TAC – October 8, 2018

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Cycle 26 Orientation

http://www.stsci.edu/hst/proposing/panel/CYCLE26Orientation.pdf

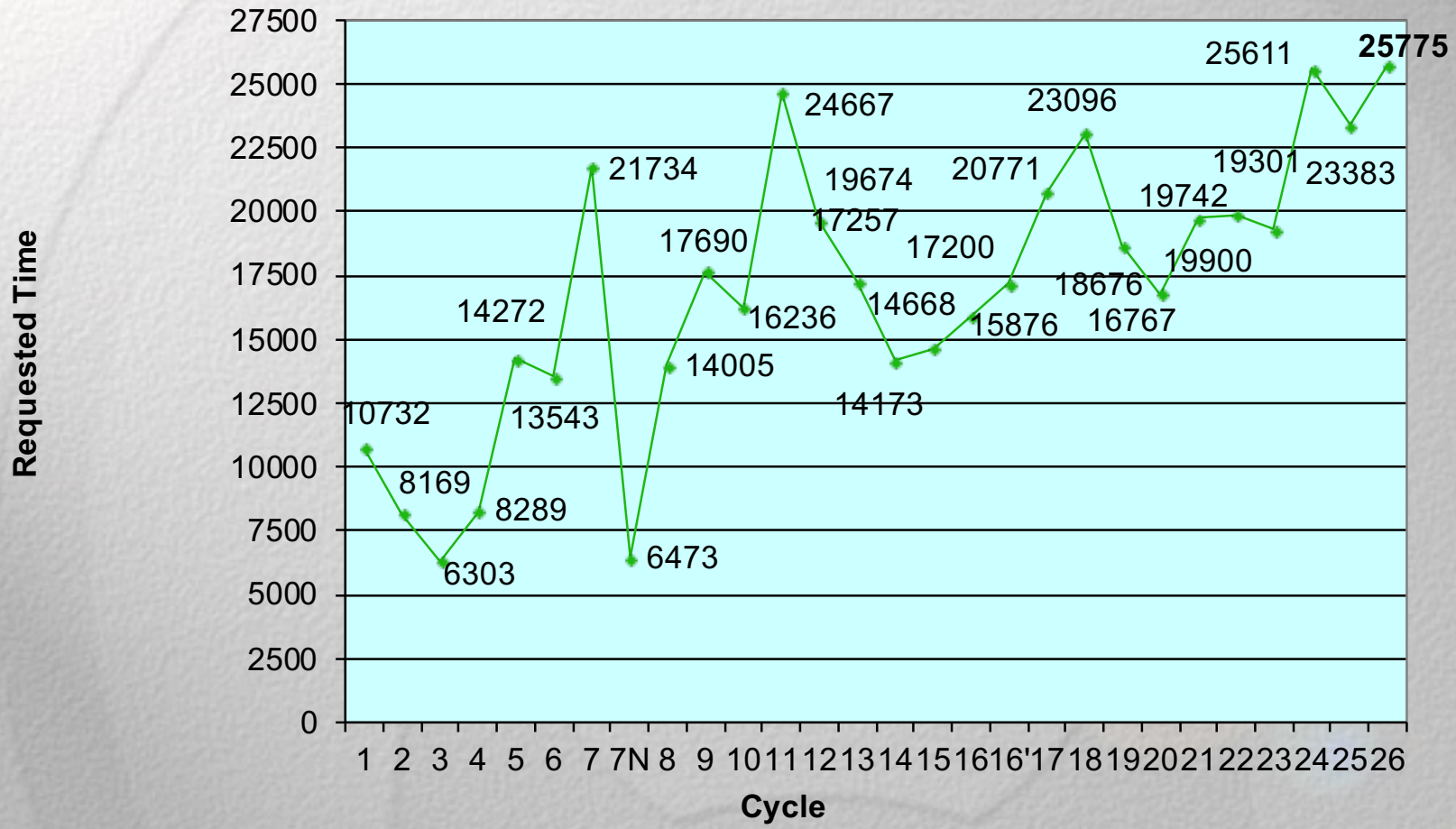
Cycle 26 ΔTAC

- HST schedule adjusted to accommodate JWST Cycle 1 TAC
- JWST TAC was postponed but the available resources on HST remain unchanged
- The Cycle 25 TAC allocated additional Small GO & regular AR programs to extend through Cycle 26
- ΔTAC adds the Medium & Large complement (plus Small/Joint programs)

