

A landscape photograph showing a dry riverbed in the foreground, scattered with large rocks and a piece of bleached driftwood. In the middle ground, a large dam structure is visible, with a few people walking on the riverbed. The background features a hillside with some buildings and utility poles under a cloudy sky. Bare trees are visible in the foreground on both sides.

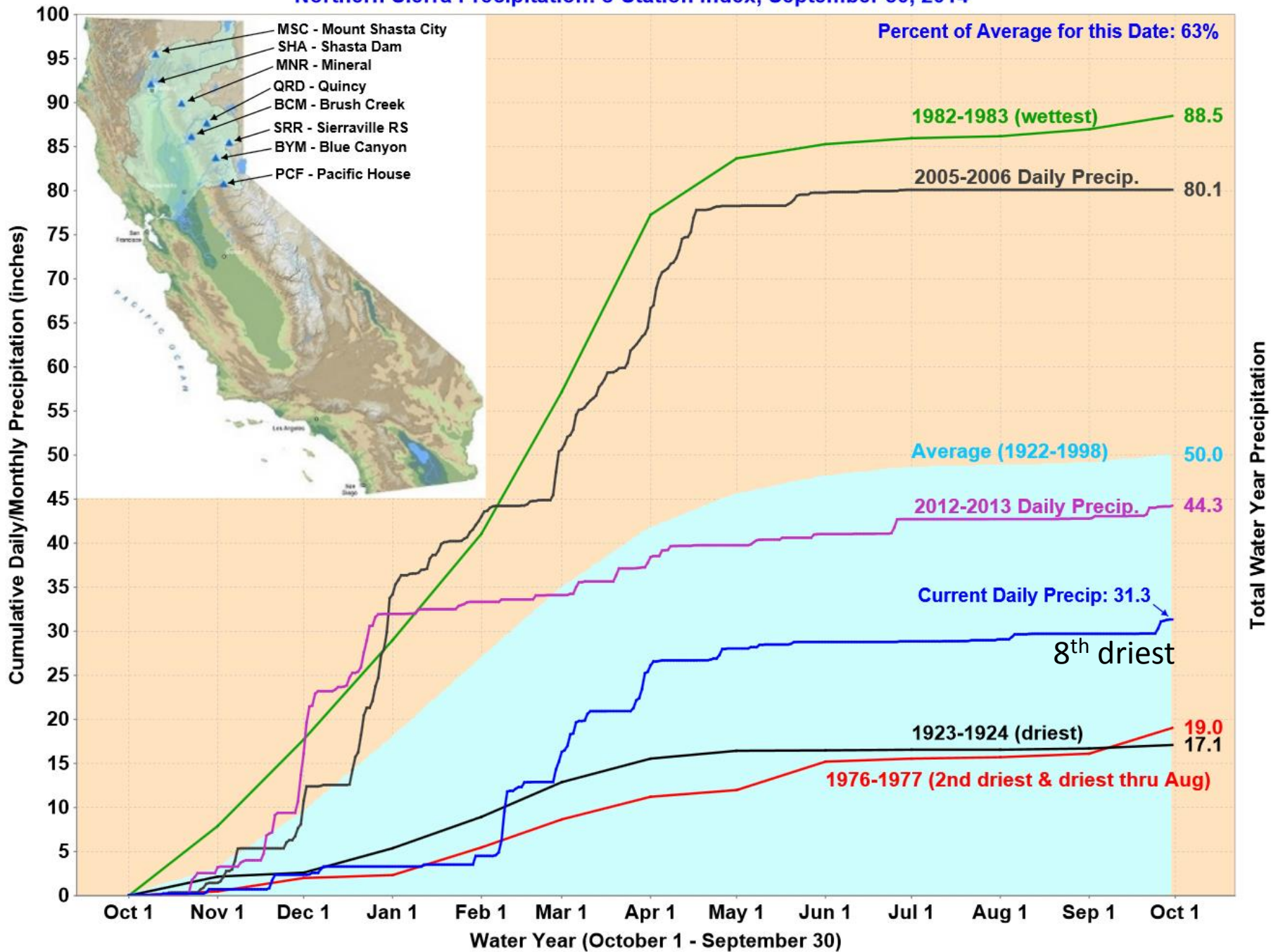
# NIDIS Workshop Water Year Perspectives

Folsom – January 2014

# Talk Overview

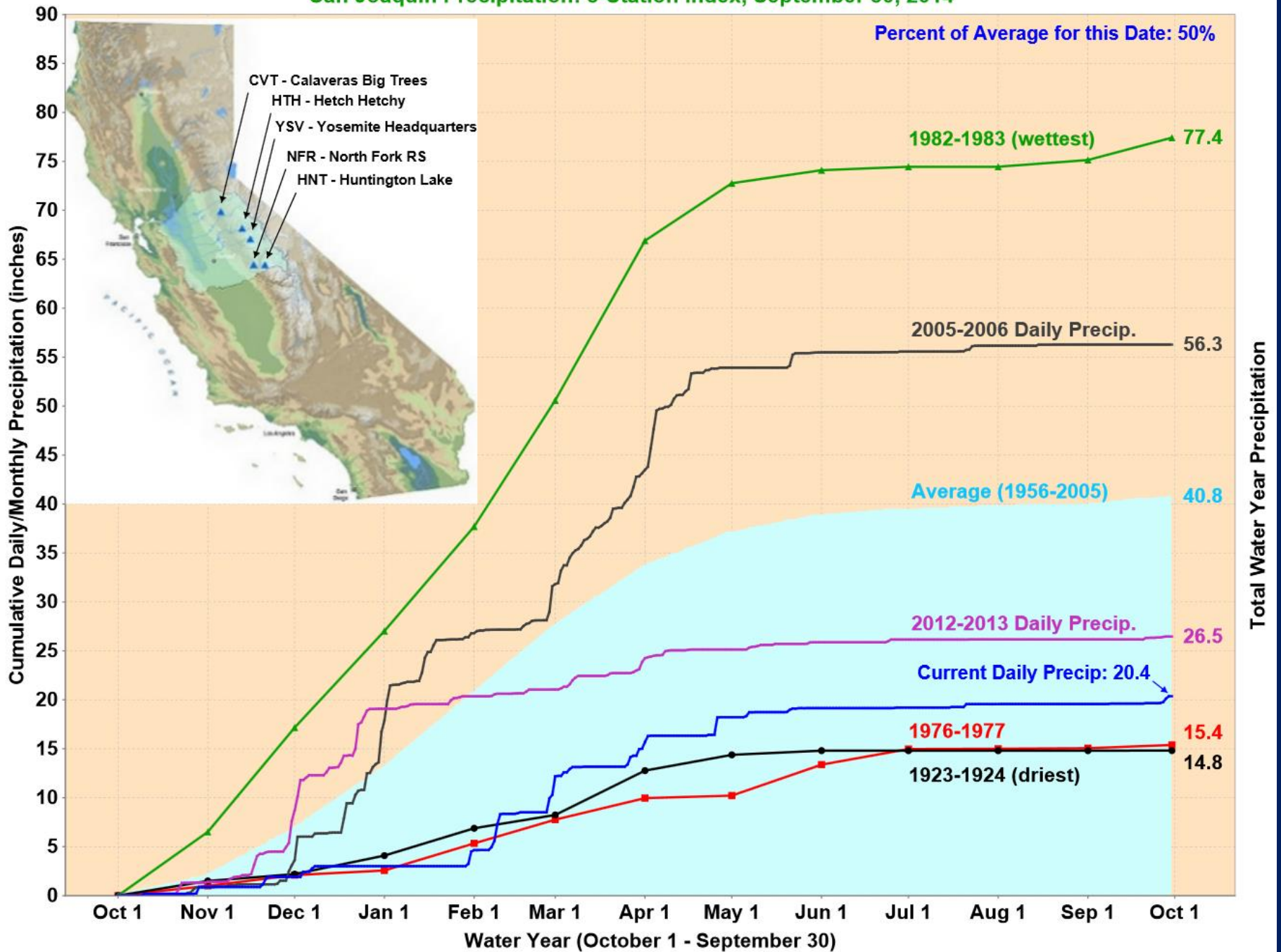
- Antecedent Conditions
- Current Conditions
- WY2015 Outlook

# Northern Sierra Precipitation: 8-Station Index, September 30, 2014



# San Joaquin Precipitation: 5-Station Index, September 30, 2014

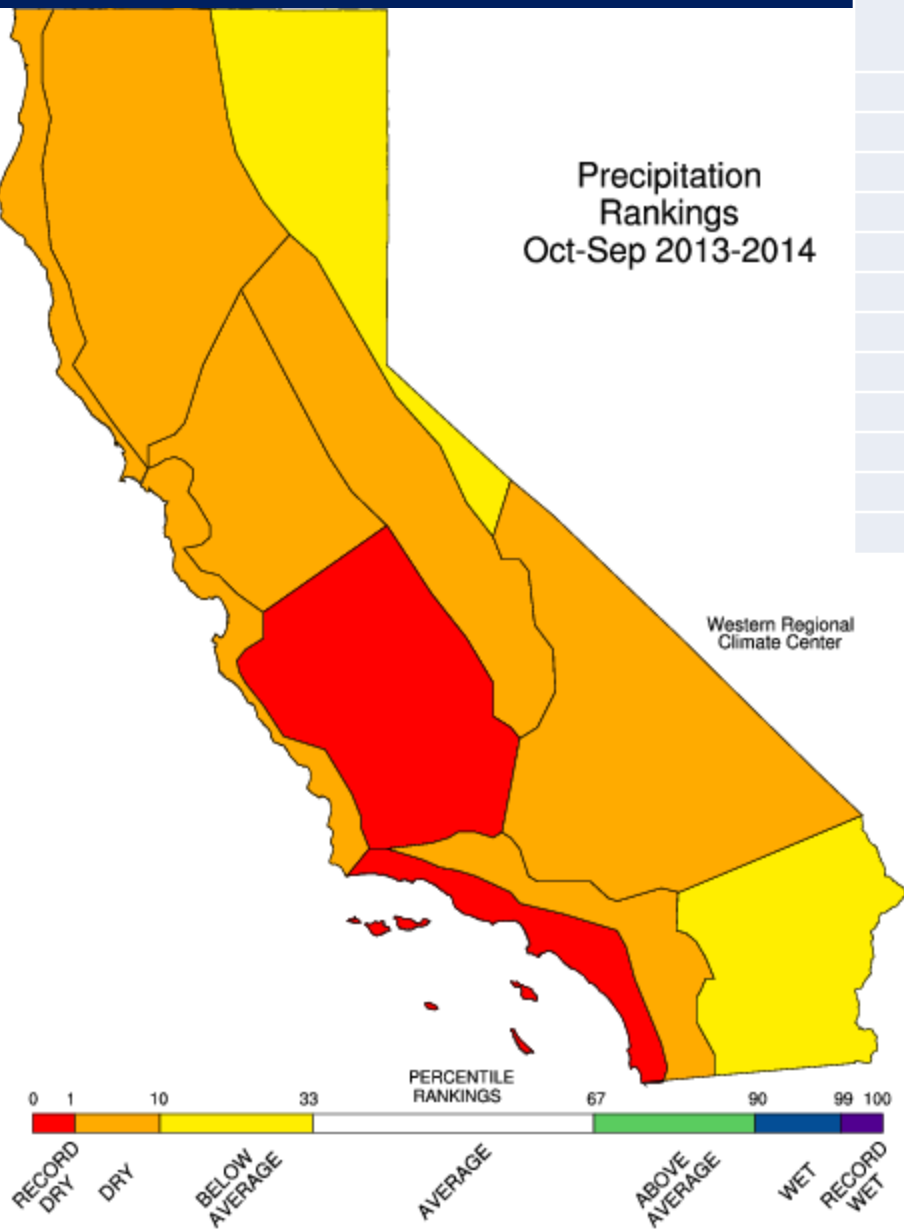
Percent of Average for this Date: 50%



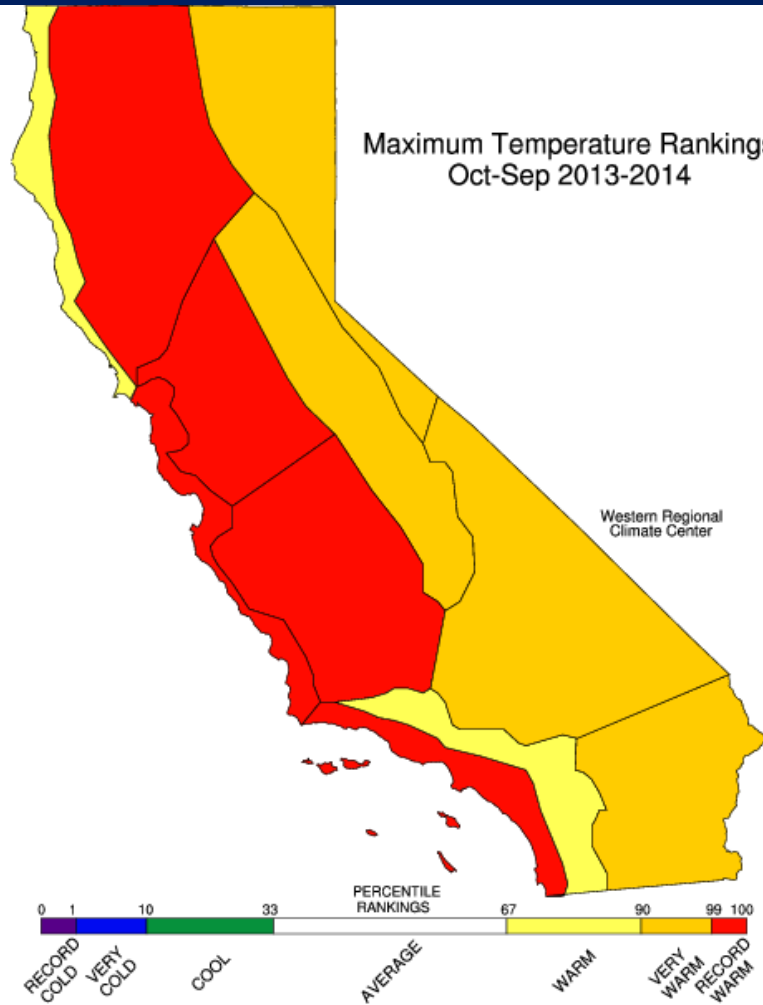
## Precipitation Rankings Oct-Sep 2013-2014

