

Colorado State Report: AASC Annual Meeting

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Presented at AASC Annual Meeting
Coeur d'Alene, ID
July 17, 2007



Since We Last Met



December Snowstorm, Dec 2006

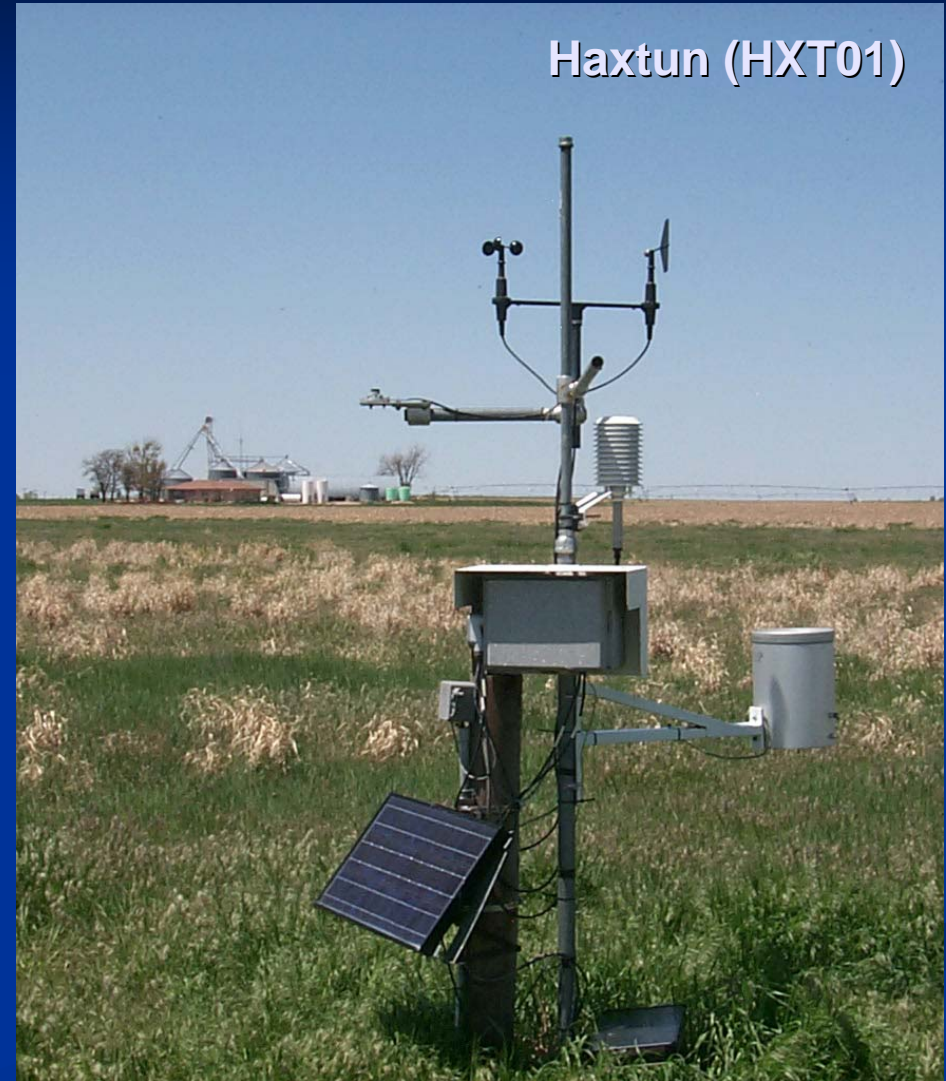


Holly Tornado, March 28, 2007

CoAgMet Update

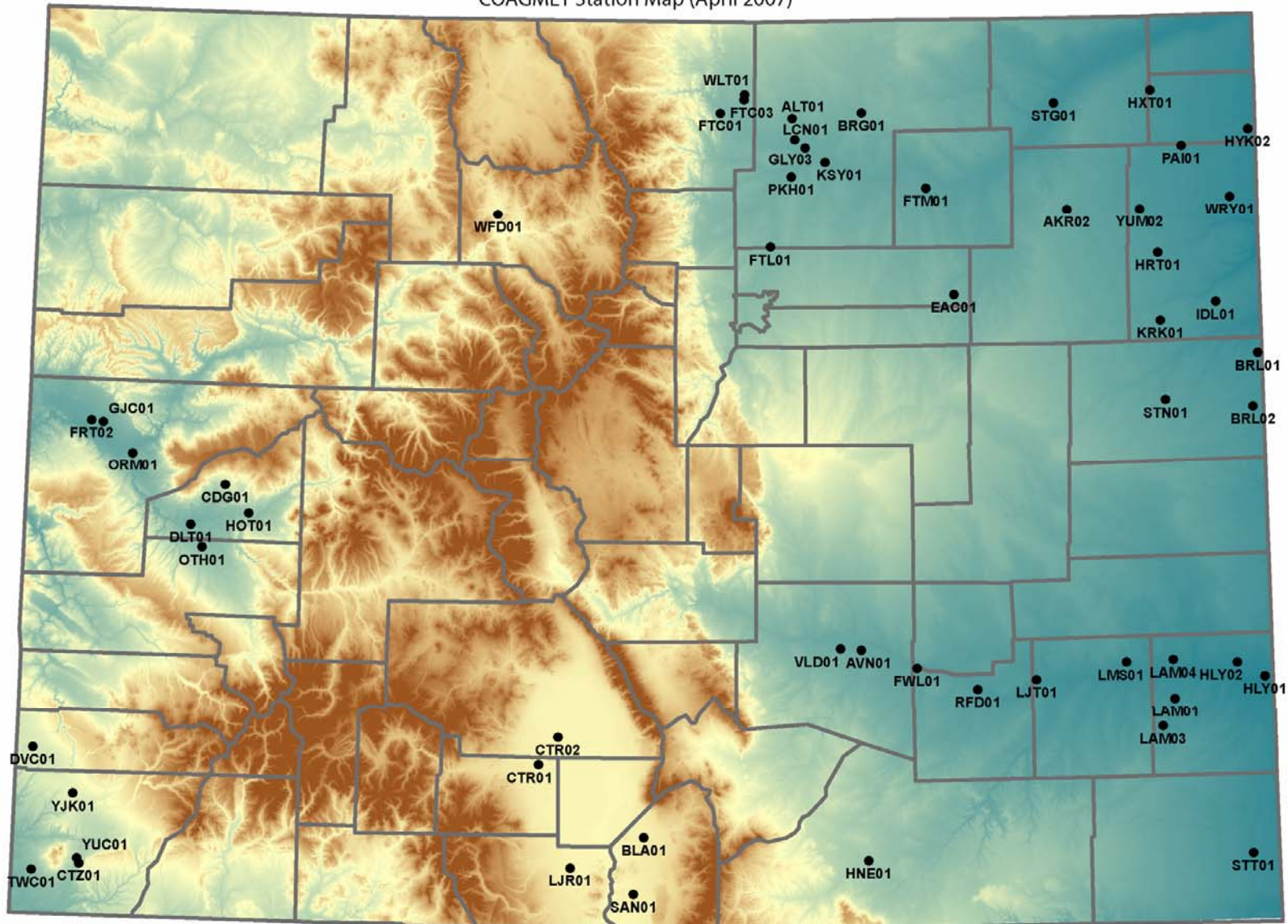
Colorado Agricultural Meteorological Network

