9th GEMINI OPERATIONS WORKING GROUP MEETING
August 8-9, 2005
Draft Minutes

Present: Taft Armandroff (Chair), Guillermo Bosch, Dennis Crabtree, Max Faundez-Abans, Paul Francis, Inger Jorgensen, Rachel Johnson, Sebastian Lopez, Phil Puxley, Doug Simons, Richard Wainscoat. Jean-Rene Roy attended the second day afternoon session by telecon.

Action Items

Action 9.1: The NGOs are to discuss with their communities the idea of discounts in charging for observations in the poorest cloud cover bin.

Action 9.2: Puxley and Jorgensen will review and revise the instrument overheads, including GMOS, and recommendations for the number of acquisitions on the Gemini Web pages.

Action 9.3: Armandroff is to organize telecons of the NGO-Gemini leadership. The first one should be August 29 at 10 am HST = 1 pm MST.

Action 9.4: The changes to the sizes of the science ranking bands has the effect of somewhat diminishing the proportion of time that the large partners receive in Band 1 relative to the smaller partners. The Operations Working Group plans to monitor this effect over multiple semesters and to discuss the implications.

Action 9.5: Puxley will see that the ODB sends appropriate e-mail notification when an observation is transitioned to/from “On Hold”.

Action 9.6: Puxley will make the Michelle spectroscopic ITC available via the Gemini Web site.

Action 9.7: The NGOs are to review the existing OT browser and see if it meets our needs for a tabular view of the observations in the OT. Send suggestions for additions to Puxley.

Action 9.8: The NGOs will send their TAC meeting dates and technical review deadline to Paul Francis.

Action 9.9: Taft Armandroff is to contact the potential Gemini Data Reduction Working Group Chair and to coordinate with the past and current GSC Chair.

Action 9.10: Gemini will pursue issues that were raised about the potential Subaru time trade.

Action 9.11: The NGOs are to consult their sample of their communities about the potential Subaru time trade.

Action 9.12: The U.K. NGO and Gemini are to make GMOS Phase-2 Cook Book available by the next Phase-2 period.
Resolutions

Resolution 9.1: The National Gemini Offices are responsible for forwarding a ranked list of proposals to Gemini each semester for consideration by the ITAC. Currently, if a partner does not forward enough proposals to fully utilize their time allocation on each telescope, their unallocated time is carried forward. This approach is open to observing condition 'cherry picking', i.e. forwarding a proposal package that doesn't include enough poor weather proposals. Thus, once a partner's good weather bins are filled, the lack of poor weather proposals cause them to under fill their time allocation. To avoid this situation, the Operations Working Group recommends that if a partner does not fully utilize their time allocation on one or both Gemini telescopes in a given semester their excess time on the respective telescope is NOT carried forward to the following semesters and is thus forfeited. This policy is not intended to apply to the small residual from program quantization. This policy should not be applied in exceptional circumstances such as when an instrument is cancelled between the NTAC and the ITAC meetings.


Resolution 9.3: The Operations Working Group endorses exploring a Subaru time trade.

Resolution 9.4: The Operations Working Group appreciates the kind hospitality of the UK NGO.

1. Review of Minutes and Action items

The minutes from our February 2005 meeting were approved. Some typos will be corrected. In addition, a correction will be applied to action 8.5 specifying “run”. The minutes will be posted on the public Gemini Web pages.

Action items were reviewed: action 8.4 related to granted internal Gemini Web site access to NGOs is ongoing. All other action items were successfully accomplished.

We reviewed the Gemini Board resolutions from their May 2005 meeting. The Ops Working Group was interested in Board resolution 2005.A.6 related to instrument decommissioning.

There is no ITAC report yet, due to other pressing Gemini activities. Hence, there were no ITAC action items to discuss.

2. Instrumentation

Doug Simons reviewed the status of Gemini instrumentation.

- bHROS: Much engineering work has been done on bHROS by Gemini and Brazilian engineers over the past few months. bHROS has only 1 (of 2) working CCD detectors. Gemini developed a spiral search technique to center the star on the fiber using the bHROS exposure meter. The throughput of bHROS is looking slightly better than expected. Demo Science for bHROS will take place in late August.
• **FLAMINGOS-2**: FLAMINGOS-2 is in the late integration and test phase of the project. All lenses have been delivered and are being aligned. Florida’s prediction of the as-built total system throughput looks quite favorable. Delivery of FLAMINGOS-2 to Cerro Pachon is projected for March 2006. It is important that FLAMINGOS-2 and NICI delivery and commissioning not collide.

• **NIFS**: NIFS has just gone through pre-ship acceptance testing at AUSPACE. Overall, the opto-mechanical performance is quite good. The detector dark current and read noise are remarkably good. The key remaining risk area is intermittent problems with the detector controller. NIFS is being shipped to Hawaii. Integration and test will take place on Mauna Kea in mid-September through early October. ALTAIR laser guide star testing with NIFS will not occur until the first quarter of 2006. Simons recommends System Verification for NIFS at the end of 2006A, but not putting NIFS in the 2006A Call for Proposals (due to no on-sky data). The key advantage of NIFS over OSIRS and SINFONI (which are ahead of NIFS in terms of availability to users) is the lower read noise and dark current of the H2RG in NIFS.

• **NICI**: Results of the recent NICI cold test include good functionality of all mechanisms. There is an issue with excess dark current that indicates a need to shield glow from the detector. The Gemini-supplied deformable mirror from CILAS is a month or more late. Simons predicts NICI delivery to Cerro Pachon in December or January.

• **ALTAIR** has long exhibited limited corrected field size that has been hypothesized to be due to non-optimal conjugation for the Mauna Kea atmospheric turbulence profile. A test field lens was inserted into ALTAIR. With the field lens changing conjugation to the ground layer, the AO correction of ALTAIR improved over the field. Simons seeks to procure a proper, coated field lens.

• First light occurred with the new ALTAIR sodium laser on May 2. This is a 12-watt solid-state laser built by CTI. Gemini has closed the loop with the laser-guide-star wavefront-sensor on the laser beacon. However, the tip-tilt/focus natural-guide-star sensor is not functioning yet. The next goal is to get that sensor working so that one can obtain a laser-guide-star corrected NIRI image. In addition, there are some wavefront errors in the off-axis paraboloids that are used in laser launch that need diagnosis and fix. This will likely induce a 6-month delay in the final working system.

• **GSAOI** is full integrated and recently had a successful cold test. The next major milestone is detector noise and dark current performance, plus on-device-guide-window performance. Delivery is predicted for first quarter 2006. NICI and FLAMINGOS-2 will take commissioning priority over GSAOI.

• **GNIRS**: Significant effort was made by NOAO and Gemini engineers to rework GNIRS. Work included replacing the final lenses in the short cameras in order to remove radiation events, new filters, and cryocooler maintenance.

