School of Natural Resources

Water Availability and Outlook Committee Report

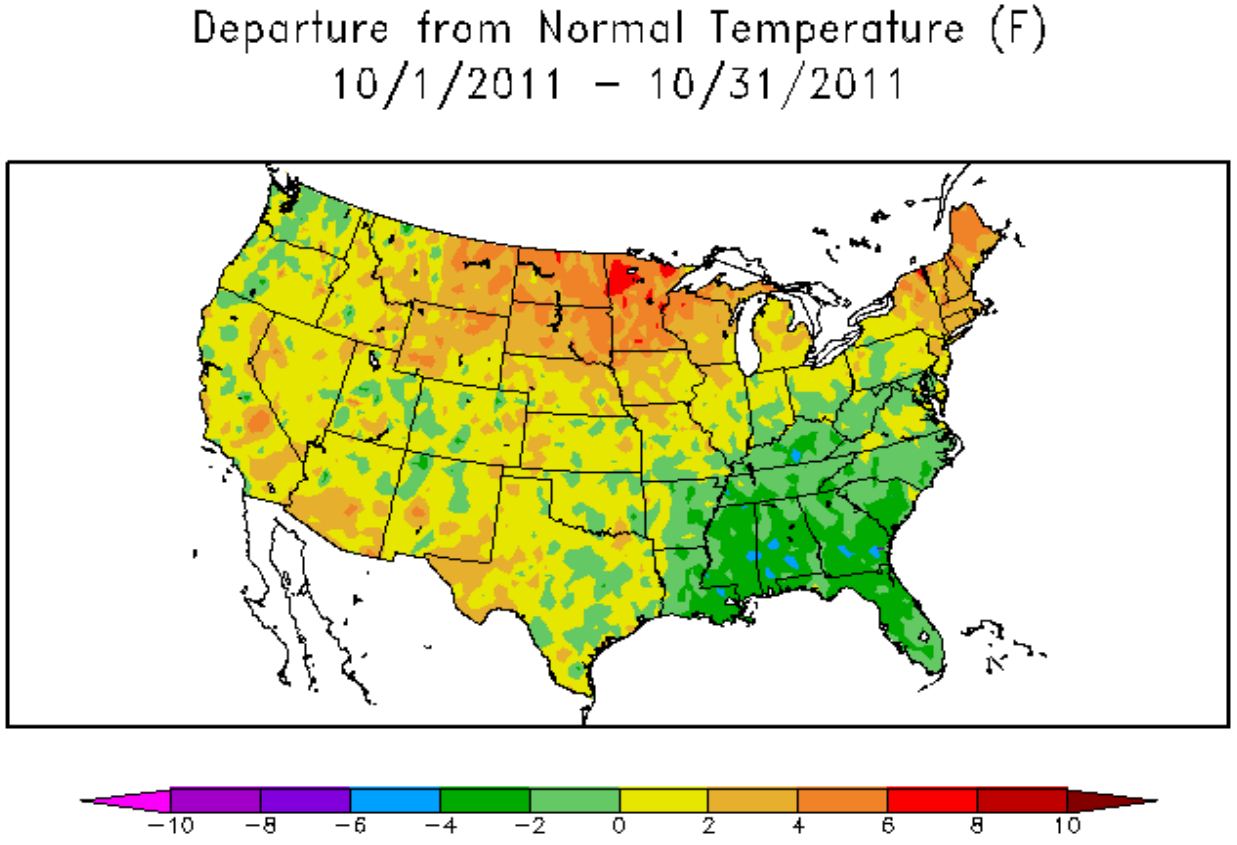
April 24, 2012

University of Nebraska–Lincoln

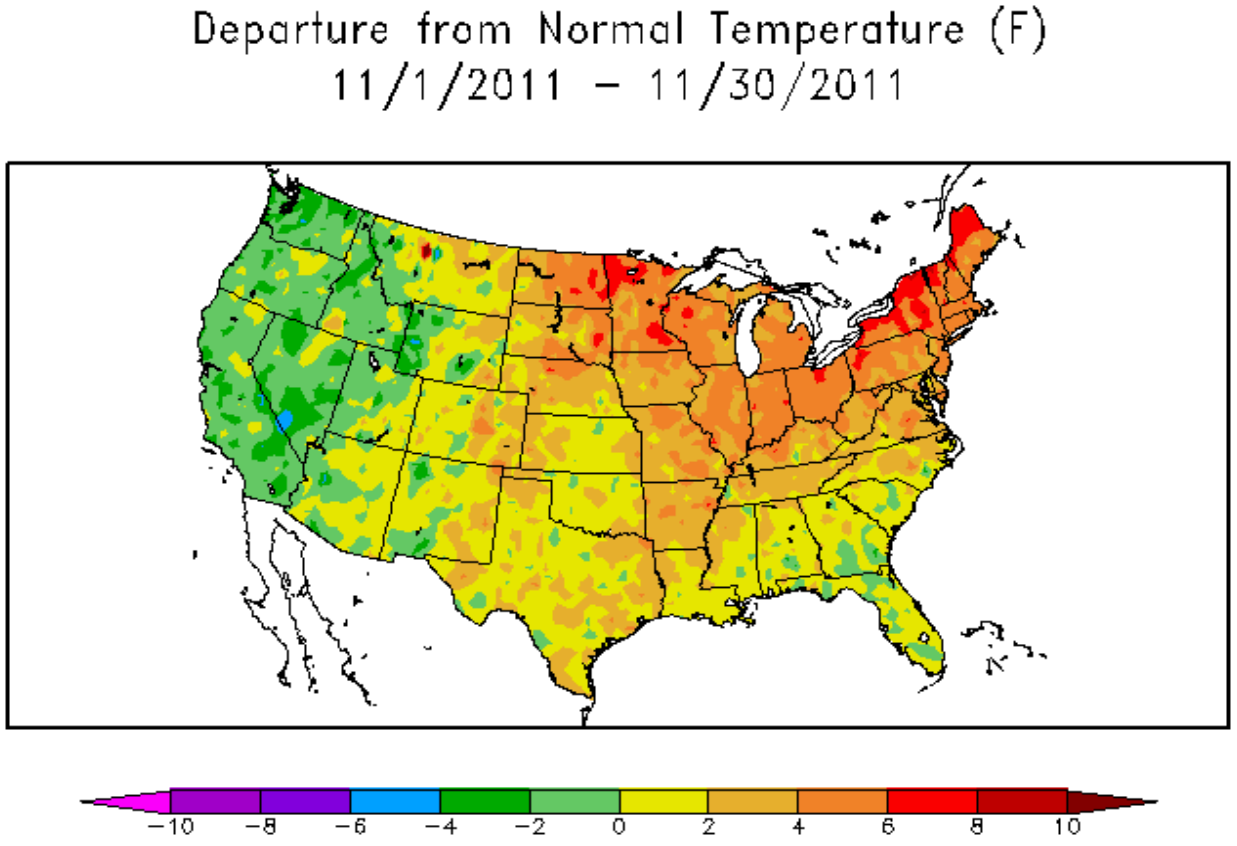
National Monthly Average Temperature Trends

(October – Present)

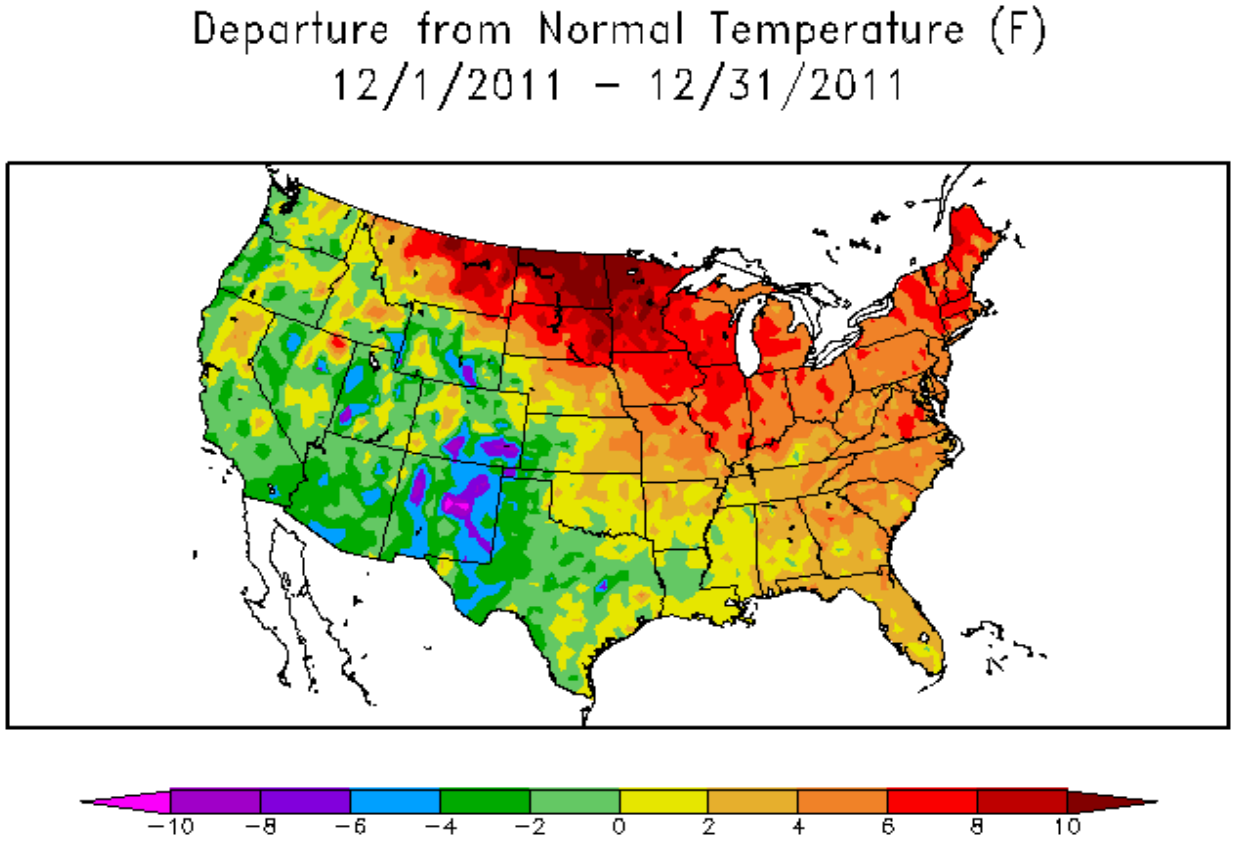
October


Departure from Normal Temperature (F)
10/1/2011 – 10/31/2011
−10 −8 −6 −4 −2 0 2 4 6 8 10
Generated 11/11/2011 at HPRCC using provisional data.
Regional Climate Centers

