



# The FastTurnaround Program at Gemini

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## Why FastTurnaround?

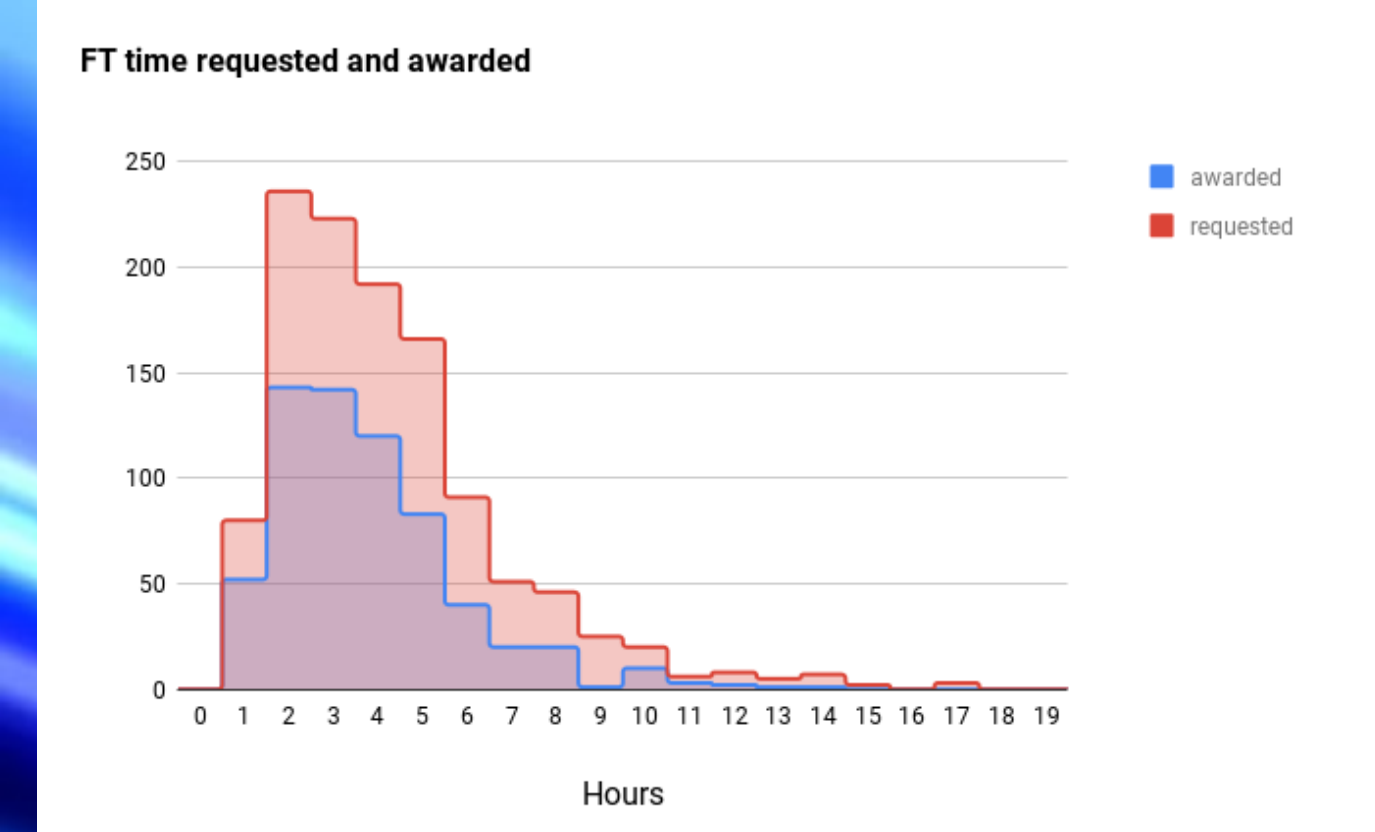
The Fast Turnaround (FT) program was implemented at Gemini in early 2015 to provide an avenue for users to obtain Gemini Observatory data at faster timescales than the traditional queue semester schedules. Astronomers from participant countries can apply every month. Proposals are peer reviewed and results are announced within 3 weeks of the proposal deadline. Any student (PI or CoI) can be assigned as the reviewer and get exposed to the proposal review process (a mentor to aid them must also be assigned). Successful proposals are included in the queue for 3 months and given a slight boost in priority over the regular queue programs.



