



15877 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Cycle: 27, Proposal Category: GO

(UV Initiative)

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

<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) NGC6946-2 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:18.0	yes
02	(2) NGC6946-3 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:20.0	yes
03	(3) NGC6946-4 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:22.0	yes
04	(4) NGC6946-5 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:24.0	yes
05	(5) NGC6946-6 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:26.0	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>
06	(6) NGC6946-7 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:28.0	yes
07	(7) NGC6946-8 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:30.0	yes
08	(8) NGC6946-9 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:32.0	yes
58	(15) NGC6946-9-COPY ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:34.0	yes
09	(9) NGC6946-10 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:36.0	yes
10	(10) NGC6946-11 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:38.0	yes
11	(11) NGC6946-12 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:40.0	yes
12	(12) NGC6946-13 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:42.0	yes
13	(13) NGC6946-14 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:44.0	yes
14	(14) NGC6946-15 ANY	ACS/WFC WFC3/UVIS	3	17-Dec-2020 12:00:46.0	yes

45 Total Orbits Used

ABSTRACT

NGC 6946 hosted at least 10 core-collapse supernovae observed in the past century - far more than any of its star forming peers - earning its name as the Fireworks Galaxy. Yet, no HST UV image of this galaxy exists. This is a roadblock for the observational study of massive stars formation, evolution and death as young high mass stars commonly have substantial UV emission. HST is the only telescope that can produce high resolution photometry at the wavelengths and depths necessary to remedy this situation. We will utilize 42 HST orbits to produce WFC3/UVIS F275W and F336W maps of the Fireworks Galaxy, create a complete catalog of its O-Type young massive stars and investigate NGC 6946's ccSNe and star

Proposal 15877 (STScI Edit Number: 2, Created: Thursday, December 17, 2020 at 12:00:46 PM Eastern Standard Time) - Overview
formation history. Combining the proposed shorter wavelength data with existing and scheduled HST observations, we will characterize the Fireworks Galaxy's future ccSNe progenitors and produce an extensive library of massive star spectral energy distributions. The proposed observations and data products will create a high value archival resource of broad interest to the scientific community, and immediately augment the utility of existing and anticipated HST data.

OBSERVING DESCRIPTION

We will map the NGC 6946 galaxy using 14 pointings, excluding the farther north and south regions on the 4x4 grid shown in Figure 1 of the Phase I proposal, as these two boxes (numbered 1 and 16) contain relatively tiny portions of the Galaxy's stellar contents and none of the observed ccSNe or SN remnants detected in the optical/radio. The adjacent pointings overlap each other at the edges of ~5%. Since photometric quality close to the edges is usually poor due to difficulties with background subtraction and sky level estimation, the overlaps will ensure that there are no gaps in catalog and no avoidable inconsistencies in catalog completeness or photometry quality across the galaxy.

To control for hot pixels and cosmic rays, we want 3 dither positions in each filter with small offsets. The target has orbital visibility periods of ~58 minutes. After guide star acquisition, each orbit will have ~3000s observing time available, which is adequate for 6 WFC3/UVIS readouts when observing with one filter per visit.

We used the HST Exposure Time Calculator to estimate the integration times necessary to detect all O-type stars in NGC 6946 at SNR=10 in the F275W and F336W filters overcoming the foreground extinction of $E(B-V)=0.35$ to be ~6000s and ~3000s or 2 orbits and 1 orbit for the requested filters. With 2+1=3 orbits for each of the 14 pointings, we require a total of 42 orbits to execute this program.

Each of the 42 requested orbits can be scheduled independently and need not be executed in any particular order. We have some flexibility with regards to the absolute orientation of the fields of view, although the 14 pointings should have similar relative orientation.

We also propose to obtain coordinated parallel observations with the ACS F435W filter. This data is not required for achieving the primary science goals of this program and we do not require any particular fields to be observed. As such, the requested parallel observations will not add any orient/roll constraints or increase the overhead while substantially contributing to the archival coverage of NGC 6946. Given the 300" separation between centers of the WFC3/UVIS (162" square) and ACS (202" square) fields of view, even observing at unconstrained orientations will

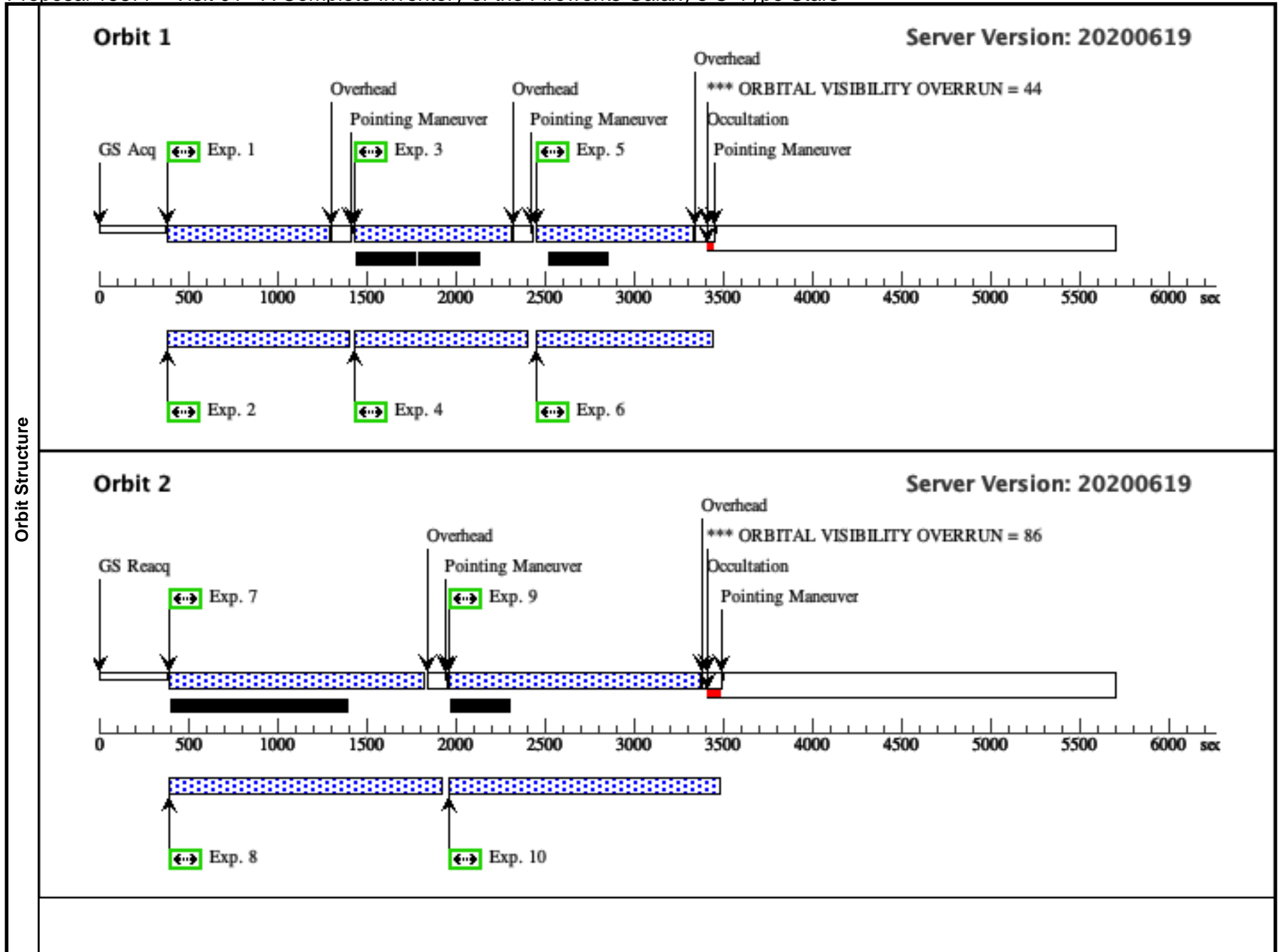
Proposal 15877 (STScI Edit Number: 2, Created: Thursday, December 17, 2020 at 12:00:46 PM Eastern Standard Time) - Overview

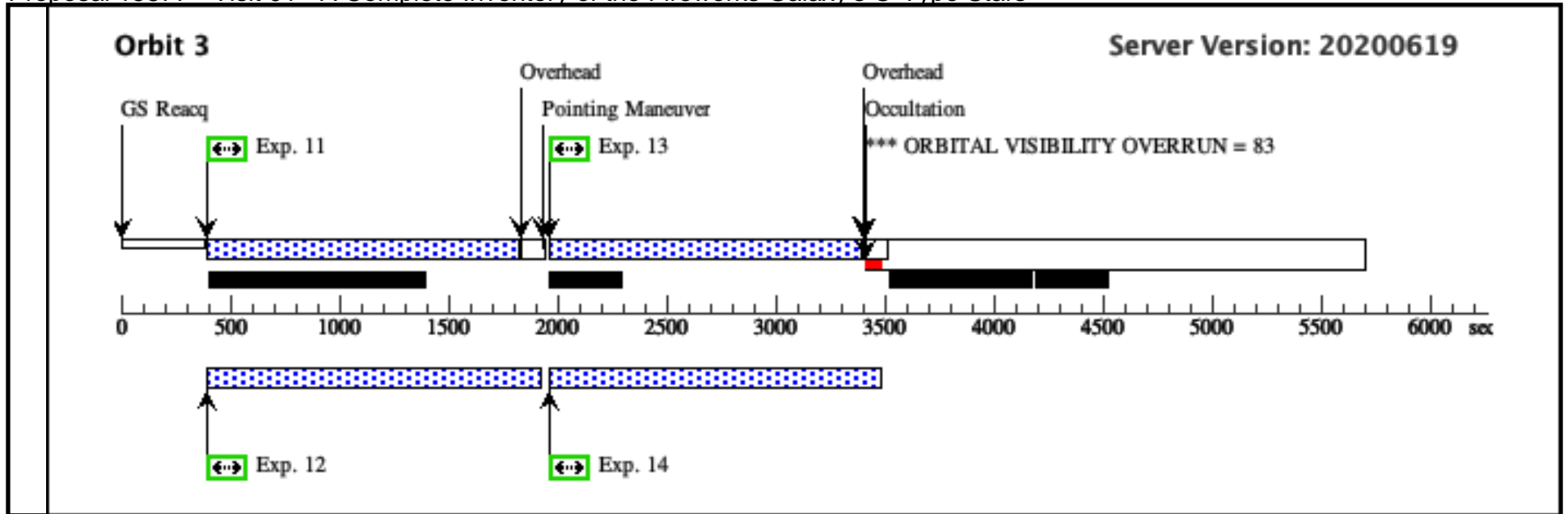
unavoidably cover significant portions of NGC 6946 for one or more orbits. To quantify the utility of the parallel observations, we used the HST ETC to estimate that in regions that are (e.g.) observed with the F435W filter for 3 orbits, we would identify all B0V and B1V stars, as well as some B2V stars, despite the foreground extinction. Since most of these sources will not be identified in the shorter wavelength F275W and F336W images, characterizing their SEDs will depend on existing and anticipated HST observations at longer wavelengths.

Proposal 15877 - Visit 01 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:46 GMT 2020

Visit	Proposal 15877, Visit 01, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	(Visit 01) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 01) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 01) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC6946-2	RA: 20 35 0.2629 (308.7510954d) Dec: +60 13 14.01 (60.22056d) Equinox: J2000		V=26.6	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[SPIRAL]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) NGC6946-2	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9			Prime + Parallel Group 1-2 in Visit 01	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 1-2 in Visit 01	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3	(1) NGC6946-2	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 01	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 3-4 in Visit 01	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5	(1) NGC6946-2	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 01	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 5-6 in Visit 01	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7	(1) NGC6946-2	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8			Prime + Parallel Group 7-8 in Visit 01	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 7-8 in Visit 01	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9	(1) NGC6946-2	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 01	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 9-10 in Visit 01	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11	(1) NGC6946-2	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 01	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 11-12 in Visit 01	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13	(1) NGC6946-2	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 01	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	14	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 13-14 in Visit 01	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]

