

# Cycle 29 Mid-Cycle Results & Cycle 30 Preparations

STUC

19 May 2022

# Mid-Cycle I+II Review Process

- Reviewers were selected from the Cycle 29 External Panelist pool
- The numbers are for Round I and (Round II); the graphics show both rounds combined
- Over 200 reviewers were available
- 102 (97) were utilized for the review with 5 reviewers per proposal; 36 (38) F and 66 (59) M

# Process (continued)

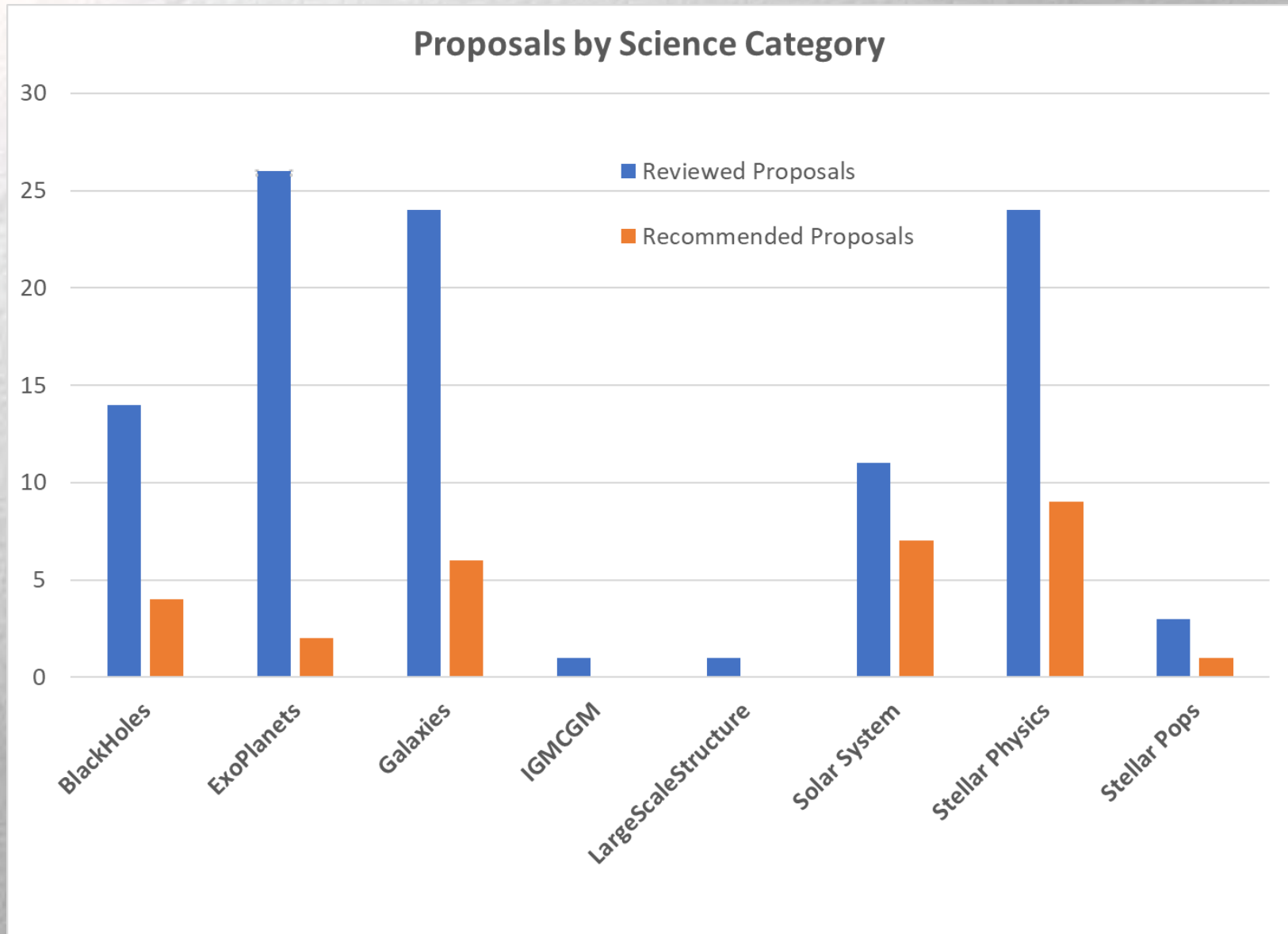
- Proposals are graded against Scientific Merit, Importance to Astronomy and Urgency
- 1 = Excellent to 5 = Poor Scale
- Final Grade is the average of the individual grades
- Mid-cycle proposals may request up to 15 orbits



