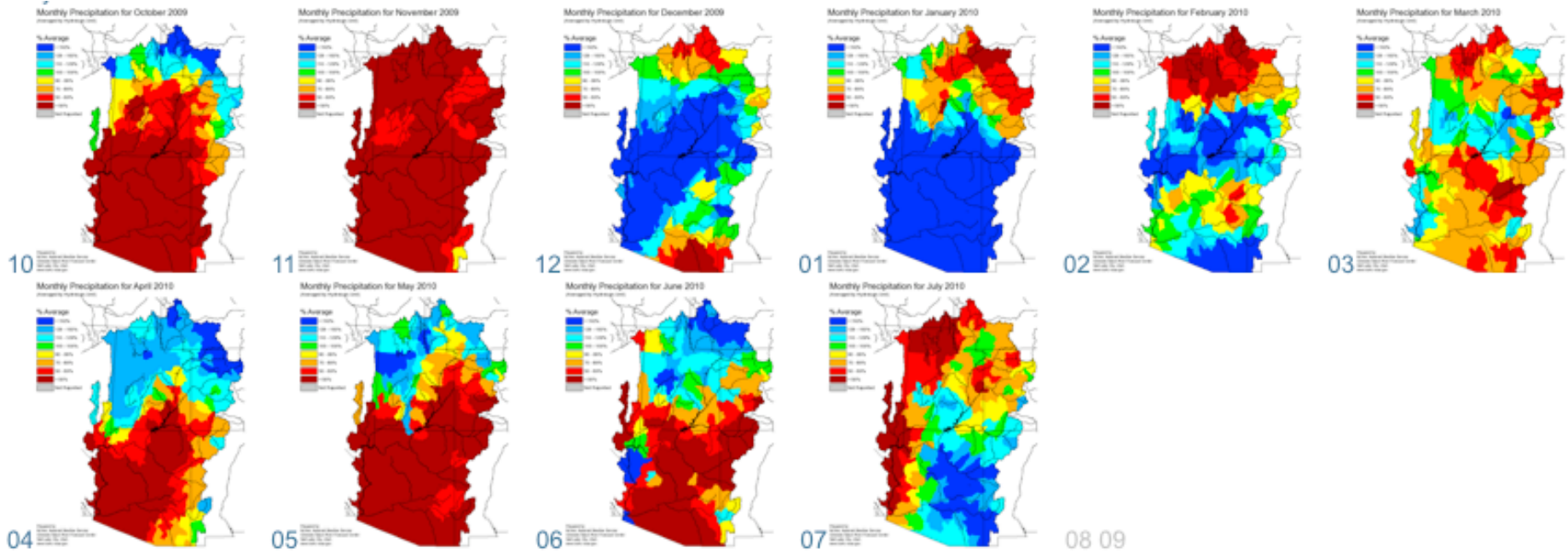


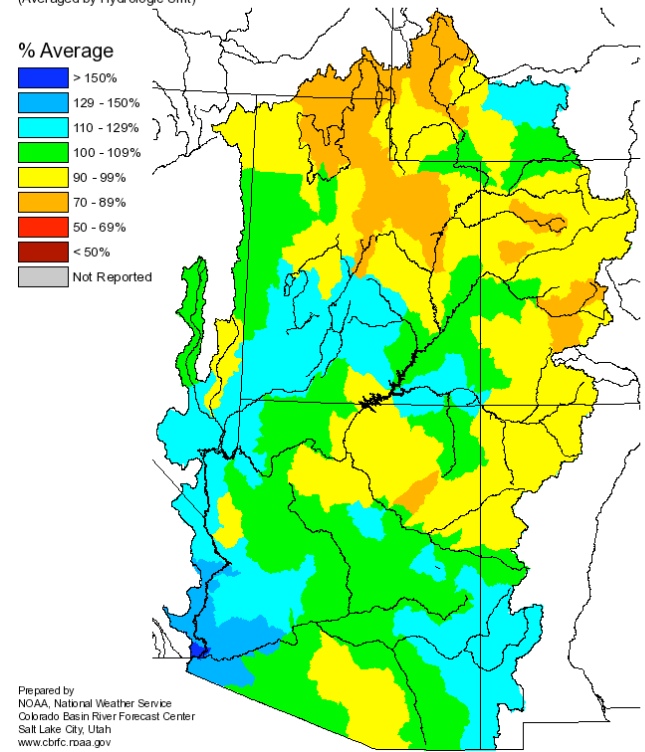
CBRFC Water Supply Verification

Outline

- Look back at 2010
- 10/90 verification
- Fall webinar



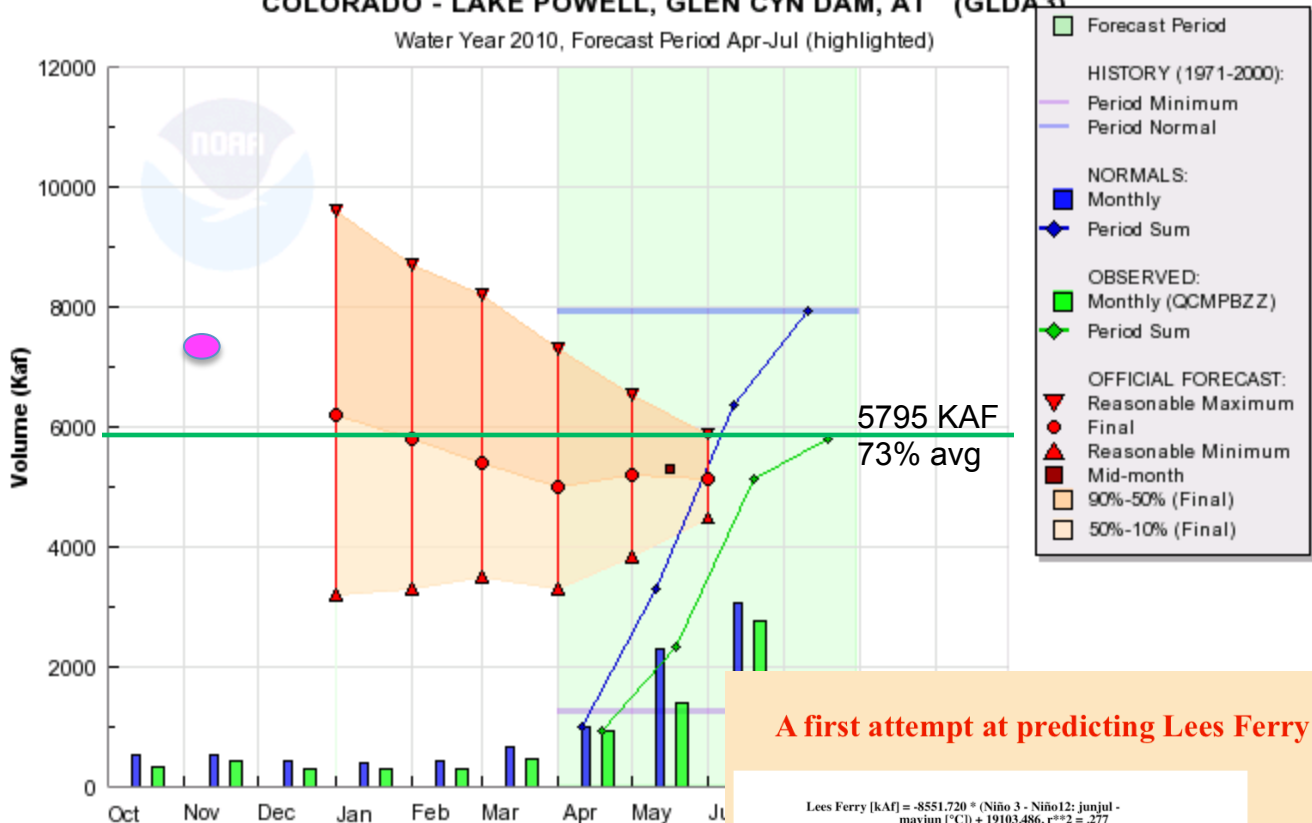
Seasonal Precipitation, October 2009 - July 2010
(Averaged by Hydrologic Unit)



Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

COLORADO - LAKE POWELL, GLEN CYN DAM, AT (GLDA3)

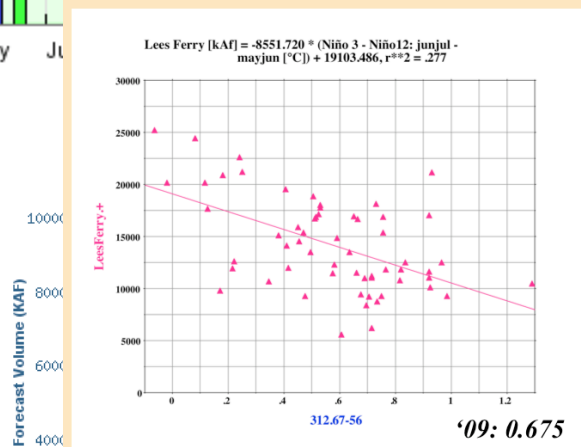
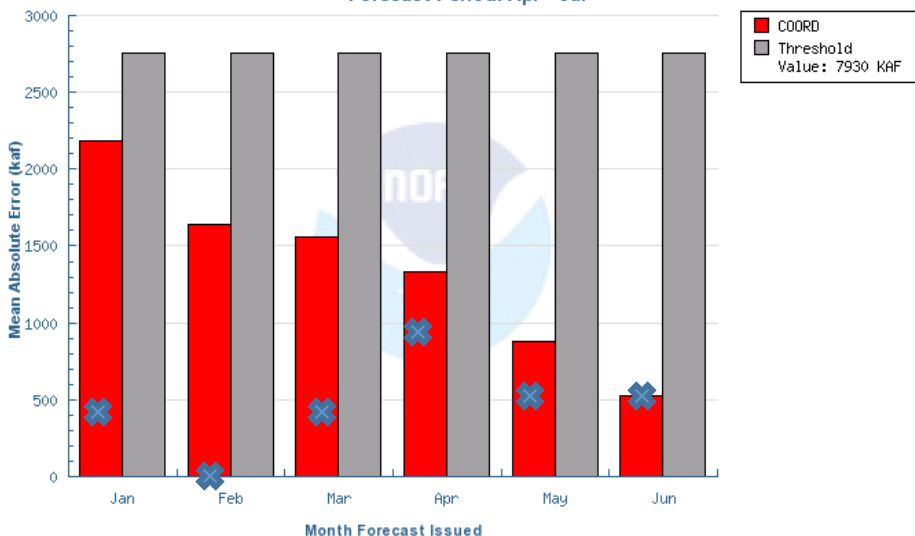
Water Year 2010, Forecast Period Apr-Jul (highlighted)



A first attempt at predicting Lees Ferry runoff in 2010

Mean Absolute Error - COLORADO - LAKE POWELL, GLEN CYN DAM, AT (GLDA3)

Forecast Period: Apr - Jul

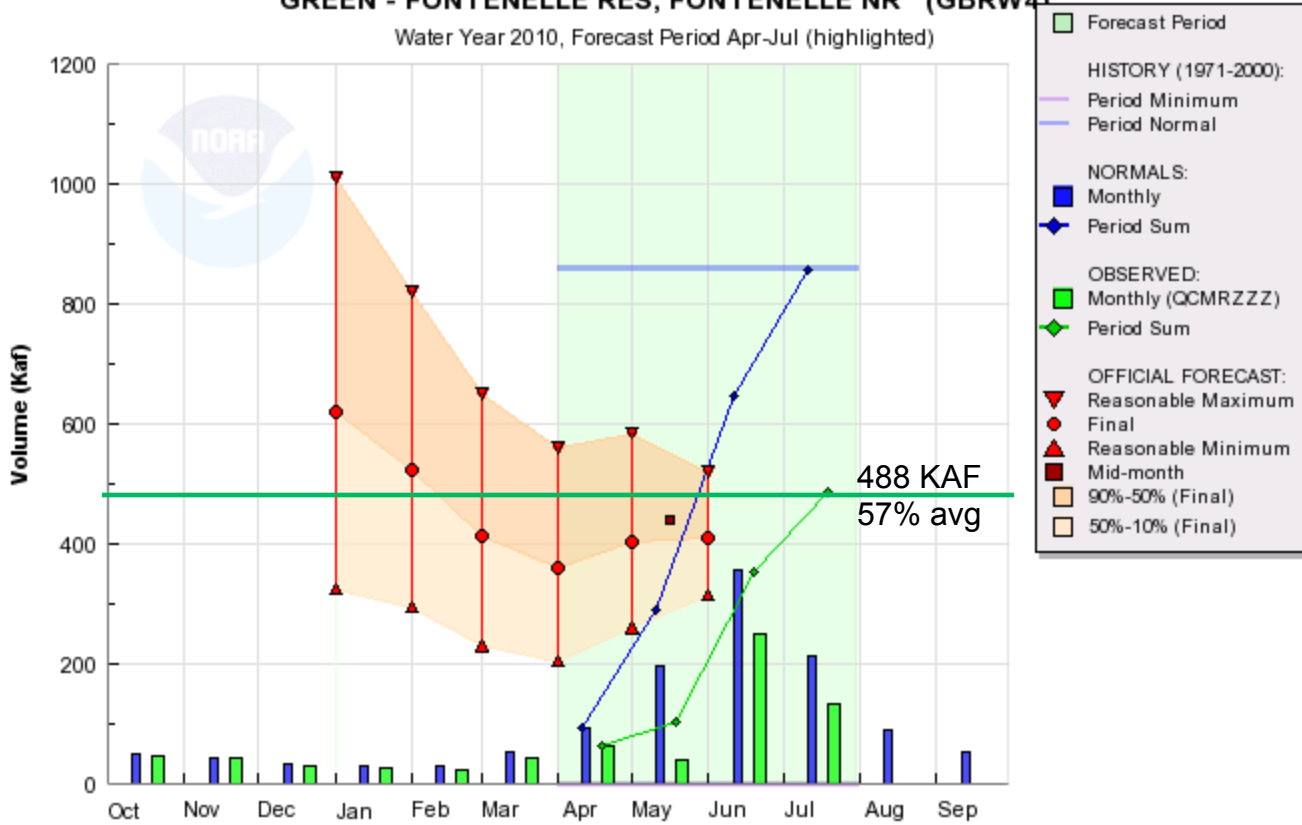


Best predictor at this lead-time is tendency of east Pacific Niño SST gradient over the early summer – anticipates a slight deficit (about -7%) for next year's flow.