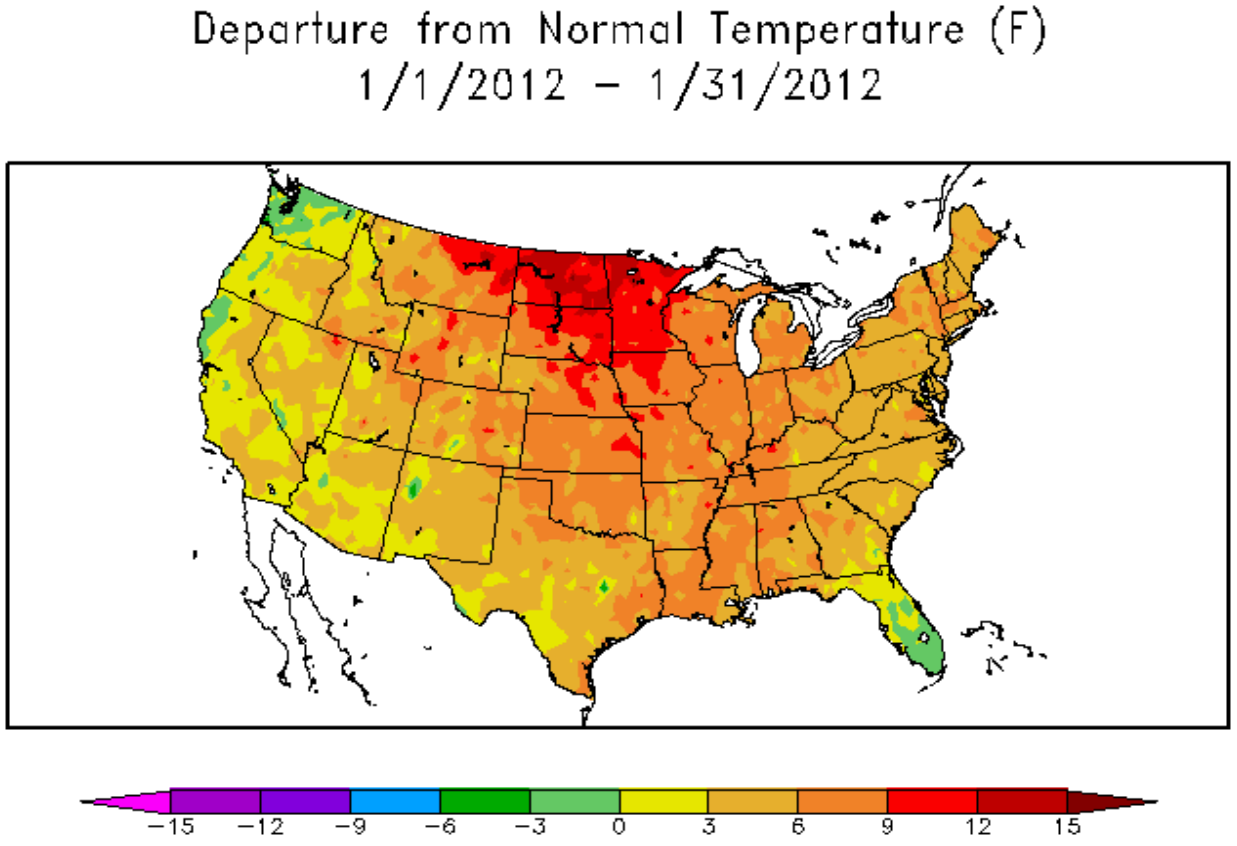
November


Departure from Normal Temperature (F)
11/1/2011 – 11/30/2011
−10 −8 −6 −4 −2 0 2 4 6 8 10
Generated 12/11/2011 at HPRCC using provisional data.
Regional Climate Centers

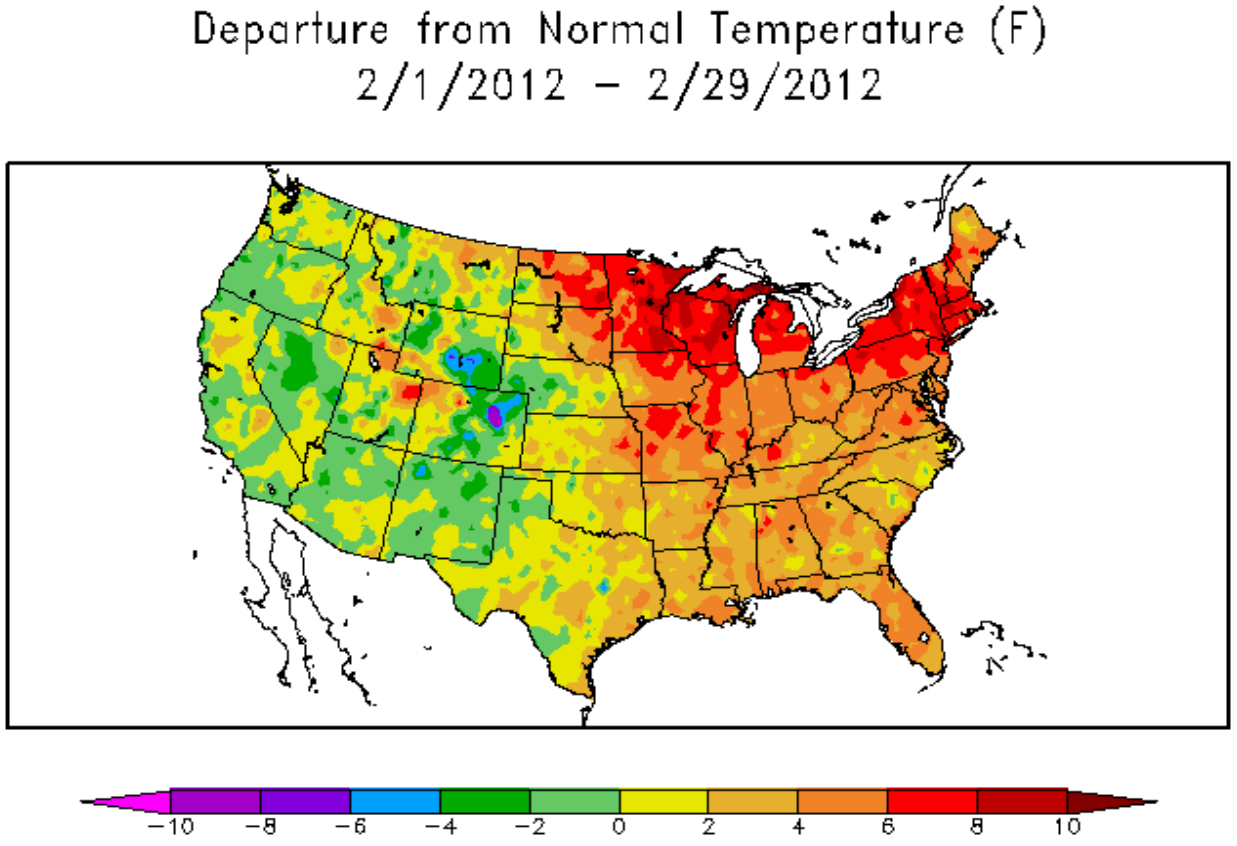
December


Departure from Normal Temperature (F)
12/1/2011 – 12/31/2011
−10 −8 −6 −4 −2 0 2 4 6 8 10
Generated 1/11/2012 at HPRCC using provisional data.
Regional Climate Centers

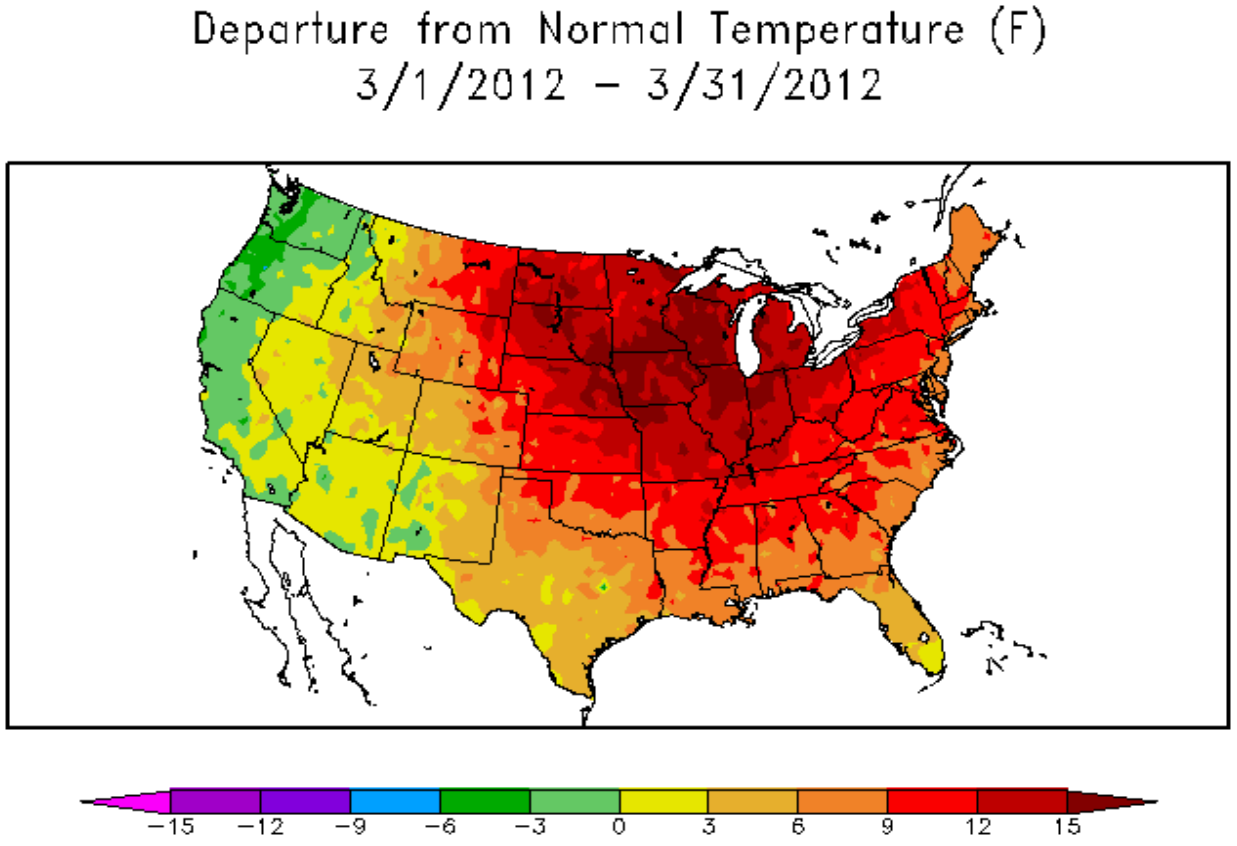
January


Departure from Normal Temperature (F)
1/1/2012 – 1/31/2012
−15 −12 −9 −6 −3 0 3 6 9 12 15
Generated 2/11/2012 at HPRCC using provisional data.
Regional Climate Centers

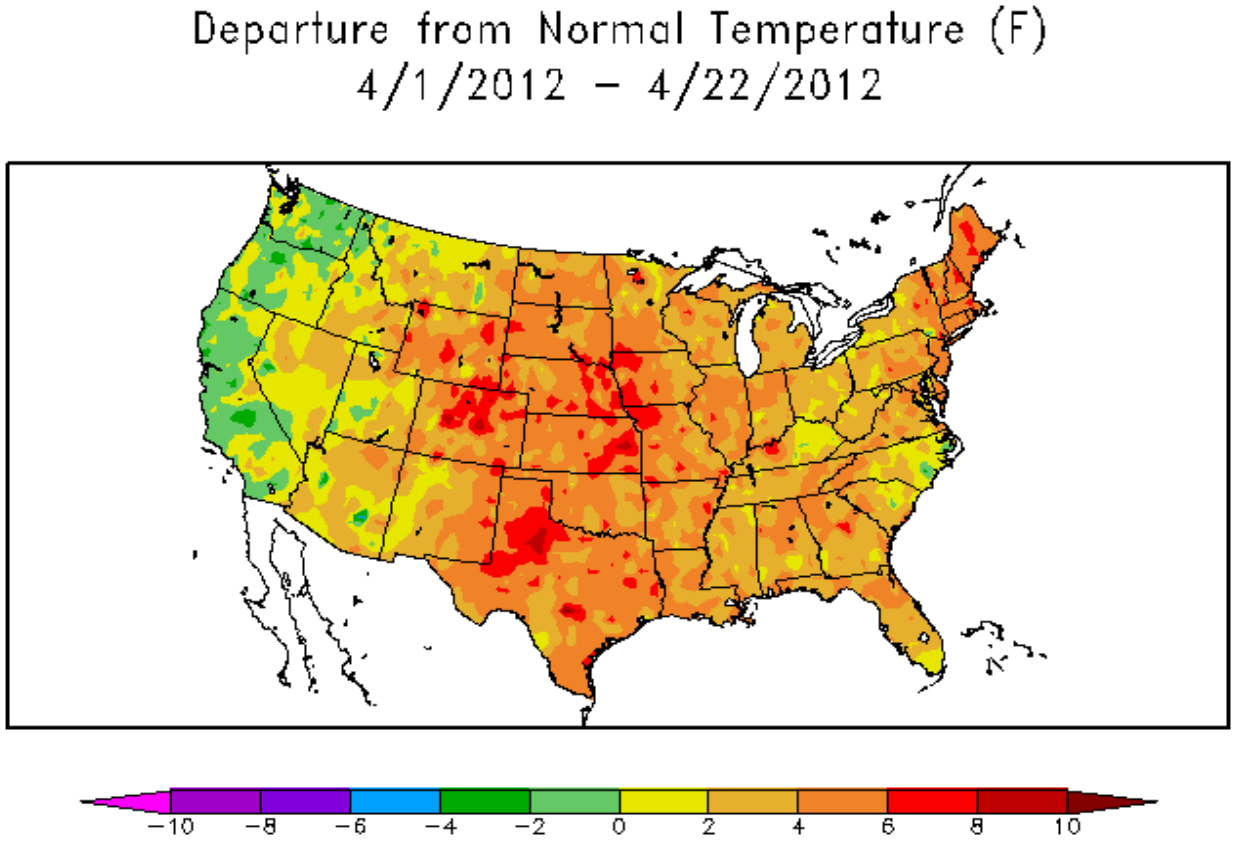
February


Departure from Normal Temperature (F)
2/1/2012 – 2/29/2012
−10 −8 −6 −4 −2 0 2 4 6 8 10
Generated 3/11/2012 at HPRCC using provisional data.
Regional Climate Centers

