



15652 - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged quasars

Cycle: 26, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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Proposal 15652 (STScI Edit Number: 10, Created: Tuesday, November 26, 2019 at 12:01:09 PM Eastern Standard Time) - Overview

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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) PSJ0030-1525	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:31.0	yes
02	(2) J0053-2012	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:34.0	yes
03	(3) WG0214-2105	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:36.0	yes
Z3	(3) WG0214-2105	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:38.0	yes
04	(4) J2205-3727	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:40.0	yes
05	(5) J0343-2828	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:42.0	yes
06	(6) J0029-3814	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:44.0	yes

Proposal 15652 (STScI Edit Number: 10, Created: Tuesday, November 26, 2019 at 12:01:09 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>
07	(7) F0530-3730	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:46.0	yes
08	(8) J0659+1629	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:48.0	yes
09	(9) W2MJ1042+1641	WFC3/UVIS	1	26-Nov-2019 12:00:49.0	yes
10	(10) J1131-4419	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:51.0	yes
11	(11) 2M1134-2103	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:53.0	yes
12	(12) 2M1310-1714	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:55.0	yes
13	(13) J1537-3010	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:56.0	yes
14	(14) J0818-2613	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:00:58.0	yes
15	(15) PSJ1721+8842	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:01:00.0	yes
16	(16) J1817+2729	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:01:02.0	yes
17	(17) WG2100-4452	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:01:04.0	yes
18	(18) J2145+6345	WFC3/IR WFC3/UVIS	2	26-Nov-2019 12:01:07.0	yes
Z2	(2) J0053-2012	WFC3/IR WFC3/UVIS	1	26-Nov-2019 12:01:08.0	yes

38 Total Orbits Used

ABSTRACT

We propose to collect a large enough sample of lensed quasars to provide definitive answers to two fundamental questions in astrophysics: 1) What's the Hubble Constant (H_0) and is the tension between the local distance ladder measurement and that extrapolated from the CMB indicative of new physics beyond Λ CDM? 2) Is the stellar initial mass function universal or does it vary with galaxy properties? A sample of 40 quadruply imaged quasars is sufficient to measure H_0 to 1% precision (thus settling the 8% difference between current measurements) and distinguish between a Chabrier and Salpeter IMF at the 99%CL. Thanks to a large collective effort to discover these extremely rare systems, we now know enough systems to reach this goal for the first time, by combining this proposal with previous efforts already in the HST archive. In addition to the two key science drivers, uniform multicolor HST imaging of this large sample of quads will enable a wealth of investigations covering topics ranging from the size of accretion disks, to the relationship between quasars and their host galaxies, to the properties of dark matter halos in massive elliptical galaxies.

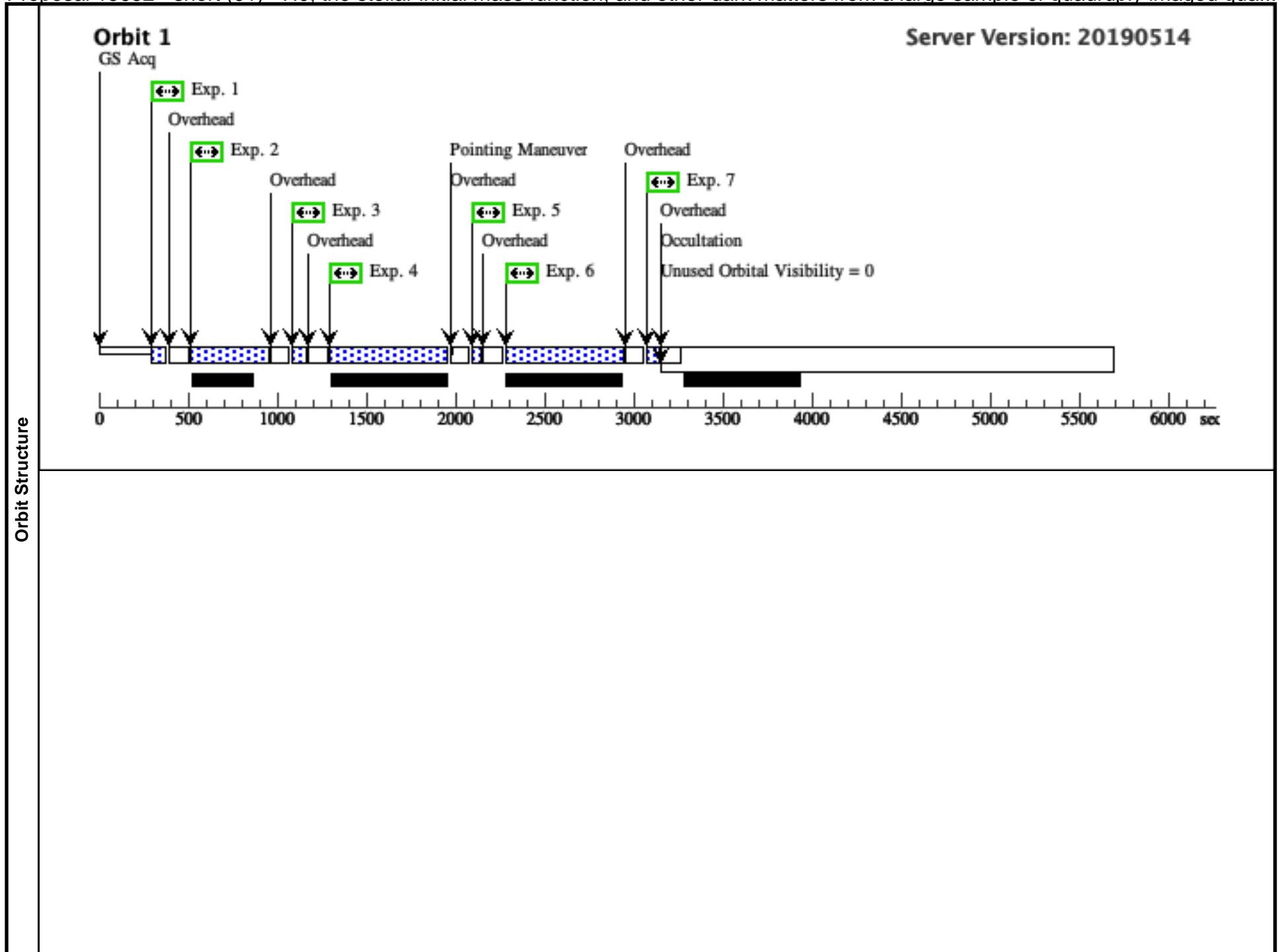
OBSERVING DESCRIPTION

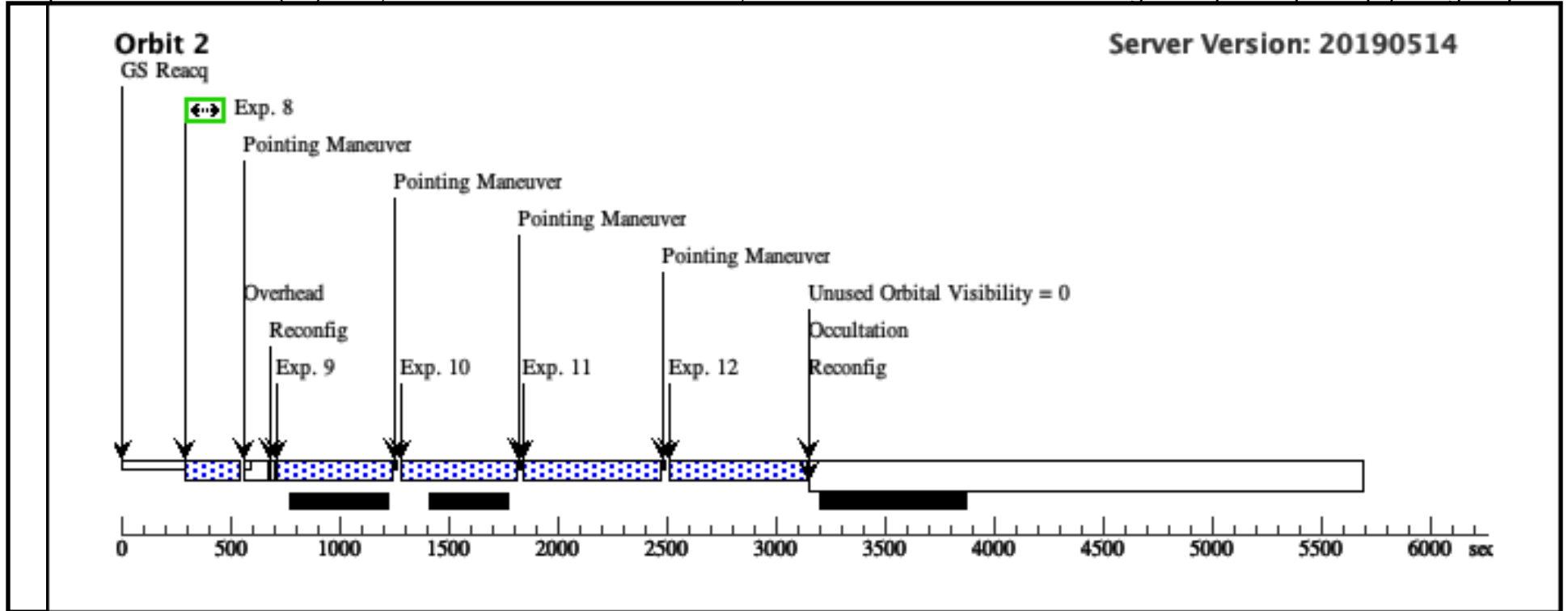
We will obtain multicolor images of a sample of quadruply imaged quasar. For each target, except W2MJ1042+1641, we will observe approximately 4 exposures in each filter. In the UVIS filters F475X and F814w we will use a 2-point dither pattern and obtain a short (50s) and long exposure at each position to avoid saturating the bright lens quasar. In the IR channel filter F160W we use a 4-point dither pattern, and STEP100 readout sequence to guarantee sufficient dynamic range to expose both the bright quasar and the host galaxy. For W2MJ1042+1641, for which WFC3-IR images already exist in the archive, we will only expose for one orbit in the visible to supplement existing data.

Proposal 15652 - short (01) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:09 GMT 2019

Visit	Proposal 15652, short (01), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(1)	PSJ0030-1525	RA: 00 30 15.3100 (7.5637917d) Dec: -15 25 3.00 (-15.41750d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: Panstarrs				
	<i>Comments:</i> Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(1) PSJ0030-1525	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12				50 Secs (50 Secs) [==>]	[1]
	2	(1) PSJ0030-1525	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO				440 Secs (440 Secs) [==>]	[1]
	3	(1) PSJ0030-1525	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12				50 Secs (50 Secs) [==>]	[1]
	4	(1) PSJ0030-1525	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO				664 Secs (664 Secs) [==>]	[1]
	5	(1) PSJ0030-1525	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106			50 Secs (50 Secs) [==>]	[1]
	6	(1) PSJ0030-1525	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106			664 Secs (664 Secs) [==>]	[1]
	7	(1) PSJ0030-1525	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106			50 Secs (50 Secs) [==>]	[1]
	8	(1) PSJ0030-1525	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=4	POS TARG 0.099,0.106			250 Secs (250 Secs) [==>]	[2]
	9	(1) PSJ0030-1525	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0			499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(1) PSJ0030-1525	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002			499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(1) PSJ0030-1525	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335			599.232292 Secs (599.232 Secs) [==>]	[2]
12	(1) PSJ0030-1525	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333			599.232292 Secs (599.232 Secs) [==>]	[2]	

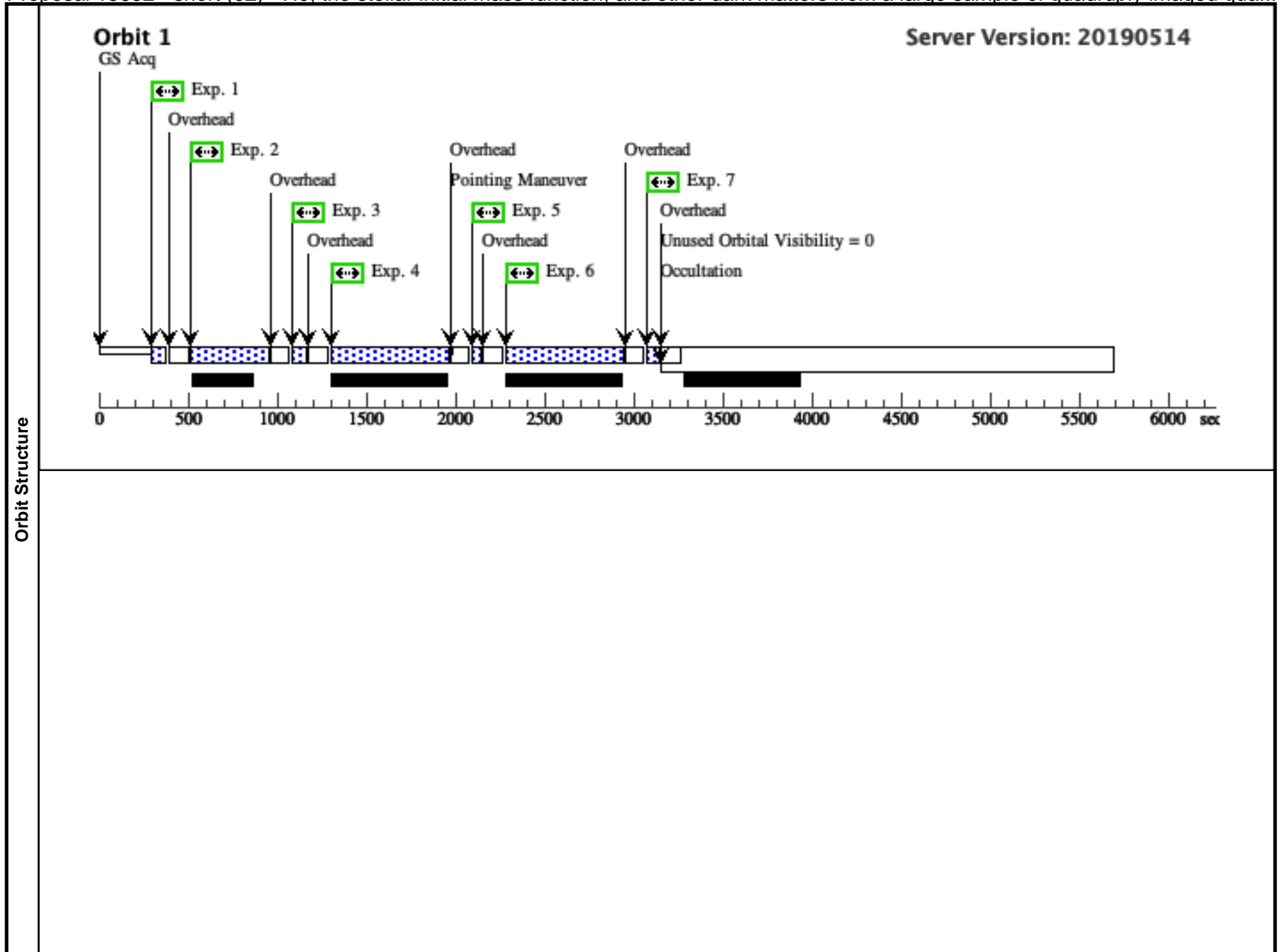


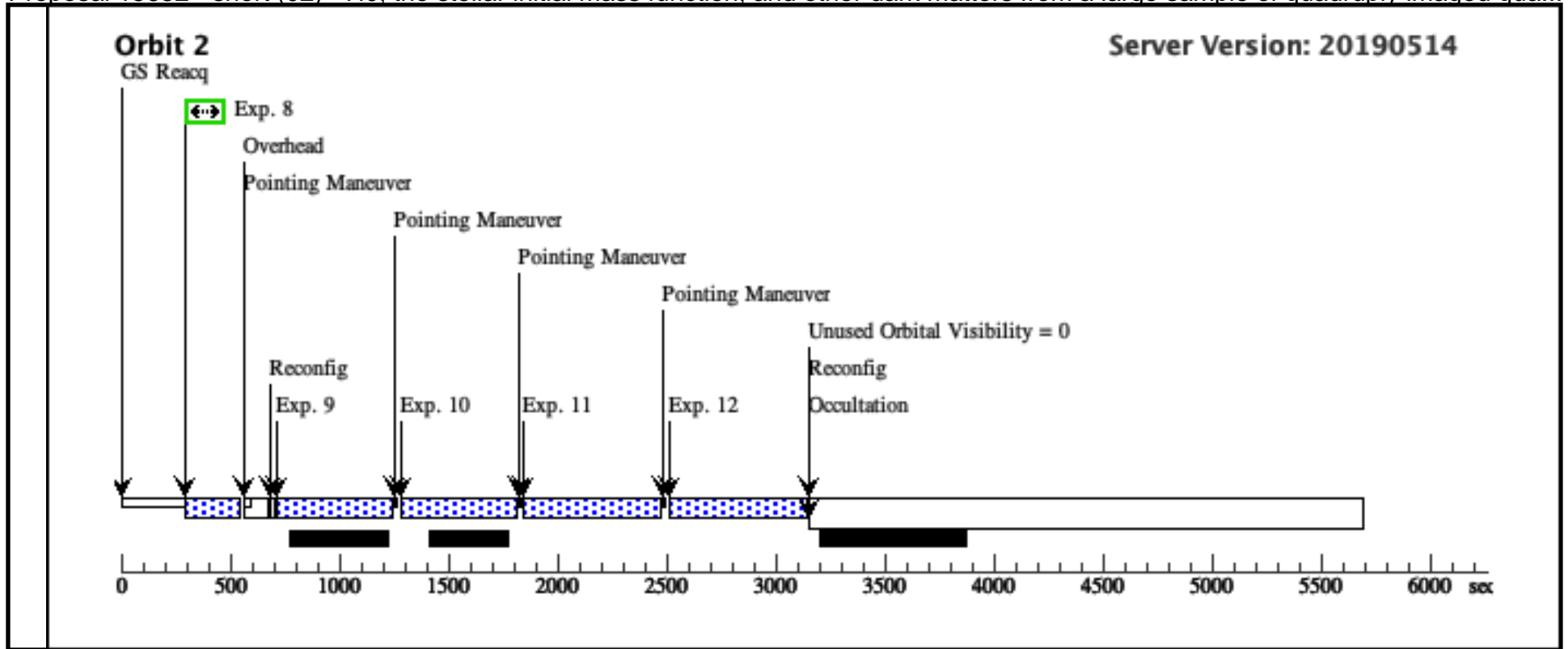


Proposal 15652 - short (02) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:09 GMT 2019

