Highlights of the 2004 Water Year in Colorado

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http://ccc.atmos.colostate.edu

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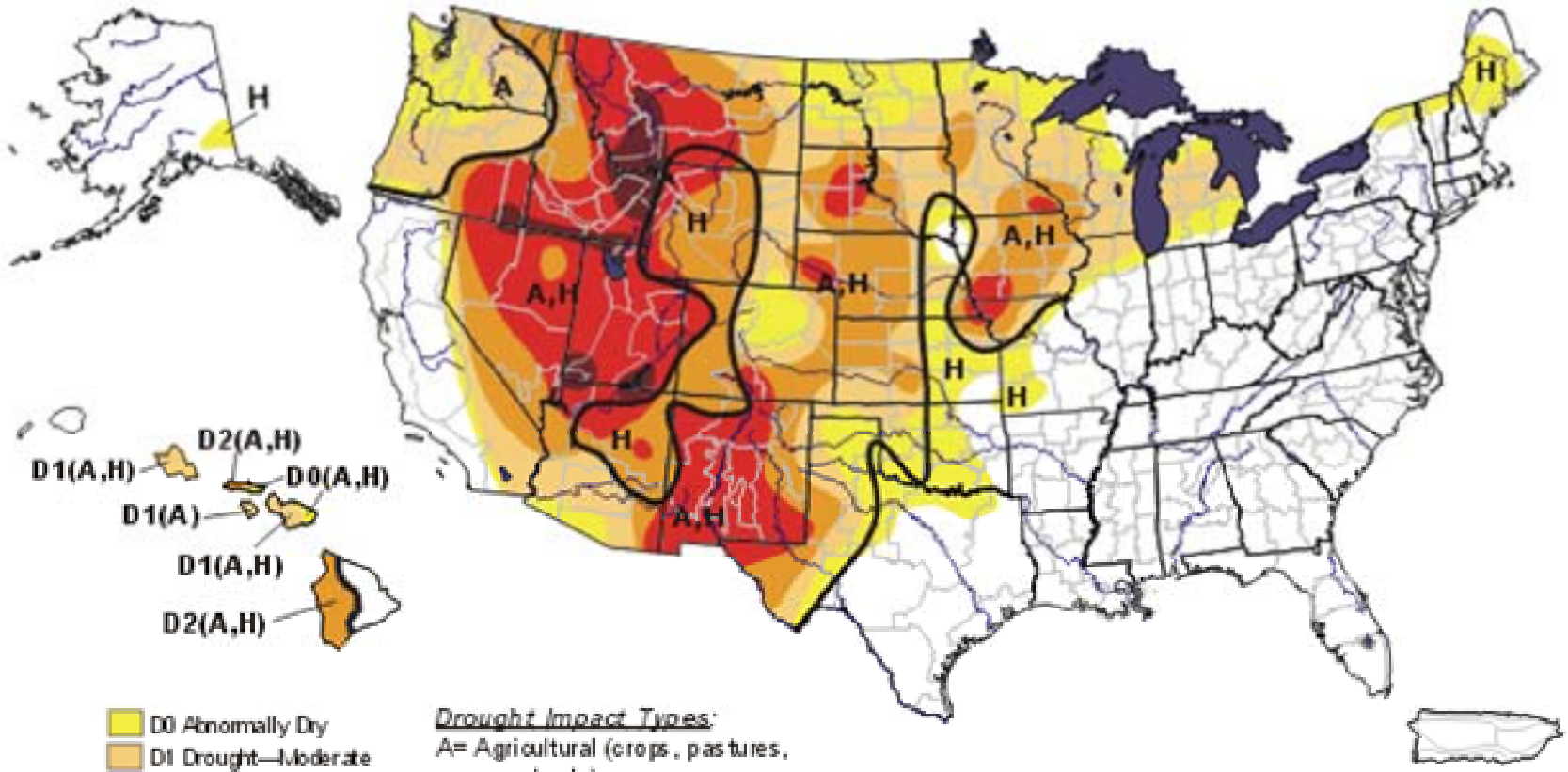
Prepared by Odie Bliss

U.S. Drought Monitor

September 30, 2003
Valid 8 a.m. EDT



D0 Abnormally Dry
D1 Drought—Moderate
D2 Drought—Severe
D3 Drought—Extreme
D4 Drought—Exceptional

Drought Impact Types:
A= Agricultural (crops, pastures, grasslands)
H= Hydrological (water)
No type = both impacts
Delineates dominant impacts

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://drought.unl.edu/dm

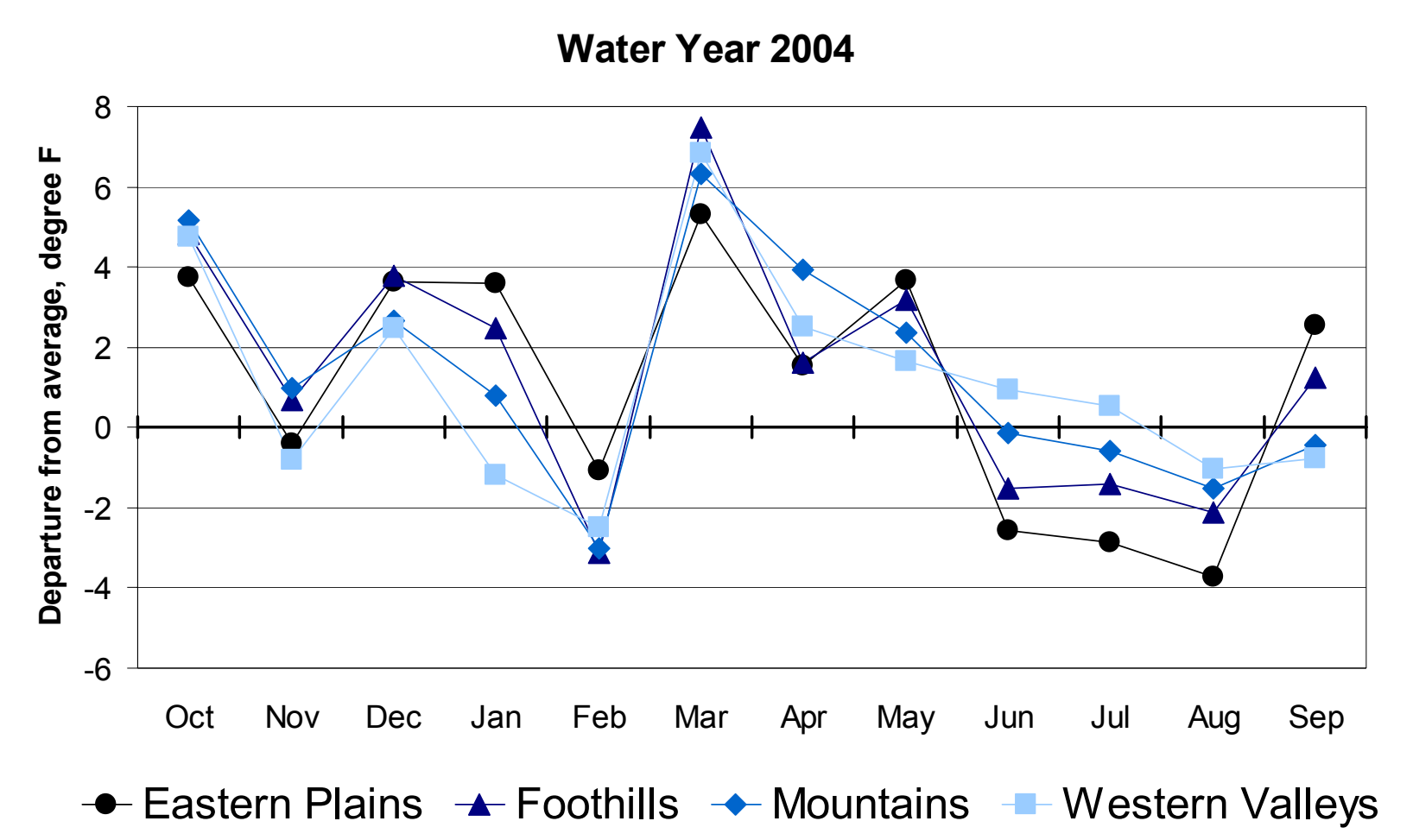
USDA

Released Thursday, October 2, 2003
Author: *Candace Tankersley/Scott Stephens, NOAA/NCDC*

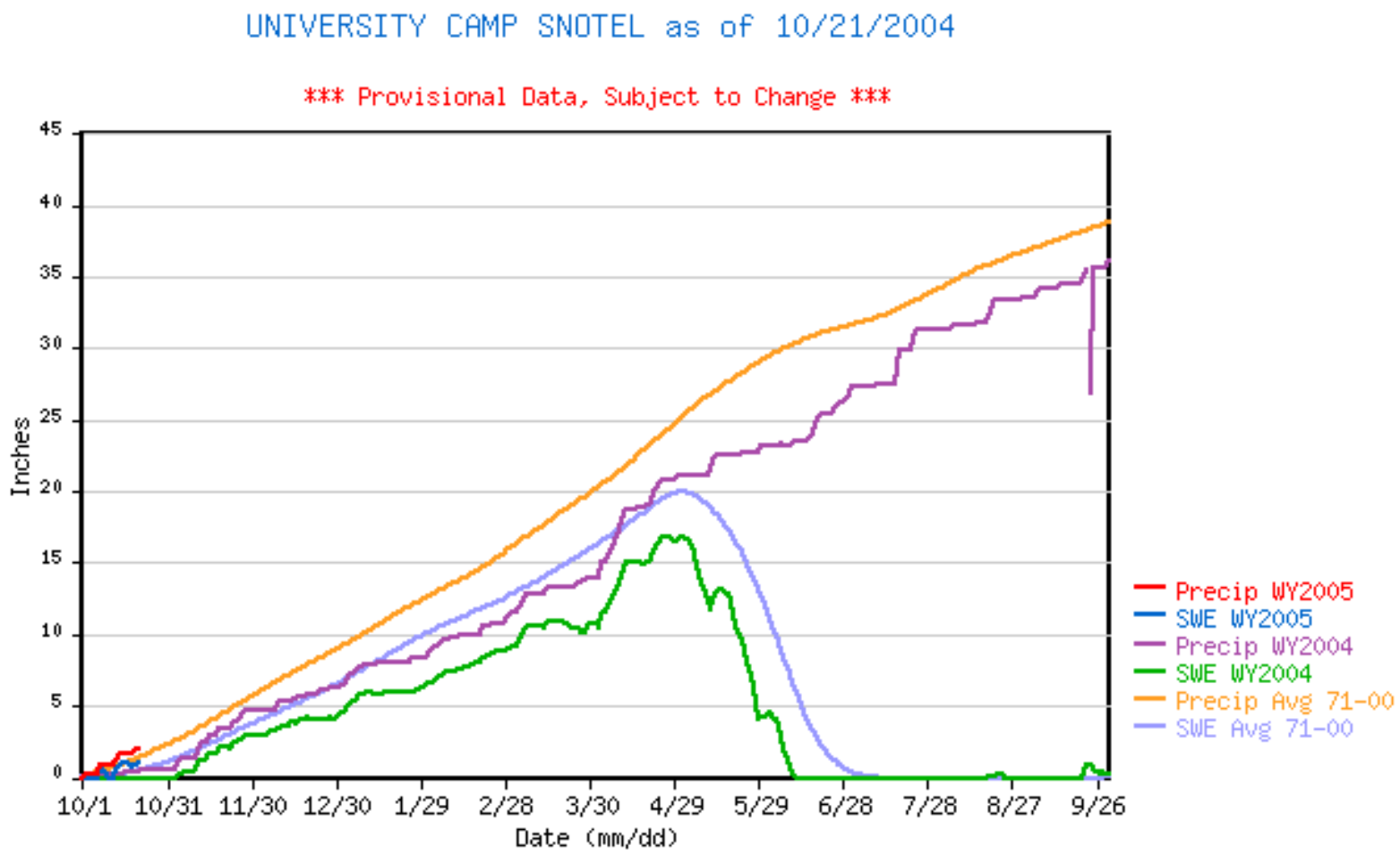
WY2004 Highlights

- Record warmth in October
- Freezing drizzle storm for Halloween, cloudy
- Good early snows over SW Colorado
- Cold and snowcovered on the Western Slope midwinter
- Fairly dry and dull midwinter elsewhere
- A cold February
- Very warm and dry March
- Wet April -- Hurray!
- Oops, warm and dry again in May
- Cool and damp summer east of mountains
- Hot and dry to the west
- Moisture onslaught into Western Colorado in September

