



Idaho Weather, Climate and Water Supply Outlook

IDWR Briefing, April 8th 2010

Jay Breidenbach, NOAA National Weather Service

National Snow Pack Animation

Temperature and Precipitation Anomalies

Stream Response

Forecast for next 10 days

El-Nino Status

Three Month Climate Outlook

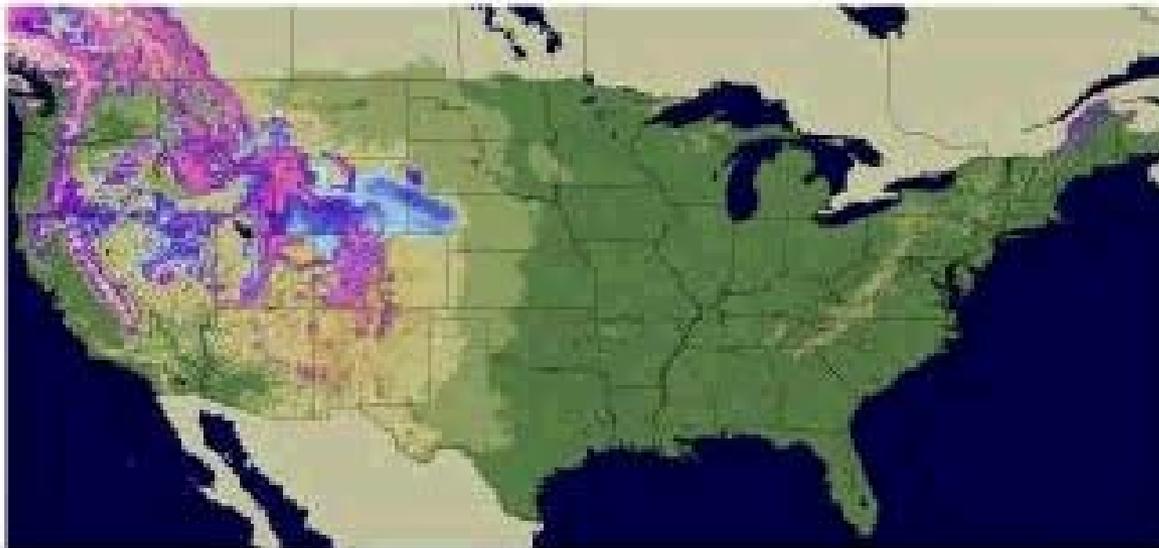
Stream Volumes and Peak Flows – Below Average



