

Cycle 28 Mid-Cycle Results & Cycle 29 Preparations

STUC

27 April 2021

Mid-Cycle I+II Review Process

- Reviewers were selected from the Cycle 28 External Panelist pool
- The numbers are for Round I and (Round II); the graphics show both rounds combined
- Over 200 (170) reviewers were available
- 95 (90) were utilized for the review with 5 reviewers per proposal; 42 (33) F/53 (56) M

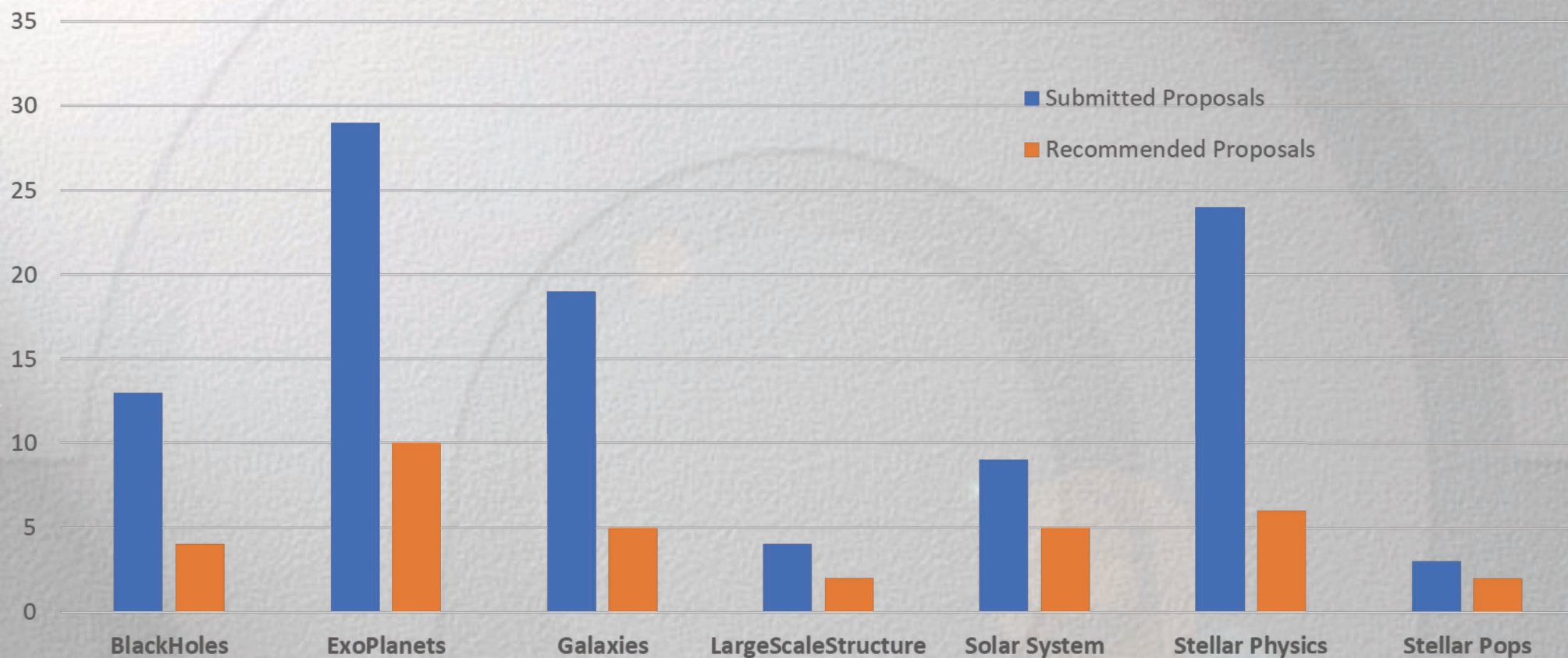
Process (continued)

- Proposals are graded against Scientific Merit, Importance to Astronomy and Urgency
- 1 = Excellent to 5 = Poor Scale
- Final Grade is the average of the individual grades
- Mid-cycle proposals may request up to 15 orbits