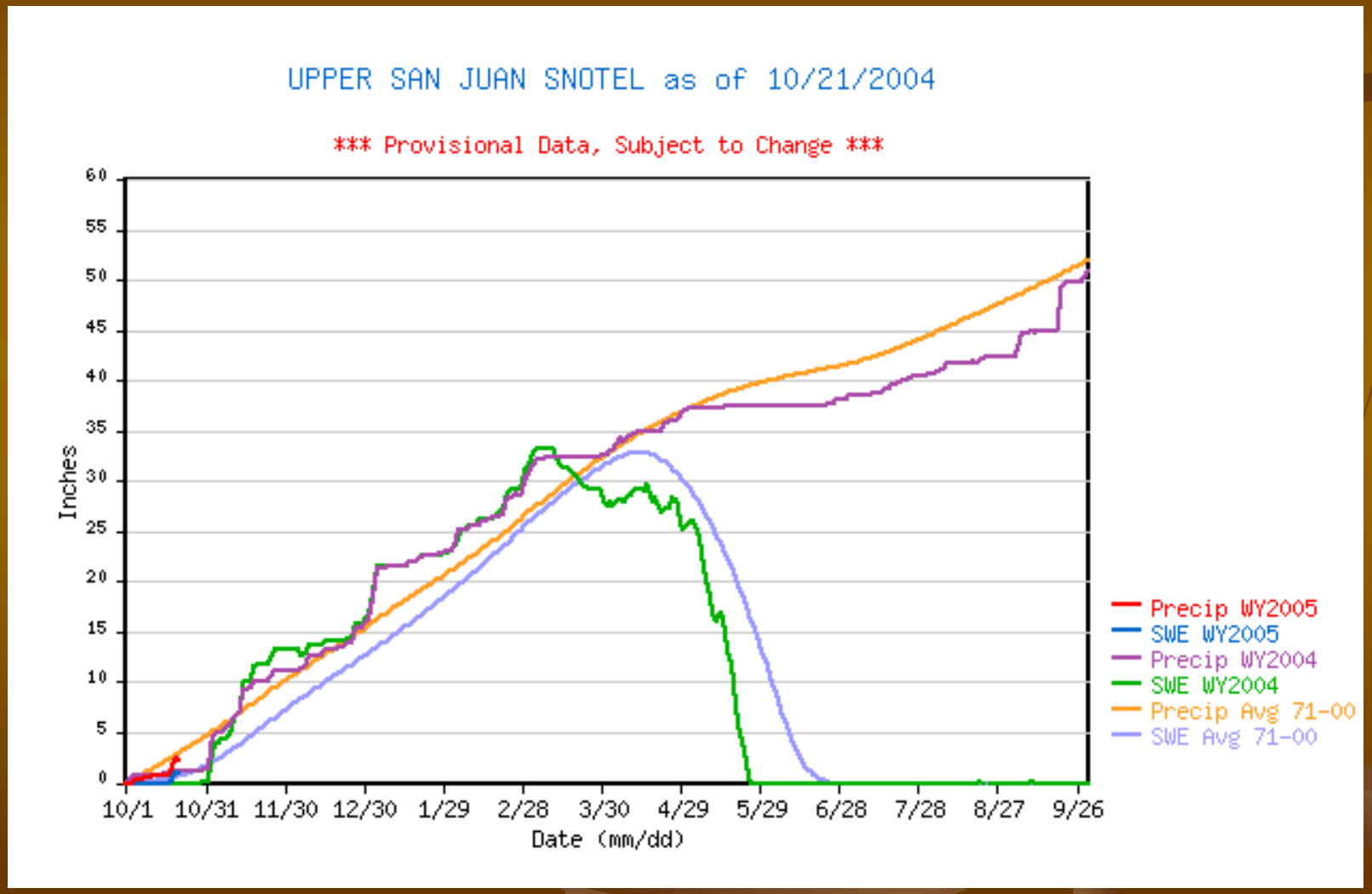
Water Year 2004 temperature departures from 1971-2000 average



