

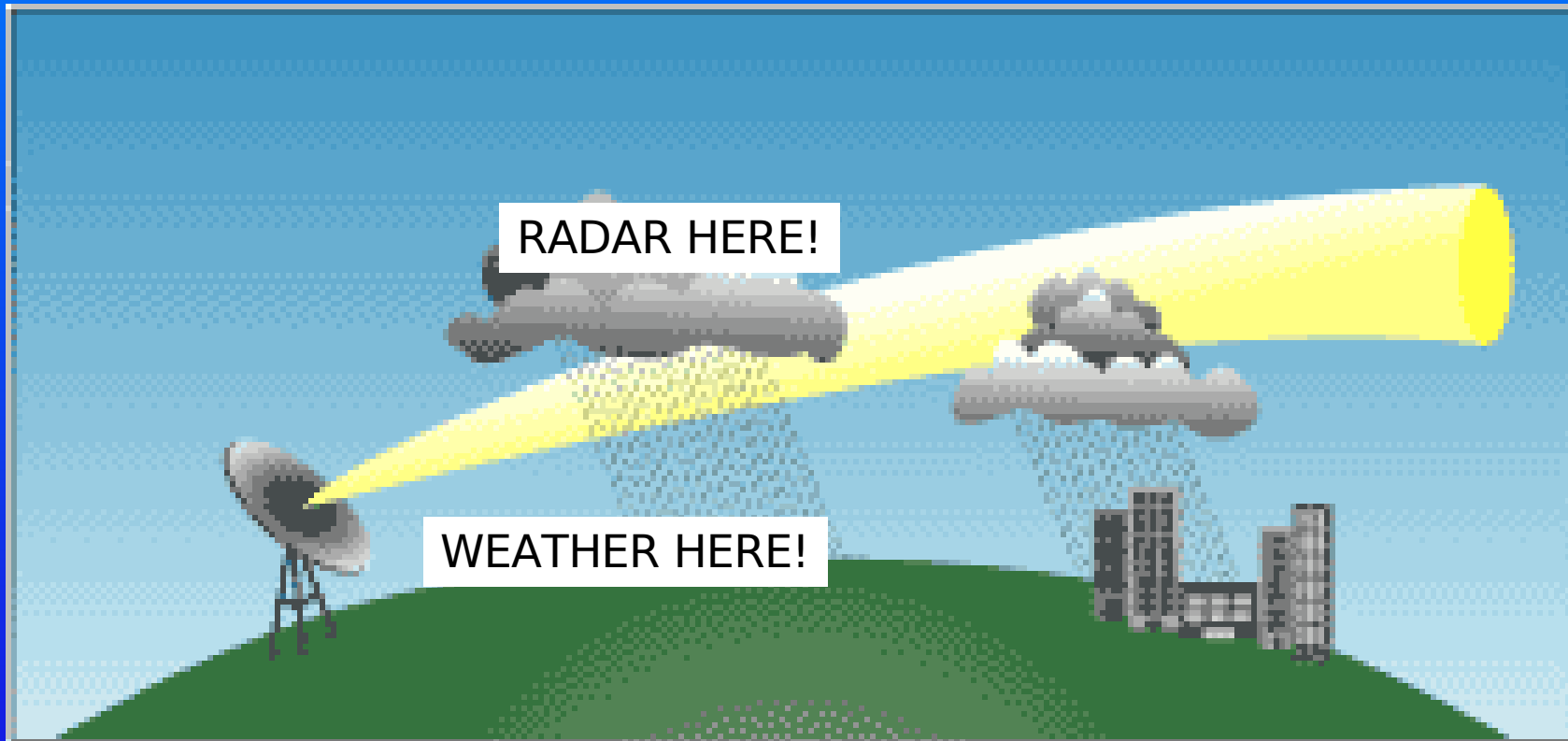
Now you can
really see the weather!

John McLaughlin, KCCI-TV
Daryl Herzmann, Iowa State University

The Rundown

- Utilizing Baron Tools
 - Web Cameras
 - School Sensors
 - Mobile Storm Chasers
- The IEMChat Project
 - Live demo!
- Horn sounds, awaking those from their slumber

