

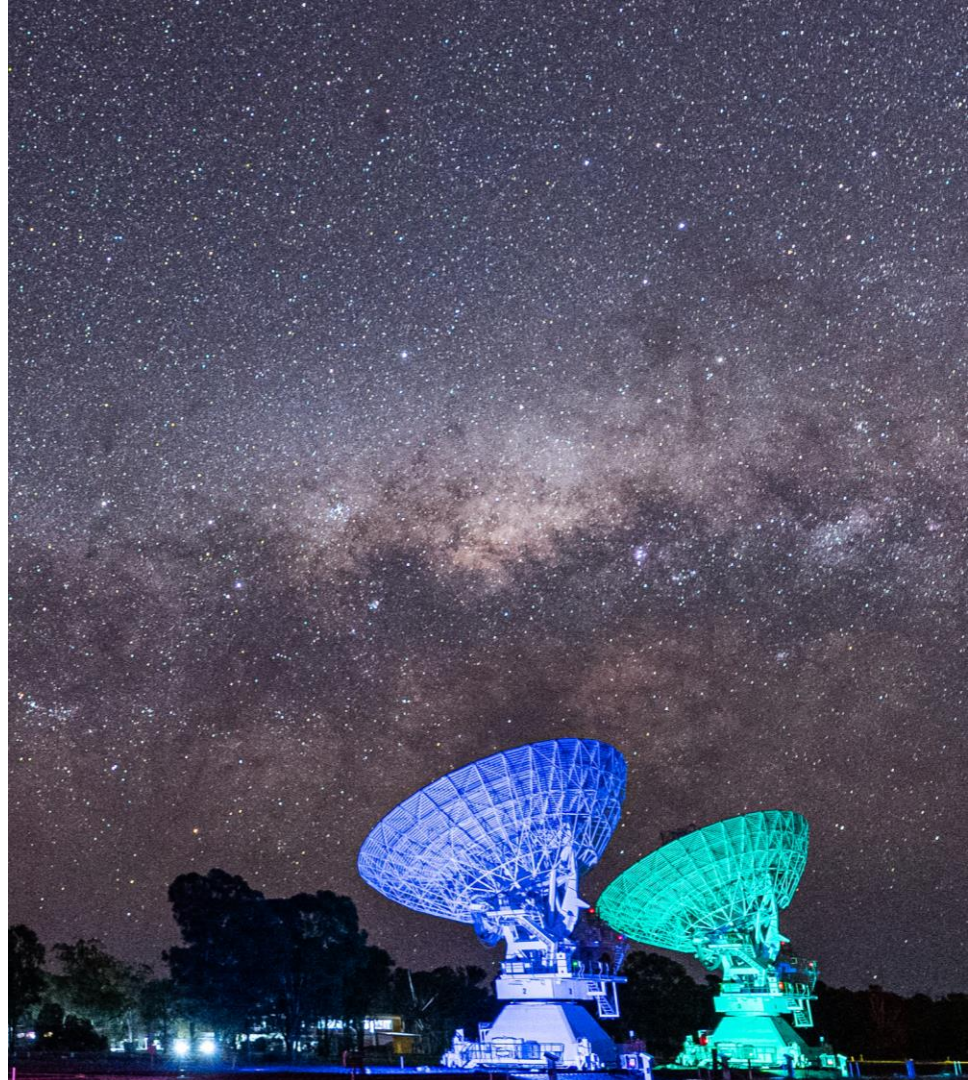


Requesting Director's Time

ATUC April 2024

Jamie Stevens | 2024-April-10

Australia's National Science Agency





I acknowledge the Gomeroi people, the Aboriginal traditional Owners of the land of the Paul Wild Observatory and pay my respects to Elders past, present. I recognise their connection to Country and their role in caring for and maintaining Country over thousands of years. May their strength and wisdom be with us today.



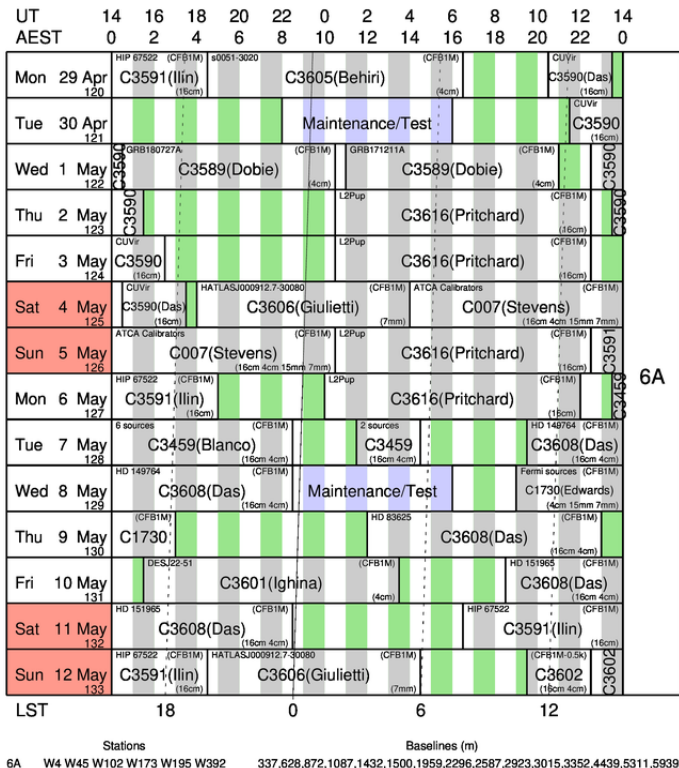
Purpose

- Explain how we make decisions on how to allocate director's time
- Explain how to apply
- Explain the NAPA/ToO policy



What are we talking about?