• **GMOS CCDs**: The amount of progress on the GMOS CCDs is less than hoped for. Mike Lesser’s processing oven has been fixed. Additional wafer processing is needed by Lesser at UA and the MIT Lincoln Labs. It will likely be 6 months after the first good test CCD that the devices will be installed in GMOS-South. We discussed the BIV (red) CCDs for GMOS North. Johnson and Armandroff felt that the GSC would want to discuss the GMOS CCD replacement issue and would likely endorse installation of the BIV CCDs into at least one GMOS.
3. Initial Discussion of 2006A Call for Proposals

Puxley and Jorgensen led discussion of the 2006A Call for Proposals. The dominant issue is what instrument will be on which port and how this changes over the semester. There is a strategy issue of whether this should be specified in advance of the Call for Proposals or whether this should be flexible to user demand.

In the North, there are almost no changes as to what will be offered in the Call for Proposals compared to semester 2005B. However, NIFS and ALTAIR LGS are planned undergo System Verification and Demo Science in 2006A. TEXES is planned for Demo Science in 2006A for 16 nights.

There was discussion of the commissioning of GMOS masks from non-GMOS images and whether it could be commissioned / tested in 2005B. It would be helpful for this to be resolved soon so this mode could be offered in 2006A.

In the South, the major change in the Call for Proposals for 2006A from 2005B is the addition of bHROS availability. We will be conservative in selecting the limiting magnitude for bHROS targets. NICI will be used for NICI Campaign Science only, which is a separate Call for Proposals.

Puxley reviewed proposed ISS port swaps for instruments in 2006A. NIFS, Michelle, and TEXES would share the up-looking port in the North. Jorgensen proposed NIFS in February and March; then Michelle in April, May and June; and then TEXES from mid-June through July. NICI and T-ReCS will share the up-looking port in the South. Puxley prefers to commission FLAMINGOS-2 on the side-looking port occupied by GMOS-South.

Puxley raised a potential time trade with Subaru. They seek GMOS time in the queue in return for guaranteed-clear classical time on Gemini.

There was substantial discussion of how the Call for Proposals discusses the availability of instruments at which time of the semester. Any way to increase flexibility was encouraged by the NGO members. Because the delivery schedules for NICI and FLAMINGOS-2 are uncertain, the blocks for commissioning are fuzzy. There is a strong desire to encourage a sufficient number and variety of observing proposals that provide adequate coverage over instrument and RA range to cover various possible scenarios for the semester. In particular, we seek to restrict the RA ranges for instruments as little as possible in the cases where the instrument is planned to be removed from a port due to the arrival of another instrument but where the delivery is uncertain.

There was also discussion of the aggregate time charges and imbalances. The major correction of 50% of the historical imbalances decided at the previous Operations Working Group meeting is being implemented in semester 2005B. There was some debate as to whether we should apply a further correction in 2006A. Canada and the U.K. argued for a correction. Some of the others felt that they would like to see the impact of the correction being applied in 2005B. The compromise was to agree on a correction that amounts to 25% of the aggregate imbalances.
The 16 nights of TEXES Demo Science received some discussion. There was a debate as to whether this time should be taken off the top or charged to the partners who use it. All agreed that the TEXES Demo Science needs to be announced in the 2006A Call for Proposals. There is a desire among some to charge the TEXES Demo Science time to the partners that use it. However, if partners are to be charged, partners would like to participate in the scientific evaluation. Simons then discovered that the MOU with U. Texas called for only 5 nights of Demo Science. By reducing the TEXES Demo Science time to 5 nights, the concerns about partner charging and TAC evaluation disappeared. Thus, the Ops Working Group is comfortable with 5 nights of TEXES Demo Science carried out in the usual way and charged “off the top.”

4. 2006A Process and Schedule

The 2005B process and the greater computer/software automation implemented for 2005B was highly successful. The new NOAO backend received good support from Dave Bell and David Gasson, but greater activity needs to take place in 2006A to insure that every NGO has proper backend installation and proper versions of the software that support it.

The new (NOAO originated) save-as-PDF capability will be implemented in PIT. Puxley circulated an e-mail prior to this meeting showing these PDF files and the style sheet. Given the save-as-PDF capability, the one partner that requires a PostScript or PDF of scientific justification along with the submission can hopefully drop this requirement. This would help make the proposal process more uniform among the NGOs.

The “hard deadlines” for PI and NGO Phase-2 submission that were implemented in 2005A had the desired positive effect. There have been a few problems with classical PIs missing their deadlines. The NGOs will increase their efforts to inform PIs of the classical Phase-2 deadlines, the importance of meeting the deadline, and possible negative consequences of missing the deadline.

The Gemini dataflow is being streamlined to allow same-day deposit into the Gemini Science Archive (not quality checked). Other major software efforts include high-level software support for NIFS, bHROS, NICI, and FLAMINGOS-2. Electronic observing logs have been implemented.

Puxley showed the 2005B observing conditions distribution. There is some improvement from 2005A, and some partners are meeting the requirements fully, but issues remain with securing enough programs requesting the poorer observing conditions. He presented some possible ideas for encouraging requests for poorer conditions.

One problem that may be resulting in the overall imbalances is that a few partners are not always filling their allocations with proposals at ITAC. There was a consensus that if a partner does not fill their allocation that they cannot carry it over into future semesters.
5. NGO Phase I and Phase II Reports

During the NGO reports (see Appendix), the following items of consensus emerged:

- Several NGOs stated that they are receiving calls for improvement to the Gemini Web pages, particularly condensing information that is spread over several changes. The NGOs are happy to participate in checking, updating, and suggesting issues with the Web pages. Puxley reported that Gemini has made some progress toward condensing the Web page info on an instrument into a single document.
- Facilitating global changes in the OT over multiple observations would be extremely helpful.
- There is interest in visits to the Gemini sites for graduate students with programs in the Gemini queue. These visits would provide more insight into Gemini than just receiving data on CD/GSA.
- The ability of an NGO to change the category of a HelpDesk request assigned to that NGO would be very helpful.

6. Science Efficiency and Productivity

Jorgensen summarized recent changes to the way that the Gemini queue is operated. All queue nights are now mixed among the instruments. This allows Gemini to gain the benefit of being able to observe any program that can benefit from the current observing conditions. Engineering tasks are now done in queue mode as well. Jorgensen believes that the multi-instrument queue will enhance the completion of highly ranked observing programs. These changes also allow rapid target of opportunity observations and supernova follow-up on almost every night. Every night has a queue coordinator assigned. Gemini is experimenting with software to help the queue coordinator optimize the choice of observing programs over the night.

Jorgensen also showed some very interesting data on observing efficiency. In addition to showing all the Gemini instruments, confidential comparative data was obtained from Keck, VLT, and Subaru. Gemini actually compares very favorably in terms of observing efficiency with comparable instruments at these other observatories.

We also discussed acquisition times and overheads. The NGOs feel that the nice data that Jorgensen presented on GMOS acquisition time is not properly reflected in the recommended overheads. In particular, all agreed that the advertised GMOS overhead numbers should be revised. Also, clear information should be given on the Gemini Web pages on how many GMOS acquisitions are needed for long spectroscopic observations.

Data distribution was also discussed by Jorgensen. Electronic data distribution to P.I.s is now effective. Data is assembled once per month per instrument. Electronic distribution of calibration data and reduced data (only GMOS imaging data at present) to P.I.s will start in September/October 2005. A number of improvements are planned, including all data being immediately ingested into the GSA.
7. NGO-Gemini Interactions

Puxley reviewed the interim organization chart. Inger Jorgensen should be contacted for northern operational issues, Phil Puxley for southern operational issues, and Jean-Rene Roy for directorial issues.