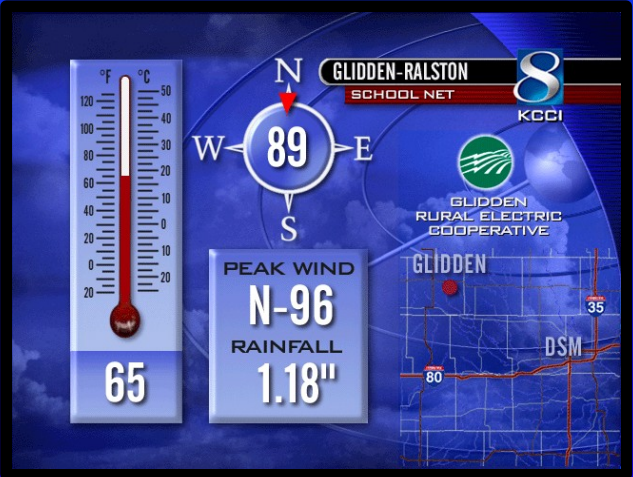
The Problem



Ground Truth

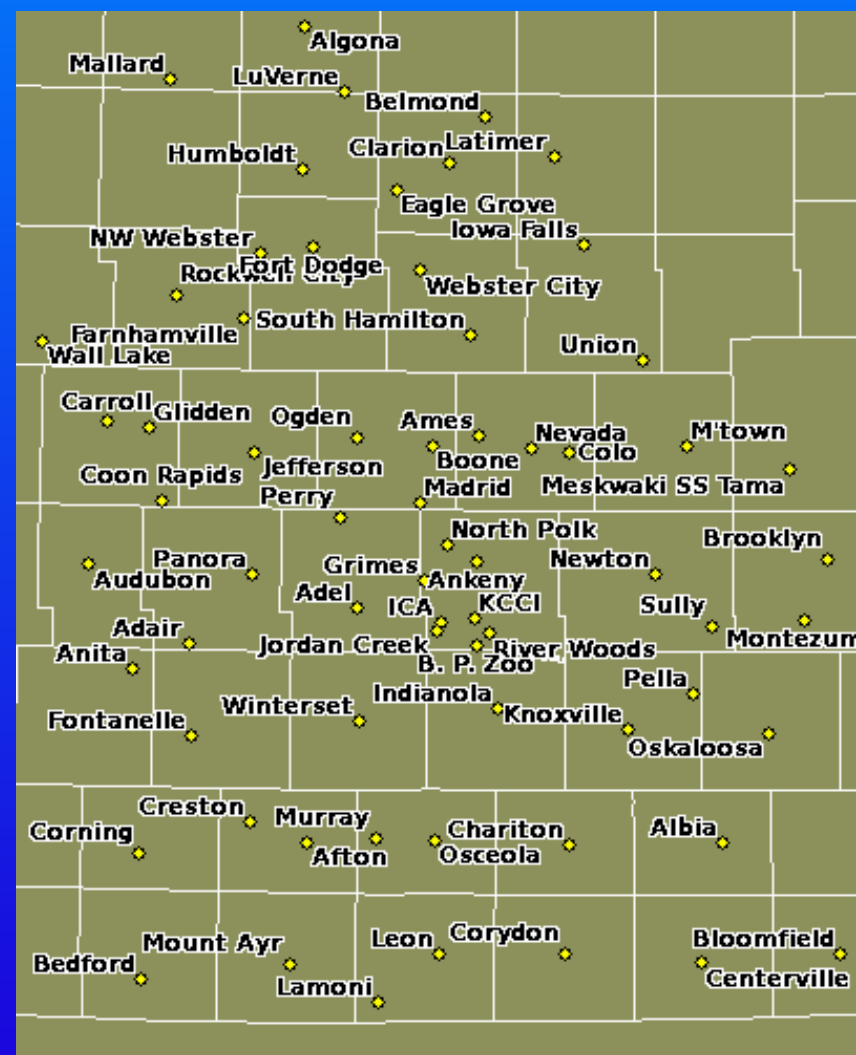


(WNW) Jefferson Fri Jul 30 20:28:02 CDT 2004



Baron Sensor Package

- Texas Weather instruments
- 67 sites deployed
- Live reports of T,Td,V,G,Rain



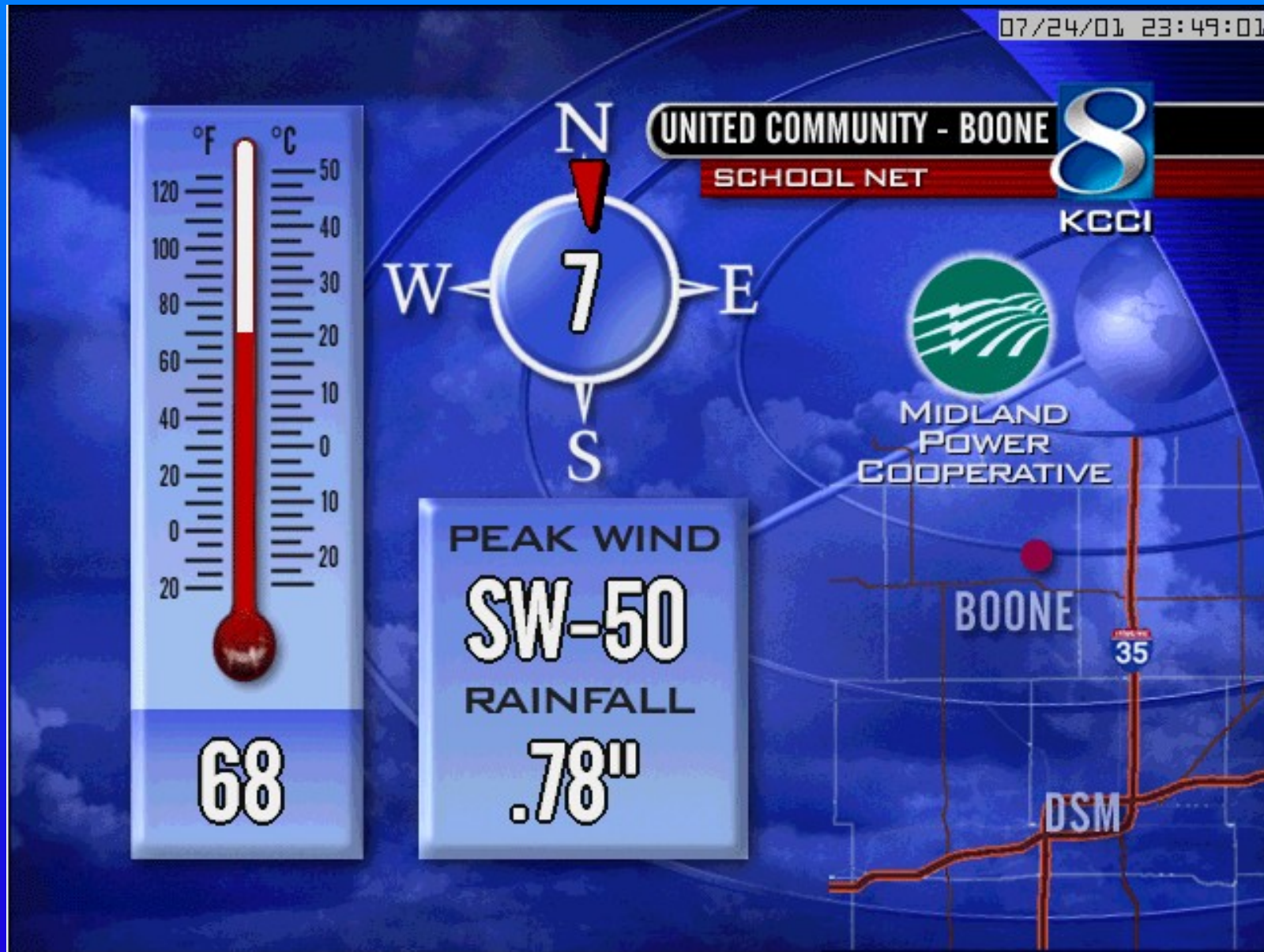
Deployment is Fun!