<http://www.coagmet.com>



CoAgMet Station Map

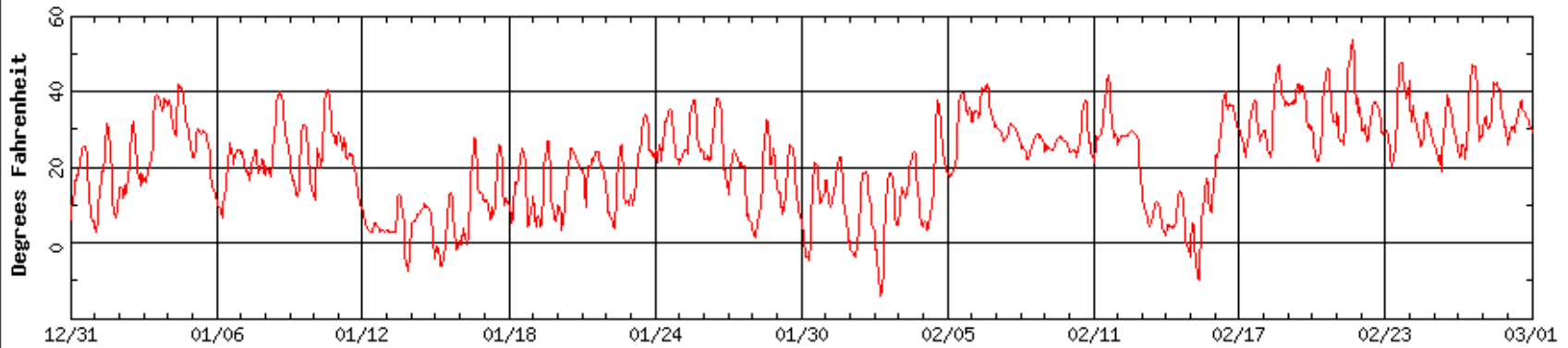
COAGMET Station Map (April 2007)