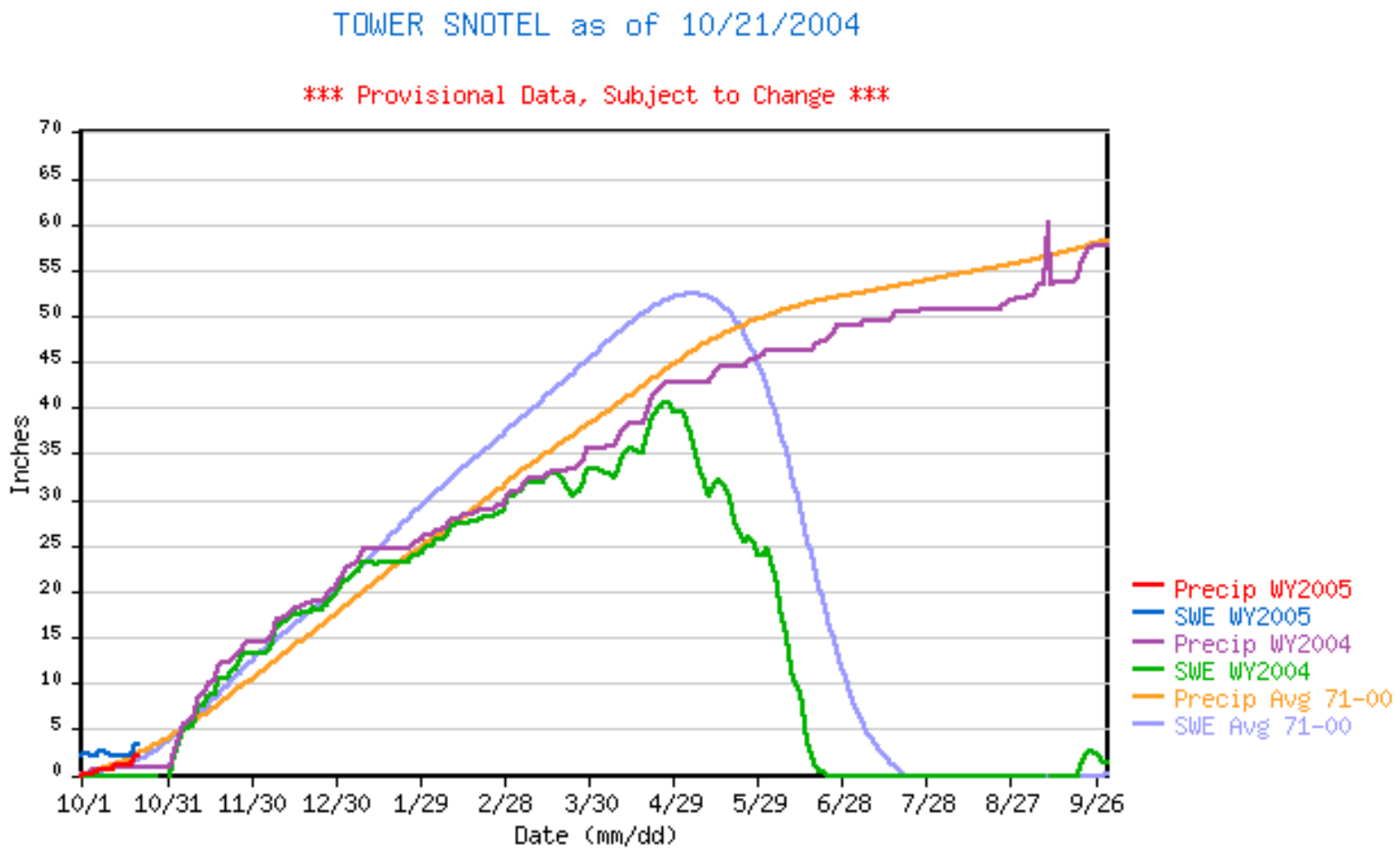
University Camp Snotel



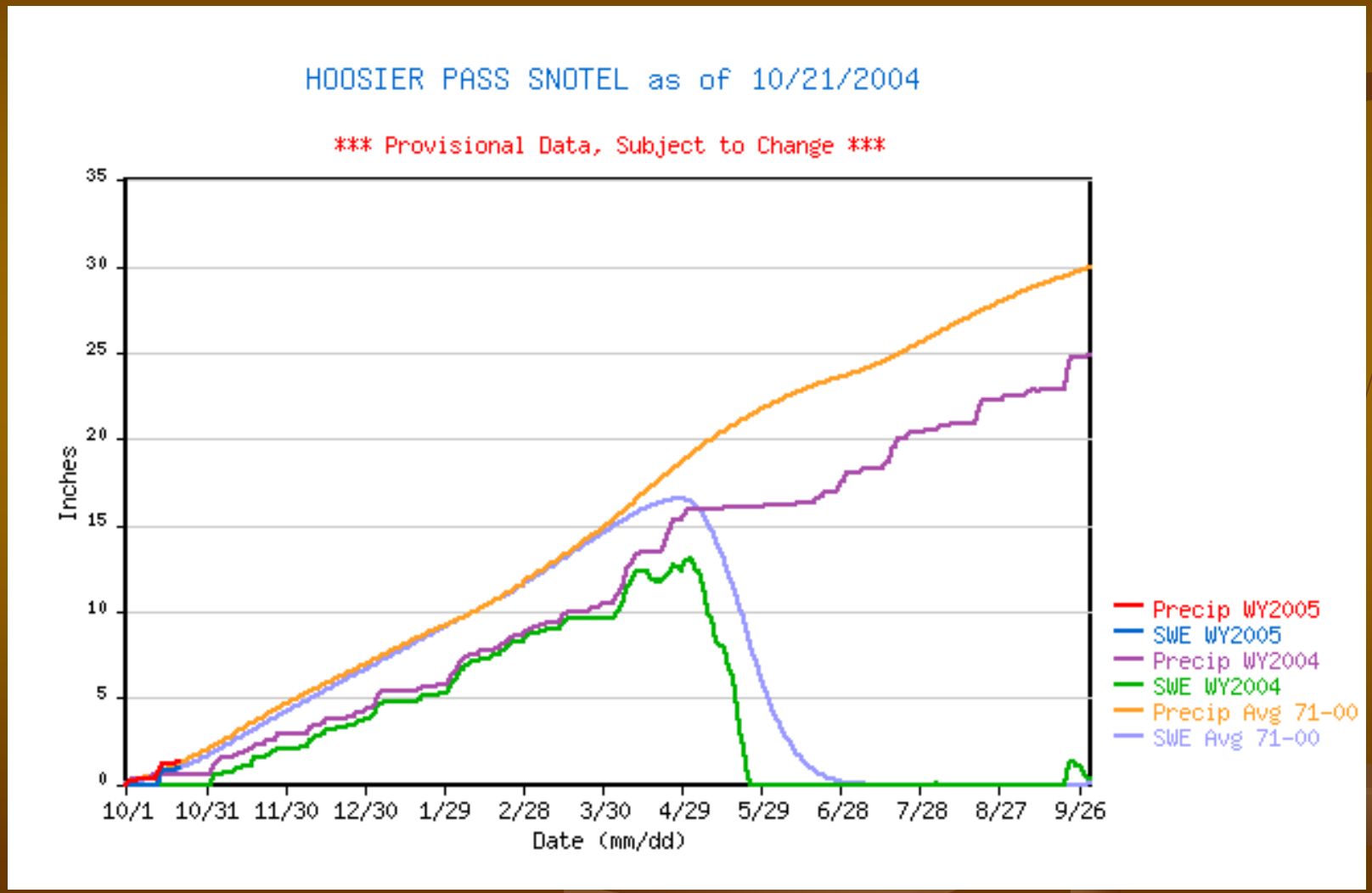
Upper San Juan Snotel



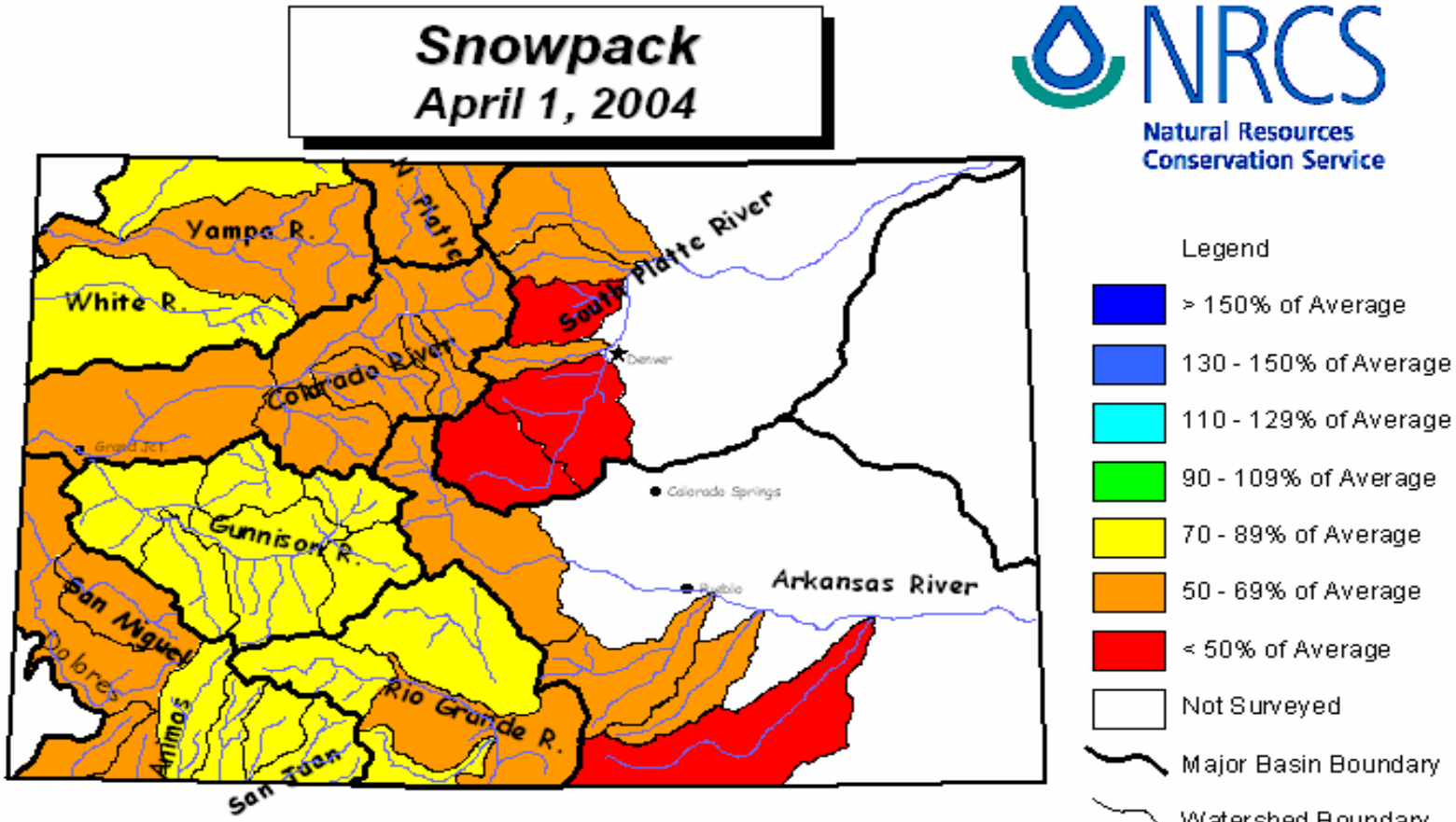
Tower Snotel



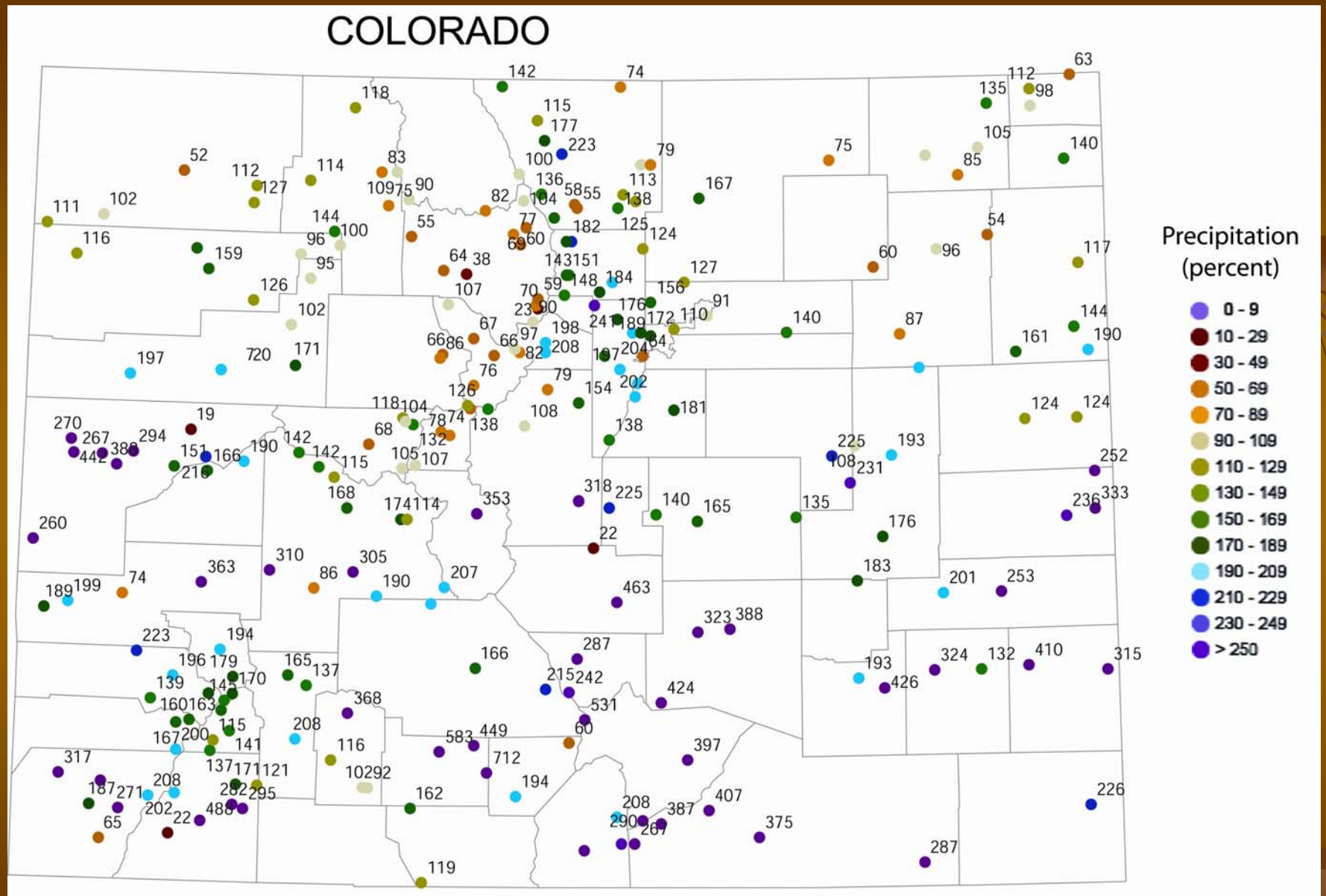
Hoosier Pass Snotel



April 1 Snowpack

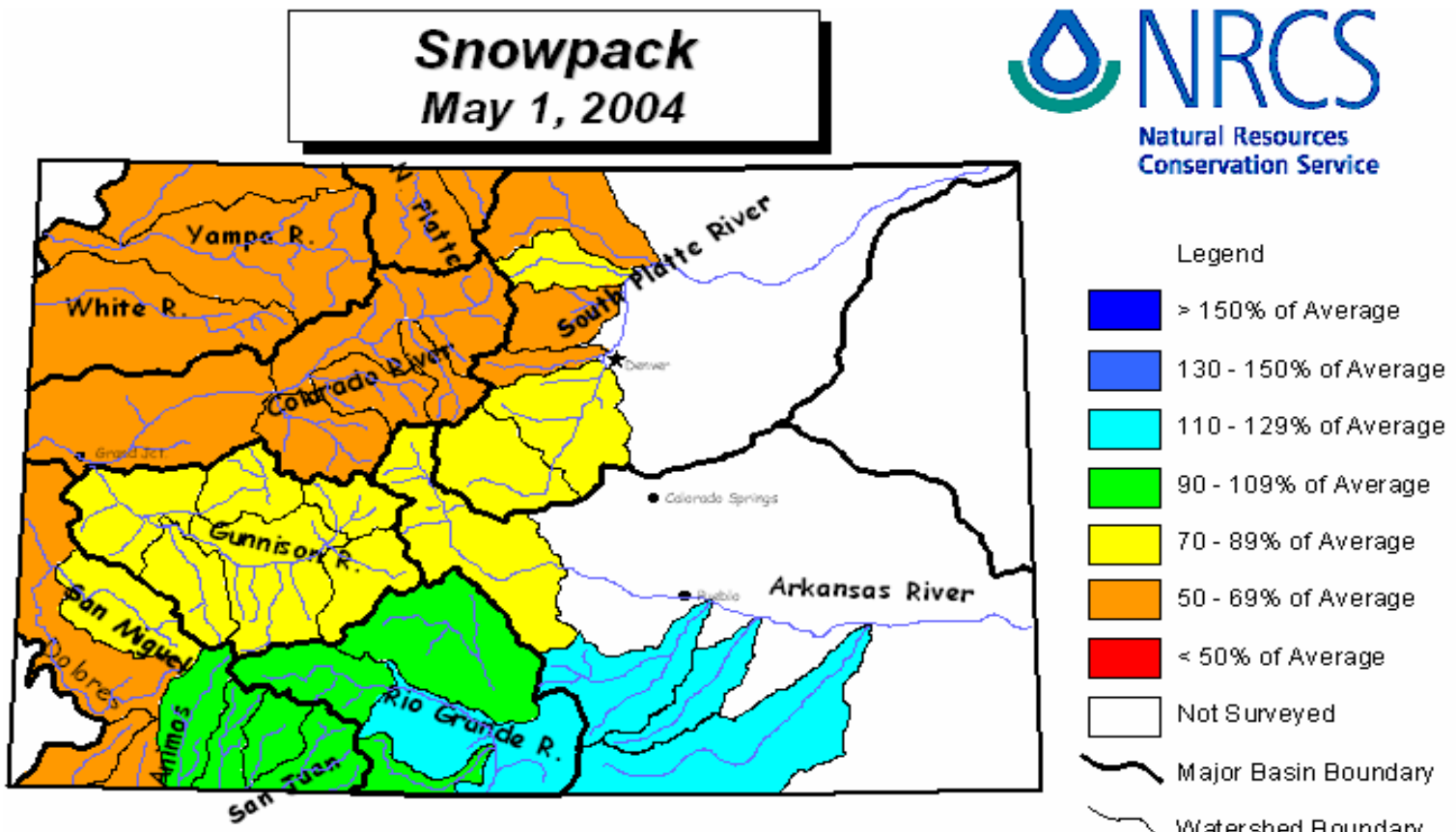


Statewide: 65% of Average
69% of Last Year



