

## Palomar Adaptive Optics Test Plan

<b>Title</b>	<b>LGS-AO Science Night Checklist</b>
Version	1.0
Date released	9/18/2007
Lead	A. Bouchez
Time requested	N/A
Required conditions	N/A

### Purpose

- Provide a schedule and checklist of science night tasks.

### Procedure

#### 3:00pm

1. Test basic AO and PHARO functionality using AO stimulus.
2. Start up laser (Procedure: Laser Startup v2.0). Bring to full power without optimization to allow temperature to stabilize.
3. Remove LLT primary mirror cover, store in elevator.

#### 4:00pm

4. Request that observatory lock be removed from Coude block.
5. Test laser interlock system.

#### 5:00pm

6. Check laser power. Optimize power and wavelength tuning.
7. Start up BTO control GUI
  - 7.1. `ssh -Y aousr@198.202.125.152`
  - 7.2. `bto_ctrl`
8. Perform BTO checkout (Procedure: Abbreviated BTO checkout v1)

#### Sunset

9. Perform NGS checkout (Procedure: NGS Checkout v3.1)
10. Perform LGS checkout (Procedure: LGS Checkout v1.0)
11. Optimize laser as necessary throughout night (Procedure: Laser Startup 2.0)

#### Science Observations

12. Follow procedure: LGS Target Acquisition v4.0

#### End-of-night

13. Close and lock Coude block (both locks)
14. Power down laser (Procedure: Laser Shutdown v1.0)
15. Install LLT primary mirror cover.

### Notes