March


Departure from Normal Temperature (F)
3/1/2012 – 3/31/2012
−15 −12 −9 −6 −3 0 3 6 9 12 15
Generated 4/11/2012 at HPRCC using provisional data.
Regional Climate Centers

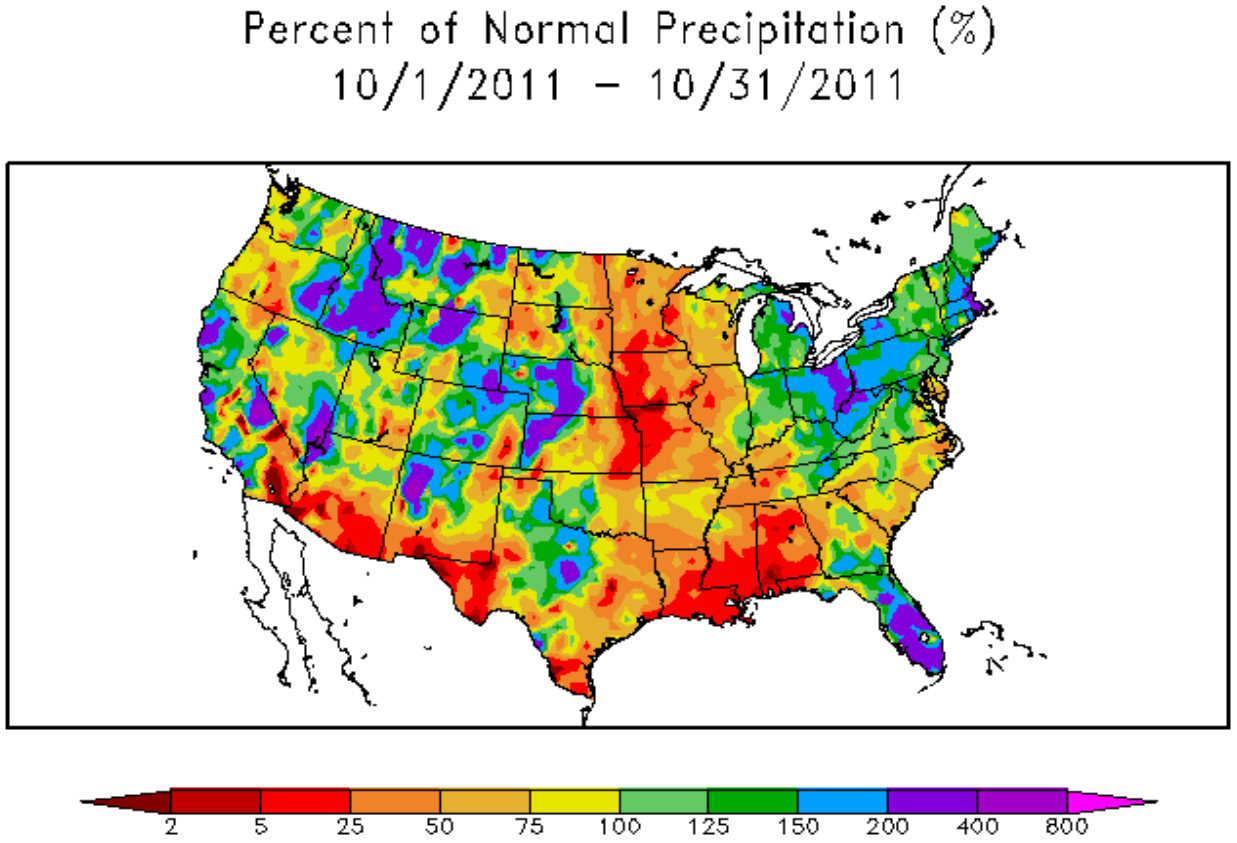
April


Departure from Normal Temperature (F)
4/1/2012 – 4/22/2012
−10 −8 −6 −4 −2 0 2 4 6 8 10
Generated 4/23/2012 at HPRCC using provisional data.
Regional Climate Centers

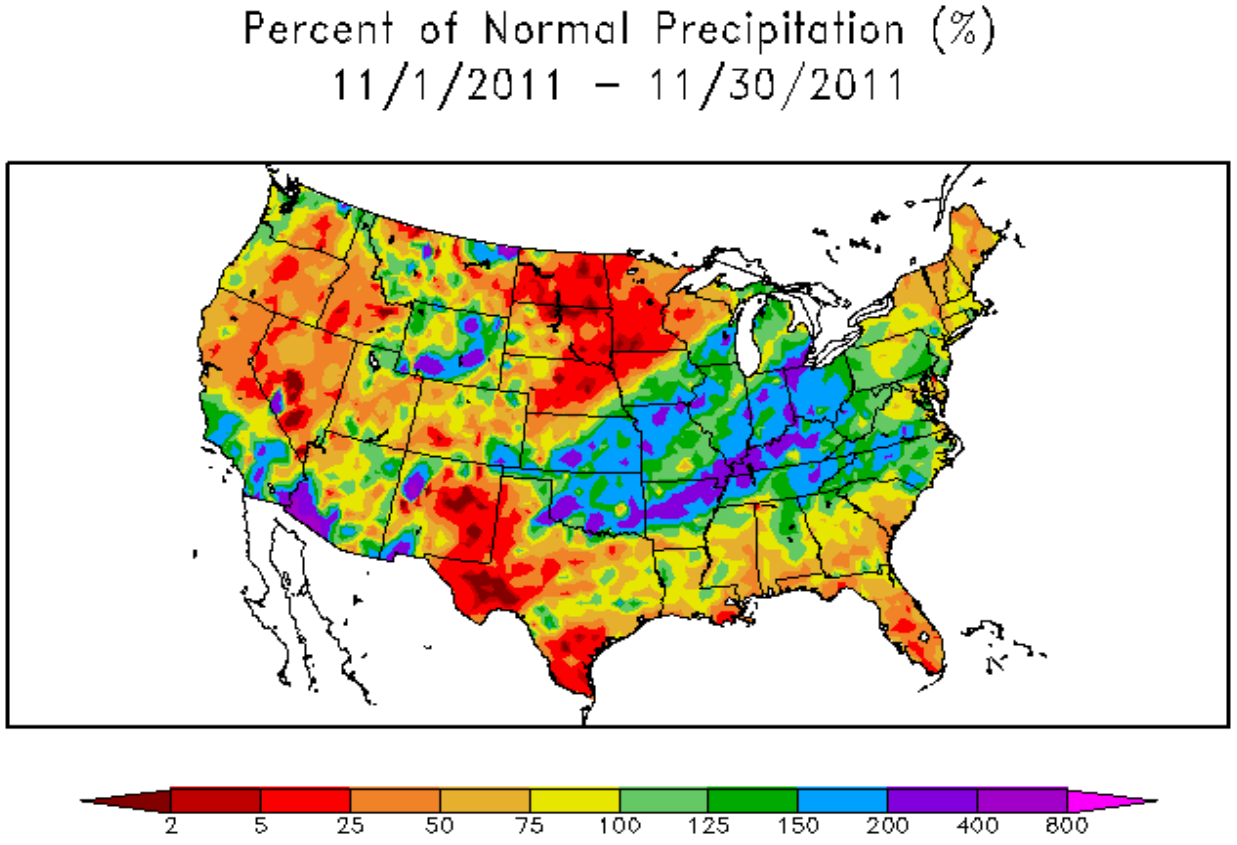
National Monthly Precipitation Trends

(October – Present)

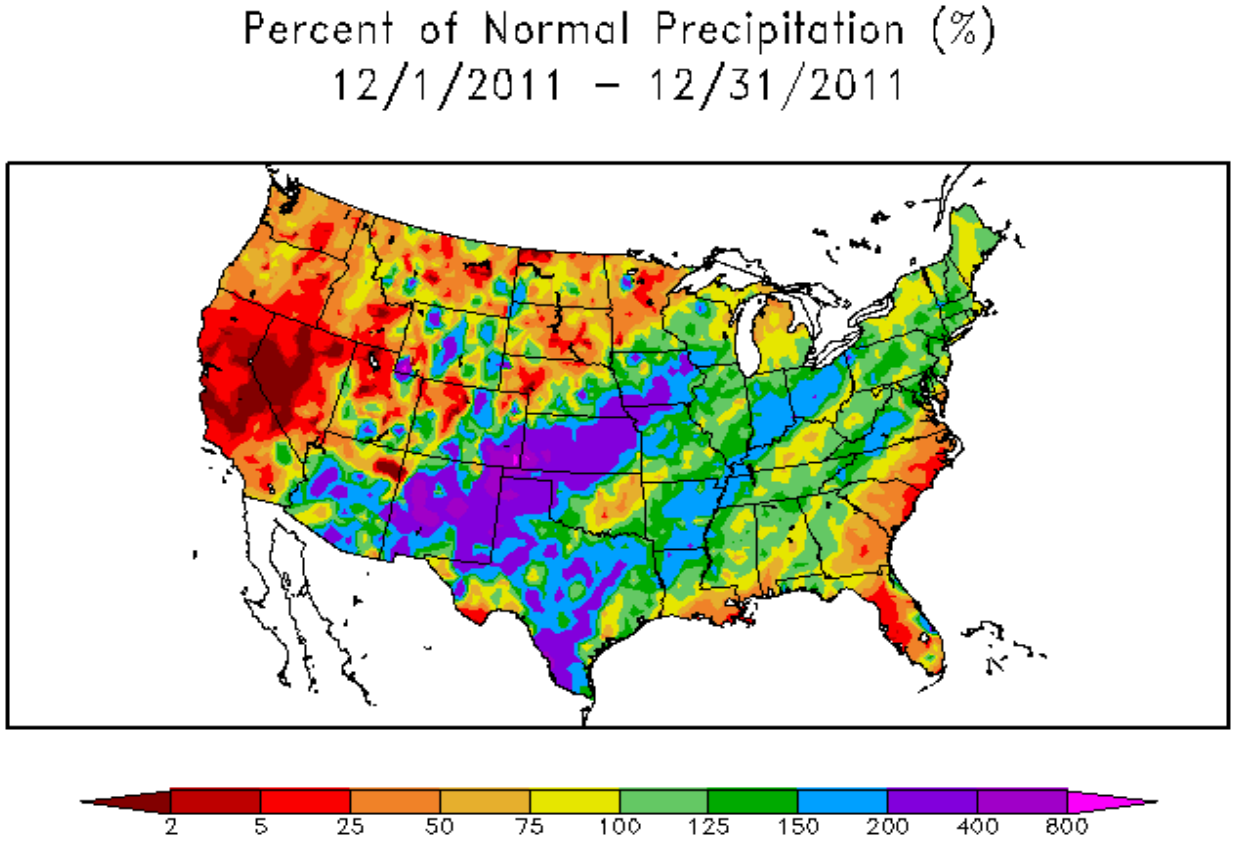
October


Percent of Normal Precipitation (%)
10/1/2011 – 10/31/2011
2
5
25
50
75
100
125
150
200
400
800
Generated 11/11/2011 at HPRCC using provisional data.
Regional Climate Centers