Klaus Wolter, 10 November 2009 (SLC.UpperCO.webinar)

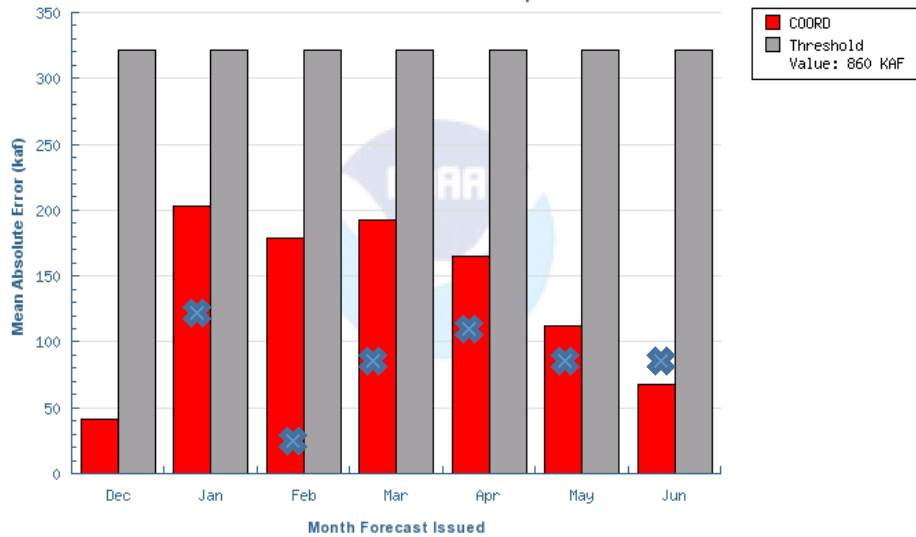
GREEN - FONTENELLE RES, FONTENELLE NR (GBRW4)

Water Year 2010, Forecast Period Apr-Jul (highlighted)



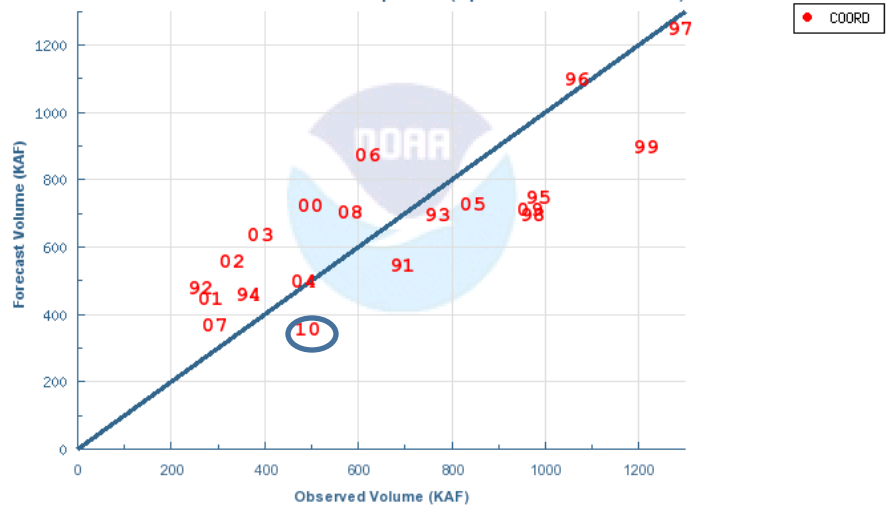
Mean Absolute Error - GREEN - FONTENELLE RES, FONTENELLE NR (GBRW4)

Forecast Period: Apr - Jul



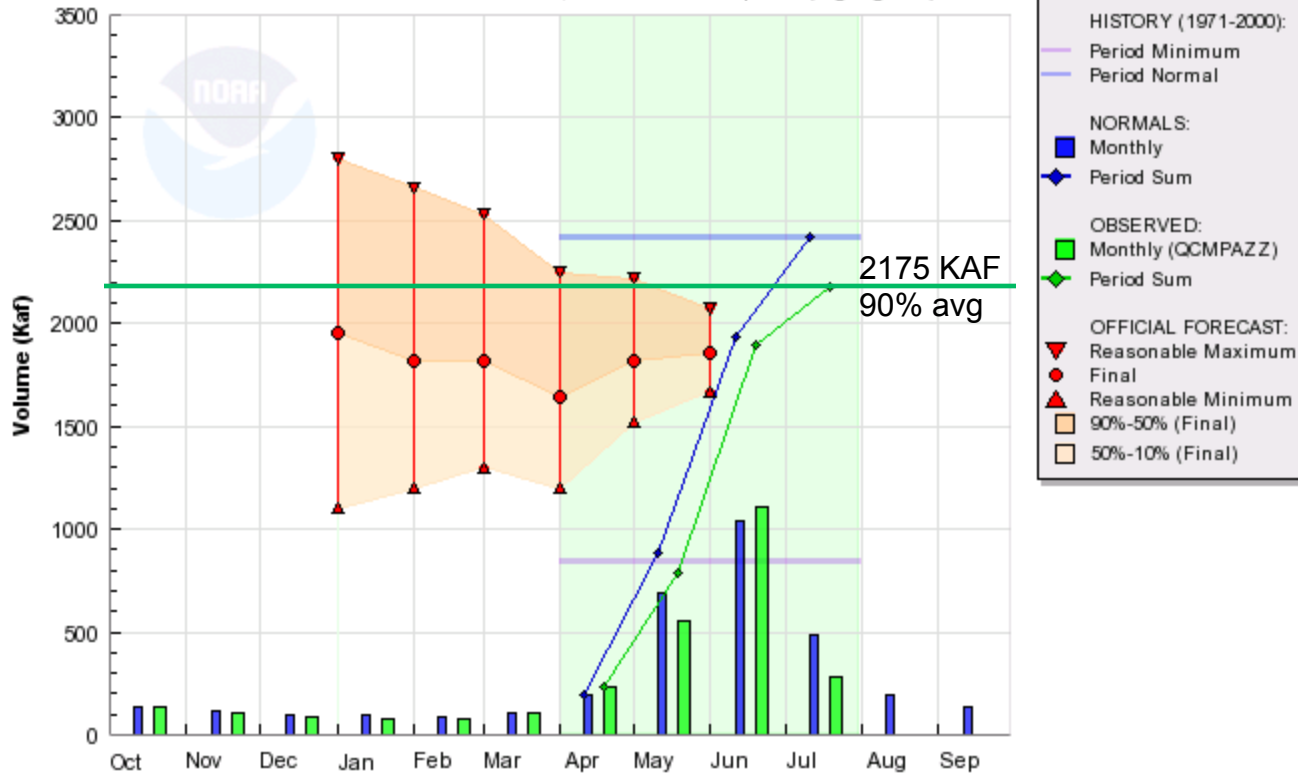
Streamflow - GREEN - FONTENELLE RES, FONTENELLE NR (GBRW4)

Forecast Period: Apr - Jul (Apr Forecast Streamflow)

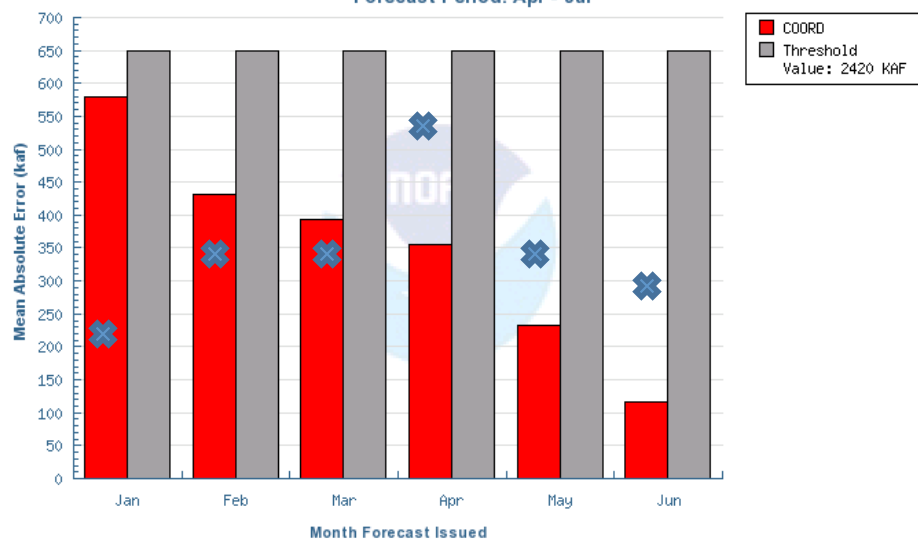


COLORADO - CAMEO, NR (CAMC2)