Regarding NGO/Gemini metrics, the sub-group of Armandroff, Crabtree, Johnson and Roy created a draft of the metrics. Some issues remained, including how we would track/measure the metrics. Puxley proposed that Armandroff, Crabtree, Johnson and himself refine the list of metrics in November. The metrics should be vetted and presented to the Gemini Board at their May 2006 meeting.

We discussed NGO visits to the Gemini sites. The visits for 2005B are being finalized.

We discussed NGO-Gemini interactions. Johnson suggested that we resume the periodic telecons between Gemini and NGO leaders (which all feel are helpful). Armandroff will organize the NGO telecons.

8. Discussion of Reports on Semester Science Operations

Puxley reviewed the results from science operations for semesters 2004A, 2005A and 2005B. Rollover is definitely helping Band-1 program completion significantly. Also, the amount of rollover between semesters has stabilized. Because of the lack of several southern commissioning activities, science time at Gemini South in 2005A was increased to 78%. However, weather was quite poor during the second half of the semester.

There was discussion of the tracking of completion data. The Operations Working Group seeks to add a 75% complete point to the tracking measurements. The NGOs also desire the spreadsheet so they can track their own completion percentages.

Jorgensen reported that some ALTAIR programs with targets early in the semester were not completed due to ALTAIR technical problems. Armandroff asked whether these P.I.s were informed that they were affected by this problem. Jorgensen and Puxley indicated that they hope to do this. More generally, Puxley stated that as other workload diminishes, he hopes that a very brief report of what/why data was/wasn’t obtained could be sent to each queue P.I. at the end of the semester (with a copy to the NGOs).

We then discussed the changed size of the science ranking bands. The Board passed a resolution that decreases the size of Band 1, to less than 20%, and assures that all the partners will be included in Band 1. Band 2 is the next 30% of the Queue. Then, Band 3 is 50% in size. The reduction in size of Band 1 has lowered the proportion of Band 1 that the larger partners have relative to the smaller partners. We discussed the issue and decided to study the statistics of Band 1 usage by partner over several semesters (see action #9.4)
9. NICI Science Campaign

Puxley discussed the NICI Science Campaign and its parameters. The Board has passed a resolution that establishes the NICI Science Campaign. The Board determined that ITAC will assess the proposals. Puxley indicated that the Gemini NICI scientists, the two or three who support NICI, will be added to the selected Team.

At the previous GSC and Operations Working Group meetings, it had been decided to form a Gemini Planet Finding Working Group. This group has not yet been formed. Gemini plans to become active in forming the Gemini Planet Finding Working Group. The Operations Working Group encourages the formation of this Working Group by the time input is needed on the Call for Proposals and the amount of time to be allocated.

Based on the delays in NICI delivery, the Operations Working Group recommends making the NICI proposal deadline later by 30 days (to October 31). This is motivated by moving it away from the standard proposal deadline and in order to give time for the Gemini Planet Finding Working Group to be formed and comment on the Campaign and the Campaign Call for Proposals.

There was discussion of whether the targets would be publicized or kept private. It was decided that Puxley’s proposal to have the teams specify whether they will release the targets, and why, in their Campaign proposal is reasonable.

The Call for Proposals for the NICI Planet Finding Campaign will clearly inform the community as to the status of NICI development and that performance figures for NICI are only predictions. The Operations Working Group supports protecting the opportunity for P.I. science with NICI. It is believed that the NICI Campaign Science Time will be taken “off the top”, so it should not affect any partner’s allocation at ITAC.

10. Enhanced Rapid Response for GRB Programs

Jorgensen discussed how GRB programs are being handled in 2005B. ITAC merged multiple GRB programs into umbrella GRB programs for the North and South. We believe that the situation in 2005B is significantly more efficient and productive than having a substantial number of groups; the number of different GRB proposals that were received was completely impractical to support in rapid response mode for a common trigger. We discussed the wording for GRB proposals in the 2006A Call for Proposals.

11. Finalization of Call for Proposals for 2005B

The Operations Working Group agrees that the TEXES campaign will be 5 nights. All the partners are interested in the Subaru time trade. The first semester will be an experiment, just as it was for Keck initially. There are a number of issues that should be explored with Subaru. The Gemini partner representatives are most interested in Suprimecam on Subaru, and
also possibly MOIRCS once it becomes available and once we can understand its performance. Some of the issues to be discussed include: 1) Will the Subaru time be placed in Band 1? 2) Will there be any restriction on the scientific topics that the Gemini Community are able to carry out at Subaru? 3) Can we assure that we will not give up too much of Gemini’s high-demand observing conditions and RA range to Subaru? 4) How will the mechanics of giving us clear nights after clouded out nights function? 4) Can we insure that the seeing will be similar/identical between the Gemini and Subaru traded time? 5) Who supports Phase-2 for the Subaru programs? 6) The NGOs seek to gain community feedback and to publicize this widely in our communities. 7) We assume that GRB rapid response is off limits to Subaru for this Gemini time. 8) Is one or more instruments available to the Gemini community? 9) Is the Subaru interest in solely Gemini North, or are targets accessible to Gemini South? 10) Is there long-term interest in time trades? We will discuss the Subaru time trade further at our Operations Working Group telecon on August 29.

bHROS will be approved for Rapid Response in 2006A.

The Operations Working Group supports the Call for Proposals providing guidance to the community in on the instruments that may be switched on/off the telescope at certain times (T-ReCS, NIFS, GMOS-South) in “full disclosure” mode. That is to say that we will express in a probabilistic manner when these instruments will be available to the community. We seek to avoid hard RA limits in order to have in-hand the proposals of that RA range in order to be able to “backfill” areas of the schedule vacated by instruments that are not delivered.

The Call for Proposals will include the notification to the community that instruments will be decommissioned after two consecutive semesters of not meeting the 16-night minimum. The Call will also announce the intent to move GNIRS to Gemini North in a future semester.

12. Other Items

Taft Armandroff described work that has taken place on the meeting of NGO and Gemini Staffs in Tucson on November 29-30. Armandroff presented a draft agenda for the meeting, and the meeting participants gave feedback on the topics to be covered.

Rachel Johnson presented on GMOS mask making from non-GMOS images. The effort is based on some initial work by Michael Ledlow. Presently, it is only set up for GMOS-South because it is based on GMOS-South images of Omega Cen. Rachel has written two scripts that takes RA and Dec of objects from a non-GMOS image and creates a fake GMOS image that can be used with the GMOS mask-making software. Rachel and Ilona are completing tests based on GMOS images from the GSA. An on-telescope test may be desirable. Gemini will do some clean-up and testing on Rachel’s scripts. Eventually, Web pages will need to be written on how to undertake GMOS mask making from non-GMOS images.