Phase I Schedule for Cycle 26

- May 10 — CP release
- August 17 — Phase I deadline
- August 30 — Download available for panelists
- October 2 — Preliminary grades
- October 9 - 10 — TAC-Panels meet
- October 11 — Super-TAC meets
- October 29 — Director's Review
- Mid-November — Notifications

Requested Orbits for *all* proposals by Cycle



8/20/18

Summary Statistics

- 489 Proposals in Cycle 26
  - 372 NASA, 93 ESA, 24 Other Countries
- 439 GO for 25,775 orbits
  - 75 Large for 10,057 Orbits
  - 21 Treasury for 3304 Orbits (*most Treasury are also Large*)
  - 335 Medium for 15,392 Orbits
  - 29 Small/Joint for 326 Orbits
- 50 Archive Legacy
- 1 Pure Parallel program for 250 orbits

Review Schedule

- TAC-Panels meet Tuesday morning → Wednesday evening
- Four TAC-Panels review broad science areas
- TAC-Panels review all proposals:
    - Large (> 74 orbits) and Treasury (any size) proposals
    - Archive Legacy proposals
    - Medium (35 – 74 orbits) proposals
    - Small/Joint proposals (< 35 orbits)

- Super-TAC meets Thursday all-day
- The super-TAC is composed of the overall TAC Chair and the Chairs and Vice-Chairs of the four TAC-Panels
- Super-TAC reviews and re-balances the top-ranked
    - Large and Treasury proposals
    - Archive Legacy Proposals

Policy Issues

Conflict of Interest

Our goal is informed, unbiased discussion of each proposal

- Voting committee members should have neither direct nor indirect interest vested in the outcome of the review
- The subset of the review committee discussing the proposal should have sufficient knowledge to assess the science

Anonymizing proposal simplifies conflicts

- We only consider personal conflicts
  - Direct involvement in the proposal
  - Involvement of close collaborators/competitors/family members based on input from individual panelists
- Institutional conflicts are **not** considered
- Panelists may flag additional conflicts during the meeting
  - Please raise any such concerns with SPG members
  - Do **not** identify the potential cause to panelists

Conflict of interest: procedures

- Panelists sign Conflicts of Interest Disclosure form and return to PSS.
- Chair (aided by PSS) is responsible for checking conflicts.
- Do not try to guess the names of the investigators on the proposal.
- In almost all cases conflicts are already recorded in our database.
- Note conflicts before discussing each proposal.
- Do **not** state the nature of the conflict (e.g., "I am a co-I on this proposal")

Conflicted panelists leave the room and do not vote.

If in doubt, ask SPG for clarification.

General guidance for Cycle 26

- Panel members should assume that all instruments will be performing nominally in Cycle 26
- Panel members should not (yet) make comparisons with JWST capabilities
- Panel members should not modify proposals unless there is a very strong scientific justification
- Panel members should *not* reject proposals based on technical considerations
  - All proposals are reviewed by STScI after Phase I. If technical questions arise during the panel review, please summon a relevant expert.
- Panel members should *not* take scheduling considerations into account in grading proposals.

Concentrate on recommending the best science..

…but recognize that it may not be possible to schedule some highly ranked programs

Panel Procedures

Panel Distribution in Cycle 26

- Four Sub-TAC panels with these science categories:
  - **Planets**: all solar system science, exoplanets and their host stars, planet formation, debris disks
  - **Stellar Physics & Populations**: stars of all masses and evolutionary stages, local ISM, Galactic structure, resolved stellar populations in galaxies
  - **AGN & IGM**: QSO, SMBH, jets, galaxy/BH co-evolution, circumgalactic medium, IGM, QSO absorption lines
  - **Galaxies & Cosmology**: stellar content of galaxies, ISM in galaxies, galaxy evolution, lensing, galaxy clusters, surveys, deep fields, distance scale, large-scale structure