Proposals do NOT need to be urgent. Any good science case is valid. Only ~18 hrs are awarded at each site each month, so proposals do need to be short, and you must commit to reviewing up to 8 other proposals within a 2 week period.

### Typical use cases:

- Short, self contained projects
- Student led projects (short timescales are particularly useful)
- Quick follow-up
- Pilot/feasibility studies
- Dataset needed to complete analysis for publication
- Early access to new modes/instruments offered at Gemini

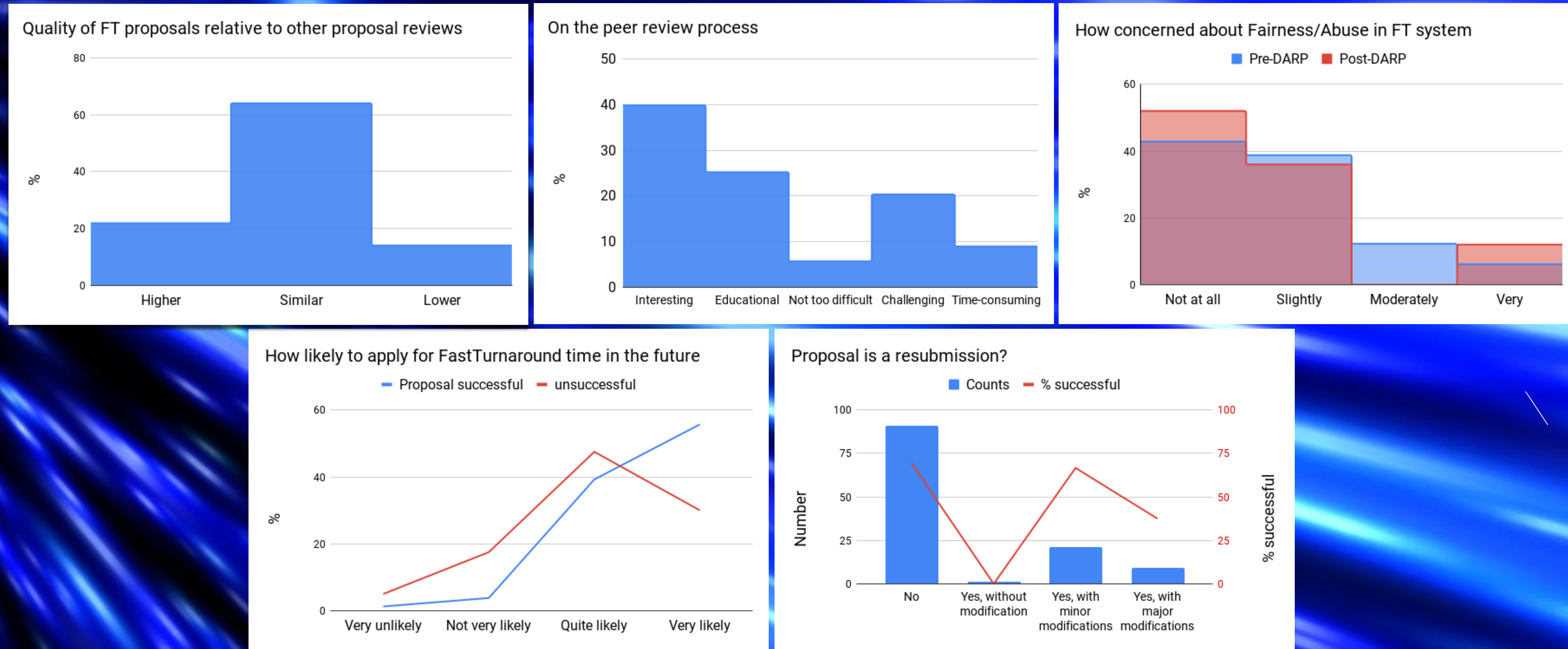


Distribution of FT time requested and awarded per proposal. The majority of FT proposals request and are awarded ~1-5 hrs, but we have received proposals requesting as many as 17hrs. Of course, long proposals will use up most of the time available each month, so such proposals will need to be very compelling to be awarded by the peer reviews.

