

Seasonal Outlook for 1st half of 2004

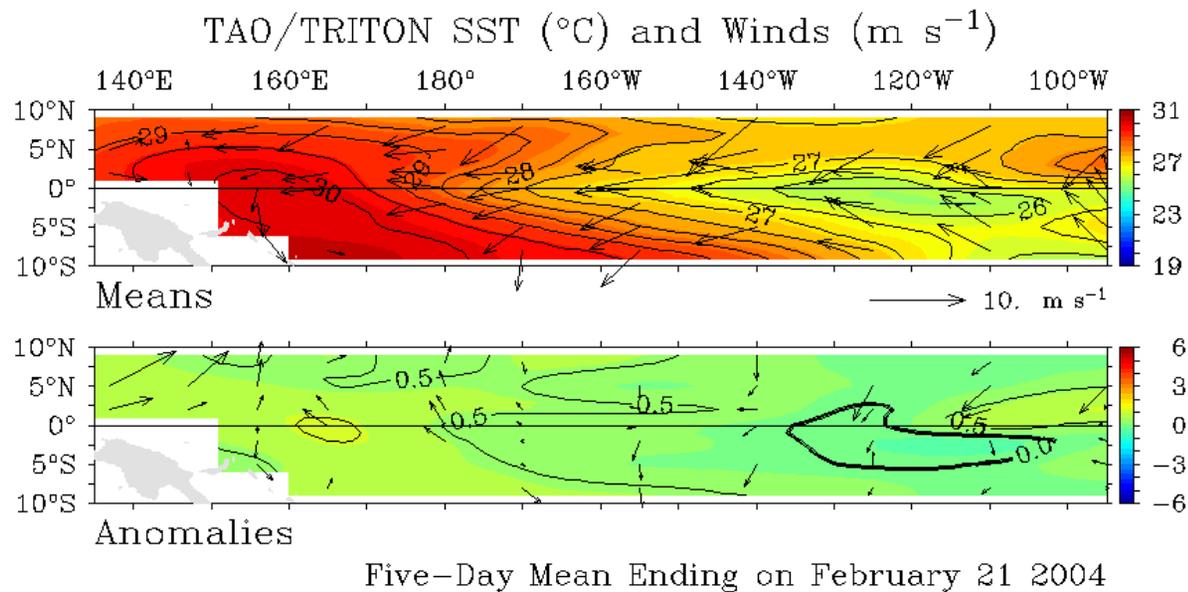
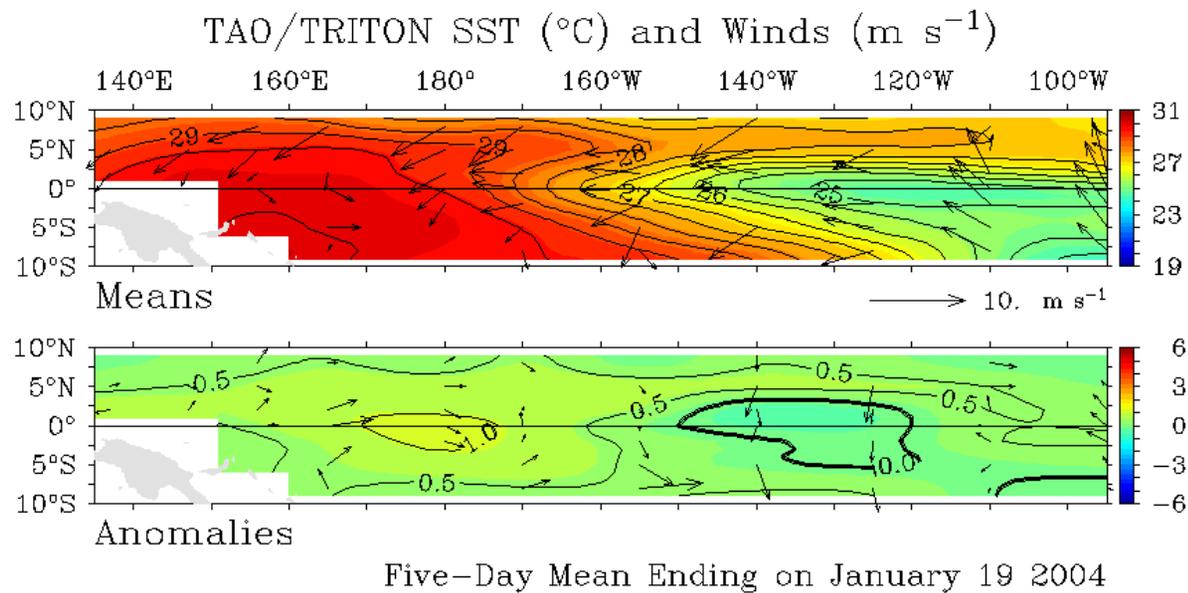
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klaus.wolter@noaa.gov

- **ENSO: Status and Prospects**
- **CPC forecasts for next four months**
- **Experimental forecasts (April-June 2004)**
- **Executive Summary**

Current
state
of ENSO
compared
to last
month
(weakened
borderline
El Niño)