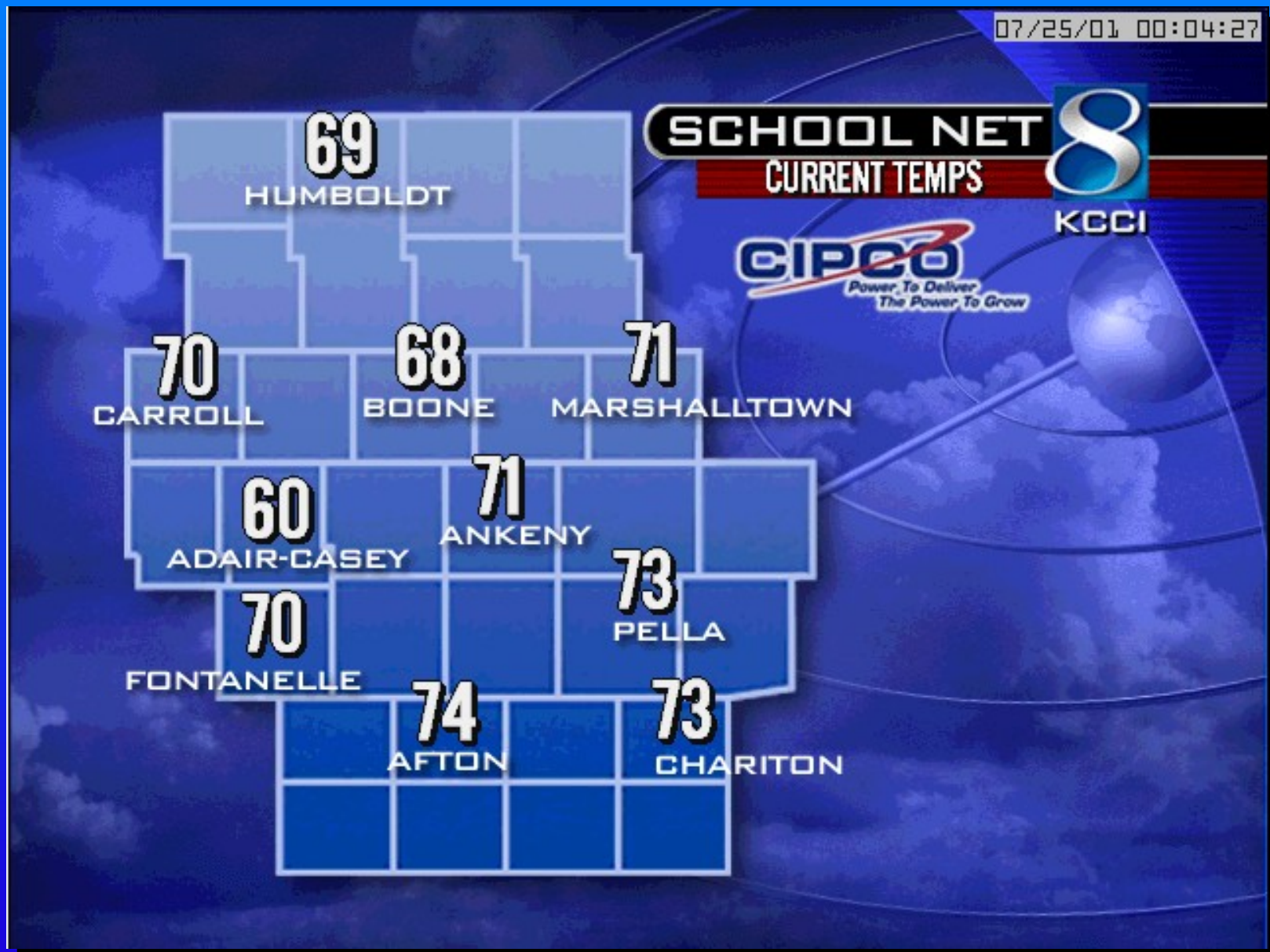
Then the work starts

- 67 sites x 10 obs per minute x 1440 x equals lots of data! What to do?
- 1/N means 1 site breaks every 6 days. The weekend dude needs a weekday hobby.
- Graphics, displays, tickers, website....
- Gotta make things educational too!

