

Summary of Key Briefing Points
1030-1130am MST January 27, 2016

Current Conditions as of Tuesday 12Z 27 January

Tropics and Mid-latitudes

Over the Tropical Pacific:

- Convection: A modest scale convective region centered near 3N, 150W at 14Z Wed.
 - Cirrus Shield radiates from this near circular domain mostly toward west
 - More narrow banded convection 6N-10N 167W-160W

Tropical Outlook

- By 00Z Wed 26 Jan, principal divergent outflow in the 0-10N band expected within mission domain
----- Confidence for large scale poleward outflow in mission region is high based on GFS/EC/FIM/CMC model agreement....
- By 00Z Thu 25 Jan, convection and upper level outflow in mission region reduced

----- Confidence for large scale features is moderate to low, given that there is no indication of wave-related dynamical organization of the current convective regime
- Recover in convection, especially by Fri in region 0-5N, 170W-120W in model fcst models.

--- in summary, the preliminary indication from Tue forecasts Tuesday would be favorable convective regime for flight mission #3, Wednesday less so, and then prospects improve by end of week.

Midlatitude Outlook

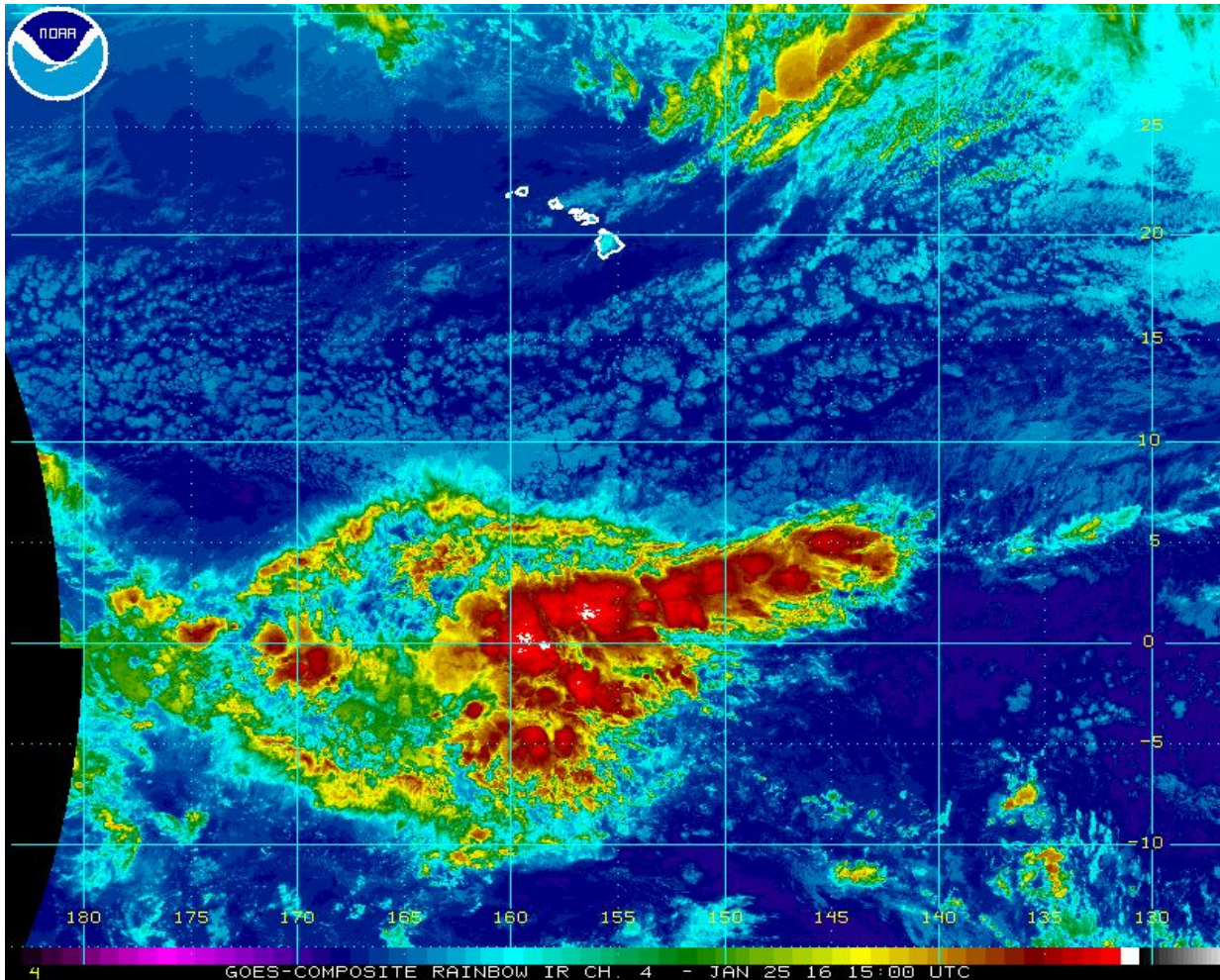
Short Term:

- Quiet CA next thru next 48 hrs- thru Wed night.

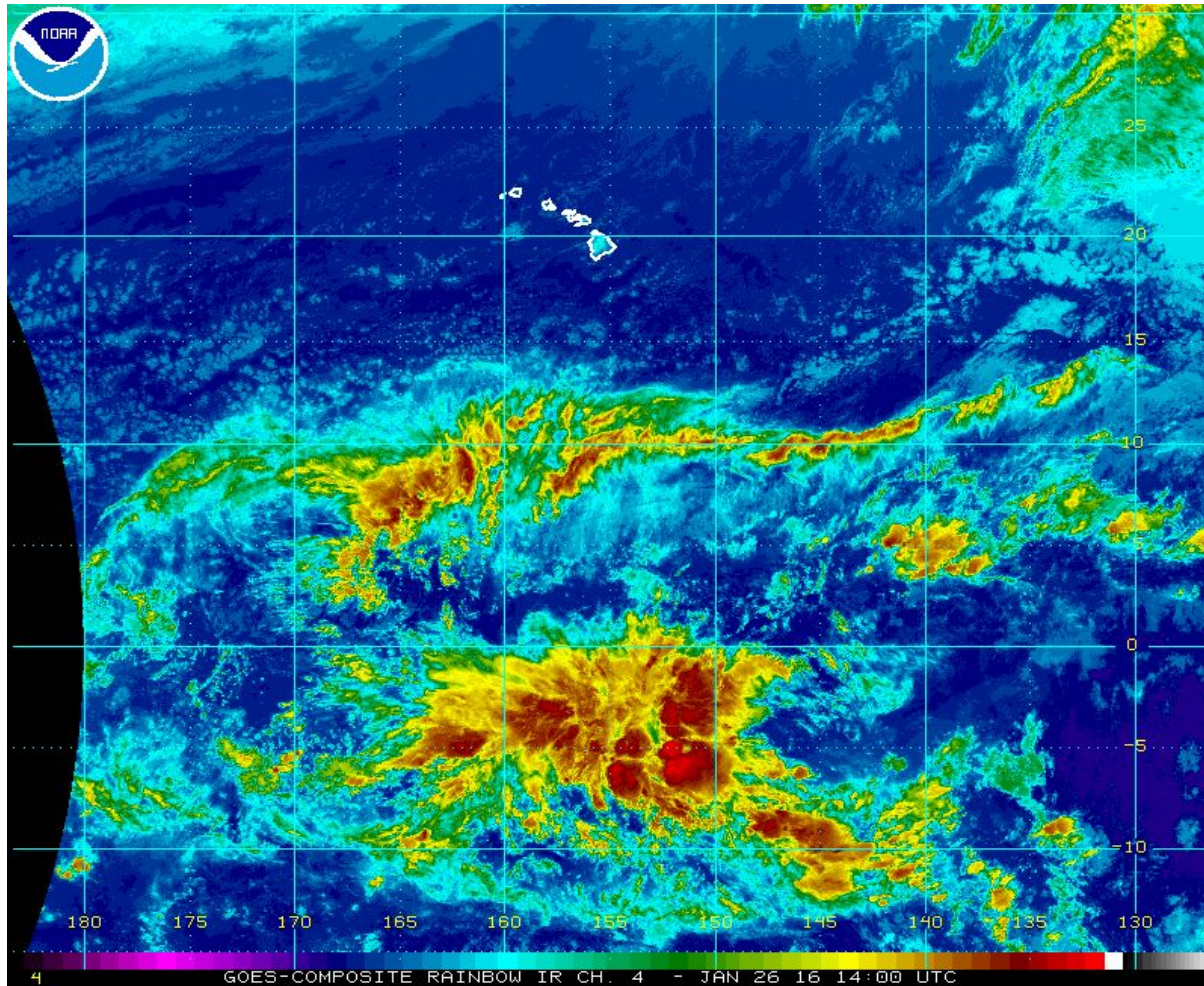
Medium - Long Term:

- High confidence that CA will be mostly dry in the period 25 Jan thru Thu 28 Jan.
---- GEFS ensemble in strong agreement to 168 hr lead (Thur 28 Jan) for a transient Ridge on the Pacific coast.
- Rains return to far coastal NCAL Thurs, spreading into NSierra Fri, associated with slowing sagging cold frontal boundary.
- GFS 12Z Tues run indicates cyclogenesis on this frontal boundary to occur near 140W on Sat.
- GFS 12z Tues run indicates Strong frontal cyclone to hit central CA on Sunday (120-132 hr lead). Confidence low...12Z ECMWF does not generate this frontal cyclone
- Days 7-10 indicates has low confidence, with considerable model disagreement.
--- the wx pattern will be dynamic and progressive, hence the lower confidence.

