

Instructions for Reviewing and Grading Proposals
Instructions are also on line at: <http://www.noao.edu/noaoprop/tac/>
Reviewed/Revised October 2011

Review Criteria

Please evaluate all proposals according to the following criteria:

- ❖ The merit of the proposed research, both within the area of specialization and in the broad picture of current astronomical research;
- ❖ The quality of the experimental design;
- ❖ Other factors which may affect the probable success and impact of the program. These may include the past productivity of the investigating team, the advantages of using NOAO facilities for carrying out the program, the importance of maintaining continuity of an ongoing program, and the adequacy of the resources available to the investigators to carry out the science program;
- ❖ The broader impacts of the proposed research, for example, in education and public awareness of science. See <http://www.nsf.gov/pubs/gpg/broaderimpacts.pdf> for details.

Note that the merit of the research may be broader than the scientific question that will be addressed. Some proposals might have as their main focus the development of a new instrument, technology, or observing mode. Such proposals should still address what future scientific investigations might be enabled once the new instrument/capability has been developed/commissioned. Science to be done during such engineering runs and the significance of the future science that would be enabled by the development of the new capability should be considered as part of the scientific potential of the proposal and be evaluated by the TAC. Reviewers are reminded that furthering the development of the next generation of instrumentalists is a specific priority for the NSF and NOAO, and proposals that address such issues may have this aspect considered as a positive aspect of their proposal. We will endeavor to provide technical reviews of any instrumentation based (new instruments or visitor instruments) proposal prior to the TAC.

Facilities that are allocated through the NOAO process are available equally to all members of the U.S. community. Preferred access to other facilities by P.I.s at U.S. institutions is not a factor in the review. Applications from astronomers and students who work at non-U.S. institutions must indicate why the project cannot be done using other facilities available to the investigators and why U.S. national facilities are needed.

Conflict of Interest

In general, NOAO policy regarding conflict of interest relies largely on common sense. When we assign Lead Reviewers, we make every effort to avoid obvious conflicts (collaborator, same institution, etc.), but our knowledge is often incomplete. Clearly, if you are involved in any way with a given proposal you should not grade that proposal and you should excuse yourself during the discussion.

If the PI or Co-I is from your institution, this may or may not be a source of conflict, depending upon the nature of your interaction (or lack thereof) with the individual. In many cases it is appropriate to grade such proposals and to participate in the discussion. If you are working on a project similar to the one being discussed, you may feel that you should not supply a grade, but this again may not mean you should remain silent during the discussion. In fact, your interest in this area implies an expertise that could be of great value.

From this it should be clear that there are few hard rules in this area, which is intentional. The best guide is common sense. If an impartial outsider would think it not appropriate that you grade or discuss a given proposal, then you probably should not. But, bear in mind that the committees are small, that your expertise is very much needed, and that omission of one grade from a total of 5 can significantly alter the result. Thus, if you feel you can honestly be impartial in grading and discussing a proposal that might have a possible conflict of interest, please do so.

Grading System

NOTE: THIS HAS CHANGED AS OF 2011B!!

Proposals should be given a grade from 5 to 10, with 10 being an outstanding proposal. The grade of "3" is reserved for proposals which have a serious technical or scientific flaw which render the observations impossible.

The meanings of the numerical grades are described below. Do not use an extreme grade to flag a proposal for discussion, since all proposals will be discussed. The primary criteria for awarding a grade should be the overall scientific merit of the proposal.

Panelists should please make use of the full scale. Using the full scale will make it easier to break ties during the panel discussion, to easily determine where natural break points exist, and to determine which proposals may require extra time for discussion. However, do not attempt to force your grade to fit any particular distribution.

The following guidelines are suggested in order to help guide your grade assignments:

- 10 Outstanding proposal:** Especially compelling, very high priority observing program with extremely well defined scientific goals that address an important and timely astrophysical problem. Excellent and feasible methodology; excellent and capable proposer(s) with good track record of publishing their observational results.
- 9 Excellent proposal:** Addresses an important astrophysical problem with a well-defined and feasible approach. Compelling science case and good methodology.
- 8 Good proposal:** Has good science content and addresses a problem or object(s) of interest, with a good chance of success.
- 7 Average proposal:** This proposal has merit, but does not stand out from the group as being particularly strong or weak.
- 6 Below average proposal:** The science is of some value but the proposal is not compelling. The goals or the methodology may be weak (or poorly described), or the proposal may simply be of lower priority.
- 5 Poor proposal:** The scientific goals are unclear or the methodology is not well thought out. Even if the observations are made, it is not clear how or if the science will be advanced.
- 3 This proposal is seriously flawed. Do not schedule:** The science is wrong, or the targets are not available, or the observations are technically impossible.