Visit	Proposal 15652, short (02), failed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	J0053-2012	RA: 00 53 44.4800 (13.4353333d) Dec: -20 12 33.29 (-20.20925d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: DES				
	Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(2) J0053-2012		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2	(2) J0053-2012		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			441 Secs (441 Secs) [==>]	[1]
	3	(2) J0053-2012		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4	(2) J0053-2012		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5	(2) J0053-2012		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6	(2) J0053-2012		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7	(2) J0053-2012		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8	(2) J0053-2012		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=4	POS TARG 0.099,0.106		251 Secs (251 Secs) [==>]	[2]
	9	(2) J0053-2012		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(2) J0053-2012		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(2) J0053-2012		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(2) J0053-2012		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

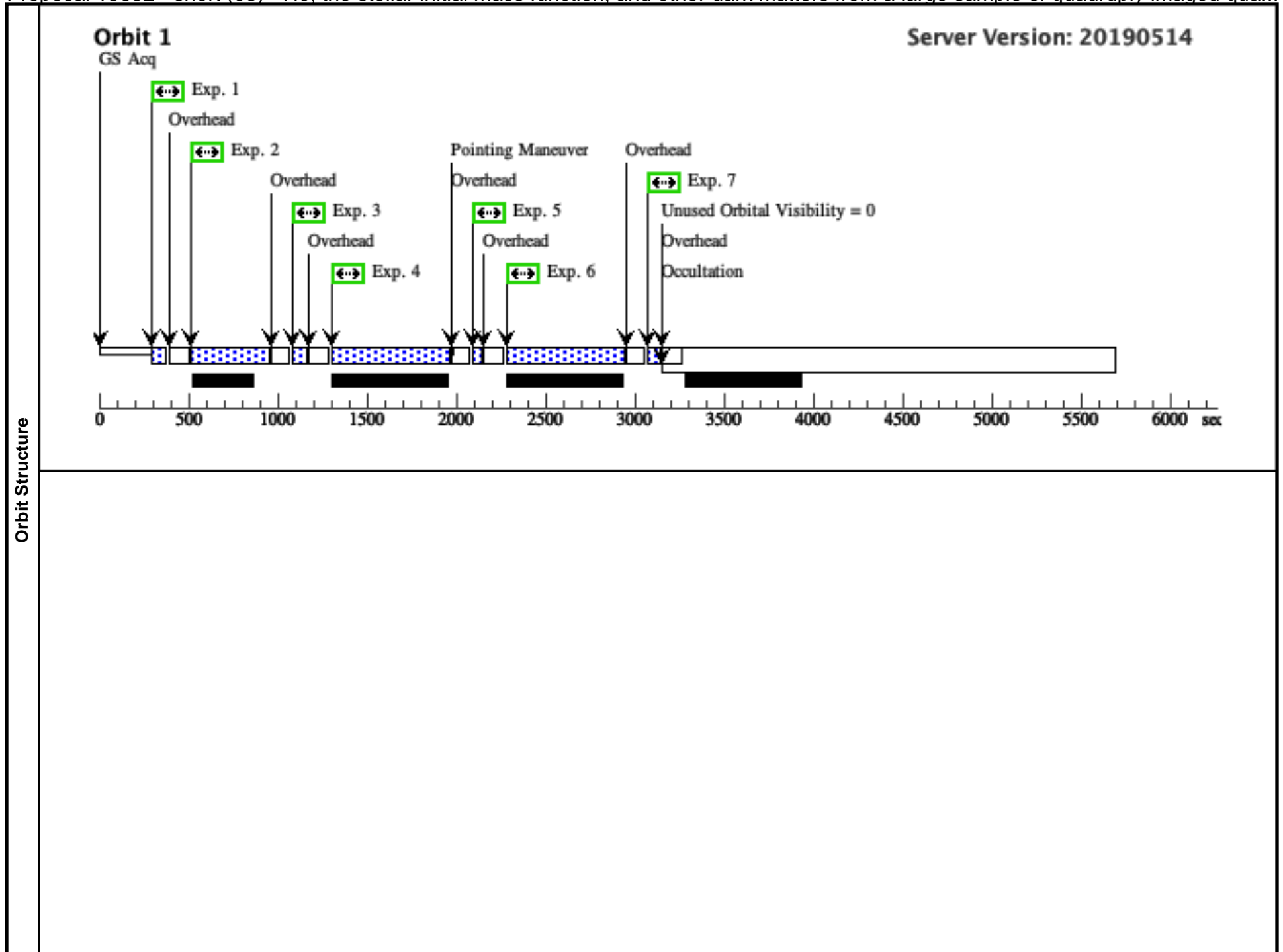


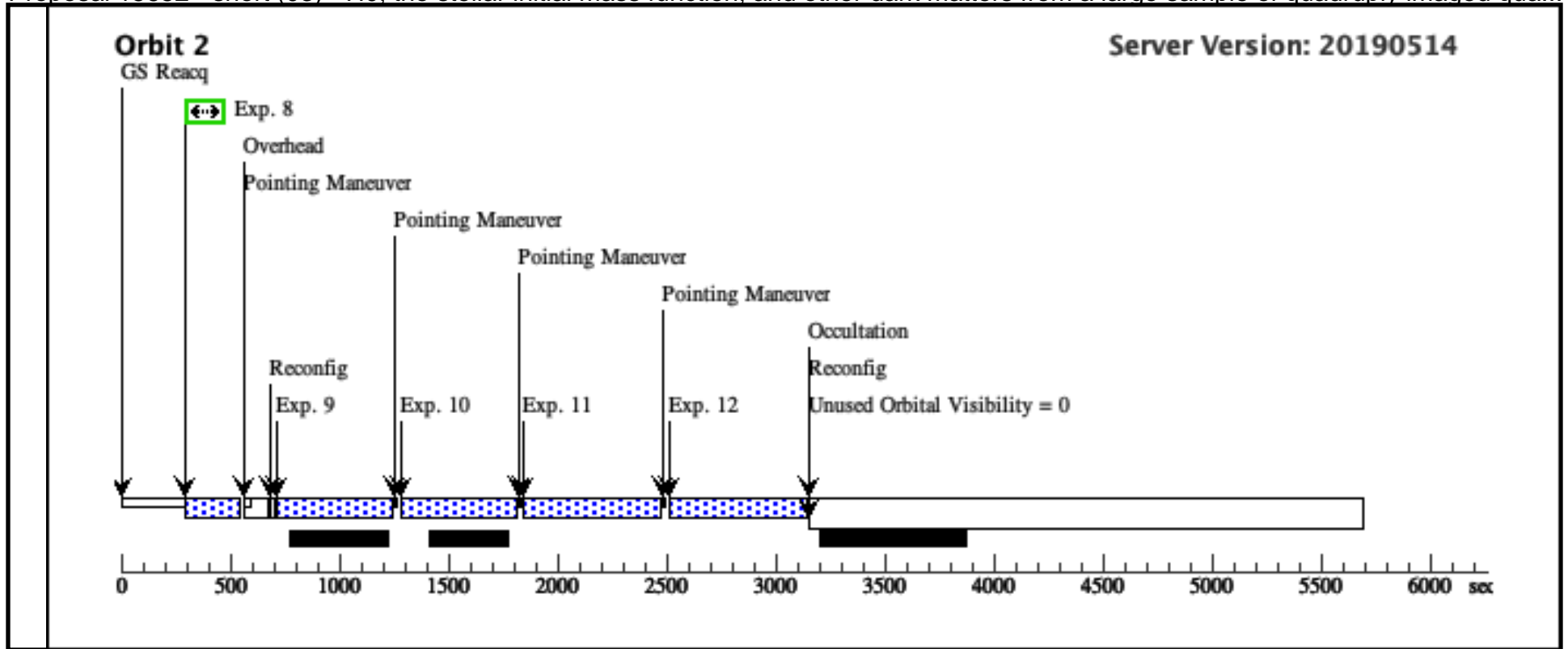


Proposal 15652 - short (03) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

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Visit	Proposal 15652, short (03), failed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(3)	WG0214-2105	RA: 02 14 16.3500 (33.5681250d) Dec: -21 05 34.97 (-21.09305d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: Gaia				
	Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			441 Secs (441 Secs) [==>]	[1]
	3	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=4	POS TARG 0.099,0.106		251 Secs (251 Secs) [==>]	[2]
	9	(3) WG0214-2105	WG0214-2105	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(3) WG0214-2105	WG0214-2105	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(3) WG0214-2105	WG0214-2105	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(3) WG0214-2105	WG0214-2105	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

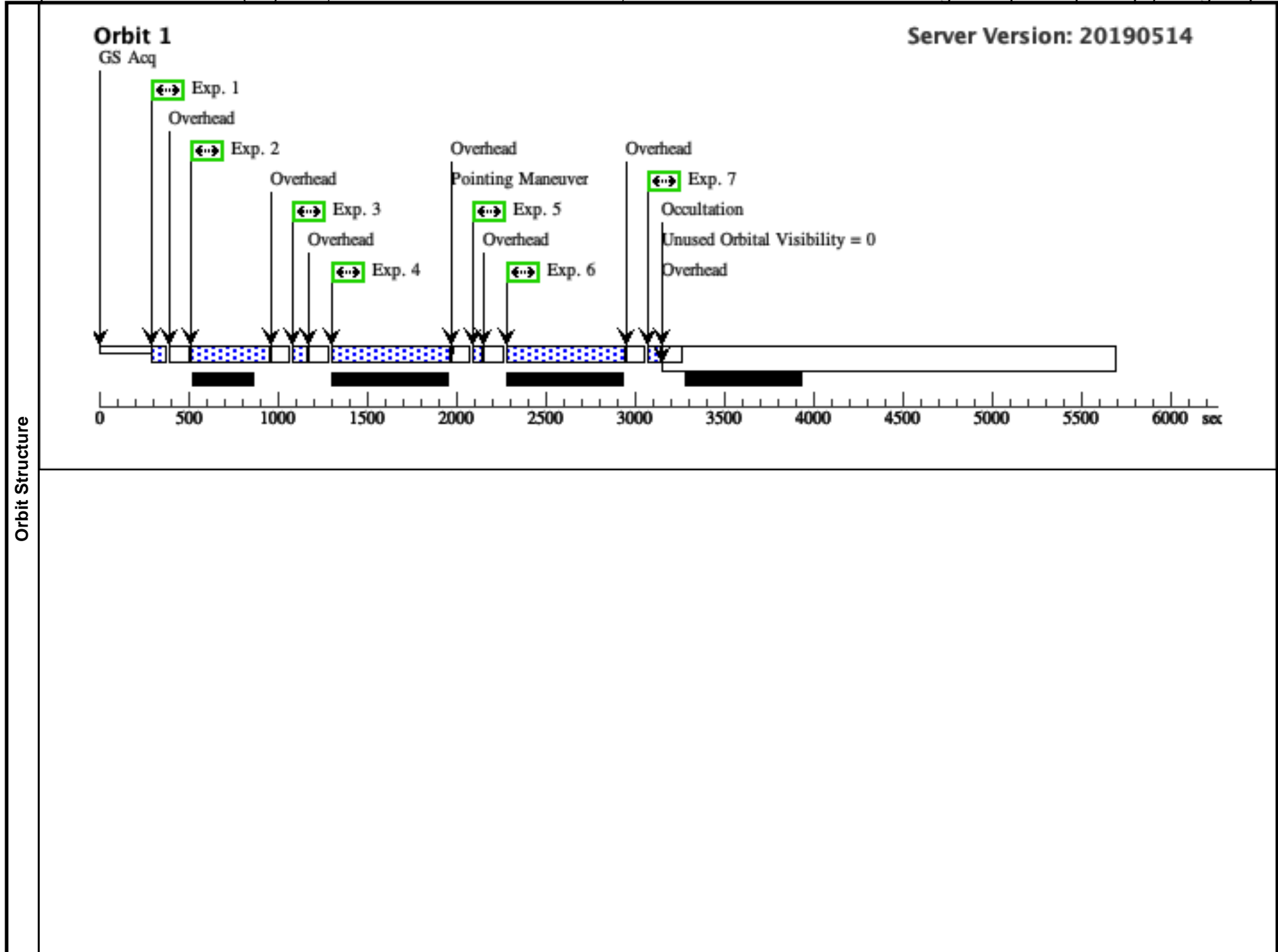


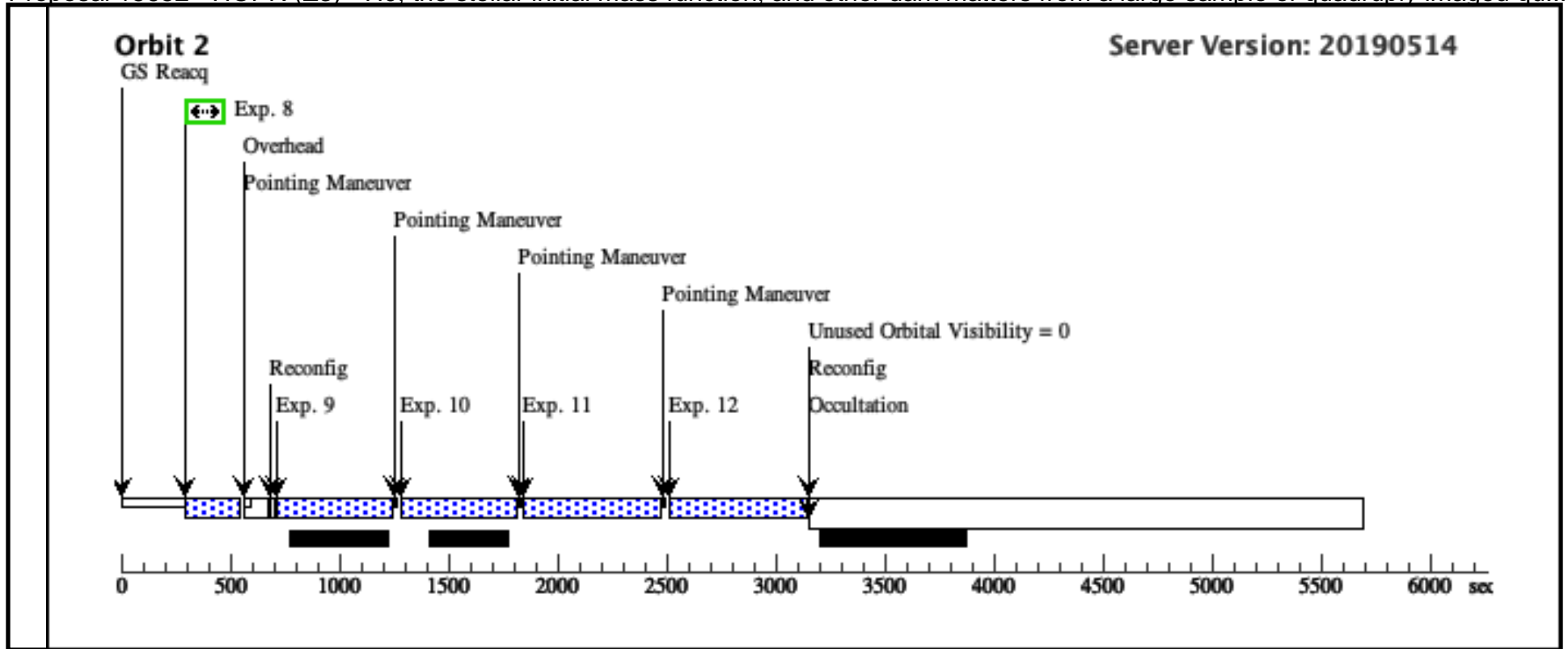


Proposal 15652 - HOPR (Z3) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qu...