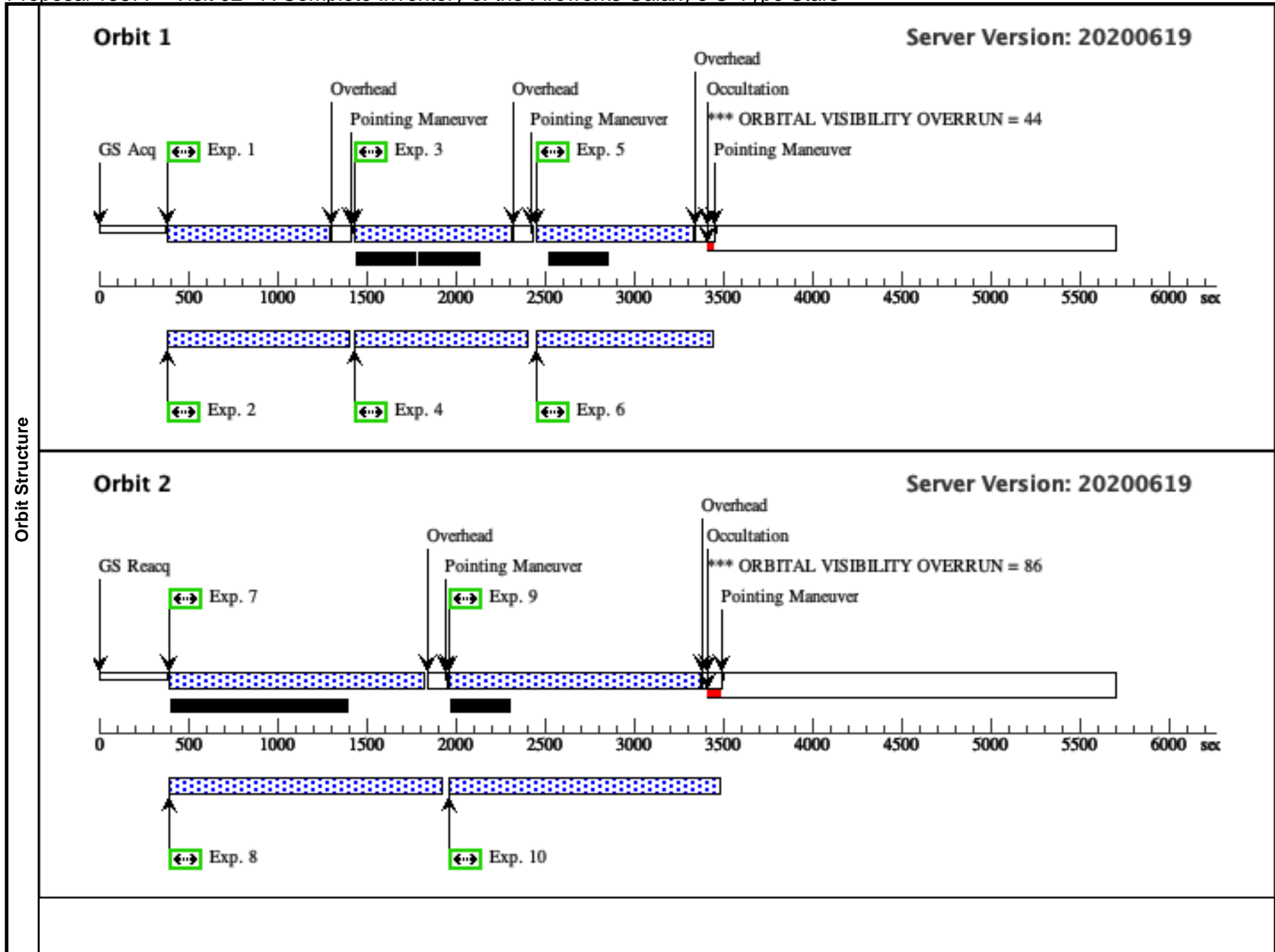


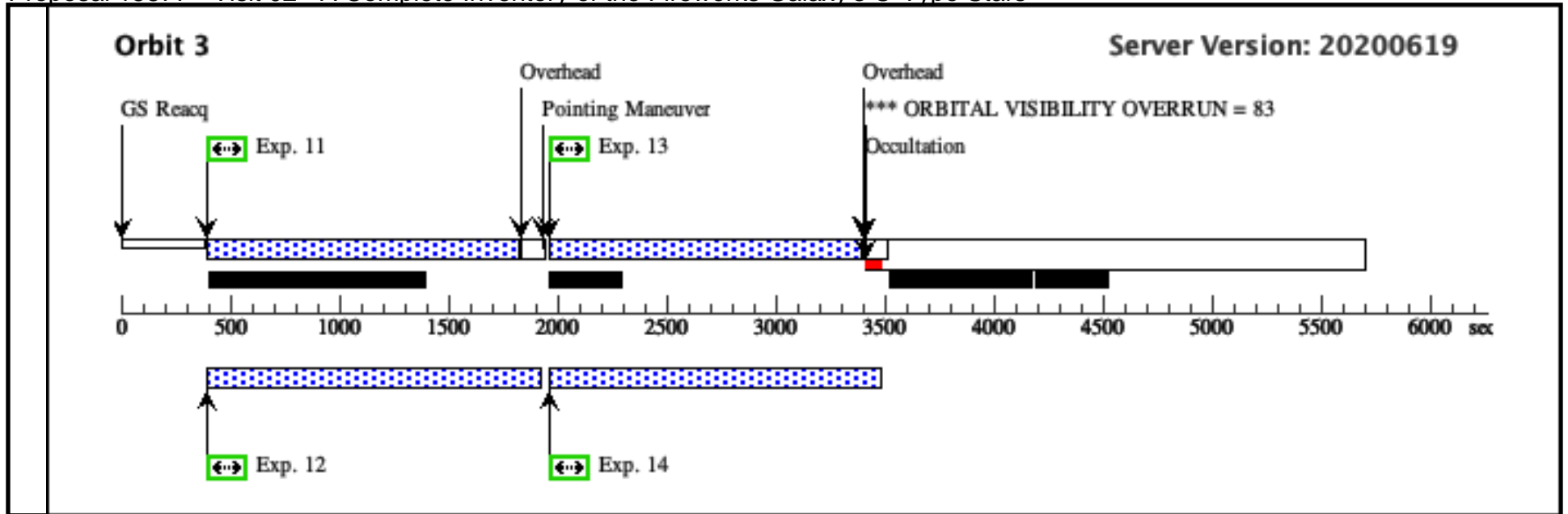


Proposal 15877 - Visit 02 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:47 GMT 2020

Visit	Proposal 15877, Visit 02, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	Diagnostics	(Visit 02) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 02) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 02) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(2)	NGC6946-3	RA: 20 34 35.6400 (308.6485000d) Dec: +60 13 14.56 (60.22071d) Equinox: J2000		V=26.6	Reference Frame: ICRS			
	<i>Comments:</i> Category=GALAXY Description=[SPIRAL]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) NGC6946-3	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		Prime + Parallel Group 1-2 in Visit 02	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in Visit 02	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3		(2) NGC6946-3	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 02	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in Visit 02	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5		(2) NGC6946-3	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 02	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 5-6 in Visit 02	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7		(2) NGC6946-3	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		Prime + Parallel Group 7-8 in Visit 02	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 7-8 in Visit 02	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9		(2) NGC6946-3	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 02	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 9-10 in Visit 02	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11		(2) NGC6946-3	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 02	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 11-12 in Visit 02	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13		(2) NGC6946-3	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 02	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
14		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 13-14 in Visit 02	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]	

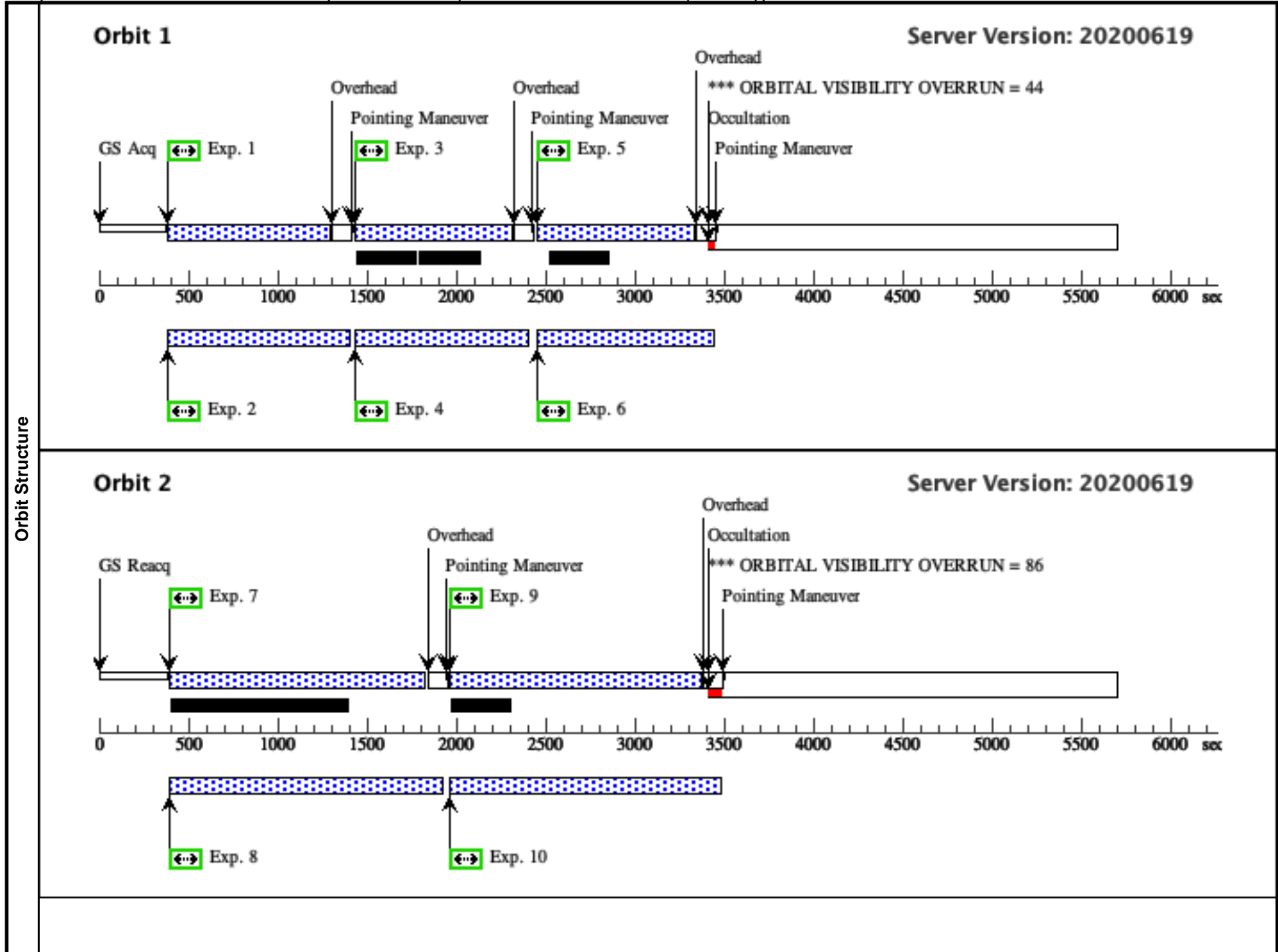


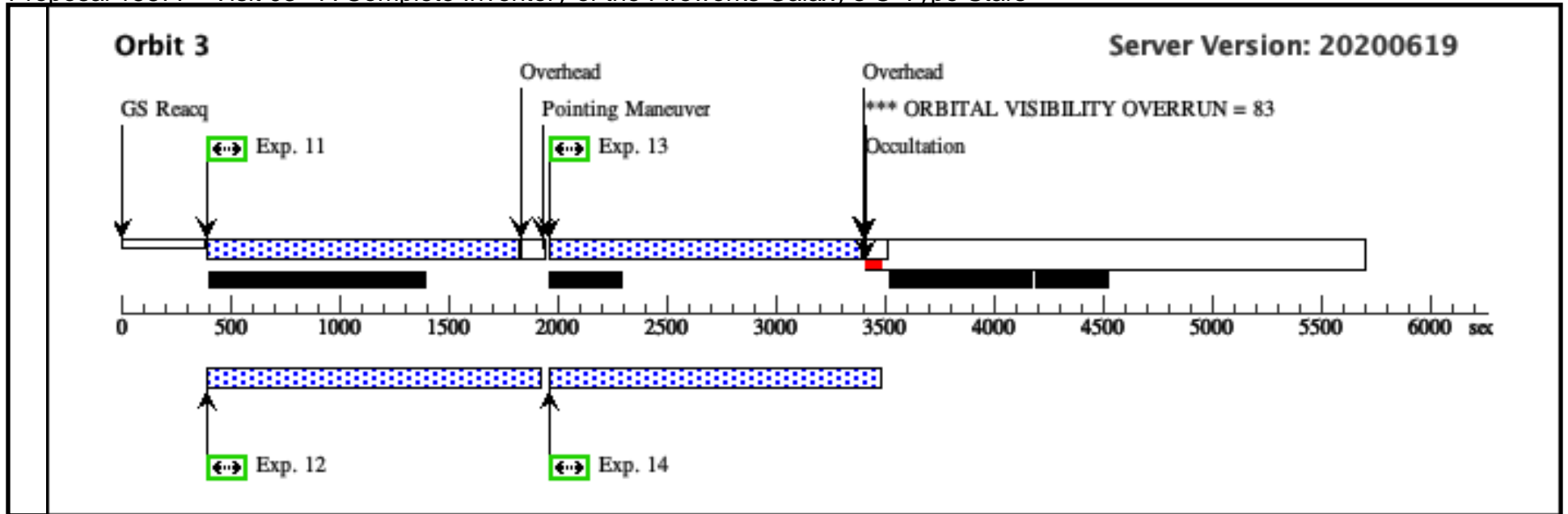


Proposal 15877 - Visit 03 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:47 GMT 2020

Visit	Proposal 15877, Visit 03, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
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Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(3)	NGC6946-4	RA: 20 35 15.0905 (308.8128771d) Dec: +60 11 23.85 (60.18996d) Equinox: J2000		V=26.6	Reference Frame: ICRS			
	<i>Comments:</i> Category=GALAXY Description=[SPIRAL]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(3) NGC6946-4	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		Prime + Parallel Group 1-2 in Visit 03	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in Visit 03	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3		(3) NGC6946-4	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 03	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in Visit 03	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5		(3) NGC6946-4	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 03	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 5-6 in Visit 03	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7		(3) NGC6946-4	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		Prime + Parallel Group 7-8 in Visit 03	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 7-8 in Visit 03	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9		(3) NGC6946-4	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 03	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 9-10 in Visit 03	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11		(3) NGC6946-4	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 03	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 11-12 in Visit 03	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13		(3) NGC6946-4	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 03	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	14		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 13-14 in Visit 03	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]

