



## 13689 - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

Cycle: 22, Proposal Category: GO

(Availability Mode: SUPPORTED)

### INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
<b>Dr. Aleksandar M. Diamond-Stanic (PI) (Contact)</b>	<b>University of Wisconsin - Madison</b>	<b>aleks@astro.wisc.edu</b>
Dr. Alison L. Coil (CoI)	University of California - San Diego	acoil@ucsd.edu
Dr. Jim Geach (CoI) (ESA Member)	University of Hertfordshire	j.geach@herts.ac.uk
Dr. Ryan Hickox (CoI)	Dartmouth College	ryan.c.hickox@dartmouth.edu
Dr. John Moustakas (CoI)	Siena College	jmoustakas@siena.edu
Prof. Gregory Rudnick (CoI)	University of Kansas Center for Research, Inc.	grudnick@ku.edu
Dr. Paul H Sell (CoI)	Texas Tech University	paul.sell@ttu.edu
Dr. Christy A. Tremonti (CoI)	University of Wisconsin - Madison	tremonti@astro.wisc.edu

### 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) SDSSJ1506+5402	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:00:42.0	yes
02	(2) SDSSJ0905+5759	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:00:45.0	yes
03	(3) SDSSJ1341-0321	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:00:47.0	yes
04	(4) SDSSJ0944+0930	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:00:48.0	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>
05	(5) SDSSJ2140+1209	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:00:50.0	yes
06	(6) SDSSJ0826+4305	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:00:52.0	yes
07	(7) SDSSJ1613+2834	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:00:53.0	yes
08	(8) SDSSJ1219+0336	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:00:55.0	yes
09	(9) SDSSJ1107+0417	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:00:57.0	yes
10	(10) SDSSJ0901+0314	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:00:58.0	yes
11	(11) SDSSJ1558+3957	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:01:03.0	yes
12	(12) SDSSJ2116-0634	WFC3/IR WFC3/UVIS	2	25-Mar-2015 21:01:04.0	yes

24 Total Orbits Used

## **ABSTRACT**

Theoretical models require strong ejective feedback to quench star formation in massive galaxies. To provide observational constraints on how this feedback process works, we have identified a sample of massive galaxies that have recently experienced a feedback-limited starburst and exhibit high-velocity, galactic-scale outflows. Our previous HST observations have shown that these galaxies are the remnants of gas-rich major mergers, and their incredibly compact optical morphologies (half-light radii  $\sim 100$  pc) suggest that feedback from massive stars and supernovae was responsible for launching their spectacular gaseous outflows ( $v=500$ - $2500$  km/s). However, there is a crucial outstanding question regarding the outflow launching mechanism: how do the velocities compare to the escape velocity of the central stellar population? The current data at rest-frame V are sufficient to measure the size of the recent starburst, but we need to know how much mass is associated with this compact component in order to determine the escape velocity. Here we propose rest-frame U and rest-frame J observations for 12 extremely compact galaxies with high-velocity outflows and SFR surface densities that approach the Eddington limit. We will use spatially resolved U-V and V-J colors in tandem with the well-

sampled, spatially integrated SED to determine the fraction of the stellar mass that is associated with the compact starburst. This will determine whether (1) the launching mechanism exceeds the escape velocity by a large factor or (2) the observed outflow velocity is comparable to the escape velocity, implying that these are the most compact galaxies ever observed by HST.

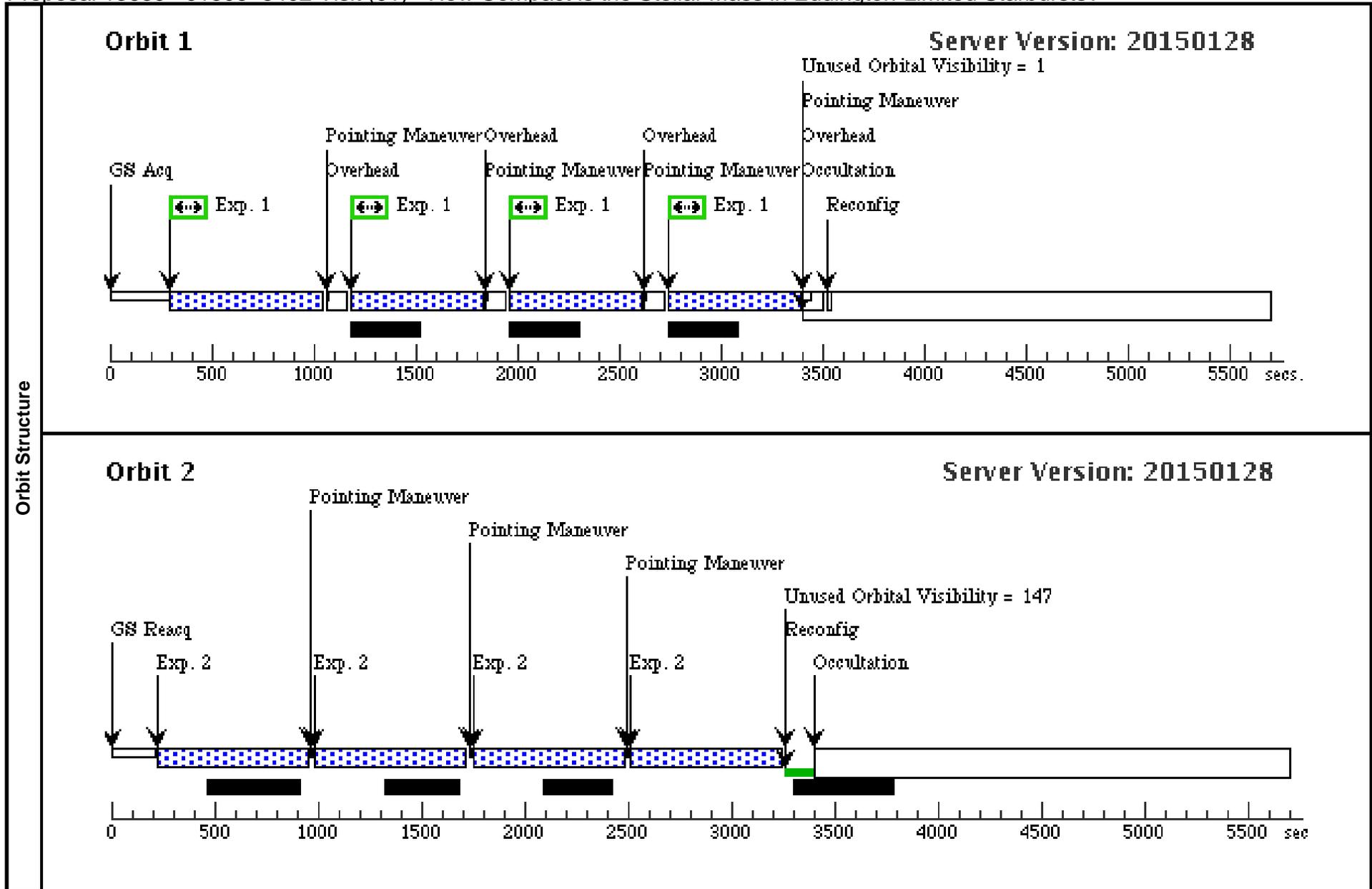
### **OBSERVING DESCRIPTION**

We are obtaining WFC3/UVIS F475W and WFC3/IR F160W imaging of 12 compact massive galaxies at  $z=0.4-0.8$  that have been observed previously with WFC3/UVIS F814W as part of programs GO-12019 and GO-12272. The morphologies of these galaxies are dominated by a compact central starburst, and our primary goal is to measure spatially resolved F475W - F814W and F814W - F160W colors for both the compact starburst and the extended diffuse emission. These galaxies have total AB magnitudes in the existing WFC3/UVIS F814W images between 18.4 and 19.1, and the measured half-light radius for the compact source is quite small (between 0.02" and 0.05" in most cases, which is smaller than the PSF FWHM). Our goal is to obtain the best possible spatial resolution, and this motivates the use of the WFC3-UVIS-DITHER-BOX and WFC3-IR-DITHER-BOX dither patterns. We will observe each target for one orbit with WFC3/UVIS F475W (using the "UVIS2" aperture) and one orbit with WFC3/IR F160W (using the "IR" aperture), and each orbit will be divided into four exposures. We have specified visit orientation requirements that are necessary to match the coverage of our previous WFC3/UVIS F814W images.

Proposal 13689 - J1506+5402 Visit (01) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