## How well has the FT program worked?

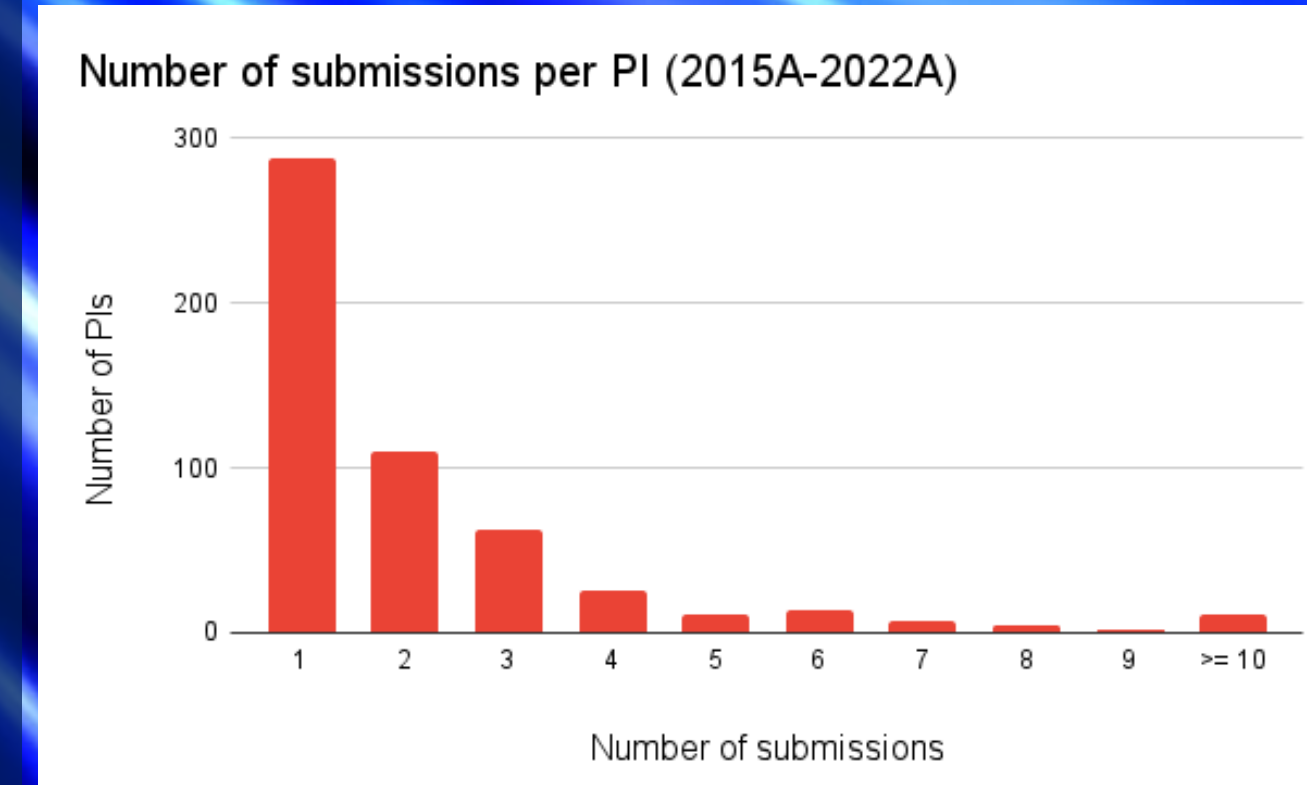
### Optional anonymous survey results

Based on 125 FT PI responses to our optional survey (provided to PIs at the same time as the peer review results): PIs find FT proposal quality to be similar to other proposals. About 2/3 find the review process Interesting/Educational. DARP did not allay fears of fairness or abuse in the system for the small fraction of concerned PIs. Most FT PIs are likely to submit FT proposals in the future, although as expected, PIs who were not awarded time are a little less likely. Proposals which were rejected originally have as good a chance as first time submissions of being awarded time on a subsequent submission if PIs modified proposals based on reviewer feedback.