Tue Nov 26 17:01:09 GMT 2019

Visit	Proposal 15652, HOPR (Z3) Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(3)	WG0214-2105	RA: 02 14 16.3500 (33.5681250d) Dec: -21 05 34.97 (-21.09305d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: Gaia				
	Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			441 Secs (441 Secs) [==>]	[1]
	3	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8	(3) WG0214-2105	WG0214-2105	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=4	POS TARG 0.099,0.106		251 Secs (251 Secs) [==>]	[2]
	9	(3) WG0214-2105	WG0214-2105	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP50	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(3) WG0214-2105	WG0214-2105	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP50	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(3) WG0214-2105	WG0214-2105	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP100	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(3) WG0214-2105	WG0214-2105	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP100	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

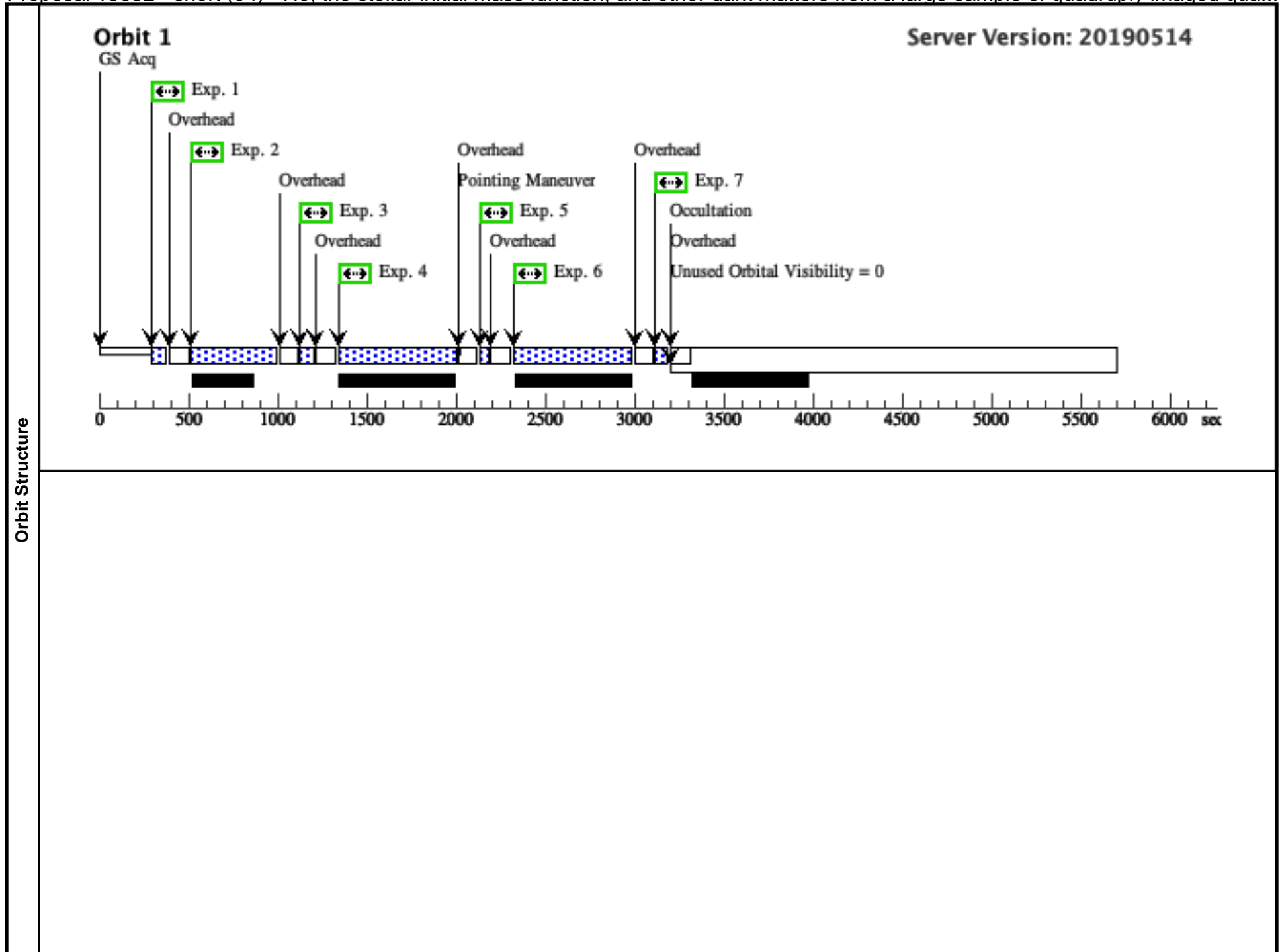


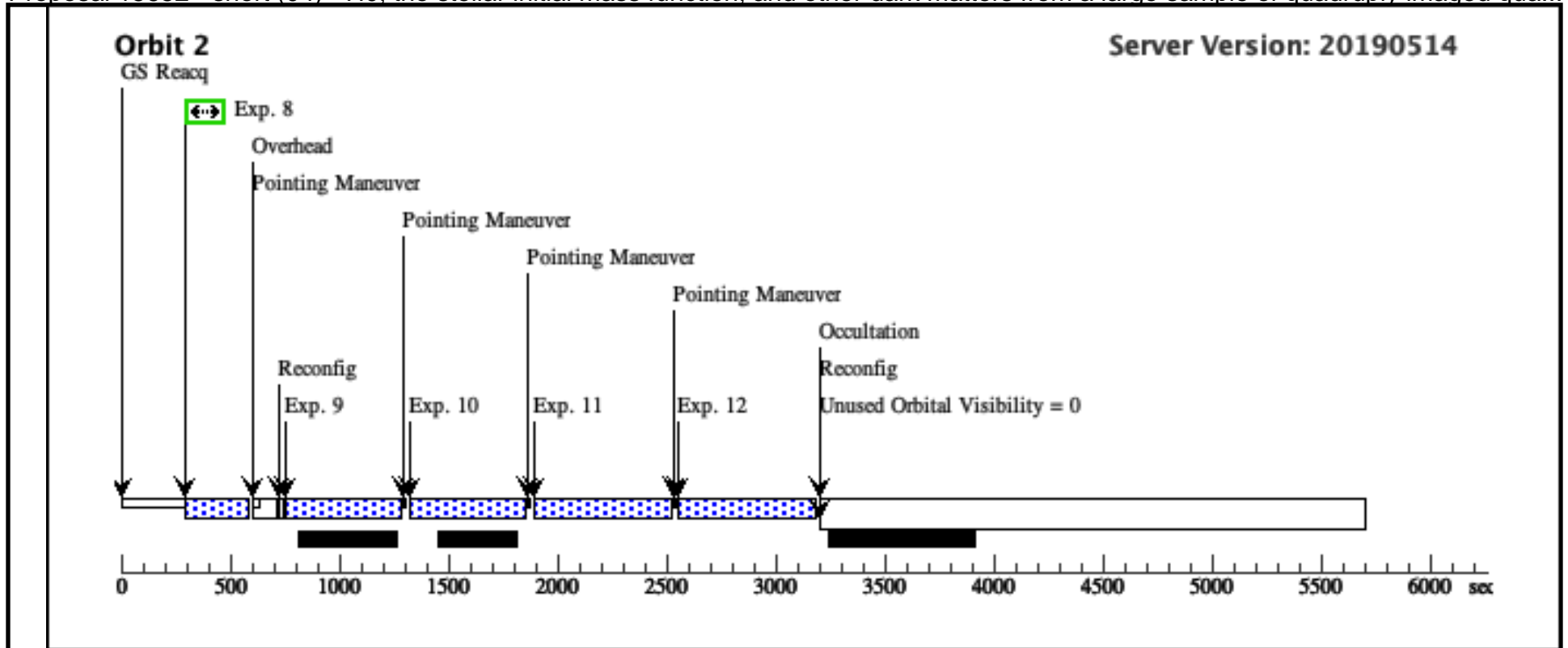


Proposal 15652 - short (04) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:10 GMT 2019

Visit		Proposal 15652, short (04), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(4)	J2205-3727	RA: 22 05 44.2300 (331.4342917d) Dec: -37 27 1.55 (-37.45043d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: DES			
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(4) J2205-3727	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2		(4) J2205-3727	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			484 Secs (484 Secs) [==>]	[1]
	3		(4) J2205-3727	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4		(4) J2205-3727	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5		(4) J2205-3727	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6		(4) J2205-3727	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7		(4) J2205-3727	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8		(4) J2205-3727	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=3	POS TARG 0.099,0.106		294 Secs (294 Secs) [==>]	[2]
	9		(4) J2205-3727	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10		(4) J2205-3727	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11		(4) J2205-3727	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12		(4) J2205-3727	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

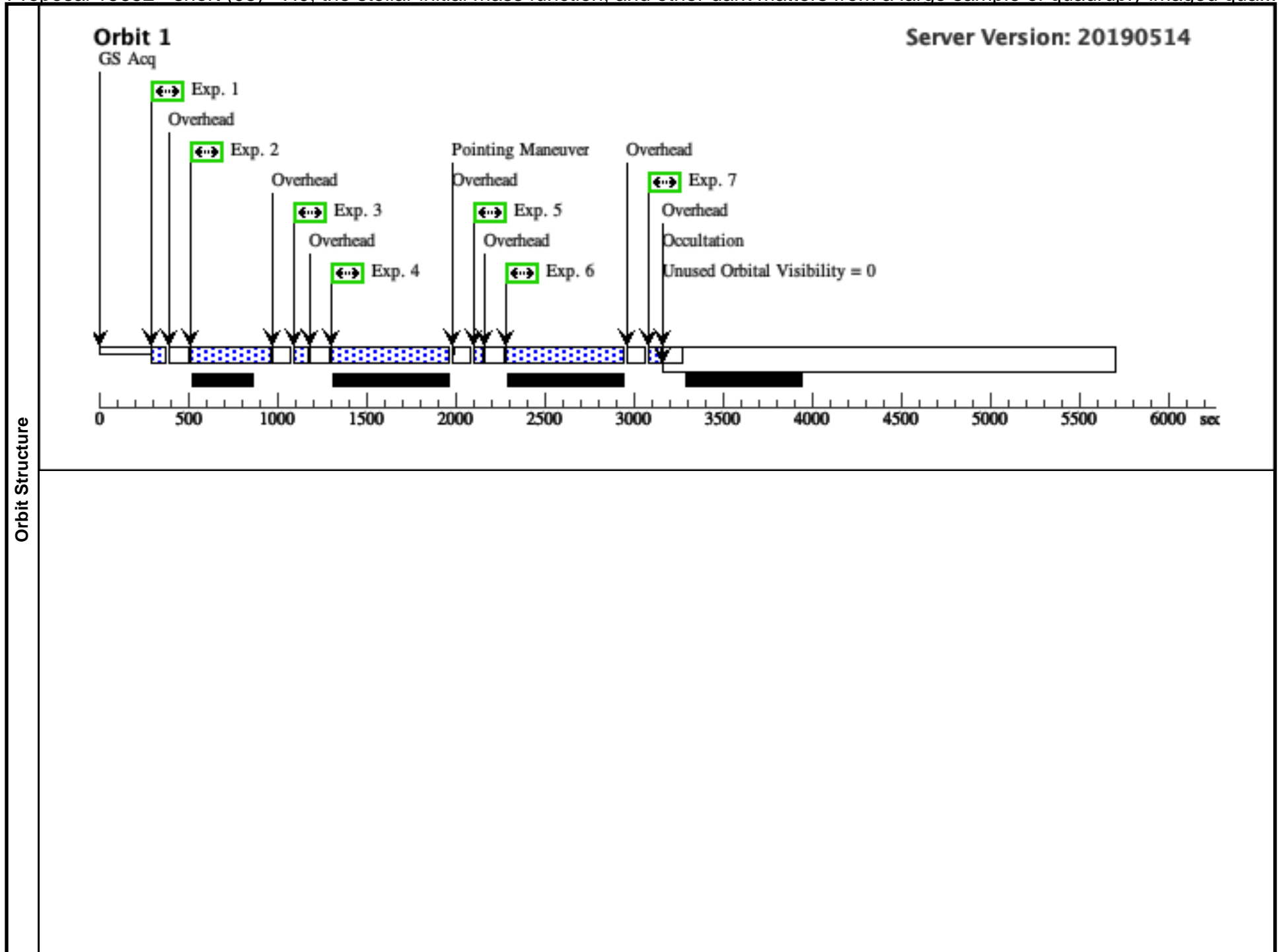


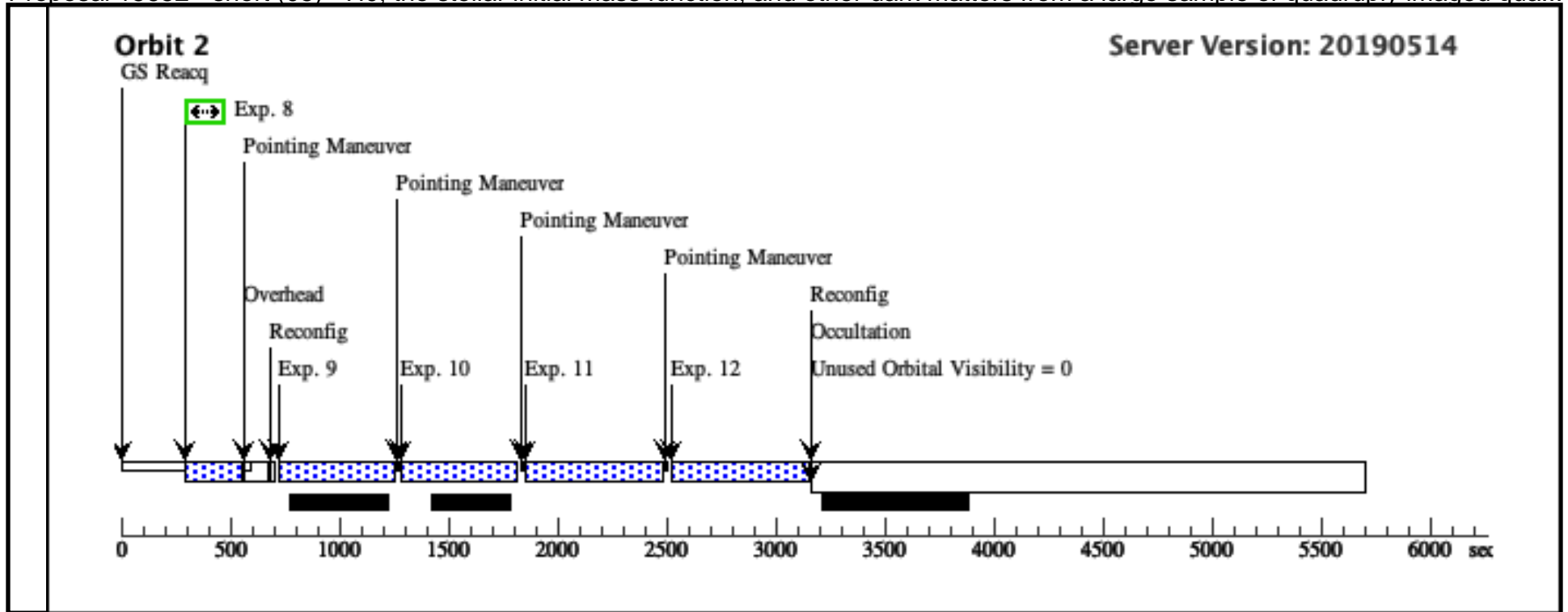


Proposal 15652 - short (05) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:10 GMT 2019

Visit	Proposal 15652, short (05), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(5)	J0343-2828	RA: 03 43 11.4600 (55.7977500d) Dec: -28 28 40.36 (-28.47788d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: DES				
	<i>Comments:</i> Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(5) J0343-2828		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2	(5) J0343-2828		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			449 Secs (449 Secs) [==>]	[1]
	3	(5) J0343-2828		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4	(5) J0343-2828		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5	(5) J0343-2828		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6	(5) J0343-2828		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7	(5) J0343-2828		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8	(5) J0343-2828		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=4	POS TARG 0.099,0.106		259 Secs (259 Secs) [==>]	[2]
	9	(5) J0343-2828		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(5) J0343-2828		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(5) J0343-2828		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(5) J0343-2828		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

