# Cycle 26 Mid-Cycle Results \& Cycle 27 Preparations 

## STUC

## 13 May 2019

## Cycle 26 Mid-Cycle Results

- 63 Proposals Reviewed for 367 Orbits
- 20 Proposals recommended for 103 orbits
- Acceptance Rate: 3.2 for proposals and 3.6 for orbits
- Instrument breakdown: ACS (20\%), COS (15\%), STIS (9\%), and WFC3 (56\%)
- Imaging ( $73 \%$ ) and Spectroscopy ( $27 \%$ )
- ESA acceptance fraction:
- Pls 35\% for proposals and $31 \%$ orbits
- ESA Cols are $45 \%$ of the total Cols
- UV Initiative: $25 \%$ for Proposals and $26 \%$ for Orbits


## Mid-Cycle Results by Science Category



## Mid-Cycle Results by Science Category



## Mid-Cycle Results by Science Category



## Cycle 27 (Cycle 25) Proposal Statistics

| Total Proposals | 1019 (1208) | Cycle 27 | Cycle 28 | Cycle 29 |
| :---: | :---: | :---: | :---: | :---: |
| GO | $838(974)$ | $24,454(144)$ | $625(\mathrm{n} / \mathrm{a})$ | $275(\mathrm{n} / \mathrm{a})$ |
| SNAP | $32(52)$ | $3622(5316)$ | Targets |  |
| Archival Research | Regular | Legacy |  |  |
| Regular | $69(105)$ | $23(12)$ |  |  |
| Theory | $57(64)$ | $4(1)$ |  |  |
| Total | $149(169)$ | $23(13)$ | $172(182)$ |  |
| ESA | $202(270)$ |  |  |  |
| ESA GO | $198(254)$ | $6229(6086)$ | Orbits |  |
| ESA SNAPs | $4(15)$ | $527(1379)$ | Targets |  |
| ESA AR | $1(1)$ |  |  | Orbits |
|  |  |  | ESA |  |
| GO Large | $54(40)$ | $5147(4333)$ | $15(10)$ | $1542(1009)$ |
| GO Medium | $169(87)$ | $8025(4240)$ | $41(27)$ | $1997(1270)$ |
| GO Treasury | $26(23)$ | $3428(4281)$ | $7(9)$ | $1057(1078)$ |
| Pure Parallel | $9(3)$ | $2149(1525)$ | $0(0)$ | $0(0)$ |

Proposal Submissions by Cycle


5/13/2019
C26 Mid-Cycle Results \& C27
Preparations


## Proposal Sizes






## Proposals by Science Categories



## Orbits by Science Categories



## C27 Instrument Summary

| Configuration | Mode | Prime \% | Coordinated Parallel \% | Total | Instrument <br> Prime <br> Usage | Instrument Prime + Coordinated Parallel Usage | Pure <br> Parallel <br> Usage | Snap <br> Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACS/SBC | Imaging | 1.6\% | 0.0\% | 1.3\% |  |  | 0.0\% | 0.0\% |
| ACS/SBC | Spectroscopy | 0.1\% | 0.0\% | 0.0\% |  |  | 0.0\% | 0.0\% |
| ACS/WFC | Imaging | 15.0\% | 37.6\% | 19.8\% |  |  | 5.0\% | 14.0\% |
| ACS/WFC | Ramp Filter | 0.7\% | 0.0\% | 0.5\% | 17.3\% | 21.6\% | 0.0\% | 0.0\% |
| ACS/WFC | Spectroscopy | 0.0\% | 0.0\% | 0.0\% |  |  | 0.0\% | 0.0\% |
| COS/FUV | Spectroscopy | 17.7\% | 0.0\% | 13.9\% |  |  | 0.0\% | 0.0\% |
| COS/NUV | Imaging | 0.1\% | 0.0\% | 0.1\% | 20.7\% | 16.3\% | 0.0\% | 0.0\% |
| COS/NUV | Spectroscopy | 2.9\% | 0.0\% | 2.3\% |  |  | 0.0\% | 0.0\% |
| FGS | POS | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| FGS | TRANS | 0.0\% | 0.0\% | 0.0\% |  |  | 0.0\% | 0.0\% |
| STIS/CCD | Imaging | 1.4\% | 0.0\% | 1.1\% |  |  | 0.0\% | 0.0\% |
| STIS/CCD | Spectroscopy | 3.4\% | 0.2\% | 2.7\% |  |  | 0.0\% | 9.5\% |
| STIS/FUV | Imaging | 0.3\% | 0.0\% | 0.2\% | 15.3\% | 12.2\% | 0.0\% | 0.0\% |
| STIS/FUV | Spectroscopy | 5.7\% | 0.2\% | 4.5\% |  |  | 0.0\% | 2.7\% |
| STIS/NUV | Imaging | 0.0\% | 0.0\% | 0.0\% |  |  | 0.0\% | 0.0\% |
| STIS/NUV | Spectroscopy | 4.5\% | 0.2\% | 3.6\% |  |  | 0.0\% | 0.0\% |
| WFC3/IR | Imaging | 14.8\% | 27.2\% | 17.4\% |  |  | 59.0\% | 39.5\% |
| WFC3/IR | Spectroscopy | 10.0\% | 2.4\% | 8.4\% | 46.7\% | 49.9\% | 1.0\% | 0.0\% |
| WFC3/UVIS | Imaging | 21.1\% | 32.2\% | 23.4\% |  |  | 35.0\% | 34.3\% |
| WFC3/UVIS | Spectroscopy | 0.8\% | 0.0\% | 0.7\% |  |  | 0.0\% | 0.0\% |
|  |  | 100\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |


| Prime + Coordinated Parallels |  |
| :---: | :---: |
| $66 \%$ | Imaging |
| $34 \%$ | Spectroscopy |