Region	WY2014 Value (inches)	% of Average	Rank
Sierra	20.76	53%	3
Northeast	15.21	63%	15
North Central	28.87	56%	6
Sacramento Delta	10.68	54%	8
San Joaquin Valley	4.81	38%	1
North Coast	33.48	51%	3
Central Coast	11.94	47%	2
South Coast	5.63	32%	1
South Interior	9.04	50%	5
Mojave	2.9	39%	2
Sonoran	2.41	54%	21
Statewide	12.08	52%	3

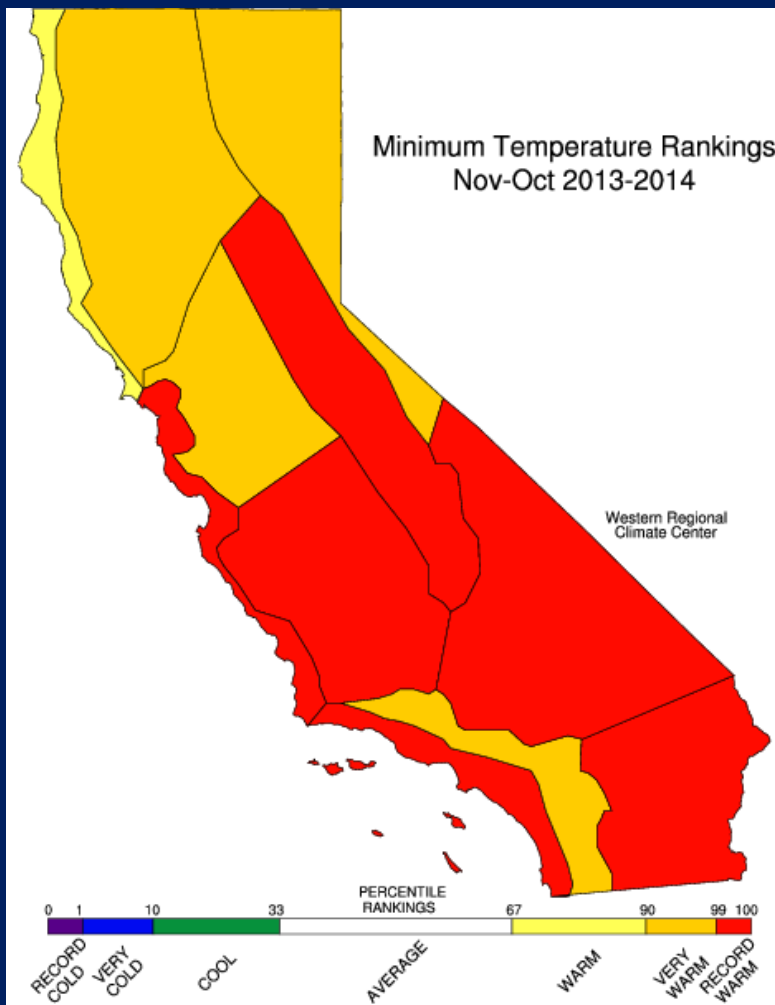
Western Regional  
Climate Center



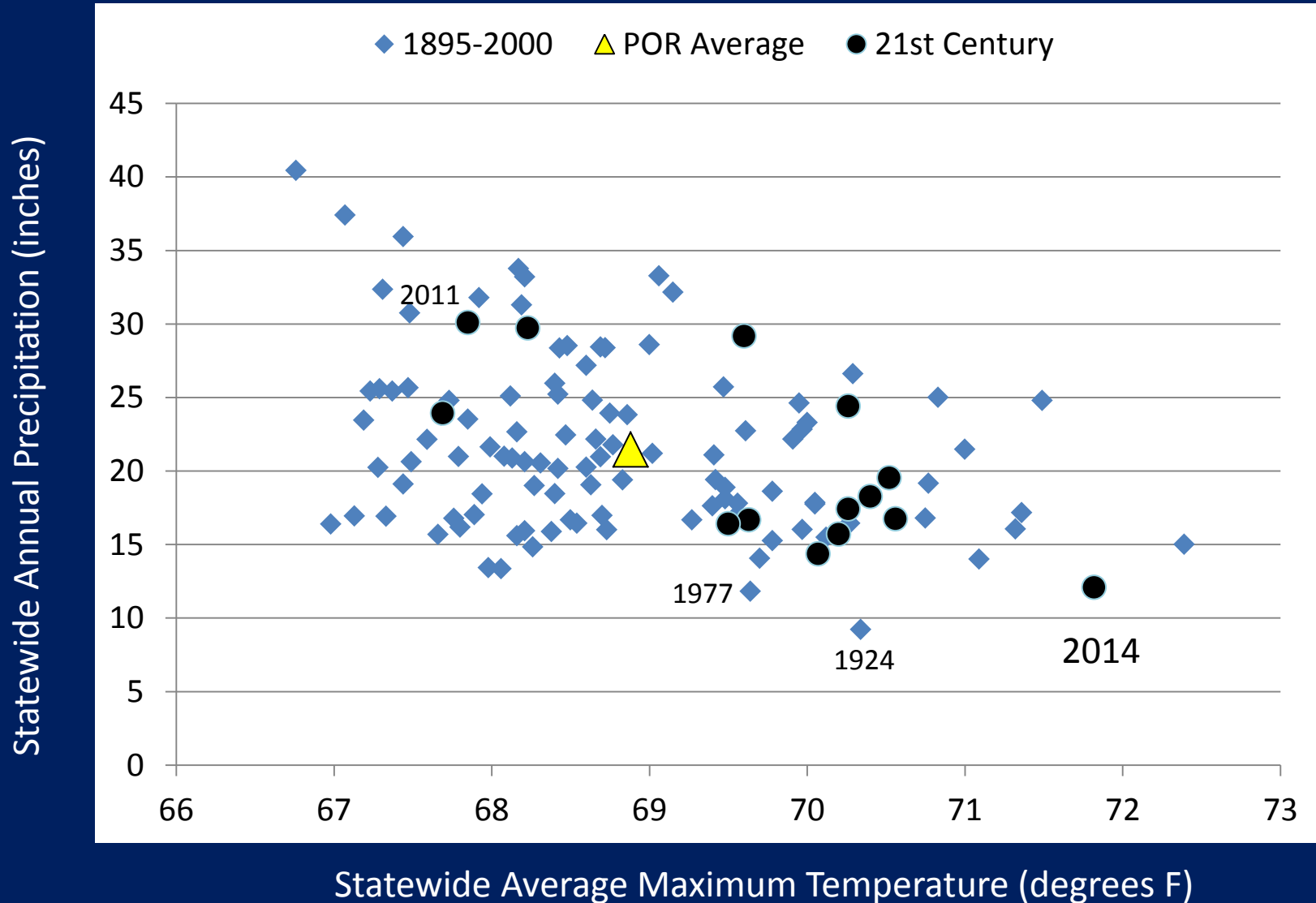
Maximum Temperature Rankings  
Oct-Sep 2013-2014



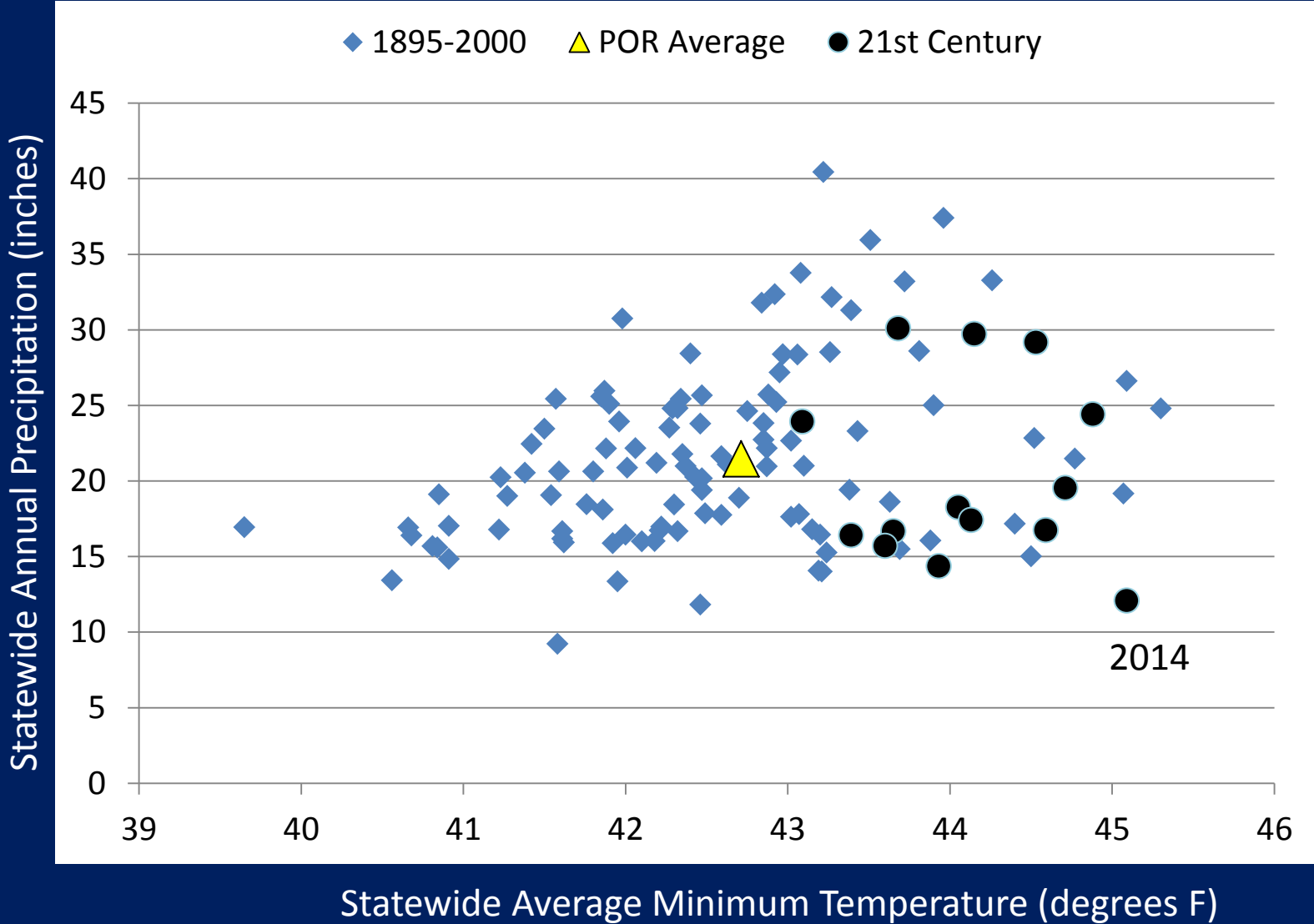
Minimum Temperature Rankings  
Nov-Oct 2013-2014



# Statewide WY Precipitation/Max Temperature 1895-2014



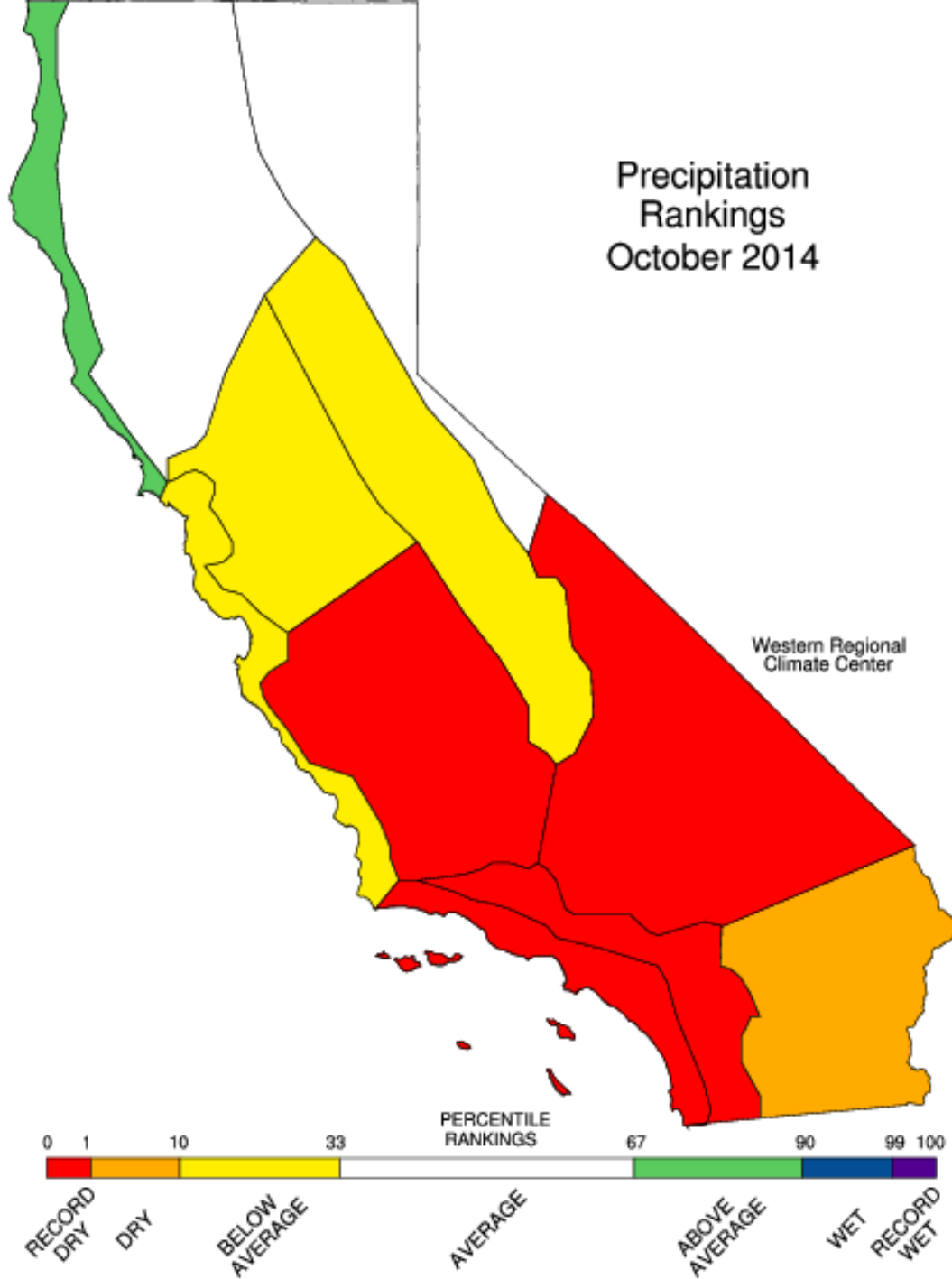
# Statewide WY Precipitation/Min Temperature 1895-2014



