



		GRAND WAZOO - PRIMARY		1.5
LOCAL TIME: 16:35	CHARA	TIME 23:35 SIDEF	EAL TIME: 13:08	
CALIBRATOR 1	FIND IRC	WHEN		NOT SET
NUM	IRC	HR	HD	SAO
CLEAR				
OBJECT	FIND IRC	WHEN	1.00	NOT SET
NUM	IRC	HR	HD	SAO
CLEAR	11 A.			
CALIBRATOR 2	FIND IRC	WHEN		NOT SET
NUM	IRC	HR	HD	SAO
CLEAR	1			
CHECK STAR	FIND IRC	WHEN		NOT SET
NUM	IRC	HR	HD	SAO
CLEAR				
JOB QUEUE STOPPE	D START.	OB QUEUE STO	P JOB QUEUE	CLEAR JOB QUEUE
Tipbit (mS) 5	Center (m) 0.00	0 Range (m) 0.01	0 REF	AUTO 0.0
SKIP LOW SNR	BYPASS FILTER	TARGET MEM Star Action	t - Do nothing - Initia	alize scope 🖕 Collect Tpoint da
CONFIG S	COPES K BAND	LONG SCAN J 10	1005 L SK/M000	Hz Frg _ NORM MODE .
SVNC GPS CLOCK	SYNC MY CLOCK	SYNC ALL CLOCKS	TRACK SOCKE	T SET DISPLAY
COMMENT	ST _ ALIGN /	ACO TIPTILT COMM	ALIGN NIRO	STOW
SCAN FOR FF	RINGE	RECORD DITHER		RECORD SCAN
Failed to send TIPTILT_OPE Failed to send OPLE_OPER	LOG to ople.			
Failed to used TPTLT_COPE_OPEN LOG OPEN / cthrcnut/chum TH YGAR 2006 WONTH 6 IS MARKED STATES MARKED STATES	LLOG to sple (distivitator, runary, 00 JAY 12 TOPEN TOPEN COPEN COPEN Coped connection from capited connection from capited connection from capited connection from capited connection from ver talescope or all calculations. for all calculations.	chi crut, chara-array, org, chi crut, chara-array, org, chi crut, chara-array, org, chi crut, chara-array, org, chi crut, chara-array, org,		