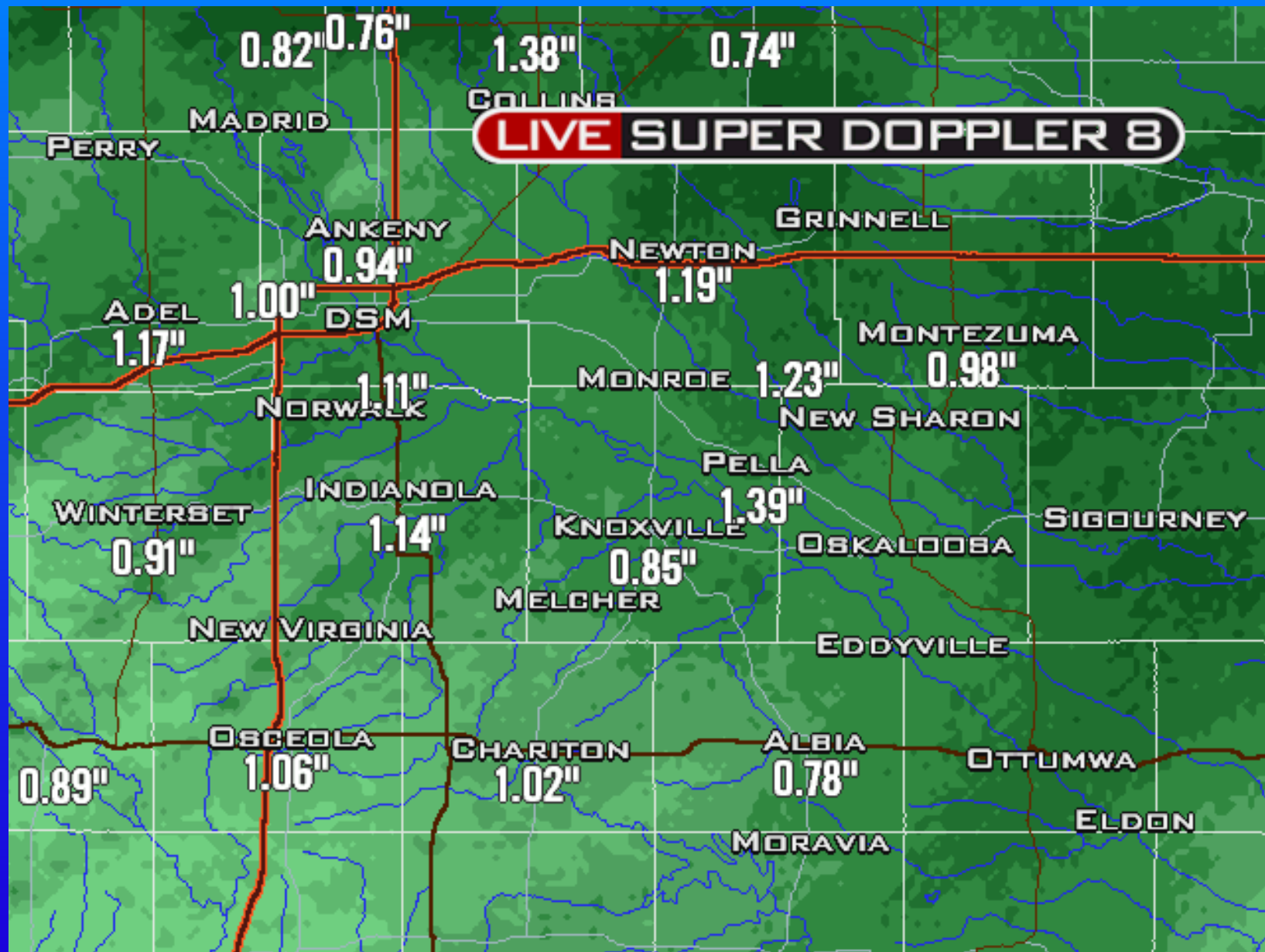
Baron Display



Baron Display



Fastrac Display





Webster City Community SchoolNet8 Site is sponsored by **Prairie Energy Cooperative**

[Home](#) [Currents](#) [Download](#) [Info](#) [Site Guide](#) [WebCams](#)

Latest Web Camera:

- ◆ Build a custom **time lapse** of this camera.