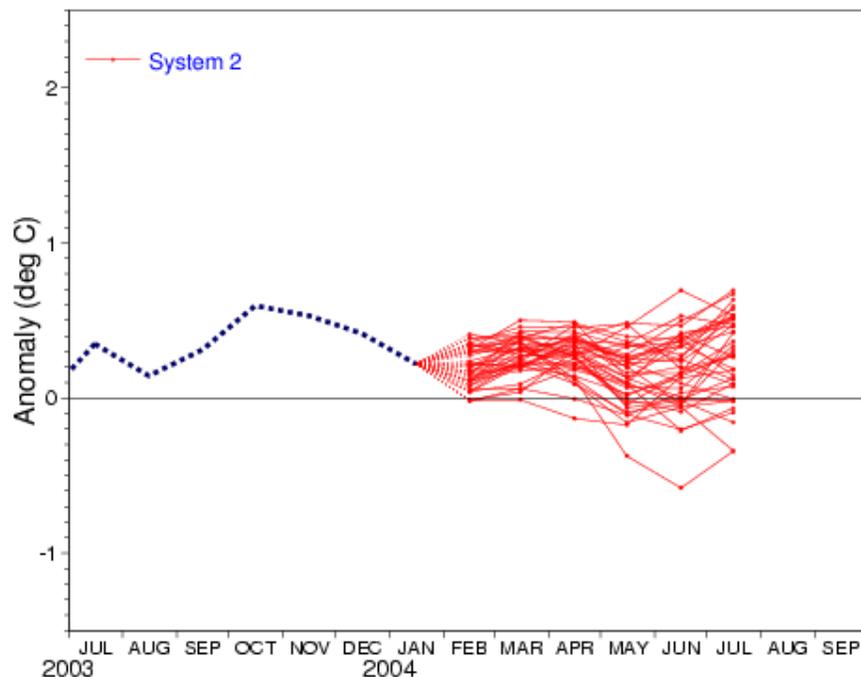




NCEP/CMB

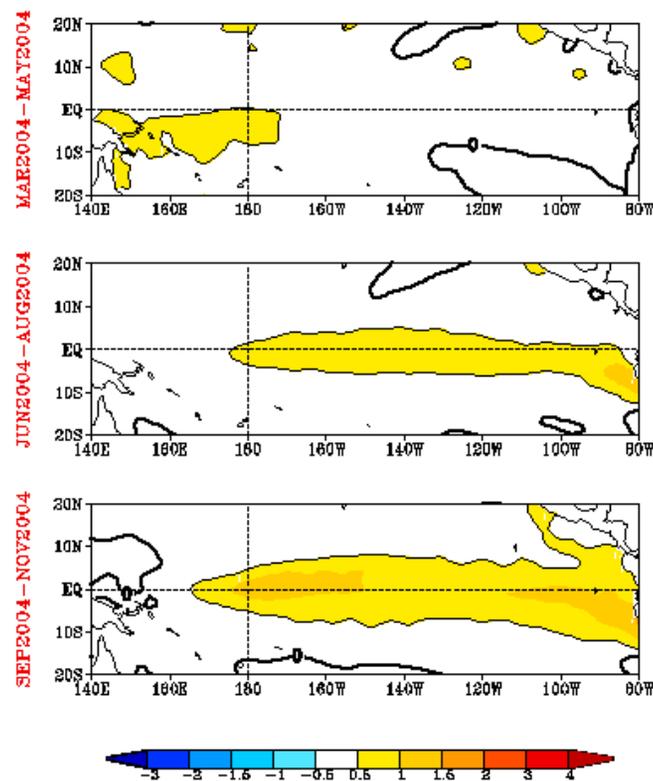
NINO3.4 SST anomaly plume ECMWF forecast from 1 Feb 2004

Monthly means plotted using NCEP adjusted OIv2 1971-2000 climatology



Forecast production date: 14 Feb 2004

FORECAST SST ANOMALIES



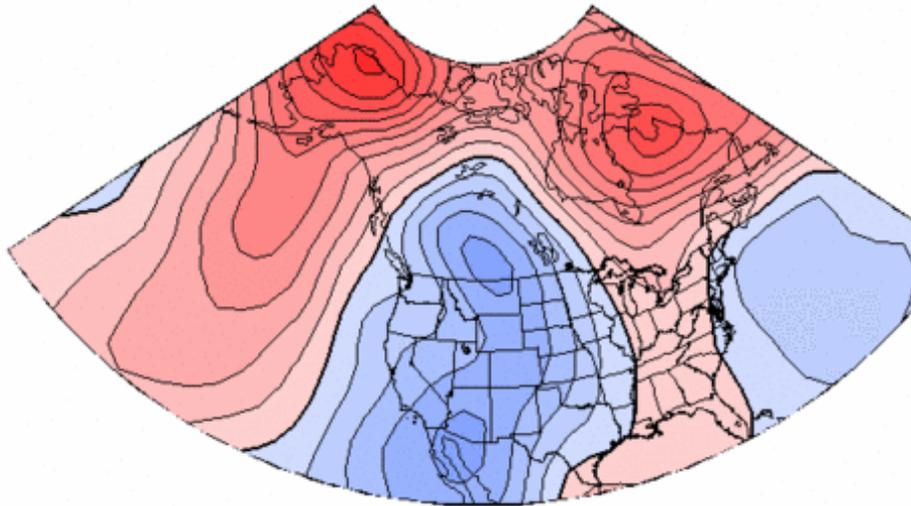
Last Update: Tue Feb 17 2004

ECMWF vs. NCEP coupled models: still holding out for El Niño!