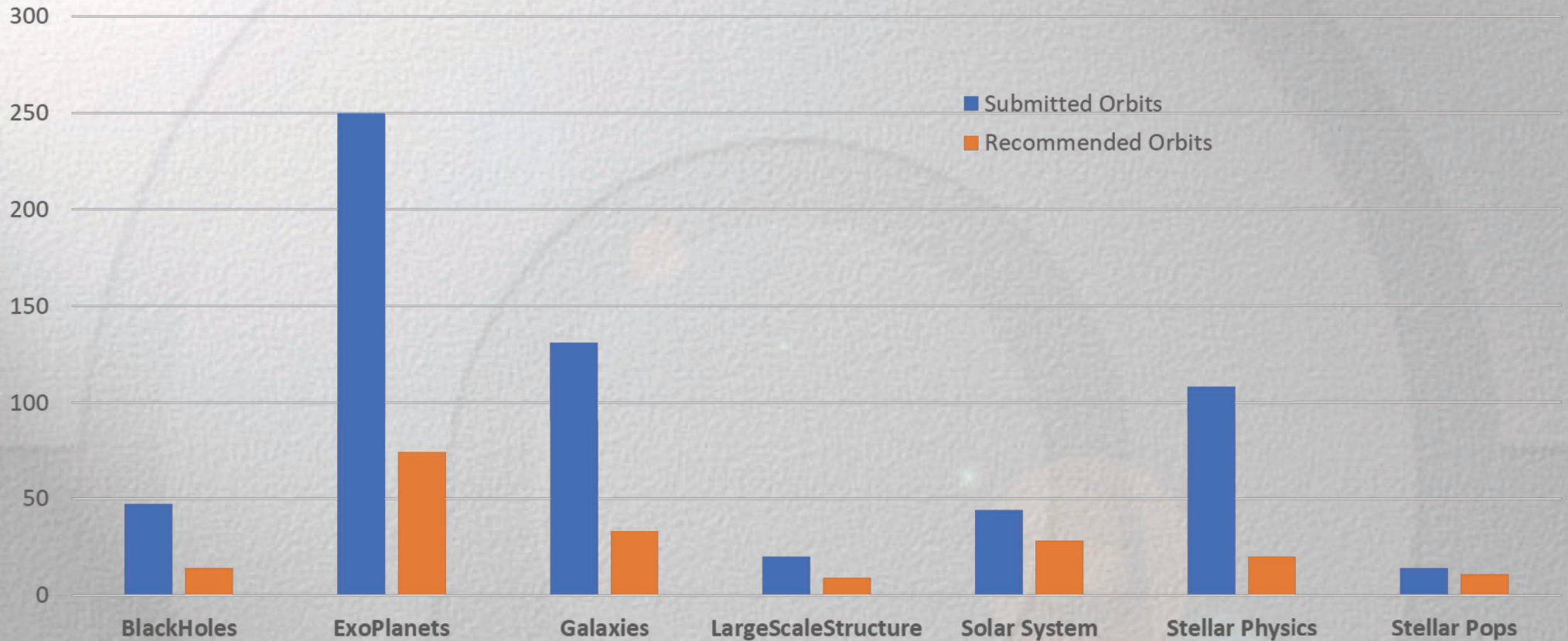
Cycle 28 Mid-Cycle I+II Results

- September 30, 2020 (January 30, 2021) was the deadline for the Mid-Cycle I (II) submissions
- 53 (48) Proposals Reviewed for 363 (251) Orbits
 - 22 (13) Proposals recommended for 135 (54) orbits
 - Acceptance Rate: 2.5 (3.7) for proposals and 2.7 (4.6) for orbits
- Instrument breakdown: ACS: 13% (6%), COS: 2% (7%), STIS: 28% (19%), and WFC3: 58% (69%)
- Imaging: 48% (74%) and Spectroscopy: 52% (26%)
- ESA acceptance fraction:
 - Pls 29% (46%) for proposals and 22% (54%) for orbits
 - ESA Cols are 24% (28%) of the total Cols
- UV Initiative: 32% (15%) for Proposals and 38% (19%) for Orbits

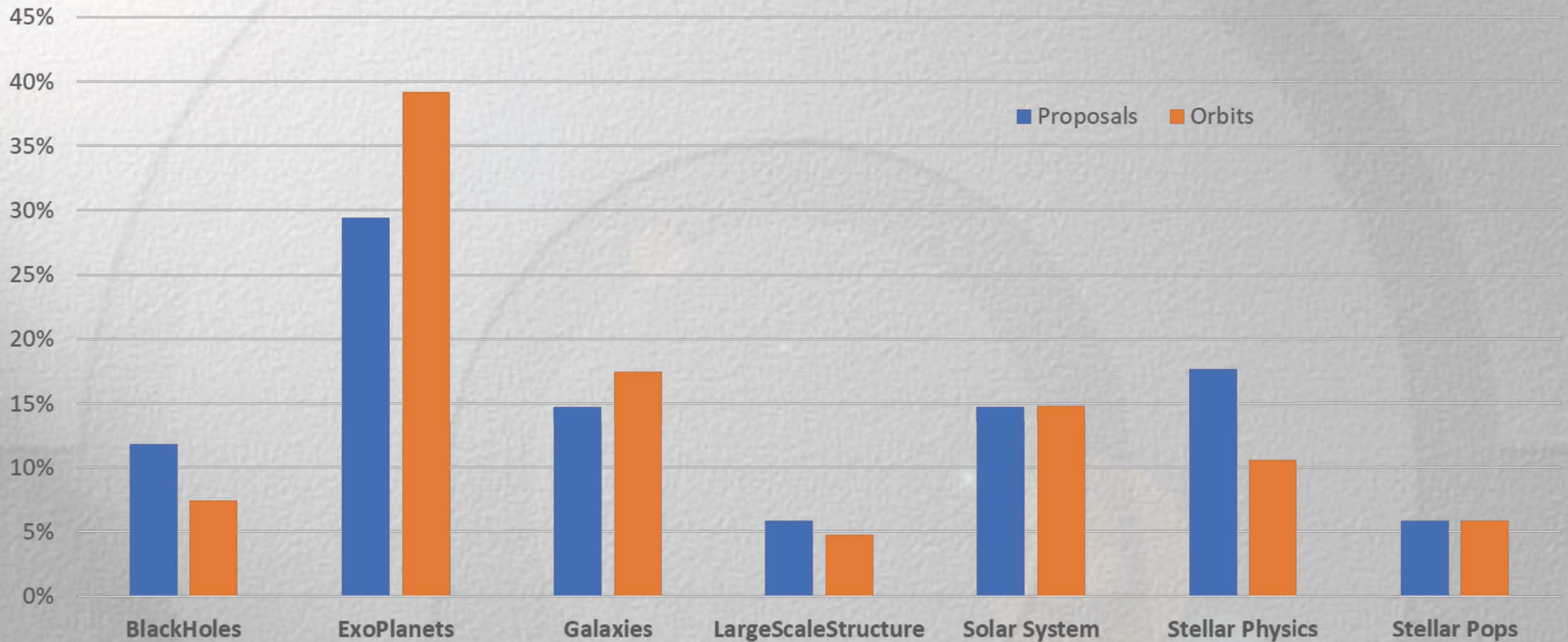
Mid-Cycle Results by Science Category (Proposals)



Mid-Cycle Results by Science Category (Orbits)



Mid-Cycle Acceptance Rate by Science Category



Gender Distribution

	Submitted	Recommended	
Female	22	5	23%
Male	79	29	37%

Submitted: M/F = 78% / 22%

Recommended: M/F = 85% / 15%

Preparations for the Cycle 29 TAC

Cycle 29 (*Cycle 28*) Proposal Statistics

Total Proposals	1129 (1080)	Cycle 29	Cycle 30	Cycle 31
GO	926 (865)	22,065 (22519)	833 (422)	256 (218)
SNAP	44 (41)	5,014 (6160)	Targets	
Archival Research	Regular	Legacy		
Regular	95 (96)	21 (27)		
Theory	44 (54)	1 (3)		
Total	159 (150)	22 (24)	181 (174)	
ESA	244 (213)			
ESA GO	232 (203)	5,958 (6170)	Orbits	
ESA SNAPs	10 (9)	921 (1081)	Targets	
ESA AR	2 (1)			
			ESA	Orbits
GO Large	31 (39)	3,581 (4033)	12 (15)	1,301 (1605)
GO Medium	117 (130)	5,743 (6259)	24 (31)	1,199 (1572)
GO Treasury	21 (22)	2,457 (2886)	8 (9)	875 (937)
Pure Parallel	2 (8)	430 (2195)	0 (0)	0 (0)

