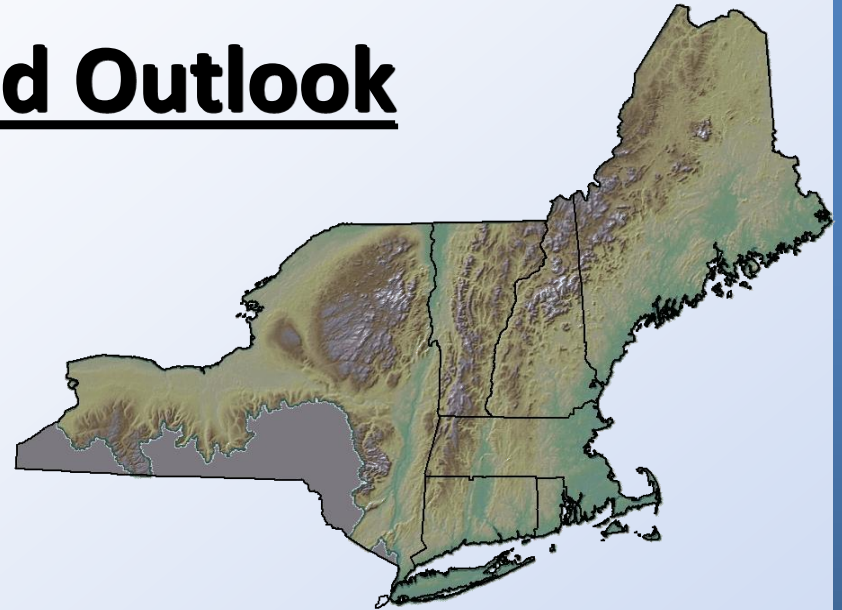


NERFC Spring Flood Outlook

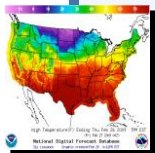
- Mar 26th 2015
- Next Briefing – 4/3



- Brought to you by:
 - Edward Capone - Service Coordination Hydrologist

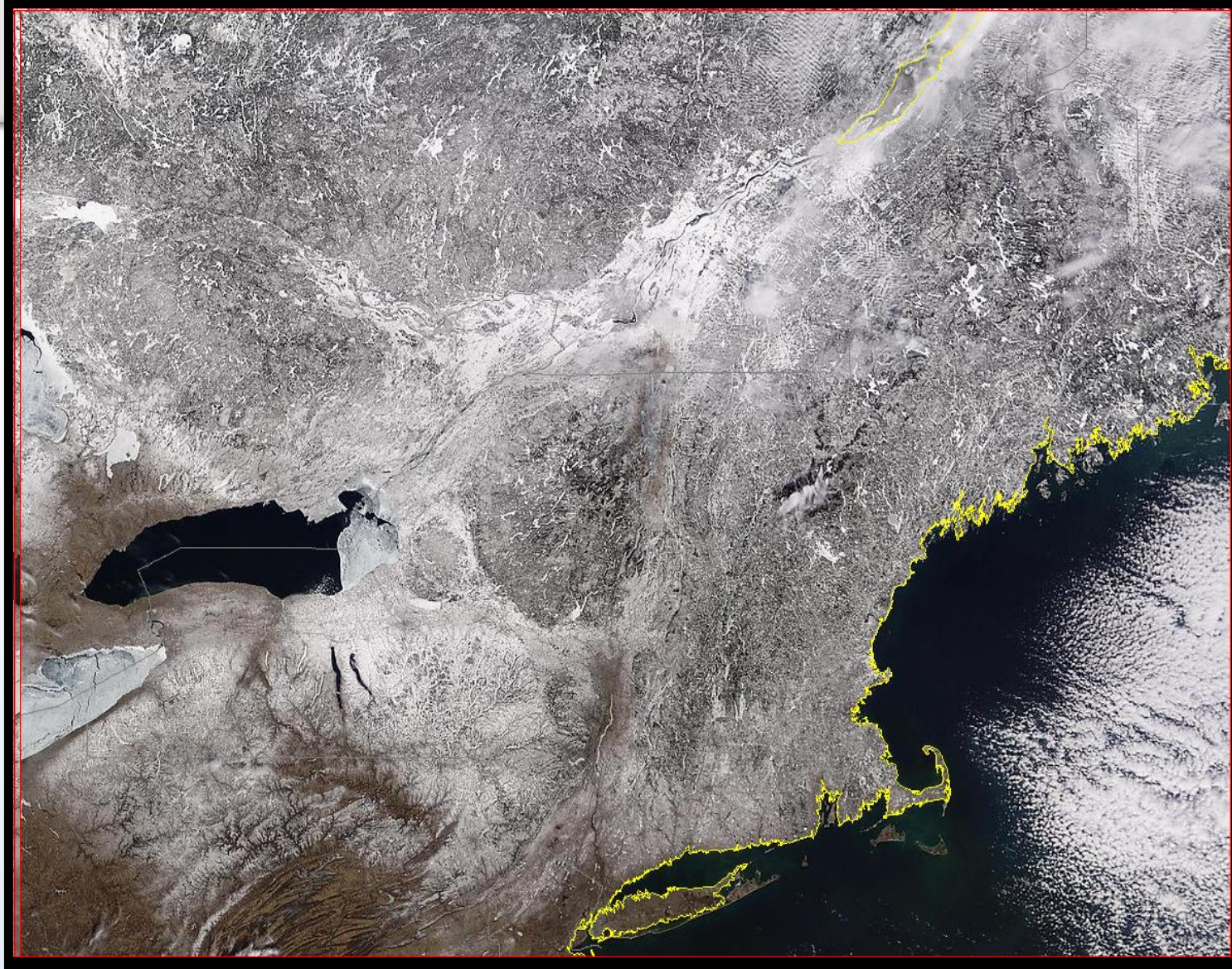
- Overview to Include:

- • Potential flood outlook – convective/synoptic conditions
- • Snow Water/Melt Potential --- Ice Jam Potential---
- • Stream flow-Groundwater-Soil moisture and Snow Water Equivalent conditions
- • Antecedent –Current—Future precipitation forecasts
- • Short and Medium Range Met Forecasts (especially potentially significant events)
- • Flood or Drought Outlook (Near term & Longer term)

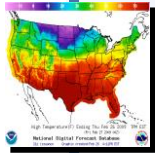


<http://ge.ssec.wisc.edu/modis-today/>

MODIS IMAGES – TERRA/ AQUA



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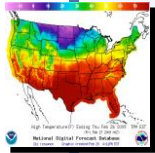
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MODIS IMAGES – TERRA/ AQUA

<http://www.weather.gov/nerfc/briefings>

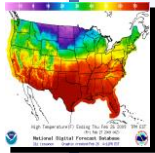
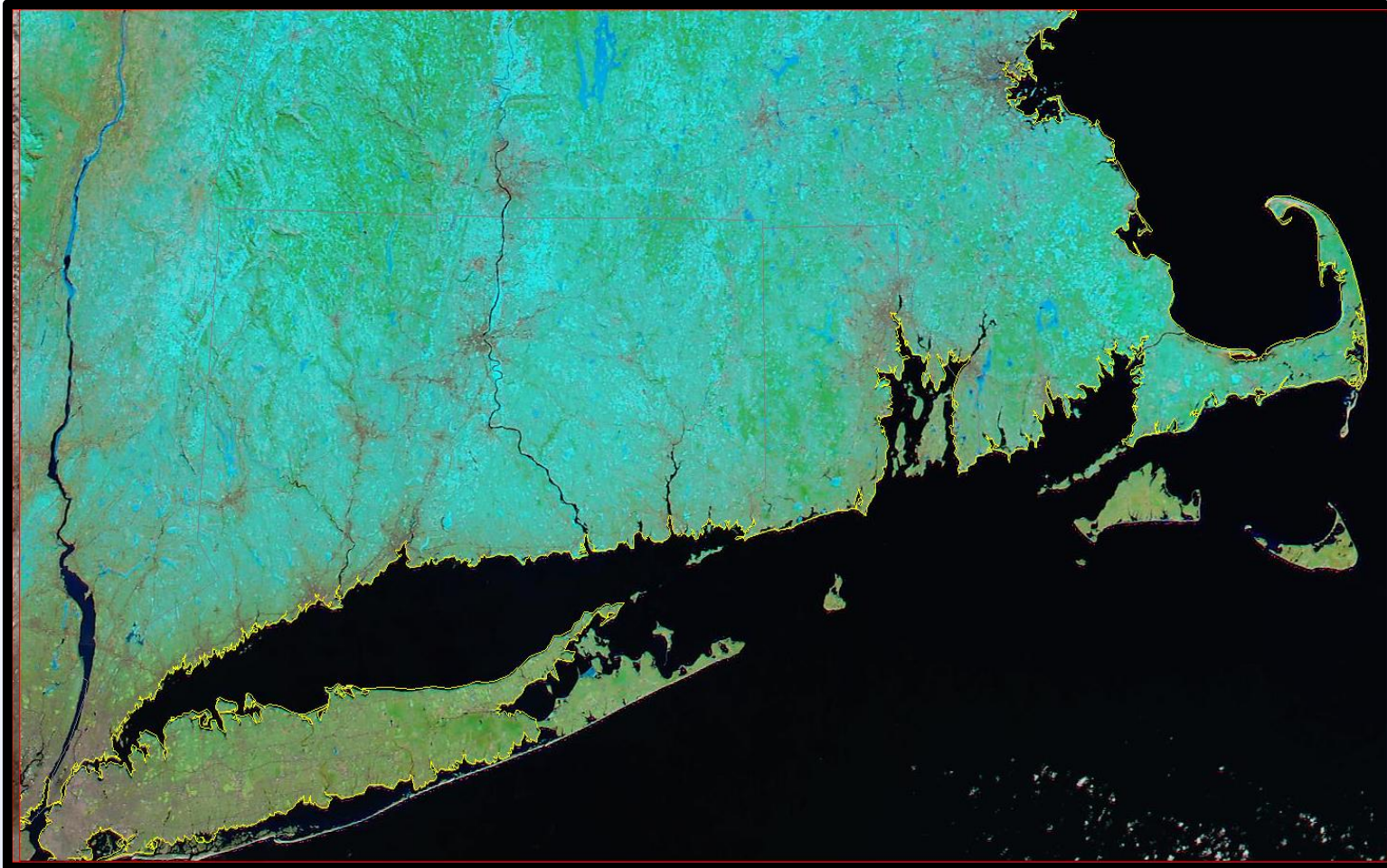