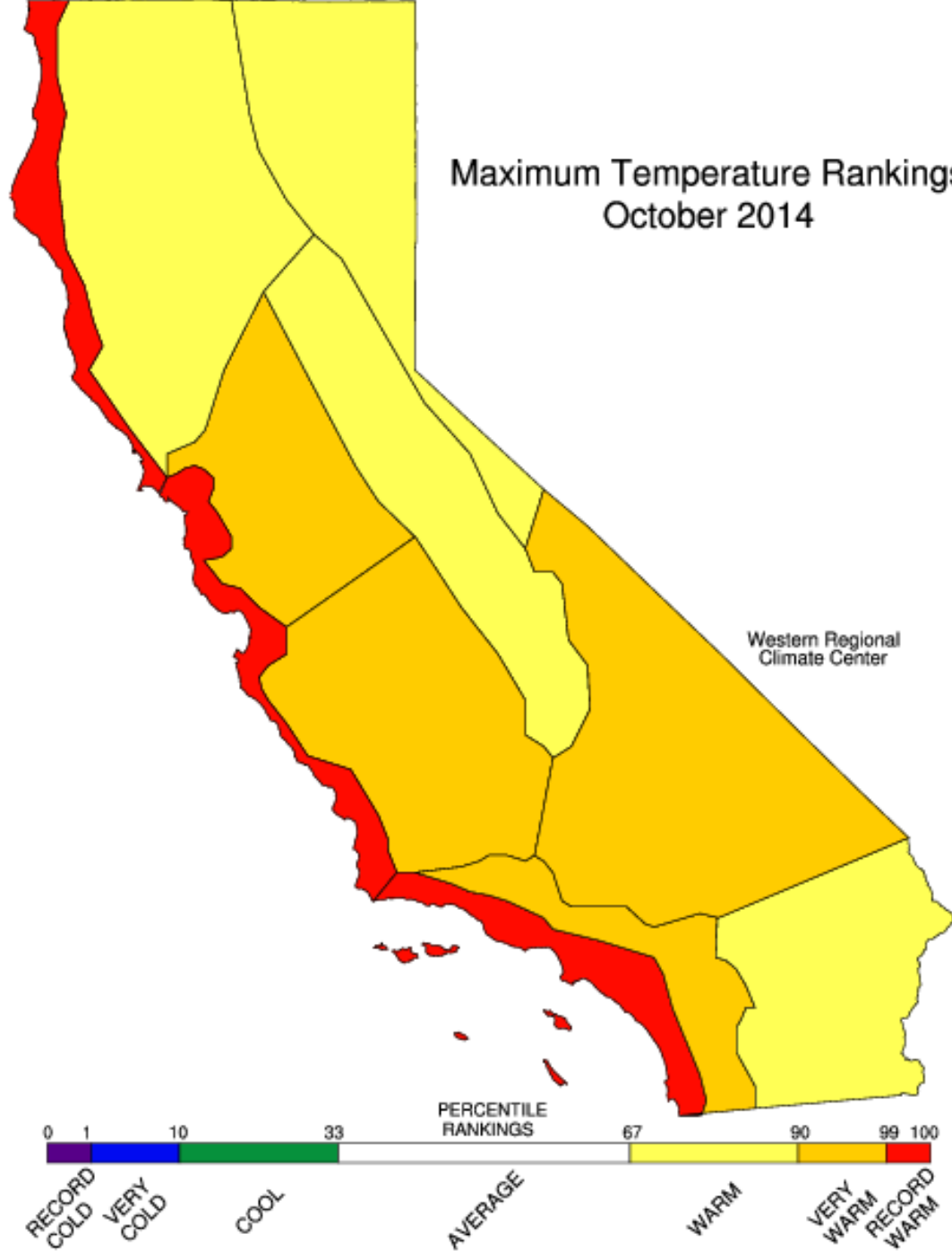


# Current Conditions

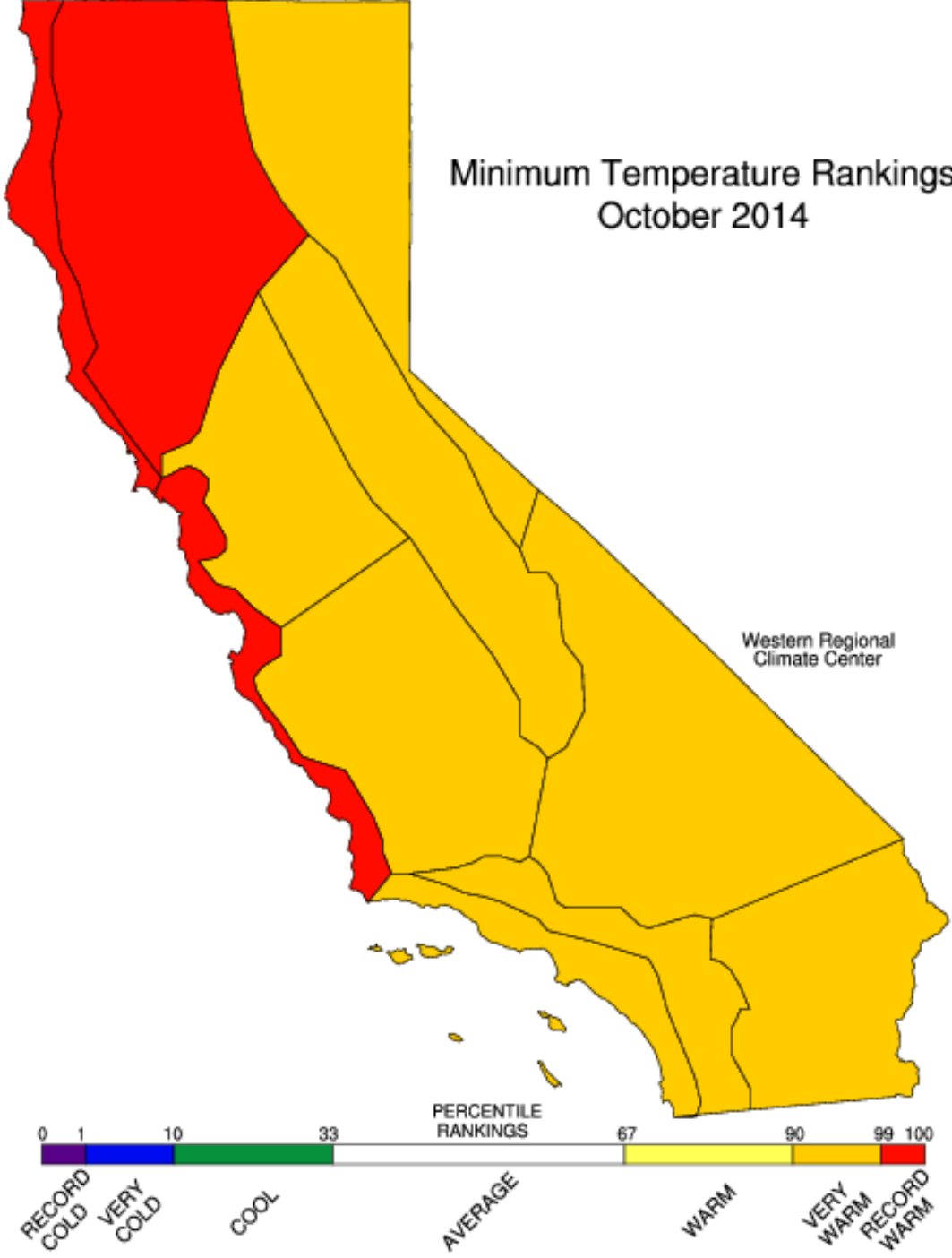
# Precipitation Rankings October 2014



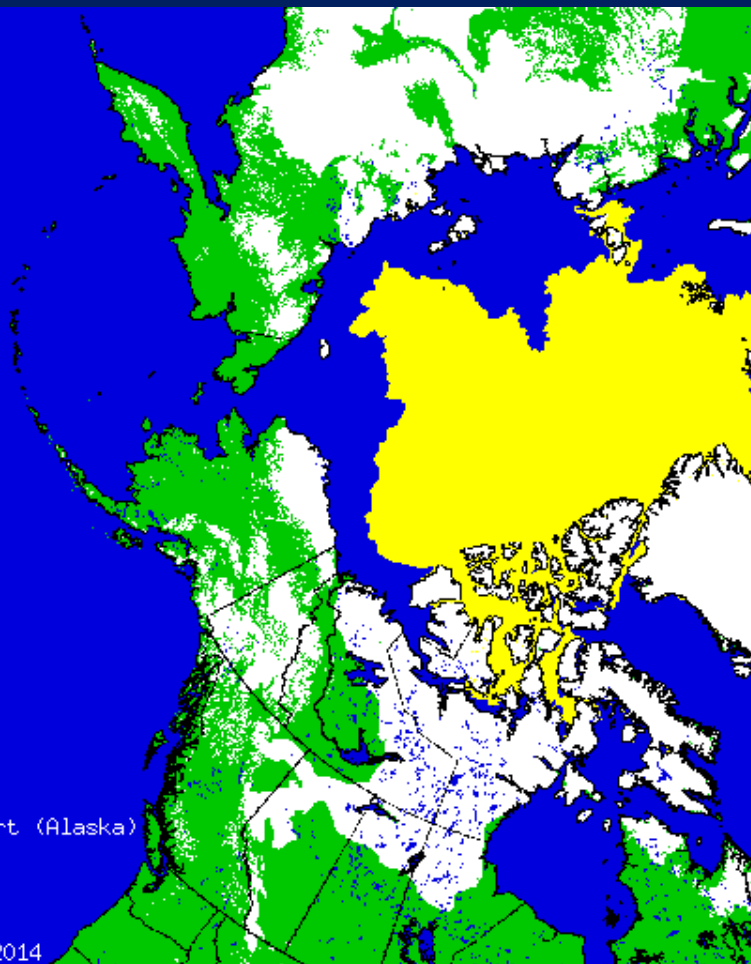
# Maximum Temperature Rankings October 2014



# Minimum Temperature Rankings October 2014



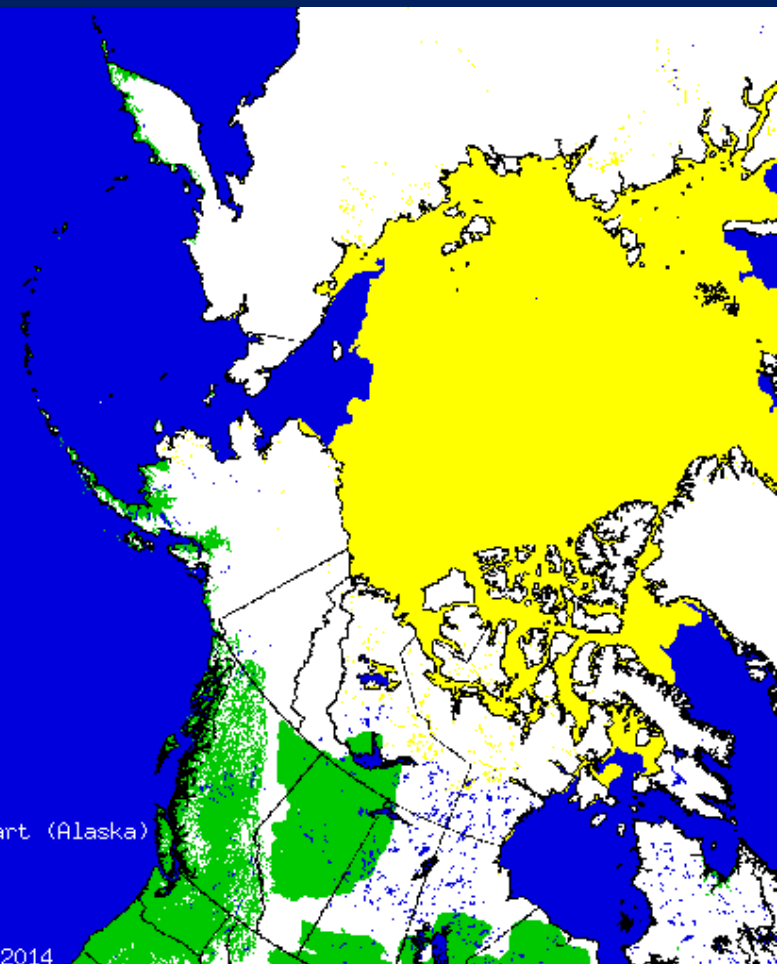
# Arctic Snow/Ice Cover 2014



Snow & Ice Chart (Alaska)