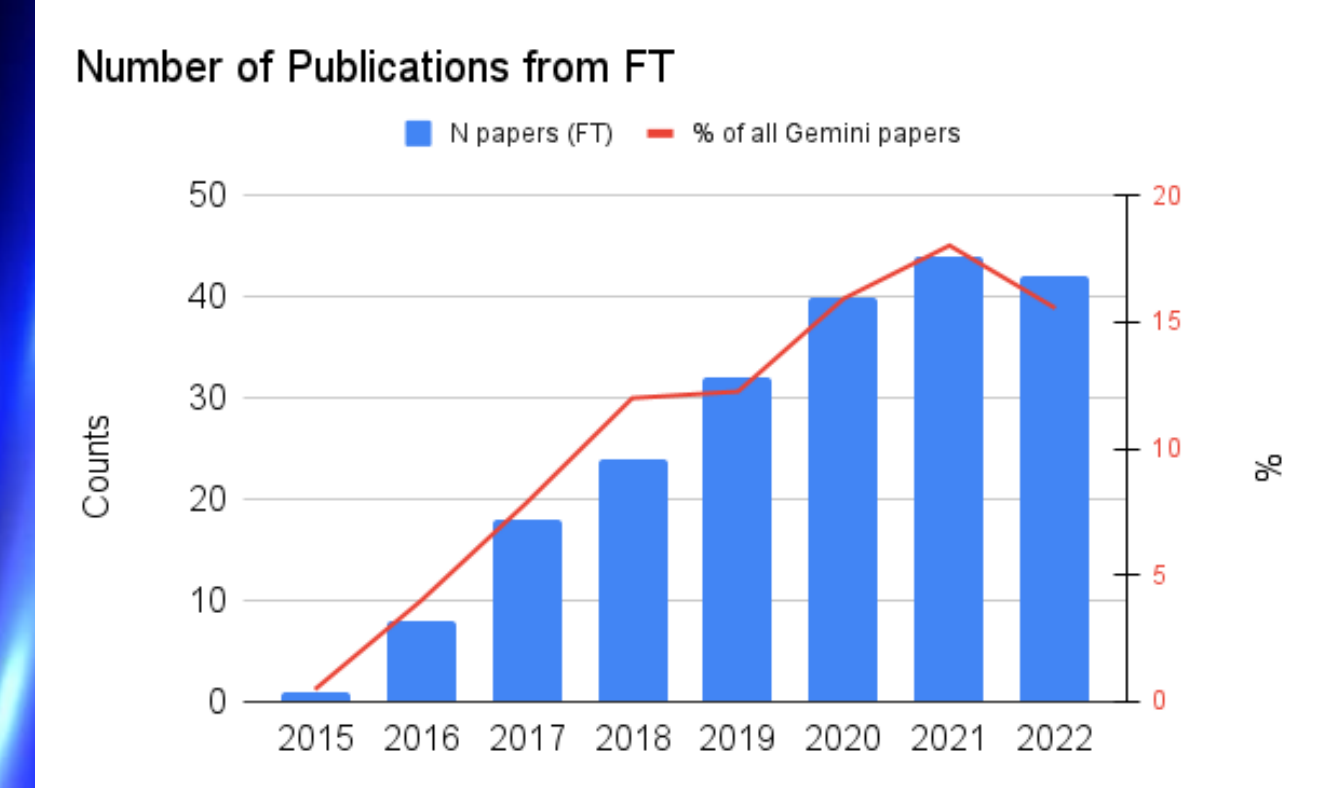
### Repeat and New customers

Do FT users return? We find that nearly half (46%) of FT users have submitted > 1 proposal. 26% have submitted > 2. Users who have submitted at least 4 proposals have had at least 1 proposal accepted. The success rate for those who have only ever submitted a single FT proposal is just over 50%.



### Publications based on FT programs

The number of publications has monotonically increased each year (current semester is normalized for the portion of the year, so may not continue the trend). This trend is similar to that for regular queue programs in the first years of Gemini. The percentage of Gemini papers that use FT data has exceeded 10% since 2018 even though the FT program uses no more than 10% of the available time on each telescope.