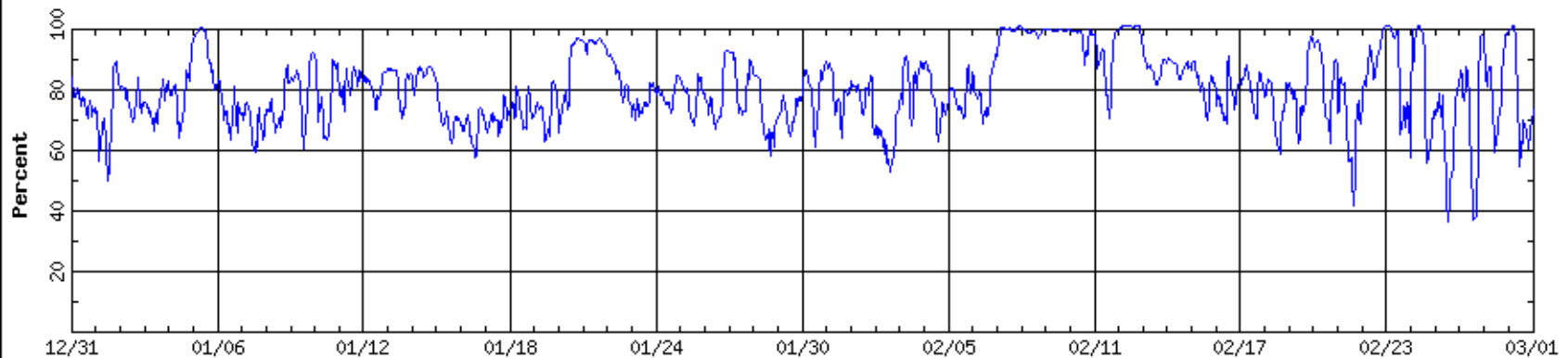
San Luis (SAN01) CoAgMet Site



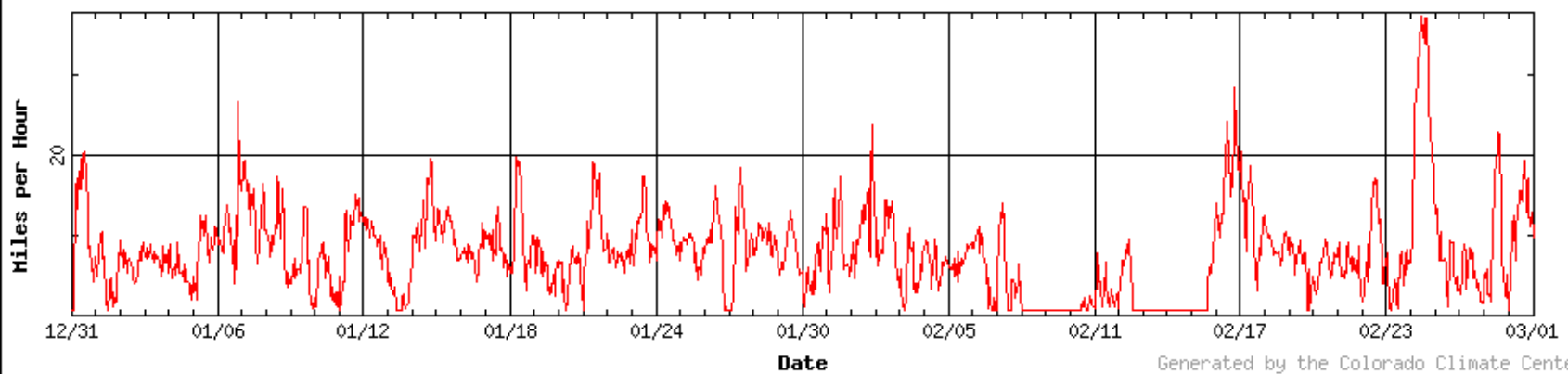
Heartstrong CoAgMet Temperature for HRT01 (12-31-2006 - 03-01-2007)



Relative Humidity for HRT01 (12-31-2006 - 03-01-2007)



Mind Speed for HRT01 (12-31-2006 - 03-01-2007)



2007 CoAgMet Summary

- 55 Active Stations
- Cell phone communications
- Initiating hourly transmission
- Representing agricultural areas only – most in irrigated cropland
- Soil moisture under consideration but no funding sources identified