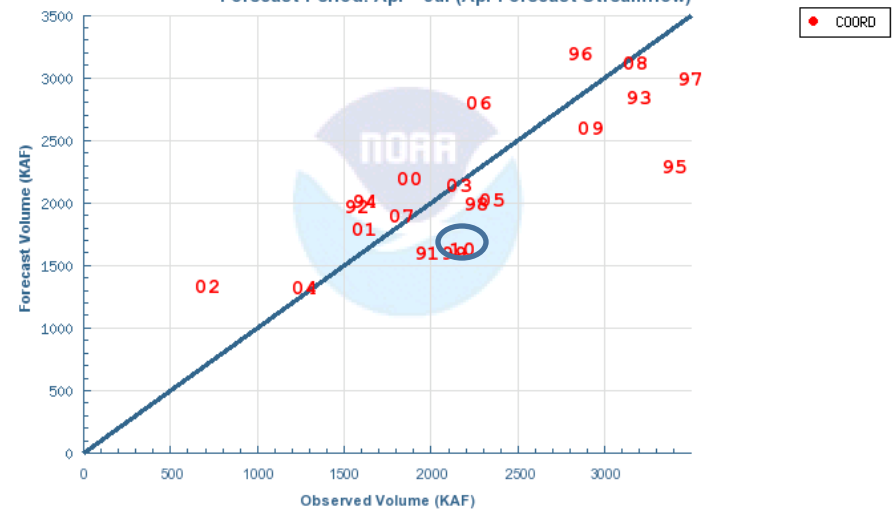
Water Year 2010, Forecast Period Apr-Jul (highlighted)



Mean Absolute Error - COLORADO - CAMEO, NR (CAMC2)
Forecast Period: Apr - Jul

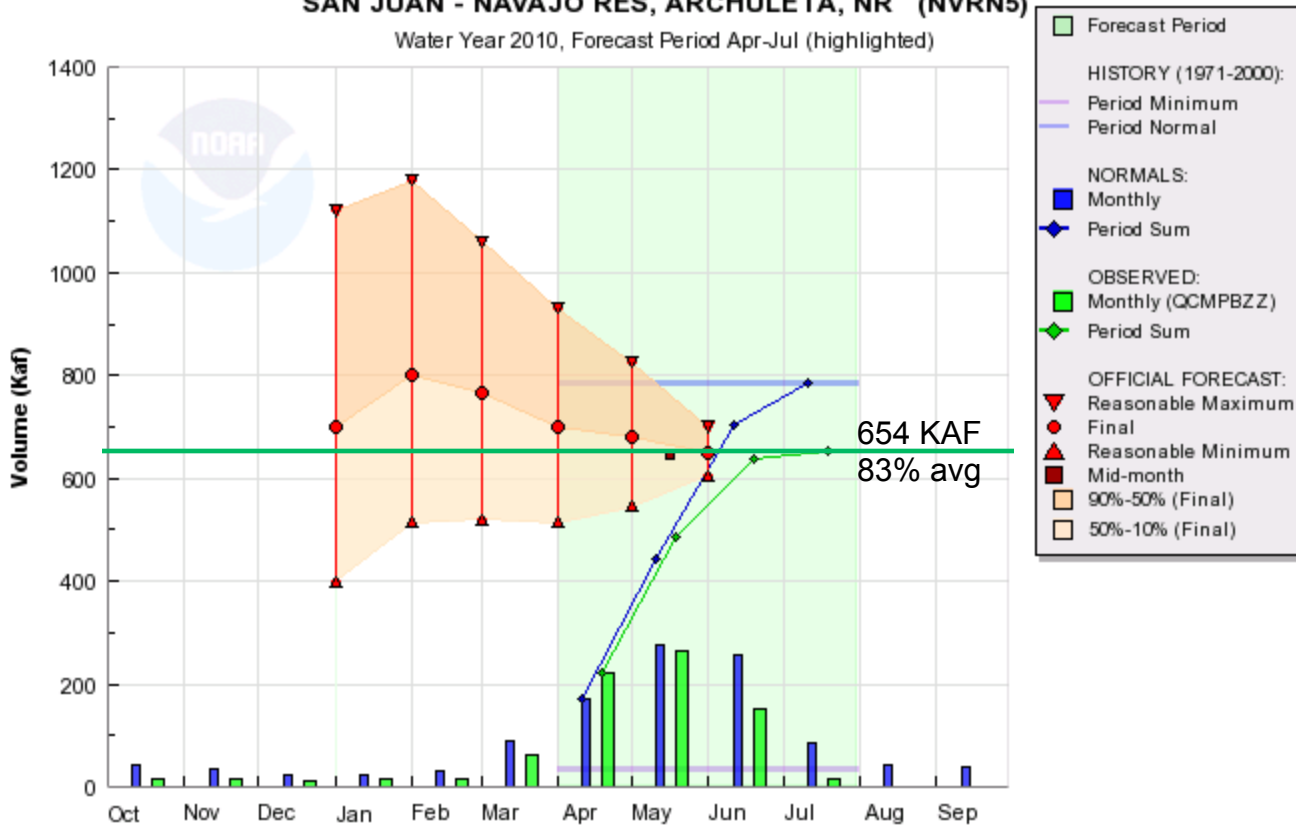


Streamflow - COLORADO - CAMEO, NR (CAMC2)
Forecast Period: Apr - Jul (Apr Forecast Streamflow)



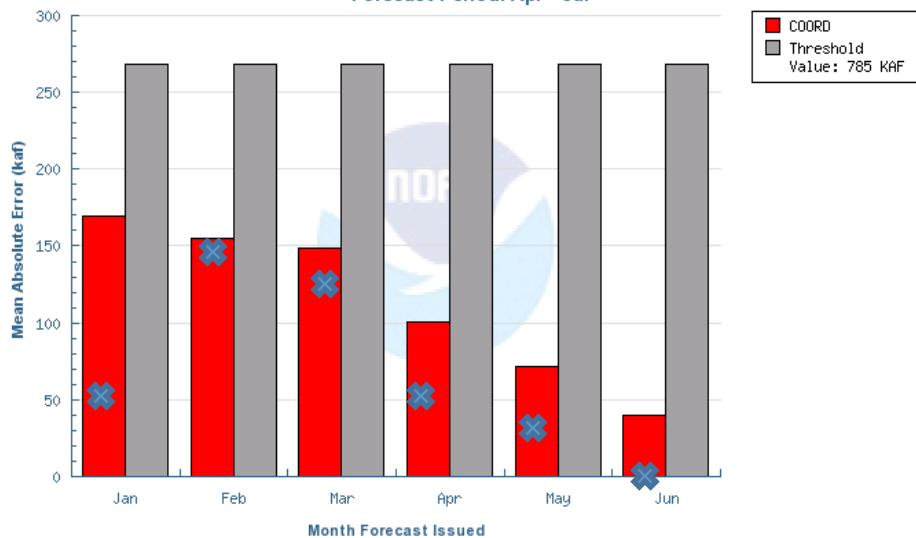
SAN JUAN - NAVAJO RES, ARCHULETA, NR (NVRN5)

Water Year 2010, Forecast Period Apr-Jul (highlighted)



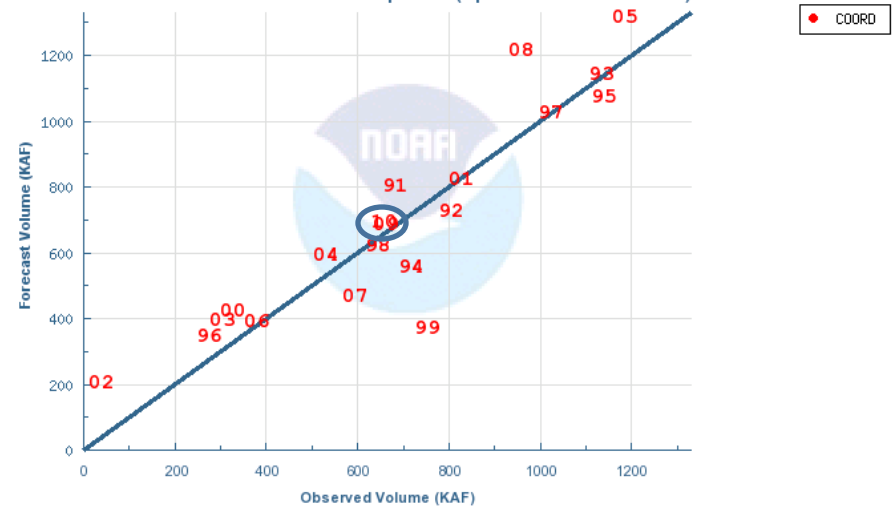
Mean Absolute Error - SAN JUAN - NAVAJO RES, ARCHULETA, NR (NVRN5)

