



16289 - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Cycle: 28, Proposal Category: GO

(JWST Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Proposal 16289 (STScI Edit Number: 3, Created: Wednesday, February 24, 2021 at 1:00:37 PM Eastern Standard Time) - Overview

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) M-5 ANY	ACS/WFC WFC3/UVIS	1	24-Feb-2021 13:00:20.0	yes
02	(1) M-5 ANY	ACS/WFC WFC3/UVIS	1	24-Feb-2021 13:00:21.0	yes
03	(1) M-5 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:22.0	yes
04	(1) M-5 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:23.0	yes
05	(1) M-5 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:24.0	yes
06	(1) M-5 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:25.0	yes
07	(1) M-5 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:26.0	yes
08	(2) NGC-288 ANY	ACS/WFC WFC3/UVIS	1	24-Feb-2021 13:00:27.0	yes
09	(2) NGC-288 ANY	ACS/WFC WFC3/UVIS	1	24-Feb-2021 13:00:28.0	yes
10	(2) NGC-288 ANY	ACS/WFC WFC3/UVIS	1	24-Feb-2021 13:00:29.0	yes
11	(2) NGC-288 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:29.0	yes
12	(2) NGC-288 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:30.0	yes
13	(2) NGC-288 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:31.0	yes
14	(2) NGC-288 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:33.0	yes

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
15	(2) NGC-288 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:34.0	yes
16	(2) NGC-288 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:35.0	yes
17	(3) M-4 ANY	ACS/WFC WFC3/UVIS	1	24-Feb-2021 13:00:35.0	yes
18	(3) M-4 ANY	ACS/WFC WFC3/UVIS	1	24-Feb-2021 13:00:36.0	yes
19	(2) NGC-288 ANY	ACS/WFC WFC3/IR	1	24-Feb-2021 13:00:37.0	yes

19 Total Orbits Used

ABSTRACT

Two broad scenarios have been suggested for the long-held problem of the formation of multiple populations (MPs) in Globular Clusters (GCs). According to the first option, GCs have experienced multiple star-formation episodes and provided a major contribution to the mass of the Galactic halo. As the alternative, there was a single star-formation episode, but a fraction of stars has successively accreted material processed and ejected by massive stars of the same generation. The mass functions (MFs) and the chemical composition of very-low mass M-dwarfs are the missing observational constraints to disentangle between the two scenarios.

Historically, MPs in the GCs have been mostly investigated from UV and visual filters that are very sensitive to the bizarre chemical composition of the GC stars more massive than ~ 0.6 solar masses. Due to the observational limits of the UV detectors, the faintest region of the color-magnitude diagram (CMD) is nearly unexplored. In the era of JWST, blind to the UV, the recent discovery, based on NIR HST photometry, of multiple sequences of very-low mass stars has provided a new window to study MPs.

We propose to combine F110W and F160W photometry, which allows us to investigate the MPs phenomenon in the poorly-explored M-dwarf regime, with F275W, F336W, and F438W data, mandatory to explore the brightest region of the CMD. From the synergy of NIR, optical and UV photometry we will constrain the chemical composition of the MPs and derive for the first time their mass-functions in the interval between ~ 0.1 and 0.8 solar masses. Our results will provide a major step forward to constrain the formation scenarios of MPs

OBSERVING DESCRIPTION

The observing program is designed to image three globular clusters: NGC288, NGC5904 and NGC6121:

-- NGC288 and NGC5904 will be observed through the F275W, F336W and F438W filters of UVIS/WFC3 and through the F110W and F160W filters of NIR/WFC3/

The field of view of each target is located about ~5 arcmin from the cluster center to overlap archive F814W WFC/ACS observations (from GO12193 and GO1329, for NGC288 and NGC5904, respectively).

Archive F814W images will be combined with the new observations in F275W, F336W and F438W to derive the pseudo two color diagram called chromosome map ($F275W - 2 * F336W + F438W$ vs. $F275W - F814W$), which is sensitive to multiple stellar populations with different chemical composition. These optical and UV observations will be exploited to study stellar populations among stars more massive than ~0.6 solar masses. F110W and F160W images of the same field of view will be used to investigate multiple populations among very low mass stars.

-- For NGC6121 UVIS/WFC3 images in F275W, F336W and F438W alone will be collected. Observations of NGC6121 will overlap archive F110W and F160W images from GO12602 and GO14725.

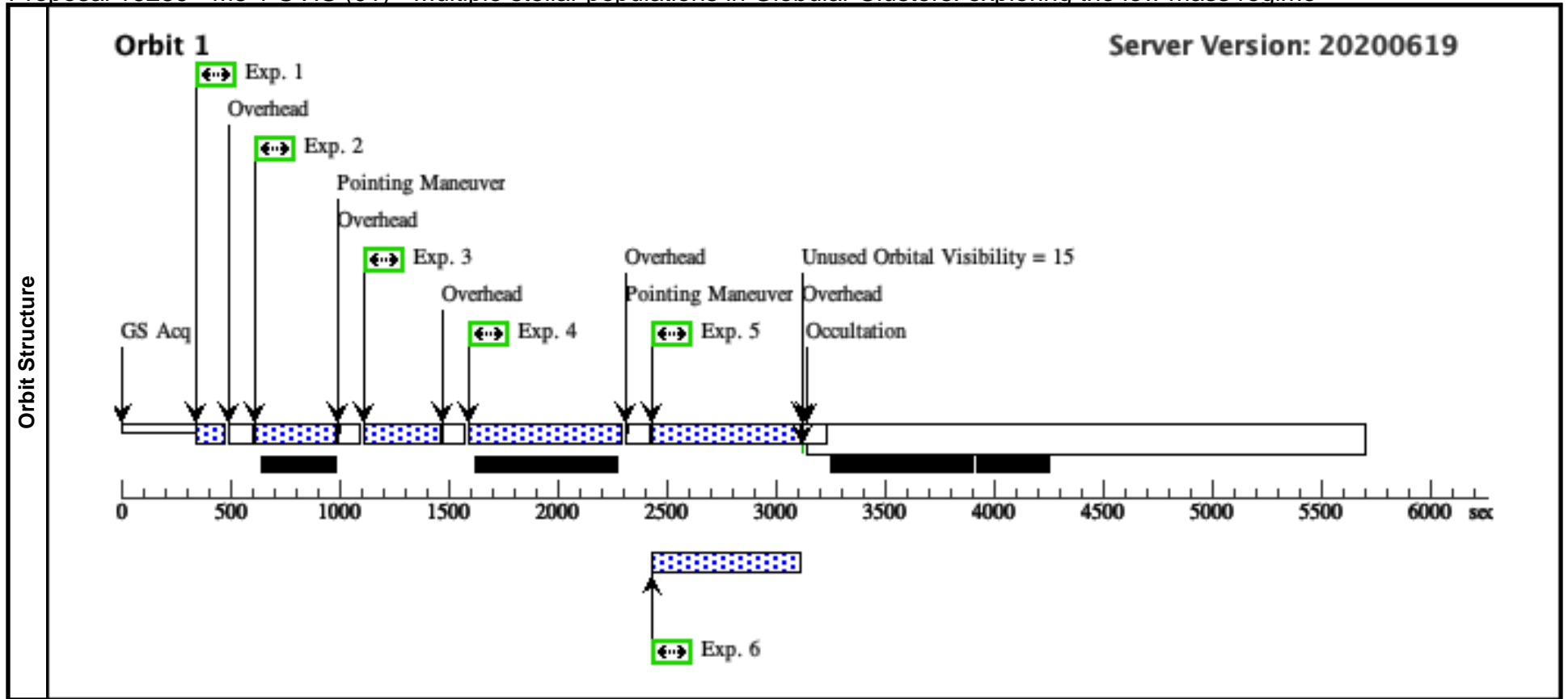
There are 18 1-orbit visits. The images are properly dithered to optimize the resulting photometric and astrometric quality.

The parallel will be taken through F606W and F814W filters of WFC/ACS to allow the investigation of photometric binaries from the F814W vs. F606W-F814W CMD.

Proposal 16289 - M5 1 UVIS (01) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

