



STScI | SPACE TELESCOPE
SCIENCE INSTITUTE

EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

Program size boundaries and allocations

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Background

JWST GO programs are divided by size into three major categories:

- Small programs, $t \leq 25$ hours
- Medium programs, $25 \text{ hours} < t \leq 75$ hours
- Large programs, $t > 75$ hours

Each category has a separate time allocation

- Small and medium allocations are divided among the topical panels
- Large allocation is assigned to the Executive Committee

The Cycles 1 & 2 GO time allocations were as follows:

- Cycle 1 allocations skewed to small programs
 - 6000 hours nominal allocation; 4:1 over-subscription
- Cycle 2 allocations were balanced based on time pressure
 - 5000 hours nominal allocations; 7:1 over-subscription



TAC allocations

The TAC allocations in Cycle 1 were as follows:

- Small programs: Nominal = 3500 hours, Actual = 3135 hours;
- Medium programs: Nominal = 1500 hours, Actual = 1960 hours
- Large programs: Nominal = 1000 hours, Actual = 1018 hours

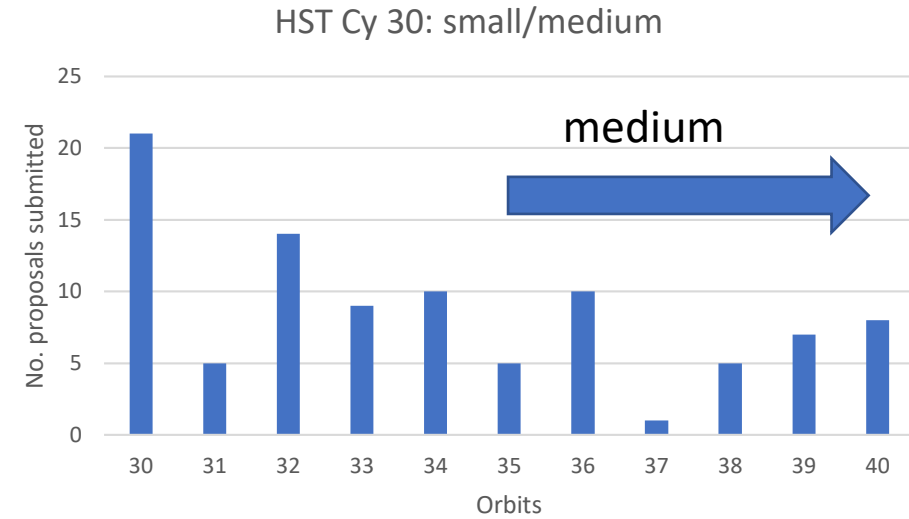
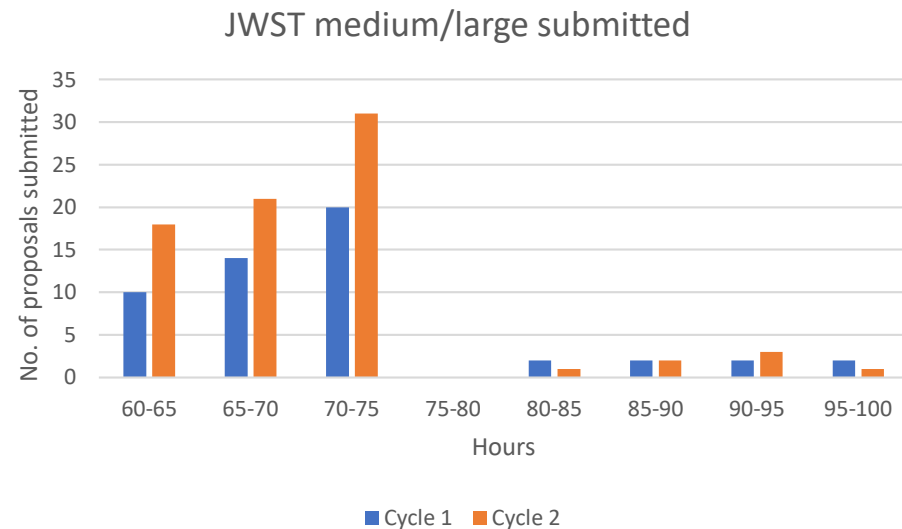
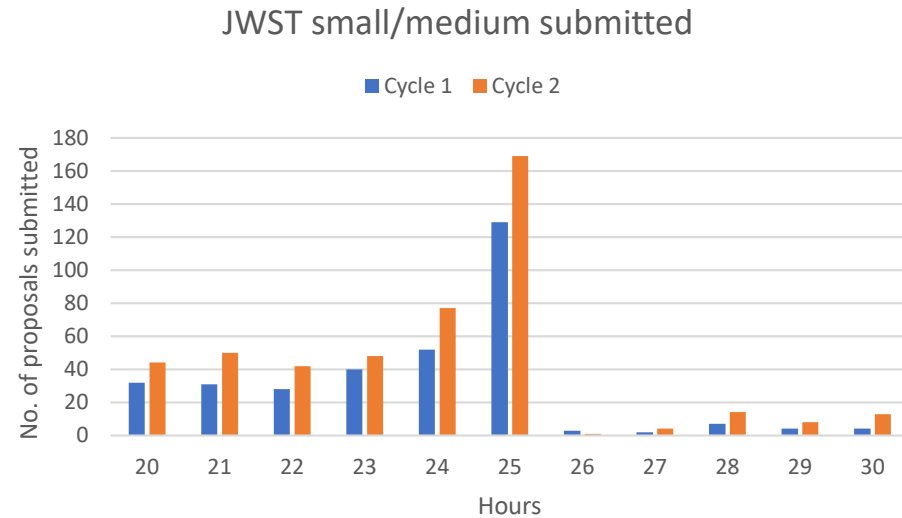
The TAC allocations in Cycle 2 were as follows (includes Atacama programs):