National Snow Pack Animation - 2010

OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP

Snow Water Equivalent
2010-01-01 to 01



Start

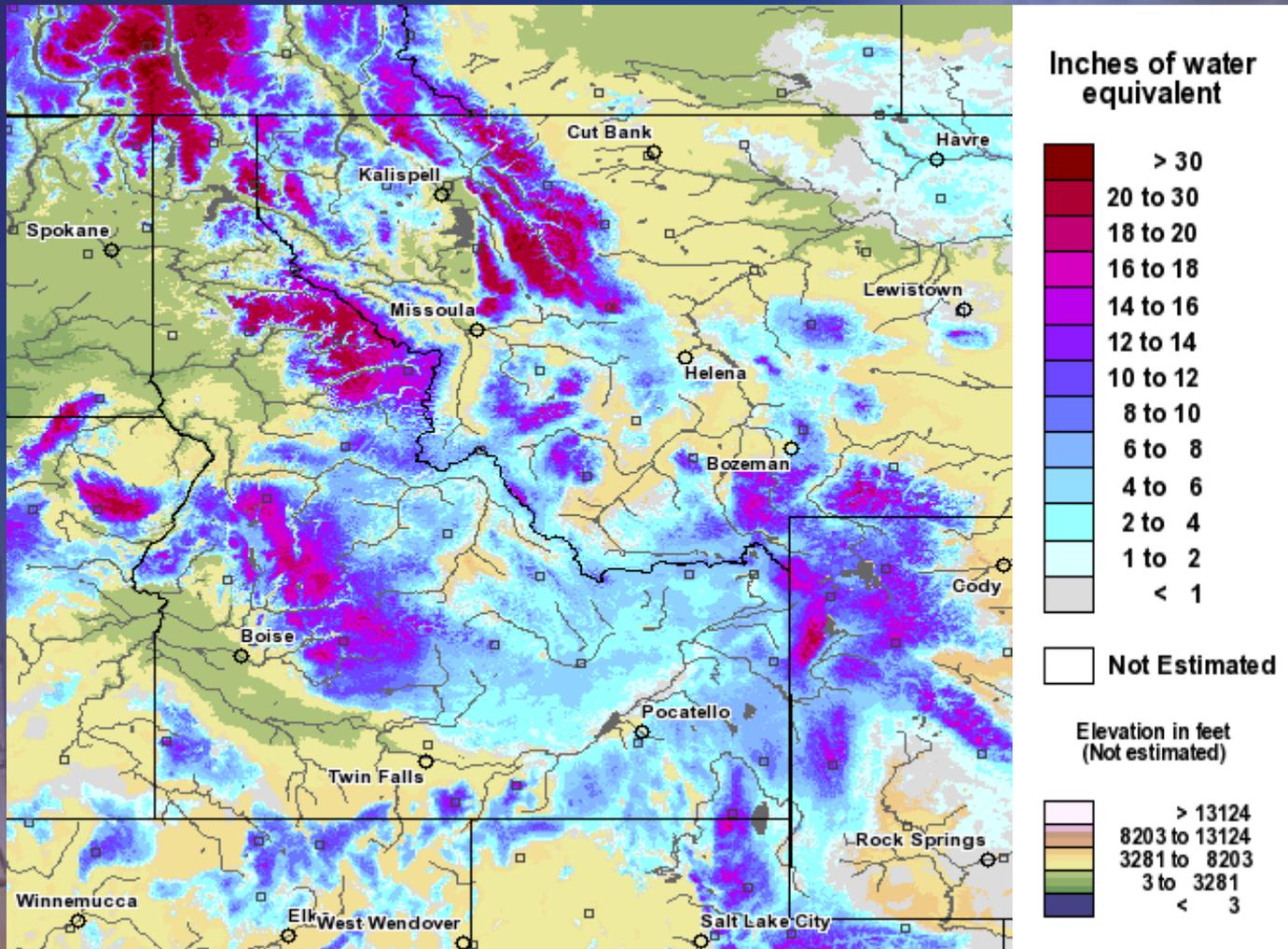
Speed in ms: 200

Apr 7th, 05Z



Snow Water Equivalent

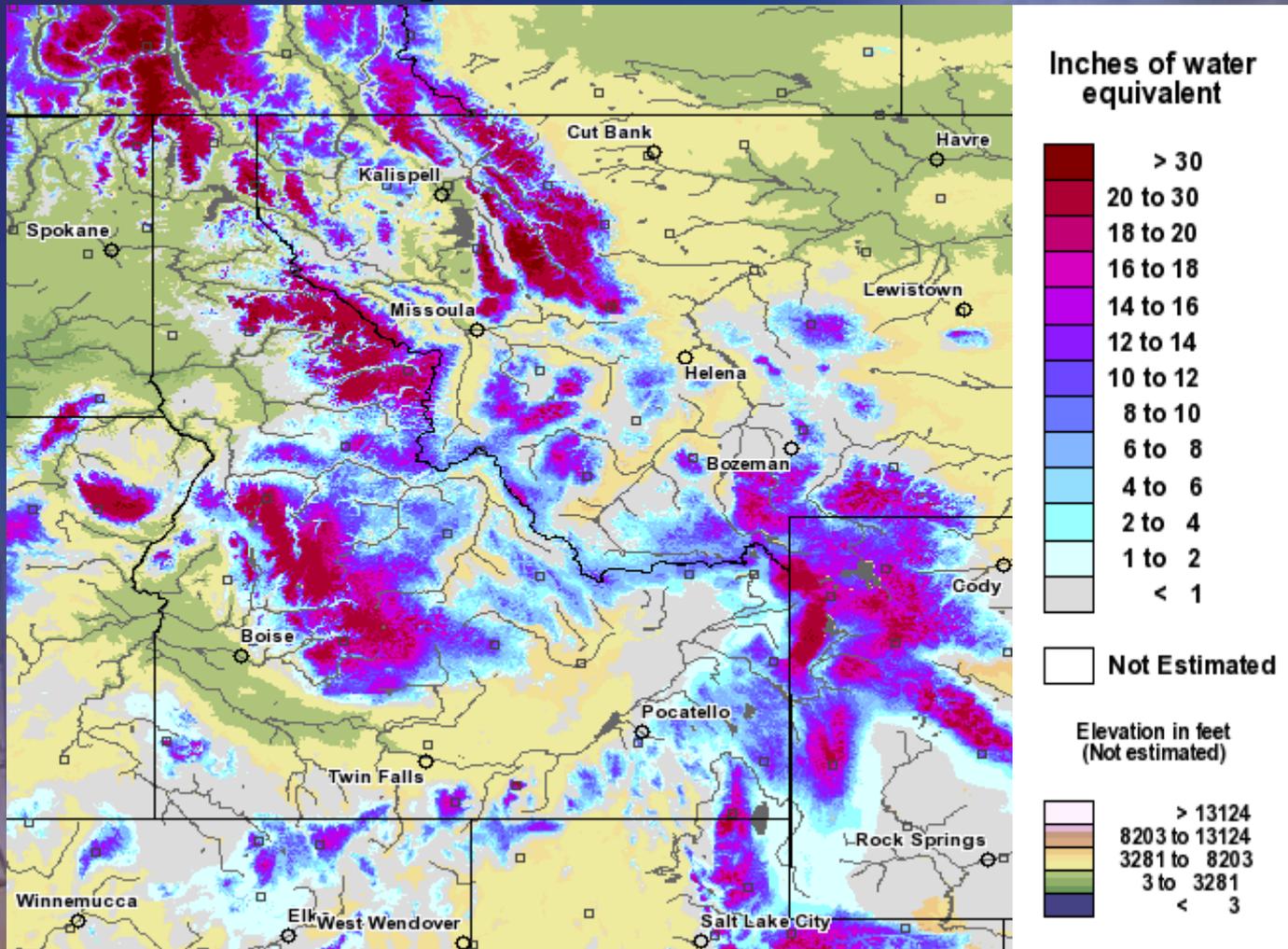
March 7th, 2010





Snow Water Equivalent

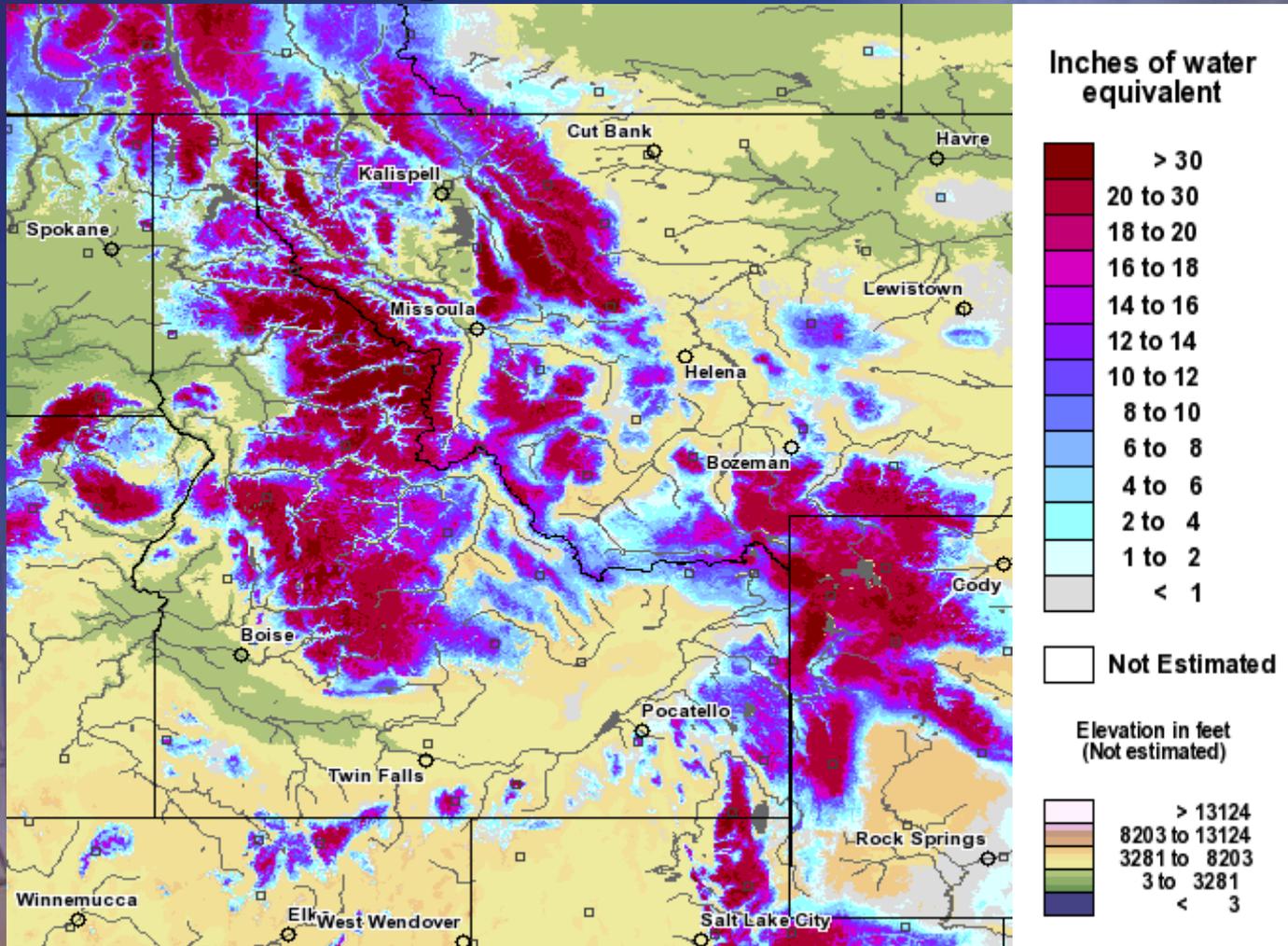
April 7th, 2010





Snow Water Equivalent

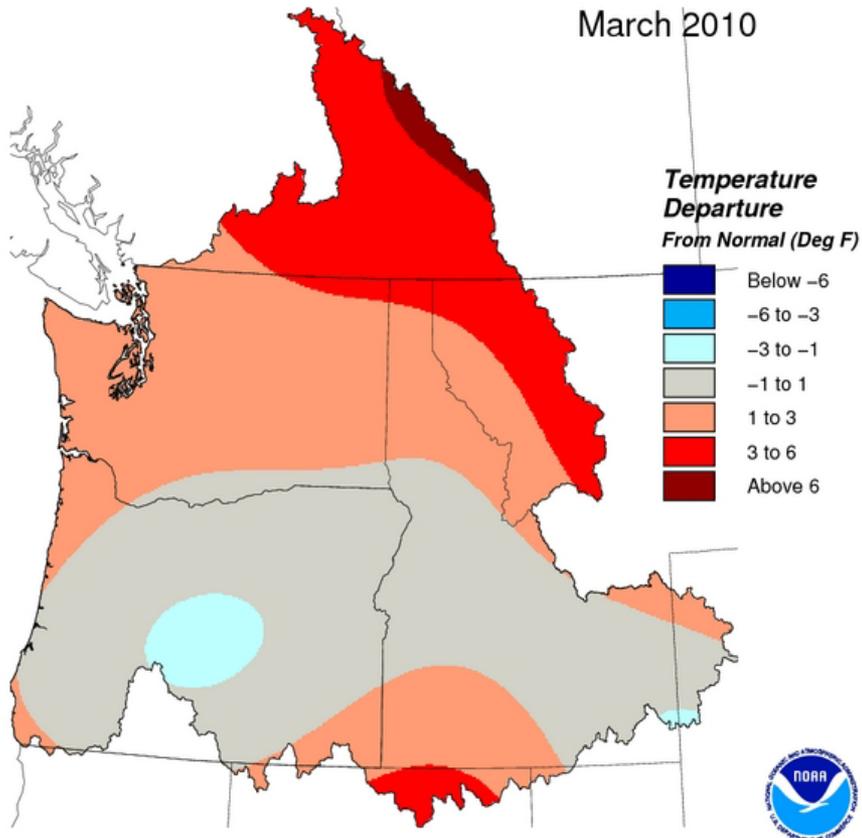
April 7th, 2009





Pacific NW Temp and Precip

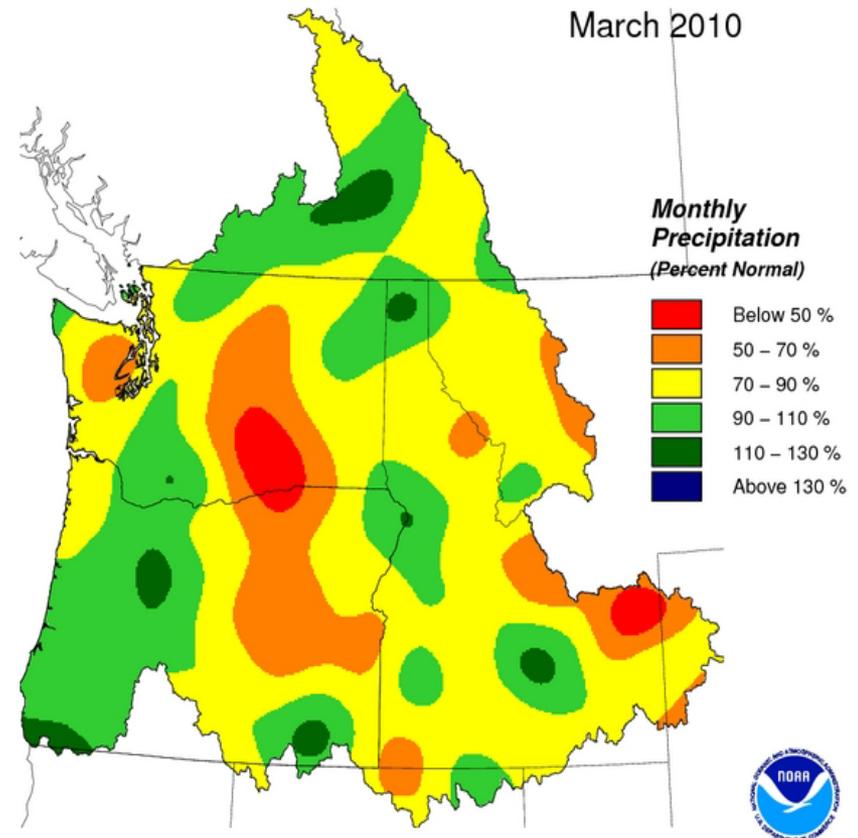
Temperature Departure
March 2010



Creation Time: Wed, Apr 7, 2010

Northwest River Forecast Center

Monthly Precipitation
March 2010



Creation Time: Wed, Apr 7, 2010

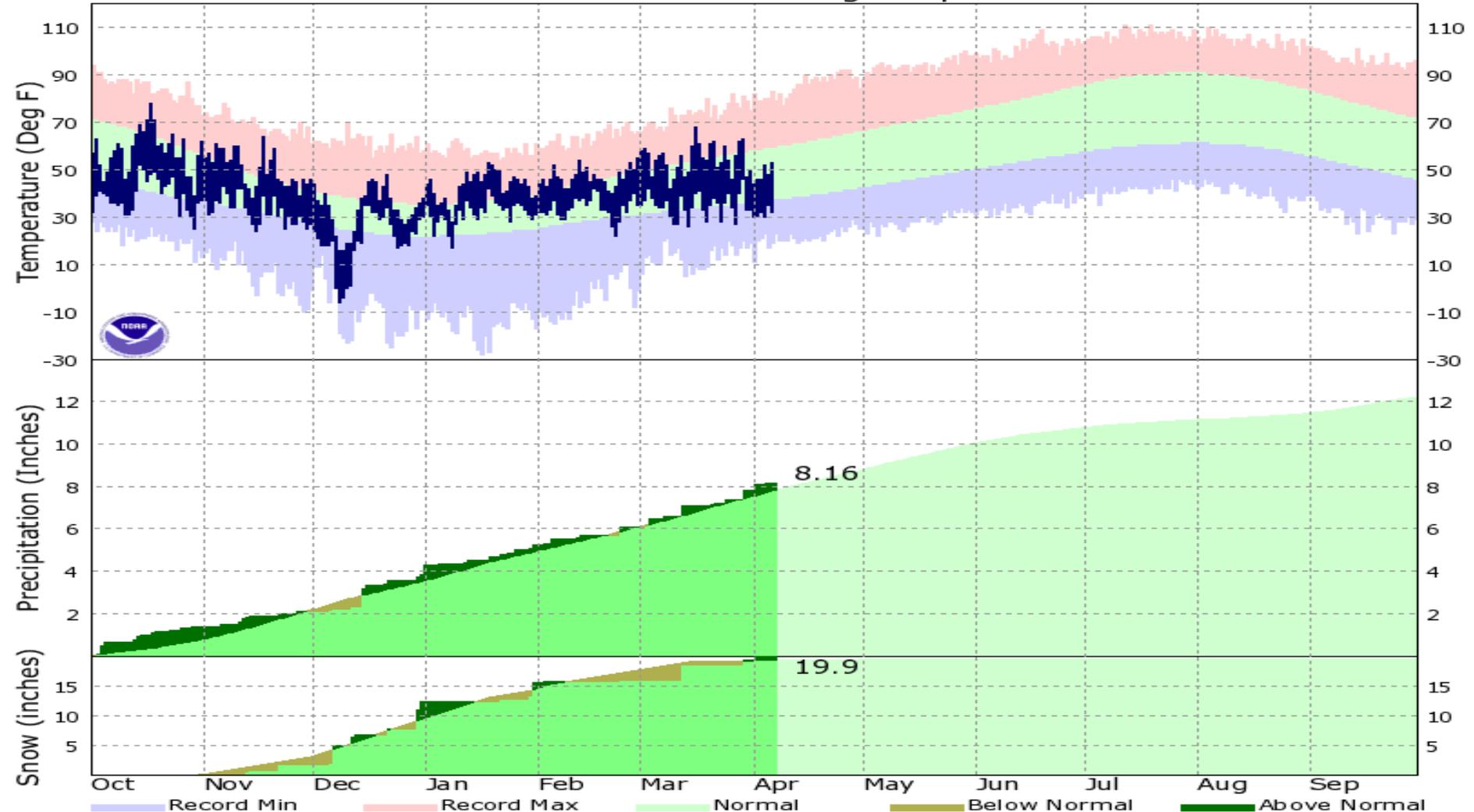