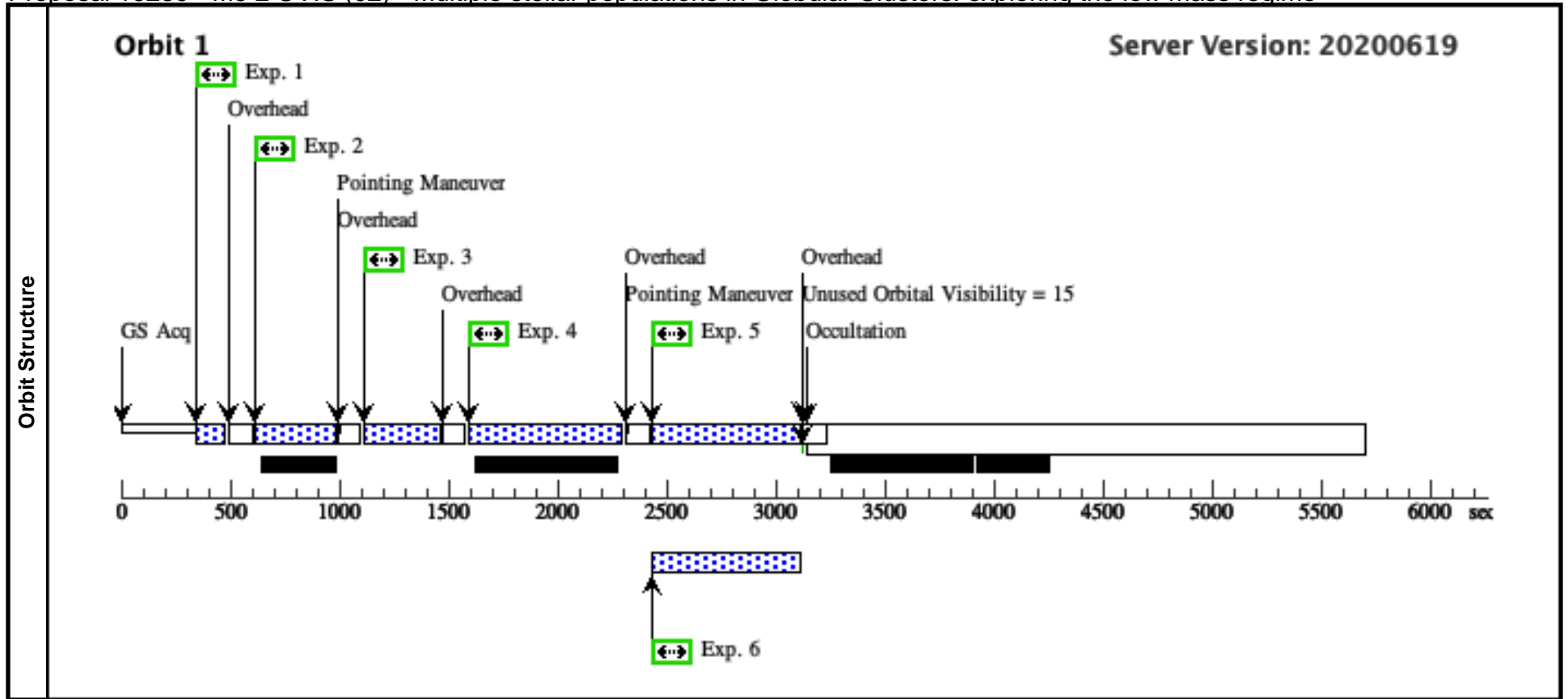
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Diagnosics										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	M-5	RA: 15 18 56.1700 (229.7340417d) Dec: +02 03 49.40 (2.06372d) Equinox: J2000	Epoch of Position: 2015.5	V=5.95	Reference Frame: SIMBAD				
Comments: Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER] Extended=YES										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) M-5	(1) M-5	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=14	POS TARG -1.5,-1.5		102 Secs (102 Secs)	
									[==>]	[1]
	2	(1) M-5	(1) M-5	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG -1.5,-1.5		348 Secs (348 Secs)	
									[==>]	[1]
	3	(1) M-5	(1) M-5	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG 1.5,1.5		348 Secs (348 Secs)	
									[==>]	[1]
	4	(1) M-5	(1) M-5	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG 1.5,1.5		680 Secs (680 Secs)	
								[==>]	[1]	
5	(1) M-5	(1) M-5	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG -1.5,-1.5	Prime + Parallel Group 5-6 in M5 1 UVIS (01)	680 Secs (680 Secs)		
								[==>]	[1]	
6	ANY	ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-6 in M5 1 UVIS (01)	472 Secs (472 Secs)		
								[==>]	[1]	



Proposal 16289 - M5 2 UVIS (02) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

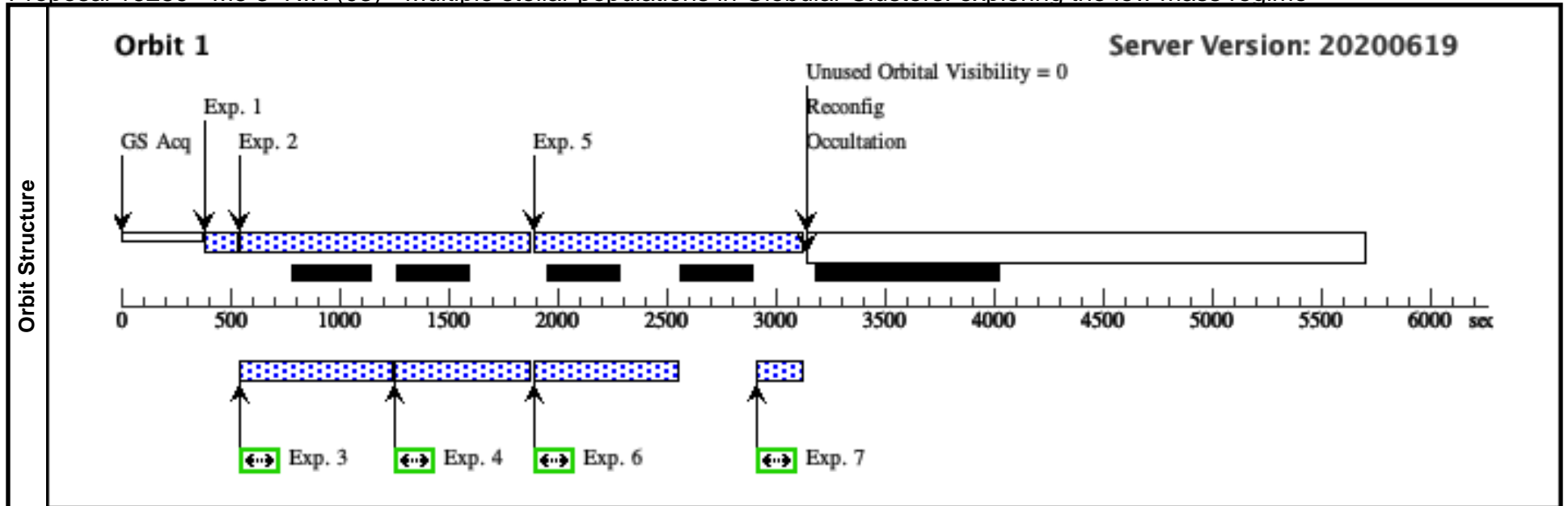
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Diagnosics										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	M-5	RA: 15 18 56.1700 (229.7340417d) Dec: +02 03 49.40 (2.06372d) Equinox: J2000	Epoch of Position: 2015.5	V=5.95	Reference Frame: SIMBAD				
Comments: Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER] Extended=YES										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) M-5	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=14	POS TARG 3,3		102 Secs (102 Secs)	
									[==>]	[1]
	2		(1) M-5	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG 3,3		348 Secs (348 Secs)	
									[==>]	[1]
	3		(1) M-5	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG 4.5,4.5		348 Secs (348 Secs)	
									[==>]	[1]
	4		(1) M-5	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG 4.5,4.5		680 Secs (680 Secs)	
								[==>]	[1]	
5		(1) M-5	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG 3,3	Prime + Parallel Group 5-6 in M5 2 UVIS (02)		680 Secs (680 Secs)	
								[==>]	[1]	
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in M5 2 UVIS (02)		472 Secs (472 Secs)	
								[==>]	[1]	



Proposal 16289 - M5 3 NIR (03) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

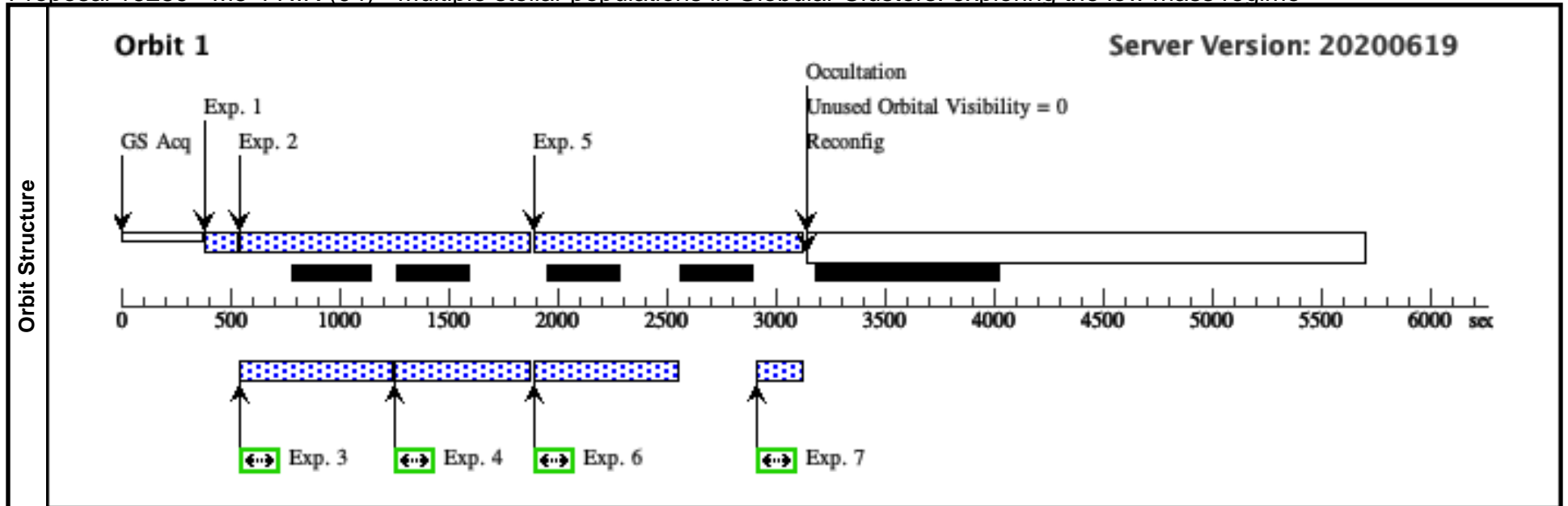
Visit	Proposal 16289, M5 3 NIR (03), scheduled Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
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	<i>Comments:</i> Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER] Extended=YES									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=13; SAMP-SEQ=SPAR S10	POS TARG -1.5,-1.5		122.943847 Secs (122.944 Secs) [==>]	[1]
	2		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG -1.5,-1.5	Prime + Parallel Group 2-4 in M5 3 NIR (03)	1302.93649 Secs (1302.936 Secs) [==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in M5 3 NIR (03)	490 Secs (490 Secs) [==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in M5 3 NIR (03)	493 Secs (493 Secs) [==>]	[1]
	5		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG -1.5,-1.5	Prime + Parallel Group 5-7 in M5 3 NIR (03)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in M5 3 NIR (03)	480 Secs (480 Secs) [==>]	[1]
	7		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in M5 3 NIR (03)	87 Secs (87 Secs) [==>]	[1]