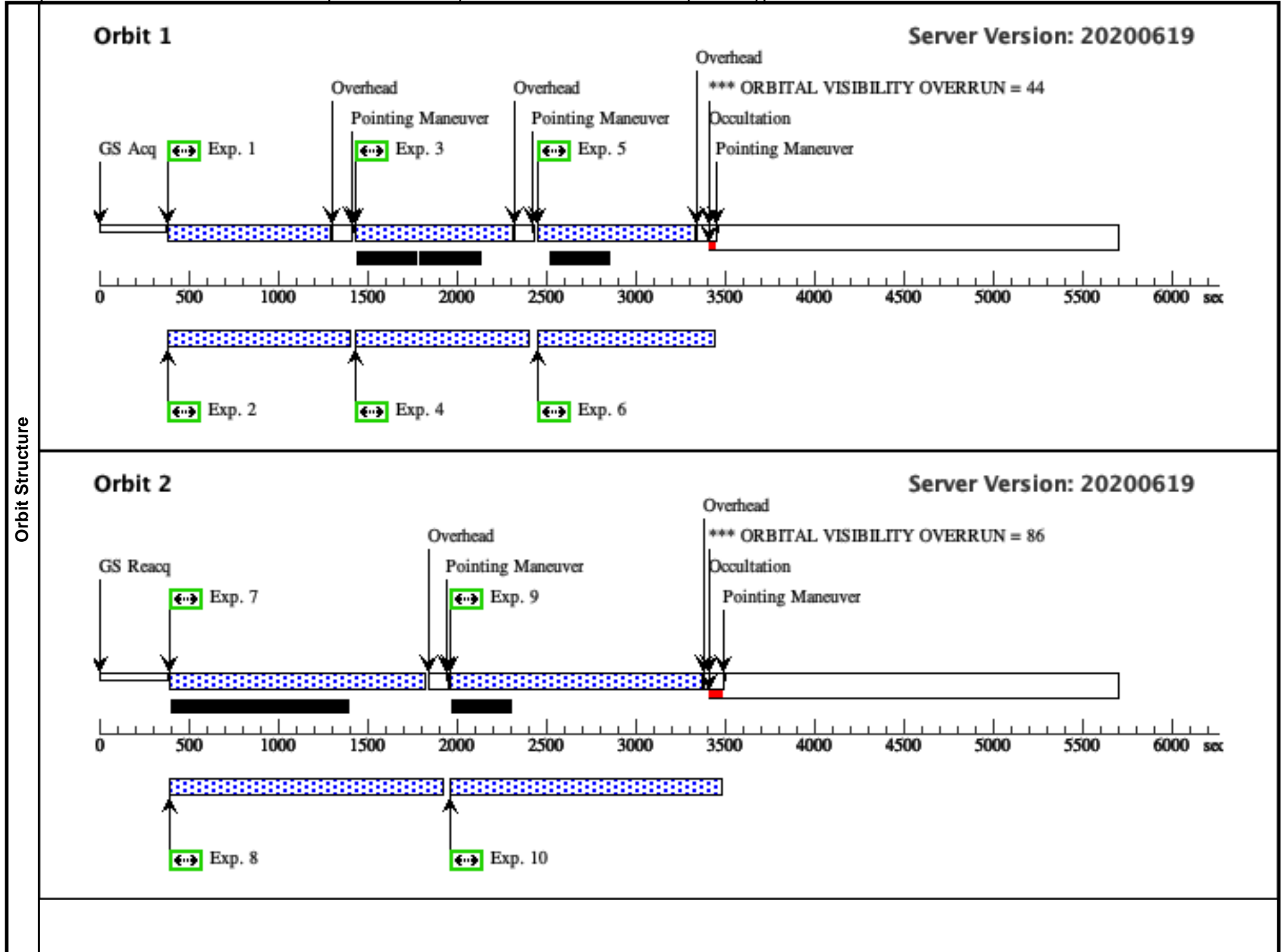


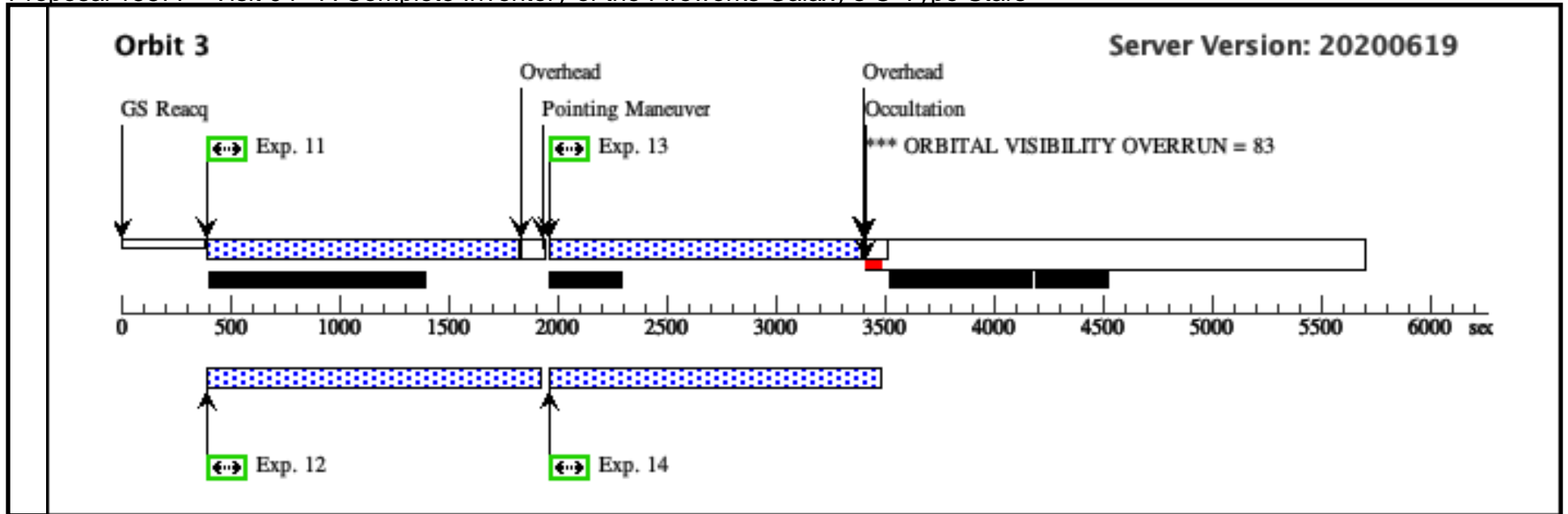


Proposal 15877 - Visit 04 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:47 GMT 2020

Visit	Proposal 15877, Visit 04, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	Diagnostics	(Visit 04) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 04) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 04) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(4)	NGC6946-5	RA: 20 34 48.9973 (308.7041554d) Dec: +60 11 9.16 (60.18588d) Equinox: J2000		V=26.6	Reference Frame: ICRS			
	<i>Comments:</i> Category=GALAXY Description=[SPIRAL]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(4) NGC6946-5	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		Prime + Parallel Group 1-2 in Visit 04	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in Visit 04	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3		(4) NGC6946-5	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 04	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in Visit 04	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5		(4) NGC6946-5	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 04	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 5-6 in Visit 04	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7		(4) NGC6946-5	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		Prime + Parallel Group 7-8 in Visit 04	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 7-8 in Visit 04	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9		(4) NGC6946-5	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 04	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 9-10 in Visit 04	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11		(4) NGC6946-5	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 04	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 11-12 in Visit 04	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13		(4) NGC6946-5	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 04	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
14		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 13-14 in Visit 04	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]	

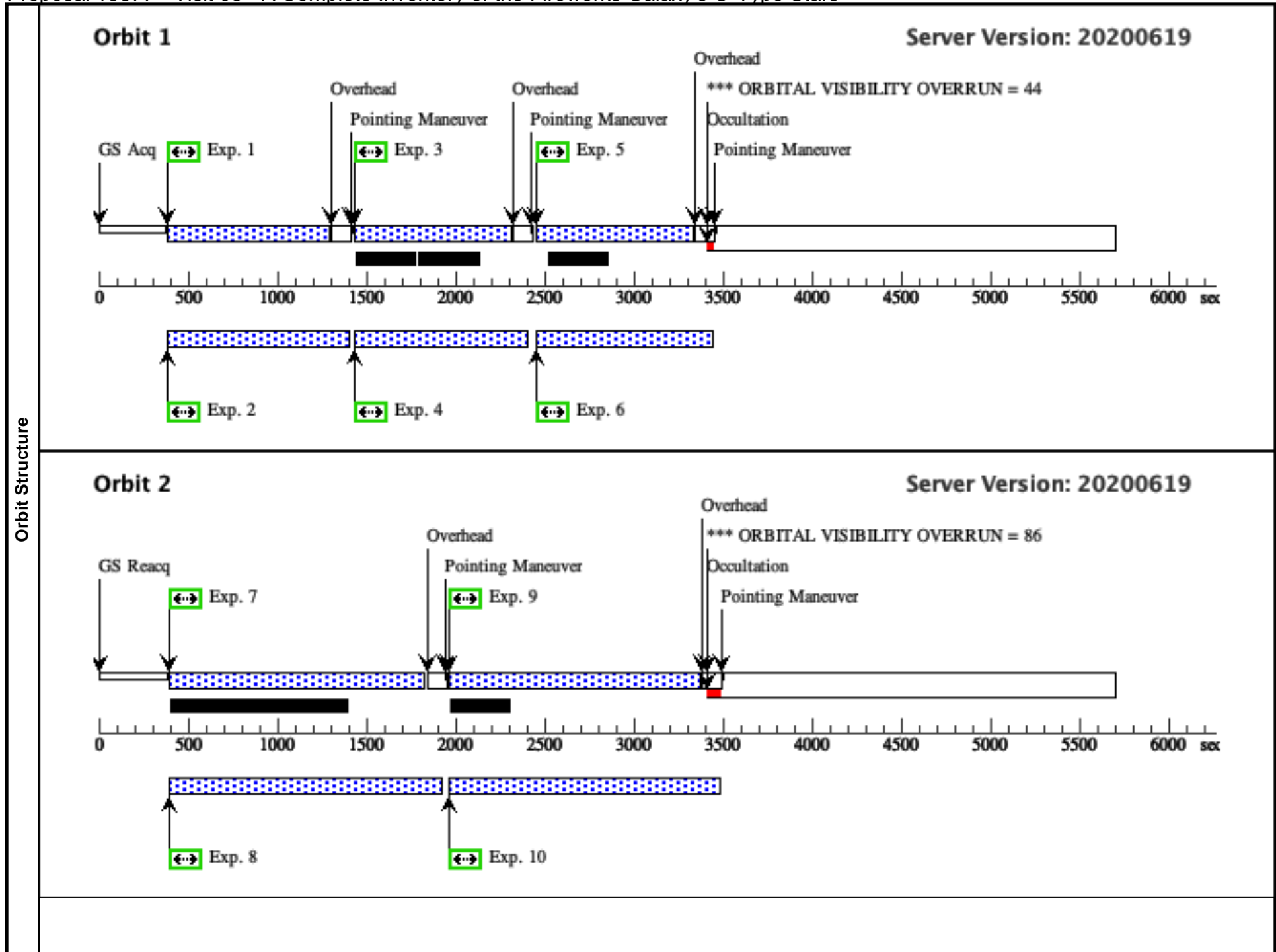


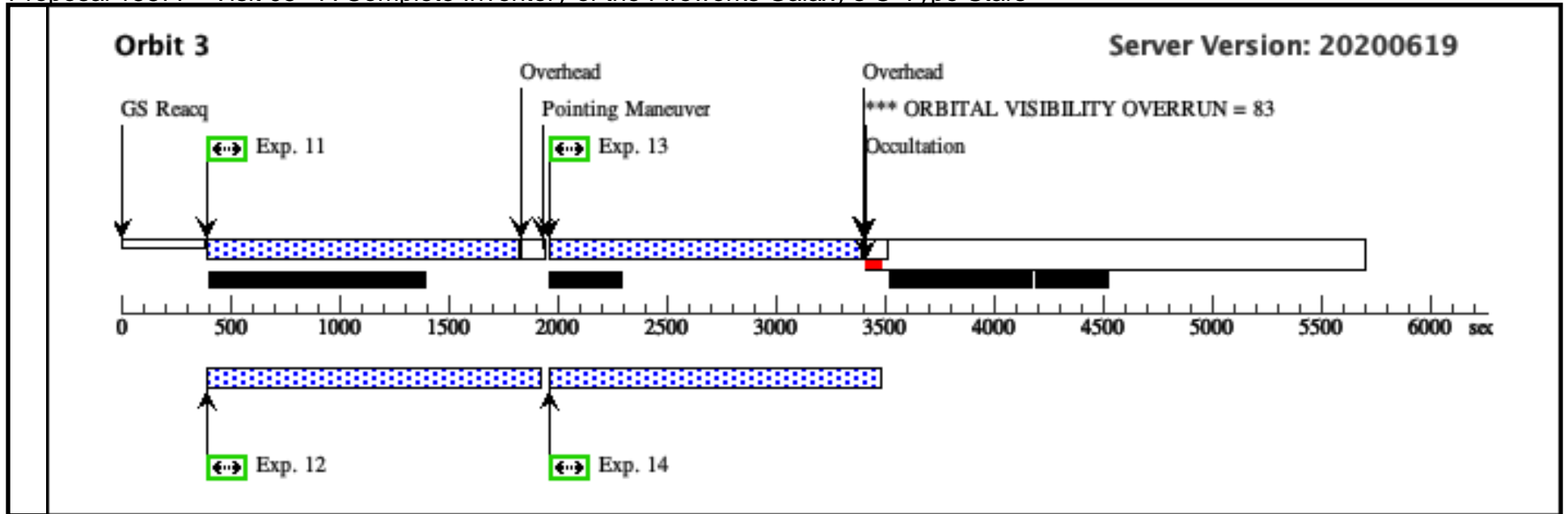


Proposal 15877 - Visit 05 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:47 GMT 2020

Visit	Proposal 15877, Visit 05, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	(Visit 05) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 05) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 05) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(5)	NGC6946-6	RA: 20 34 23.8434 (308.5993475d) Dec: +60 11 7.83 (60.18551d) Equinox: J2000		V=26.6	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[SPIRAL]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(5) NGC6946-6	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9			Prime + Parallel Group 1-2 in Visit 05	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 1-2 in Visit 05	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3	(5) NGC6946-6	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 05	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 3-4 in Visit 05	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5	(5) NGC6946-6	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 05	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 5-6 in Visit 05	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7	(5) NGC6946-6	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8			Prime + Parallel Group 7-8 in Visit 05	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 7-8 in Visit 05	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9	(5) NGC6946-6	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 05	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 9-10 in Visit 05	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11	(5) NGC6946-6	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 05	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 11-12 in Visit 05	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13	(5) NGC6946-6	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG -0.7725, 9.123168	Prime + Parallel Group 13-14 in Visit 05	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	14	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 13-14 in Visit 05	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]