Thu Mar 26 01:01:06 GMT 2015

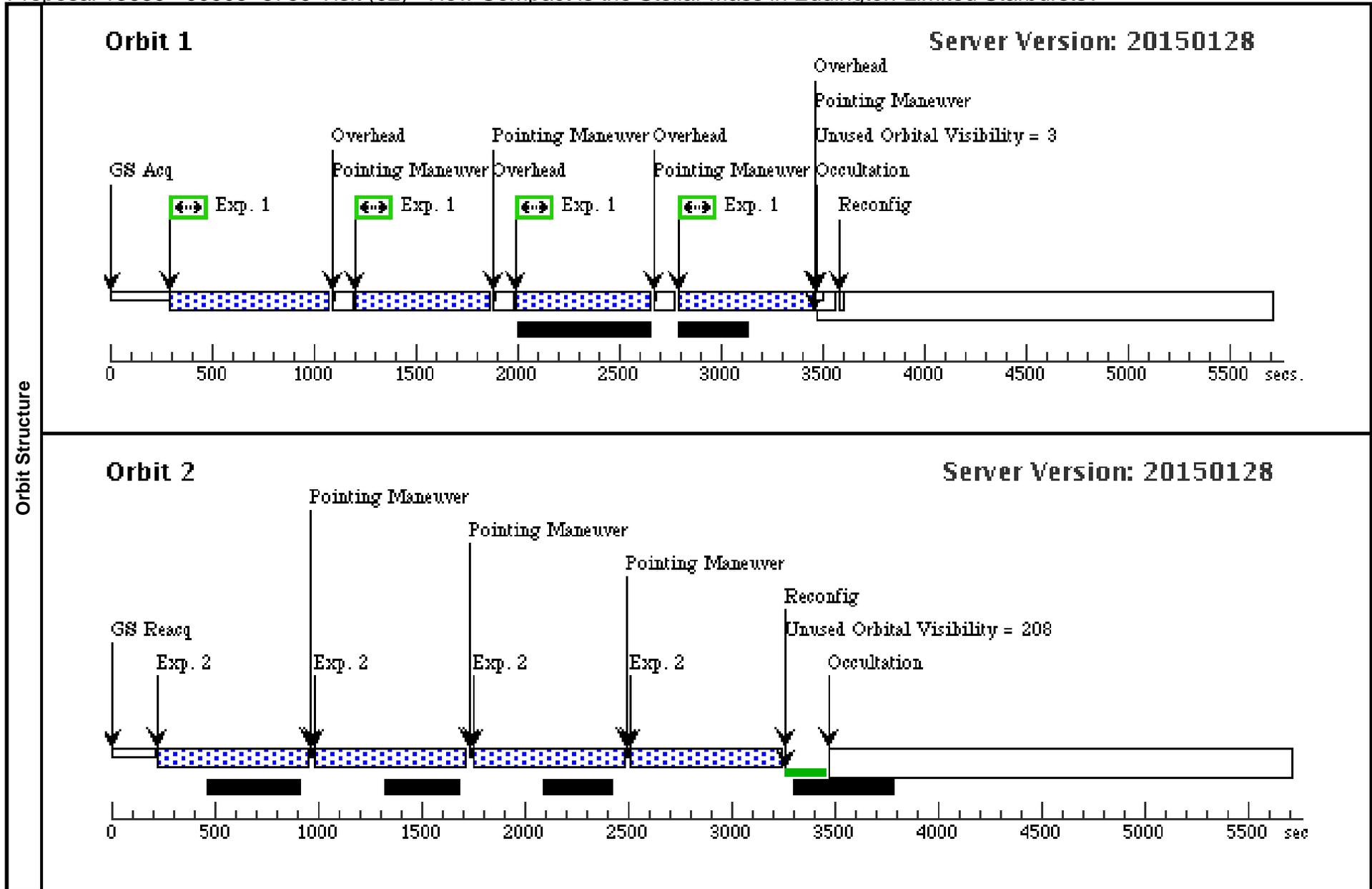
Visit	<b>Proposal 13689, J1506+5402 Visit (01), implementation</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 75D TO 85 D									
	#	Primary Pattern	Secondary Pattern	Exposures						
Patterns	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1)						
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	SDSSJ1506+5402 Alt Name1: SDSSJ150636.30+540220.9	RA: 15 06 36.3000 (226.6512500d) Dec: +54 02 20.90 (54.03914d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.609	V=19.1+/-0.5 g=19.1, H=18.2 [AB]	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV Exp	(1) SDSSJ1506+5402	WFC3/UVIS, ACCUM, UVIS2	F475W		POS TARG null,-19; GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-1 in J1506+5402 Visit (01) (1)	600.0 Secs (2683 Secs) [==>724.0 Secs (Pattern 1)] [==>653.0 Secs (Pattern 2)] [==>653.0 Secs (Pattern 3)] [==>653.0 Secs (Pattern 4)]	[1]
2	IR Exp	(1) SDSSJ1506+5402	WFC3/IR, MULTIACCUM, IR	F160W		NSAMP=15; SAMP-SEQ=SPAR S50	Pattern 2, Exps 2-2 in J1506+5402 Visit (01) (2)	702.938605 Secs (2811.754 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]	



Proposal 13689 - J0905+5759 Visit (02) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

Thu Mar 26 01:01:06 GMT 2015

Visit		<b>Proposal 13689, J0905+5759 Visit (02), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 75D TO 85 D								
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112 Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)						
(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false		(2)							
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	SDSSJ0905+5759	RA: 09 05 23.6100 (136.3483750d) Dec: +57 59 12.46 (57.98679d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.7124	V=19.6+/-0.5 g=19.6, H=18.6	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV Exp	(2) SDSSJ0905+5759	WFC3/UVIS, ACCUM, UVIS2	F475W		POS TARG null,-19; GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-1 in J0905+5759 Visit (02) (1)	600 Secs (2742 Secs) [==>750.0 Secs (Pattern 1)] [==>664.0 Secs (Pattern 2)] [==>664.0 Secs (Pattern 3)] [==>664.0 Secs (Pattern 4)]	[1]
2	IR Exp	(2) SDSSJ0905+5759	WFC3/IR, MULTIACCUM, IR	F160W		NSAMP=15; SAMP-SEQ=SPAR S50	Pattern 2, Exps 2-2 in J0905+5759 Visit (02) (2)	702.938605 Secs (2811.754 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]	



Proposal 13689 - J1341-0321 Visit (03) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

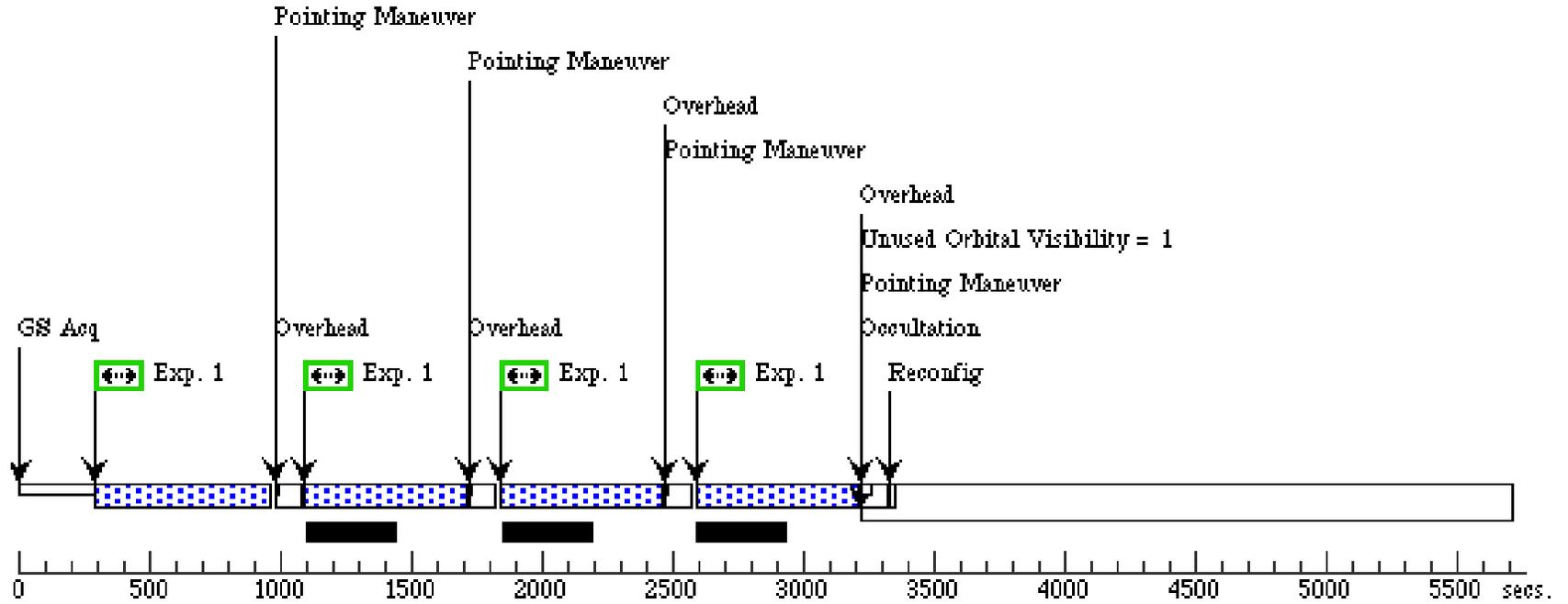
Thu Mar 26 01:01:07 GMT 2015

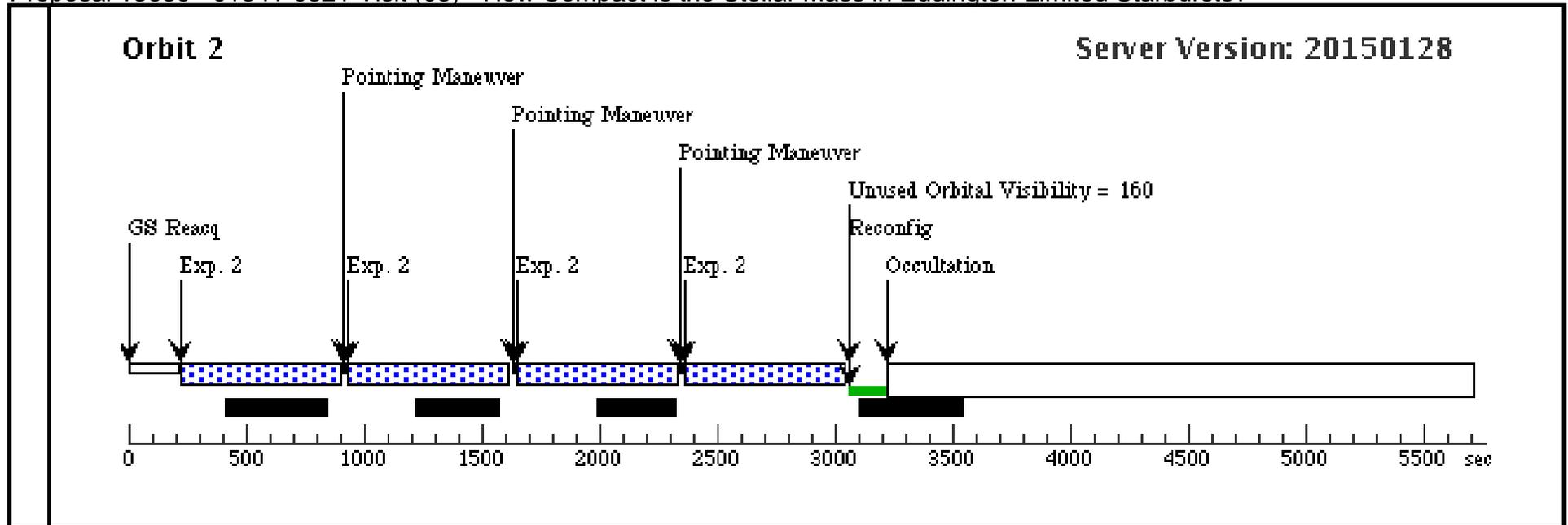
Visit	<b>Proposal 13689, J1341-0321 Visit (03), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 112D TO 122 D									
	#	Primary Pattern	Secondary Pattern	Exposures						
Patterns	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1)						
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	SDSSJ1341-0321	RA: 13 41 36.8000 (205.4033333d) Dec: -03 21 25.29 (-3.35703d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.6579	V=19.0+/-0.5 g=19.0, H=18.4	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV Exp	(3) SDSSJ1341-0321	WFC3/UVIS, ACCUM, UVIS2	F475W			POS TARG null,-19	Pattern 1, Exps 1-1 in J1341-0321 Visit (03) (1)	600 Secs (2496 Secs) [==>642.0 Secs (Pattern 1)] [==>618.0 Secs (Pattern 2)] [==>618.0 Secs (Pattern 3)] [==>618.0 Secs (Pattern 4)]
2	IR Exp	(3) SDSSJ1341-0321	WFC3/IR, MULTIACCUM, IR	F160W		NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 2-2 in J1341-0321 Visit (03) (2)	652.938154 Secs (2611.753 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]