Proposal 16289 - M5 4 NIR (04) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

Visit	Proposal 16289, M5 4 NIR (04), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	M-5	RA: 15 18 56.1700 (229.7340417d) Dec: +02 03 49.40 (2.06372d) Equinox: J2000	Epoch of Position: 2015.5	V=5.95	Reference Frame: SIMBAD				
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Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=13; SAMP-SEQ=SPAR S10	POS TARG 0,0		122.943847 Secs (122.944 Secs)	
									[==>]	[1]
	2		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG 0,0	Prime + Parallel Group 2-4 in M5 4 NIR (04)	1302.93649 Secs (1302.936 Secs)	
									[==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in M5 4 NIR (04)	490 Secs (490 Secs)	
									[==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in M5 4 NIR (04)	493 Secs (493 Secs)	
								[==>]	[1]	
5		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 0,0	Prime + Parallel Group 5-7 in M5 4 NIR (04)	1202.936167 Secs (1202.936 Secs)		
								[==>]	[1]	
6		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in M5 4 NIR (04)	480 Secs (480 Secs)		
								[==>]	[1]	
7		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in M5 4 NIR (04)	87 Secs (87 Secs)		
								[==>]	[1]	



Proposal 16289 - M5 5 NIR (05) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

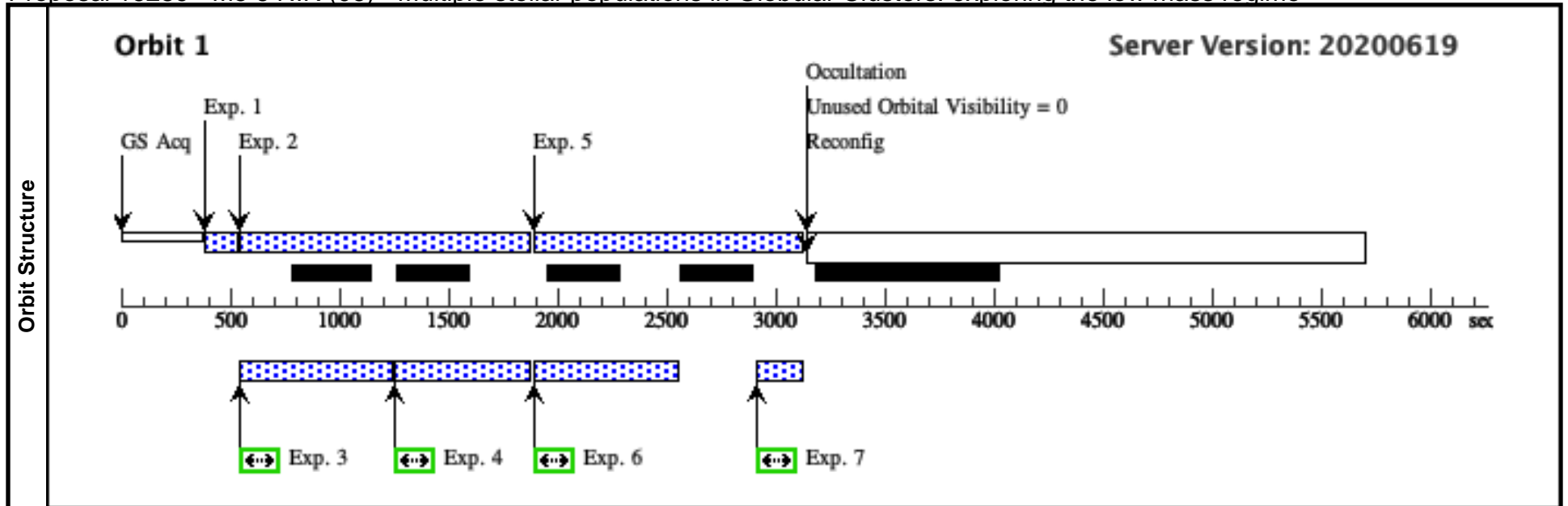
Wed Feb 24 18:00:38 GMT 2021

Visit	Proposal 16289, M5 5 NIR (05), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
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Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
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	2		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG 1.5,1.5	Prime + Parallel Group 2-4 in M5 5 NIR (05)	1302.93649 Secs (1302.936 Secs) [==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in M5 5 NIR (05)	490 Secs (490 Secs) [==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in M5 5 NIR (05)	493 Secs (493 Secs) [==>]	[1]
	5		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 1.5,1.5	Prime + Parallel Group 5-7 in M5 5 NIR (05)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in M5 5 NIR (05)	480 Secs (480 Secs) [==>]	[1]
	7		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in M5 5 NIR (05)	87 Secs (87 Secs) [==>]	[1]

Proposal 16289 - M5 6 NIR (06) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

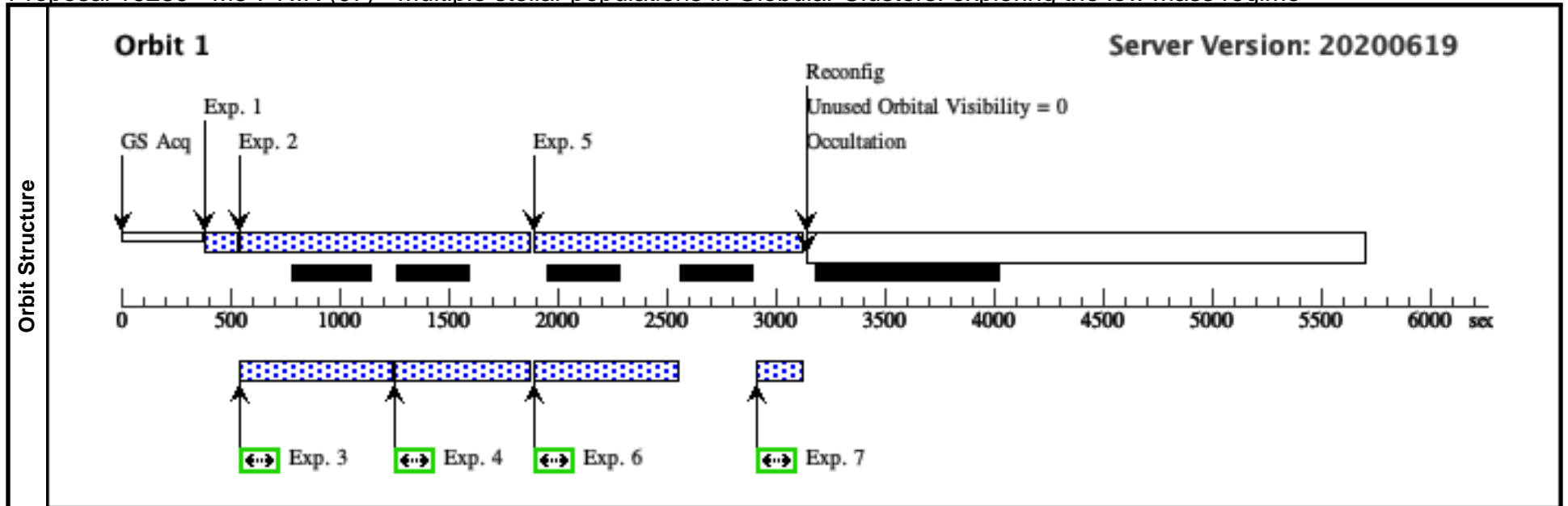
Visit	Proposal 16289, M5 6 NIR (06), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	M-5	RA: 15 18 56.1700 (229.7340417d) Dec: +02 03 49.40 (2.06372d) Equinox: J2000	Epoch of Position: 2015.5	V=5.95	Reference Frame: SIMBAD				
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Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPAR S10	POS TARG 3,3		122.943847 Secs (122.944 Secs)	
									[==>]	[1]
	2		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG 3,3	Prime + Parallel Group 2-4 in M5 6 NIR (06)	1302.93649 Secs (1302.936 Secs)	
									[==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in M5 6 NIR (06)	490 Secs (490 Secs)	
									[==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in M5 6 NIR (06)	493 Secs (493 Secs)	
								[==>]	[1]	
5		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 3,3	Prime + Parallel Group 5-7 in M5 6 NIR (06)	1202.936167 Secs (1202.936 Secs)		
								[==>]	[1]	
6		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in M5 6 NIR (06)	480 Secs (480 Secs)		
								[==>]	[1]	
7		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in M5 6 NIR (06)	87 Secs (87 Secs)		
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Proposal 16289 - M5 7 NIR (07) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