8-14d. Forecast (28feb-6March)

temp850 initialized 2004022100

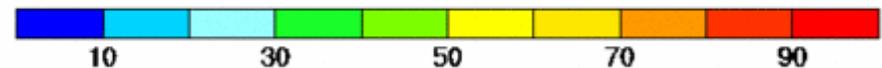
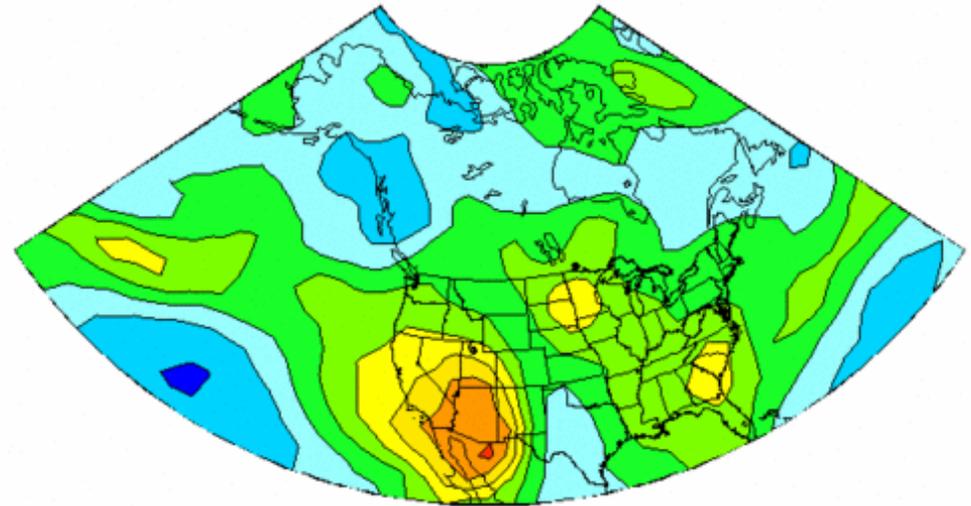
Ens Mean Fcst Anomaly



apcp initialized 2004021100

Upper Tercile Probs

Percent



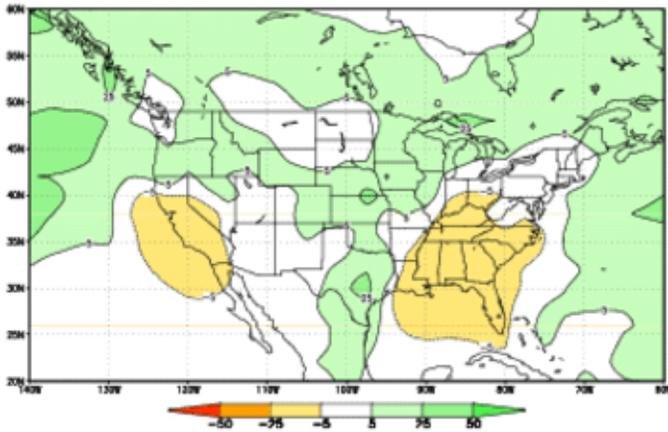
Starting with next weekend, calibrated weather forecasts show a wintery pattern for much of the western U.S., with subtropical moisture entering from the west coast to allow for above-normal precipitation southwest of Colorado in particular. This won't be enough to resuscitate our snowpack for now, but at least the pattern remains active. This forecast will be updated later today.

Source: <http://www.cdc.noaa.gov/~jsw/refcst/week2/>

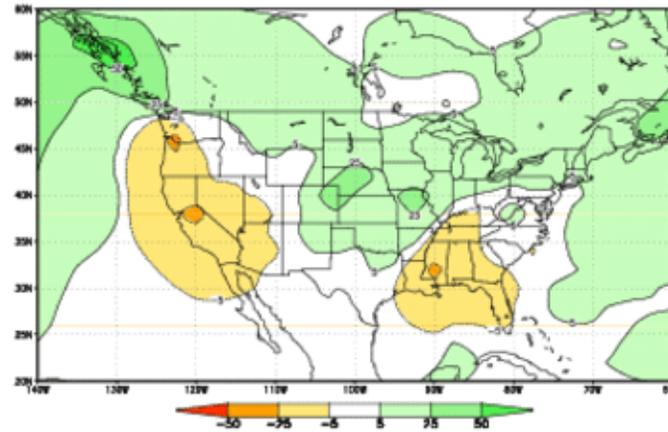
6-10d. Forecast (28feb-3March)

Day 6-10 Fcst IC 20040223
Precipitation Anomaly (mm)