Same TAC Process in Cycle 29 as in Cycle 28

- Hybrid approach: dividing proposals between external panels and virtual panels meeting by video-conference.
- **External panelists** provide the assessment and grading of a subset of Small GO proposals (1 – 15 orbits) including Snapshot and Archival proposals.
 - **These proposals are ranked using the grades of the panelists.**
- **Virtual panels** review the remaining Small GO, Medium, Archival Legacy, Large and Treasury proposals. Virtual panelists interact virtually by video-conference.
 - **These proposals are ranked after the discussion and grading in the virtual panels.**
- **Exceptions:**
 - All Solar System proposals will be reviewed by the virtual panel (due to the small proposal pool).
 - All Target of Opportunity proposals will be reviewed by their corresponding virtual panels in order to review them in context.

TAC Process (continued)

- TAC Chair: **Ata Sarajedini** (Florida Atlantic University)
- Panel structure in Cycle 29:
 - Solar System
 - Planets and Planet Formation
 - Stellar Physics
 - Stellar Populations
 - Galaxies
 - IGM & CGM
 - Massive Black Holes and Hosts
 - Large-scale structure
- Each virtual panel has 8 – 10 panelists, a Chair, and a Vice-Chair (except for Solar System, which has no Vice-Chair)
- The TAC Chair, the Panel Chairs and Vice-Chairs, and the three At-Large Members form the **Executive Committee** (formerly the super-TAC)

Available Orbits in Cycle 29

- Roughly **2700** orbits available for Cycle 29 GO proposals (unchanged from Cycle 28)
- Break-down:
 - **600** orbits for the TAC (Large and Treasury)
 - **1400** orbits for the Small proposals (Regular GO with 1 – 34 orbits)
 - **700** orbits for medium-sized proposals (35 – 74 orbits)
- Approximately **1000** SNAP targets

External Panel Review

- Each panel hosting external panelists has a specific allocation of **orbits for Small proposals**.
- Snapshot & Archive allocations are drawn from a central pool.
- External panelists review and grade the assigned proposals.
- STScI produces a ranked list of all programs in each panel based on the received grades.
- Small proposals on the rank-ordered list are recommended for acceptance until the cumulative orbit request exceeds the allocation.
- Archival and Snapshot proposals ranked within the list of recommended Small proposals are recommended for acceptance as well.

Virtual Panel Review

- 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 and Vice-Chair) will vote.
- **New: Vice-Chairs (like Chairs) are not assigned any reviews and grades in order to lower their workload.**

Virtual Panel Review (cont.)

- TAC proposals will also be sent to **three 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.

Backup:

C29 Process Details and Submission Statistics

TAC Process Details

Proposals reviewed by external panelists:

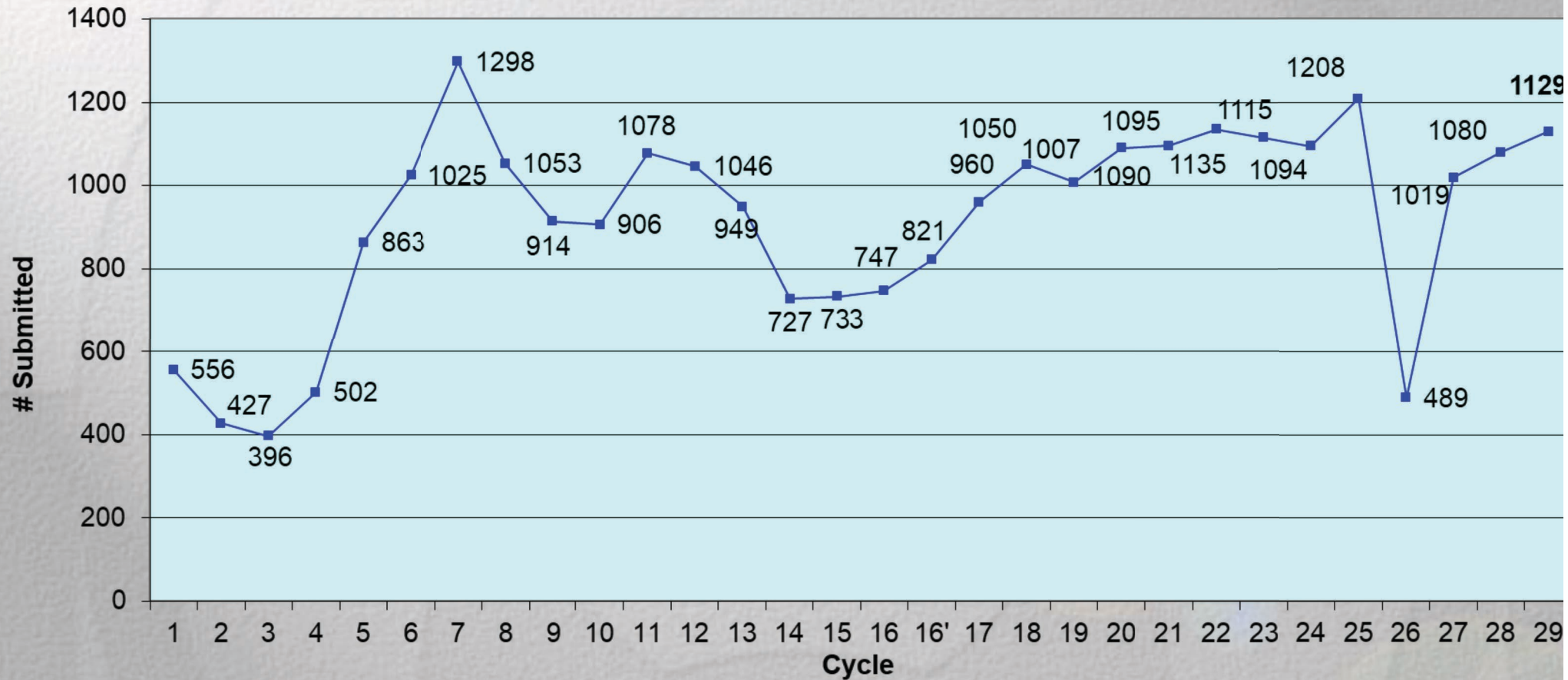
- Proposals are categorized by science topic and sent to seven panels which host external panelists who are experts on this topic.
 - Reviewers grade on an absolute system (excellent → poor)
 - Grades are collected, averaged and ranked list compiled for that topic
 - Orbit allocation by topic based on proposal/orbit pressure
- The highest ranked proposals are marked as recommended for acceptance
 - “Recommended” proposals made available to panel chairs prior to the virtual panel meetings
 - The panel chairs will use this information to monitor the programmatic balance of the recommended list of proposals reviewed by individual and group panelists.