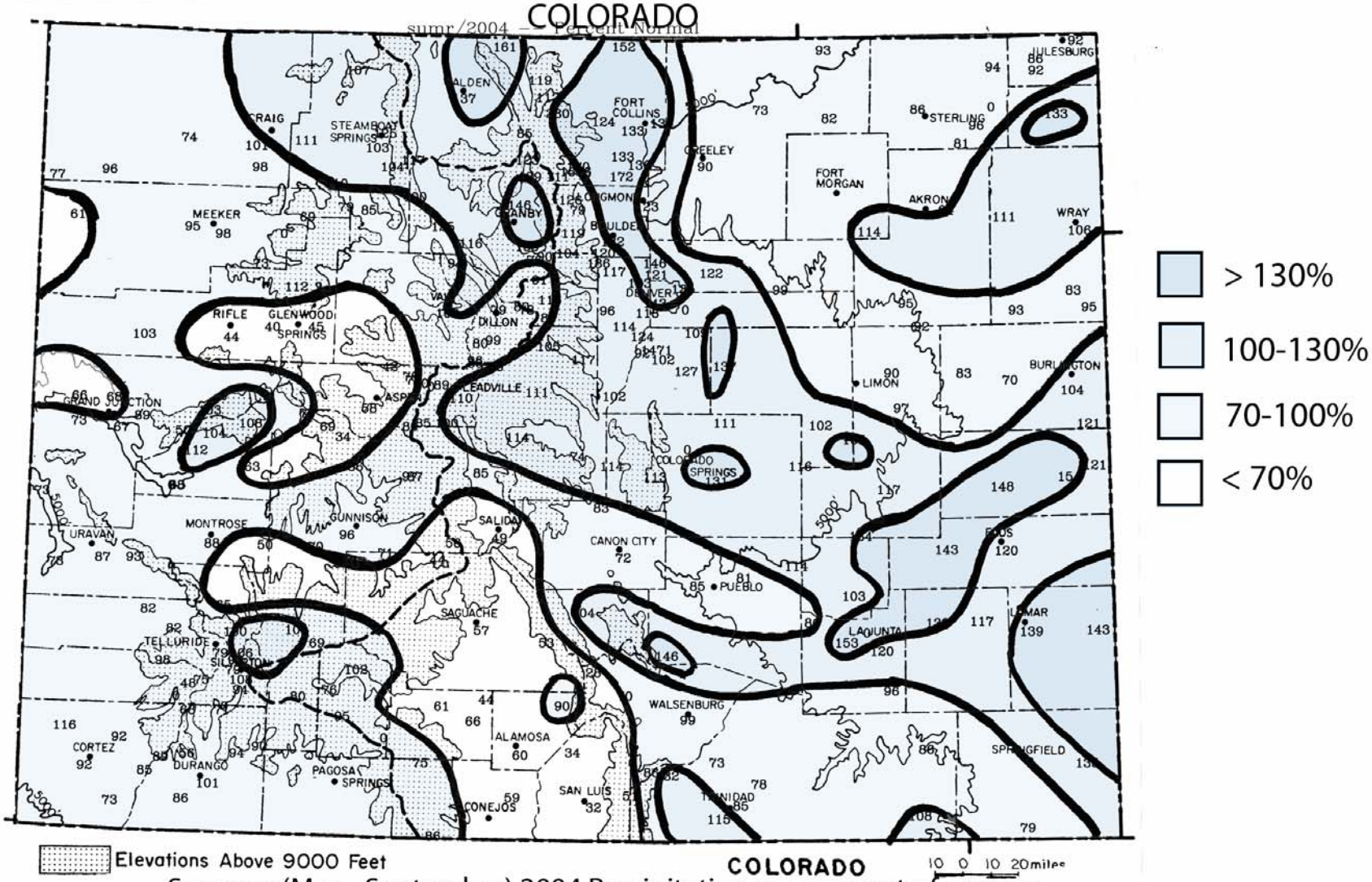
April 2004 precipitation as a percent of the 1971-2000 average.

May 1 Snowpack

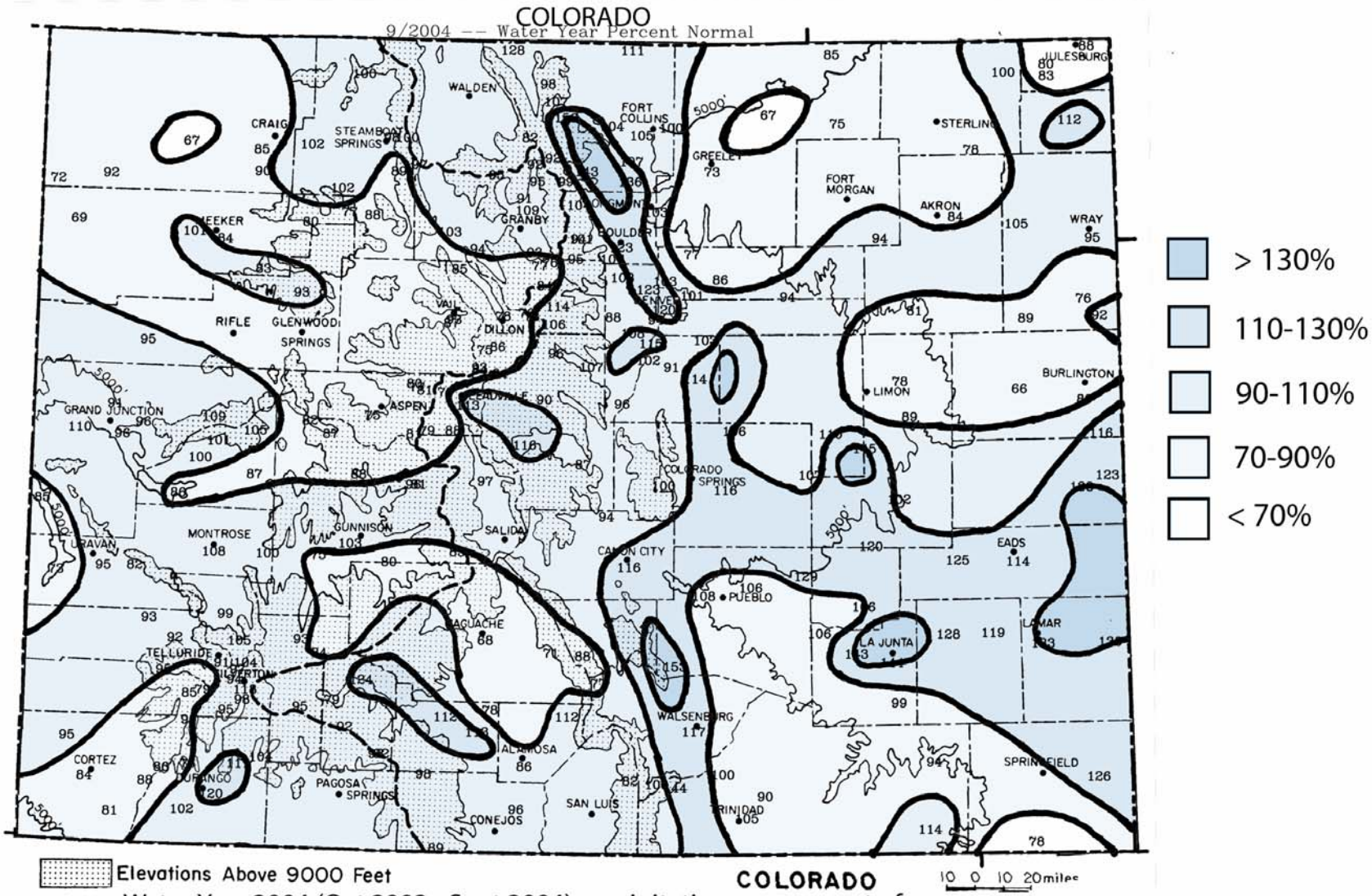


Statewide: 68% of Average
78% of Last Year

Summer 2004 (May–Sep) precipitation as a percent of the 1971-2000 average



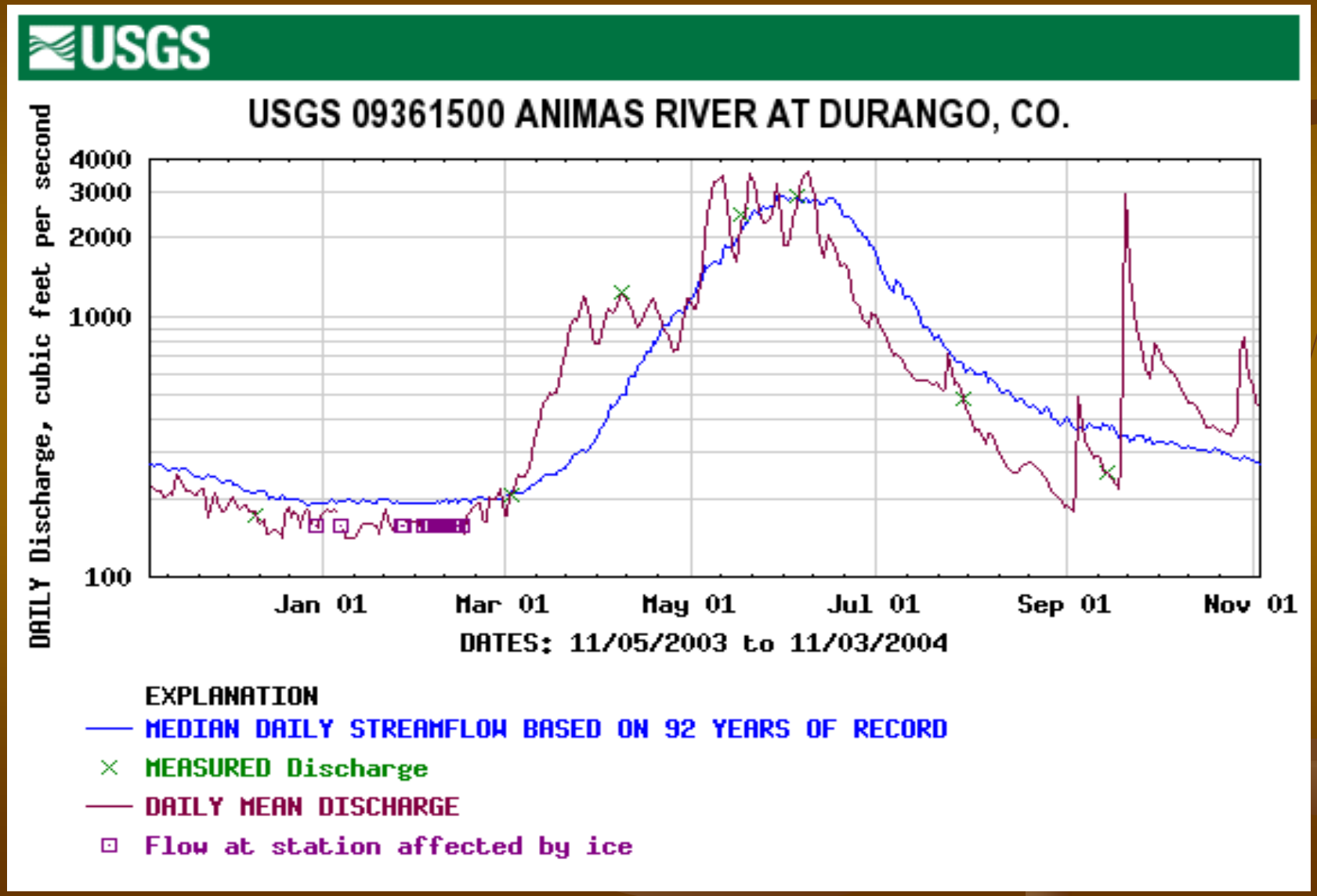
Water Year 2004 precipitation as a percent of the 1971-2000 average