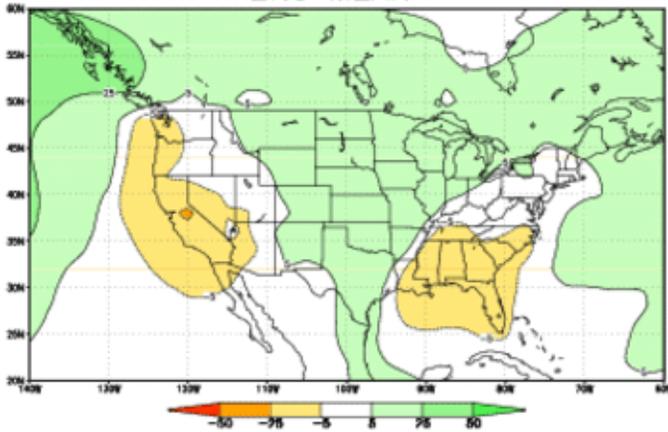
GFS T254



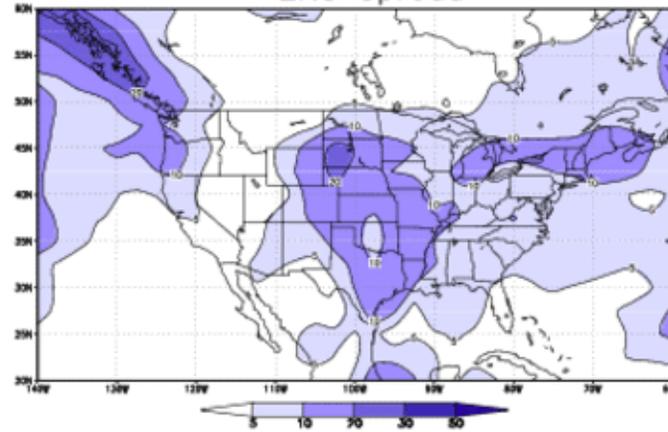
ENSC T126



ENS MEAN



ENS Spread



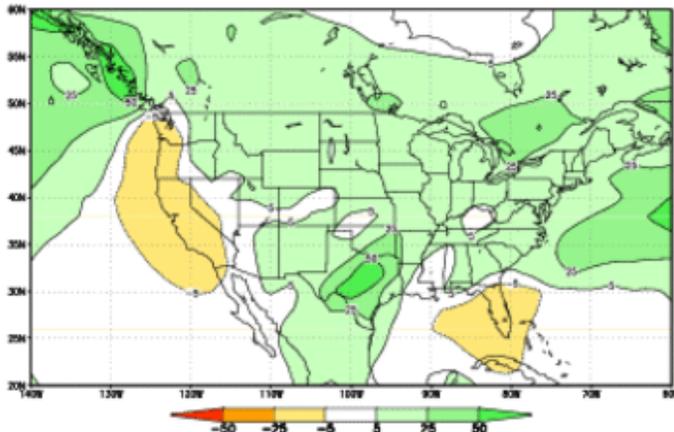
CPC-based moisture forecast for next weekend into next week.

Source:
<http://www.cpc.ncep.noaa.gov/schemm/>

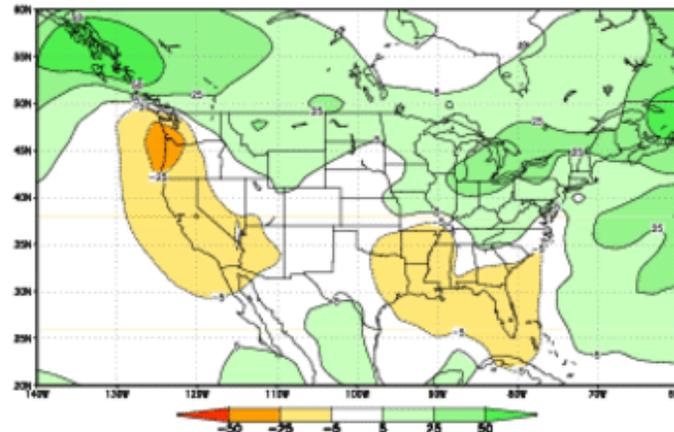
8-14d. Forecast (1-7 March)

Week 2 Fcst IC 20040223
Precipitation Anomaly (mm)