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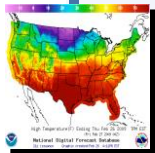
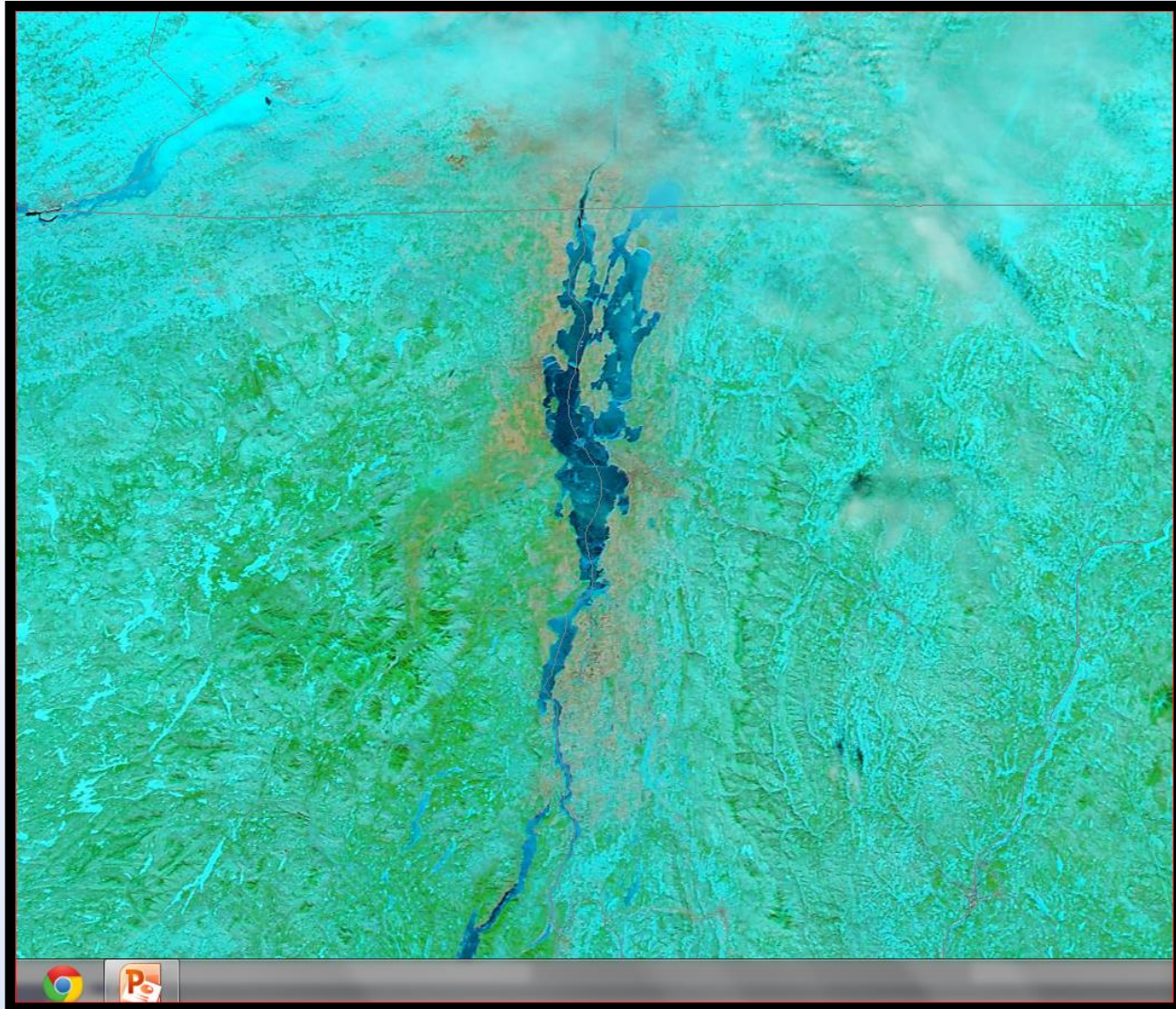
<http://ge.ssec.wisc.edu/modis-today/>
MODIS IMAGES – TERRA/ AQUA

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<http://ge.ssec.wisc.edu/modis-today/>
MODIS IMAGES – TERRA/ AQUA

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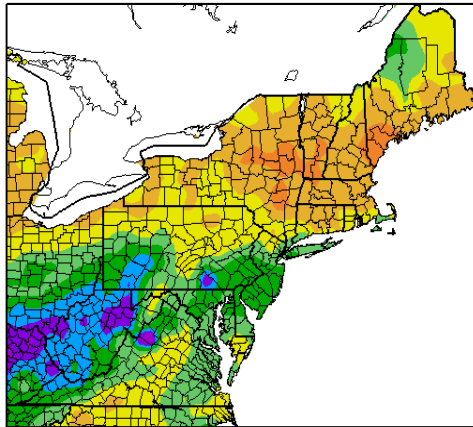
Service Area Highlights

➤ Monthly Highlights to March 26th

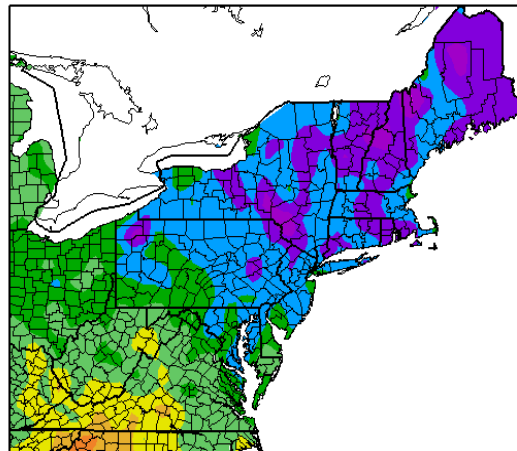
- **Below Normal Temps for March**
- **2nd Mild Interlude of March is here...and stronger**
- **Snow Events continued north rain/snow mix south**
- **Snow Depths/SWE ... slow melt...NO MELT an issue**
- **Another cold shot coming this weekend/early next week**
- **Precipitation mostly below normal for March**

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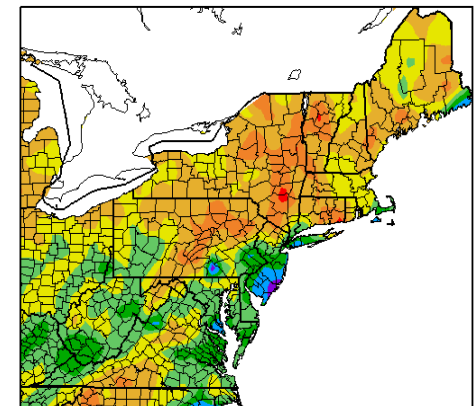
Departure from Normal Precipitation (in)
3/1/2015 - 3/23/2015



Departure from Normal Temperature (F)
3/1/2015 - 3/23/2015



Departure from Normal Precipitation (in)
12/24/2014 - 3/23/2015



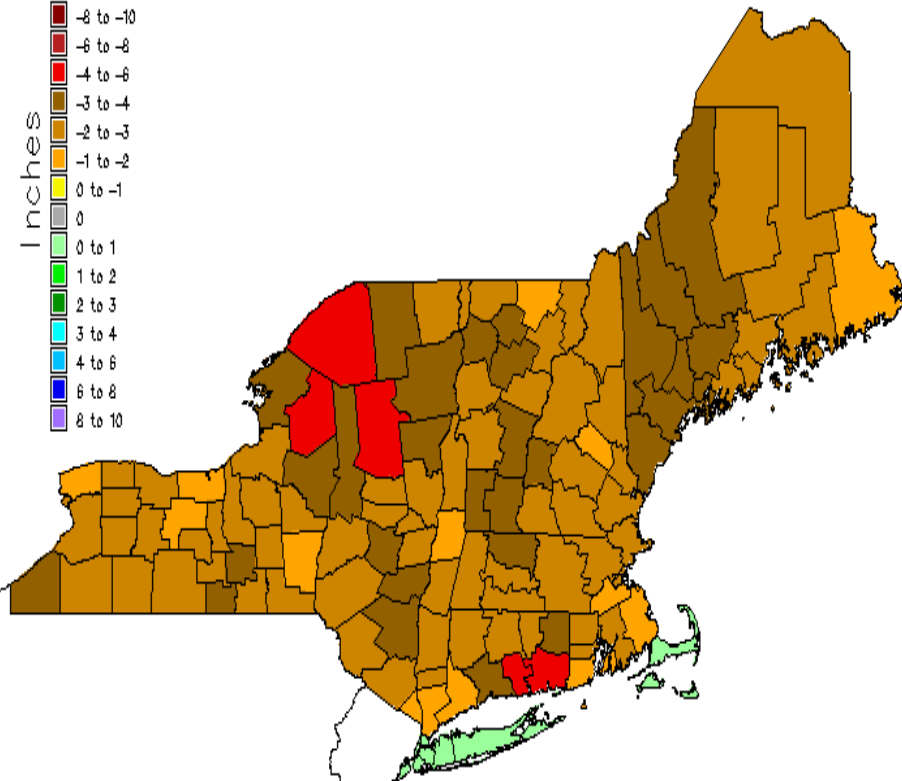
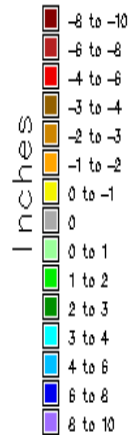
dated 3/24/2015 at HPRCC using provisional data.

Regional Climate Centers

90 and 180 Day Precipitation Departures



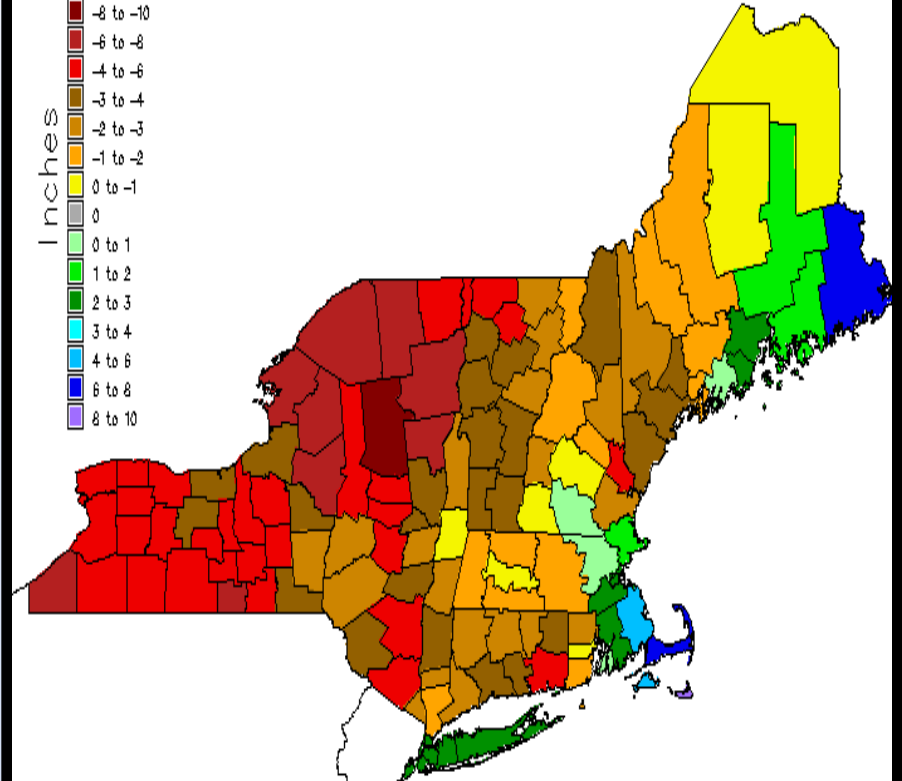
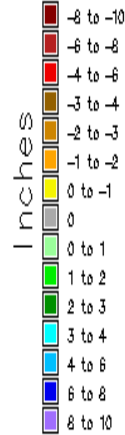
90 Day Departures from Normal
Ending 2015-03-23



