

12th GEMINI OPERATIONS WORKING GROUP MEETING
January 30,31 2007
Draft Minutes – R.Johnson, Feb 20 2007

Present: Dennis Crabtree, Tim Davidge (by video), Paul Francis, Rachel Johnson (Chair), Inger Jorgensen, Sebastian Lopez, Bryan Miller (part), Bernadette Rodgers (part), Jean-Rene Roy (part), Verne Smith, Richard Wainscoat, Mike West

Action Items

Action 12.1 *Dennis Crabtree will lead the creation of a user feedback questionnaire to be sent to all users who have been awarded Gemini time.*

Action 12.2 *Gemini Observatory will provide to the PIs statistics (e.g. RA distribution and observing condition distribution by Band) of 07B programs that are in the queue after the 07B ITAC, and before the 07B Phase-II. The same statistics for 07A will also be provided (though this will not be in time for the 07A Phase-II process).*

Action 12.3 *From 07B, proposals requesting more than one telescope (GMOS-N, GMOS-S, Subaru or Keck) will not be allowed by any partner. Bryan Miller will investigate whether PIT can be modified to prevent different telescopes being chosen in the resources, and also to have a section allowing users to state that their proposal is linked with others requiring different telescopes.*

Action 12.4 *Verne Smith & Dennis Crabtree to send software which populates observing condition bins during the NTAC process to other interested NGOs.*

Action 12.5 *From 07B Phase-I the NGOs should forward all joint proposals to Gemini after the NTAC, even those that did not get time. These should be forwarded with 0 time, and a dummy ranking. This will simplify joint proposal reporting.*

Action 12.6 *The observatory will update the web view of the interactive database so that it shows the date that the PI last stored a program.*

Action 12.7 *Bryan Miller to propagate the minimum useful time from the Band 3 tab in the PIT into the OT*

Action 12.8 *Bryan Miller to investigate software for duplication checking against the GSA and active database. This should be accessible from PIT, preferably automatically and PIT should generate a warning if duplications were found and not addressed by the PI.*

Action 12.9 *Bryan Miller to modify the OT to allow the NGOs to indicate that they have checked the Finding Charts and to allow linking of finding charts with observations.*

Action 12.10 *Bryan Miller will investigate the feasibility of improving the Phase-II skeletons given to the PI, both in the short and in the longer term. Specific suggestion from this meeting were:*

- *include a note in the Phase-II skeleton giving the location of the OT libraries*
- *include all or part of the relevant OT library(ies) in the Phase-II skeleton*
- *make the Phase-II skeletons look less like observations so that it is clear that PIs have to do something.*

Action 12.11 *Gemini will have a deadline for the Gemini contact scientist to check the Phase-II. This will be 3 weeks after the deadline for the NGO to forward the Phase-II to Gemini.*

Action 12.12 *The observatory will review the actual vs. model distribution of observing conditions.*

Action 12.13 *The NGOs will send suggestions for external reviewers for the NGO review to Dennis Crabtree. Note that the aim is now to conduct this review via email and video/telecon.*

Action 12.14 *The current and next Ops WG chair will define the agenda for the Gemini-NGO meeting in Brazil.*

Action 12.15 *The observatory will update and improve the mask design checklist, add examples of good and bad masks, and put this on a public web page*

Action 12.16 *Inger Jorgensen will review the charging for Michelle Compensation Time since 05A, and calculate corrections to bring this in to line with the Ops WG resolution 8.1. The corrections will be applied to the cumulative time accounting at the end of semester 07A.*

Action 12.17 *Inger Jorgensen to write a document outlining the time accounting policies and send it to the Ops WG for review.*

Action 12.18 *Bernadette Rodgers will check the effect of changing quanta sizes when implementing Resolution 12.5*

Action 12.19 *Bryan Miller to create a PIT tab for classical backup programs by 08A.*

Action 12.20 *From 07B reminders of the deadline for classical PIs will be sent automatically from the ODB. Bryan Miller to implement this in ODB. As long as this automatic email is implemented then the classical deadline will be a hard deadline.*

The NGOs will check and submit the classical Phase-II within 10 days of this deadline, and Gemini will then have another 10 days to check the program before the observing begins.

