Operations Working Group Meeting #14

(Imiloa Science Center, Hilo, Hawaii: 30-31 January 2008)

Attending: Colin Aspen (Hawaii), Dennis Crabtree (Gemini), Tim Davidge (Canada), Inger Jorgensen (Gemini), Sandy Leggett (Gemini), Sebastian Lopez (Chile), Stuart Ryder (Australia), Ilona Soechting (U.K.), Verne Smith (Chair-U.S.A.)

Connected via video from La Serena: Bryan Miller (Gemini), Bernadette Rodgers (Gemini), Marilia Sartori (Brazil)

New Action Items & Resolutions

Action Item.14.1: Verne Smith will ensure that multiple runs, sometimes with different instruments, on the same telescope will be forwarded to Gemini from NOAO as one .xml file. This includes the pre-imaging parts of GMOS MOS programs.

Done.

Action Item.14.2: Inger Jorgensen and Bernadette Rodgers will add so-called complete programs to the OT libraries. These will include typical acquisition and calibration sequences.

Mostly complete. Libraries for all operational instruments have been significantly improved and include Examples as well as Templates. Errors, problems or shortcomings in the libraries should be reported via the Helpdesk system."

Action Item.14.3: Bryan Miller will modify the PIT to incorporate the following:

1) An RA/DEC warning if the target list includes positions falling outside of any RA/DEC restrictions for that semester.
2) Add a box to indicate if the program is part of a Ph.D. thesis.
3) Add a box to indicate if GMOS programs could be executed satisfactorily from either the Gemini-N or Gemini-S telescopes.
4) Edit slightly the language in the Band 3 box to make it clearly that a Band 3 program is more likely to be executed if the total time is reduced, relative to time requested if such a program were in Band 1 or Band 2.

1) Incorporated in the 08B PIT
2-3) On the task list for the 09A PIT
4) Done

Action Item.14.4: Inger, with help from Tim Davidge and Stuart Ryder, will post photometric transformation coefficients on the Gemini GMOS web pages.

Will be done by meeting time. In addition, there is a GMOS-N calibration paper now in the process of being published and we will obtain permission from the journal to display these results on the web.

Action Item.14.5: Verne will head a committee (with Bryan Miller and Percy Gomez) to draft Gemini user feedback questionnaires. This material will be sent to Dennis Crabtree and the rest of the OpsWG for comments.

In progress, with survey questions to be circulated before the OpsWG meeting. (Weekend before meeting.)

Action Item.14.6: Dennis will put together, a committee to review the Gemini Observing Conditions to see if their definitions and/or quantization should be changed. Tim Davidge has agreed to be a member of this committee (but will not chair).

In progress…Tim still refuses to chair.

Action Item.14.7: Stuart will lead the Australian NGO to host the January 2009 OpsWG meeting (for semester 2009B) in Sydney, Australia. This meeting will take place the same week and at the same place as the next Gemini NGO meeting (number 4 in this series, with the last having been held in June 2007 at Iguazu, Brazil).

Done.

Resolution.14.1: The Operations Working Group supports the U.K. community in its efforts to remain in the Gemini Partnership. The committee thanks the U.K. community for all of the support it has provided to the Gemini Observatory over the history of the partnership and notes the many fruitful collaborations that have resulted from U.K. membership.

Done--the UK is in the partnership.

Resolution.14.2: The Operations Working Group recommends that Gemini reconsider its policy on the sea-level safety review for visitors to the Mauna Kea summit. We propose an amendment to allow other observers already working on the summit to undergo the safety review at the mid-level facility.

Resolution.14.3: Dennis circulated a draft of a document that will specify how to deal with any partner undersubscription to telescope time. The OpsWG will provide comments to this draft and agrees in principle to the necessity to proactively deal with and prevent any "time banking" by partners.

Resolution.14.4: The OpsWG calls on all NTACs and NGOs to check to make sure that the minimum time requested by approved programs be consistent with the recommended time from the respective ITAC.

Resolution.14.5: An instrument will be scheduled on the telescope if there are approved programs whose total requested time is at least 6% of the Band 1 plus Band 2 science time. If the approved time is less than this time, Gemini reserves the right to either restrict the RA-range of any scheduled programs or to not offer the instrument at all.