ObservingRealities and Constraints 2006



P. Sallave-Goldfinger











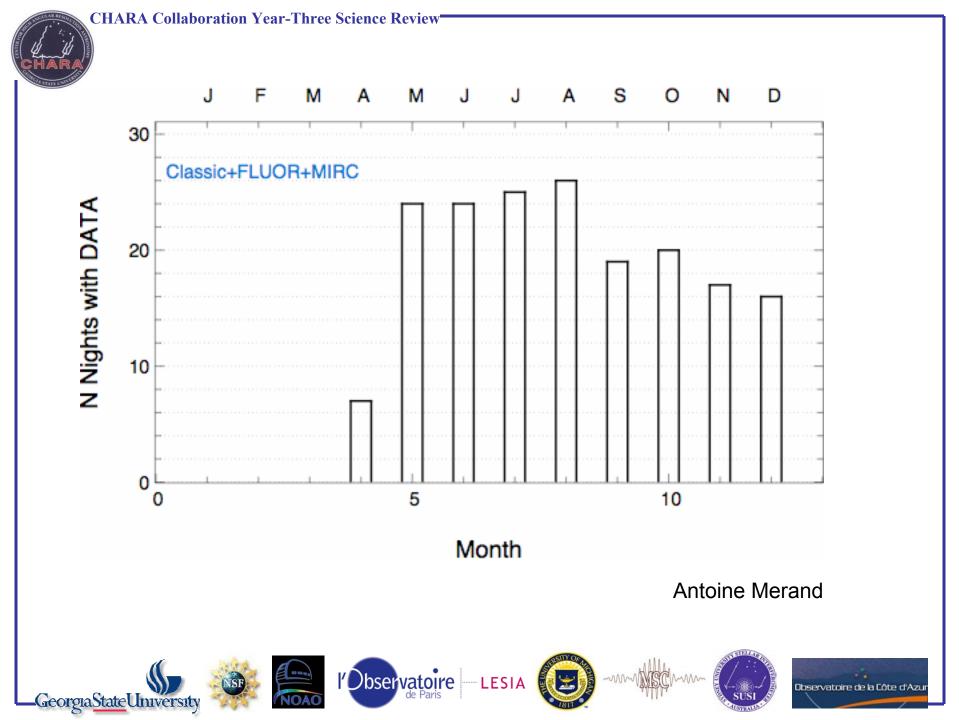




Observing Responsibilities

- To assure the Highest Quality of scientific output possible for the PI's and *at times Protect the instrument from the PI*.
- The Observing Assistant has full responsibility for nighttime operation of the Array/Observatory, related observing equipment, and *all Beam Combiners running :*)
- To continually evaluate the Array system status, including environmental control functions, and schedules of the targets to be observed.
- Basically "To make sure things don't go whacky "





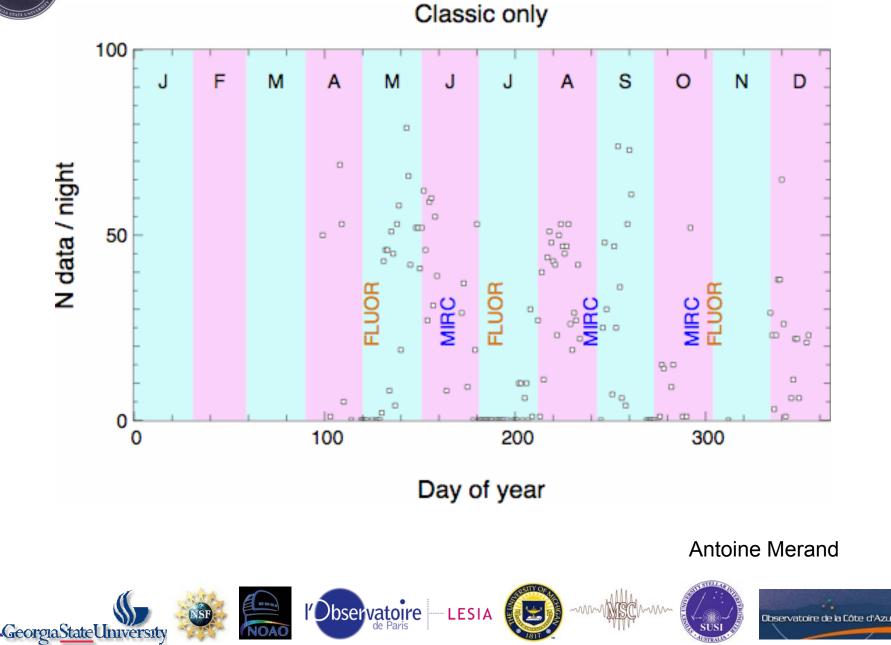


Observing Statistics 2006

- Current 2006 data from the CHARA Observing reports show that *212* observation nights were attempted total all beam combiners.
- Fringes were gathered on *162* nights.
- Around *3500* observations were made with CHARA Classic.
- *2100* data points were gathered on the S1/E1 baseline.
- Total AROC nights 8.
- AROC MIRC nights **5**.
- AROC only *3* nights.
- The **Grand Wazoo** which makes this all possible was introduced October 1, 2006 !!!