Resolutions

Resolution 12.1 *The Ops WG recommend that the following principles be taken into account in time exchange negotiations with Subaru 1) that there be a long term time balance (over several semesters) 2) that the exchange be queue for queue with a ranked list and that programs should be executed as far as possible in priority order*

Resolution 12.2 *The Ops WG discussed issues that may arise if there is an agreement to bring TEXES back to Gemini in 07B. Should this occur, we recommend the observatory aim to include the following points in the new agreement:*

- *If there are no TEXES programs that have requested observing conditions that match or are worse than the current observing conditions, then the time should revert to normal Gemini queue observing.*
- *The priority for execution of TEXES programs should follow the same rules as for normal queue programs, that is in general the TEXES program in the highest queue band that matches the current observing conditions should be observed.*

Resolution 12.3 *The Ops WG recommend that, starting from the Phase-II process for 07B, there is only one deadline for Phase-II submission by the PI. This will ensure that all targets are potentially available at the beginning of the semester. This PI Phase-II deadline will be approximately four weeks after the release of the*

Observing Tool for that semester. PIs who require an extension should submit an email to the relevant Head of Science Operations (and copied to their NGO contact) prior to the deadline. The deadline for NGOs to submit checked Phase-II to Gemini will be approximately two weeks after the PI submission deadline. Gemini will complete the Phase-II checks within approximately three weeks of this NGO deadline. The dates for semester 07B are: July 10 (PI→NGO), July 24 (NGO→Gemini), August 14 (Gemini finish checking).

Resolution 12.4 *The Ops WG recommend that the goals for program completion be updated and split into Requirements and Goals. We expect that the requirements should be achievable except in exceptional circumstances (e.g. large earthquakes, extreme bad weather). To check that the requirements are achievable, the Ops WG also recommend that the observatory review the true distribution of observing conditions as compared to the assumed model distribution, as differences between these could affect completion rates.*

Resolution 12.5 *The Ops WG recommends changing the queue merging process in the following manner, to prevent imbalances in Band 3 share due to ranking of classical programs that does not reflect their scientific merit. Classical time on the Gemini telescopes requested by a partner should be subtracted from the partner's total time for the semester before the queue merging process. Classical programs are then removed from the merging sequence. The partner's share of the total queue will then be calculated. The partner's number of slots in the queue merging sequence, or the size of the partner's merge quantum should be adjusted to match the partner's share of total queue time.*

Resolution 12.6 *The Ops WG recommend that from 07B classical programs specify the real observing conditions required for their program (previously classical programs have set all the conditions to Any). Classical PIs will also be able to specify a back-up program to be carried out in worse observing conditions. If the conditions at the telescope during the classical run are worse than required in either the main or back-up program then the time should revert to queue observing. **In this case the classical program will be charged at 75% of the time during which the classical run was active on the telescope.***

Resolution 12.7 *The Ops WG wish to clarify that, as occurred during the recent earthquake at Gemini North, loss of all or part of a classical run for any reason (including technical failure and natural disasters) is charged to the partner. **(As stated above a classical run will not be charged for time during the night when the telescope has reverted to queue observing).***

Resolution 12.8 *The Ops WG recommend that, once the software is in place to send an automatic deadline reminder to classical PIs, the classical deadline should become a hard deadline.*

Review of Minutes and Action Items

Minutes and Actions of Ops WG meeting #11:

The draft minutes from Ops WG meeting #11, held in August 06, were approved.

The actions items from meeting #11 were reviewed. All had been completed except for:

AI 11.5 – now AI 12.10 (OT library skeletons)

AI 11.8 – now AI 12.13(NGO review)

AI 11.10 – now AI 12.1 (user feedback questionnaire)

AI 11.13 – now AI 12.2 (statistics)

Information was provided as requested for some of the Action Items from meeting #11:

Action 11.3 All NGOs will assess, during the technical assessment of 07A proposals, how feasible it is for them to run duplication checks for each proposal using the current PIT button which checks the Gemini

Science Archive. They will report back at the next meeting.
All NGOs reported that running these checks was feasible.

Action 11.9 All NGO reps will investigate the procedure to implement long-term status for Gemini proposals in their respective partner countries.

UH would not be able to implement this. For the US, Australia and UK it would be OK.

