

# Magellan Associate Director Report

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# Personnel

- ***Telescope Systems Programmer:***

- Glenn Eychaner took up this position in mid-November, and has already making important contributions to the Magellan operations

- ***Telescope Engineer/Scientist:***

- Ads were placed in the AAS and SPIE job registers, and in Physics Today; deadline for applying was March 1
- 14 applications were received; letters of reference were requested for 5
- Interviews will be carried out in June with top 2-3 candidates

# Personnel (cont.)

- ***Magellan Fellows:***

- David Floyd and Ricardo Covarrubias were selected as the new Magellan Fellows
- David obtained his Ph.D. at Edinburgh, and held a post-doc position at STScI; he works on the host galaxies of QSOs
- Ricardo Covarrubias is finishing a Ph.D. at U. Washington; he carries out research on supernovae
- David began his appointment in mid-February; his first chore has been to get a program going to measure and record image quality on science images taken with MagIC, IMACS, and LDSS3; he is presently working with Glenn Eychaner to implement new observer workstations (Mac Minis)
- Ricardo will arrive in Chile on May 22

# Observing Statistics

## Baade Telescope Instrumentation Usage:

	30 Mar 2006- 3 Sep 2006	4 Sep 2006- 8 Feb 2007
IMACS	68%	73%
PANIC	32%	27%

## Clay Telescope Instrumentation Usage:

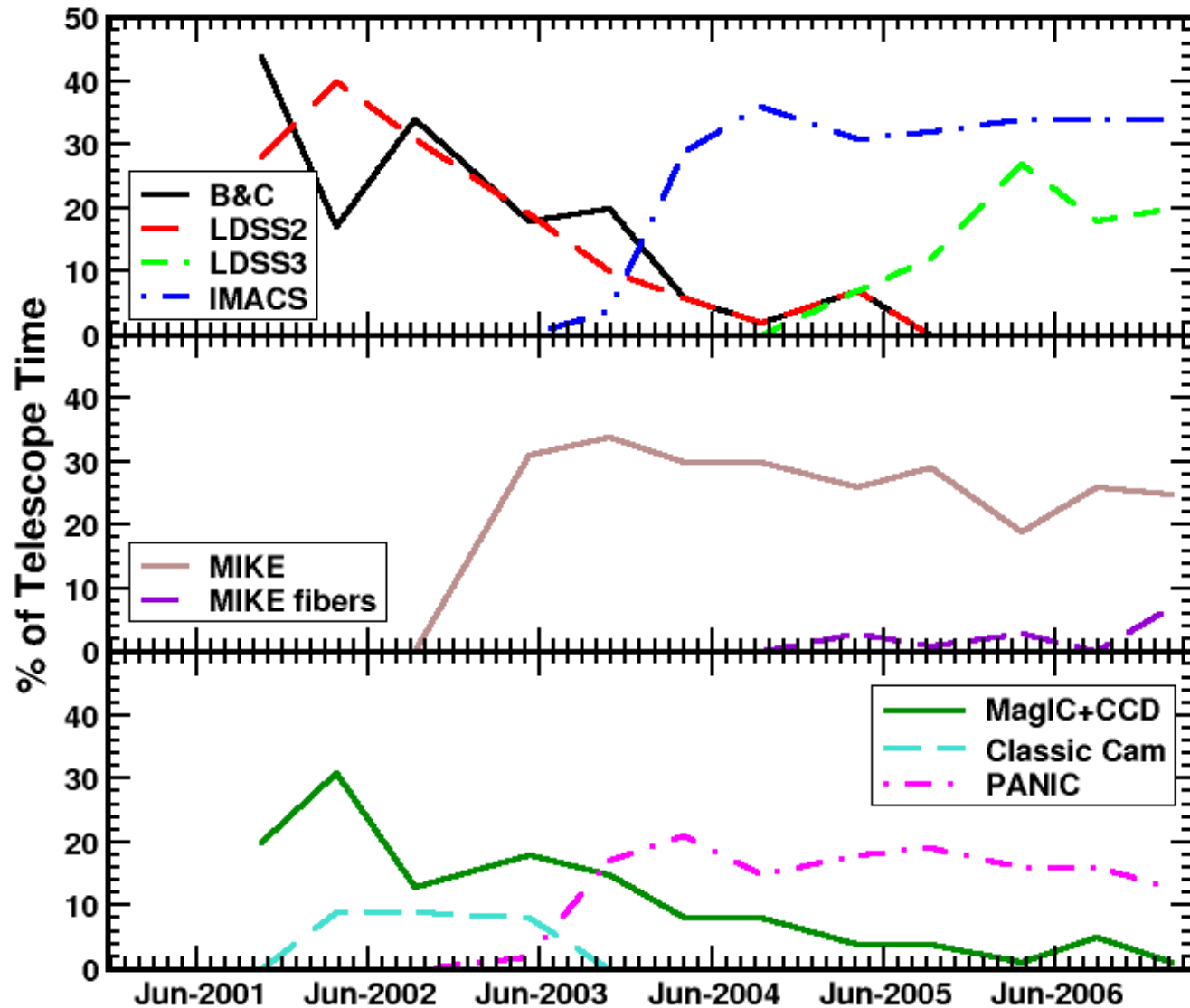
	30 Mar 2006- 3 Sep 2006	4 Sep 2006- 8 Feb 2007
MIKE	51%	48%
MIKE fibers	--	13%
LDSS-3	36%	38%
MagIC	11%	1%
Other	2%	--