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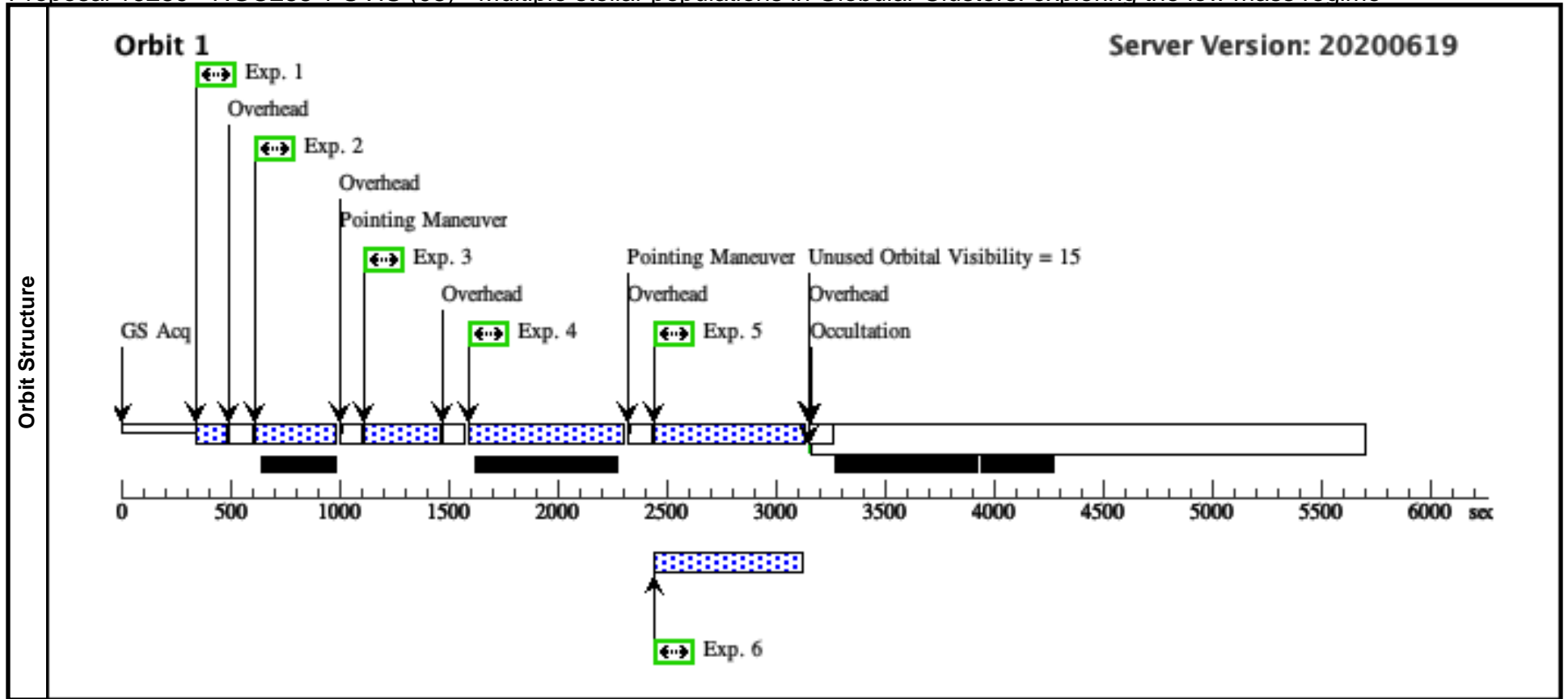
Visit	Proposal 16289, M5 7 NIR (07), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
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	<i>Comments:</i> Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER] Extended=YES									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPAR S10	POS TARG -1,-1		122.943847 Secs (122.944 Secs) [==>]	[1]
	2		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG -1,-1	Prime + Parallel Group 2-4 in M5 7 NIR (07)	1302.93649 Secs (1302.936 Secs) [==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in M5 7 NIR (07)	490 Secs (490 Secs) [==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in M5 7 NIR (07)	493 Secs (493 Secs) [==>]	[1]
	5		(1) M-5	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG -1,-1	Prime + Parallel Group 5-7 in M5 7 NIR (07)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in M5 7 NIR (07)	480 Secs (480 Secs) [==>]	[1]
	7		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in M5 7 NIR (07)	87 Secs (87 Secs) [==>]	[1]



Proposal 16289 - NGC288 1 UVIS (08) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

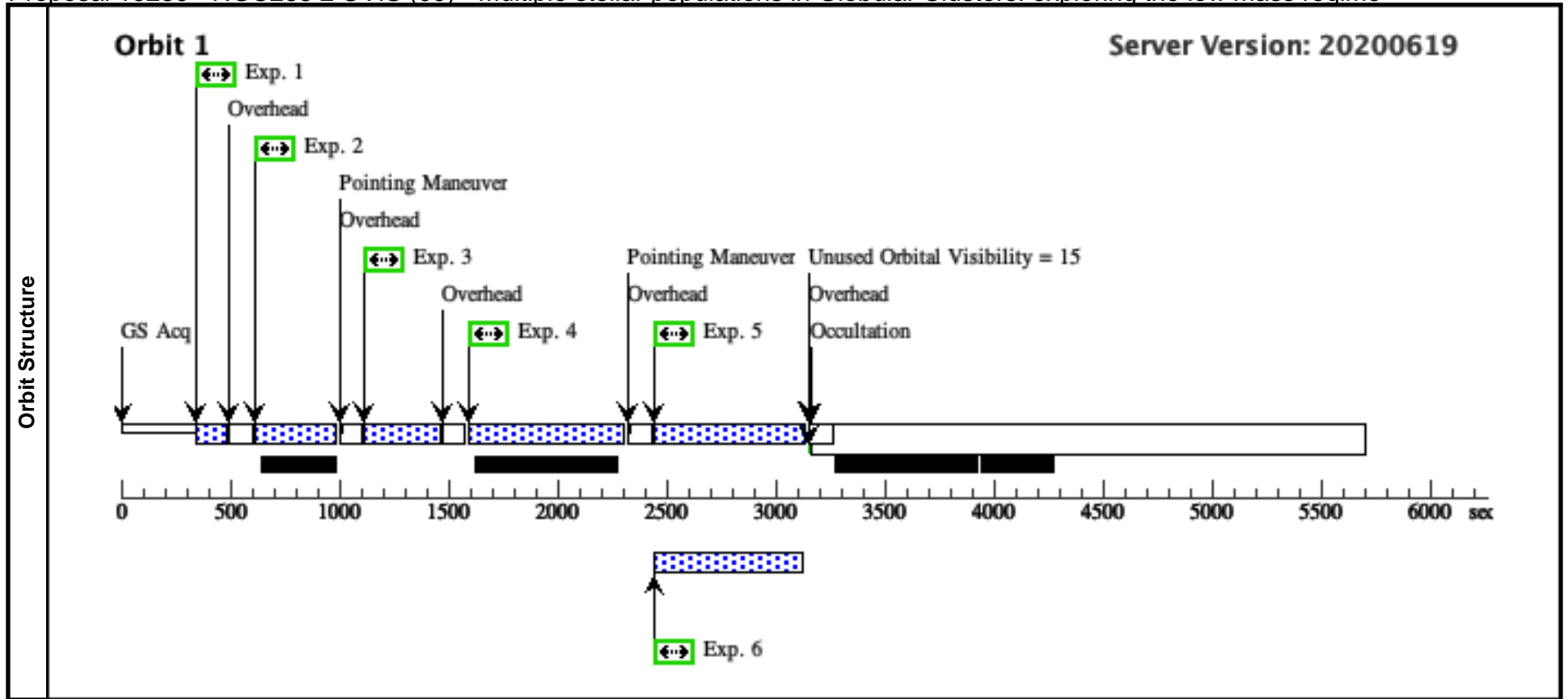
Visit	Proposal 16289, NGC288 1 UVIS (08), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)									
	(Exposure 4 (NGC288 1 UVIS (08))) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser (Primary Exposure 5 (Prime + Parallel Group 5-6 in NGC288 1 UVIS (08))) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser									
Diagnosics										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC-288	RA: 00 52 22.4400 (13.0935000d) Dec: -26 36 53.28 (-26.61480d) Equinox: J2000	Epoch of Position: 2015.5	V=8.13	Reference Frame: SIMBAD				
Comments: Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(2) NGC-288		WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=14	POS TARG -1.5,-1.5		105 Secs (105 Secs) [==>]	[1]
	2	(2) NGC-288		WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG -1.5,-1.5		348 Secs (348 Secs) [==>]	[1]
	3	(2) NGC-288		WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG 1.5,1.5		348 Secs (348 Secs) [==>]	[1]
	4	(2) NGC-288		WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG 1.5,1.5		690 Secs (690 Secs) [==>]	[1]
	5	(2) NGC-288		WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG -1.5,-1.5	Prime + Parallel Group 5-6 in NGC288 1 UVIS (08)	690 Secs (690 Secs) [==>]	[1]
	6	ANY		ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-6 in NGC288 1 UVIS (08)	472 Secs (472 Secs) [==>]	[1]



Proposal 16289 - NGC288 2 UVIS (09) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