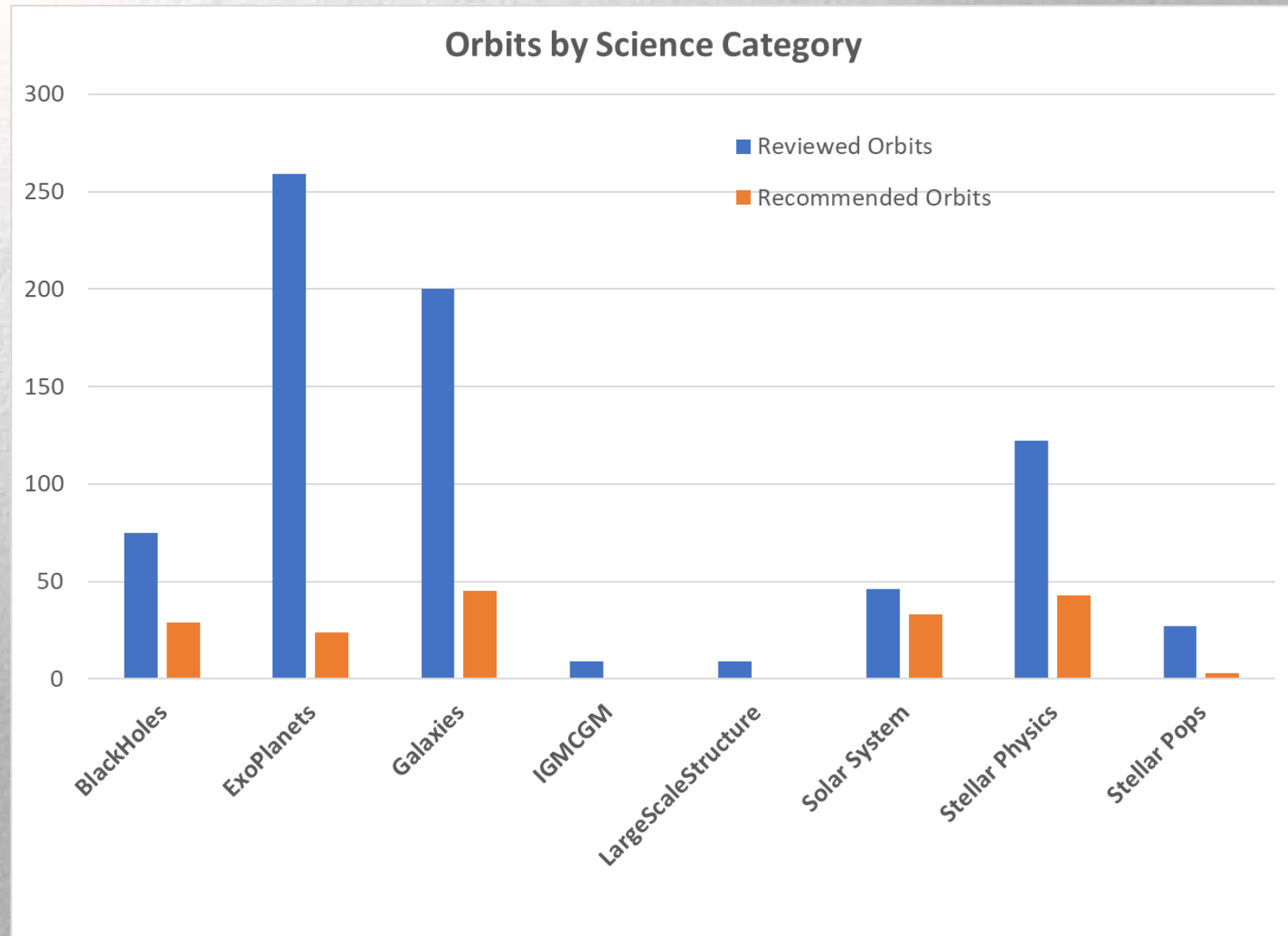
# Cycle 29 Mid-Cycle I+II Results

- September 30, 2021 (January 31, 2022) was the deadline for the Mid-Cycle I (II) submissions
- 8 (3) Proposals rejected as non-compliant and removed from review
- 57 (47) Proposals reviewed for 391 (356) Orbits
  - 14 (15) Proposals recommended for 78 (99) orbits
  - Acceptance Rate: 1:4.1 (3.1) for proposals and 1:5.0 (3.6) for orbits
- Instrument breakdown: ACS: 6% (12%), COS: 6% (16%), STIS: 10% (4%), and WFC3: 77% (68%)
- Imaging: 65% (74%) and Spectroscopy: 35% (26%)
- ESA acceptance fraction:
  - Pls 36% (7%) for proposals and 40% (6%) for orbits
  - ESA Cols are 27% (25%) of the total Cols
- UV Initiative: 14% (40%) for Proposals and 9% (56%) for Orbits

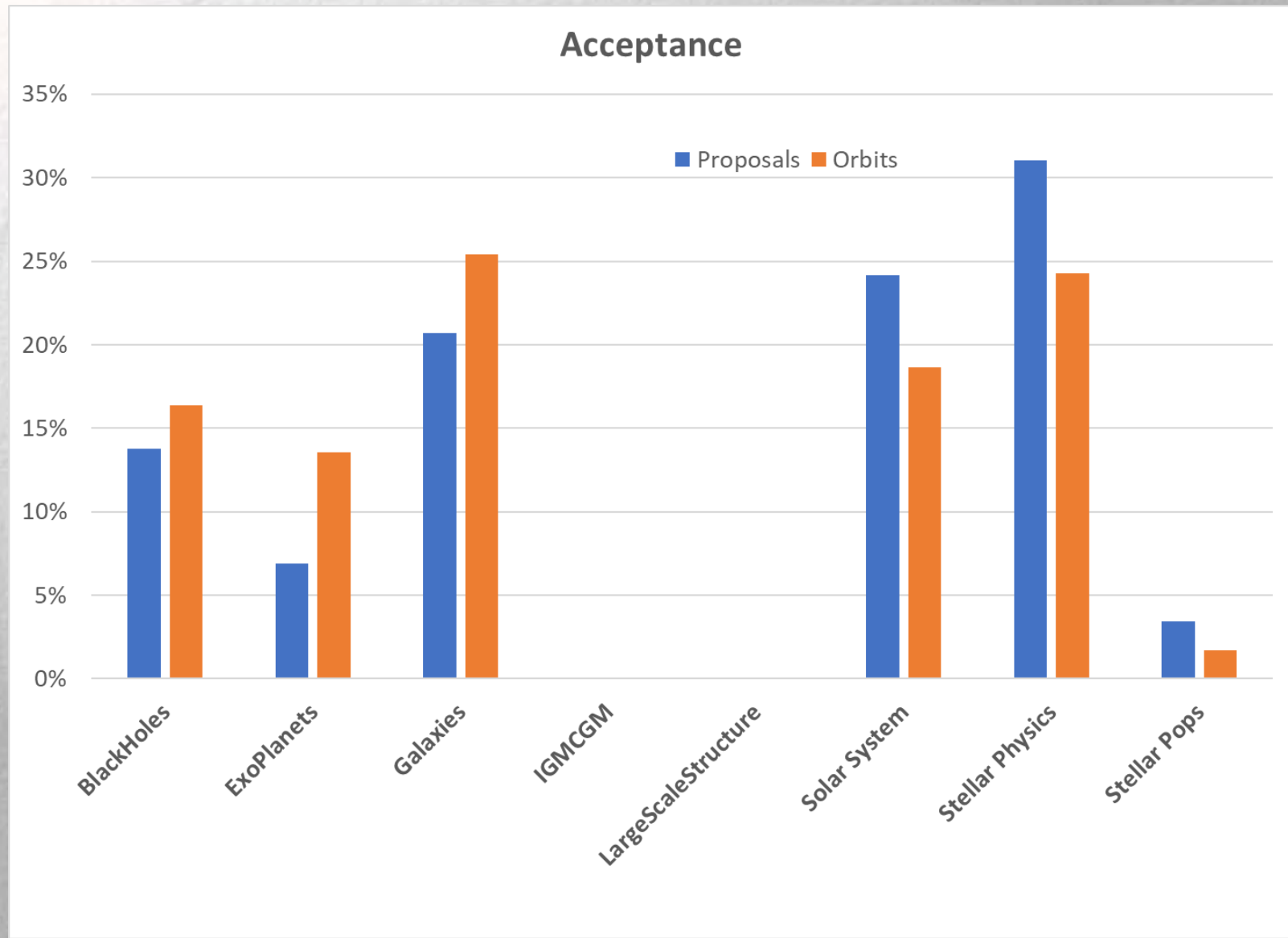
# Mid-Cycle Results by Science Category (Proposals)