Building The CHARA Consortium







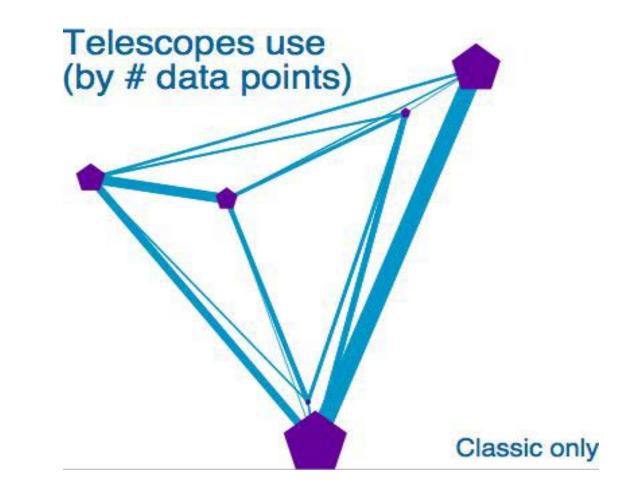












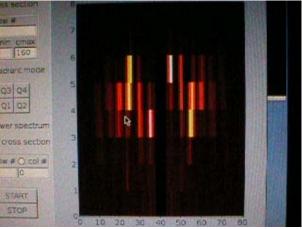
Antoine Merand



CHARA and MIRC

* Operated successfully together for 5 nights without a hitch -





Go Fringes !!!



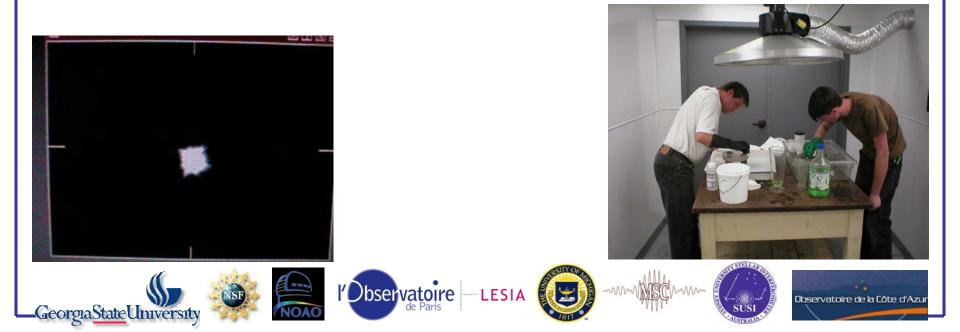




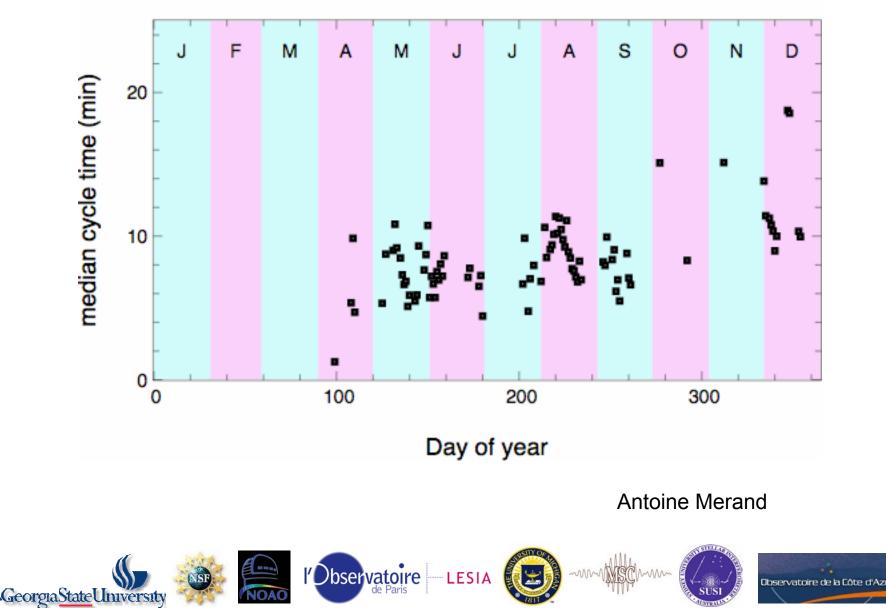




Around The Array 2007







nights with at least 15 data points

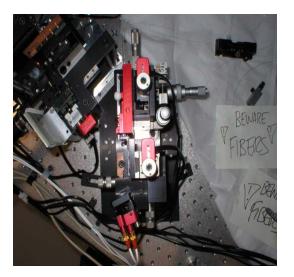


Array Initialization 2007

 Over 4000 pieces of Hardware, Software and Equipment need to be started and shutdown each observing session with six beams.

