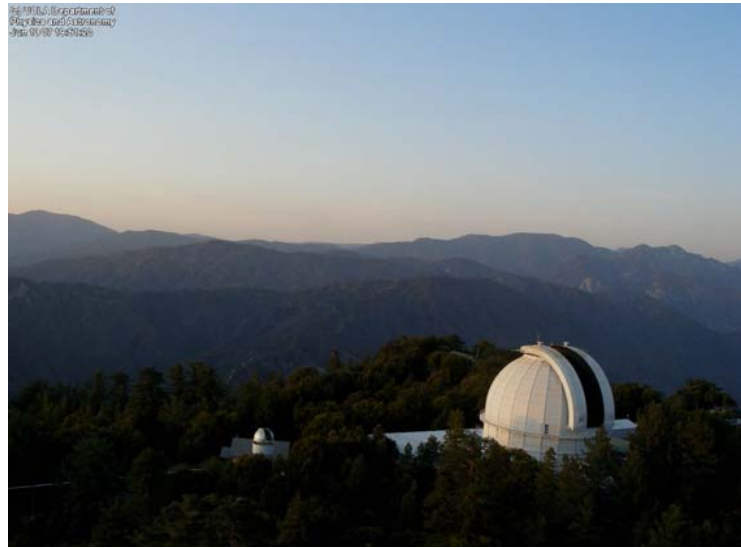




2008 Nightly Reports and Remote Observations



By ~ PJ Sallave - Goldfinger



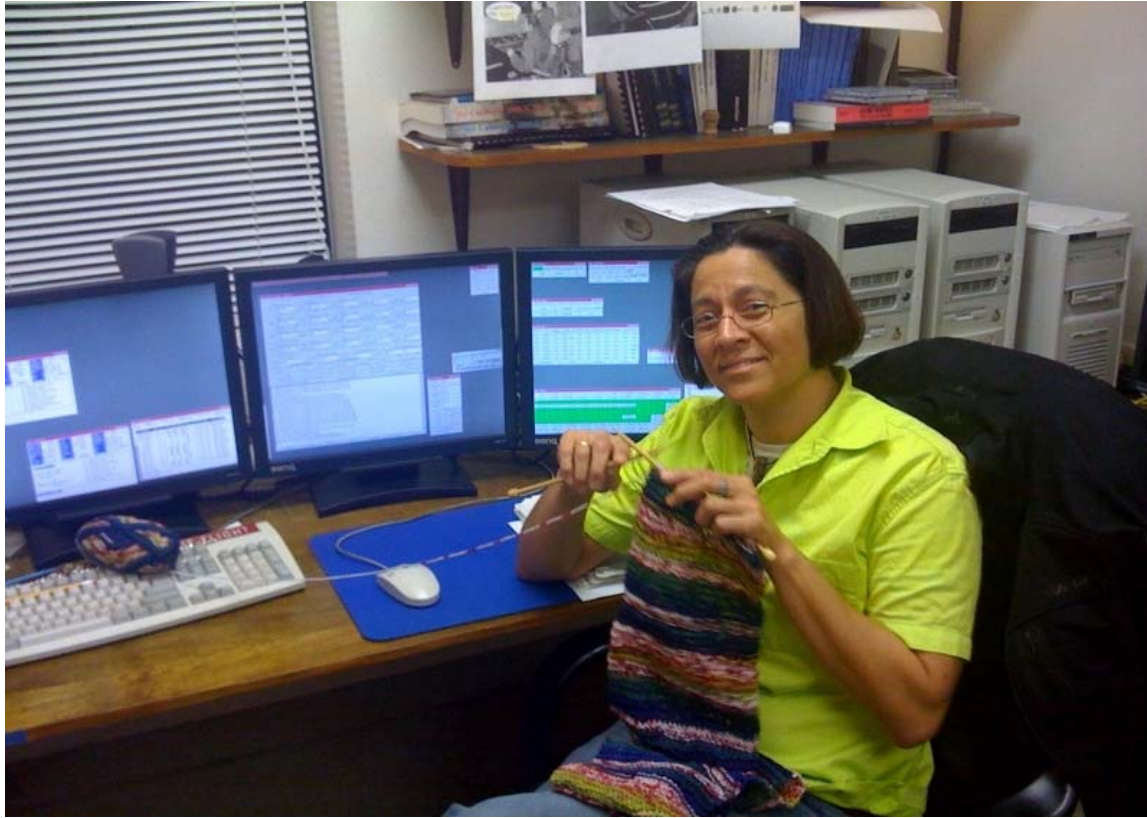
LESIA





Observing Protocol

- To assure the Highest Quality of scientific output possible for the PI's .
- The Observing Assistant has full responsibility for night-time operation of the Array/Observatory, related observing equipment.
- To continually evaluate the Array system status, including environmental control functions, and schedules of the targets to be observed.
- Insure safe use of the instruments and systems during remote observations - We are watching !!!



Knitting while operating



Observing Statistics 2008

Based on nightly observing reports

- 269 Observing Sessions attempted
- 115 had multiple instruments running
- 77 nights lost mainly due to weather
- Highest reported seeing values in August
- Only three full nights noted being lost to technical issues !!
- The most prevalent technical issues were
 - Carts getting stuck on rails
 - S2 telescope computer rebooting itself
 - Bandwidth due to remote observation
 - Telescope domes and enclosures





Remote Observing Protocol

The current CHARA protocol is that if Remote Observation time is allocated ...

- The Remote Observer must first be trained and fluent in Array operations.
