ATCA Update

ATUC November 2022

Jamie Stevens | 2022-November-9

Legacy Projects Update

- No update from teams this meeting
- No time scheduled in 2022OCT semester, since StarFISH completed observing in 2022APR

CABB Status

- No change to CABB status
  - 4 blocks (2 in each IF) are incapable of forming reliable zoom bands
  - Continuum bands still producing reliable data
- No zoom observations at all scheduled in 2022OCT
  - The only requested 64 MHz zooms observations were scored too low by the TAC to get time
- Pulsar binning and VLBI modes scheduled and still working as expected

BIGCAT transition

- Since the BIGCAT install date is a moving target, the next semester may have to be scheduled in parts
  - similar to how Parkes has been scheduled recently
- The scheduling will be complicated by array configurations, but we will do the best we can

NAPA policy update

- To deal with multiple proposals asking to observe the same source at the same time, in consultation with the 2022OCT TAC, we propose to add the following to the NAPA policy.

- This policy change has already been used for a recent set of requests for GRB 221009A.

- This policy would apply to ATCA, Parkes and LBA NAPA requests. The full text of the updated proposed NAPA policy is included in the extra slides.

- Feedback from the ATUC is welcomed.

NAPA policy update

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.
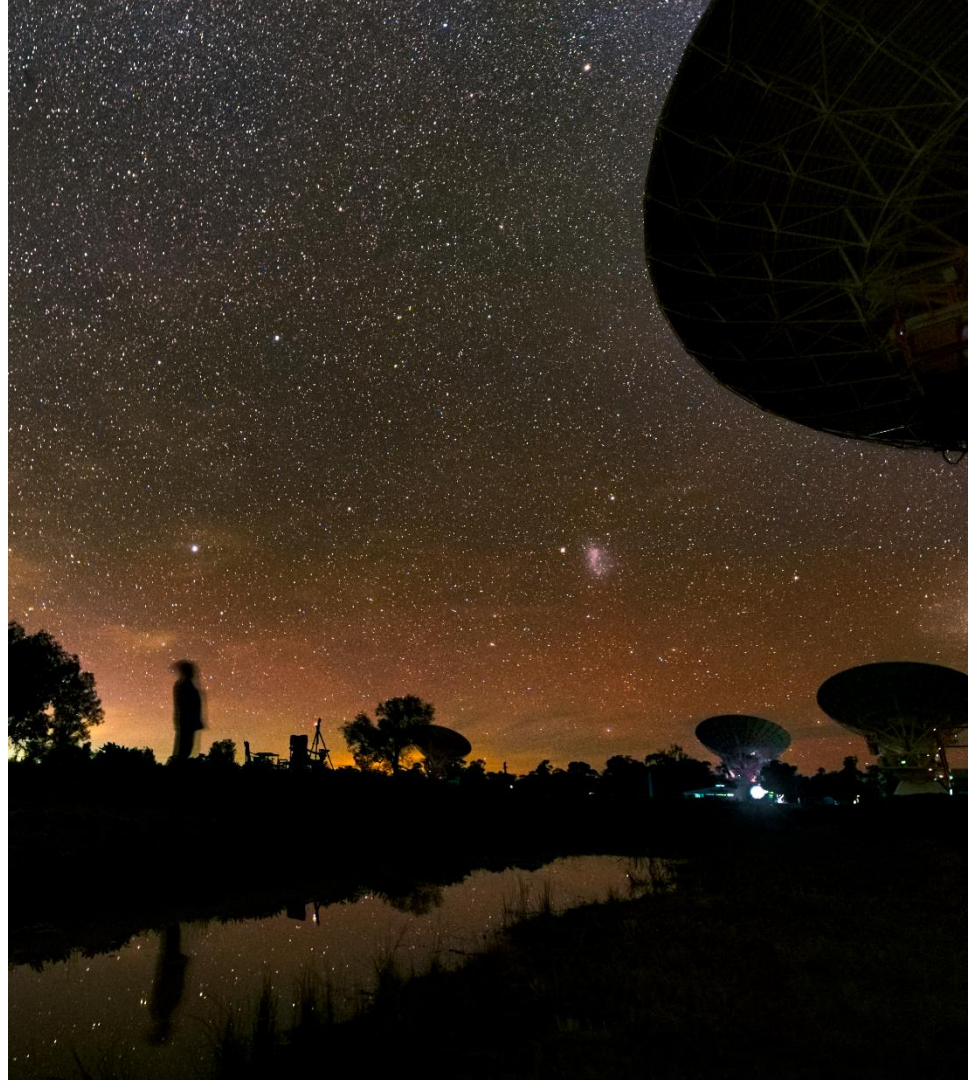
Thank you

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Updated proposed 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.

Statistics

Project allocations for "normal" projects (who expect to get time in a single semester, excluding NAPA).

	2021APR	2021OCT	2022APR	2022OCT
# of Proposals	33 (2432 hr)	26 (1040 hr)	40 (2441 hr)	33 (2130 hr)
Cutoff Grade	3.3	3.3	3.2	3.1
Projects 90 – 100%	22	20	26	27
Projects 40 – 90%	3	1	3	0
Projects < 40%	1	0	3	1
Projects 0%	7	5	8	5

ASKAP-related projects

	2021APR	2021OCT	2022APR	2022OCT
# of Proposals regular	33 (2432 hr)	26 (1040 hr)	40 (2411 hr)	33 (2130 hr)
# ASKAP-related regular	6 (428 hr) [17.6%]	4 (120 hr) [11.5%]	4 (176 hr) [7.3%]	8 (349 hr) [16.4%]
# of Proposals NAPA	28 (1515 hr)	28 (1618 hr)	25 (1461 hr)	26 (1811 hr)
# ASKAP-related NAPA	3 (272 hr) [18.0%]	1 (120 hr) [7.4%]	1 (120 hr) [8.2%]	1 (120 hr) [6.6%]

NAPA Allocation

Semester	NAPA/ToO (hours) **	NAPA %	ToO %	ASKAP %
2022APR	425 (13.7%)	65.6	34.4	7.6
2021OCT	555 (17.9%)	66.6	33.4	19.8
2021APR	528 (17.0%)	70.5	29.5	9.2
2020OCT	455 (14.7%)	62.1	37.9	9.2

** Percentages in "hours" column represent the fraction of the
  usable semester, which is roughly 3100 hours.