- The scheduling process cannot fill all time
- Constraints on dates, array and correlator configurations, temperature
- LST ranges have different subscription rates
- There will always be unallocated time in the semester schedule
 - We call this Director's Discretionary Time, or green time due to the colour on the graphical schedule
 - This is not desirable, since we have to meet performance figures of > 70% astronomy
- We offer the unallocated time to requests that come in at short notice





How we decide

- We wait until the time is less than a week away
 - To allow for multiple requests
- We then assess priority of requests
 - Time-critical maintenance or test observations
 - NAPAs that have been through the TAC process usually take priority over ToO requests
 - If the observations are simultaneous with multiwavelength observations
 - Replacement of previously scheduled time that was displaced by NAPA or ToO triggers
 - More observing time for an already scheduled experiment



Things we consider

- Is the target likely to produce impactful science?
- How time-sensitive are the observations?
- Is the array configuration suitable for these observations?
- Is the weather suitable for these observations?
- If this target is being observed at other radio telescopes, what extra value does the proposed observations bring?
- How many other requests have been made to observe this target?



How to apply

- Ideally, please think ahead and submit a NAPA, even if there is only a small chance of triggering per semester
- To make it easy for us, please send an email to alert@atnf.csiro.au with:
 - Target coordinates
 - Who will do the observing, and who your project expert will be
 - The time you want
 - A brief science case explaining:
 - What observations you are requesting (frequencies, etc.)
 - Why they are useful, why they are time-critical
 - Coordination with other facilities, if applicable
 - If Murriyang: the data rate required
 - If LBA: the stations required/desired
 - If you are open to collaboration with other teams who request observations of this source
 - If you have an existing project code or need a new CX/PX/VX code
- Then, request the time in the Portal as well so it is easy to approve



NAPA policy

Non-A-Priori Assignable (NAPA) projects can be proposed through the normal TAC process. They should specify a well-defined set of observations in response to a well-defined set of triggers that are unpredictable in time. No claim-staking of a source, or class of sources, will be permitted.

The TAC will evaluate these proposals on their scientific and technical merits and assign each a scientific priority. In the normal semester scheduling process, a cutoff grade is established whereby most projects with that TAC grade were scheduled most of their time. If a NAPA project is graded equally to or higher than this cutoff grade, it is presumed that it would have been eligible to get time, if the trigger time were known. Therefore, any NAPA project graded equally to or higher than this cutoff grade may displace any other scheduled observation. Any NAPA project graded lower than this may be scheduled in unallocated time.

Any project, regardless of grade, may be scheduled at the discretion of the Facilities Program Director or Space & Astronomy Director. Except in exceptional circumstances, maintenance time and reconfiguration time cannot be displaced for a NAPA observation. A NAPA trigger for either ATCA or Parkes cannot displace time allocated to the LBA without explicit approval from the Directors. A trigger for an LBA NAPA may displace scheduled time at the ATCA and Parkes however, if the grade of the LBA project would have normally seen that project scheduled.

If requested and approved, a NAPA project may be allowed to use the ATCA rapid-response service, which can automatically respond to a trigger within seconds. In this case, no other NAPA will be able to use the service until the minimum required time has elapsed to ensure that the data is scientifically useful, as defined by the investigator. After this exclusionary period, and while the triggered project is still being observed, only higher-ranked projects may use the service, except at the discretion of the scheduler or the Directors. The rapid-response service must not be used to obtain time on the telescope for observations other than those described in the science justification supplied to the TAC.

The TAC may impose limits on the number of triggers for a NAPA project, or on the total amount of scheduled time that it may displace. After a trigger, the TAC or the Directors may reassess a NAPA proposal at any time, if they feel that the science situation has changed from the original proposal.

In the case that more than one NAPA project wishes to trigger on the same event and source, and at the same time, the scheduler, the Directors and/or the TAC may assign an impartial expert to design and carry out observations that satisfy the scientific requirements of all the triggering projects. The data from these observations would be shared between the teams, and the trigger will count towards the allocation of each project.

In the case that more than one NAPA project wishes to trigger at the same time, but for different events and sources, the project with the higher TAC grade will be preferred by the scheduler. This does not preclude the scheduling of the other projects at other times, if requested.

NAPA proposals may be granted "pre-graded" (continuing) status by the TAC, usually for one year (including the semester in which it was proposed). If the NAPA trigger condition is unlikely, this pre-grading may allow the triggers to be used even if they happen after the end of the semester, without requiring the proposal to be resubmitted. If a trigger is used, but the timing of the proposed follow-up observations would take them into the following semester, pre-graded status makes that possible. If, however, an event requires follow-up observations more than a semester after the trigger, then a separate normal proposal should be submitted for this purpose.

https://www.atnf.csiro.au/observers/apply/too_apply.html#Non%20A-priori%20Assignable



NAPA/ToO policy summary

- We try to accommodate impactful time-critical science by giving it priority over less time-critical science
- All projects given time on the telescope have merit, so priority is never guaranteed
- We seek to be as efficient as possible, so repetition of observations is avoided wherever possible, usually by encouraging collaboration
- The scheduler acts on behalf of the directors, but they or you can ask the directors for their input



Future directions

- Feedback and suggestions are welcomed
- Are we being clear enough in our procedures and policies?
- Are we being fair to all users?
- Are NAPAs the right way to propose?
- Should we schedule more green time?
 - Allow for easier accommodation of NAPA and ToO triggers
 - Allow for replacement of displaced time



Thank you

Astronomy and Space Science

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