**Orbit 1**

Server Version: 20150128

Orbit Structure

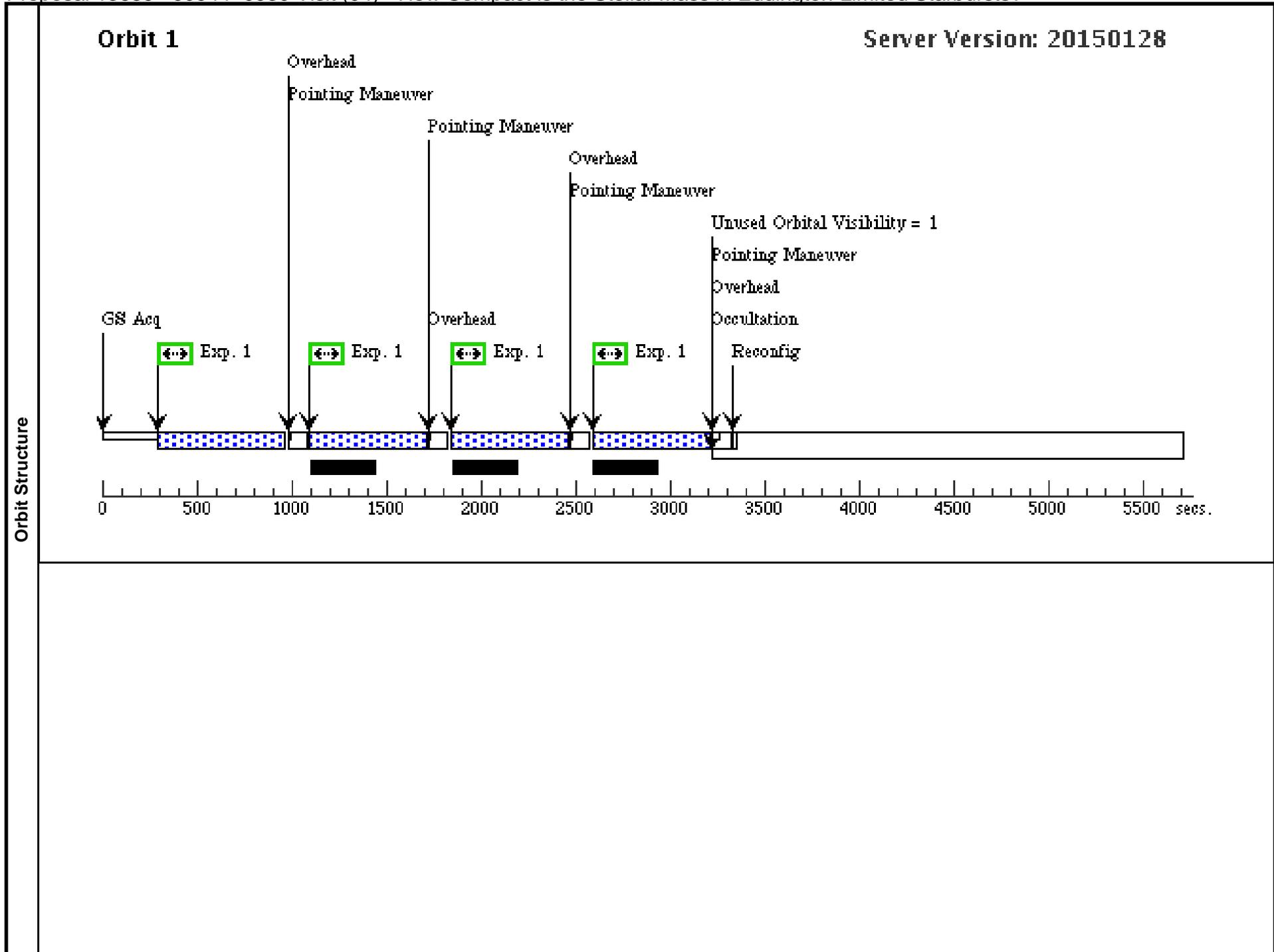


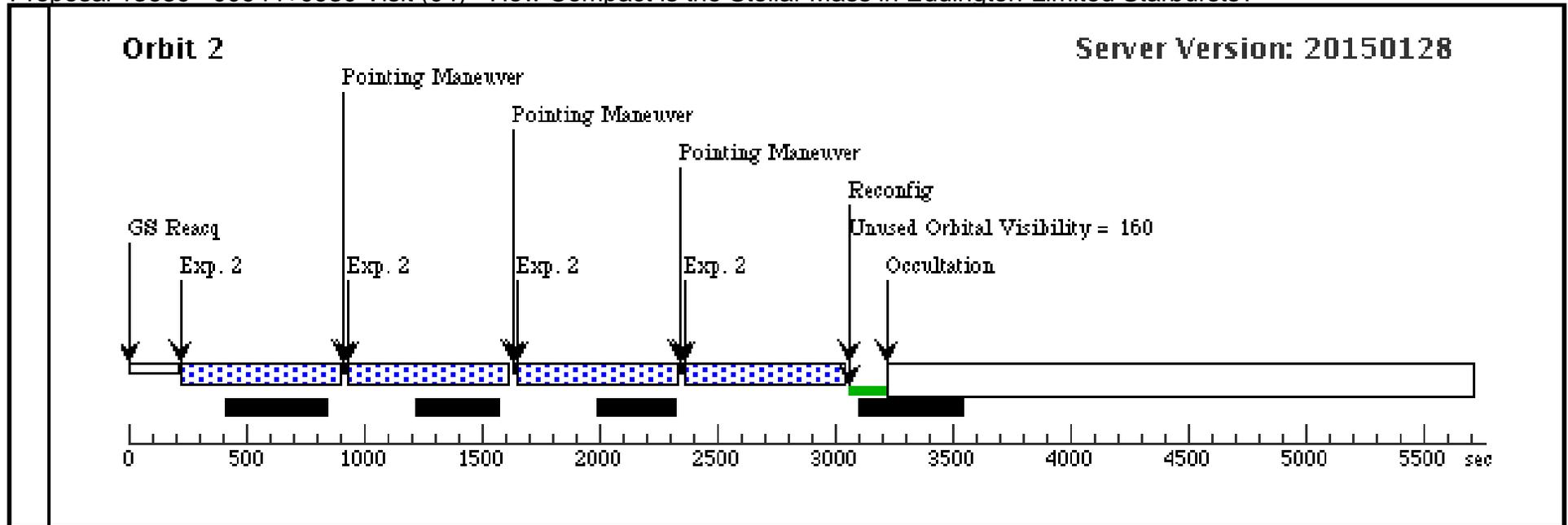


Proposal 13689 - J0944+0930 Visit (04) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

Thu Mar 26 01:01:07 GMT 2015

Visit	<b>Proposal 13689, J0944+0930 Visit (04), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 92D TO 102 D									
	#	Primary Pattern	Secondary Pattern	Exposures						
Patterns	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1)						
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	SDSSJ0944+0930 Alt Name1: SDSSJ094417.85+093019.4	RA: 09 44 17.8400 (146.0743333d) Dec: +09 30 19.38 (9.50538d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.514	V=19.8+/-0.5 g=19.8, H=18.4	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV Exp	(4) SDSSJ0944+0930	WFC3/UVIS, ACCUM, UVIS2	F475W		NSAMP=14; SAMP-SEQ=SPAR S50	POS TARG null,-19; GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-1 in J0944+0930 Visit (04) (1)	600 Secs (2496 Secs) [=>642.0 Secs (Pattern 1)] [=>618.0 Secs (Pattern 2)] [=>618.0 Secs (Pattern 3)] [=>618.0 Secs (Pattern 4)]
2	IR Exp	(4) SDSSJ0944+0930	WFC3/IR, MULTIACCUM, IR	F160W				Pattern 2, Exps 2-2 in J0944+0930 Visit (04) (2)	652.938154 Secs (2611.753 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[2]





Proposal 13689 - J2140+1209 Visit (05) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