Forecast Period: Apr - Jul



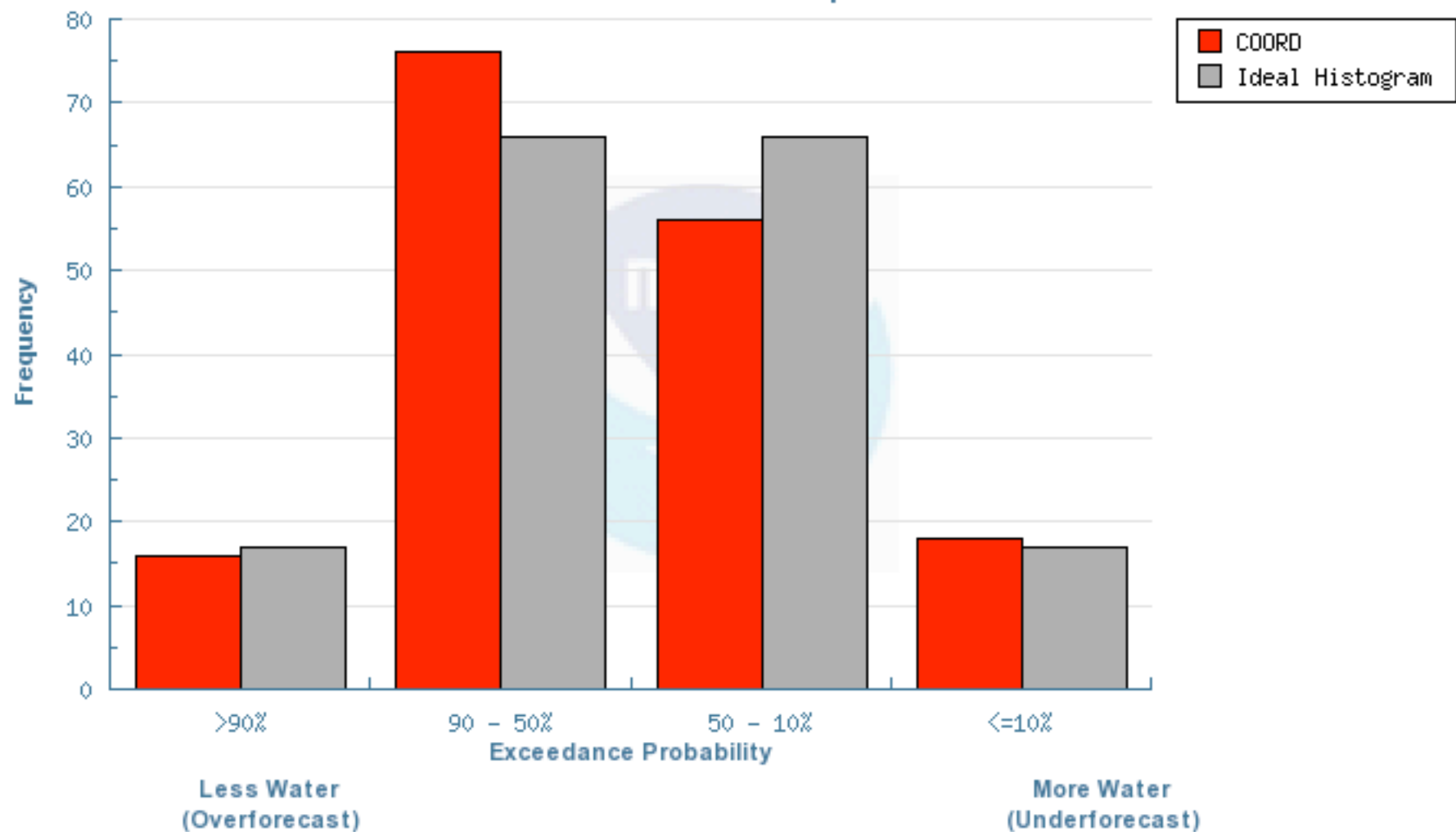
Streamflow - SAN JUAN - NAVAJO RES, ARCHULETA, NR (NVRN5)

Forecast Period: Apr - Jul (Apr Forecast Streamflow)



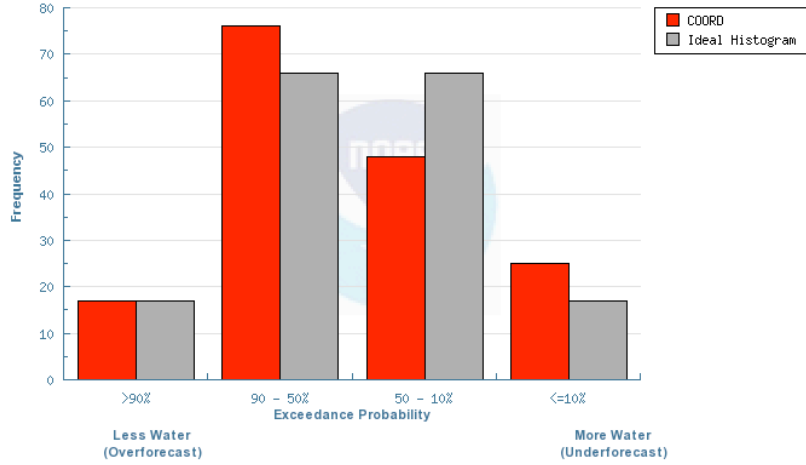
Rank Histogram - COLORADO - LAKE POWELL, GLEN CYN DAM, AT (GLDA3)

Forecast Period: Apr - Jul



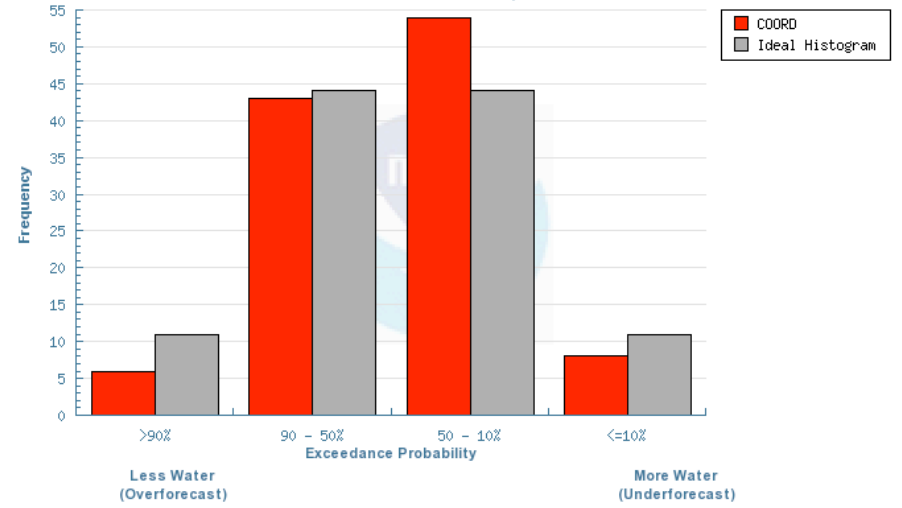
Rank Histogram - GREEN - GREEN RIVER, UT (GRVU1)

