UC Charge (D5)

NOAO Users Committee Meeting: 17 - 18 June 2012; Tucson, AZ
Meeting Charge
Revised: 21 May 2014

UC Mission Statement

The Users Committee provides NOAO with feedback and advice on all aspects of NOAO operations that impact users of NOAO facilities and services including the Gemini telescopes.

In their recent solicitation for proposals to manage NOAO beyond 2016, the NSF described NOAO as follows:

“NOAO is a national center for research in ground-based, nighttime, optical and infrared (O/IR) astronomy for the U.S. astronomical community.

NOAO’s core mission is to facilitate access for all qualified professional researchers to state-of-the-art observational capabilities and data bases [emphasis added] in O/IR astronomy, and to enable the U.S. research community to pursue a broad range of modern astrophysical challenges from small bodies within the Solar System, to the most distant galaxies in the early Universe, to indirect observations of dark energy and dark matter.”

Required reading

The committee should read (or review) the following documents (or relevant sections) in preparation for the face-to-face meeting:

• UC 2013 Report and NOAO Response (http://www.noao.edu/dir/usercom/)
• MPS/AST Divestment Options (http://www.nsf.gov/pubs/2014/nsf14022/nsf14022.jsp)
• KPNO 2.1m Announcement of Opportunity (http://www.noao.edu/kpno/news/KPNO2mA0v2.pdf)
• NOAO Data Lab, Science Use Cases, Draft 3 (http://ast.noao.edu/sites/default/files/DataLabscicase3.pdf)
• NOAO LSST Community Science Center White Paper (http://ast.noao.edu/facilities/future/lsst/lcsc; see white paper link at mid-page)
• NOAO Annual Program Plan FY14 (http://www.noao.edu/dir/program_plan/program_plan_fy14.pdf)

Useful Reading

• ReSTAR reports (http://ast.noao.edu/system/restar)
• New Worlds New Horizons (Astro2010; especially Chapters 1 and 2)
• NSF/AST Portfolio Review Documents (Review, AST Response, FAQ; http://www.nsf.gov/mps/ast/ast_portfolio_review.jsp)

**NOAO: a national center transformed**

In the aftermath of the NSF Astronomy Portfolio Review, NOAO has received new programmatic and financial guidance from NSF that will require NOAO to change in fundamental ways. As such, NOAO has entered into a period of significant transformation with profound implications for our current user community.

The most visible changes to users involve Kitt Peak National Observatory, and include: (a) transfer of KP 2.1-m telescope to new operator; (b) transition of NOAO time on WIYN 3.5-m from mostly “open access” to mostly “project oriented” or, in the worst case, complete withdrawal from WIYN partnership; and (c) transition of the Mayall 4-m from a multi-user, multi-instrument open access facility to a large collaboration oriented, survey facility using the Dark Energy Spectroscopic Instrument (DESI). KPNO will continue to enable high-impact, world-leading research but obviously in a very different way.

In Chile, the Blanco 4-m instrument suite is undergoing major renewal, led by the hugely successful Dark Energy Camera and to be followed by the arrival of new optical and near-IR spectrometers (COSMOS and TripleSpec4). The SOAR 4.2-m telescope and the SMARTS telescope constellation remain available to the community, while community access to Las Cumbres Global Telescope Network (LCOGTN) is imminent. In short, NOAO South will remain an “open access” powerhouse.

NOAO is also entering a new era of rich catalogs containing millions of objects over large swaths of the celestial sphere. On the near-term horizon are significant catalogs from the Dark Energy Survey as well as major community-led surveys with DECam. On the far horizon are the LSST catalogs. With that in mind, NOAO has begun a major new effort to improve data services and user support related to catalog access and manipulation in a collaborative environment.

It is a time of great changes, some painful, some exciting. This is the year that NOAO will finalize its transformation plan and start to implement it. This is the perfect moment for NOAO to discuss our plans with the UC and receive feedback.

**Specific charges (2014)**

The committee is requested to comment on several specific topics. NOAO will provide presentations on each topic to the committee approximately one (1) week before their arrival in Tucson. The topics are:
1. Please comment on the overall NOAO transformation plan/vision. NOAO seeks to provide excellence in open access to telescopes, data, catalogs, and tools for the US community.

2. Please comment on current operations and community engagement with DECam at CTIO. The committee should comment on current scheduling of community time including surveys to ensure the highest productivity.

3. Please comment on the current plans for development DESI on the Mayall.

4. Please comment on the on-going infrastructure and science capability modernization programs at KPNO and CTIO including the deployment and early use of KOSMOS and COSMOS and soon TripleSpec.

5. Please comment on current NOAO concepts and plans for the NOAO Data Lab and associated catalog-based research services, with a particular emphasis on desired user tools (both basic and advanced) to be deployed within collaborative workspaces.

6. Please comment on the current level of usage and scientific productivity of the NOAO share of SOAR. Suggestions about “quick wins” to improve scientific productivity would be particular welcome.

7. Please on how US observers can best exploit the Gemini telescopes. The Committee should comment on near term capabilities needed by the US community, and specifically what priorities are seen for future Gemini instruments (for example to exploit surveys and LSST science).

8. Please comment on the recent constitution of the Gemini large survey long program TAC.