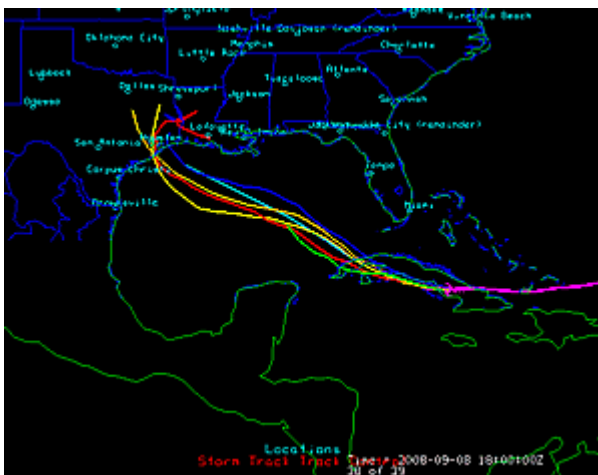


Hurricane Ike

Hurricane Ike and Texas A&M

While Houston braced for Ike's landfall, Gerry Creager at Texas A&M did some emergency planning, sending a heads-up to LDM users that the potential for his site's losing power was great. Here's partial text of Gerry's message:



If you're feeding from Bigbird or Sasquatch, please plan to have alternates available over the weekend. Although we do not anticipate losing power and backup power, these things have happened before. For those of you who haven't taken notice, NHC is predicting a landfall due south of my site by about 100 miles. The degree of recurve after landfall is subject to some conjecture. I'm anticipating we'll see 60+ kt sustained winds and 80 kt or so gusts, which is somewhat higher than this

area's used to. I expect downed trees and power lines, and given the history of our power system, I expect some power failures. If we stay up, there's no guarantee other areas of campus will, as we're pretty widely dispersed, See you on the other side.

Texas A&M's computers were up for the duration of the high hurricane winds, and College Station did not experience the outages or property damage that Houston, and more particularly, Galveston, sustained.

Hurricane Ike and [RAMMADA](#)

Unidata staff used hurricane Ike as well as other storms this year to explore the requirements of realtime data collection and case study creation using RAMMADA.

Like many other weather observers, both professional and amateur, staff in the Unidata

Program Center were following closely the projected path and predictions of the hurricane. Unidata staff members archived various data sets and products to help illustrate how RAMADDA can be used to generate case studies both manually and automatically by setting up the "harvester" within the program. RAMADDA is an open data management framework that enables a data provider or a community of users to upload, manage and share large data holdings. It is designed to run in multiple contexts, ranging from local desktop use to real time and case-study data archives. In this instance, Jeff Weber and Jeff McWhirter have created a [study](#) that has the potential to be useful to all of the communities that Unidata serves. The weather community will be interested in the storm tracking and storm intensity files, while the climate community can view Ike in context with other seasons and storms, and hydrologists may want to use and add storm surge, drainage, or other hydrological data. It is this concept of multi-disciplinary and dynamic case studies that is driving the development of the RAMADDA within the Next Generation Case Study framework. RAMADDA has many uses other than case studies. The image above shows the solutions for Ike's landfall derived from various operational and experimental models.

Welcome New Committee Members

Unidata's governance committee structure can easily be described as a critical component of any success the organization has achieved thus far. The committees provide guidance, participate in decision-making, provide critical comments on pivotal documents, and create a dialogue structure.

Meetings of both the Users and the Policy Committee are taking place this month in Boulder. We will be welcoming new members to both committees. Joining the Users Committee are: Brian Etherton, UNC-Charlotte, Brendon Hoch, Plymouth State University, and Larry Oolman, University of Wyoming. On the Policy Committee side we will welcome Brian Colle, Stony Brook University / SUNY, and Anton Kruger, University of Iowa as members and Peter Griffith who will be presenting NASA's perspective, based on his knowledge and experience the agency.

Providing your ideas to the committees is a crucial part of Unidata's decision-making process. The Users Committee will be considering the GEMPAK transition and making recommendations to the Policy Committee. In an all-community e-mail Users Committee Chair, Gary Lackmann, wrote: "an online [forum](#) has been set up in an effort to increase community participation in this discussion. We welcome your contributions to the forum, and we encourage any comments and feedback that you wish to share..." You are welcome to correspond with any [member](#) of the Users Committee as well.

We urge you to review the [agenda](#). Other topics of interest will be discussed during the meeting, and your input to any of those items is welcome.