Snow Project Update

Ultrasonic Snow Depth Sensor Test and Evaluation for NWS

<http://snowstudy.cocorahs.org>



2006-2007 Test Sites



- Station Locations 2006
- ▲ NWS Test Beds



Snow Sensors Installation in Progress



Aberdeen, SD



Buffalo, NY



Fort Collins, CO



Indianapolis, IN

Aberdeen, SD, Operational Site



Cheyenne, WY, Operational Site



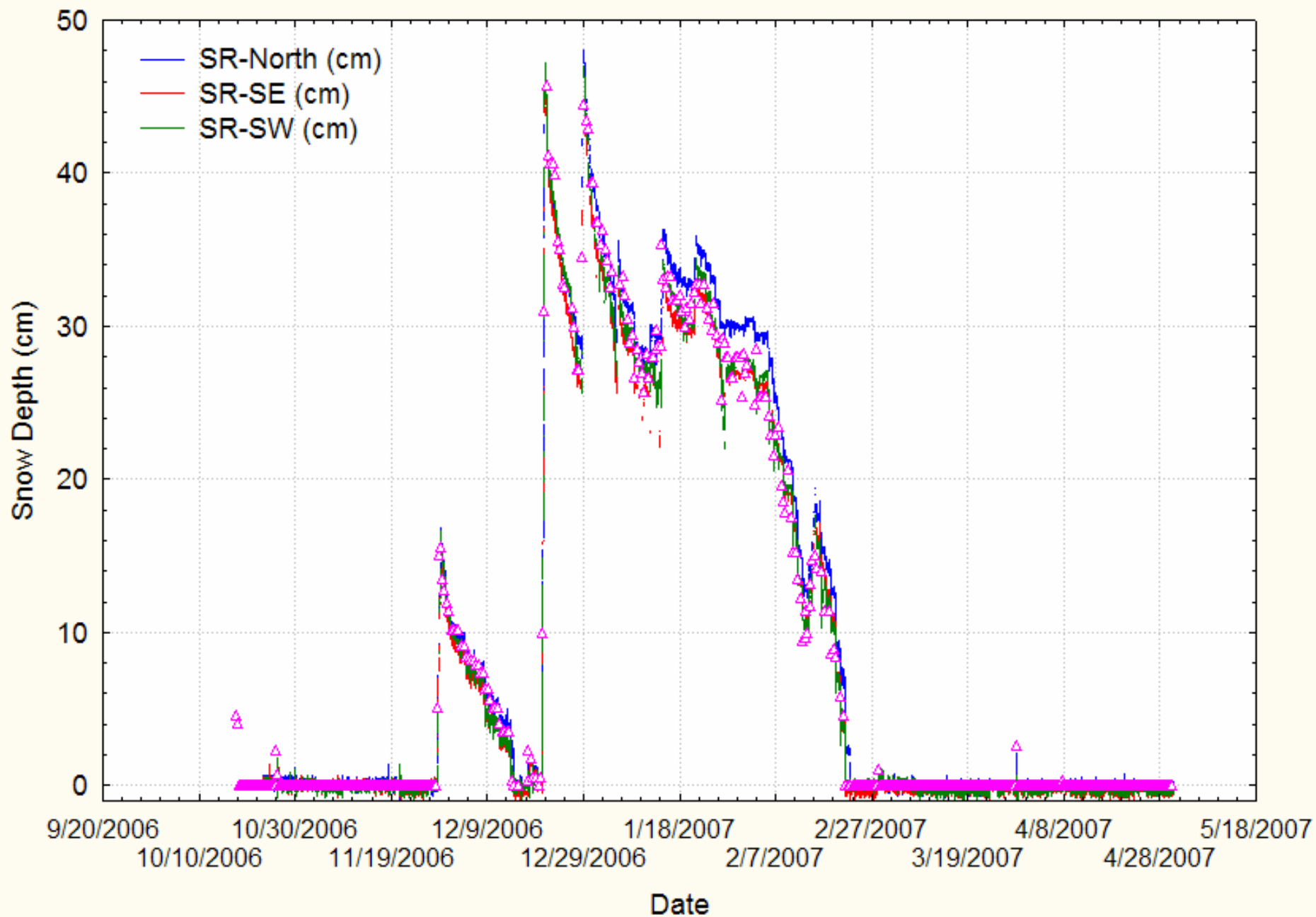
Indianapolis, IN, Operational Site



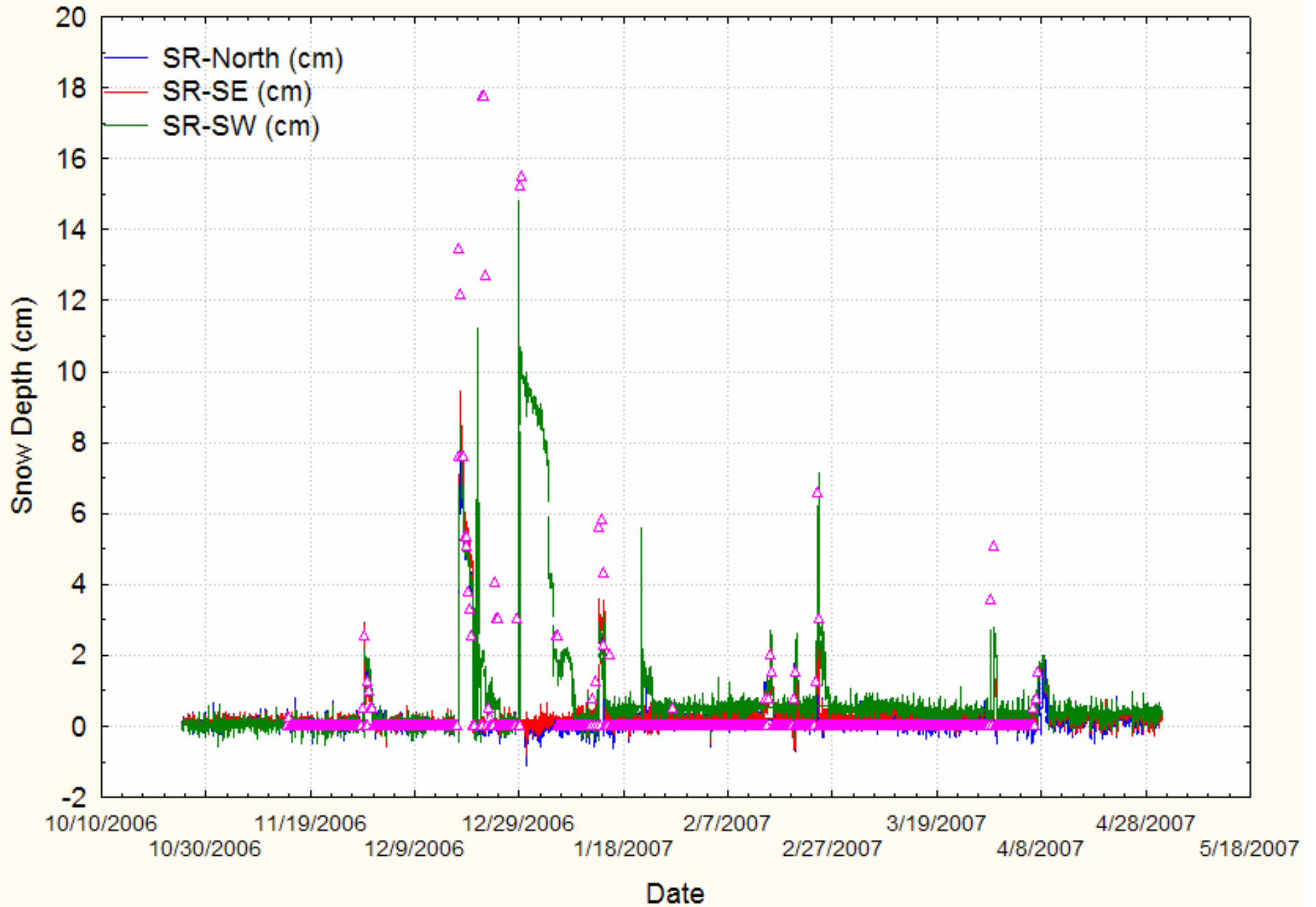
Fairbanks, AK, Operational Site



Fort Collins, CO Automated and Manual Total Snow Depth (cm)



Cheyenne, WY Automated and Manual Snow Depth (cm)



Conclusions

- Sensors performed well in a variety of climates and adverse conditions
- Very little missing data and instrument failure
- Challenges with drifting snow in windy environments