Resolution.14.6: If a Standard ToO program triggers, the program[1]s completion will be measured against the total triggered time. Such programs will be included in the completion rate requirements, goals and reporting used for non-ToO programs. Triggers retracted by the PI will not be included in this calculation. If a ToO program uses all of its time, it is also considered complete, even if some triggers are lost.
If a Standard ToO program does not trigger, the program is excluded from the requirements, goals and reporting.

Resolution.14.7: The Completion Rate requirements and goals for Band 3 programs will be 80% of started programs should have 75% of PI defined minimum data taken as a requirement and 100% as a goal.

Resolution.14.8: The OpsWG feels that the decision on whether to include the IFU in the GNIRS repair and refurbishment should be sent to the GSC for discussion and for their advice.

Review of Minutes and Action Items from Meeting #13

The draft minutes from OpsWG meeting #13, held in July 2007 in Melbourne, Australia, were approved.

The action items from meeting #13 were reviewed and the review is summarized below for each item.

Action Item.13.1: Bernadette Rodgers, Richard Wainscoat, and Sandy Leggett will work on ways to modify the ITAC Merging Sequence. Richard has noted that round-off errors can affect, especially, the smaller partners. They will investigate use of a fixed, mathematically generated merging sequence and use of variable quanta to make the changes that are necessary each semester to reflect time adjustments that are made to correct for partner imbalances. The start point of the merge sequence will continue to rotate across the partnership.

The aim of these changes is to make the ITAC process fairer and more transparent to all partners, and to make it easier for the NTACs to predict which band a program will be placed in by the ITAC.
Done. By all accounts, this improved the ITAC process as it was hoped it would do.

Action Item.13.2: Inger Jorgensen will add plots of RA distributions onto the public websites for current and previous semesters. The RA distributions will include observations submitted, as well as those observed.
Done.

Action Item.13.3: Bryan Miller will modify the OT to incorporate the following changes, listed in order of priority:

1) update the Phase II checks, such that the PI has an option to not continue to show warnings if they have been shown once, and to allow the NGO contact scientisit to turn-off errors.
2) allow easier access to the OT libraries.
3) add a step called "In Review" to indicate a phase in which the NGO contact is reviewing observations and the PI cannot access and change these observations during the "In Review" process.
4) institute "Smart GCAL" observations into the OT.
5) continue to improve the Skeletons/Templates, with emphasis on the actual sequences of the observations as organizational folders.

Items 1, 2, 3 done. Item 4 will take more work and 5 is continuing.

Action Item.13.4: Ilona Soechting and Verne Smith will prepare a list of so-called"Hot-Button Items" that can be addressed in order to improve the user community perception of Gemini. This list will be circulated by the end of September.
Partially complete.

Action Item.13.5: Rachel Mason will re-send an e-mail to the NGOs to remind everyone to read and comment on the new sets of webpages.
Done.

Action Item.13.6: Bernadette Rodgers and Inger Jorgensen will work with the instrument scientists to ensure that the OT libraries are error-free.
Done.

Action Item.13.7: Dennis Crabtree will check into rescheduling the weekly Science Staff meetings to 9:00am in the Northern summer and 9:30am in the Northern winter (Hawaii time).
Done.

PRESENTATIONS

Board Resolutions

Dennis Crabtree reviewed Gemini Board resolutions from the Board meeting in La Serena, Chile on 14-16 November 2007. Of particular interest to the OpsWG were resolutions 2007.B.6 and 2007.B.7. Resolution 2007.B.6 asks that the proposal for dealing with undersubscription of scheduled time by a partner be referred to the NGOs for input and to have any revised policy ready for Board consideration at its May 2008 meeting. The draft, entitled "Gemini Time Allocation and the Prevention of Time Banking" was passed to the OpsWG members by Dennis for their comments and input.

Resolution 2007.B.7 approved the minimum science fraction times of 85% for Gemini-North and 75% for Gemini-South in semester 2008B. A goal of up to 90% on both telescopes is set, depending on the commissioning schedules for GNIRS and FLAMINGOS2.

ITAC Summary and Actions

Sandy Leggett provided the summary of the 2008A ITAC meeting that was held on 27-28 November 2007 in La Serena, Chile. It was noted that the Canadian representative, Tim Davidge, connected remotely to this meeting and that Rosemary Pike attending as training to take over from Brian Walls as technical secretary for 2008B.