Forecast Period: Apr - Jul



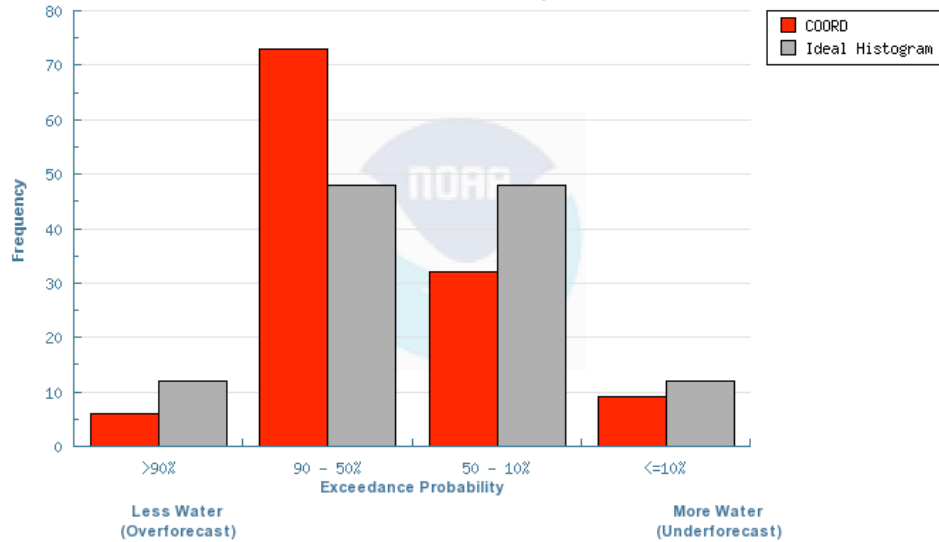
Rank Histogram - COLORADO - CAMEO, NR (CAMC2)

Forecast Period: Apr - Jul



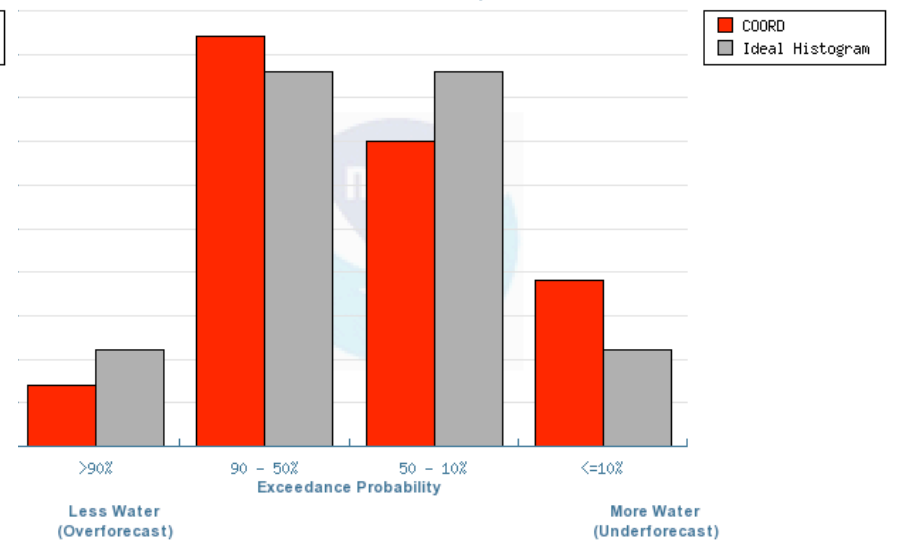
Rank Histogram - GUNNISON - BLUE MESA RES (BMDC2)

Forecast Period: Apr - Jul



Rank Histogram - DOLORES - MCPHEE RES (MPHC2)

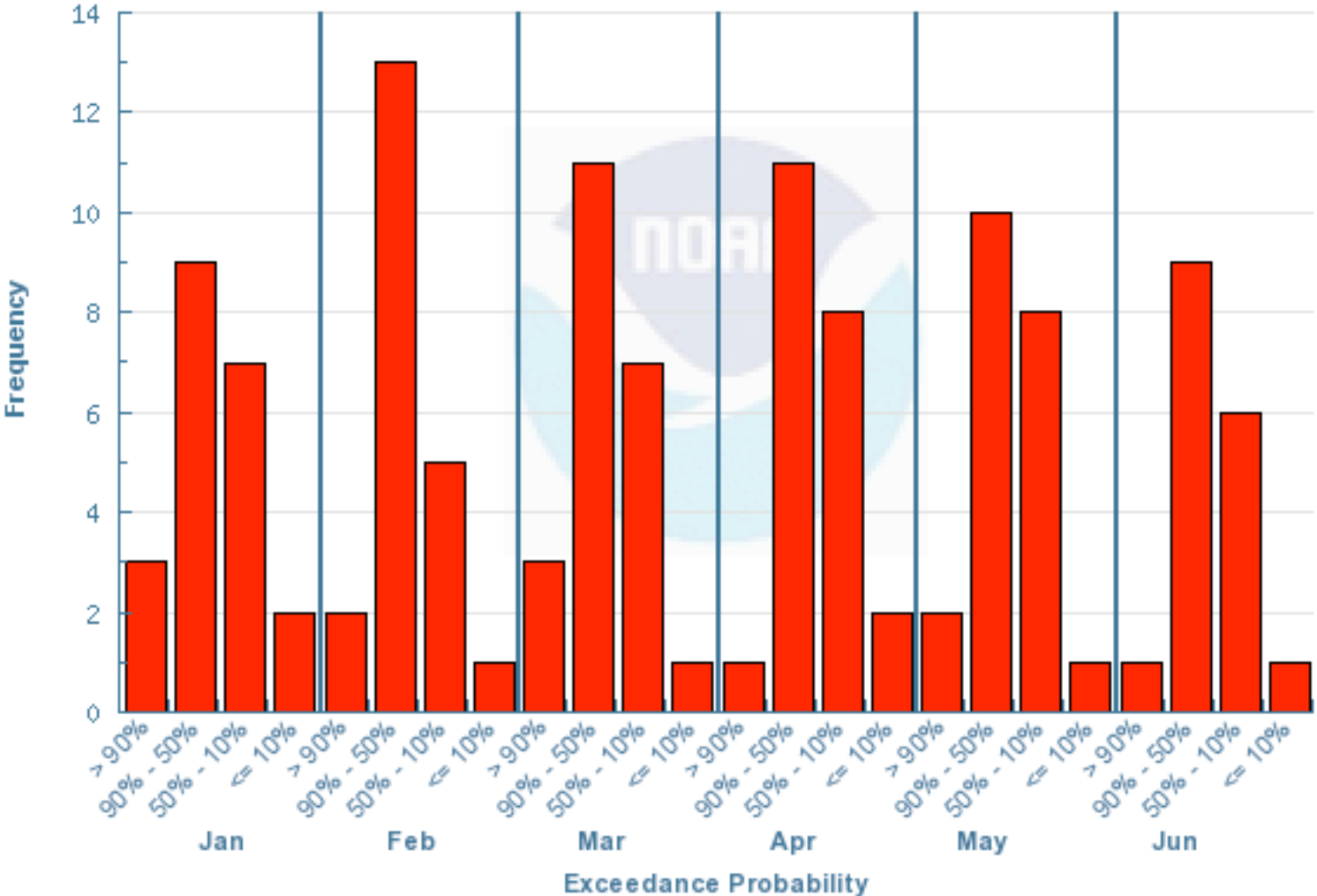
Forecast Period: Apr - Jul



Rank Histogram by Lead Time - COLORADO - LAKE POWELL, GLEN CYN DAM, AT (GLDA)