■ 2007-2008 snow season data collection

■ Remote data collection will be tested at some sites

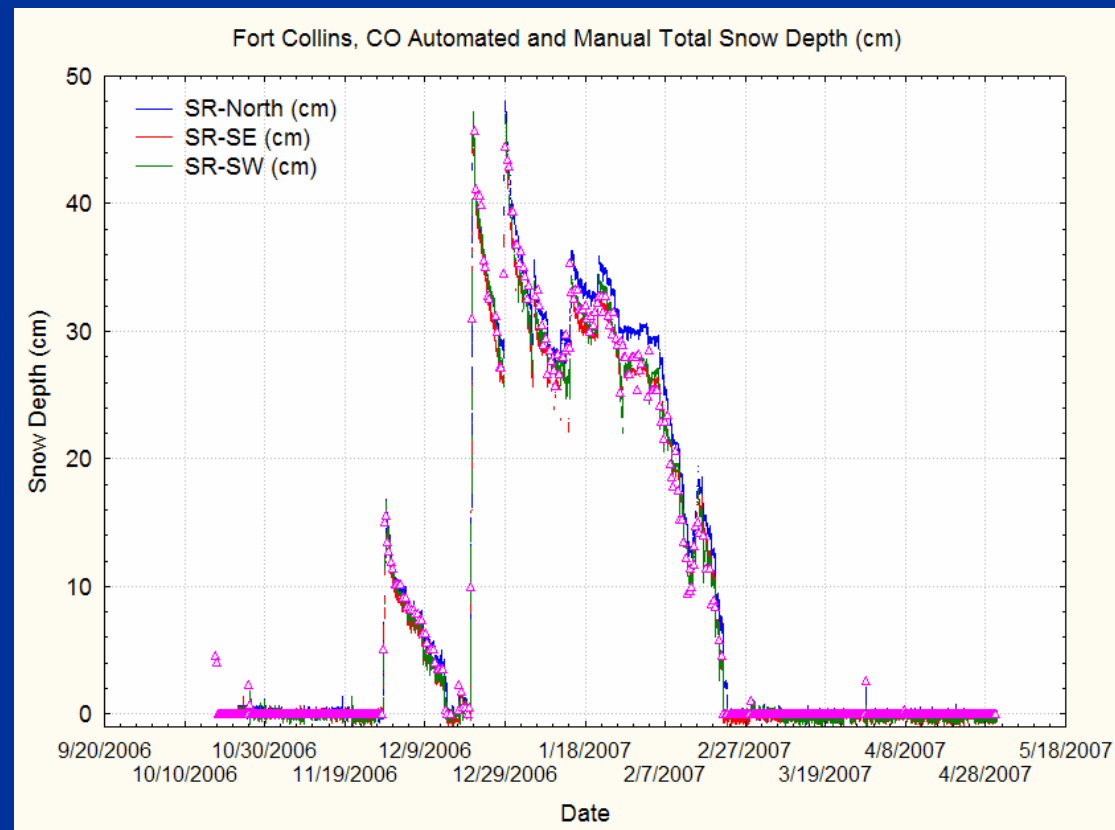
- Solar panels
- Communications

■ Issues of concern

- Snow measurement surface
- Frost heave control
- Wind effects
- Instrument Siting

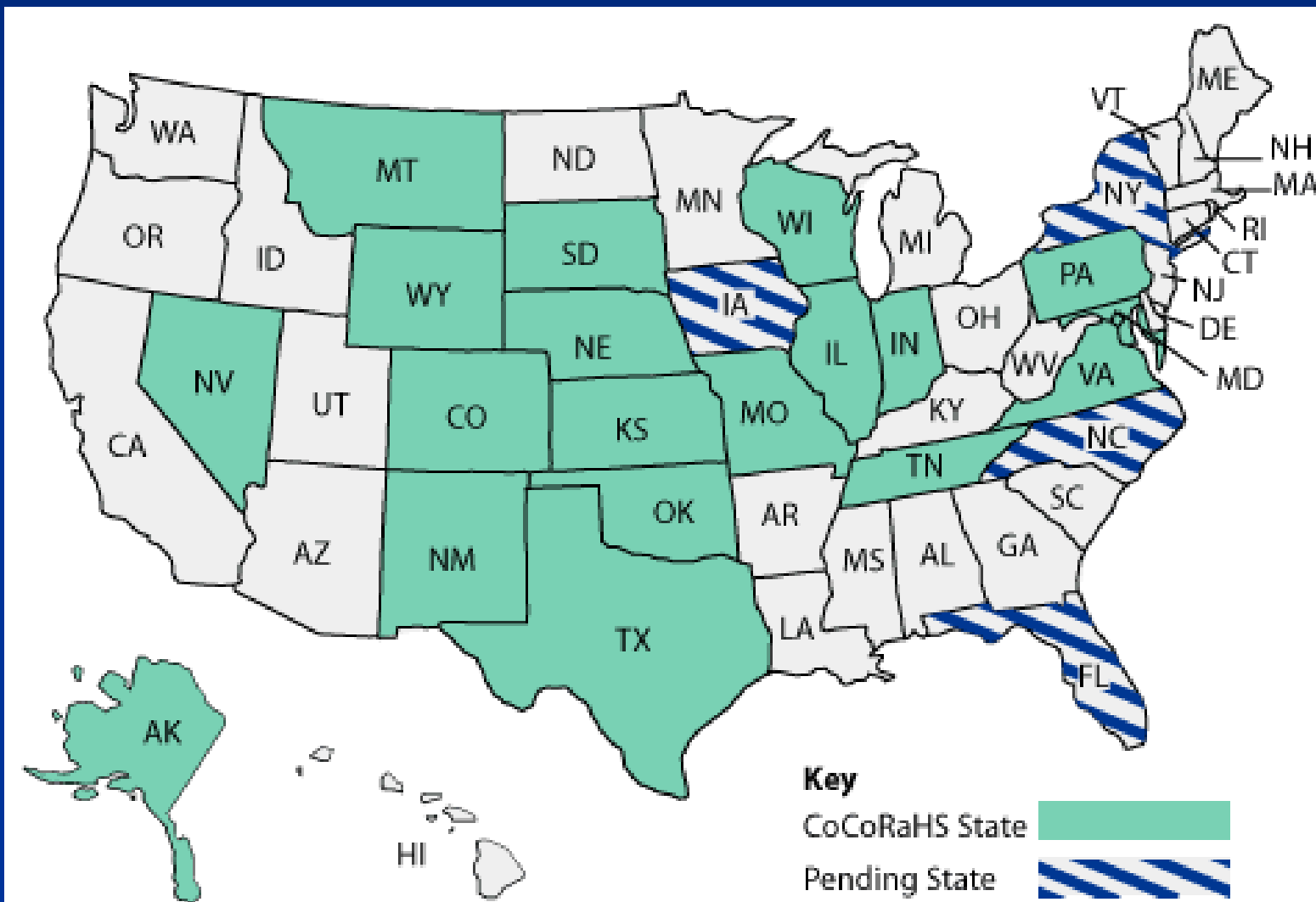
■ Planning meeting scheduled July 31 in Sterling, VA