Action 11.11 Bernadette Rodgers will estimate the effort required to take the distribution of right ascensions, as well as the observing conditions, into account when the queue is compiled at the ITAC,

It is feasible to compile a summary of the RA distribution of submitted programs for the ITAC. Taking these RA distributions into account when filling the queue would require considerable software effort.

The group then discussed action items from a telecon that was held in December 2006. One of these was whether all partners could agree to allow only one telescope per proposal. This is a requirement for the package that the NGOs submit to Gemini, meaning that any multi-telescope proposals have to be manually split by the NGOs. Previously multi-telescope proposals were allowed in the US. Whilst realising that some PIs might find this restriction artificial, we agreed that we would require it. The other option discussed was to automate the splitting of proposals, but it was felt that the observations in the PIT were often not set up in a way that made it obvious how the proposal should be split (e.g. which targets were for which telescope). The PIT should be modified either to prevent multiple telescopes being selected (preferred) or to warn the PI when this has occurred, and to allow PIs to link multiple telescope proposals (Action 12.3).

Board Resolutions

Dennis Crabtree presented the resolutions from the November 2006 Board meeting.

ITAC Summary and actions

Bernadette Rodgers summarized the November 2006 ITAC meeting and feedback.

For the 2007A NTAC and ITAC process Gemini developed a password protected web page to give information to the committee members. The plan for 2007B is to split this into separate NTAC and ITAC pages and then to make the NTAC page publicly available. Also planned for 2007B is a pre-ITAC telecon to review documentation.

Some changes were made to the queue after the ITAC meeting. These were due to the removal of the bHROS time, and exchange time targets being unspecified at the time of the meeting. The ITAC feedback recommends that changes after the CfP should be avoided if possible, but that if necessary they should be resolved (and ITAC informed) no later than the ITAC meeting. The observatory commented that they are working with the exchange time partners to improve the process before the next meeting.

Some partners have software which populates the observing condition bins during the NTAC process. They will send this to interested parties (Action 12.4).

Instrument Status Review – Joe Jensen

Joe asked for Ops WG input on the following:

- NICI Campaign scheduling. How many protected blocks in 2007B ?
- No public NICI time in 2007B
- TEXES in 2007B – desirability, partner participation, operations
- Flamingos2 commissioning in 2007B and a possible collision of Flamingos2 and MCAO
- The handling of Flamingos2 campaigns.

All expect for the last two of these issues were addressed at various points during the meeting.

Joe gave a status report on the recent and upcoming instrumentation.

GSAOI has been assembled and tested in Chile and passed acceptance tests. Punch list items from the acceptance tests have been fixed and integration and testing was recently completed in the Cerro Pachon (CP) lab. GSAOI is now in storage until MCAO is ready.

Flamingos-2 is integrated and the mechanisms are mostly working. However, there are remaining problems that are being addressed but are causing slippage of the schedule. Delivery to CP is now expected in mid-2007. The Flamingos-2 commissioning blocks currently scheduled for 07A are likely to be too early, so commissioning time should be scheduled in 07B. Further delays put Flamingos-2 at risk of collision with MCAO. Filters for the Flamingos-2 campaigns will be commissioned after the rest of the instrument. The earliest Flamingos-2 can be offered for general use is in the 08A Call for Proposals, this depends on taking and analysing commissioning data before September 2007.

NICI passed pre-ship acceptance tests in Hilo in October 2006 and arrived on CP in early Jan 2007. Assembly and testing in the CP lab is now well under way. The first test on the sky is scheduled in late February. AO tests show similar performance as in Hilo. The light leaks were fixed and the background now meets specifications. An area of concern is the performance of the deformable mirror (DM), which as well as two failed edge actuators, also has limited stroke. This may limit the seeing conditions in which NICI can operate.

There is a backup plan to order a replacement DM if on-sky tests confirm limited performance.

NICI system verification (SV) is required to provide data to support the Call For Proposals, but demo science is not needed (as already provided by early campaign targets). To avoid conflict with campaign targets, the observatory team proposes to pick well known SV targets (e.g. debris disks, stars with known companions), and then to publicise the data. As usual the SV will also test end-to-end performance

The Altair Laser Guide Star commissioning is now back on track. SV observations started in January, and the data are good quality. The system has to be made more reliable and efficient before it can be used as part of the regular queue.