# Mid-Cycle Results by Science Category (Orbits)



# Mid-Cycle Acceptance Rate by Science Category





# Gender Distribution

	Submitted Proposals	Recommended Proposals	
Female	22	9	41%
Male	82	20	24%

Submitted: M/F = 79% / 21%

Recommended: M/F = 69% / 31%



# Preparations for the Cycle 30 TAC

# Cycle 30 (*Cycle 29*) Proposal Statistics

<b>Total Proposals</b>	<b>1062 (1129)</b>	<b>Cycle 30</b>	<b>Cycle 31</b>	<b>Cycle 32</b>
GO	880 (926)	19,911 (22,065)	496	214
SNAP	41 (44)	5,261 (5014)	Targets	
Archival Research	Regular	Legacy		
Regular	92 (95)	14 (21)		
Theory	35 (44)	0 (1)		
Total	127 (159)	14 (22)	141 (181)	
ESA	212 (244)			
ESA GO	201 (232)	5,064 (5958)	Orbits	
ESA SNAPs	10 (10)	998 (921)	Targets	
ESA AR	1 (2)			
			ESA	Orbits
GO Large	25 (31)	2,786 (3581)	8 (12)	780 (1301)
GO Medium	118 (117)	5,798 (5743)	25 (24)	1,306 (1199)
GO Treasury	14 (21)	1,538 (2457)	6 (8)	746 (875)
Pure Parallel	2 (2)	430 (430)	0 (0)	0 (0)



# Same TAC Process in Cycle 30 as in Cycle 29

- 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 Small proposals in CGM/IGM and Large-scale Structure are reviewed by the virtual panels.
  - 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: **Boris Gaensicke** (University of Warwick)
- Panel structure in Cycle 30:
  - 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 – 11 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 30

- Roughly **3500** orbits available for Cycle 30 GO proposals
- Break-down:
  - **750** orbits for the EC (Large and Treasury)
  - **1000** orbits for medium-sized proposals (35 – 74 orbits)
  - **1700** orbits for the Small proposals (Regular GO with 1 – 34 orbits)
  - **50** orbits held for contingency
- 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 14 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.
- Chairs and Vice-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 **five 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:

## C30 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.

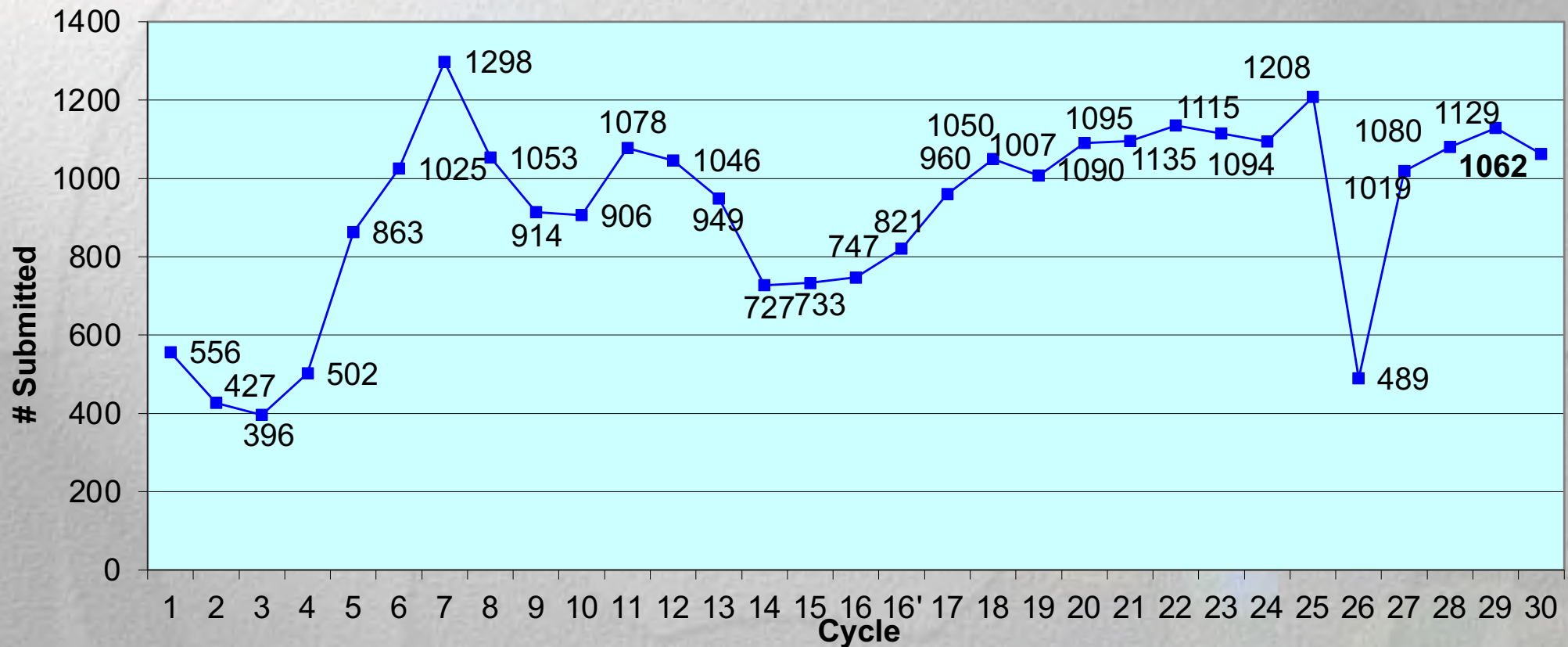
# TAC Process (continued)

