

Gemini instrument update

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Current instruments

- **TEXES** - successful run Nov 2006 (shortened by earthquake). Offered for 16 night run in October in 2007B. During this block TEXES programs have priority. Time reverts to normal queue if there are no TEXES programs that can use the observing conditions.
See <http://www.gemini.edu/sciops/instruments/texas/TexasIndex.html>
- **bHROS** - 2007A run cancelled and not offered in 2007B. Board directed observatory to discuss loan to SALT in return for Gemini community time on SALT (details TBD).
See <http://www.gemini.edu/index.php?option=content&task=view&id=216>
- **LGS** - now being used for science. Target elevation restriction lowered to >40 degrees. High Strehl (max 10% in H, 20% in K) requires tip-tilt star $8.5 < R < 15$ within 15". Low Strehl requires tip-tilt stars with $15 < R < 18.5$ within 25". 25" limit due to field lens, for NIRI imaging, distance can be greater if target is placed non-centrally. ALTAIR-LGS observations must request CC 50 and IQ 70.
See <http://www.gemini.edu/sciops/instruments/altair/altairIndex.html>
- **GMOS CCD upgrade** - various options being considered - Simon to cover

NICI

- Arrived on CP January 2007.
- First on-sky commissioning (6n) in Feb. Reasonably good conditions. Closed AO loop and achieved 20-25% Strehl in H. Some concerns about DM performance prior to commissioning. Performing better than expected (though not yet quite good enough).
- NICI Campaign - 50 nights over ~2.5 years, to be scheduled in “modified queue” blocks. During these blocks NICI campaign will be observed if the weather conditions are good enough, otherwise observations will revert to normal queue. In 2007A and 2007B aim for 12 nights of chargeable time (likely requires twice as much time to be scheduled in the NICI blocks).
- First PI Call For Proposals will be 08A

Flamingos-II

- Integration and testing at University of Florida is ongoing. No major show stoppers but several small issues.
- Expect acceptance testing middle 2007, and commissioning during 07B
- Campaigns to look for high redshift galaxies
 - F2T2 - Fabry-Perot tunable narrow band filter. Optics polished and coated, integration and testing underway. Installs in MOS foredewar and so requires dedicated observing blocks
 - Ultra-narrow band filters - should be delivered in about 6 months. Installed in normal filter wheels
 - Campaign teams intend to apply for time through the regular TAC process.

MCAO and GSAOI

- GSAOI passed acceptance tests, arrived at CP Oct 2006. Final acceptance completed late 2006, now in storage until MCAO is ready.
- MCAO: Canopus optical bench delivered to Chile and now being integrated. DM and drive electronics now in Chile, and RTC to be delivered soon. Main schedule risk is with the laser. Delivery has slipped, now scheduled for August.