— snow  
— ice

Fri Oct 3 2014



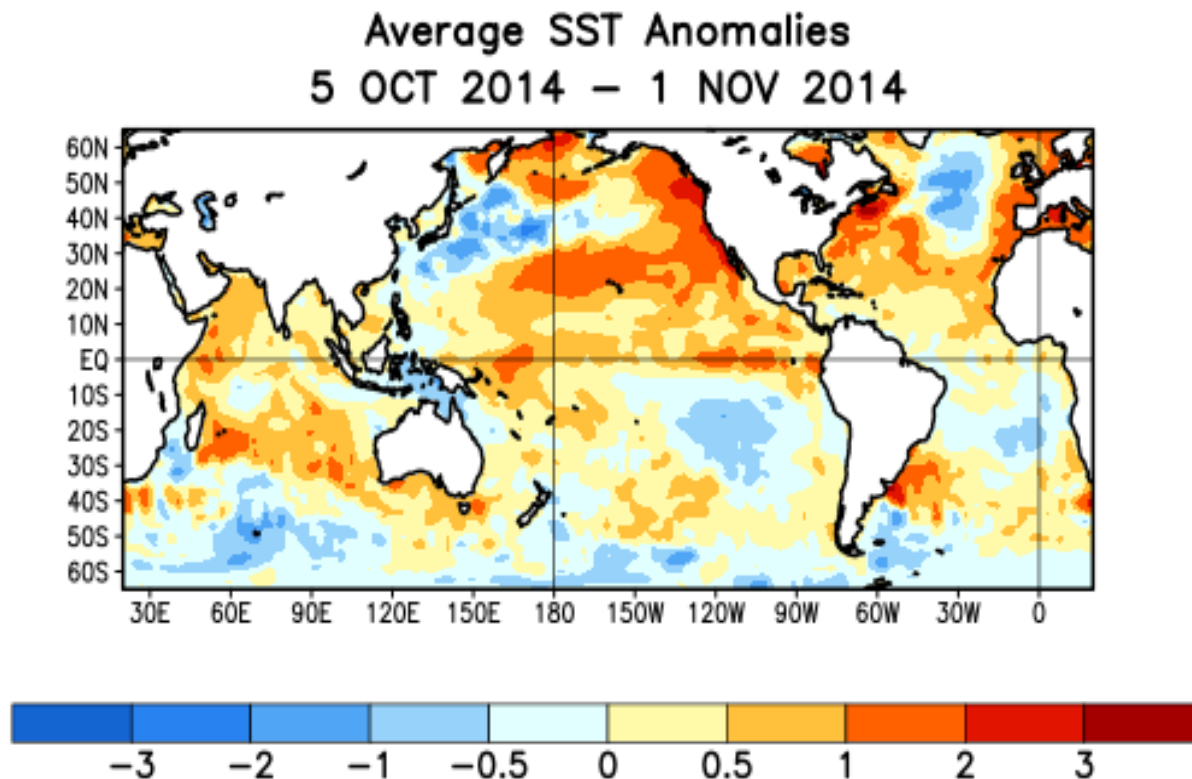
Snow & Ice Chart (Alaska)

— snow  
— ice

Mon Nov 3 2014

# Global SST Departures (°C) During the Last Four Weeks

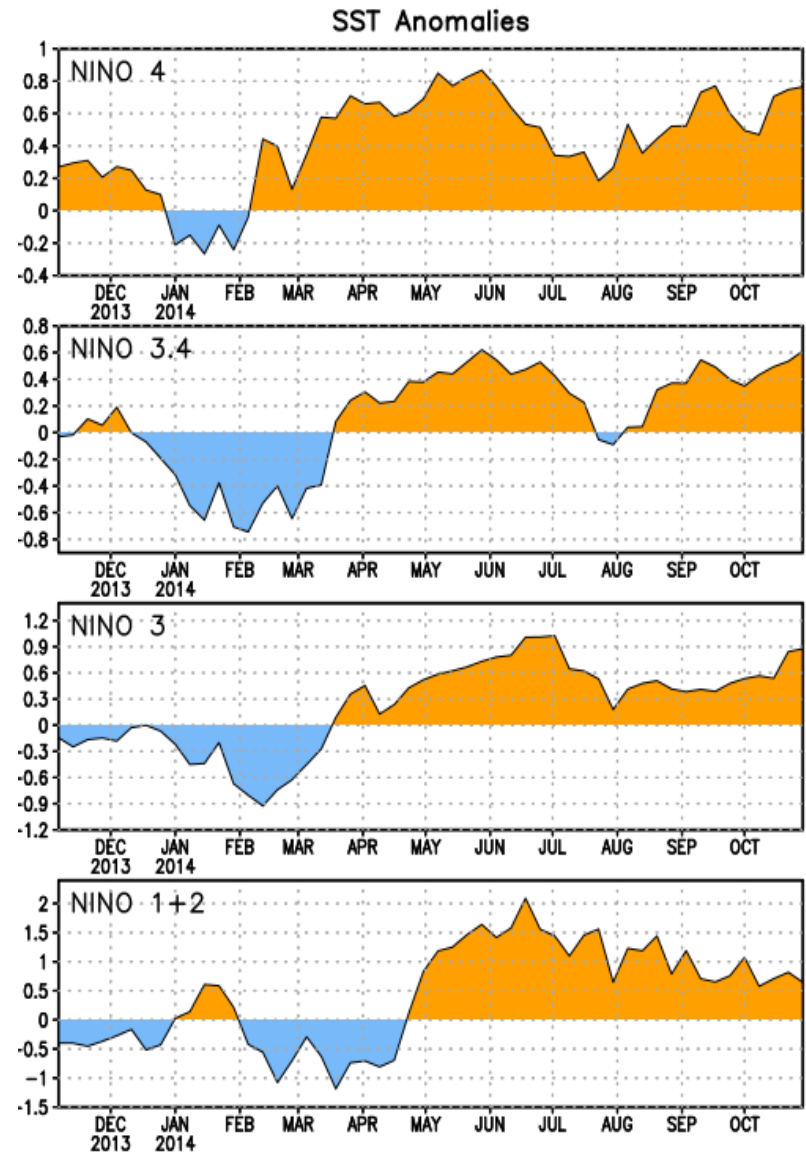
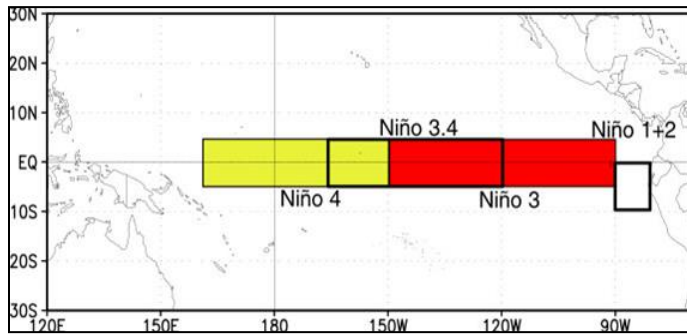
During the last four weeks, equatorial SSTs were above-average across the Pacific and western Indian Ocean and below-average north of Australia (the Maritime Continent).



# Niño Region SST Departures (°C) Recent Evolution

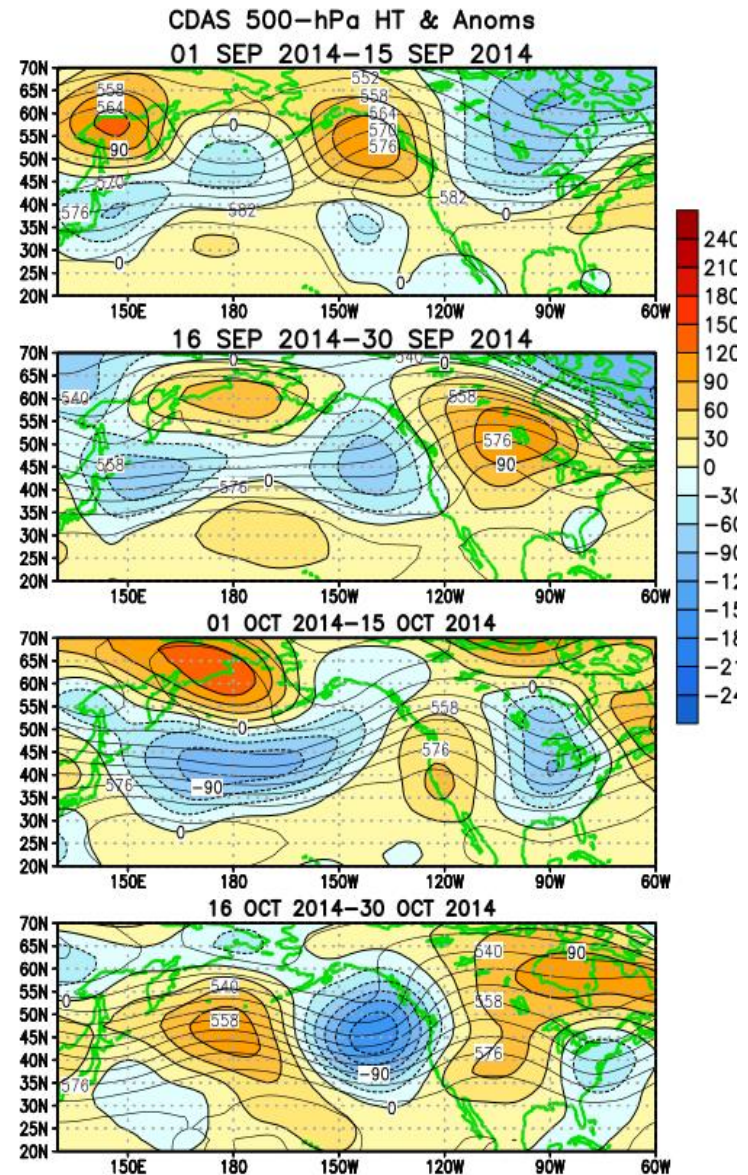
The latest weekly SST departures are:

Niño 4	0.8°C
Niño 3.4	0.6°C
Niño 3	0.9°C
Niño 1+2	0.6°C



# Atmospheric anomalies over the North Pacific and North America During the Last 60 Days

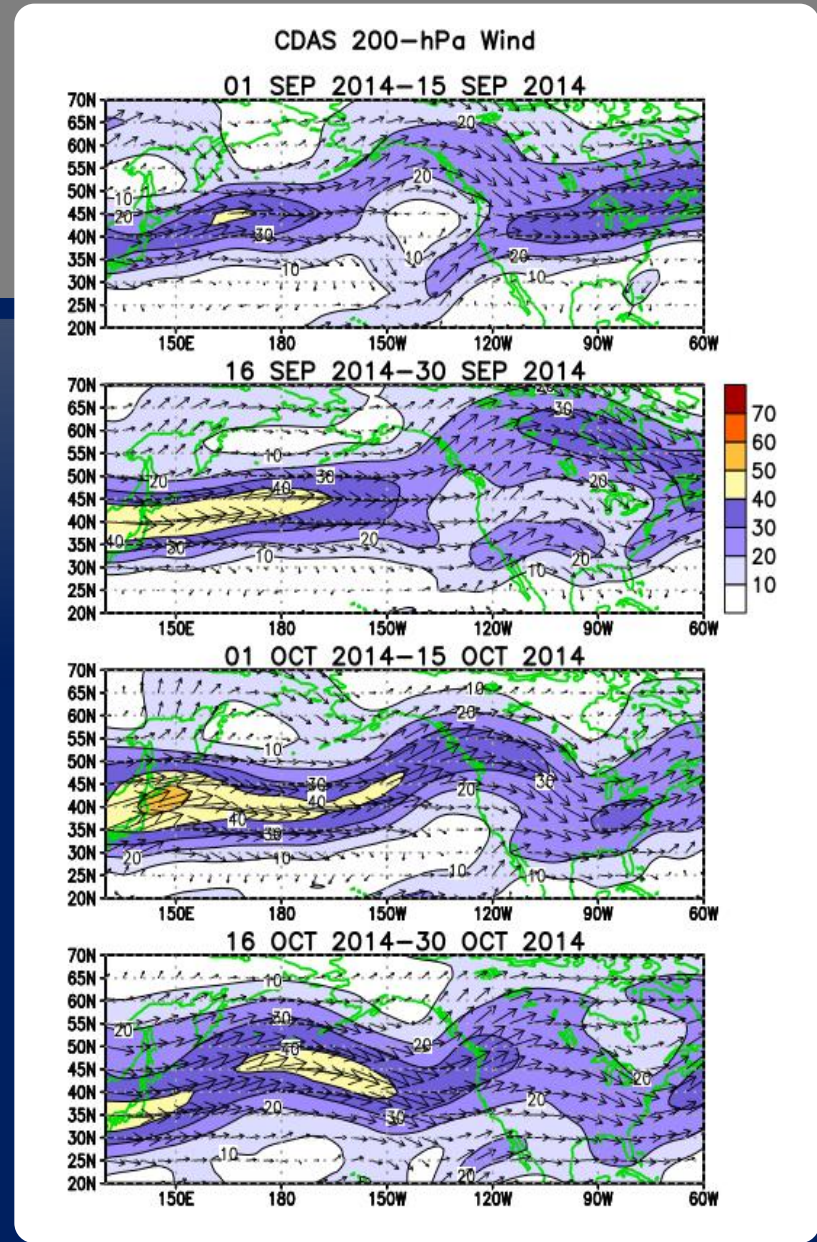
During early September-late October, the pattern generally featured an anomalous ridge over the western N. America and an anomalous trough over the eastern N. America. This pattern often led to above-average temperatures in the West and below average temperatures in the East.