Source: NOAA Northeast River Forecast Center, Taunton, MA



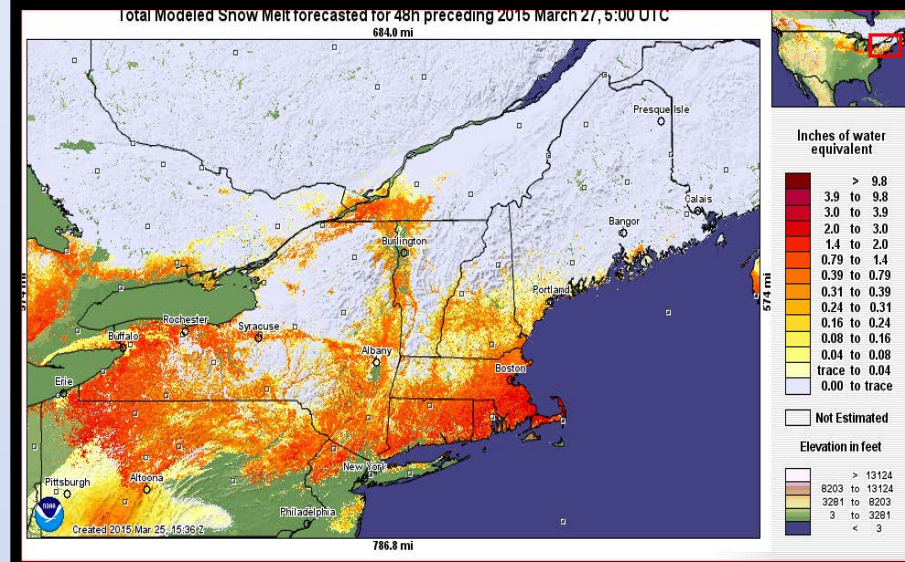
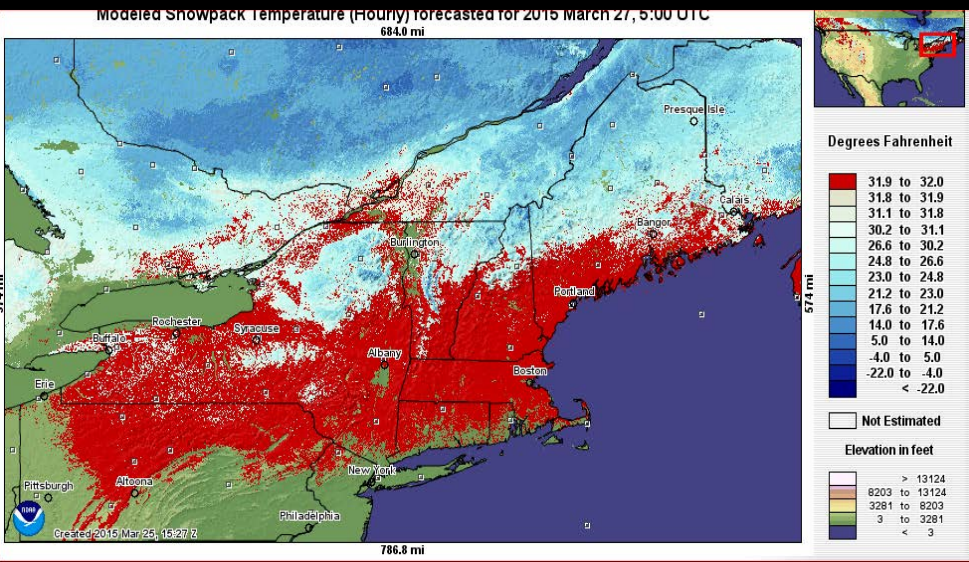
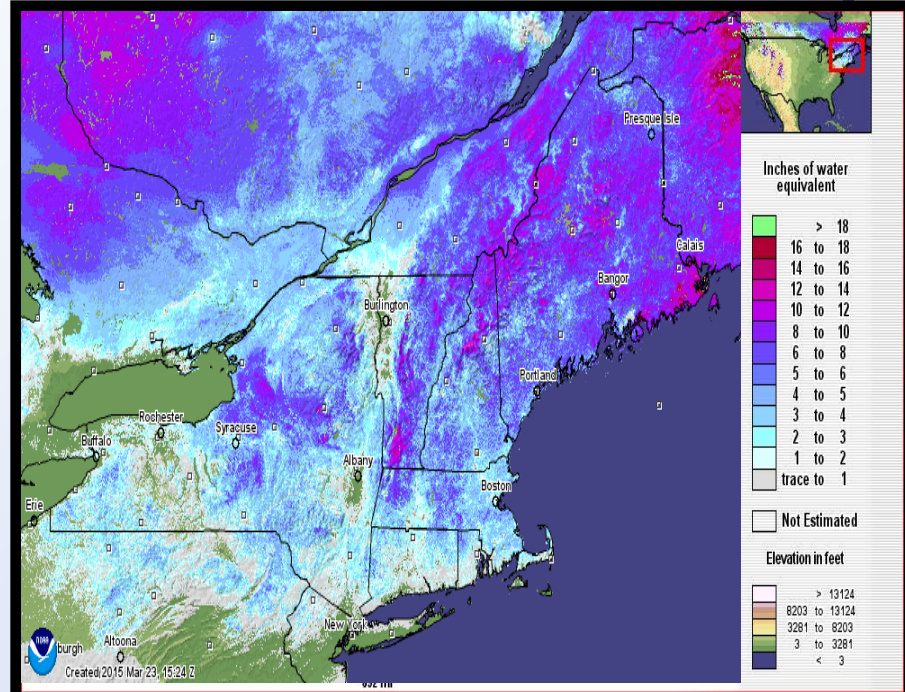
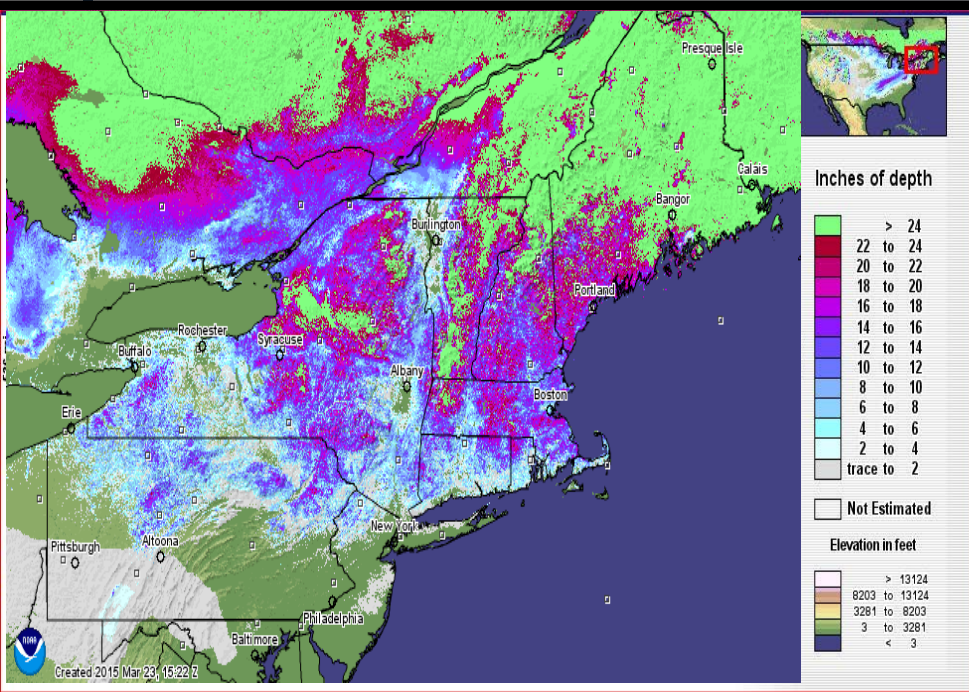
180 Day Departures from Normal
Ending 2015-03-23



Source: NOAA Northeast River Forecast Center, Taunton, MA

Snow Conditions

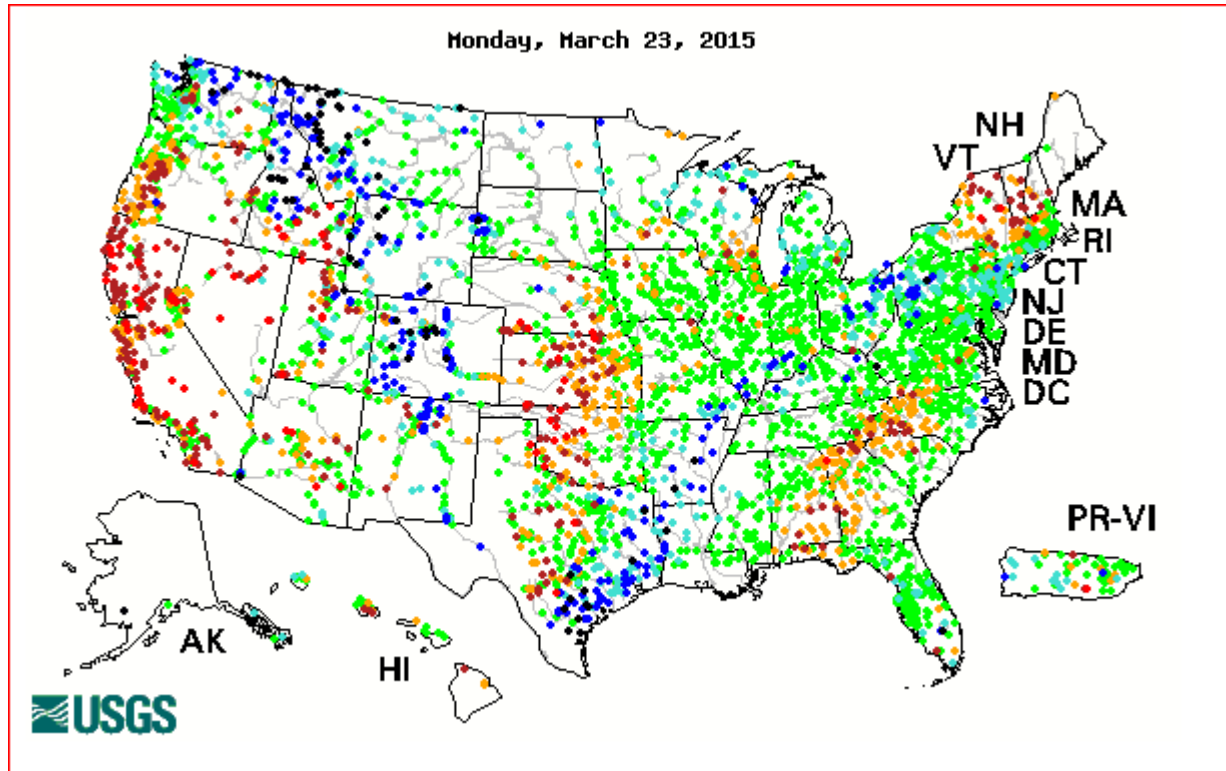
---Depth---SWE---Temperature---Melt



USGS Current Streamflow Conditions

Map of 7-day average streamflow compared to historical streamflow for the day of the year (United States)

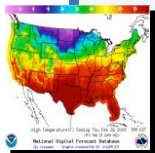
Monday, March 23, 2015



Choose a data retrieval option and select a location on the map

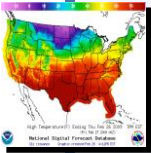
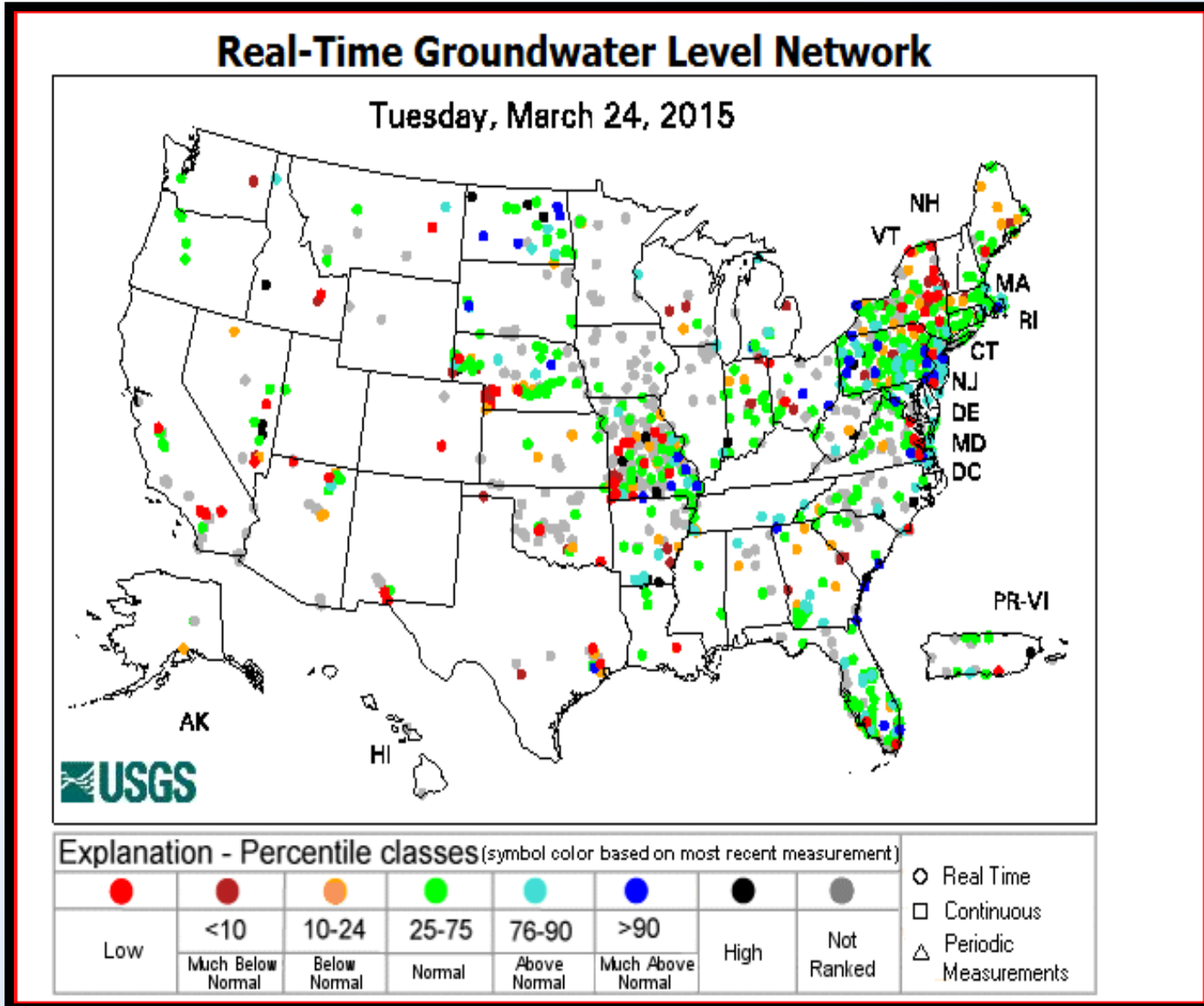
- List of all stations in state, State map, or Nearest stations