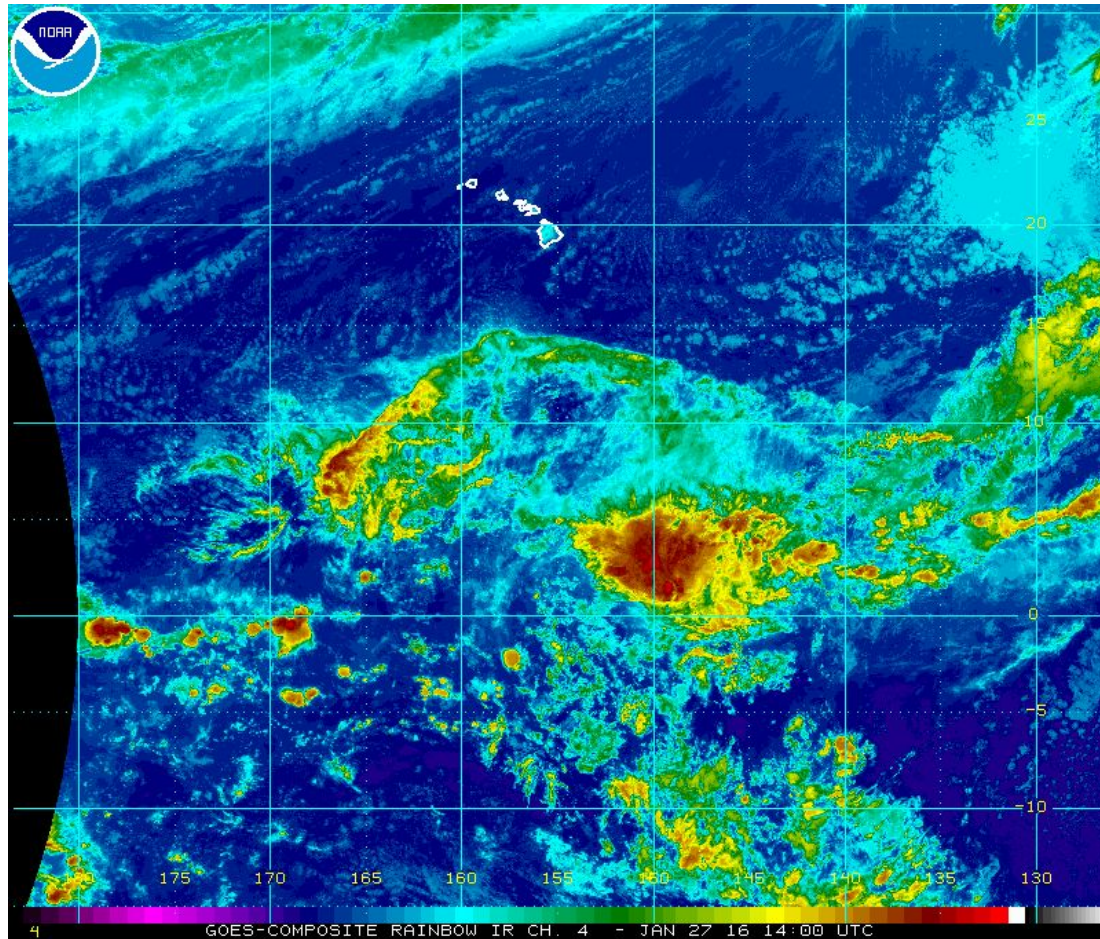
Monday 15Z January 25 Enhanced IR Image



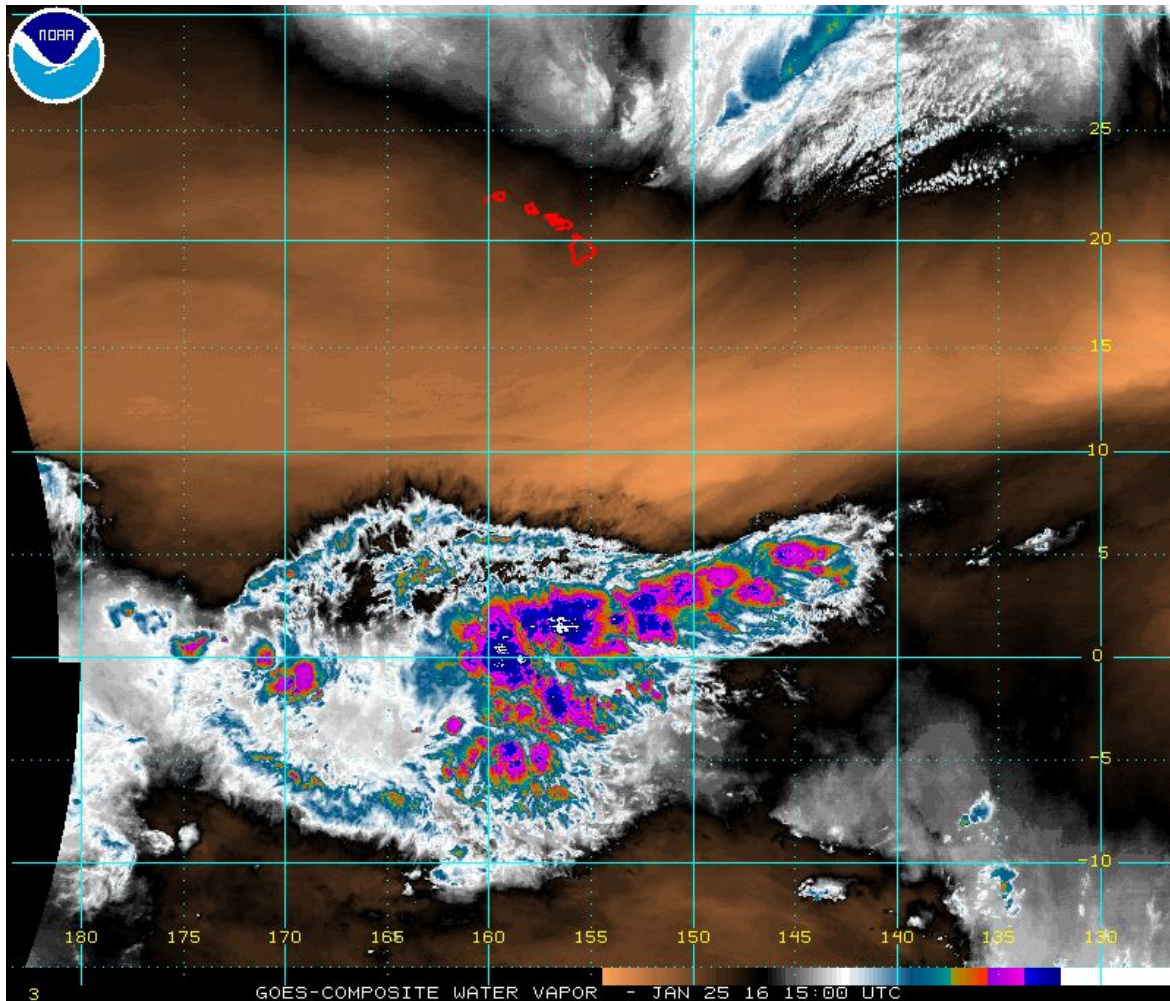
Tuesday 14Z January 26 Enhanced IR Image



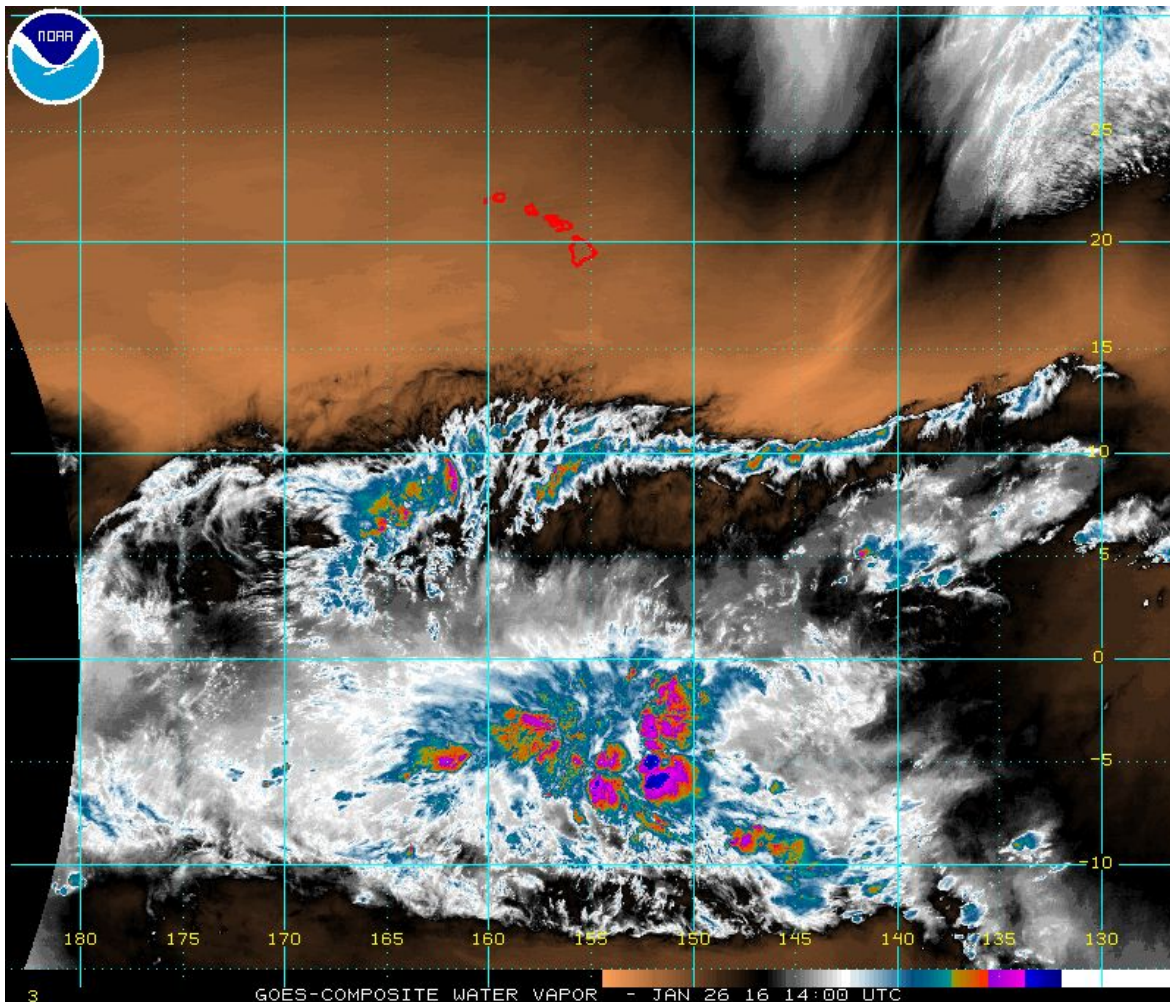
Wednesday 14Z January 27 Enhanced IR Image