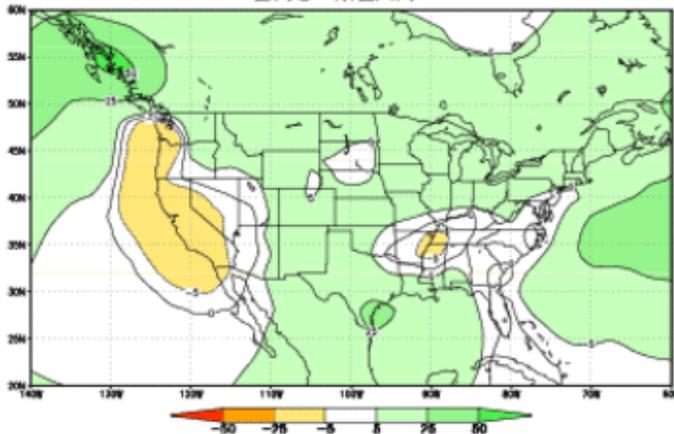
GFS T254



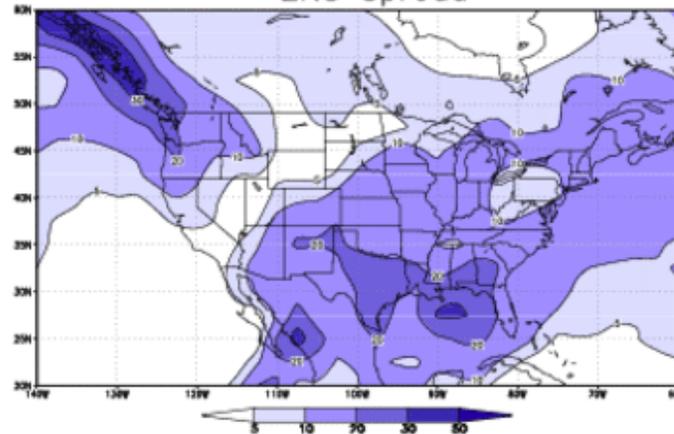
ENSC T126



ENS MEAN



ENS Spread

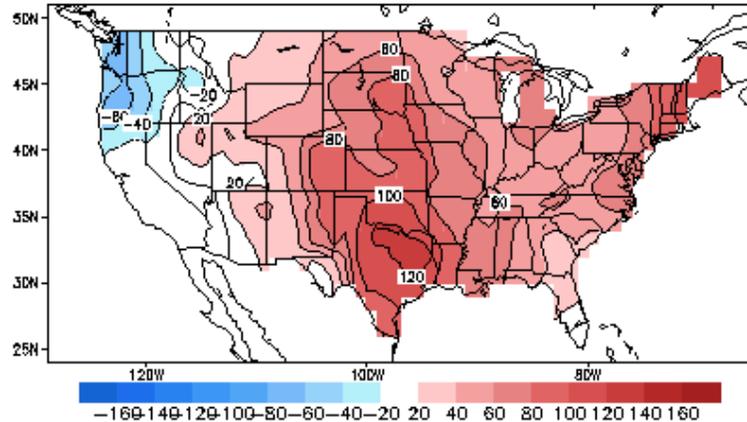


CPC-
based
moisture
forecast
for next
week.

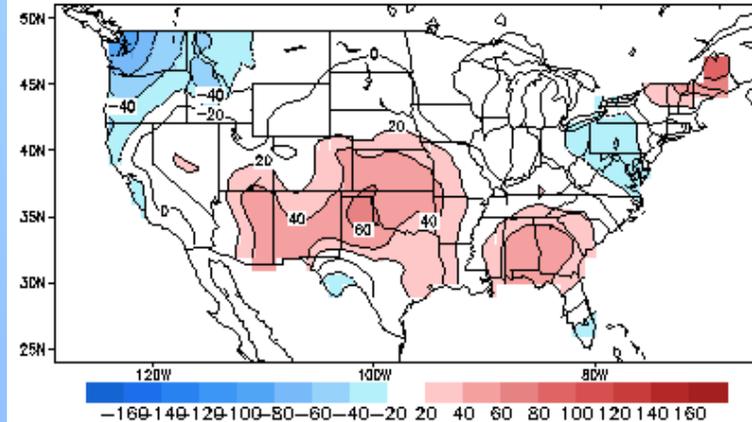
Source:
[http://
www.cpc.n
cep.noaa.go
v/schemm/](http://www.cpc.ncep.noaa.gov/schemm/)

Soil Moisture Analog Forecasts

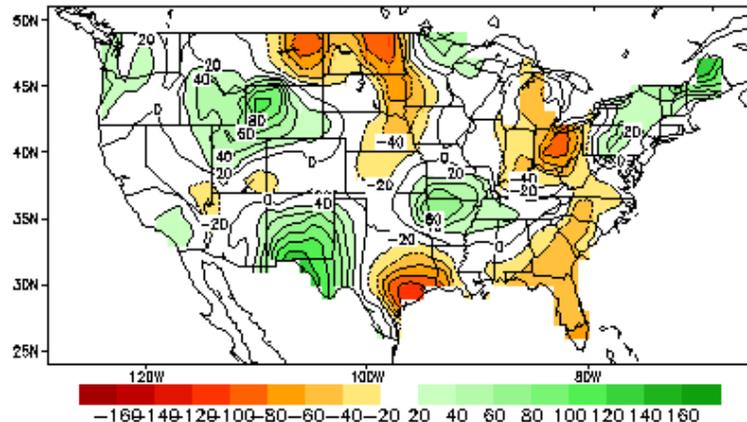
Lagged Averaged Temperature Outlook for MAR 2004
units: anomaly (sdX100), SM data ending at 20040220



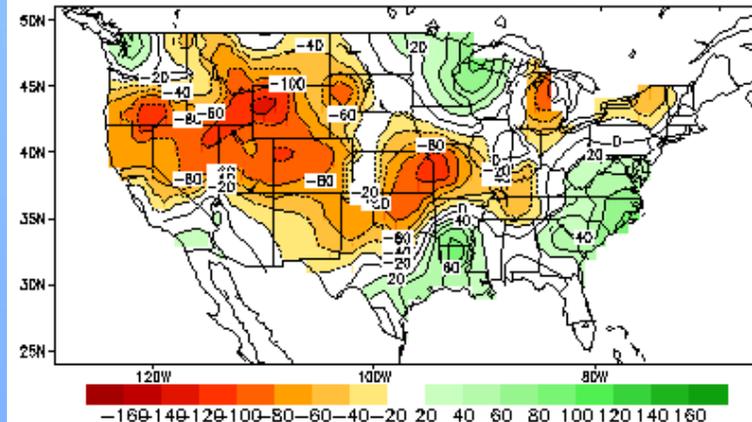
Lagged Averaged Temperature Outlook for AMJ 2004
units: anomaly (sdX100), SM data ending at 20040220



Lagged Averaged Precipitation Outlook for MAR 2004
units: anomaly (sdX100), SM data ending at 20040220