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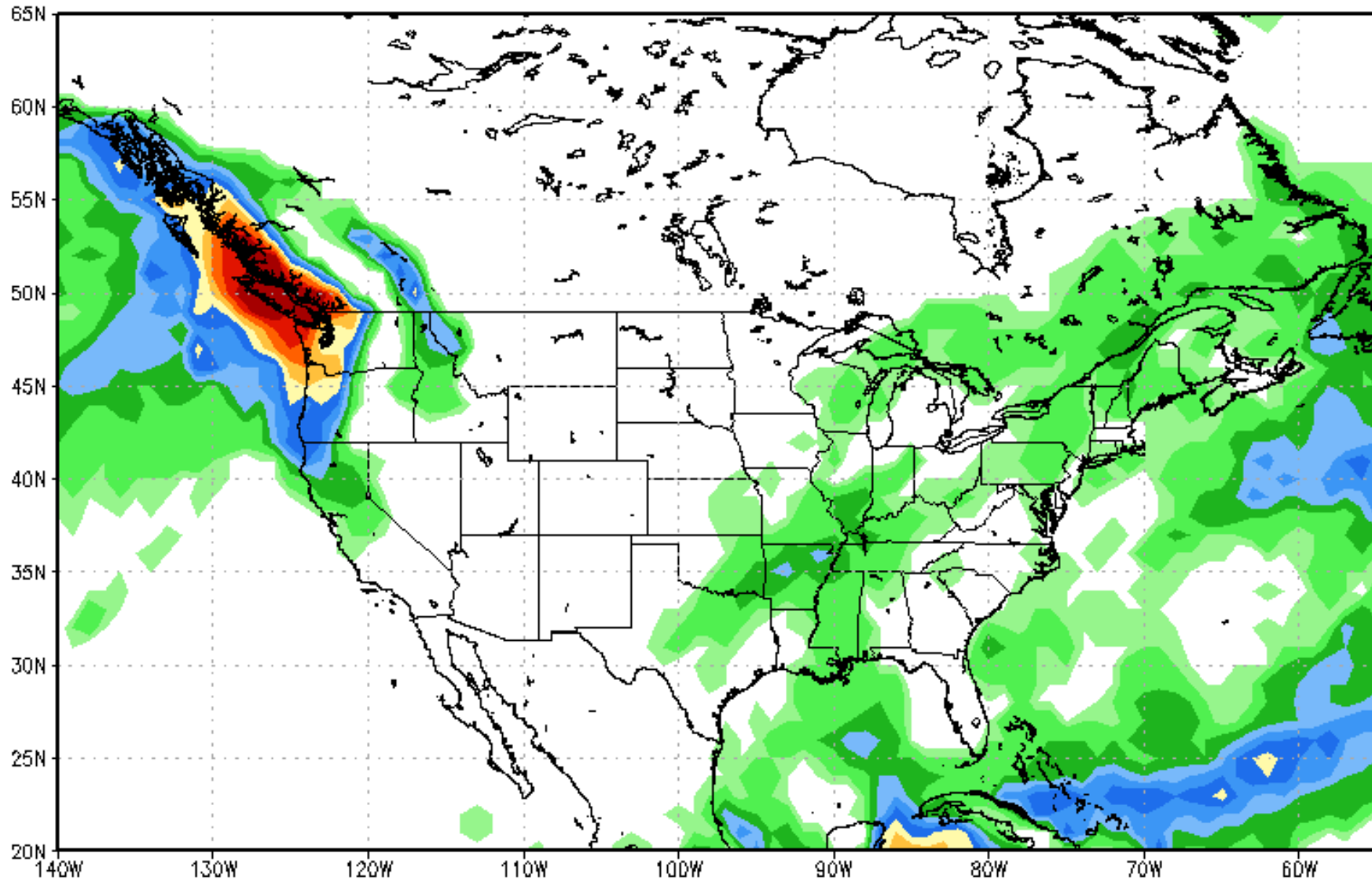


Looking Ahead to 2015

Forecast of Weak El Nino

# Probability of Week2 total precip exceeding 50mm

US NOAA NWS NCEP Week2 00Z GFS forecast valid 00Z 20141109



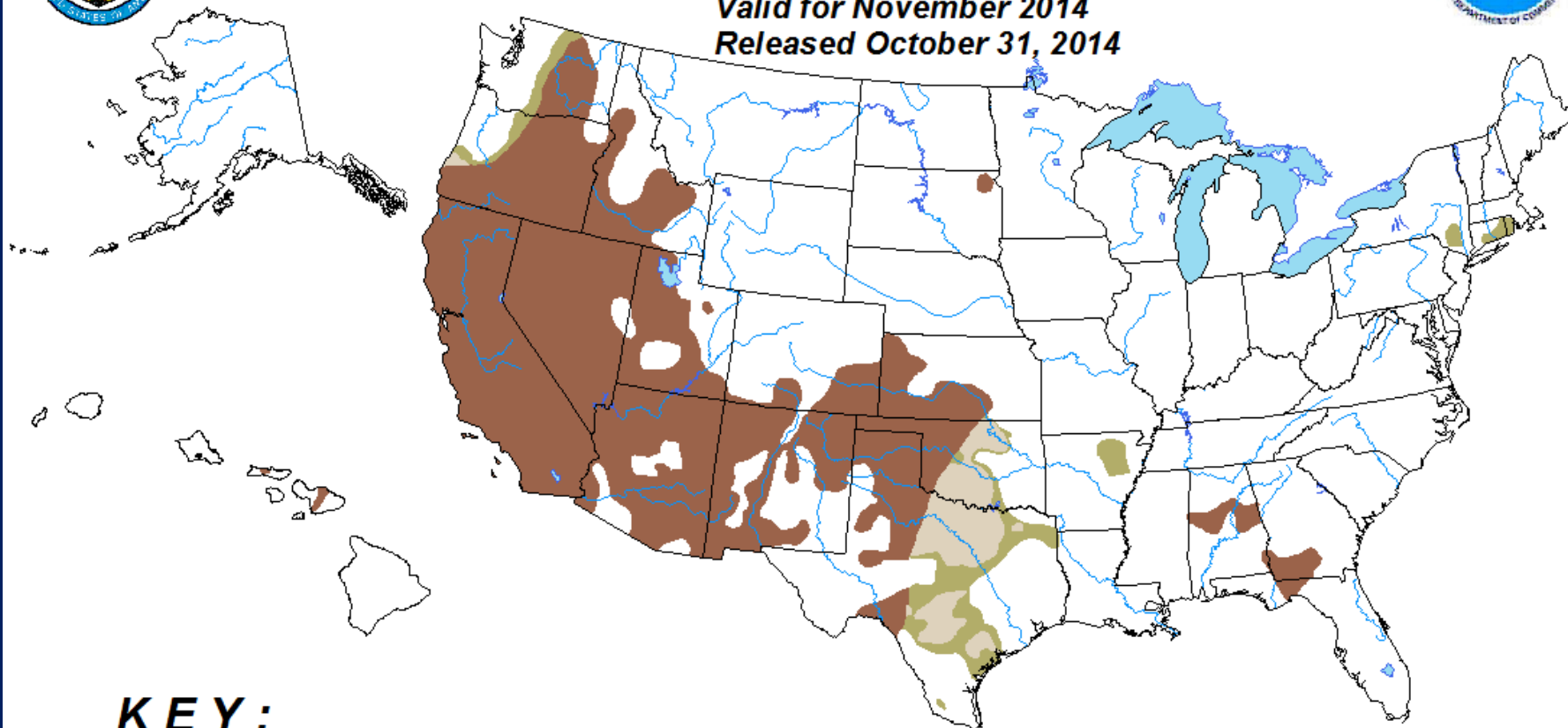


# U.S. Monthly Drought Outlook





## Drought Tendency During the Valid Period

Valid for November 2014

Released October 31, 2014



### **KEY:**

-  Drought persists or intensifies
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely

Authors: Adam Allgood & David Miskus, Climate Prediction Center, NOAA  
[http://www.cpc.ncep.noaa.gov/products/expert\\_assessment/mdo\\_summary.html](http://www.cpc.ncep.noaa.gov/products/expert_assessment/mdo_summary.html)

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor.

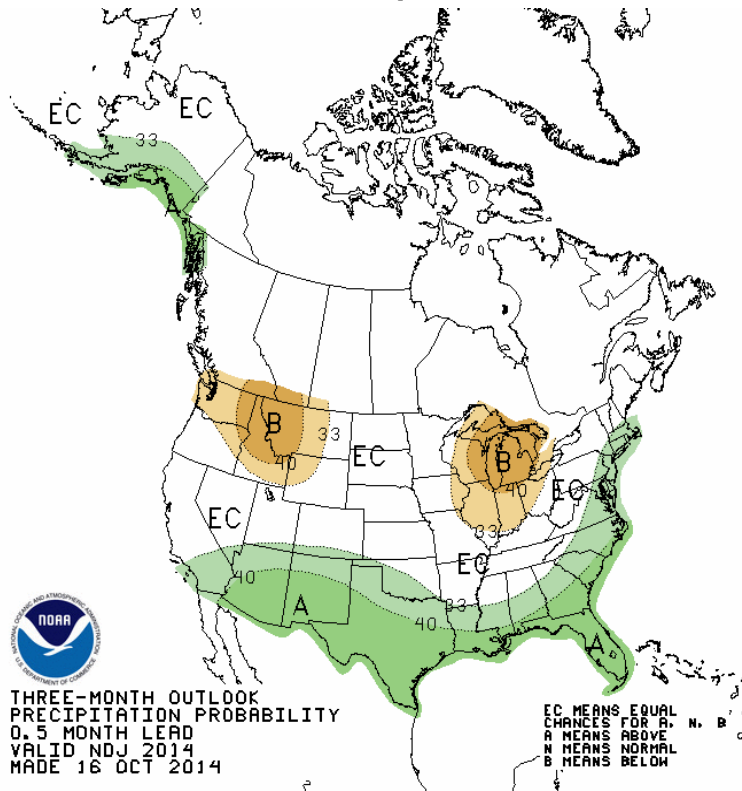
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period although drought will remain. The green areas imply drought removal by the end of the period (D0 or none)

# U. S. Seasonal Outlooks

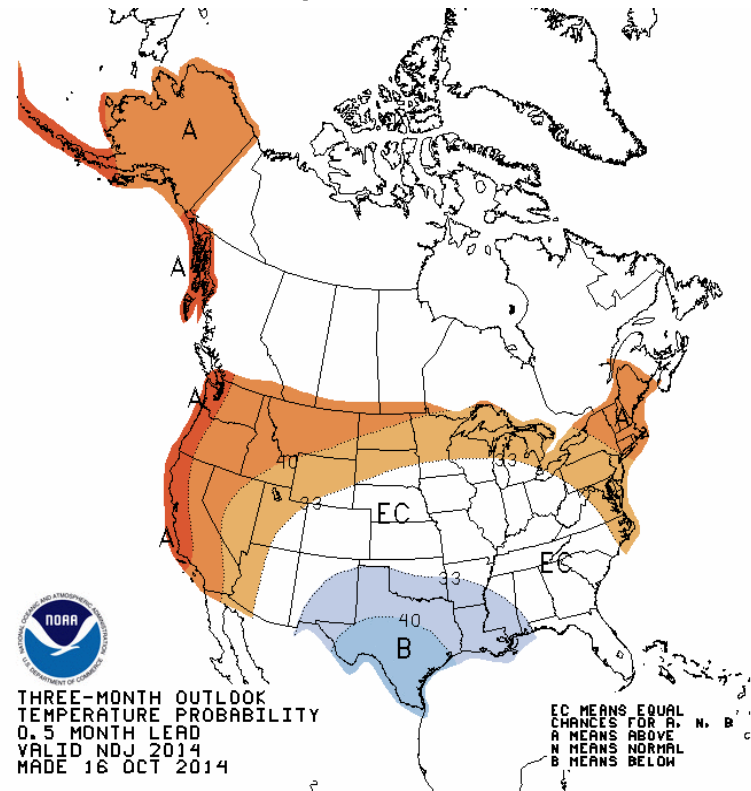
November 2014 - January 2015

The seasonal outlooks combine the effects of long-term trends, soil moisture, and, when appropriate, ENSO.