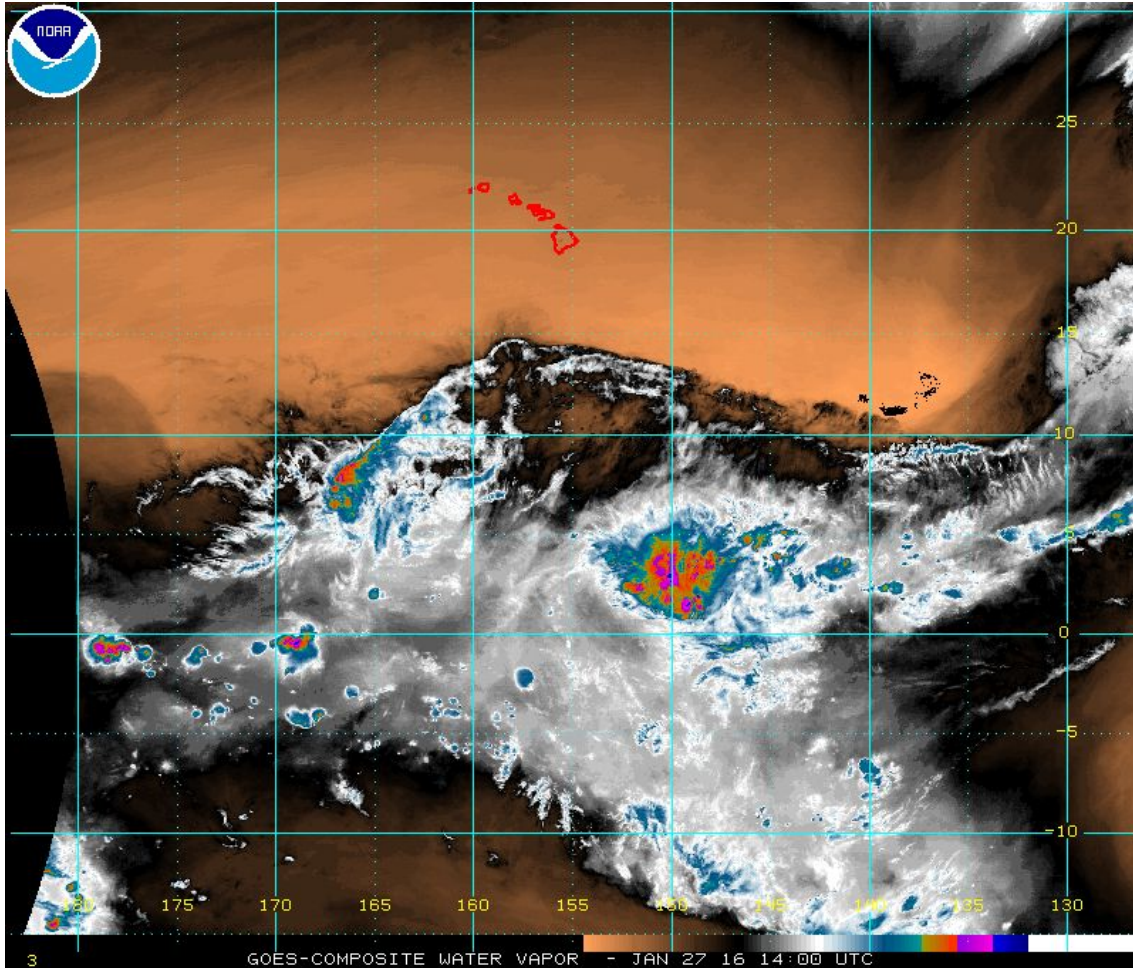
Monday 15Z January 25 Water Vapor Image



Tuesday 14Z January 26 Water Vapor Image

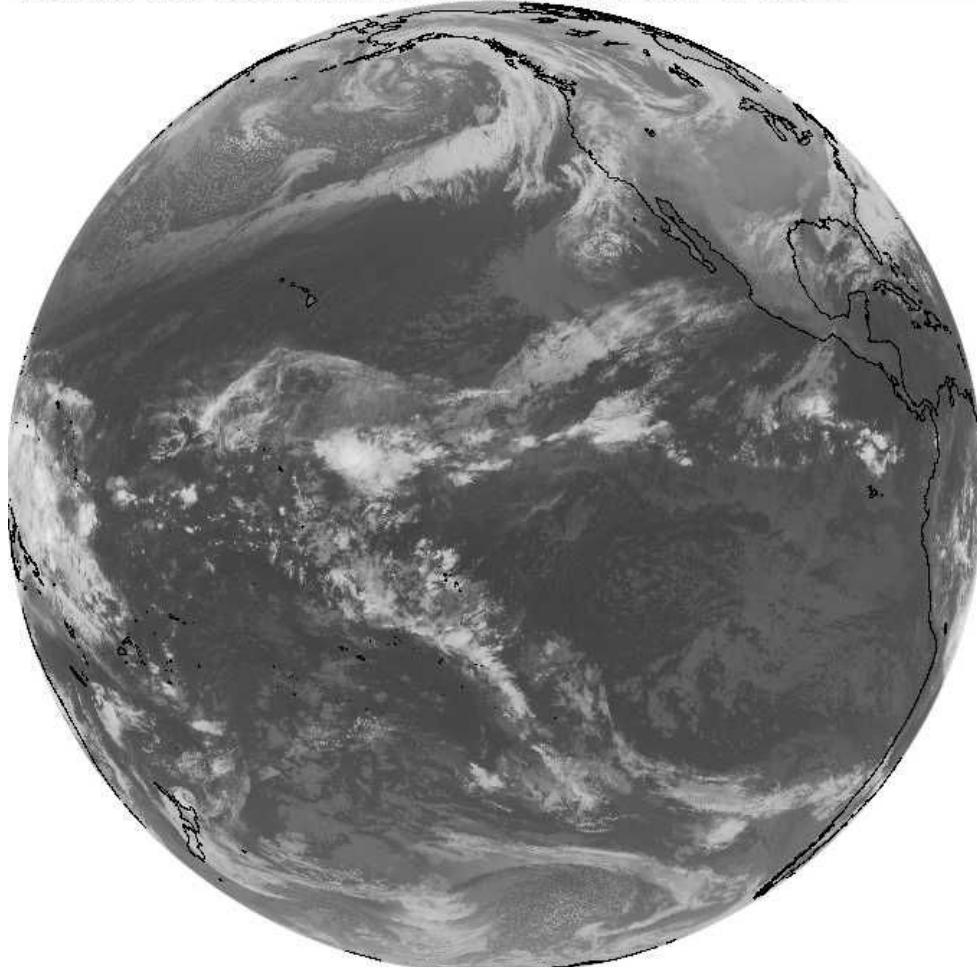


Wednesday 14Z January 27 Water Vapor Image



Wed 12Z January 27 GOES West IR Image

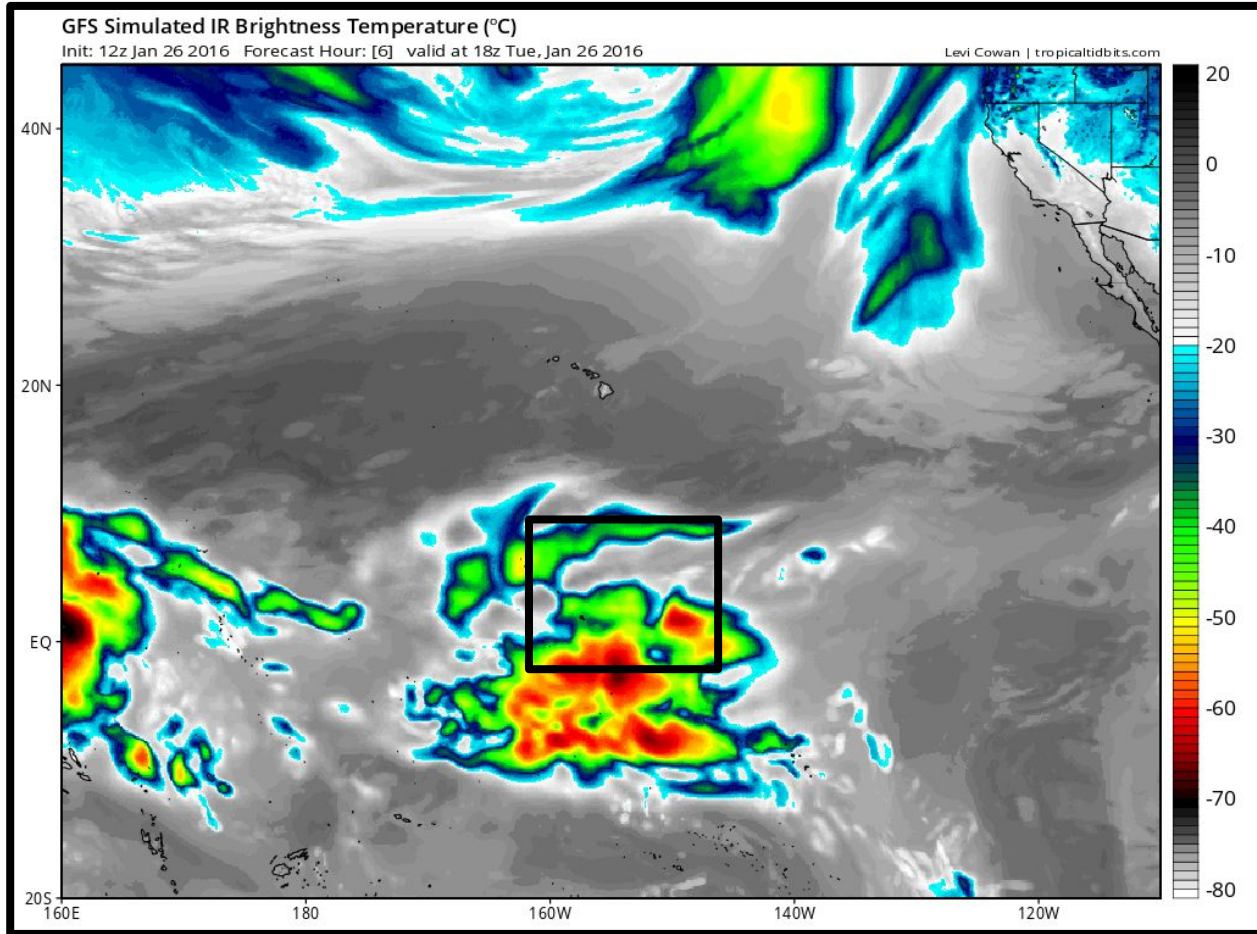
GOES WEST FULL DISK LONGWAVE IR 27 JAN 16 12:00 SSEC: UW-MADISON