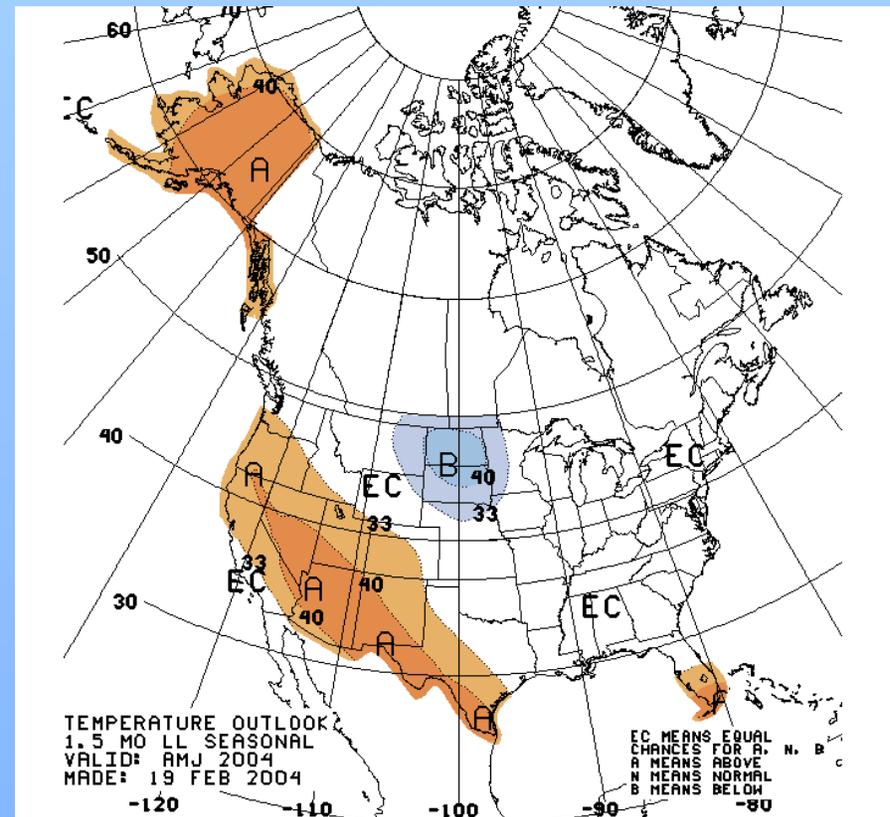
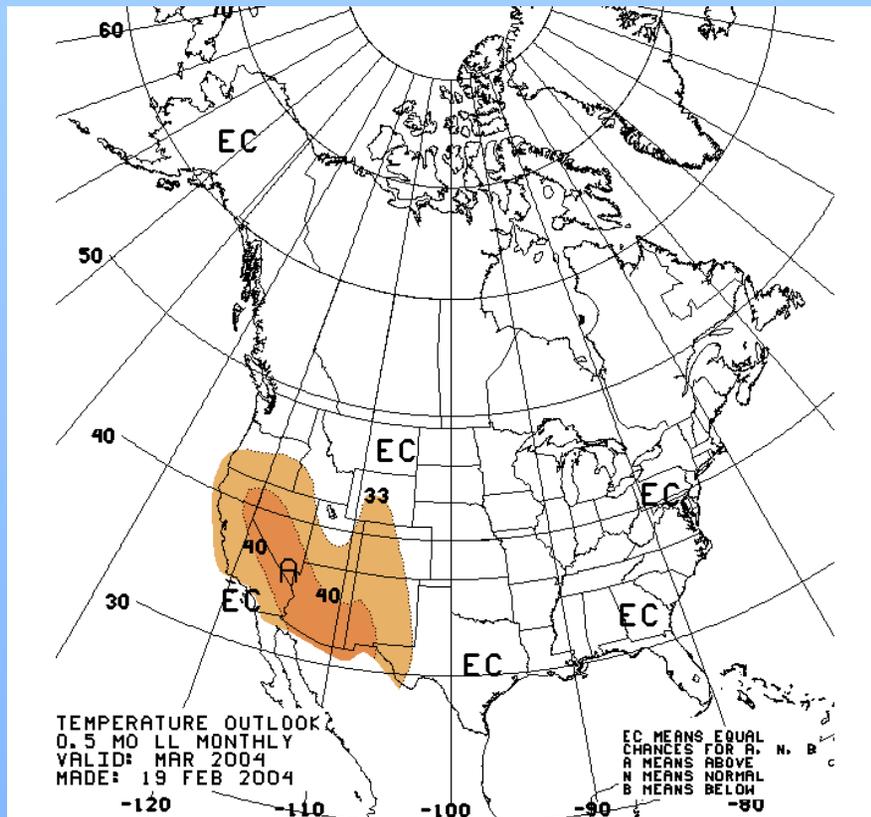


Lagged Averaged Precipitation Outlook for AMJ 2004
units: anomaly (sdX100), SM data ending at 20040220