- We insist and will check that Astronomers have observational experience and once again are acquainted with the Software and Observing manuals.
- Also required for first time observers is a trip and visit for an accompanying observing run at the CHARA Array to learn observing techniques firsthand.
- Learning over Skype or running things with just a few nights practice is not sufficient and will not qualify for remote observations.
- To insure safe use of the instrument .
- **CRUCIAL TOOLS** * Take Notes* The Weather Gui* Sockman* Patience !!!



Remote Facilities

- All with hard copies of CHARA procedure documents at observing stations !!!

- Atlanta
- Sydney
- Grasse





Modes of Operation

- Primary observing:
 - Just like normal observing
 - Use Primary GW & OPLE
- Secondary observing:
 - **We try to stay out of the way :-)**
 - Use Secondary GW & OPLE



– Slide credit Ellyn Baines 2004



Remote Observation Tips

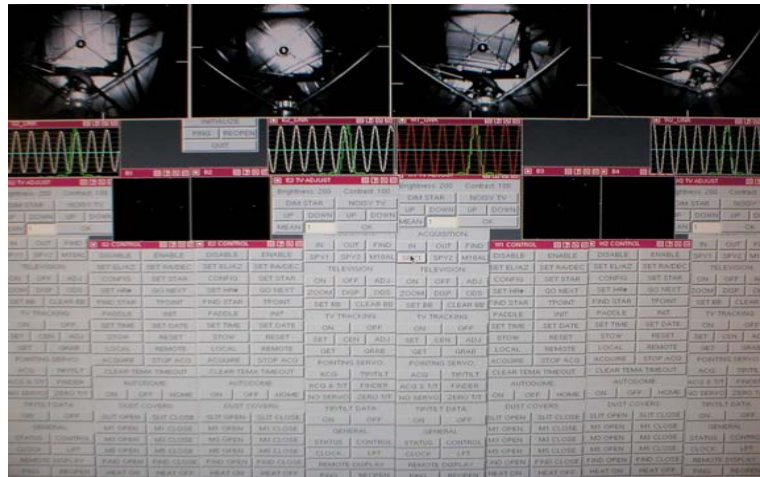
- Carts, Beams, Telescopes
- Weather GUI
- Sockman
- Use CHARA documents
 - Software Overview
 - Remote Observing Guide





Array Initialization 2008 - Reminder -

- Over **4000** pieces of Hardware, Software and Equipment need to be started and shutdown each observing session with six beams.
- Does not include technical problems !!!