2016027 120000

McIDAS

00-HR GFS 12Z Tues Jan 26 : IR Brightness Temp

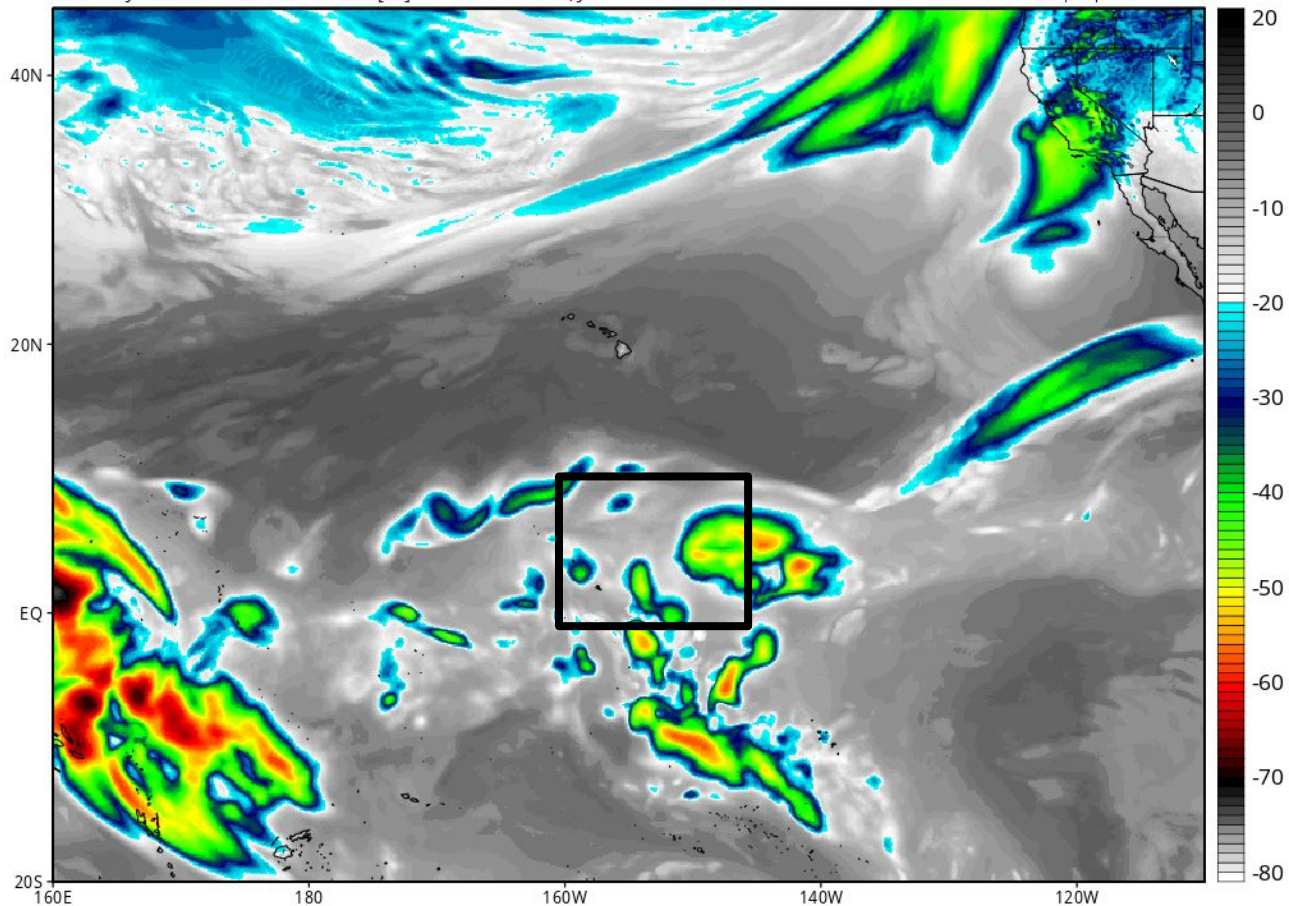


12-HR GFS 18Z WED Jan 27 : IR Brightness Temp

GFS Simulated IR Brightness Temperature (°C)

Init: 06z Jan 27 2016 Forecast Hour: [12] valid at 18z Wed, Jan 27 2016

Levi Cowan | tropicaltidbits.com

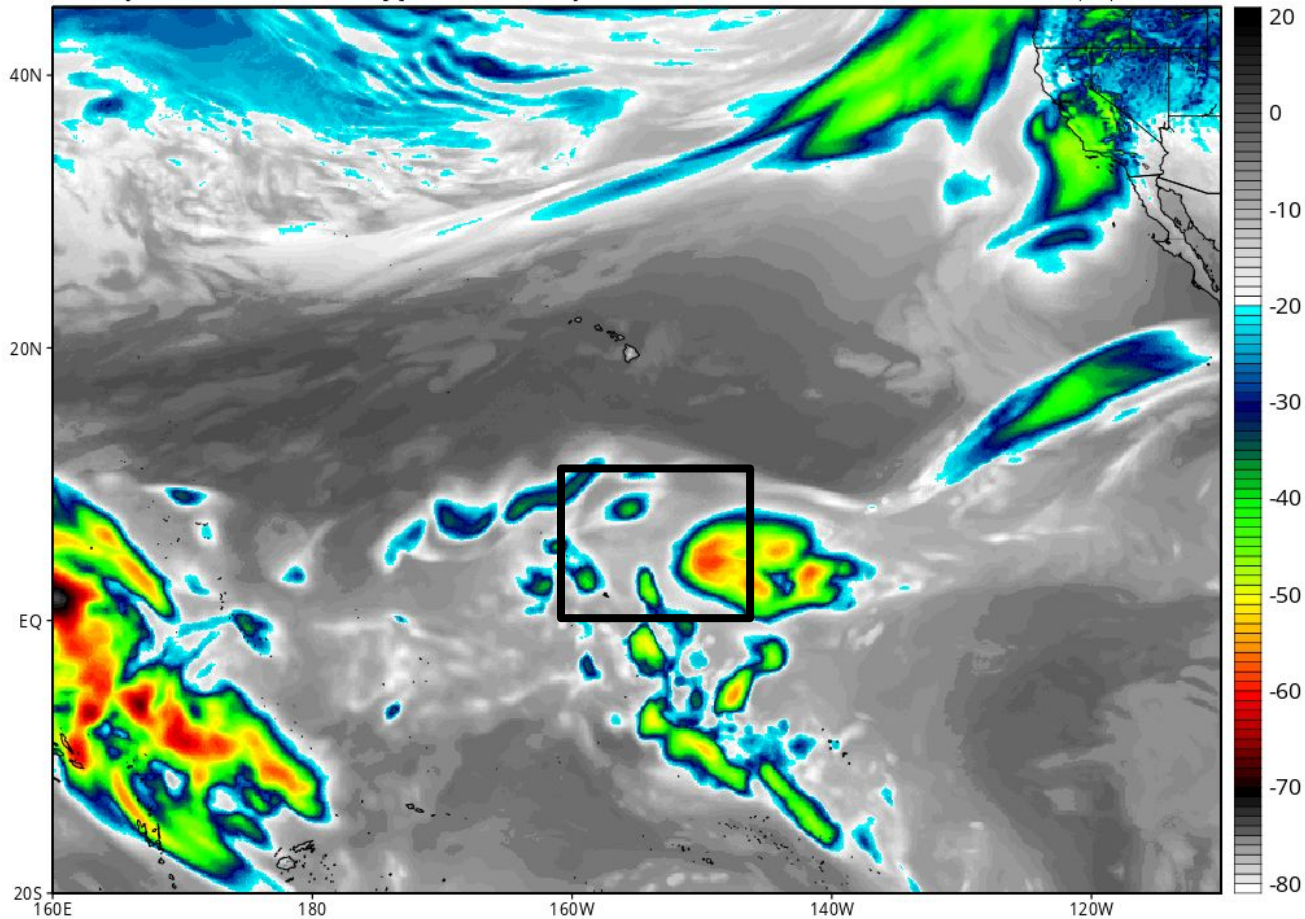


6-HR GFS 18Z WED Jan 27 : IR Brightness Temp

GFS Simulated IR Brightness Temperature (°C)

Init: 12z Jan 27 2016 Forecast Hour: [6] valid at 18z Wed, Jan 27 2016

Levi Cowan | tropicaltidbits.com

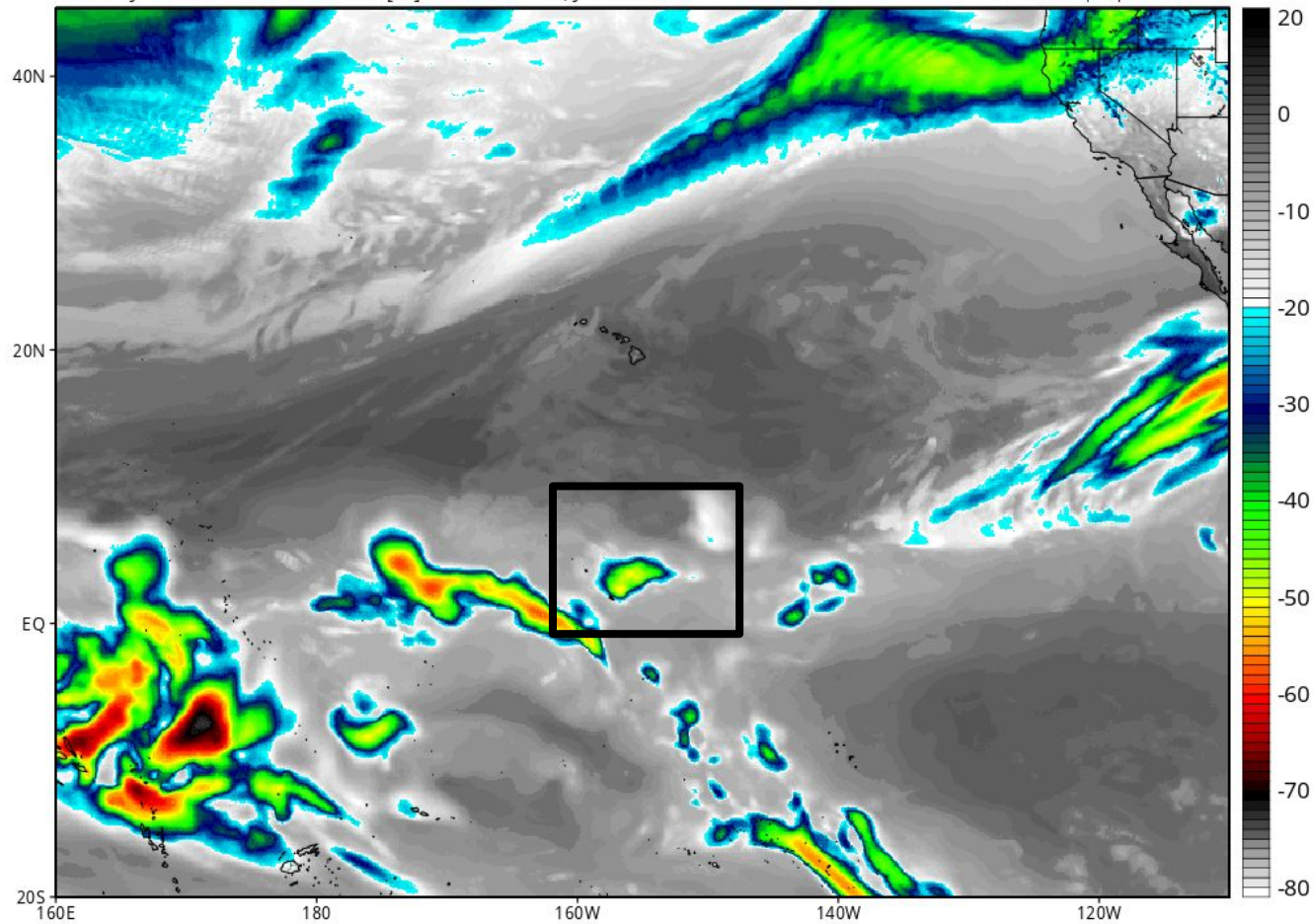


42-HR GFS 00Z FRI Jan 29 : IR Brightness Temp

GFS Simulated IR Brightness Temperature (°C)