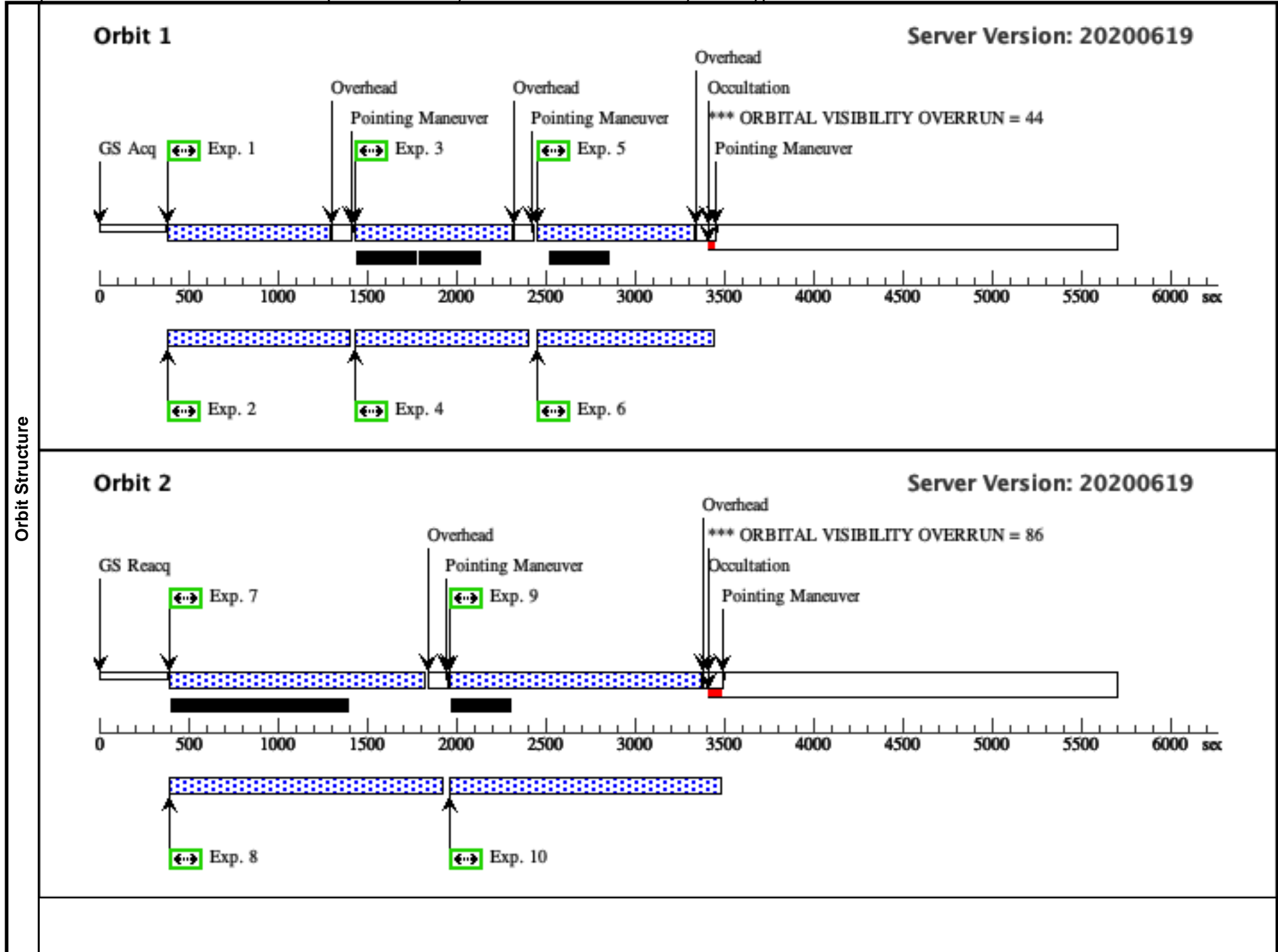


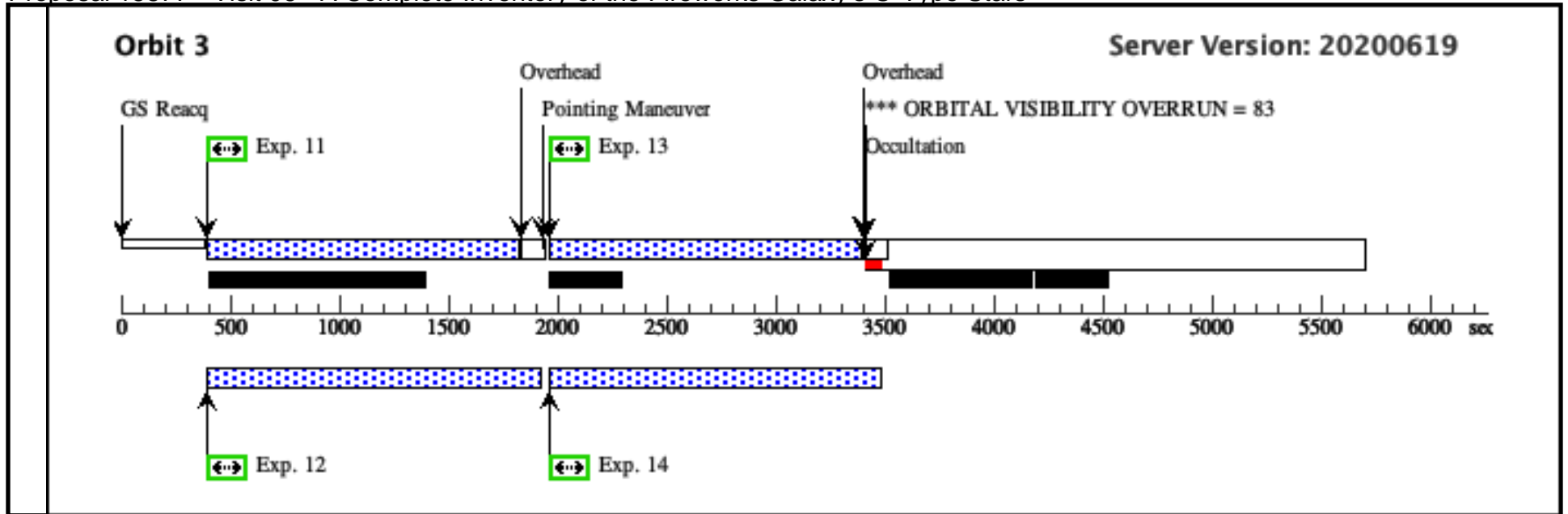


Proposal 15877 - Visit 06 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:47 GMT 2020

Visit	Proposal 15877, Visit 06, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	Diagnostics	(Visit 06) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 06) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 06) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(6)	NGC6946-7	RA: 20 35 28.3362 (308.8680675d) Dec: +60 09 12.18 (60.15338d) Equinox: J2000		V=26.6	Reference Frame: ICRS			
	<i>Comments:</i> Category=GALAXY Description=[SPIRAL]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(6) NGC6946-7	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		Prime + Parallel Group 1-2 in Visit 06	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in Visit 06	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3		(6) NGC6946-7	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 06	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in Visit 06	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5		(6) NGC6946-7	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 06	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 5-6 in Visit 06	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7		(6) NGC6946-7	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		Prime + Parallel Group 7-8 in Visit 06	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 7-8 in Visit 06	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9		(6) NGC6946-7	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 06	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 9-10 in Visit 06	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11		(6) NGC6946-7	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 06	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 11-12 in Visit 06	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13		(6) NGC6946-7	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 06	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	14		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 13-14 in Visit 06	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]

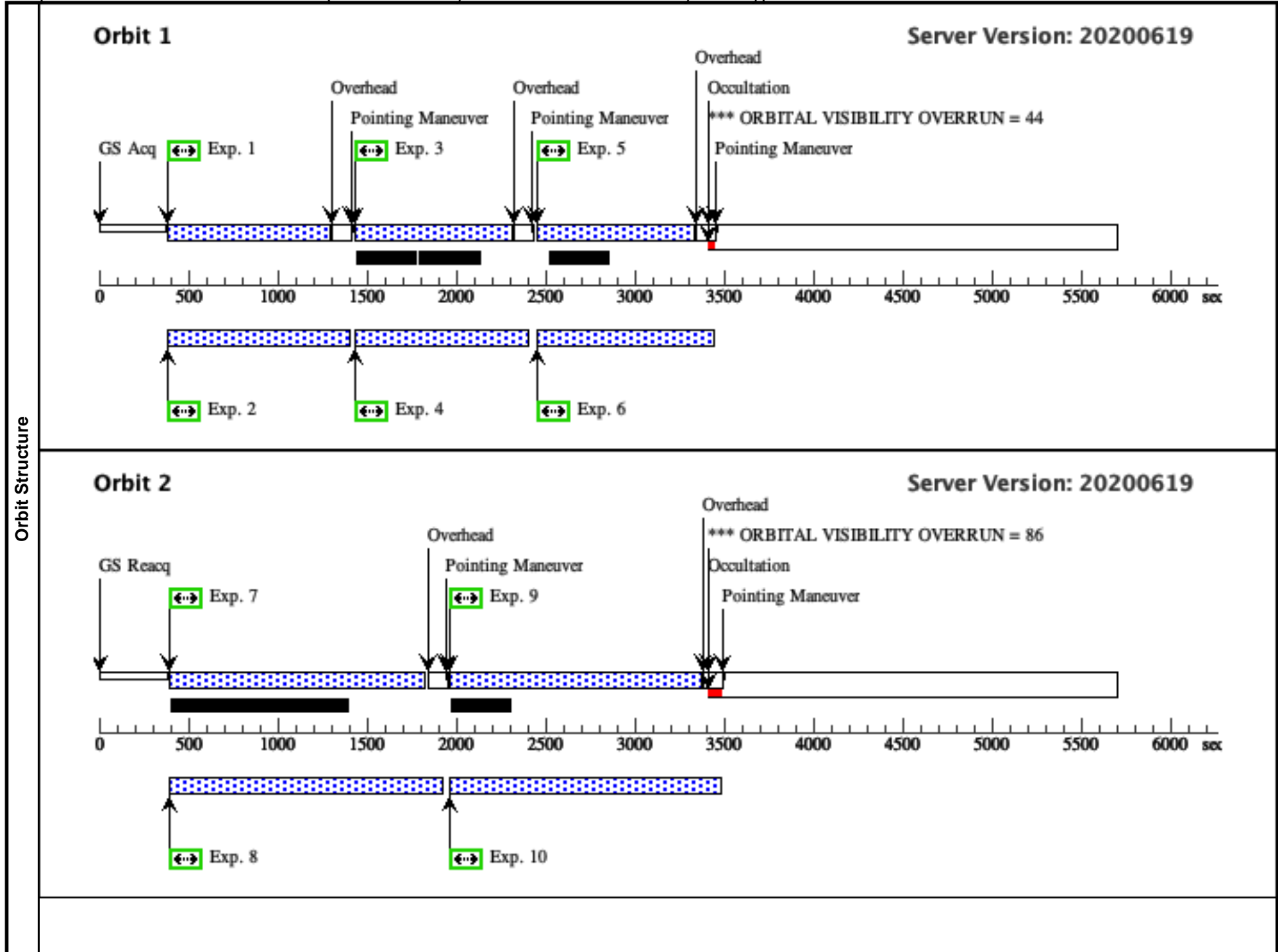


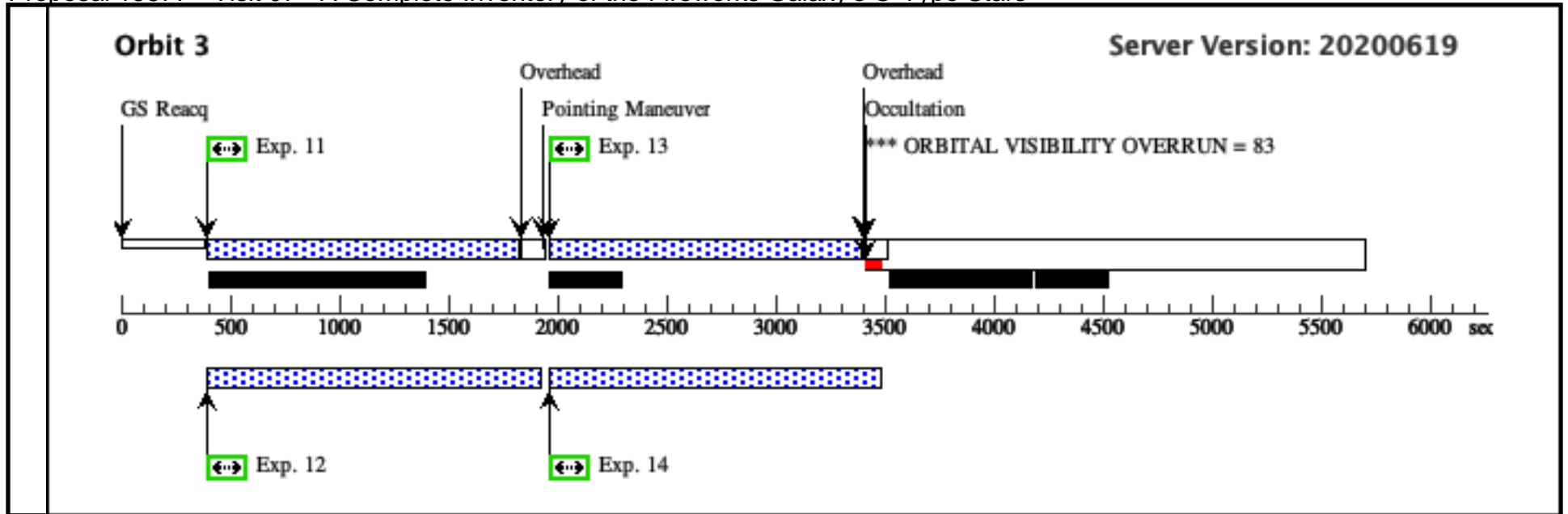


Proposal 15877 - Visit 07 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:47 GMT 2020

Visit	Proposal 15877, Visit 07, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	(Visit 07) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 07) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 07) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	NGC6946-8	RA: 20 35 3.7826 (308.7657608d) Dec: +60 09 15.06 (60.15418d) Equinox: J2000		V=26.6	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[SPIRAL]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(7) NGC6946-8	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9			Prime + Parallel Group 1-2 in Visit 07	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 1-2 in Visit 07	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3	(7) NGC6946-8	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 07	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 3-4 in Visit 07	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5	(7) NGC6946-8	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 07	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 5-6 in Visit 07	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7	(7) NGC6946-8	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8			Prime + Parallel Group 7-8 in Visit 07	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 7-8 in Visit 07	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9	(7) NGC6946-8	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 07	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 9-10 in Visit 07	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11	(7) NGC6946-8	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 07	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 11-12 in Visit 07	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13	(7) NGC6946-8	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 07	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
14	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 13-14 in Visit 07	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]	