Panel Review: Logistics

- Panel Chair runs meeting
- Vice-Chair takes over if the Chair has a conflict and leaves the room
- PSS maintains database, produces ranked lists, answer questions or summon STScI staff experts, as needed.
- Technical and Policy support is available from STScI staff:
  - SPG (policy)
  - INS (instrument expertise)
  - OED (scheduling and implementation)
- Can be contacted at any time during the discussion

Proposals for Review

- All proposals were ranked prior to the panel meeting based on the preliminary grades.
- The top 20% of the proposals have been advanced for review in each panel.
- The preliminary grades will be erased prior to the discussion.
- Each non-conflicted panelist may suggest one (1) proposal from the bottom 80% for inclusion in the review. A strong justification must be provided.
- This process is necessary in order to limit the number of proposals for discussion to less than about 40.
  - Spend time discussing the best proposals
  - Avoid discussing proposals that are less likely to be approved

Review Criteria *(posted in each meeting room)*

- The scientific merit of the program and its potential contribution to the advancement of scientific knowledge
- The program's importance to astronomy in general
- The extent to which the proposal demonstrates sufficient understanding to assure a thorough analysis of the data
- A demonstration that the unique capabilities of HST are required to achieve the science goals of the program.

Reviewers must ensure that the comments address some or all of these primary criteria

Proposal Ranking

- The panels review and rank **all** proposals
- Chair/PSS identify conflicts before discussing a proposal
- All un-conflicted panelists vote on all proposals
- Each panel has a fixed orbit allocation for **Medium** proposals.
  - This allocation defines the cut-off line for acceptance or rejection of the Medium proposals.
  - **Small/Joint** proposals are ranked relative to the cut-off line defined by the Medium proposals. If they are above, they will be considered for acceptance by the Director, taking into account the overall number of orbits available. The Director has discretion to accept proposals below the cut-off line.
- Each panel will rank the **Large/Treasury/AR Legacy** proposals together with all other proposals. The top five (5) proposals will be advanced to the super-TAC.
- Confirm resource allocation: primary orbits, coordinated or pure parallel, proprietary period, duplication justification.

Proposal Comments

- Comments are required for all proposals (including triaged proposals); these are entered via the Web-Reviewer tool.
- Primary reviewer is responsible for writing the comments; add any comments arising from the discussion to produce a final set of comments for each proposal.
- Don't make up reasons for rejection – if a proposal was good, but just didn't quite make the cut, then say so. Be particularly careful near the allocation boundaries, and remember that highly ranked proposals may not be schedulable.
- Use *Mandatory* comments only to exclude targets [e.g. duplications] or to reduce observing time allocation.
- All other comments are *advisory*.

Grading the proposals: some suggestions

Grading process & panel responsibilities

- Keep all proposal types together.
- Maintain one panel score sheet with all proposals included. This ensures that the grading is done in a uniform way
- Produce a final ranked list that combines Small/Joint, Medium, Treasury, Large and AR Legacy proposals. Use the same grading scale for all types:
  - Rank at least twice as many proposals as there are above cut-off line
  - Set a "do not award" lower limit
  - No need to rank carefully those proposals that clearly will not get accepted.
- Panel Chair [and Vice-Chair] write a short summary, documenting the primary decisions of the panel, the reasoning that went into those decisions and the manner in which contentious issues were resolved .
  - The summary should capture the logic and rationale of the panel's conclusions in sufficient detail so that it can be recalled and understood later by the STScI Director and/or the TAC

Super-TAC Process

- The super-TAC Chair Priya Natarajan and the four sub-TAC Chairs and four Vice-Chairs will form the super-TAC on Thursday.
- Each panel will advance five Large/Treasury/Legacy proposals to the super-TAC.
- These proposals will be known to the super-TAC members late Wednesday afternoon to allow all panelists to become familiar with these proposals.
- The super-TAC may use the panel rankings as a guide-line but can otherwise revisit the ranking considering programmatic balance, additional expertise of other TAC members, or other considerations.
- The super-TAC will discuss and grade all proposals.
- Conflicts will be handled the same way as at the sub-TAC level.
- The super-TAC will generate a rank-ordered list of proposal down to at least the 2N line.
- After the ranking is complete, the super-TAC will review the team expertise for the proposals above the cut-off line and make recommendations if necessary.
- They will then write the final report and the review comments.