Init: 06z Jan 27 2016 Forecast Hour: [42] valid at 00z Fri, Jan 29 2016

Levi Cowan | tropicaltidbits.com



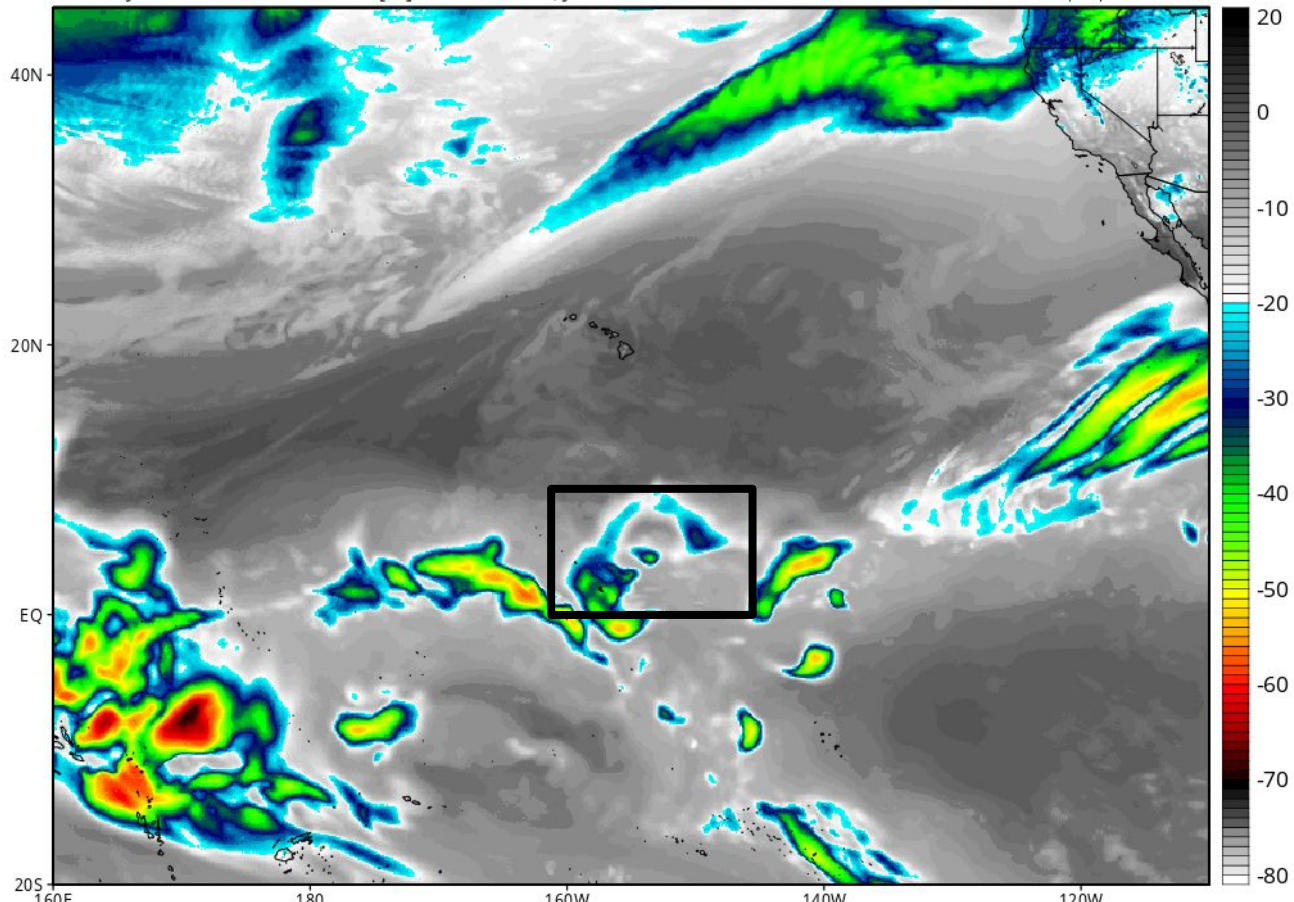
Short Term Fcsts

GFS Valid 00Z FRI Jan 29 (2PM THU HNL Time)

GFS Simulated IR Brightness Temperature (°C)

Init: 12z Jan 27 2016 Forecast Hour: [36] valid at 00z Fri, Jan 29 2016

Levi Cowan | tropicaltidbits.com

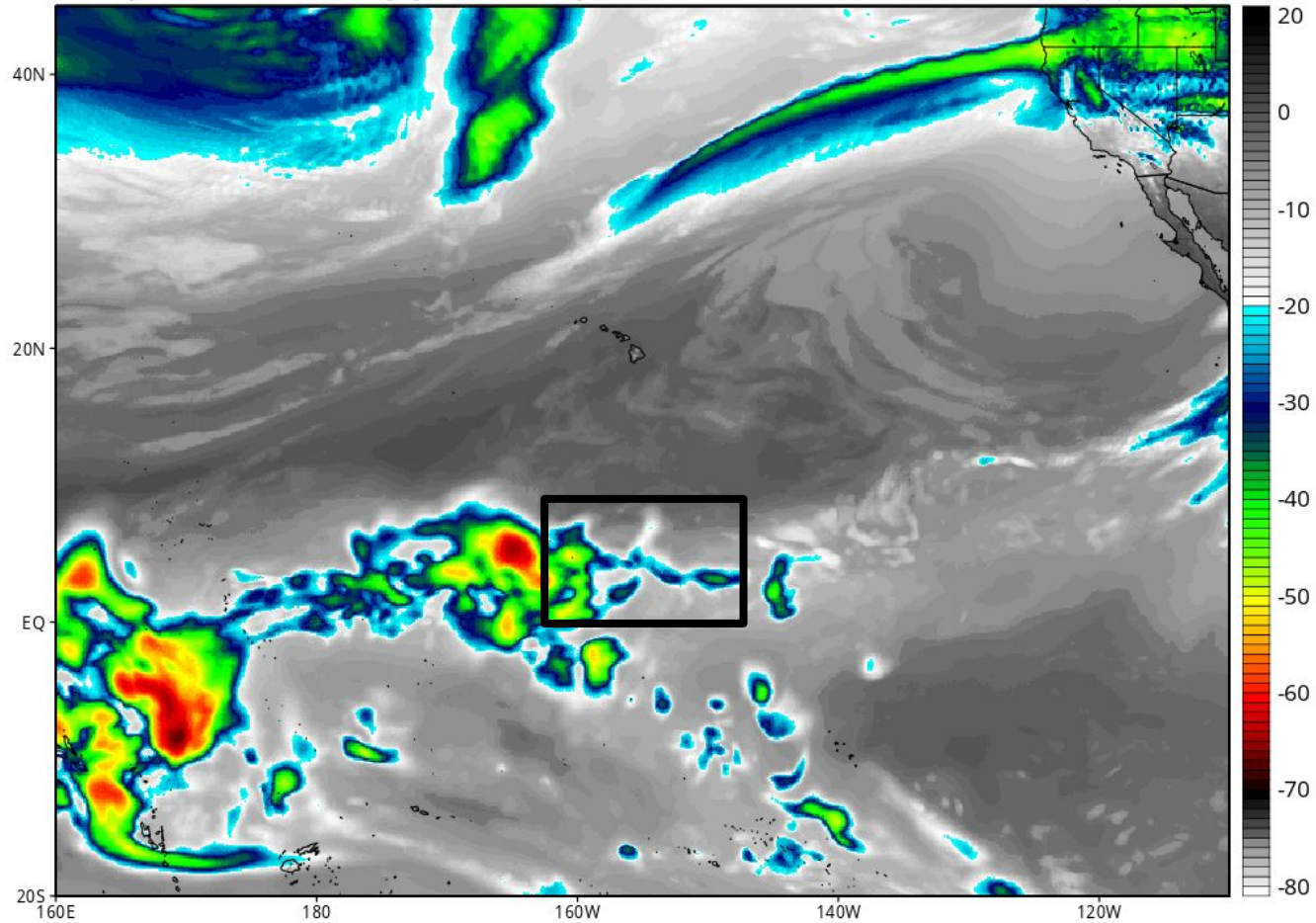


60 HR GFS --- Valid 00Z SAT Jan 30 (2PM FRI HNL Time)

GFS Simulated IR Brightness Temperature (°C)

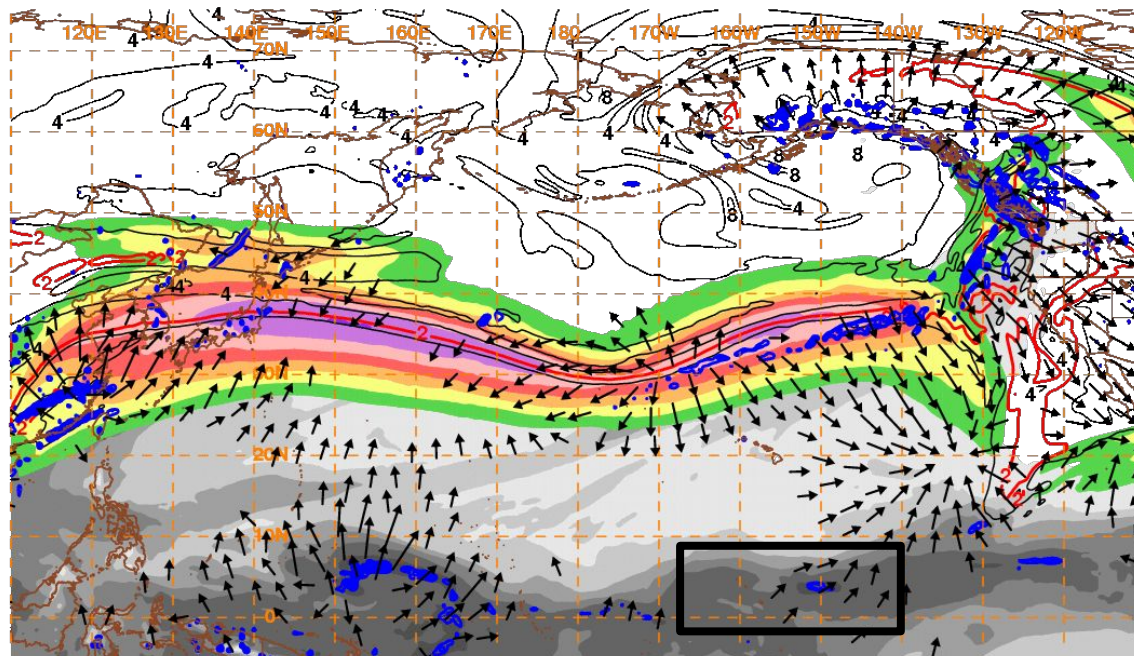
Init: 12z Jan 27 2016 Forecast Hour: [60] valid at 00z Sat, Jan 30 2016

