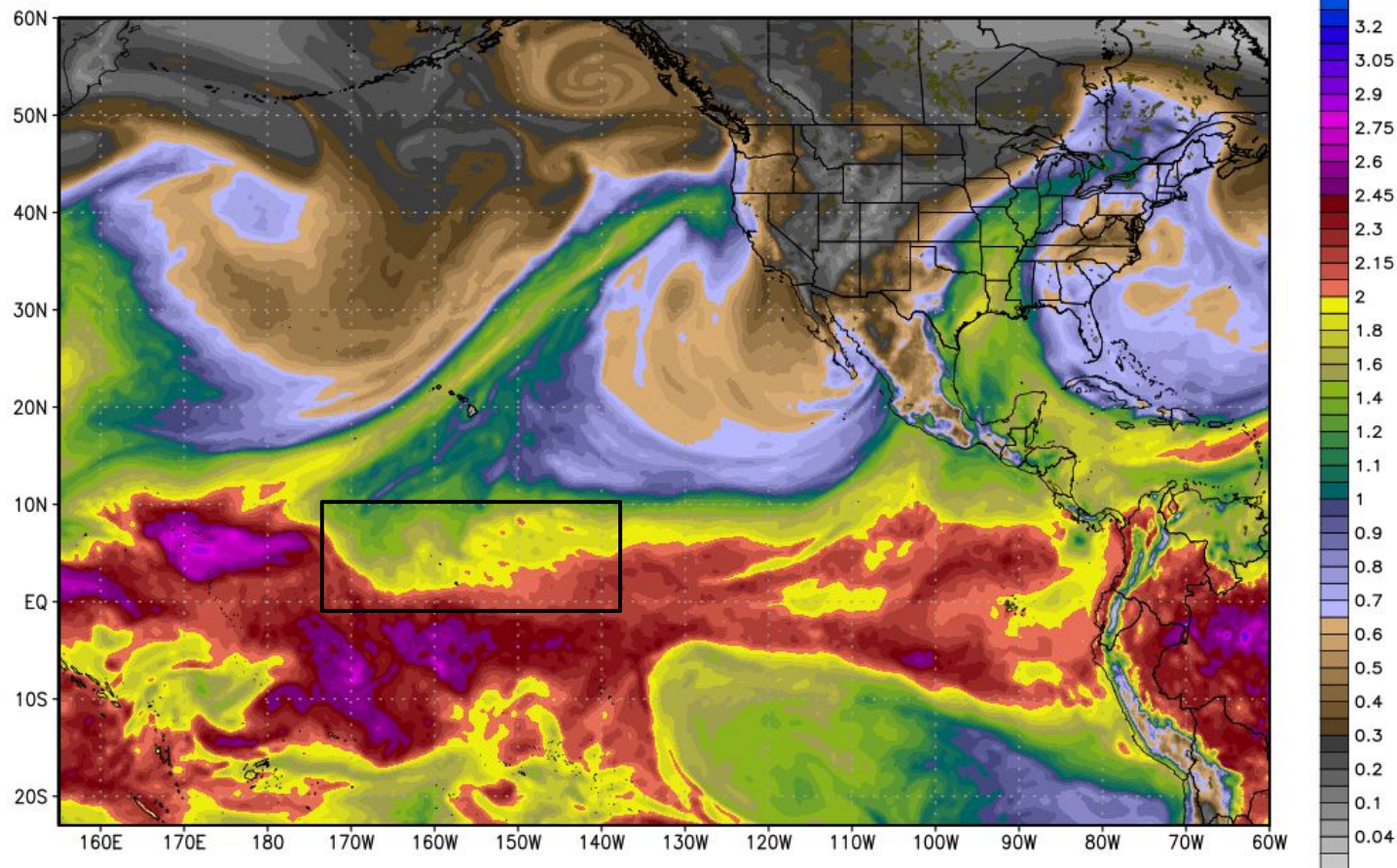
MaxPWAT: 3.05 inch
SLP Min|Max 968.5 | 1032.7 hPa

Latest: 96HR Lead EC Valid 00Z WED



NCEP GFS Precipitable Water [inch]
INIT: 06Z05MAR2016 fx: [090] hr --> Wed 00Z09MAR2016

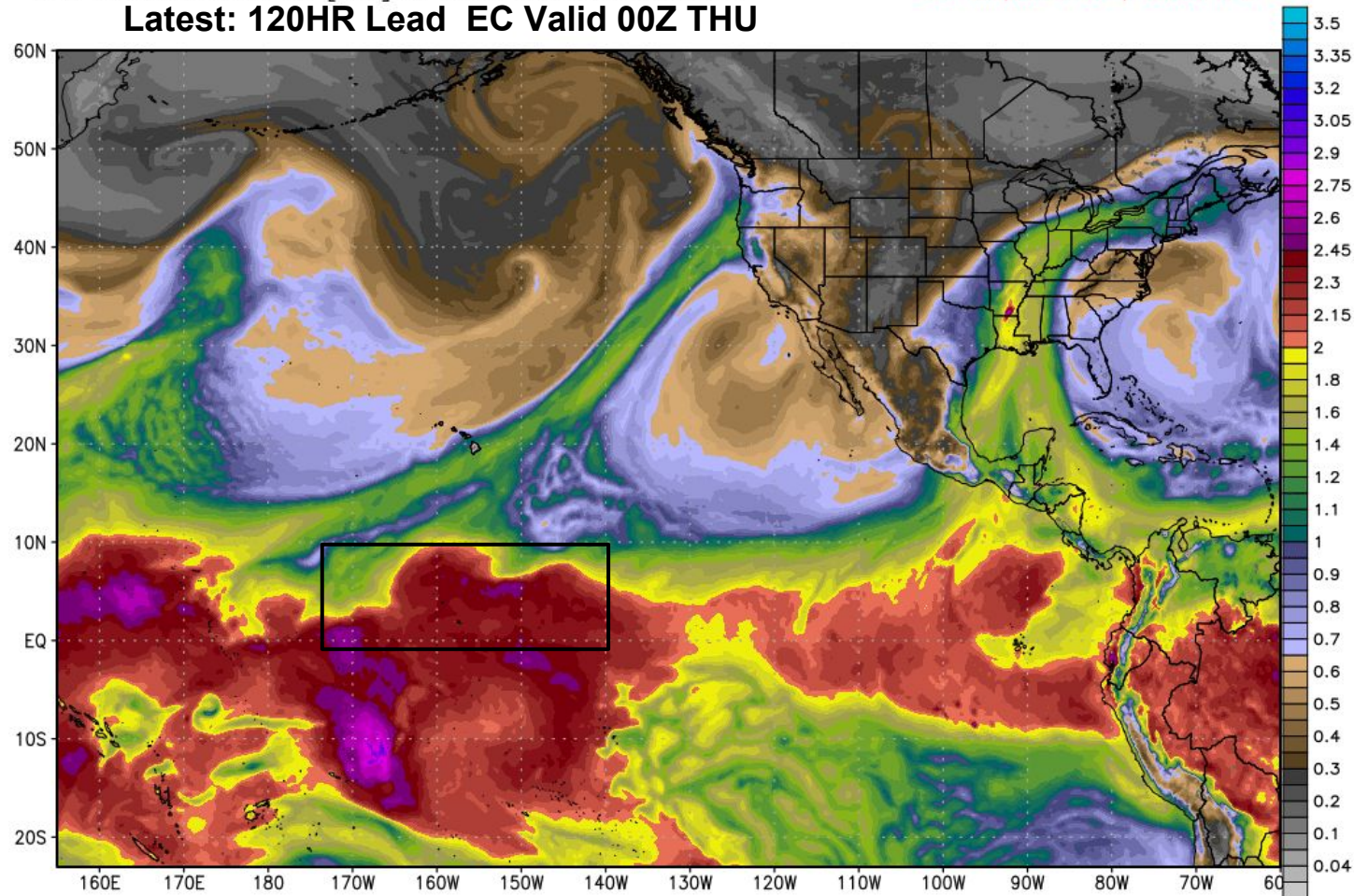
Latest: 90HR Lead GFS Valid 00Z WED



ECMWF Column Water [inch]
INIT: 00Z05MAR2016 fx: [120] hr --> Thu 00Z10MAR2016

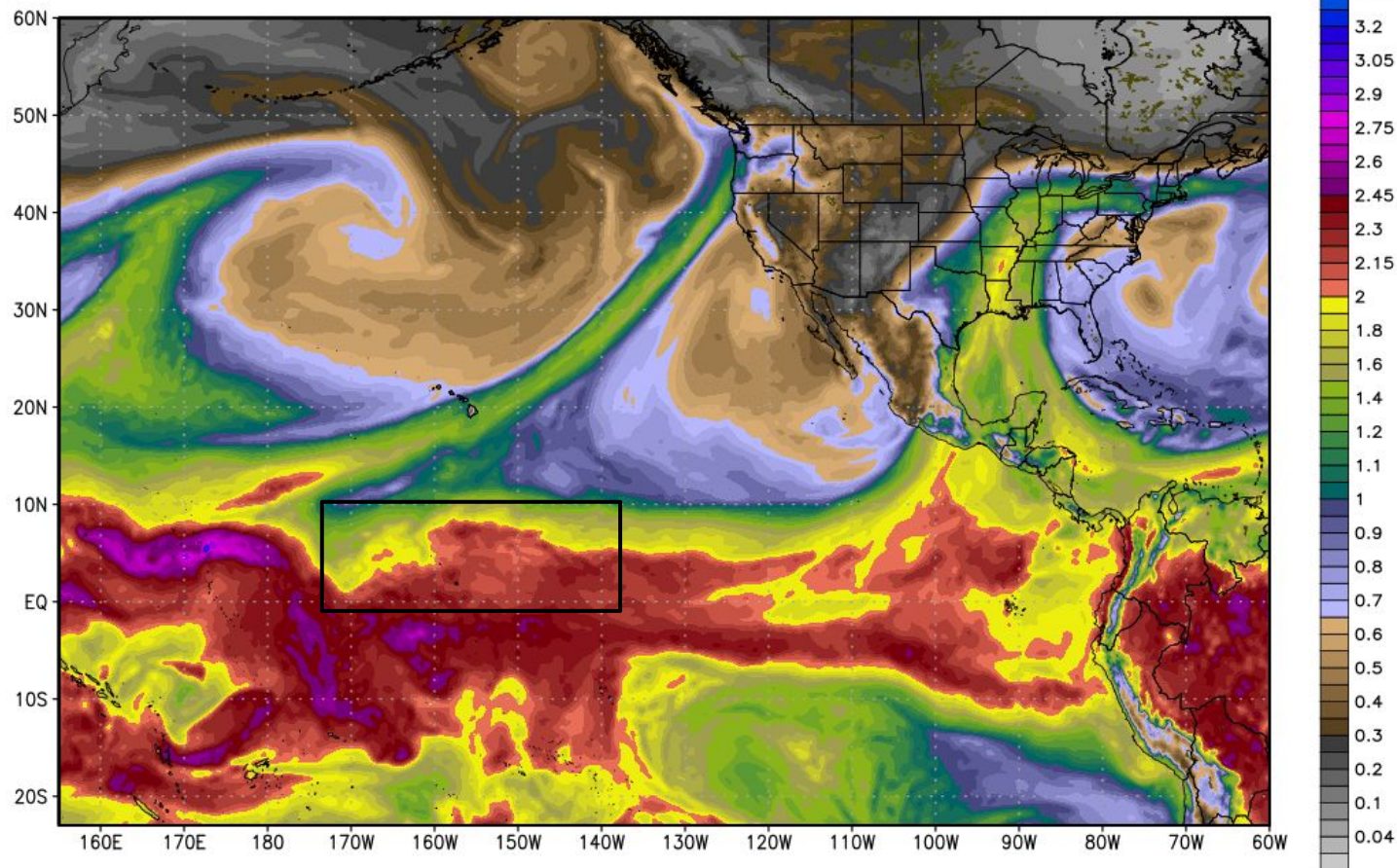
MaxPWAT: 3.05 inch
SLP Min|Max 970.4 | 1031.5 hPa

Latest: 120HR Lead EC Valid 00Z THU



NCEP GFS Precipitable Water [inch]
INIT: 06Z05MAR2016 fx: [114] hr --> Thu 00Z10MAR2016

Latest: 114HR Lead GFS Valid 00Z THU



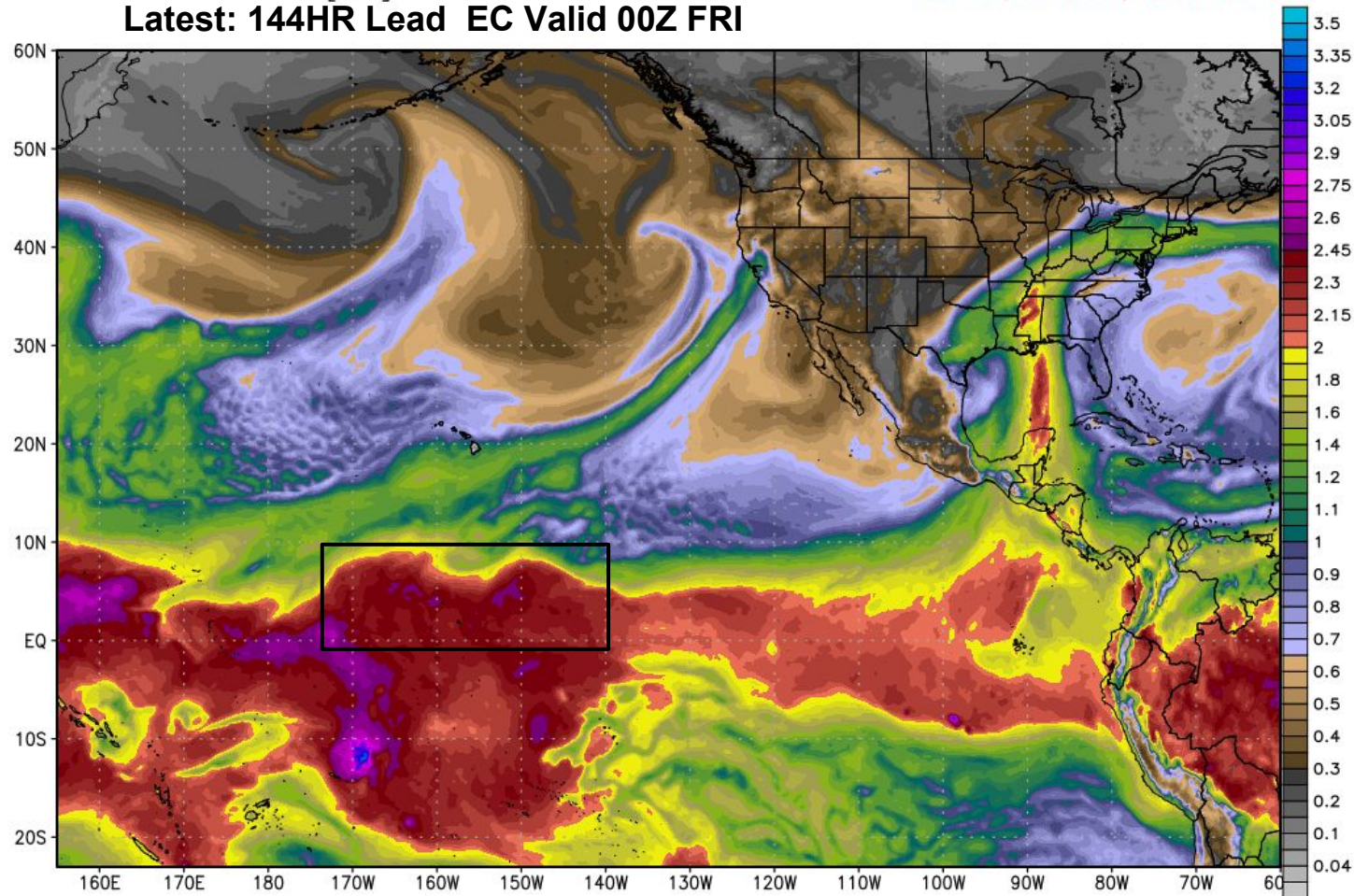
ECMWF Column Water [inch]