Confidentiality

- Remember that you should not discuss the outcome of the panel evaluations, now or in the future.
- Many panel members (and STScI and JHU staff) are also proposers; don't discuss results during breaks.
- If the panel wants to send a particularly important message to a proposer, use the comments.

Orbit allocations

Cycle 26 Duration

- Cycle 26 has started on October 1, 2018 and will end on September 30, 2019
- → Nominal 12 month cycle.
- STScI has pre-allocated 1200 orbits for **Small** proposals in Cycle 26 during the Cycle 25 TAC.
- Many of these Small programs will execute in Cycle 26. Therefore Small proposals were not included in the Cycle 26 Call for Proposals

Cycle 26 Allocations

- 1900 orbits for GO (Large/Treasury + Medium + Small/Joint)
  - 1100 for Large/Treasury programs
  - 800 for Medium proposals
  - Small/Joint at Director's discretion
- Super-TAC may recommend adjustments to the Small/Medium/Large split
- Orbit oversubscription is 19:1 and 9.3:1 for Medium and Large/Treasury, respectively.
- AR: no budget required in Phase 1

Orbit Allocation

based on a combination of orbit and proposal pressure

Panel	Small/Joint proposals	Small/Joint orbits	Medium proposals	Medium orbits	Large proposals	Large orbits	Allocation
Planets	5	n/a	67	3051	11	n/a	160
Stars&Pops	12	n/a	101	4465	24	n/a	244
AGN&IGM	6	n/a	68	3417	12	n/a	173
Galaxies&Cos	6	n/a	96	4341	31	n/a	223
Super-TAC	*n/a*	*n/a*	*n/a*	*n/a*	*20*	*n/a*	*1100*

- Panel allocations are for Medium proposals
- Super-TAC allocation is for Large/Treasury proposals
- Anticipate 20 proposals to be advanced to super-TAC
- Small/Joint proposals have 50+ orbits allocated for all TAC panels combined

Questions????

- Please refer ALL policy questions to SPG staff!!!

After the TAC

- As usual, we welcome feedback on the TAC process
  - Can we improve it
  - What were the main shortcomings
  - Can we make it “faster”, “cheaper”, ”better”?
- We will send email to all TAC and Panel members requesting your views of the process

THANK YOU!!!!

- The TAC review is supported by 54 panelists
- 11 panelists from ESA member states
- ESA provides full funding for participation of ESA panelists
- Continuing partnership with ESA

Personnel & Logistics

Key STScI Staff

- STScI management
  - **Ken Sembach** – Director
  - **Nancy Levenson** – Deputy Director
  - **Antonella Nota** – ESA Associate Director
  - **Neill Reid** – Associate Director of Science
- Science Mission Office
  - **Alessandra Aloisi** – SMO Head
  - **Claus Leitherer** – Head of Science Policies Group
  - **Lou Strolger** – SPG Astronomers
  - **Brett Blacker** – SPG Technical Manager
  - **Sherita Hanna** – SPG Administrative Staff
  - **Karen Sealover** – ESA Administrative Staff
- Hubble Mission Office
  - **Tom Brown** – HST Mission Office Head
  - **John MacKenty, Rachel Osten** – Mission Office Scientists
- Operations & Engineering Division
  - **Denise Taylor** – Operation Planning Branch

Observers

- **Ken Carpenter** – NASA
- **Mike Garcia** – NASA
- **Kevin Hartnett** – NASA
- **Michael New** – NASA
- **Jennifer Wiseman** – NASA
- **Dana Balser** – NRAO
- **Dara Norman** – NOAO
- **Andrea Prestwich** – CfA
- **Stefanie Johnson** – U. Colorado
- **Jessica Kirk** – U. Colorado
- **Osterbrock Scholars** – UC Santa Cruz