Observatoire LESIA

Does not include technical problems !!!

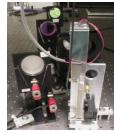


GeorgiaStateUnivers:

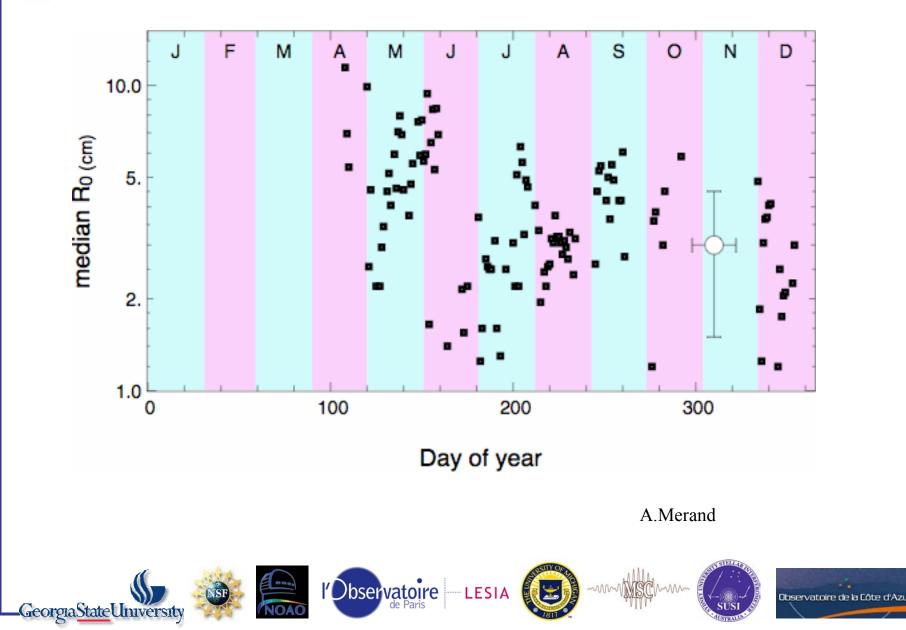














Array Functionality

- The Array *Still* works best whenever Theo calls or is Observing.
- More stable with two full time operators !!!
- Works very well even after being static for awhile.
- Doing up to *4 baseline changes* a night with MIRC Great -
- Hail to the new Baseline solutions implemented !!!!



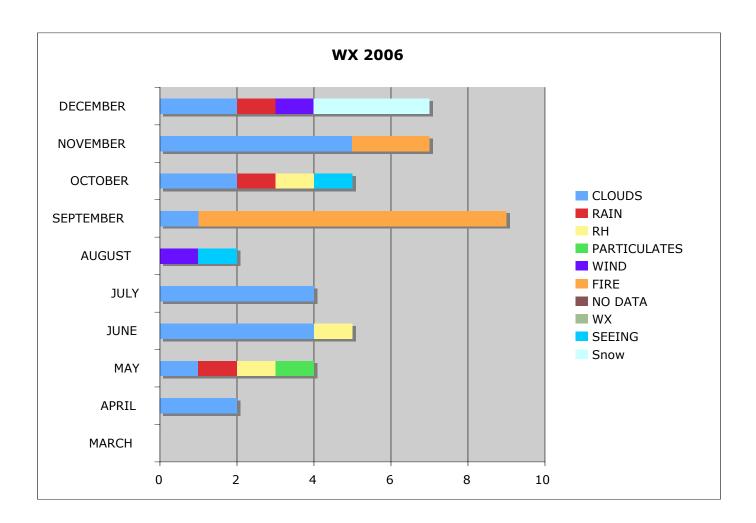


Alternative Observing Scenarios

- The Q Rules !!!
- Inquiring 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.