Explanation - Percentile classes						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	



USGS -- Current Groundwater Conditions

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Water Supply/Lake Levels

New York City's Water Supply System

March 23, 2015

Total Storage (% of Capacity)

Current: 73.6

Normal: 93.1

Consumption (billion gallons)

03/22/15 1.04

Average Precipitation (inches)

Actual Historical

January: 2.58 3.11

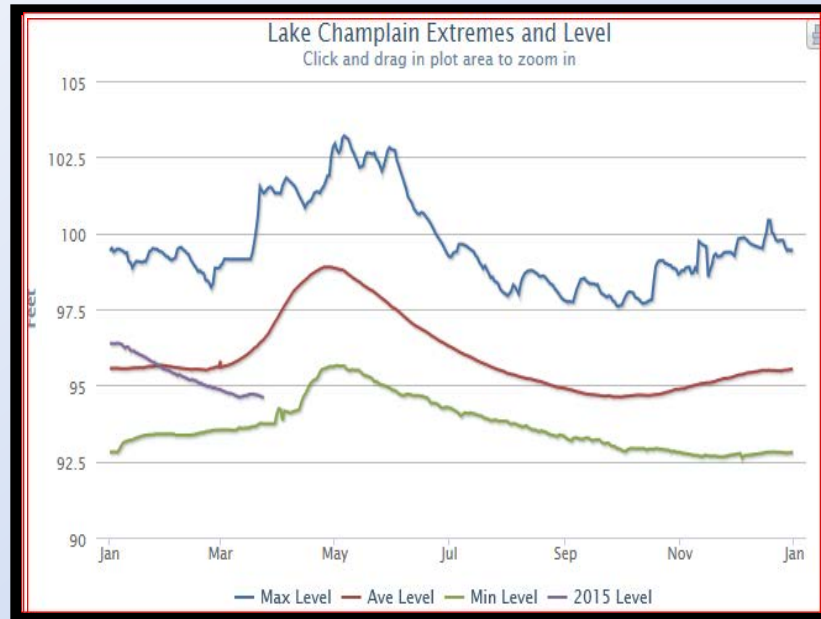
February: 1.60 2.50

March: 1.09 2.58

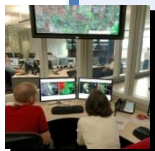
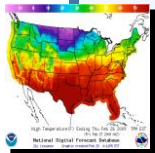
Current Conditions Status = Normal Operations

Quabbin Level	Normal Operations	Below Normal	Drought Warning	Drought Emergency 1	Drought Emergency 2	Drought Emergency 3
	100%- 80%	80%-65%	65%-50%	50% -30%	38% -25%	25% -0%

Scituate Reservoir Elevation (feet)	280.96	(92.1 % of Capacity)
Plant Influent (mgd)	54.035088	(83.6 CFS)
Cumulative Reservoir Evap. (gal)	-46,830	
Downstream Discharge (mgd)	9.95	(15.39 CFS)



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Soil Moisture/River Ice Thickness/Frost Depth

- Palmer/Crop Soil Moisture Indices -- Short/Long Term Normal/Wet south basins
- River Ice Thicknesses ---Jan- Mar AFDD Above Normal
 - 0.5' to 1.5' ft. Plus Ice Thickness –Central/Northern NY northeastward to Maine
 - Many openings ...Ice Free SNE

--Earlier Ice Jams (Breakup/Freezeup)

Walkill River

Cattaraugus Creek

Buffalo Creek

Casanovia Creek

St. Johns River

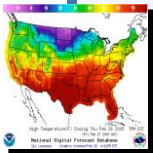
Aroostook River

Penobscot River

Kennebec

Frost

< 6 inches SNE

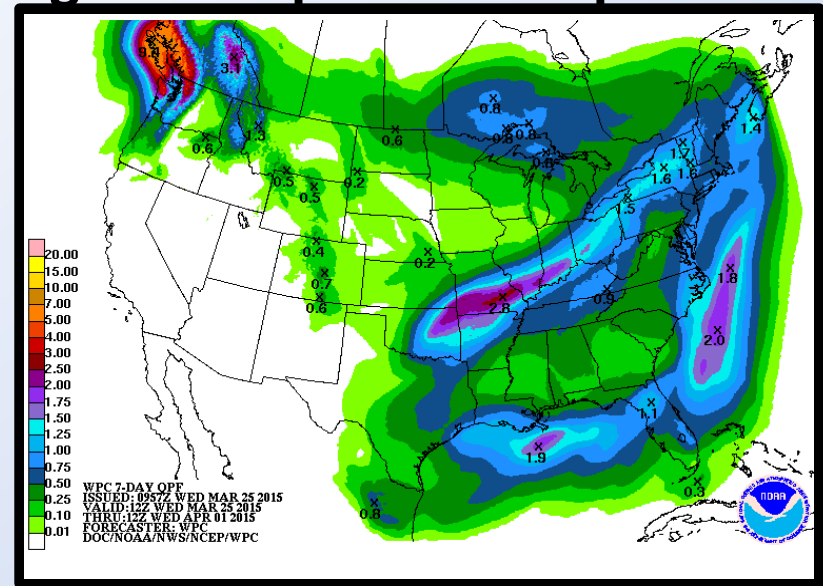
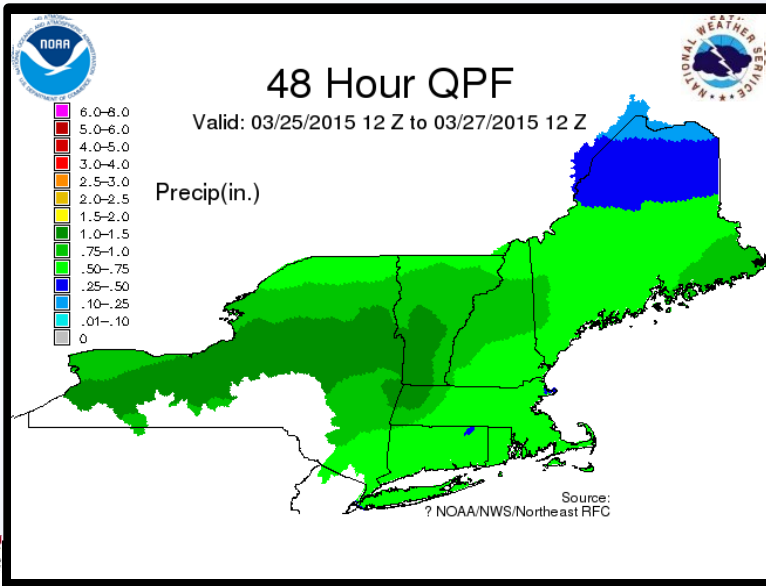


Looking Ahead – Pattern Switching—BNTANP

➤ Week 1

➤ Brief...but significant warmup

➤ Near 1 Inch Rain Event...higher temps and dewpoints



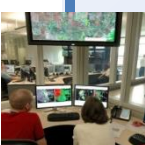
➤ Week 2

➤ – Below Normal Temps

➤ -- Above Normal Precipitation.

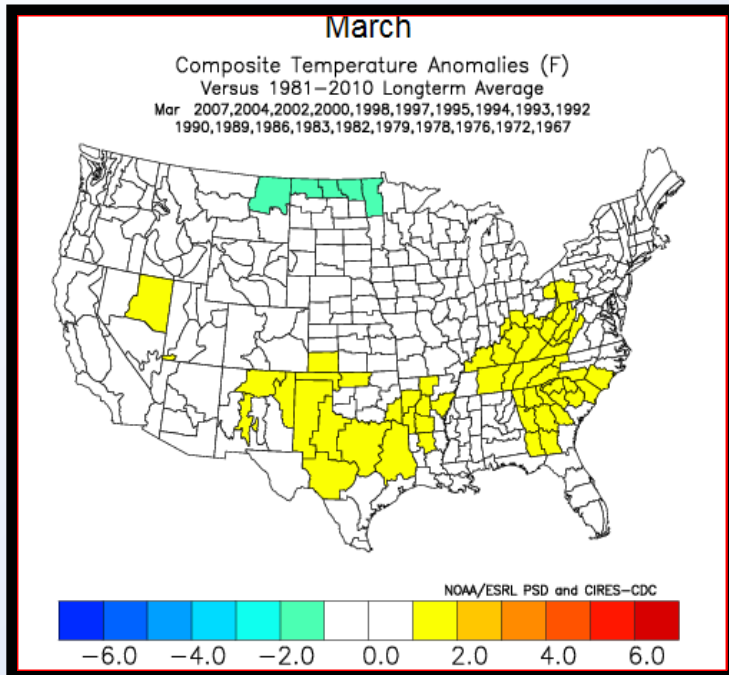
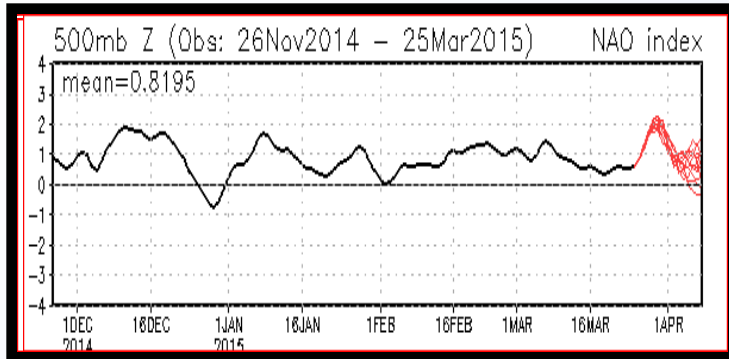
➤ Can we get another period of Controlled Melt?