INIT: 00Z05MAR2016 fx: [144] hr --> Fri 00Z11MAR2016

MaxPWAT: 3.42 inch

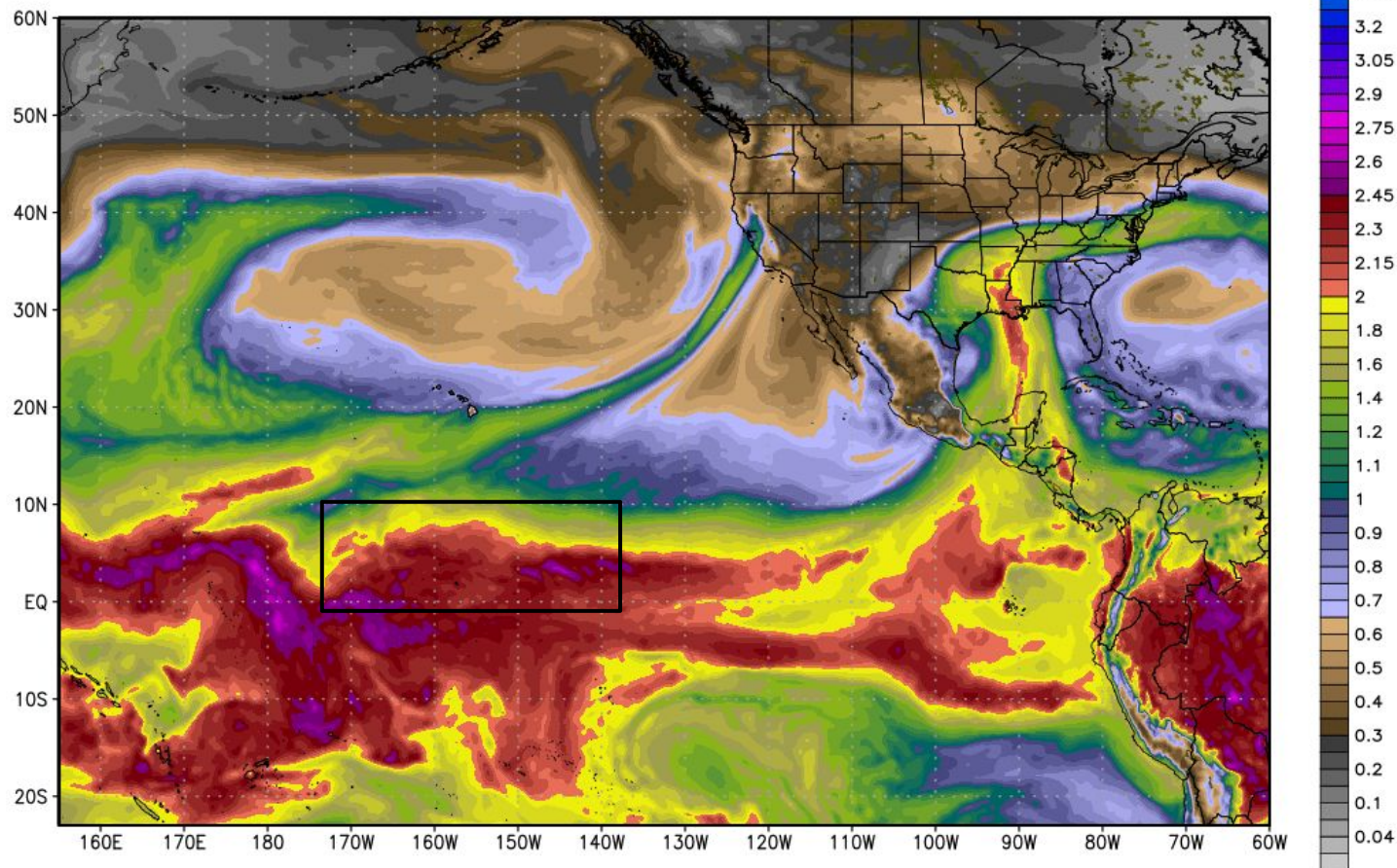
SLP Min|Max 965.1 | 1029.5 hPa

Latest: 144HR Lead EC Valid 00Z FRI



NCEP GFS Precipitable Water [inch]
INIT: 06Z05MAR2016 fx: [138] hr --> Fri 00Z11MAR2016

Latest: 138HR Lead GFS Valid 00Z FRI

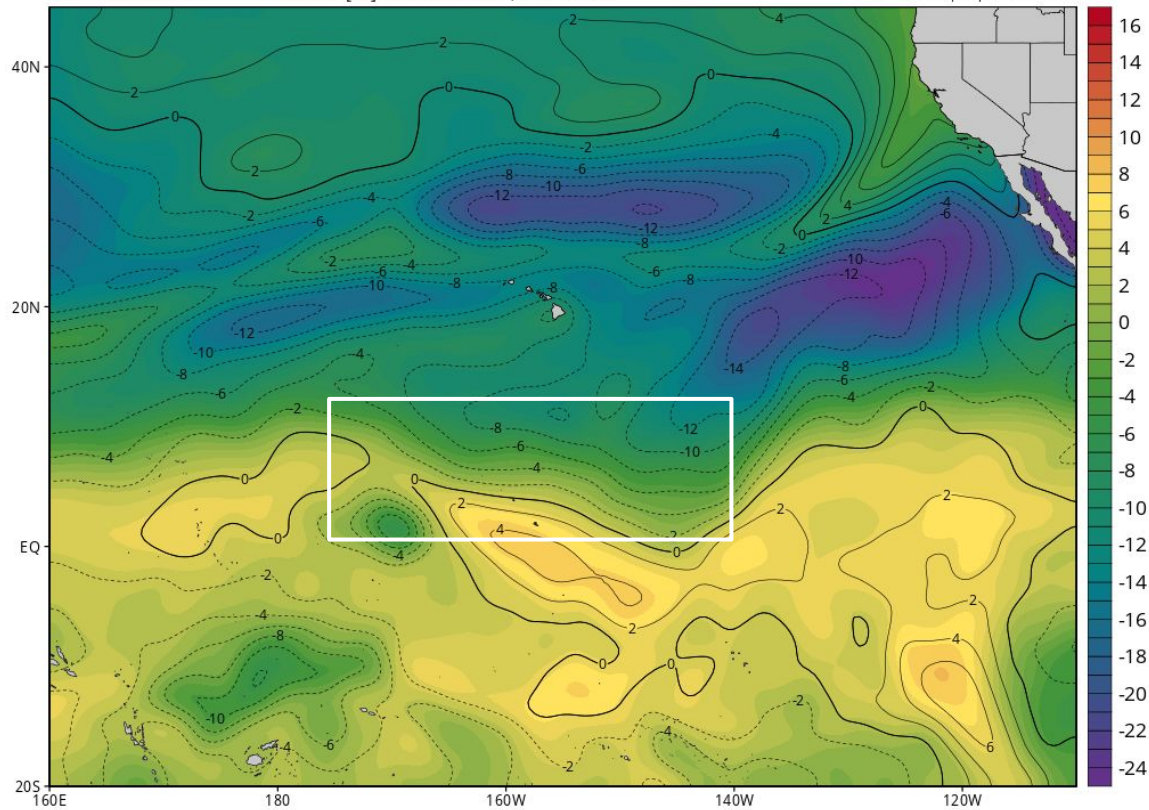


GFS Instability Forecasts: Mar 6 00z - Mar 11 00z

GFS Marine Instability (Theta-e: Lifted Parcel - Environment) (°C, shaded) & Anomaly (contour)

Init: 06z Mar 05 2016 Forecast Hour: [18] valid at 00z Sun, Mar 06 2016

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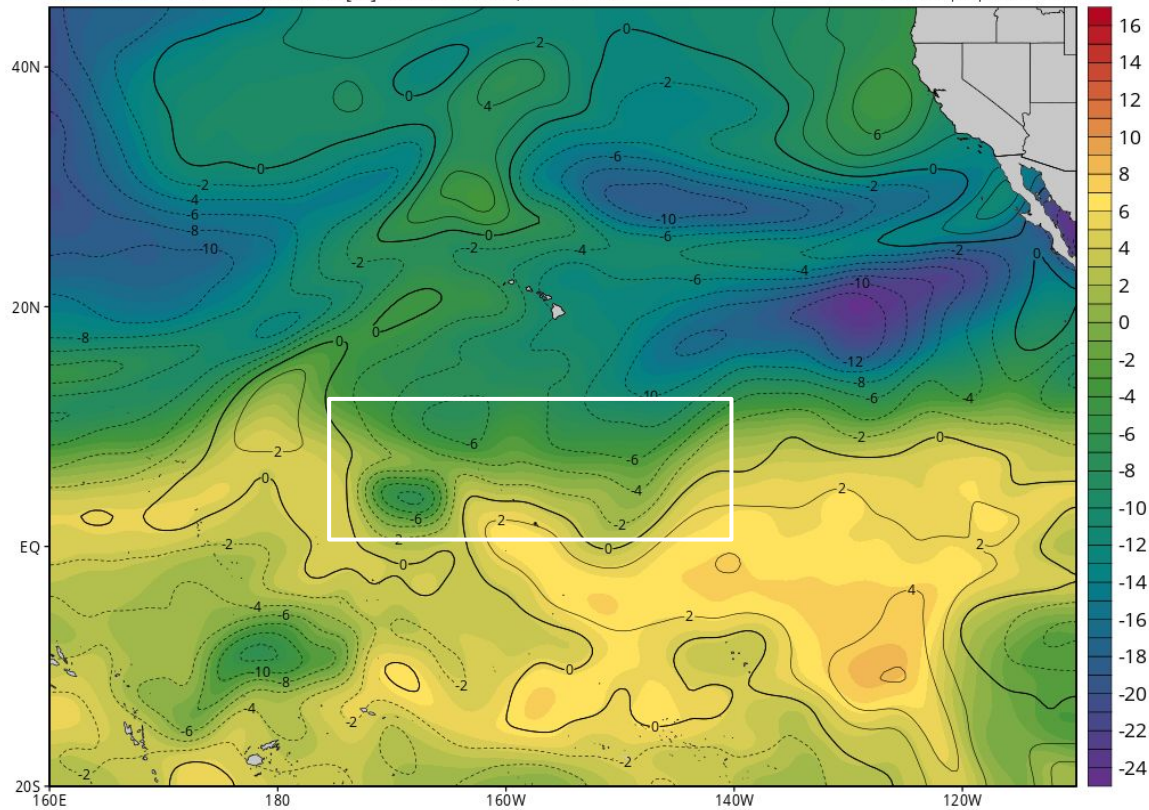


GFS Forecast 00Z
SUN

GFS Marine Instability (Theta-e: Lifted Parcel - Environment) (°C, shaded) & Anomaly (contour)

Init: 06z Mar 05 2016 Forecast Hour: [42] valid at 00z Mon, Mar 07 2016

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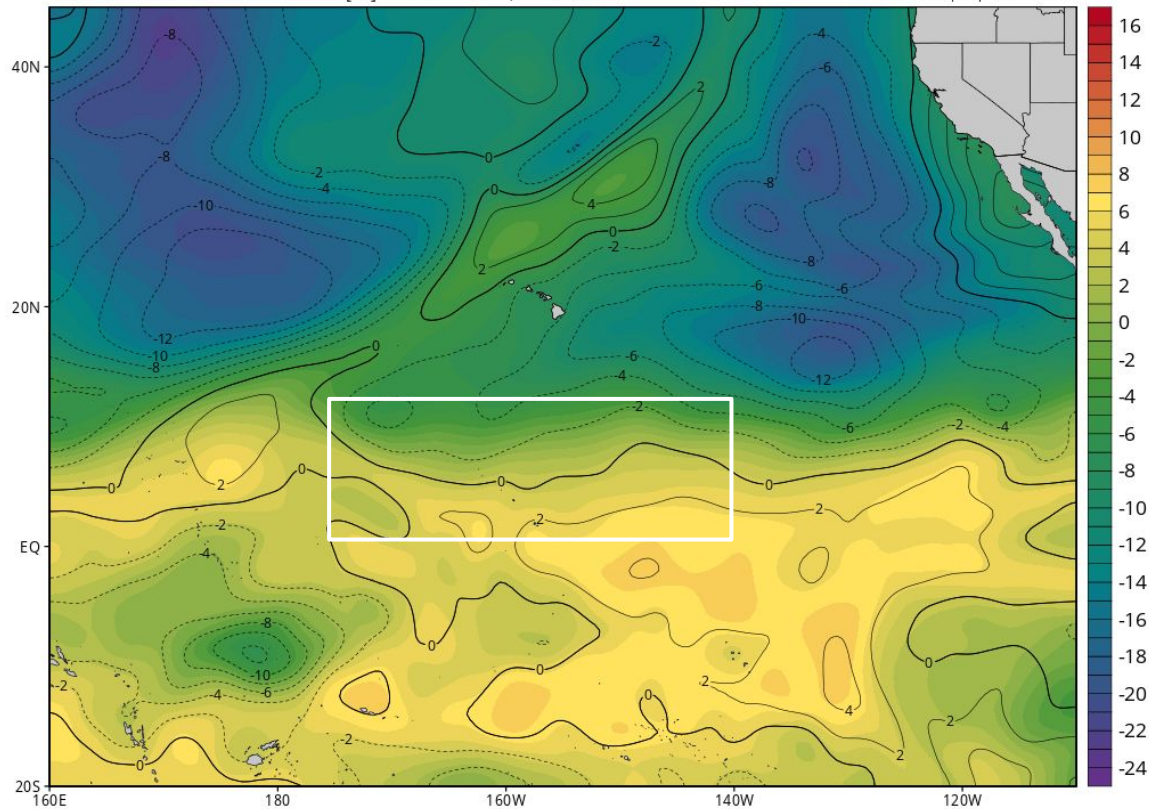


GFS Forecast 00Z
MON

GFS Marine Instability (Theta-e: Lifted Parcel - Environment) (°C, shaded) & Anomaly (contour)

Init: 06z Mar 05 2016 Forecast Hour: [66] valid at 00z Tue, Mar 08 2016

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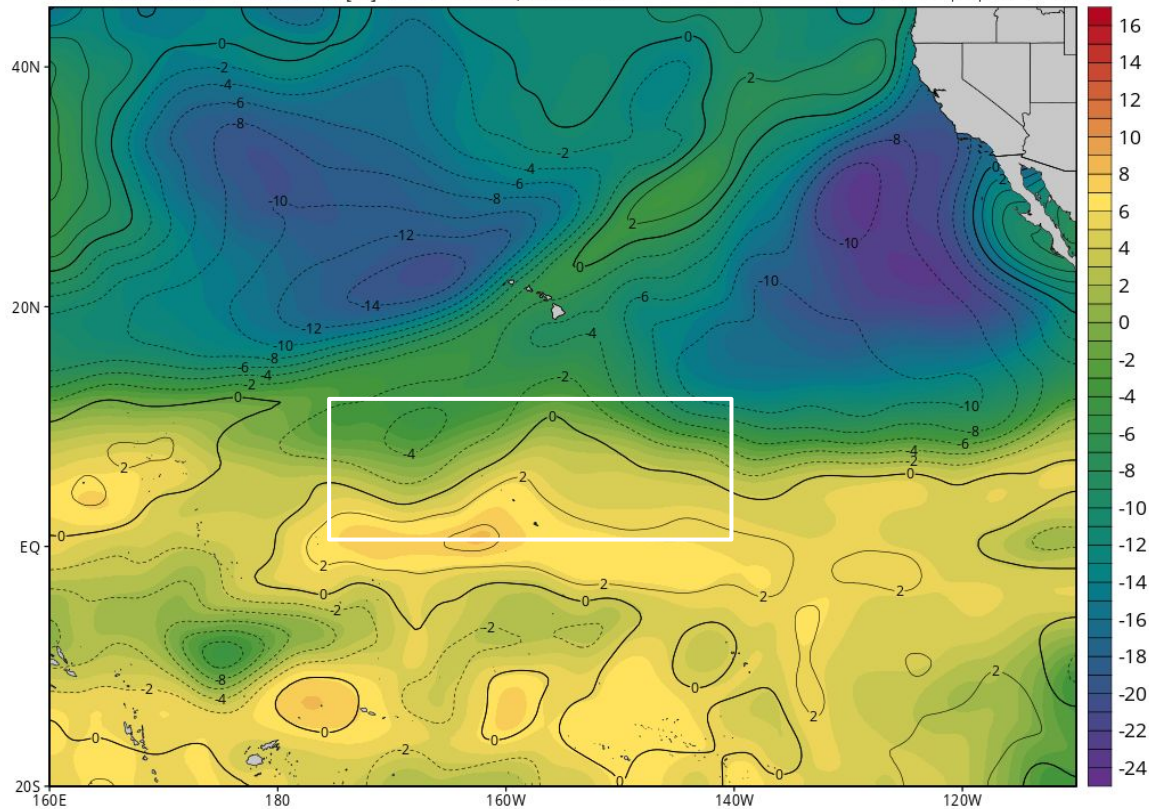


GFS Forecast 00Z
TUE

GFS Marine Instability (Theta-e: Lifted Parcel - Environment) (°C, shaded) & Anomaly (contour)

Init: 06z Mar 05 2016 Forecast Hour: [90] valid at 00z Wed, Mar 09 2016

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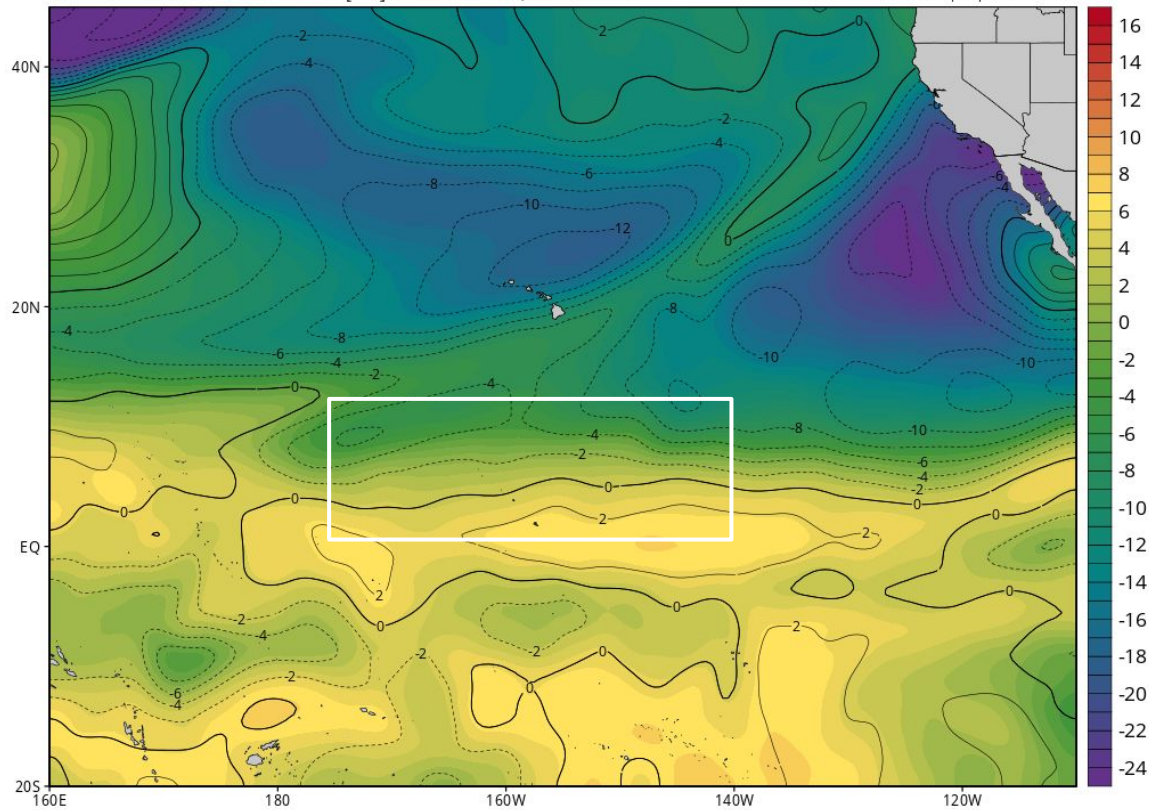