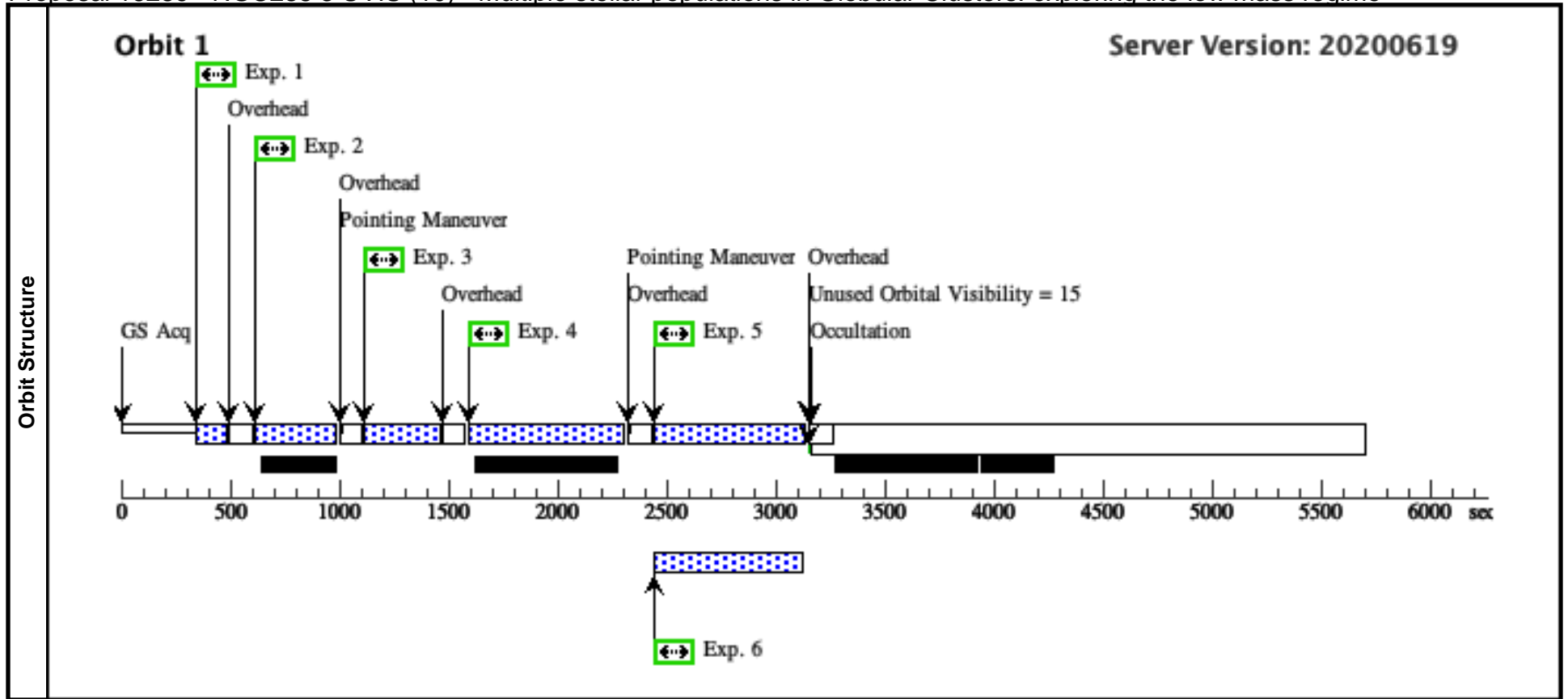
Visit	Proposal 16289, NGC288 2 UVIS (09), scheduling Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)									
	(Exposure 4 (NGC288 2 UVIS (09))) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser (Primary Exposure 5 (Prime + Parallel Group 5-6 in NGC288 2 UVIS (09))) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser									
Diagnosics										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC-288	RA: 00 52 22.4400 (13.0935000d) Dec: -26 36 53.28 (-26.61480d) Equinox: J2000	Epoch of Position: 2015.5	V=8.13	Reference Frame: SIMBAD				
Comments: Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) NGC-288	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=14	POS TARG 3,3		105 Secs (105 Secs)	
									[==>]	[1]
	2		(2) NGC-288	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG 3,3		348 Secs (348 Secs)	
									[==>]	[1]
	3		(2) NGC-288	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG 4.5,4.5		348 Secs (348 Secs)	
									[==>]	[1]
	4		(2) NGC-288	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG 4.5,4.5		690 Secs (690 Secs)	
								[==>]	[1]	
5		(2) NGC-288	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG 3,3	Prime + Parallel Group 5-6 in NGC288 2 UVIS (09)		690 Secs (690 Secs)	
								[==>]	[1]	
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in NGC288 2 UVIS (09)		472 Secs (472 Secs)	
								[==>]	[1]	



Proposal 16289 - NGC288 3 UVIS (10) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

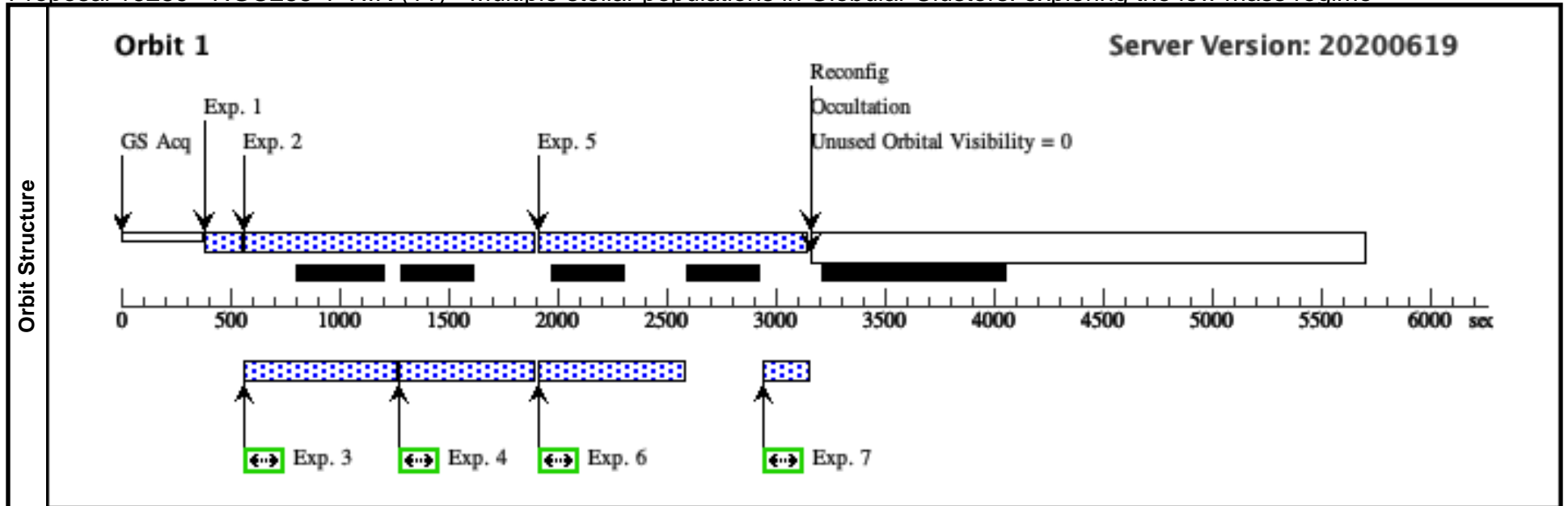
Visit	Proposal 16289, NGC288 3 UVIS (10), scheduling Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)									
	(Exposure 4 (NGC288 3 UVIS (10))) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser (Primary Exposure 5 (Prime + Parallel Group 5-6 in NGC288 3 UVIS (10))) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser									
Diagnosics										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	NGC-288	RA: 00 52 22.4400 (13.0935000d) Dec: -26 36 53.28 (-26.61480d) Equinox: J2000	Epoch of Position: 2015.5	V=8.13	Reference Frame: SIMBAD				
Comments: Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) NGC-288	WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=14	POS TARG 6,6		105 Secs (105 Secs)	
									[==>]	[1]
	2		(2) NGC-288	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG 6,6		348 Secs (348 Secs)	
									[==>]	[1]
	3		(2) NGC-288	WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG 7.5,7.5		348 Secs (348 Secs)	
									[==>]	[1]
	4		(2) NGC-288	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG 7.5,7.5		690 Secs (690 Secs)	
								[==>]	[1]	
5		(2) NGC-288	WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG 6,6	Prime + Parallel Group 5-6 in NGC288 3 UVIS (10)		690 Secs (690 Secs)	
								[==>]	[1]	
6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in NGC288 3 UVIS (10)		472 Secs (472 Secs)	
								[==>]	[1]	



Proposal 16289 - NGC288 4 NIR (11) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

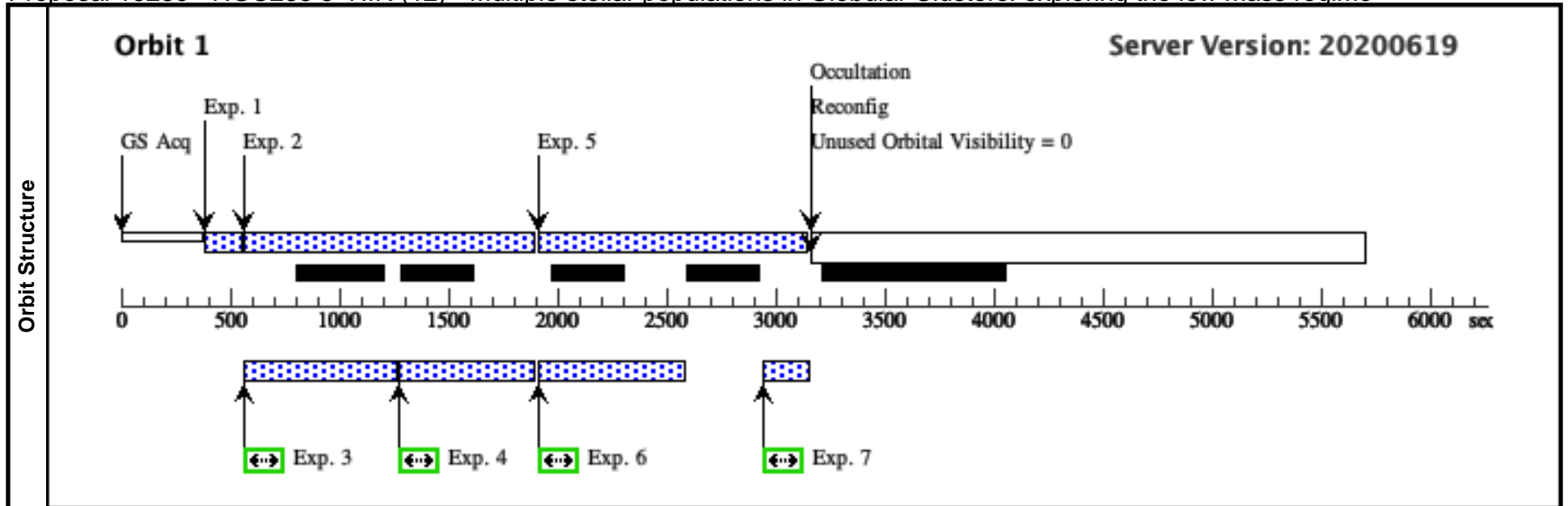
Visit	Proposal 16289, NGC288 4 NIR (11), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	NGC-288	RA: 00 52 22.4400 (13.0935000d) Dec: -26 36 53.28 (-26.61480d) Equinox: J2000	Epoch of Position: 2015.5	V=8.13	Reference Frame: SIMBAD				
	<i>Comments:</i> Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=SPAR S10	POS TARG -3,-3		142.945773 Secs (142.946 Secs) [==>]	[1]
	2		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG -3,-3	Prime + Parallel Group 2-4 in NGC288 4 NIR (11)	1302.93649 Secs (1302.936 Secs) [==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in NGC288 4 NIR (11)	490 Secs (490 Secs) [==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in NGC288 4 NIR (11)	493 Secs (493 Secs) [==>]	[1]
	5		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG -3,-3	Prime + Parallel Group 5-7 in NGC288 4 NIR (11)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in NGC288 4 NIR (11)	487 Secs (487 Secs) [==>]	[1]
	7		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in NGC288 4 NIR (11)	83 Secs (83 Secs) [==>]	[1]