- Ongoing challenge – determining fresh snowfall from continuous measurements of total snow depth



CoCoRaHS Update

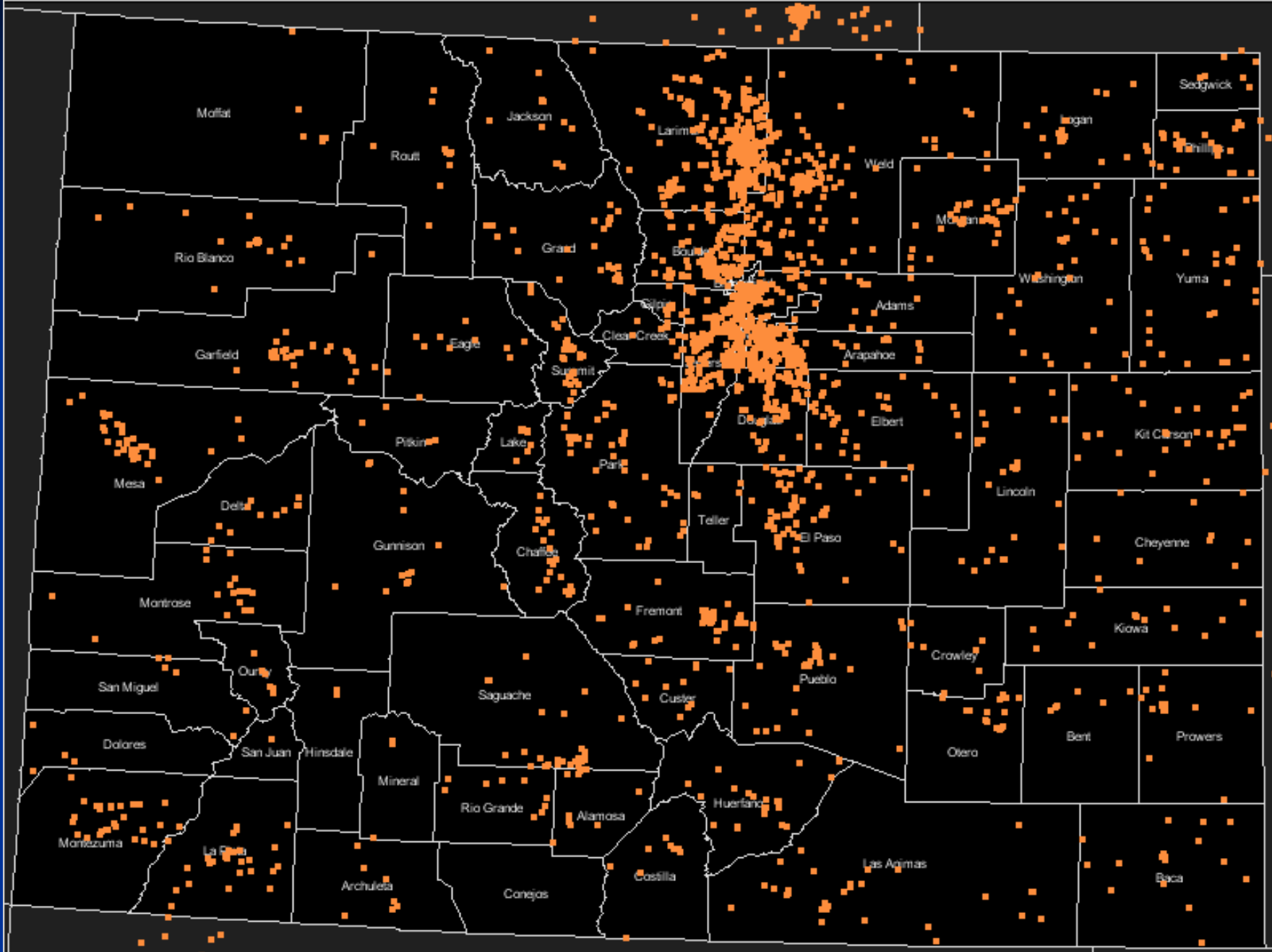
Community Collaborative Rain, Hail, and Snow Network