Levi Cowan | tropicaltidbits.com

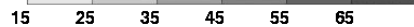


From Latest Initialization of GFS (06Z WED 27 Jan)

GFS 18-hr Fcst Valid 00Z 28 January THU (2pm local HT WED)

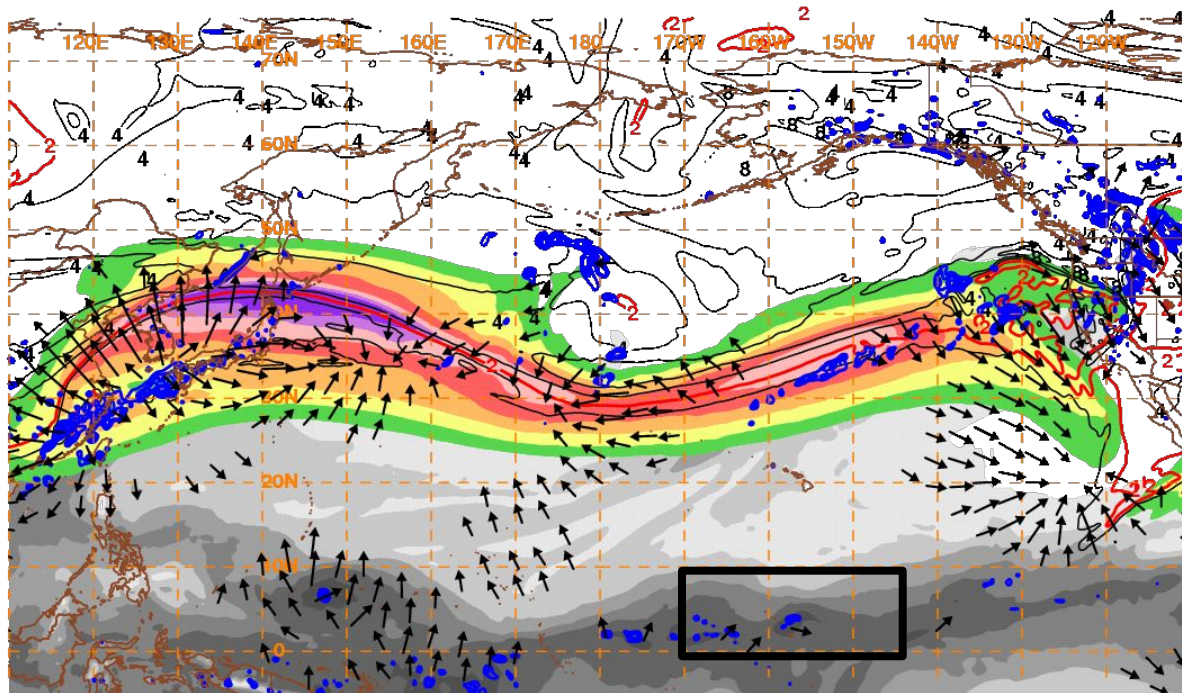


10 m/s → **160128/0000V018 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel**

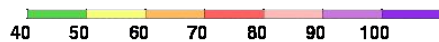


From Latest Initialization of GFS (06Z WED 27 Jan)

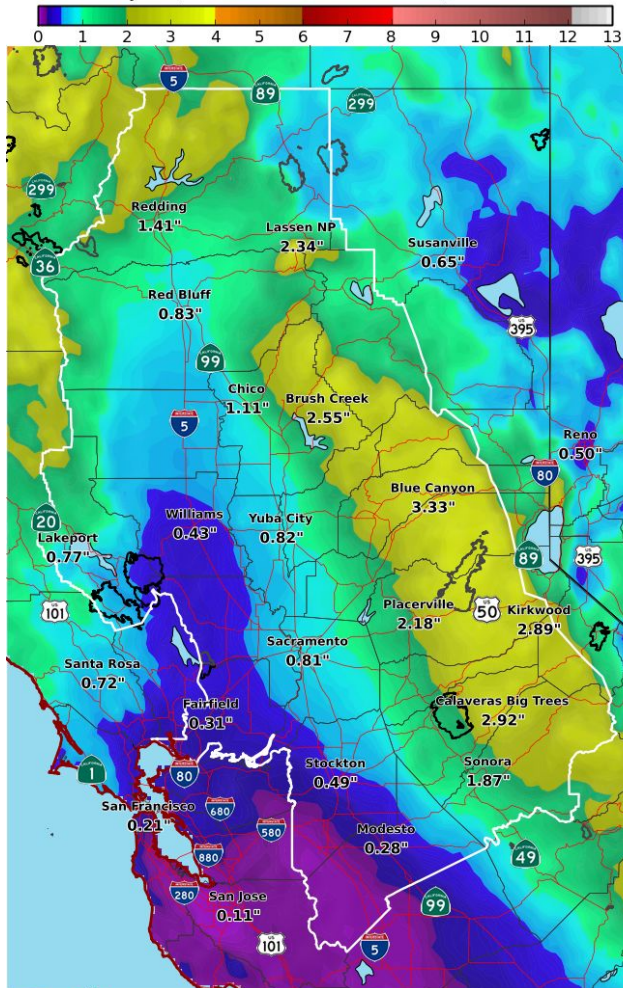
GFS 42-hr Fcst Valid 00Z 29 January FRI (2pm local HT THU)



10 m/s → 160129/0000V042 PW, 250 hPa Isotachs, PV, Irr. Wind, 500 hPa Upward Vert. Vel



6-Day Forecast Precipitation (Inches)
Valid: Tue Jan 26, 2016 at 04 AM PST to Mon Feb 01, 2016 at 04 AM PST



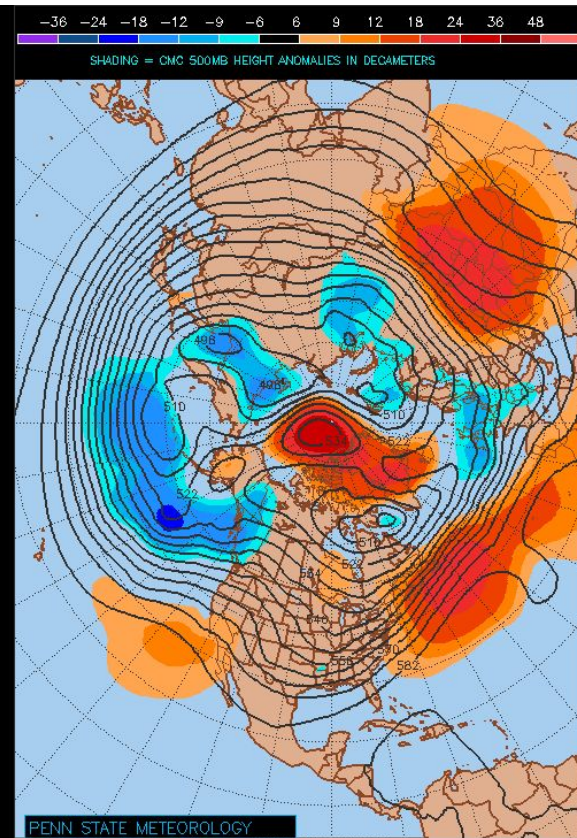
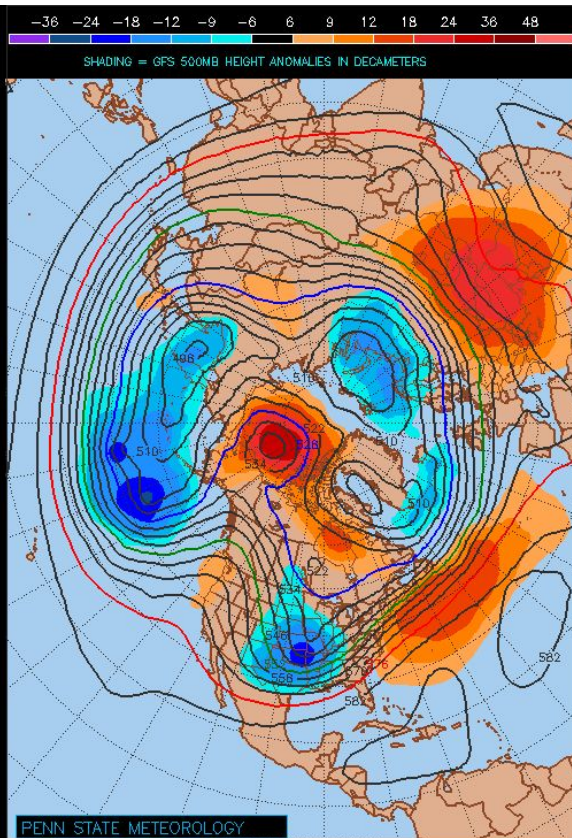
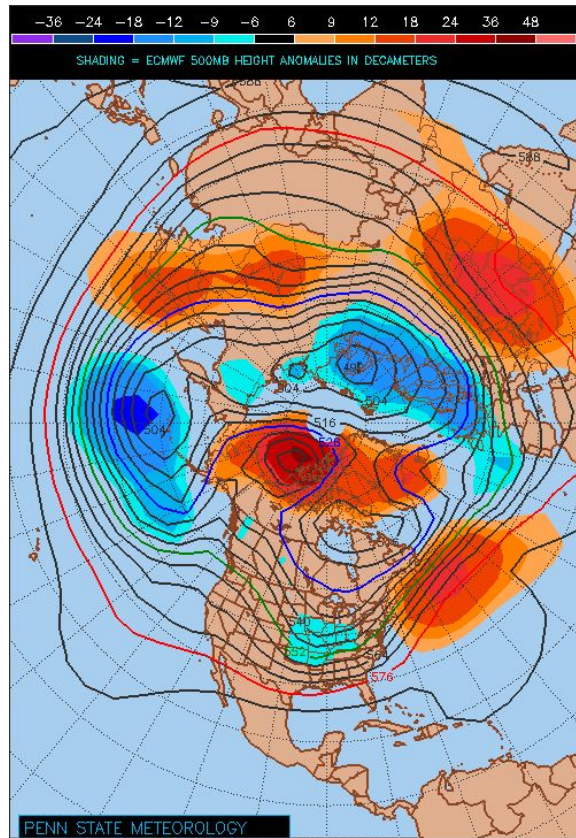
National Weather Service