Progress on MCAO is being made on several fronts – the DMs and drive electronics are now in Chile, and the optical bench is being integrated. The biggest uncertainty is with the laser, delivery has slipped and it is now expected no earlier than August 2007.

There is a proposal to bring TEXES back for one block of ~17 nights in 2007B.

The Michelle array controller upgrade was cancelled.

There is little progress on acquiring red sensitive GMOS CCDs. Two main possibilities exist - Hamamatsu CCDs, which have good performance on paper, but uncertain availability, and three already used Lincoln Lab CCDs from CFHT that should give sensitivity comparable to FORS on VLT.

Joe then gave a brief review of the current status of the Aspen process. The team chosen to build PRVS is standing by for Board approval and funding to proceed. The GPI team is making steady progress towards a PDR in May of this year. GPI is scheduled to come online at the end of 2010 and will replace NICI. It is hoped to restart the WFMOSS conceptual design studies by the May Board meeting. Data for the Mauna Kea Site Monitoring are now being collected after a slow start due to bad weather during the last few months.

2007A Phase-I and Phase-II Review

Phase-I and II Report from the Observatory – Bernadette Rodgers

In 2007A 505 proposals were submitted for a total of 6445 hours. 30% of submitted proposals were joint, <10% were classical. The Gemini community request for exchange time was oversubscribed (by x6 on Subaru and x1.5 on Keck), whereas exchange communities were undersubscribed in their Gemini requests. GMOS-N had the largest fraction of requested time (59%) in the North. In the South GMOS-S and GNIRS were equal top with 32%.

Bernadette requested that, from 07B, the NGOs send all the joint proposals to Gemini including those that did not get time (Action 12.5).

Discussion of NGO Phase-I and Phase-II reports – NGO reps

The reports are included in Appendix A.

During the discussion of the NGO reports it was requested that the interactive database on the web that shows Phase-II status should also show the date that the program was last stored by the PI, as this will be useful for Phase-II deadline tracking (Action 12.6).

2007A telescope schedules – Inger Jorgensen & Michael West

Flamingos-2 commissioning is scheduled for the South but is unlikely to happen in this semester.

Initial discussion of 2007B CFP – Michael West & Inger Jorgensen

In the North the only change for 2007B is that the elevation limit to use the Laser Guide star is now 40 degrees. The proposed science time is 90%.

In the South there will be NICI campaign science and Flamingos-2 commissioning and Science Verification. BHROS and Phoenix are not offered. The proposed science time is 75%.

As before, the HIRES exchange time is a classical 5N exchange. The Keck community has access to Michelle, NIRI and T-ReCS. The distribution amongst these instruments will be determined by demand. Gemini will exchange 40-50 hours with Subaru. Subaru can access GMOS-N & S and NIFS.

As in previous semesters a flexible blocks strategy will be used for instrument swaps. In the North, NIFS and Michelle will swap on the up-looking port. In the South, NICI and T-ReCS will swap on the up-looking port. GMOS-S will be dismantled for Flamingos-2 commissioning and science verification.

In 2007B, 12 nights are allocated to the NICI campaign. This time is taken off the top. The simplest way to ensure 12 nights of good conditions for NICI is to take more than 12 nights off the top. A factor of 1.5 has been found to work well for the Michelle compensation time, so 18 nights were taken off the top for NICI campaign science. Note that the NICI campaign is scheduled in blocks to protect other good seeing programs – no NICI campaign science will be observed outside the blocks. During the NICI campaign blocks, observations will revert to queue if the conditions are not good enough for NICI. Another problem is how many nights to schedule in order to get 12 nights of chargeable NICI time. The observatory will decide this. There will probably be two or more campaign science blocks to allow analysis and changes to observing strategy in between.

The Ops WG discussed the process of exchanging time with Subaru and the way that the exchange should be balanced (Resolution 12.1). Gemini propose to add the exchange time across the ranking bands with the following percentages – 30% in Band 1, 30% in Band 2 and 40% in Band 3. Previous completion statistics

indicate that this will lead to 65-70% of the scheduled time being executed. Gemini will send a ranked proposal list to Subaru.

