Science Observing Policy



3.6m Devasthal Optical Telescope

Aryabhatta Research Institute of Observational Sciences

Manora Peak, Nainital - 263 001

Uttarakhand, India

CHANGE RECORD

Document Number: ARI-DOT-TEL-POL-001

Issue: 3

| ISSUE | DATE | TOTAL PAGES | MODIFIED PAGES | REMARKS |
|-------|-------------|----------------|-------------------|--|
| 1 | 28-Jul-2017 | 5 | All | Initial Issue |
| 2 | 22-Jun-2020 | 5 | All | Change made in observing mode due to COVID situation |
| 3 | 25-Jan-2021 | 5 | All | Typos corrected |

Released by :

About the document: The purpose of this document is to define the policies and procedures which will be followed while making time allocation for carrying out scientific observations with the 3.6m Devasthal Optical Telescope (DOT) which is run and maintained by the Aryabhatta Research Institute of Observational Sciences (ARIES). This policy document has been prepared based on the inputs received from the 3.6m DOT - Time Allotment Committee (DTAC) and the Governing Council of ARIES. The updated version of this document can be found at the 3.6m DOT page on ARIES website (https://www.aries.res.in).

1. Mode of Observations:

The observing time on 3.6m DOT will be offered in two modes:

- (a) Visitor Mode: visiting astronomers present at the telescope, over-viewing and guiding the activities of the observing staff.
- (b) Service Mode: observations are done by observatory staff on the basis of predetermined sequences of operations mutually agreed by the DOT operation team and the proposer.

However, for the first few cycles, till the observing procedures are validated by the DOT team, majority of the observations will be carried out in the Visitor Mode only. The final figure (in per cent) for the Visitor and Service Modes will be decided by the competent authority based on the experience gained during the operation of the telescope for the first few cycles. These figures may be subjected to periodic adjustments, depending on the experience gained in operation of the DOT and the evolution of the community demands.

2. Proposal Category:

As decided by the Governing Council of ARIES in its 25th and 30th meeting, the observing time on 3.6m DOT will be apportioned as follows: 60% Open time on competitive basis to any astronomer working in an Indian Institution subject to the scientific merit of the proposals; 33% guaranteed time for astronomers from ARIES subject to the merit of the proposals; and 7% guaranteed time for Belgian astronomers, also subject to the merit of their proposals. The observing time shares are allocated based on the affiliation of the Principal Investigator (PI). The PI should be affiliated to one of the institutions from India or Belgium. The time share in which proposal is submitted, i.e. 60% (Indian-time), 33% (ARIES-time), 7% (Belgian-time), should be specified in the observing proposal.

3. Proposal submission and evaluation procedure :

- (a) Observing proposals have to be submitted using the DOT Online Proposal Submission System (DOPSES) at the URL: http://dopses.aries.res.in or at any other URL announced on the ARIES webpage.
- (b) For each observing cycle, a Call for Proposals will be issued on the web-page of 3.6m DOT and an email will be sent to all Indian and Belgian proposers who have registered with the DOPSES. An email to all the Indian Institutions pursuing research on the topics related to astronomy and astrophysics, will be circulated one month

before the deadline for submission: 1st December and 1st August for the periods February to May and October to January respectively.

The Call for the proposals will be notified to the Belgian astronomers for their 7% observing time share through Belgian-Time Allocation Committee (B-TAC). The table below specifies some of the important dates.

| Item | Cycle-1 (Feb-May) | Cycle-2 (Oct-Jan) |
|--------------------------|----------------------|----------------------|
| Call for Proposal | 1st November | 1st July |
| Deadline for Submissions | 1st December | 1st August |
| Time Allocation | 10th January | 10th September |

- (c) Each proposal should identify a single individual who will act as PI and will be responsible for the proposed scientific programme. The PI will be the contact person for all communications with the DOT Team, including the data delivery.
- (d) All the proposals belonging to the proposal category of ARIES-Time and Indian-Time will be reviewed by the DTAC including external refereeing process. The proposals will be graded to one of the following categories.

A (Excellent): The allocated observing time will definitely be scheduled

B (Good): The allocated observing time will be scheduled if time is available after scheduling proposals of category [A]

C (Fair): The allocated observing time will be scheduled on best-effort basis.

D (Poor): The proposal contains clear technical and/or scientific flaws and will not be allocated time.

(e) The B-TAC will review the proposals belonging to the category of Belgian Time. Two members, DTAC-chairman and the DTAC-convener will also be members of the B-TAC to interface between the two TACs and also to coordinate with the DOT team.

4. Local hospitality and observing assistance:

ARIES will provide local hospitality and travel assistance to one observer per program as described below. If a second observer is required, this has to be clearly mentioned in the proposal so that arrangement could be done accordingly.

(a) Observing assistance: A night observing team of three persons viz. a scientific assistant, a helper and an electrician, will assist the proposer in both Visitor and Service modes of observations. The operation of the telescope, instruments and the dome will be carried out by the scientific assistant. For first few cycles, at least one scientist from ARIES may also be present during night to support the observations. The proposer has to fill the science observation log. The proposer has to specify the

- instrument set-up, exposure time and desired signal-to-noise ratio while submitting the proposal to the DOPSES.
- (b) Travel assistance: The proposer (s) has to reach Devasthal for observation on their own cost. If requested, the details of ARIES travel agency will be provided to the proposer. The students from universities may be provided travel support and accommodation by ARIES during observing run, subject to merit of the proposal.
- (c) Accommodation at Haldwani and Devasthal: The proposer will be provided lodging and board on payment basis at either Haldwani Transit House or Devasthal Guest House or at both depending on the requirement. A single room accommodation will be provided to the proposer and if a second observer is accompanying the observer, accommodation will be provided to him or her subject to availability.

5. Data rights:

Successful proposers will have exclusive access to their scientific data for the duration of a proprietary period. Normally this period will expire one year after the date of observation. An extension of this proprietary period may be granted in special cases and the corresponding requests will have to be submitted to the Director, ARIES, at least one month before the expiry.

6. Director's Discretionary Time (DDT) Proposals

As per the Resolution No. 33.4 of Governing Council of ARIES, about 10% of the available science time, will be reserved as Observatory Time / Director's Discretionary Time for allocation by the Director, ARIES. A DDT proposal must necessarily belongs to one of the following four categories:

- (a) Proposal for test and maintenance due to unforeseen requirements of 3.6m DOT facility
- (b) Category-A proposals that have lost time due to technical problems and asking for compensation.
- (c) Proposals of Target of Opportunity (ToO) nature requiring immediate observations of a sudden and unexpected astronomical event.
- (d) Proposals requesting observations on a scientific topic which is highly competitive and could produce a unique or break-through results.
 - DDT proposals can be submitted any time. Request for the DDTs should be made to the Director, ARIES as a fresh proposal or in case of an ongoing proposal that needs the time, referring by proposal number and providing justification for DDT time request. The allocation will be made by Director, ARIES in consultation with the Astronomer In-charge, 3.6m DOT. The data policy for the compensation time shall follow the policy for the regular proposal. However, the lock-in time for the DDT proposals such as ToO shall be 90 days from the date of observation.