Guidelines in the Dual Anonymous Review System (ver. S26A)

Subaru TAC

Proposal reviews should be based solely on scientific merit. However, unconscious bias has been identified in the review processes of other observatories such as ESO (Patat 2016), Hubble Space Telescope (Johnson & Kirk 2020), ALMA (Carpenter et al. 2022), etc. Subaru TAC examined the six semesters from S20A to S22B and found that the success rates of female PI proposals were about half of those of male-led ones throughout the periods (Fig.1). The quantitatively same tendency remains even if the proposals are divided by the proposers' years of experience. While the origin of this difference is not understood, this can be caused by unconscious bias. TAC considers that the success rates should be equal because gender does not make any difference in scientific quality. There is a known statistical tendency for male reviewers to give female PI proposals harsher evaluations, and the tendency can be eliminated by implementing a dual anonymous (DA) review system (Johnson & Kirk 2020). Subaru SAC and TAC have implemented a DA system for the review of the Subaru proposals from S23B. This document provides guidelines for proposers on how to write their proposals and for reviewers on how to evaluate proposals in the DA system.

Fig.1 Difference of proposal success rates depending on gender of PI of proposals submitted in semesters between S20A and S25A.

Guidelines For Proposers

The most important point of a Dual Anonymous (DA) system is to ensure that reviewers focus on the scientific merit of proposals, not on the proposers' identity. Proposers should prepare their proposals in a manner compliant with the DA system where proposers are not identifiable by reviewers (and reviewers are not identifiable by proposers, either). The general guidelines of the DA writing style are as follows:

- Avoid mentioning names and affiliations of Principal Investigator (PI) / Co-Investigators (Co-Is) in Scientific Justification (SJ) and parts disclosed to reviewers in Coversheet. Especially, please carefully remove any information on PI/Co-Is when proposers recycle their previous SJ and other materials.
- Avoid claiming ownership of the proposers' past work in SJ. When referring to proposers' unpublished work or dataset, use "private communications" or similar words without specifying names, proposal IDs, etc.
- Cite references in a neutral third-party manner, including references to proposers' data and software.

Examples of DA violations:

- Examples for referencing a paper, Tanaka, et al. 2023
  Incorrect: We revealed that A is B (Tanaka, et al. 2023).
  Correct: Tanaka, et al. (2023) revealed that A is B.
  Incorrect: The equivalent width was measured in ten objects in our past observation (Tanaka, et al. 2023).
  Correct: The equivalent width was reported in ten objects in Tanaka, et al. (2023).

- Examples for referencing data taken by the "FOO" project
  Incorrect: In the FOO Survey, we have conducted 6 nights of observations and found xxx.
  Correct: Investigations of the data taken by FOO Survey have found xxx (private communication).

- Examples for referencing proposers' paper in preparation
  Incorrect: Region A has recently been observed (Tanaka, et al. in prep.).
  Correct: Region A has recently been observed (private communication).

More practical examples can be found in the Dual-Anonymous Guidelines of ALMA [link].

Coversheet items not open to reviewers:

Proposers still need to show their identities in the Coversheet items listed below. While these items will be disclosed to TAC, they will be replaced by "****" when the proposals are sent to reviewers, including technical reviewers. Proposers are requested to write text following the guidelines above for SJ and other Coversheet items, apart from those listed

below, so that the proposers' identities will not be identifiable by the reviewers.

- Principal Investigator
- Co-Investigators
- Thesis Work
- List of Applicants' Related Publications
- Condition of Closely-Related Past and Scheduled Observations
- Post-Observation Status and Publications
- Team Expertise

Note for Intensive proposals:

"Roles of Co-Investigators", requested in Call-for-Proposals, should be described in "11. Team Expertise" of Coversheet, not in Scientific Justification.

Compliance:

Proposers must anonymize their identity in the text disclosed to reviewers to follow the DA writing style. If TAC and reviewers find cases of apparent violations of the DA writing style, the proposers will be notified in the review report. Although there is no penalty for such cases in this semester, it is possible to introduce a penalty of rejection in future semesters.

Guidelines For Reviewers

Reviewers are requested to evaluate proposals solely based on their scientific merit and should not try to identify the proposers. If reviewers find possible cases of apparent violations of the DA writing style such as sentences disclosing the proposers' identity, please notify the cases to TAC through "Comments to TAC" in PRORES, the proposal review web system. However, please do not consider such violations in the scientific evaluation of the proposals. Example cases of the violations can be found in the Dual-Anonymous Guidelines of ALMA [link].