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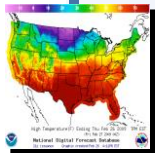
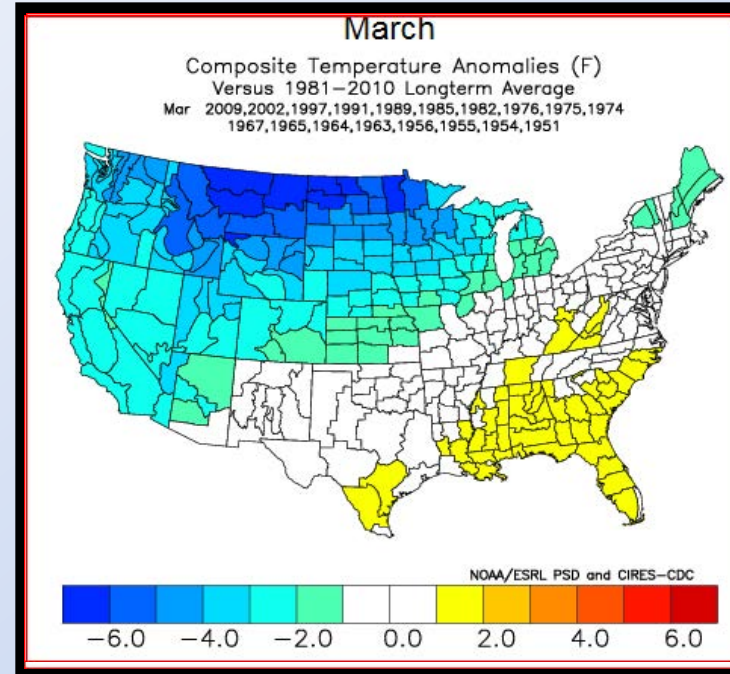
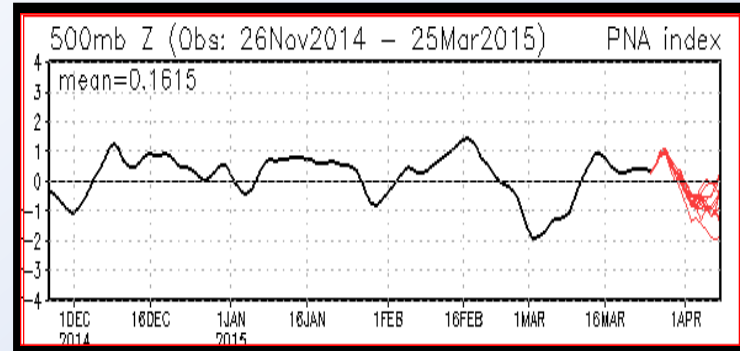


North Atlantic Oscillation (NAO) Pacific-North American Pattern (PNA)

➤ NAO

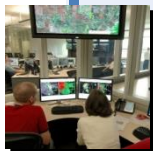
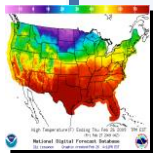
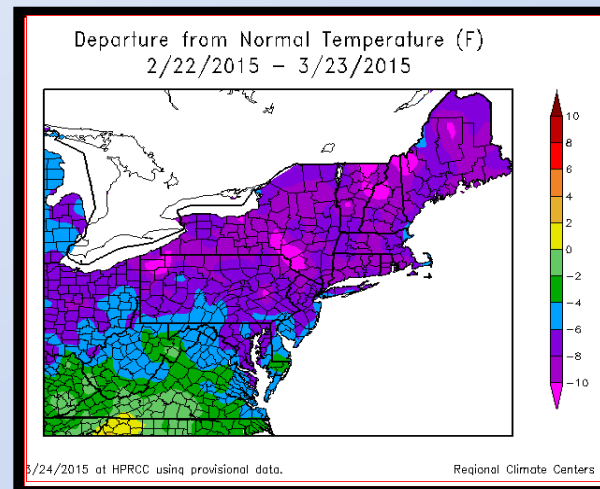
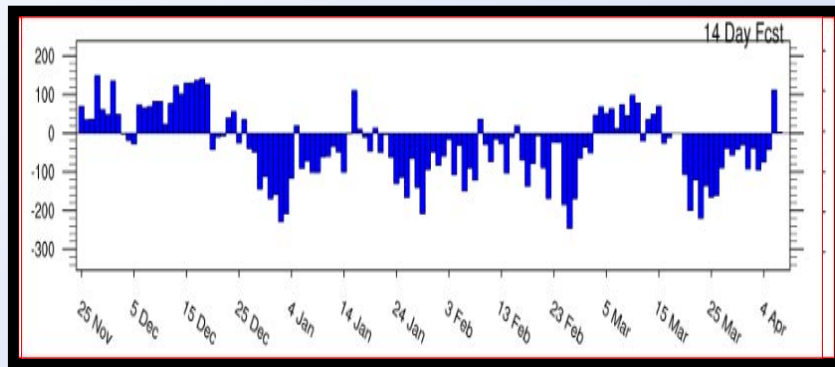
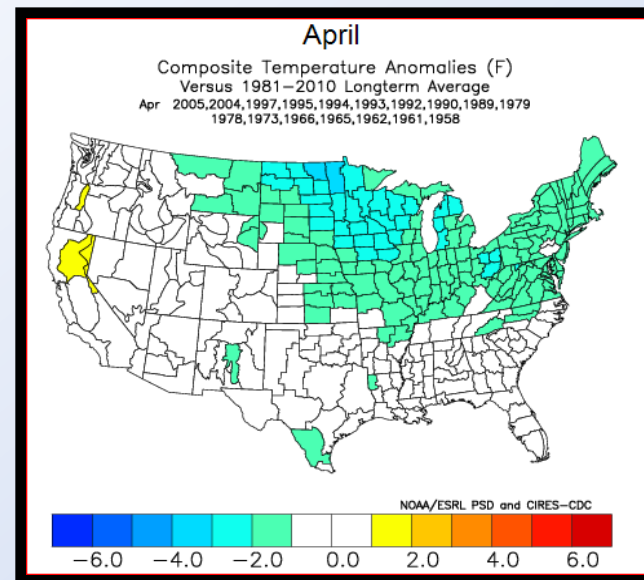
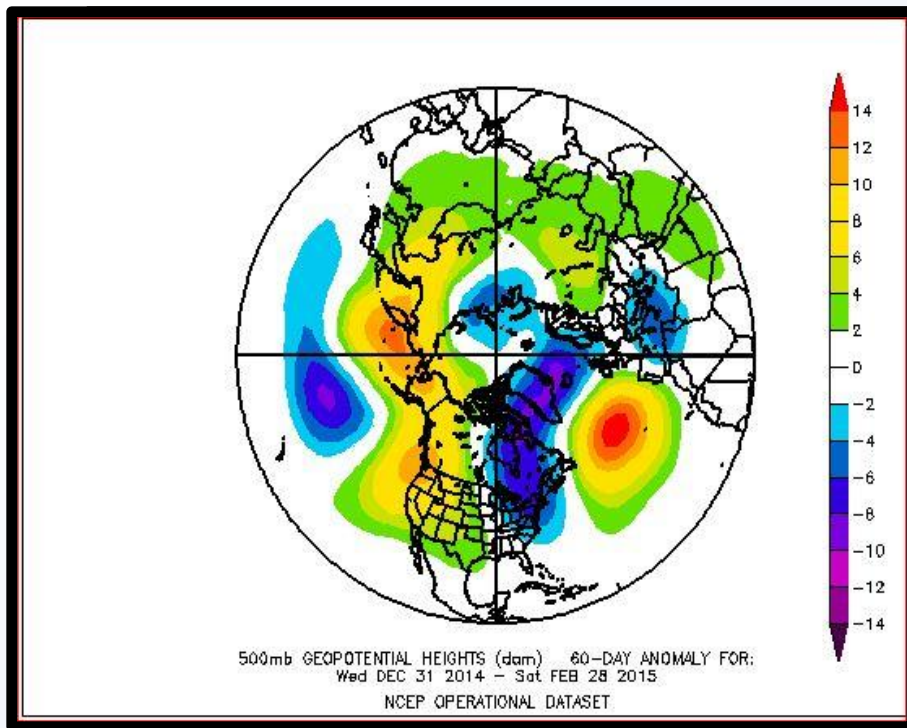


PNA



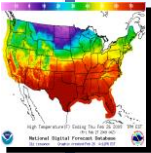
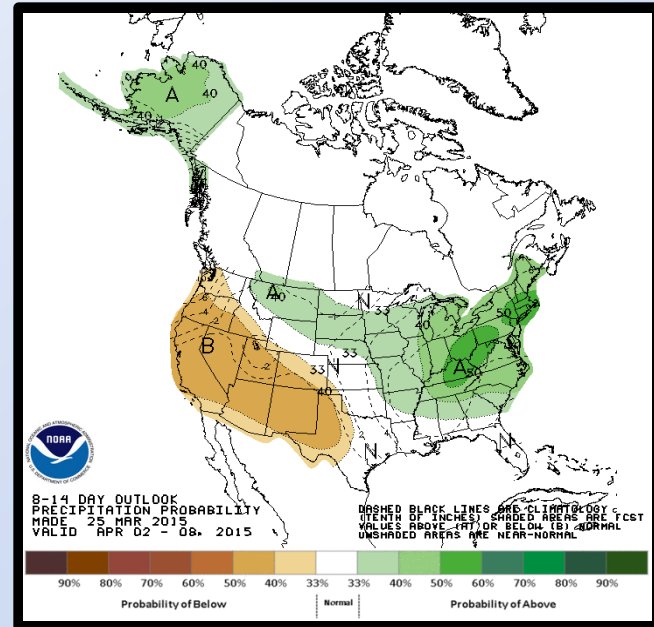
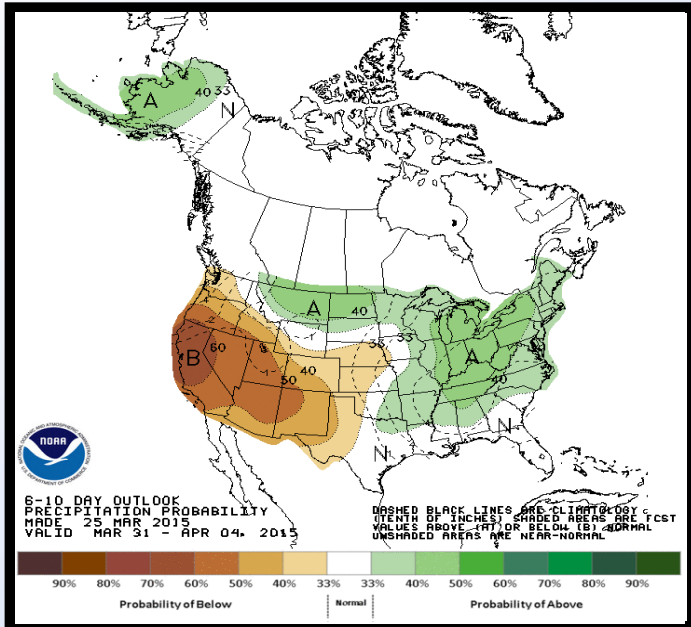
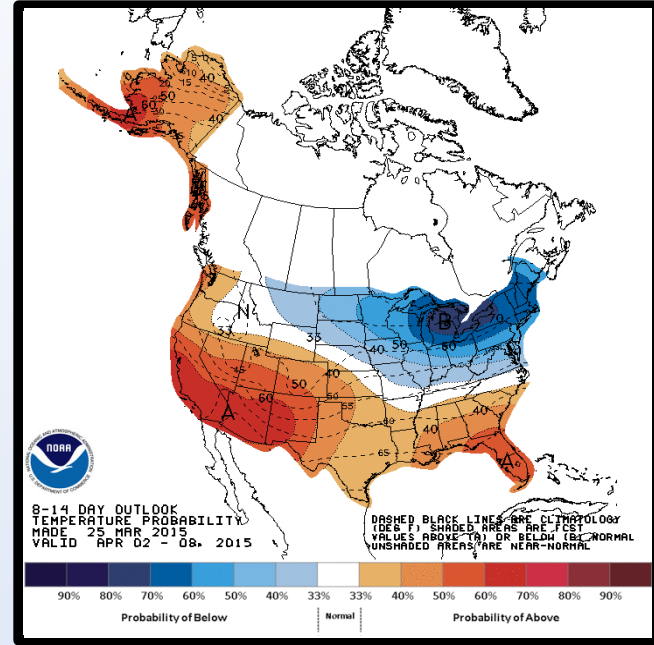
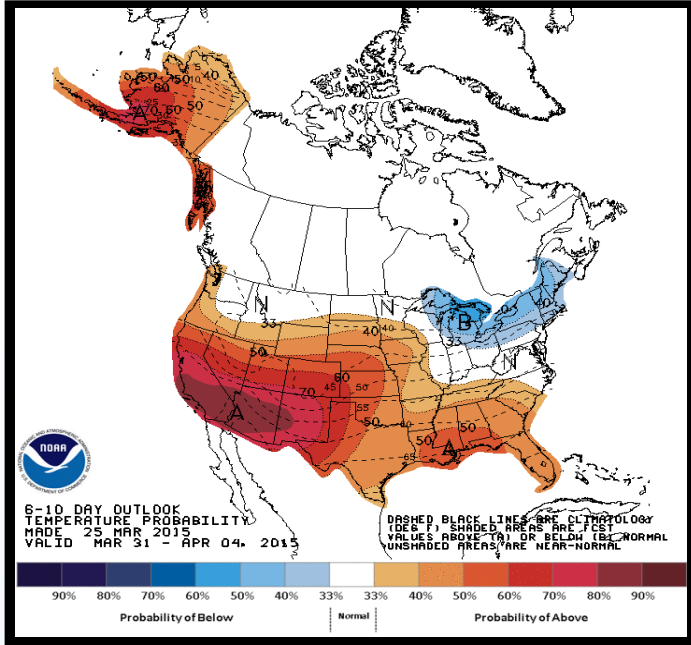
Dominant Winter Wx Pattern