### Precipitation



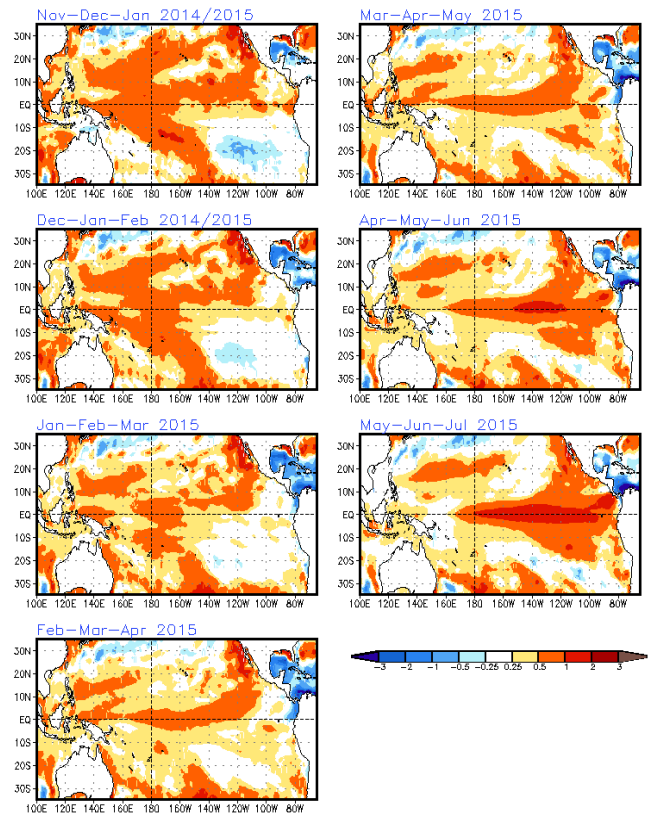
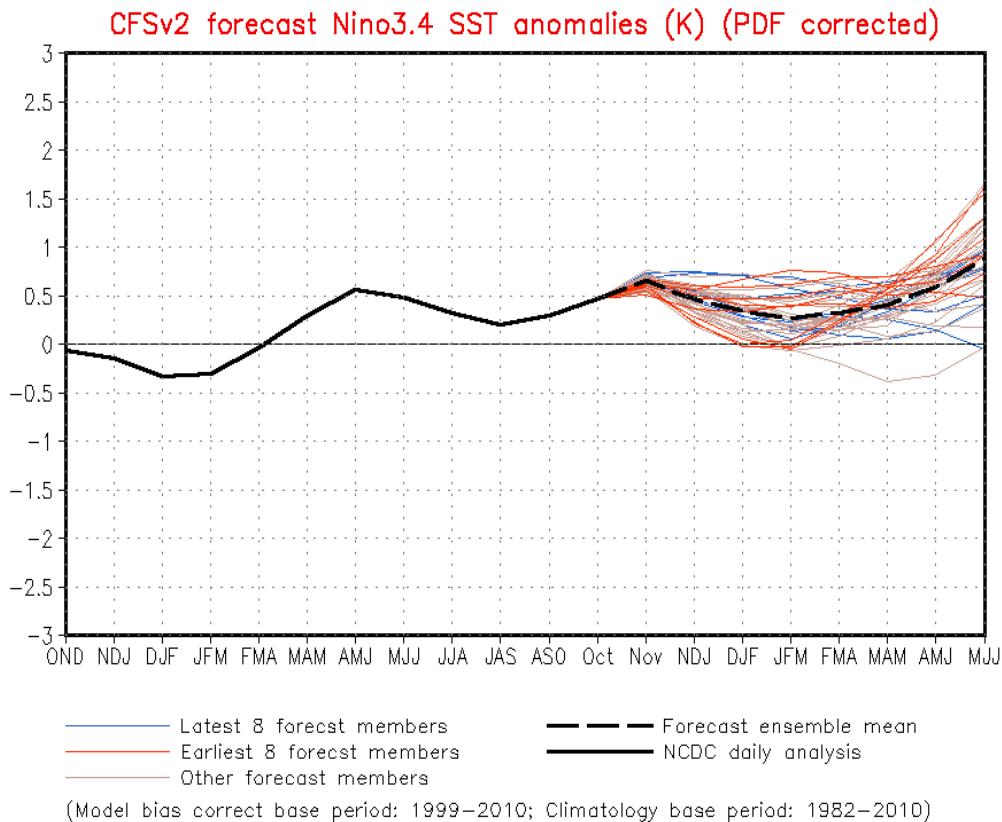
### Temperature



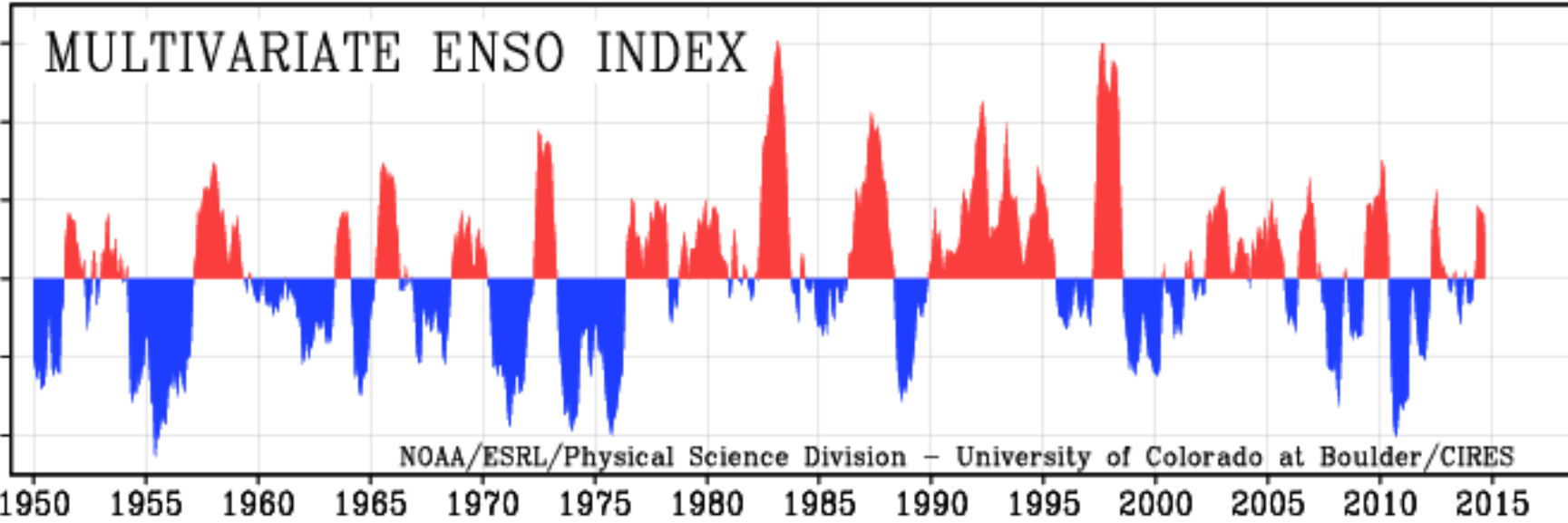
# SST Outlook: NCEP CFS.v2 Forecast (PDF corrected)

Issued: 3 November 2014

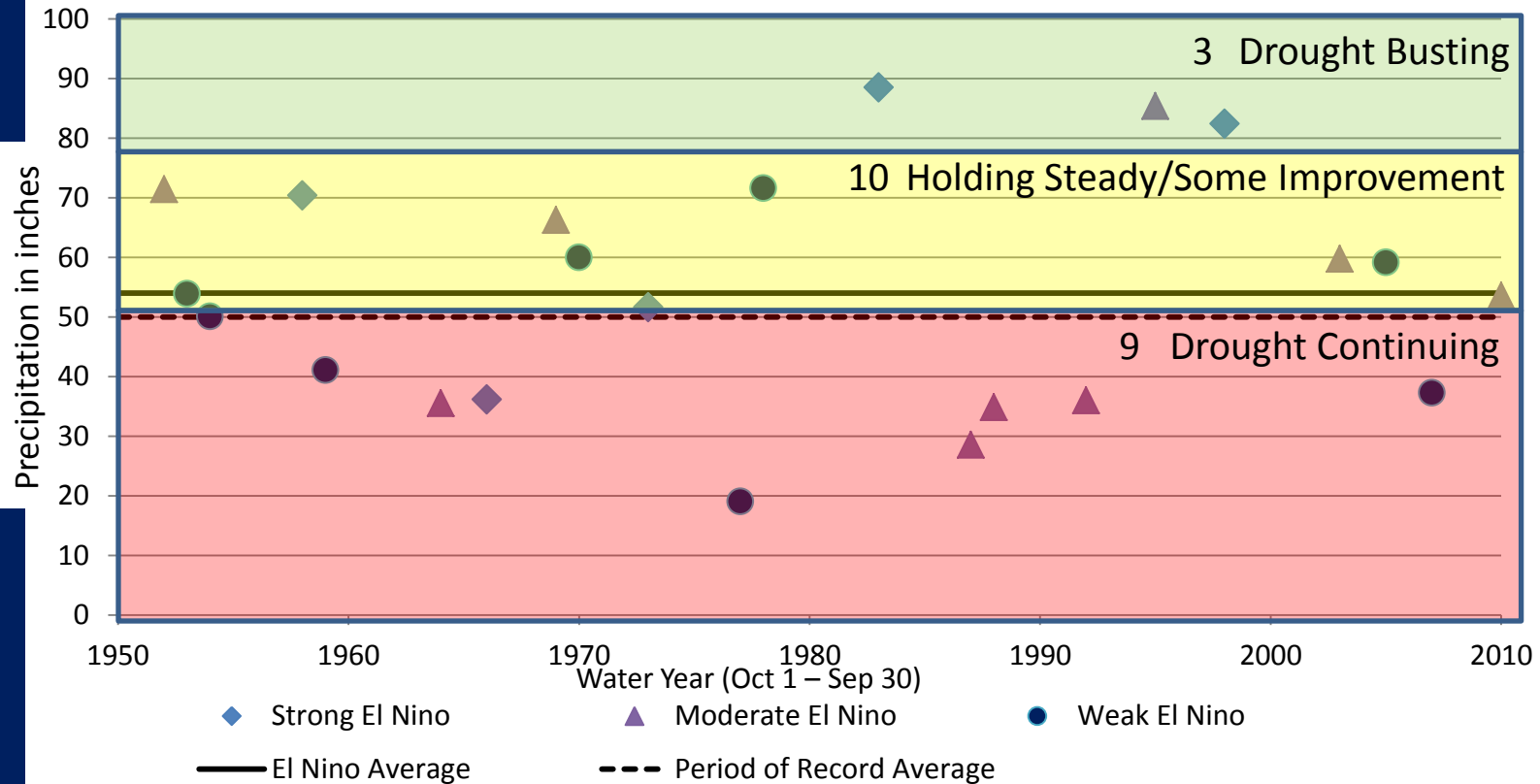
The CFS.v2 ensemble mean (black dashed line) predicts warm-neutral conditions into early 2015.