TAC Process (continued)

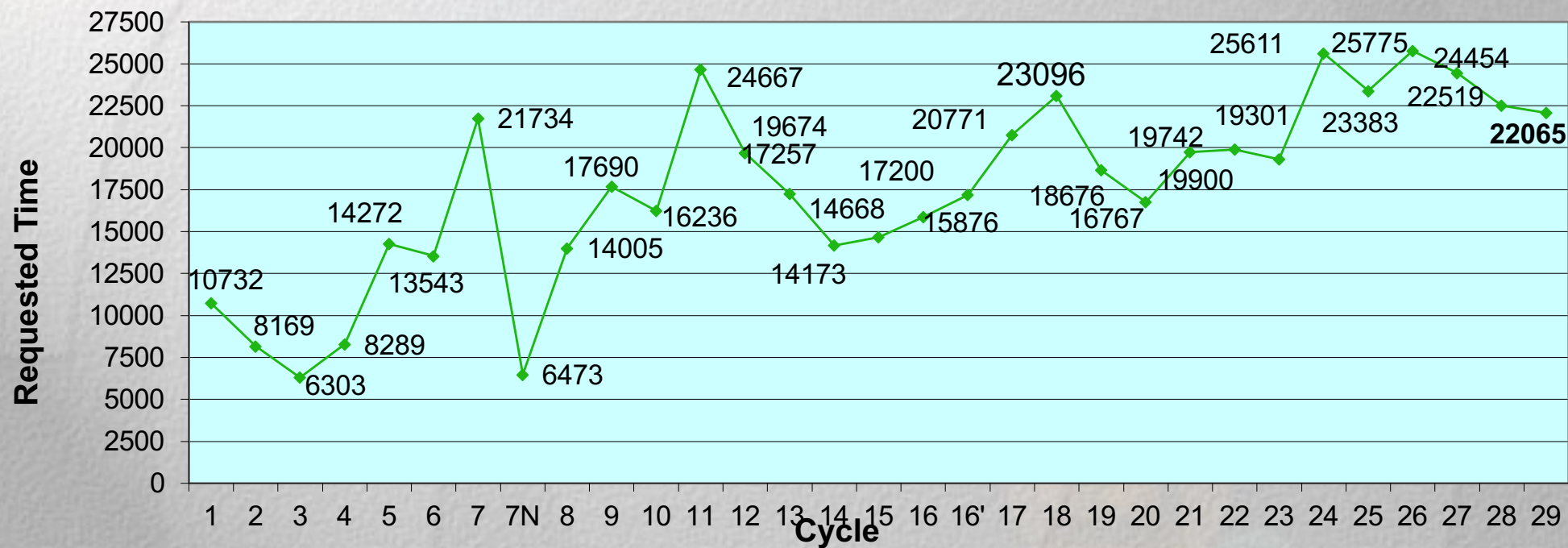
Proposals reviewed by virtual group panels:

- There are eight panels, with 9 members, including Chair and Vice-Chair (no Vice-Chair in Solar System). The virtual panelists participate via video-conference.
- Each panel is allocated a specific number of slots for Medium proposals and an orbit allocation for Small proposals based on the proportional proposal/orbit pressure.
- After completing their review, group panels can cross-reference against the proposals recommended by the external panelists to check for duplication/science balance
 - Panel chairs/STScI staff have forewarning on potential conflicts
- The panel Chairs and Vice-Chairs, together with the EC Chair and three At-Large members, constitute the super-TAC that reviews Large/Treasury/Legacy proposals.
- The Executive Committee meets by video-conference as well.