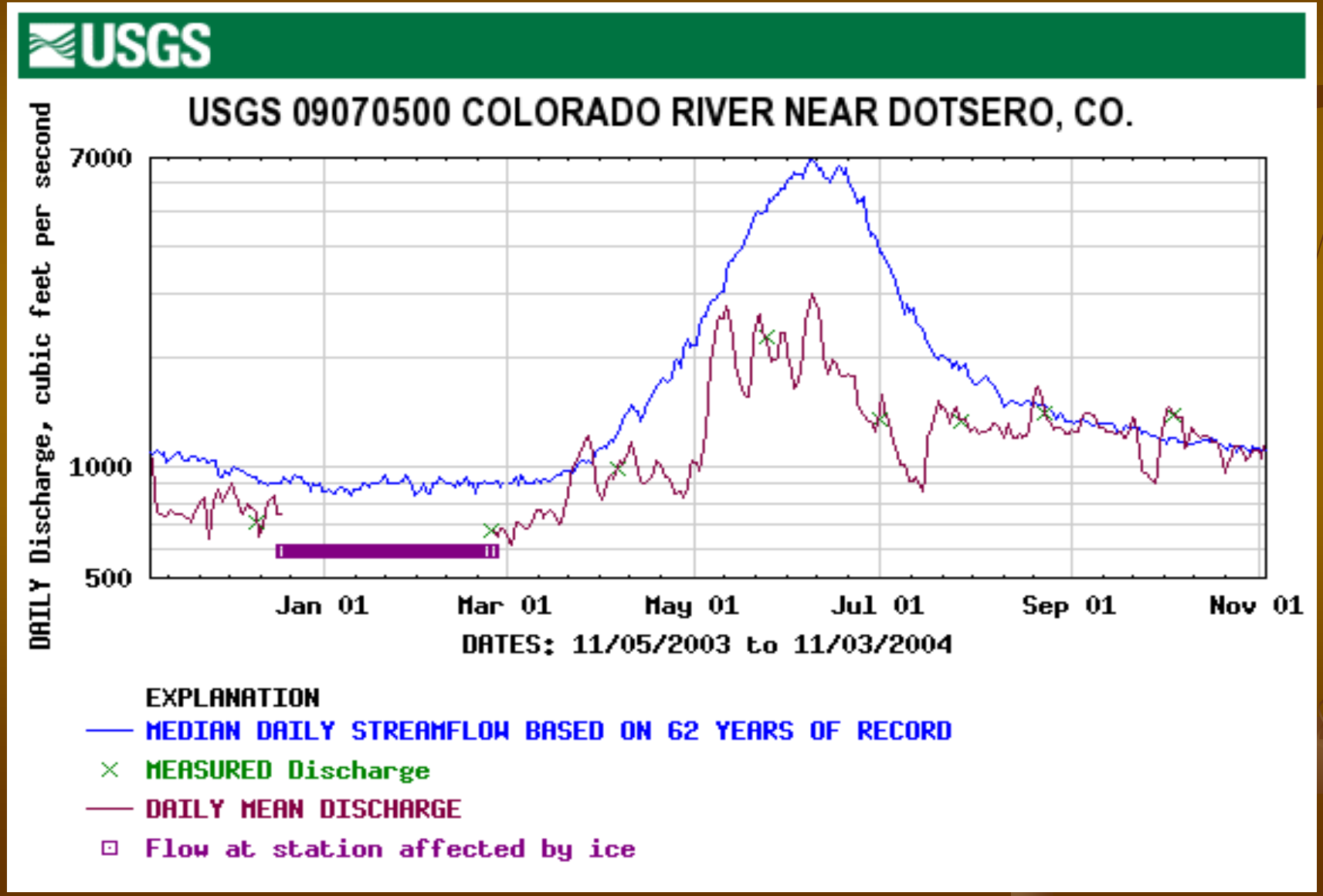
Water Year 2004 (Oct 2003 - Sept 2004) precipitation as a percent of average.