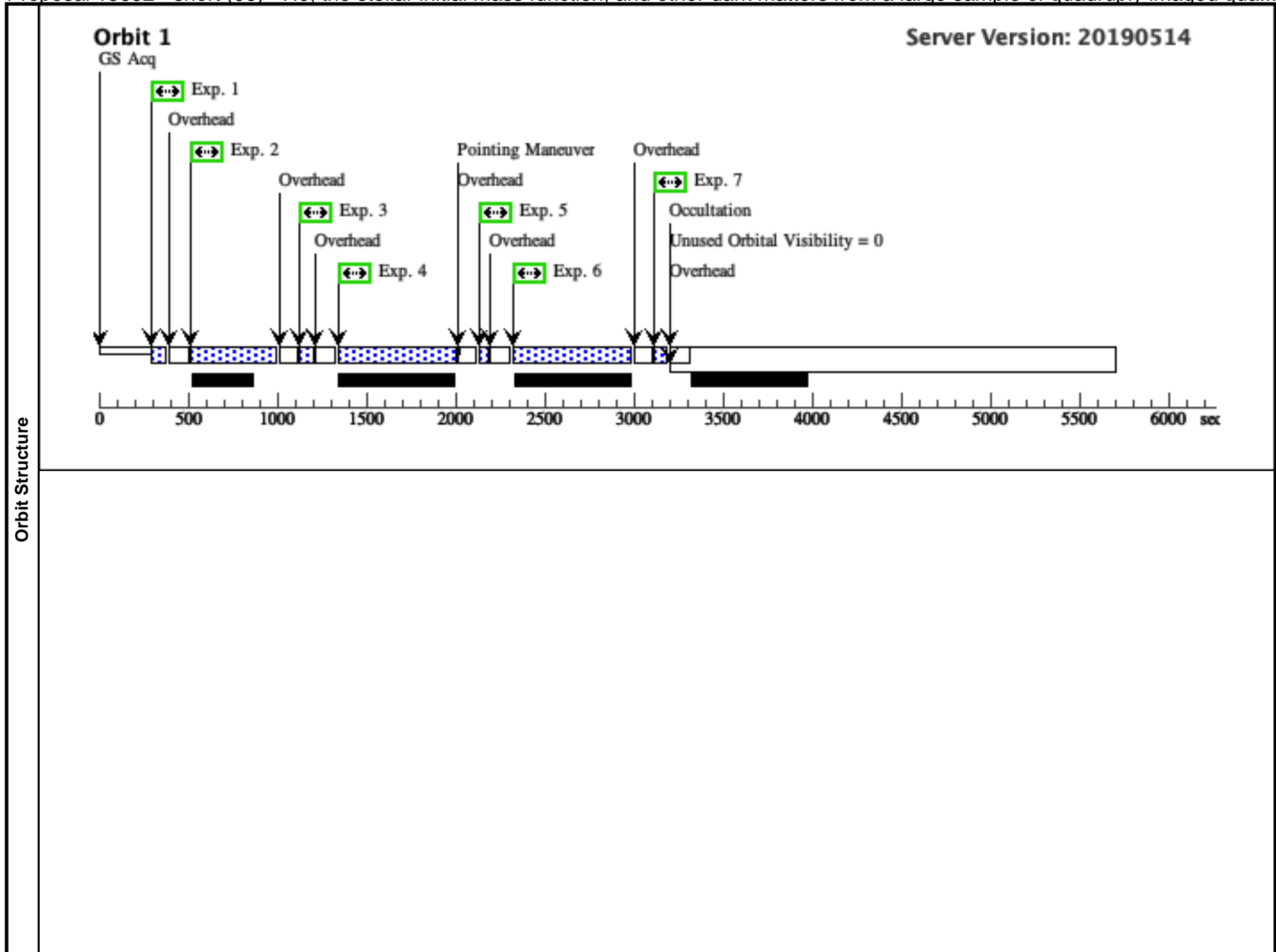


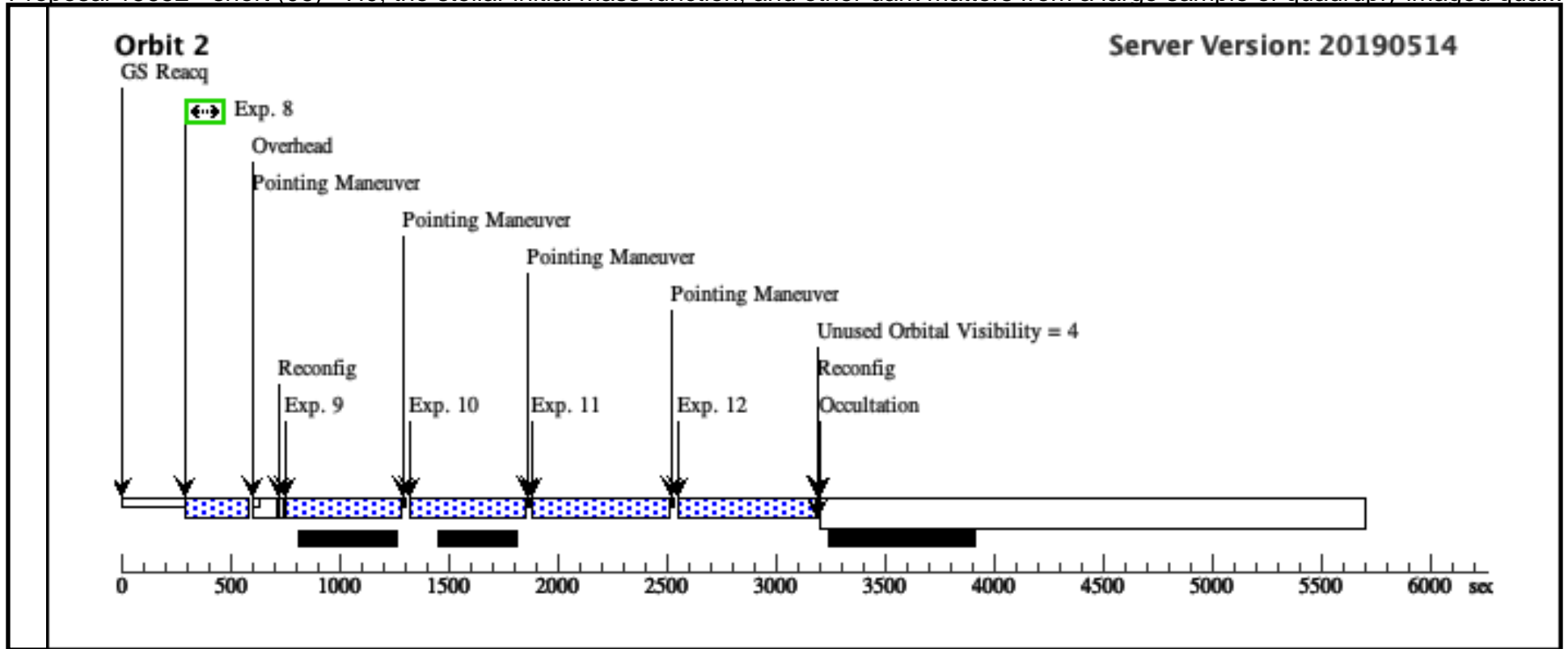


Proposal 15652 - short (06) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:10 GMT 2019

Visit	Proposal 15652, short (06), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(6)	J0029-3814	RA: 00 29 40.6100 (7.4192083d) Dec: -38 14 26.16 (-38.24060d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: DES				
	Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(6) J0029-3814		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2	(6) J0029-3814		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			484 Secs (484 Secs) [==>]	[1]
	3	(6) J0029-3814		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4	(6) J0029-3814		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5	(6) J0029-3814		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6	(6) J0029-3814		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7	(6) J0029-3814		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8	(6) J0029-3814		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=3	POS TARG 0.099,0.106		290 Secs (290 Secs) [==>]	[2]
	9	(6) J0029-3814		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(6) J0029-3814		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(6) J0029-3814		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(6) J0029-3814		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

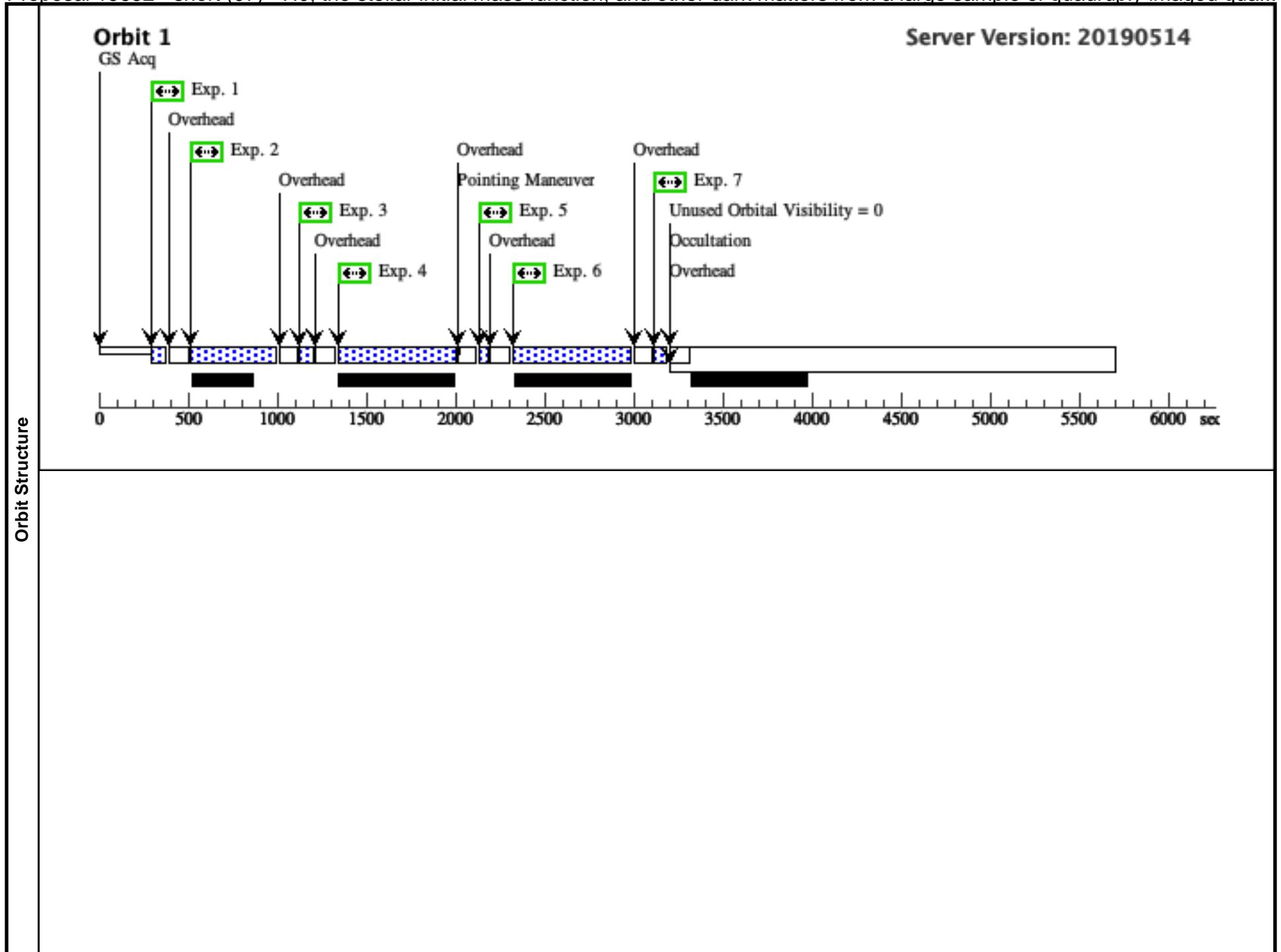


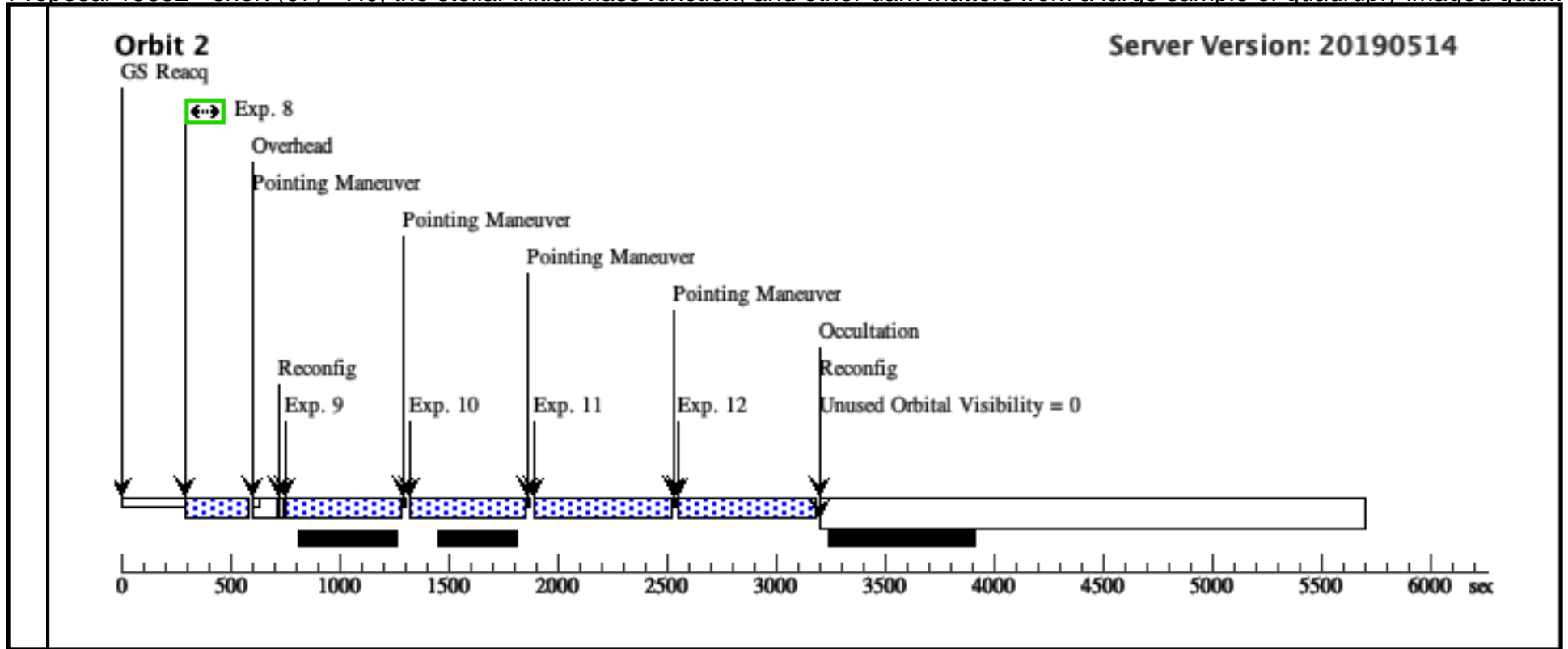


Proposal 15652 - short (07) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:10 GMT 2019

Visit		Proposal 15652, short (07), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
		(7)	F0530-3730	RA: 05 30 36.9781 (82.6540754d) Dec: -37 30 10.74 (-37.50298d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: DES				
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1	(7) F0530-3730	F0530-3730	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]	
	2	(7) F0530-3730	F0530-3730	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			484 Secs (484 Secs) [==>]	[1]	
	3	(7) F0530-3730	F0530-3730	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]	
	4	(7) F0530-3730	F0530-3730	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]	
	5	(7) F0530-3730	F0530-3730	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]	
	6	(7) F0530-3730	F0530-3730	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]	
	7	(7) F0530-3730	F0530-3730	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]	
	8	(7) F0530-3730	F0530-3730	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=3	POS TARG 0.099,0.106		294 Secs (294 Secs) [==>]	[2]	
	9	(7) F0530-3730	F0530-3730	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP50	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]	
	10	(7) F0530-3730	F0530-3730	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP50	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]	
	11	(7) F0530-3730	F0530-3730	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP100	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]	
12	(7) F0530-3730	F0530-3730	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP100	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]		

