

AO Engineering plan for 19-22 Sep. 2005

v2.1: 09/19/05, AB

Schedule Overview

PDT date	12° twilight		Overview
09/19/05	19:43	05:40	Day: Laser checkout; test LLT; align BTO; test Q3 safety. Night: Demo ASCAM, align LLT, char. LGS, test UTT, close HO on LGS
09/10/05	19:42	05:40	Day: Test Q3 safety, BTO servo system Night: Demo Q3 safety, LGS off zenith & close HO, demo LOWFS focus
09/21/05	19:41	05:41	Day: Test BTO servo system Night: First LGS corrected images
09/22/05	19:39	05:42	repeat

CIT/JPL Personnel Schedule

Personnel	Sun. 09/18	Mon. 09/19	Tue. 09/20	Wed. 09/21	Thu. 09/22
J. Angione		X	X	X	X
A. Bouchez	X	X	X	X	X
S. Guiwits			Arrive 1pm	X	X
J. Cromer		X	X	X	X
R. Dekany		X	X	X	
E. Kibblewhite	X				
A. Morrisett		X	X		
H. Petrie		X			
C. Shelton		X	X	X	X
T. Truong		X		X	
M. Troy		X	X	X	X
V. Velur	X	X	X	X	X

Blue = uncertain

Run priorities (from 08/30/05 mtg.)

1. Lock high-order loop on LGS
 - a. Demonstrate smaller LGS (<2.8")
 - b. Demonstrate brighter LGS (sufficient for 500 Hz).
 - c. Close uplink tip-tilt loop (UTT) on LGS
2. Demonstrate pointing laser off zenith (<20° zenith angle).
 - a. Demonstrate Q3 safety interlock.
 - b. Demonstrate BTO servo operation (fall-back: open-loop operation)
3. Demonstrate reliable LOWFS zernike decomposition (eg. Focus)
4. Record first LGS-corrected images.

Coordinated work at Palomar 09/13/05 – 09/18/05

1. Mon. 09/12 – Wed. 09/16: C. Shelton and R. Burruss aligning AO bench, testing UTT.
2. Mon. 09/12 – Sun 09/18: E. Kibblewhite working on laser: higher power.
3. Tue. 09/13 – Thu. 09/15: J. Angione, G. Brack, J. Henning testing Q3 safety interlock.
4. Fri. 09/16: A. Bouchez and V. Velur aligning trolley mirror rotary stage (need telescope moves 10am-4pm)
5. Sun. 09/18: V. Velur and A. Bouchez installing 4" BTO optics.

Experiment Schedule 09/19/05

Date	Start	End	ID	Description	Personnel
9/19	0900	1200		Test LLT focus mechanism	HP, VV, RT
9/19	0900	1300		Reinstall M1b, align HeNe to polar axis.	AB
9/19	1300	1400		Install LLT	Palomar staff
9/19	1300	1530		Align CSFL to polar axis	VV
9/19	1530	1600		Planning mtg. (data room)	All
9/19	1600	2000		Q3 safety system tests (& dinner)	JA, JH, CS
9/19	2000	0430	1	Demo ASCAM shutter control	AM
9/19	2000	2100		AO checkout	MT, CS
9/19	2100	0000	2	LLT alignment and collimation	HP, RD, VV
9/19	0000	0200	3	Measure LGS size, flux, laser power at LLT.	AB, RD, VV
9/20	0200	0300	4	UTT checkout	MT, TT, AB, RD
9/20	0300	0430	5	Close HO loop on LGS	MT, AB, RD
9/20	0430	0540	6	GEO satellite imaging experiment	RD, AB