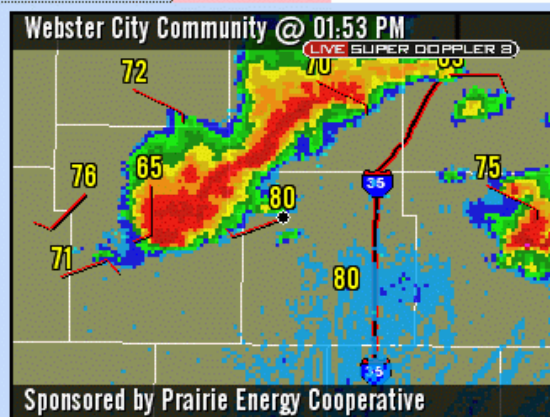


Webster City Fri May 21 13:55:01 CDT 2004

Internet service by: **WMTEL.NET**

Live Super Doppler8:

[Latest Image](#) [Show Loop](#)



Current Observation:

Site	Webster City Community
Date/Time	May 21 01:54 PM
Temperature	79°F
Relative Humidity	77 %
Dew Point	71°F
Wind	WSW @ 3 mph
Pressure	29.80
Feels Like	84°F
Rain for the Day	00.07 in
Rain for the Month	03.45 in
High Temperature	82°F
Low Temperature	63°F
High Wind	SW @ 29 mph
Solar	20 W/m ²
High Solar	1130 W/m ²

Switch SchoolNet8 Site:

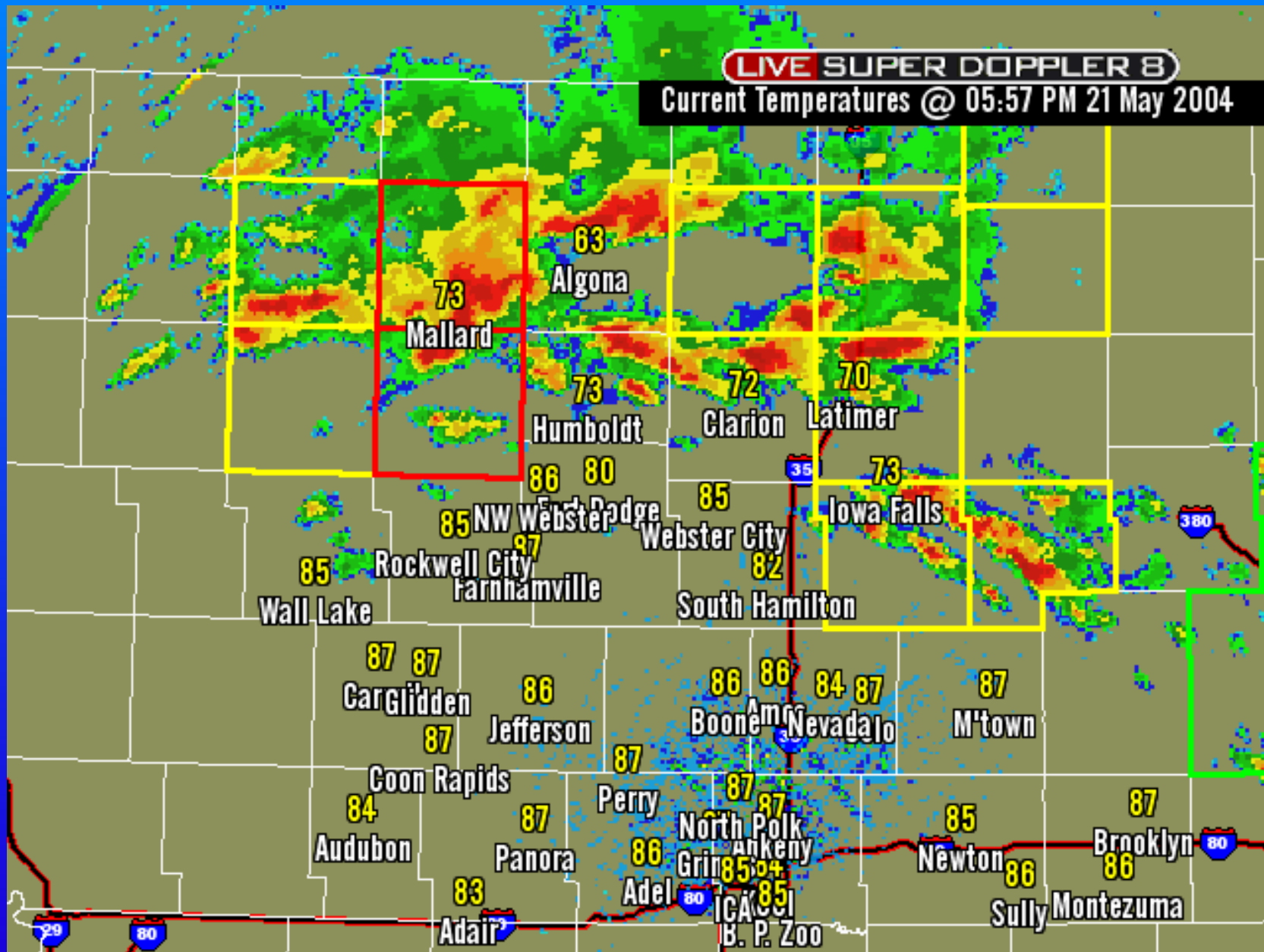
Select from map -or- Select from list

Webster City Community

Compare Station

** This page refreshes every minute.

Live Super Doppler8 App



Educational, remember?