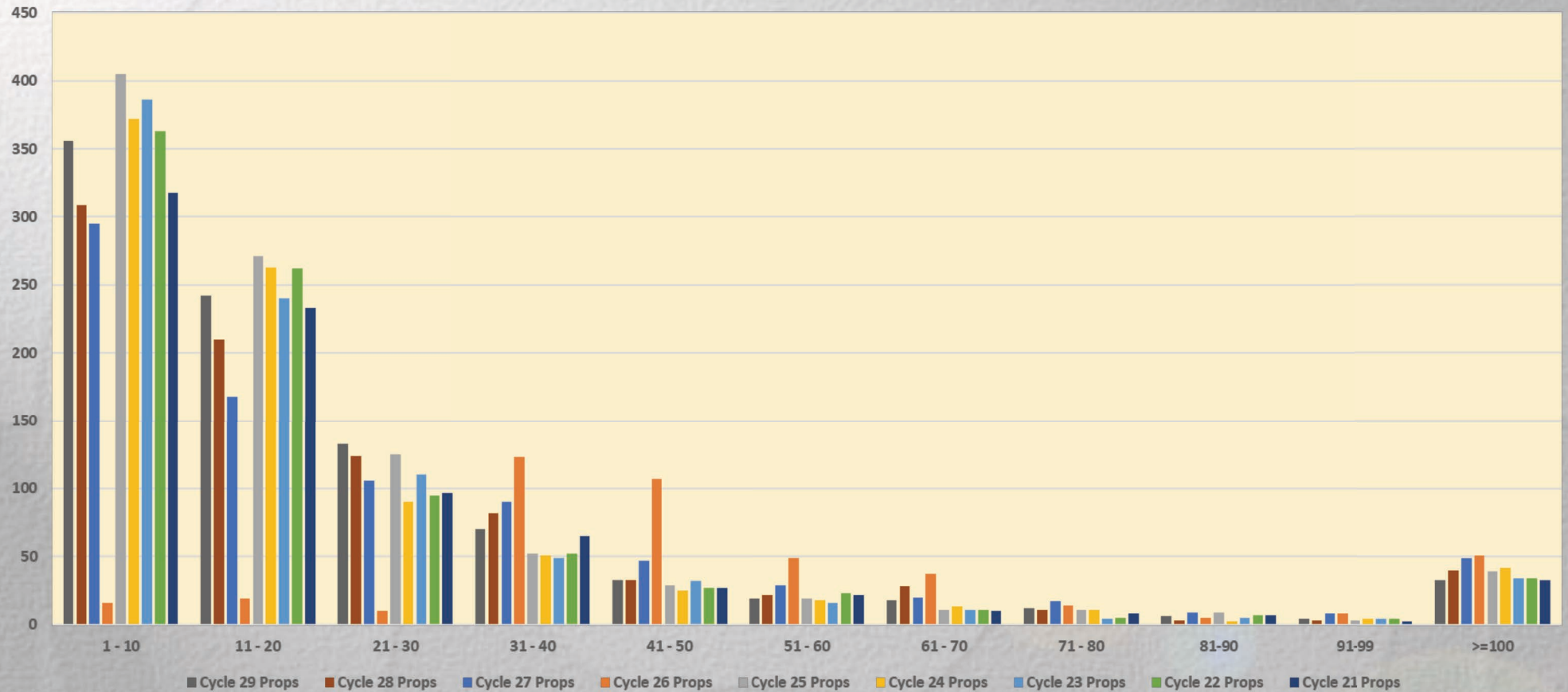
Proposals by Cycle

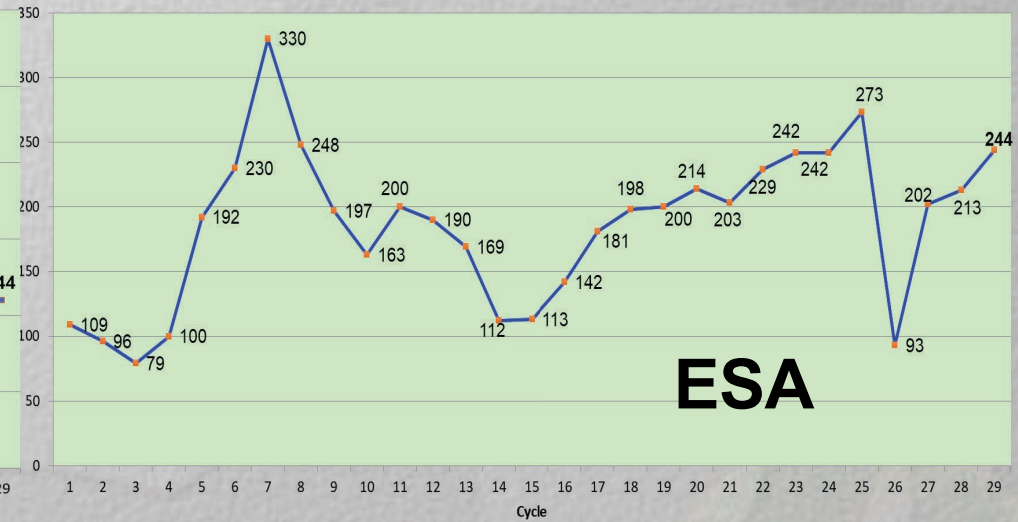