Follow Us:



Medium - Long Range Forecast

3 Model Intercomparison Deterministic Fcsts of 500Z/anomalies : Day 7-10 Mean/anomalies (from 00Z WED 27 Jan initializations)



Medium - Long Range Forecast

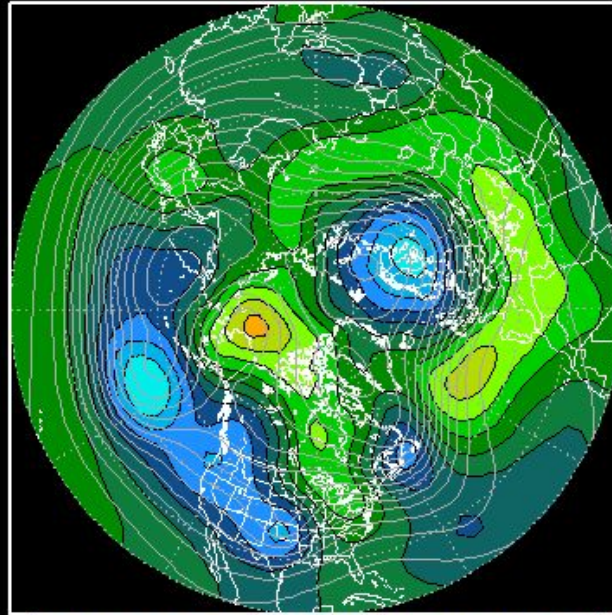
Day 9 Ensemble Mean 500Z Forecast

NCEP GEFS Ensemble 500 mb Height and Anomalies Valid OOZ Feb 3 (216 Hr Fcst)

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

216H Forecast from: 00Z Mon JAN,25 2016

Valid time: 00Z Wed FEB,03 2016



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

Medium - Long Range Forecast

Day 7 Ensemble Mean 500Z Forecast

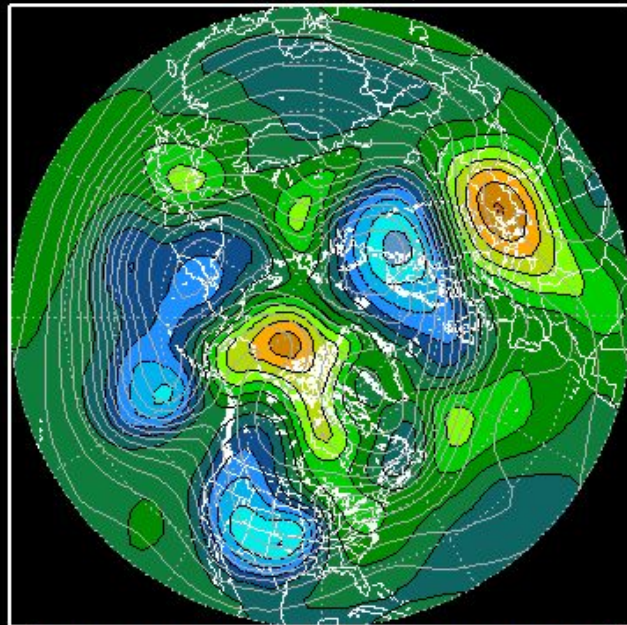
NCEP GEFS Ensemble 500 mb Height and Anomalies

Valid OOO Feb 3 (164 Hr Fcst)

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

168H Forecast from: OOO Wed JAN,27 2016

Valid time: OOO Wed FEB,03 2016

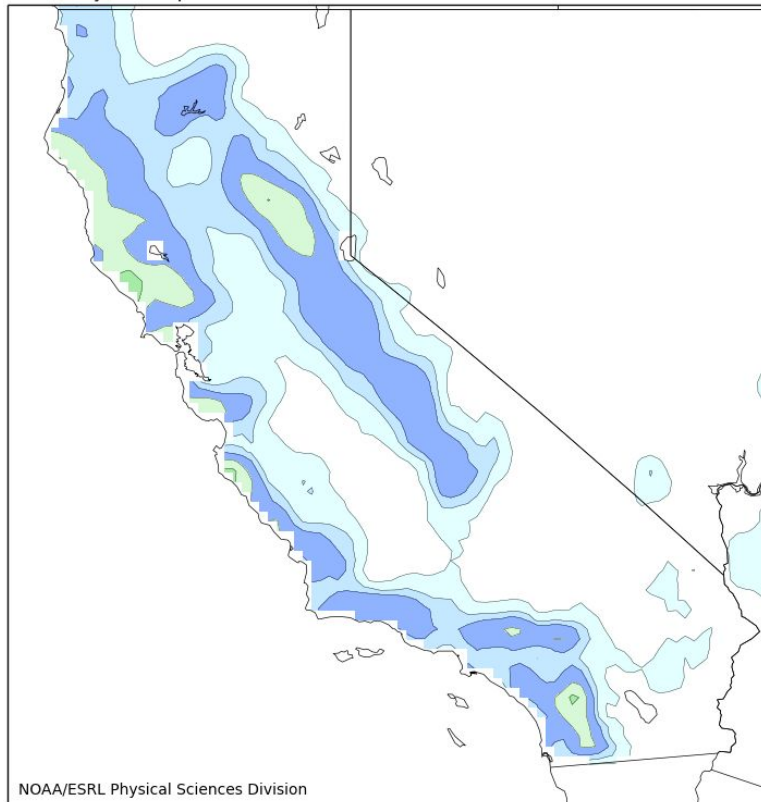


-360 -280 -200 -120 -40 40 120 200 280 360

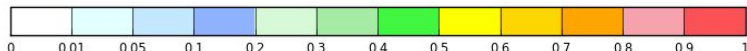
Medium - Long Range Forecast

ESRL-Calibrated Reforecast Pcpn : Day 6-10 Fcst for 00z 29 January -00z Wed February 3 (from the 00Z WED 27 JAN ensembles of the experimental reforecast system)

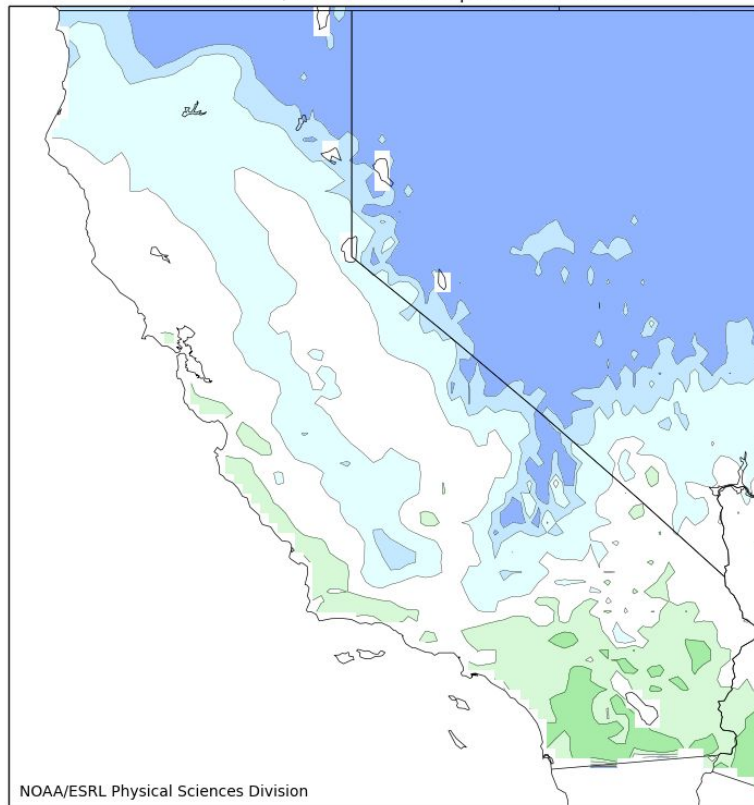
150-264hr fcst from 00Z Wed Jan 27. Valid 06Z Tue Feb 02 - 00Z Sun Feb 07
Probability of Precip > 50mm. CSGD. 2002-2013 CCPA and Reforecast2 Calibration.



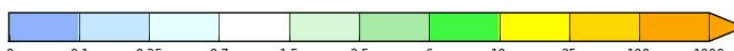
NOAA/ESRL Physical Sciences Division



150-264hr fcst from 00Z Wed Jan 27. Valid 06Z Tue Feb 02 - 00Z Sun Feb 07
Ratio. Forecast/Climo Prob of Precip > 50mm. CSGD.