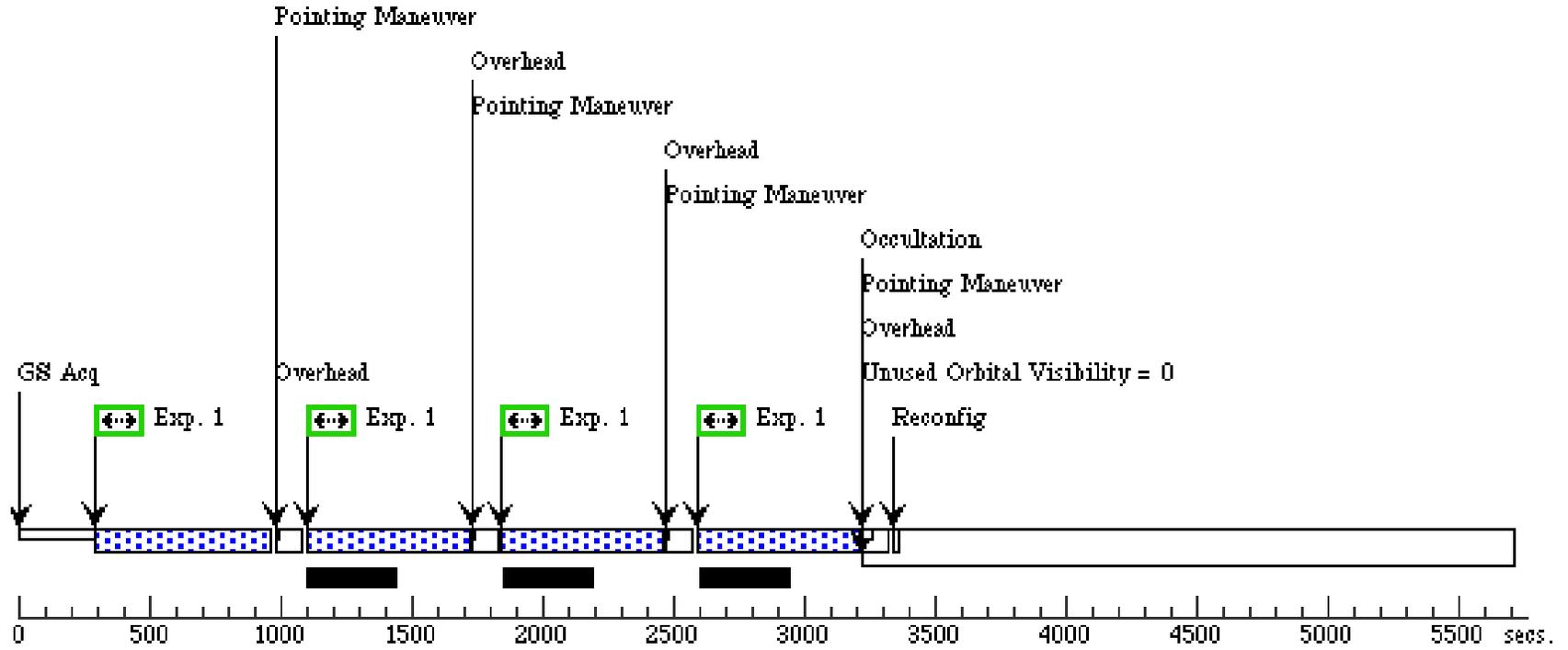
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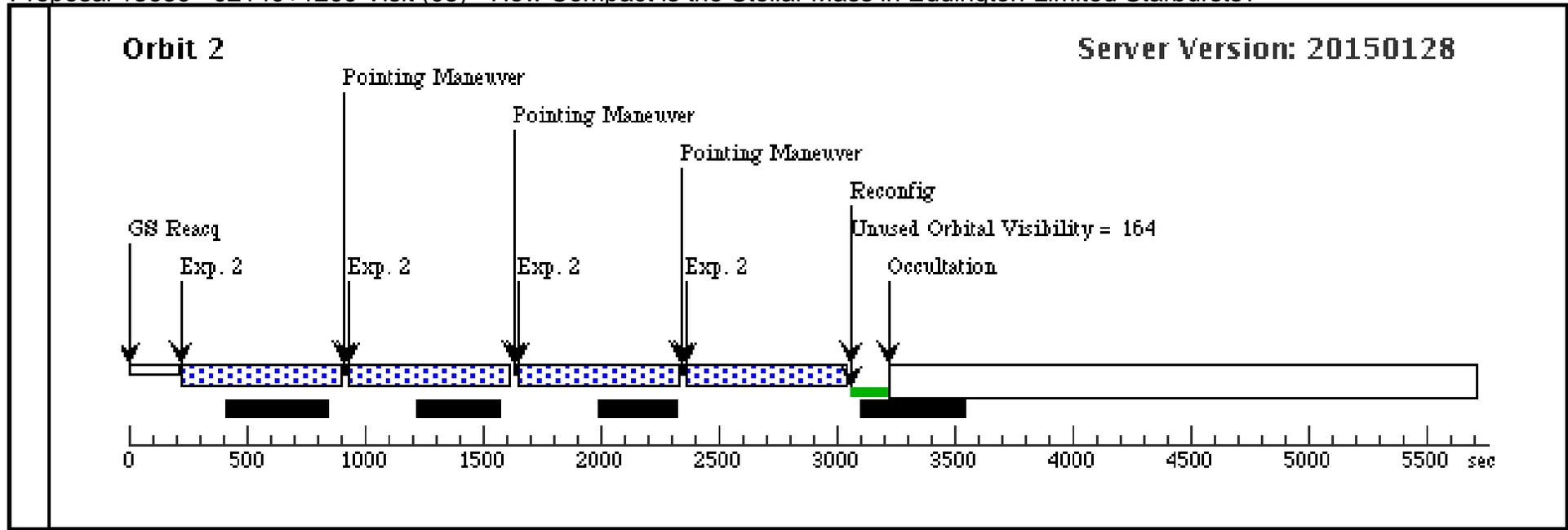
Visit		<b>Proposal 13689, J2140+1209 Visit (05), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 259D TO 279 D								
Patterns	#	Primary Pattern		Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)					
(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false		(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(5)	SDSSJ2140+1209 Alt Name1: SDSSJ214000.49+120914.6	RA: 21 40 0.4900 (325.0020417d) Dec: +12 09 14.60 (12.15406d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.752	V=20.1+/-0.5 g=20.1, H=18.6	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV Exp	(5) SDSSJ2140+1209 9	WFC3/UVIS, ACCUM, UVIS2	F475W		POS TARG null,-19; GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-1 in J2140+1209 Visit (05) (1)	600 Secs (2501 Secs) [==>644.0 Secs (Pattern 1)] [==>619.0 Secs (Pattern 2)] [==>619.0 Secs (Pattern 3)] [==>619.0 Secs (Pattern 4)]	[1]
2	IR Exp	(5) SDSSJ2140+1209 9	WFC3/IR, MULTIACCUM, IR	F160W		NSAMP=14; SAMP-SEQ=SPAR S50	Pattern 2, Exps 2-2 in J2140+1209 Visit (05) (2)	652.938154 Secs (2611.753 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]	

**Orbit 1**

Server Version: 20150128

Orbit Structure

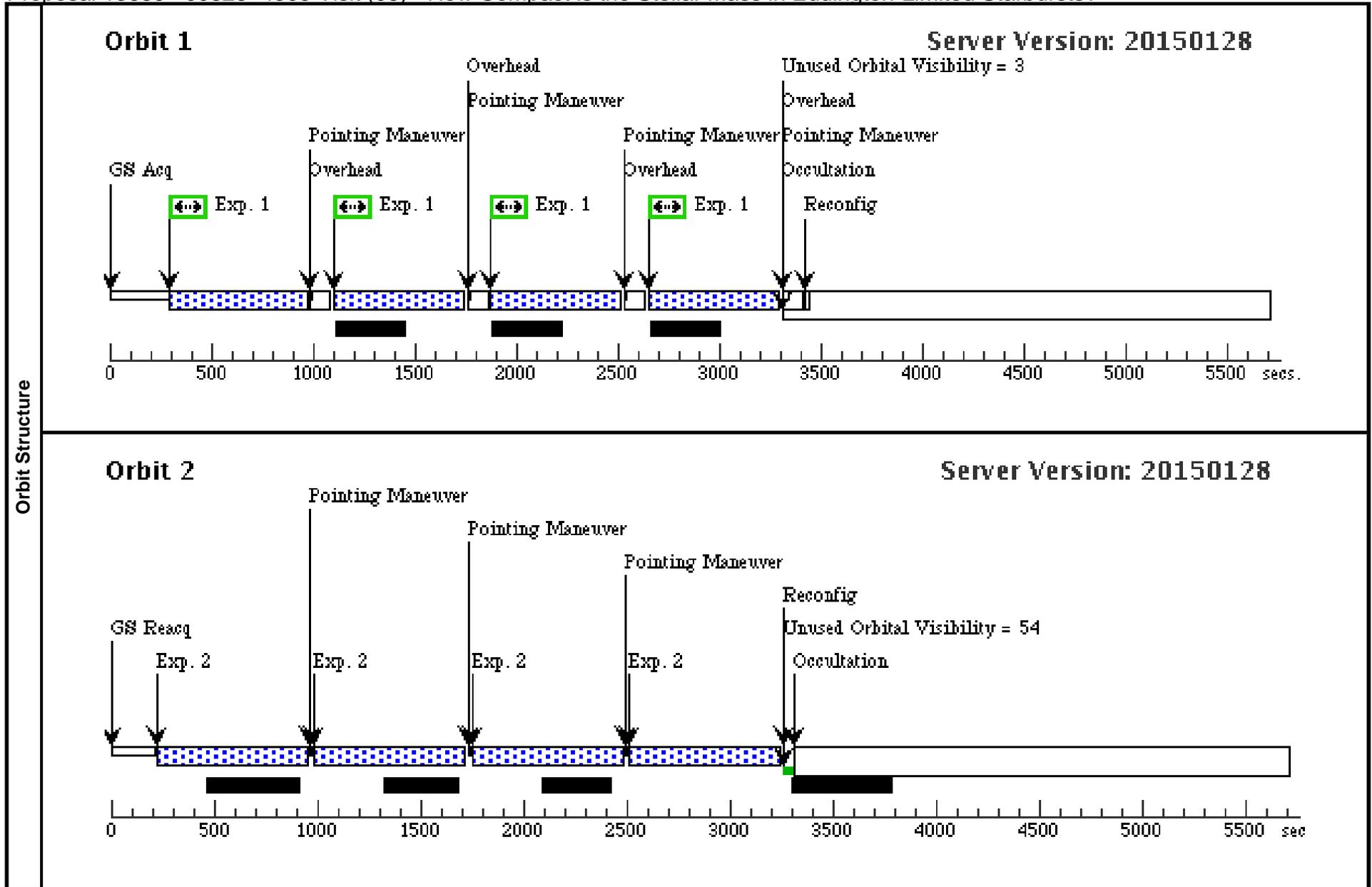




Proposal 13689 - J0826+4305 Visit (06) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

