



TO: Eric Gawiser, Katelyn Allers, Rebecca Bernstein, Marla Geha, Anthony Gonzalez, Jennifer Lotz, Kevin Luhman, Ginny McSwain, Casey Papovich, Armin Rest, Adam Stanford
FROM: Robert Blum
CC: David Silva, NOAO Executive Committee
SUBJECT: NOAO Response to Users Committee 2012 Report
DATE: August 3, 2012

Dear Eric, Katelyn, Rebecca, Marla, Anthony, Jennifer, Kevin, Ginny, Casey, Armin, and Adam,

Thank you very much for the 2012 NOAO User's Committee report and recommendations. NOAO greatly appreciates your efforts on behalf of the Observatory and its community. NOAO and the US OIR community face challenges in the year ahead, and we will rely on your input and advice to make choices in our program that maximize science opportunities for the US community in the face of severe budget constraints.

NOAO management has reviewed your report, and finds it timely and useful in scoping our program for FY13. Below, we respond to your individual recommendations, which we take very seriously. NOAO is pleased that you find our current program appropriately balanced and still responsive to the community needs.

1. Overall Balance

Recommendation 1.1

We recommend that NOAO maintain its balance of current activities, preserving its core missions to the greatest degree possible given budgetary constraints.

NOAO agrees. The Annual Program Plan for FY13 to be delivered to NSF in Q1 FY13 keeps to this balance under the assumption of planned \$25.5M in NSF base funding.

Recommendation 1.2

The UC recommends pursuing additional time swap agreements at all aperture sizes to further broaden the scientific capabilities available to the community, which is also a specific recommendation from the ALTAIR report. The extent of such time swaps, once established, can be re-evaluated and adjusted based upon proposal pressure for each facility.

NOAO will continue to pursue time swaps as appropriate and as opportunities arise. We plan to continue an arrangement started this year with AAO to gain access to the multi-object wide field spectroscopic capability at AAO in exchange for wide field imaging at CTIO. We continue to support Gemini time swaps on behalf of the US community with Keck and Subaru for access to capabilities like HIGHRES.

Recommendation 1.3

We encourage NOAO to expand remote and service observing access.

NOAO's current call for proposals calls for remote observing on SOAR for general users. In addition, Kitt Peak is working with PIs to schedule experienced users for remote observations in 2012B (and has been since 2011). We will continue...

Recommendation 1.4

We encourage continued access within the O/IR system for visitor instruments, recognizing that limited resources require that such instruments cannot demand a significant investment of NOAO support.

NOAO agrees. NOAO will continue to support visitor instruments as resources allow.

2. Community Use of the Dark Energy Camera (DECam)

Recommendation 2.1

Further outreach to describe DECam capabilities and challenges is needed.

NOAO will do its utmost to engage the community with DECam. NOAO held a successful community workshop in 2011 and is currently scheduling science verification observations proposed by the community. NOAO received requests for approximately 400 hours of SV time for a possible allocation of about 100 hrs. This is an encouraging start.

Recommendation 2.2

We encourage NOAO to maintain its pro---active role in developing the DECam Community Pipeline, providing technical assistance as needed and delaying acceptance of the instrument if necessary.

As of this writing, NOAO has received and tested CP 1.5 from NCSA and expects to install v2.0 by August 6, 2012 and v2.1 by August 31, 2012. A well functioning CP is a high priority for NOAO.

Recommendation 2.3

We strongly encourage NOAO to provide good documentation as part of the DECam Community Pipeline so that users will know what processing has been applied to go from raw to reduced data.

NOAO will ensure complete CP documentation is delivered to its users.

Recommendation 2.4

We encourage NOAO to explore a mechanism for assigning access to DECam in fractional nights.

NOAO will explore this possibility, but it is not in our initial plan. Remote observing with DECam on fractional nights is a possibility.

3. Modernization at KPNO and CTIO

Recommendation 3.1

The UC recommends that NOAO revisit the priorities for ReSTAR Phase 2 after the NSF has completed the Portfolio Review implementation plan to ensure that NOAO priorities are consistent with available resources and community needs.

NOAO agrees.

Recommendation 3.2

The UC supports NOAO's current plans for commissioning and operation of pODI.

NOAO is pleased to say that as of this writing, pODI is installed on the WIYN 3.5m. Installation and commissioning are continuing in 2012B.

Recommendation 3.3

NOAO should provide documentation on the existing MOSAIC and NEWFIRM pipelines for the community.

NOAO will improve existing documentation on the pipelines and make it available/visible to users.

4. Big BOSS

Recommendation 4.1

We recommend that an NOAO or other outside scientist be included as an observer on BigBOSS instrument design and review committees in advance of a signed MOU. This person should attempt to ensure that BigBOSS plans are compatible with community science interests.