Northwest River Forecast Center



Temperature and Precipitation at Boise

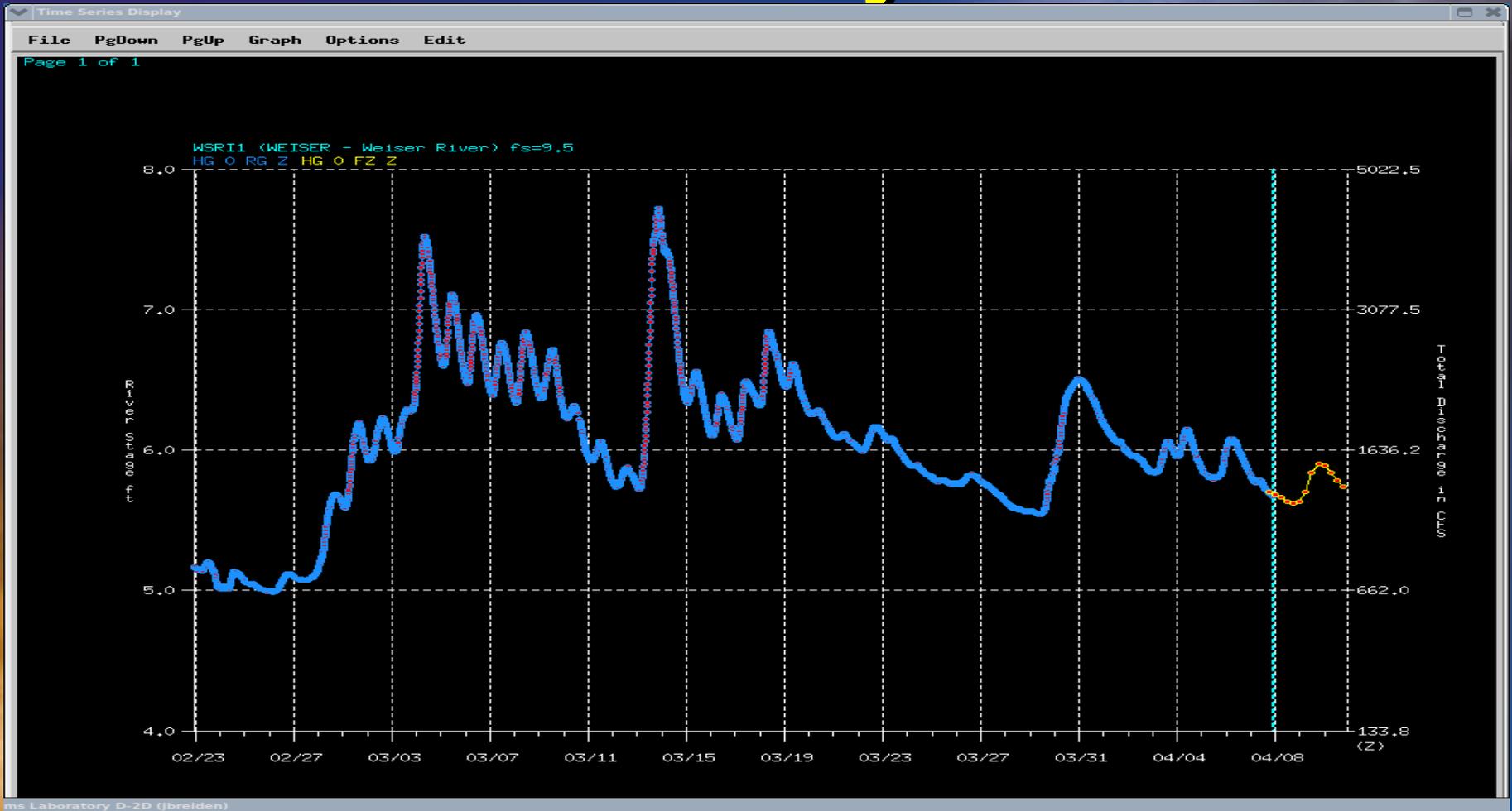


KBOI - Oct 2009 Through Sep 2010





Cooler Weather Slows Runoff after early start



Weiser River



Rain event in Owyhee Basin





High Elevation Runoff slow to start



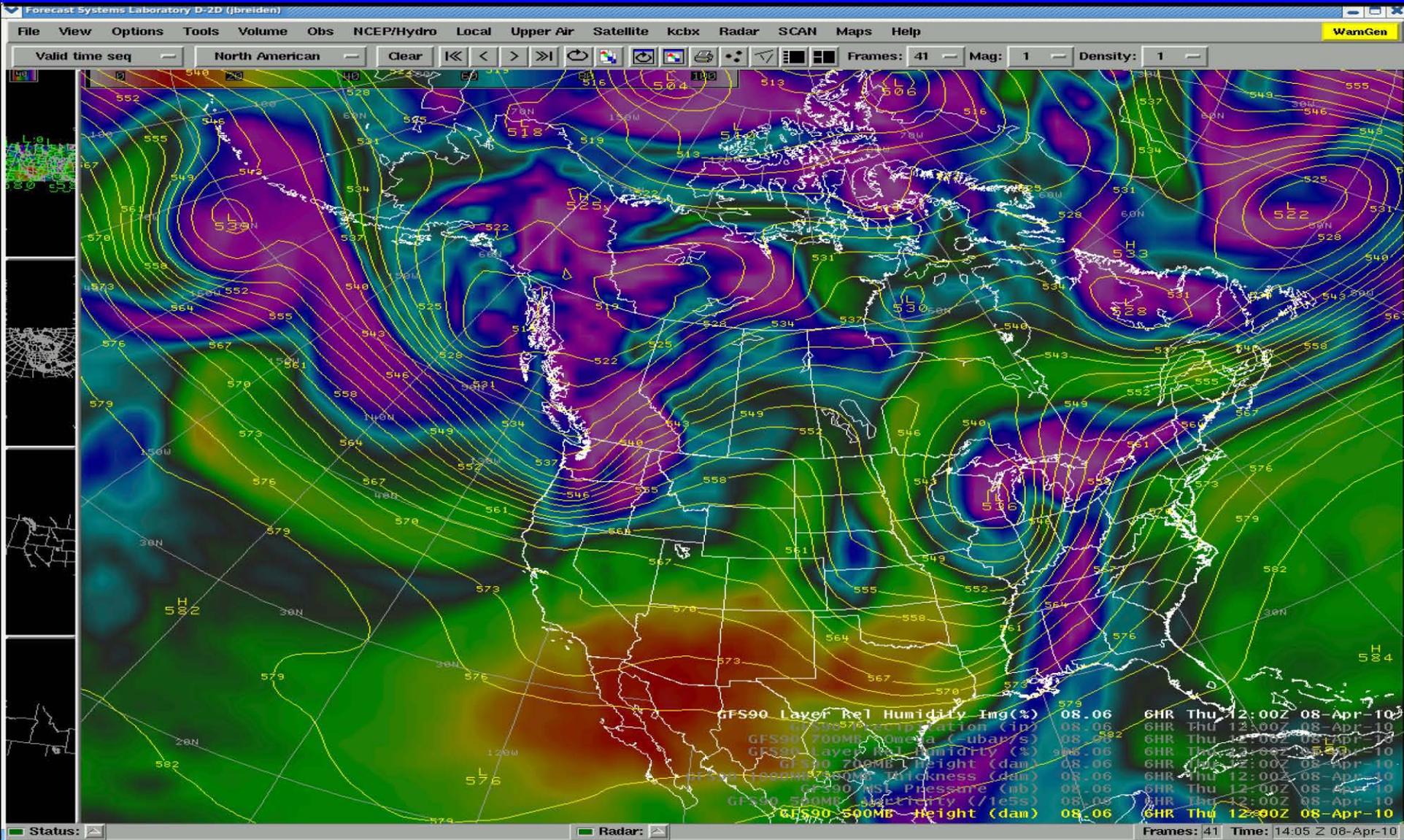


High Elevation Runoff slow to start

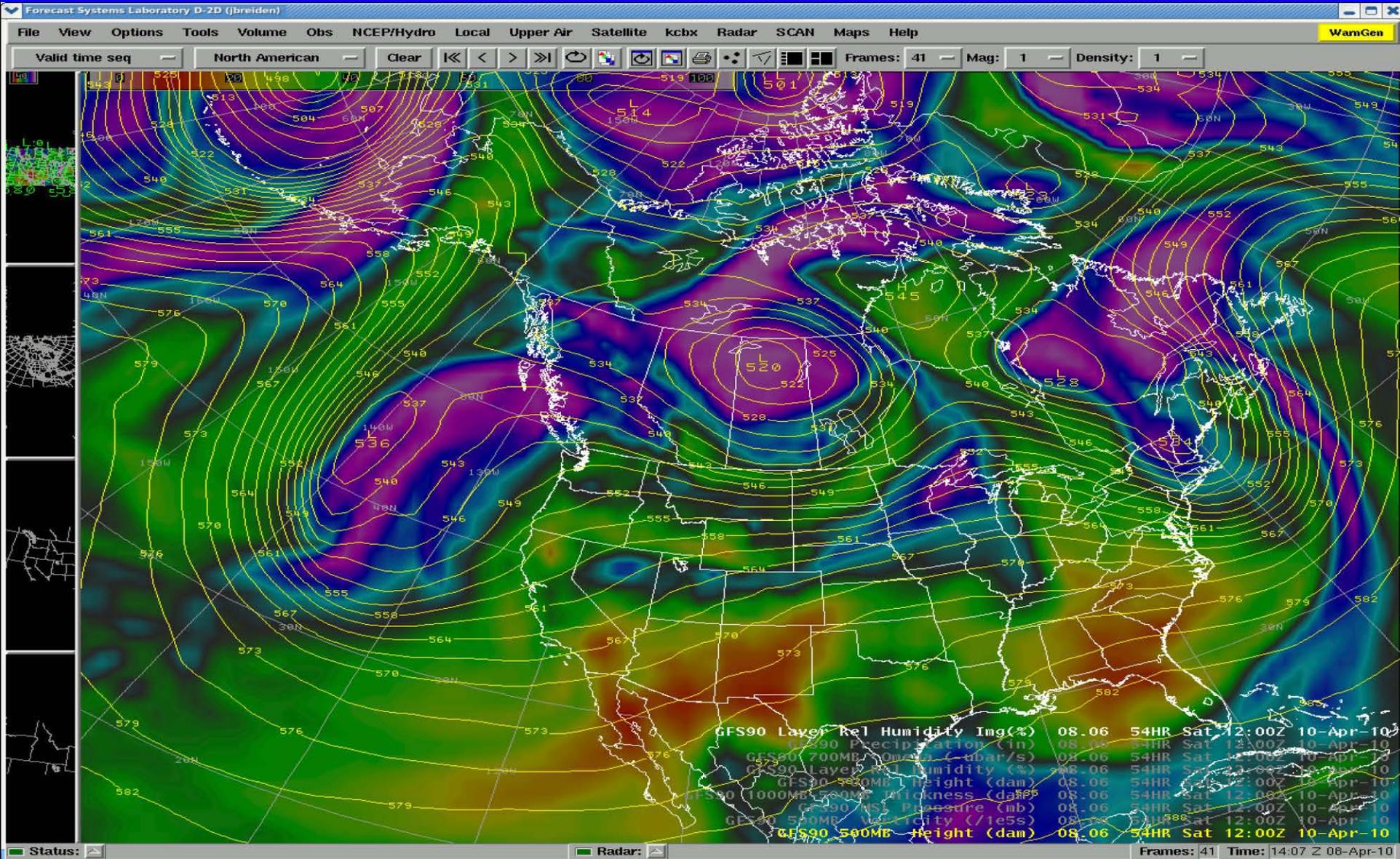


Thursday - Apr 8th

500 mb heights / model precipitation



Saturday, Apr 10th



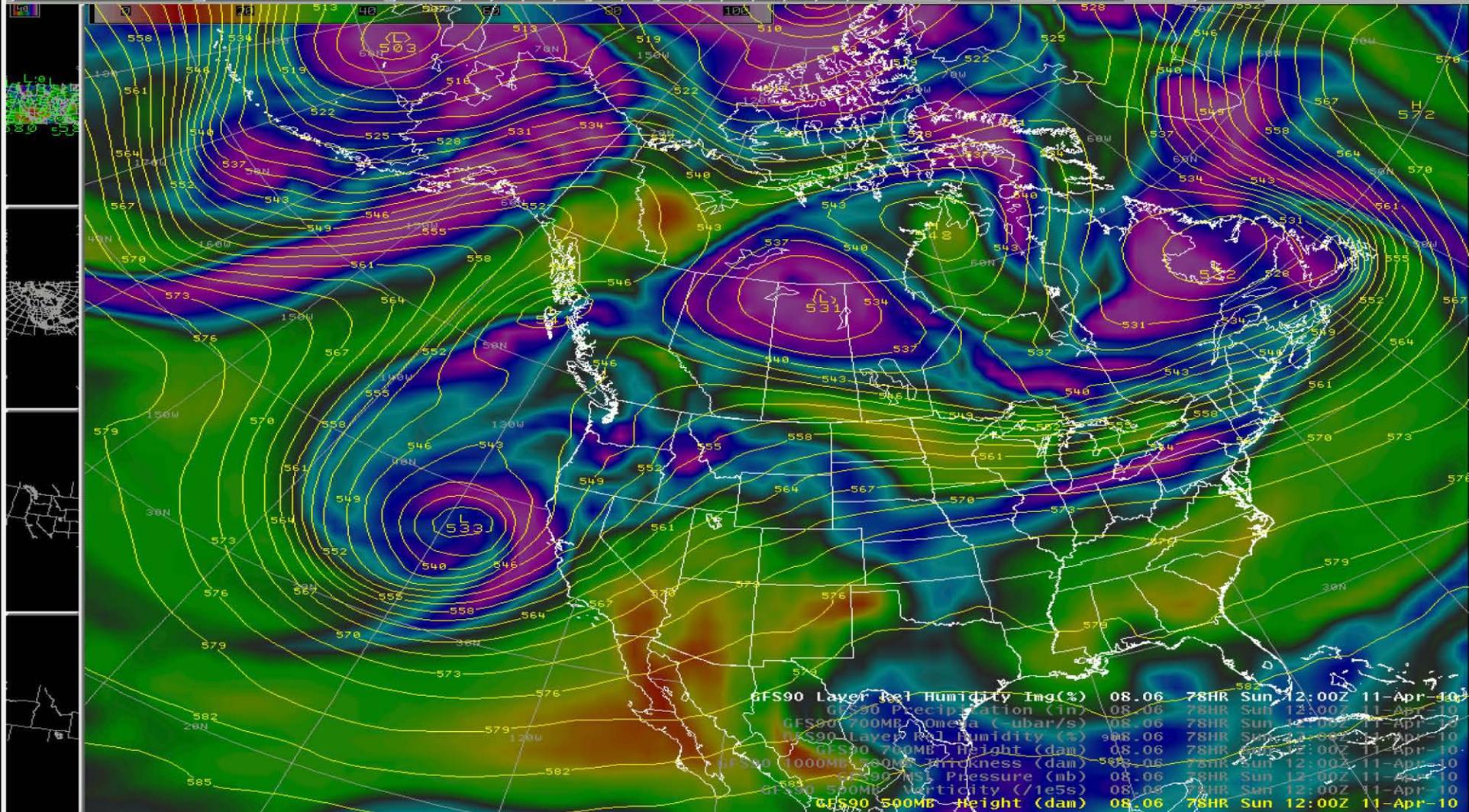
Sunday, Apr 11th

Forecast Systems Laboratory D-2D (jbreiden)

WamGen

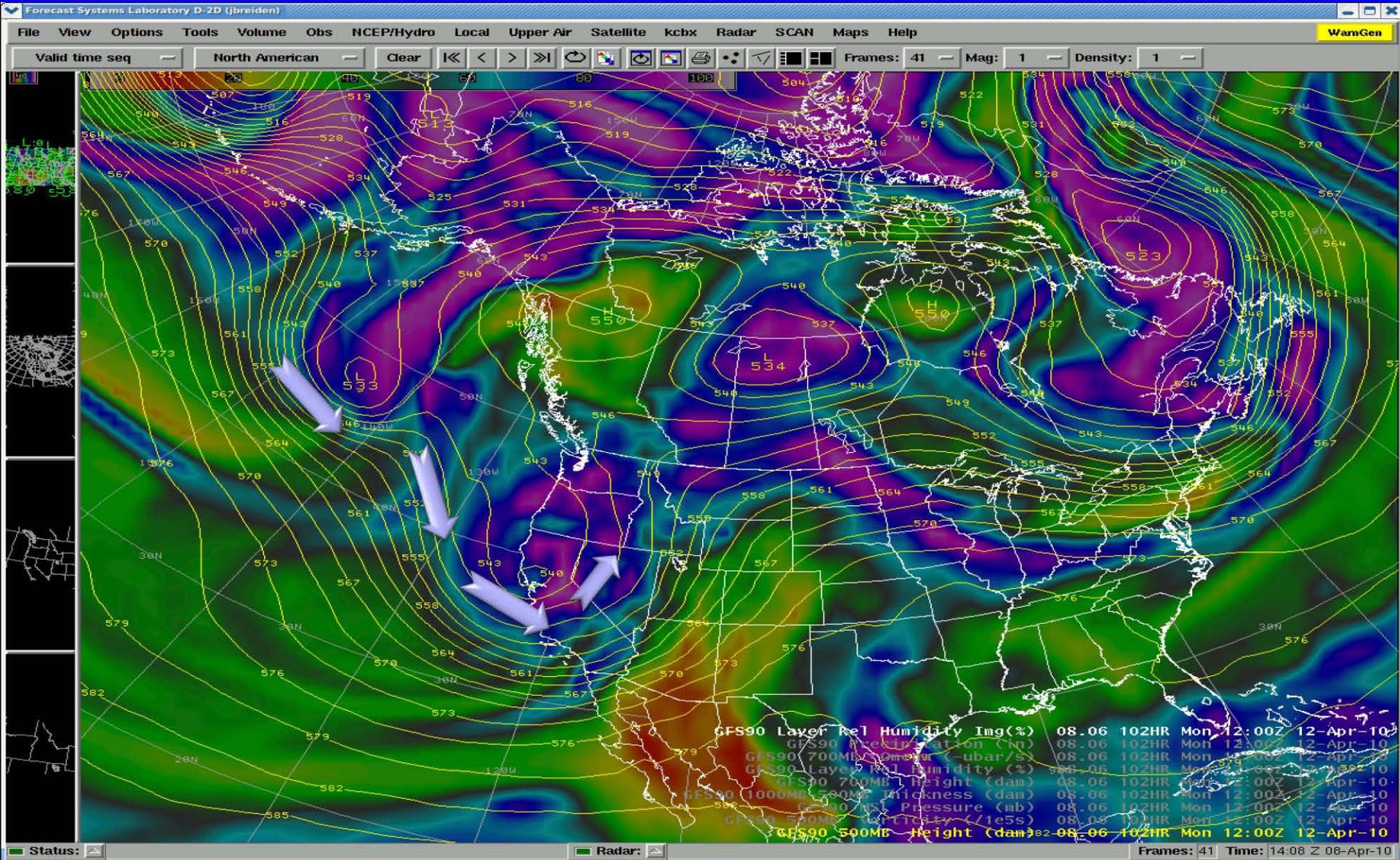
File View Options Tools Volume Obs NCEP/Hydro Local Upper Air Satellite kcbx Radar SCAN Maps Help