Proposal 16289 - NGC288 5 NIR (12) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

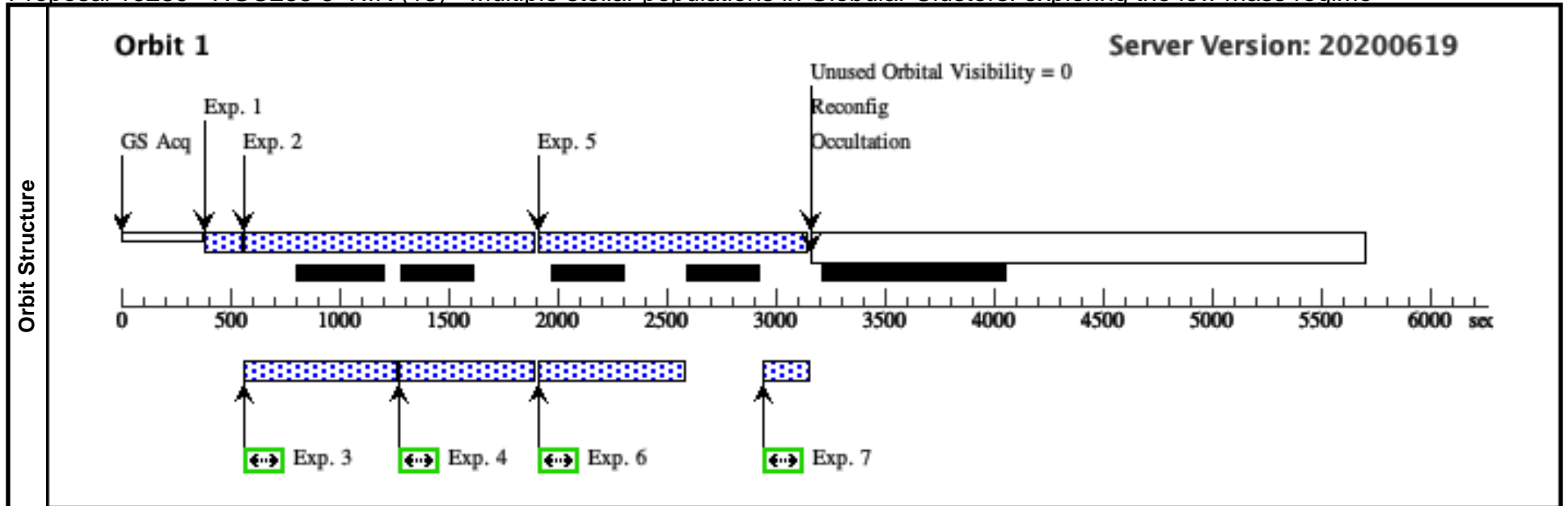
Visit	Proposal 16289, NGC288 5 NIR (12), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	NGC-288	RA: 00 52 22.4400 (13.0935000d) Dec: -26 36 53.28 (-26.61480d) Equinox: J2000	Epoch of Position: 2015.5	V=8.13	Reference Frame: SIMBAD				
	<i>Comments:</i> Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=SPAR S10	POS TARG -1.5,-1.5		142.945773 Secs (142.946 Secs) [==>]	[1]
	2		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG -1.5,-1.5	Prime + Parallel Group 2-4 in NGC288 5 NIR (12)	1302.93649 Secs (1302.936 Secs) [==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in NGC288 5 NIR (12)	490 Secs (490 Secs) [==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in NGC288 5 NIR (12)	493 Secs (493 Secs) [==>]	[1]
	5		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG -1.5,-1.5	Prime + Parallel Group 5-7 in NGC288 5 NIR (12)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in NGC288 5 NIR (12)	487 Secs (487 Secs) [==>]	[1]
	7		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in NGC288 5 NIR (12)	83 Secs (83 Secs) [==>]	[1]



Proposal 16289 - NGC288 6 NIR (13) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

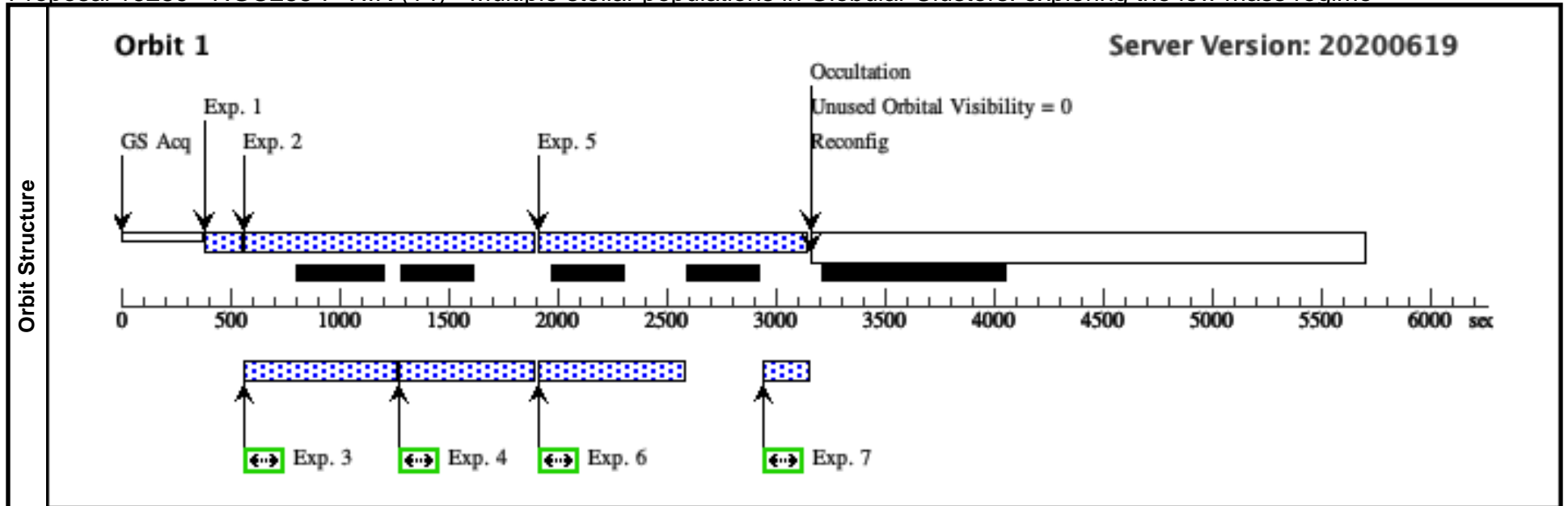
Visit	Proposal 16289, NGC288 6 NIR (13), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	NGC-288	RA: 00 52 22.4400 (13.0935000d) Dec: -26 36 53.28 (-26.61480d) Equinox: J2000	Epoch of Position: 2015.5	V=8.13	Reference Frame: SIMBAD				
	<i>Comments:</i> Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=15; SAMP-SEQ=SPAR S10	POS TARG 0,0		142.945773 Secs (142.946 Secs) [==>]	[1]
	2		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG 0,0	Prime + Parallel Group 2-4 in NGC288 6 NIR (13)	1302.93649 Secs (1302.936 Secs) [==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in NGC288 6 NIR (13)	490 Secs (490 Secs) [==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in NGC288 6 NIR (13)	493 Secs (493 Secs) [==>]	[1]
	5		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 0,0	Prime + Parallel Group 5-7 in NGC288 6 NIR (13)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in NGC288 6 NIR (13)	487 Secs (487 Secs) [==>]	[1]
	7		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in NGC288 6 NIR (13)	83 Secs (83 Secs) [==>]	[1]



Proposal 16289 - NGC288 7 NIR (14) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