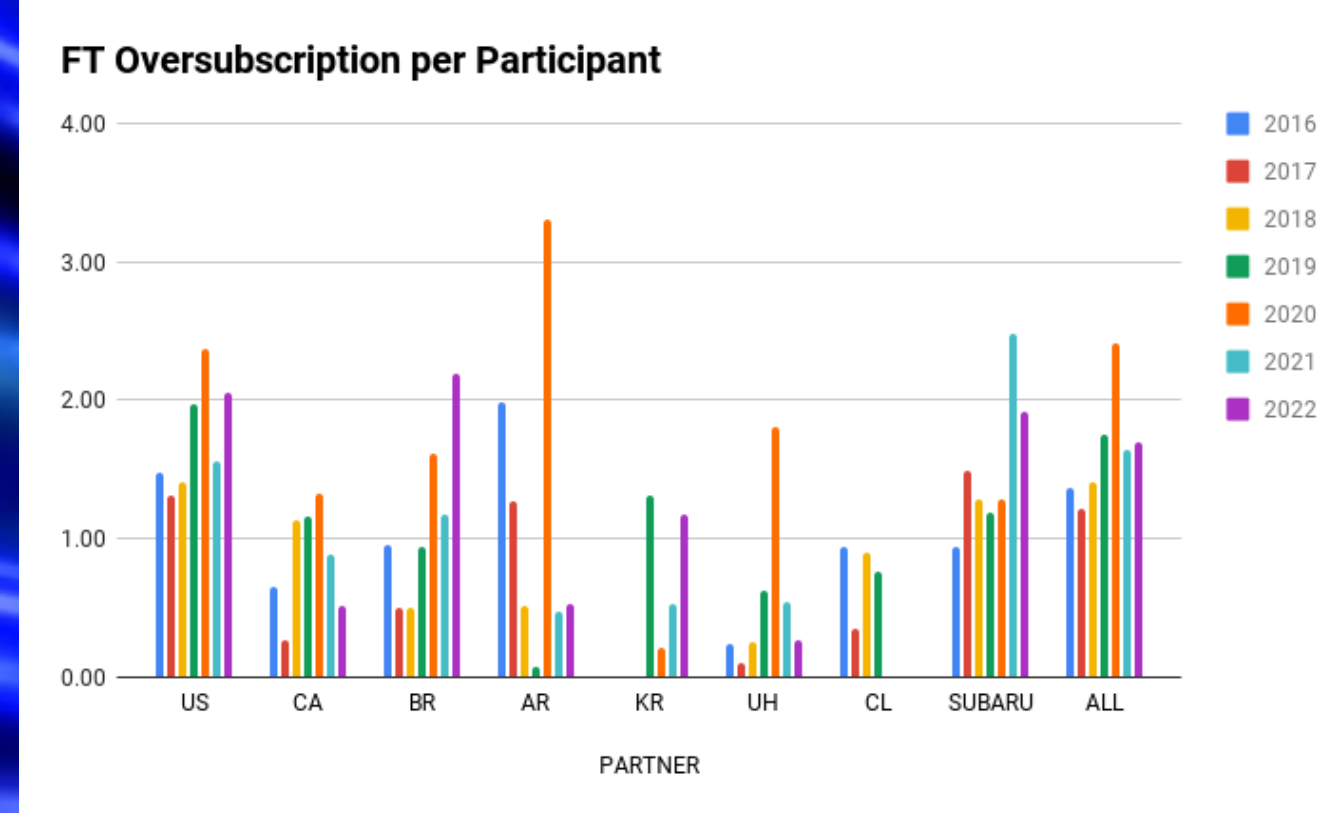
## Dual Anonymous Review Process (DARP)

During the peer review process, reviewers provide scores for 8 other proposals. Initially, while proposers did not know the identities of the reviewers, reviewers would have access to information about the proposing teams. In early 2021, we switched to a dual anonymous review process, where the proposing team identities are also hidden from the reviewer. The purpose of this was to promote fairness and to eliminate subconscious bias to the extent possible. We are planning to do a full analysis of the DARP process. Here we show a couple preliminary pre- and post-DARP comparisons.

- \* Student-led proposals have so far had better success since instituting DARP. Students constitute 20% of our FT PIs.
- \* We had one concern that non-native English speakers might be penalized in DARP if reviewers assumed any grammatical mistakes were due to carelessness. Fortunately, we find that at least in 2 of 3 cases where partners have largely non-native English speaking communities, success rates have actually improved post-DARP.