Animas River at Durango Hydrograph

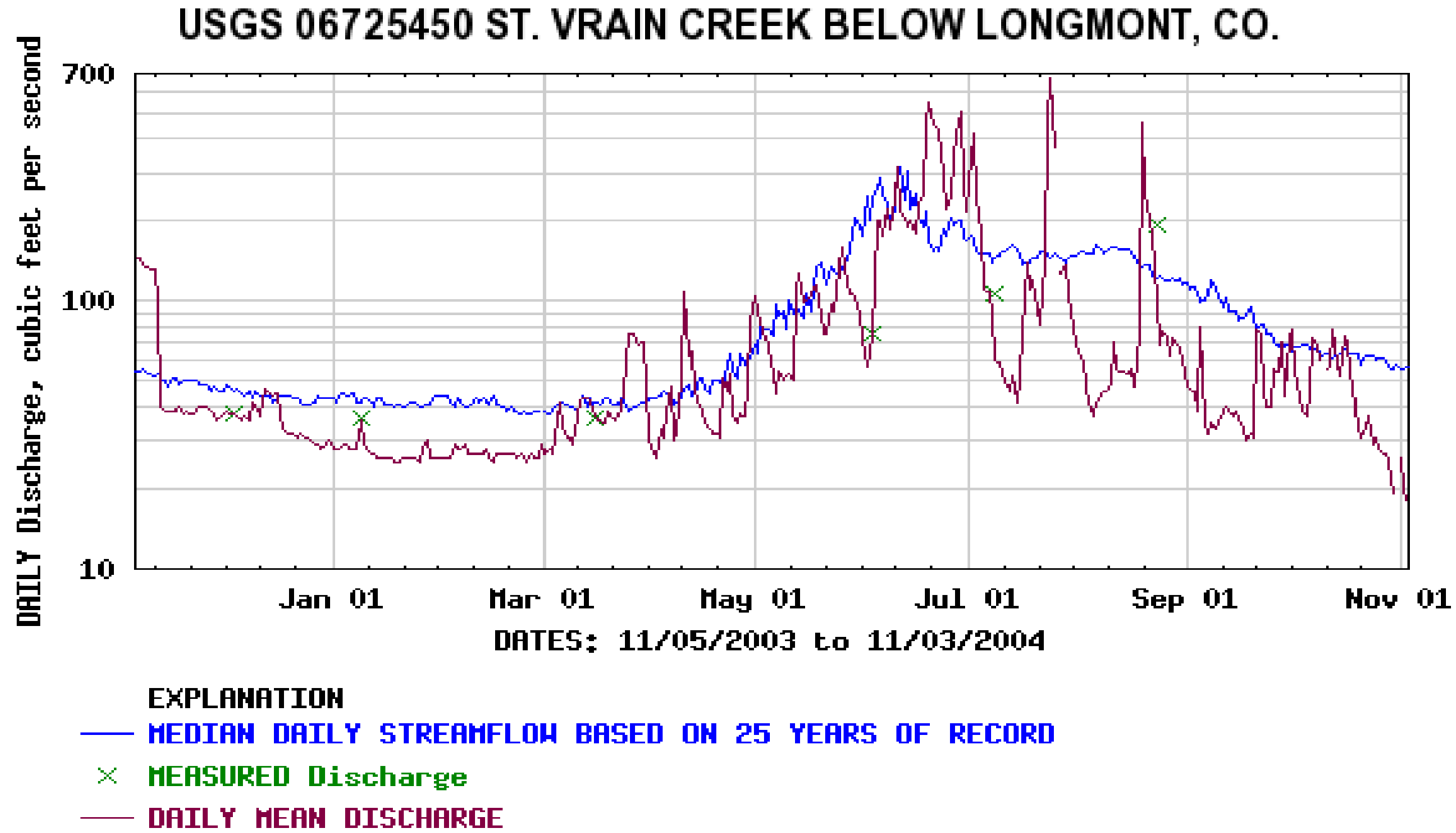
Note the surge in late season runoff



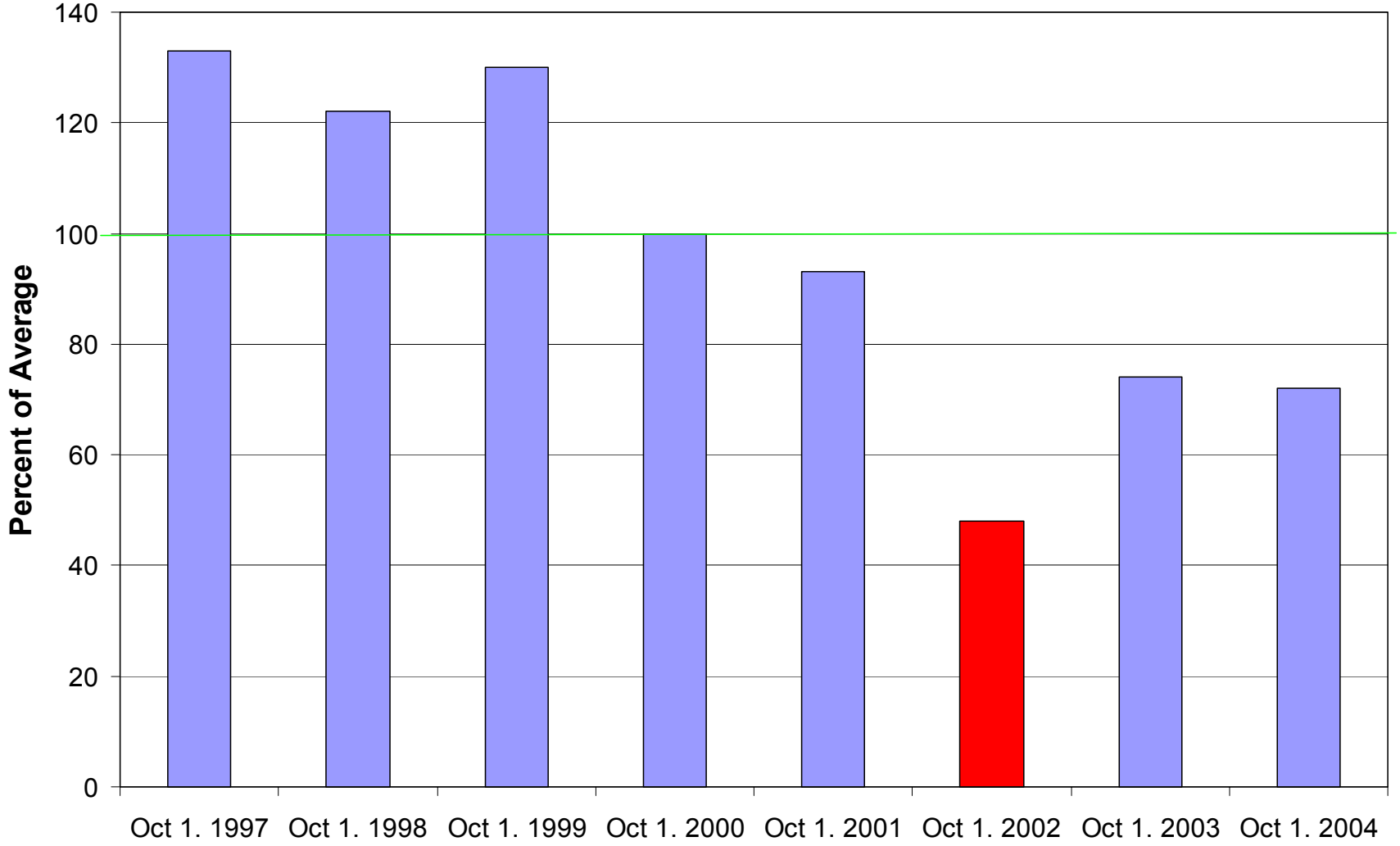
Colorado River at Dotsero Hydrograph



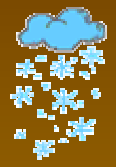
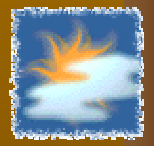
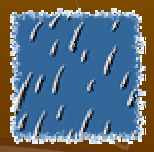
St. Vrain at Longmont Hydrograph



Colorado Statewide Reservoir Levels on October 1st for Years 1997- 2004



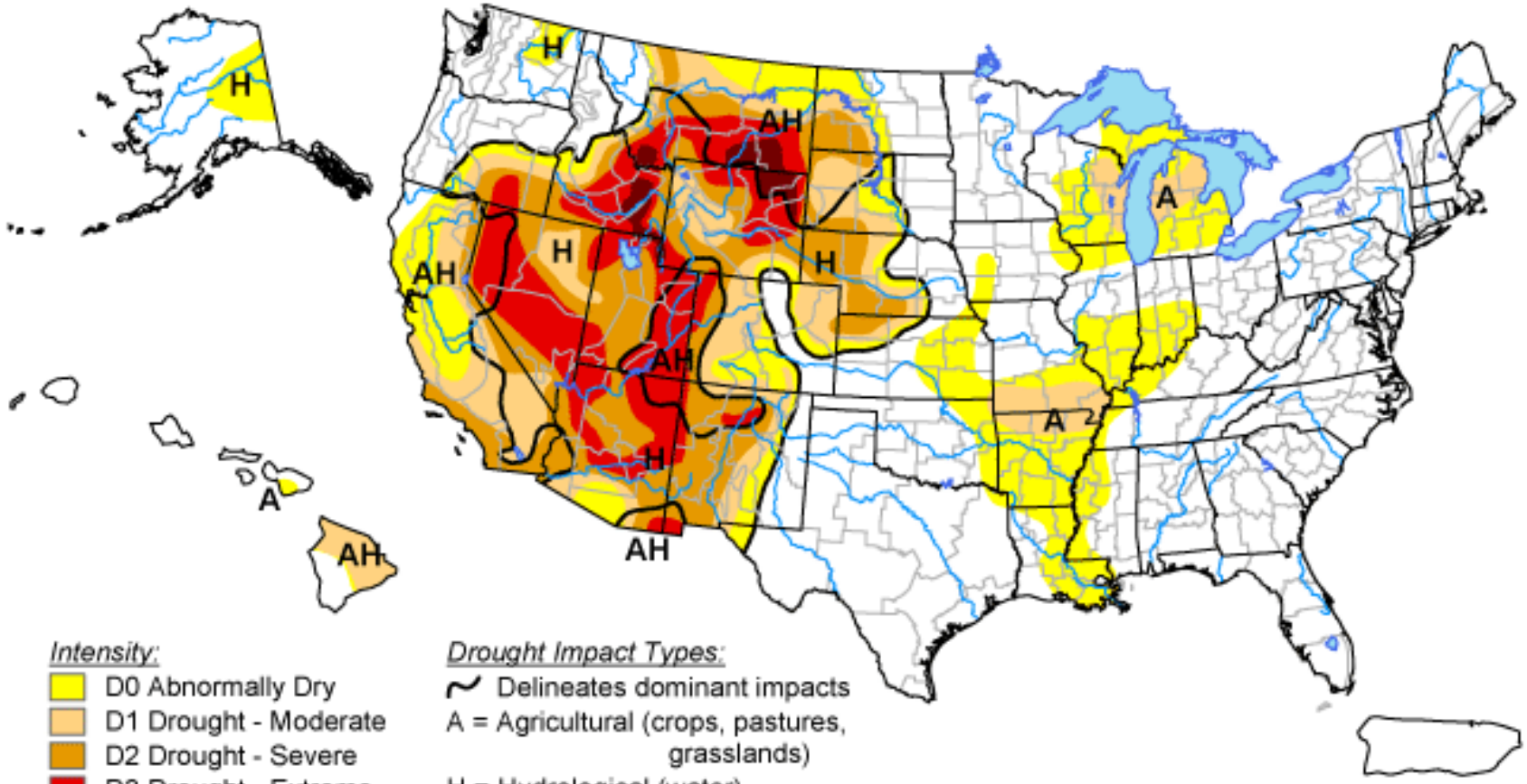
Summary

- A mild winter again 
- Another year with below average snowmelt runoff
- Generous growing season precipitation east of the mountains
- Coolest summer in a looong time 
- Improvements in soil moisture
- Reservoirs hung in there
- Significant runoff from rains 

Overall: Continued Softening Of Drought Intensity

U.S. Drought Monitor

October 5, 2004
Valid 8 a.m. EDT



Intensity:
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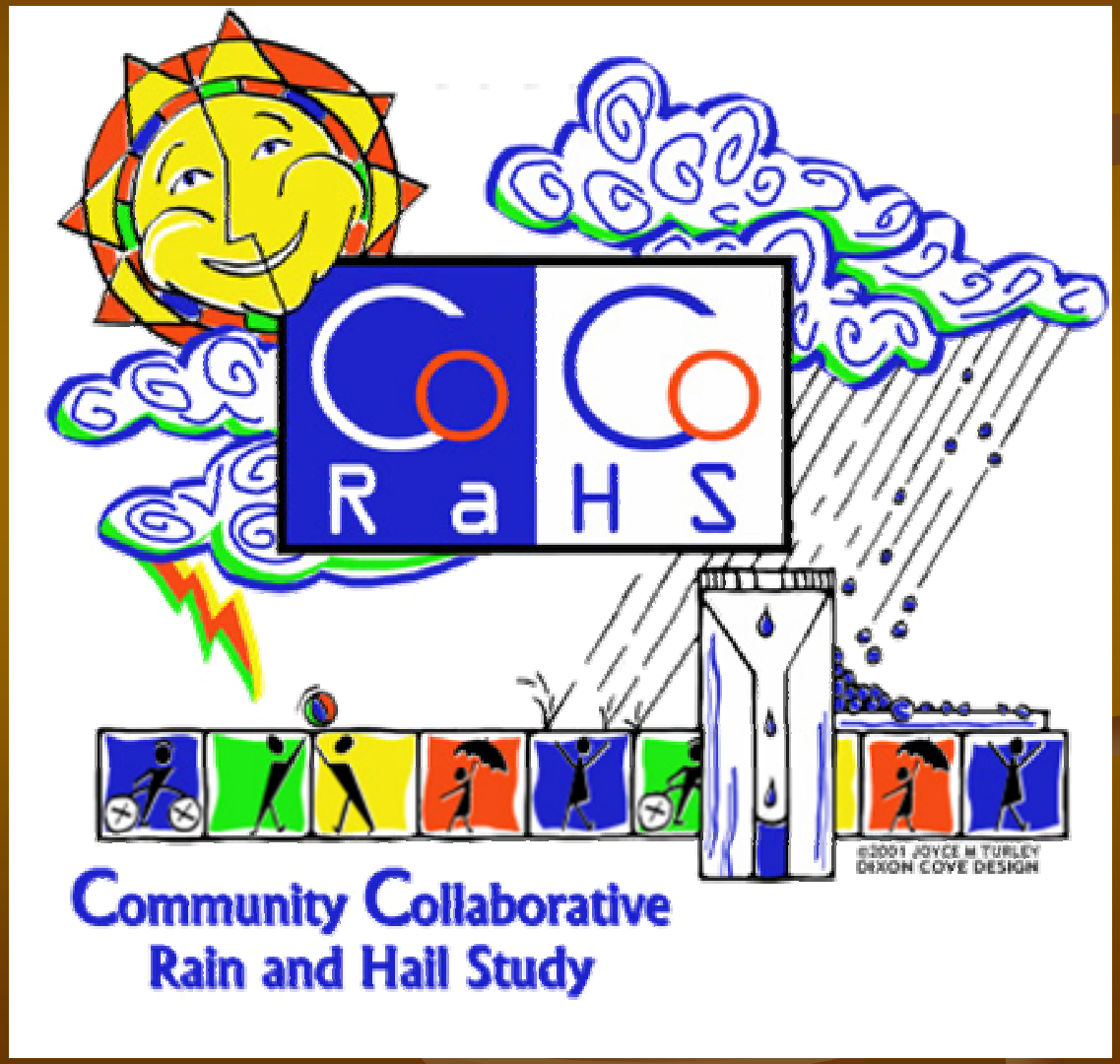
USDA National Drought Mitigation Center

Released Thursday, October 7, 2004
Author: Michael Hayes, NDMC

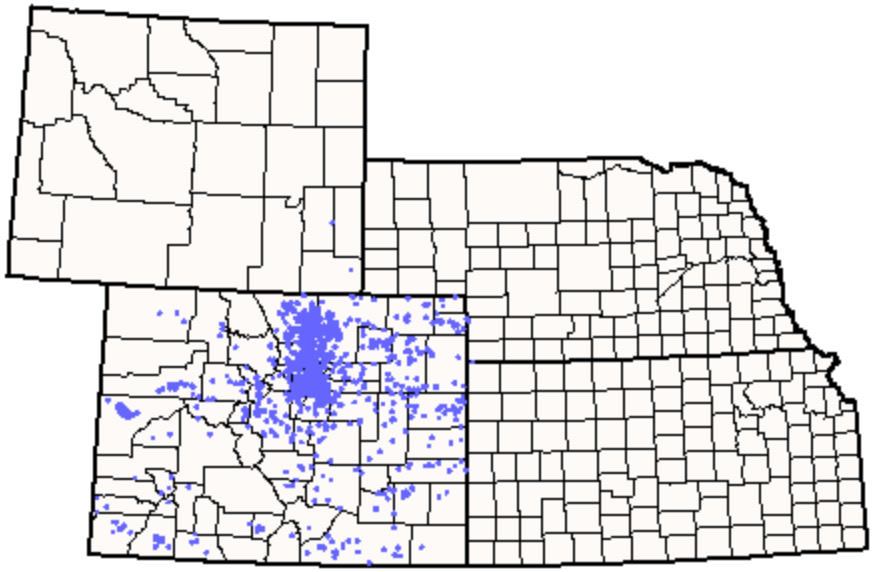
http://drought.unl.edu/dm

And How About CoCoRaHS?