GFS Forecast 00Z
WED

GFS Marine Instability (Theta-e: Lifted Parcel - Environment) (°C, shaded) & Anomaly (contour)

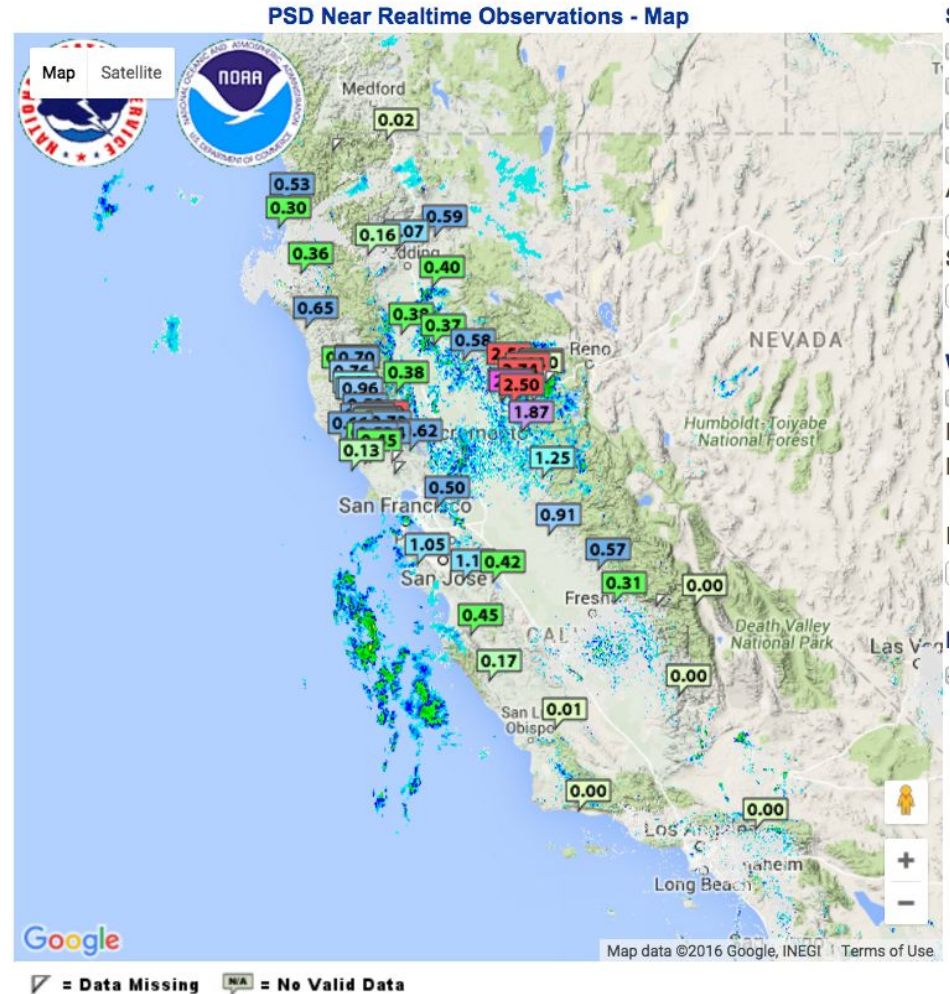
Init: 06z Mar 05 2016 Forecast Hour: [114] valid at 00z Thu, Mar 10 2016

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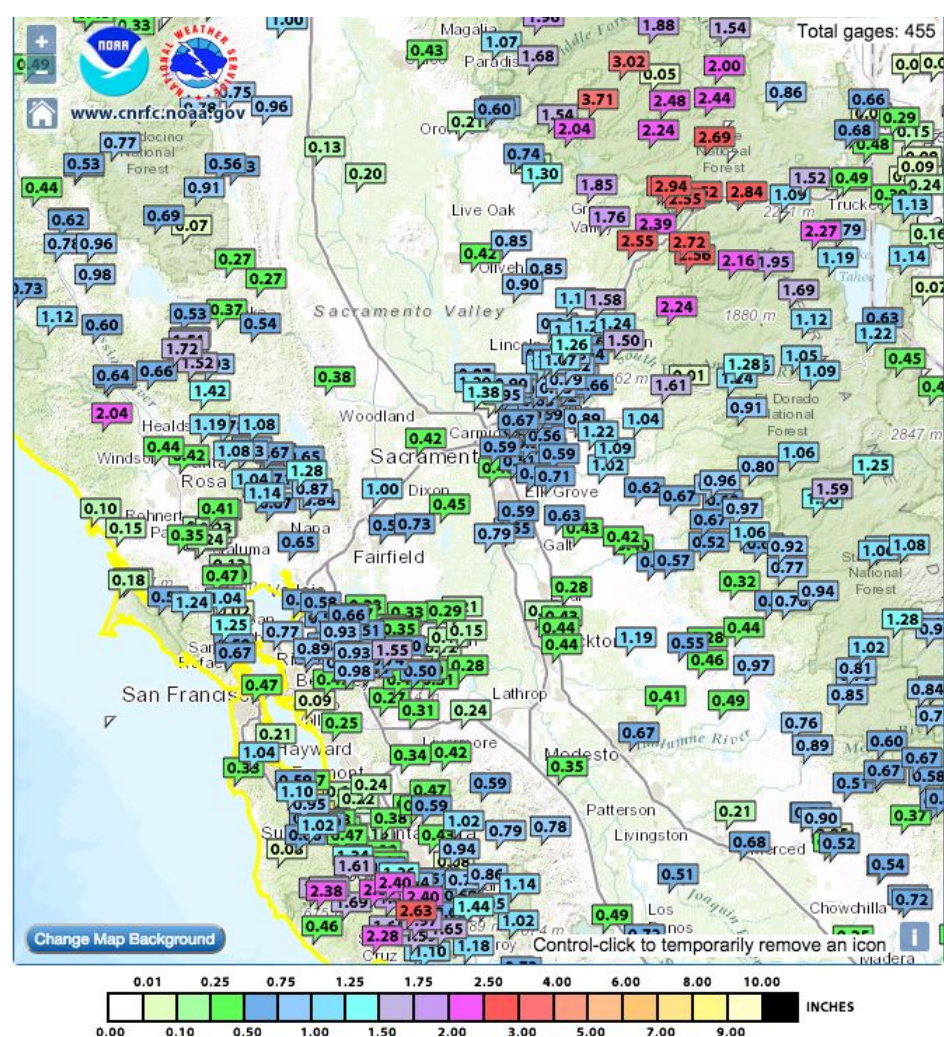


GFS Forecast 00Z
THU

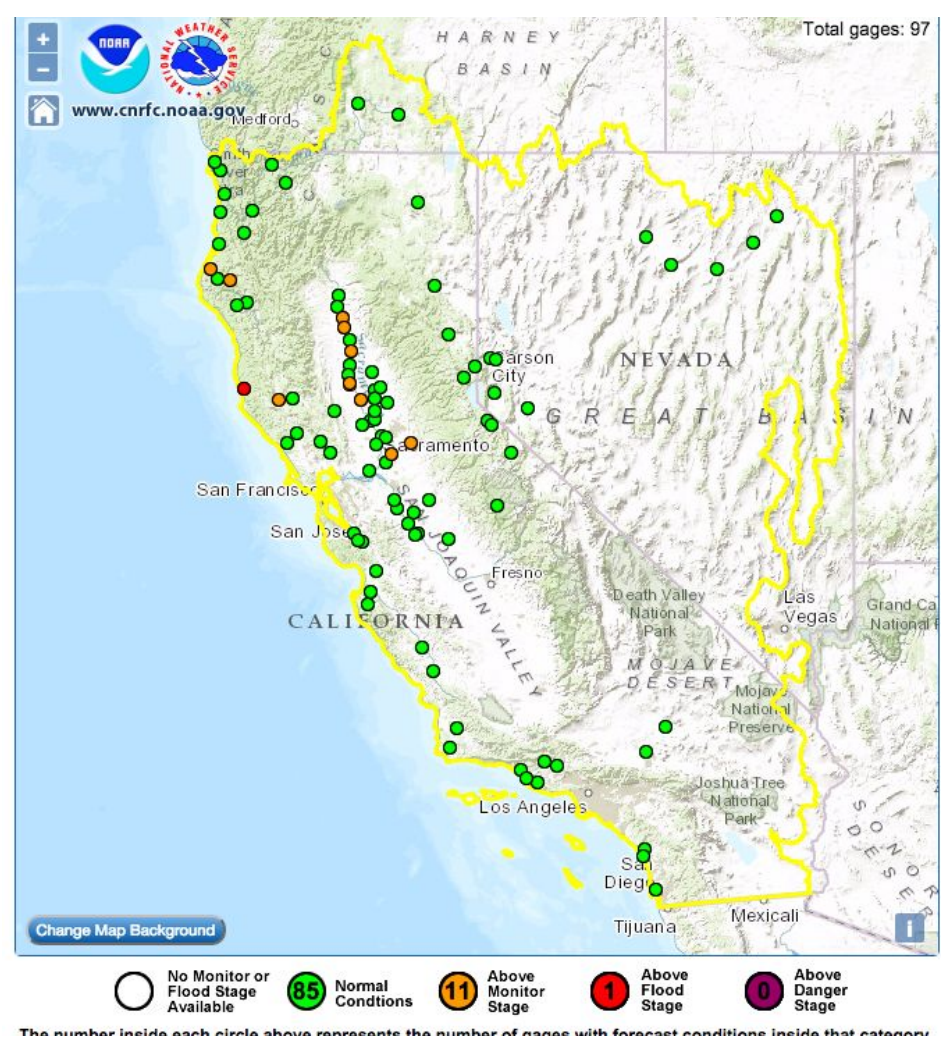
PSD OBS: 24 HR QPE



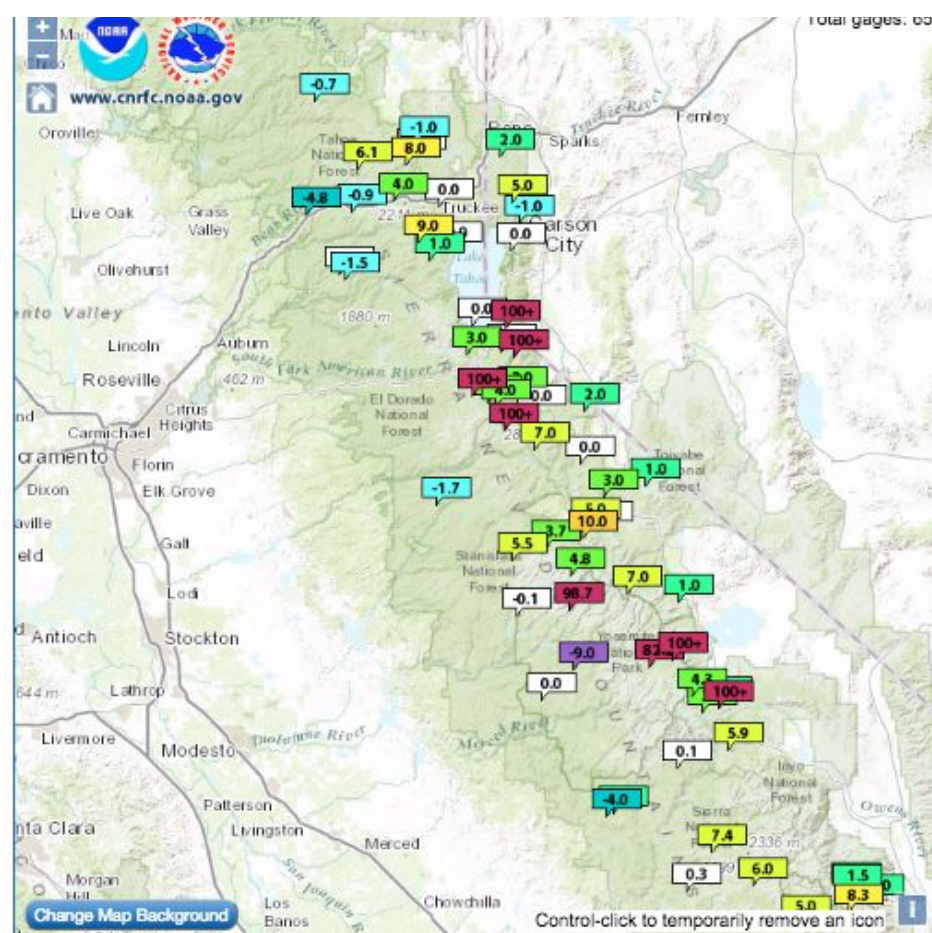
CNRFC OBS: 24 HR QPE



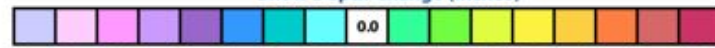
CNRFC: River Forecast Pts



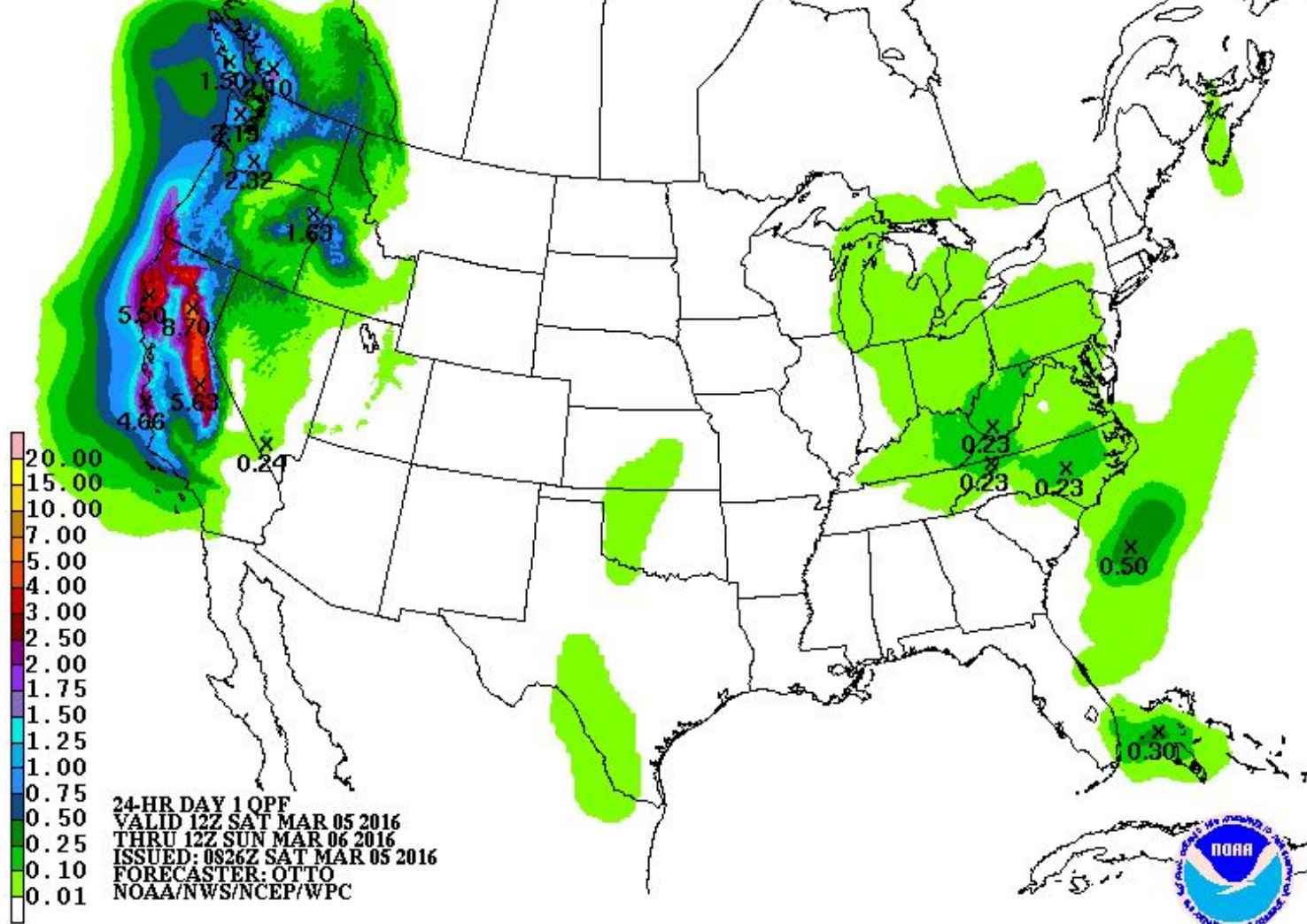
CNRFC: 24 Hr Snow Depth Change



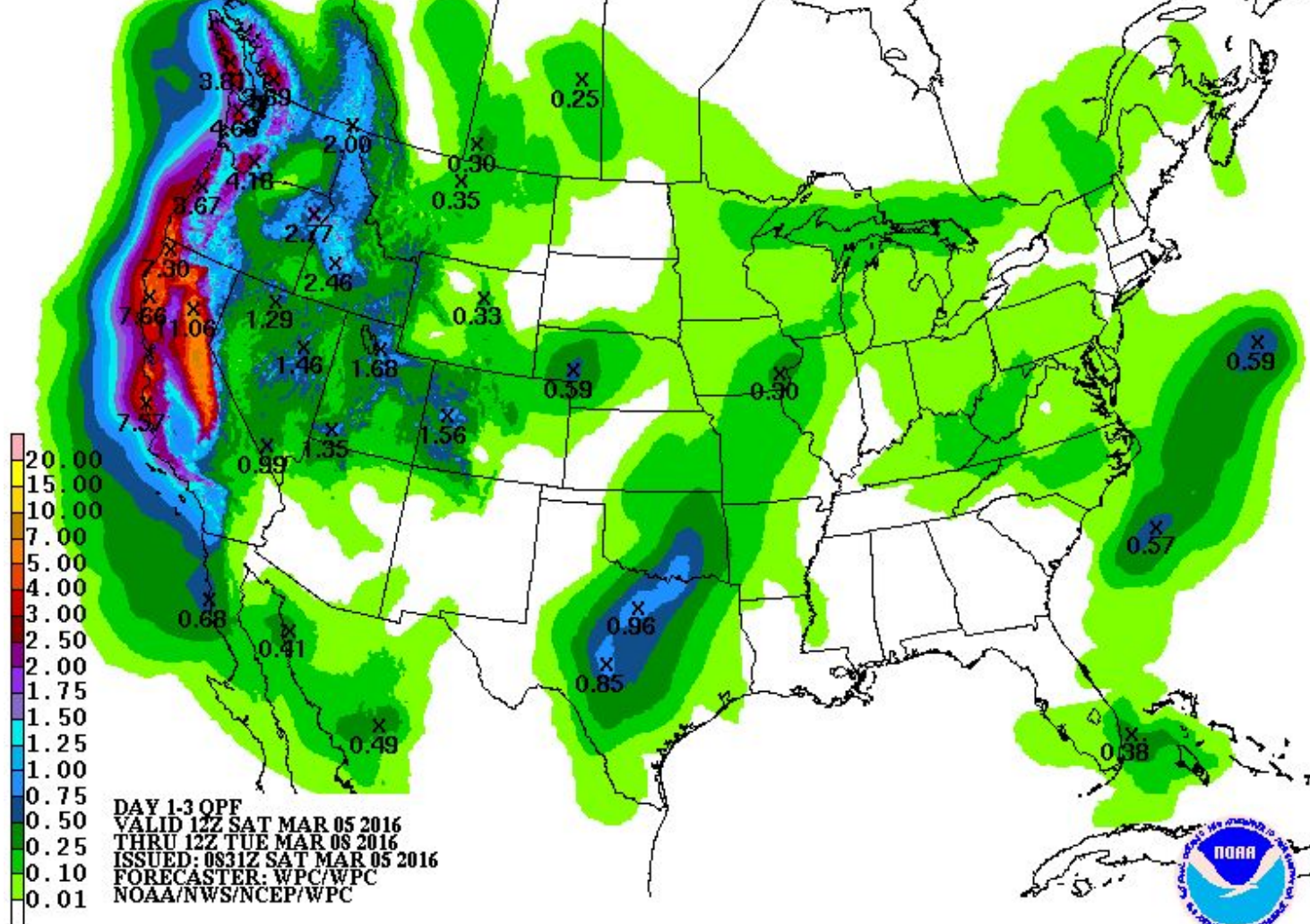
Snow Depth Change (Inches)