- Small programs: Nominal = 2900 hours, Actual = 2400 hours
- Medium programs: Nominal = 1250 hours, Actual = 1920 hours
- Large programs: Nominal = 850 hours, Actual = 900 hours

Current plans are to use a balanced approach for Cycle 3, adjusting each category based on time pressure



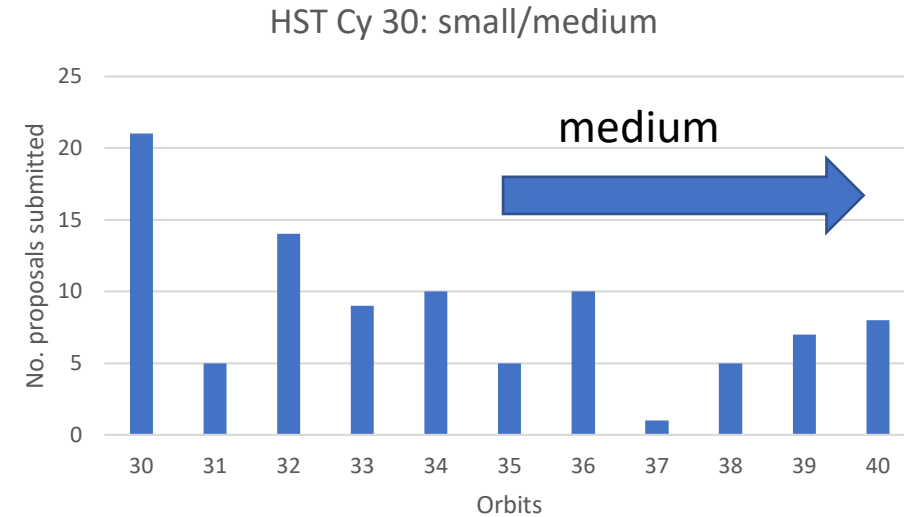
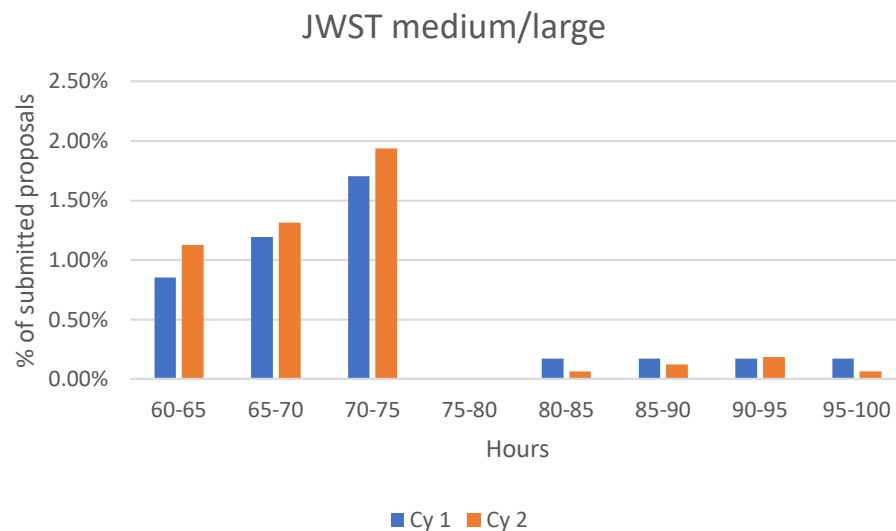
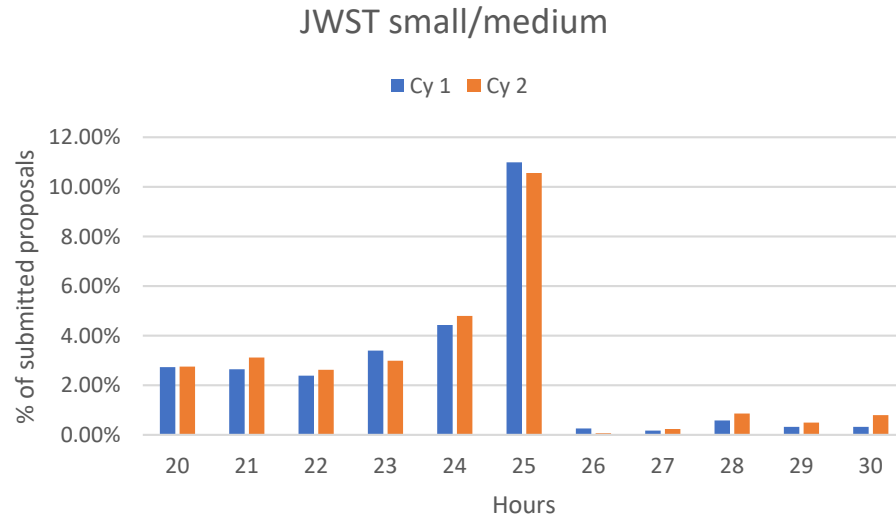
Boundary pressure: squeezing into the box