Thu Mar 26 01:01:07 GMT 2015

Visit	<b>Proposal 13689, J0826+4305 Visit (06), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 147D TO 157 D									
	#	Primary Pattern	Secondary Pattern	Exposures						
Patterns	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112 Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)						
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false		(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	SDSSJ0826+4305 Alt Name1: SDSSJ082638.41+430529.5	RA: 08 26 38.4100 (126.6600417d) Dec: +43 05 29.39 (43.09150d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.604	V=19.4+/-0.5 g=19.4, H=18.4	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV Exp	(6) SDSSJ0826+4305	WFC3/UVIS, ACCUM, UVIS2	F475W		GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-1 in J0826+4305 Visit (06) (1)	600 Secs (2588 Secs) [==>647.0 Secs (Pattern 1)] [==>647.0 Secs (Pattern 2)] [==>647.0 Secs (Pattern 3)] [==>647.0 Secs (Pattern 4)]	[1]
2	IR Exp	(6) SDSSJ0826+4305	WFC3/IR, MULTIACCUM, IR	F160W		NSAMP=15; SAMP-SEQ=SPAR S50	Pattern 2, Exps 2-2 in J0826+4305 Visit (06) (2)	702.938605 Secs (2811.754 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]	



Proposal 13689 - J1613+2834 Visit (07) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

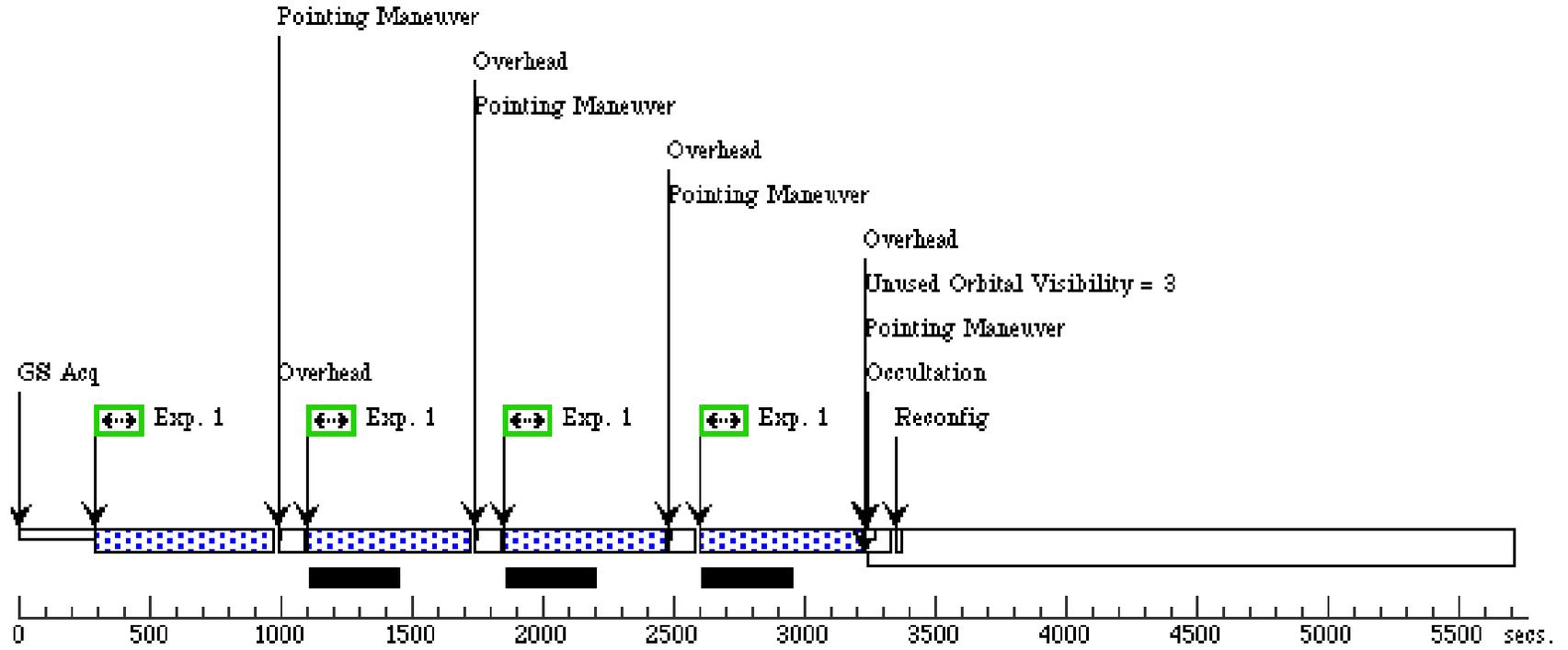
Thu Mar 26 01:01:08 GMT 2015

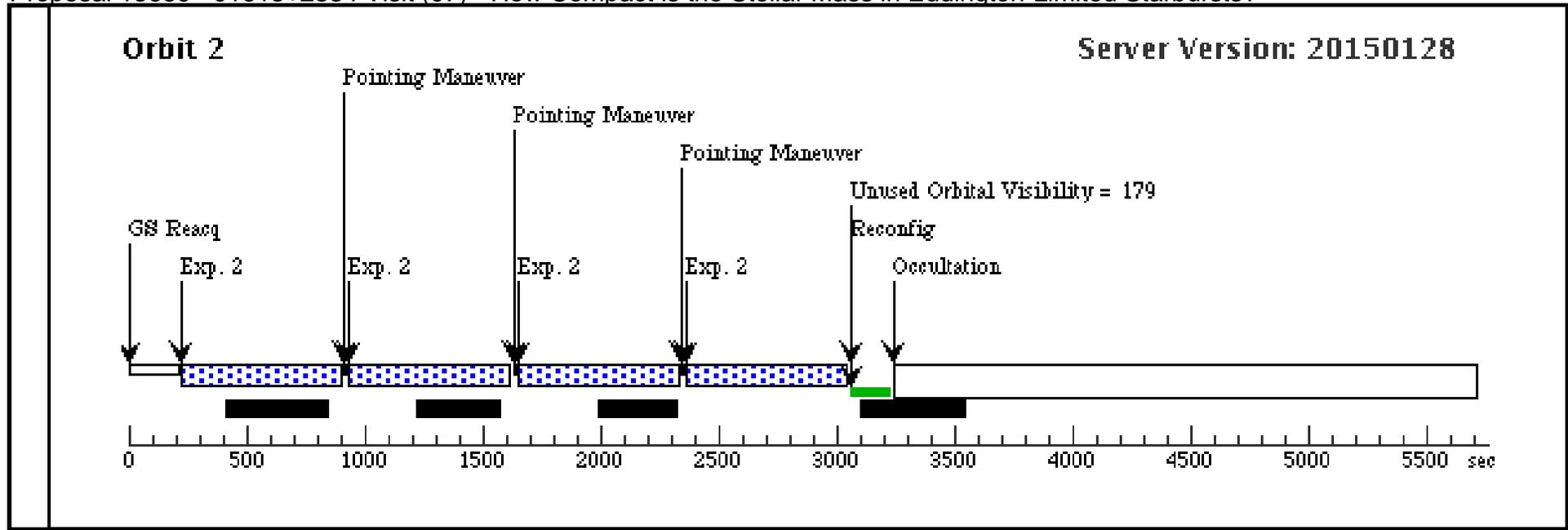
Visit		<b>Proposal 13689, J1613+2834 Visit (07), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 51D TO 61 D								
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112 Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)						
(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365 Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false		(2)							
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	SDSSJ1613+2834 Alt Name1: SDSSJ161332.53+283414.8	RA: 16 13 32.5300 (243.3855417d) Dec: +28 34 14.80 (28.57078d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.450	V=19.8+/-0.5 g=19.8, H=17.6	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV Exp	(7) SDSSJ1613+2834	WFC3/UVIS, ACCUM, UVIS2	F475W		POS TARG null,-19; GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-1 in J1613+2834 Visit (07) (1)	600 Secs (2513 Secs) [==>650.0 Secs (Pattern 1)] [==>621.0 Secs (Pattern 2)] [==>621.0 Secs (Pattern 3)] [==>621.0 Secs (Pattern 4)]	[1]
2	IR Exp	(7) SDSSJ1613+2834	WFC3/IR, MULTIACCUM, IR	F160W		NSAMP=14; SAMP-SEQ=SPAR S50	Pattern 2, Exps 2-2 in J1613+2834 Visit (07) (2)	652.938154 Secs (2611.753 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]	

**Orbit 1**

Server Version: 20150128

Orbit Structure





Proposal 13689 - J1219+0336 Visit (08) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