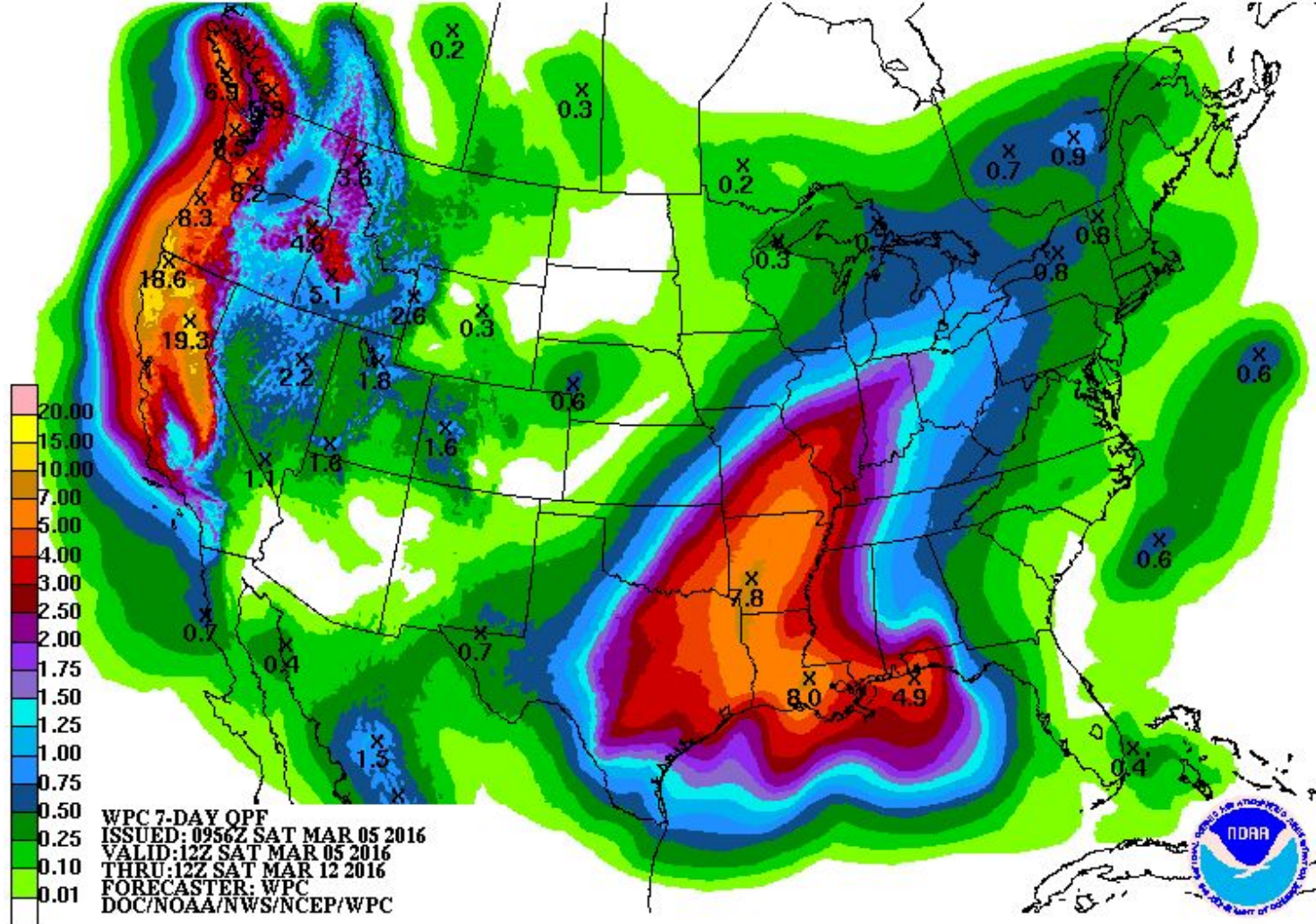
WPC: 1 Day Total
QPF



WPC: 3 Day Total
QPF



WPC: 7 Day Total
QPF



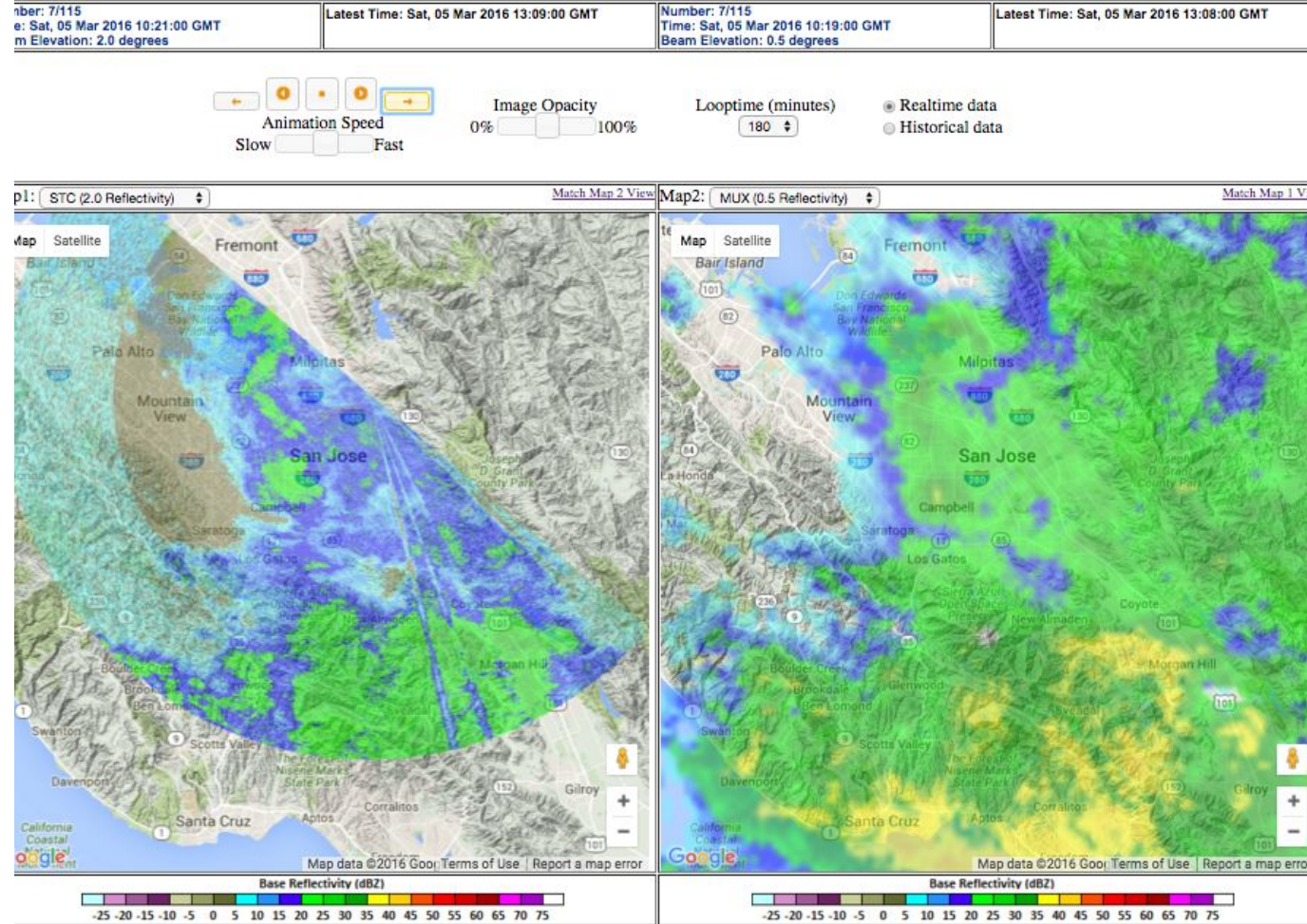
Santa Clara

X-Band vs

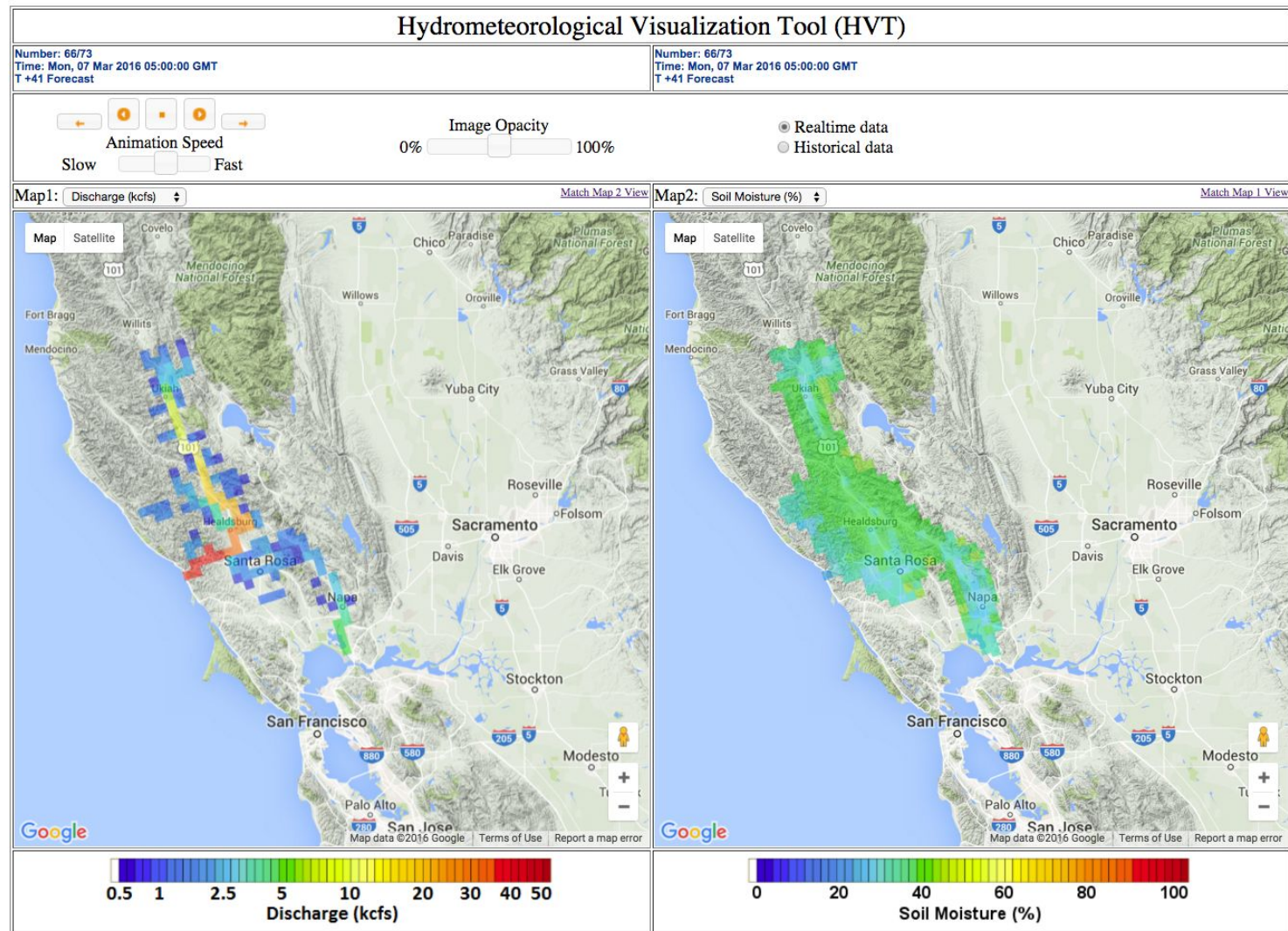
KMUX S-

band Radar

Reflectivity



PSD: Hydro Distributed Model Forecast



Lake Mendocino

EAST FORK RUSSIAN RIVER - LAKE MENDOCINO (YTPC1)

Latitude: 39.20° N

Longitude: 123.18° W

Elevation: 784 Feet

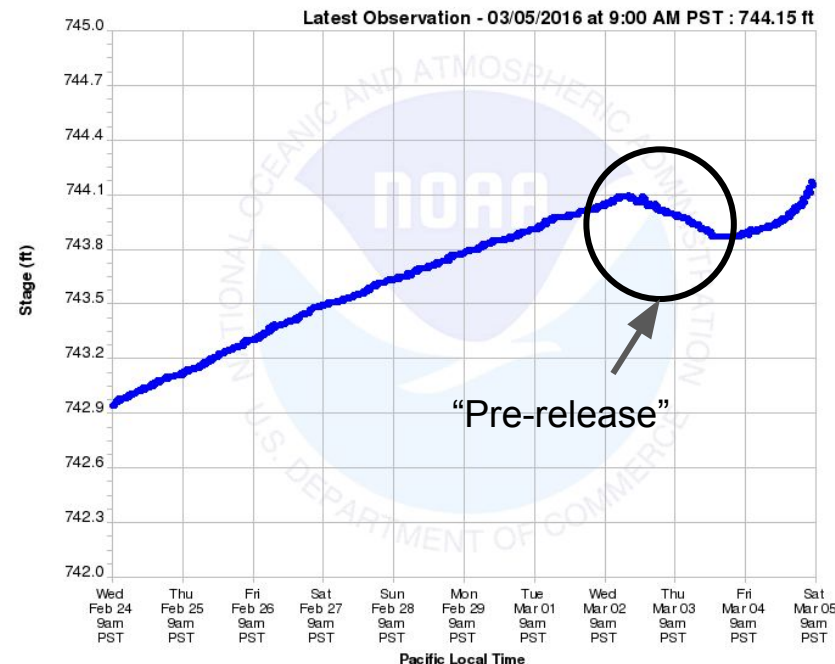
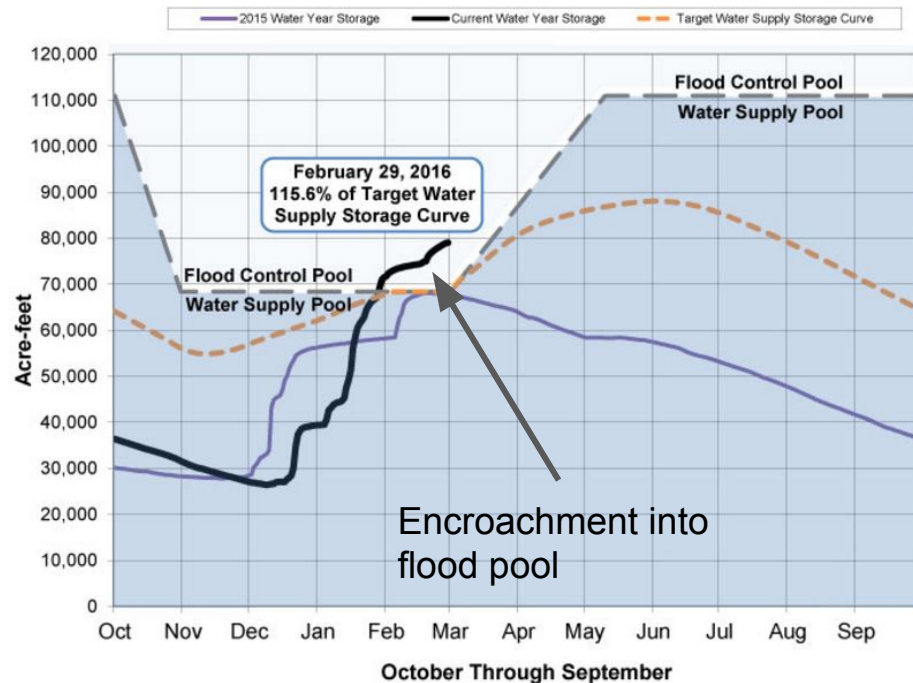
Location: Mendocino County in California