## GO Requested Instruments



## Cycle 27 Joint Observatory Requests

| Joint <br> Observatory | Proposals | Requested Time | HST Orbits |
| :---: | :---: | :---: | :---: |
| Chandra | 12 | 1617 Ksecs | 690 |
| NOAO | 14 | 46 Nights | 768 |
| NRAO | 10 | 384 Hours | 546 |
| TESS | 1 | 8 Targets | $40+40+40$ |
| XMM | 13 | 797 Ksecs | 557 |

## C27: Special Categories

- 37 Target of Opportunity Proposals:
- 19 Disruptive, 18 non-Disruptive and 9 Both
- 21 Long Term
- Requesting 1,030 orbits
- Proposal Special Categories
- UV Initiative: 388 GOs for 11,346 orbits and 40 ARs
- JWST Prep: 77 proposals for 4,245 orbits
- Fundamental Physics: 24 proposals for 1,241 orbits
- 5 AR Cloud Computing proposals
- 8 Calibration
- 4 AR and 4 GO for 38 orbits


## Proposals by Country (w/out USA)



## Proposals by US State



## TAC Organization

- The proposal review will be on June 9-14, 2019.
- The panels will discuss Small, Medium, SNAP and Archival proposals until Wednesday noon.
- The TAC and Panel structure will be like in Cycle 25 and before, and not like in Cycle 26.
- The TAC will meet until Friday late afternoon to allow for sufficient time to discuss the Large, Treasury and Legacy proposals.
- We will have again one Solar System panel.
- The panels will meet in the STScI Muller and Rotunda buildings.
- The pairings of science categories will be like in Cycle 25 (e.g., IGM with Galaxies)


## TAC Organization (cont.)

- TAC Chair: Rachel Somerville (Flatiron \& Rutgers)
- Panel structure in Cycle 27:
- 15 panels organized by science category
- 1 single panel for Solar System
- 2 mirror panels for Planets and Planet Formation
- 3 mirror panels for Stellar Physics
- 2 mirror panels for Stellar Populations
- 3 mirror panels for Galaxies \& IGM
- 2 mirror panels for Massive Black Holes and Hosts
- 2 mirror panels for Cosmology
- Each panel has 9 panelists and a Chair.


## Available Orbits in Cycle 27

- Roughly 2700 orbits available for Cycle 27 GO proposals
- Break-down:
- 600 orbits for the TAC (Large and Treasury)
- $\mathbf{1 5 0 0}$ orbits for the 15 Panels (Regular GO with < 35 orbits)
- 600 orbits for medium-sized proposals ( $35-74$ orbits)
- Approximately $\mathbf{8 0 0}$ SNAP targets


## TAC Process

- Each proposal receives preliminary grades from 6 panelists only (instead of from all) to reduce the workload
- Two panelists will be assigned as reviewers to each proposal when the proposals are distributed. The assignment of Reviewer A vs. B will be made after the result of the triage is known in order to balance the number of A and B reviews for each panelist.
- Preliminary grades are due 10 days prior to the meeting. The triage list will be made available to the panel shortly thereafter so that the panelists can read any proposal they have not graded in more detail.
- During the actual panel meeting all panelists (except for the Chair) will vote.


## TAC Process (cont.)

- TAC proposals will also be sent to four additional external reviewers who are not TAC members.
- These reviewers are typically previous panelists who are experts in the field.
- The reviewers will comment on the strengths and weaknesses of the proposal and the timeliness of the science.
- The reviews will be provided to the TAC reviewers in support of their own assessment.


## TESS Update

TESS was launched on April 182018 and started science observations on July 25 The 2-year mission will survey $85 \%$ of the sky in $24^{\circ} \times 96^{\circ}$ segments, with observations spanning 27 days for each segment
The survey of the southern hemisphere will be completed in July 2019; TESS will flip $180^{\circ}$ to observe the northern hemisphere


Charter:
The HST-TESS Advisory Committee is charged with providing guidance on optimal strategies for maximizing the scientific return from HST observations of TESS targets. In particular, the Working Group should address the following tasks:

- Solicit input from the community on how HST can capitalize on the discoveries made by TESS;
- Identify specific science themes and/or exoplanet types that should receive particular attention;
- Provide advice on the optimal timing for substantive follow-up observations and suggest mechanisms for enabling those observations;
- Comment on the appropriate scale of resources likely required to support those programs.
The committee will summarise its conclusions in a report to the Director and presentations to the STUC in fall 2019.


## Advisory Committee membership

Chair: Daniel Apai (Arizona)
Members: Nick Cowan (McGill), Kevin Heng (Geneva), Laura Kreidberg (CfA), Mercedes Lopez-Morales (CfA - STUC), Caroline Morley (U. Texas)
STScI support: John Mackenty, Neill Reid

The committee has started regular telecons

- Plans underway for a request to the community for white papers ( $<3$ pages)
- Deadline for submission in early July
- On-line survey questionnaire to be distributed in late May/early June
- Developing plans to consult with experts in specific areas