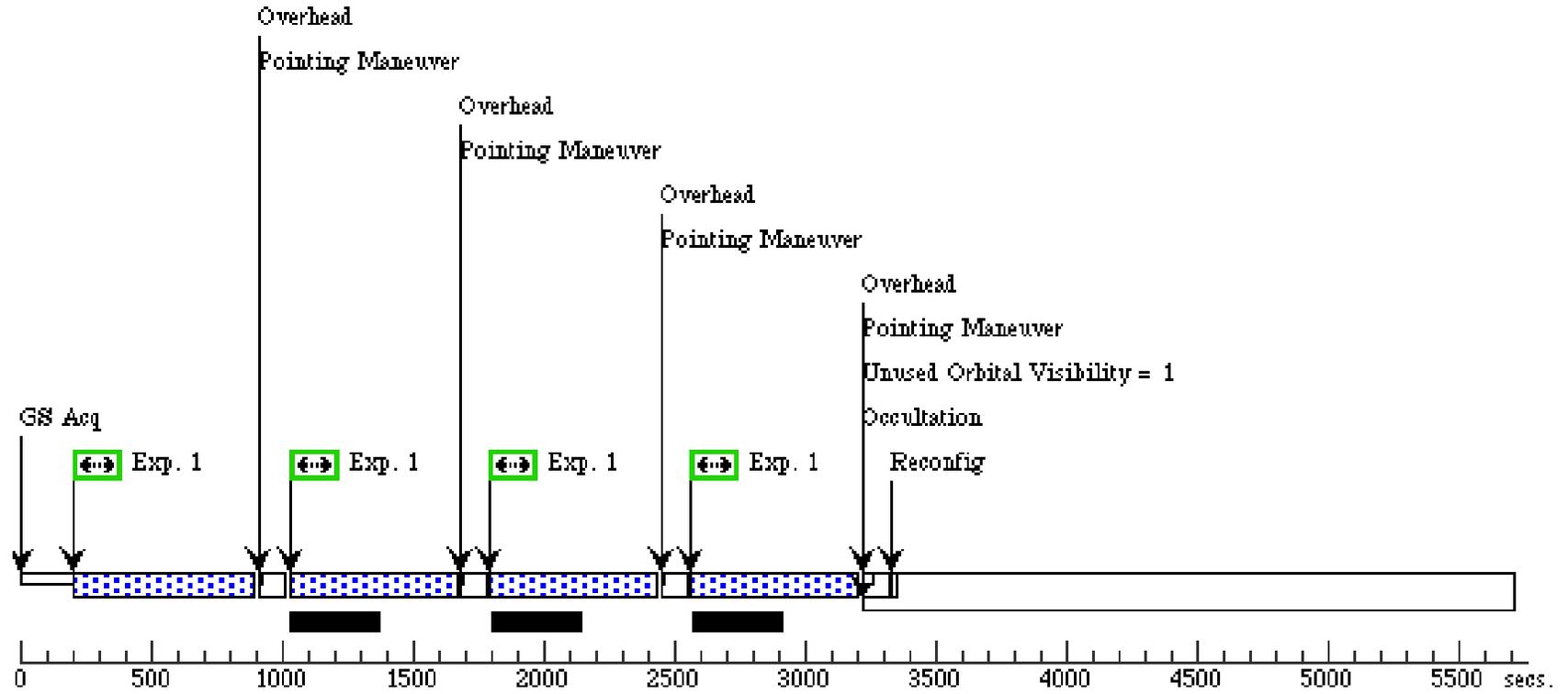
Thu Mar 26 01:01:08 GMT 2015

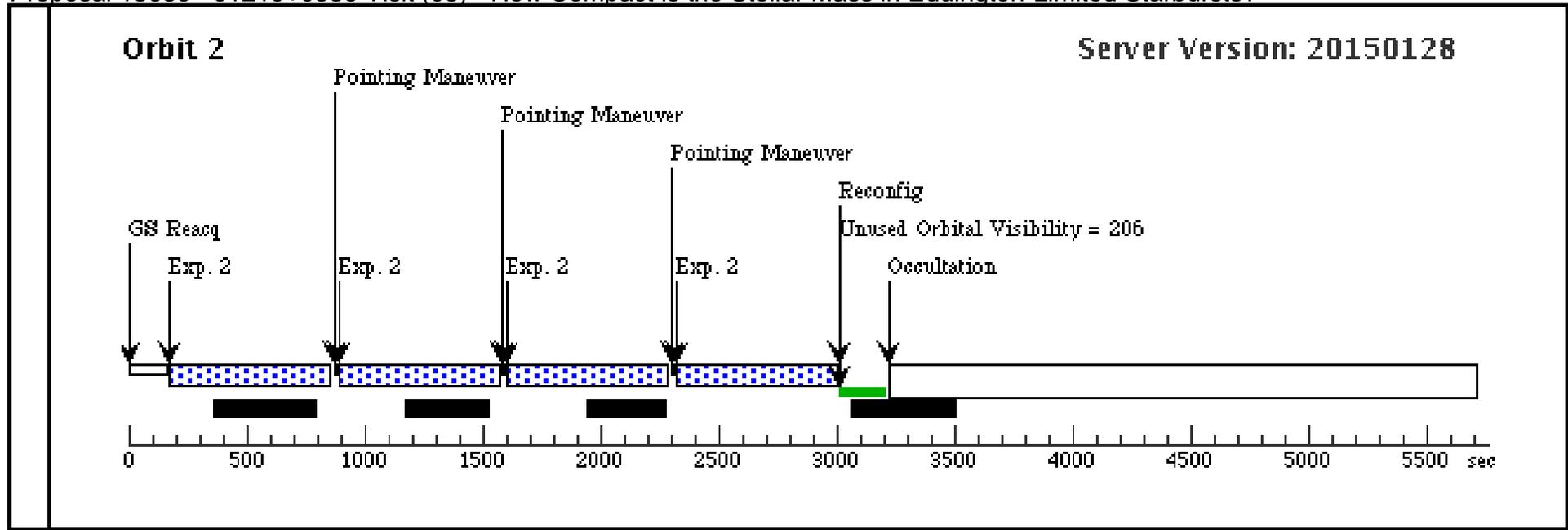
Visit	<b>Proposal 13689, J1219+0336 Visit (08), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 123D TO 133 D									
	#	Primary Pattern	Secondary Pattern	Exposures						
Patterns	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1)						
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	SDSSJ1219+0336	RA: 12 19 55.7800 (184.9824167d) Dec: +03 36 15.90 (3.60442d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.4514	V=19.5+/-0.5 g=19.5, H=17.7	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV exp	(8) SDSSJ1219+0336	WFC3/UVIS, ACCUM, UVIS2	F475W			POS TARG null,-19; GS ACQ SCENARI O SINGLE	Pattern 1, Exps 1-1 in J1219+0336 Visit (08) (1)	600 Secs (2588 Secs) [==>665.0 Secs (Pattern 1)] [==>641.0 Secs (Pattern 2)] [==>641.0 Secs (Pattern 3)] [==>641.0 Secs (Pattern 4)]
2	IR Exp	(8) SDSSJ1219+0336	WFC3/IR, MULTIACCUM, IR	F160W		NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 2-2 in J1219+0336 Visit (08) (2)	652.938154 Secs (2611.753 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]

**Orbit 1**

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Orbit Structure





Proposal 13689 - J1107+0417 Visit (09) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