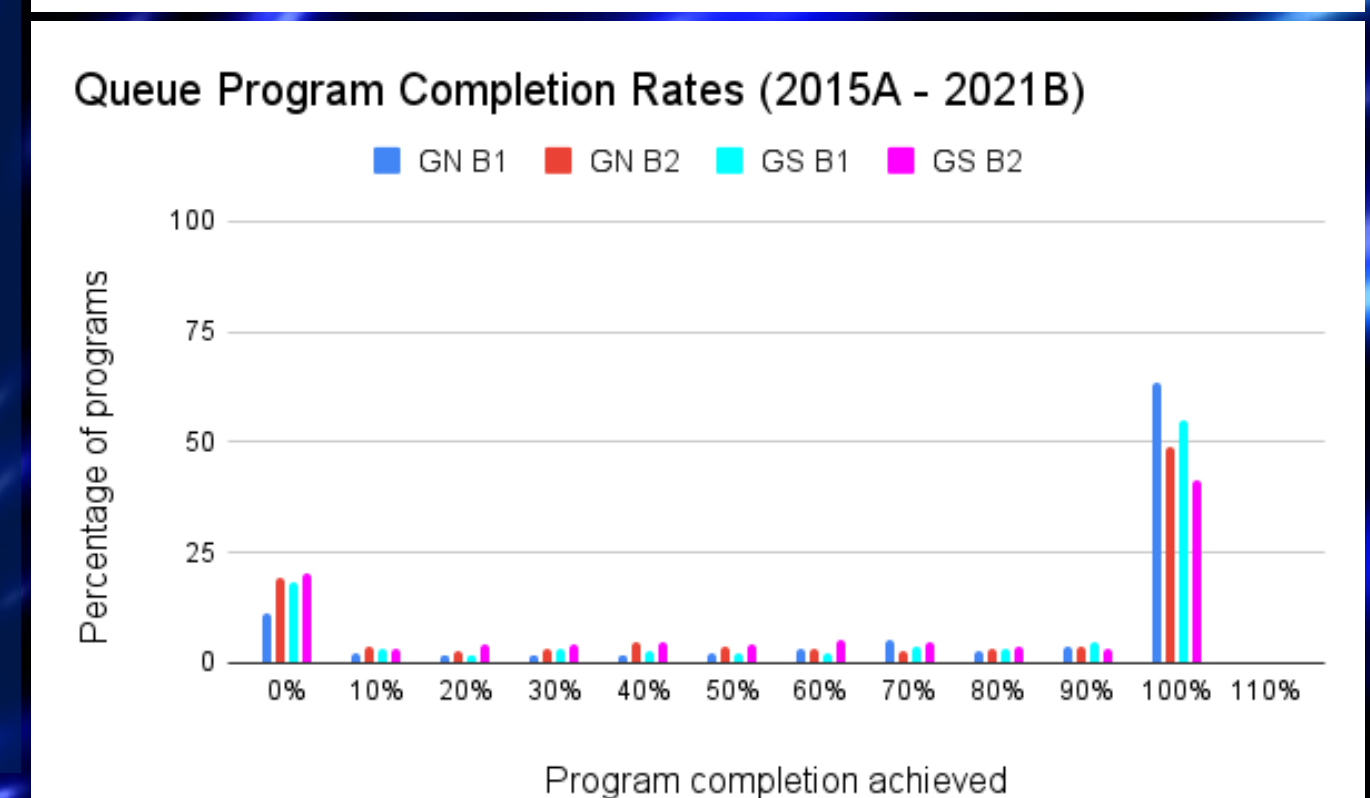
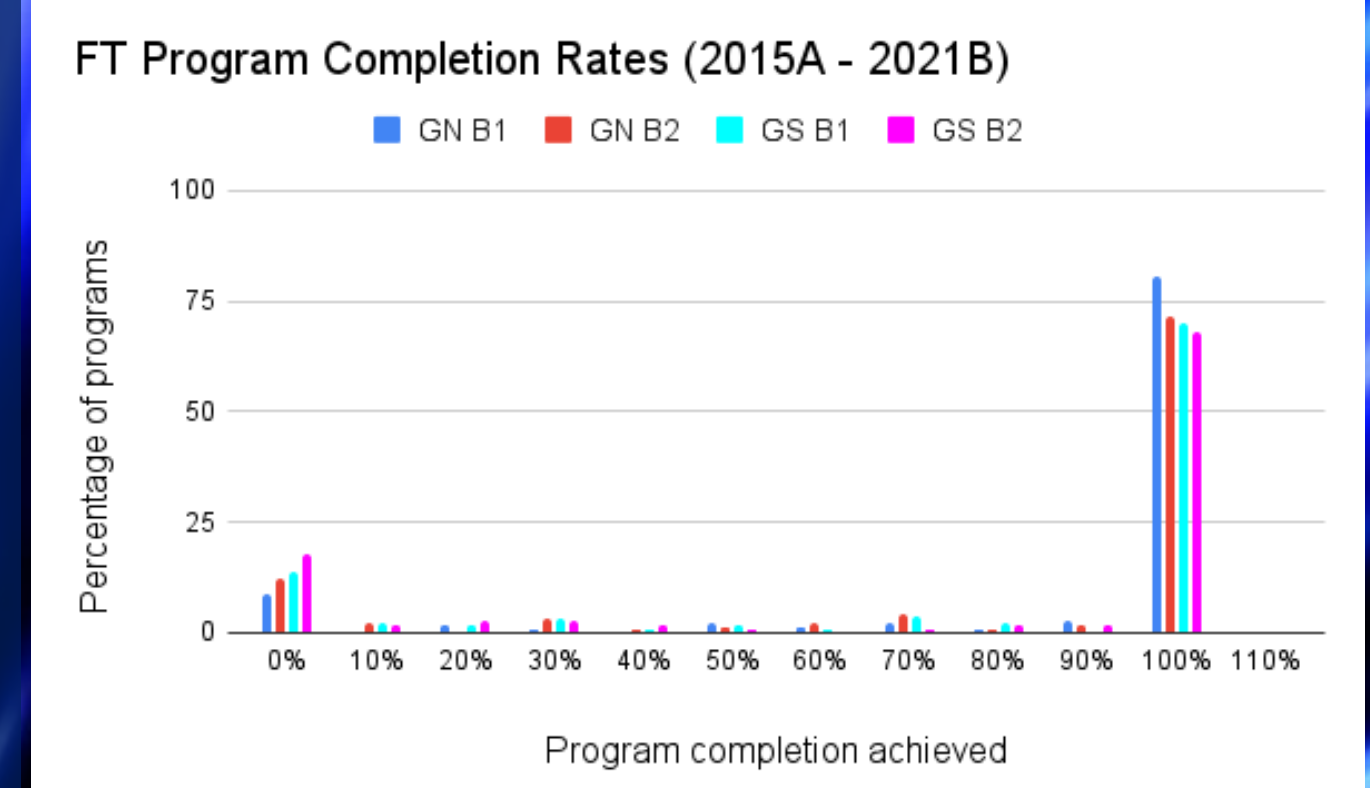
### Oversubscription

