UNIDATA

From Wx Fax to Smart Phones
Evolutions in Unidata Information Delivery

by
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Outline of my Irreverent Reflections

- Before Unidata - aka “the dark ages”
- Tuning in to your inner Zephyr: I hope it quits raining
- NextLab and VisionLab - Drinking from a Firehose
- IDD → New York, Chicago, L.A., Waimanalo?
- The Mauna Kea Weather Center
- Back to the Future

Seriously Thanks

- My students and my research are deeply indebted to Unidata (and UCAR and NSF).
- Your data delivery and display services provide the foundation upon which my program is built.
The Dark Ages before Unidata

This is how we “Logged” in

My professors at UW had time to relax: Dick Reed, Frank Badgley, Bob Fleagle, and Phil Church.
That’s because Lorrie Grider was working full time to hang fax maps and plot data on charts.

Unidata has eliminated her job.

Difax maps in the hall with Dick Reed and Wendel Nuss. Dick routinely out-forecast everyone in Seattle.

Unidata ended his run.
A crises caused by Computers and Satellites

- The Unidata Program solved two problems:
  - Access to and acquisition of atmospheric science data
  - Access to interactive tools for conducting education and research with those data.

MEAS and NextLab

- Note the satellite dish on the roof
Warning this machine is a server, do not power down.

NextLab was funded by the MRI program at NSF. I pitched NeXT computers.

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Tuning in to your Inner Zephyr

“We suspect any person who takes on the job of (university Unidata) site manager does not have the foggiest notion of how the system works”

Fred House, Drexel University
Unidata C-band

- Satellite data delivery. Is it snowing again Tom?

MEAS and NextLab

- Dr. Watson and Steven Chiswell with SUN II workstations
MEAS and NextLab

- WXP display for 1 June 1991

IDD to Waimanalo?

- Dave Fulker’s clear vision of Internet data delivery.
- Skeptics argued that the Internet would fold once NSF pulled out.
the Internet hasn’t folded yet

IDD

Even in Hilo!!

University of Hawaii VisionLab

Focus on Tropical Meteorology
University of Hawaii VisionLab

Quad-core Mac Workstations
- can run IDV and Illustrator

Mauna Kea Weather Center

- Provides custom forecasts of $C_n^2$ and “seeing”
- Smart-phone friendly weather server
Mauna Kea Weather Center

- Provides custom forecasts of $C_n^2$ and “seeing”
At 00z YK2 the UH Weather Server turned into a pumpkin*
*perhaps the only one in the US, given all the reminders from UPC

Back to the Future

- Unidata’s challenge remains to gracefully replace “obsolete” tools
- with new tools that manage an ever increasing torrent of data,
- and to do all this with insufficient funds and continuing advice from absent minded professors
Unidata cyborg:

- can project any data or model output upon command.
- manages your weather derivatives portfolio
- books travel based on weather outlook
- Can laser holes in fog, while keeping your lunch cold
Questions?