Standardized Departure

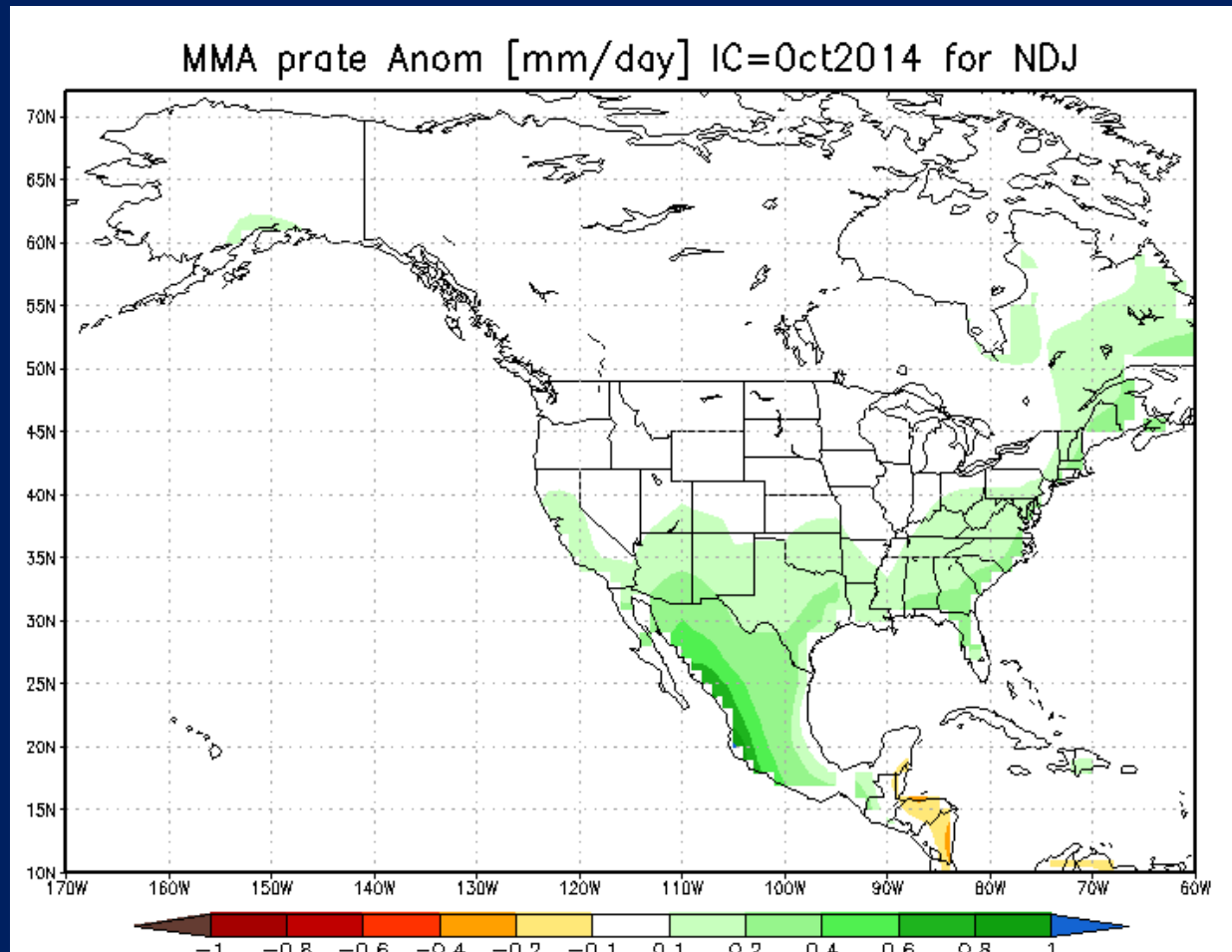


### 8 Station Index Water Year Totals



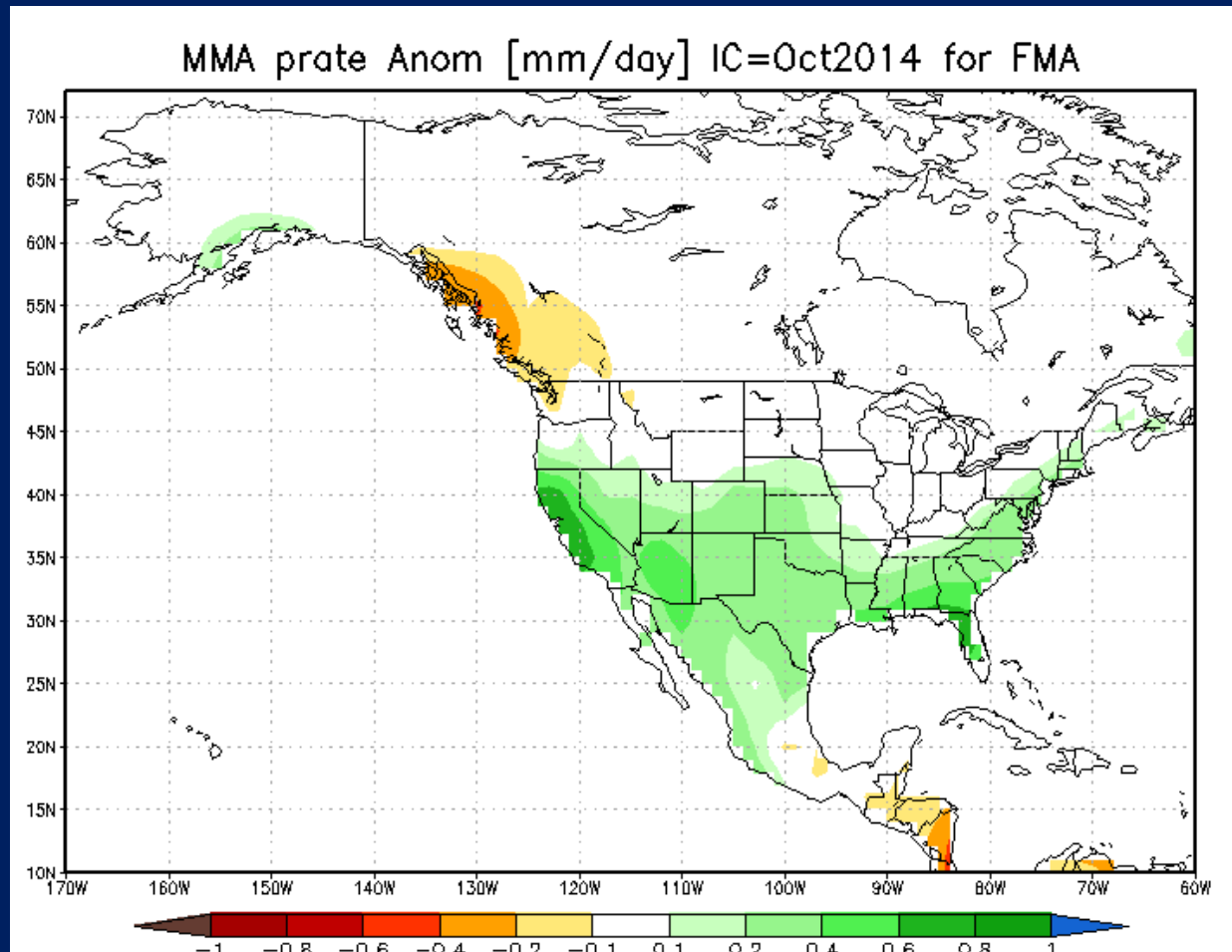


# International Multi-Model Ensemble

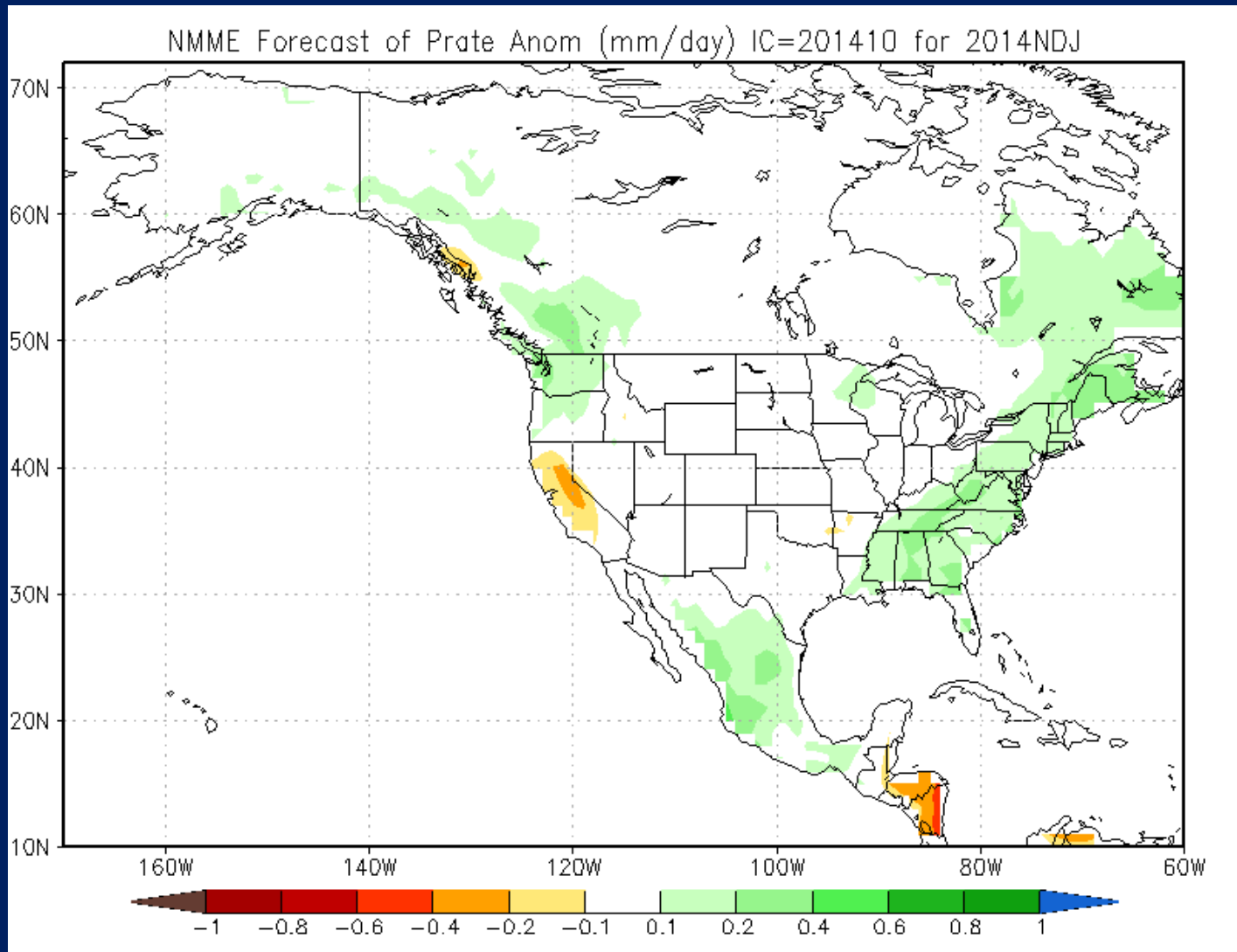




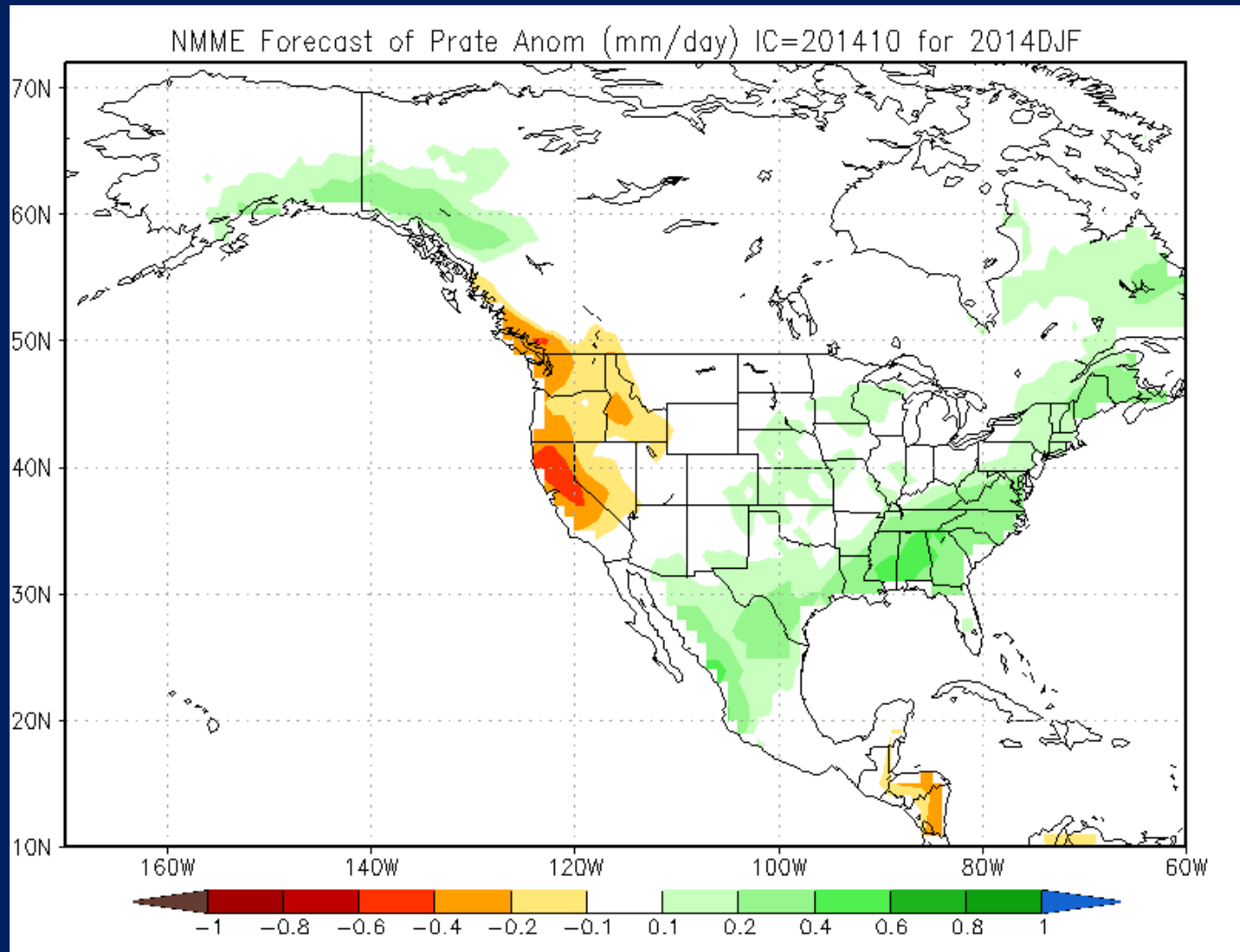
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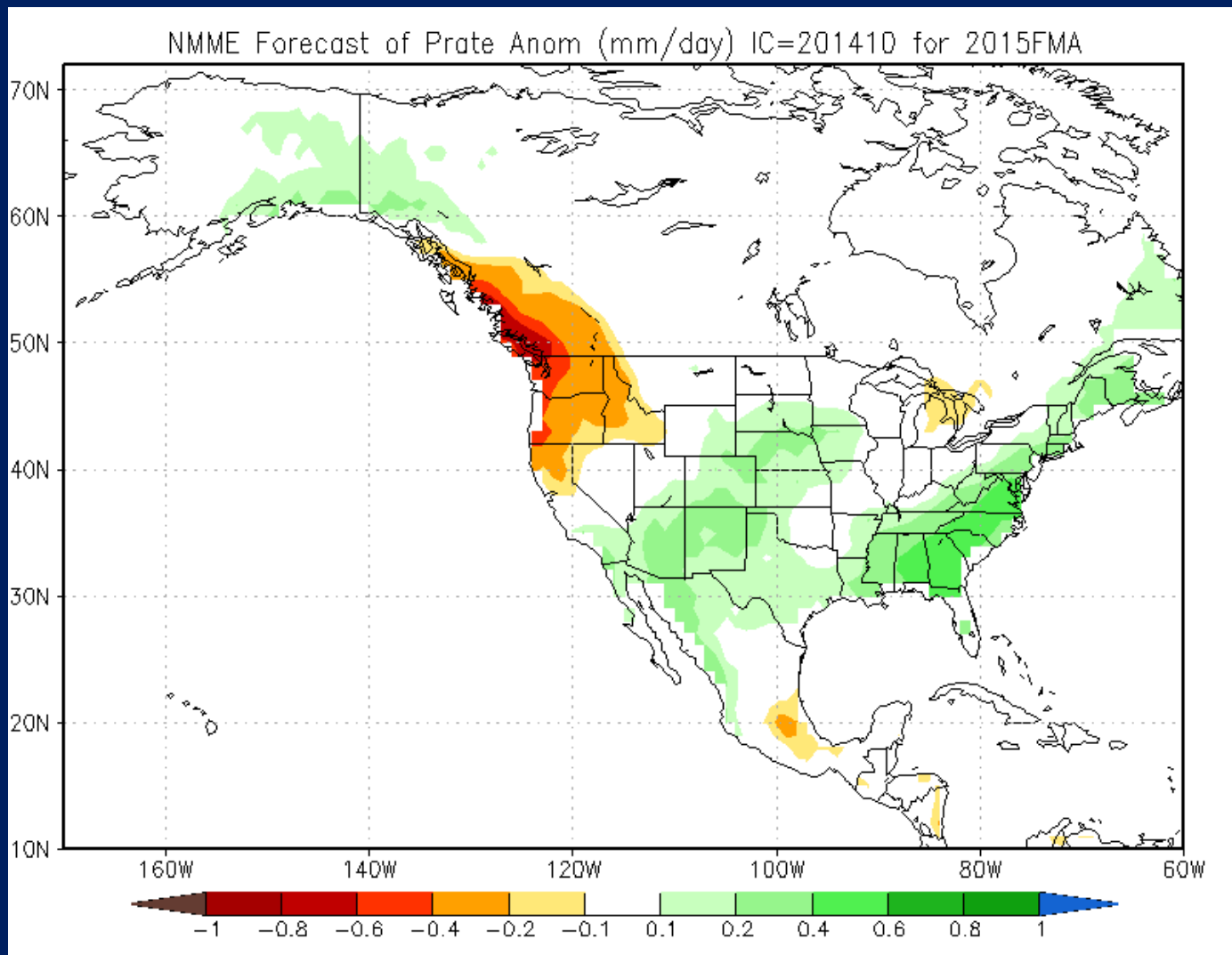
# North American Multi-Model Ensemble