While for the regular queue the average oversubscription for both sites is about 2, the average oversubscription for FT is only around 1.8 in recent years and this is an improvement since the start of the program. Unfortunately, many of our partners achieve even smaller oversubscription rates. This is one area we should strive to improve.



### Program completion

FT programs are given a slight boost in priority during queue scheduling. This is reflected in the higher rate of program completion of FT programs over regular queue programs. Programs that reached 0% completion were for the most part those that had very early targets, had observations with tight timing windows and/or required very good conditions, used instruments/modes that became unavailable due to faults after the proposal was accepted, or were untriggered ToOs. These latter cases are also causes of queue incompleteness.



## FAQ

- Why do I have to review proposals outside of my area of expertise? There are only ~20 proposals received per month, and you are requested to review 8 of them. There are not likely to be 8 related to your field. Proposals should be written with this in mind. We do use keywords to match proposals to reviewers. The remainder are chosen at random.
- Can I submit more than 1 proposal per cycle? Yes, but you must designate a different reviewer for each proposal (choose a Co-I).
- Can reviewers have a larger range of scores to use than 0-4? We are considering this.
- A co-worker also submitted an FT proposal. Can we discuss our reviews? Absolutely not. All reviews must be unique. Also, these proposals are supplied to reviewers in confidentiality. Only mentors + mentees (students) should discuss reviews.

For more information, see [www.gemini.edu/observing/phase-i/ft](http://www.gemini.edu/observing/phase-i/ft) or email [gem.fast-turnaround@noirlab.edu](mailto:gem.fast-turnaround@noirlab.edu)