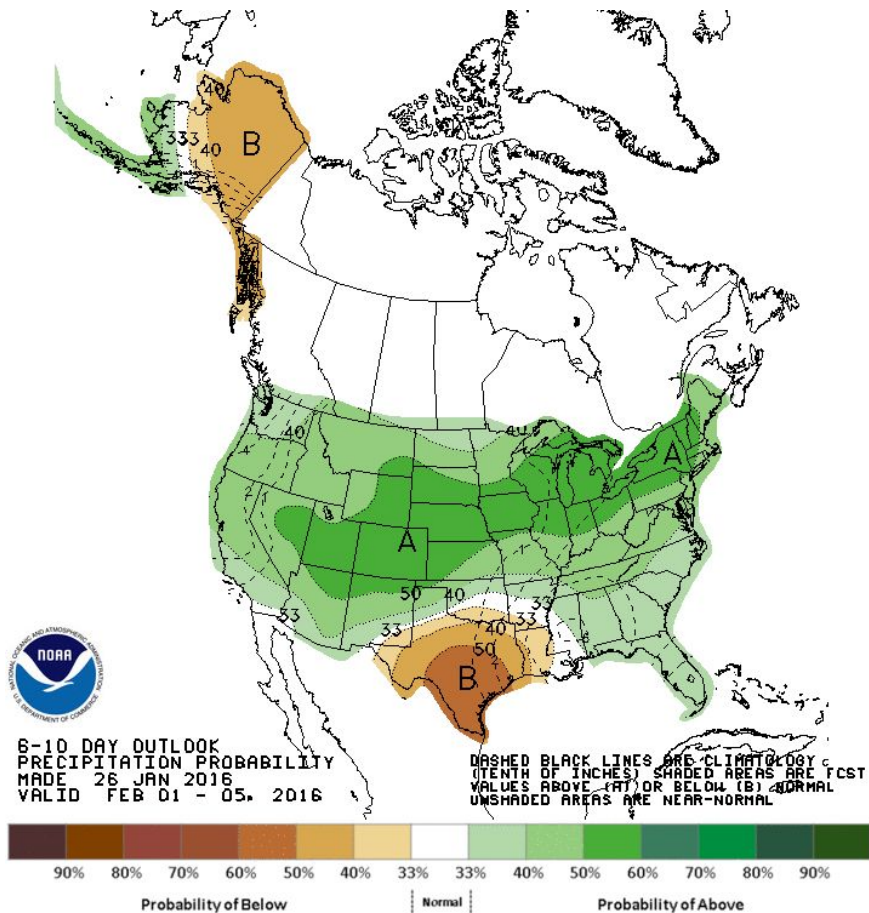


NOAA/ESRL Physical Sciences Division



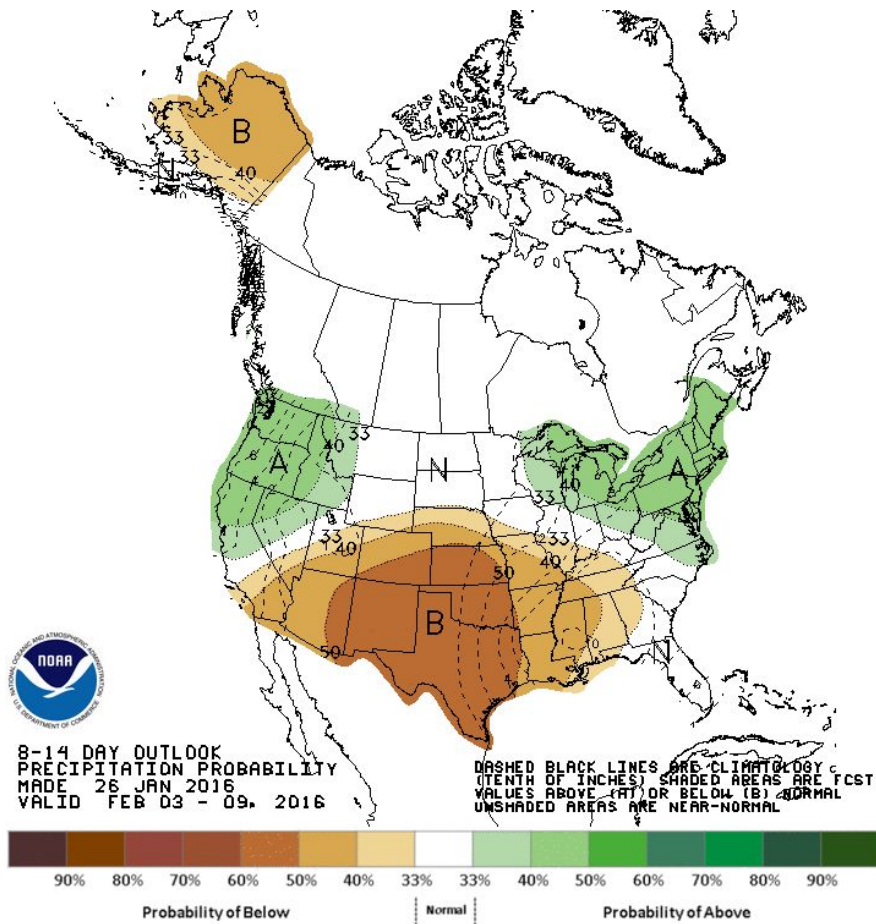
Medium - Long Range Forecast

CPC 6-10 Day Pcpn Outlook Valid 01 FEB - 05 Feb 2016



Medium - Long Range Forecast

CPC 8-14 Day Pcpn Outlook Valid 03 Feb - 09 Feb 2016



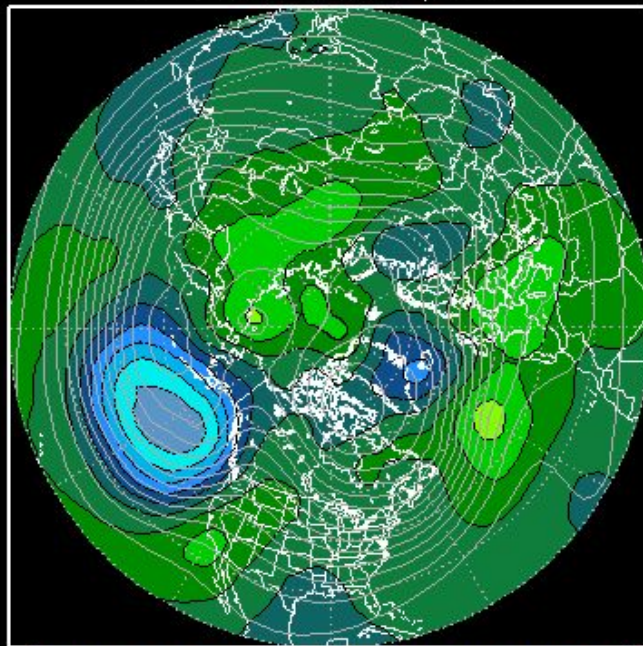
Medium - Long Range Forecast

360 Hr Fcst Ensemble Mean 500 Z Anom : Valid 8 Feb 2016

NCEP ENSEMBLE MEAN ANOMALY - 500mbZ(m)

360H Forecast from: 00Z Sun JAN,24 2016

Valid time: 00Z Mon FEB,08 2016



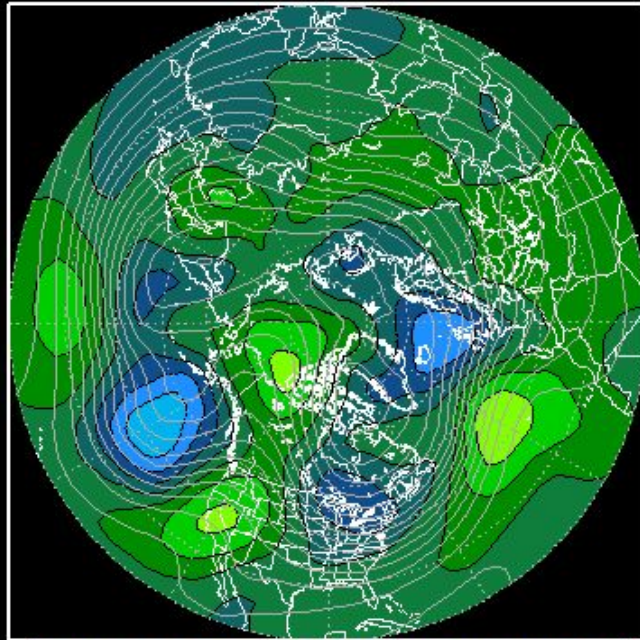
Medium - Long Range Forecast

288 Hr Fcst Standardized Ensemble Mean 500 Z Anom : Valid 8 Feb 2016

NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)

288H Forecast from: 00Z Wed JAN,27 2016

Valid time: 00Z Mon FEB,08 2016

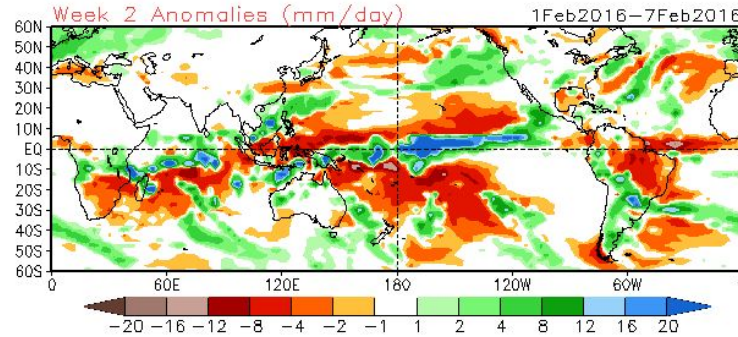
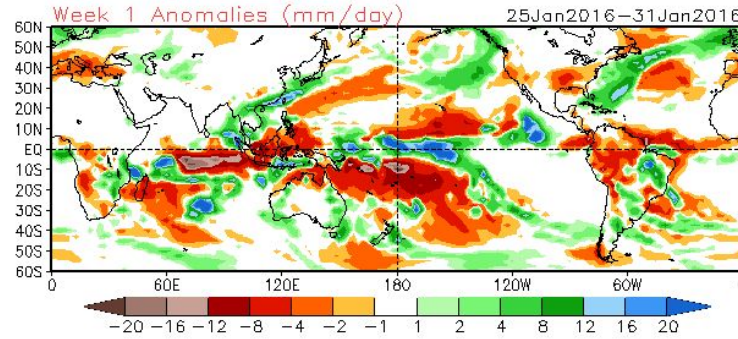


Medium - Long Range Forecast

CFS Week 1 and Week 2 PCPN Anomalies: Jan 24 initialized

CFSv2 Weeks 1 & 2 Precipitation

16 Member Ensemble Mean Forecast from 24Jan2016

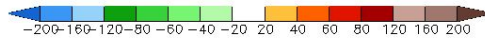
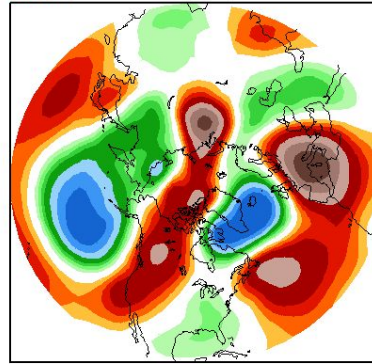


Medium - Long Range Forecast

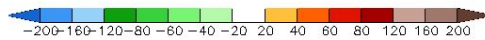
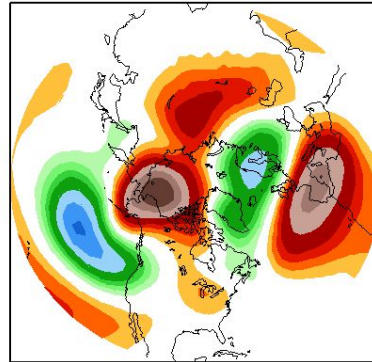
CFS Week 1 and Week 2 500 mb Height Anomalies: Jan 23 initialized

CFSv2 Weeks 1 & 2 500 hPa Z Anomalies (m)
16 Member Ensemble Mean Forecast from 24Jan2016

Week 1 25Jan2016-31Jan2016



Week 2 1Feb2016-7Feb2016



Medium - Long Range Forecast

CFS Week 1 and Week 2 NA Pcpn Anomalies: Jan 23 initialized

CFSv2 Weeks 1 & 2 Precipitation
16 Member Ensemble Mean Forecast from 24Jan2016