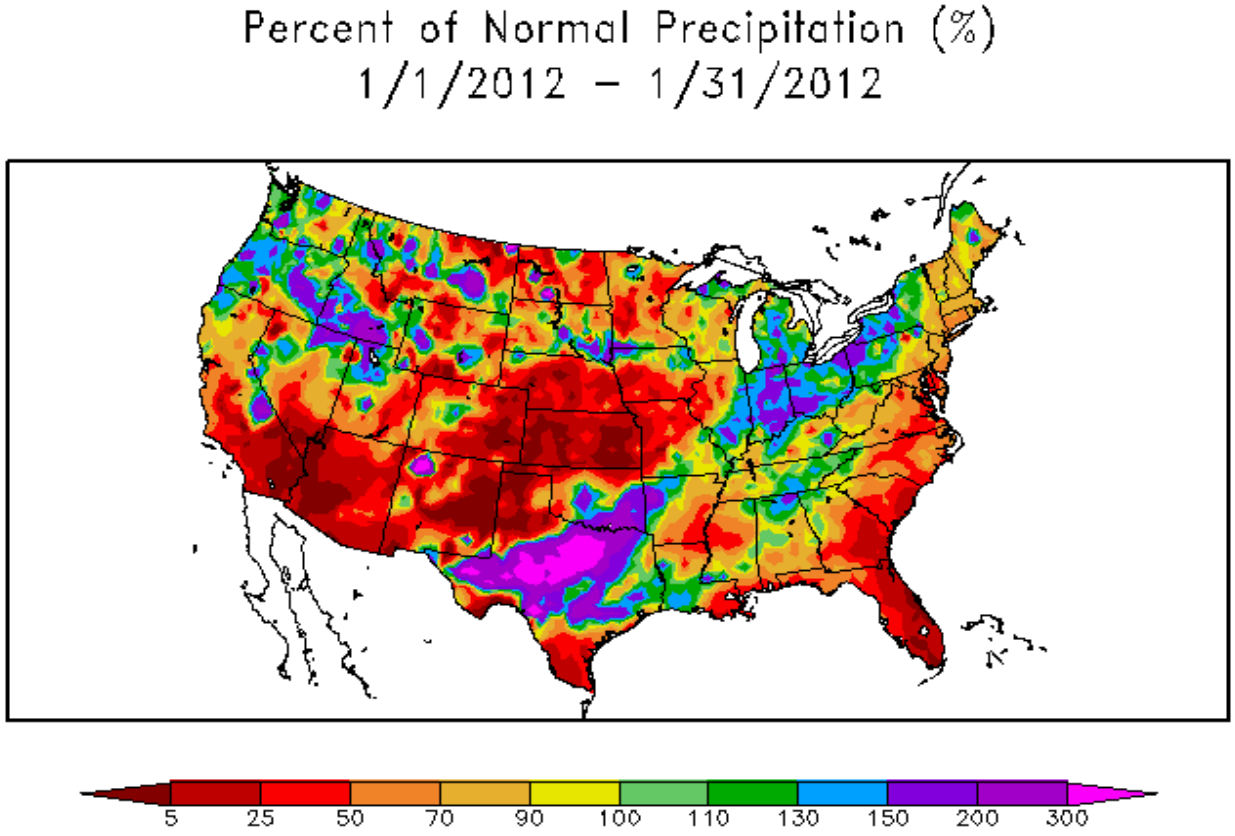
November


Percent of Normal Precipitation (%)
11/1/2011 – 11/30/2011
2
5
25
50
75
100
125
150
200
400
800
Generated 12/11/2011 at HPRCC using provisional data.
Regional Climate Centers

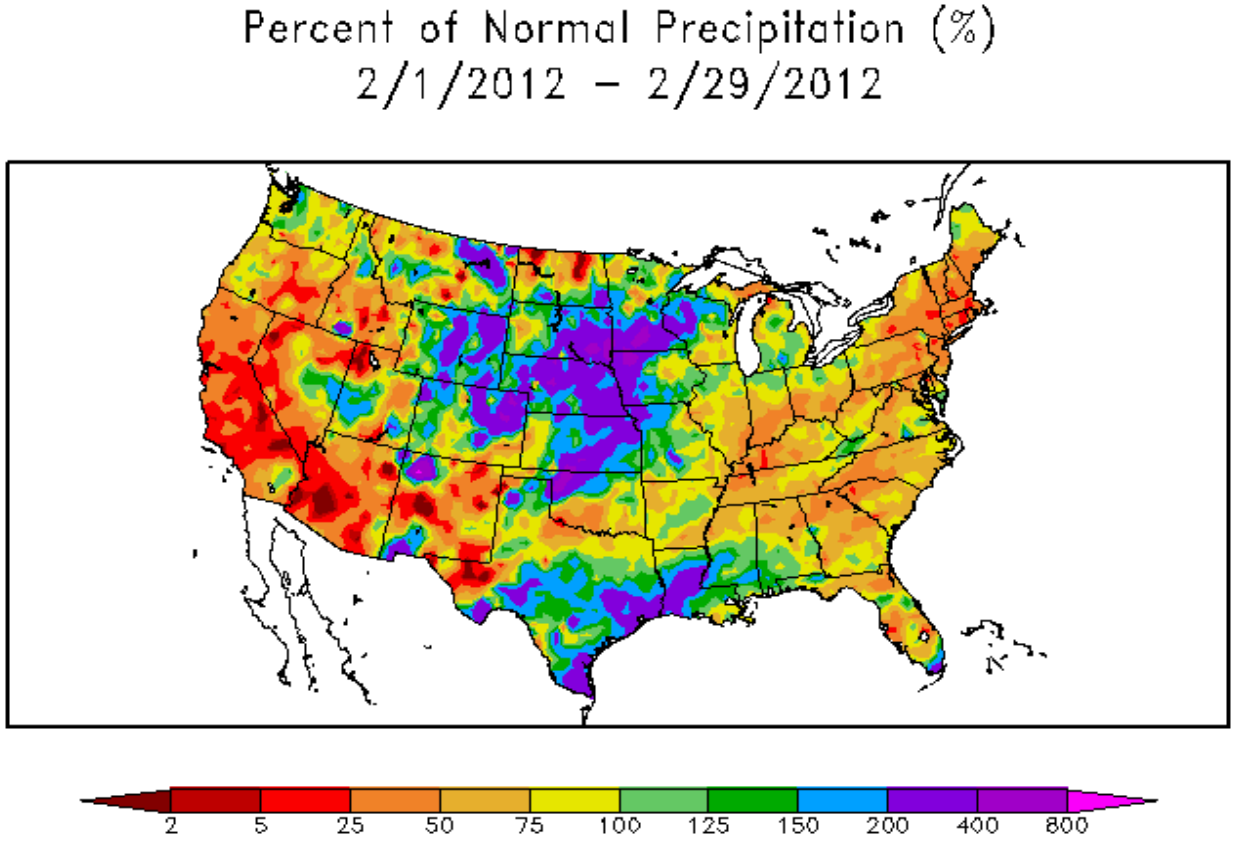
December


Percent of Normal Precipitation (%)
12/1/2011 – 12/31/2011
2
5
25
50
75
100
125
150
200
400
800
Generated 1/11/2012 at HPRCC using provisional data.
Regional Climate Centers

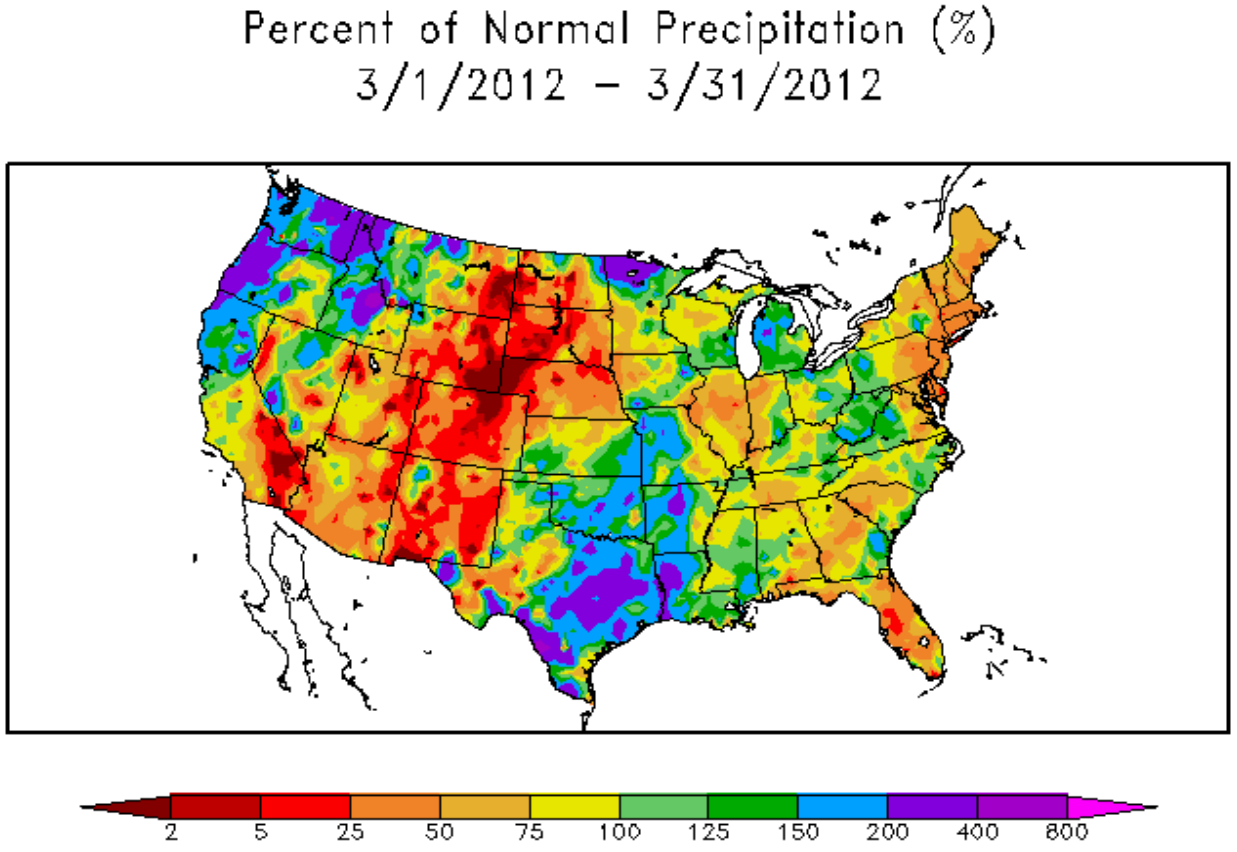
January


Percent of Normal Precipitation (%)
1/1/2012 – 1/31/2012
5
25
50
70
90
100
110
130
150
200
300
Generated 2/11/2012 at HPRCC using provisional data.
Regional Climate Centers

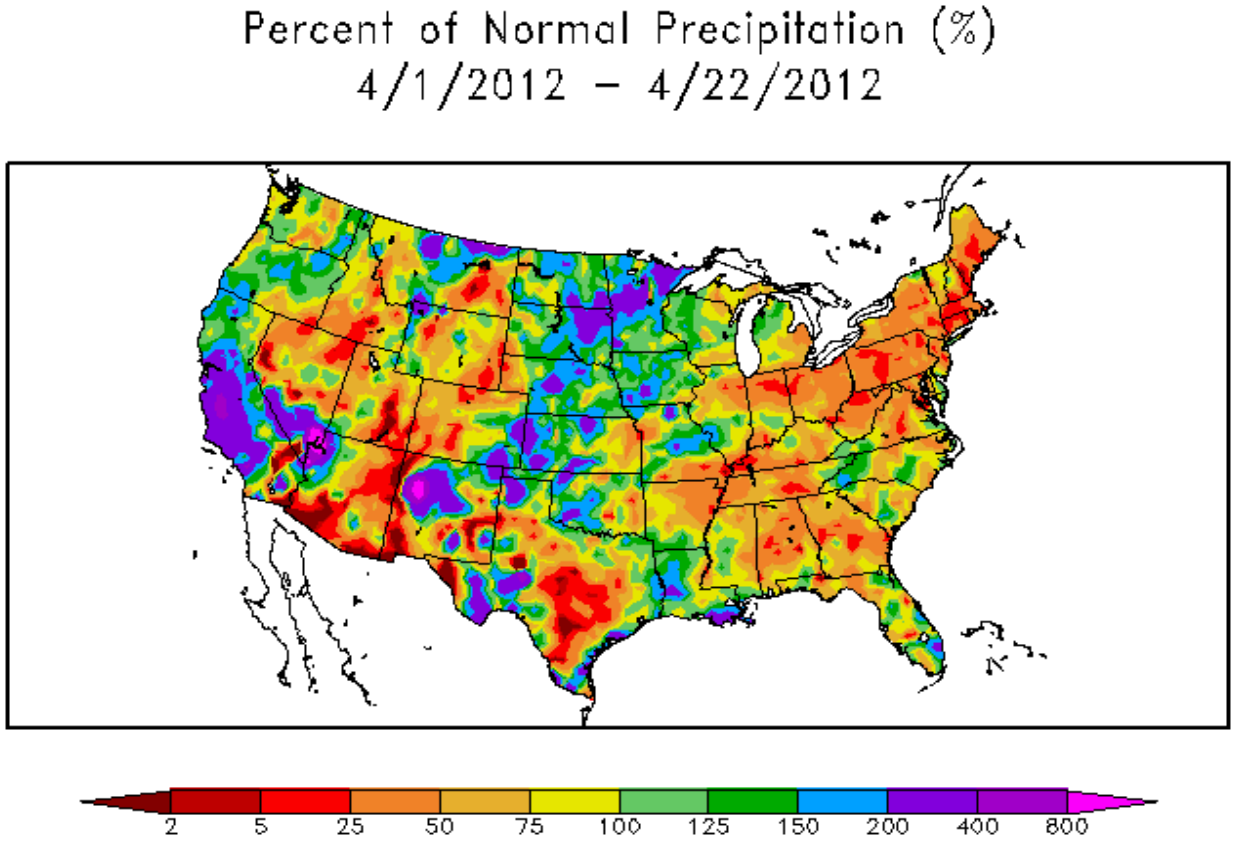
February


Percent of Normal Precipitation (%)
2/1/2012 – 2/29/2012
2
5
25
50
75
100
125
150
200
400
800
Generated 3/11/2012 at HPRCC using provisional data.
Regional Climate Centers