River Group: Russian Napa

Monitor Stage: N/A

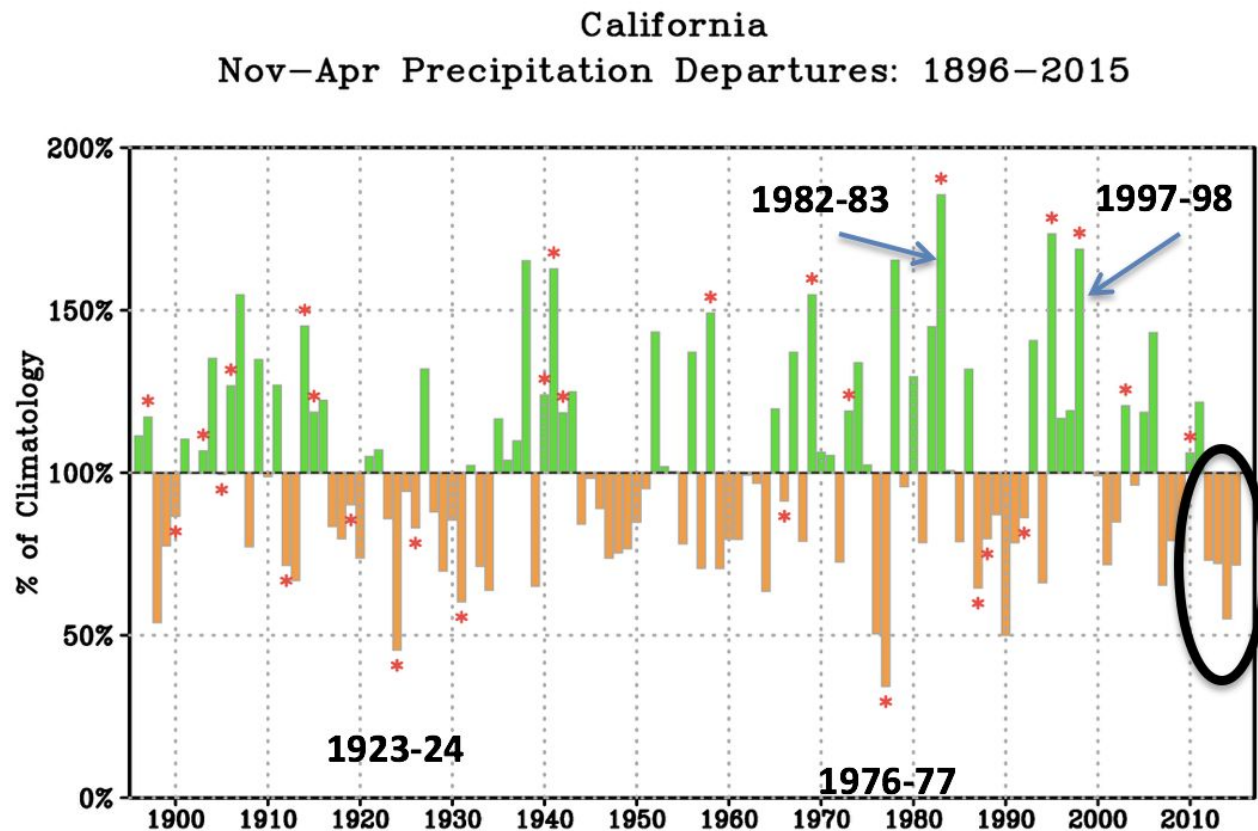
Flood Stage: N/A

Lake Mendocino Water Supply Storage



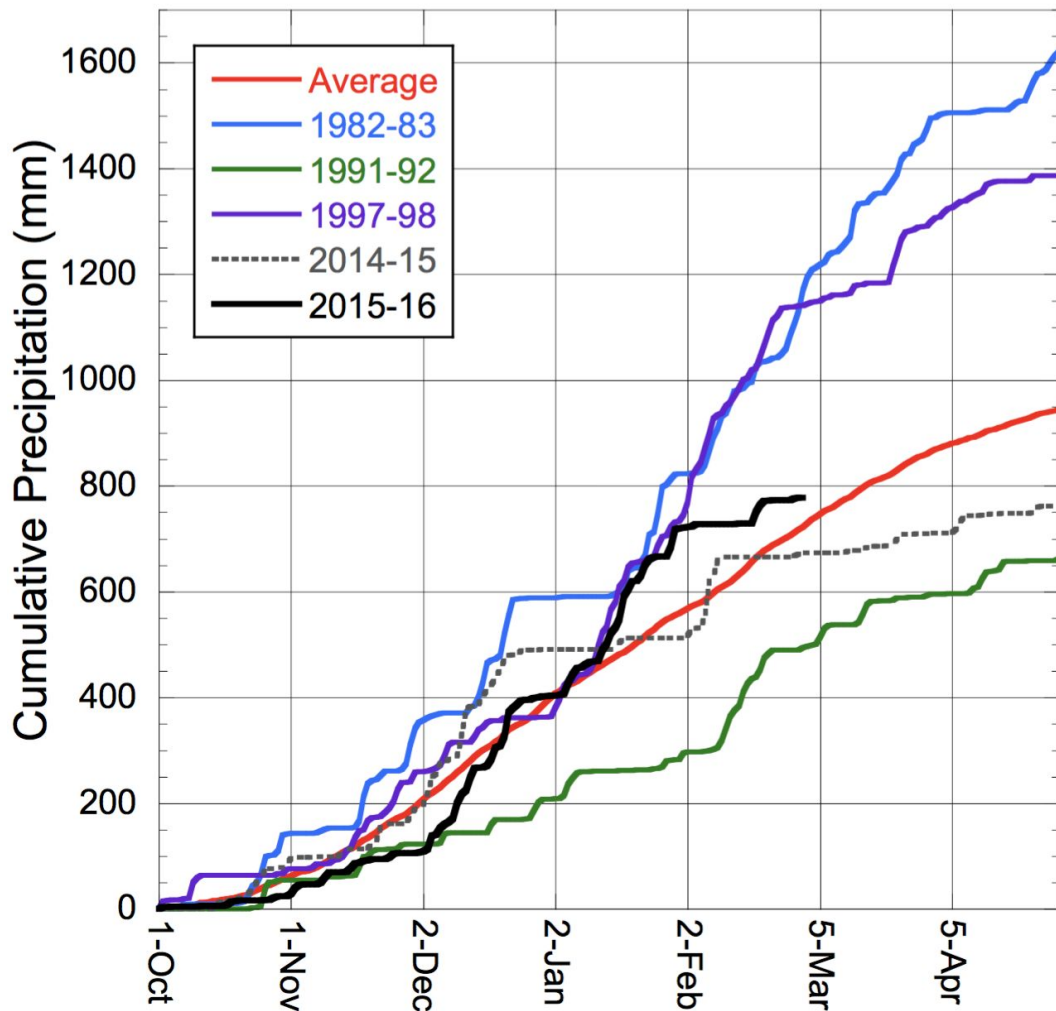
California Dream'n

Is El Niño A California Drought Buster?



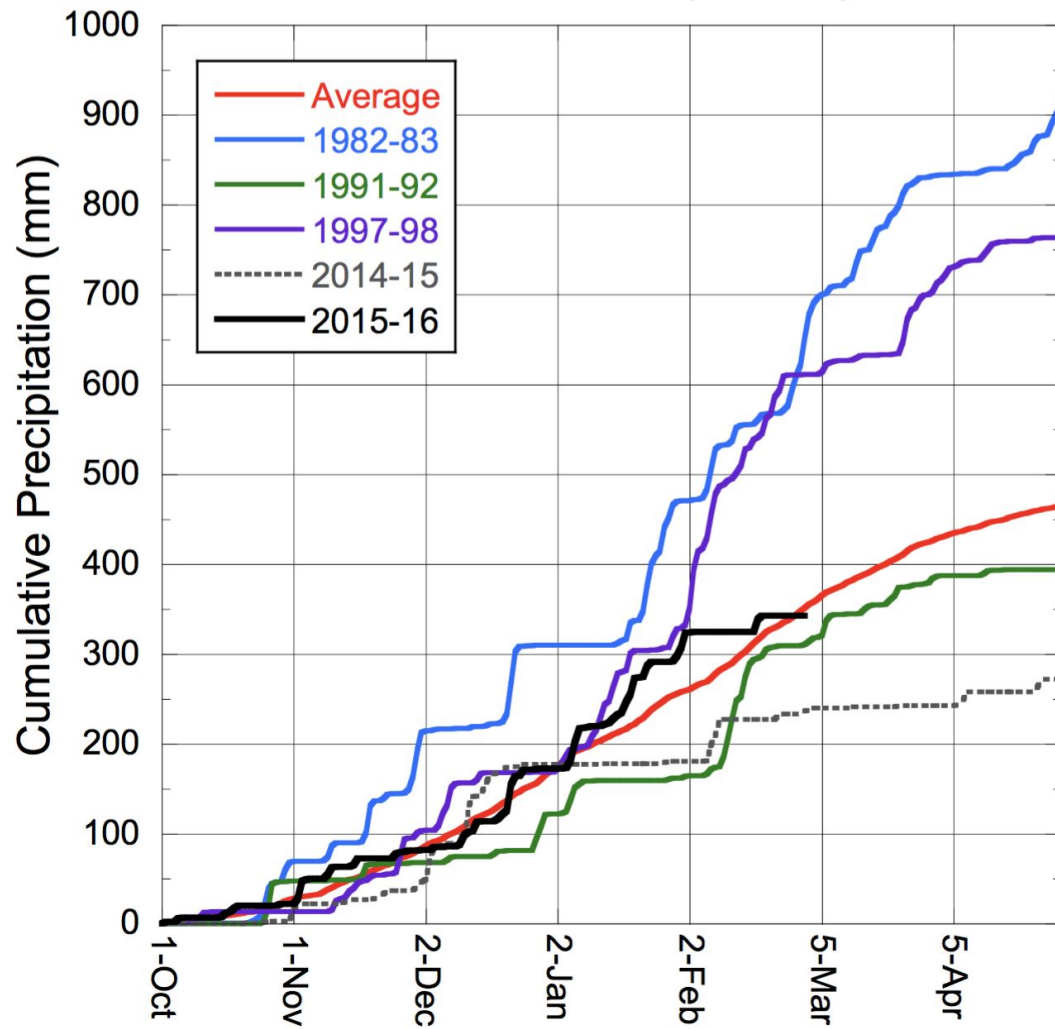
Northern California (PRISM)

Courtesy Brant Liebmann



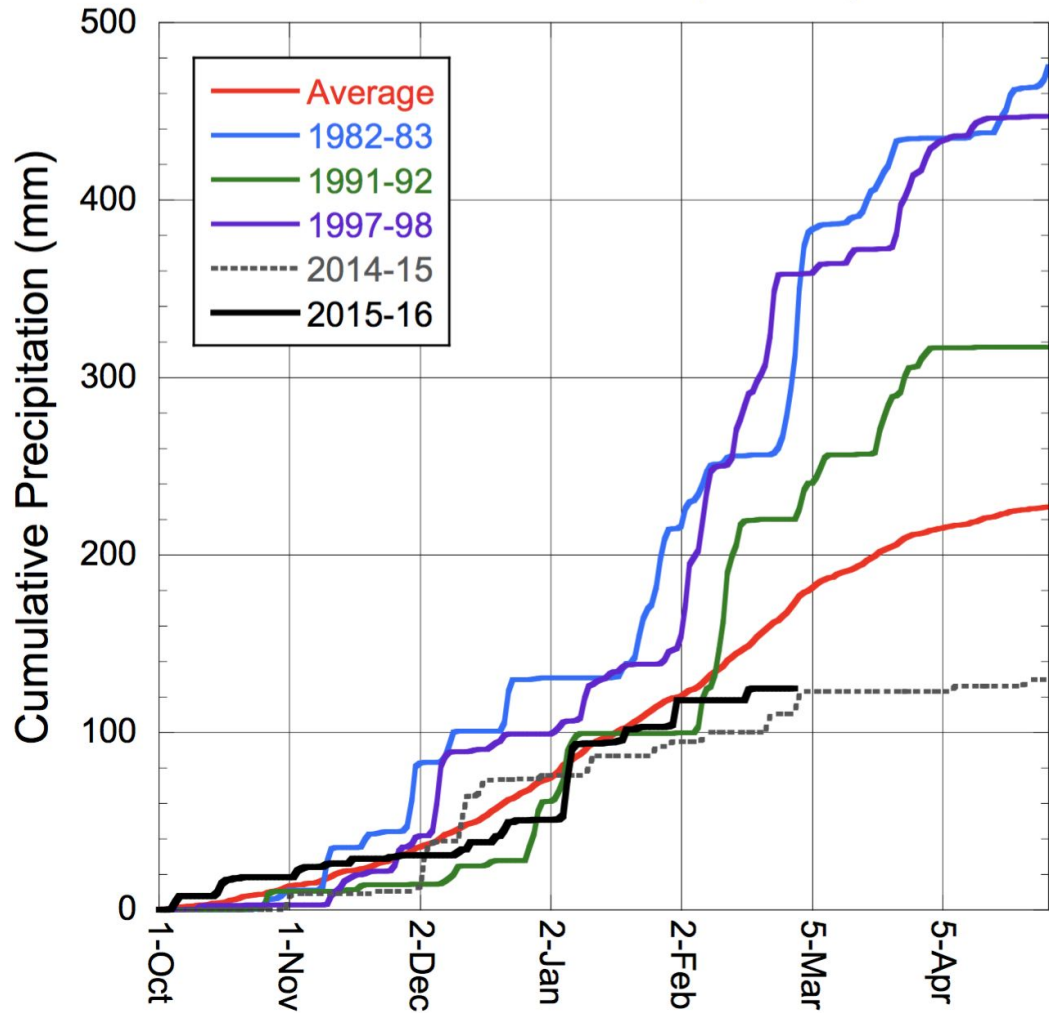
Central California (PRISM)

Courtesy Brant Liebmann



Southern California (PRISM)

Courtesy Brant Liebmann



For CA, a few examples of stations from across the state, departures since Oct. 1:

SOCAL

San Diego (Brown Field) -2.22

Los Angeles (LAX) -5.03

Paso Robles -3.43

Santa Barbara -5.99

CENTRAL/NORCAL

San Francisco (downtown) -3.67

San Jose -2.21

Sacramento -4.05

Stockton -0.31

Modesto +0.67

Redding -1.25 (+1.74 since January)

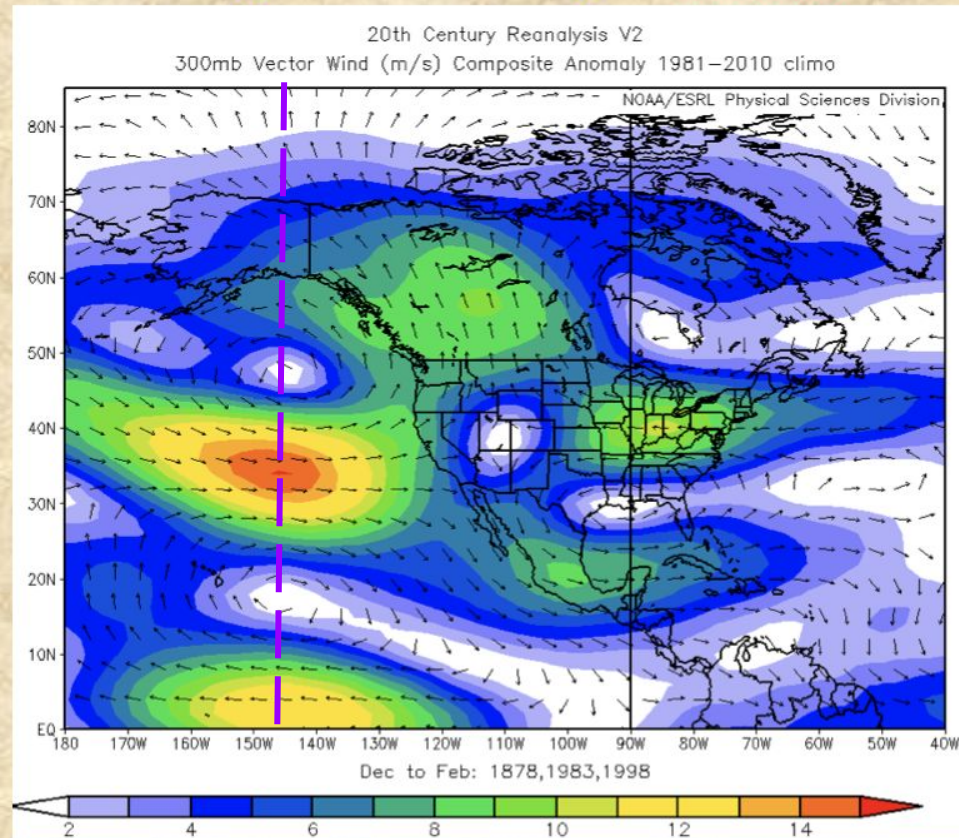
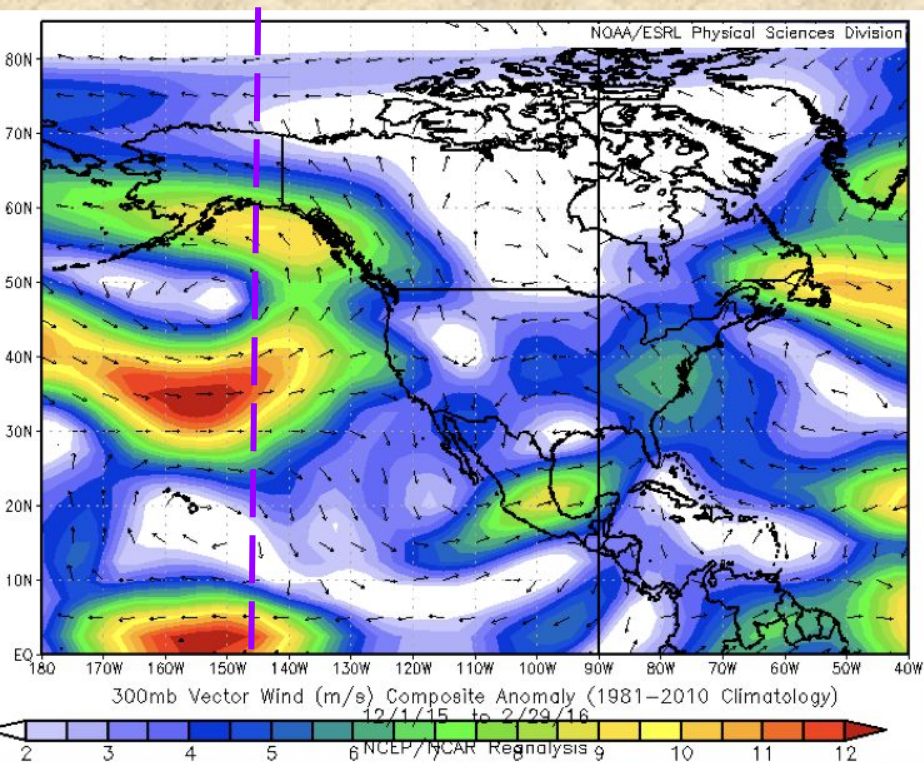
Eureka +7.59

Crescent City +8.73

thanks to Randy for this update....