Simons indicated that a Board resolution on the next wave of Aspen activity has passed. We will learn more as this information is rolled out.
Puxley described the use of MASS and DIM on Cerro Pachon. Because MASS measures turbulence at various atmospheric layers, it is useful for deciding whether AO programs should be attempted from the Queue at any given time. A MASS that is identical to that used on Cerro Pachon will be installed on Mauna Kea (on the roof of the Gemini support building). A water vapor meter (IRMA) is now operating on Cerro Pachon.

Roy reported on the Gemini Science Archive (GSA). Gemini is working to make the GSA more available on the Gemini home page. Work is underway to allow interested parties to subscribe to an e-mail notification for when data with certain keywords or program IDs goes public. Puxley discussed priorities for work on the Observing Tool and high-level software. The Operations Working Group suggested that the following items be given priority: INSERT PHIL EMAIL

Roy described an internal review of the Gemini Outreach program. The Ops Working Group nominates Dennis Crabtree to serve on this committee. Dennis would bring extensive experience in outreach.

We discussed the December “Gemini Focus” Newsletter contents. The Operations Working Group suggests an article on the enhanced Queue Management, including completion statistics and efficiency statistics. Articles on bHROS and NIFS are also recommended.

We discussed the sharing of or swapping of technical reviews. Paul Francis led that discussion. The challenge is facilitating information exchange during the very tight review schedule. There can be bilateral trades. We decided to exchange TAC dates and technical review deadlines to see whether bilateral exchanges are functional.

Taft Armandroff discussed changes in the NOAO Data Products Program and their impact on IRAF support. There will be no impact on answering Gemini-IRAF-based HelpDesk requests by the U.S. NGO.

**13. Next Operations Working Group Meeting**

The next Operations Working Group meeting will be hosted by Gemini in Hilo and held on February 2-3, 2006. The August 2006 meeting will be hosted by the Canadian NGO and held in British Columbia.
Appendix A – Reports from the National Gemini Offices

Argentina NGO report for  2005B semester

Phase I

After some last-minute changes, the PIT backend was set-up just on time (thanks to efforts at Gemini and help from the UH), and the process ran smoothly. Although the overall subscription rate has not changed dramatically, we gladly notice that more teams are getting involved in applying for Gemini data, which yields in a better distribution of proposals among different available instruments. A total of 12 proposals were presented, 3 of them being joint proposals with other partners. Unluckily none of them were successful neither in our NTAC nor in their partners, so no joint proposal has made it into Phase II. The toughest issue during the NTAC process is related to its conformation, as no applying PI or Co-I can be an NTAC member according to current local rules. The NGO is “lobbying” hard on this aspect in order to change rules and allow the NTAC to have more time available to run the ranking process.

Phase II

The revision of Phase II submissions relies only on two members of the NGO and that narrows the scope of expertise in different instruments. We have started collaboration with the Brazilian NGO exchanging proposals in areas where our partners have more experience (mid IR spectroscopy) and taking care of some of their (optical) proposals to balance the number of proposals each partner has to check.

The iteration process has started a bit late, but it looks like most of the proposals are correcting minor issues at this stage already. PIs find it difficult to find information on the web maze but also praised the evolution of the OT library and rely more on the examples found in it.

For this particular semester, as I am involved in revision of Phase II proposals, I have found inconvenient to hold the OWG meeting during the last week before the final deadline (August 12th). I guess that shifting it a few days after the deadline will also help to address the Phase II completion issue with absolute figures.

Guillermo Bosch
Australia NGO report for 2005B semester

Phase 1

Despite a big increase in the amount of Australian Gemini time available (due to the purchase of nights from the UK), oversubscriptions held up very nicely: overall oversubscription factor was 2.84, and a record 31 proposals were received. For the first time, Gemini was the most oversubscribed Australian telescope, receiving more proposals than the AAT.

Australian Time Requested (hrs.)

<table>
<thead>
<tr>
<th>Telescope</th>
<th>GMOS North</th>
<th>GMOS South</th>
<th>GNIRS</th>
<th>Keck/HIRES</th>
<th>NIRI</th>
<th>NIRI-Altair</th>
<th>Michelle</th>
<th>T-ReCS</th>
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<td>559.0</td>
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<td>19.3</td>
<td>10.5</td>
<td>460.2</td>
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<td>55.5</td>
<td>(33.3)</td>
<td>15.0</td>
<td>2.0</td>
<td>19.3</td>
<td>10.5</td>
<td>559.0</td>
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# of Proposals

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<th>GMOS South</th>
<th>GNIRS</th>
<th>Keck/HIRES</th>
<th>NIRI-Altair</th>
<th>Michelle</th>
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<td>31</td>
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The move of the NGO to Canberra went smoothly, and no serious problems were encountered with the TAC process (yet). We didn’t forward enough low ranked Gemini-North proposals to Gemini, because other partners shot down a lot of big proposals that we liked, so we had to slot an extra one in at the last moment to fill up the time.

We arranged a time swap of 20 hours with Canada: we gave them 20 of our Gemini-North hours in return for 20 more hours in the south. This was decided at the NTAC stage – our TAC (which met first) noted that without a swap the science grades of our borderline North proposals were not competitive with the grades of borderline South projects – the TAC therefore said that they wanted a swap if Canada was willing. Canada’s TAC agreed that it would be beneficial at their meeting.

Some confusion was caused by multiple technical evaluations of international proposals. Would it be possible to get such proposals evaluated by only one NGO?
Phase II
At the time of writing (2nd August) 80% of PIs have submitted their Phase II’s for review. Corresponding figure this time last semester was around 30%, so blood-curdling warnings and a strict deadline seem to be working.

Completion Rates:
I’ve been compiling some statistics on what fraction of Aussie proposals actually gets done (a follow-on from last year’s user survey). You might find the results interesting.

![Australian Gemini Time](image)

I’ve used the allocated Australian Bands 1-3 + classical time as a measure of the number of hours available. Naturally some of this would be lost to cloud. Since 2001B, the ratio of hours of observation to hours available has sat rather close to 60% throughout.

At the time of writing there are 15 Aussie Gemini publications. Typical time between data being taken and publication is 18-24 months: the current rush of publications is due to the large amount of complete programs done in 03B. Given the above graph we might expect a dip in the Aussie publication rate over the next year, due to relatively poor stats in 04A and 04B, then a dramatic rise into 2007.

In 2004A and before, many users complained that the data they got was not very usable. Common complaints were inappropriate standard star calibrations and funny variable bias patterns in IR detectors. Everyone I’ve talked to more recently, however, seems impressed by the quality of their data.
User Comments

I’ve been doing a speaking tour of the country, trying to drum up enthusiasm and proposals for Gemini. In the process I’ve talked to a lot of users about their opinions of Gemini, what’s good and bad about it. Here are the most frequent comments, to give you some idea of what our community thinks.

- Everyone raves about the quality and helpfulness of the Gemini staff.
- The image quality of the data is superb and widely commented upon.
- Lots of people ask “What can’t we just have one TAC for Gemini?” Lots of confusion about how much time to request from each partner for multinational proposals, and strategies in case different NTACs rank proposals differently. 15/31 proposals in 05B were submitted to more than one TAC, and several more had international Co-I’s from other partner countries but had decided not to risk multiple jeopardy.
- Lots of negative comments about the acquisition overheads with GMOS. There seems to be agreement that the quoted figures are realistic, but they are much longer than the VLT needs, let alone our own telescopes. The long overheads rule out a whole class of science (using Gemini’s superb seeing to take quick high-res images of large samples).
- Lots of negative comments about the web page – how vital information is dispersed in multiple non-obvious places.

