

McIDAS in the Classroom: Tales of a Wayward McIDAS Site Coordinator

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Outline



- Introduction
- McIDAS in the classroom
 - From the IPP to Routine use
 - Real time display
 - Community outreach
- Issues and challenges
 - McIDAS
 - Non-McIDAS
- Future



Introduction

- Background about Madison College (aka MATC)
 - ~40,000 students
 - 9 campus locations
 - 12 county district
 - +3200 graduates per year
- Prior to August 2014:
 - Adjunct Faculty at MATC
 - Full time UW Associate Scientist
- Post August 2014:
 - Full time Faculty
 - Part time UW Associate Scientist

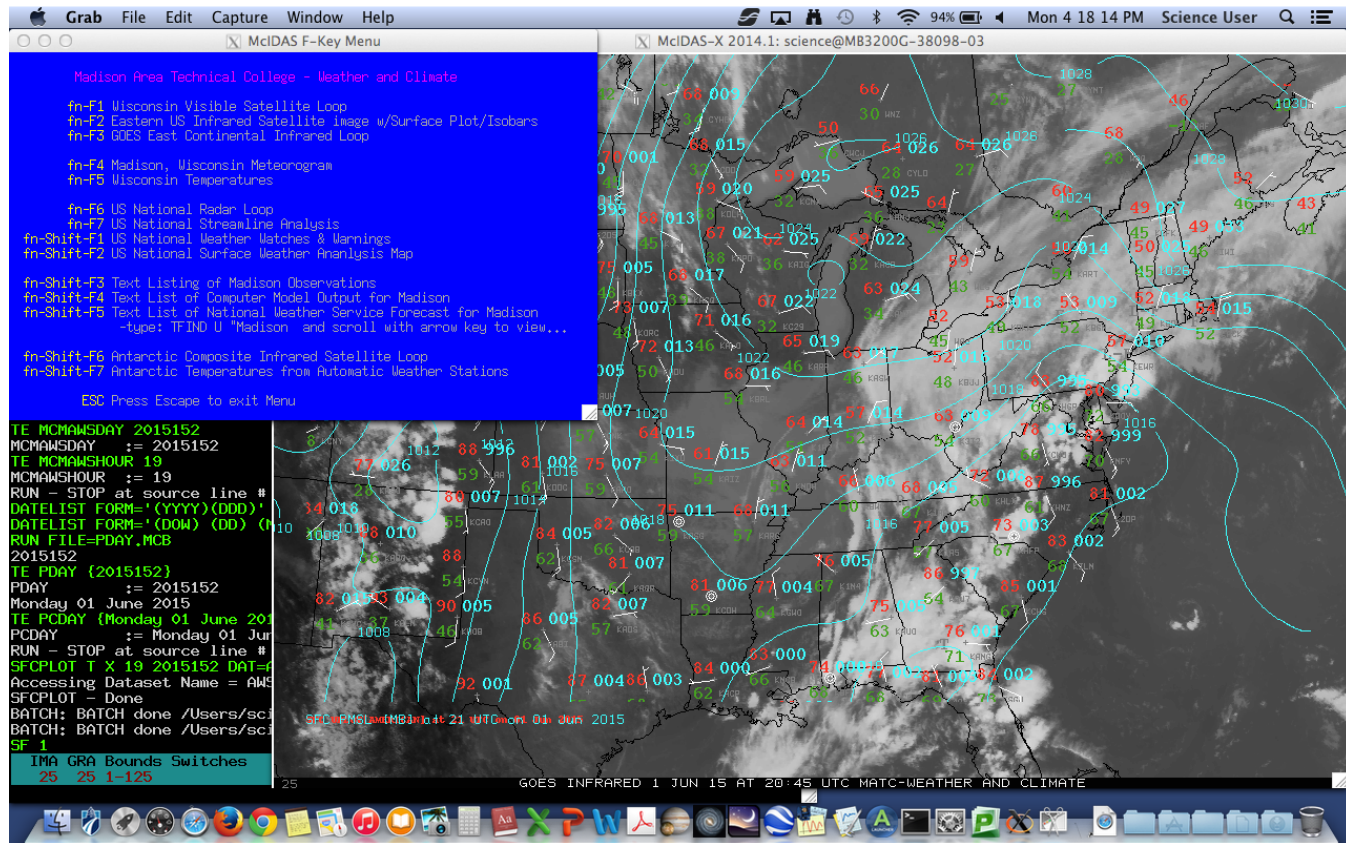


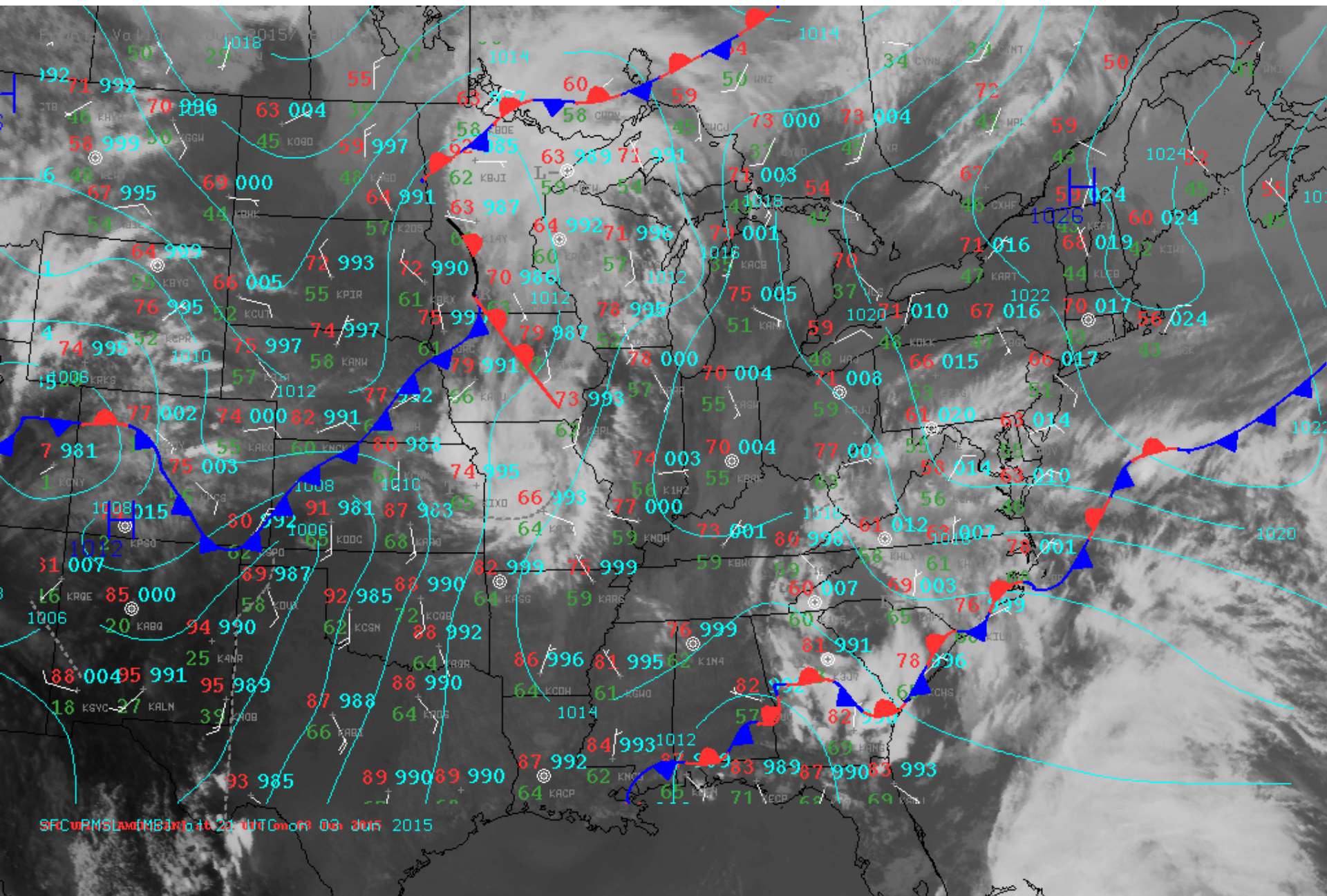
From MATC IPP to Routine use: McIDAS in the classroom