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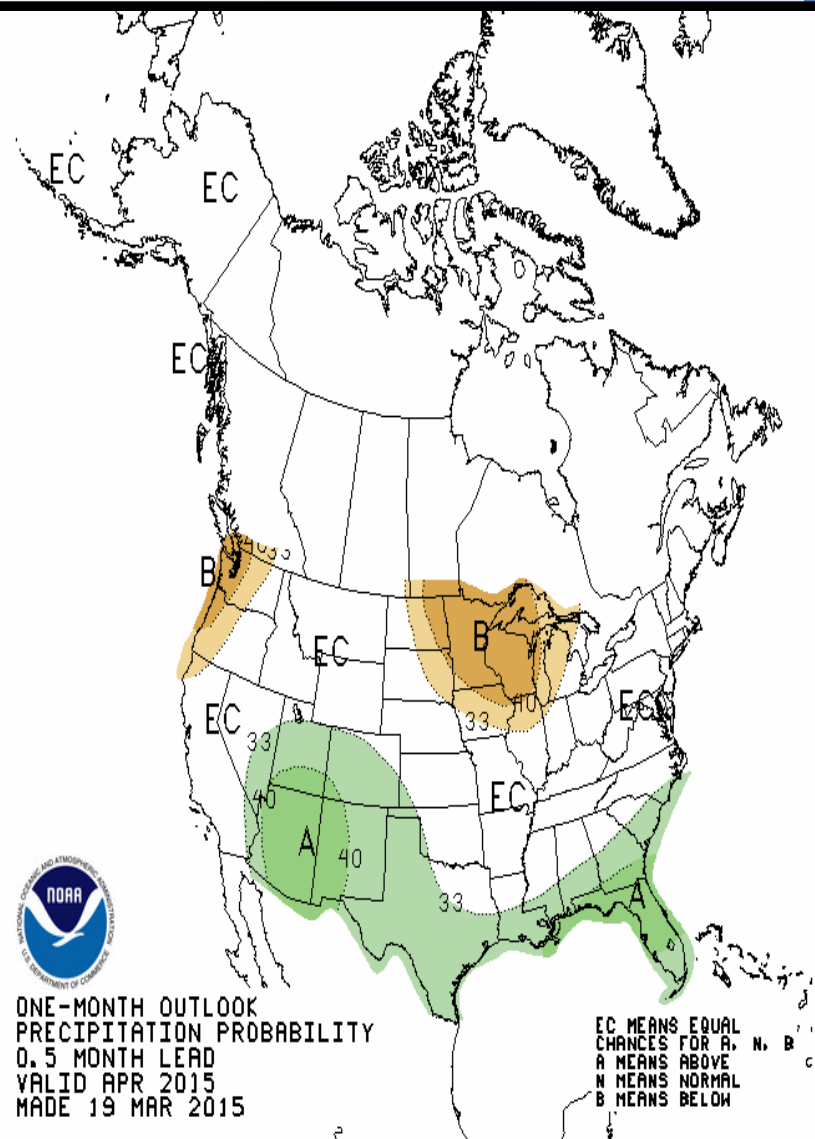
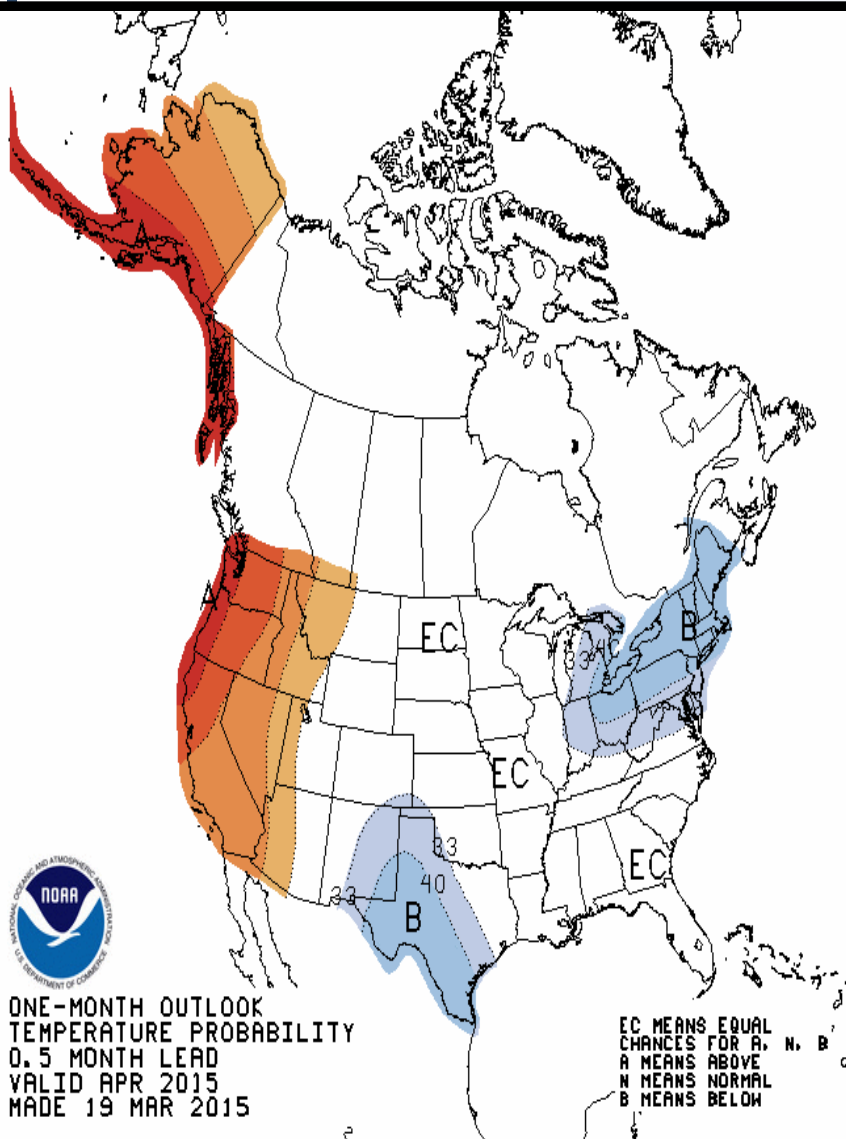


Outlooks – 6-10 and 8-14 day

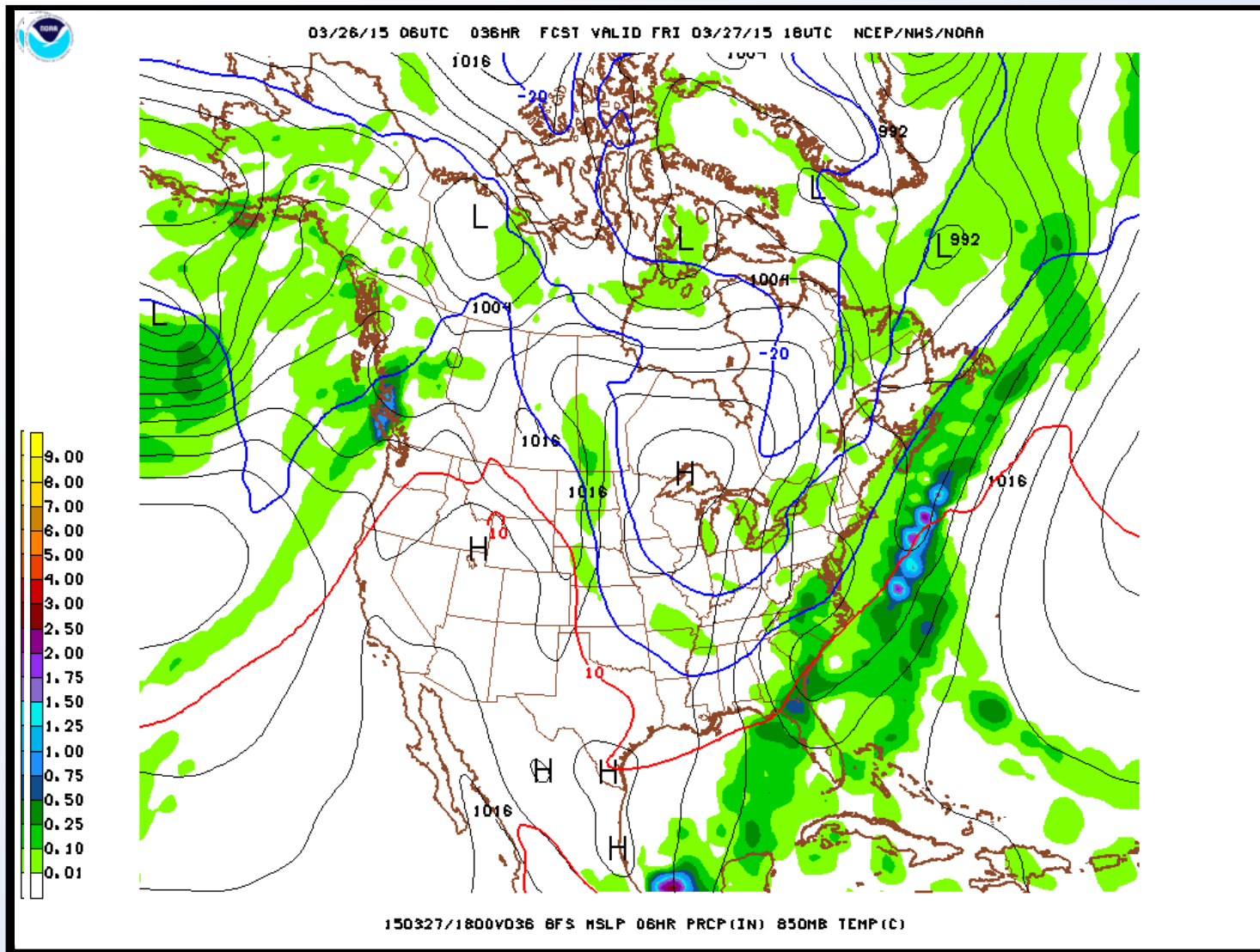
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CPC April 2015 Outlook

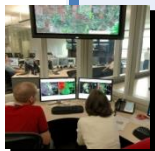
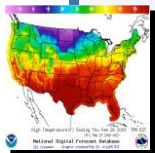