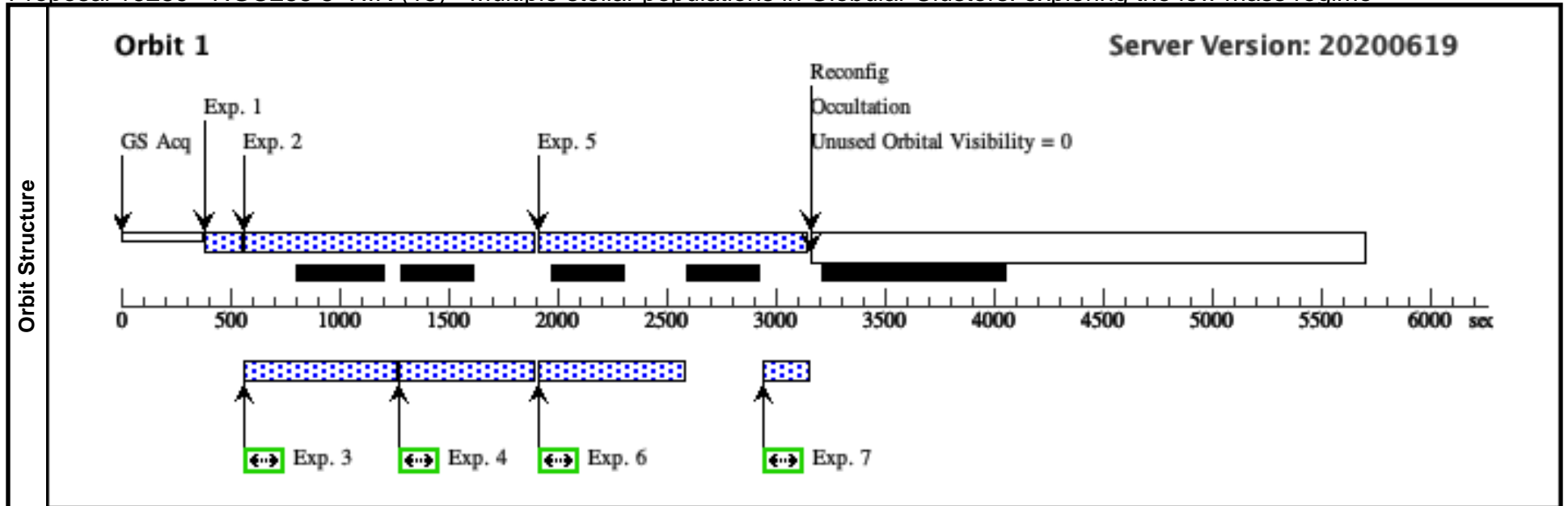
Visit	Proposal 16289, NGC288 7 NIR (14), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	NGC-288	RA: 00 52 22.4400 (13.0935000d) Dec: -26 36 53.28 (-26.61480d) Equinox: J2000	Epoch of Position: 2015.5	V=8.13	Reference Frame: SIMBAD				
	<i>Comments:</i> Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S10	POS TARG 1.5,1.5		142.945773 Secs (142.946 Secs) [==>]	[1]
	2		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG 1.5,1.5	Prime + Parallel Group 2-4 in NGC288 7 NIR (14)	1302.93649 Secs (1302.936 Secs) [==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in NGC288 7 NIR (14)	490 Secs (490 Secs) [==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in NGC288 7 NIR (14)	493 Secs (493 Secs) [==>]	[1]
	5		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 1.5,1.5	Prime + Parallel Group 5-7 in NGC288 7 NIR (14)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in NGC288 7 NIR (14)	487 Secs (487 Secs) [==>]	[1]
	7		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in NGC288 7 NIR (14)	83 Secs (83 Secs) [==>]	[1]



Proposal 16289 - NGC288 8 NIR (15) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

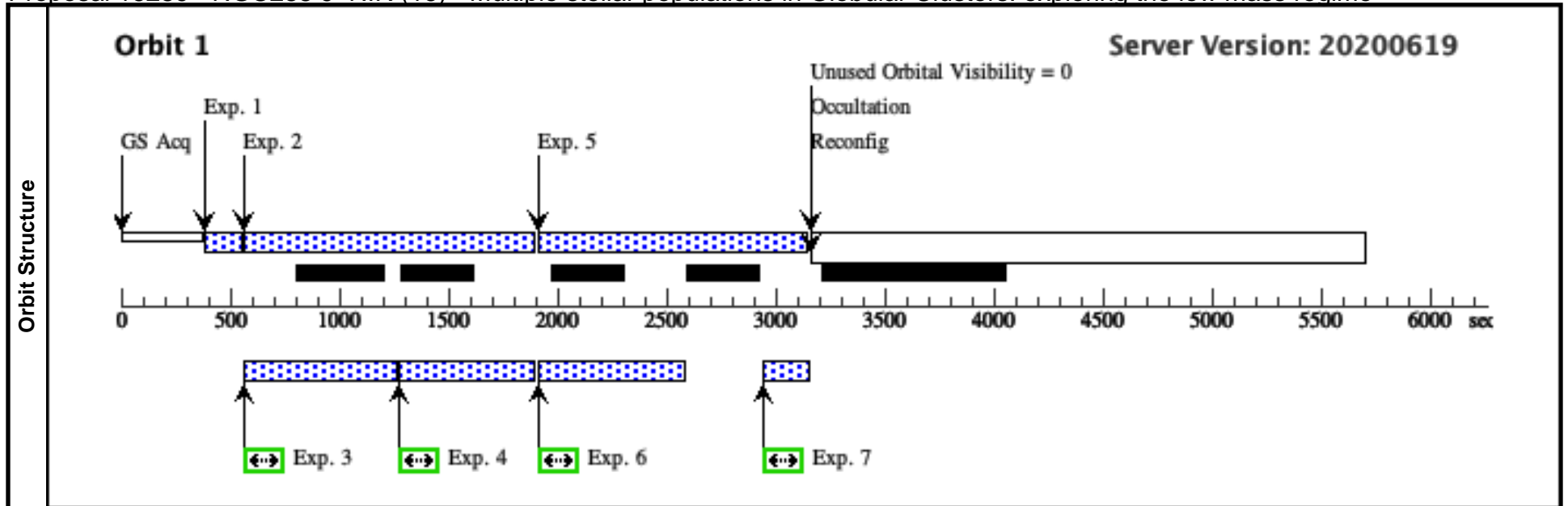
Visit	Proposal 16289, NGC288 8 NIR (15), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	NGC-288	RA: 00 52 22.4400 (13.0935000d) Dec: -26 36 53.28 (-26.61480d) Equinox: J2000	Epoch of Position: 2015.5	V=8.13	Reference Frame: SIMBAD				
	<i>Comments:</i> Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S10	POS TARG 3,3		142.945773 Secs (142.946 Secs) [==>]	[1]
	2		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG 3,3	Prime + Parallel Group 2-4 in NGC288 8 NIR (15)	1302.93649 Secs (1302.936 Secs) [==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in NGC288 8 NIR (15)	490 Secs (490 Secs) [==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 2-4 in NGC288 8 NIR (15)	493 Secs (493 Secs) [==>]	[1]
	5		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F110W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 3,3	Prime + Parallel Group 5-7 in NGC288 8 NIR (15)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in NGC288 8 NIR (15)	487 Secs (487 Secs) [==>]	[1]
	7		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-7 in NGC288 8 NIR (15)	83 Secs (83 Secs) [==>]	[1]



Proposal 16289 - NGC288 9 NIR (16) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:38 GMT 2021

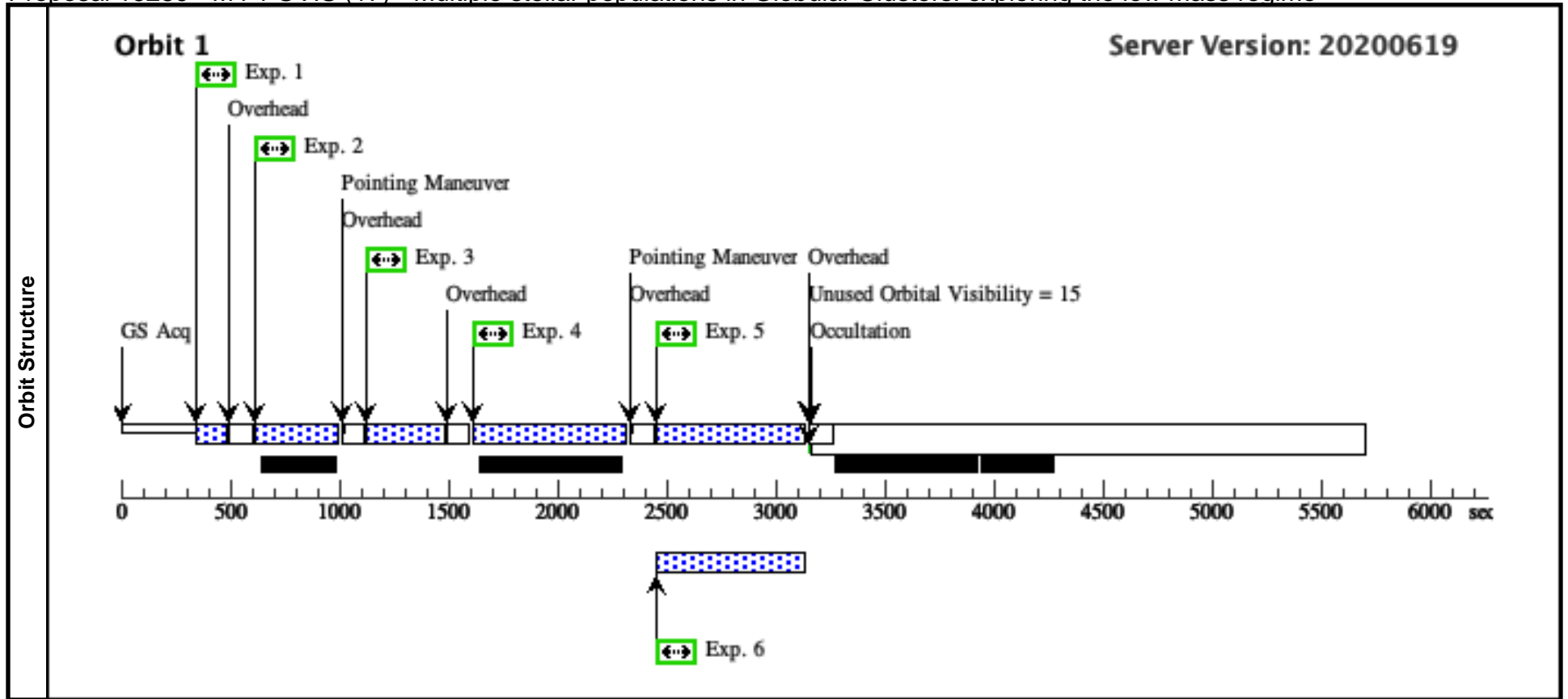
Visit	Proposal 16289, NGC288 9 NIR (16), failed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	NGC-288	RA: 00 52 22.4400 (13.0935000d) Dec: -26 36 53.28 (-26.61480d) Equinox: J2000	Epoch of Position: 2015.5	V=8.13	Reference Frame: SIMBAD				
	<i>Comments:</i> Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S10	POS TARG 0.5,-0.5		142.945773 Secs (142.946 Secs) [==>]	[1]
	2		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG 0.5,-0.5	Prime + Parallel Group 2-4 in NGC288 9 NIR (16)	1302.93649 Secs (1302.936 Secs) [==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in NGC288 9 NIR (16)	490 Secs (490 Secs) [==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in NGC288 9 NIR (16)	493 Secs (493 Secs) [==>]	[1]
	5		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 0.5,-0.5	Prime + Parallel Group 5-7 in NGC288 9 NIR (16)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in NGC288 9 NIR (16)	487 Secs (487 Secs) [==>]	[1]
	7		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in NGC288 9 NIR (16)	83 Secs (83 Secs) [==>]	[1]