The Users Committee meets 9-10 October in Boulder. The Policy Committee meets later in the month, 21-22 October. Here is that committee's [members list](#).



A Multidisciplinary Computer Lab for Meteorological and Oceanographic Applications at the FIT

Dr. Steven M. Lazarus (PI), Associate Professor Marine and Environmental Systems, Florida Institute of Technology

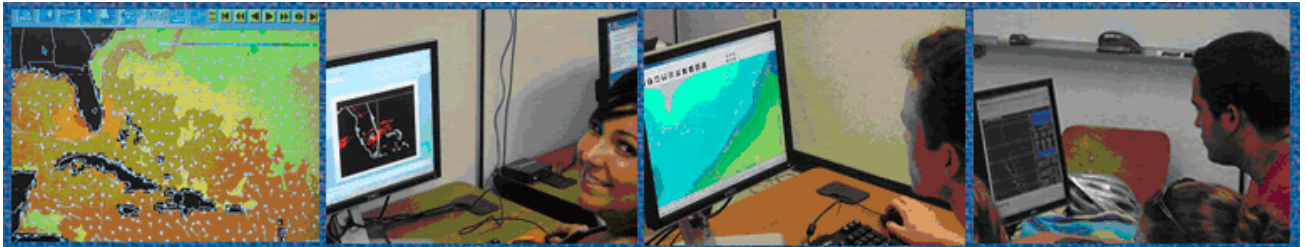
The “Florida Tech Multidisciplinary Computer Lab” was funded, in part, by a Unidata Equipment award totaling approximately \$12K. Nine Dell desktop machines were purchased, five UPS, and a single port switch. Each machine was equipped with an Intel Core 2 Duo Processor E6600 (2.40GHz, 4M, 1066MHz FSB). The machines were purchased and up and running prior to the beginning of fall classes in August 2007. The Florida Institute of Technology (FIT) contributed to the development of the lab by providing approximately \$5 K in internal funding for computer desks, chairs, as well as port and KVM switches. FIT Information Technology personnel configured the boxes and installed supporting freeware including an Xwindow emulator (Cygwin) and the Unidata IDV.

Since their installation, the machines have been extensively used for both research and educational purposes – supporting the work of several graduate students engaged in projects such as a NOAA funded grant coupling the WRF-EMS to hydrodynamic and wave models. For this project WRF grib output is decoded and viewed using GEMPAK. In Mesoscale Meteorology last spring, students used both NSHARP (e.g., Fig. b) and GARP (e.g., Fig. e) software to evaluate the 3 May 1999 Central Oklahoma tornado outbreak (using COMET archived data streams). This year’s synoptic students used both NMAP2 and GARP to view COMET archived data sets from the Superstorm of 12-14 Mar 1993 as well as data provided in "Northeast Snowstorms" text by Uccellini and Kocin (AMS, 2004). Oceanography students are students in both the synoptic and mesoscale courses. At the time of this writing, FIT undergraduate students are immersed in a summer Field Projects (FP) program and are working with faculty to evaluate the

NCEP Real Time Mesoscale Analysis (RTMA) products. This work includes the use of GEMPAK routines to generate comparison analyses that integrate additional surface data from a small network of 5 temporary weather stations deployed by FIT students in the Cape Canaveral region as well as data from the KSC mesonet which is not ingested into the RTMA. We have configured a special version of GARP to integrate these local surface data sets with the traditional surface data brought in via our LDM feed.

Oceanography and Environmental Science students are an integral part of the FP program here at FIT, and they are getting their first exposure to the suite of Unidata software. In addition, they now have access, via NMAP2, to the Real-Time Ocean Forecast System (RTOFS) sea surface temperature and current velocities as well NOAA's Wave Watch III model output including significant wave height, period, and direction (e.g. see Fig. far left). FP students are also engaged in individual projects involving the compositing and viewing NLDN lightning data via NMAP2 (see 2nd Fig. 2nd from left), and will be using model forecast winds to calculate trajectories in conjunction with an FP air sampling project on the 4th of July.

It is our desire to continue to broaden the use of the Unidata software here at FIT. This process will be facilitated as more datasets become available, especially IDV-friendly data streams as well as case studies and non-traditional data sets (i.e., non-meteorological).



Profiler Data

Since the announcement by NOAA's National Weather Service of the temporary discontinuance of the wind profiler data products, Unidata staff has been working collaboratively with NOAA and [The Weather Coalition](#) toward a resolution of the issue and the eventual restoration of the data to the community.