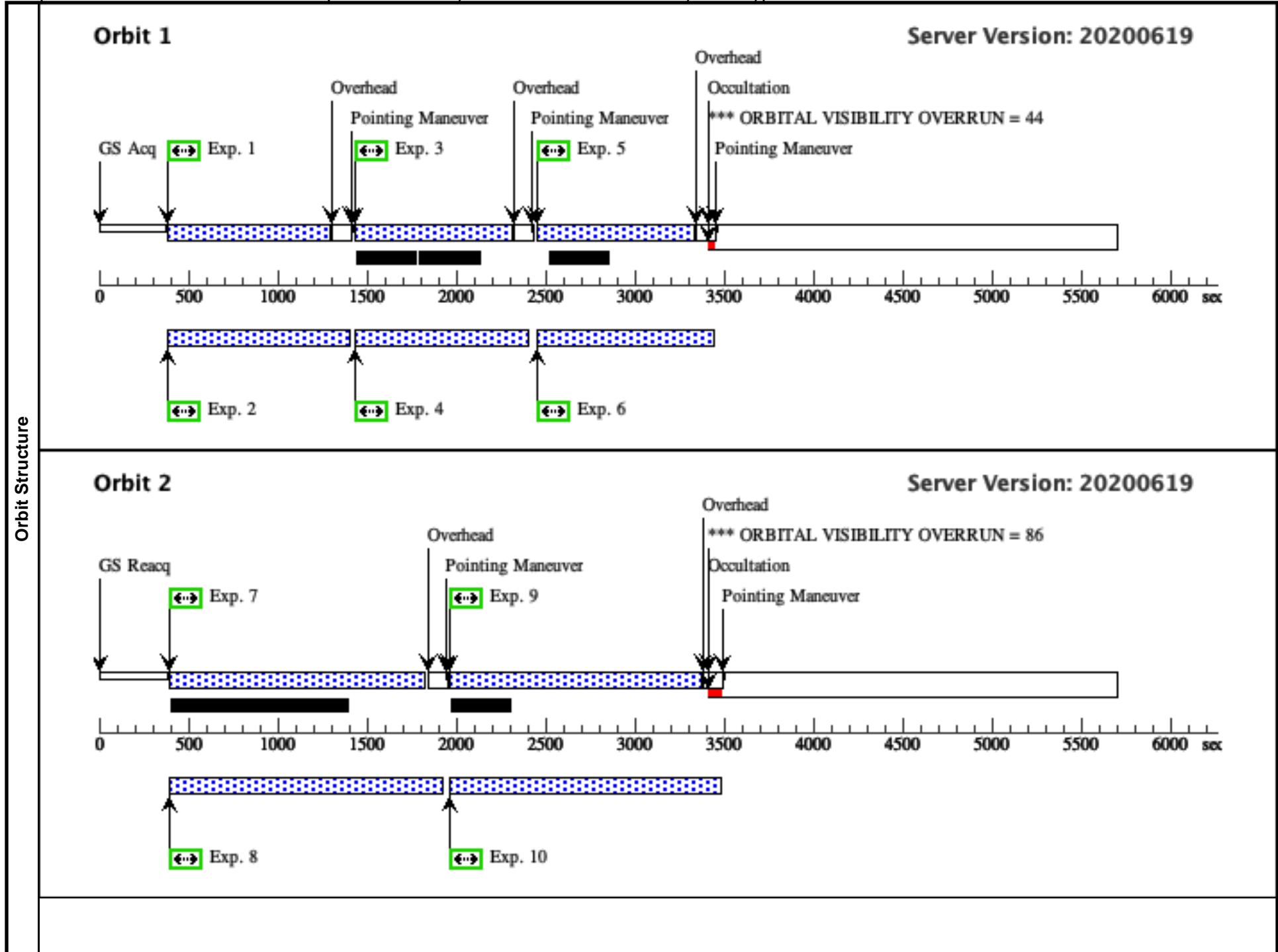


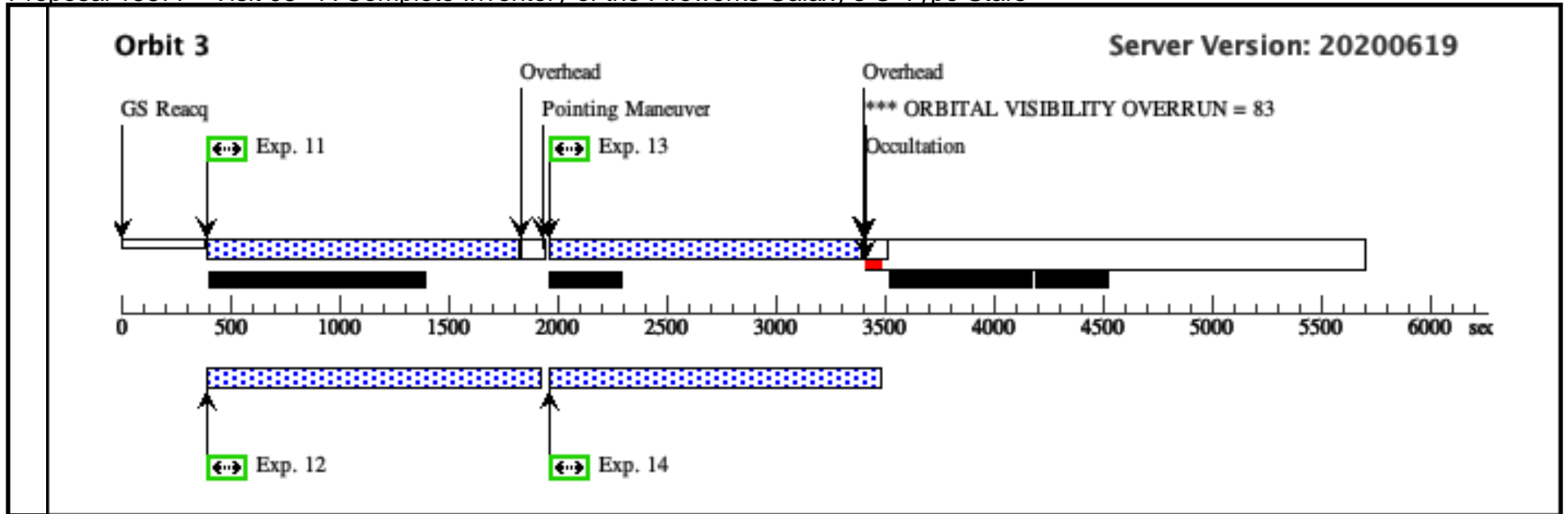


Proposal 15877 - Visit 08 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:47 GMT 2020

Visit	Proposal 15877, Visit 08, failed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	Diagnostics	(Visit 08) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 08) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 08) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN								
Fixed Targets		#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
		(8)	NGC6946-9	RA: 20 34 37.4858 (308.6561908d) Dec: +60 09 4.39 (60.15122d) Equinox: J2000		V=26.6	Reference Frame: ICRS			
	<i>Comments:</i> Category=GALAXY Description=[SPIRAL]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(8) NGC6946-9	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		Prime + Parallel Group 1-2 in Visit 08	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in Visit 08	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3		(8) NGC6946-9	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 08	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in Visit 08	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5		(8) NGC6946-9	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 08	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 5-6 in Visit 08	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7		(8) NGC6946-9	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		Prime + Parallel Group 7-8 in Visit 08	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 7-8 in Visit 08	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9		(8) NGC6946-9	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 08	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 9-10 in Visit 08	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11		(8) NGC6946-9	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 08	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 11-12 in Visit 08	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13		(8) NGC6946-9	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG -0.7725, 9.123168	Prime + Parallel Group 13-14 in Visit 08	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
14		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 13-14 in Visit 08	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]	

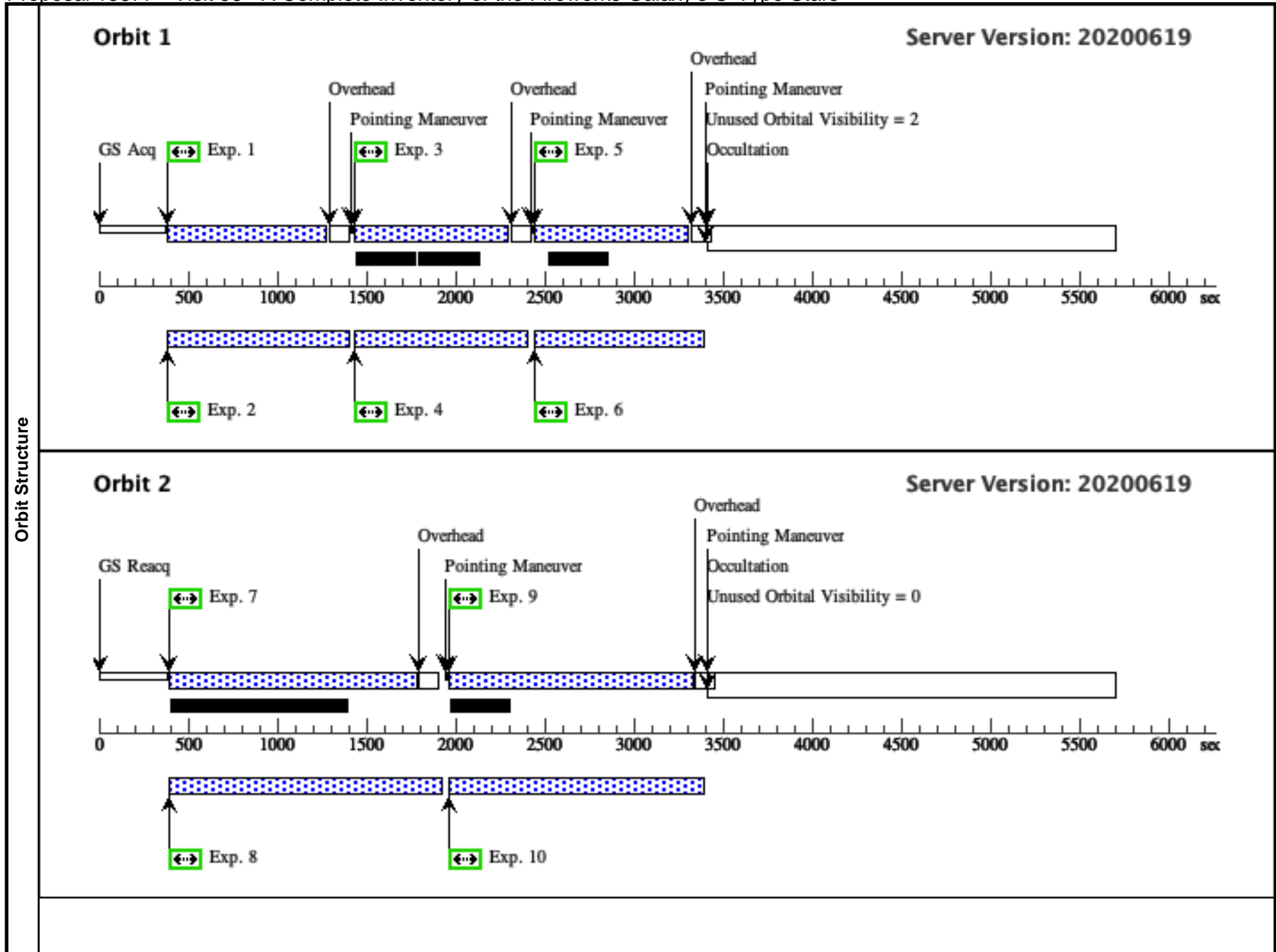


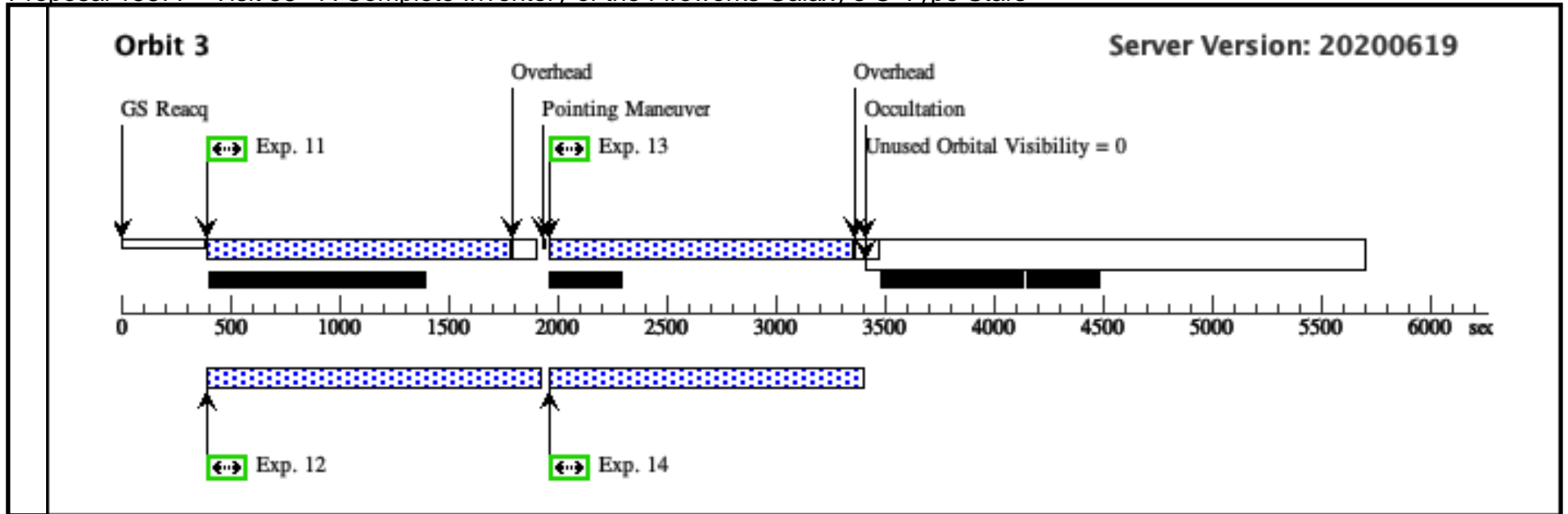


Proposal 15877 - Visit 58 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:48 GMT 2020

Visit	Proposal 15877, Visit 58, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 255.5D TO 255.5 D Comments: Repeat of Viist 08									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(15)	NGC6946-9-COPY	RA: 20 34 40.4932 (308.6687217d) Dec: +60 08 49.53 (60.14709d) Equinox: J2000		V=26.6	Reference Frame: ICRS				
	Comments: Category=GALAXY Description=[SPIRAL]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(15) NGC6946-9-CO PY	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		Prime + Parallel Group 1-2 in Visit 58	870 Secs (865 Secs) [=>865.0 Secs]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in Visit 58	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3		(15) NGC6946-9-CO PY	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 58	870 Secs (865 Secs) [=>865.0 Secs]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in Visit 58	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5		(15) NGC6946-9-CO PY	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 58	870 Secs (865 Secs) [=>865.0 Secs]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 5-6 in Visit 58	810 Secs (759 Secs) [=>759.0 Secs]	[1]
	7		(15) NGC6946-9-CO PY	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		Prime + Parallel Group 7-8 in Visit 58	1400 Secs (1371 Secs) [=>1371.0 Secs]	[2]
	8		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 7-8 in Visit 58	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9		(15) NGC6946-9-CO PY	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 58	1400 Secs (1371 Secs) [=>1371.0 Secs]	[2]
	10		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 9-10 in Visit 58	1400 Secs (1310 Secs) [=>1310.0 Secs]	[2]
	11		(15) NGC6946-9-CO PY	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 58	1400 Secs (1390 Secs) [=>1390.0 Secs]	[3]
	12		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 11-12 in Visit 58	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13		(15) NGC6946-9-CO PY	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 58	1400 Secs (1390 Secs) [=>1390.0 Secs]	[3]
14		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 13-14 in Visit 58	1400 Secs (1313 Secs) [=>1313.0 Secs]	[3]	