Proposal 16289 - M4 1 UVIS (17) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:39 GMT 2021

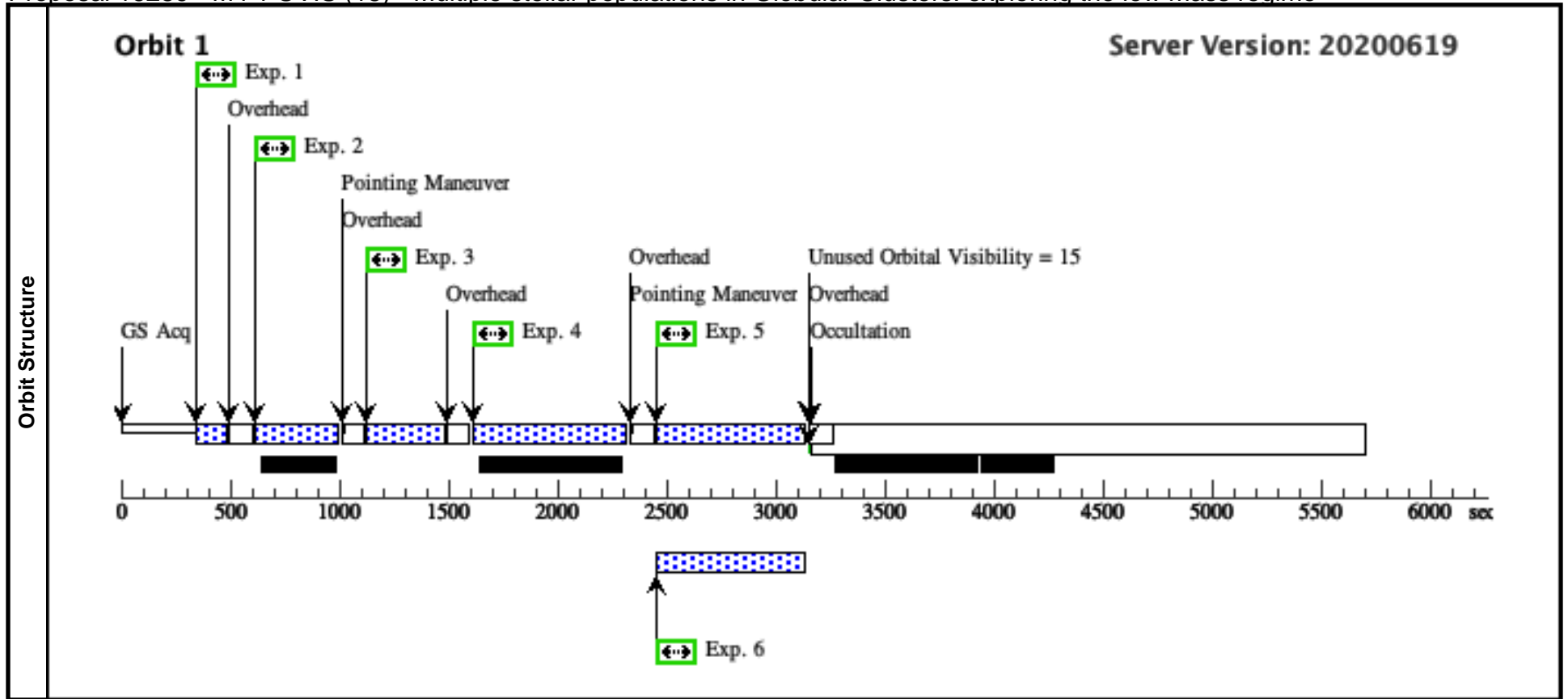
Visit	Proposal 16289, M4 1 UVIS (17), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)									
	(Exposure 4 (M4 1 UVIS (17))) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser (Primary Exposure 5 (Prime + Parallel Group 5-6 in M4 1 UVIS (17))) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser									
Diagnosics										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	M-4	RA: 16 23 43.5000 (245.9312500d) Dec: -26 29 57.00 (-26.49917d) Equinox: J2000	Epoch of Position: 2015.5	V=-7	Reference Frame: SIMBAD				
Comments: Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(3) M-4		WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=14	POS TARG -1.5,-1.5		105 Secs (105 Secs)	
									[==>]	[1]
	2	(3) M-4		WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG -1.5,-1.5		358 Secs (358 Secs)	
									[==>]	[1]
	3	(3) M-4		WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG 1.5,1.5		358 Secs (358 Secs)	
									[==>]	[1]
	4	(3) M-4		WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG 1.5,1.5		680 Secs (680 Secs)	
								[==>]	[1]	
5	(3) M-4		WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG -1.5,-1.5	Prime + Parallel Group 5-6 in M4 1 UVIS (17)	680 Secs (680 Secs)		
								[==>]	[1]	
6	ANY		ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-6 in M4 1 UVIS (17)	472 Secs (472 Secs)		
								[==>]	[1]	



Proposal 16289 - M4 1 UVIS (18) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

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Visit	Proposal 16289, M4 1 UVIS (18), completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)									
	(Exposure 4 (M4 1 UVIS (18))) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser (Primary Exposure 5 (Prime + Parallel Group 5-6 in M4 1 UVIS (18))) Warning (Form): FLASH level may be too high for this exposure or a long subexposure. See extended explanation in the diagnostic browser									
Diagnosics										
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	M-4	RA: 16 23 43.5000 (245.9312500d) Dec: -26 29 57.00 (-26.49917d) Equinox: J2000	Epoch of Position: 2015.5	V=-7	Reference Frame: SIMBAD				
Comments: Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(3) M-4		WFC3/UVIS, ACCUM, UVIS-CENTER	F438W	FLASH=14	POS TARG 3,3		105 Secs (105 Secs)	
									[==>]	[1]
	2	(3) M-4		WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG 3,3		358 Secs (358 Secs)	
									[==>]	[1]
	3	(3) M-4		WFC3/UVIS, ACCUM, UVIS-CENTER	F336W	FLASH=14	POS TARG 4.5,4.5		358 Secs (358 Secs)	
									[==>]	[1]
	4	(3) M-4		WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG 4.5,4.5		680 Secs (680 Secs)	
								[==>]	[1]	
5	(3) M-4		WFC3/UVIS, ACCUM, UVIS-CENTER	F275W	FLASH=16	POS TARG 3,3	Prime + Parallel Group 5-6 in M4 1 UVIS (18)		680 Secs (680 Secs)	
								[==>]	[1]	
6	ANY		ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 5-6 in M4 1 UVIS (18)		472 Secs (472 Secs)	
								[==>]	[1]	



Proposal 16289 - NGC288 9 NIR repeat (19) - Multiple stellar populations in Globular Clusters: exploring the low mass regime

Wed Feb 24 18:00:39 GMT 2021

Visit	Proposal 16289, NGC288 9 NIR repeat (19), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, ACS/WFC Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	NGC-288	RA: 00 52 22.4400 (13.0935000d) Dec: -26 36 53.28 (-26.61480d) Equinox: J2000	Epoch of Position: 2015.5	V=8.13	Reference Frame: SIMBAD				
	<i>Comments:</i> Category=STELLAR CLUSTER Description=[GLOBULAR CLUSTER]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=15; SAMP-SEQ=SPAR S10	POS TARG 0.5,-0.5		142.945773 Secs (142.946 Secs) [==>]	[1]
	2		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=14; SAMP-SEQ=SPAR S100	POS TARG 0.5,-0.5	Prime + Parallel Group 2-4 in NGC288 9 NIR repeat (19)	1302.93649 Secs (1302.936 Secs) [==>]	[1]
	3		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in NGC288 9 NIR repeat (19)	490 Secs (490 Secs) [==>]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F814W			Prime + Parallel Group 2-4 in NGC288 9 NIR repeat (19)	493 Secs (493 Secs) [==>]	[1]
	5		(2) NGC-288	WFC3/IR, MULTIACCUM, IR-FIX	F160W	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 0.5,-0.5	Prime + Parallel Group 5-7 in NGC288 9 NIR repeat (19)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in NGC288 9 NIR repeat (19)	487 Secs (487 Secs) [==>]	[1]
	7		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 5-7 in NGC288 9 NIR repeat (19)	83 Secs (83 Secs) [==>]	[1]