Forecast Period: Apr - Jul

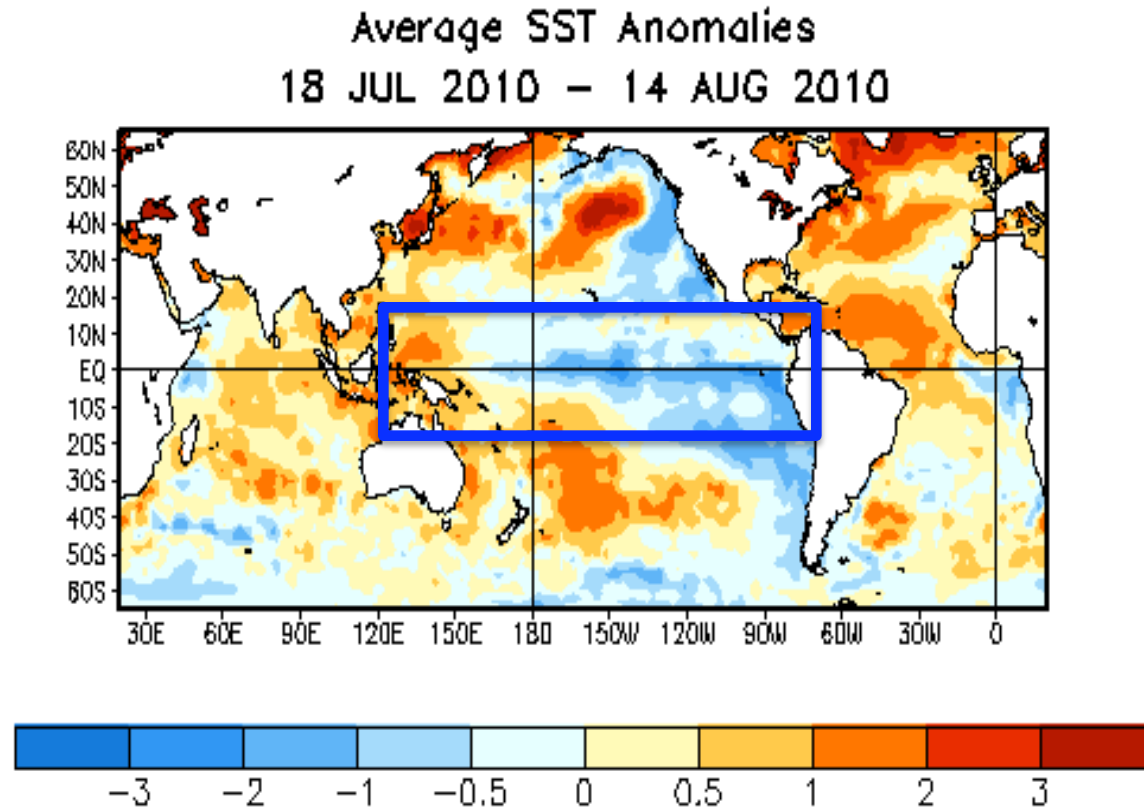
COORD



2010 Verification Webinar

- Lots more detail on 2010 forecasts
- Look ahead to 2011
- Tentative date: 10am MT Nov 9

Climate Outlook: La Nina



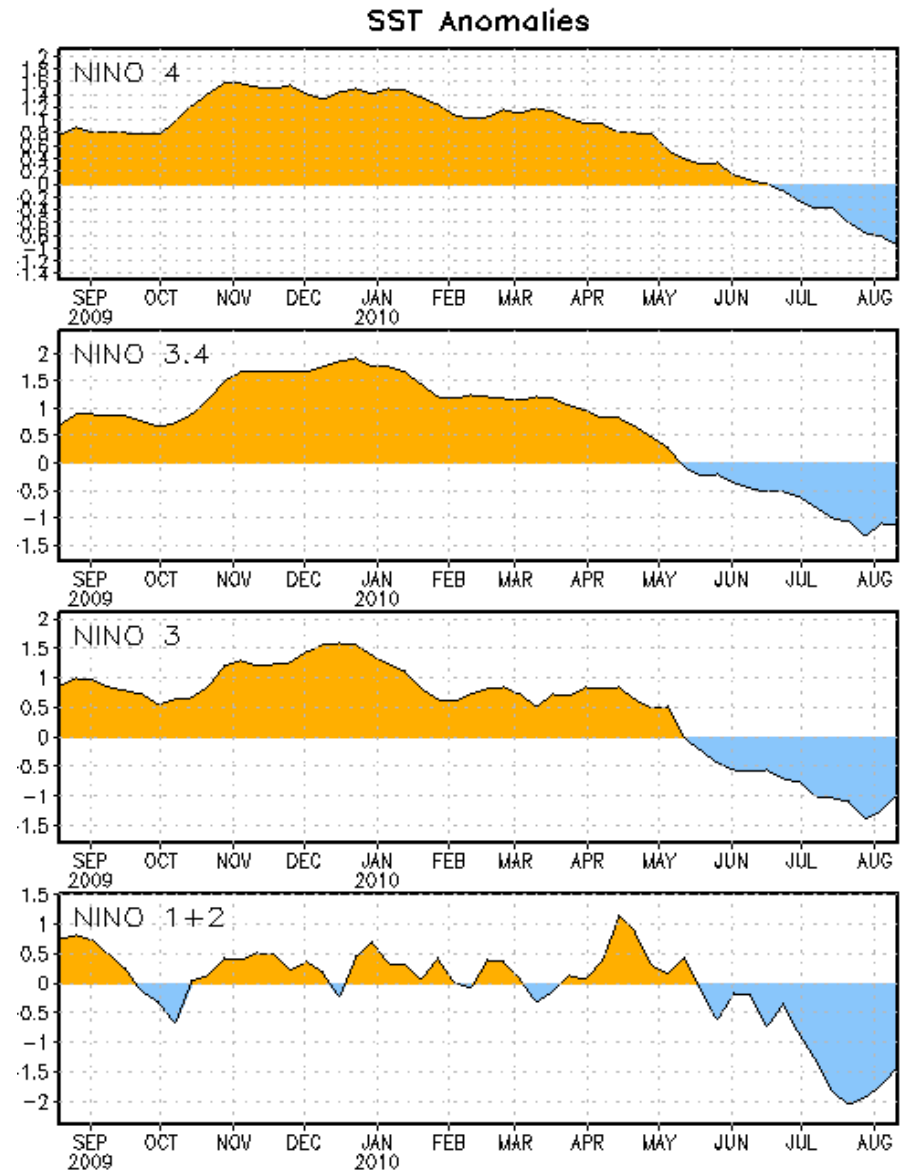
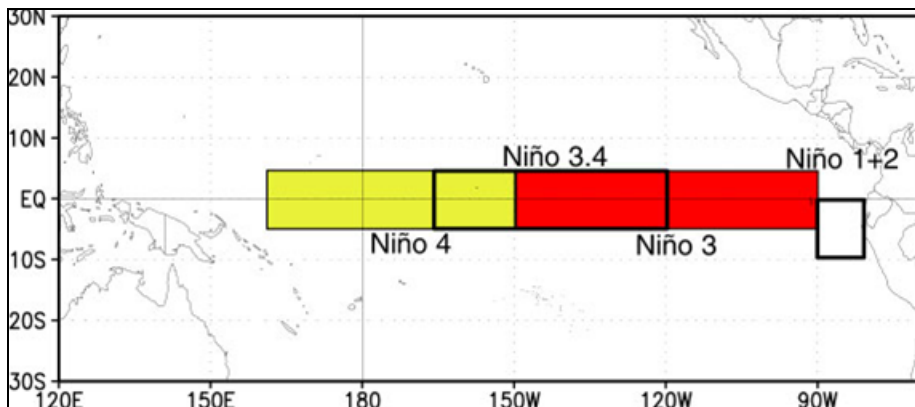
During the last four weeks, equatorial SSTs were above-average across the western Pacific, Indian, and Atlantic Oceans. Equatorial SSTs were below-average across the central and eastern Pacific, far eastern Atlantic, and far western Indian Ocean.