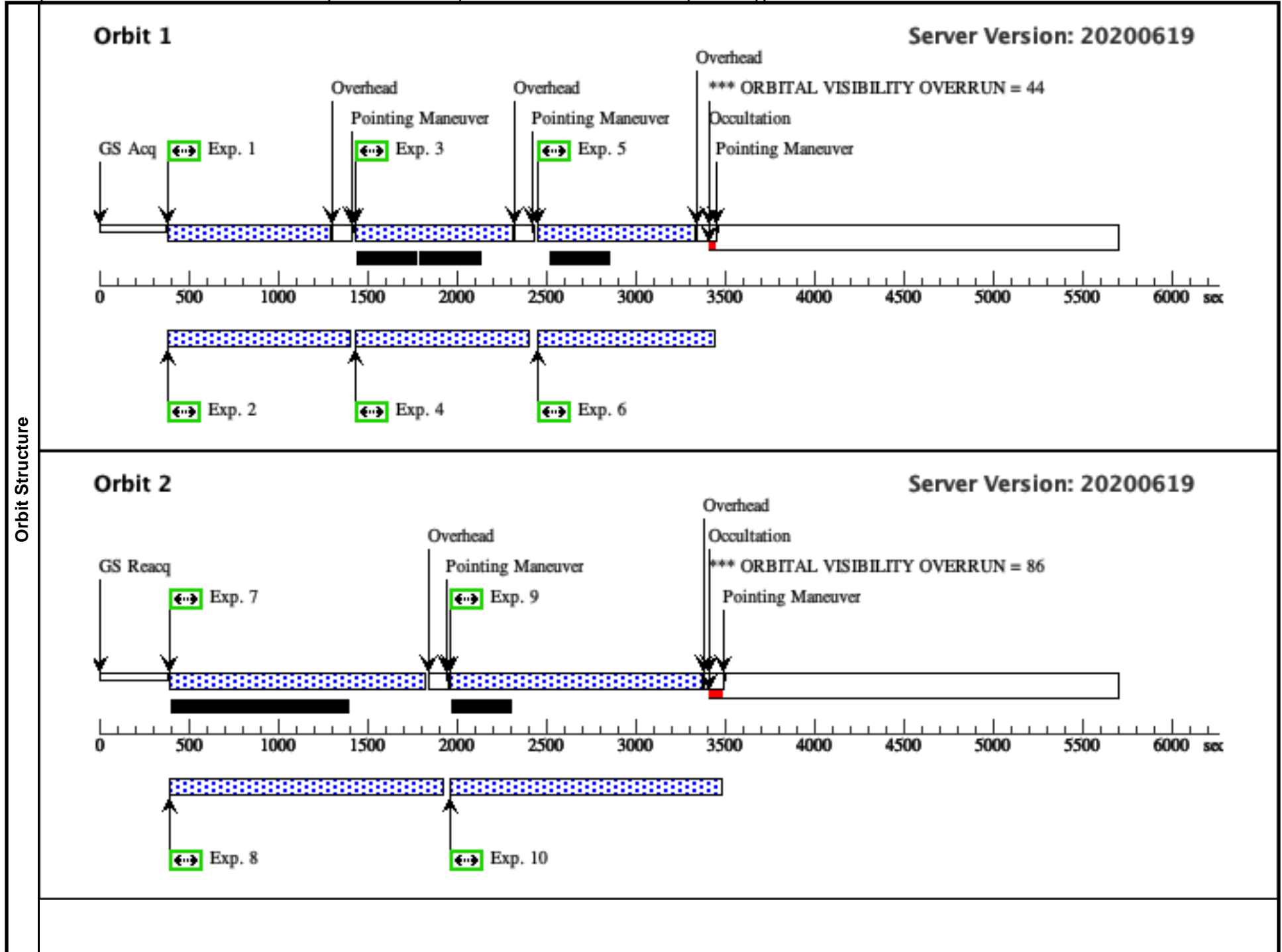


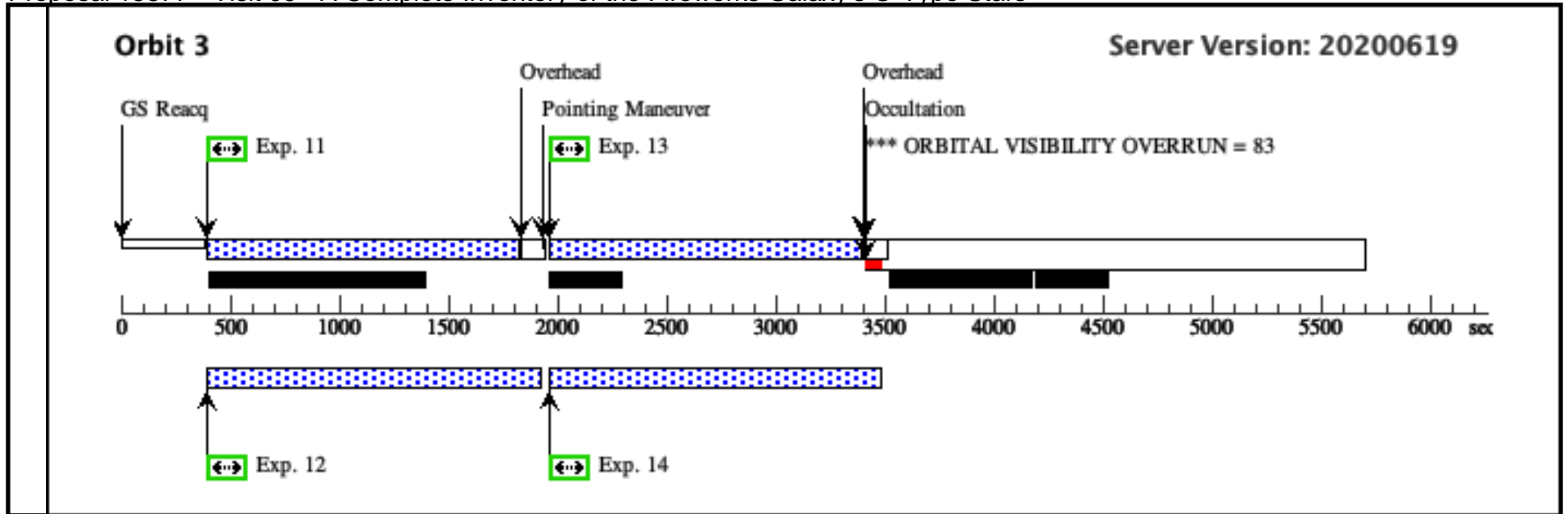


Proposal 15877 - Visit 09 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:48 GMT 2020

Visit	Proposal 15877, Visit 09, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	(Visit 09) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 09) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 09) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	NGC6946-10	RA: 20 34 12.6816 (308.5528400d) Dec: +60 09 1.31 (60.15036d) Equinox: J2000		V=26.6	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[SPIRAL]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(9) NGC6946-10	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9			Prime + Parallel Group 1-2 in Visit 09	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 1-2 in Visit 09	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3	(9) NGC6946-10	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 09	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 3-4 in Visit 09	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5	(9) NGC6946-10	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 09	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 5-6 in Visit 09	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7	(9) NGC6946-10	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8			Prime + Parallel Group 7-8 in Visit 09	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 7-8 in Visit 09	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9	(9) NGC6946-10	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 09	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 9-10 in Visit 09	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11	(9) NGC6946-10	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 09	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 11-12 in Visit 09	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13	(9) NGC6946-10	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG -0.7725, 9.123168	Prime + Parallel Group 13-14 in Visit 09	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
14	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 13-14 in Visit 09	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]	

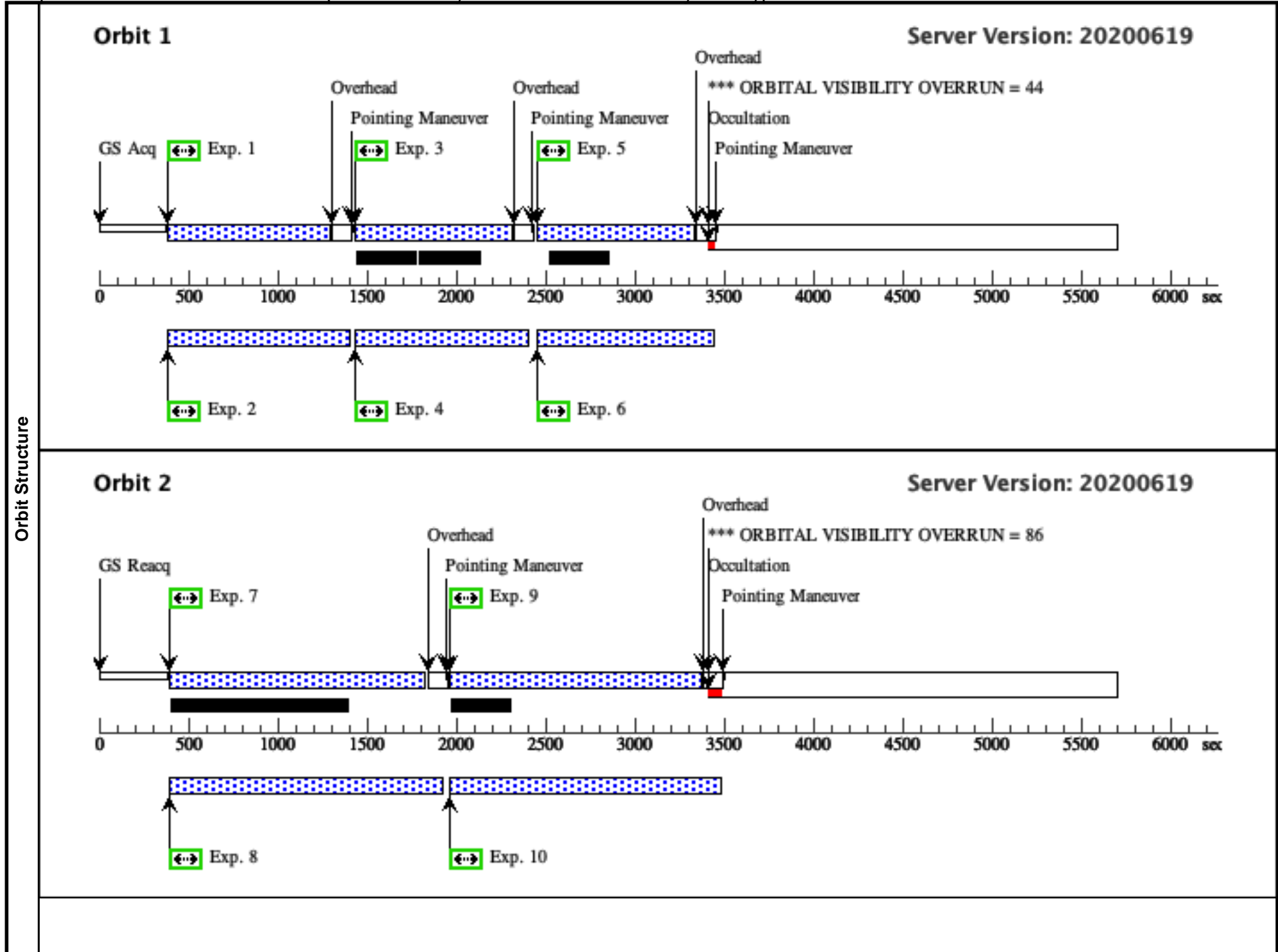


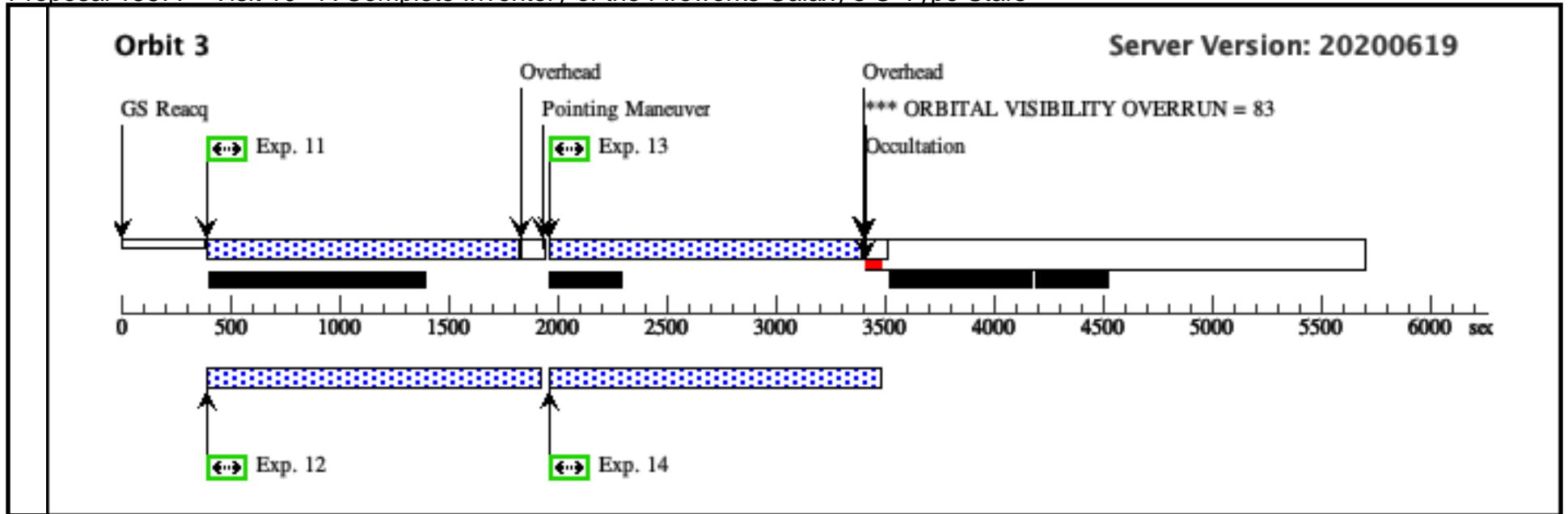


Proposal 15877 - Visit 10 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:48 GMT 2020

Visit	Proposal 15877, Visit 10, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	(Visit 10) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 10) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 10) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	NGC6946-11	RA: 20 35 17.0830 (308.8211792d) Dec: +60 07 9.50 (60.11931d) Equinox: J2000		V=26.6	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[SPIRAL]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(10) NGC6946-11	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9			Prime + Parallel Group 1-2 in Visit 10	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 1-2 in Visit 10	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3	(10) NGC6946-11	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 10	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 3-4 in Visit 10	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5	(10) NGC6946-11	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 10	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 5-6 in Visit 10	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7	(10) NGC6946-11	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8			Prime + Parallel Group 7-8 in Visit 10	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 7-8 in Visit 10	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9	(10) NGC6946-11	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 10	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 9-10 in Visit 10	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11	(10) NGC6946-11	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 10	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 11-12 in Visit 10	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13	(10) NGC6946-11	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 10	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
14	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 13-14 in Visit 10	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]	