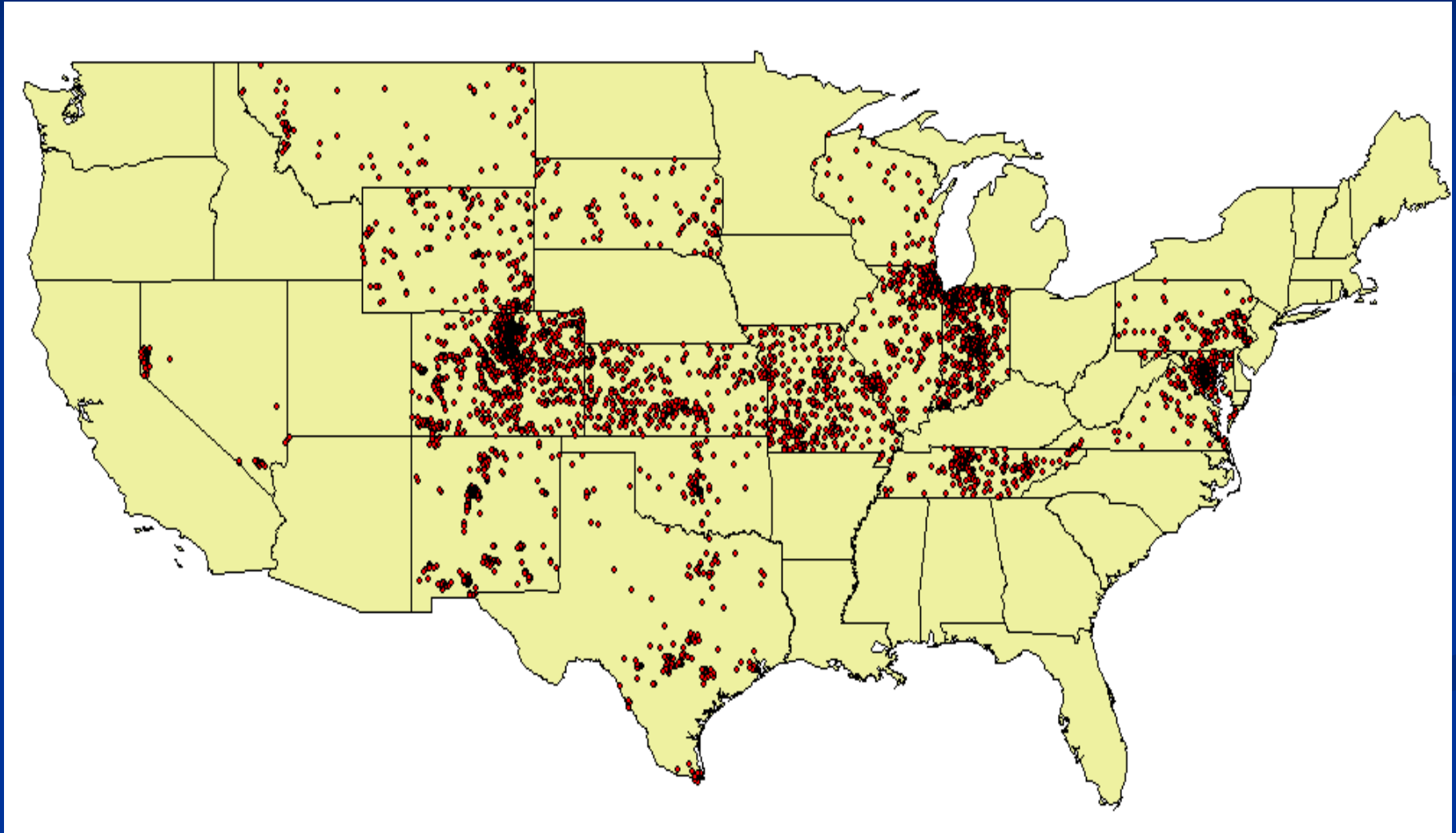
Active Stations
Colorado

Colorado CoCoRaHS Stations



National CoCoRaHS Stations

as of 6/11/07

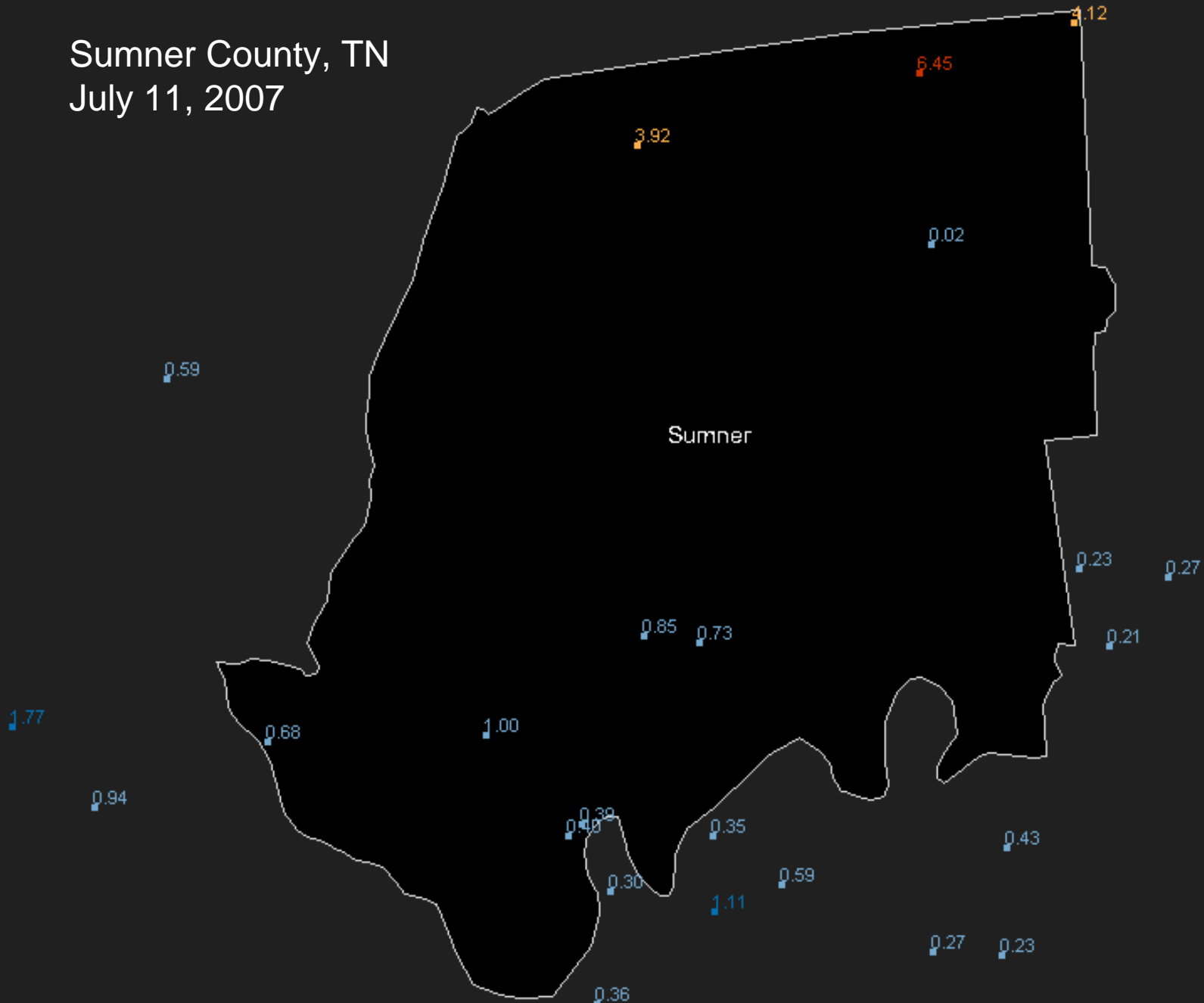


Daily Precipitation (inches x.xx), for the 24 hour period ending ~7:00 am

Sumner County, Tennessee 7/11/2007

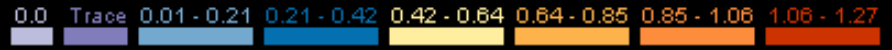


Sumner County, TN