Niño Region SST Departures (°C)

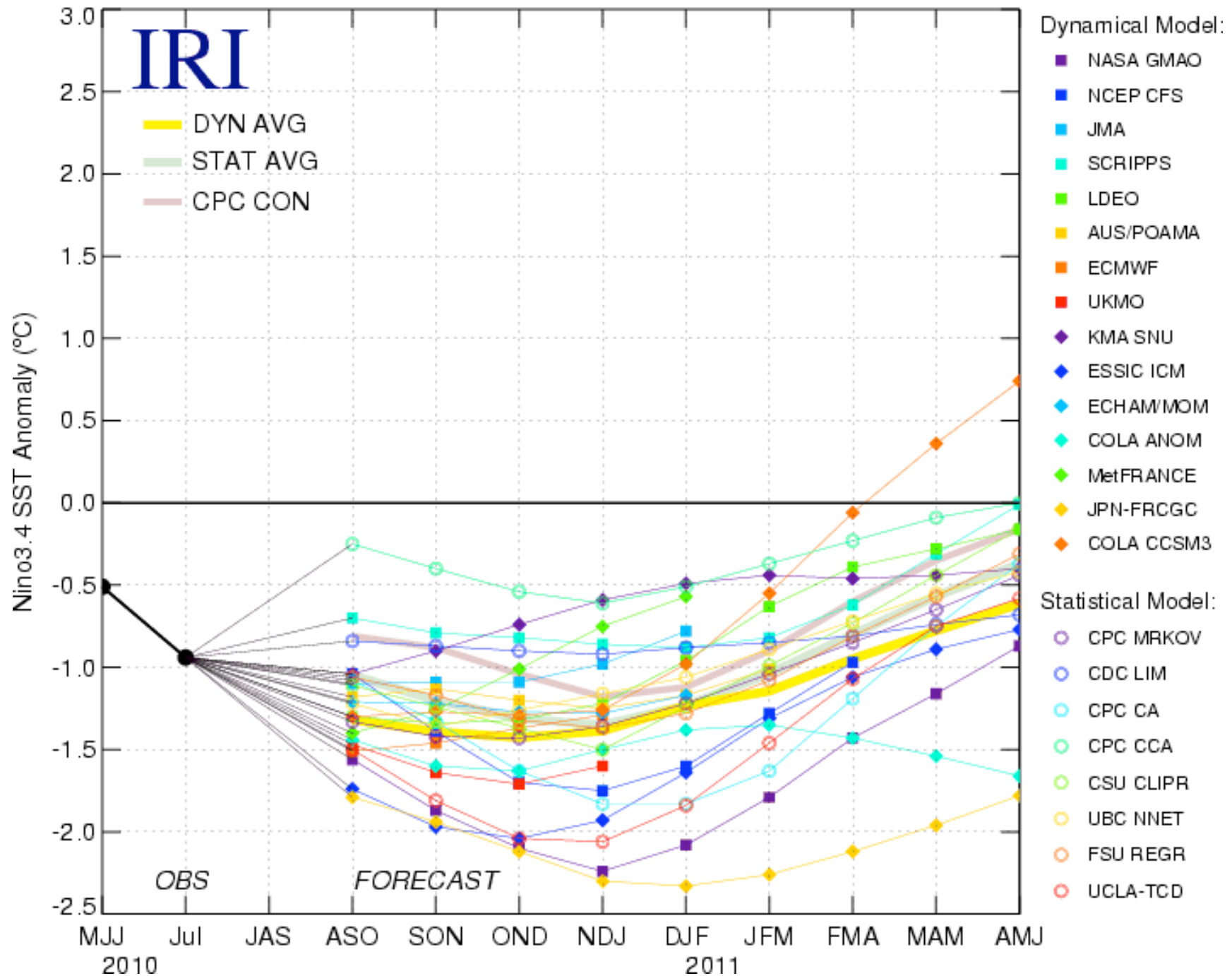
Recent Evolution

The latest weekly SST departures are:

- Niño 4** **-0.9°C**
- Niño 3.4** **-1.1°C**
- Niño 3** **-0.9°C**
- Niño 1+2** **-1.4°C**

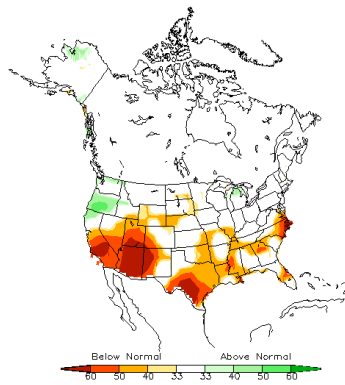


Model Predictions of ENSO from Aug 2010



CFS monthly Prec probability forecast

Oct 2010

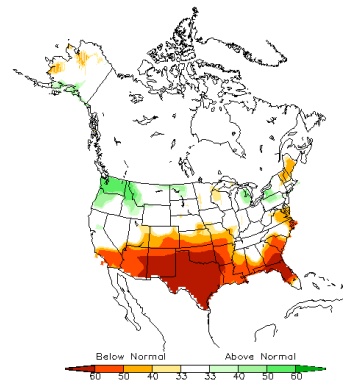


Last update: Mon Aug 16 2010

Initial conditions: 5Aug2010-14Aug2010

CFS monthly Prec probability forecast

Nov 2010

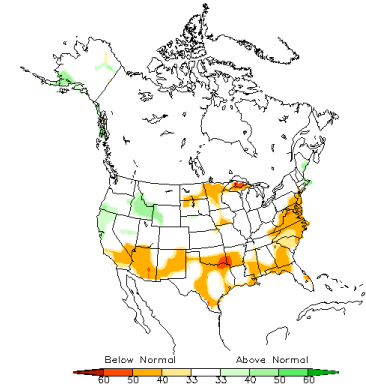


Last update: Mon Aug 16 2010

Initial conditions: 5Aug2010-14Aug2010

CFS monthly Prec probability forecast

Dec 2010

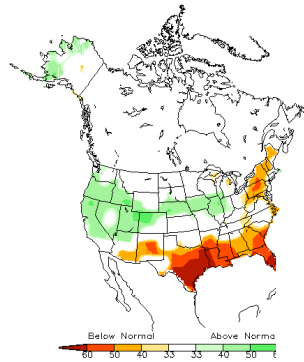


Last update: Mon Aug 16 2010

Initial conditions: 5Aug2010-14Aug2010

CFS monthly Prec probability forecast

Jan 2011

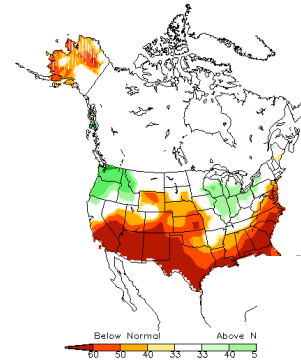


Last update: Mon Aug 16 2010

Initial conditions: 5Aug2010

CFS monthly Prec probability forecast

Mar 2011

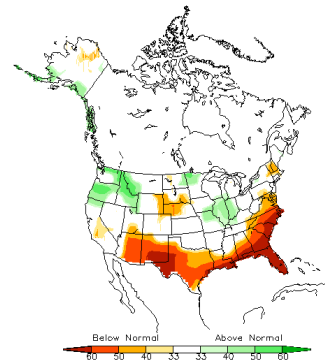


Last update: Mon Aug 16 2010

Initial conditions: 5Au

CFS monthly Prec probability forecast

Feb 2011

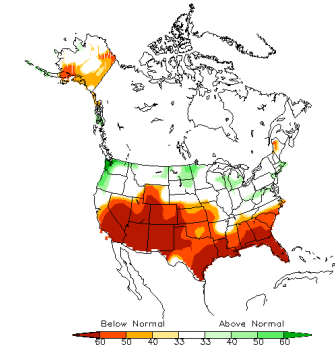


Last update: Mon Aug 16 2010

Initial conditions: 5Aug2010-14Aug2010

CFS monthly Prec probability forecast

Apr 2011



Last update: Mon Aug 16 2010

Initial conditions: 5Aug2010-14Aug2010