The Ops WG discussed operational issues that might arise should TEXES come back to the Gemini North in 2007B (Resolution 12.2). The group did not feel that the partner imbalance in usage of TEXES – dominated by the US with some proposals also from the UK – was a major issue.

2007B Process and Schedule

PIT and policy changes for 07B – Bryan Miller

A Band 3 tab has been added to the 2007B PIT, so that users can state worse observing conditions and a minimum useful time, to be considered if their program is in Band 3. Having this information in the Phase-I will allow the TACs to make informed decisions about the likelihood of observation, and allow the Band 3 requirements to be technically and scientifically assessed. From 2007B programs will need approval to relax their observing conditions and change the minimum useful time. Inger Jorgensen noted that the minimum useful time should be propagated into the OT (Action 12.7). Verne Smith noted that he has to change the NOAO form to include this new information, but that this should not be a problem.

Other changes for the 2007B PIT include improvements to the user interface for the guide star wizard and printing of the number of words used for each section in the pdf (note that if warnings for exceeding word limits are required in the future then this should be possible to implement).

Planned changes for the 2008A PIT include automatic duplication checking against the archive and the active database (Action 12.8), access to some OT features, in particular the TPE for guide star selection and improved text formatting.

New features for the 2007B OT include an auto-updating feature that will allow bug fixes and new features to be implemented incrementally, various aids to help Phase-II definition and checking, including smart GCAL settings and automated Phase-II checking, automatic selection of guide stars and linking of finding charts to observations. A radio button to show that the NGOs have checked the finding charts was requested (Action 12.9). A small group will be set up to plan the automated Phase-II checking and will possibly also discuss how to improve the Phase-II skeletons (Action 12.10). NGO input would be useful.

The development schedule for the 2007B OT is: OT released for testing Monday May 14, OT web page updates ready by June 1, OT release June 7.

The 2008A OT will include MCAO and GSAOI support and a new organization of sequences. Gmmps is being rewritten as an OT module.

Dates and topics for NGO Phase-II training sessions

During 07B the NGOs will require training in how to check GMOS-MOS masks. There will be a session at the NGO meeting in Brazil, and at least one additional session via video conference.

2007B Process deadlines - Bernadette Rodgers

In 2007, the normal deadline of March 31 is a Saturday, therefore all NGOs agreed to make the deadline Mon April 2nd. Jun 8 is the goal for Gemini to send Phase-II skeletons to the PI. This is slightly faster than normal, to try and avoid a clash with the Brazil Gemini Science meeting, therefore it may slip by a few days.

The Ops WG discussed the current practice of having two Phase-II deadlines. Gemini has found that PIs with early targets do not always submit their Phase-II by the first deadline, and that the observatory is often short

of targets at the transition between semesters. We decided to change to a single Phase-II deadline (Resolution 12.3). This will be at a similar time to the previous first deadline - around 4 weeks after the release of the Phase-II skeletons. The NGOs will then have approximately 2 weeks to check the Phase-II and submit them to Gemini. As the NGOs are doing double the amount of Phase-II checking in these two weeks they may not be able to forward all the Phase-II to Gemini by the deadline, so this is a ‘best-efforts’ deadline, with a goal to forward 90%, and with priority on programs with early targets. Gemini will help the NGOs to prioritize by emailing the NGO contact with any programs that should be checked first.

Gemini agreed to set a deadline for the observatory science staff to make the final check on the programs and set them to Ready. This will be 3 weeks after the NGO deadline (Action 12.11).

For 2007B Phase-II the provisional deadlines are:

July 10	PI → NGO
July 24	NGO → Gemini
August 14	Gemini finish checking

Science operations update – Inger Jorgensen, Mike West, Dennis Crabtree

The Ops WG recommend updating of the completion rate goals and a split into Requirements and Goals (Resolution 12.4). The Band 3 goals are revised to use the concept of minimum useful time. This is set by the PI in the proposal, and gives the minimum observations required for useful science. The aim is to avoid penalizing large Band 3 programs. These are often currently not started because they would most likely not be completed.