Is El Nino 2016 El Nino-No Show?

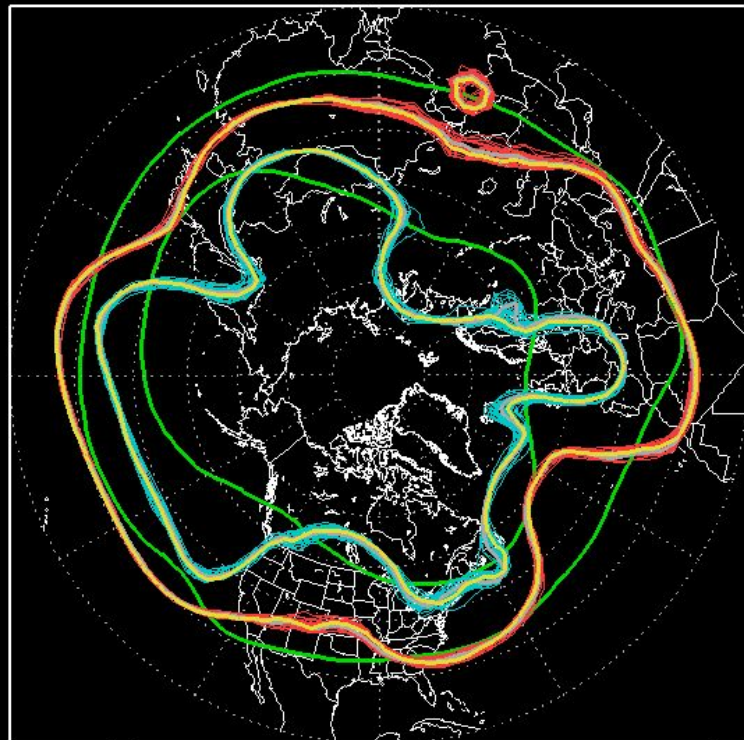
Circulation in DJF 2015-16 versus three previous 'Super Niños'



Courtesy of Klaus Wolter, based on oral presentation to Nevada Water Resources Association

NCEP ENSEMBLE 500mb Z

048H Forecast from: 00Z Fri MAR,04 2016
Valid time: 00Z Sun MAR,06 2016



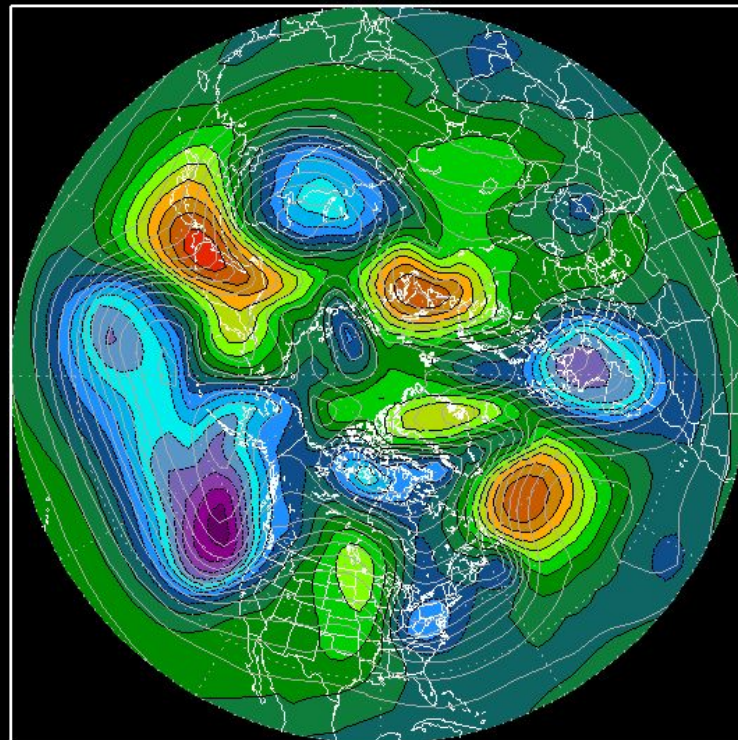
00z Runs:(21)

12z Runs:(21)

— 5400m — 5700m — Cntrl 00z — Cntrl 12z — CLIM

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

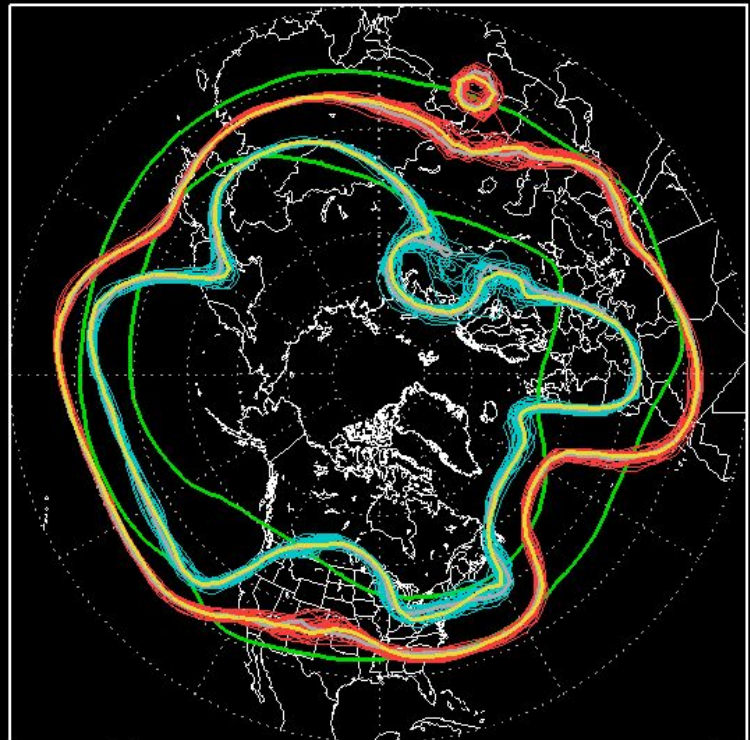
048H Forecast from: 00Z Fri MAR,04 2016
Valid time: 00Z Sun MAR,06 2016



— -360 — -280 — -200 — -120 — -40 — 40 — 120 — 200 — 280 — 360

NCEP ENSEMBLE 500mb Z

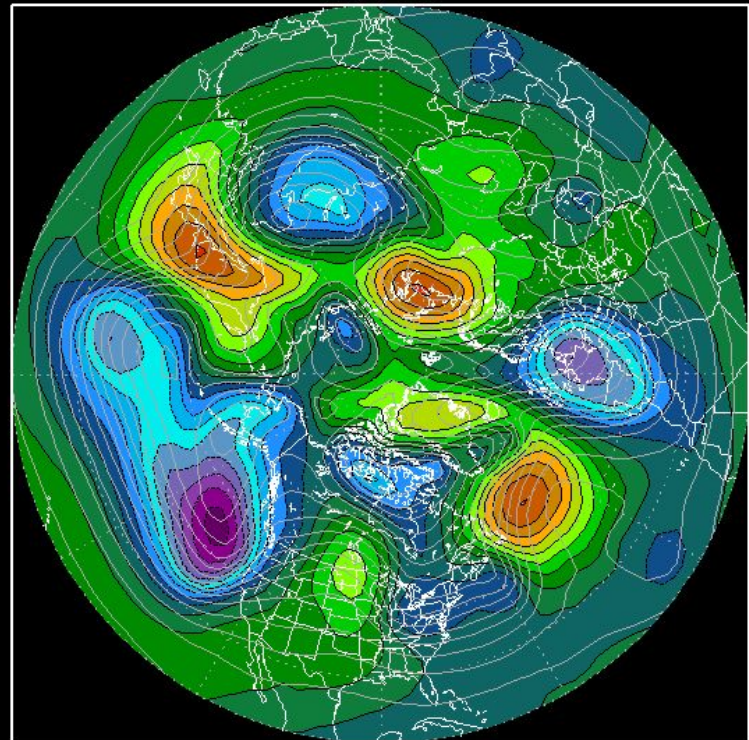
072H Forecast from: 00Z Thu MAR,03 2016
Valid time: 00Z Sun MAR,06 2016



00z Runs:(21) 12z Runs:(21)
— 5460m — 5700m — Cntrl 00z — Cntrl 12z — CLIM

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

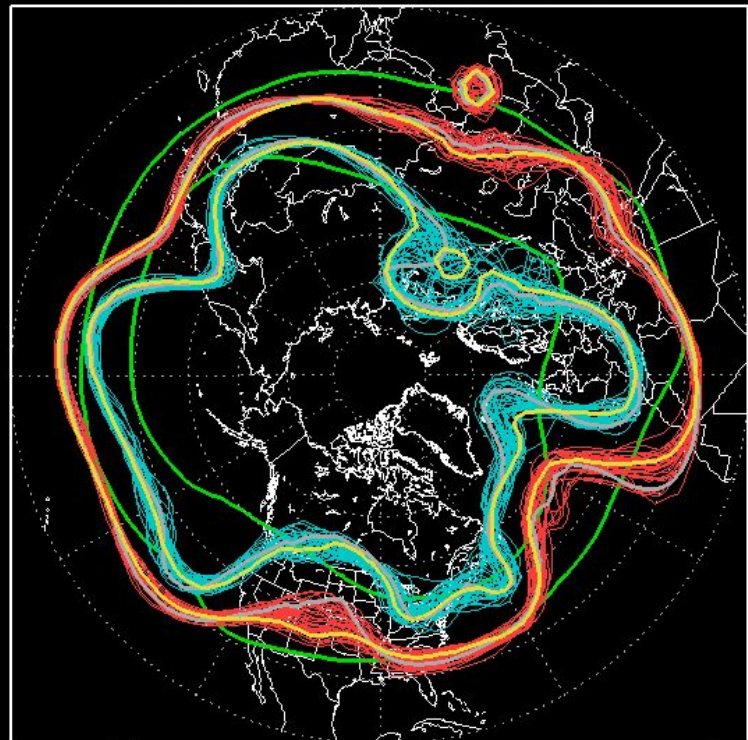
072H Forecast from: 00Z Thu MAR,03 2016
Valid time: 00Z Sun MAR,06 2016



-360 -280 -200 -120 -40 40 120 200 280 360

NCEP ENSEMBLE 500mb Z

096H Forecast from: 00Z Wed MAR,02 2016
Valid time: 00Z Sun MAR,06 2016

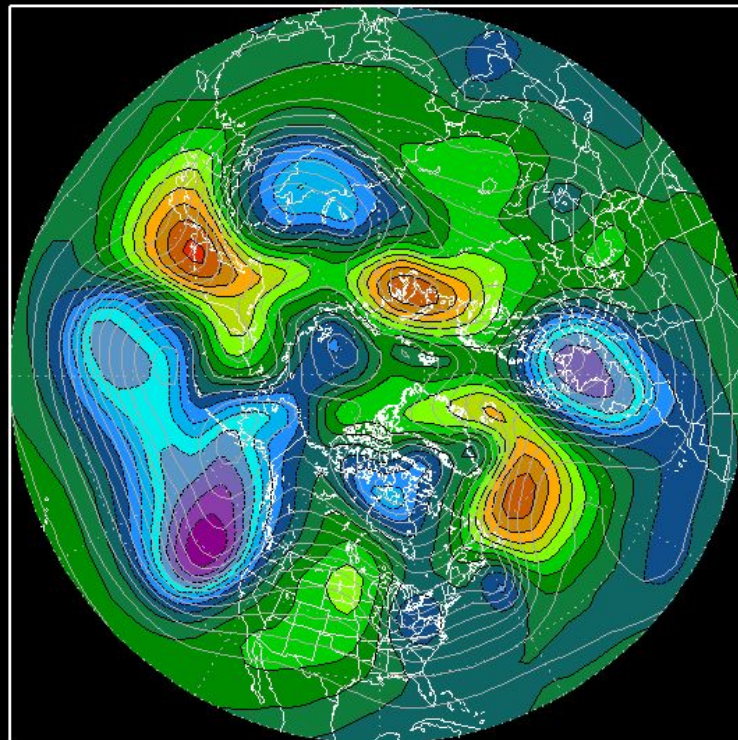


00z Runs:(21) 12z Runs:(21)

— 5460m — 5700m — Cntrl 00z — Cntrl 12z — CLIM

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

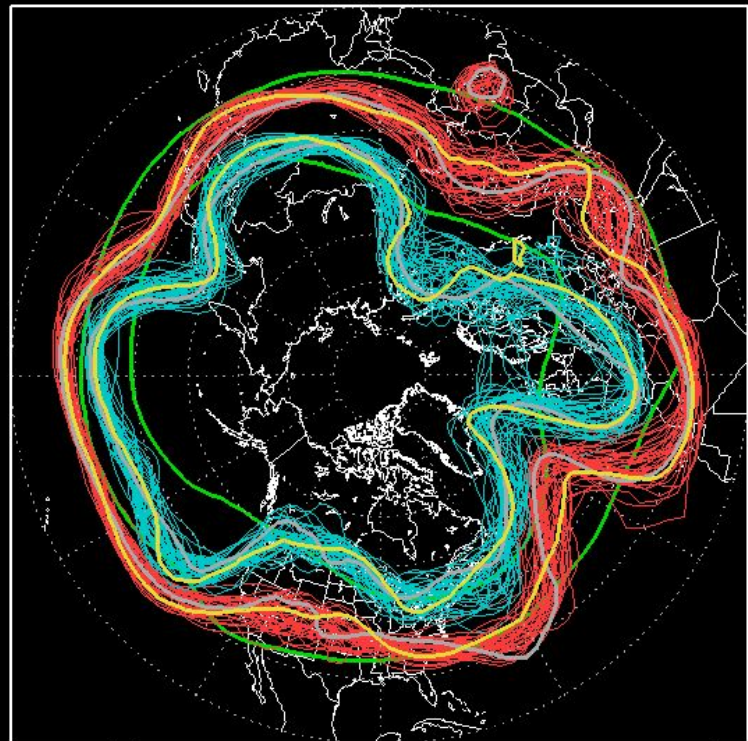
096H Forecast from: 00Z Wed MAR,02 2016
Valid time: 00Z Sun MAR,06 2016



-360 -280 -200 -120 -40 40 120 200 280 360

NCEP ENSEMBLE 500mb Z

144H Forecast from: 00Z Mon FEB,29 2016
Valid time: 00Z Sun MAR,06 2016

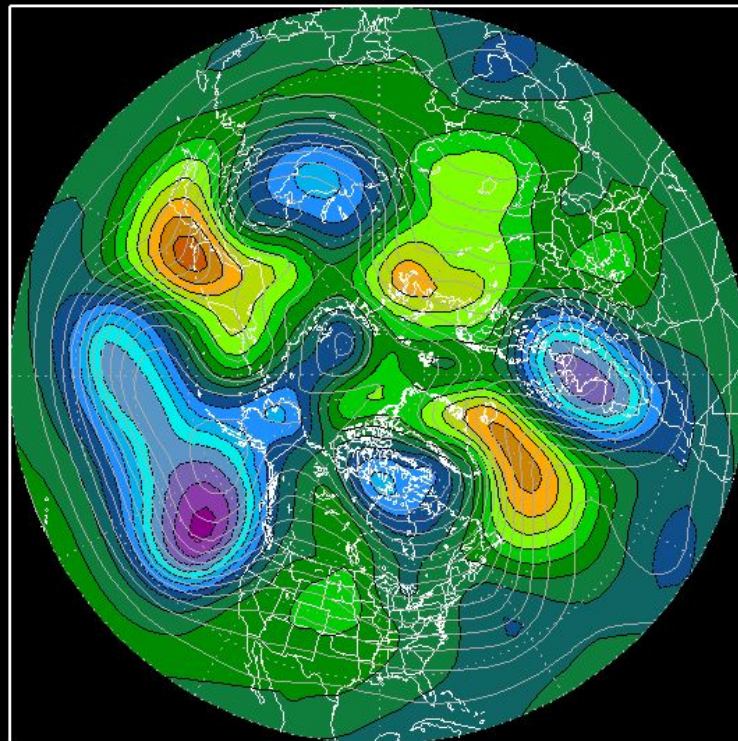


00z Runs:(21) 12z Runs:(21)