March

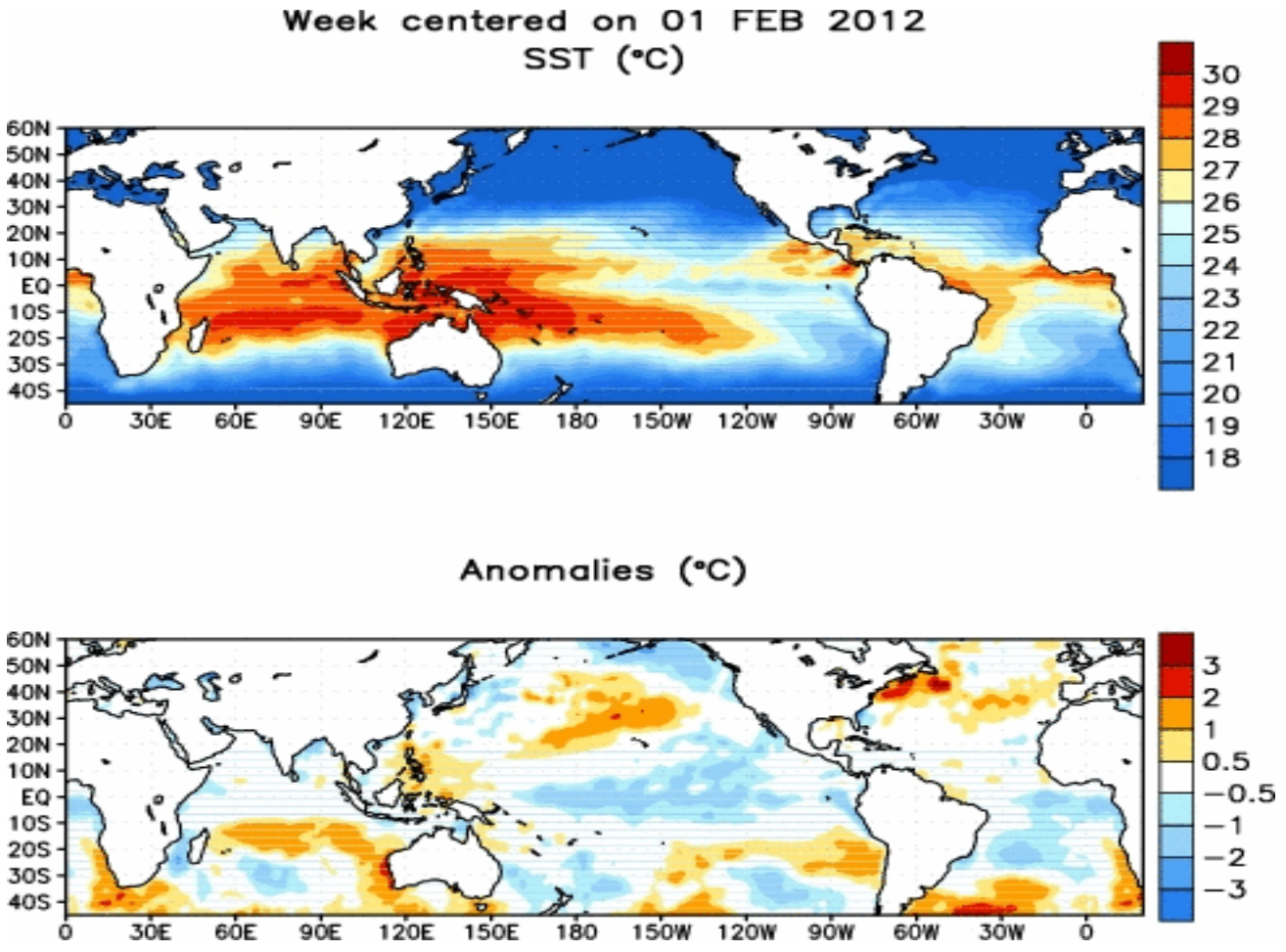

Percent of Normal Precipitation (%)
3/1/2012 – 3/31/2012
2
5
25
50
75
100
125
150
200
400
800
Generated 4/11/2012 at HPRCC using provisional data.
Regional Climate Centers

April

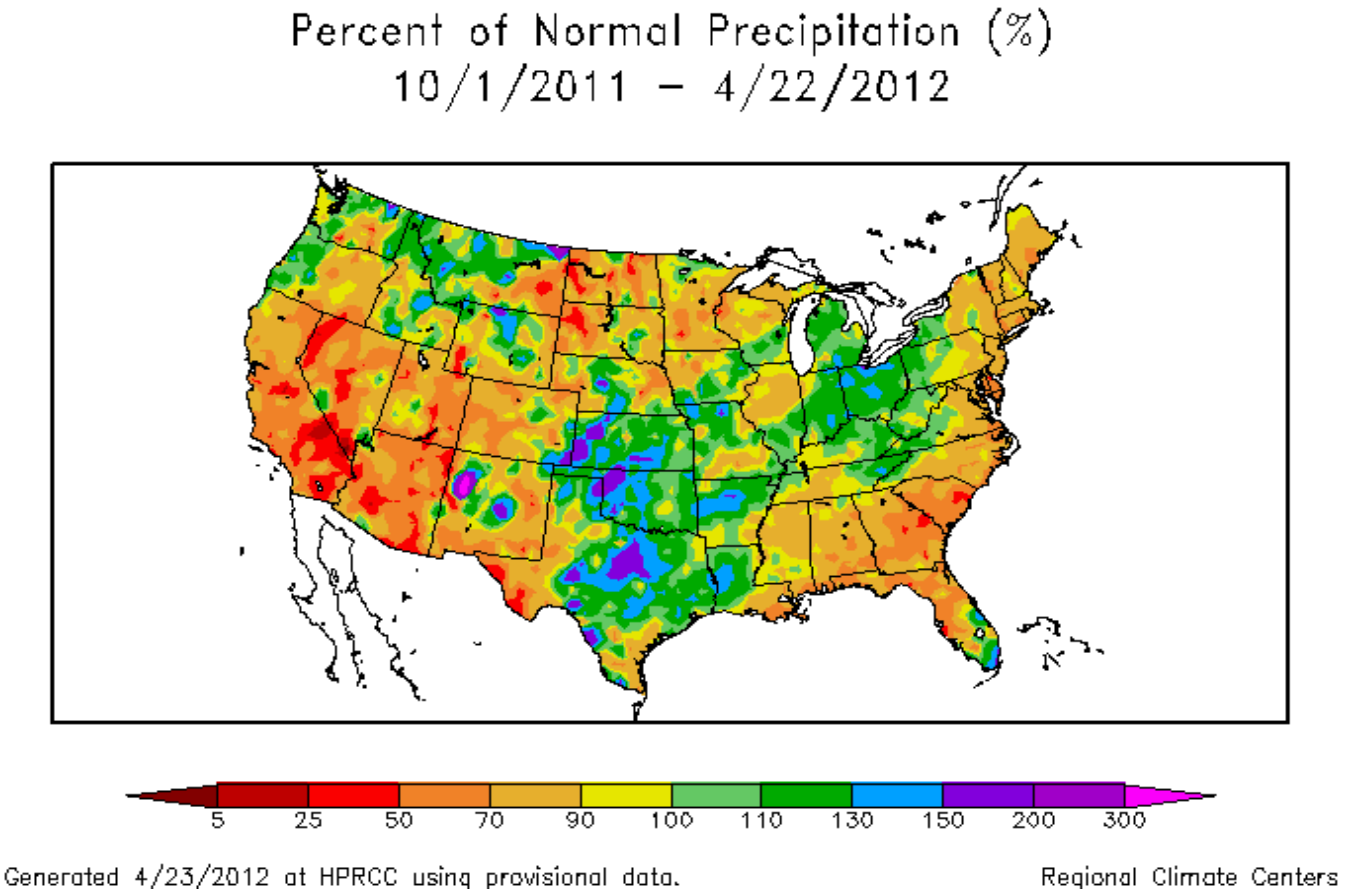

Percent of Normal Precipitation (%)
4/1/2012 – 4/22/2012
2
5
25
50
75
100
125
150
200
400
800
Generated 4/23/2012 at HPRCC using provisional data.
Regional Climate Centers

Composite Trends

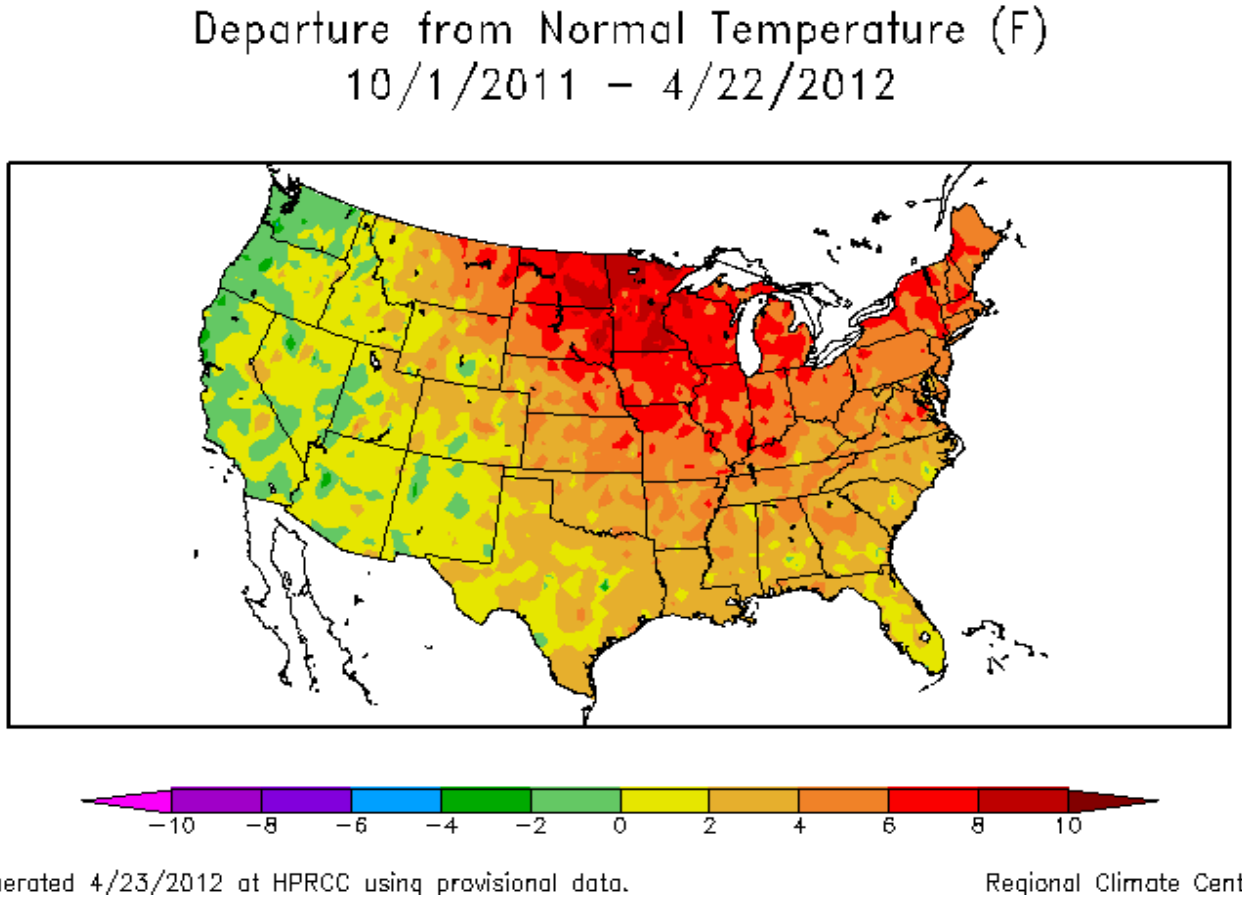
(October – Present)