CoCoRaHS!

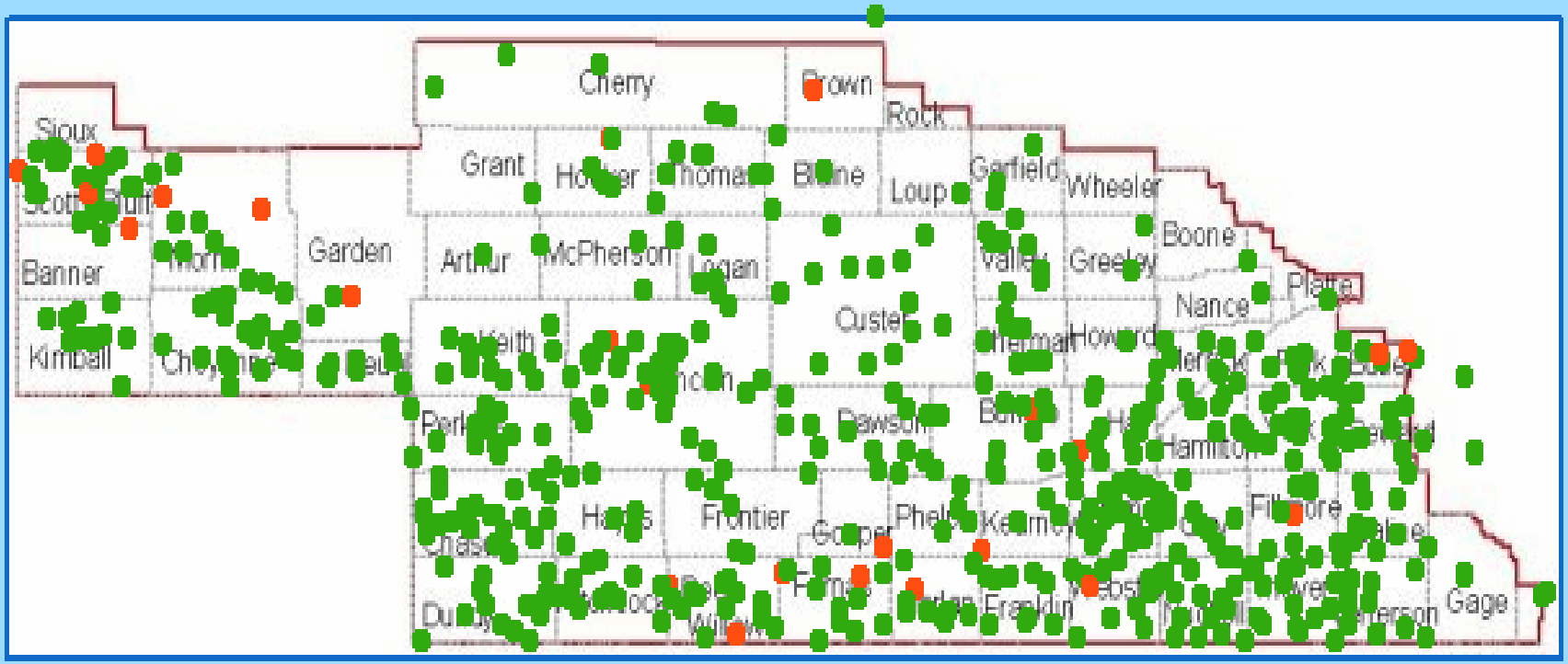
- A great year for CoCoRAHS!
- Over 400 new volunteers
- Now statewide and spreading to Wyoming, Nebraska and Kansas



4-state map from new CoCo RaHS web site

NeRAIN

Nebraska Rainfall Assessment and Information Network



http://dnrdata.dnr.state.ne.us/NeRAIN/index.asp

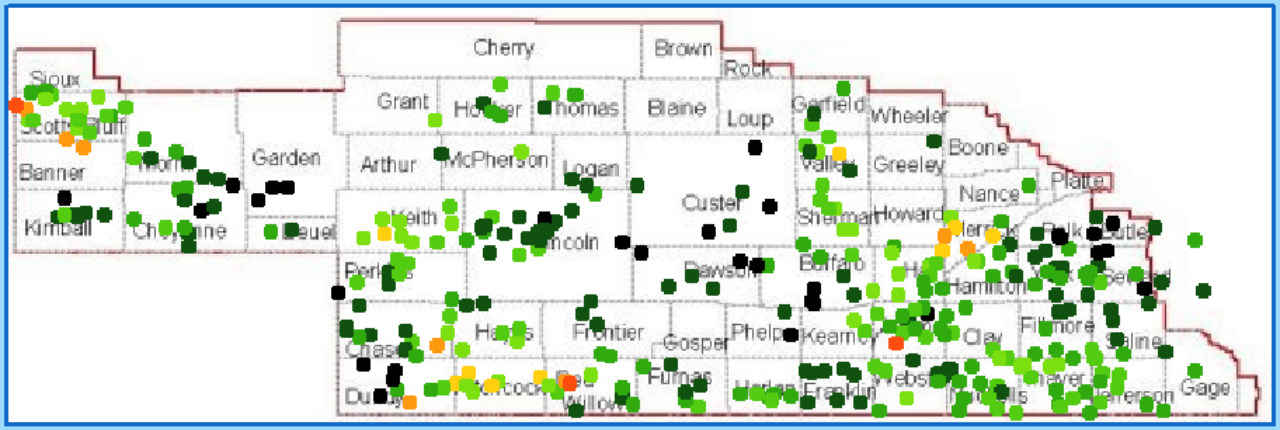
<< < **Jul 2004** > >>

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Daily Precipitation
NeRAIN
Project Area
7/22/2004
Color Identification Chart
Navigation Tips

County View
NRD View

Daily Precip | Weekly Precip | Monthly Precip
Invert Map Colors for Readability?



Color Identification Chart
(Inches of rainfall)

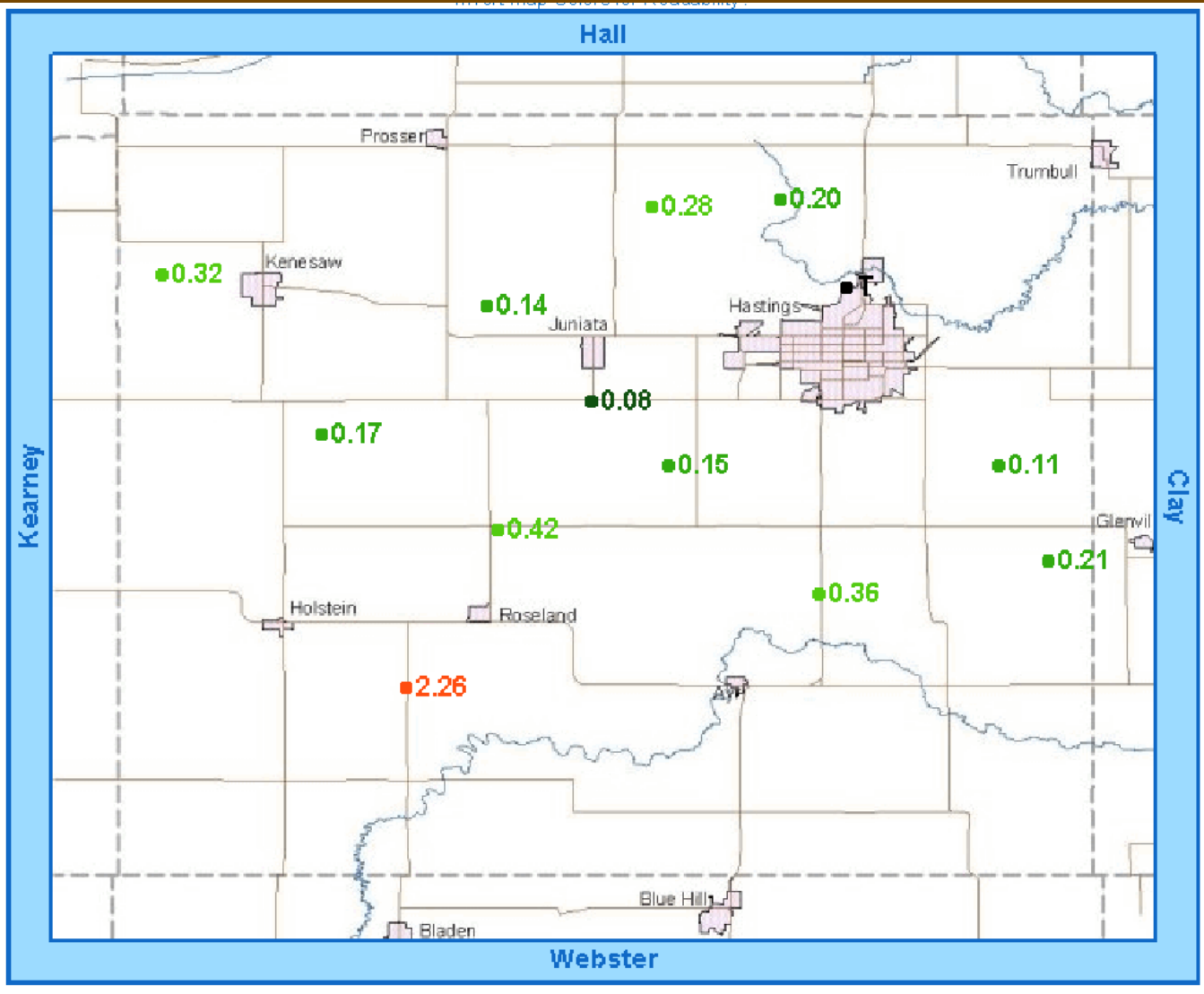
0.00	T	T-0.10	0.10-0.25	0.25-0.50	0.50-1.00	1.00-1.50	1.50-2.00
2.00-3.00	3.00-4.00	4.00-5.00	5.00-7.50	7.50-10.00	10.00-15.00	>15.00	