Valid time seq North American Clear << < > >> Frames: 41 Mag: 1 Density: 1



Variable	Time	Value
GFS90 Layer Rel Humidity (mg%)	08.06 78HR Sun 12:00Z 11-Apr-10	
GFS90 Precipitation (in)	08.06 78HR Sun 12:00Z 11-Apr-10	
GFS90 700MB Omega (-ubar/s)	08.06 78HR Sun 12:00Z 11-Apr-10	
GFS90 Layer Rel Humidity (%)	08.06 78HR Sun 12:00Z 11-Apr-10	
GFS90 700MB Height (dam)	08.06 78HR Sun 12:00Z 11-Apr-10	
GFS90 700MB Air Mass Thickness (dam)	08.06 78HR Sun 12:00Z 11-Apr-10	
GFS90 700MB Pressure (mb)	08.06 78HR Sun 12:00Z 11-Apr-10	
GFS90 500MB Vorticity (/1e5s)	08.06 78HR Sun 12:00Z 11-Apr-10	
GFS90 500MB Height (dam)	08.06 78HR Sun 12:00Z 11-Apr-10	

Monday, Apr 12th



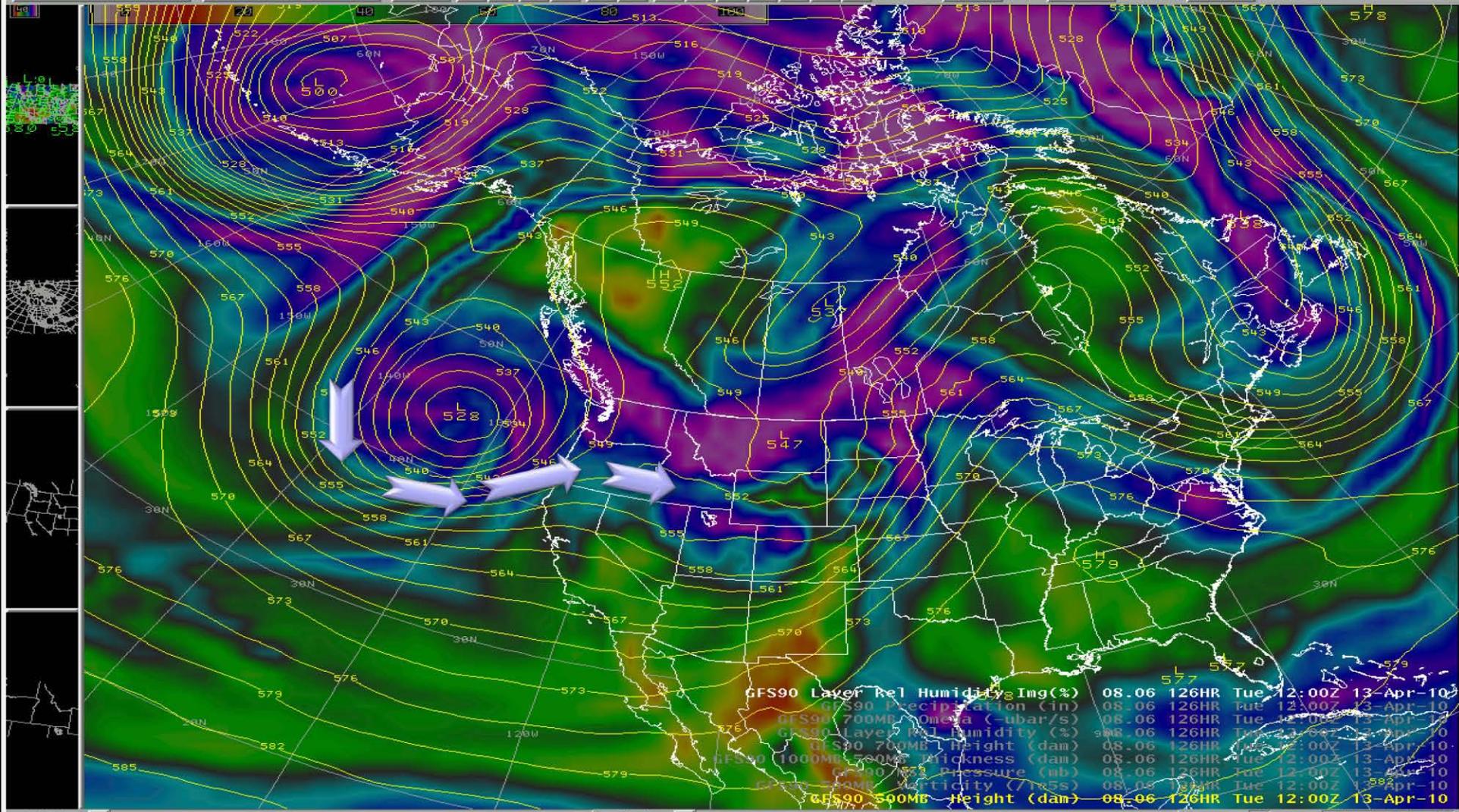
Tuesday, Apr 13th

Forecast Systems Laboratory D-2D (jbreiden)