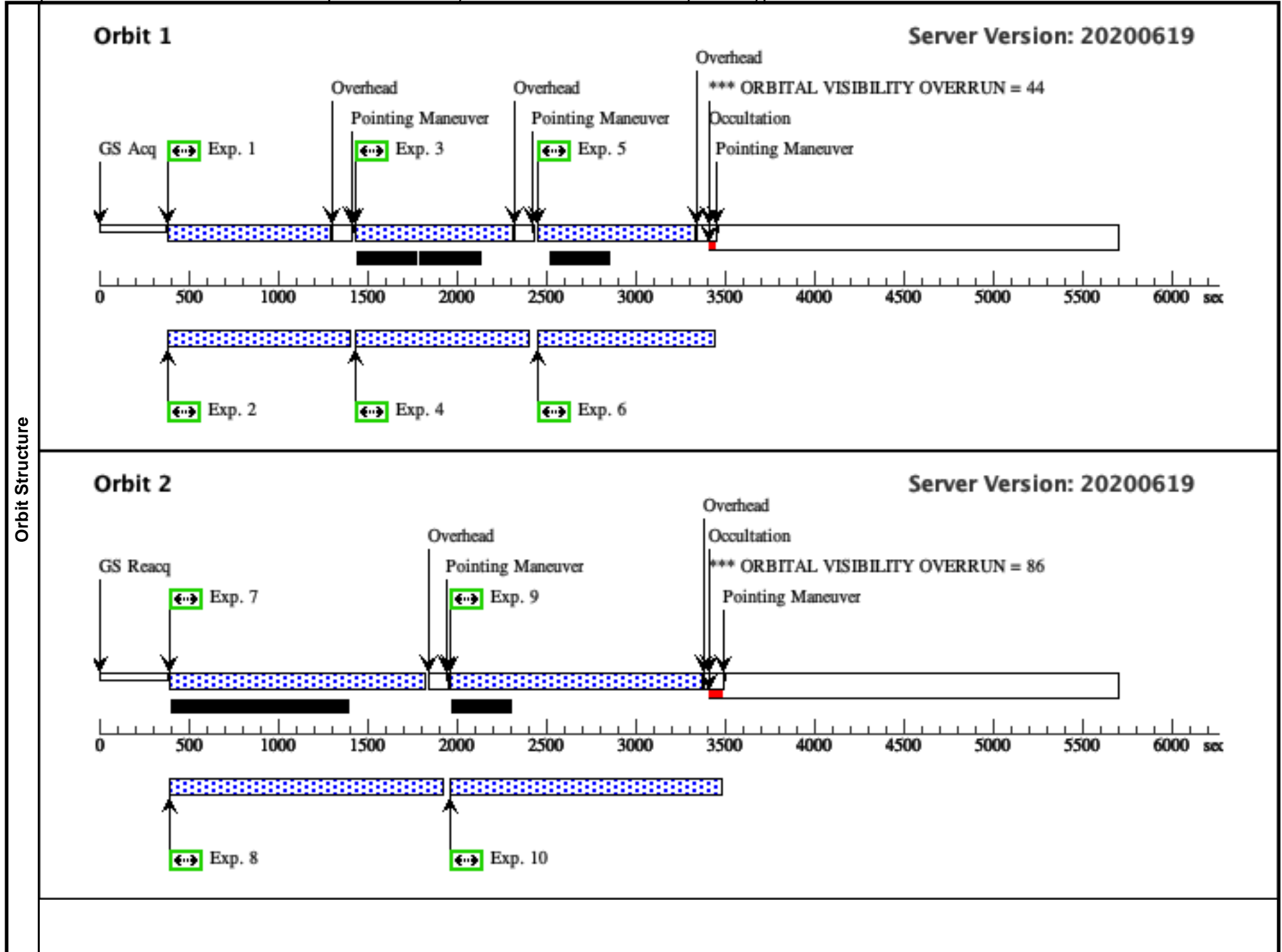


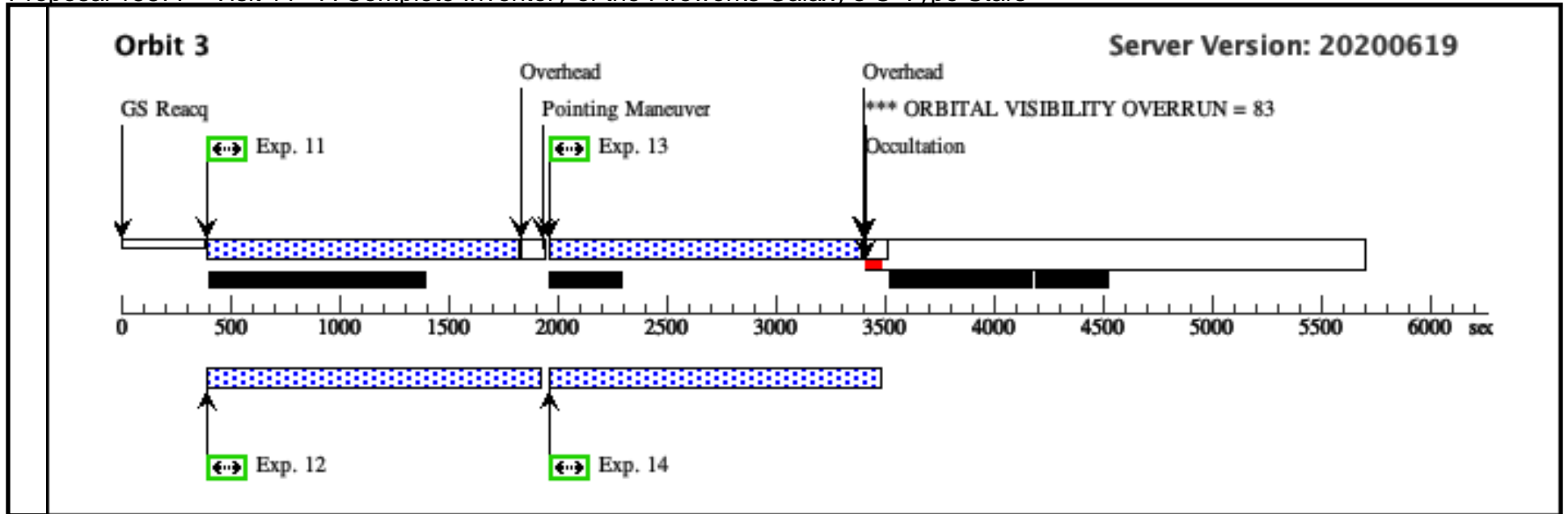


Proposal 15877 - Visit 11 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:48 GMT 2020

Visit	Proposal 15877, Visit 11, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	(Visit 11) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 11) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 11) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(11)	NGC6946-12	RA: 20 34 51.9795 (308.7165812d) Dec: +60 07 8.49 (60.11903d) Equinox: J2000		V=26.6	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[SPIRAL]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(11) NGC6946-12	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9			Prime + Parallel Group 1-2 in Visit 11	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 1-2 in Visit 11	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3	(11) NGC6946-12	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 11	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4	ANY	ACS/WFC, ACCUM, WFC	F606W				Prime + Parallel Group 3-4 in Visit 11	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5	(11) NGC6946-12	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 11	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 5-6 in Visit 11	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7	(11) NGC6946-12	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8			Prime + Parallel Group 7-8 in Visit 11	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 7-8 in Visit 11	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9	(11) NGC6946-12	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 11	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 9-10 in Visit 11	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11	(11) NGC6946-12	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 11	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 11-12 in Visit 11	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13	(11) NGC6946-12	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 11	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	14	ANY	ACS/WFC, ACCUM, WFC	F435W				Prime + Parallel Group 13-14 in Visit 11	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]

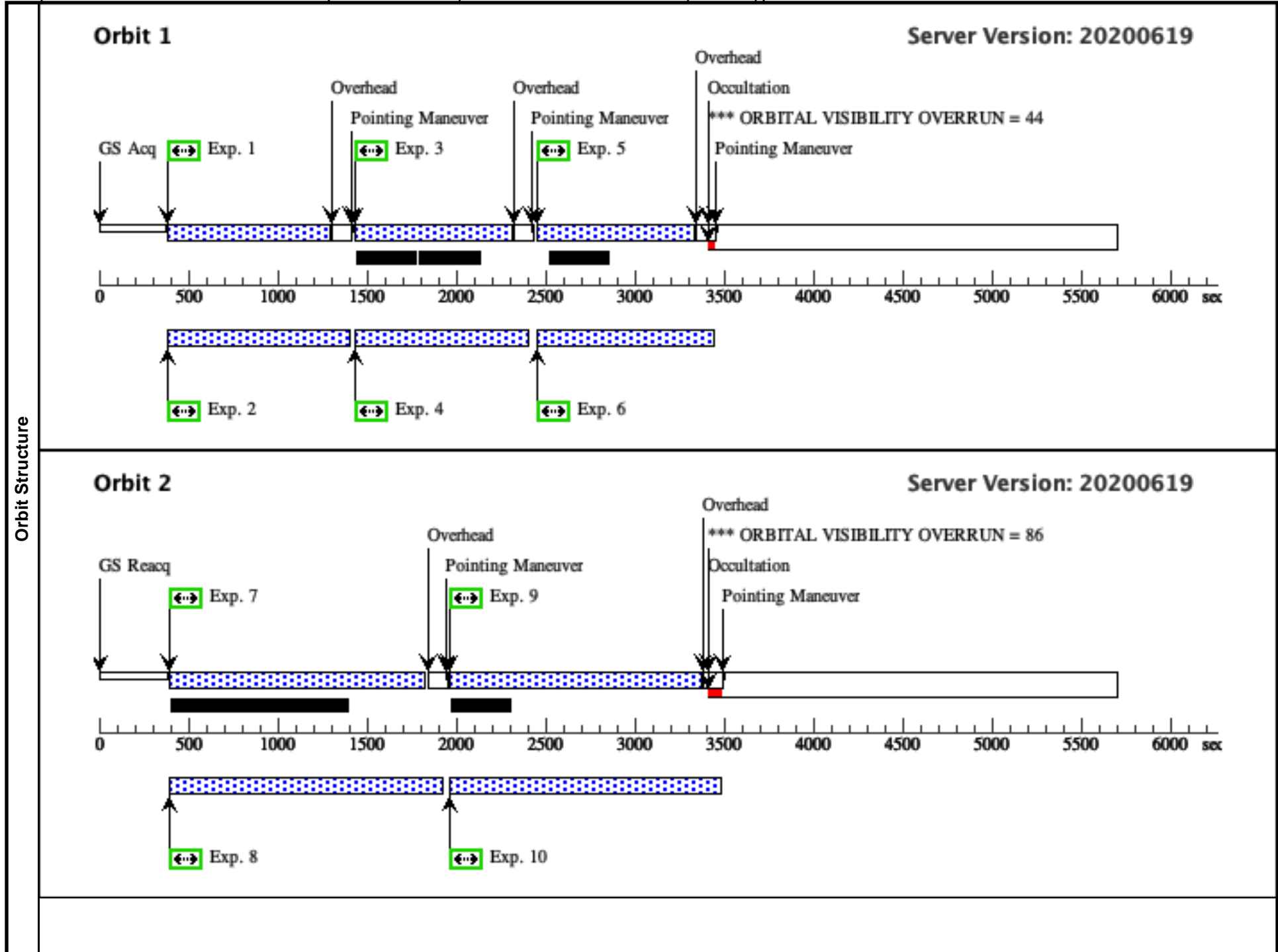


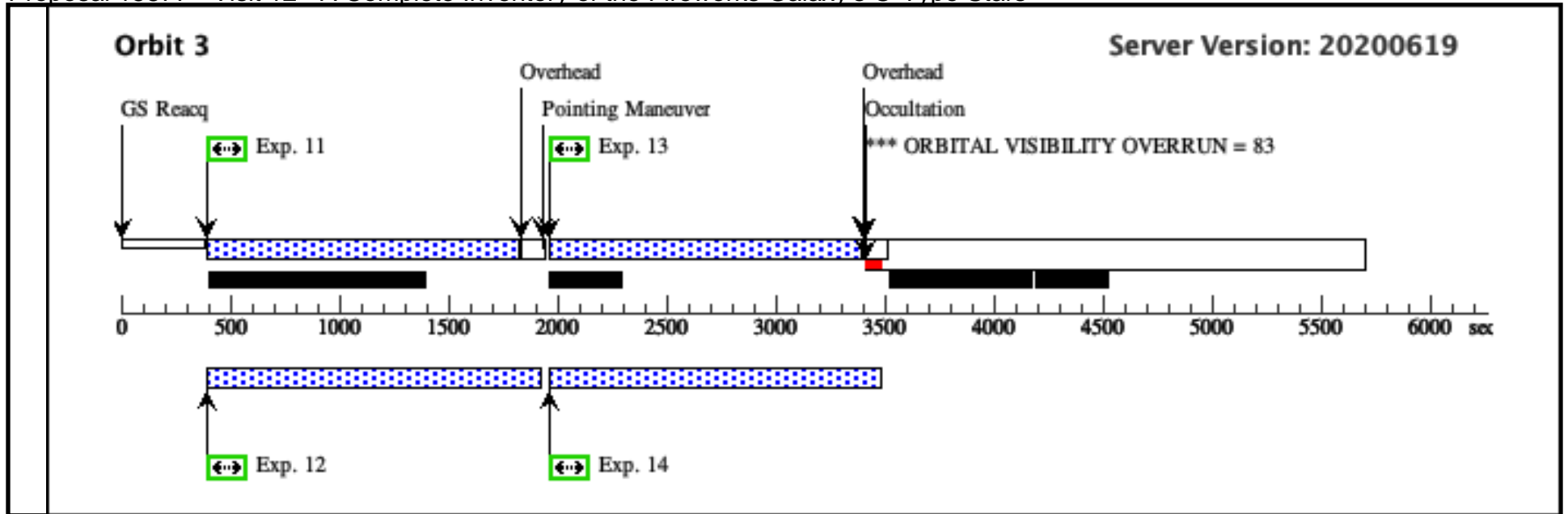


Proposal 15877 - Visit 12 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:48 GMT 2020

Visit	Proposal 15877, Visit 12, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D																																																																																																																																																						
	(Visit 12) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 12) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 12) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN																																																																																																																																																						
Fixed Targets	# Name Target Coordinates Targ. Coord. Corrections Fluxes Miscellaneous																																																																																																																																																						
	(12) NGC6946-13 RA: 20 34 26.8779 (308.6119913d) Dec: +60 06 59.69 (60.11658d) Equinox: J2000 <i>Comments:</i> <i>Category=GALAXY</i> <i>Description=[SPIRAL]</i>																																																																																																																																																						
Exposures	<table border="1"> <thead> <tr> <th>#</th> <th>Label</th> <th>Target</th> <th>Config,Mode,Aperture</th> <th>Spectral Els.</th> <th>Opt. Params.</th> <th>Special Reqs.</th> <th>Groups</th> <th>Exp. Time (Total)/[Actual Dur.]</th> <th>Orbit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>(12) NGC6946-13</td> <td>WFC3/UVIS, ACCUM, UVIS</td> <td>F336W</td> <td>FLASH=9</td> <td></td> <td>Prime + Parallel Group 1-2 in Visit 12</td> <td>870 Secs (880 Secs) [=>880.0 Secs]</td> <td>[1]</td> </tr> <tr> <td>2</td> <td></td> <td>ANY</td> <td>ACS/WFC, ACCUM, WFC</td> <td>F606W</td> <td></td> <td></td> <td>Prime + Parallel Group 1-2 in Visit 12</td> <td>810 Secs (810 Secs) [=>810.0 Secs]</td> <td>[1]</td> </tr> <tr> <td>3</td> <td></td> <td>(12) NGC6946-13</td> <td>WFC3/UVIS, ACCUM, UVIS</td> <td>F336W</td> <td>FLASH=9</td> <td>POS TARG 1.44613, 2.92567</td> <td>Prime + Parallel Group 3-4 in Visit 12</td> <td>870 Secs (880 Secs) [=>880.0 Secs]</td> <td>[1]</td> </tr> <tr> <td>4</td> <td></td> <td>ANY</td> <td>ACS/WFC, ACCUM, WFC</td> <td>F606W</td> <td></td> <td></td> <td>Prime + Parallel Group 3-4 in Visit 12</td> <td>810 Secs (850 Secs) [=>850.0 Secs]</td> <td>[1]</td> </tr> <tr> <td>5</td> <td></td> <td>(12) NGC6946-13</td> <td>WFC3/UVIS, ACCUM, UVIS</td> <td>F336W</td> <td>FLASH=9</td> <td>POS TARG 2.89226, 5.85135</td> <td>Prime + Parallel Group 5-6 in Visit 12</td> <td>870 Secs (880 Secs) [=>880.0 Secs]</td> <td>[1]</td> </tr> <tr> <td>6</td> <td></td> <td>ANY</td> <td>ACS/WFC, ACCUM, WFC</td> <td>F435W</td> <td></td> <td></td> <td>Prime + Parallel Group 5-6 in Visit 12</td> <td>810 Secs (803 Secs) [=>803.0 Secs]</td> <td>[1]</td> </tr> <tr> <td>7</td> <td></td> <td>(12) NGC6946-13</td> <td>WFC3/UVIS, ACCUM, UVIS</td> <td>F275W</td> <td>FLASH=8</td> <td></td> <td>Prime + Parallel Group 7-8 in Visit 12</td> <td>1400 Secs (1414 Secs) [=>1414.0 Secs]</td> <td>[2]</td> </tr> <tr> <td>8</td> <td></td> <td>ANY</td> <td>ACS/WFC, ACCUM, WFC</td> <td>F435W</td> <td></td> <td></td> <td>Prime + Parallel Group 7-8 in Visit 12</td> <td>1400 Secs (1410 Secs) [=>1410.0 Secs]</td> <td>[2]</td> </tr> <tr> <td>9</td> <td></td> <td>(12) NGC6946-13</td> <td>WFC3/UVIS, ACCUM, UVIS</td> <td>F275W</td> <td>FLASH=8</td> <td>POS TARG 1.28765, 2.14396</td> <td>Prime + Parallel Group 9-10 in Visit 12</td> <td>1400 Secs (1414 Secs) [=>1414.0 Secs]</td> <td>[2]</td> </tr> <tr> <td>10</td> <td></td> <td>ANY</td> <td>ACS/WFC, ACCUM, WFC</td> <td>F435W</td> <td></td> <td></td> <td>Prime + Parallel Group 9-10 in Visit 12</td> <td>1400 Secs (1396 Secs) [=>1396.0 Secs]</td> <td>[2]</td> </tr> <tr> <td>11</td> <td></td> <td>(12) NGC6946-13</td> <td>WFC3/UVIS, ACCUM, UVIS</td> <td>F275W</td> <td>FLASH=8</td> <td>POS TARG 2.06024, 0.912275</td> <td>Prime + Parallel Group 11-12 in Visit 12</td> <td>1400 Secs (1432 Secs) [=>1432.0 Secs]</td> <td>[3]</td> </tr> <tr> <td>12</td> <td></td> <td>ANY</td> <td>ACS/WFC, ACCUM, WFC</td> <td>F435W</td> <td></td> <td></td> <td>Prime + Parallel Group 11-12 in Visit 12</td> <td>1400 Secs (1406 Secs) [=>1406.0 Secs]</td> <td>[3]</td> </tr> <tr> <td>13</td> <td></td> <td>(12) NGC6946-13</td> <td>WFC3/UVIS, ACCUM, UVIS</td> <td>F275W</td> <td>FLASH=8</td> <td>POS TARG -0.7725 9,1.23168</td> <td>Prime + Parallel Group 13-14 in Visit 12</td> <td>1400 Secs (1432 Secs) [=>1432.0 Secs]</td> <td>[3]</td> </tr> <tr> <td>14</td> <td></td> <td>ANY</td> <td>ACS/WFC, ACCUM, WFC</td> <td>F435W</td> <td></td> <td></td> <td>Prime + Parallel Group 13-14 in Visit 12</td> <td>1400 Secs (1396 Secs) [=>1396.0 Secs]</td> <td>[3]</td> </tr> </tbody> </table>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	1		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		Prime + Parallel Group 1-2 in Visit 12	870 Secs (880 Secs) [=>880.0 Secs]	[1]	2		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in Visit 12	810 Secs (810 Secs) [=>810.0 Secs]	[1]	3		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 12	870 Secs (880 Secs) [=>880.0 Secs]	[1]	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in Visit 12	810 Secs (850 Secs) [=>850.0 Secs]	[1]	5		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 12	870 Secs (880 Secs) [=>880.0 Secs]	[1]	6		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 5-6 in Visit 12	810 Secs (803 Secs) [=>803.0 Secs]	[1]	7		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		Prime + Parallel Group 7-8 in Visit 12	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]	8		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 7-8 in Visit 12	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]	9		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 12	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]	10		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 9-10 in Visit 12	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]	11		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 12	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]	12		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 11-12 in Visit 12	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]	13		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 12	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]	14		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 13-14 in Visit 12	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]
	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit																																																																																																																																													
	1		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		Prime + Parallel Group 1-2 in Visit 12	870 Secs (880 Secs) [=>880.0 Secs]	[1]																																																																																																																																													
	2		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in Visit 12	810 Secs (810 Secs) [=>810.0 Secs]	[1]																																																																																																																																													
	3		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 12	870 Secs (880 Secs) [=>880.0 Secs]	[1]																																																																																																																																													
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in Visit 12	810 Secs (850 Secs) [=>850.0 Secs]	[1]																																																																																																																																													
	5		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 12	870 Secs (880 Secs) [=>880.0 Secs]	[1]																																																																																																																																													
	6		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 5-6 in Visit 12	810 Secs (803 Secs) [=>803.0 Secs]	[1]																																																																																																																																													
	7		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		Prime + Parallel Group 7-8 in Visit 12	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]																																																																																																																																													
	8		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 7-8 in Visit 12	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]																																																																																																																																													
	9		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 12	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]																																																																																																																																													
	10		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 9-10 in Visit 12	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]																																																																																																																																													
	11		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 12	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]																																																																																																																																													
	12		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 11-12 in Visit 12	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]																																																																																																																																													
	13		(12) NGC6946-13	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 12	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]																																																																																																																																													
14		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 13-14 in Visit 12	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]																																																																																																																																														