Some more specific comments from members of the national office:

- The GMOS mask-making software is buggy and has caused at least two users a lot of grief. In a couple of cases, it was impossible to get it to work so a Gemini staff member had to do the mask design.
- Stuart Ryder notes that the OT Tips and Tricks web page sometimes disagrees with the OT example libraries. He can give specific details.
Brazil NGO report for 2005B semester

1 – Brazilian Proposals 2005B

As for the submitted proposals for Semester 2005B, a total of 32.15 hours at Gemini North have been requested, representing an oversubscription of 1.29. For Gemini South, 35.29 hours have been requested, resulting in an oversubscription of 1.31. Table 1 displays the final allocated time schedule for the Brazilian proposals after ITAC evaluation.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Proposals</th>
<th>Requested Time [hours]</th>
<th>ITAC Allocated Time [hours]</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMOS North</td>
<td>5</td>
<td>22.45</td>
<td>13.45</td>
</tr>
<tr>
<td>GMOS South</td>
<td>8</td>
<td>25.75</td>
<td>17.75</td>
</tr>
<tr>
<td>GNIRS</td>
<td>3</td>
<td>9.54</td>
<td>9.2</td>
</tr>
<tr>
<td>NIRI</td>
<td>2</td>
<td>9.70</td>
<td>4.5</td>
</tr>
</tbody>
</table>

| Total       | 18        | 67.44                   | 44.90                      |

2 – Publication metrics

Table 2 displays the Publication Metrics by Year of the Brazilian community using both telescopes. Only proposals with 100% of completion were considered. The efficiency was adopted as “one succeeded proposal with 100% of completion will produce one paper”. On Table 3, theses and conference proceedings metrics are displayed, where proceedings summaries have been taken into account.

Based on Table 2, one realizes that science production from the 100% completion Brazilian programs has low efficiency. Our expectation is, at least, close to 50% of efficiency. We are just inquiring our users about the Gemini “data handling” and the “reducing processes” with IRAF-Gemini packages.

On the other hand, a few PIs are waiting for complementary observations from other telescopes, e.g., X-ray satellite, before being able to produce science together with the Gemini data.
### Table 2: Publication metrics by year

<table>
<thead>
<tr>
<th>Year</th>
<th>Proposals</th>
<th>Completion 100%</th>
<th>Brazilian papers</th>
<th>Efficiency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>8</td>
<td>1</td>
<td></td>
<td>12.5</td>
</tr>
<tr>
<td>2003</td>
<td>11</td>
<td>3</td>
<td></td>
<td>27.3</td>
</tr>
<tr>
<td>2004</td>
<td>11</td>
<td>3</td>
<td></td>
<td>27.3</td>
</tr>
<tr>
<td>2005</td>
<td>3</td>
<td>1 (until now)</td>
<td></td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>33</td>
<td>8</td>
<td>Mean 25.1</td>
</tr>
</tbody>
</table>

### Table 3: Thesis and conference proceedings

<table>
<thead>
<tr>
<th>Year</th>
<th>Proposals</th>
<th>Completion 100%</th>
<th>Proceedings</th>
<th>Thesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>11</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>3</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>33</td>
<td>9</td>
<td>3</td>
</tr>
</tbody>
</table>

### 3 – Suggestions for the improvement of data handling processes

There is some dissatisfaction with the data handling from the old DAT tape with the calibrations data sets sent by Gemini to the PIs. At a first glance, it is not obvious to pick the files which are applicable to one’s science observations contained in the CD data set.

In spite of the log files for each data archive, PIs have spent some time to find the suitable calibration images to be used with the science data. Our suggestion is to introduce a keyword in the calibration and science images' header and in the log file, from “bias” to “calibration standards stars”, in order to facilitate the recognition of which data sets must be used with the science data for each specific program. Obviously, each calibration image may have more than one “code” because it is useful to more than one project and/or run.
4 – Brazilian Questions

I would like to submit “again” some issues for appreciation, which we wish that could be taken into account. As a small partner, we would like that the Ops. WG derived some resolutions about them, when applicable.

1. Let us examine closely the change of the size of Band 1.

2- Let us spend a few minutes discussing about Band 1 programs: what is the executed percentage? What about the data quality?

3- Based on the fact that Gemini keeps careful track of the telescope time used, we think it should be possible to have, at the end of each semester, a short and compact report on each program. So we ask for the following details:

   a- The overall conditions of the completely executed programs (e.g. quality data, weather conditions, seeing)
   b- For the partially-executed programs, the reasons for this partiality: (i) weather conditions, (ii) instrumental failure, (iii) problems with the program itself, (iv) queue order, to mention a few. NOTE: Point (iii) is important to find out how well the NGOs, NTACs and contact scientists have been working.
   c- Not-executed programs: the reasons why! No matter in which band the program was!

5 – Brazilian Gemini Support

5.1 – bHROS engineering's work

Brazil had have the opportunity to collaborate with Gemini on the bHROS engineering work for improvement of this instrument. Rodrigo Prates Campos, Brazilian NGO staff member and René Laporte, staff member of Instituto Nacional de Pesquisas Espaciais (INPE), Brazil, have worked hard for approximately three months on engineering and technical work done to test the instrument and make it ready as an operational instrument. The goal was to finish the engineering work and technical commissioning by the end of June 2005, then to be ready for the beginning of the science commissioning by the end of July 2005. There are two summaries containing the status of the bHROS after this engineering, separated by disciplines and/or subsystems.

5.2- Staff training

As NGO, in spite of our short budget, we continue to successfully provide the Brazilian Gemini community with instrument support. However, to improve our efficiency even
more, the Brazilian NGO is “still trying” to manage to establish a program that envisages its staff training at the Gemini facilities during Phases II processes in 2006.

I would like to state again that, as a small partner, we define our participation in the support/training at Gemini from now on as “Phase II-Support”. That means we wish to concentrate the efforts to improve our expertise to support Phase II. We are also interested in running “queue runs”, but we do not have enough personnel for those duties at the present time.

6 – Gemini Public Information and Outreach Network

The Brazilian NGO's Public Affairs and Educational Outreach personnel have had a very busy semester, mainly due to the 25th anniversary of the Observatório do Pico dos Dias (OPD). The Gemini world has had very good visibility in two main events: an afternoon-and-night of open doors at the OPD (April 17, 1,000 people present, security and ambulance infrastructure) and the anniversary ceremony and small cocktail at the OPD (on Apr. 20, 300 people including researchers, political, military and civil personalities, same infrastructure).

One press release on the new Gemini outreach web page was strongly aimed at the media in early March’05 and it has had a good feedback from the journalists.

Six institutional bulletins concerning Gemini technical and scientific matters have been issued through the Sociedade Astronômica Brasileira's electronic service.

Gemini is present also in our talks and exhibits: during the 1st semester, 411 school children and about 3,000 people in general has been reached, as well as 1,668 visitors at the OPD.