WamGen

File View Options Tools Volume Obs NCEP/Hydro Local Upper Air Satellite kcbx Radar SCAN Maps Help

Valid time seq North American Clear << >> Frames: 41 Mag: 1 Density: 1



Status:

Radar:

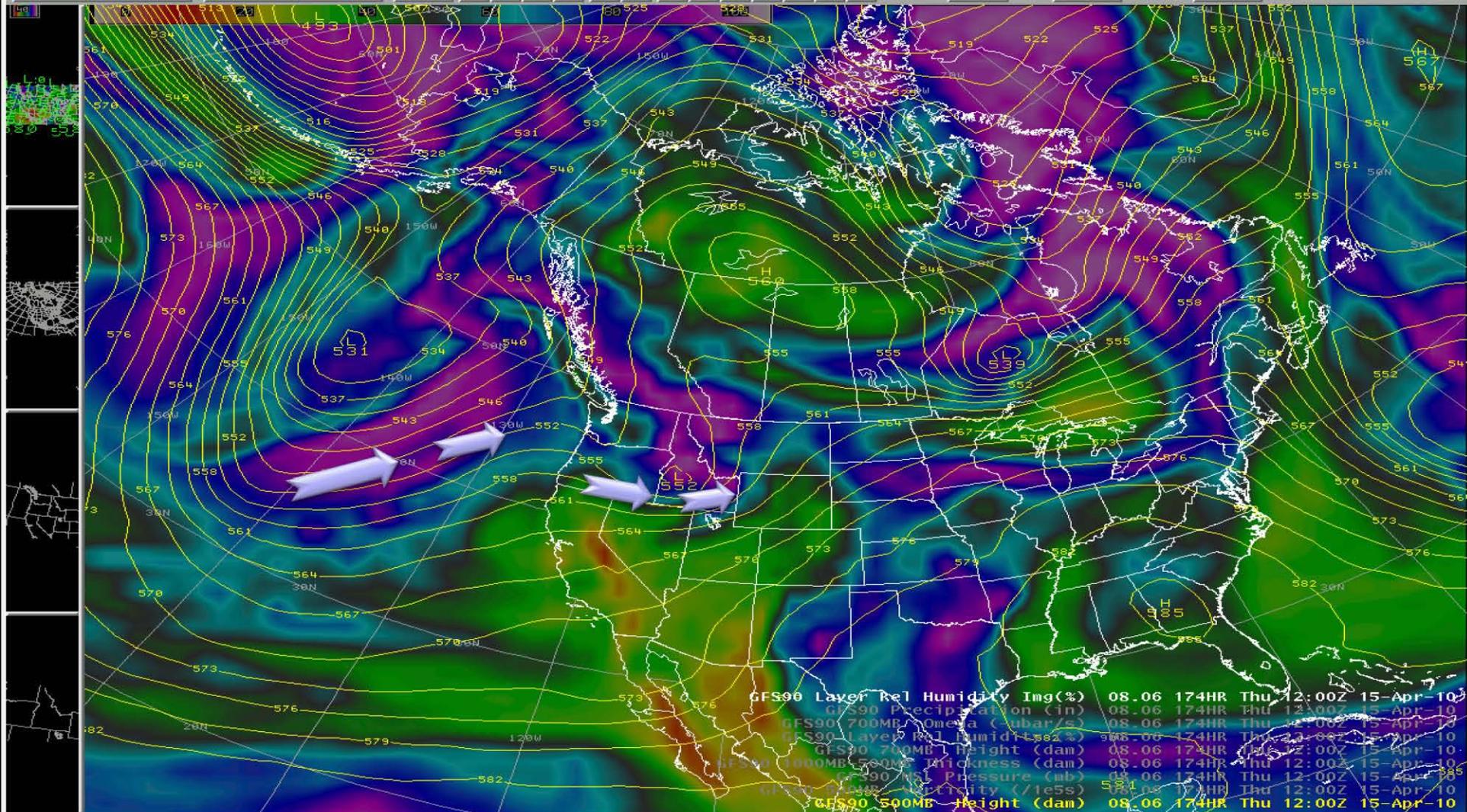
Frames: 41 Time: 14:09 Z 08-Apr-10

Thursday, Apr 15th

Forecast Systems Laboratory D-2D (jbreiden)

File View Options Tools Volume Obs NCEP/Hydro Local Upper Air Satellite kcbx Radar SCAN Maps Help WamGen

Valid time seq North American Clear < > Frames: 41 Mag: 1 Density: 1



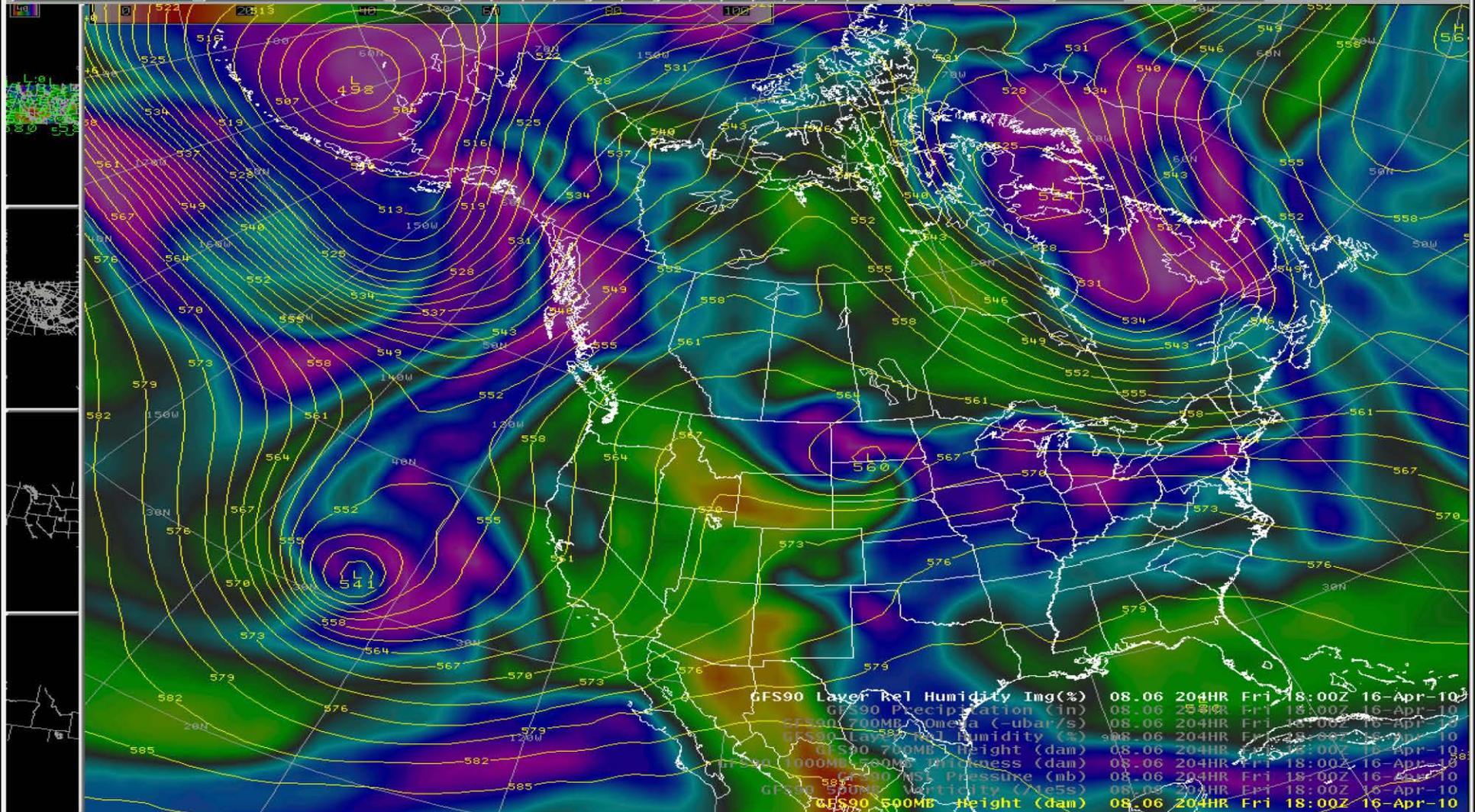
Status: Radar: Frames: 41 Time: 14:10 Z 08-Apr-10

Friday, Apr 16th

Forecast Systems Laboratory D-2D (jbreiden)

File View Options Tools Volume Obs NCEP/Hydro Local Upper Air Satellite kcbx Radar SCAN Maps Help WamGen

Valid time seq North American Clear << >> Frames: 41 Mag: 1 Density: 1



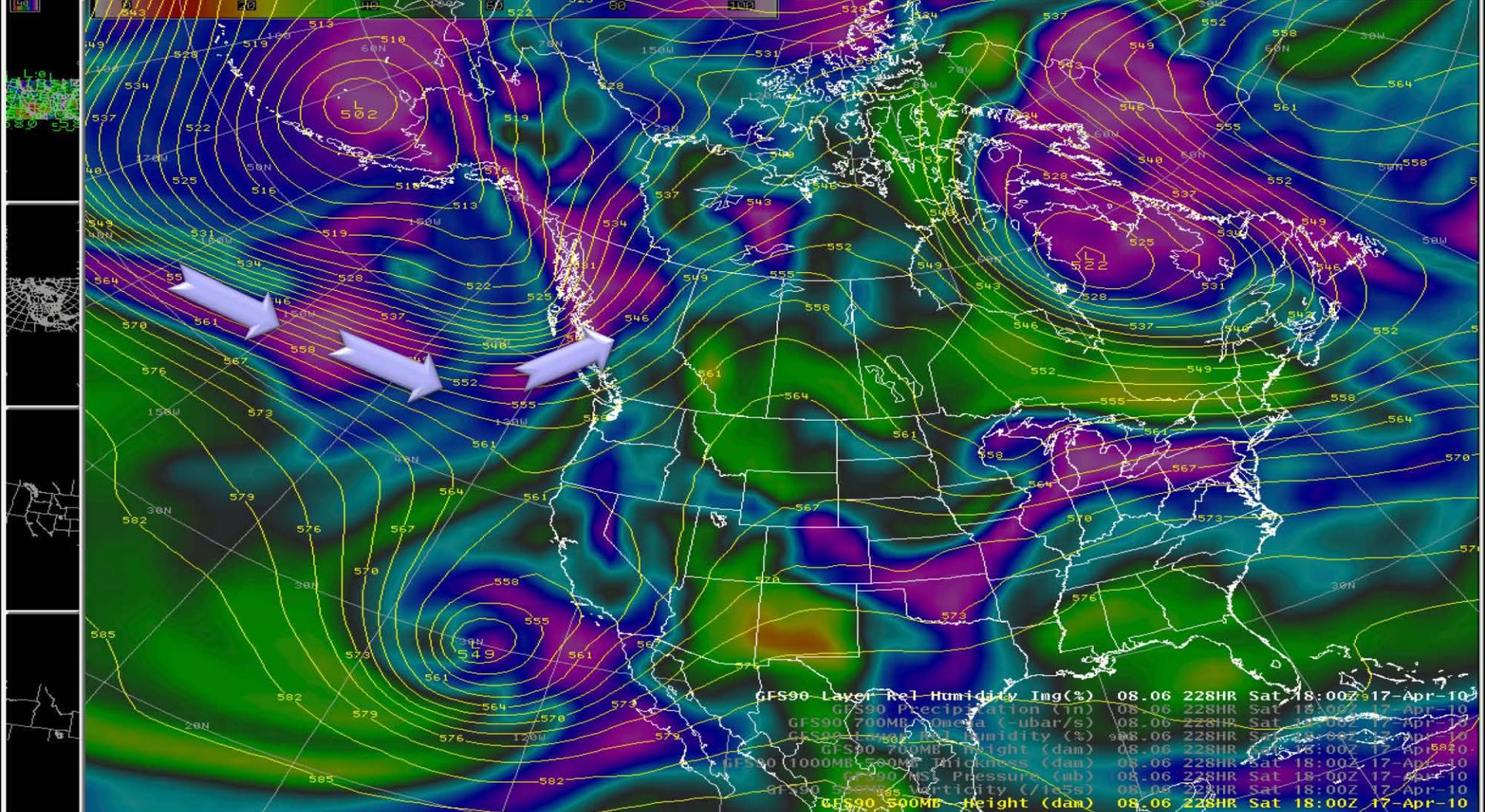
Variable	Time	Unit	Date
GFS90 Layer Rel Humidity	08.06 204HR	Img(%)	Fri 18:00Z 16-Apr-10
GFS90 Precipitation	08.06 204HR	(in)	Fri 18:00Z 16-Apr-10
GFS90 700MB Omega	08.06 204HR	(ubar/s)	Fri 18:00Z 16-Apr-10
GFS90 Layer Rel Humidity	08.06 204HR	(%)	Fri 18:00Z 16-Apr-10
GFS90 700MB Height	08.06 204HR	(dam)	Fri 18:00Z 16-Apr-10
GFS90 700MB Thickness	08.06 204HR	(dam)	Fri 18:00Z 16-Apr-10
GFS90 NSL Pressure	08.06 204HR	(mb)	Fri 18:00Z 16-Apr-10
GFS90 500MB Vorticity	08.06 204HR	(1e5s)	Fri 18:00Z 16-Apr-10
GFS90 500MB Height	08.06 204HR	(dam)	Fri 18:00Z 16-Apr-10