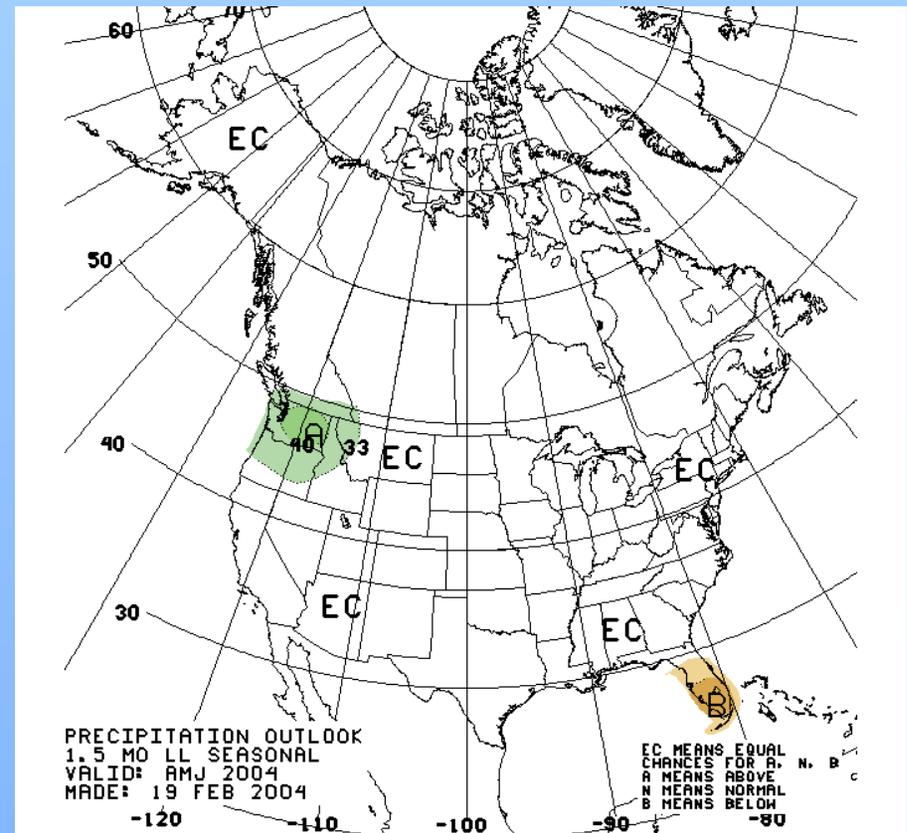
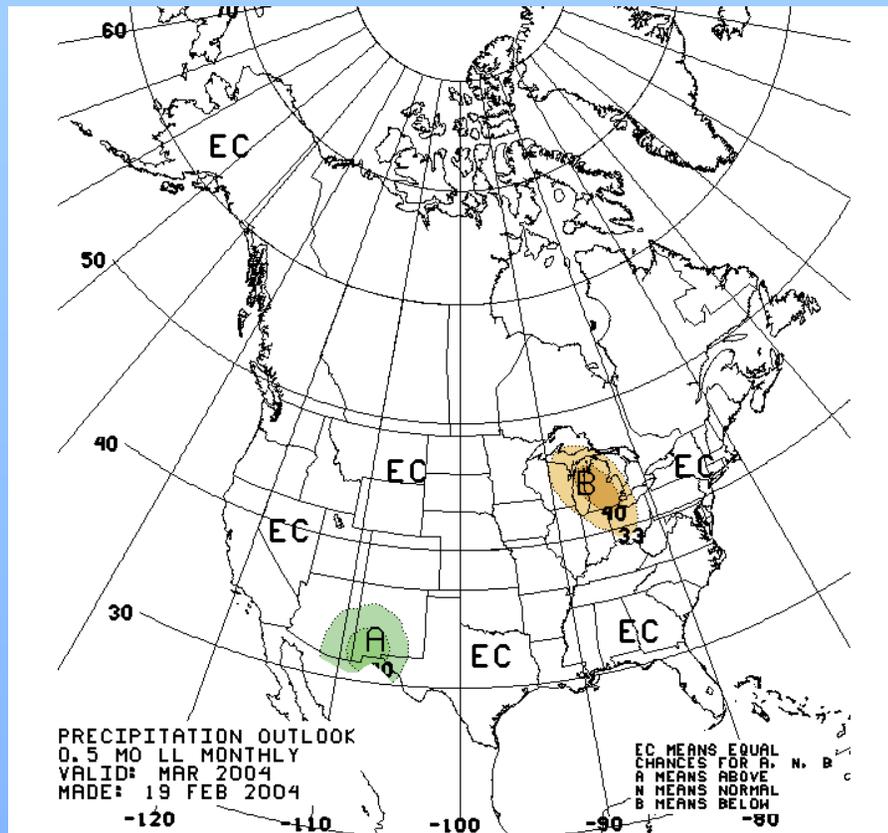
For next month, this tool predicts near-normal precipitation & warm conditions for eastern Colorado in particular, while April through June is predicted to be 'warmish' and dry.

Temperature Forecasts (CPC)



According to CPC, southwestern Colorado will have a preference for warmer than normal temperatures into late spring, while northeastern Colorado has no discernible tilt of the odds.