Surface Map – Mar 27th

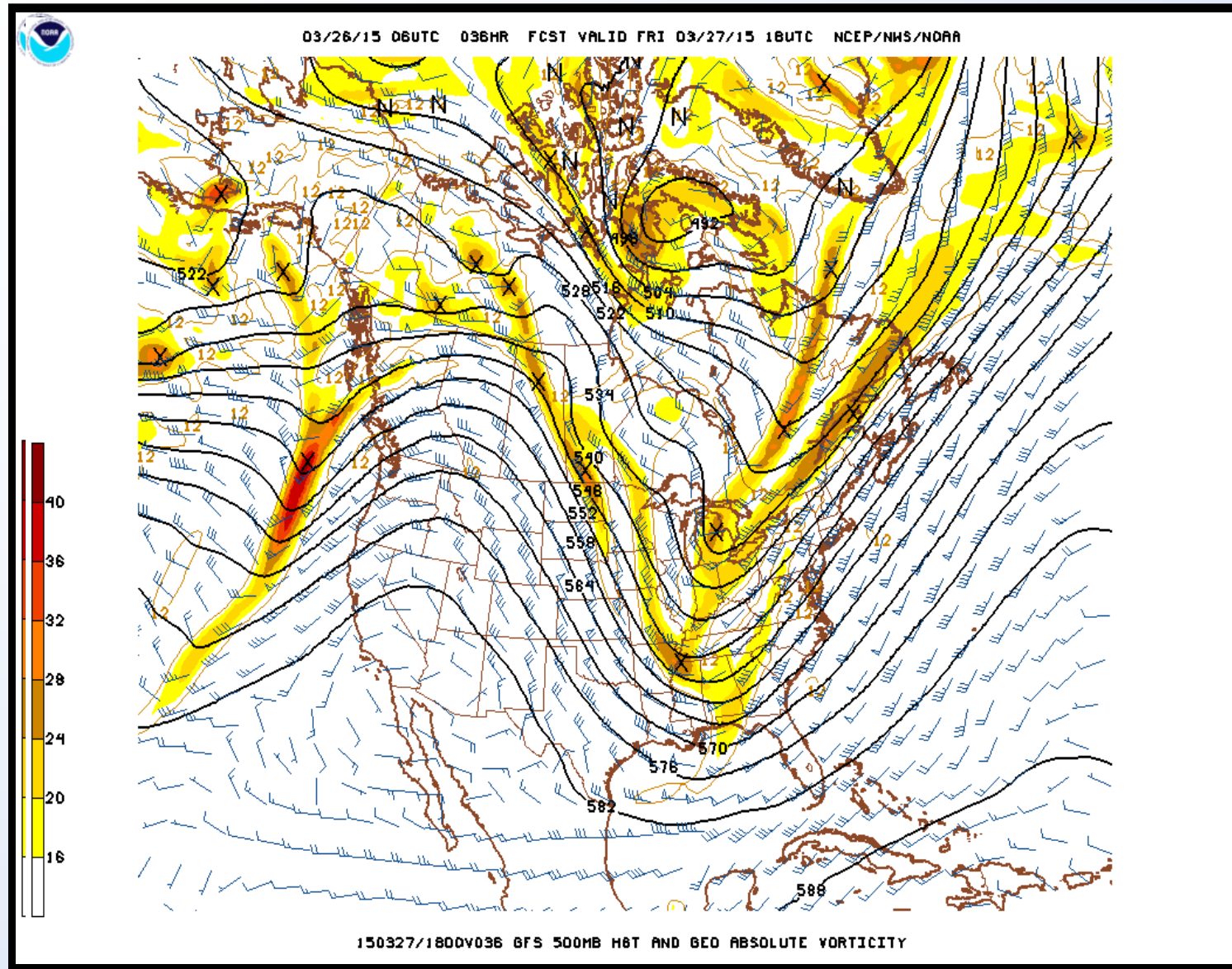


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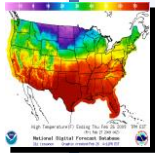
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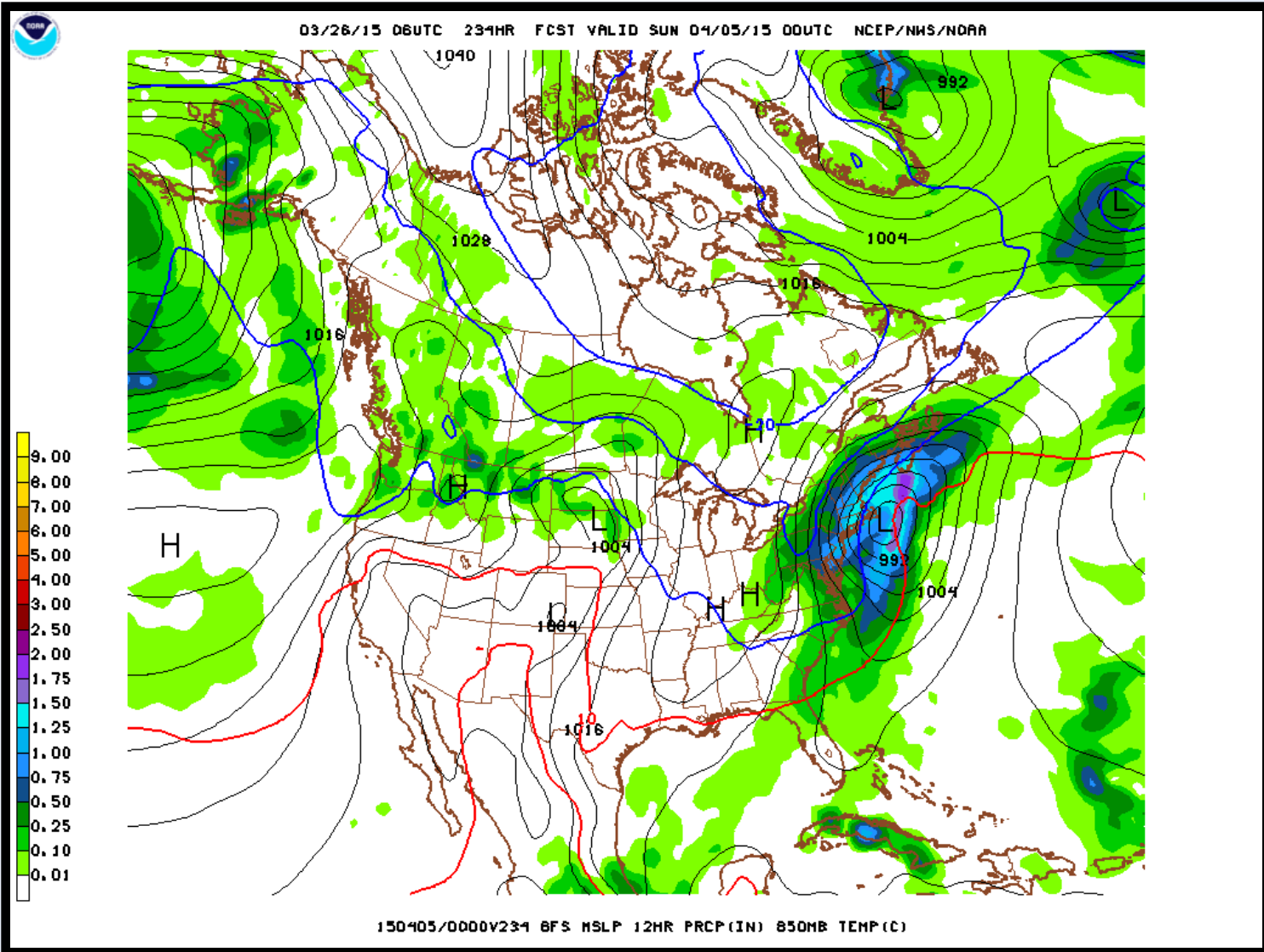
500 MB Height – Mar 27th



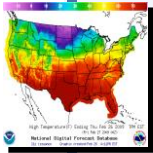
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Surface Analysis --- Apr 5th

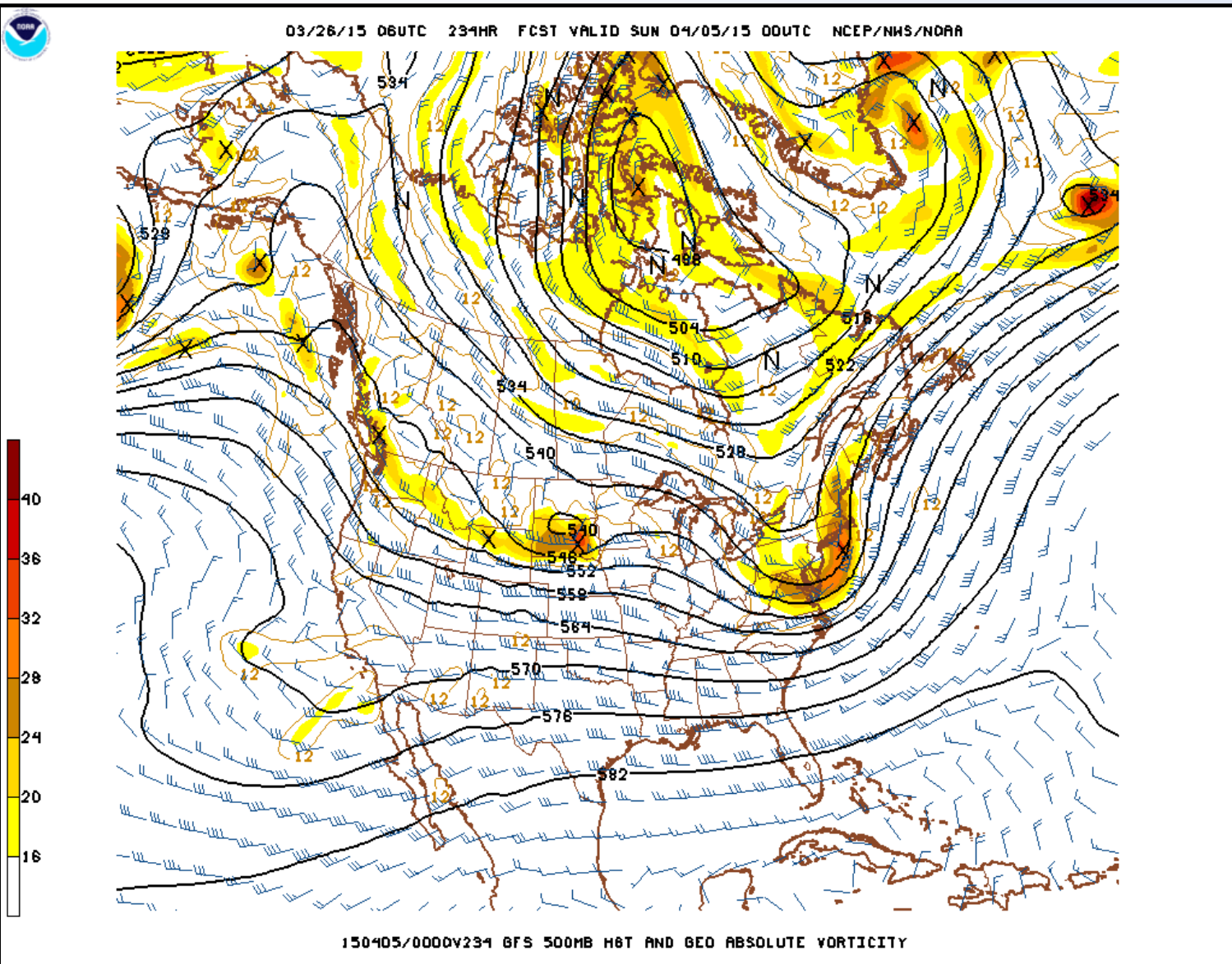
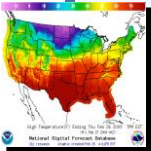