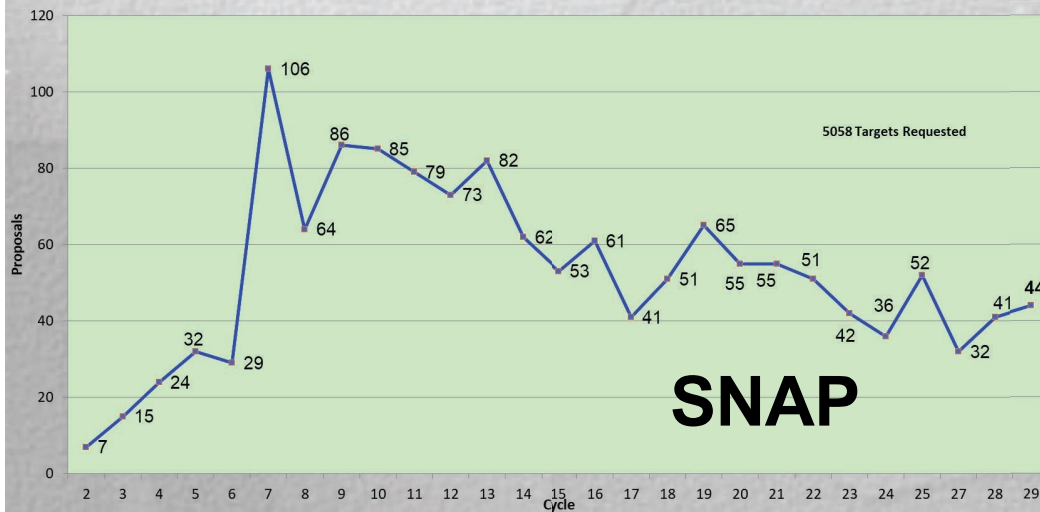
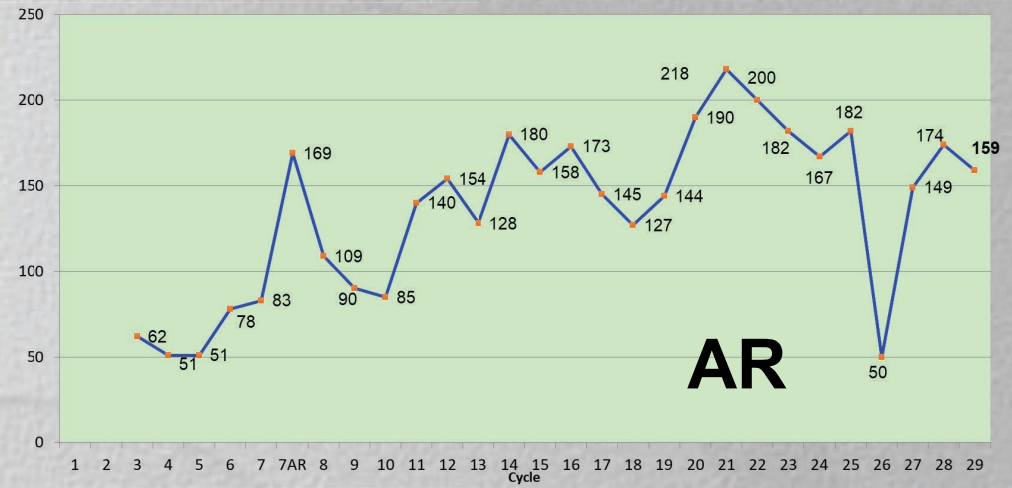
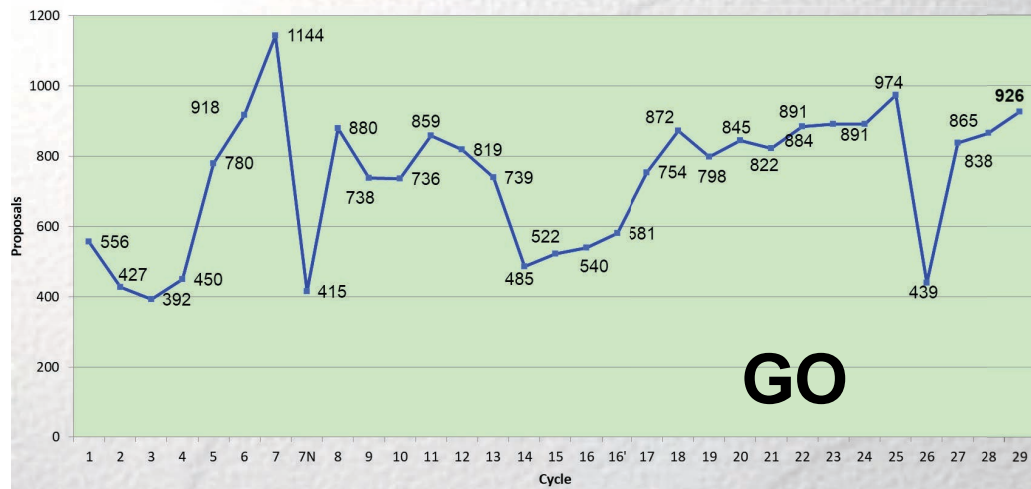