Saturday, Apr 17th

Forecast Systems Laboratory D-2D (jbreiden)

File View Options Tools Volume Obs NCEP/Hydro Local Upper Air Satellite kcbx Radar SCAN Maps Help **WamGen**

Valid time seq **North American** Clear << < > >> [Refresh] [Zoom] [Density] Frames: 41 Mag: 1 Density: 1



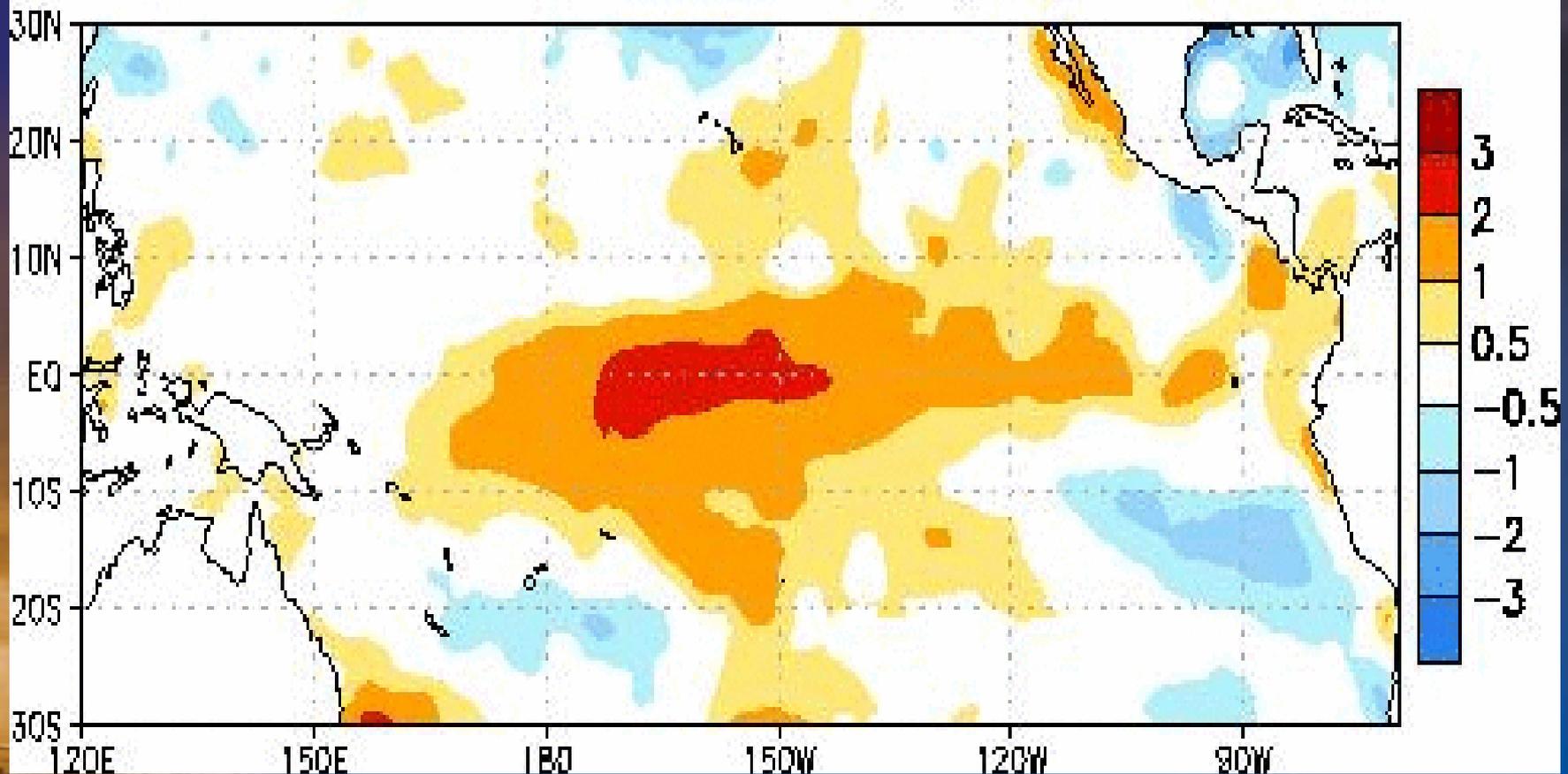
GFS90 Layer Rel Humidity (mg%)	08.06	228HR	Sat 18:00Z 17-Apr-10
GFS90 Precipitation (in)	08.06	228HR	Sat 18:00Z 17-Apr-10
GFS90 700MB Omega (-ubar/s)	08.06	228HR	Sat 18:00Z 17-Apr-10
GFS90 700MB Rel Humidity (%)	08.06	228HR	Sat 18:00Z 17-Apr-10
GFS90 700MB Height (dam)	08.06	228HR	Sat 18:00Z 17-Apr-10
GFS90 1000MB 700MB Thickness (dam)	08.06	228HR	Sat 18:00Z 17-Apr-10
GFS90 NSL Pressure (mb)	08.06	228HR	Sat 18:00Z 17-Apr-10
GFS90 500MB Vorticity (/10 ⁵ s)	08.06	228HR	Sat 18:00Z 17-Apr-10
GFS90 500MB Height (dam)	08.06	228HR	Sat 18:00Z 17-Apr-10



Equatorial Sea Surface Temperature Anomalies



Week centered on 13 JAN 2010
SST Anomalies (°C)