There was consensus that the meeting went very well and was helped by the several pre-iterations on the queue that were carried out via email the week before the meeting.

It was noted that the exchange nights with Subaru would now be classical nights for classical nights. The exchange demand from Keck was one night each of NIRI, Michelle, and T-ReCS, while the demand from Subaru was for 3 nights of T-ReCS and 2 nights of GMOS-N.

There was considerable discussion on whether to split Band 3 into two groups, such as 3a/b or 3+/-, due to the wide disparity in science rankings between the top of Band 3 and the bottom of Band 3. Splitting Band 3 needs to be balanced against not dividing the bands too finely. In the end, the group decided to continue on "as is", at least for another semester, but this issue will be re-discussed at the next meeting.

New modifications to the PIT will include:
- Add a flag to identify inappropriate RA/DEC.
- Add a box to identify projects with Ph.D. involvement.
- Add a box to indicate if a GMOS North/South move is OK.
- Clarify the wording of the Band 3 tab.

2008A Phase I and Phase II Review

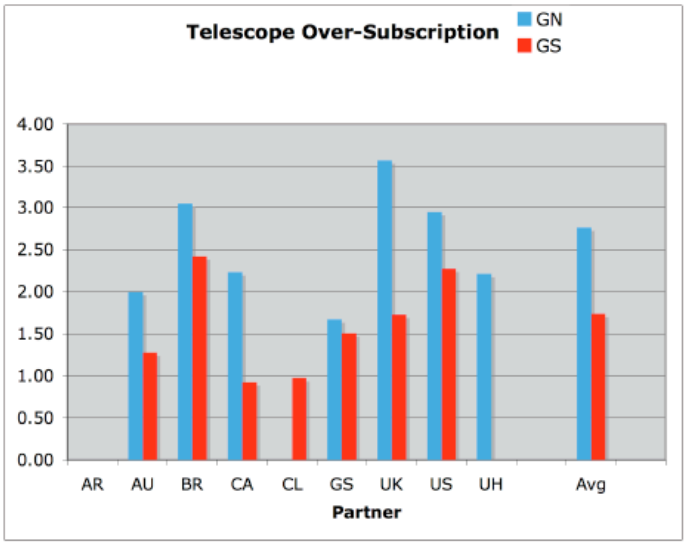
Bernadette, Inger, and Sandy provided the Phase I and Phase II reports from the observatory. Demand for the telescopes is healthy, allow both Canada and Chile barely oversubscribed their time on Gemini-S. No doubt this is due to the current instrument set on Gemini-S (with GNIRS gone), but this situation is a potential near-term problem to monitor.

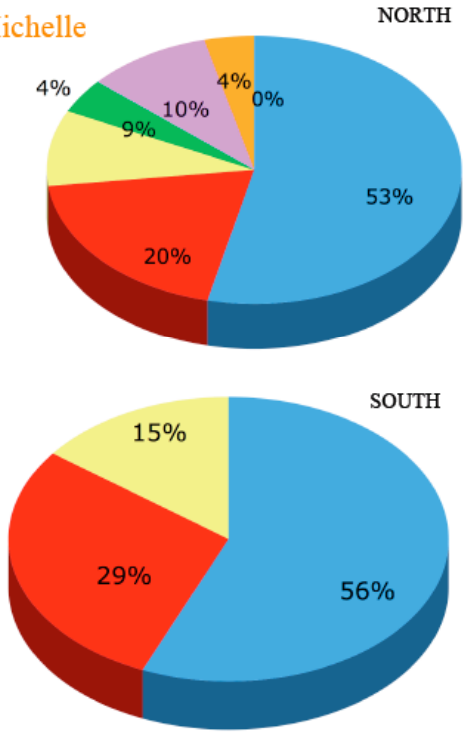
Initial demand and final allocation statistics are illustrated in the following two figures.