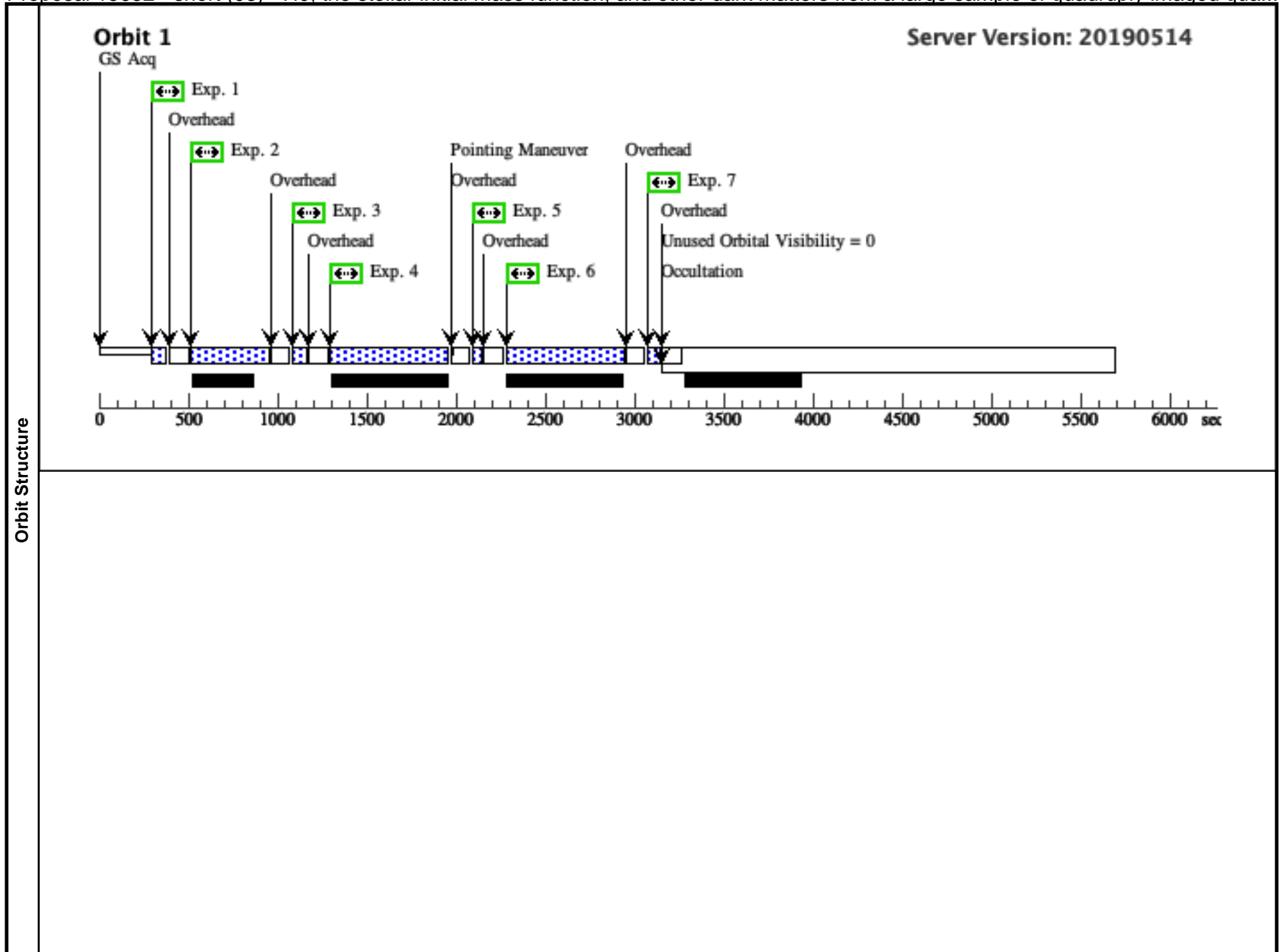


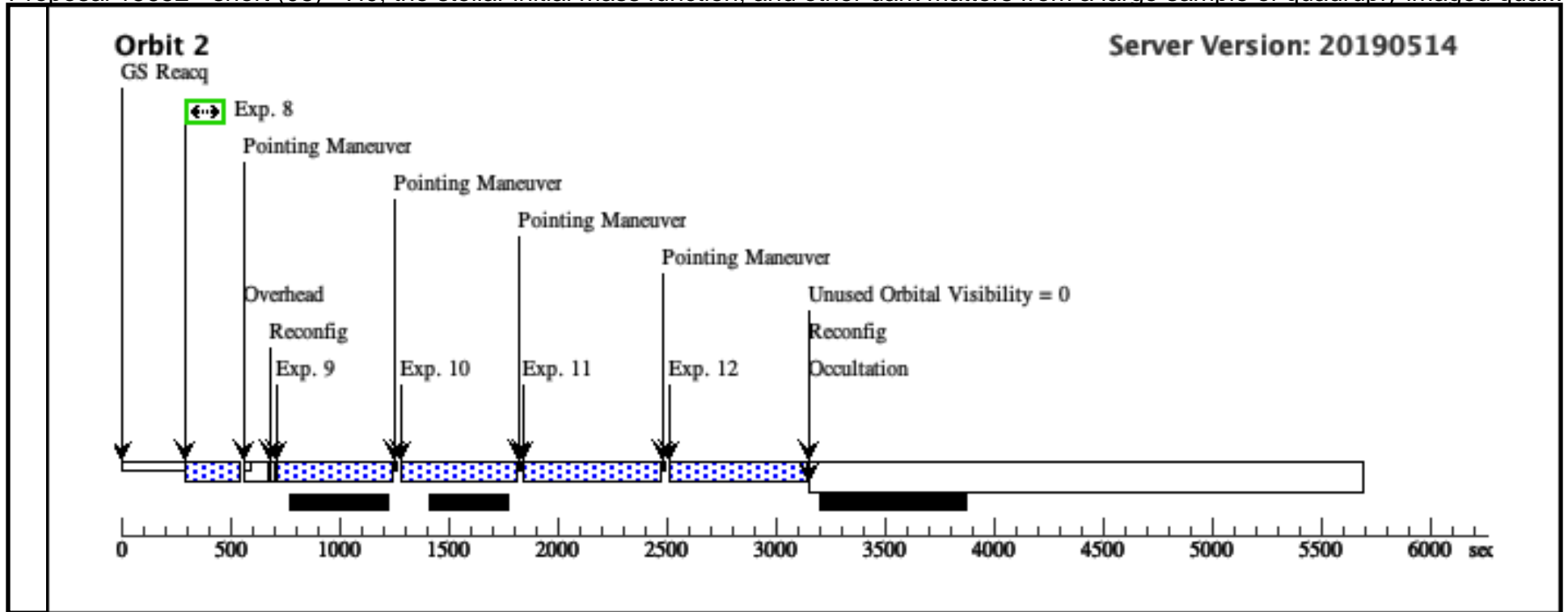


Proposal 15652 - short (08) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:10 GMT 2019

Visit	Proposal 15652, short (08), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(8)	J0659+1629	RA: 06 59 4.0789 (104.7669954d) Dec: +16 29 9.27 (16.48591d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: DES				
	<i>Comments:</i> Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(8) J0659+1629		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2	(8) J0659+1629		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			440 Secs (440 Secs) [==>]	[1]
	3	(8) J0659+1629		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4	(8) J0659+1629		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5	(8) J0659+1629		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6	(8) J0659+1629		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7	(8) J0659+1629		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8	(8) J0659+1629		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=4	POS TARG 0.099,0.106		250 Secs (250 Secs) [==>]	[2]
	9	(8) J0659+1629		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(8) J0659+1629		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(8) J0659+1629		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(8) J0659+1629		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	





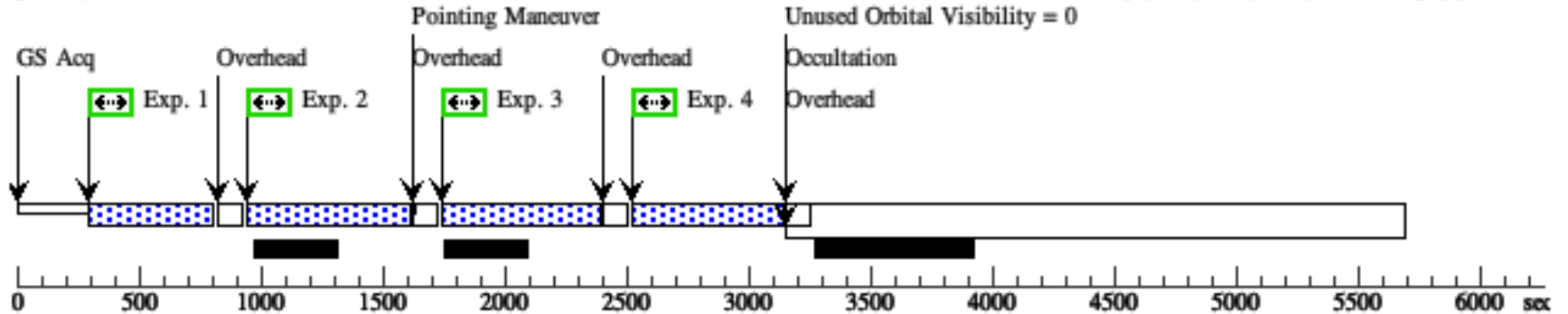
Proposal 15652 - singleorbit (09) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply image...

Tue Nov 26 17:01:10 GMT 2019

Visit	Proposal 15652, singleorbit (09), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	W2MJ1042+1641	RA: 10 42 22.0572 (160.5919050d) Dec: +16 41 14.87 (16.68746d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: SDSS				
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(9) W2MJ1042+1641	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			500 Secs (485 Secs)	
			1						[=>485.0 Secs]	[1]
	2		(9) W2MJ1042+1641	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (649 Secs)	
			1						[=>649.0 Secs]	[1]
3		(9) W2MJ1042+1641	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (649 Secs)		
		1						[=>649.0 Secs]	[1]	
4		(9) W2MJ1042+1641	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO	POS TARG 0.099,0.106		617 Secs (602 Secs)		
		1						[=>602.0 Secs]	[1]	

Orbit 1

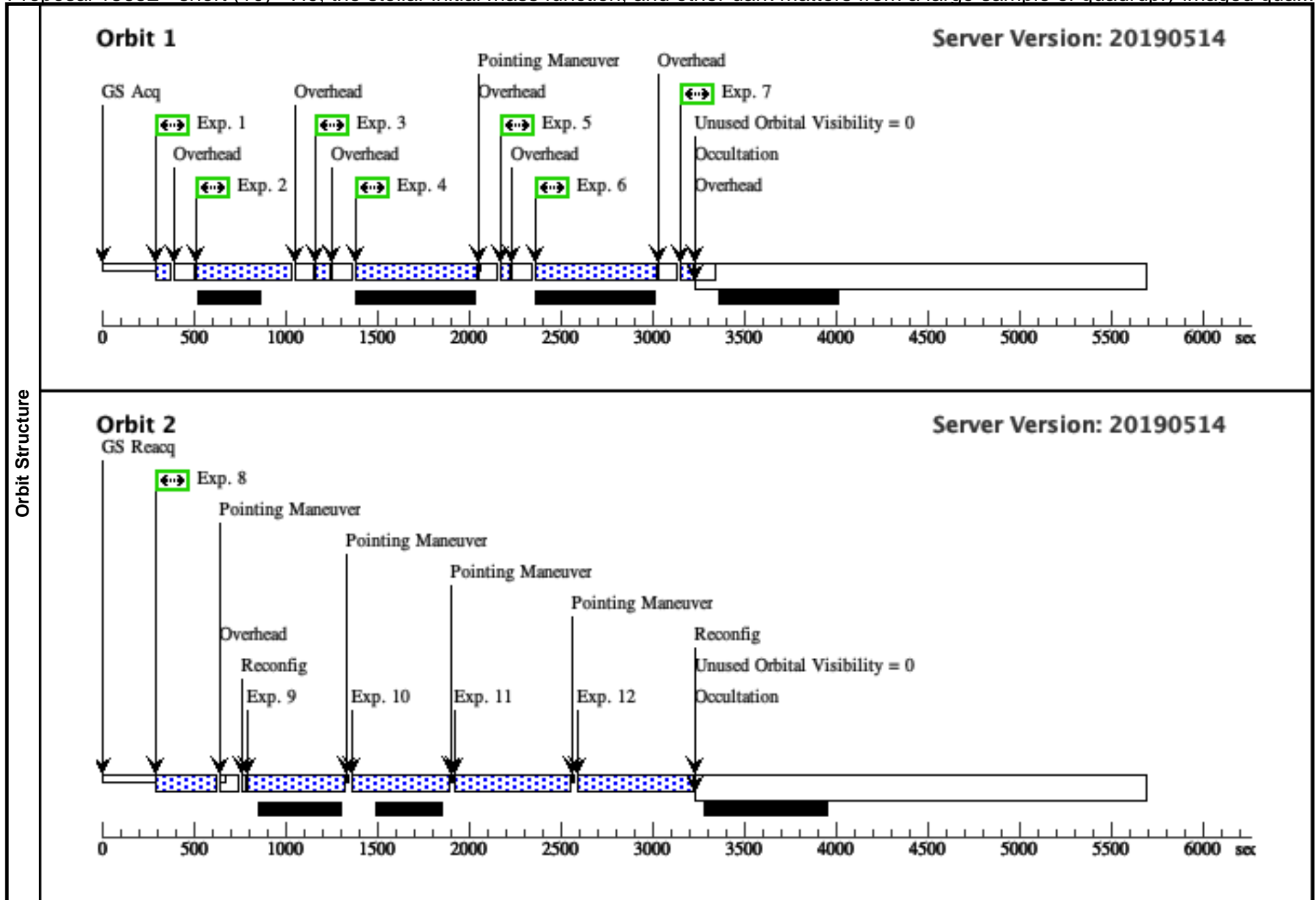
Server Version: 20190514



Proposal 15652 - short (10) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:10 GMT 2019

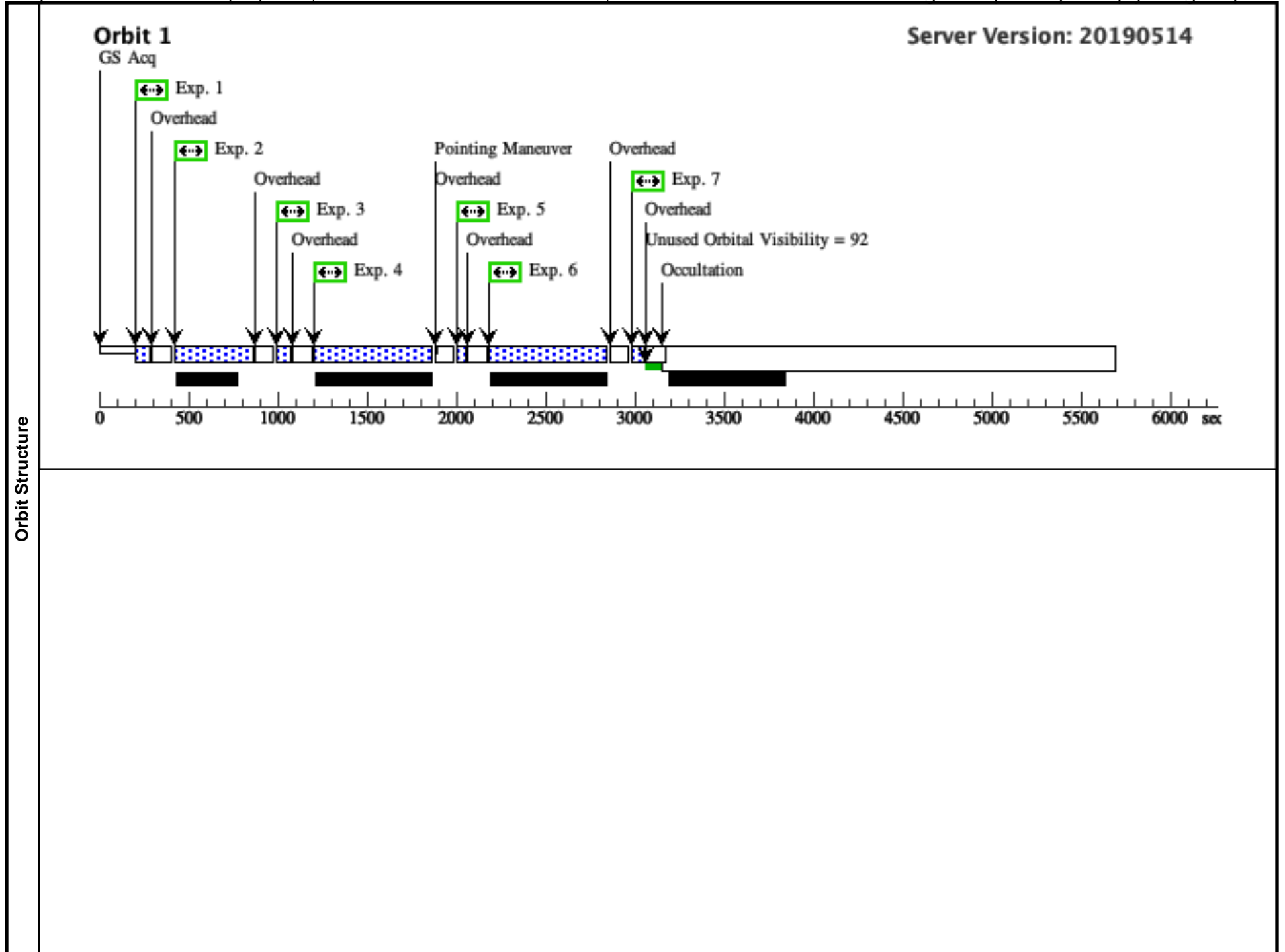
Visit		Proposal 15652, short (10), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(10)	J1131-4419	RA: 11 31 0.0262 (172.7501092d) Dec: -44 19 59.77 (-44.33327d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: Gaia			
<i>Comments:</i> Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(10) J1131-4419	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2		(10) J1131-4419	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			522 Secs (522 Secs) [==>]	[1]
	3		(10) J1131-4419	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4		(10) J1131-4419	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5		(10) J1131-4419	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6		(10) J1131-4419	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7		(10) J1131-4419	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8		(10) J1131-4419	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0.106		333 Secs (333 Secs) [==>]	[2]
	9		(10) J1131-4419	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10		(10) J1131-4419	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11		(10) J1131-4419	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12		(10) J1131-4419	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