There are clear “edge effects” at the boundaries for the JWST submitted proposals.



Boundary pressure: squeezing into the box

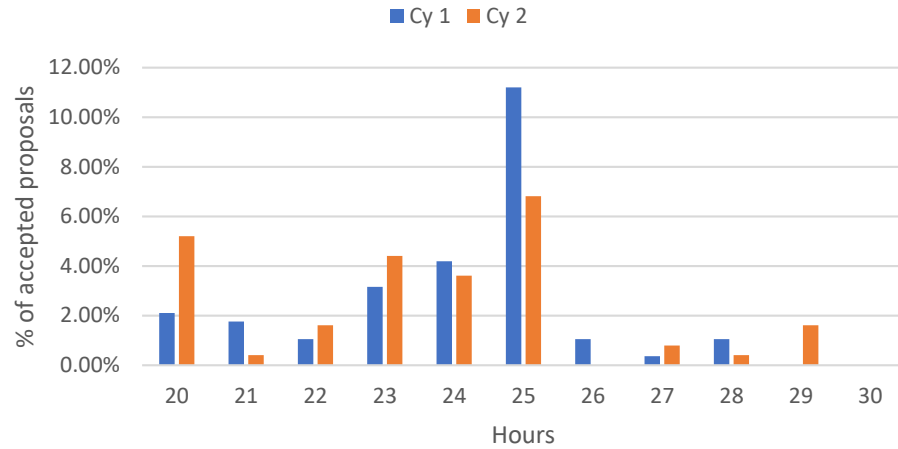


There are clear “edge effects” at the boundaries for the JWST submitted proposals. Proportionally, the curves are very similar between the two cycles.