Panel Information

Panel	Panel Support	Panel Chair	Vice-Chair	Leveler	Room
Planets	Tony Roman	Gilda Ballester	Nader Haghighipour	Brian Williams	112
Stars & Pops	Hannah Wakeford	Corinne Charbonnel	Annette Ferguson	Bonnie Meinke	Café Con
AGN & IGM	Elizabeth Nance	John O'Meara	Fred Hamann	Lou Strolger	224
Galaxies & Cos	Steven Goldman	Alberto Franceschini	Alyson Brooks	Rachel Osten	Boardroom
TAC	Brett Blacker	Priya Natarajan	n/a	Lou Strolger	Boardroom

Backup

Types of Proposals

Standard proposals	
GO	Small/Joint (1-34 orbits); Medium (35-74); Large (≥ 75)
AR	Legacy
Special categories	
Long-term	allocate time in C26 - C28 if justified **scientifically**
ToO	ultra-fast (<2 d) ToO: up to 1 activation allowed; 2-21 d ToOs: 8 activations; >21 d: no limit
CVZ	no penalty to observer if executed as non-CVZ
Calibrations	Calibrate specific modes of HST observation
Reg. HST-Chandra	< 75 HST, up to 400 ksec Chandra, < 15% time-constrained
Large HST-Chandra	≥ 75 HST, up to 600 ksec Chandra, < 15% time-constrained
HST-XMM	Up to 150 ksec
HST-NOAO	Up to 15-20 nights available on most telescopes
HST-NRAO	Up to 3% of the available time (North America)

UV Initiative

- A UV initiative is again supported to ensure the unique UV capabilities of HST are fully utilized while they still exist.
  - Allocation targets for GO proposals
  - UV archival proposals aimed at producing high-level data products and tools
- Orbit allocation *targets* of 40% for panels and 50% for the TAC
- **These percentages are recommendations, not quotas**; proposals must meet the usual requirement of high scientific quality set for all successful Hubble proposals.
- We received 202 GO's for 11,216 orbits and 11 AR's.

Possible Panel Schedule

- Panels have ~40 proposals to discuss
- Discuss triage *process* at the outset
  - Identify additional proposals recommended for inclusion in discussion
- Discuss and grade all proposals
- Finalize ranking of Small/Joint, Medium, Large, Treasury and AR Legacy proposals.
  - Panels should consider the scientific balance
  - Panels re-rank proposals without changing the grades
- Define "do not award" lower limit, below which proposals should not be accepted at any circumstances. Typically this is the 2N line, where N is the number of orbits at the cut-off line.
- Review the team expertise of the Medium and Small/Joint proposals above the cut-off line and make recommendations if necessary.
- Write final report and review comments.

Close collaborators

Who qualifies as a close collaborator?

- **Active** collaborator on a current research program (including Cycle 26 HST proposals)
- **Active** co-author on 3 or more papers in last 3 years
  - i.e. more than a participant in a large project (e.g. SDSS)
- **Active** collaborator on several recent programs
  - At least 3 projects completed in last 3 years

Key question: would my personal research benefit (or would there be an *appearance* of benefit) if this proposal is accepted?

If the answer is yes, then there is a conflict

Duplication policy

- **To maximize observing efficiency, later-cycle GO programs may not duplicate observations in current or past GO programs; duplicate targets will be disallowed or embargoed unless justified scientifically**

- **Duplications are defined as *same target or field, same instrument and mode, similar spectral range, similar exposure time*. *Consult SPG staff if in doubt.***

- The PI is responsible for noting duplications. Panels should approve duplications explicitly (in comments) or observations can be disallowed.

- Same-cycle duplications: avoid duplicate targets within and between panels. No “forced collaborations’’ allowed.

Detailed Procedures

1. Panelists with conflicts of interest leave the room. This includes STScI staff and Observers
2. The Chair manages the process and participates in the discussion, including the voting.
3. Primary reviewer summarizes and reviews proposal. Secondary reviewer adds supplementary comments.
4. Discussion among panelists.
5. Specify resource allocation: primary orbits, coordinated or pure parallel, proprietary period, duplication justification.
6. Vote on proposal via Web-Reviewer System. **EVERYONE IN THE ROOM MUST VOTE – NO ABSTENTIONS**
7. Primary Reviewer is responsible for collating all relevant comments, and recording those comments via Web-Reviewer System.