Proposals reviewed by **virtual group panels**:

- There are eight panels, with 10 – 13 members, including Chair and Vice-Chair (no Vice-Chair in Solar System). The virtual panelists participate via video-conference.
- Each panel is allocated an orbit allocation for Small and Medium 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 Executive Committee that reviews Large/Treasury/Legacy proposals.
- The Executive Committee meets by video-conference as well.

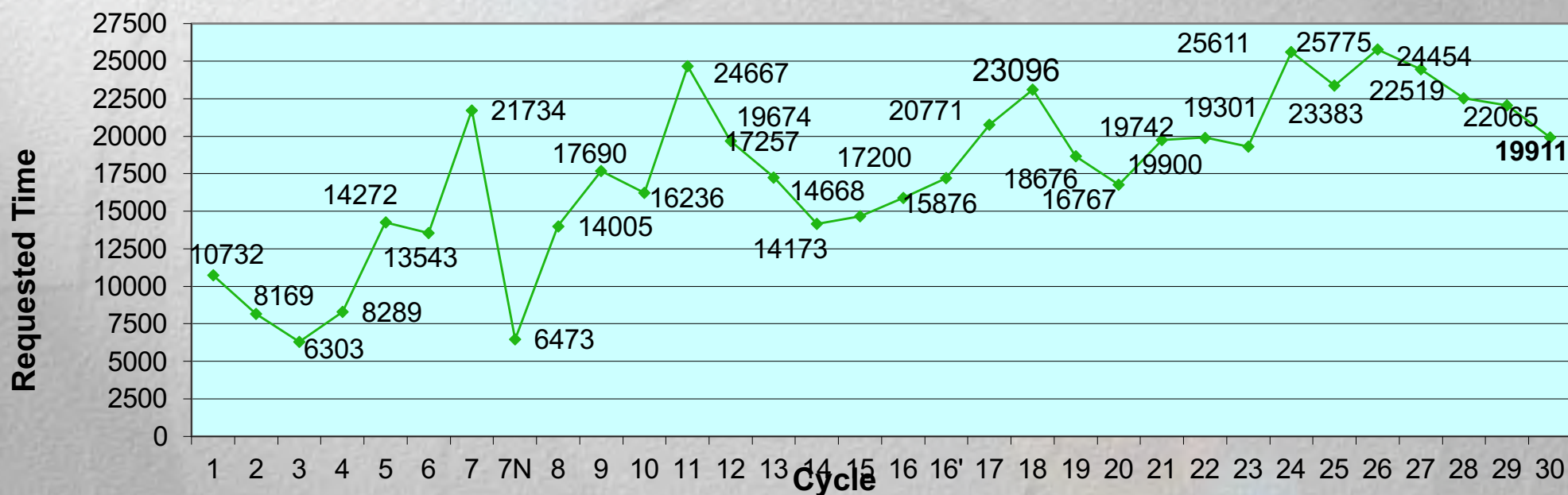


# Proposals by Cycle

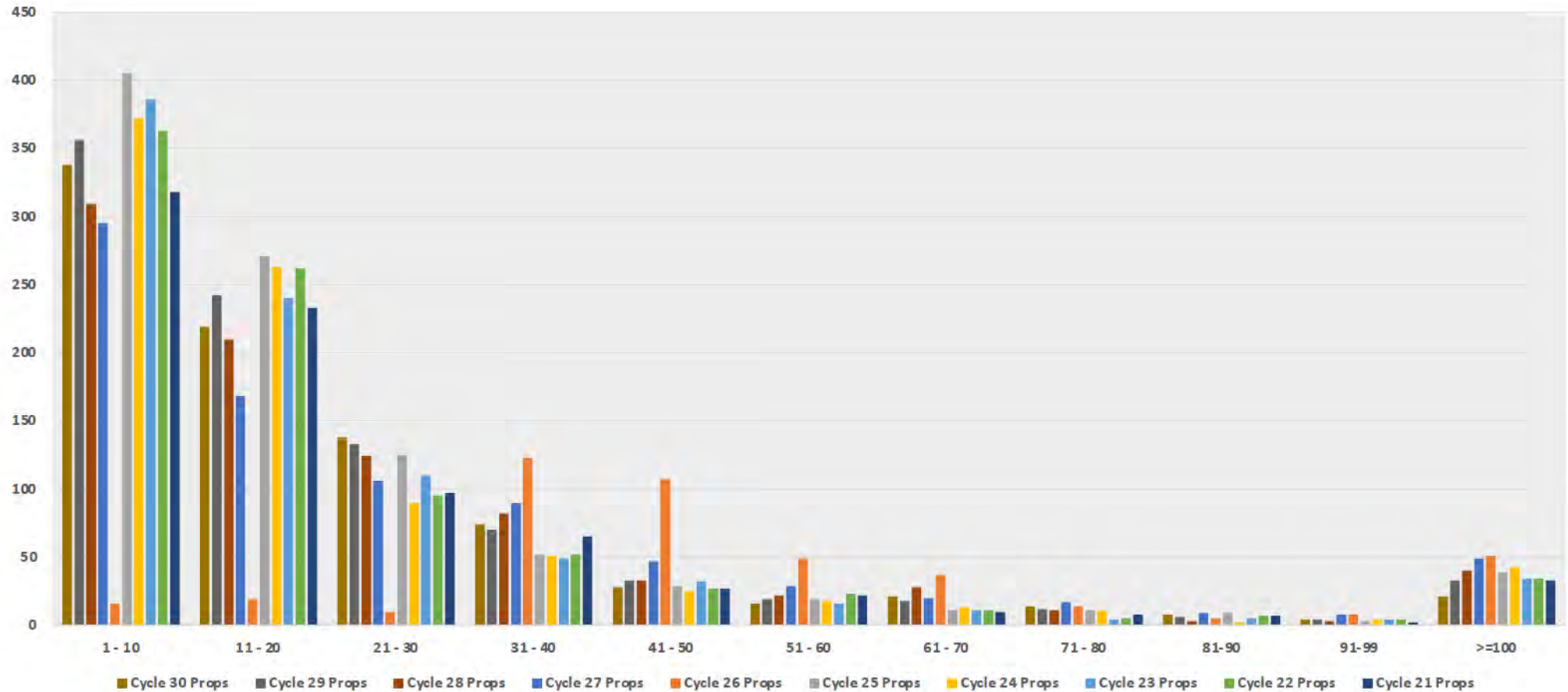


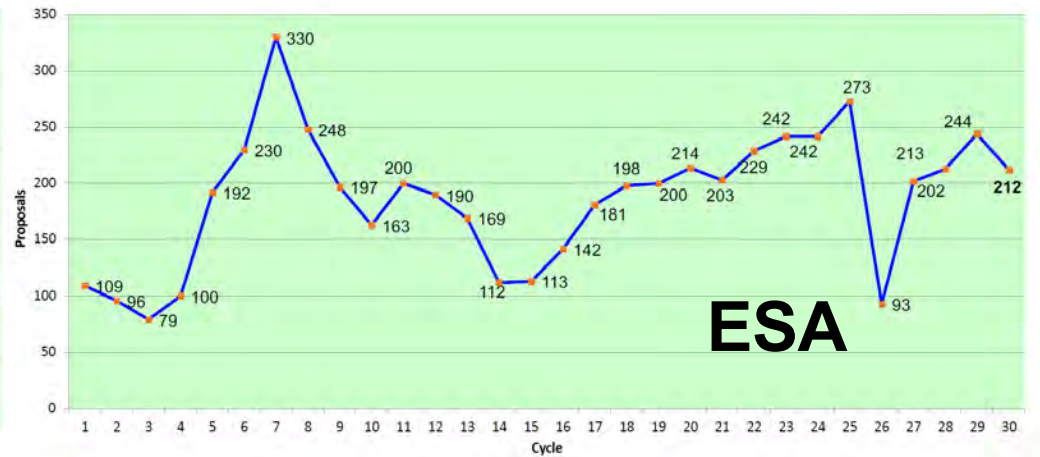
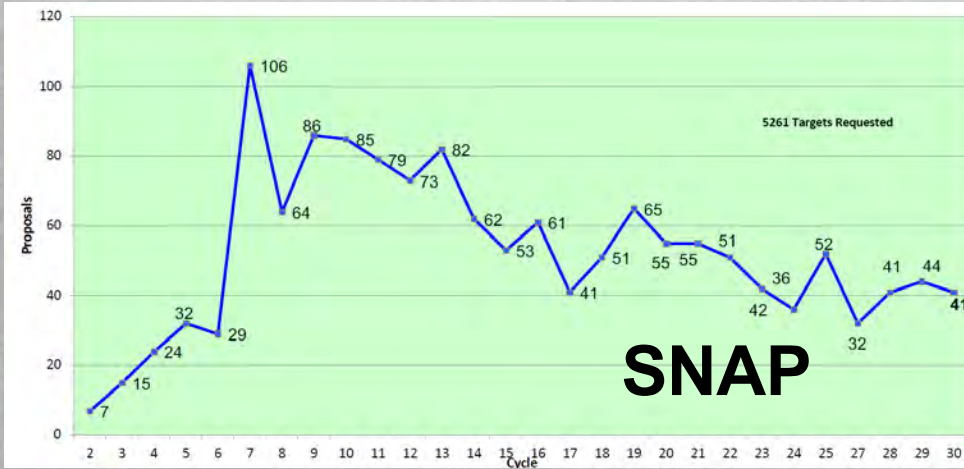
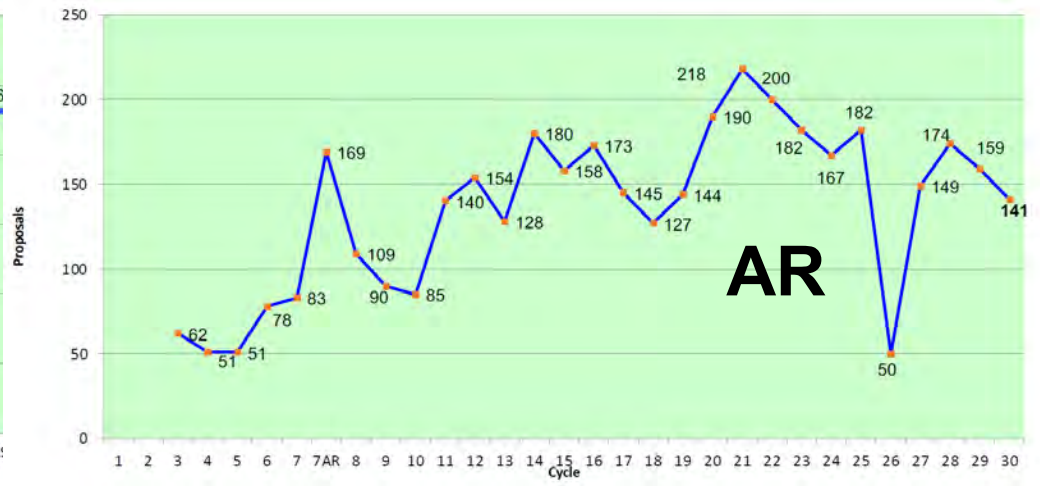