Orbits by Cycle



Proposal Sizes



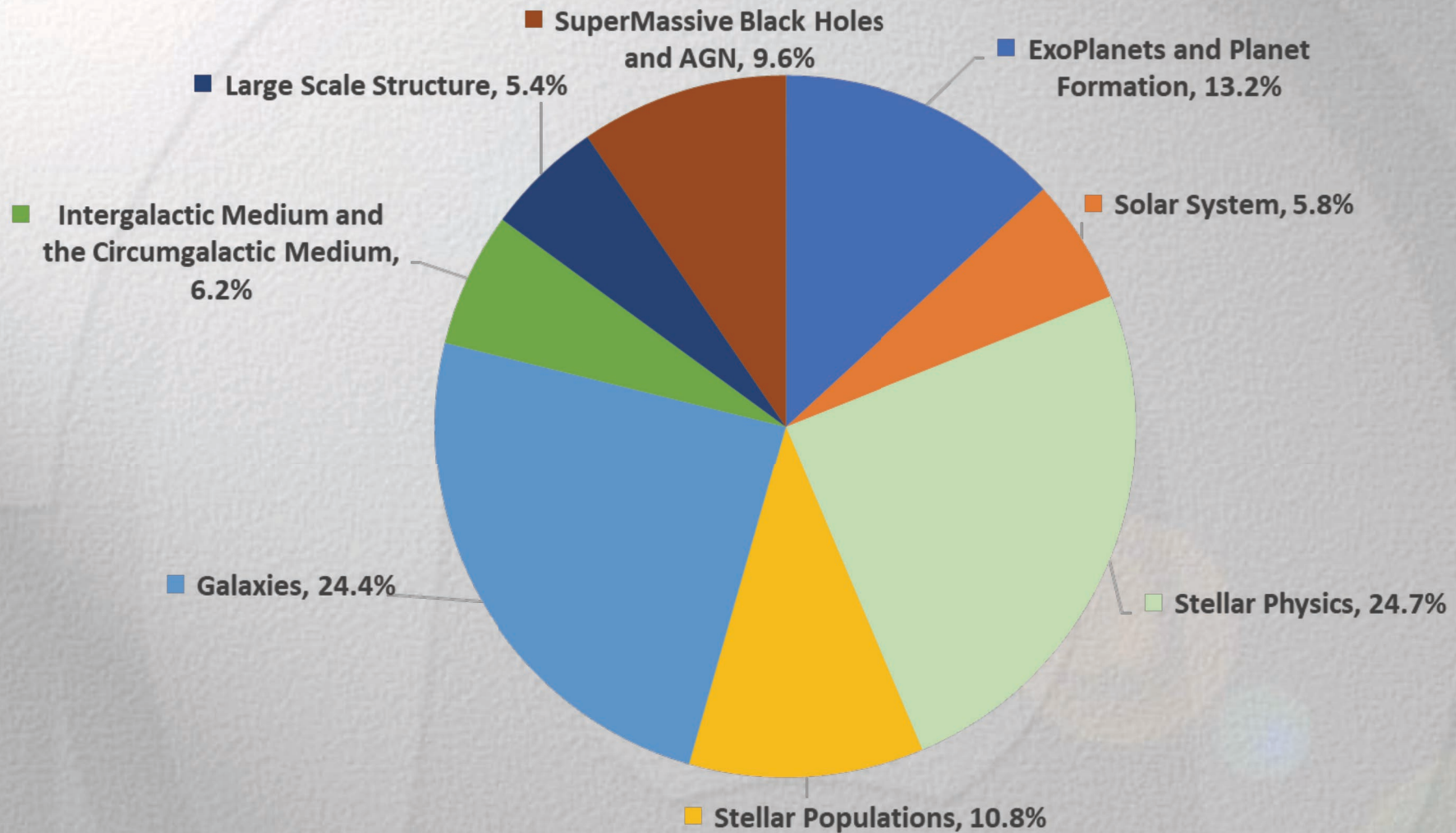


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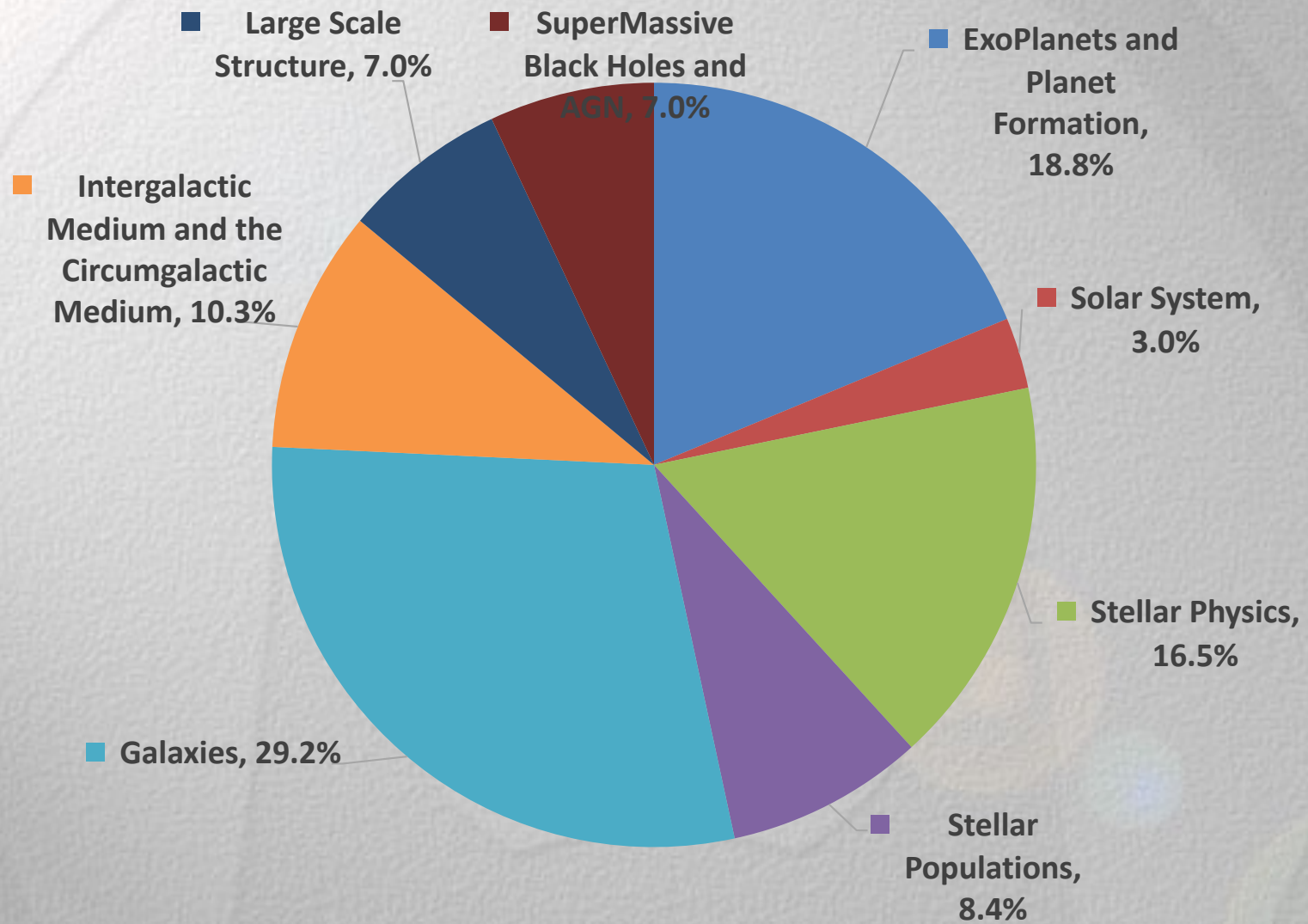
C28 Mid-Cycle Results & C29
Preparations