NOAO BigBOSS planning and effort is currently focused on two areas. Four NOAO scientists are officially assigned Big BOSS tasks, which include formal interfaces with the Big BOSS team. This effort concentrates on detailed design and interfaces to ensure technical success of the project when the instrument is delivered to the Mayall 4-m. NOAO will attend all major design reviews.

At the same time, NOAO is committed to ensuring community science aspirations are folded into the project through science cases and requirements that flow from them. See recommendation 4.2 and response.

Recommendation 4.2

The UC supports the creation of a BigBOSS Community Science Definition team. This team should include individuals with a wide range of scientific interests. We recommend that this group draft a community requirements document well in advance of a MOU.

As of this writing, KPNO Director Timothy Beers has enlisted Dr. Connie Rockosi (UC Lick) to head the Community Science Advisory Committee. We expect the committee to begin work in FY13 to help establish community requirements for Big BOSS.

5. Gemini

Recommendation 5.1

The UC recommends that NOAO press Gemini to complete the effort to modernize current instruments and to increase the number of commissioned instruments with competitive capabilities (e.g., FLAMINGOS---2, GPI), particularly at Gemini South, as rapidly as possible.

NOAO agrees that commissioning Flamingos 2 is a high priority. Completing the GMOS CCD upgrades is too. NOAO will work with Gemini to best support the US community in the use of GPI when it is delivered in mid-2013 (expected as of this writing). Bringing MCAO on line at Gemini South and maintaining the LGS system in the north are also important. The age and state of the NIRI near infrared imaging capability in the North is a concern, but NOAO would advocate new spectroscopic capability as a higher priority.

Recommendation 5.2

The UC recommends that NOAO pursue time trades between the Gemini telescopes and other large---aperture telescopes to provide US community astronomers access to a fuller range of observational capabilities.

NOAO believes the current state of Gemini trades is "what the market will bear." Offering access to MCAO in the South will surely create demand in other communities when that system is in operation. However, with expected demand for MCAO to be high, a proper balance must be struck between US Gemini community use of MCAO and other large aperture capabilities. NOAO will continue to advocate for access to Subaru and Keck high dispersion spectroscopy, among others, as priorities when trades are organized.

Recommendation 5.3

The UC recommends that NOAO work to ensure that the selection of new instruments for Gemini be based on the capabilities that are in high demand within the US community, as described in the ALTAIR report.

NOAO, through representation on the GSTAC, and generally, continues to advocate for ALTAIR priorities for new Gemini instruments. NOAO pushed hard for a new high dispersion optical spectrograph (currently in procurement process) and is advocating now for a large wavelength range, high efficiency spectrograph that is consistent with ALTAIR and would support the highly successful Gemini ToO program as well as look to the future with an eye on LSST (or other) follow-up.

Recommendation 5.4

The UC recommends that NOAO manage the development of data tools with documentation, and to manage online fora (FAQs, bulletin boards, wikis) to facilitate the reduction of data from Gemini instruments.

NOAO has met been met with resistance from Gemini in the past when attempting to set up non-Gemini instrument web pages. Nevertheless, NOAO agrees with the UC that it would be good to give users a well-documented set of basic data reduction recipes and documents (cook books). NOAO will consider developing these in the coming year depending on available resources.

Recommendation 5.5

The UC recommends that efforts to provide remote “eavesdropping” and remote classical observing should continue. The UC also recommends that NOAO and Gemini study how users could make rapid changes to programs to maximize the efficiency of Gemini observations.

NOAO agrees it would be good for US users to have remote/eavesdropping access to Gemini and to be able to make “rapid” changes in their programs to maximize science and efficiency. This is a position that NOAO has advocated to Gemini consistently. NOAO will continue to advocate for this.

Recommendation 5.6

The UC does not recommend that NOAO pursue a unified TAC across the partnership.

NOAO accepts the Users Committee recommendation.

6. Surveys

Recommendation 6.1

We recommend that the PI survey fraction be kept at its present target of roughly 20% of the total time available to the community.

NOAO accepts this recommendation for the present observing cycle (2013 A+B). However, NOAO will continue to analyze both input metrics (demand) and output metrics (publications/citations) to assess the Survey program and possibly expand it in the future if the analysis shows significantly higher demand and impact. In any case, NOAO agrees that a strong PI science program on its 4-m's is in the best interest of community science.

Recommendation 6.2

We recommend that surveys be allowed in the B semester on the Blanco. However, it should be made clear to the TAC and the proposers that any Blanco survey time

proposed for the B semester needs to pass a high scientific bar due to the limited time available.

NOAO agrees.

Recommendation 6.3

The UC recommends that PI proposals continue to be solicited for Gemini survey programs. NOAO should look into solutions to technical issues related to queue scheduling of survey programs.

NOAO agrees. NOAO believes classical observing is one way to make surveys more successful on Gemini. Allowing for some queue mode surveys is also important to take advantage of this mode when it is scientifically justified.