Phase I Summary - 2008A
Initial Demand

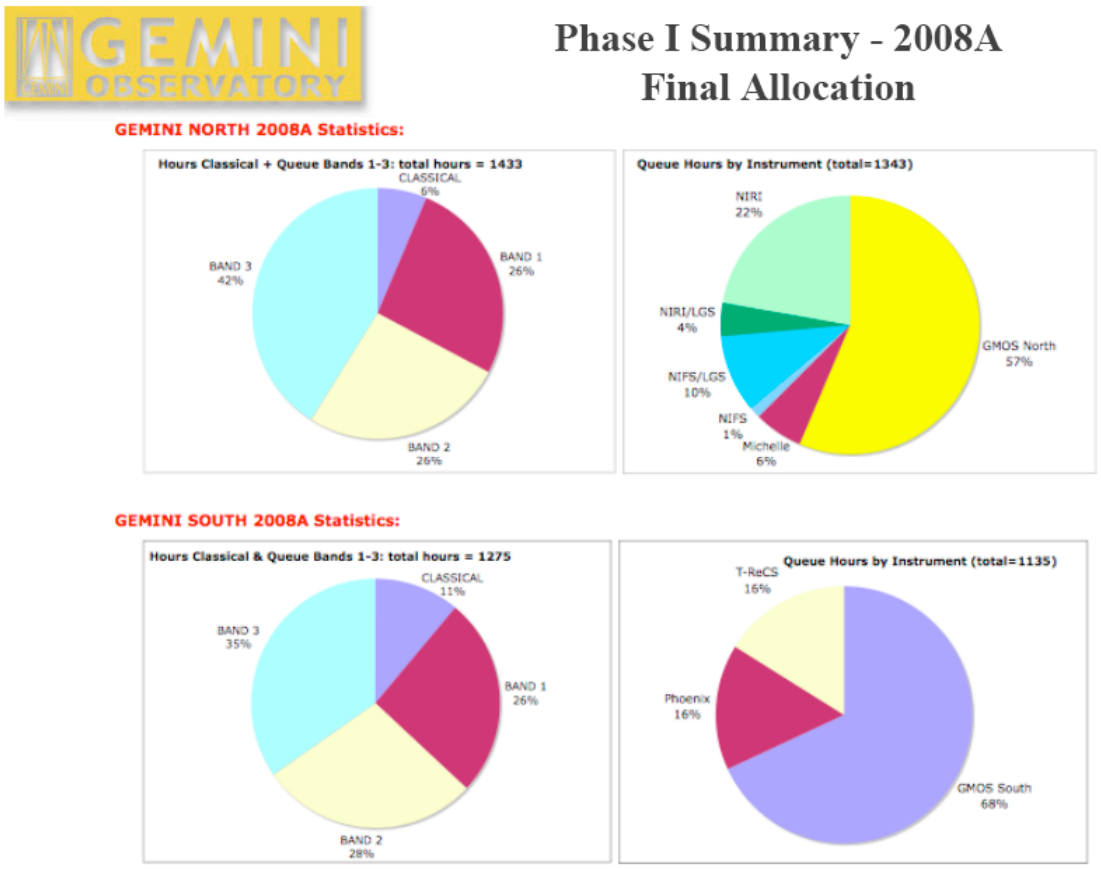
North: GMOS, NIRI, NIRI+Altair, NIFS, NIFS+Altair, Michelle

South: GMOS, Phoenix, T-ReCS





Operations Working Group, January 30-31, 2008



Each NGO representative presented a brief update on the Phase I/Phase II processes for 2008A and any changes in their respective partner offices. No serious problems were noted, although there are changes worth noting in the NGO offices of Australia, Canada, and Chile.

Australia: Effective 1 January 2008 the Australian Gemini Office is hosted by the Anglo Australian Observatory in Sydney. Stuart Ryder is now the Australian Gemini Scientist for the 3-year period 2008-2010. More details about the Australian Office are in their report.

Canada: Stephanie Cote has returned from leave and has taken over the duties of group leader of the Canadian Gemini Office. Tim Davidge has stepped down as group leader, but continues as the Canadian member of the OpsWG and as the Canadian ITAC member. There are two new members of the CGO; John Blakeslee has arrived to take up a continuing appointment,

while Andre-Nicolas Chene has joined as a Research Associate. Additional details can be found in the Canadian report.