5460m 5700m Cntrl 00z Cntrl 12z CLIM

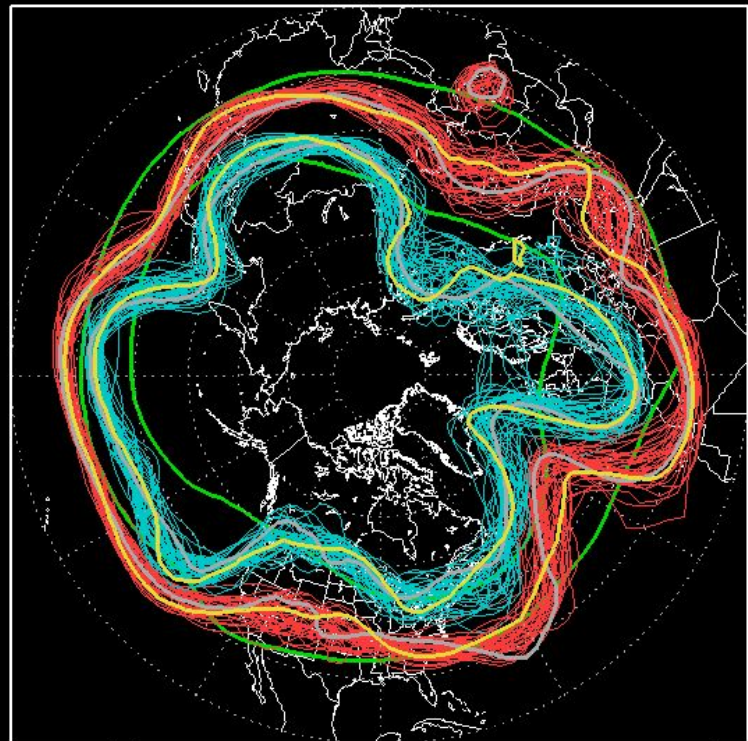
NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

144H Forecast from: 00Z Mon FEB,29 2016
Valid time: 00Z Sun MAR,06 2016



NCEP ENSEMBLE 500mb Z

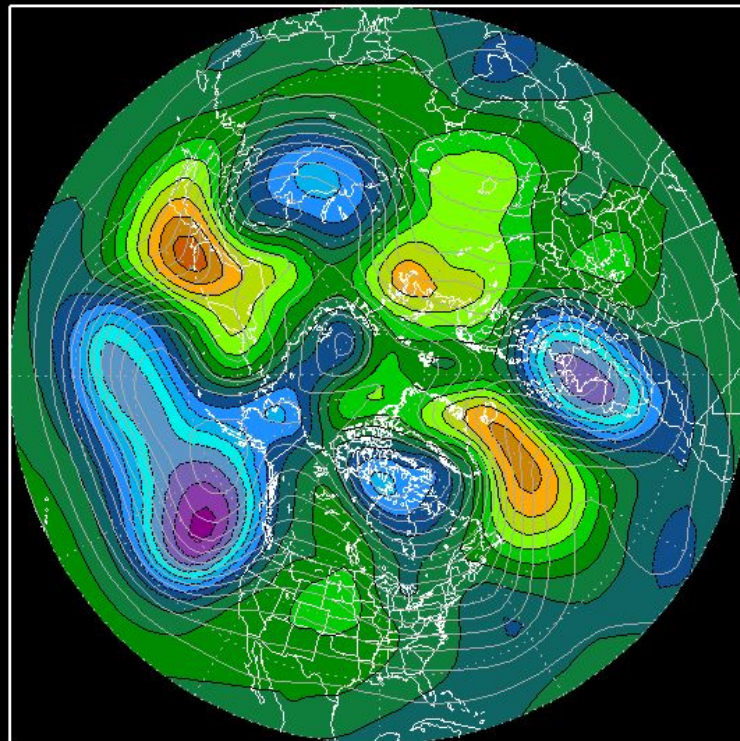
144H Forecast from: 00Z Mon FEB,29 2016
Valid time: 00Z Sun MAR,06 2016



00z Runs:(21) 12z Runs:(21)
— 5460m — 5700m — Cntrl 00z — Cntrl 12z — CLIM

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

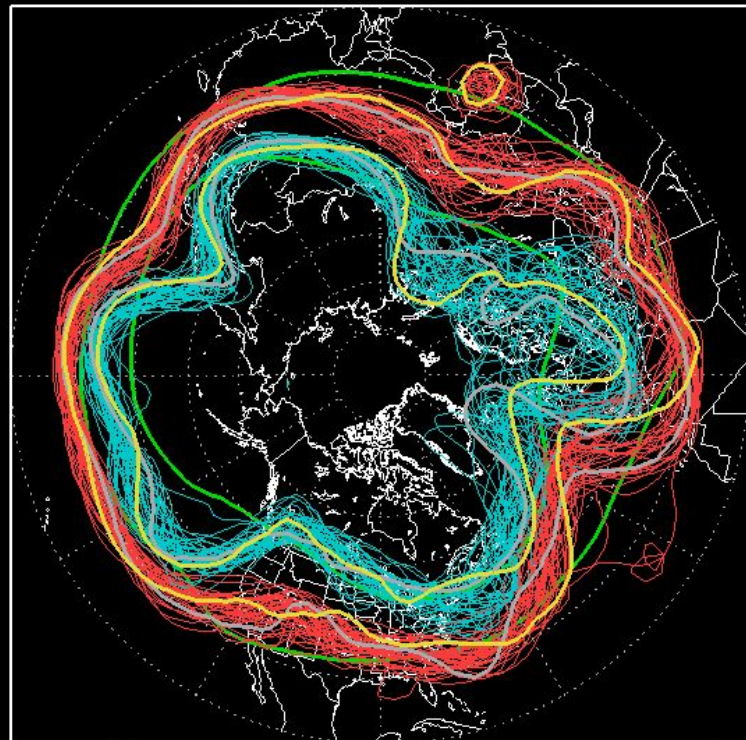
144H Forecast from: 00Z Mon FEB,29 2016
Valid time: 00Z Sun MAR,06 2016



-360 -280 -200 -120 -40 40 120 200 280 360

NCEP ENSEMBLE 500mb Z

168H Forecast from: 00Z Sun FEB,28 2016
Valid time: 00Z Sun MAR,06 2016

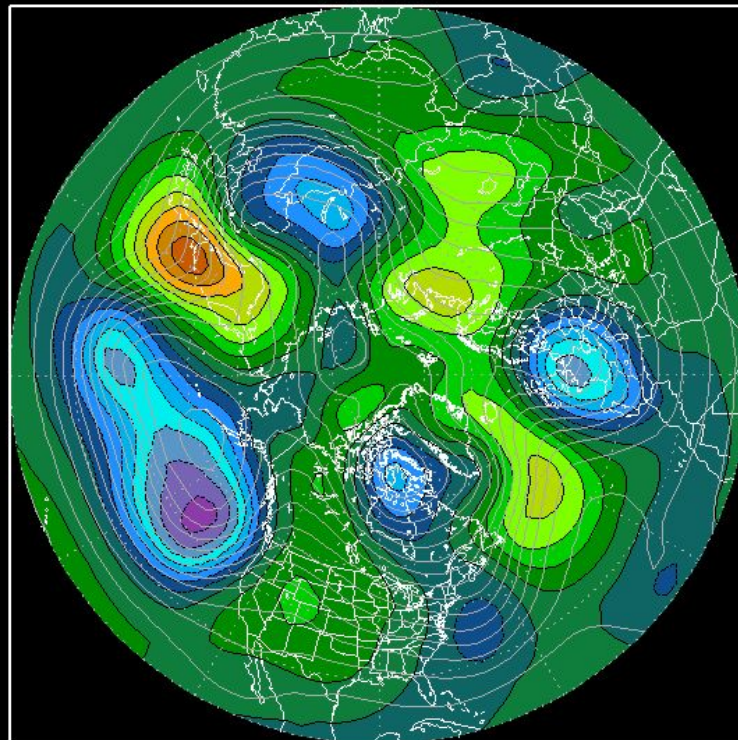


00z Runs:(21) 12z Runs:(21)

5460m 5700m Cntrl 00z Cntrl 12z CLIM

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

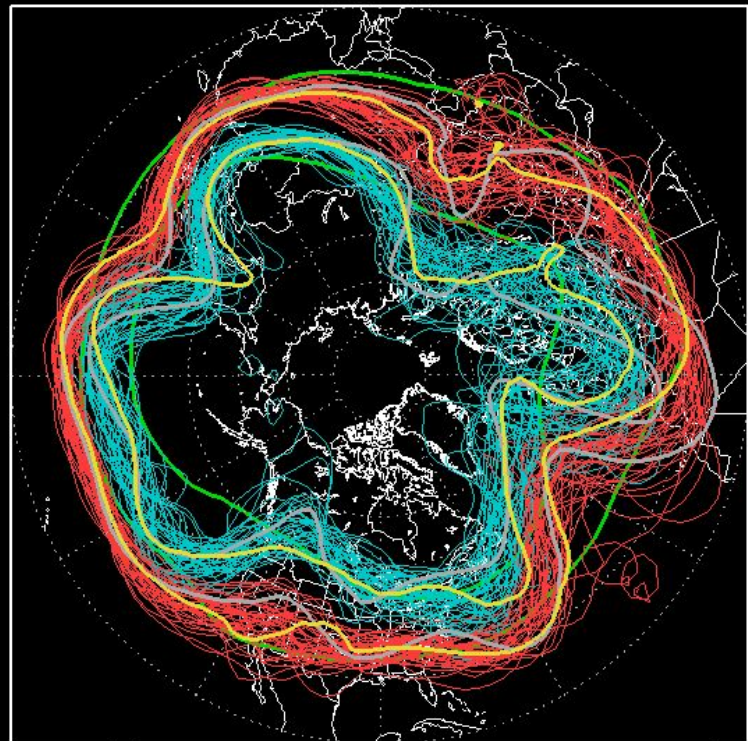
168H Forecast from: 00Z Sun FEB,28 2016
Valid time: 00Z Sun MAR,06 2016



-360 -280 -200 -120 -40 40 120 200 280 360

NCEP ENSEMBLE 500mb Z

192H Forecast from: 00Z Sat FEB,27 2016
Valid time: 00Z Sun MAR,06 2016

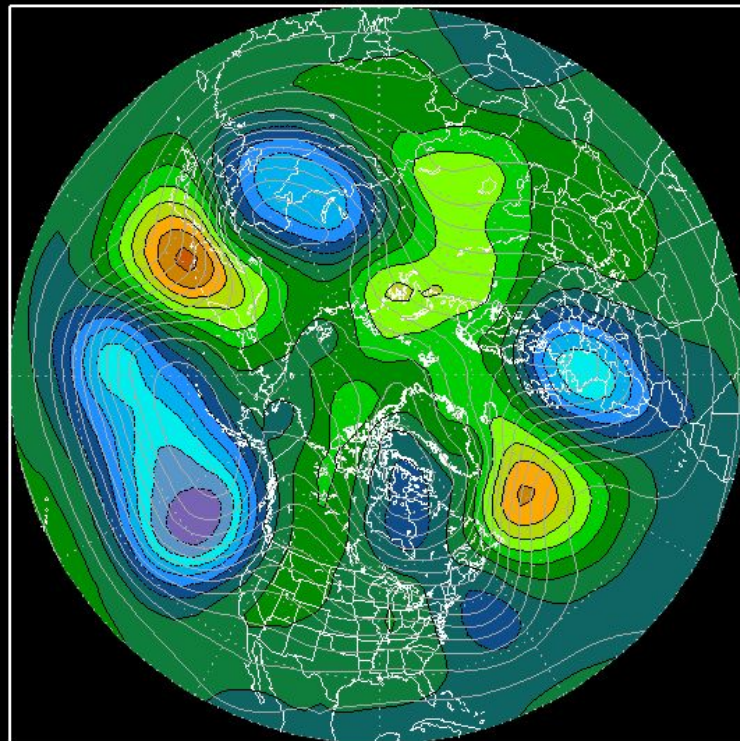


00z Runs:(21) 12z Runs:(21)

5460m 5700m Cntrl 00z Cntrl 12z CLIM

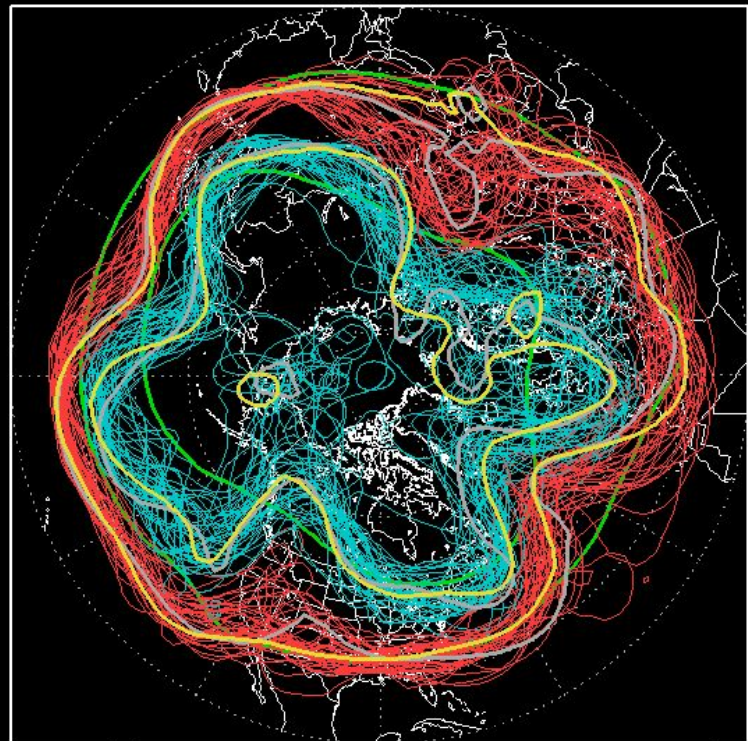
NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

192H Forecast from: 00Z Sat FEB,27 2016
Valid time: 00Z Sun MAR,06 2016



NCEP ENSEMBLE 500mb Z

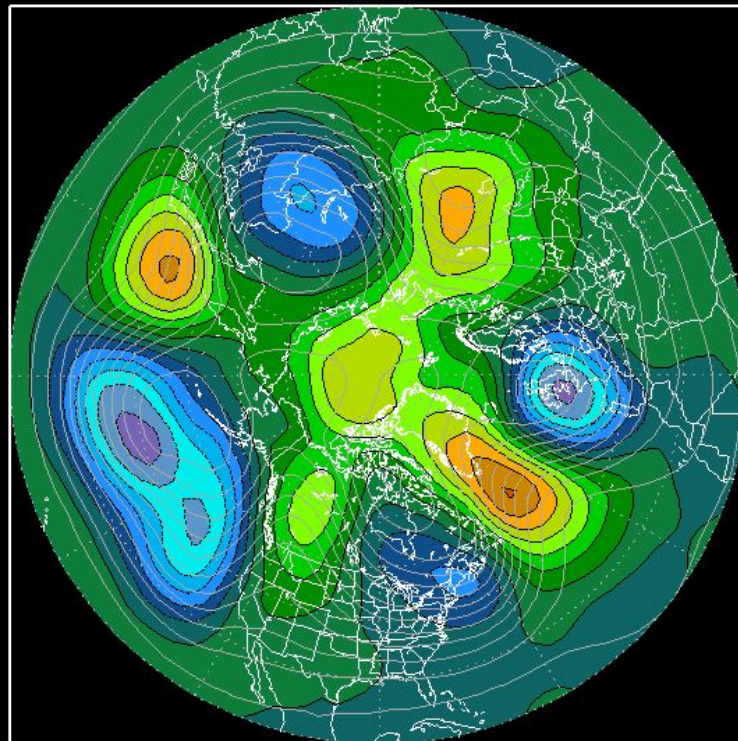
216H Forecast from: 00Z Fri FEB,26 2016
Valid time: 00Z Sun MAR,06 2016



00z Runs:(21) 12z Runs:(21)
— 5400m — 5700m — Cntrl 00z — Cntrl 12z — CLIM

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

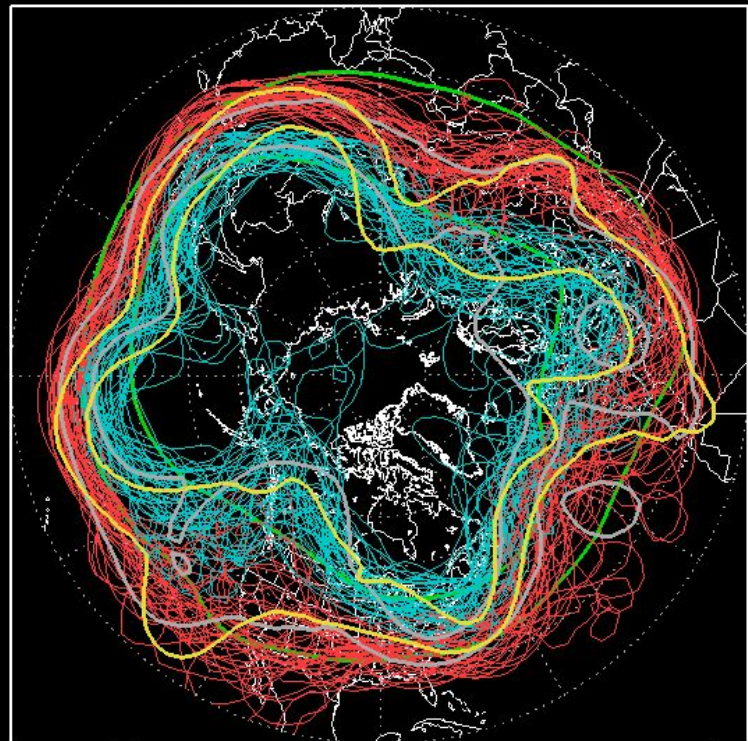
216H Forecast from: 00Z Fri FEB,26 2016
Valid time: 00Z Sun MAR,06 2016