Week centered on 01 FEB 2012
SST (°C)
60N
50N
40N
30N
20N
10N
EQ
10S
20S
30S
40S
0
30E
60E
90E
120E
150E
180
150W
120W
90W
60W
30W
0
30
29
28
27
26
25
24
23
22
21
20
19
18
Anomalies (°C)
3
2
1
0.5
−0.5
−1
−2
−3

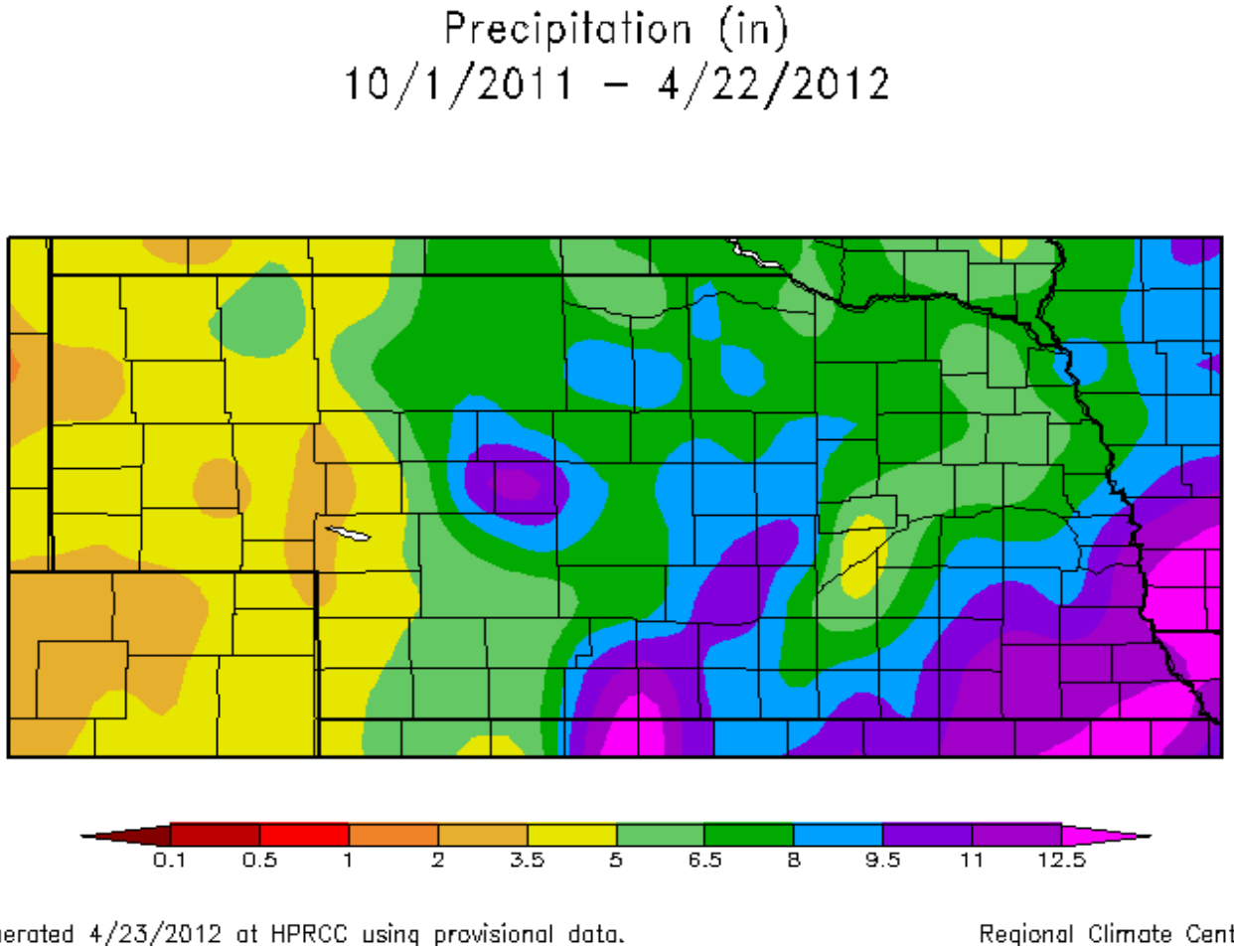
National Precipitation Trend