23

Proposals by Science Categories



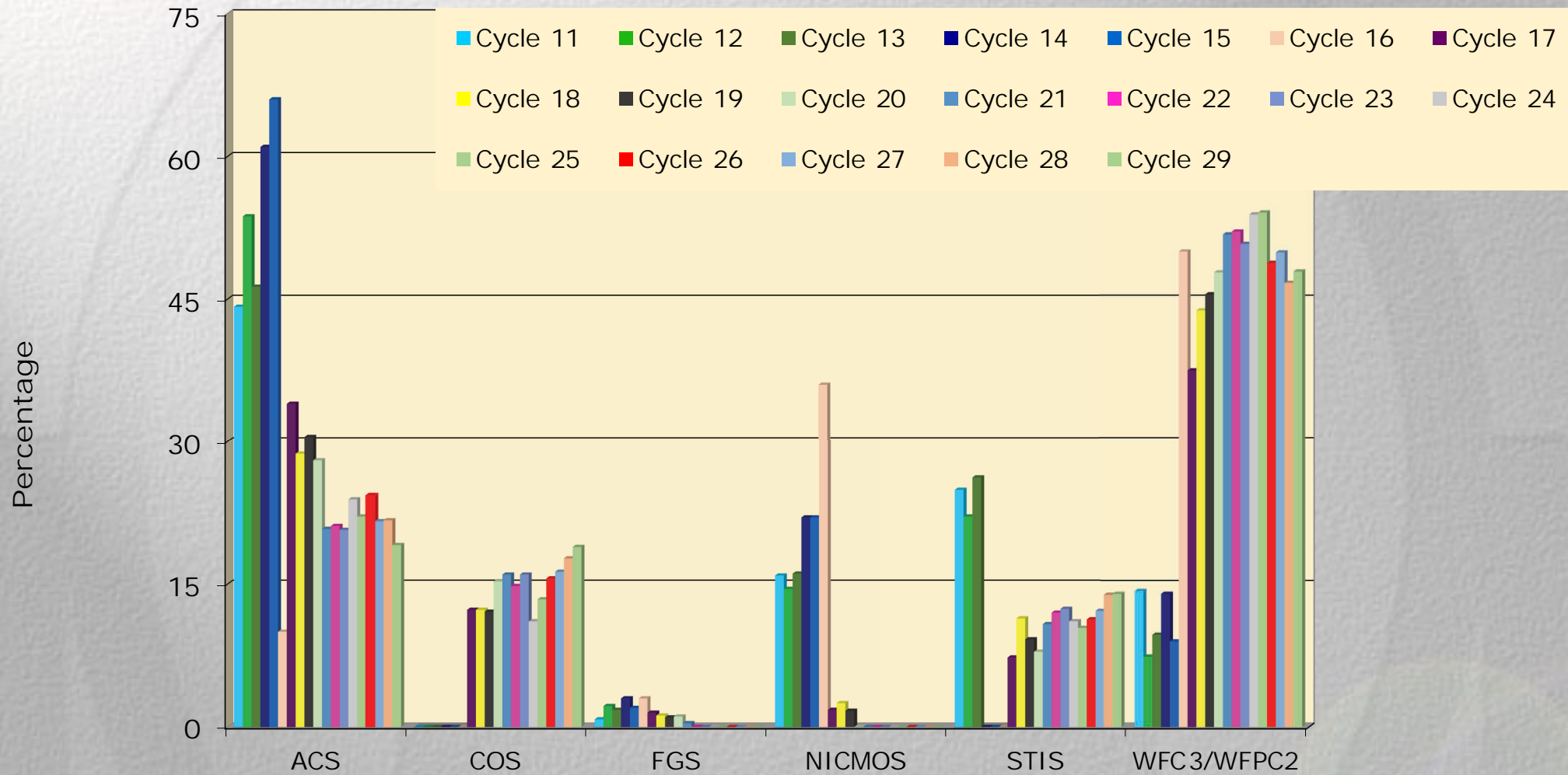
Orbits by Science Categories



C29 Instrument Summary

Configuration	Mode	Prime %	Coordinated Parallel %	Total	Prime Usage	Prime + Coordinated Parallel Usage	Pure Parallel Usage	Snap Usage
ACS/SBC	Imaging	1.6%		1.4%				
ACS/SBC	Spectroscopy	0.2%		0.1%				
ACS/WFC	Imaging	12%	43.2%	16.4%				10.9%
ACS/WFC	Ramp Filter	1.3%		1.1%	15.1%	19.1%		1.9%
ACS/WFC	Spectroscopy	0.1%		0.1%				
COS/FUV	Spectroscopy	20%		17.2%				3.0%
COS/NUV	Imaging	0.1%		0.1%	22.1%	18.9%		
COS/NUV	Spectroscopy	2%		1.7%				
FGS	POS				0.0%	0.0%		
FGS	TRANS							
STIS/CCD	Imaging	2.%		1.7%				
STIS/CCD	Spectroscopy	3.3%	0.4%	2.9%				0.6%
STIS/FUV	Imaging	0.2%		0.2%	16.3%	14.0%		
STIS/FUV	Spectroscopy	5.7%		4.9%				
STIS/NUV	Imaging	0.02%		0.0%				
STIS/NUV	Spectroscopy	5.1%		4.4%				1.6%
WFC3/IR	Imaging	10.6%	24.1%	12.5%			3.0%	28.2%
WFC3/IR	Spectroscopy	8.5%	3.6%	7.8%	46.5%	47.9%		
WFC3/UVIS	Imaging	26%	28.7%	26.3%			97.0%	51.9%
WFC3/UVIS	Spectroscopy	1.5%		1.3%				2.0%

GO Requested Instruments



Cycle 29 Joint Observatory Requests

Observatory	Proposals	Requested Time	HST Orbits
Chandra	11	866 Ksecs	204
NoirLab	7	15 Nights	132
NRAO	9	166 Hours	236
TESS	4	4 Targets	104
XMM	12	1076 Ksecs	281

C29: Target of Opportunity Request

	Proposals	HST Orbits
Disruptive	18	219
Non-Disruptive	19	505
Both	12	206
Long Term	28	575

C29: Special Initiatives

Initiative	Proposals	HST Orbits
UV	394 + 42 ARs	11,084
JWST	65	2,920
Fundamental Physics	26 + 8 ARs	1,008
Cloud Computing	5	-
Data Science Software	0	-
Calibration	5	ARs

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Countries of Investigators

Country	PI	CoPI	CoI	Country	PI	CoPI	CoI	Country	PI	CoPI	CoI
Afghanistan			2	France	9	8	208	Slovakia		1	1
Argentina		1	16	German	30	8	366	Slovenia			1
Australia	11	8	175	Greece			10	South Africa			12
Austria	2	1	18	Hungary	3		8	Spain	13	4	164
Belgium	1	1	40	Iceland			4	Sweden	16	4	135
Brazil	2	5	33	India	6	4	24	Switzerland	19	2	175
Canada	23	6	199	Ireland		4	33	Taiwan	3		31
Chile	8	6	120	Israel	3	1	57	Thailand			1
China	7	20	88	Italy	33	9	375	The Netherlands	20	7	186
Columbia			1	Japan	5	3	121	The Vatican			5
Croatia			2	Korea			20	Turkey		2	3
Cyprus			2	Mexico	3	2	44	Ukraine	2		6
Czech Republic			4	Norway	1		6	United Arab Emirates			5
Denmark	5	1	93	Poland	2	1	15	United Kingdom	68	18	582
Finland	2		18	Portugal		2	21	United States	827	224	5399
				Russia	6		31				

US States and Territories of Investigators

US State	PI	CoPI	Col	US State	PI	CoPI	Col	US State	PI	CoPI	Col
AK			1	KY	8	5	21	OH	15	4	100
AL	12	3	42	LA	2		6	OK	2		8
AR			1	MA	66	13	384	OR	2		
AZ	66	13	450	MD	147	47	1173	PA	30	11	119
CA	149	36	1039	ME			6	RI	1	2	8
CO	26	5	112	MI	30	8	162	SC	2	1	22
CT	10	5	56	MN	12	8	71	TN	4		14
DC	18	9	172	MO	4	2	24	TX	38	10	273
DE	3	1	5	MT	3		5	UT	6		20
FL	13	3	62	NC	5	3	26	VA	9	3	106
GA	5	3	30	NE			3	VT	1		2
HI	12		59	NH	1	2	12	WA	11		58
IA		1	6	NJ	21	3	113	WI	12	4	64
IL	29	5	232	NM	11	4	56	WV			8
IN	15	5	68	NV	1		7	WY	3	1	9
KS	2		23	NY	20	4	158	Virgin Islands			4