Chile: CONICYT has created an "Astronomy Program" that supervises several offices (such as the ALMA site, the APEX Chilean TAC, or ESO/Chile Funds) that includes the Gemini Office. The new structure consists of Vivian Heyl as President of CONICYT, Dr. Monica Rubio as Director of the Astronomy Program, and Sebastian Lopez as Chilean NGO Head.

Instrument Review

Joe Jensen provided a report on the status of various instruments and programs as listed below. Highlights of Joe's presentations are noted and more detailed descriptions can be found in the presentation on the website.

NICI:

--Is undergoing commissioning.
--The mechanical, optical, and cryocooler issues have been addressed.
--High level software testing is underway.

FLAMINGOS2:

--The integration and testing is underway at U. Florida.
--Recent cryocooler problems have occupied the team recently and these issues have taken priority.
--Expected delivery to Gemini-S in quarter 3 of 2008.

GNIRS:

--Repair work is currently taking place in Hilo.
--Optics assessment and repair is underway; some of the optics suffered some damage.
--The replacement detector has been ordered.

TEXES:

--The second run was successful and consisted of 16 nights on Gemini-N in October 2007.

Canopus (MCAO):

--The system is being integrated in Chile.
--The first multiple closed loop tests were successful.
--Laser and infrastructure work is now taking place.

GMOS CCDs:

--New CCD options appear promising.

Aspen Instruments:

--GPI is in its final design stage.
--WFMOS design studies are to begin soon.
--GLAO monitoring and modeling is underway.

Discussion of the 2008B Call for Proposals

Dennis, Bernadette, and Inger presented information for planning the 2008B Call for Proposals. There was a discussion of how time would be distributed in the event that the UK did not receive any time in 2008A. Happily this is now a moot point.

The instrument availability, engineering, and commissioning plans are as follows:

Instruments for 2008B -

Gemini North

- NIRI
  - Imaging f/6, f/14, f/32
  - Spectroscopy f/6
  - Queue and classical all modes
  - Altair 1-2.5um and L-band
  - LGS (available 7-14n/month in queue, band 1 and 2, only; el>40deg)
- GMOS
  - Imaging, long slit, MOS, IFU
  - Nod & shuffle
  - Queue and classical all modes
- GNIRS
  - *Commissioning not until early 2009*
- *TEXES*
  - *Not available*
- Michelle
  - Imaging and spectroscopy (R=200 – 3000, and echelle)
  - Queue and classical all modes
  - Imaging polarimetry
  - Spectropolarimetry not available
- NIFS
  - AO and non-AO
  - Queue and classical all modes
  - LGS (same constraints as NIRI+LGS)

- Propose 86% science time = 159 nights
  - Board requirement is 85%, goal is 90%
- *Highlighted capabilities not being offered*

Instruments for 2008B -
Gemini South

- GMOS
  - Imaging, long slit, MOS, IFU
  - Nod & shuffle
  - Queue and classical all modes
- T-ReCS
  - Imaging, spectroscopy
  - Queue and classical all modes
- *NICI*
  - *Campaign Science Only*
  - *Possible SV*
- Phoenix
  - High-resolution NIR spectroscopy
  - Queue and classical
- *FLAMINGOS-2*
  - *Commissioning only*

- GNIRS is not offered
- AcqCam is not offered
- bHROS is not offered

- Propose 82% science time = 150 nights
  - Board requirement is 75%, goal is 90%
  - 12n NICI campaign (~1/4 of campaign) => 18n off the top
  - ~2n NICI SV
- *Highlighted are new instruments not yet available*

Exchange Time

- HIRES on Keck
  - Classical only; 5n exchange
  - Pre-scheduled, integer nights only
    - 1 night: 6-20 August
    - 2 nights: 8-22 October
    - 2 nights: 3-16 December
  - Keck community has access to Michelle, NIRI, T-ReCS
- Suprime-Cam and MOIRCS on Subaru
  - Classical only, 5n exchange (6n if demand warrants it)
  - Pre-scheduled, integer nights only
    - Dates TBD
  - MOIRCS imaging and spectroscopy (MOS)
  - Subaru community has access to GMOS-N, NIRI, NIFS, Altair/NGS, Altair/LGS (with suitable backup programs), T-ReCS, GMOS-S