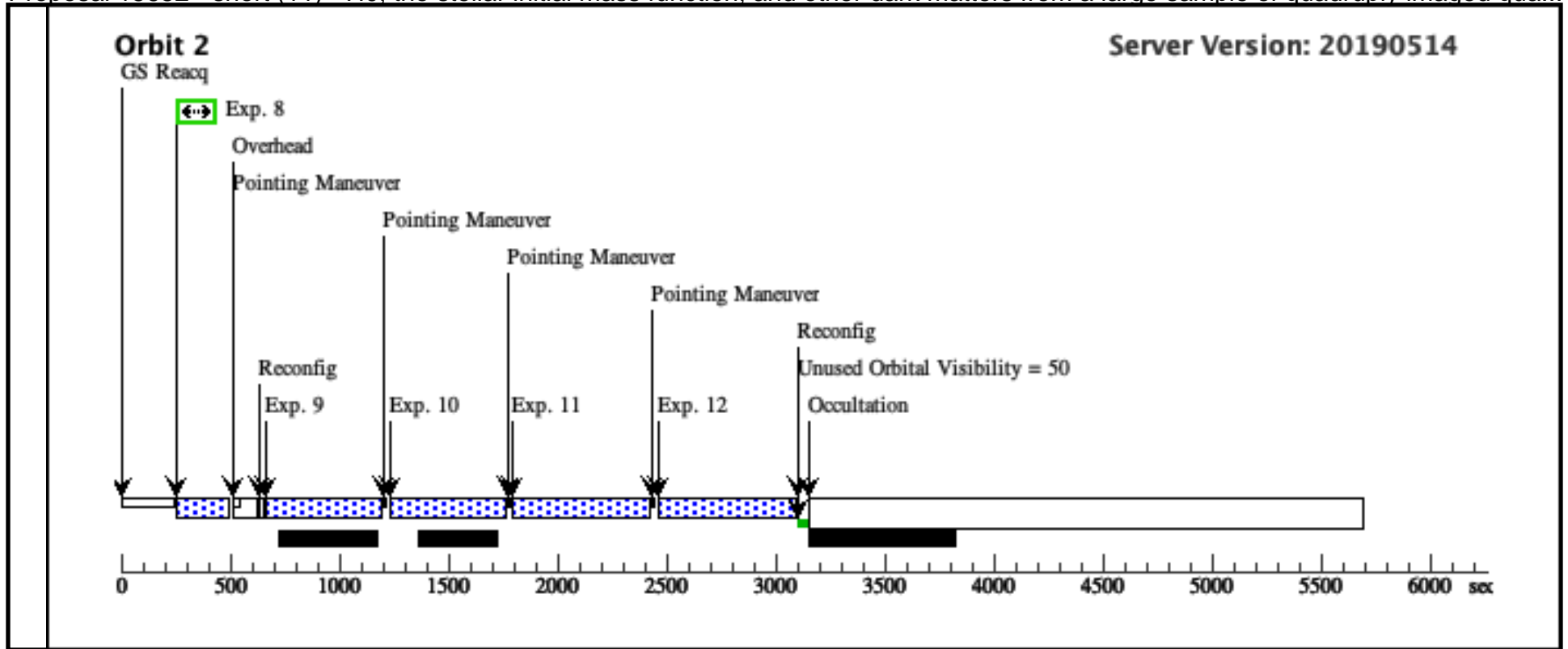


Proposal 15652 - short (11) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:10 GMT 2019

Visit	Proposal 15652, short (11), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(11)	2M1134-2103	RA: 11 34 40.5700 (173.6690417d) Dec: -21 03 22.82 (-21.05634d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: 2MASS				
	Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(11) 2M1134-2103	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	GS ACQ SCENARI O SINGLE		50 Secs (50 Secs) [==>]	[1]
	2		(11) 2M1134-2103	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			441 Secs (441 Secs) [==>]	[1]
	3		(11) 2M1134-2103	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4		(11) 2M1134-2103	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5		(11) 2M1134-2103	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0. 106		50 Secs (50 Secs) [==>]	[1]
	6		(11) 2M1134-2103	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0. 106		664 Secs (664 Secs) [==>]	[1]
	7		(11) 2M1134-2103	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0. 106		50 Secs (50 Secs) [==>]	[1]
	8		(11) 2M1134-2103	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=4	POS TARG 0.099,0. 106		247 Secs (247 Secs) [==>]	[2]
	9		(11) 2M1134-2103	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10		(11) 2M1134-2103	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2. 002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11		(11) 2M1134-2103	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5. 335		599.232292 Secs (599.232 Secs) [==>]	[2]
12		(11) 2M1134-2103	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3 .333		599.232292 Secs (599.232 Secs) [==>]	[2]	

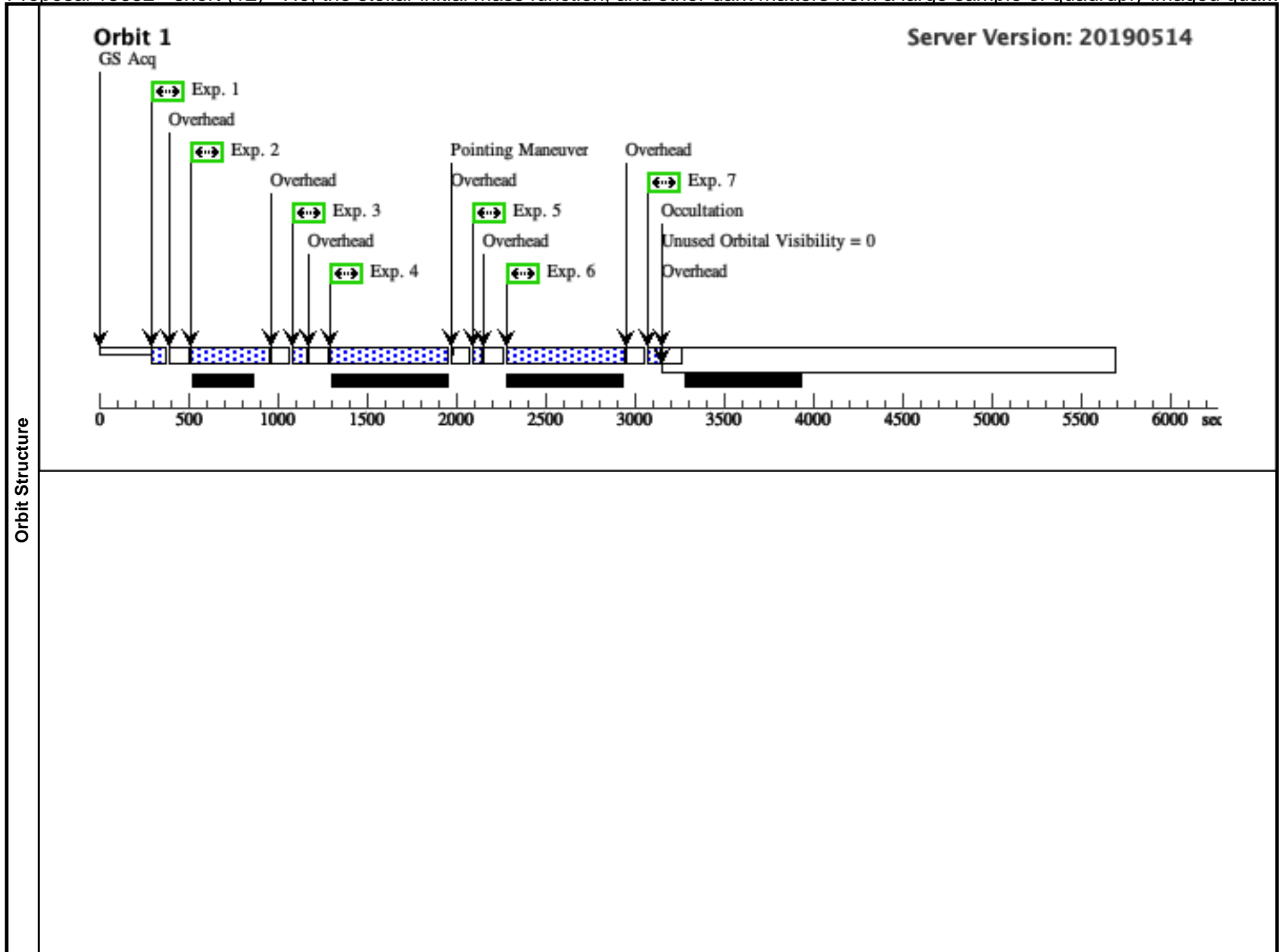


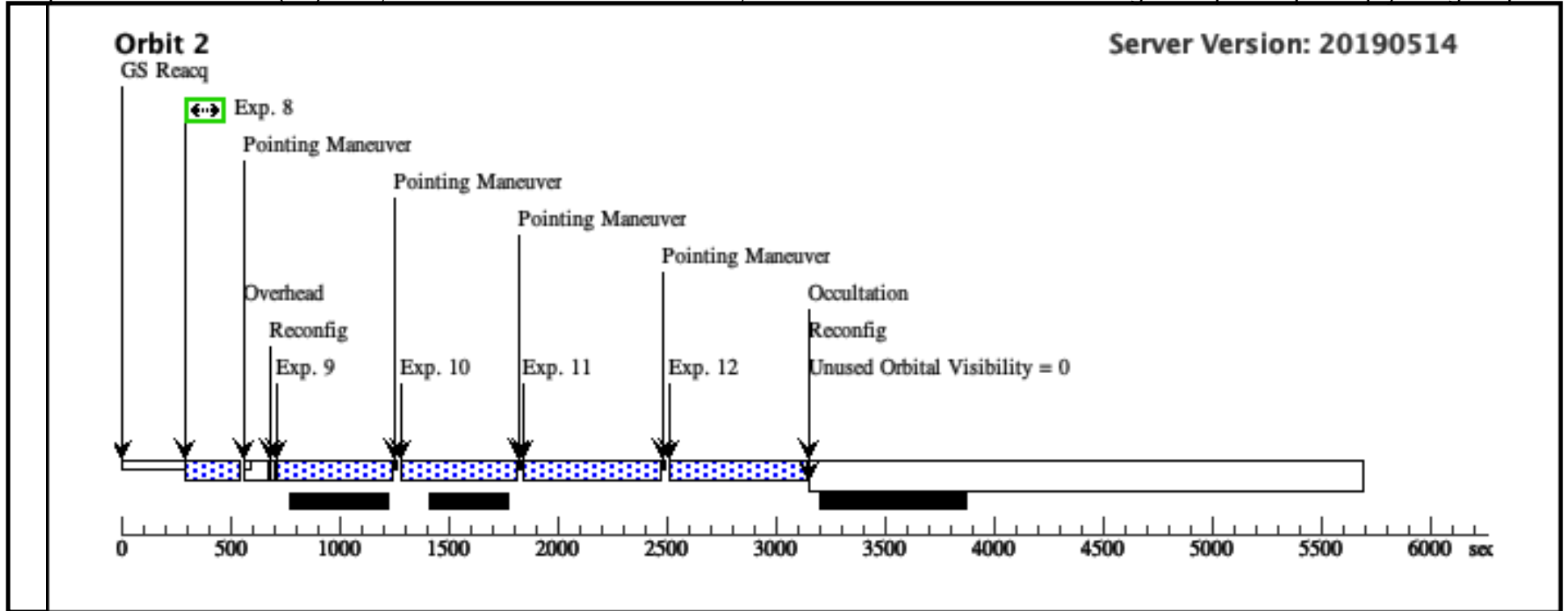


Proposal 15652 - short (12) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:10 GMT 2019

Visit		Proposal 15652, short (12), scheduling Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous					
		(12)	2M1310-1714	RA: 13 10 20.0600 (197.5835833d) Dec: -17 14 57.52 (-17.24931d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: 2MASS				
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]											
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1		(12) 2M1310-1714	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]	
	2		(12) 2M1310-1714	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			440 Secs (440 Secs) [==>]	[1]	
	3		(12) 2M1310-1714	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]	
	4		(12) 2M1310-1714	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]	
	5		(12) 2M1310-1714	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]	
	6		(12) 2M1310-1714	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]	
	7		(12) 2M1310-1714	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]	
	8		(12) 2M1310-1714	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=4	POS TARG 0.099,0.106		250 Secs (250 Secs) [==>]	[2]	
	9		(12) 2M1310-1714	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]	
	10		(12) 2M1310-1714	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]	
	11		(12) 2M1310-1714	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]	
12		(12) 2M1310-1714	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]		

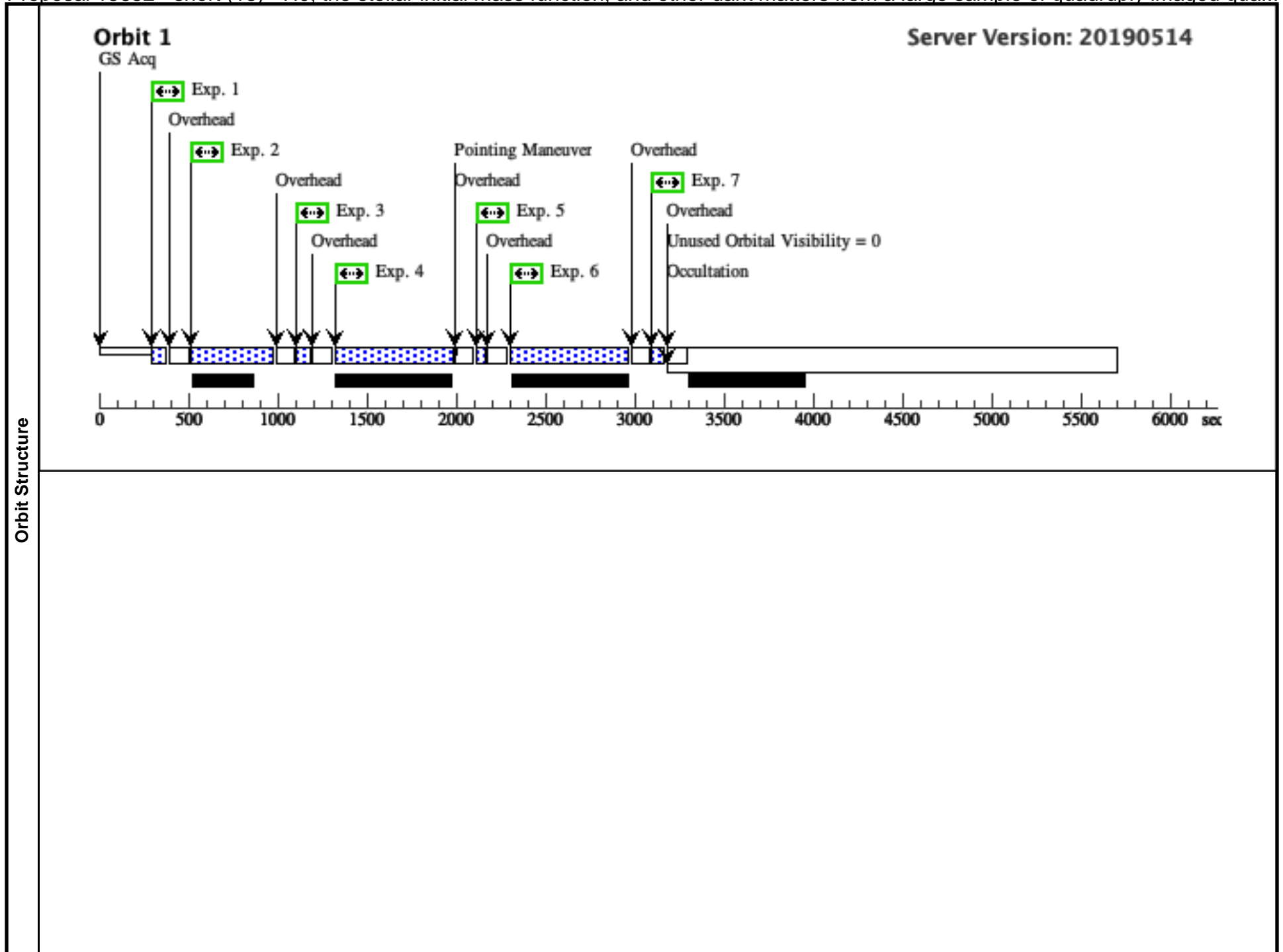


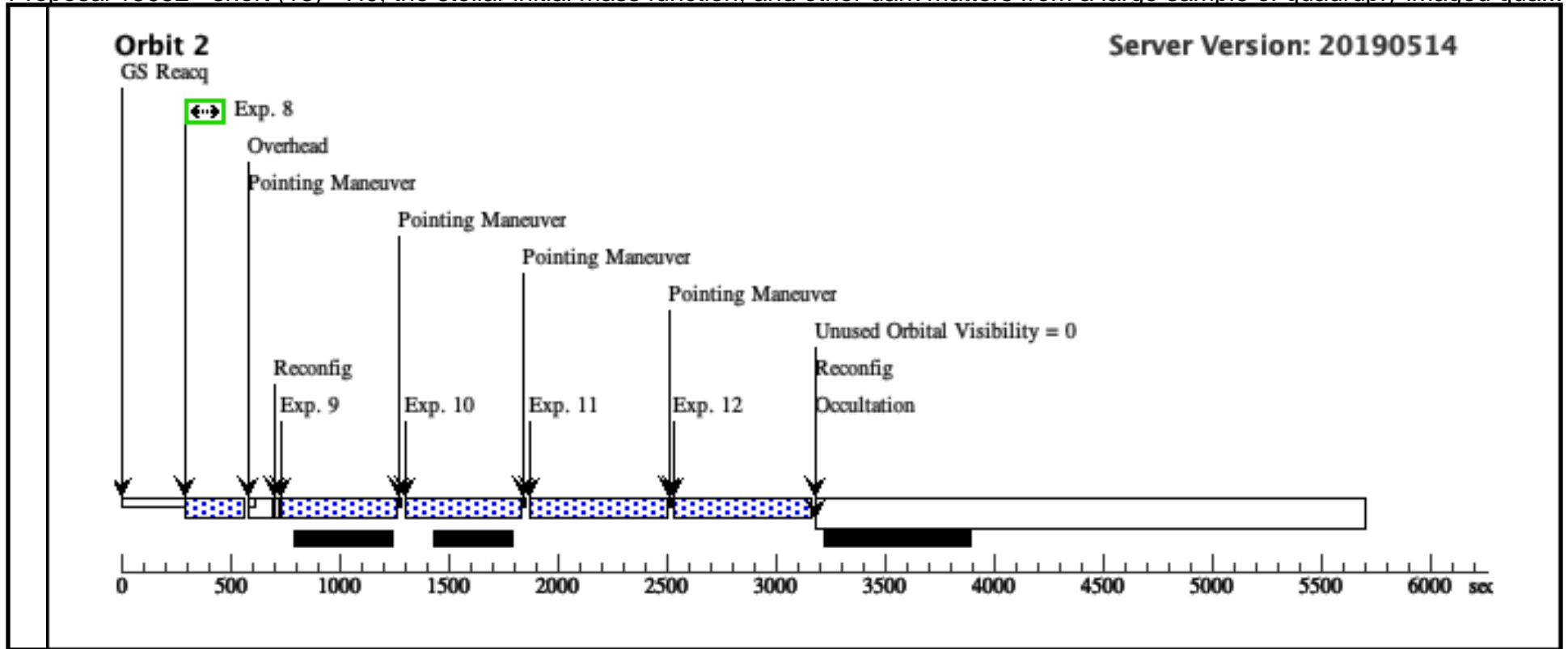


Proposal 15652 - short (13) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:10 GMT 2019