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500 MB Height – Apr 5th

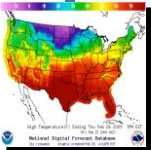
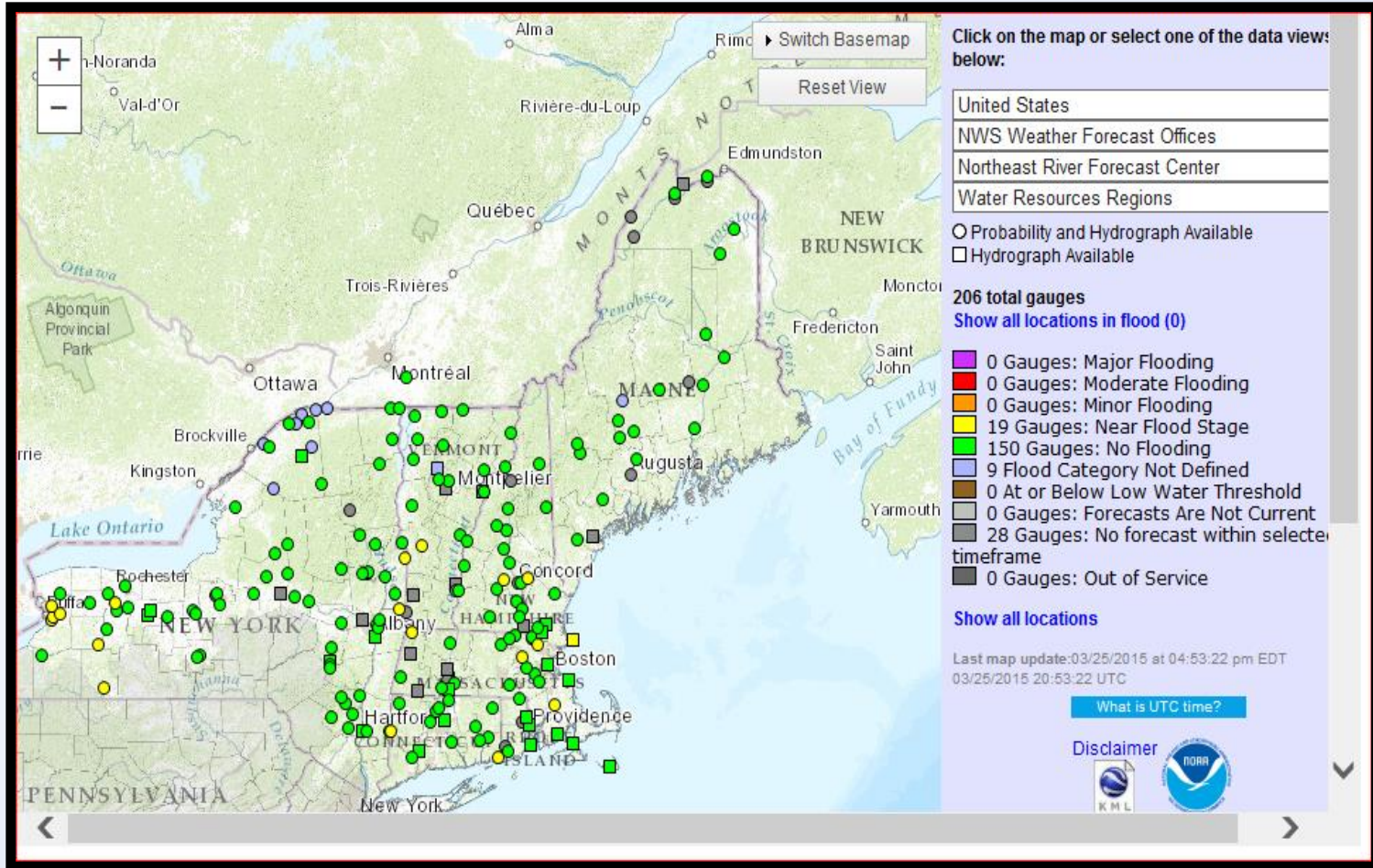
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NERFC Daily Forecast

<http://www.weather.gov/nerfc/>

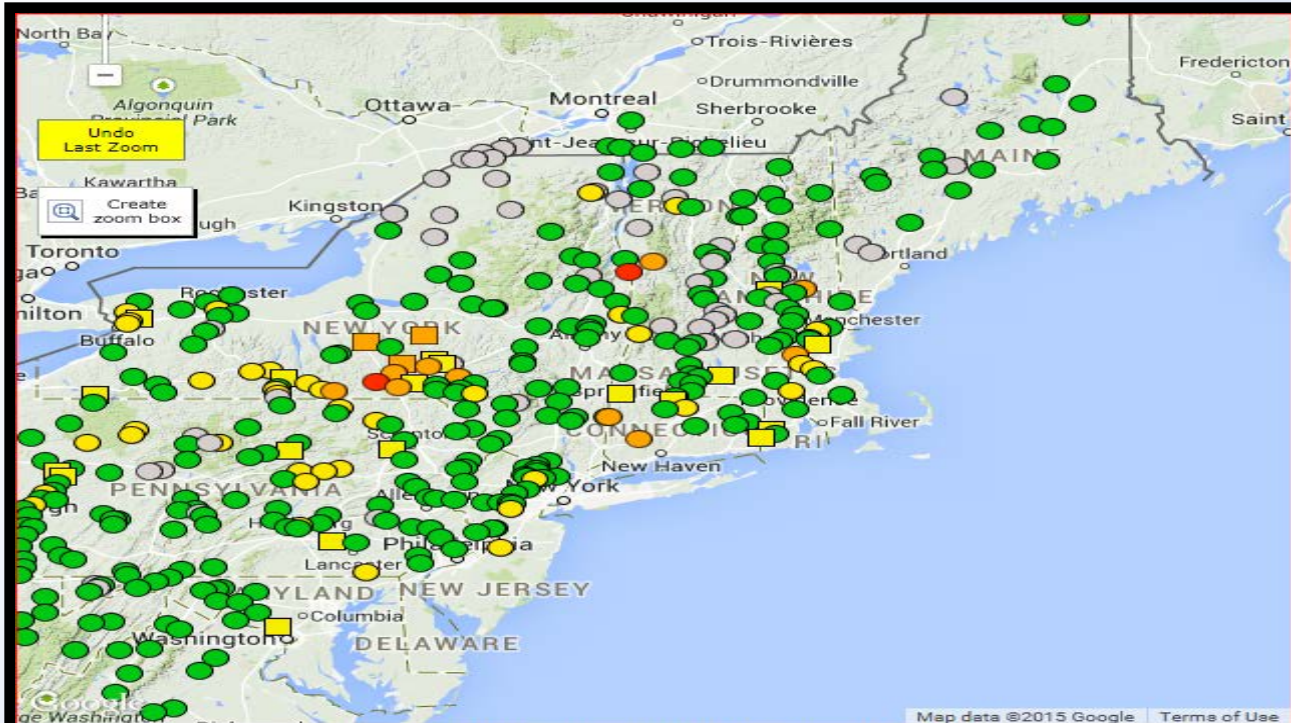
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MMEFS – Met Model Ensemble Forecast System

<http://www.erh.noaa.gov/mmefs/index.php?Lat=44&Lon=-73&Zoom=6>

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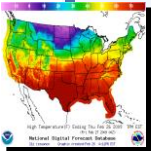
Map Last Updated: Tuesday, March 24, 2015 at 1:11:20 PM

Turn Auto Refresh ON

Turn RFC Boundaries ON

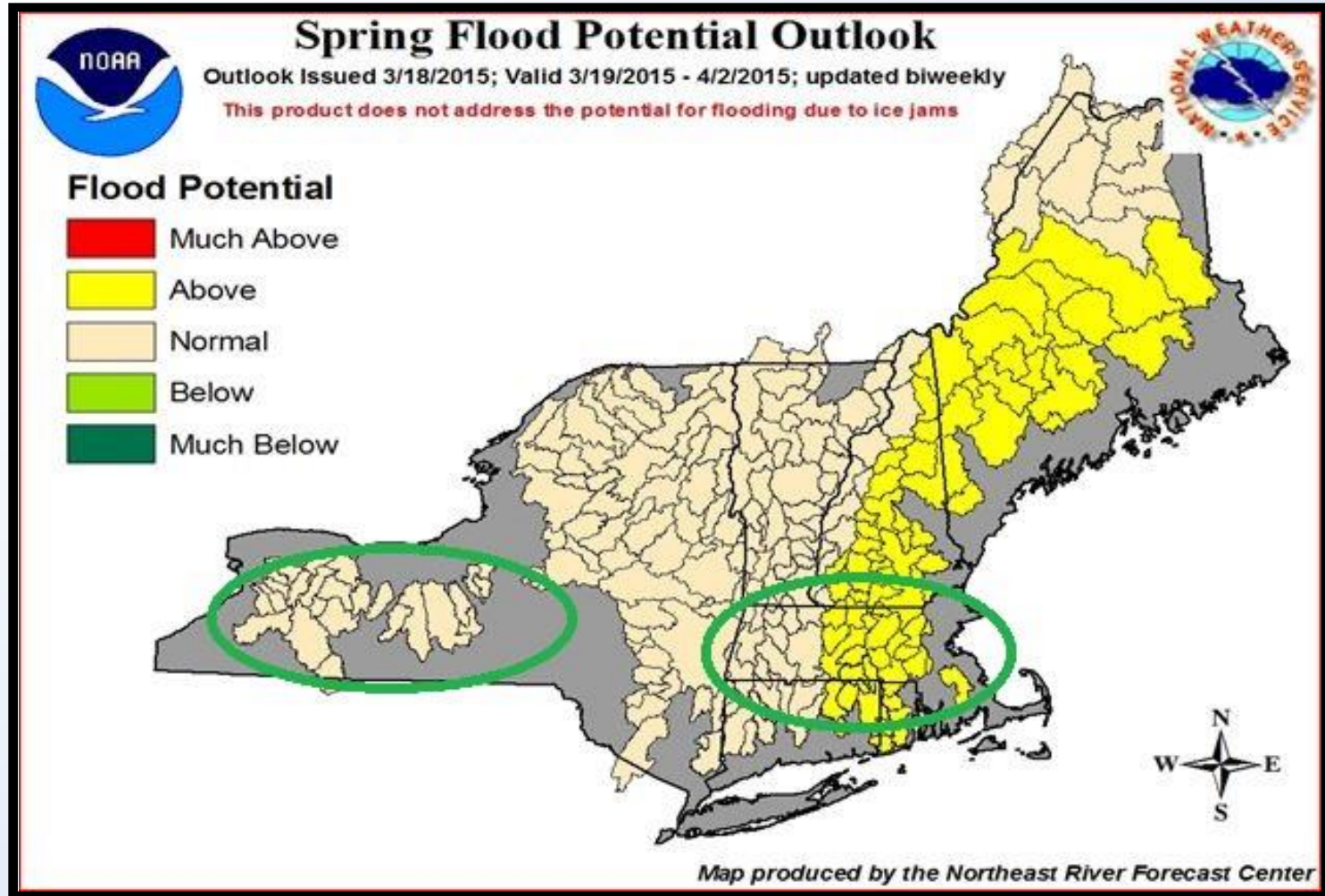
Make a link to this map view

News Legend		
News Items less than 24 hours old	News Items 1 to 7 days old	No current News Items
Map Legend		
Chance of Exceedance		
30%	Level	70%
●	Action	■
●	Minor Flood	■
●	Moderate Flood	■
●	Major Flood	■
● = less than 30% chance of reaching Action level		
○ = no critical levels defined for this point		
River Forecast Centers		
Middle Atlantic River Forecast Center		
Northeast River Forecast Center		
Ohio River Forecast Center		
Southeast River Forecast Center		

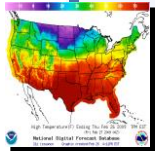


Flood Potential Outlook

Valid until Apr 2nd

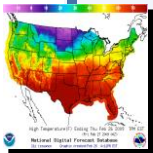


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Upcoming Briefings Friday Morning Schedule

- **Winter/Spring Outlooks**
 - *Friday, April 3rd at 11:00AM*
 - *Every 2 Weeks into May 2014*
 - *Emphasis on Snowpack and Ice/Melt Issues*
 - *Fridays – Week of Snow Survey Measurements*





© DAPIXARA



4 days ago

- ***Thank you***
- ***Ed Capone***
- ***Service Coordination Hydrologist***