# North American Multi-Model Ensemble

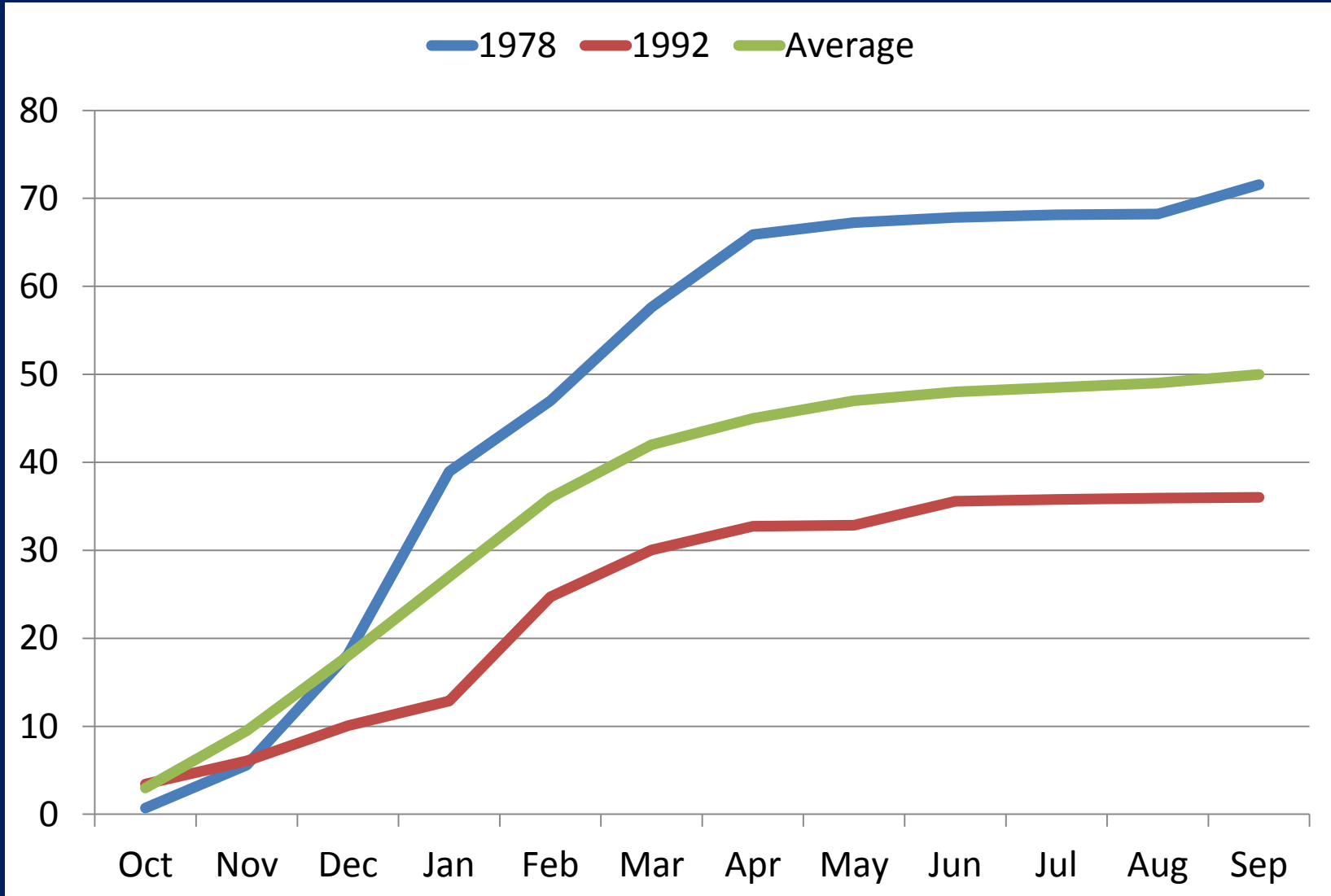


# North American Multi-Model Ensemble



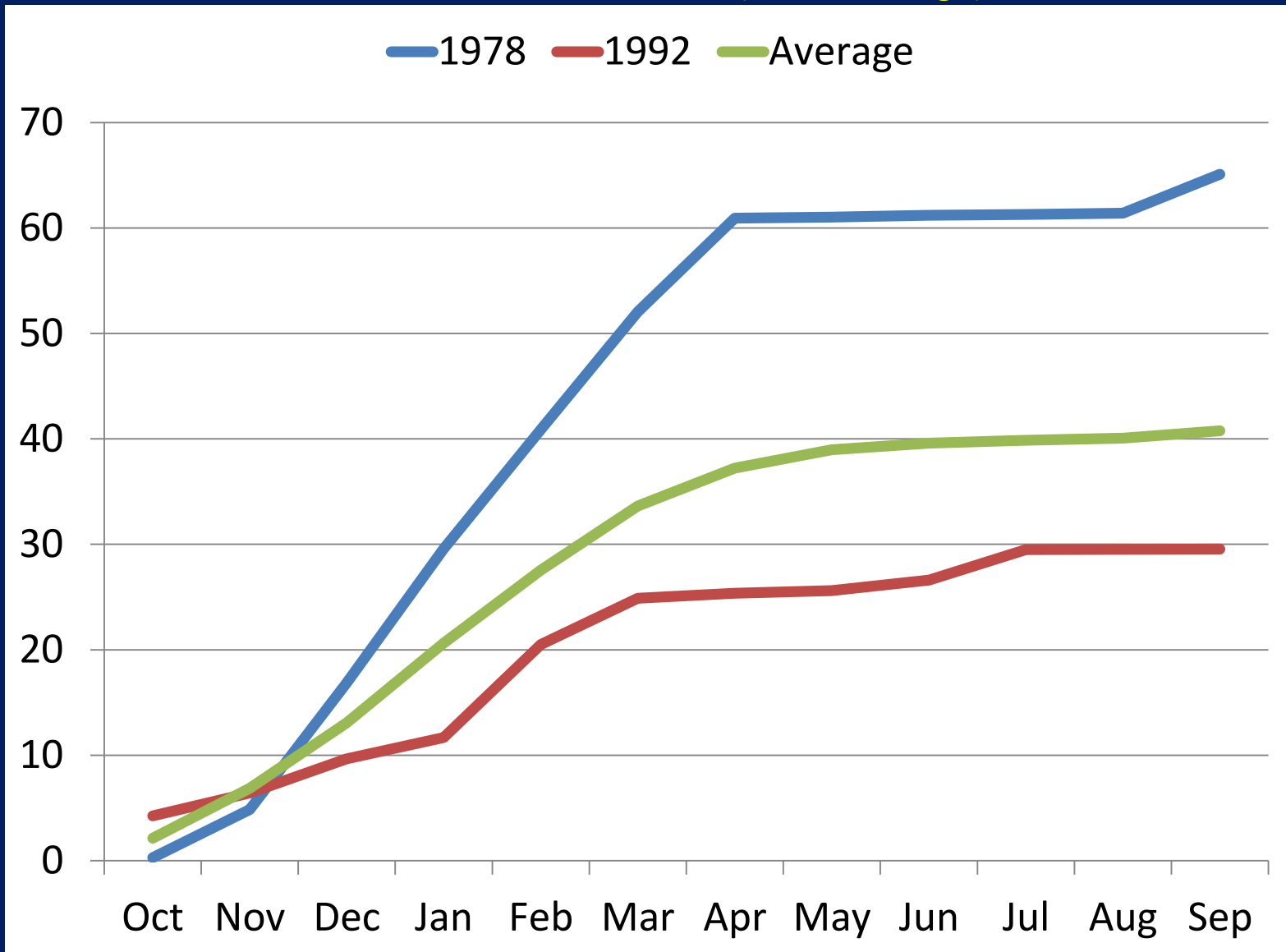
# 8-Station Index

Oct 2014: 2.7 inches (90% of average)



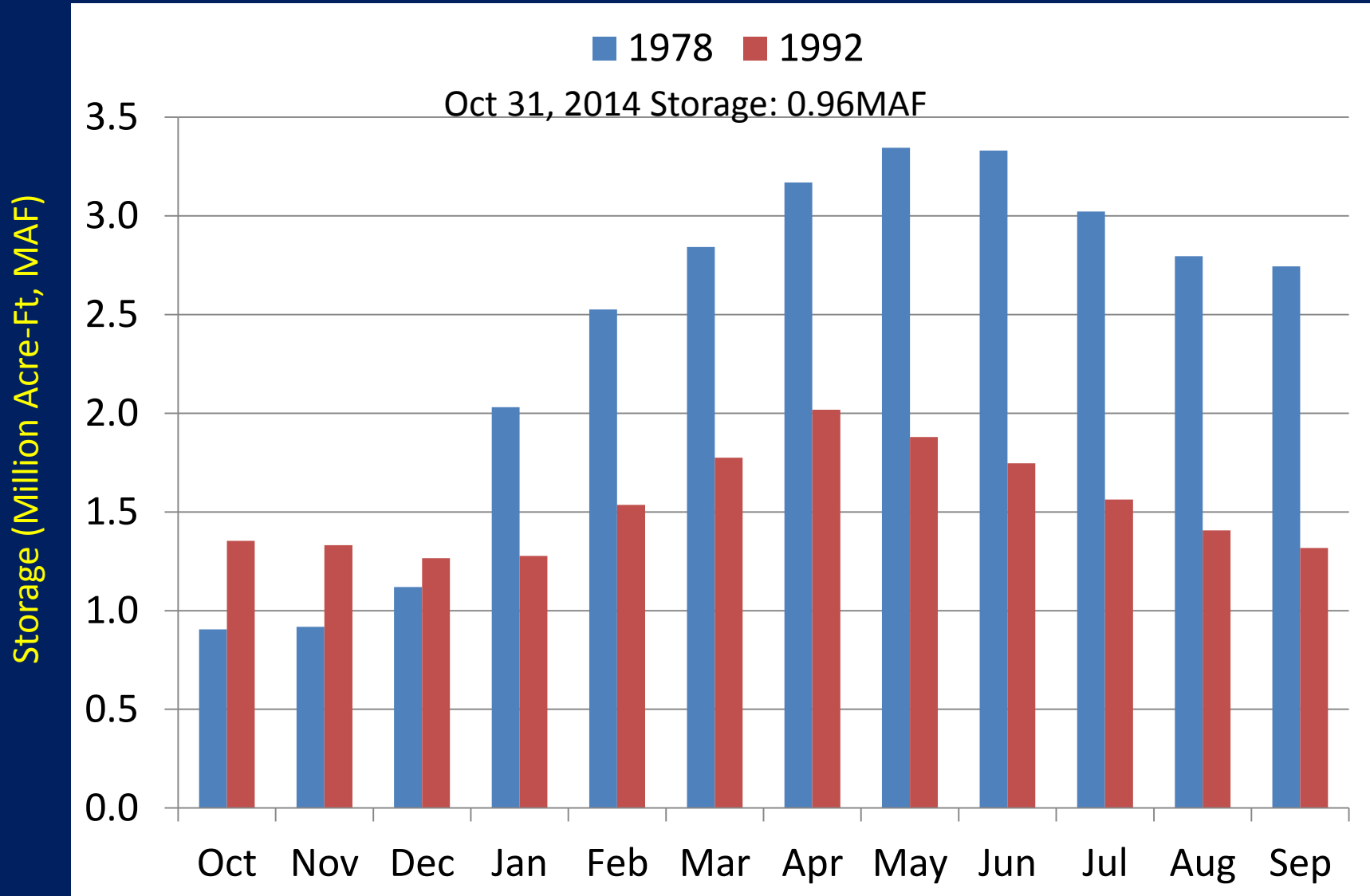
# 5-Station Index

Oct 2014: 0.1 inches (5% of average)





# Oroville Storage



# Take Home Points

- El Nino years are the most variable of the ENSO groupings on water year outcomes
- Jet Stream's development of zonal flow or a split flow and split flow location will help determine how the water year plays out

A scenic photograph of a sunset over a large body of water. The sun is low on the horizon, creating a bright, shimmering reflection on the water's surface. Several ducks are visible swimming in the water. The sky is a mix of deep blue and golden yellow, with scattered clouds. In the background, there are dark silhouettes of mountains and a forested hillside on the right.

Questions?

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[Michael.L.Anderson@water.ca.gov](mailto:Michael.L.Anderson@water.ca.gov)