

ACS Cycle 20 calibration plan

- Will cover 12 months, from Nov 1st 2012 to Oct 31st 2013
- The ACS calibration plan consists of 33 external and 976 internal orbits
- The programs include 14 programs to create reference files (biases, etc.), monitoring UV sensitivities, photometric accuracy, CTE (internal and external), and flat fields
- The plan is similar to the standard ACS calibration plan performed in previous Cycles, but it has important differences.
- The orbit request went down by 44% (ext) and 20% (int) in Cycle17 with respect to cycle 15 (68 int+ 1665 ext.). In Cycle 18, we lowered the orbit request by an additional 20% (internal orbits), and the external orbit request remained unchanged. In Cycle 19 we needed more internal orbits (+12%) because of the allocation of a larger number of subarray images. In Cycle 20, we add new programs which require a moderate increase of the requested orbits (+9 external, +77 internal).
- As in Cycle 18-19, we include a separate subarray bias program (to be linked with one GO program) and short darks to be used for pixel based CTE correction. New programs: SBC red leak monitor, WFC bandpass variation around the FOV, and post-flash calibration.

ACS Cycle 20 Calibration Plan

PI	Proposal Title	Frequency	Time (orbits)		Scheduling Required	Resources Required (FTE)	Products	Accuracy Required	Notes
			External	Internal					
Golimowski 13152-3-4	ACS CCD Daily Monitor	3x/week		728	Periodic	0.5	Ref files		Dark, bias creation
Chiaberge 13155	ACS External CTE Monitor	Yearly	9		< Feb 2013	0.5	formula	1% abs	Monitoring of CTE losses to calibrate correction formula
Ogaz 13156	ACS Internal CTE Monitor	Yearly		15	Nov 12 (CTE) Jul-Sep 13(darks)	0.09	Web, cte ref files	1%	EPER, short darks for pix-based CTE calibration
Golimowski 13157	ACS CCD Hot Pixel Annealing	4 weeks		156	Periodic	0.25	Ref		
Smith 13158	ACS UV Contamination Monitor	Yearly	2			0.2	Ref, ISR	1%	SBC
Grogin 13159	<u>ACS CCD Stability Monitor</u>	3x in cycle	4		Nov12 Mar/Jul13	0.6	Ref files	1%	L-flat, Distortion, Photometry
McMaster 13160	ACS Internal Flat Fields	2x/cycle		16	~Dec12 ~Aug13	0.2	Ref, ISR	<1%	Track flat field changes, uses lamp
Ogaz 13161	ACS SBC darks	Yearly		4	Mar 13	0.04		10%	
Bohlin 13162	ACSPhotometric cross-cal	Yearly	9			0.3	ISR, zp, ref files	1%	Time dependent phot cal
Wheeler 13163	ACS SBC MAMA Recovery	as needed				0.004	-	-	After irregular safing
Golimowski 13164	Bias Frames for subarrays			1	Linked to GO13001	0.003	Ref files	-	Subarray biases for WFC
Chiaberge 13165	<u>SBC Red Leaks</u>		5			0.2			Temporal and temperature red leak variations .1 STIS orbit
Ogaz 13166	<u>Post flash calibration</u>			22	< Nov 1st	0.2			Post-flashed darks and biases
Bohlin 13167	<u>Bandpass variations across the FOV</u>	2x in the cycle	4	34	2 stars within 3 months	0.3		1%	User defined subarrays
Total requested orbits			33	976		3.387			