# Orbits by Cycle



# Proposal Sizes





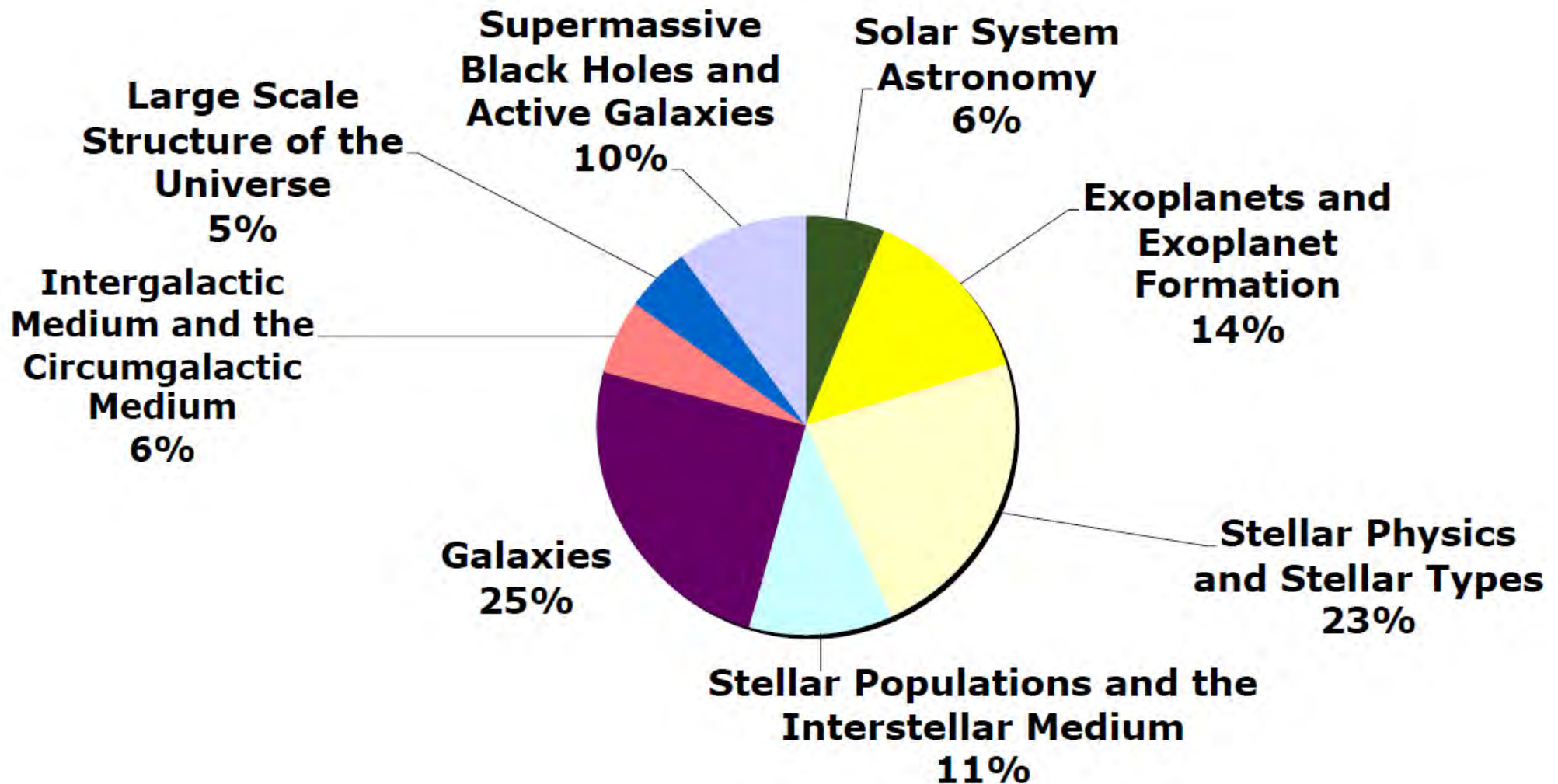
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C29 Mid-Cycle Results & C30  
Preparations