July 11, 2007

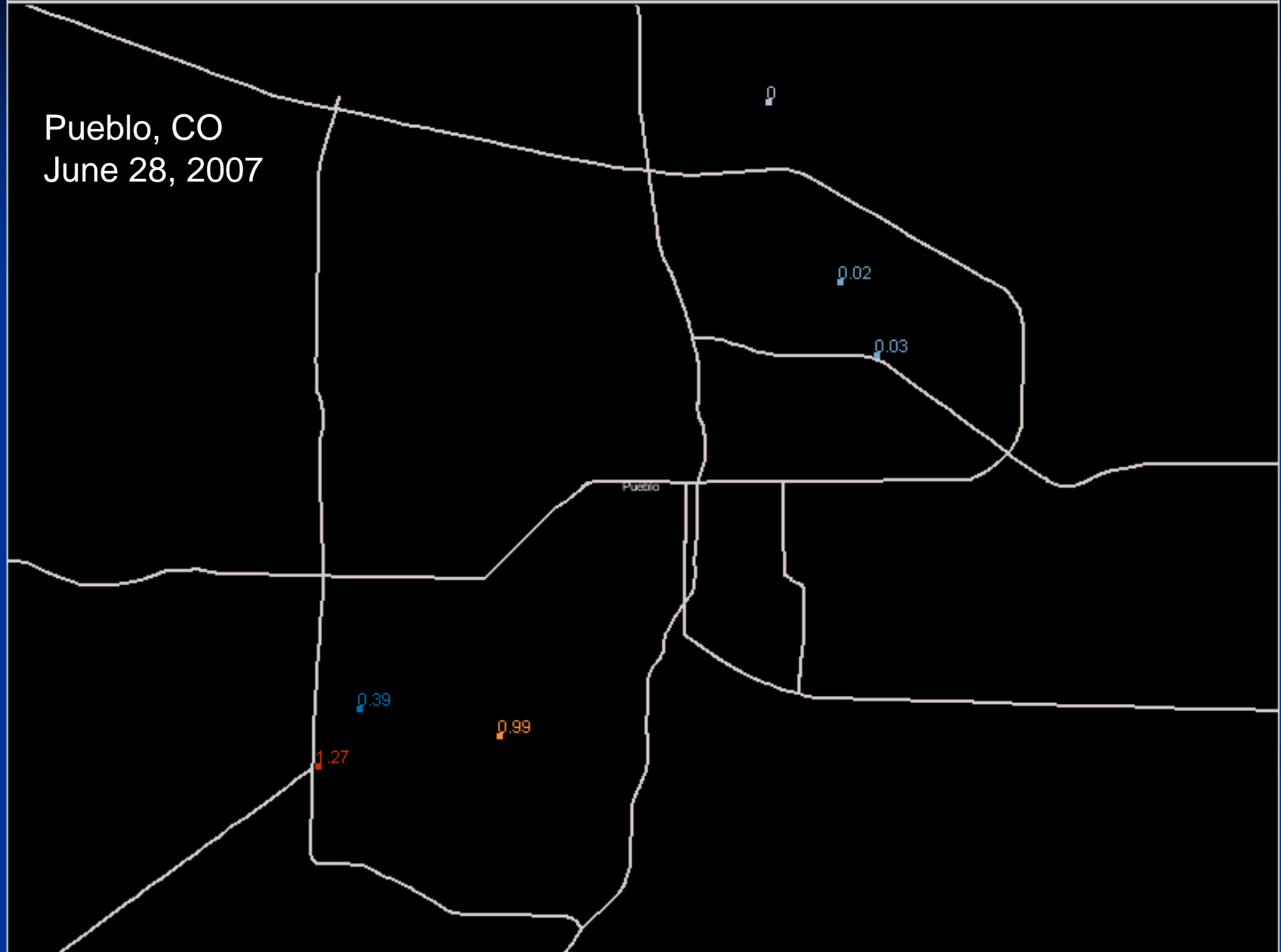


Daily Precipitation (inches x.xx), for the 24 hour period ending ~7:00 am

Pueblo, Colorado 6/28/2007



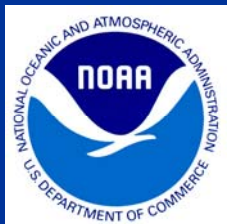
Pueblo, CO
June 28, 2007



For More Information, Visit the CoCoRaHS Web Site



<http://www.cocorahs.org>



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