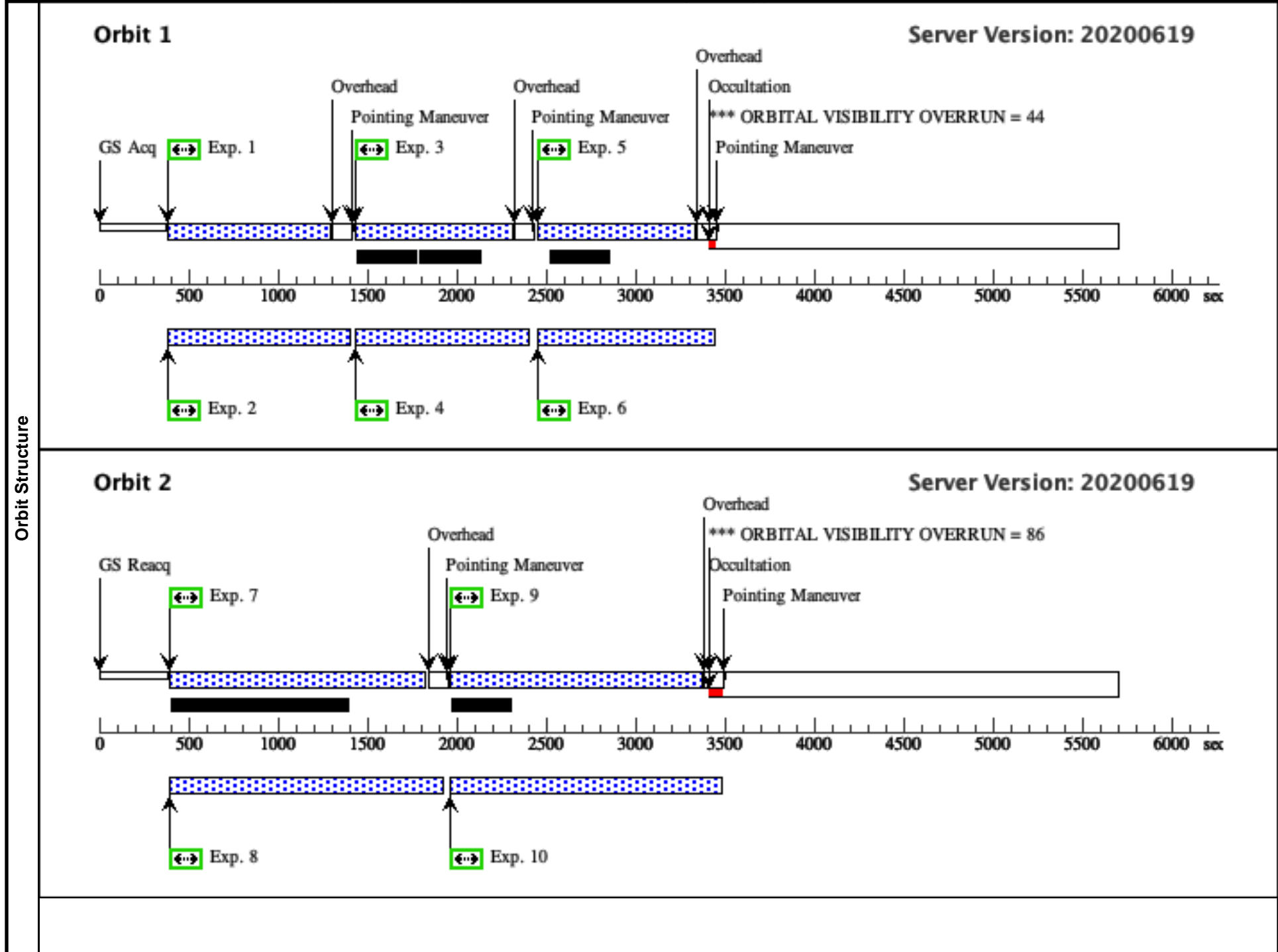


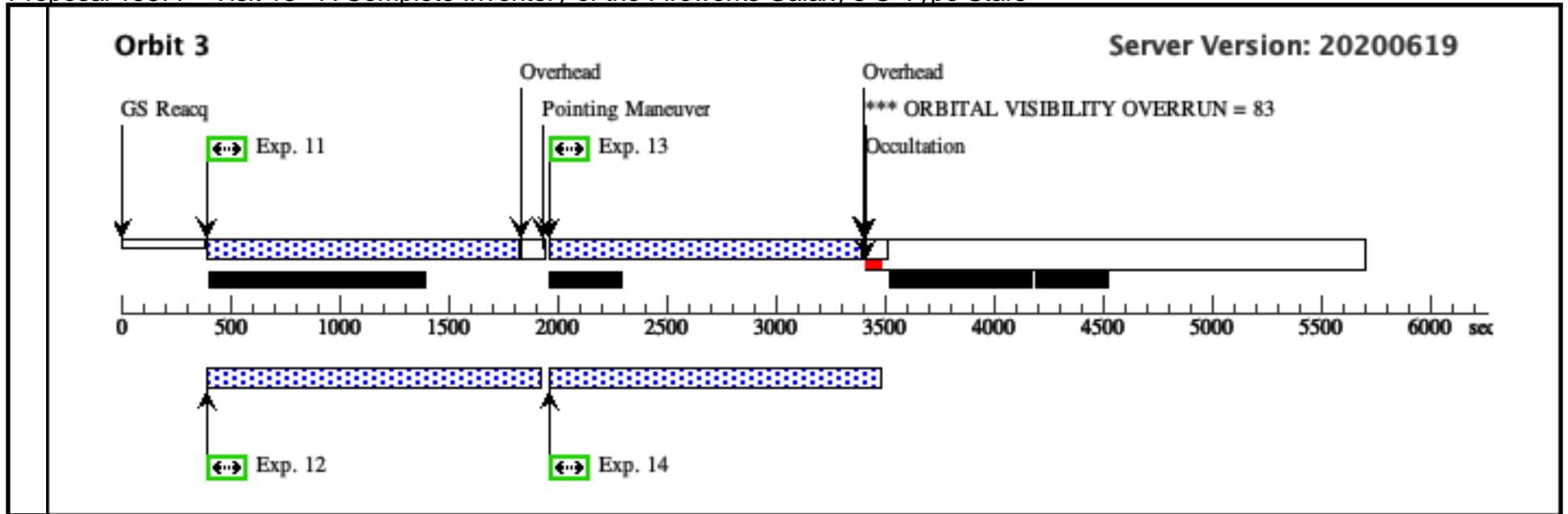


Proposal 15877 - Visit 13 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:48 GMT 2020

Visit	Proposal 15877, Visit 13, completed Diagnostic Status: Warning Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	(Visit 13) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 13) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN (Visit 13) Warning (Orbit Planner): ORBITAL VISIBILITY OVERRUN									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(13)	NGC6946-14	RA: 20 35 5.6012 (308.7733383d) Dec: +60 05 8.89 (60.08580d) Equinox: J2000		V=26.6	Reference Frame: ICRS				
Comments: Category=GALAXY Description=[SPIRAL]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(13) NGC6946-14	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		Prime + Parallel Group 1-2 in Visit 13	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in Visit 13	810 Secs (810 Secs) [=>810.0 Secs]	[1]
	3		(13) NGC6946-14	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 13	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in Visit 13	810 Secs (850 Secs) [=>850.0 Secs]	[1]
	5		(13) NGC6946-14	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 13	870 Secs (880 Secs) [=>880.0 Secs]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 5-6 in Visit 13	810 Secs (803 Secs) [=>803.0 Secs]	[1]
	7		(13) NGC6946-14	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		Prime + Parallel Group 7-8 in Visit 13	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	8		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 7-8 in Visit 13	1400 Secs (1410 Secs) [=>1410.0 Secs]	[2]
	9		(13) NGC6946-14	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 13	1400 Secs (1414 Secs) [=>1414.0 Secs]	[2]
	10		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 9-10 in Visit 13	1400 Secs (1396 Secs) [=>1396.0 Secs]	[2]
	11		(13) NGC6946-14	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 13	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	12		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 11-12 in Visit 13	1400 Secs (1406 Secs) [=>1406.0 Secs]	[3]
	13		(13) NGC6946-14	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 13	1400 Secs (1432 Secs) [=>1432.0 Secs]	[3]
	14		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 13-14 in Visit 13	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]





Proposal 15877 - Visit 14 - A Complete Inventory of the Fireworks Galaxy's O-Type Stars

Thu Dec 17 17:00:48 GMT 2020

Visit	Proposal 15877, Visit 14, completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: ORIENT 73D TO 77 D; ORIENT 163D TO 167 D; ORIENT 253D TO 257 D; ORIENT 343D TO 347 D									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(14)	NGC6946-15	RA: 20 34 38.7111 (308.6612963d) Dec: +60 05 9.21 (60.08589d) Equinox: J2000		V=26.6	Reference Frame: ICRS				
	<i>Comments:</i> Category=GALAXY Description=[SPIRAL]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(14) NGC6946-15	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9		Prime + Parallel Group 1-2 in Visit 14	870 Secs (870 Secs) [=>870.0 Secs]	[1]
	2		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 1-2 in Visit 14	810 Secs (810 Secs) [=>]	[1]
	3		(14) NGC6946-15	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 1.44613, 2.92567	Prime + Parallel Group 3-4 in Visit 14	870 Secs (870 Secs) [=>870.0 Secs]	[1]
	4		ANY	ACS/WFC, ACCUM, WFC	F606W			Prime + Parallel Group 3-4 in Visit 14	810 Secs (840 Secs) [=>840.0 Secs]	[1]
	5		(14) NGC6946-15	WFC3/UVIS, ACCUM, UVIS	F336W	FLASH=9	POS TARG 2.89226, 5.85135	Prime + Parallel Group 5-6 in Visit 14	870 Secs (870 Secs) [=>870.0 Secs]	[1]
	6		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 5-6 in Visit 14	810 Secs (769 Secs) [=>769.0 Secs]	[1]
	7		(14) NGC6946-15	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8		Prime + Parallel Group 7-8 in Visit 14	1400 Secs (1362 Secs) [=>1362.0 Secs]	[2]
	8		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 7-8 in Visit 14	1400 Secs (1400 Secs) [=>]	[2]
	9		(14) NGC6946-15	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 1.28765, 2.14396	Prime + Parallel Group 9-10 in Visit 14	1400 Secs (1362 Secs) [=>1362.0 Secs]	[2]
	10		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 9-10 in Visit 14	1400 Secs (1320 Secs) [=>1320.0 Secs]	[2]
	11		(14) NGC6946-15	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG 2.06024, 0.912275	Prime + Parallel Group 11-12 in Visit 14	1400 Secs (1361 Secs) [=>1361.0 Secs]	[3]
	12		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 11-12 in Visit 14	1400 Secs (1396 Secs) [=>1396.0 Secs]	[3]
	13		(14) NGC6946-15	WFC3/UVIS, ACCUM, UVIS	F275W	FLASH=8	POS TARG -0.7725 9,1.23168	Prime + Parallel Group 13-14 in Visit 14	1400 Secs (1361 Secs) [=>1361.0 Secs]	[3]
14		ANY	ACS/WFC, ACCUM, WFC	F435W			Prime + Parallel Group 13-14 in Visit 14	1400 Secs (1319 Secs) [=>1319.0 Secs]	[3]	