# Observing Statistics

## Baade + Clay Telescopes Instrumentation Usage:

	30 Mar 2006- 3 Sep 2006	4 Sep 2006 8 Feb 2007
IMACS	34%	34%
MIKE	26%	25%
MIKE fibers	--	7%
PANIC	16%	13%
LDSS-3	18%	20%
MagIC	5%	1%
Other	1%	--

# Observing Statistics: Instrument Usage



# Observing Statistics

## Baade + Clay Telescopes Average Instrumentation Usage:

	21 Sep 2004- 8 Feb 2007
IMACS	33%
MIKE	25%
LDSS-3	18%
PANIC	16%
MagIC	3%
MIKE fibers	3%
Other (B&C, CorMASS, POETS)	2%

# Observing Statistics

4 Sep 2006-8 Feb 2007:

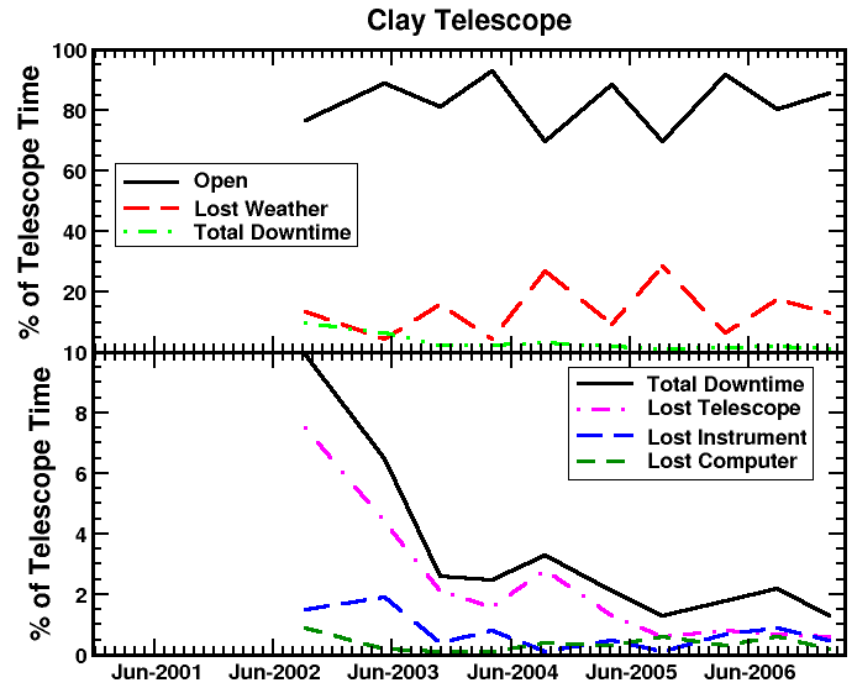
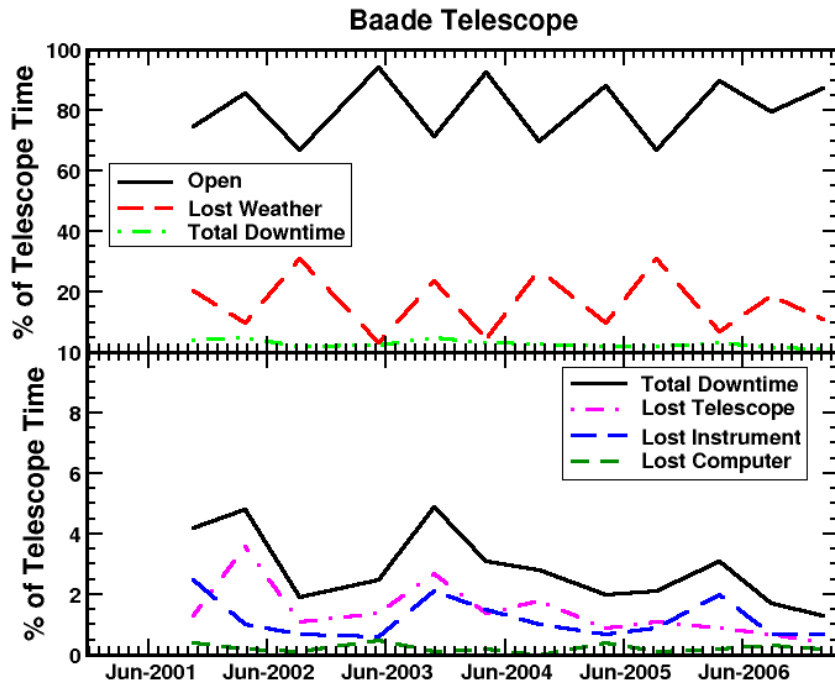
	Baade	Clay
% Open	87.5%	85.6%
% Lost to Weather	11.2%	13.1%
% Lost to Telescope	0.4%	0.6%
% Lost to Instrument	0.7%	0.5%
% Lost to Computer	0.2%	0.2%
<b>% Total Downtime</b>	<b>1.3%</b>	<b>1.3%</b>