2008B Engineering – Gemini North

- Plan 25 nights = 14%
- Probable use of nighttime engineering:
  - Finish Coating of Primary Mirror *[4n]*
    - *scheduled for July-Aug 2008*
  - Secondary Mirror coating *[8n]*
  - A&G maintenance *[8n]*
  - aO Performance verification and improvements *[3n]*
  - Instrument on-sky checkouts after maintenance or instrument swaps *[2n]*
  - Routine and emergency hardware/software maintenance and repairs, including instrument maintenance *[as needed, instrument maintenance done with other instruments operating in queue]*
  - Unused engineering time will be returned to science

2008B Engineering – Gemini South

- Plan 34 nights = 18%
- Probable use of nighttime commissioning/engineering
  - A&G preventative maintenance *[8n]*
  - Complete NICI Commissioning *[up to 6n]*
  - Flamingos-2 on-sky Acceptance Test *[up to 8n]*
  - Laser engineering for MCAO *[5n]*
  - Early MCAO commissioning *[up to 11n]*
  - Instrument on-sky checkouts after maintenance or instrument swaps *[2n]*
  - Routine and emergency hardware/software maintenance and repairs, including instrument maintenance *[as needed, instrument maintenance done with other instruments operating in queue]*
  - Unused commissioning/engineering will be returned to science

2008B Commissioning Plans – Gemini South

- NICI
  - Expect majority complete in 2008A but some issues, e.g., optimization of AO performance and resolution of detector issues, could continue into 08B
- Flamingos II
  - Instrument delivery schedule still highly uncertain
  - Current 2008 Observatory Plan includes on-sky Acceptance Test only; subject to change if instrument is on Cerro Pachon by 3Q2008
  - Will displace GMOS-S or T-ReCS when mounted
- Gemini MCAO System (GeMS)
  - Laser engineering planned before AO system and camera are mounted
  - Mounting Canopus (AO system) and GSAOI will require two ports; possibly as early as 4Q2008
  - Will displace Phoenix and NICI; either can swap with T-ReCS on up-looking port; defer decision until needed, then decide based on science demand

Proposed ISS Port Swaps in 2008B

Gemini North

- NIFS and Michelle on up-looking port
- Proposed schedule:
  - NIFS (Aug to late Sept)
  - Michelle (late Sept to mid-December)
  - NIFS (mid-December to end of January)
- No restrictions on RA due to instrument swaps
- Relatively few instrument swaps to free up engineering resources for GNIRS work

Gemini South

- GMOS-S, T-ReCS, Phoenix, NICI (on side port) co-exist for most if not all semester
  - NICI performance on side port TBC
  - Significant schedule uncertainty with Flamingos-2 and MCAO/GSAOI
- Potential swaps:
  - FLAMINGOS-2 with GMOS-S and/or T-ReCS for on-sky AT
    - Timing depends on uncertain F-2 schedule; ~2 week window
  - Canopus & GSAOI with Phoenix & NICI
    - Phoenix or NICI could swap with T-ReCS depending on necessity and demand
    - 2nd half of semester at earliest
- No restrictions on RA in CfP for potential swaps; updated schedule available at time of ITAC

2008B Process and Schedule

Bryan presented updates to Action Items from Meeting #13 which are summarized here in the review of Action Items. He then discussed changes to the PIT and OT for 2008A and 2008B. These include for 2008A:
--Added a total requested time box for the Band 3 tab.

The following Process Dates were adopted for the 2008B Call for Proposals:

31 March 2008: Proposal Deadline.
Set by Partners: NTAC Meetings.
15 May 2008: E-transmission of proposals.
21-26 May 2008: E-mail iterations with ITAC members on draft queue and classical schedule.
28-29 May 2008: ITAC (Hilo).
9 June 2008: Final queue/schedule. Feedback time.
13 June 2008: Queue and classical schedule on web. Phase II skeletons and 2008B OT released.
14 July 2008: PI Phase II deadline for submission to NGOs.
28 July 2008: Phase II reviews complete.
1 August 2008: Start of semester 2008B.
15 August 2008: Queue fully loaded.

Gemini Interactions with NGOs and the Community

Gemini Visitors

The Dataflow Project

Next Meeting

The next OpsWG meeting will be held on 29-31 July 2008 in Tucson, AZ.