Visit	Proposal 15652, short (13), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(13)	J1537-3010	RA: 15 37 25.3435 (234.3555979d) Dec: -30 10 16.81 (-30.17134d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: DES				
	Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(13) J1537-3010	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2		(13) J1537-3010	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			464 Secs (464 Secs) [==>]	[1]
	3		(13) J1537-3010	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4		(13) J1537-3010	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5		(13) J1537-3010	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6		(13) J1537-3010	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7		(13) J1537-3010	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8		(13) J1537-3010	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=3	POS TARG 0.099,0.106		274 Secs (274 Secs) [==>]	[2]
	9		(13) J1537-3010	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP50	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10		(13) J1537-3010	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP50	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11		(13) J1537-3010	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP100	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12		(13) J1537-3010	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP100	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

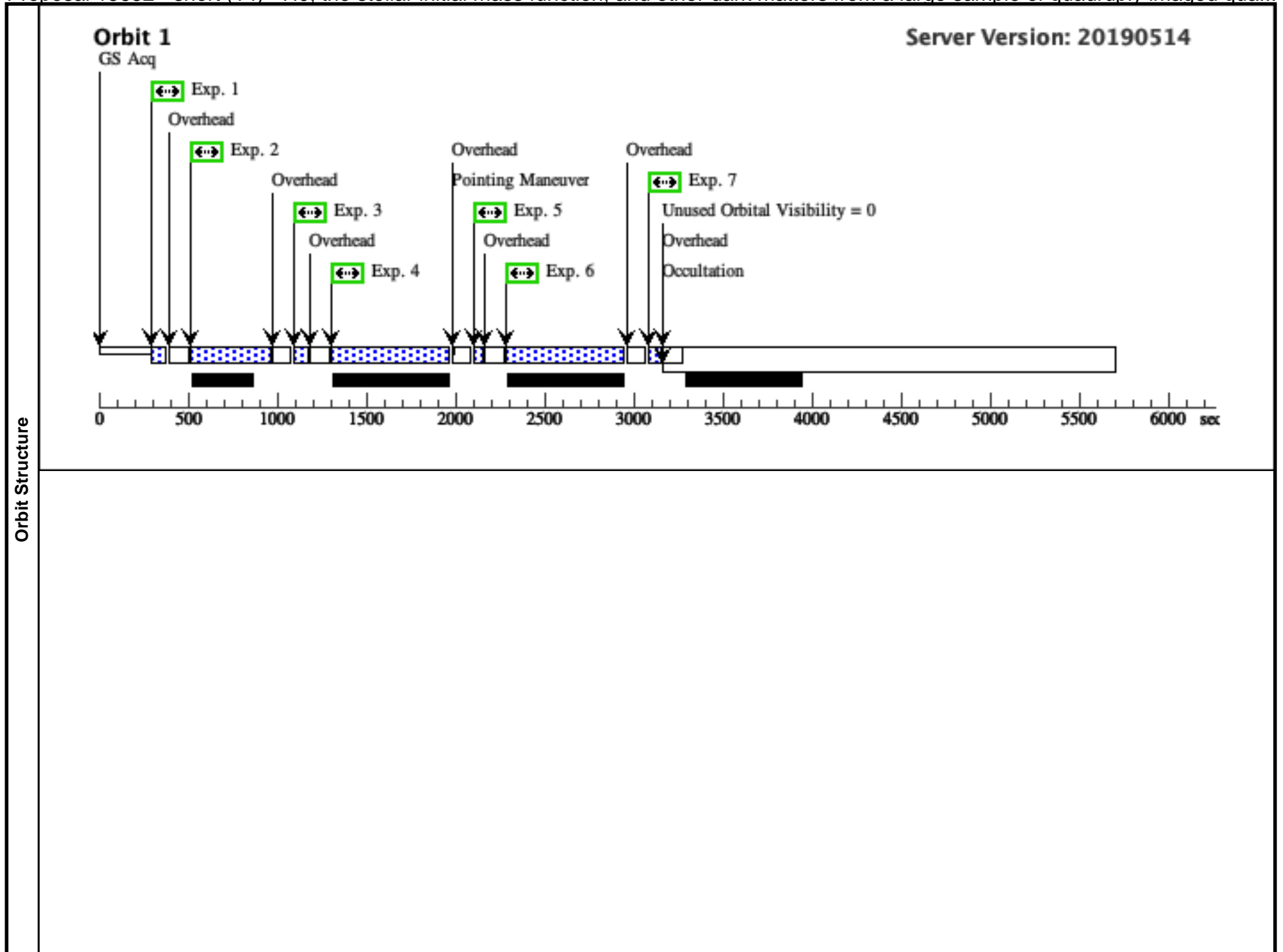


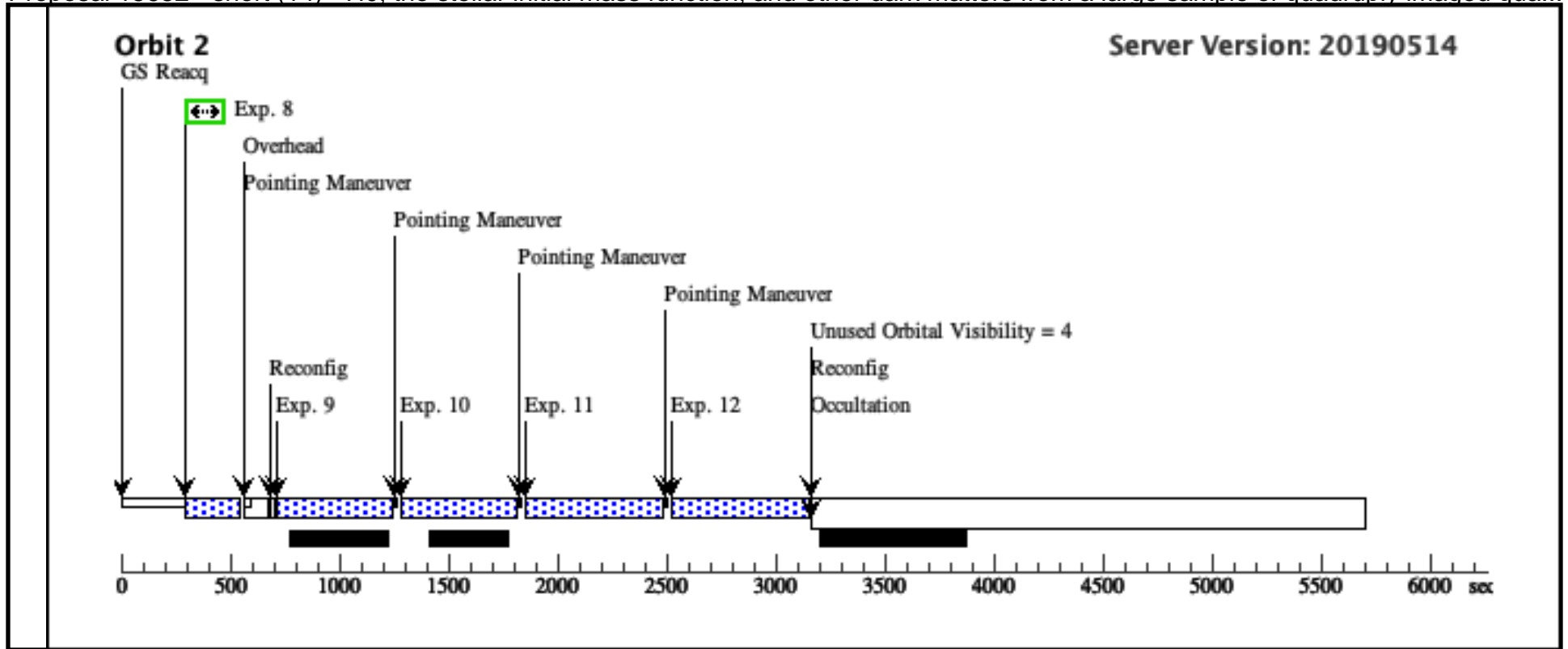


Proposal 15652 - short (14) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:11 GMT 2019

Visit		Proposal 15652, short (14), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(14)	J0818-2613	RA: 08 18 28.3000 (124.6179167d) Dec: -26 13 25.32 (-26.22370d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: SDSS			
	Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(14) J0818-2613		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2	(14) J0818-2613		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			449 Secs (449 Secs) [==>]	[1]
	3	(14) J0818-2613		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4	(14) J0818-2613		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5	(14) J0818-2613		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6	(14) J0818-2613		WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7	(14) J0818-2613		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8	(14) J0818-2613		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=4	POS TARG 0.099,0.106		255 Secs (255 Secs) [==>]	[2]
	9	(14) J0818-2613		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(14) J0818-2613		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(14) J0818-2613		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(14) J0818-2613		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

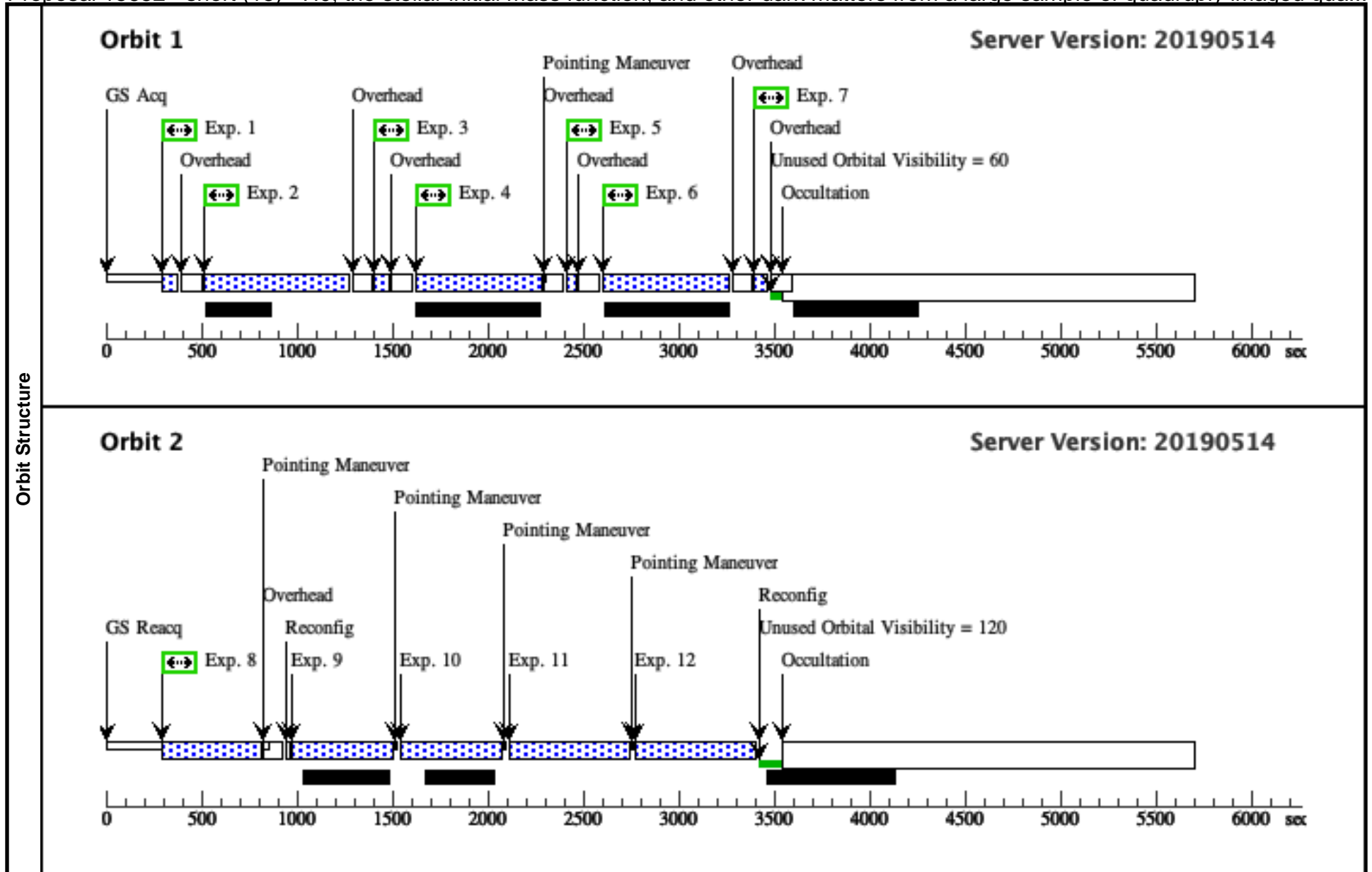




Proposal 15652 - short (15) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:11 GMT 2019

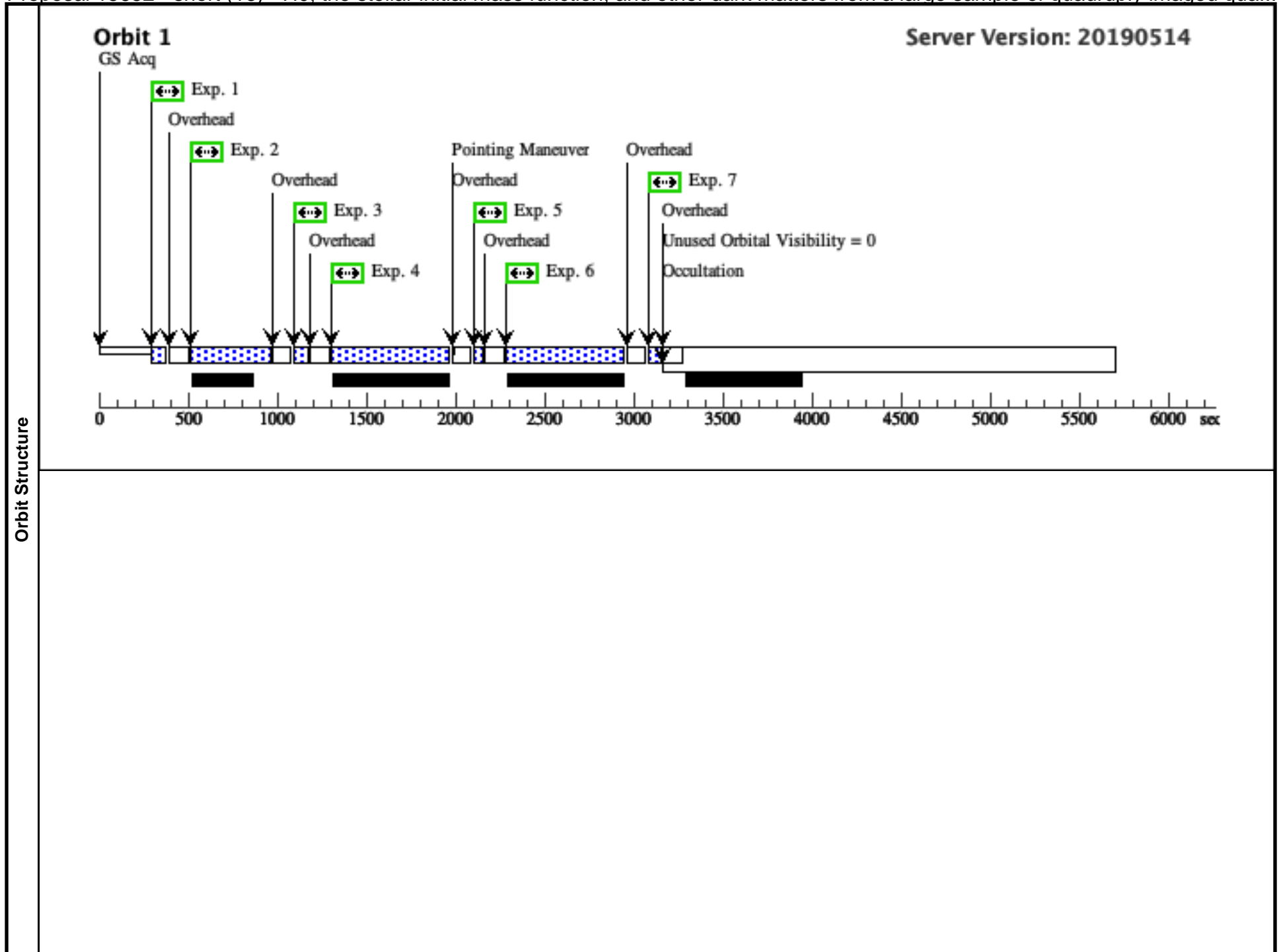
Visit	Proposal 15652, short (15), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(15)	PSJ1721+8842	RA: 17 21 48.7100 (260.4529583d) Dec: +88 42 22.56 (88.70627d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: Panstarrs				
	Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(15) PSJ1721+8842	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12				50 Secs (50 Secs) [==>]	[1]
	2	(15) PSJ1721+8842	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO				764 Secs (764 Secs) [==>]	[1]
	3	(15) PSJ1721+8842	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12				50 Secs (50 Secs) [==>]	[1]
	4	(15) PSJ1721+8842	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO				664 Secs (664 Secs) [==>]	[1]
	5	(15) PSJ1721+8842	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106			50 Secs (50 Secs) [==>]	[1]
	6	(15) PSJ1721+8842	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106			664 Secs (664 Secs) [==>]	[1]
	7	(15) PSJ1721+8842	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106			50 Secs (50 Secs) [==>]	[1]
	8	(15) PSJ1721+8842	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO	POS TARG 0.099,0.106			518 Secs (518 Secs) [==>]	[2]
	9	(15) PSJ1721+8842	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0			499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(15) PSJ1721+8842	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002			499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(15) PSJ1721+8842	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335			599.232292 Secs (599.232 Secs) [==>]	[2]
12	(15) PSJ1721+8842	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333			599.232292 Secs (599.232 Secs) [==>]	[2]	