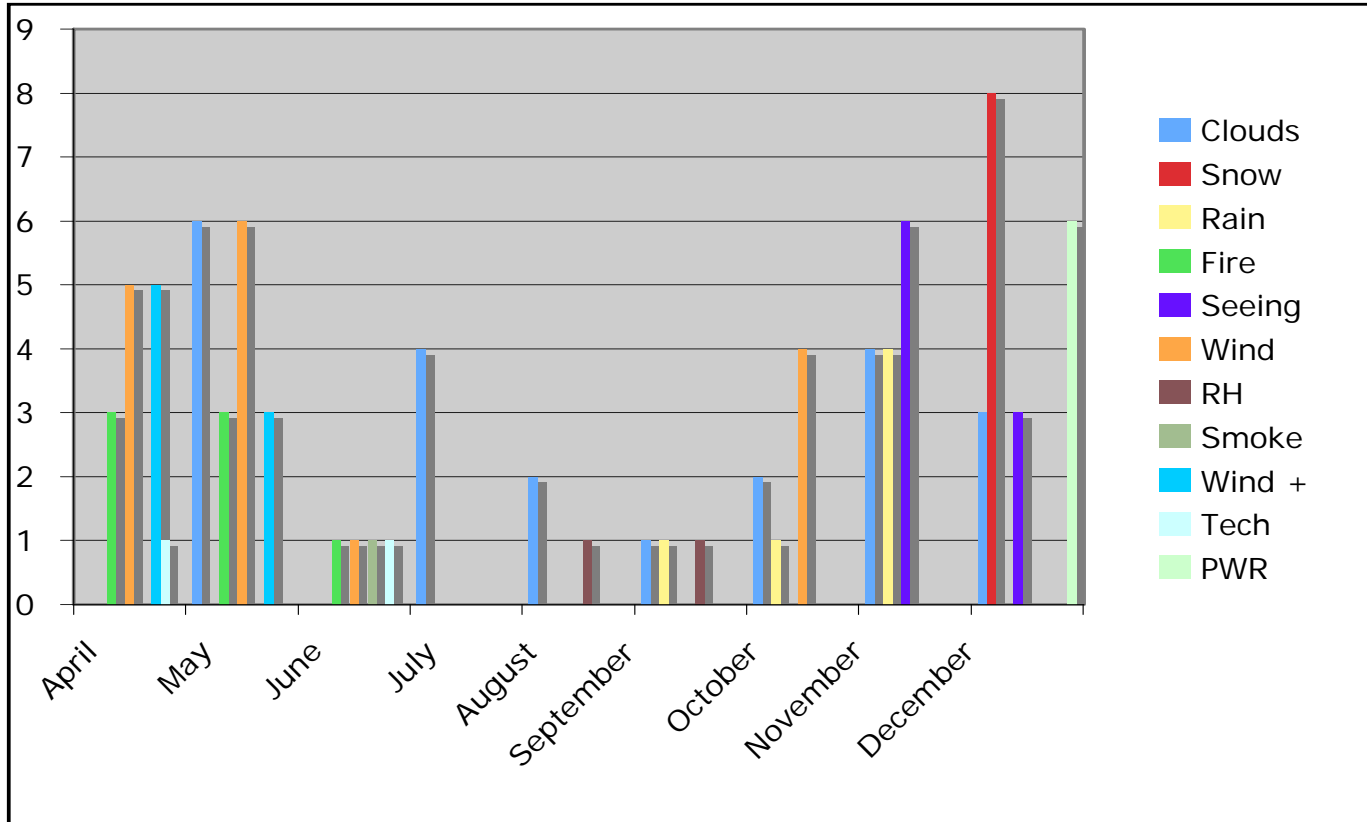
Alternative Observing Scenarios

- The Q is still available for use
- Inquire about substitute observing modes
- Choose Targets that are in different parts of the sky
- Have targets ready for capricious weather conditions
Ex: Bad seeing, wind, a bright source would be better
- Time Saving - Pre Check for background stars in the star fields



Weather 2008

Based on Observing Reports





The CHARA Control Room



When putting out fires

Fermilab Tevatron Control Room





2008 Observing Memoirs confessions....

- Headline Remote Observations from Sydney -
- Pavo Crashes TCS on All 6 Domes -
- Gail breaks filter wheel -
- Ming and Ajay candle light observing



(Observations done all night with back lights on in lab)





CHARA Information

- Visit the CHARA web site under User's Info for operational procedures, site information and other documents at:
- <http://www.chara.gsu.edu/CHARA/data/>
- Log in info required, if needed please inquire

Thank you !!! Heres to a fantastic 2009 !!!