The Brazilian government is deeply concerned about Social Inclusion, which is the availability of scientific and technological knowledge and equality of opportunities to the poor, handicapped and senior citizens. One may regard this matter as an indirect additional Gemini concern and, as so, such people make up an average of 80% of all persons who got in touch with the LNA and its astronomers.

LNA keeps on distributing CDs that also contain slide presentations with Gemini facts and images to public and private schools and teachers both in the southern region of the state and during public events throughout the country.

Max Faúndez-Abans
Laboratório Nacional de Astrofísica
Brazilian National Gemini Office
Canada NGO report for 2005B semester

Canadian response to the 2005B Call for Proposals was modest. The details of the 47 proposals received are included in the following two tables. The subscription rate on Gemini-South was significantly lower than that for Gemini-North (1.2 vs. 2.7). The combined subscription rate was 1.95. There were no major issues during Phase I, which ran quite smoothly.

<table>
<thead>
<tr>
<th>Canadian Time Requested (hours)</th>
<th>GMOS North</th>
<th>GMOS South</th>
<th>GNIRS</th>
<th>HIRES</th>
<th>Michelle</th>
<th>NIRI</th>
<th>Altair</th>
<th>Phoenix</th>
<th>T-ReCS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telescope</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gemini North</td>
<td>312.81</td>
<td>33</td>
<td>0</td>
<td>0</td>
<td>270.2</td>
<td>173.5</td>
<td>0</td>
<td>0</td>
<td>487.45</td>
<td></td>
</tr>
<tr>
<td>Gemini South</td>
<td>167.00</td>
<td>43.08</td>
<td>0</td>
<td>0</td>
<td>210.08</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>210.08</td>
</tr>
<tr>
<td>Grand Total</td>
<td>312.81</td>
<td>167.00</td>
<td>43.08</td>
<td>20</td>
<td>54.8</td>
<td>99.84</td>
<td>0</td>
<td>0</td>
<td>697.53</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th># of Proposals</th>
<th>GMOS North</th>
<th>GMOS South</th>
<th>GNIRS</th>
<th>HIRES</th>
<th>Michelle</th>
<th>NIRI</th>
<th>Altair</th>
<th>Phoenix</th>
<th>T-ReCS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telescope</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gemini North</td>
<td>13</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Gemini South</td>
<td>14</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>18</td>
<td>12</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>47</td>
<td></td>
</tr>
</tbody>
</table>

Canada ended up trading 20 hours of GS time to Australia in exchange for the same number of hours on GN. This helped balance the subscription rates in both partners. The TAC process and packaging of the results to send to Gemini went well this past semester.

Phase II has progressed well with no major problems. There has been some improvement overall in the PIs handling of Phase II. PIs are still missing information that is on the Gemini website. A single stop web page for each instrument would be very helpful.

The imaging contest for Canadian amateur astronomers concluded successfully in May at the CASCA meeting. The Gemini winner received a nice poster of the image taken of RY Tau. The event received moderate media coverage including the front page of the online version of Sky Telescope.

I gave a talk on Gemini at the Centre of the Universe, HIA’s visitor centre, on July 8. The talk was followed by a live video link to the Gemini North control room to talk with the investigators for a Canadian classical run.

While Canadians generally support the ‘Queue’, we feel that it limits the experience graduate students can obtain. NRC-HIA manages a grant that pays for graduate student travel in support of successful telescope proposals. We are working with Gemini to allow a limited number of students to spend 1-2 months working at Gemini.

Dennis Crabtree
Chilean NGO report for 2005B semester

Phase I

The Chilean 2005B proposal deadline was on April 1st. The submission process ran almost smoothly. Due to some local organization problems (100% of the NGO on vacation at one time, one system manager alone) we started too late setting up our backend server, and produced an overall delay in the CfP. We have made arrangements already to avoid this problem in the future.

Nevertheless, these difficulties did not affect the interaction with PIs one month later (as usual, arrival times of Chilean proposals range from hours to a couple of minutes before deadline). The Chilean 2005B statistics are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Time requested (h)</th>
<th>Proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMOS-S</td>
<td>140.2</td>
<td>8</td>
</tr>
<tr>
<td>GNIRS</td>
<td>34.2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>174.4</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

Subscription factor = 1.2

Out of these 11 proposals, 3 were joint proposals (all GMOS): one CH+US+CA, one CH+UK+G, and one CH+UK. There was one classical proposal requesting 3 nights.

Pre-TAC technical assessment was done and distributed in advance of TAC meeting. The TAC finally ranked 9 proposals with a total awarded time of 144.4 hours. Of these programs, 2 will use GNIRS and 7 GMOS-S.

Phase II

Phase II has gone smoothly. There has been a good interaction with PIs. Three programs have been submitted successfully before the first deadline of July 12.

Improvements of the new OT (Palote) are evident. More in detail, we noted that the "class" of an observation cannot be changed any longer (unlike in previous versions), while in the webpages there still are instructions on how to change it (in case of calibrations).

Issues/Questions

One 2005A program was completed in less time than allocated (remaining 6.8 hours). The reason given by the PI was a lucky conjunction of a conservative estimation of overheads and RA distribution, so many observations could be executed with one telescope setup. The question that is raised is how to proceed in these cases, if the PI requests using the remaining time. After the Gemini-S Director, should Gemini consult the corresponding NGO or TAC Chair.

Sebastian Lopez
United Kingdom NGO report for 2005B semester

Phase I

For the 2005B proposal round the UK received 80 proposals for ~1620 hours.

The split by instruments is given in the following table:

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Gemini North</th>
<th>Gemini South</th>
</tr>
</thead>
<tbody>
<tr>
<td>#props</td>
<td>hours</td>
<td>% of hrs</td>
</tr>
<tr>
<td>GMOS-N</td>
<td>26</td>
<td>456.8</td>
</tr>
<tr>
<td>NIRI</td>
<td>13</td>
<td>167.6</td>
</tr>
<tr>
<td>NIRI/Altair</td>
<td>2</td>
<td>19.0</td>
</tr>
<tr>
<td>Michelle</td>
<td>6</td>
<td>134.8</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>778.2</td>
</tr>
</tbody>
</table>

Note that this includes 4 proposals that asked for Gemini North and South. The times are not corrected for wrongly estimated overheads.

The time available (oversubscription rates) in 2005B are 337 hours (2.3) in the North and 232 hours (3.6) in the South.

54 proposals for 780.7 hours, and 4 Michelle CT proposals for 41.3 hours, were forwarded to the ITAC. 35 proposals for 593 hours (371 hours in the North and 222 in the South) were approved (including the Michelle CT).

Phase I comments, questions and suggestions

A few people used the previous semester’s xml file and got confused by the message which appeared upon submitting, which said that they had already submitted the proposal. Rerwording the message might makes things clearer, or a semester flag could be added to PIT, so it knows if the proposal has been submitted in the current semester.

Several UK proposals were to observe extended emission line sources. The ITC emission line input has no /arcsec^2 option which is confusing. Also the requirement to have line width > 1nm makes it hard to estimate S/N for narrower lines.
Phase II

All UK Phase II for 2005A were submitted by the second deadline.