CHARA

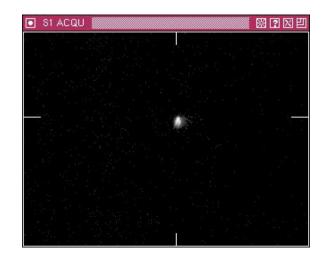


Based on 2006 Observing Reports





Off the Observing list going for Nova Scorpii 2007





Mag 4.8 the night previous estimate Monsignor Royer





AROC Winter Nights

- About 45 Nights attempted
- 16 data gathered
- 29 Weather prevailed









CHARA Control Room



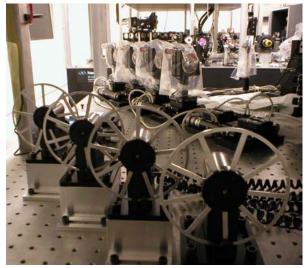
With Multiple Beam Combiner Operation







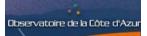
Hey Ming from MIRC



MIRC Optical Choppers









Weather Particulars for 2006

- Many California brush fires.
- California wild fires closed the Array for about 14 days.
- Closed due to particulates only 1 day for 2006.
- Precipitation at low RH levels.
- Extreme fluctuations in atmospheric conditions from one arm of the Array to the other.
- Decrease in atmospheric stability...Especially looking out over the exhaust pipe of Los Angeles !!!

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2006 Observing Memoirs confessions....

- Who do we call for a backup of any system ;-} Dr. Berger !!!
- Tired grouchy Array observers sharing information in the Observing report that has absolutely nothing to do with observing!!!
- Senior observer slapped verbally by a Hungarian Scientist.
- A certain person shall remain nameless... A CHARA PI & Deputy Director of The ISC at IPAC...never the less.... locked themselves out on the 100" catwalk and was heard yelling for assistance !!!

















Hey lets not forget these Guys -



Steve Golden Assistant Site manager

The list is Endless !!!!







Thank you for your Acknowledgment



This makes my Mother and family VERY Proud











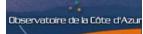




For 2007 Your CHARA ARRAY Operators *PJ Goldfinger & Chris Farrington*







Observing with AROC

Ellyn Baines



AROC Basics

• AROC = Arrington Remote Operations Center

• Located in Science Annex on GSU campus

- Dedicated 2/28/02
- In regular use from Jan. 2007 on



Outfitted Nicely

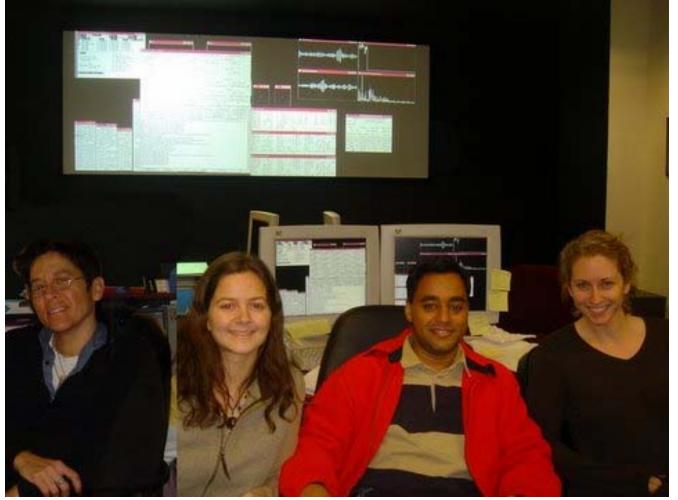
• Uses Virtual Private Network to talk to the mountain machines

• Has 2 Proxima projection screens, comfy chairs, coffee maker





Current AROC Crew

















Observing

• All servers (except OPLE) are run on Mt. Wilson machines

• We keep the number of GUIs/status windows to a minimum

• Beyond that, observing is pretty much the same!





Georgia State Univ

Primary vs. Secondary

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



Failure Modes

• Scope TVs freeze ("Too little memory") - restart scope server

• The other normal crashes, etc.





Advantages vs. Disadvantages

- No airfare costs Not on Mt. Wilson
- Can stay home
- It's so darn cool

Georgia State Univer

- You can't check clouds/weather
- Dependent on others to fix problems
- Can really confuse GSU cops





Success or not?

Yes!!