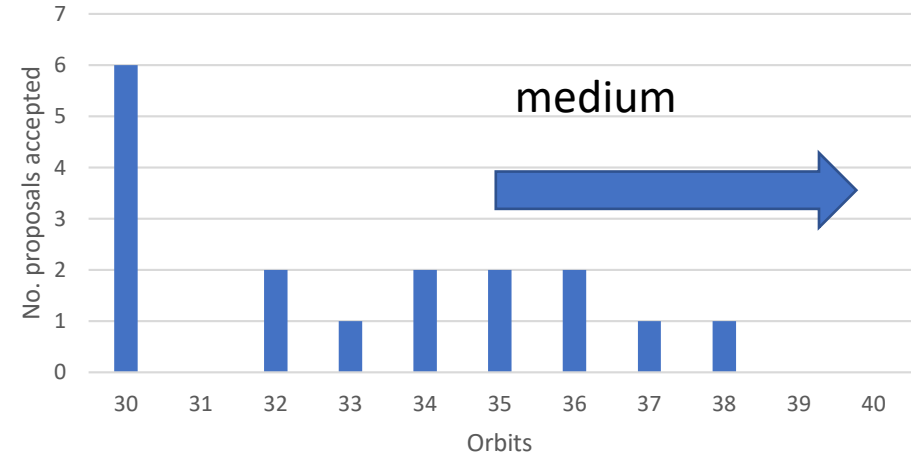


Boundary pressure: accepted

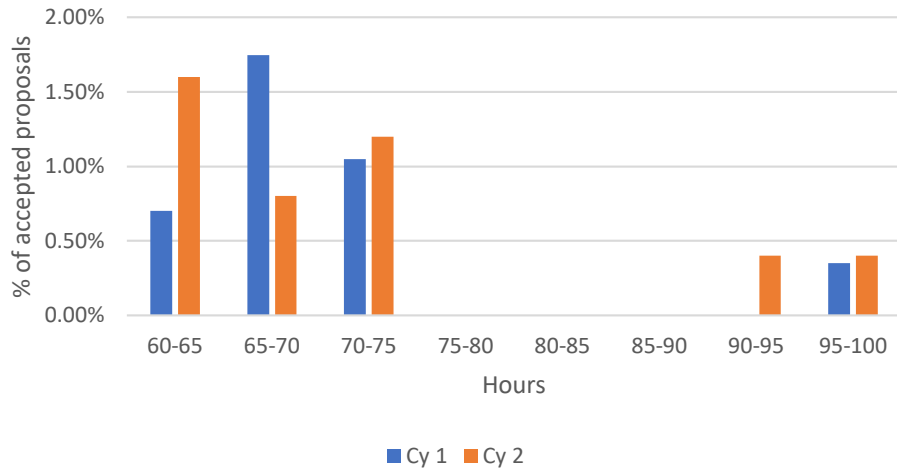
JWST small/medium accepted



HST Cy 30: small/medium



JWST medium/large accepted



There are clear “edge effects” at the boundaries for the JWST submitted proposals.

Proportionally, the curves are very similar between the two cycles.

Distributions are somewhat flatter for accepted proposals

Small mediums are more successful than small large proposals (caveat overall numbers)



Does the current allocation scheme limit science opportunities?

- Cycle 3 will follow Cycle 2 in retaining the small/medium/large size categories
 - Science topics for large & medium programs just below the cutoff lines in past cycles largely mirror topics that were awarded time
 - This suggests that re-balancing the current allocations is unlikely to add substantively different science to the overall program
- The JSTUC previously proposed exploring community interest in very large programs
 - COSMOS-Webb is the largest JWST program awarded time to date – 207 hours
 - JSTUC letter [from March 1, 2019](#) recommends a Call for “Large Program White Papers”
 - Original recommendation to explore for Cycle 3, but that proved logistically impossible
 - Submissions should explain why a single large program is required to achieve the science goals
 - Based on an assessment of those papers, time could be set aside for this program category
 - Minimum size of ~300 hours with up to ~900/1000 hours available
 - Executive Committee would have discretion to re-balance between Large/Treasury & Very Large
 - Allocations to other size categories scaled accordingly – but total allocation could also be enhanced
 - Timeline for Cycle 4 if we decided to issue a call for white papers (but see next slide):
 - Call for submissions in 12/2023, deadline 2/15/2024, review for viability by next JSTUC meeting
 - Reviewers should include representatives for the JSTUC



Questions for the JSTUC

- Looking forward to Cycle 4, should we consider
 - Resetting the boundary between small & medium proposals?
 - Resetting the boundary between medium & large proposals?
- Adding a Very Large Program category
 - Cycle 4 seems timely to add this category - does the JSTUC agree?
 - Timeline for Cycle 4 if we decided to issue a call for white papers:
 - Call for submissions in 12/2023, deadline 2/15/2024, review for viability by next JSTUC meeting
 - Reviewers should include representatives for the JSTUC
 - But is the white paper process necessary?