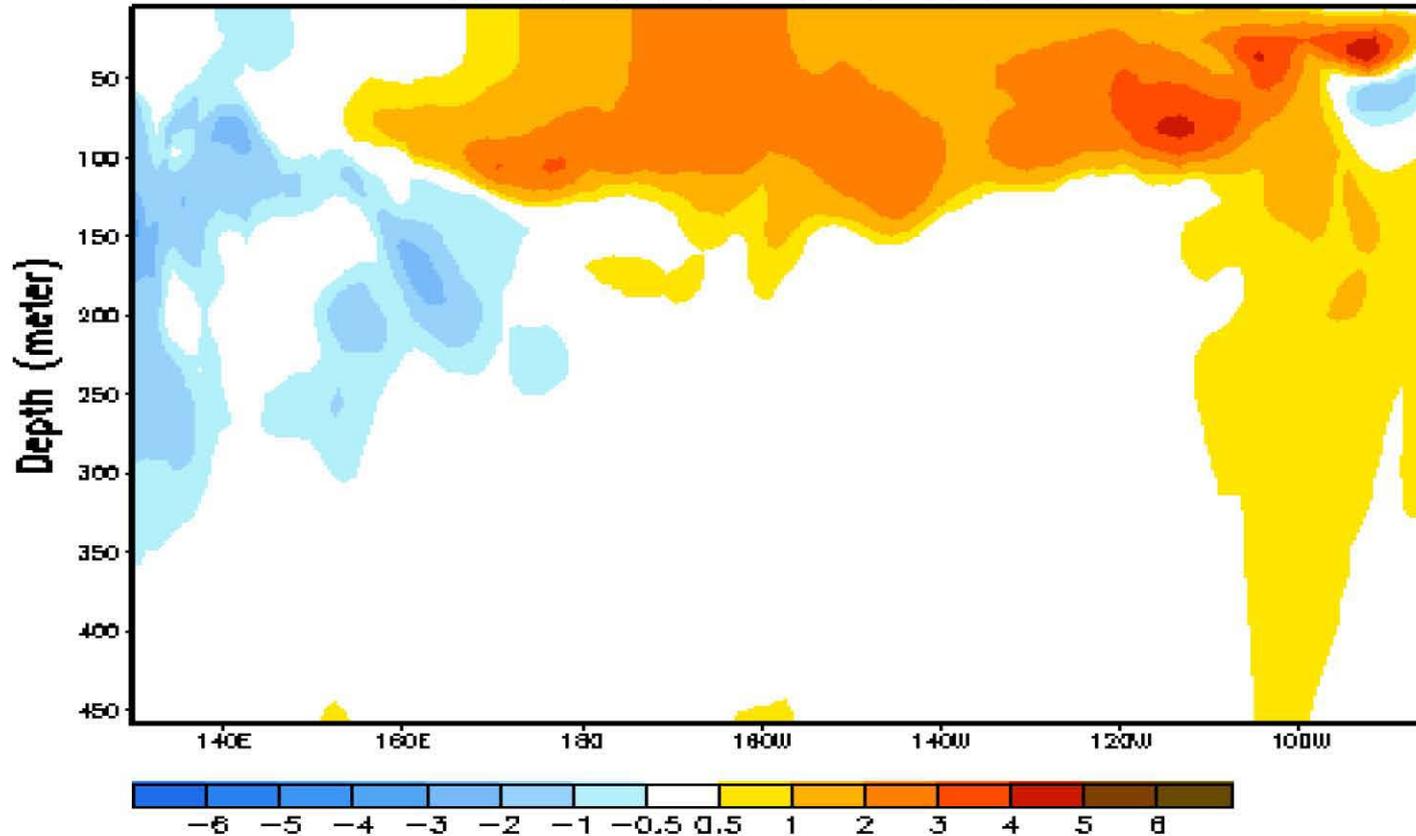




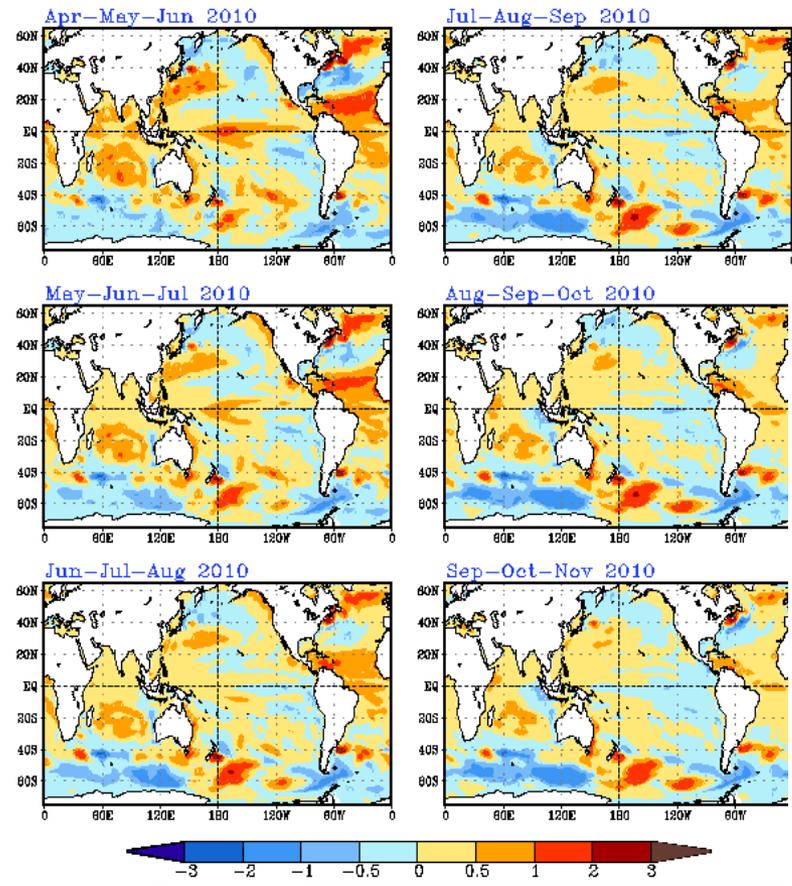
Warm sub-surface anomaly along equator



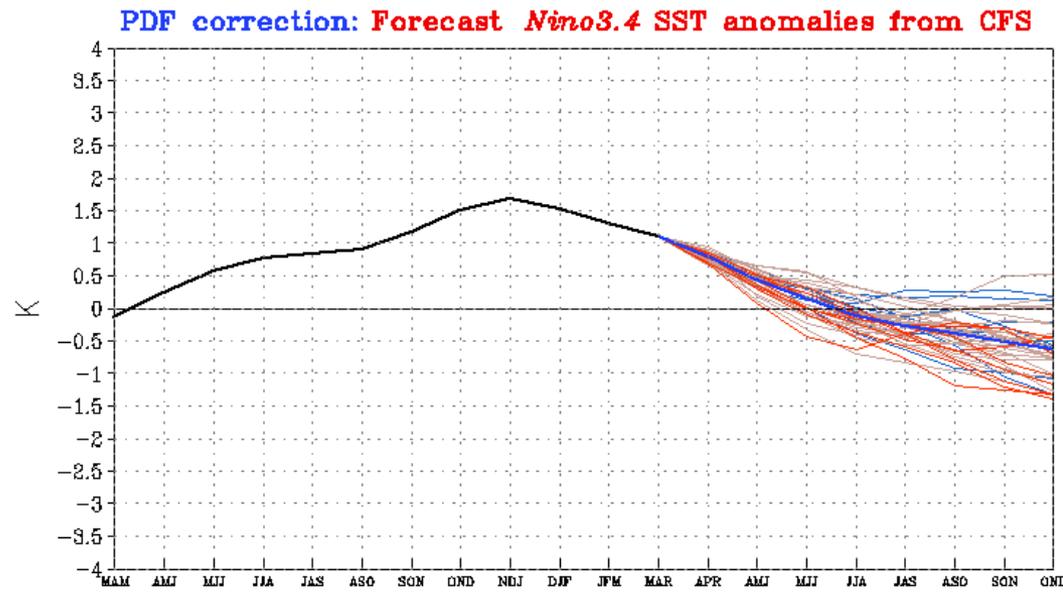
Equatorial Temperature Anomaly (°C)
Pentad centered on 02 FEB 2010



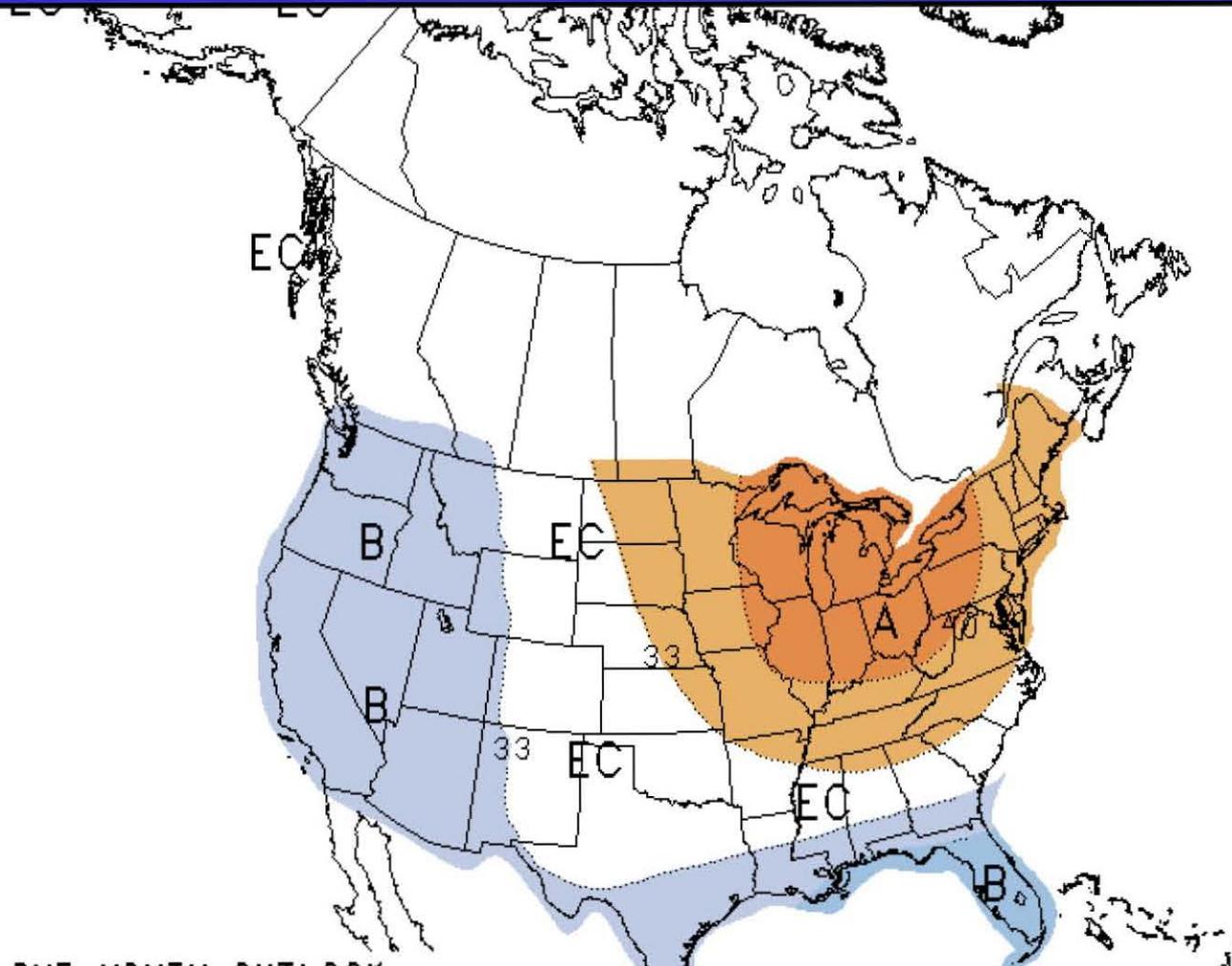
SST Outlook: NCEP CFS Forecast Issued April 4th 2010



The CFS ensemble mean (heavy blue line) predicts El Niño decrease in intensity with sea surface conditions returning to neutral by late summer.



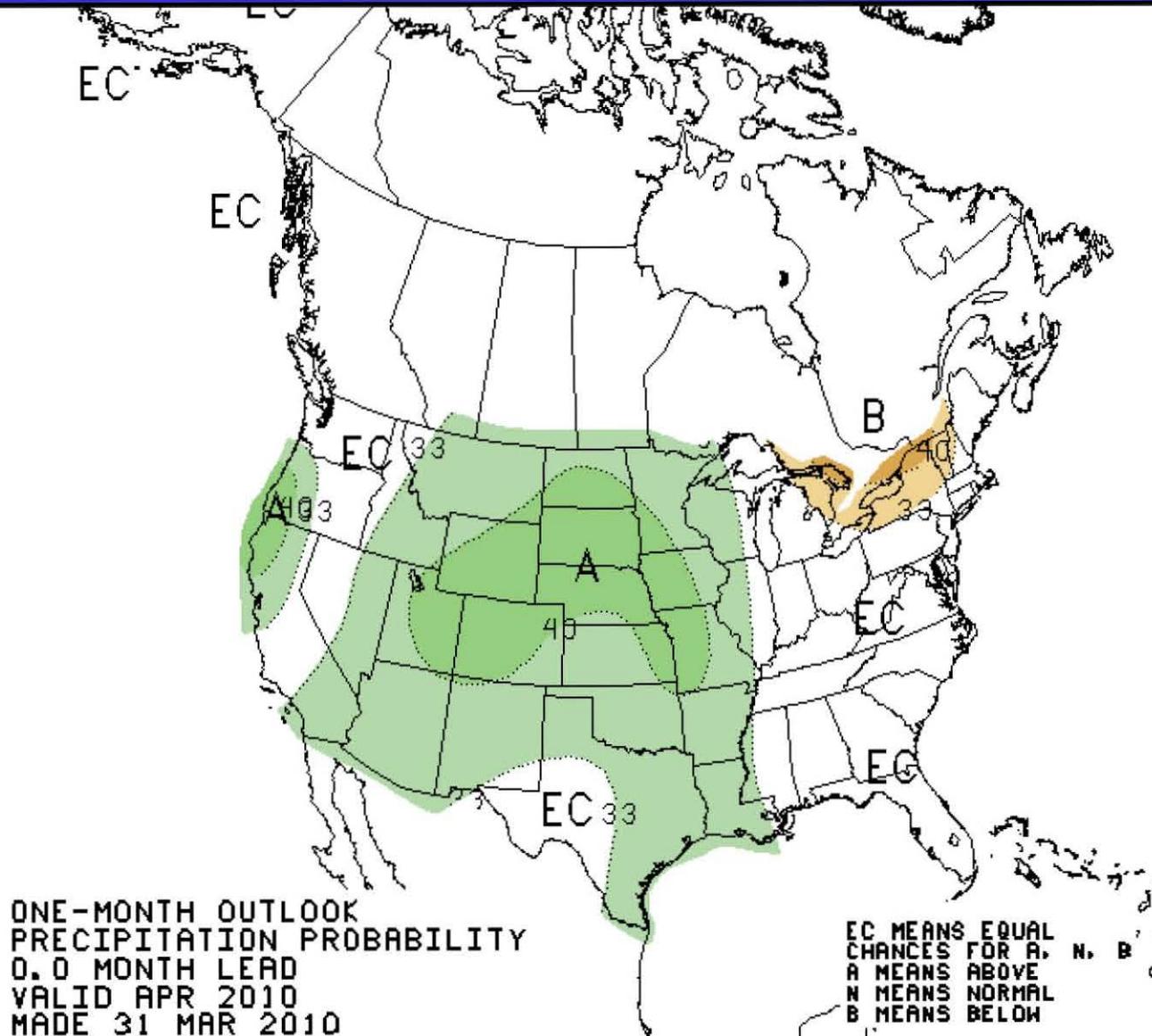
One Month Outlook (April 2010) Temperatures