Precipitation Forecasts (CPC)

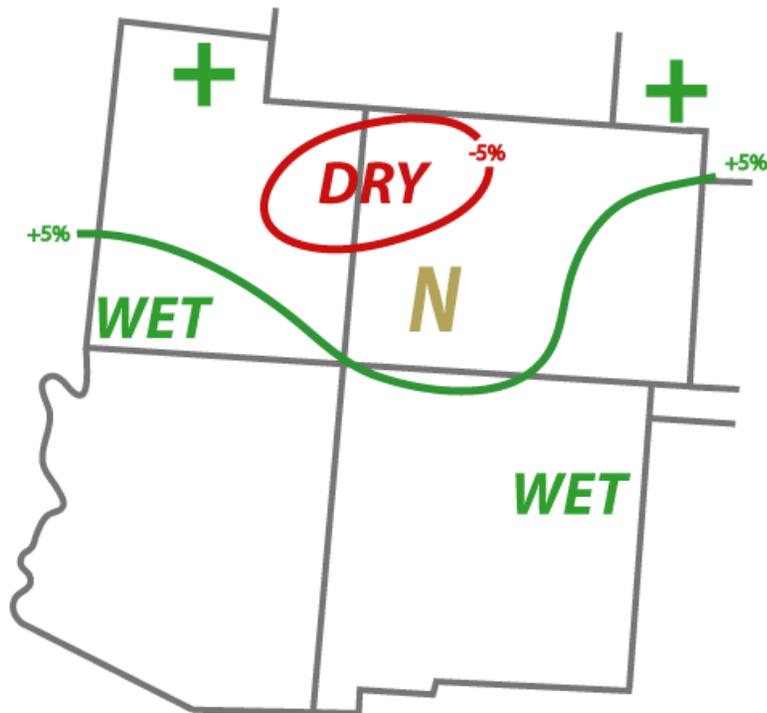


CPC continues to show no tilt in the odds for Colorado moisture through the next four months. Near-normal tropical Pacific SST continues to 'fluster' CPC forecasters.

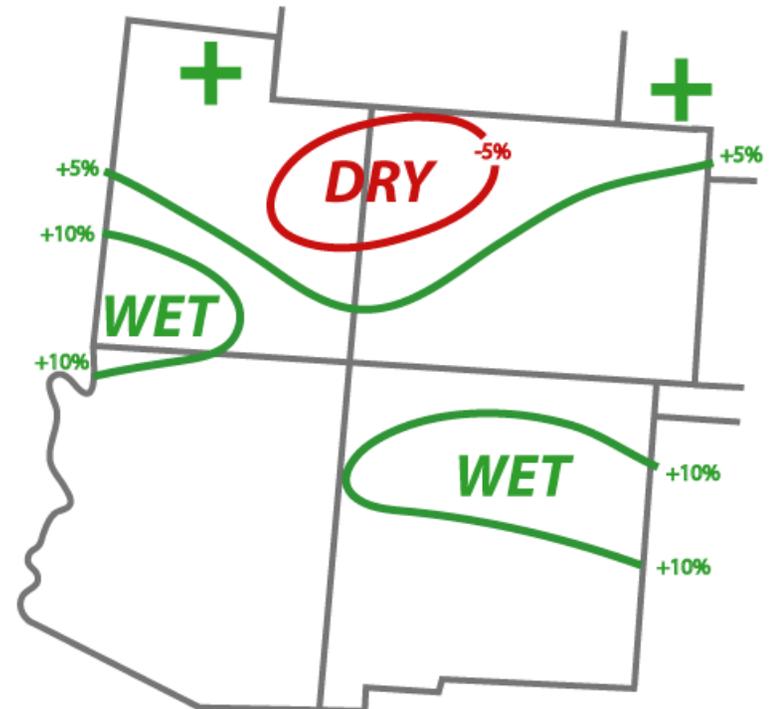
Source (for CPC forecasts): <http://www.cpc.ncep.noaa.gov/products/forecasts/>

Updated experimental forecasts

EXPERIMENTAL CDC APR-JUN 2004 PRECIPITATION FORECAST
(issued January 15, 2004)



EXPERIMENTAL CDC APR-JUN 2004 PRECIPITATION FORECAST
(issued February 12, 2004)



For April-June 2004, my latest forecast gives all but northwestern Colorado better-than-normal odds of at least average moisture. In fact, compared to last month, this forecast is overall more optimistic, or at least 'holds the line'.

Source: <http://www.cdc.noaa.gov/~kew/SWcasts/>

Executive Summary (23 February 2004)

1. The most recent El Niño event - declared over last June - is still trying to make a comeback. Weak El Niño conditions are the safest bet for the next few months, but I would not be surprised to see El Niño return in force later this year. However, it is not likely that it will play a role before spring is over.
2. Except for a dry spell in mid-January, 2004 has seen a fairly active stormtrack over Colorado, with a continued preference for the western and southern mountains to receive the lion's share of the moisture. The next two weeks should see more of the same, with the best chance for Front Range moisture over the coming weekend.
3. In my experimental forecasts for April through June 2004, all but northwestern Colorado show slightly wetter-than-normal odds, an upward trend compared to the last two forecasts. Since April is often the snowiest month of the year in the higher Front Range elevations, there still is hope for a belated recovery beyond April 1st.
4. Bottomline: As anticipated, the last few winter months have not been favorable for the north-central mountains of Colorado. With the establishment of a southern stormtrack from California to Texas, there is still hope for at least near-normal moisture in March. For April-June 2004, the northwestern plateau of Colorado is flagged as a potential drought trouble spot, while the remainder of Colorado, New Mexico, Utah, and Arizona have better than normal odds of receiving at least average moisture. A return of El Niño is still possible for the summer, but quite unlikely before the end of spring.