The new completion rate goals and requirements are :

Requirements	Goals
1. Band 1: 90% completion rate (excl ToO prg) after rollover period	1. Band 1: 100% completion rate (excl ToO prg) after rollover period
2. Band 2: 75% completion rate (excl ToO prg)	2. Band 2: 100% completion rate (excl ToO prg)
3. Band 2: 80% of started programs should have 75% of data taken	3. 90% of started programs should have 75% of data taken
4. Band 3: 80% of started programs should have 100% of PI defined minimum data taken	4. Band 3: 80% of started programs should have 75% of all data taken

The Ops WG commented that the requirements should be achievable, and that experience from previous semesters suggests that they may be set too high. The observatory think there is still room for improvement in the Band 3 completion statistics, and they would also like to review how the real distribution of observing conditions compares with that assumed for filling the queue (Action 12.12), as if these are different that could also affect the completion statistics. Another suggestion was to have rollover for all Band 1 programs.

The mean acquisition times for 2005B & 2006A for all spectroscopic modes were ~12 minutes. This is in addition to the 6 minutes required for slewing and guide star acquisition. Optical and near-infrared acquisition times are very similar in the North and South. In the mid-infrared, T-ReCS acquisitions times are longer than Michelle. The observatory is aiming to improve this. Other planned improvements to make

acquisitions faster are: a consistent acquisition method for all modes (already implemented at GN), automatic transmission of offsets to TCS (already implemented at GN), better guide probe mapping and improved mount performance.

Other planned improvements to science operations are: Smart Phase-II checking for trivial issues, improved queue planning, better tools for performance monitoring (e.g. open shutter efficiency, and acquisition times).

NGO Gemini interactions

NGO Review – Dennis Crabtree

Dennis presented a draft charge to the NGO & TAC process review committee. At the Aug 06 Ops WG meeting it was decided that the review of the NGO and the TACs should be considered separate (though carried out by the same committee). The NGO & TAC review document will therefore be split into two.

Tim Davidge commented that NGOs have been reviewed twice as part of the visiting committee process and he was unclear what new information would come out of this review process

The review will now be conducted by video and phone calls, hopefully in July and August. The NGO reps are to send suggestions for committee members to Dennis Crabtree (Action 12.13).

Gemini – NGO meeting

Rachel Johnson and Verne Smith will organize the agenda for the Gemini-NGO meeting in Brazil (Action 12.14).

NGO checking of Mask Designs – Inger Jorgensen

Inger Jorgensen outlined the workflow from PI submission of a mask object definition file (ODF) to Gemini cutting the mask. The NGOs will take over the scientific check of the ODF. This requires someone who is familiar with GMOS, and has to happen on a fairly short timescale. This will require NGOs to have a back-up person in place in case the primary NGO contact is away.

Rodrigo Carrasco gave a short demo of how to check masks, and an example of a good and bad mask. The current checklist that is used by Gemini staff will be updated and put on the public web page (Action 12.15).

Semester 2006B Science Operations

In 2006B the delivered/planned time was 74% in the North and 133% in the South. The low percentage in the North is due to the earthquake downtime and a cassegrain rotator overhaul that was originally planned for 2006A. The high percentage in the South is due to the NICI and Flamingos-2 commissioning not taking place, and a telescope maintenance shutdown also being postponed.

Completion rates in the North and South for 2006B are generally not as good as in previous semesters. In the North, as well as producing unexpected downtime, the earthquake affected in particular completion of TEXES and Michelle programs. Completion was also affected by the laser guide star system not being ready for queue programs. In the South the seeing was poor, affecting Band 1 and 2 completion rates in particular, and also GMOS was out of action for a month. The 2006B bHROS programs have all been completed.

The LGS commissioning continued throughout the semester in the North and SV programs were observed towards the end of the semester.

Time accounting updates

For 2007A, the Ops WG applied a new method to correct for partner imbalances. As 2007A had not yet started at the time of the Ops WG meeting, it was too early to assess the effectiveness of these new corrections. Therefore the same method will be applied for 2007B, and the effect of the 2007A corrections will be evaluated in August 2007.

The Ops WG resolution 8.1 (7-8 Feb 2005) recommended a different way of charging for GT than in the original instrument builder agreement.