# Observing Statistics

## Instrument Downtime:

	30 Mar 2006- 3 Sep 2006	4 Sep 2006- 8 Feb 2007
MIKE	1.1%	0.0%
MIKE fibers	--	2.8%
MagIC	0.0%	0.0%
LDSS-3	0.9%	0.5%
IMACS	1.0%	0.4%
PANIC	0.2%	1.6%
Other	--	--

# Observing Statistics: Downtime



# Facility Instrument Policy

- The updated version of the Magellan Facility Instrument Policy was presented to the Council in March
- Upon approval by the Council of this revised document, we will begin working with the teams currently building Magellan instruments to make sure that all of the steps in the policy are followed

# Commissioning of Instruments

- **IMACS** -- commissioned
- **MIKE** -- certified by Council as commissioned at March meeting
- **MagIC** -- almost commissioned
- **PANIC** -- uncommissioned (probably never will be)
- **LDSS3** -- an uncommissioned Magellan instrument
  - Progress has been slow in completing commissioning process
  - Ian Thompson will continue to support detector system; Christoph Birk continues to maintain the instrument control software
  - A scientist is needed to serve as the Instrument P.I.
  - An institution is needed to take over maintenance of the mechanical systems (e.g., the shutter needs work now)
  - A support agreement is needed

# Magellan Improvements

## ***Control System for M1:***

- Frank visited U. of Arizona recently to discuss issues with the M1 hardpoints, actuators, and control computers
- The LBT has developed and is using a new version of servo card that puts a micro processor/controller on each card and an RS 485 serial network instead of wired connections to each servo card
- There are strong arguments for both Magellan and the MMT to upgrade to the new cards
- This will require a feasibility study first (which will be funded within the Magellan Operations budget)
- A full upgrade of both the Baade and Clay telescopes will probably cost ~\$120-150K
- Once the feasibility study is completed, we will likely return to the Council with a proposal to finance this upgrade from the Magellan Improvements fund

# Magellan Improvements (cont.)

## ***Aluminizing Filament Power Supply:***

- There is a design problem with the Magellan aluminizing filament power supply which has led to drops of aluminum falling on the mirrors
- The MMT has successfully switched to using commercial welders as power supplies
- Frank plans to modify the 100-inch aluminizing system to use the same commercial welder, and carry out extensive testing; this can be done within the Magellan Operations budget
- An eventual upgrade of the Magellan system will probably cost \$50-75K
- If testing of the modified 100-inch system goes well, a proposal will be made to upgrade the Magellan system using funds from the Magellan Improvements Fund

# Committees

## ***Operations Committee:***

- Current members: M. Phillips (chair), W. Freedman, M. Johns, F. Perez, S. Sheckman, A. Szentgyorgi, I. Thompson, A. Uomoto, & D. Zaritsky
- Recent discussion topics have included:
  - f/5 commissioning schedule
  - New rotator bearing for Nasmyth West (IMACS) instrument rotator
  - Failure of azimuth sector switch on Baade
  - ADC alignment problem
  - M1 actuator cylinder repair and replacement
  - M1 hard points
  - Instrument cable wraps for folded ports
  - LDSS3 commissioning
  - Dome trucks
  - Louver safety screens
  - Earthquake preparedness

# Committees (cont.)

## ***Users Committee:***

- Forming a Users Committee proved more difficult than anticipated
- Next good opportunity to meet is Oct. 31 (the day after the Magellan Science Symposium in Cambridge)