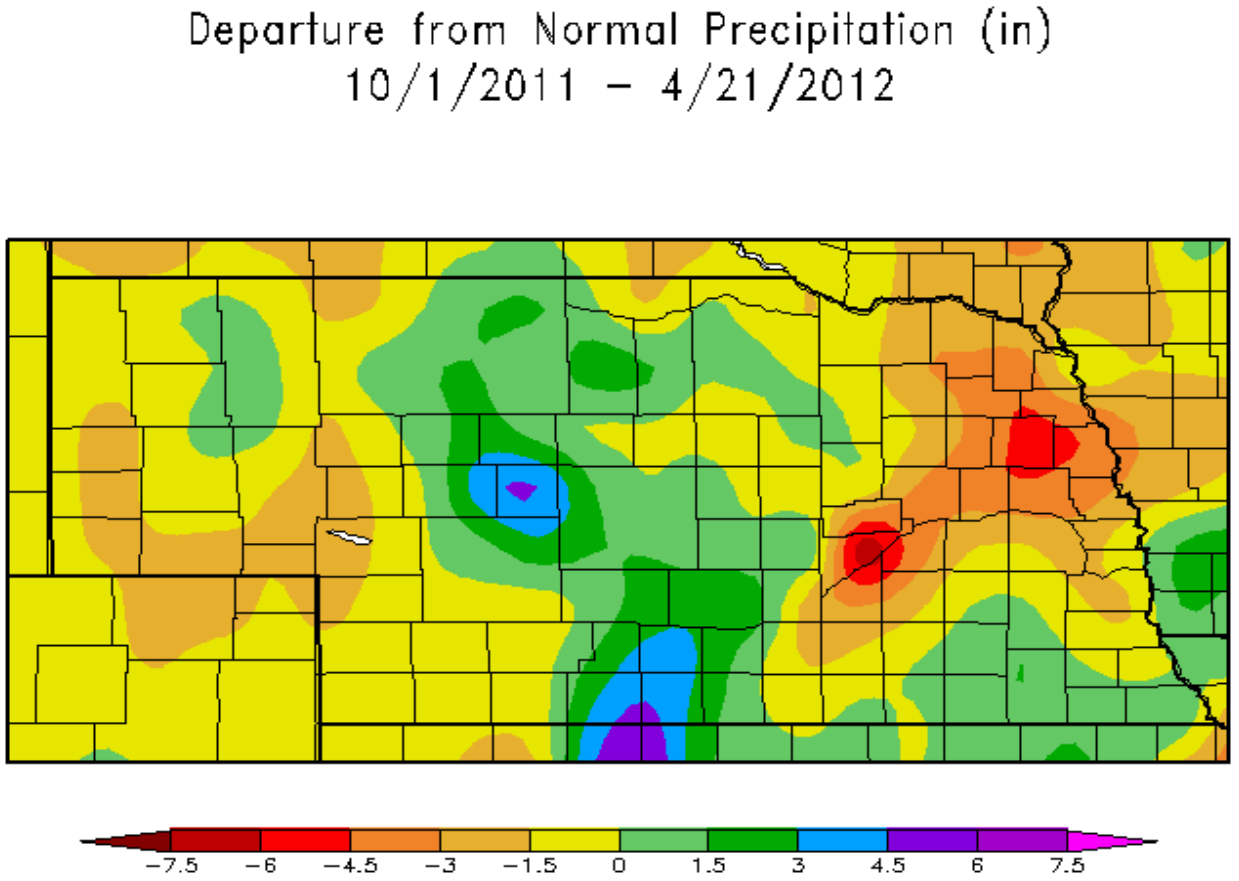
National Temperature Trend



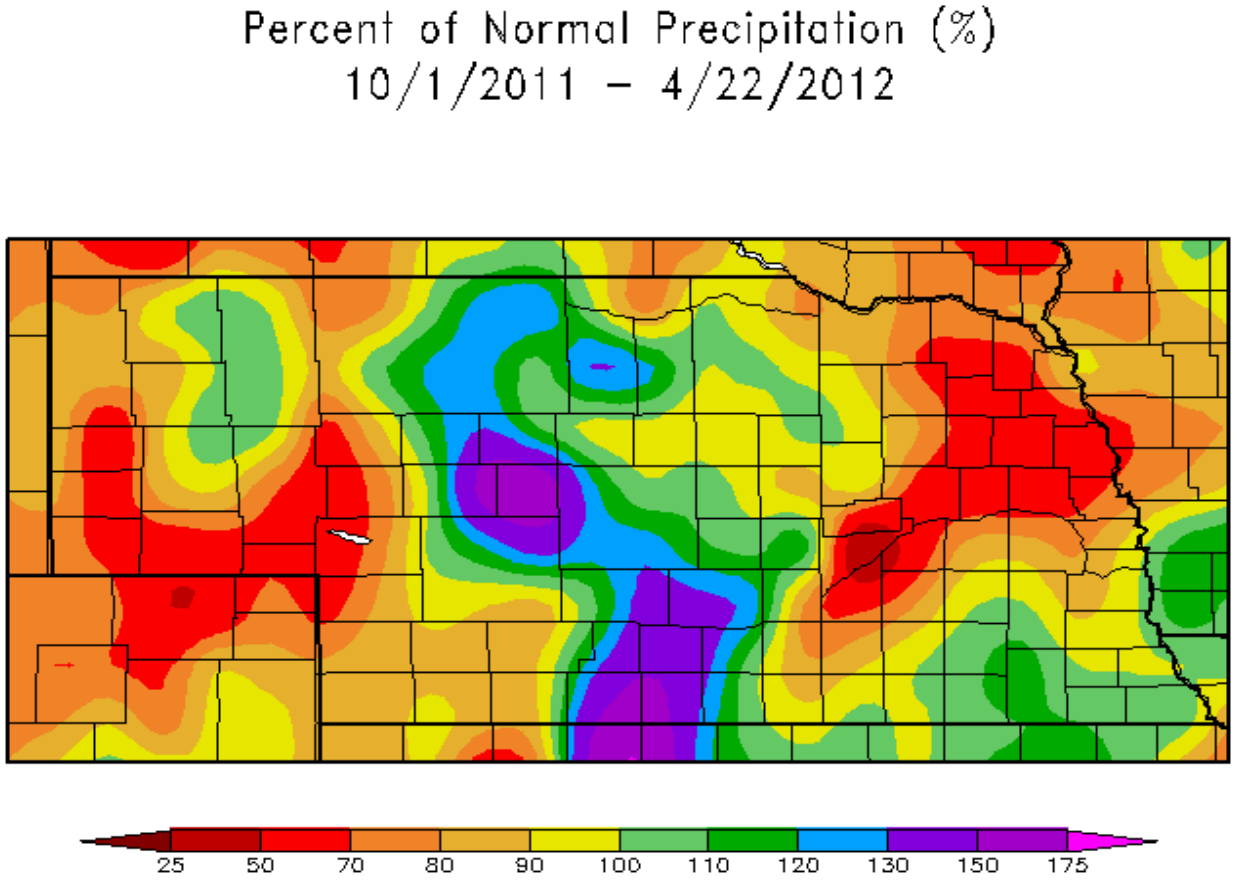
Nebraska Precipitation



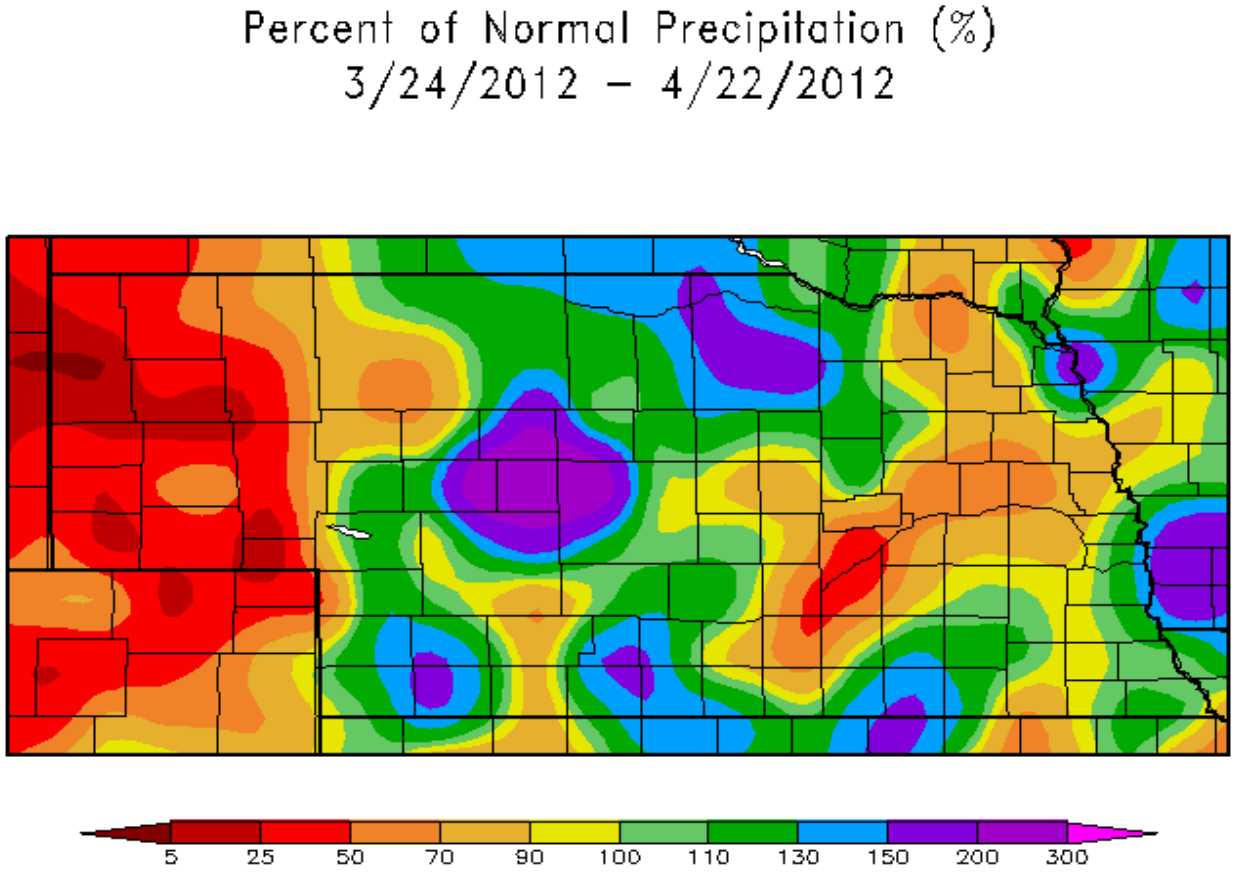
Nebraska Precipitation Departures



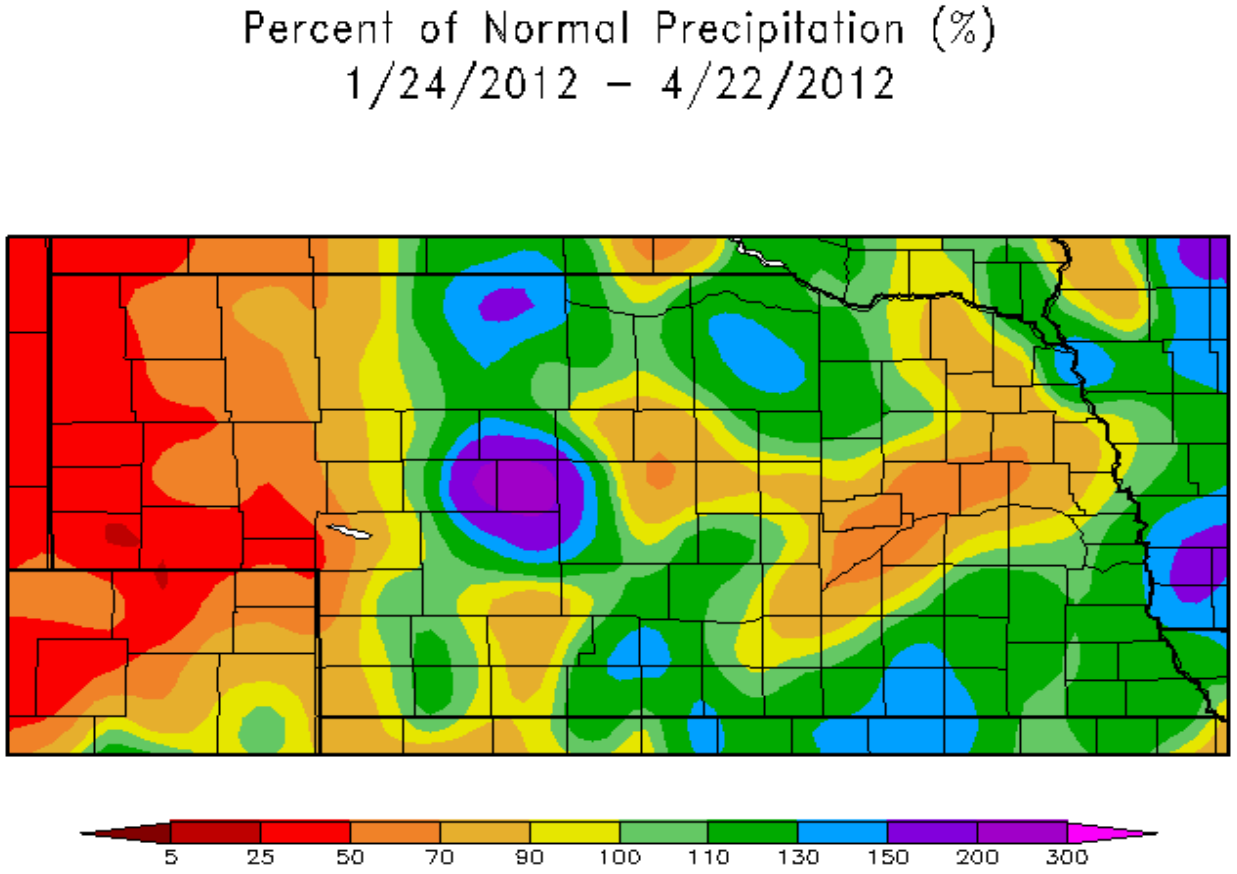
Nebraska Percent of Normal Precipitation