The 2005B Phase II process has run smoothly so far. The OT databases seemed to be down less, and there have been no complaints about this. We received about half of the 2005B Phase II for the 1st deadline.

Phase II comments, questions and suggestions

- NGO checking of web pages and OT libraries before Phase II would be useful for both NGO and the observatories. The NGO will help to find errors and inconsistencies and also point out where PIs may get confused. In the UK we would like to do this as incorrect OT libraries increase the Phase II checking burden, and inconsistent or confusing instructions can make it hard to convince the PIs that we are telling them the truth. NGO checking could be achieved by a deadline around 2 weeks before the OT release for Phase II changes, web pages and OT libraries to be ready.

2005B problems that we would have caught include:
  - GNIRS library observe class incorrect for arcs
  - The GMOS spectroscopic standards web page is not good enough for PIs to pick stars. In any case, blank targets would seem to make more sense.
  - GNIRS OT component pages refer to checking a calibration box.

- Observe classes are good. Some suggestions:
  - Remove acquisition overhead from the science and add it to the acquisition (some PIs thought they were being charged twice).
  - Copy the explanation from 2005B special instructions before next semester. One good explanation for all instruments will probably suffice, though the GMOS list is good. The correspondence of Nighttime Partner Calibration with baseline calibration is not immediately obvious.
  - Could the planned time be even more exact? Currently it is calculated from the overall observe class of an observation which is sometimes incorrect e.g. a GMOS spechshot standard which contains an arc will have an overall observe class of Nighttime Program Calibration because the arc has this class.

- OT
  - We really, really need a way to easily see the same parameter in more than one observation. Checking, for example, the observe classes in a program with many observations by clicking on each one is mind numbing.

- Web pages
  - GNIRS IFU instructions should be improved and integrated with the rest
  - I don’t think PIs are finding the Special Instructions page containing changes for this semester. Could it be made more prominent, e.g. from the Phase II overview page, and the Phase II links in the side bar?
- The information on the web pages about splitting long programs should correspond to reality and also be consistent across instruments. GMOS is the only instrument I could find that mentions that long programs (>4 hours) may be split. GNIRS and NIRI mention splitting programs in order to re-center objects on the slit. GNIRS requires longslit programs to be broken into multiple observations with accompanying acquisitions, NRI mentions extra overhead due to checking centering.

**Other UK news**

UK staff went on 3 observing visits to the telescopes in 2005A, Rachel supported GMOS-N and trained on NRI, Reba supported GMOS-S and GNIRS, and Ilona supported GMOS-S.

The UK NGO held a mid-infrared workshop on March 21st in Oxford, which was attended by ~25 people. There were 2 introductory talks and a Gemini data reduction talk in the morning, and science talks in the afternoon.

Ilona has sent a draft GMOS Phase-II cookbook to Gemini. Ilona and Rachel have been working on creating GMOS masks from non-GMOS images.

The UK 8mUG meeting was held in March. Points relevant for operations were:
- People strongly dislike the ESO 1 hour maximum OB length.
- Gemini Phase-II is considered time consuming (i.e. compared to ESO). People would like to be able to make the same change to several observations at once. They would also like to import lists of coordinates.
- More generic templates were requested for OT libraries, and it should be clear what you have to change.
- There was a comment that the NRI/Altair skeleton is just NRI.
United States NGO report for 2005B semester

Phase I

The NOAO Gemini Science Center (NGSC) saw enthusiastic demand from the U.S. community for Gemini observing time for semester 2005B. Ninety-seven proposals were received for Gemini North: 50 for GMOS-North, 21 for NIRI alone, 14 for NIRI with the Altair adaptive optics system, 14 for Michelle, and 7 for Keck HIRES. Ninety U.S. proposals requested Gemini South: 40 for GMOS-South, 28 for GNIRS, 15 for Phoenix, 12 for T-ReCS, and none for the Acquisition Camera. In total, 187 U.S. Gemini proposals sought 340.4 nights on the two Gemini telescopes. The oversubscription factors of 3.0 at Gemini North and 3.6 at Gemini South demonstrate healthy community engagement.

The NOAO Telescope Time Allocation Committee (TAC) reviewed the proposals, and the NGSC Staff performed technical assessments. The 93 most highly ranked proposals were forwarded to Gemini for ITAC review. Ten approved U.S. Gemini programs requested classical observing and were scheduled in this mode.

The Phase I process ran smoothly in the U.S. However, a few issues arose during Phase I. These are listed in the spirit of improvement for next semester:

- The lack of a Gemini integration time calculator (ITC) for Michelle in spectroscopy mode was a problem for both proposers and NGSC Staff performing technical reviews. An ITC is provided for Michelle in imaging mode. NGSC Staff recommend that the Michelle ITC be generalized to include all spectroscopy modes to be offered in semester 2006A.
- The Gemini Web pages continue to be an issue. We applaud the recent update of some of the pages. However, too many of the instrument Web pages remain out of date, and too many policy and/or procedure changes that have occurred during the past few years are not fully reflected on the Web pages. The NOAO Users’ Committee recently criticized the Gemini Web pages, citing outdated information and difficulty in finding information required to submit proper Phase I and II programs. One of the contributors to user dissatisfaction with the Gemini Web pages is the lack of consistency between instruments in how important information is presented. An example of this inconsistency is the occasional “burying” of important information required for a proper Phase II in the “Hot News” or other less mainstream pages.
- As regards the Gemini Web deficiencies described above, NGSC suggests that the Operations Working Group develop a process to involve the NGO Staff in identifying issues with the Web pages, contributing to solving any deficiencies, and reviewing drafts of Web page updates.
- Community members using the HelpDesk select an incorrect category surprisingly frequently. For these queries to be properly routed, the current procedure is to request that Gemini manually change the category of that query. If the ability to change the category were available to the NGOs for queries assigned to NGO Staff, we could speed response
time and burden Gemini less. Thus, we request a mechanism that would allow NGO Staff to change category in the HelpDesk.

- We had some trouble with joint proposal submissions from Australia, who are required by the Australian TAC to submit a PDF file of parts of the text. We suggest uniform implementation of the PIT-to-PDF tool that has been discussed, which should eliminate such non-uniformities in submission.

## Phase II

NGSC staff performed Phase II review, and related proposer interactions, for U.S. proposals. NGSC reminded all U.S. P.I.s (on June 29, July 11, and August 5) of the Phase II deadlines, their great importance, and the help available to them through NGSC. Individual NGSC contact scientists also sent individualized reminders and offers of Phase II assistance to the investigators they had been assigned. For 2005B, the Phase II checking and related P.I. interactions are going well. Before or at the early-in-semester P.I. Phase II deadline (July 12), 20 U.S. programs had submitted targets to NGSC. By the corresponding NGO deadline (end of July 22), NGSC had worked with all of these P.I.s and forwarded 23 Phase II programs to Gemini (the number sent is larger than the number received by the P.I. deadline because we were able to check/interact/fix some programs that arrived after the P.I. deadline).

The following difficulties or inefficiencies arose during the 2005B Phase II process to date. These are given in the spirit of continuously improving the Phase II process, to the benefit of the Gemini communities. We appreciate the fact that some of our suggestions from the last such report have been implemented.