- 2010: Madison Area Technical College Interactive (MATC) Processing Project (IPP) (See MUG Meeting 2010 presentation)
 - Unidata Equipment grant for:
 - Servers (ADDE and LDM)
 - Instructor and to seed student use (McIDAS-X & some McIDAS-V)
 - Displays (McIDAS-X)
 - Rollout of classroom laptops (60+) (McIDAS-X)
- Applications:
 - Student Real-time Weather Scavenger Hunts
 - Satellite Meteorology:
 - e.g. Clouds top vs. Clear sky compared with Surface observations
 - Precipitation/radar
 - Paperless Weather Forecasting

Real time display

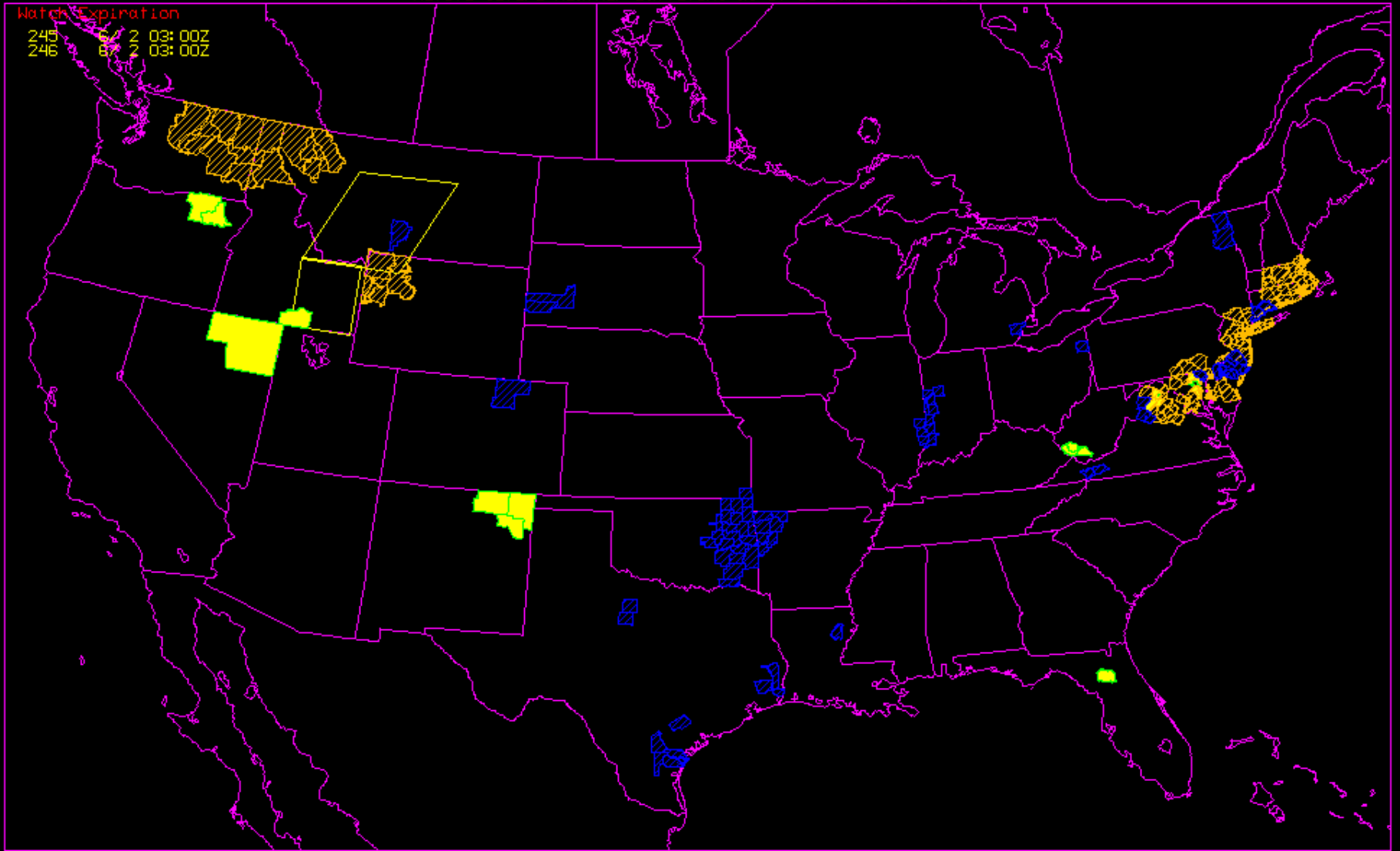
- Display in the classroom laptops:



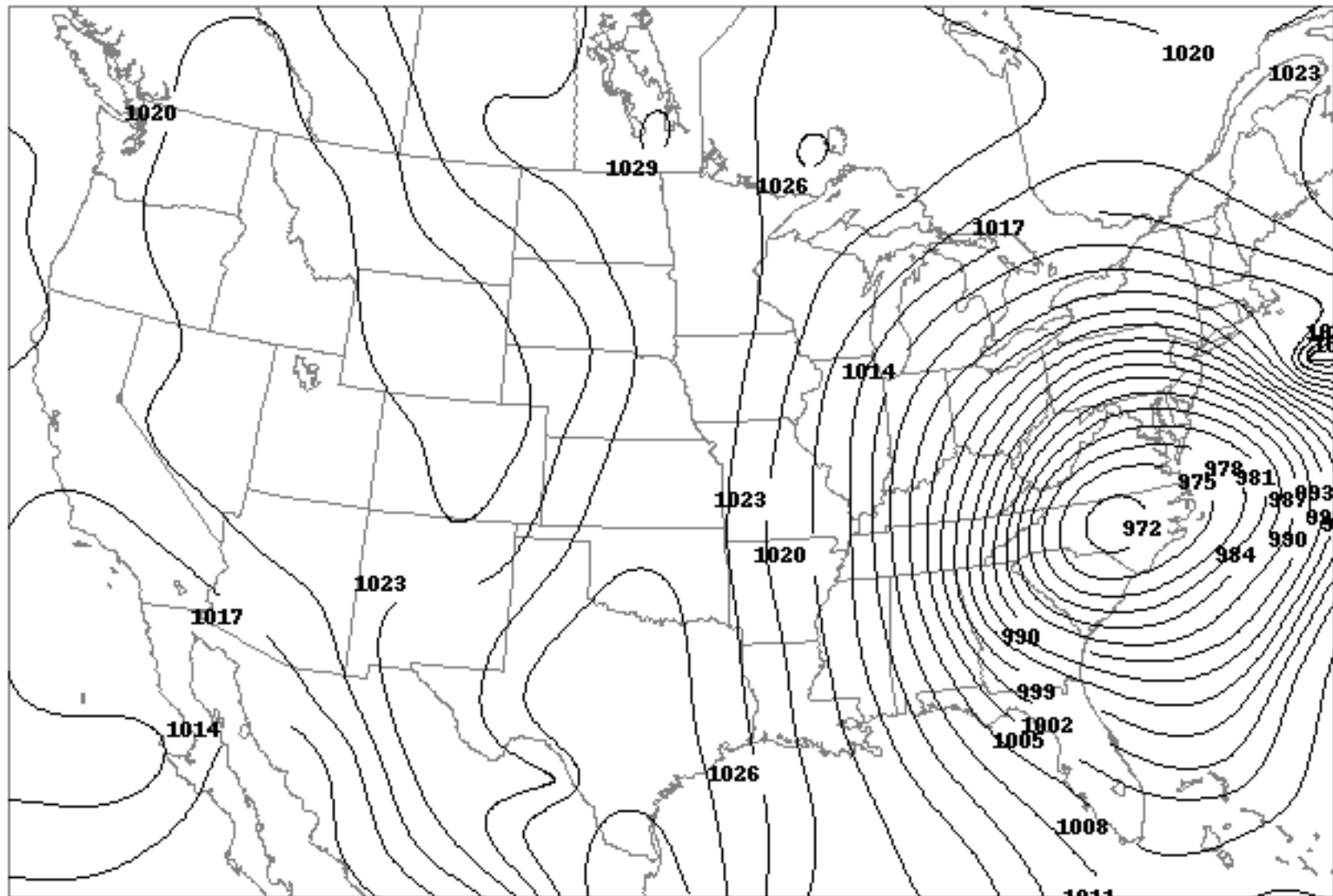


Watch Expiration

245 6/2 03:00Z
246 6/2 03:00Z



	T-Storm	Tornado	Winter Storm	Blizzard	Winter Wx Advisory	Flood
Watch	Yellow outline	Red outline	Blue outline	White outline	White hatched	Blue hatched
Warning	Yellow solid	Red solid	Blue solid	White solid	White hatched	Blue hatched