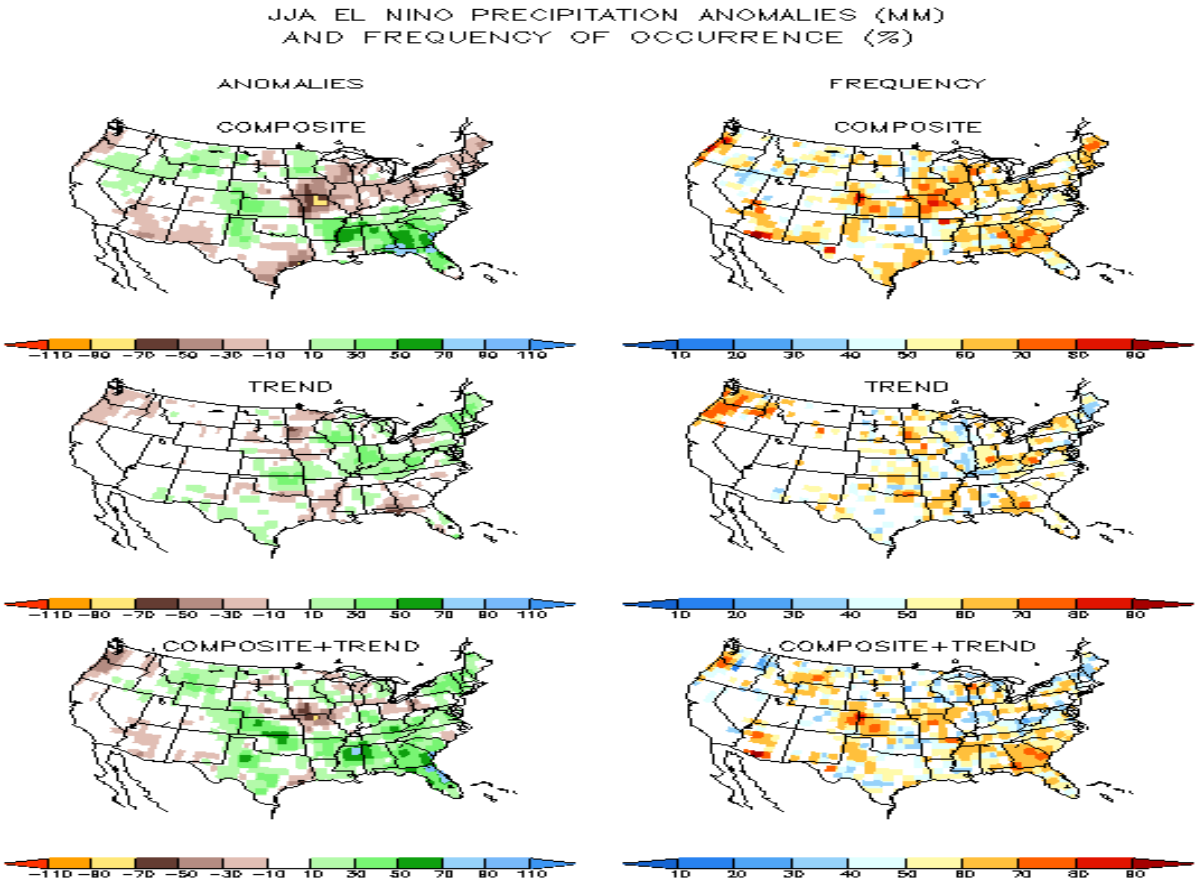
90-day Precipitation Trend



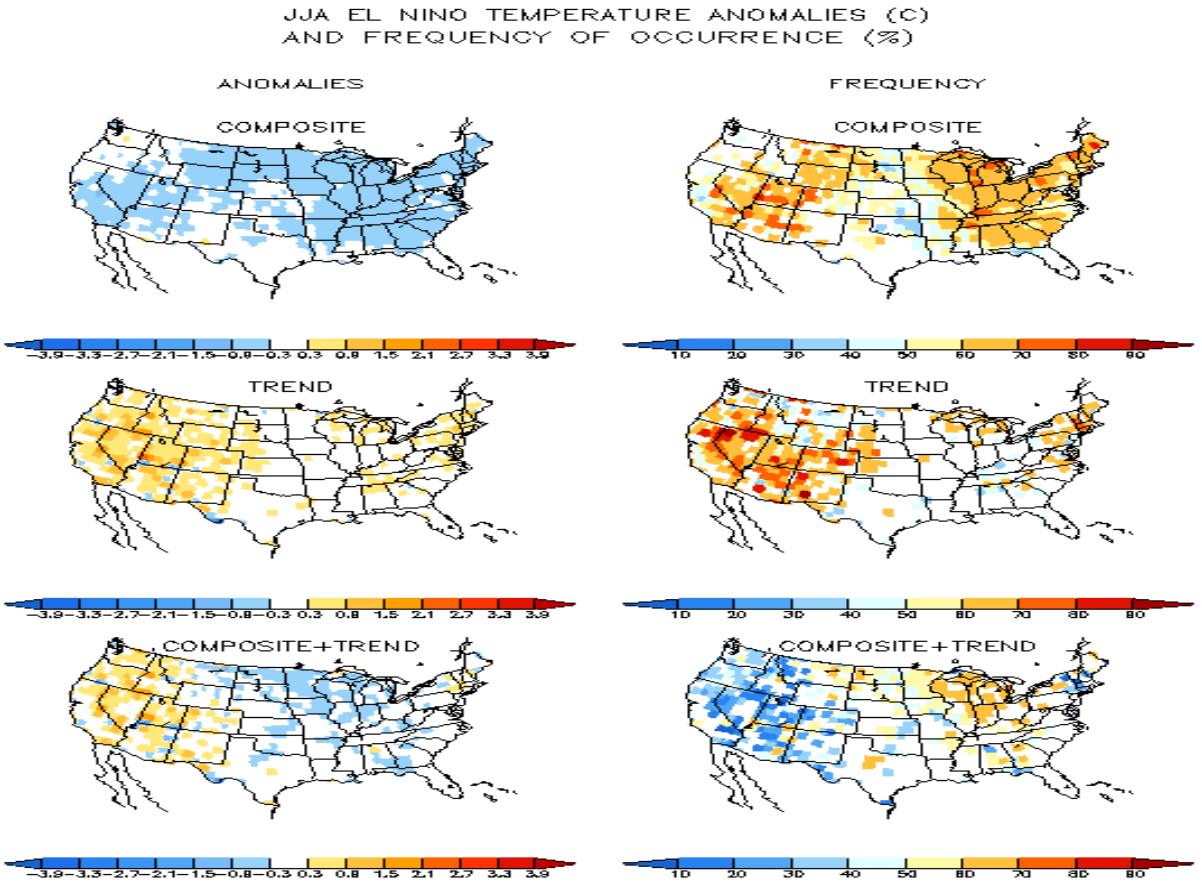
30-day Precipitation Trend



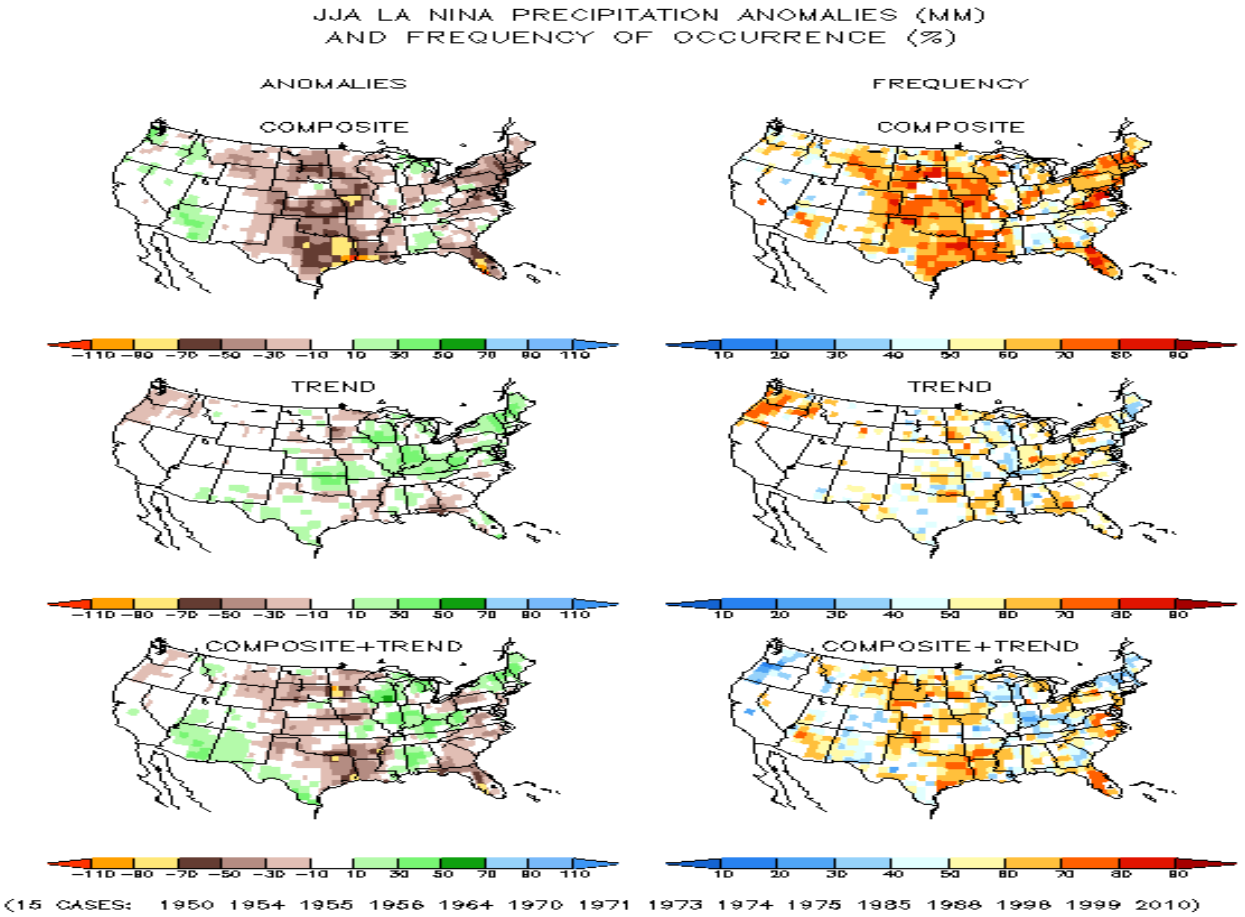
El Nino Summer Precipitation Tendency



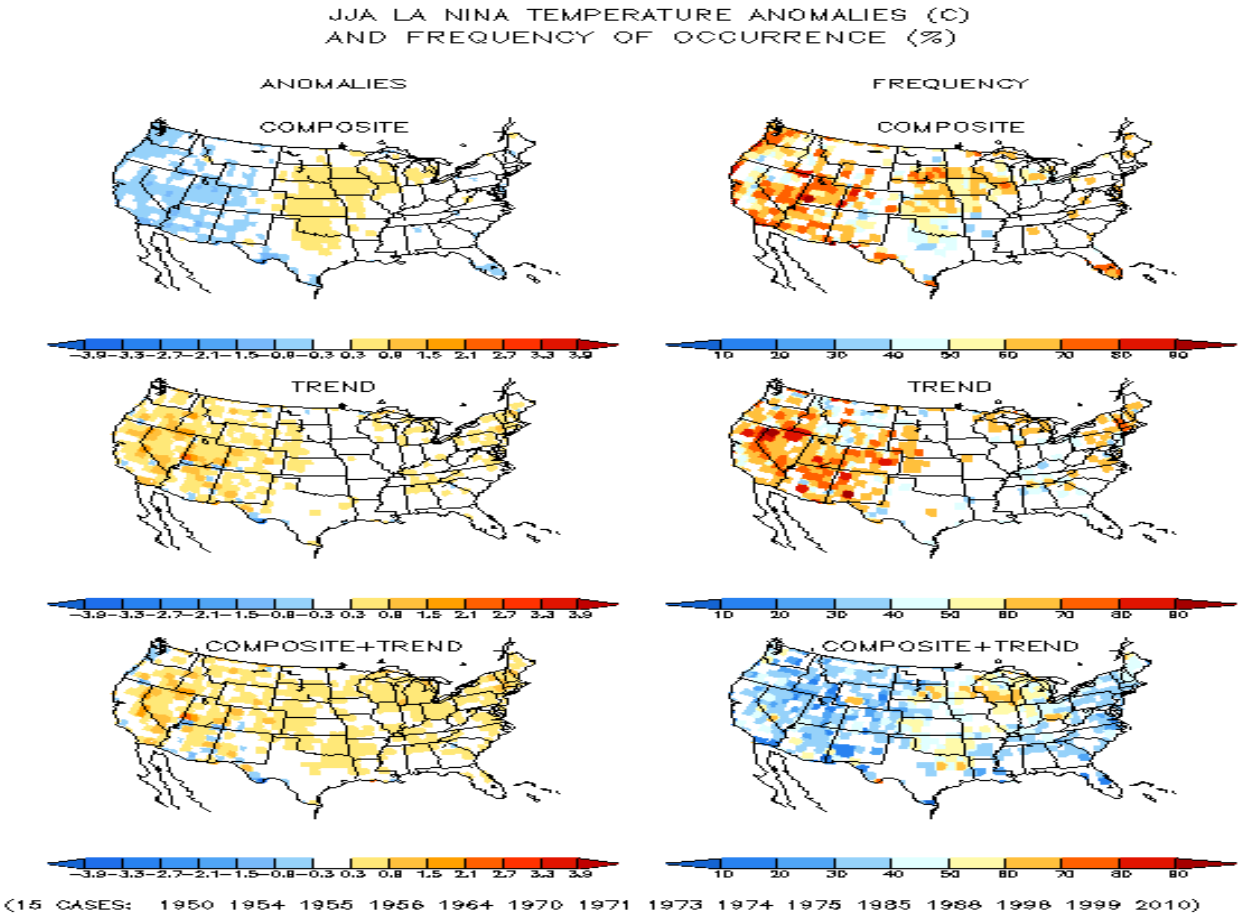
El Nino Summer Temperature Tendency



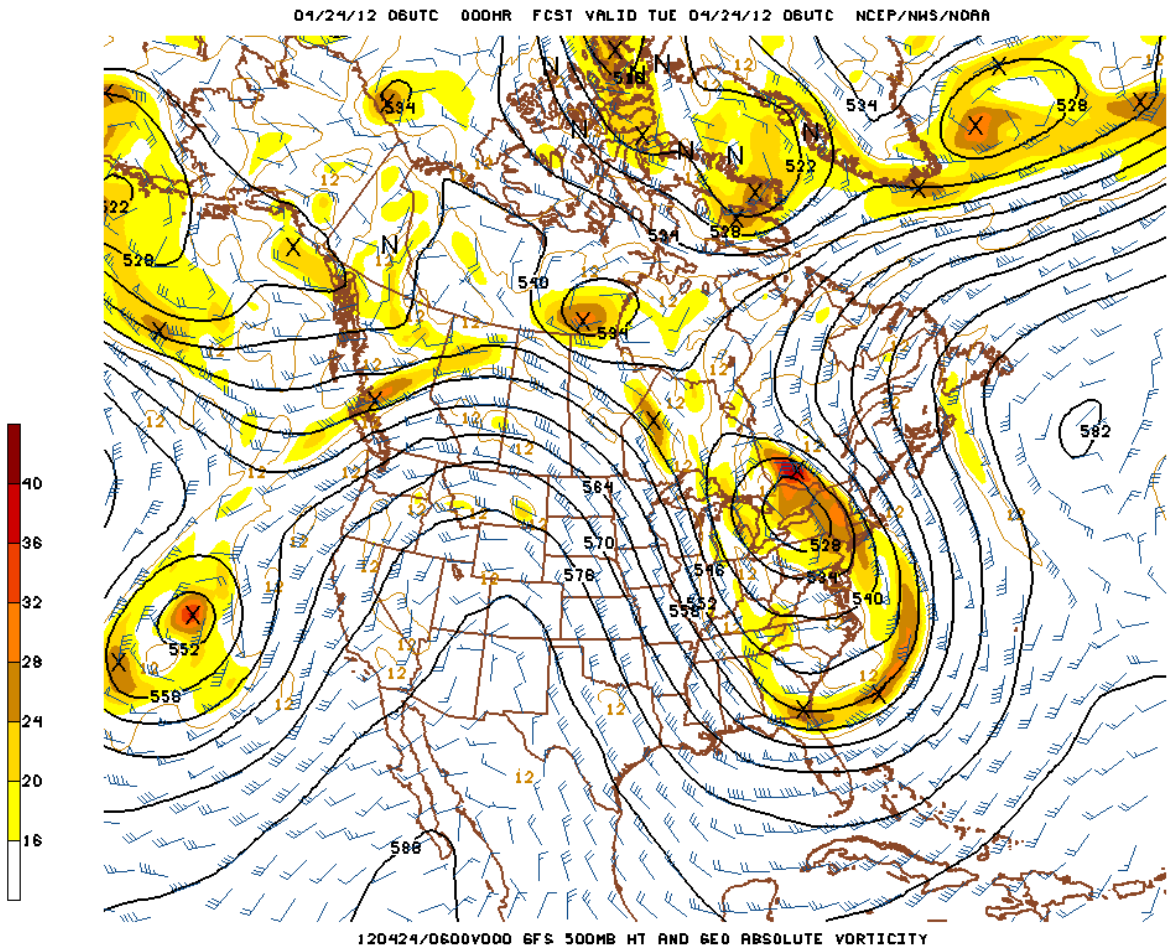
La Nina Summer Precipitation Tendency



La Nina Summer Temperature Tendency



Current Upper Air Pattern



Conclusions

- Persistent dryness northeast
- Short term dryness Panhandle
- Abysmal snowpack
- Early green up – frost/freeze?
- Plant water cycle advanced
- Planting advanced
- Fire danger – low RH high winds
- Early severe weather
- La Nina out – El Nino in?
- Drought Alert