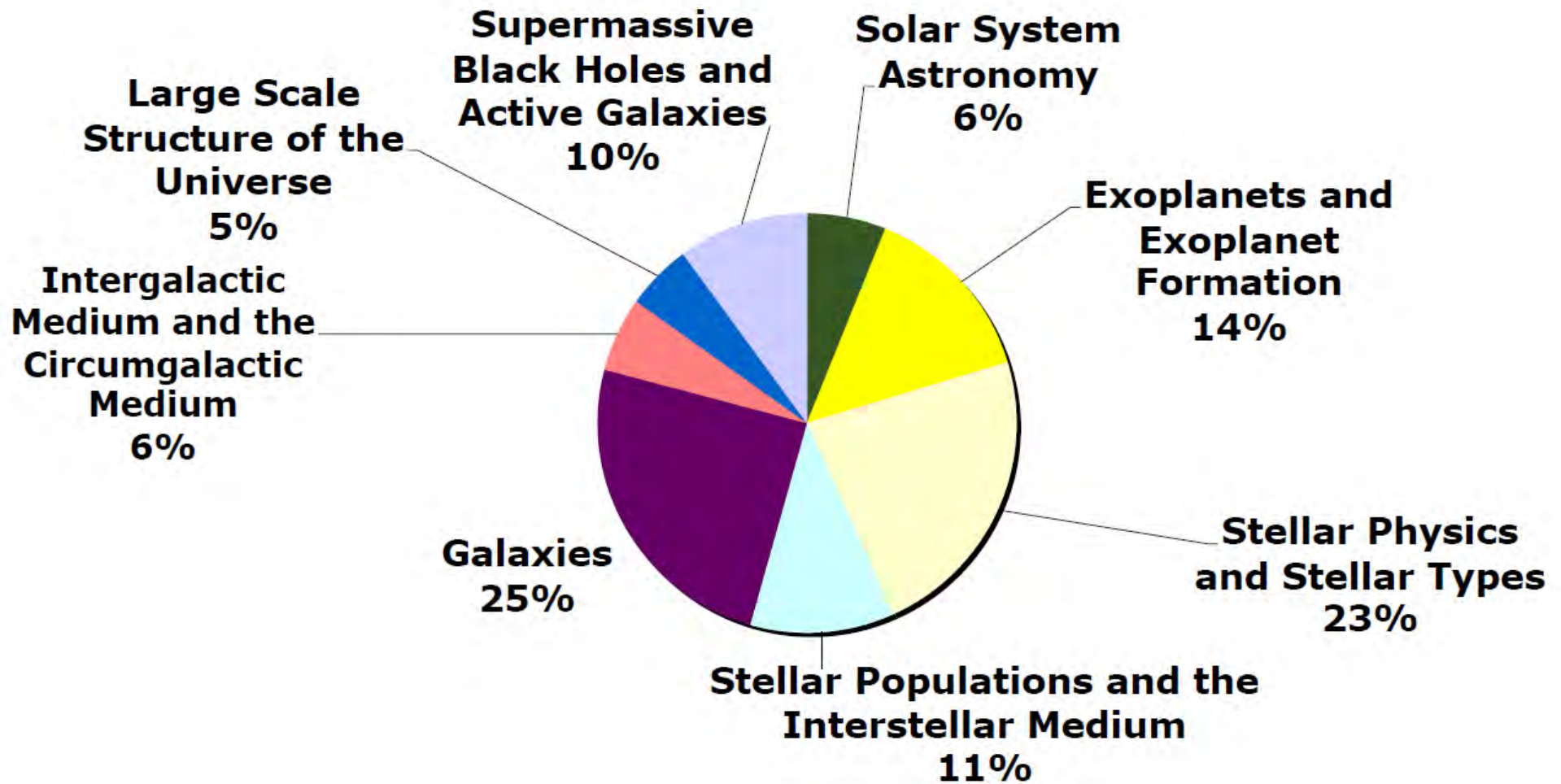
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# Proposals by Science Categories