-360 -280 -200 -120 -40 40 120 200 280 360

NCEP ENSEMBLE 500mb Z

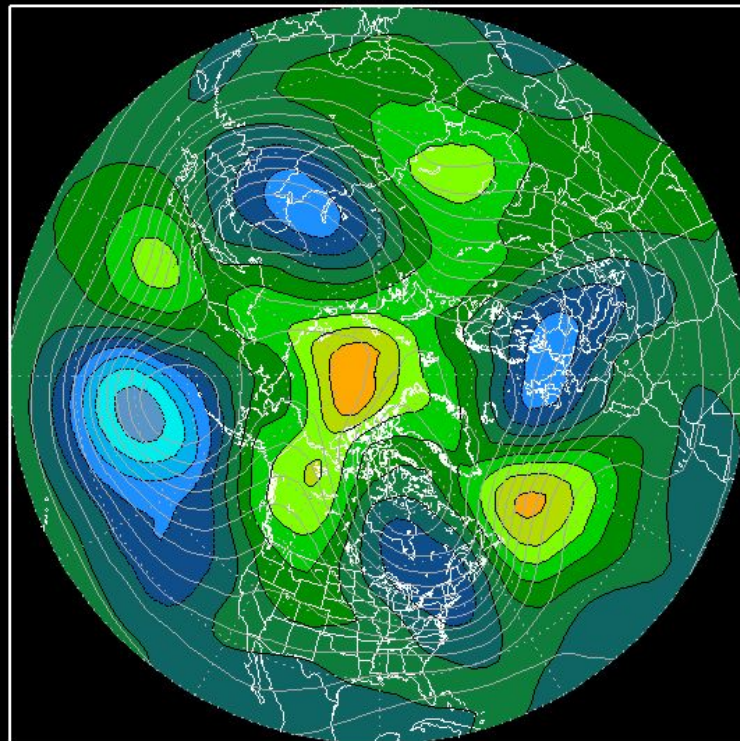
264H Forecast from: 00Z Wed FEB,24 2016
Valid time: 00Z Sun MAR,06 2016



00z Runs:(21) 12z Runs:(21)
— 5460m — 5700m — Cntrl 00z — Cntrl 12z — CLIM

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

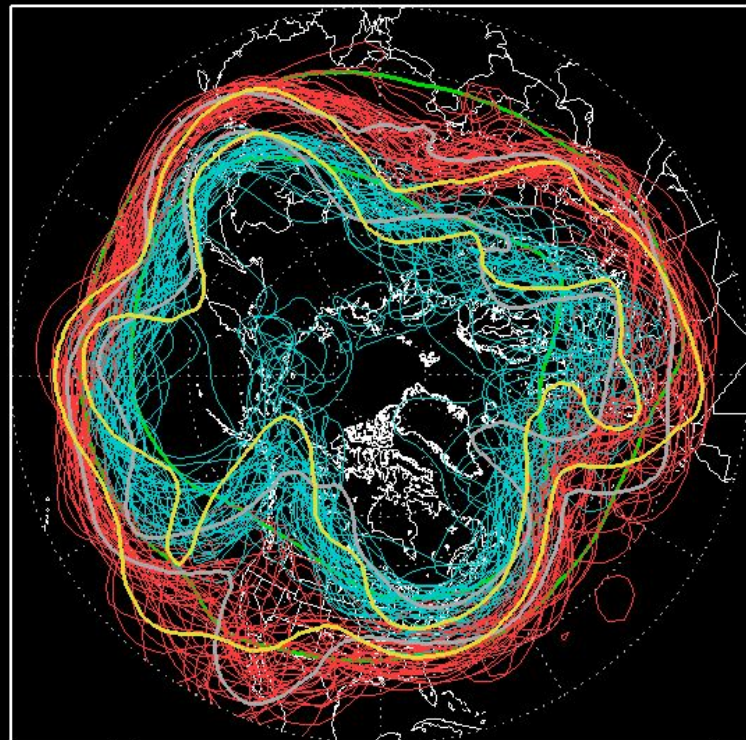
264H Forecast from: 00Z Wed FEB,24 2016
Valid time: 00Z Sun MAR,06 2016



-360 -280 -200 -120 -40 40 120 200 280 360

NCEP ENSEMBLE 500mb Z

288H Forecast from: 00Z Tue FEB,23 2016
Valid time: 00Z Sun MAR,06 2016

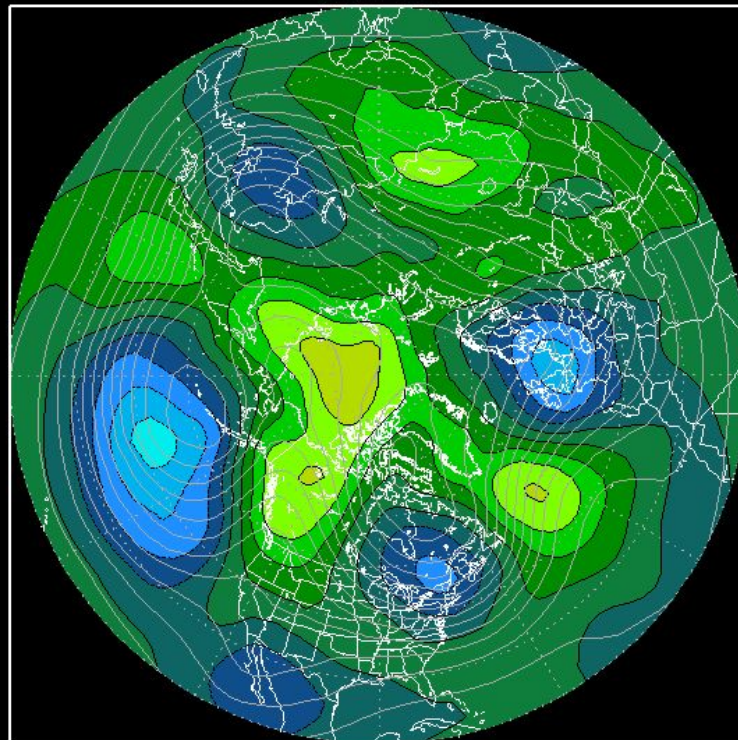


00z Runs:(21) 12z Runs:(21)

5460m 5700m Cntrl 00z Cntrl 12z CLIM

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

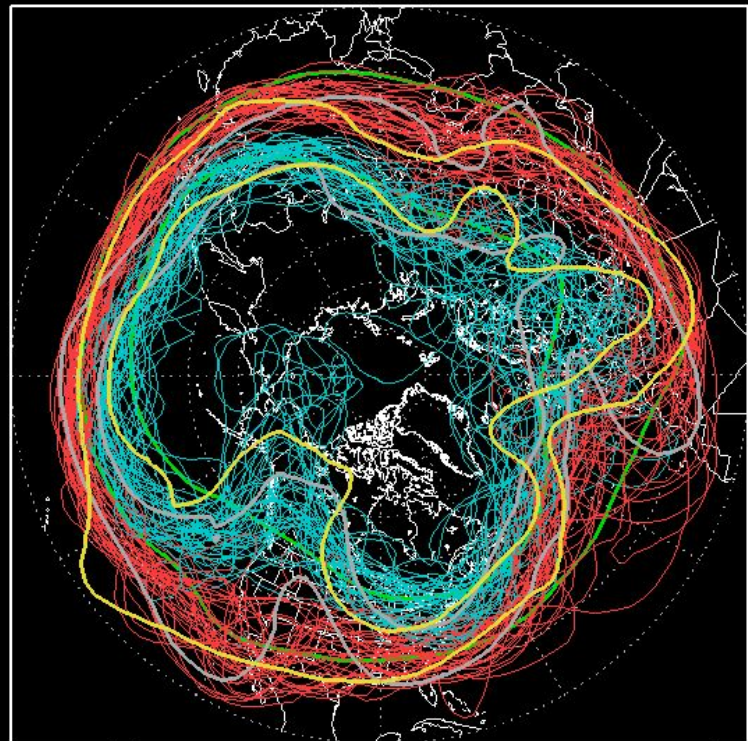
288H Forecast from: 00Z Tue FEB,23 2016
Valid time: 00Z Sun MAR,06 2016



-360 -280 -200 -120 -40 40 120 200 280 360

NCEP ENSEMBLE 500mb Z

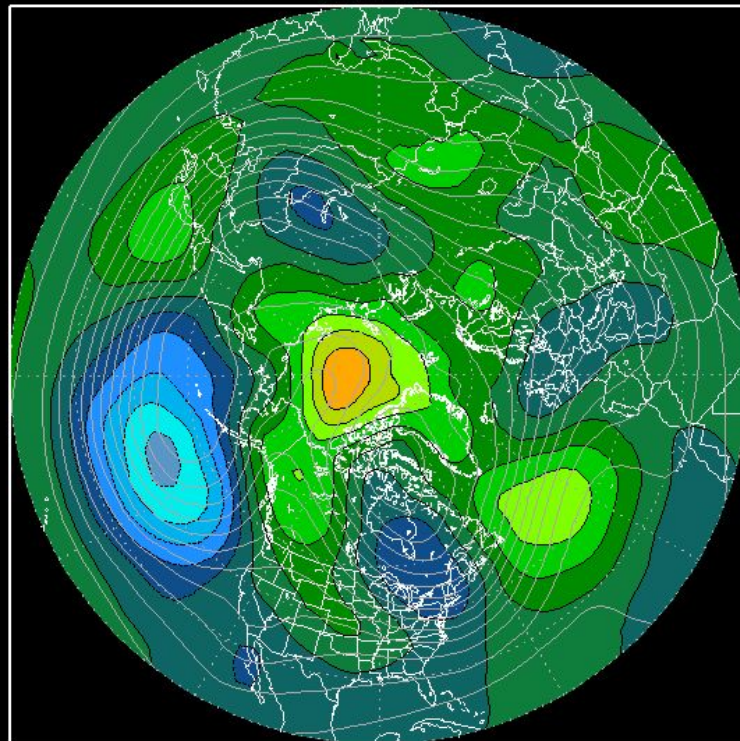
312H Forecast from: 00Z Mon FEB,22 2016
Valid time: 00Z Sun MAR,06 2016



00z Runs:(21) 12z Runs:(21)
5460m 5700m Cntrl 00z Cntrl 12z CLIM

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

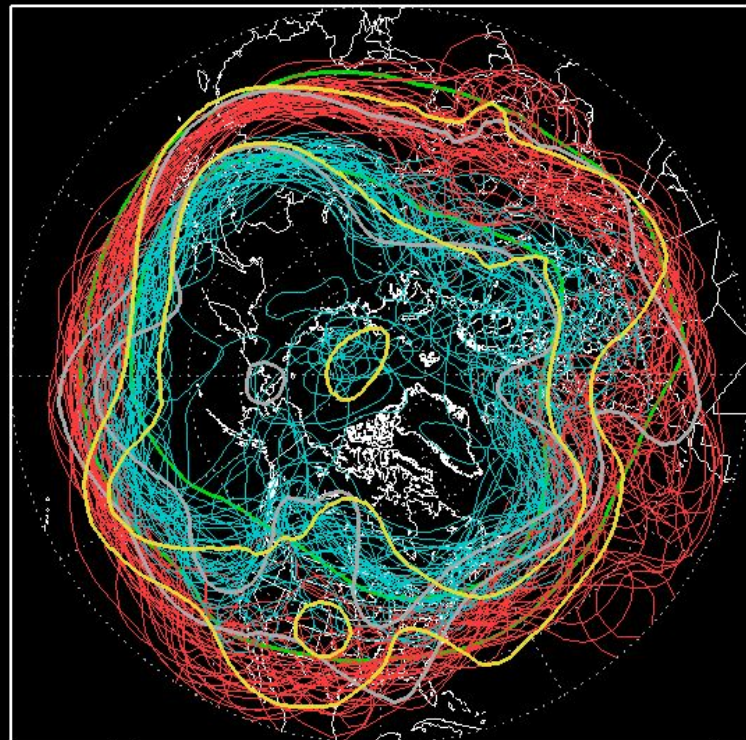
312H Forecast from: 00Z Mon FEB,22 2016
Valid time: 00Z Sun MAR,06 2016



-360 -280 -200 -120 -40 40 120 200 280 360

NCEP ENSEMBLE 500mb Z

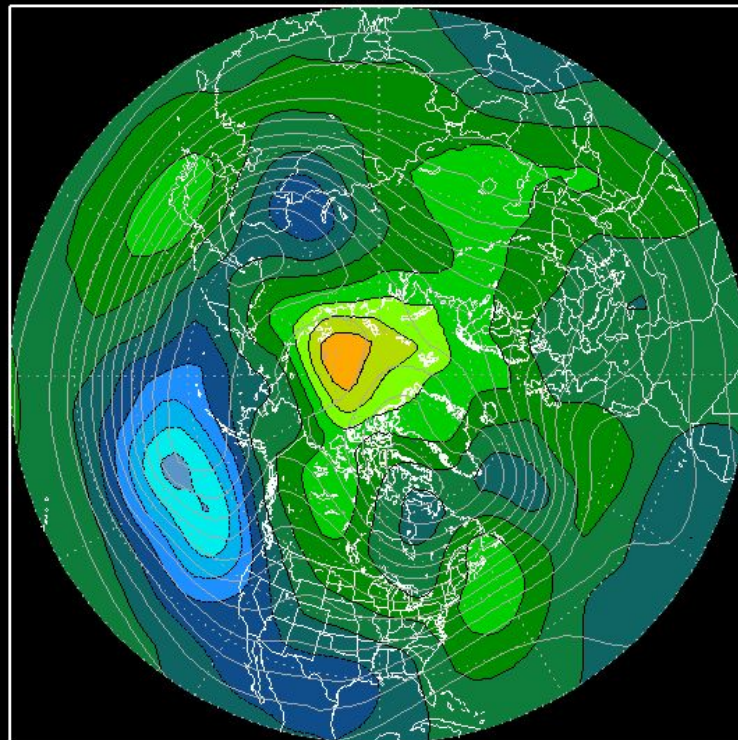
360H Forecast from: 00Z Sat FEB,20 2016
Valid time: 00Z Sun MAR,06 2016



00z Runs:(21) 12z Runs:(21)
5460m 5700m Cntrl 00z Cntrl 12z CLIM

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

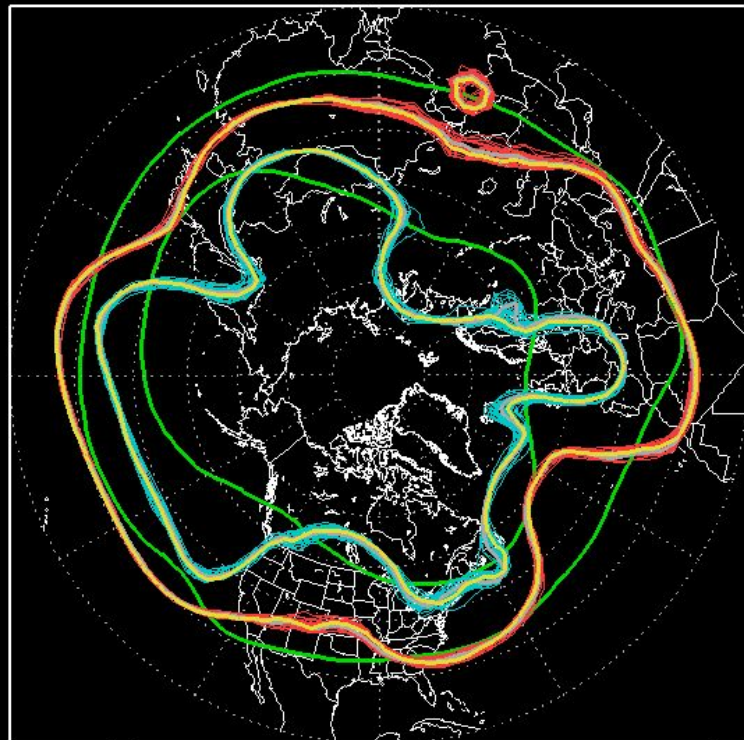
360H Forecast from: 00Z Sat FEB,20 2016
Valid time: 00Z Sun MAR,06 2016



-360 -280 -200 -120 -40 40 120 200 280 360

NCEP ENSEMBLE 500mb Z

048H Forecast from: 00Z Fri MAR,04 2016
Valid time: 00Z Sun MAR,06 2016



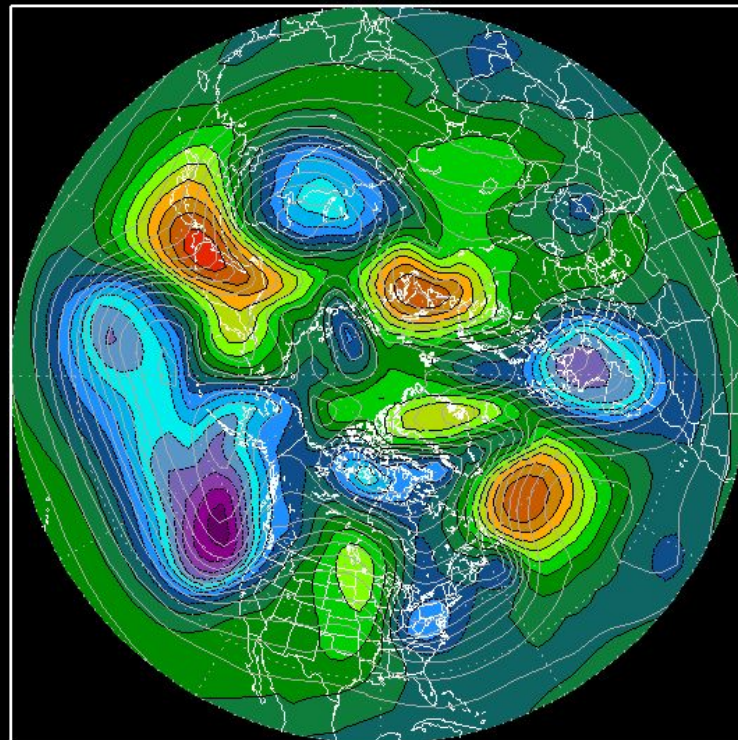
00z Runs:(21)

12z Runs:(21)

— 5400m — 5700m — Cntrl 00z — Cntrl 12z — CLIM

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

048H Forecast from: 00Z Fri MAR,04 2016
Valid time: 00Z Sun MAR,06 2016



-360 -280 -200 -120 -40 40 120 200 280 360