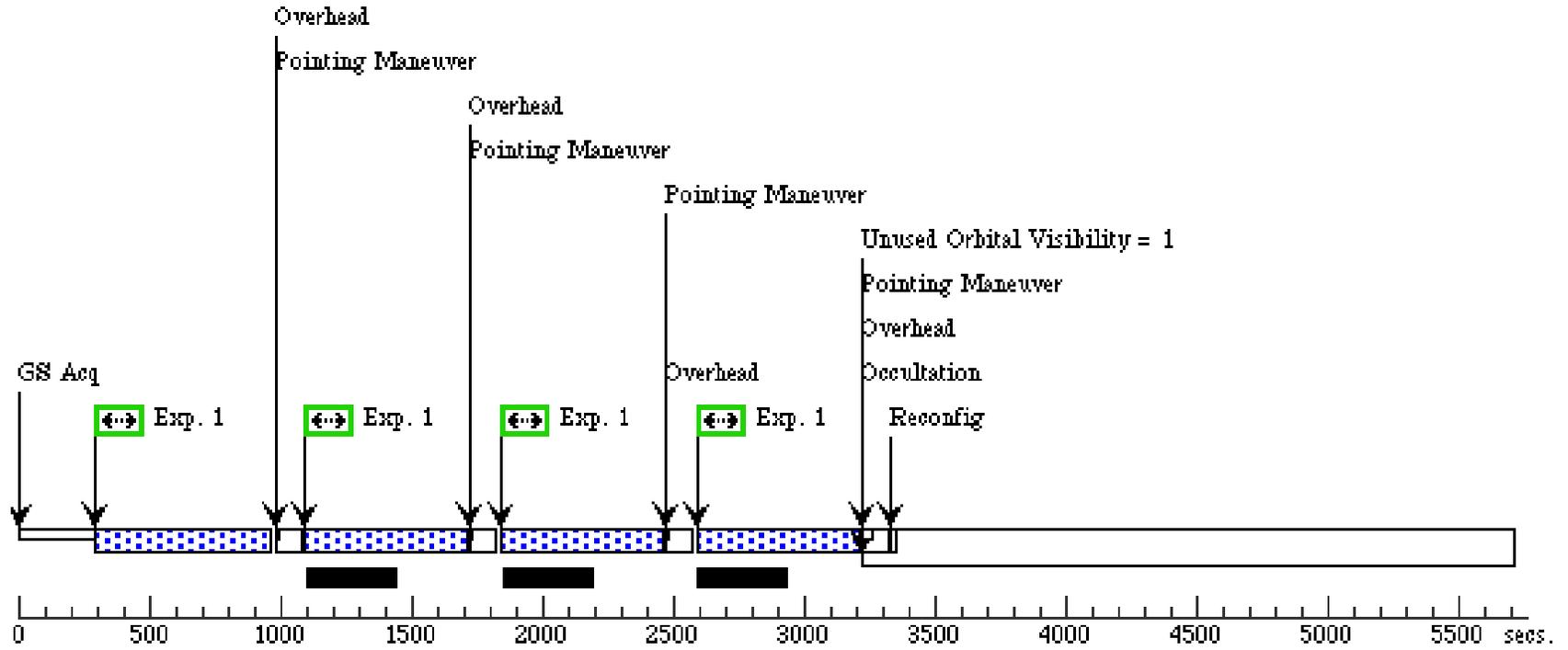
Thu Mar 26 01:01:08 GMT 2015

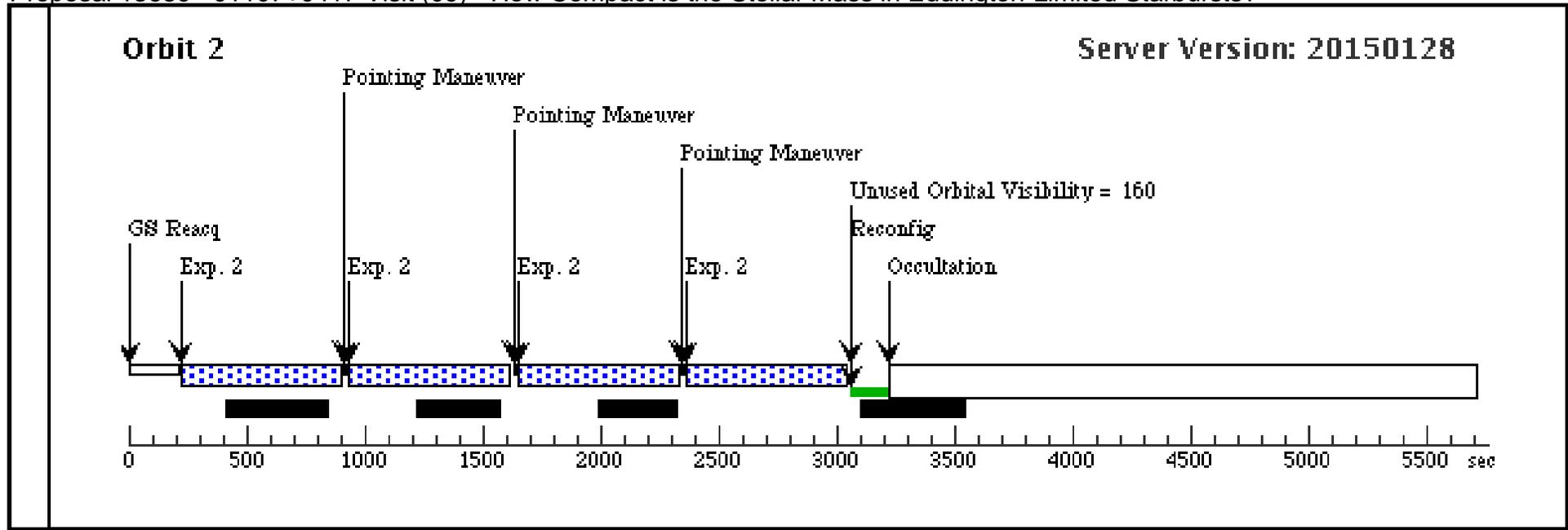
Visit		<b>Proposal 13689, J1107+0417 Visit (09), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 108D TO 118 D								
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)					
(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false		(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	SDSSJ1107+0417	RA: 11 07 2.8700 (166.7619583d) Dec: +04 17 2.75 (4.28410d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.4666	V=19.5+/-0.5 g=19.5, H=18.3	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV Exp	(9) SDSSJ1107+0417	WFC3/UVIS, ACCUM, UVIS2	F475W			POS TARG null,-19; GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-1 in J1107+0417 Visit (09) (1)	600 Secs (2496 Secs) [==>642.0 Secs (Pattern 1)] [==>618.0 Secs (Pattern 2)] [==>618.0 Secs (Pattern 3)] [==>618.0 Secs (Pattern 4)]
2	IR Exp	(9) SDSSJ1107+0417	WFC3/IR, MULTIACCUM, IR	F160W		NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 2-2 in J1107+0417 Visit (09) (2)	652.938154 Secs (2611.753 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]

**Orbit 1**

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Orbit Structure





Proposal 13689 - J0901+0314 Visit (10) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

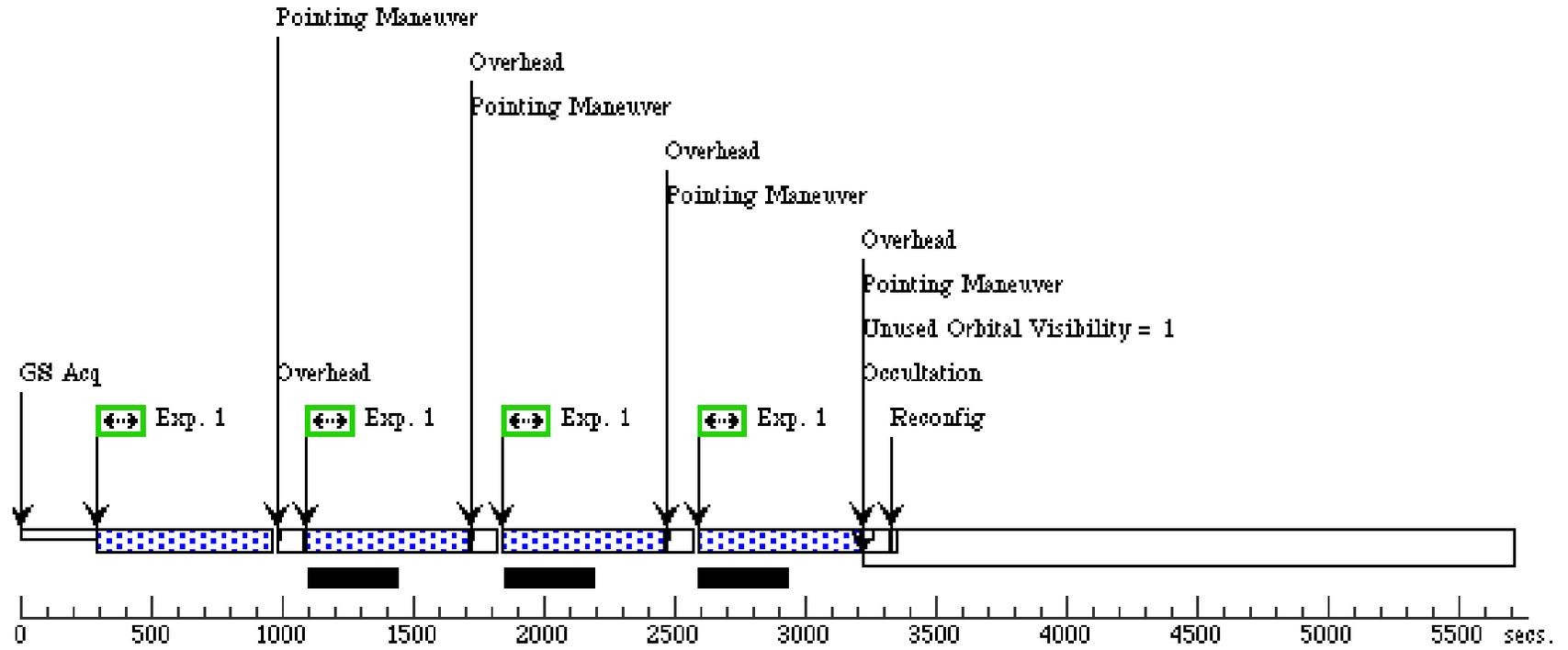
Thu Mar 26 01:01:08 GMT 2015

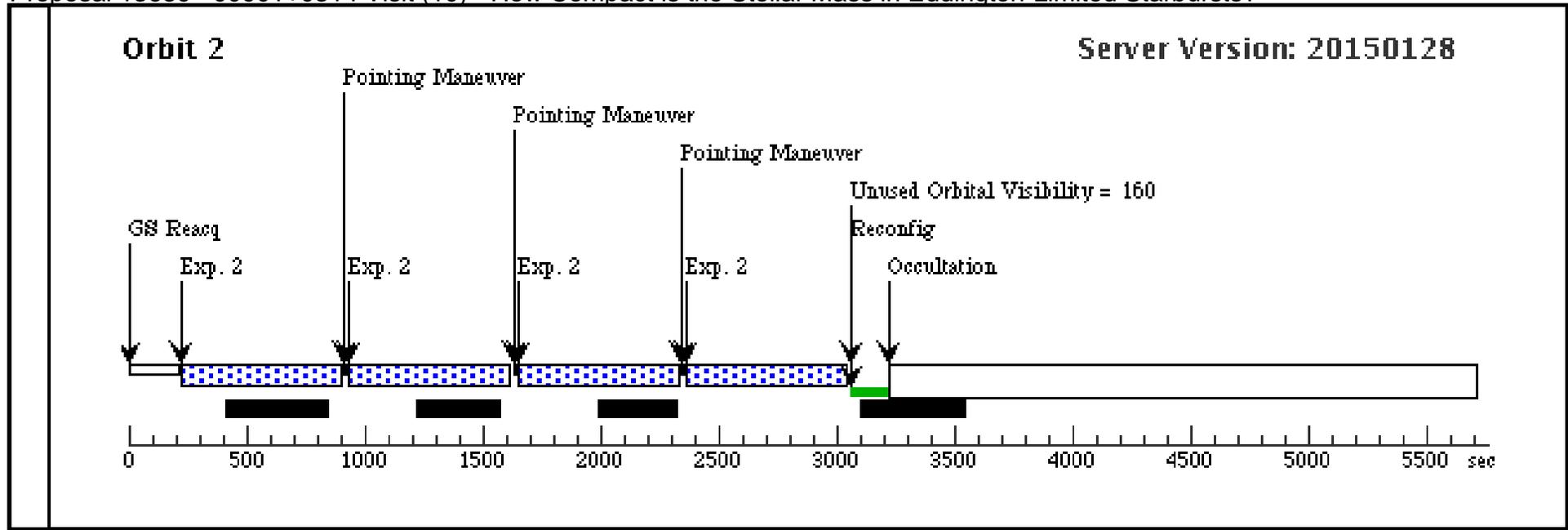
Visit		<b>Proposal 13689, J0901+0314 Visit (10), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 104D TO 114 D								
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)					
(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false		(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	SDSSJ0901+0314	RA: 09 01 33.4300 (135.3892917d) Dec: +03 14 12.48 (3.23680d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.4594	V=19.3+/-0.5 g=19.3, H=18.0	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV Exp	(10) SDSSJ0901+0314	WFC3/UVIS, ACCUM, UVIS2	F475W			POS TARG null,-19	Pattern 1, Exps 1-1 in J0901+0314 Visit (10) (1)	600 Secs (2496 Secs) [==>642.0 Secs (Pattern 1)] [==>618.0 Secs (Pattern 2)] [==>618.0 Secs (Pattern 3)] [==>618.0 Secs (Pattern 4)]
2	IR Exp	(10) SDSSJ0901+0314	WFC3/IR, MULTIACCUM, IR	F160W		NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 2-2 in J0901+0314 Visit (10) (2)	652.938154 Secs (2611.753 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]