(part of) 8.1 – The Ops WG recommends that compensatory time and guaranteed time payments from 2005A onwards are limited to a maximum rate of 20% of the time charged. This rate should not be a disincentive for instrument use, yet is a reasonable rate considering the work involved in producing a new instrument. The Ops WG recommends that payments beyond the 20% rate are accumulated and accounted separately. On an individual semester basis, the excess accumulated cost would be borne by the partnership, but the payment of compensation would continue in future semesters until users have paid all accumulated compensatory time, or the instrument is decommissioned.

This charging has been applied for the NIFS guaranteed time (GT), but not for the Michelle Compensatory Time (CT). The Michelle CT charges using the recommendation above will be calculated in time for the 08A Call for Proposals, and adjustments added then (Action 12.16).

Inger Jorgensen is preparing a document describing the details of the time charging and accounting. This will be released to the community after internal and committee review (Action 12.17).

The NGOs should reiterate to the TACs that programs fulfilling the poor weather criteria are only not charged if they are in Band 4. Gemini also commented that poor weather programs are very useful and NGOs should push the communities to generate more.

The following time trades will be used in 2007B:

GS 8 hours Canada -> Brazil, 20 hours Canada -> Australia.

GN 8 hours Brazil -> Canada, 20 hours Australia -> Canada

User-Gemini interactions

Gemini science meeting

As of 31 January 2007 there were 54 registrations. The SOC has had two telecons. There will be approximately 60 talks over 3 days. Slots have been allotted to countries for them to fill and finding speakers is generally going well.

Gemini Users meeting

We discussed topics for the Gemini Users meeting on June 14 in Brazil. It is crucial that there is plenty of time discussion. Particular topics suggested were: user feedback on the distributed model, instrument decommissioning and queue vs. classical time, a summary of the management retreat process and outcomes. The draft agenda will be sent to the NGOs for comment.

Gemini Management Review – Dennis Crabtree

Dennis summarized the process for the upcoming Gemini Management Review. The goal is to increase the science productivity of Gemini. Required tasks and priorities have been input from various sources – e.g. NGO, Science Staff, GSC. The science staff then voted on these lists, the results were tweaked to take into account the priorities of other groups, and the list was sent to various groups for resourcing. In future years NGO staff will also have the opportunity to vote on these lists. It is likely that this review will be an annual event.

User Feedback

The Ops WG reviewed the topics identified in the August 2006 meeting as important for the users. All of these are still important. Data reduction is becoming more important and a possible topic for the NGO meeting in Brazil is what Gemini and NGOs can do to help users reduce their data.

Optimizing the use of telescope and PI/NGO time

Gemini Dataflow Project – Paul Hirst

Paul presented an overview of the current history of the data flow project, including the outcomes of the data reduction working group meeting in October 2006, and current plans for implementation of data reduction pipelines.

The pipelines and users data reduction packages will call the same set of data reduction tool, plans are to improve these and run them in PyRAF in non-pipeline mode.

The pipeline is currently in the definition phase – the plan is for a science quality pipeline tied to the GSA and running offline, probably at CADC. A Quality Assurance pipeline will run at the summits in near real-time and provide feedback to observers (e.g. S/N) and possibly quick-look science to PIs.

The tentative timeline is for Gemini package releases to move towards PyRAF in the 1st quarter of 2007 (with possibly one final IRAF version at the same time as the PyRAF release, then PyRAF only). Summit operations will transition to PyRAF in early 2007.

Classical time – Inger Jorgensen

The probability of getting data on a classical night is comparable to the completion rate in Band 2. The Ops WG noted that the present queue assembly methodology has problems with regard to classical observing time on the Gemini Telescopes in that it provides no motivation for NTACs to rank classical time on the Gemini Telescopes highly. Most NTACs are ranking their classical time with band 3 equivalent ranking, with the result that their relative share of bands 1 and 2 is increased, and their share of band 3 decreased. This may be contributing to the partner imbalances that have been occurring.

There are two possibilities to prevent this - require a ranking equivalent to band 1 or 2 for a program to be scheduled as a classical program, or for all classical time for a partner to be taken from the top of the partner's share of time before the queue merging process. The Ops WG preferred the second option (Resolution 12.4).

