

Caltech Optical Observatories / NASA Jet Propulsion Laboratory
Palomar Adaptive Optics

Palomar LGSAO Engineering Summary 10/13/06 UT

Daytime results:

1.

Night log:

1800 AM adjusting LLT diagnostics.
1910 Starting laser alignment in Coude lab.
1925 Starting laser alignment in dome. BTO power measurements:
 Laser output: 4.4 W
 Prime focus cage: 3.9 W
 LLT focus: 3.4 W
 Laser output: 3.9 W
2005 Completed laser alignment in dome.
2010 Unable to open dome due to partial coverage of low clouds
 with rising humidity.
2025 AM adjusting ND filters on diagnostics bench.
2200 Testing LOWFS transmission with HeNe laser.
2220 AM done with LLT diagnostics bench alignment.
2230 SG and JR testing new PC in Cass cage.
2335 Clouds may be clearing. Opening dome.
2340 Starting NGS AO checkout on WDS 1035.
0000 Closing dome to project laser in dome.
 laser power = 4.2W
0015 Test firing laser in dome. Successful.
0025 Clouds too thick to fire laser. Reverting to BTO
 calibration experiment.
0030 Beginning BTO off-zenith calibration:
 Meridian 33 -> -15: 20061013_0728.
 Meridian 50 -> +65: 20061013_0833.
0210 Starting up laser for projection in dome.
 laser power = 4,3 W
0230 Propagating at zenith. Very blurred image of LGS.
0238 Moving to bright star to check seeing.
0246 Restarting AO system to try to fix apparent database
 problem. Turned out to be a failure of AOCF to load tables.
0308 Finally managed to close loops on V=6 star. Seeing is 2.44"
 in K -> 3.2" in V.
0320 Scrubbing laser operations for night, due to clouds,
 humidity, and atrocious seeing.
0330 Testing new BTO off-zenith lookup tables.
0430 Opening for NGS tests.
0440 Seeing is 3.1" in V. Quitting.