SFC PMSL [MB] at 18 UTC on 13 Mar 1993

Community Outreach

- MidWest Severe Storms Tracking/Response Center
 - Satellite support:
 - McIDAS-V
 - Via ADDE
 - Mini Severe Weather Seminar: Dark Skies
- Science Olympiad
 - Hamilton Middle School



Issues and Challenges

- Limited IT support
 - Nearly no Unix/Linux on campus
 - Primarily Windows
 - Mac/Apple nearly exclusively used in Art Department and Physical Sciences Department

- Wireless Networking issues with a mobile classroom
 - (Minor issue: Wired network connection stability for servers)

- Computer "Image" - rollout and stability

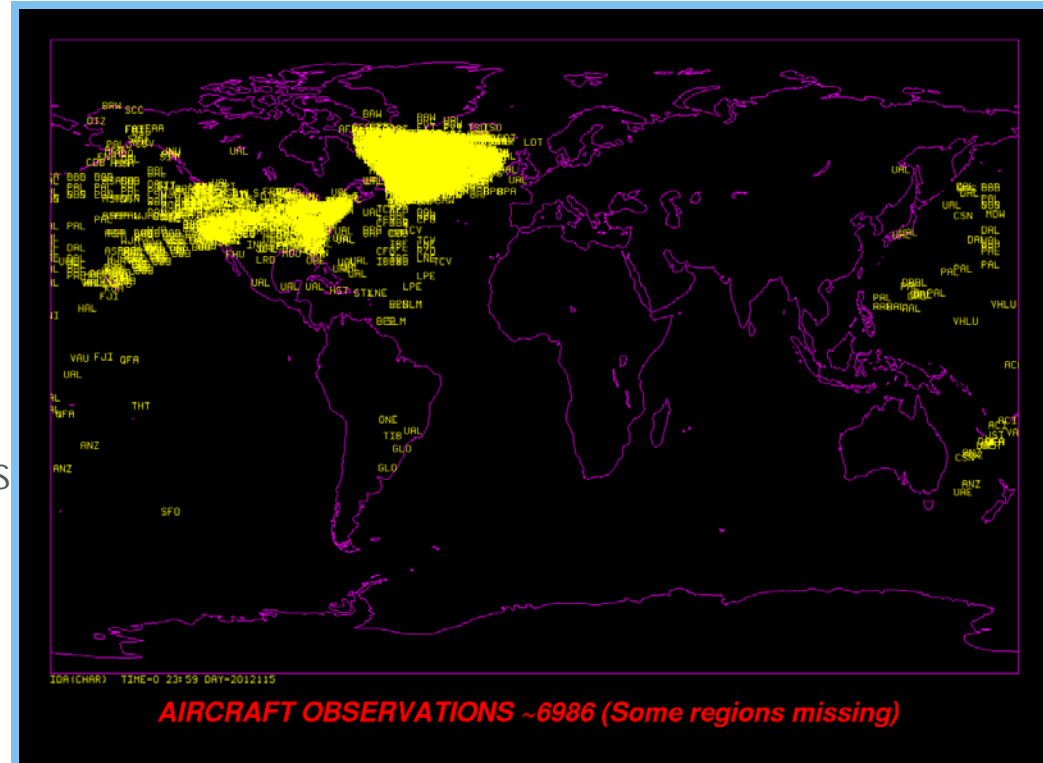
- OS support level mismatch

- Restrictions on administrative access (security concerns) to "fix" issues as they are noticed – remotely or even in house. Must rely on IT to fix and if lab that day, may be facing a time crunch.

- Lack of computer refresh.

Issues and Challenges

- McIDAS related issues:
 - Reliance on Unidata community ADDE servers
 - AIREPs/PIREPs
 - Missing sectors
 - GFSMOS
 - SFCPLOT
 - Station model: clouds
 - WWDISP/WWLIST
 - Have more watch/warnings
- McIDAS-V/IDV adoption
- LDM and ADDE expansion



Future

- Support future course development
- Individual student research
 - Honors program
- Possibility of additional grant work involving students analyzing the data
 - McIDAS will be one of the tools in the tool box!
- New equipment
 - Servers
 - Tablet environment?

Thank you!

Questions?

Thank you to the Unidata, the Unidata community, UW- AOS, the McIDAS User Services Group, SSEC Data Center, and Madison College!

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