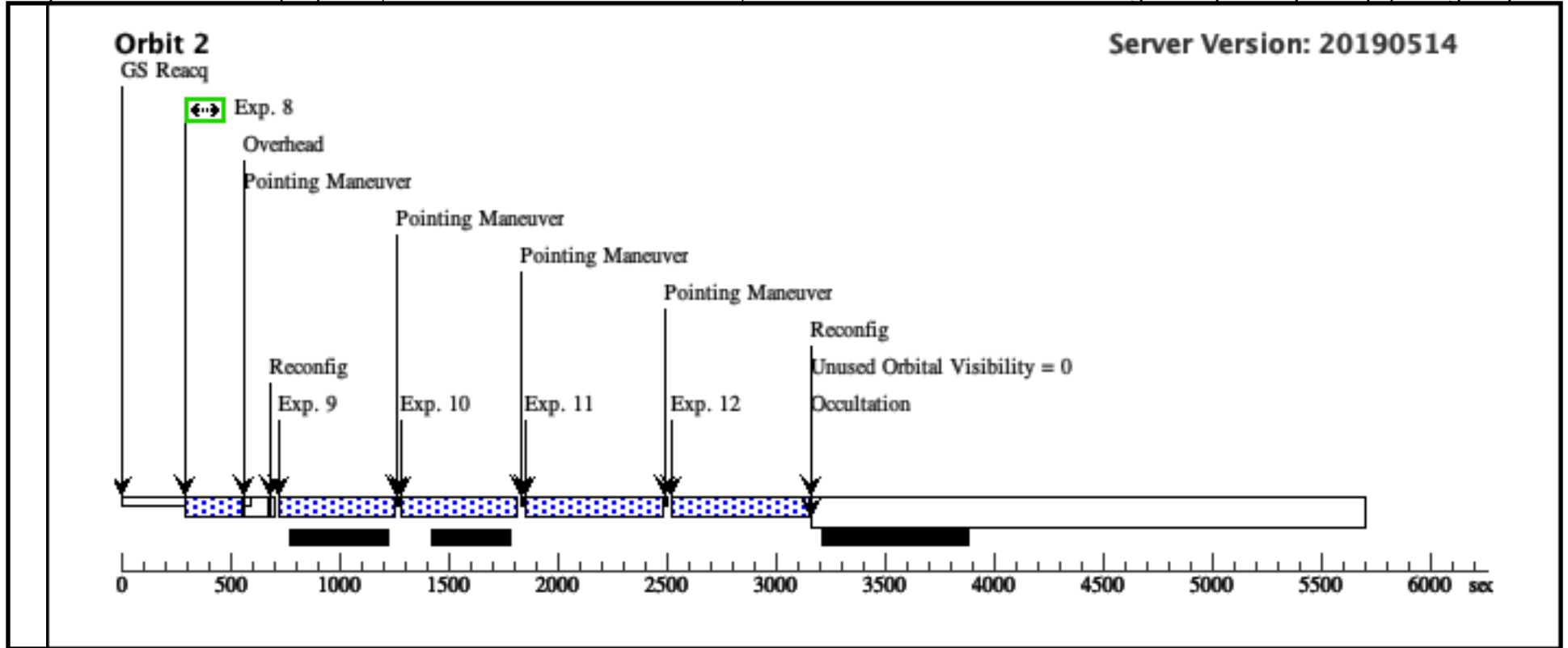


Proposal 15652 - short (16) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

Tue Nov 26 17:01:11 GMT 2019

Visit		Proposal 15652, short (16), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(16)	J1817+2729	RA: 18 17 30.7928 (274.3783033d) Dec: +27 29 40.50 (27.49458d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: SDSS			
Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, OSO]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(16) J1817+2729	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2		(16) J1817+2729	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			449 Secs (449 Secs) [==>]	[1]
	3		(16) J1817+2729	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4		(16) J1817+2729	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5		(16) J1817+2729	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6		(16) J1817+2729	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7		(16) J1817+2729	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8		(16) J1817+2729	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=4	POS TARG 0.099,0.106		259 Secs (259 Secs) [==>]	[2]
	9		(16) J1817+2729	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10		(16) J1817+2729	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11		(16) J1817+2729	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12		(16) J1817+2729	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	

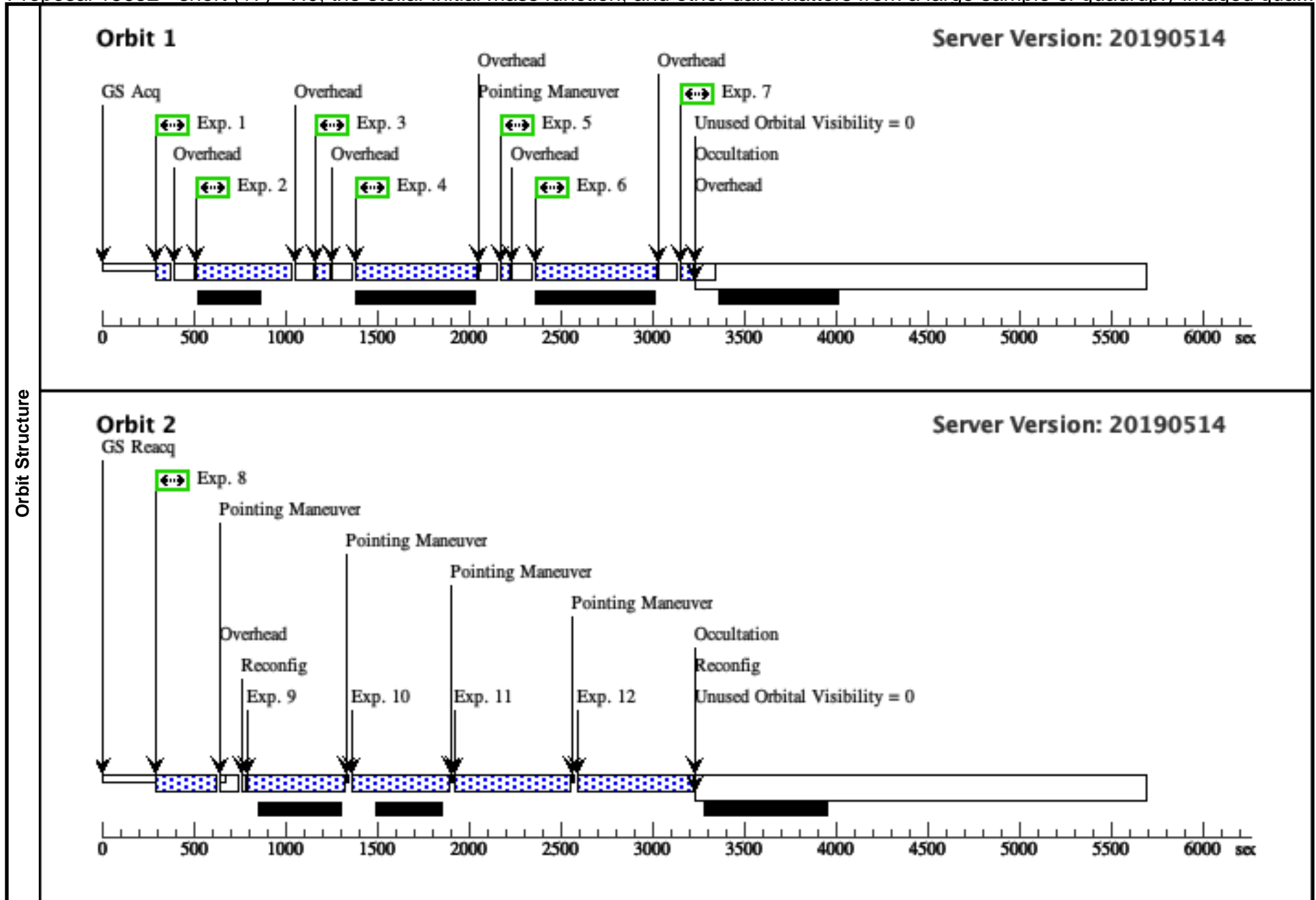




Proposal 15652 - short (17) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

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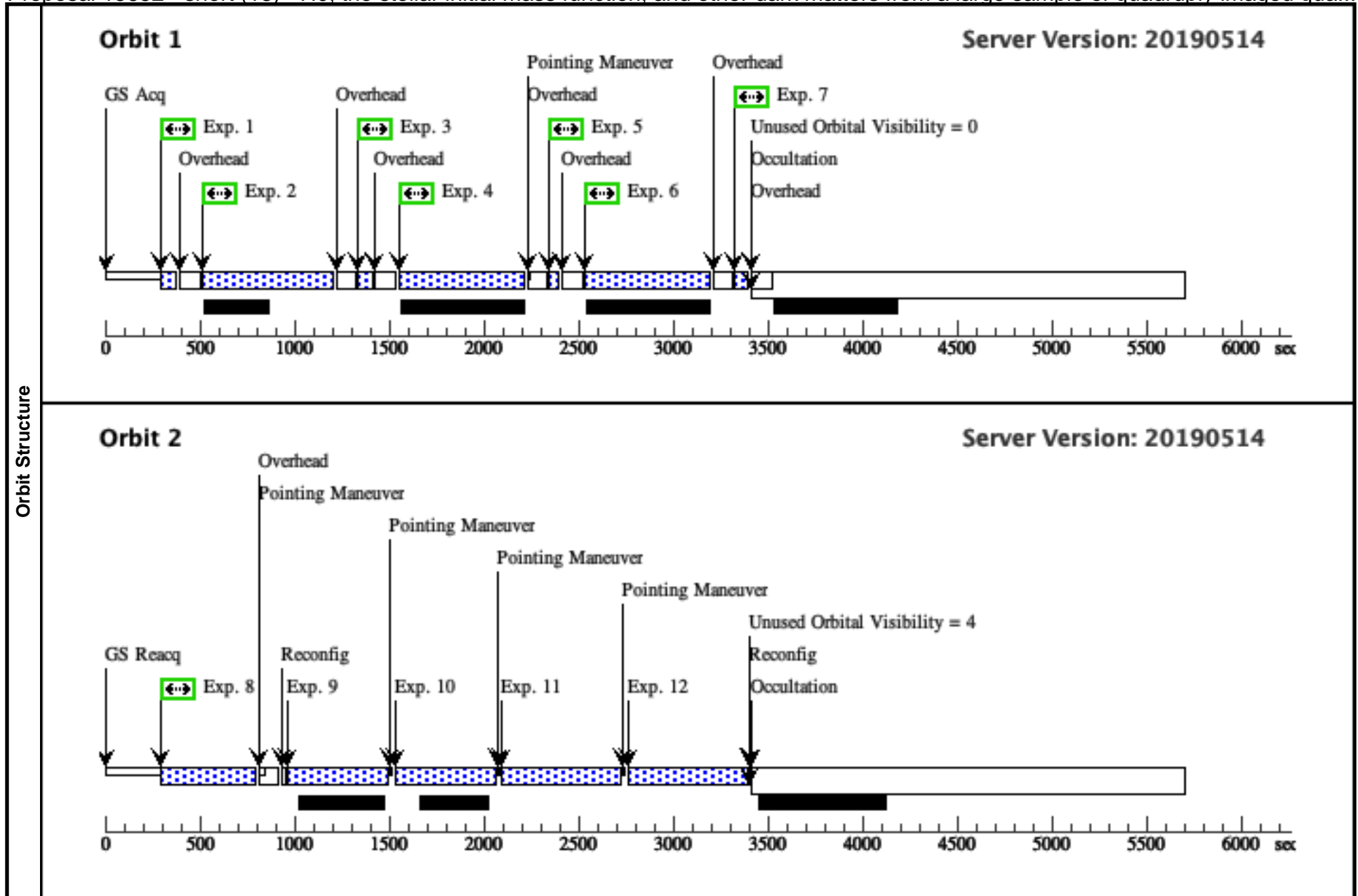
Visit	Proposal 15652, short (17), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(17)	WG2100-4452	RA: 21 00 14.9100 (315.0621250d) Dec: -44 52 6.63 (-44.86851d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: Gaia				
	Comments: Category=GALAXY Description=[GRAVITATIONAL LENS, QSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(17) WG2100-4452	WG2100-4452	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2	(17) WG2100-4452	WG2100-4452	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			522 Secs (522 Secs) [==>]	[1]
	3	(17) WG2100-4452	WG2100-4452	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4	(17) WG2100-4452	WG2100-4452	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5	(17) WG2100-4452	WG2100-4452	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6	(17) WG2100-4452	WG2100-4452	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7	(17) WG2100-4452	WG2100-4452	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8	(17) WG2100-4452	WG2100-4452	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=2	POS TARG 0.099,0.106		333 Secs (333 Secs) [==>]	[2]
	9	(17) WG2100-4452	WG2100-4452	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10	(17) WG2100-4452	WG2100-4452	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11	(17) WG2100-4452	WG2100-4452	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12	(17) WG2100-4452	WG2100-4452	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	



Proposal 15652 - short (18) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qua...

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Visit		Proposal 15652, short (18), completed Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)								
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
		(18)	J2145+6345	RA: 21 45 5.1825 (326.2715938d) Dec: +63 45 41.21 (63.76145d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: SDSS			
<i>Comments:</i> Category=GALAXY Description=[GRAVITATIONAL LENS, QSO]										
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(18) J2145+6345	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	2		(18) J2145+6345	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO			695 Secs (695 Secs) [==>]	[1]
	3		(18) J2145+6345	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12			50 Secs (50 Secs) [==>]	[1]
	4		(18) J2145+6345	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO			664 Secs (664 Secs) [==>]	[1]
	5		(18) J2145+6345	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	6		(18) J2145+6345	WFC3/UVIS, ACCUM, UVIS2	F814W	CR-SPLIT=NO	POS TARG 0.099,0.106		664 Secs (664 Secs) [==>]	[1]
	7		(18) J2145+6345	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=12	POS TARG 0.099,0.106		50 Secs (50 Secs) [==>]	[1]
	8		(18) J2145+6345	WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO	POS TARG 0.099,0.106		505 Secs (505 Secs) [==>]	[2]
	9		(18) J2145+6345	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[2]
	10		(18) J2145+6345	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[2]
	11		(18) J2145+6345	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[2]
12		(18) J2145+6345	WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[2]	



Proposal 15652 - HOPR (Z2) - H0, the stellar initial mass function, and other dark matters from a large sample of quadruply imaged qu...

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Visit	Proposal 15652, HOPR (Z2), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: (none)									
	Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous			
	(2)	J0053-2012	RA: 00 53 44.4800 (13.4353333d) Dec: -20 12 33.29 (-20.20925d) Equinox: J2000		V=21.0+/-0.5	Reference Frame: DES				
	<i>Comments:</i> Category=GALAXY Description=[GRAVITATIONAL LENS, QSO]									
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	(2) J0053-2012		WFC3/UVIS, ACCUM, UVIS2	F475X	CR-SPLIT=NO; FLASH=5	POS TARG 0.099,0.106		220 Secs (220 Secs) [==>]	[1]
	2	(2) J0053-2012		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 0.0,0.0		499.234285 Secs (499.234 Secs) [==>]	[1]
	3	(2) J0053-2012		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=15; SAMP-SEQ=STEP5 0	POS TARG 5.962,2.002		499.234285 Secs (499.234 Secs) [==>]	[1]
	4	(2) J0053-2012		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG 3.729,5.335		599.232292 Secs (599.232 Secs) [==>]	[1]
	5	(2) J0053-2012		WFC3/IR, MULTIACCUM, IR	F160W	NSAMP=12; SAMP-SEQ=STEP1 00	POS TARG -2.233,3.333		599.232292 Secs (599.232 Secs) [==>]	[1]