101



Touchstone Energy[®]
Cooperatives
of Iowa



TEACHER GUIDE



[Home](#) [My Site](#) [Currents](#) [Download](#) [Info](#) [Site Guide](#) [Site Index](#) [SNET 101](#) [WebCams](#)

Select Lesson:

Welcome to the SchoolNet8.com Website Guide

Your guide to resources found on this website and links to other useful information on the Internet. The guide is presented in 10 lessons designed to highlight various features of the website:

- [1. Comparing Observations](#)
- [2. Solar Radiation](#)
- [3. Sortable Current Conditions](#)
- [4. One Minute Data Traces](#)
- [5. Web Cameras](#)
- [6. Live Super Doppler8 App](#)
- [7. Using RADAR with Observations and Warnings](#)
- [8. Orthophotography](#)
- [9. Wind Barbs](#)
- [10. Navigating SchoolNet8.com](#)

As with the rest of SchoolNet8.com, this guide is a work in progress. Your comments and feedback are **certainly welcome.**

SchoolNet8.com sponsored by: [CIPCO](#) Page Loaded: 22 August 2005 11:41 PM [[Contact Info](#)]

SchoolNet Training Night



On to web cameras!



Lets track things other than
giant mutant killer insects!

Canon VB-C10

- Webcam runs embedded Linux OS with internet support built in. (No Attached Computer!)
- Keys to happy webcam
 - Mount it high
 - Mount it sturdy
 - Keep the dome clean
 - Keep the insects away
 - Keep electronics dry

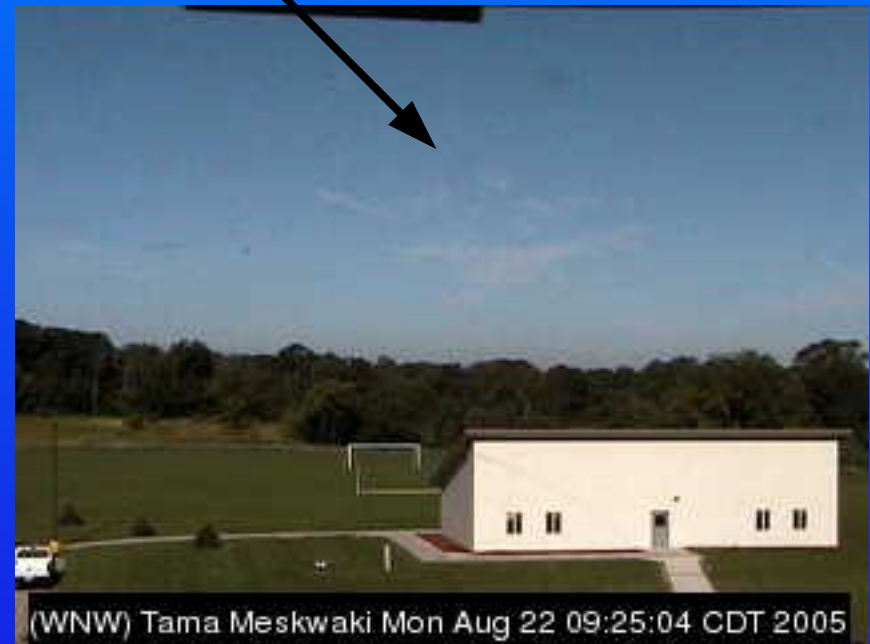


New Model: Canon VB-C50

The sky is blue!



VB-C10



VB-C50

Movie Time!