- NGSC Staff recommend that the Observing Tool (OT) be enhanced to contain a self-checking capability. A check button should be added that would perform straightforward mechanical checks: for example, checks of the targets in the Phase I vs. Phase II proposals, checks of the observing conditions granted vs. those contained in the Phase II, missing “observe” command, etc. This would greatly reduce the time required to complete a Phase II check and increase checking accuracy, benefiting Gemini and the NGOs. It could also allow P.I.s to do some self-checking before submission.
- NGSC Staff recommend that the OT enable NGO staff to highlight and fetch multiple programs with a single fetch from the database.
- NGSC has been advising U.S. P.I.s to use the OT libraries. This often strongly increases the P.I.’s ability to complete their Phase II without major errors. NGSC Staff recommend that the OT libraries be easily available within the OT for all instruments. If the rules for the upcoming semester are well defined, the NGOs could help check whether the OT libraries are completely in compliance before Phase II commences.
- NGSC continues to receive P.I. feedback advocating for GMOS mask making from pre-existing images or astrometry of sufficient accuracy (i.e., not requiring GMOS pre-imaging). This would certainly simplify the process of securing GMOS multi-object spectroscopy.
- NGSC carefully tracks the status of each U.S. Phase II program. The Interactive Observing Database Snapshot page
(http://www.gemini.edu/sciops/schedules/obsStatus/ODBConfigGS05A.html) has aided this tracking significantly, and NGSC appreciates this innovation. One deficiency of this page is that the status is updated only once per day. It would be helpful if this page were updated with a more rapid cadence. One suggestion is to update the page with the same cadence as the “Execution Status” pages (http://www.gemini.edu/sciops/schedules/obsStatus/ObsStatusNorth.html#GN-2005B-Q-1), which is “every few hours.” Another possibility is to automatically trigger an update of the pages when more than some fixed number of observations has changed status since the previous update.

- As NGSC interacts with the community on Phase II, it is clear that there is interest in an eavesdropping mode. NGSC recommends that the Operations Working Group explore how to enable eavesdropping pathfinder(s). NGSC is enthusiastic to participate in such an effort.

**Other**

The following NGSC astronomers visited Gemini to take part in queue observing and/or training during semester 2005A. The first table shows visits for standard queue observing.

<table>
<thead>
<tr>
<th>Dates</th>
<th>NGSC Astronomer</th>
<th>Telescope</th>
<th>Instrument(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/20-3/23</td>
<td>Bob Blum</td>
<td>North</td>
<td>NIRI/ALTAIR queue</td>
</tr>
<tr>
<td>3/31-4/3</td>
<td>Lucas Macri</td>
<td>North</td>
<td>NIRI/ALTAIR + GMOS-N queue</td>
</tr>
<tr>
<td>3/8-3/12</td>
<td>Lucas Macri</td>
<td>South</td>
<td>GMOS-S queue</td>
</tr>
<tr>
<td>3/26-3/30</td>
<td>Jay Elias</td>
<td>South</td>
<td>GNIRS queue</td>
</tr>
<tr>
<td>5/5-5/9</td>
<td>Tom Matheson</td>
<td>South</td>
<td>GMOS-S queue</td>
</tr>
<tr>
<td>7/14-7/18</td>
<td>Rachel Mason</td>
<td>South</td>
<td>T-ReCS queue</td>
</tr>
</tbody>
</table>

The second table shows NGSC support at Gemini South for Phoenix classical observing support and during semester 2005A. NGSC provides training and start-up assistance to all Phoenix observers.

<table>
<thead>
<tr>
<th>Dates</th>
<th>NGSC Astronomer</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/24-3/3</td>
<td>Verne Smith</td>
<td>Phoenix classical</td>
</tr>
<tr>
<td>4/24-5/2</td>
<td>Ken Hinkle</td>
<td>Phoenix classical</td>
</tr>
<tr>
<td>6/12-6/30</td>
<td>Bob Blum &amp; Verne Smith</td>
<td>Phoenix classical</td>
</tr>
</tbody>
</table>

NGSC has informed the U.S. community of the imminent NICI Planet Search Campaign via the NOAO Newsletter and an e-mail to a comprehensive list of U.S. exoplanet researchers.

NGSC has made three new staff hires since the most recent report at the February 2005 Operations Working Group meeting: Knut Olsen (internal transfer), Susan Ridgway, and Adwin
Boogert. Olsen will transition to NGSC around September 1 and will visit the two Gemini sites to receive training in NIRI/ALTAIR and GMOS. Adwin Boogert will start in NGSC in December and will be based in La Serena; he will support IR programs, including mid-IR. Susan Ridgway will also be based in La Serena and will commence NGSC employment in January 2006. She will concentrate on adaptive-optics programs. Patrice Bouchet is no longer on the NGSC or NOAO staff and is working in France.

Submitted by Taft Armandroff
University of Hawaii NGO report for 2005B semester

Phase 1

A total of 14 proposals were received for Gemini North. These consisted of:
GMOS – 7 queue proposals seeking a total of 70.17 hours.
GMOS – 5 classical proposals seeking a total of 5 nights (50 hours)
Michelle – 1 queue proposal seeking 2.5 hours
NIRI – 1 queue proposal seeking 7 hours
4 proposals were joint.

The total requested time was 129.67 hours, and the total available time was 102 hours. The corresponding oversubscription factor is 1.27. This oversubscription was lower than usual. Two possible reasons are that I had explained at a faculty meeting that the UH share of Gemini time in 2005B was lower than usual because of a correction factor from previous semester, and this may have caused some potential applicants to seek their observations on other telescopes.

The UH oversubscriptions are also often lower in the B semester than in the A semester, because of the present makeup of the UH faculty.

No major issues were encountered. Some teething problems with the proposal acceptance software were encountered – many partners experienced similar problems – UH computing staff helped to solve the problems.

One joint proposal had the amounts of time requested from each partner badly mangled. This proposal was from a Gemini staff member.

Technical reviews were performed for UK and Australian HIRES proposals.

Phase II

One program was assigned to UH that had a UK lead scientist – this program has been reassigned to UK.

Response from Gemini staff in reviewing programs that are “For Activation” seems to have been slower than in previous semesters. This is starting to be problematic with respect to the Phase II deadline. No email is being automatically sent when programs are set to hold, resulting in no knowledge of status change/review to NGO and PI.

People preparing Phase II programs continue to find it very hard to find information on the Gemini web site. This is particularly true of new users. The cookbooks in the OT library that are available are very limited. It would be a tremendous service to users and NGOs if these could be greatly improved.
UH astronomers continue to have strong interest in classical observing with Gemini. Each semester, we continue to have one or two programs that are much better done classically.

Each semester recently, UH has had programs designed to observe as yet undiscovered targets. Preparation of Phase II programs for these leads to some discomfort in the present system (setting observations to “For Activation” or “Ready” when they are not). Some further discussion of how to deal with these would be useful.

I suspect that there is some kind of modification/logging issue in OT. One user attempted to modify observations that were set “For Activation.” This seems to have not stuck in the database, but the log file no longer shows the NGO “store” that set the proposals “For Activation.”