# Orbits by Science Categories



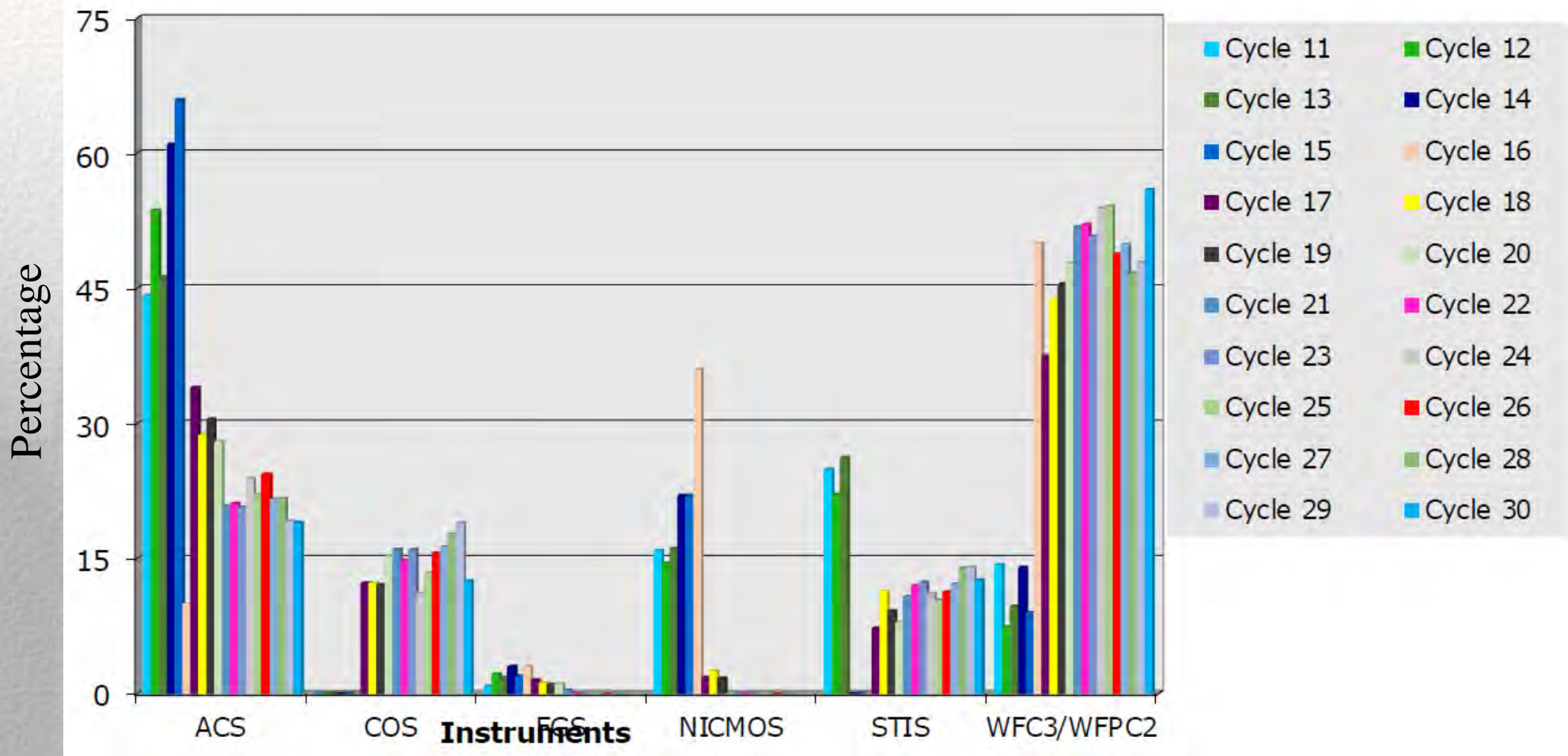


# C30 Instrument Summary

Configuration	Mode	Prime %	Coordinated Parallel %	Total	Prime Usage	Prime + Coordinated Parallel Usage	Pure Parallel Usage	Snap Usage
ACS/SBC	Imaging	1.42%	0.0%	1.2%			0.0%	0.0%
ACS/SBC	Spectroscopy	0.08%	0.0%	0.1%			0.0%	0.0%
ACS/WFC	Imaging	10.54%	54.7%	16.4%			0.0%	9.6%
ACS/WFC	Ramp Filter	1.34%	0.0%	1.2%	13.4%	19.0%	0.0%	5.0%
ACS/WFC	Spectroscopy	0.04%	0.3%	0.1%			0.0%	0.0%
COS/FUV	Spectroscopy	12.61%	0.0%	10.9%			0.0%	8.8%
COS/NUV	Imaging	0.15%	0.0%	0.1%	14.4%	12.5%	0.0%	0.0%
COS/NUV	Spectroscopy	1.62%	0.0%	1.4%			0.0%	0.0%
FGS	POS	0.00%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FGS	TRANS	0.00%	0.0%	0.0%			0.0%	0.0%
STIS/CCD	Imaging	1.41%	0.0%	1.2%			0.0%	0.0%
STIS/CCD	Spectroscopy	3.30%	0.0%	2.9%			0.0%	0.7%
STIS/FUV	Imaging	0.10%	0.0%	0.1%	14.5%	12.6%	0.0%	0.0%
STIS/FUV	Spectroscopy	3.35%	0.0%	2.9%			0.0%	0.0%
STIS/NUV	Imaging	0.03%	0.0%	0.0%			0.0%	0.0%
STIS/NUV	Spectroscopy	6.31%	0.0%	5.5%			0.0%	1.5%
WFC3/IR	Imaging	14.48%	10.5%	13.9%			3.0%	29.4%
WFC3/IR	Spectroscopy	5.05%	0.0%	4.4%	57.7%	56.0%	0.0%	0.0%
WFC3/UVIS	Imaging	36.58%	34.5%	36.3%			97.0%	45.0%
WFC3/UVIS	Spectroscopy	1.59%	0.0%	1.4%			0.0%	0.0%



# GO Requested Instruments



# Cycle 30 Joint Observatory Requests

Observatory	Proposals	Requested Time	HST Orbits
Chandra	9	910 Ksecs	145
NoirLab	8	19.06 Nights	172
NRAO	7	147 Hours	203
TESS	3	3 Targets	116
XMM	13	971 Ksecs	151

# C30: Target of Opportunity Requests

	Proposals	HST Orbits
Disruptive	15	222
Non-Disruptive	21	438
Both	10	156
Long Term	19	401

Requests are for entire proposal



# C30: Special Initiatives

Initiative	Proposals	HST Orbits
UV	380 + 37 ARs	9,818
Fundamental Physics	26=1 + 7 ARs	685
Cloud Computing	2	-
Data Science Software	8	-
Calibration	3 Ars + 2 GOs	10

# Countries of Investigators

Country	PI	Col	CoPI	Country	PI	Col	CoPI	Country	PI	Col	CoPI
Afghanistan		1		Greece	2	14	1	South Africa		5	
Argentina		9		Hungary	1	3		Spain	12	144	3
Australia	8	142	3	Iceland		2		Sweden	14	119	8
Austria	1	12	1	India	3	23	2	Switzerland	8	100	
Belgium	2	32	2	Ireland		24	2	Tawian		10	2
Brazil	1	22	5	Israel	2	40	1	Thailand	1	3	
Canada	20	178	8	Italy	39	402	3	The Netherlands	19	170	9
Chile	8	122	7	Japan	6	95	2	The Vatican		3	
China	12	95	10	Korea	1	16		Ukraine	2	6	
Columbia		1		Mexico	2	35	1	United Arab Emirates		7	1
Croatia		2		New Zealand		3		United Kingdom	58	530	27
Czech Republic		6		Norway	1	9		Vietnam		1	
Denmark	5	78	4	Poland	1	13		South Africa		5	
Finland	2	9		Portugal		6		Spain	12	144	3
France	15	178	9	Russia	1	32	1	Sweden	14	119	8
Germany	24	351	13	Slovenia		1		United States	791	4957	213



# US States and Territories of Investigators

US State	PI	Col	CoPI	US State	Col	CoPI	Col	US State	PI	Col	CoPI
AL	13	47	3	LA	2	4		OH	12	89	4
AR		1		MA	65	367	17	OK	2	11	
AZ	57	413	14	MD	149	1117	41	OR	4		
CA	153	916	30	ME		2		PA	22	107	6
CO	25	78	5	MI	22	141	6	RI	1	2	
CT	9	51	2	MN	11	86	10	SC	3	15	1
DC	13	157	11	MO	4	24	2	TN	5	12	1
DE	4	6	1	MS		1		TX	38	253	13
FL	12	70	2	MT	1	3		UT	7	41	1
GA	5	41	6	NC	5	26	2	VA	7	94	2
HI	20	91	3	NE		1		VT		5	
IA	4	15		NH	4	13	2	WA	10	40	
IL	26	201	8	NJ	21	95	5	WI	8	55	2
IN	13	74	4	NM	7	35		WV		3	