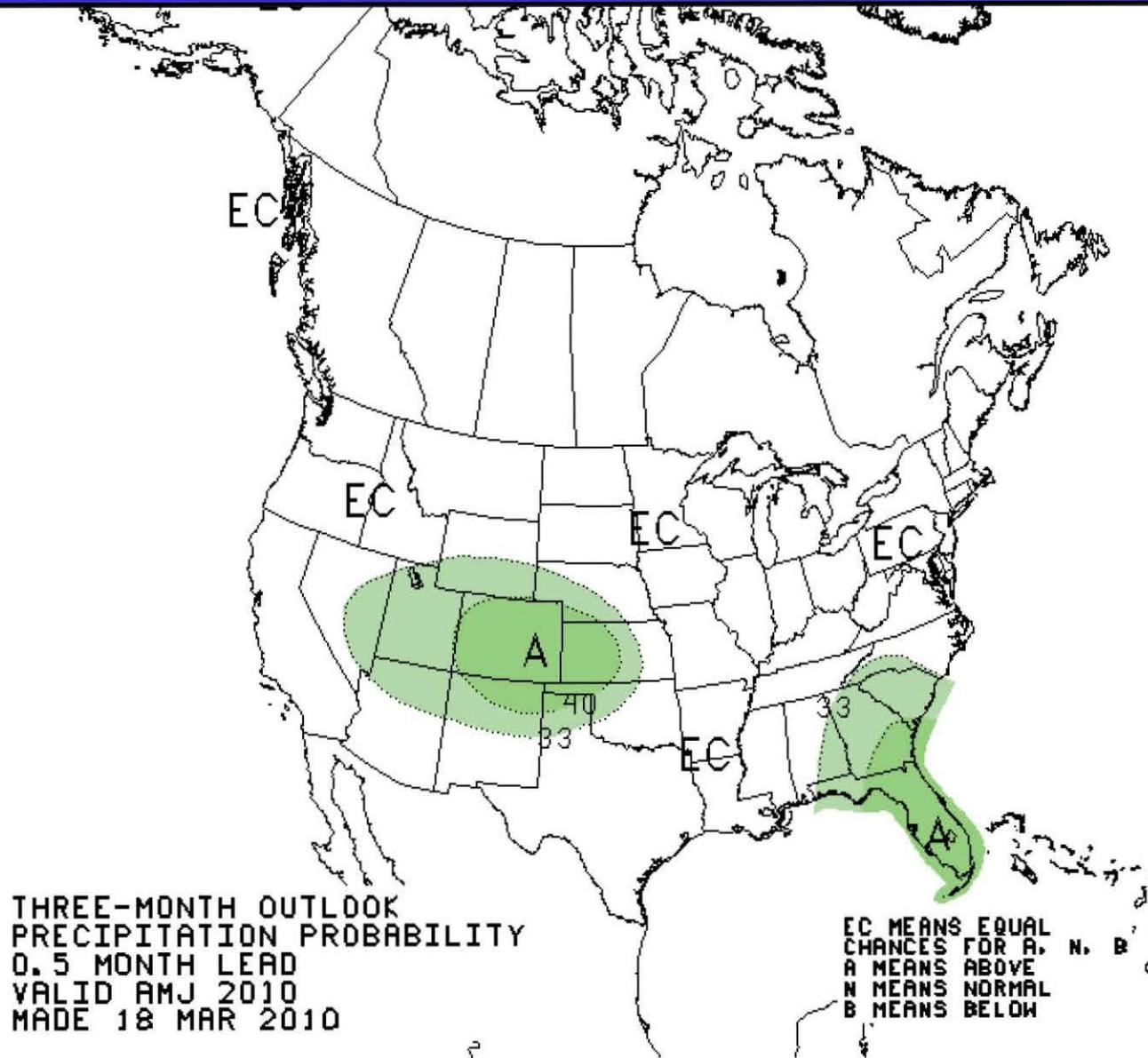
ONE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.0 MONTH LEAD
VALID APR 2010
MADE 31 MAR 2010

EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

One Month Outlook (April 2010) Precipitation



Three Month Outlook (April-June) Precipitation



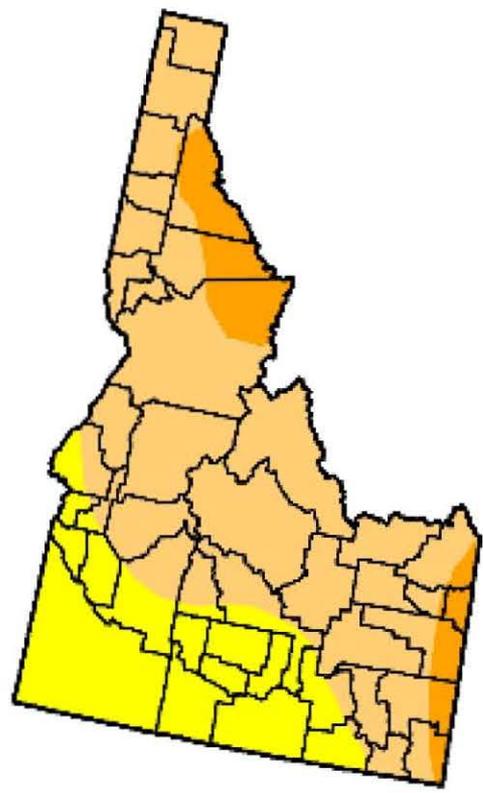
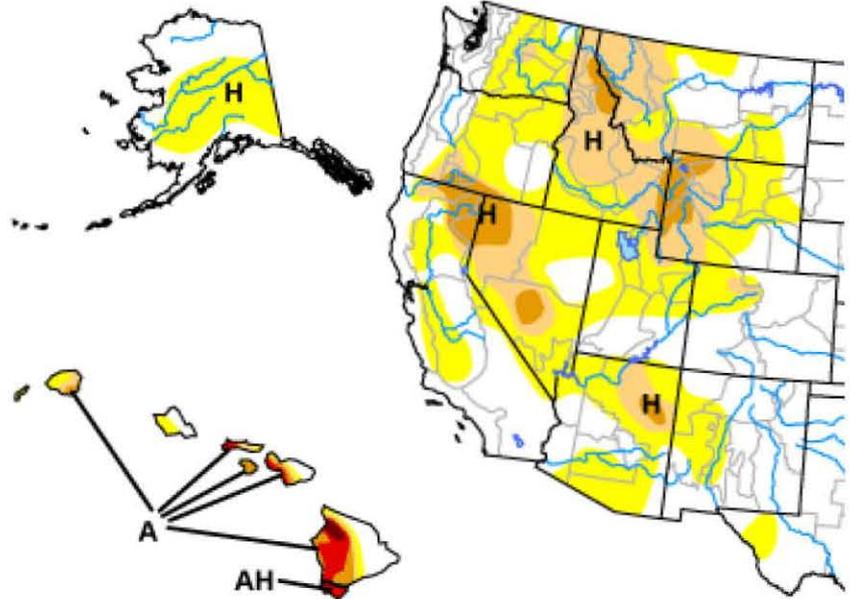


Drought Situation



U.S. Drought Monitor

April 6, 2010
Valid 8 a.m. EDT



- Intensity:
- D0 Abnormally Dry
 - D1 Drought - Moderate
 - D2 Drought - Severe
 - D3 Drought - Extreme
 - D4 Drought - Exceptional

- Drought Impact Types:
- Delineates dominant impacts
 - A = Agricultural (crops, pastures, grasslands)
 - H = Hydrological (water)

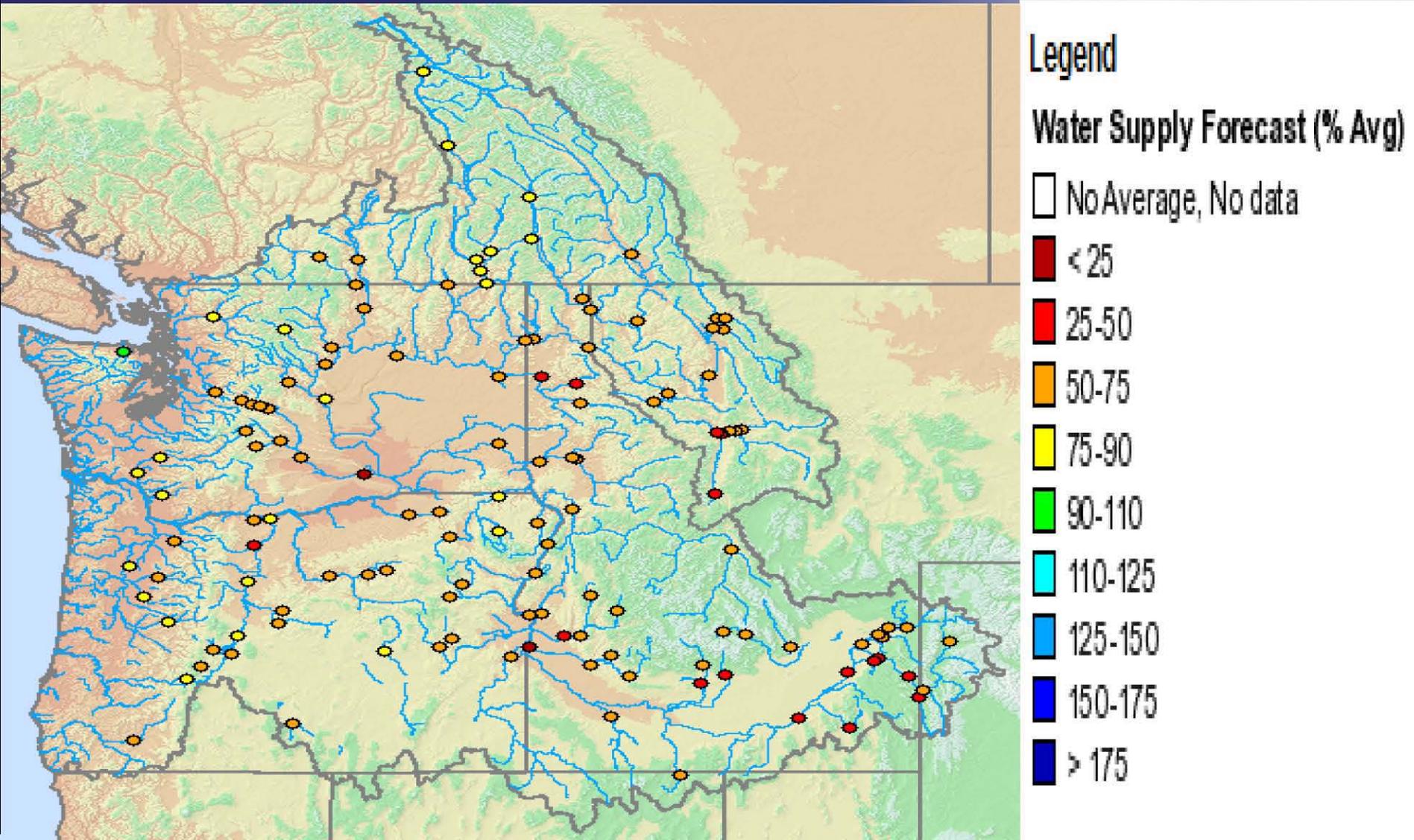
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>

Released Thursday, April 8, 2010
Author: Anthony Artusa, NOAA/NWS/NCEP/CPC



Below Normal 2010 Water Supply





Idaho Spring Flood Outlook

- The probability of spring flooding related to snowmelt is below average
- Lack of low elevation snow pack also suggest a “well behaved” melt.
- Peak flows significantly reduced and early.





Current Information on Web

www.weather.gov/boise

www.nwrfc.noaa.gov/westernwater