Please submit your grades via the web following the enclosed instruction sheet. For the overall TAC process to work, **it is extremely important that we receive your grades by the deadline.** If for some reason you cannot meet the deadline, notify Mia Hartman (mhartman@noao.edu) as soon as possible prior to the deadline date. Please let us know if you encounter any problems with the form or with any of the proposals. If you notice that information is missing or a proposal has printed out incorrectly, we may be able to fix the problem by the time of your panel meeting if you tell us immediately.

TAC members' grades will be computed to find the average grade for each proposal; this grade will provide a starting point for discussion. The average grades will be included in a packet of materials forwarded to you at the hotel prior to the meeting. If we do not receive grades from all members of your panel by the deadline date we will be unable to provide these lists prior to the meeting.

Lead Reviewers

Each TAC member serves as a Lead Reviewer for a share of the proposals. Lead Reviewer assignments are included in your materials. Lead Reviewers should record preliminary comments for the proposals assigned to them.

COMMENTS PROCEDURES: PLEASE READ CAREFULLY.

Comments: Procedures

At the meeting, the Lead Reviewer will begin the discussion of the proposal by providing a very brief summary evaluation, based on their preliminary comments.

After the discussion of proposals, Lead Reviewers should augment their preliminary comments with the comments captured during the discussion. Panel members will provide the Lead Reviewer with written text that captures their contribution to the discussion.

Lead Reviewers are responsible for producing summary comments. Chairs will make sure that there will be frequent breaks during the panel meeting to allow the time for editing the comments.

Panel Chairs will perform a final check of the summary comments. The final check will be done when all panelists are still available in person, so they can confirm the details of the panel discussion as needed. **Panel Chairs are responsible for delivering the checked summary comments to us.** These comments will be forwarded to the PI so it is essential that they be as complete, accurate, and clear as possible using complete sentences. Comments should be fair, professional, constructive, and respectful and the panel members should cast themselves as the recipient when wording the comments.

Lead Reviewers and Chairs will edit the summary comments by using the Web page at <http://www.noao.edu/noaoprop/tac/>. All panelists may use the electronic Proposal Worksheets, available at the same Web page to make their comments available to the Lead Reviewers.

If for some reason you are unable to enter your comments via the Web, please contact Mia Hartman (mhartman@noao.edu).

Comments: Contents

Please evaluate the proposals for all telescopes and record your preliminary comments in whichever format you prefer. You may annotate the proposals, or use the electronic Proposal Worksheet. Lead Reviewers will build on their preliminary comments to produce the summary comments. Summary comments should consider all applicable criteria (listed at beginning of this document.). If a technical review is a significant factor in whether a proposal receives time, please flag this fact prominently so that we can confirm the technical assessment.

The NOAO policy is to award telescope time based on the scientific merit of proposals, determined through peer review. **Access to other facilities by P.I.s at U.S. institutions is not a factor in awarding NOAO telescope time.** We do request that investigators state how the planned observations on NOAO facilities are relevant to the scientific goals of the proposal, especially in the case that other facilities are being used as well so that the TAC can see how the proposed observations fit into the overall scientific program.

Summary comments should contain the TAC impressions on the proposal. If the panel concludes that a proposal should not be granted observing time under any circumstances, the summary comments should include detailed information as to why the panel reached their conclusion. Comment editing should be done with special care for the proposals that are ranked the lowest.

Additional guidelines for writing comments can be found at <http://www.noao.edu/gateway/tac/overview.pdf>.

Technical Review

Technical review information will be made available to all TAC members via the web. We do not provide a technical review of every proposal, but we try to review those that have the greatest likelihood for technical problems. If you feel you need specific technical or other information to evaluate a proposal, you may consult whatever experts you wish, but you should attempt to retain an appropriate degree of confidentiality. If you have a question about the feasibility of the observations proposed, please email that concern to Mia Hartman (mhartman@noao.edu).