Navigation Tips

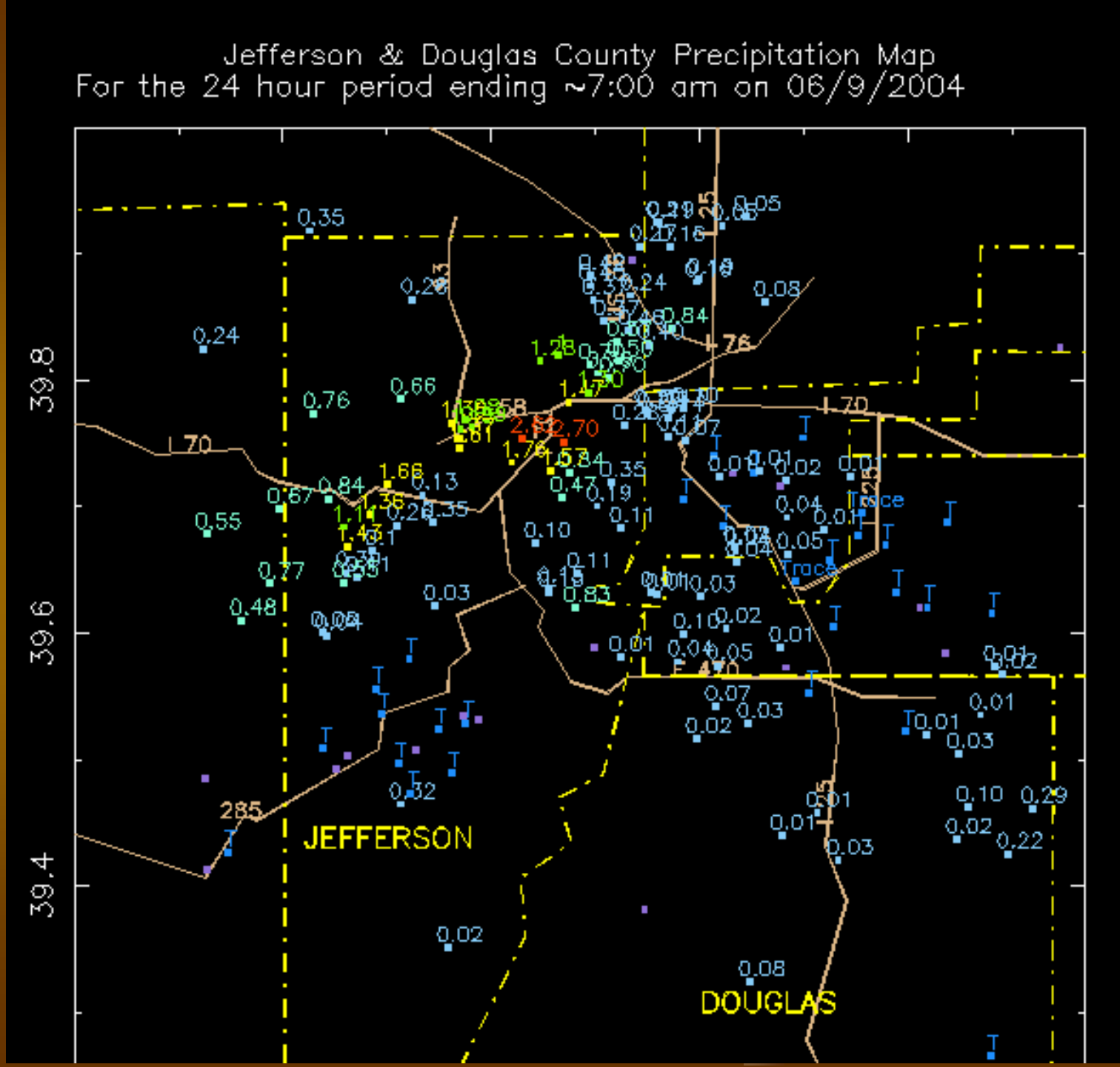
- **To change dates**, click on any active date in the calendar
- **To change counties**, click on any active county in the image map in the upper right corner **OR** click on any county name in the borders of the map

e-mail

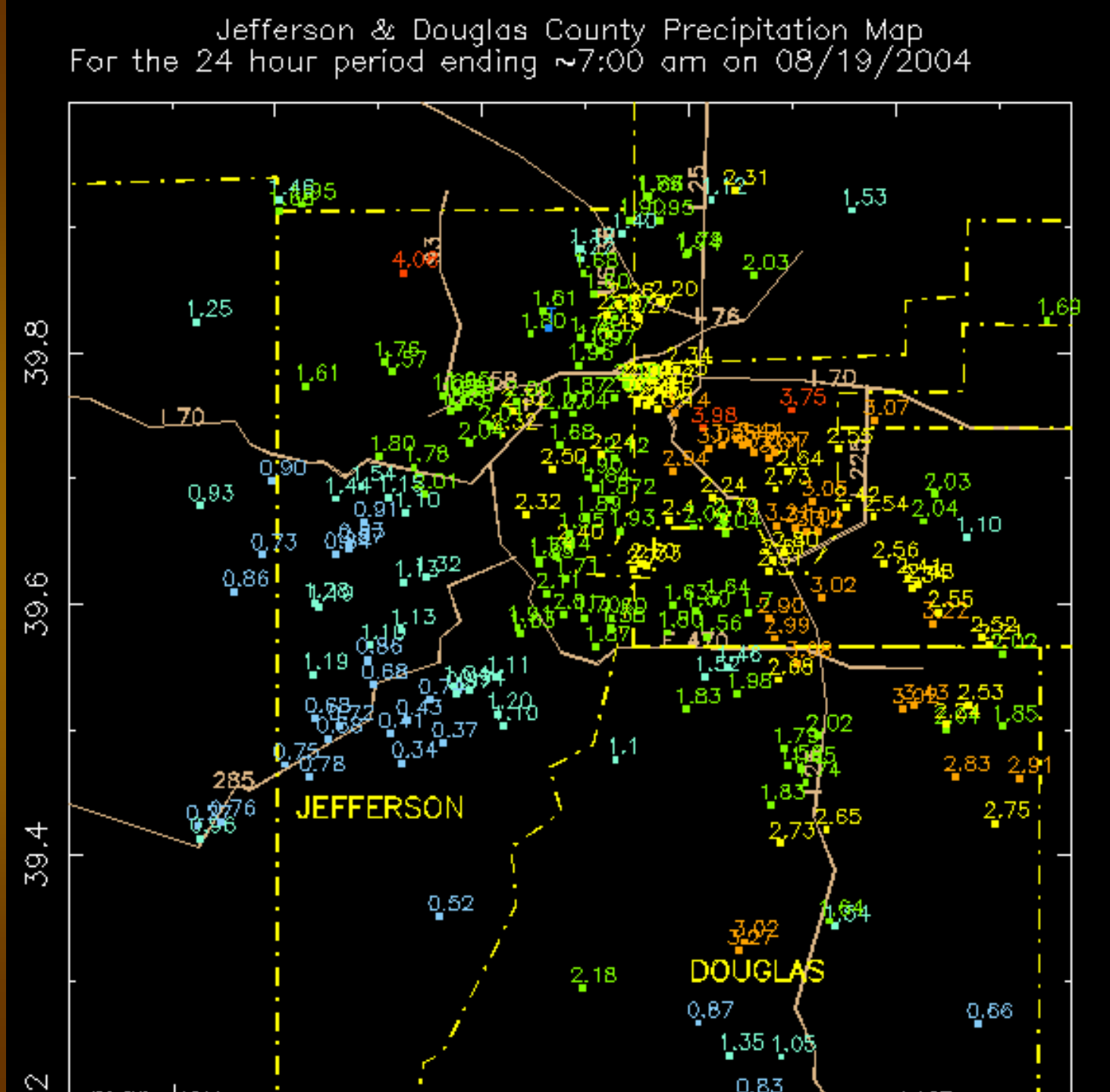
Example of Adams County Data from Nebraska -- NeRAIN



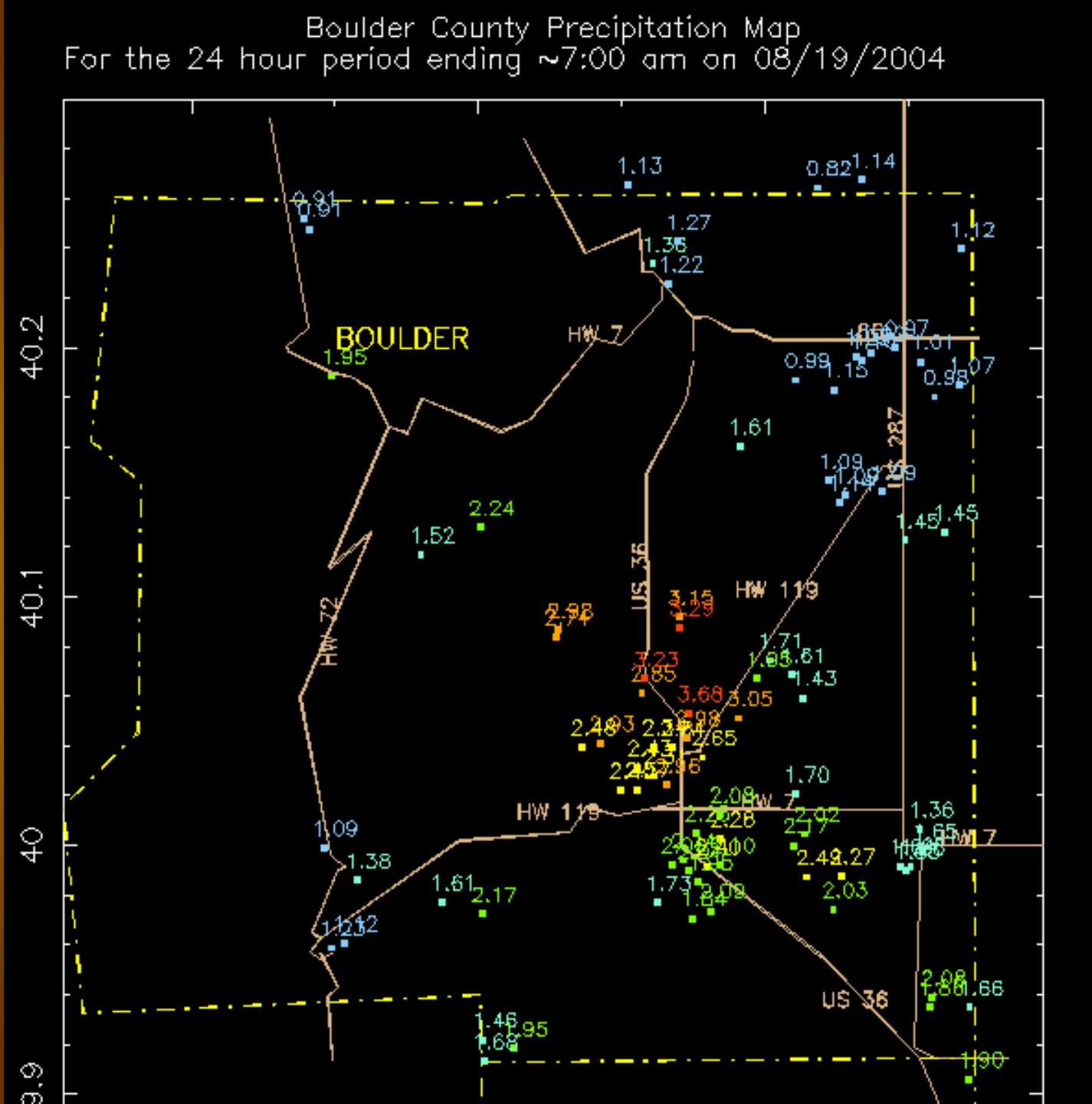
CoCoRaHS map for June 9, 2004 Golden, Colo.



CoCoRaHS map for August 19, 2004 Jefferson County



CoCoRAHS map for August 19, 2004 Boulder County



For more information visit the CoCo RaHS Web site

http://www.cocorahs.org

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Informal Science Education Program,
National Science Foundation
and
many local charter sponsors.

Colorado Climate Center

Data and Power Point Presentations available for downloading

http://ccc.atmos.colostate.edu

- click on “Drought”
- then click on “Presentations”