Here is a specific (rather extreme) example to illustrate the change:

Assumptions:

=====

Partner A has 160 hours (10%)
Partner A chooses to allocate 60 hours as classical (6 nights)
Total available is 1600 hours
Partner A has 10 slots of the normal 100 length sequence
Queue merge quantum is 3 hours
Total classical time across partnership is 35 nights

Total queue time is 1250 hours
Partner A's share of queue is $100/1250 = 8\%$

Therefore:

Partner A should have only 8 slots in the 100 length merge sequence

OR

Partner A's queue merge quantum is reduced to 2.4 hours (but keeps 10 slots in the 100 length sequence)

The result:

Partner A has 6 classical nights and 8% of band 1, 8% of band 2, 8% of band 3 (within queue merge rounding errors)

Using the present methodology, the result would be:

Partner A has 6 classical nights, and 10% of band 1, 10% of band 2, and 1% of band 3.

Operationally, it is expected that the easiest and fairest way to implement this change will be via adjustments to the queue merge quanta. The queue merge sequence has historical significance (e.g., different start point each semester to ensure fairness), which makes it preferable to adjust the merge quanta. Adjustments of the queue merge quanta also allow precise matches to partner share to be made, whereas adjustments to the merge sequence are limited to the granularity of the merge sequence which is 1 part in 100, or 1%. Bernadette Rodgers will check the affects of changing quanta size (Action 12.18).

Programs submitted for classical time usually have IQ=Any, CC=Any as conditions. When these classical programs get converted to queue, observation condition change requests have to be approved otherwise the data will be useless. Classical PIs often request last minute target additions when the weather forecast looks worse than required for their suggested science program, these additions are therefore not scientifically or technically assessed. The Ops WG recommend that, from 2007B, all submitted proposals for classical time should state the observing conditions required for the main science program. In addition a backup program can be suggested for worse observing conditions than the main science program. The NGOs will technically assess both the main and the back-up programs. If the conditions at the telescope are worse than requested in the main and back-up programs then the time will revert to queue observations (Resolution 12.6).

A PIT tab will be added for the classical backup program (Action 12.19). This will not be possible for the 07B PIT. Therefore in 07B short science and technical justifications for the classical backup program will be added in the proposal science and/or technical justification sections.

Classical programs are charged for all time lost during their run due to e.g. technical problems, bad weather (unless the telescope has reverted to queue observing) or natural disasters (e.g. earthquakes) (Resolution 12.7).

Many classical PIs do not prepare their Phase-II by the deadline (3 weeks before the 1st night of the run). The Observing Database will be updated to automatically remind classical PIs when their Phase-II is due (Action 12.20). Once this has happened, the classical deadline will become a hard deadline (Resolution 12.7).

RA distribution and Queue assembly

Inger Jorgensen showed slides of RA distribution and observing condition distribution of programs in the Q after the ITAC as an example of what will be put on the web page (Action 12.2).

News and short updates

Update on plan to improve web pages – Rachel Mason

The first step for web page improvement was to get the content up-to-date, clear and accurate. This has largely been achieved, due to work by NGOs/Instrument Scientists and Rachel Mason. Some very detailed and helpful comments were received. Changes were mostly implemented in time for the 07A CfP. The second and bigger step is a re-organization of the site so that information is easier to find. Mid-IR and near-IR pages have been re-organized. Comments received have been positive. Several possibilities have been investigated for a new content management system, Drupal was chosen because it is open source and customizable. Rachel is currently experimenting with a basic Drupal template to explore capabilities and limitations.

A small group will be formed to work on re-organizing the information. This is a non-trivial problem. The aim is for the re-organization to be complete in 07B.

Gemini Focus content for next issue – Jean-Rene Roy

Ideas for future special issues would be useful (i.e. like the AO issue). Possible topics for the next issue: status of Aspen instruments, article on data flow, Target of Opportunity (system and science), NIFS science results, TEXES + 6 science articles (suggestions welcome) – early LGS science results, earthquake recovery, short operations update.

Mask Design – Rachel Johnson

The transformations for producing GMOS masks from non-GMOS images have now been tested on sky in the North and the South. The scripts have been written and are ready to be released in the Gemini package. The user web pages are being written.

Next meeting

The next meeting will be on 30 and 31 July in Australia. The venue is still to be decided.