Switching Gears



Chatting History

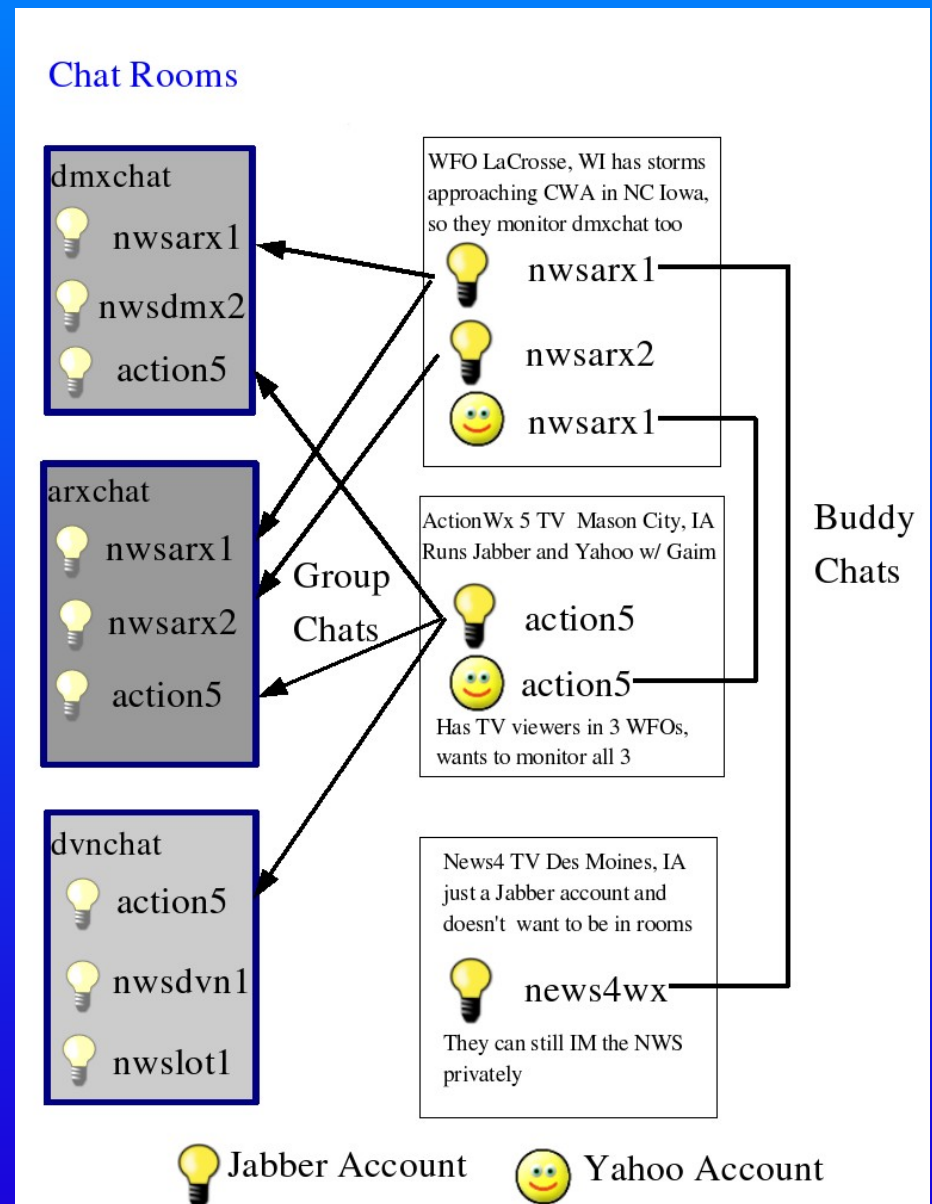
- We were turned on to the idea at the Fall 2003 Baron Training, others had been using for a good while now. (daryl conducts room survey...)
- Began using Yahoo! IM in spring 2004 with good success.
- Winter 2005, began a joint project with the NWS DMX to look for alternatives. Why you ask? (daryl advances slide)

Problems with Yahoo!

- The Yahoo! provided client is adware.
- Chat rooms are limited to 50 users (?)
- Yahoo! Protocol only supports participation in 1 chat room at once.
- Yahoo! Chat not allowed on some WANs
- Securing chat rooms from unauthorized access. How?
- Nobody likes getting Yahoooooo'd!!!

New Chatting System

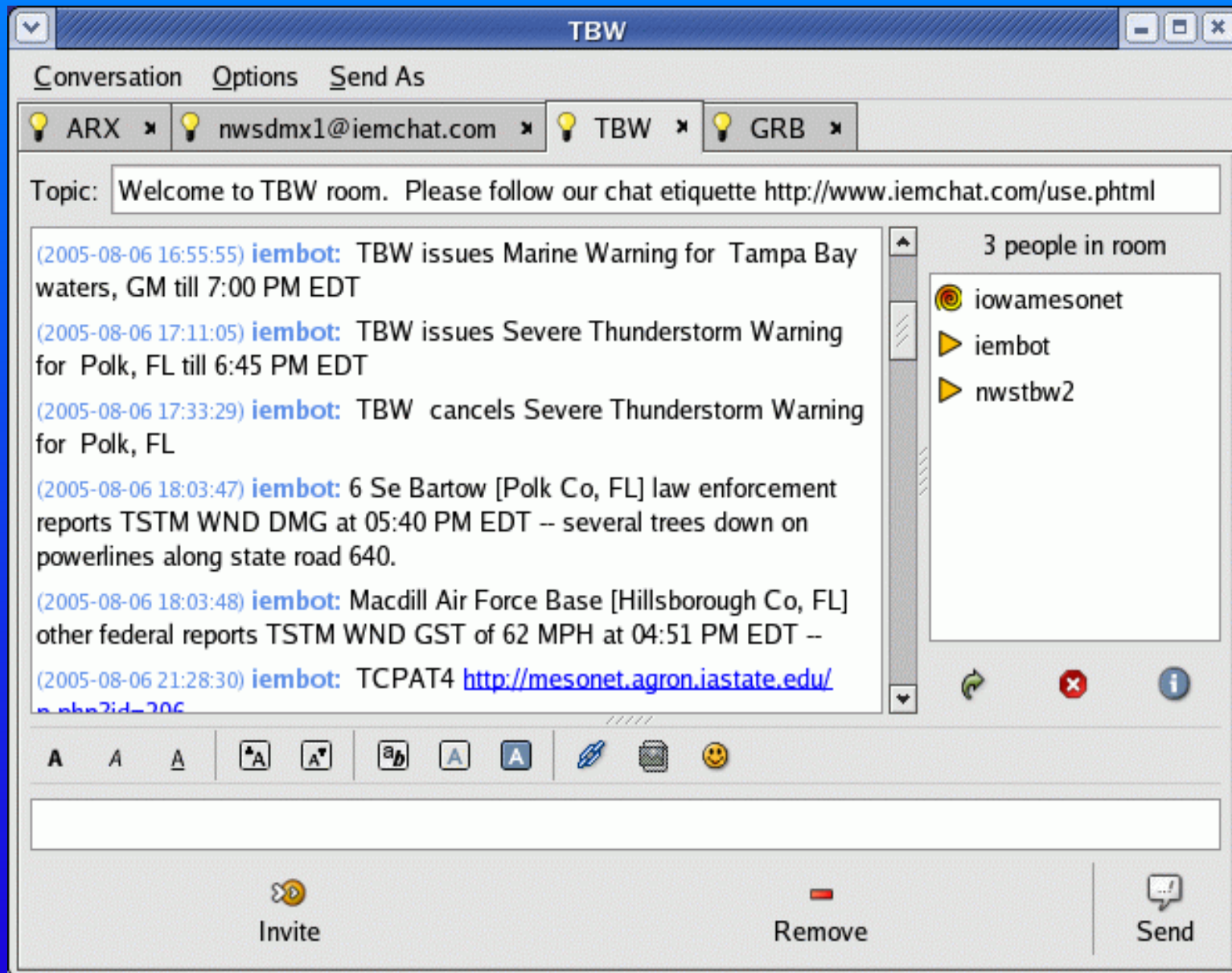
- Secure
- Simple
- Scalable
- Sustainable
- Sexy (why migrate?)
- Support legacy Yahoo! clients



IEMChat Project Features

- Encryption
- ∞ users in a chat room
- Users can join multiple rooms (multiple WFOs)
- Rooms have recent history when you join them. Can get caught up quickly.
- Standards based XML protocol (Jabber). Open Source client (Gaim).

Screen shot



Hello, lembot!

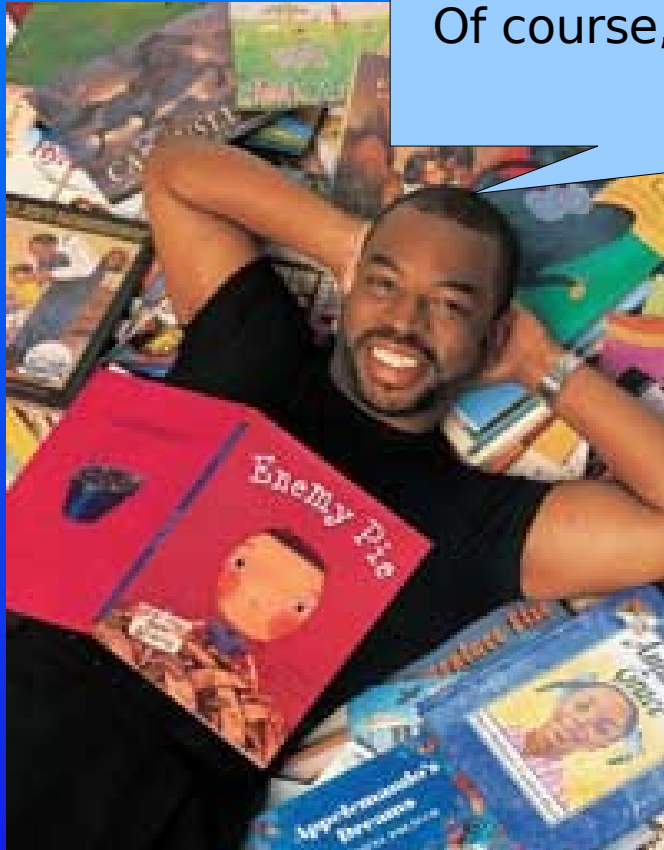
- lembot is the code name for a chat “bot”
- A bot is a program that participates in chats and acts like another user
- lembot is a good bot!



iembot is smart and fast.

- TBW issues Marine Warning for Tampa Bay waters, GM till 8:45 PM EDT
- MHX issues Severe Thunderstorm Warning for Onslow, NC till 11:15 AM EDT
- GGW cancels Lake Wind Advisory for Central and Southern Valley, MT and Garfield, MT and McCone, MT
- TULSA,OK (KTUL) ASOS reports gust of 41 knots from NNW @ 0919Z
- MCD! <http://www.spc.noaa.gov/products/md/md2046.html>
- 2 W Harrison [Douglas Co, SD] public reports HAIL of 1.75 INCH at 06:58 PM CDT --
- TCPAT1 <http://mesonet.agron.iastate.edu/p.php?id=505>

Of course, you don't have to take my word for it.



SchoolNet8 Website
<http://www.schoolnet8.com>

KCCI-TV Website
<http://www.theiowachannel.com>

IEM Chat Project Website
<http://www.iemchat.com>

Iowa Mesonet Website
<http://mesonet.agron.iastate.edu>