**Orbit 1**

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Orbit Structure

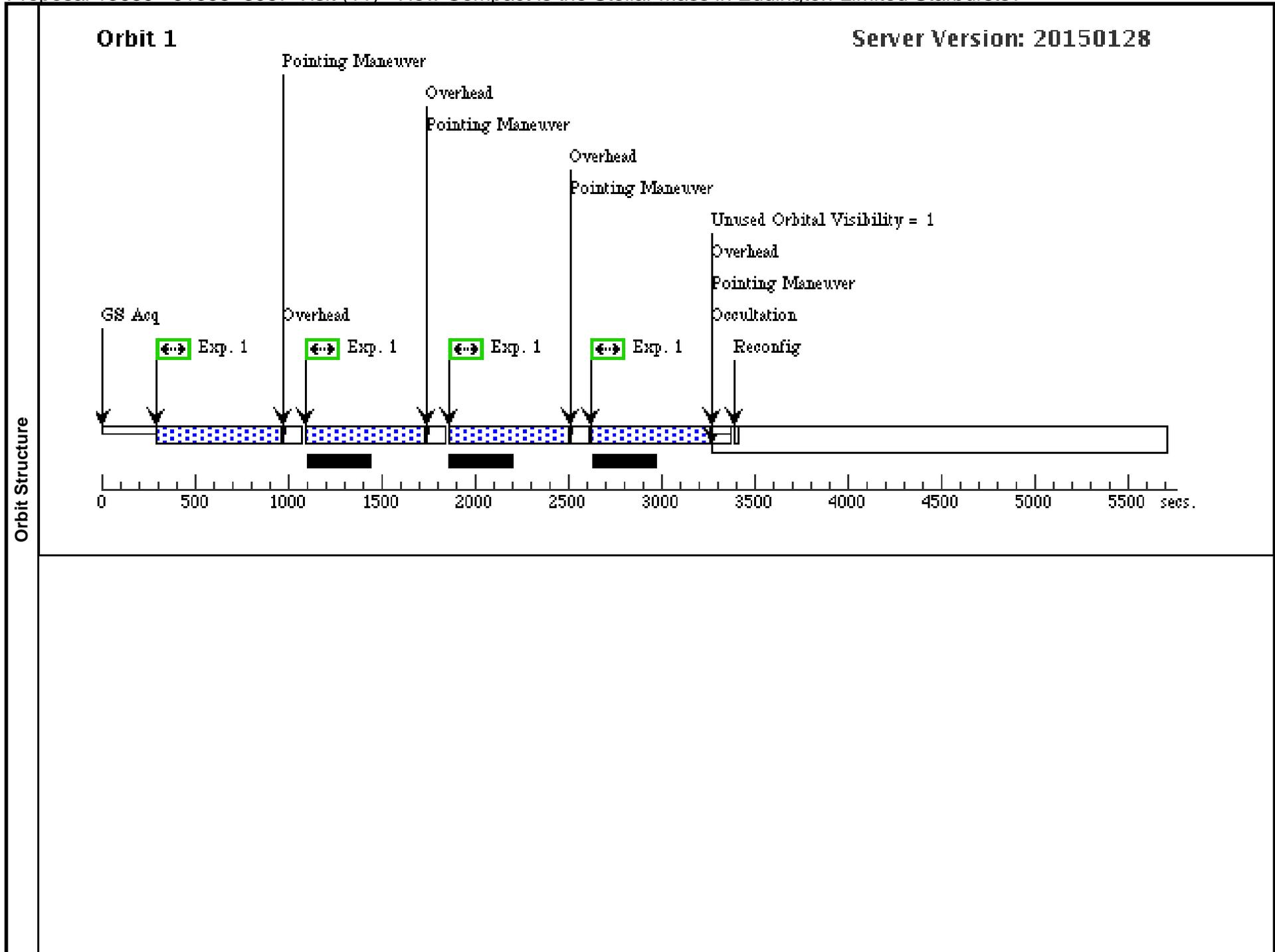


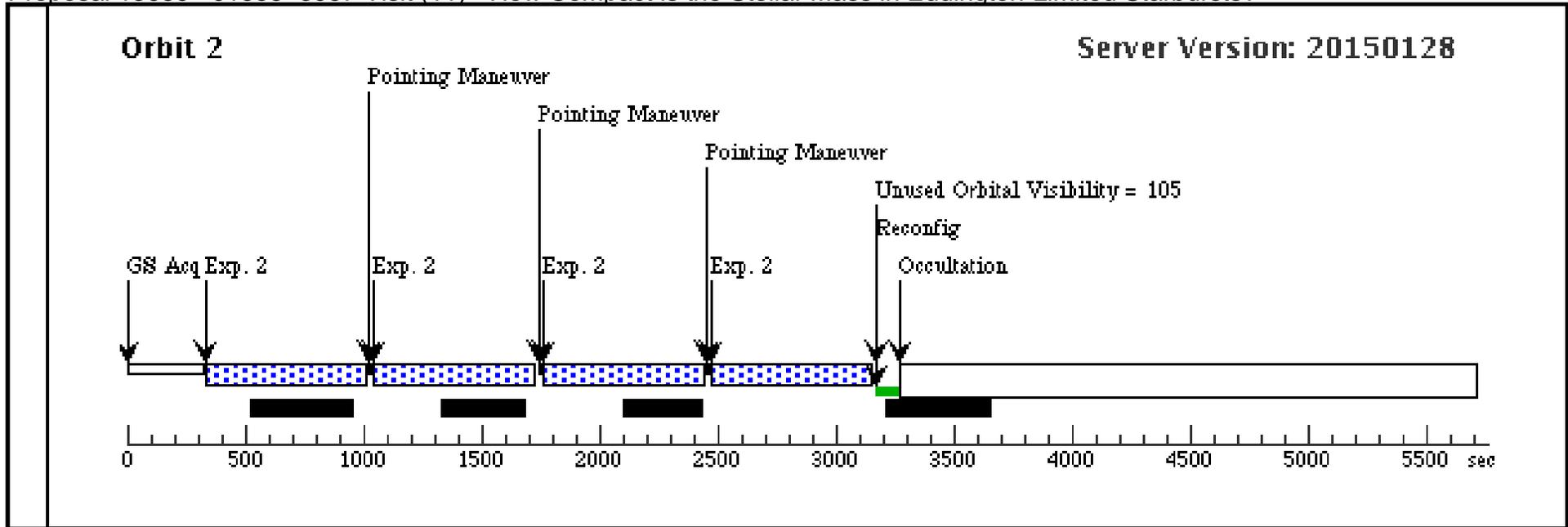


Proposal 13689 - J1558+3957 Visit (11) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

Thu Mar 26 01:01:08 GMT 2015

Visit	<b>Proposal 13689, J1558+3957 Visit (11), completed</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 305D TO 315 D									
	#	Primary Pattern	Secondary Pattern	Exposures						
Patterns	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false	(1)						
	(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false	(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(11)	SDSSJ1558+3957	RA: 15 58 11.2400 (239.5468333d) Dec: +39 57 20.80 (39.95578d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.4548	V=19.0+/-0.5 g=19.0, H=17.5	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV Exp	(11) SDSSJ1558+3957	WFC3/UVIS, ACCUM, UVIS2	F475W		GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-1 in J1558+3957 Visit (11) (1)	600 Secs (2552 Secs) [==>638.0 Secs (Pattern 1)] [==>638.0 Secs (Pattern 2)] [==>638.0 Secs (Pattern 3)] [==>638.0 Secs (Pattern 4)]	[1]
2	IR Exp	(11) SDSSJ1558+3957	WFC3/IR, MULTIACCUM, IR	F160W		NSAMP=14; SAMP-SEQ=SPARS50	NEW OBSET FULL ACQ; GS ACQ SCENARIO BASE1B3	Pattern 2, Exps 2-2 in J1558+3957 Visit (11) (2)	652.938154 Secs (2611.753 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]





Proposal 13689 - J2116-0634 Visit (12) - How Compact is the Stellar Mass in Eddington-Limited Starbursts?

Thu Mar 26 01:01:08 GMT 2015

Visit		<b>Proposal 13689, J2116-0634 Visit (12), scheduling</b> <b>Diagnostic Status: No Diagnostics</b> Scientific Instruments: WFC3/IR, WFC3/UVIS Special Requirements: ORIENT 100D TO 110 D								
Patterns	#	Primary Pattern	Secondary Pattern	Exposures						
	(1)	Pattern Type=WFC3-UVIS-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.173 Line Spacing=0.112	Coordinate Frame=POS-TARG Pattern Orientation=23.884 Angle Between Sides=81.785 Center Pattern=false		(1)					
(2)	Pattern Type=WFC3-IR-DITHER-BOX-MIN Purpose=DITHER Number Of Points=4 Point Spacing=0.572 Line Spacing=0.365	Coordinate Frame=POS-TARG Pattern Orientation=18.528 Angle Between Sides=74.653 Center Pattern=false		(2)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(12)	SDSSJ2116-0634	RA: 21 16 25.1500 (319.1047917d) Dec: -06 34 44.82 (-6.57912d) Equinox: J2000	Proper Motion RA: 0.0 arcsec/yr Proper Motion Dec: 0.0 arcsec/yr Parallax: 0.0" Epoch of Position: 2000 Redshift: 0.7285	V=20.0+/-0.5 g=20.0, H=18.6	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	UV Exp	(12) SDSSJ2116-0634	WFC3/UVIS, ACCUM, UVIS2	F475W			POS TARG null,-19	Pattern 1, Exps 1-1 in J2116-0634 Visit (12) (1)	600 Secs (2496 Secs) [==>642.0 Secs (Pattern 1)] [==>618.0 Secs (Pattern 2)] [==>618.0 Secs (Pattern 3)] [==>618.0 Secs (Pattern 4)]
2	IR Exp	(12) SDSSJ2116-0634	WFC3/IR, MULTIACCUM, IR	F160W		NSAMP=14; SAMP-SEQ=SPAR S50		Pattern 2, Exps 2-2 in J2116-0634 Visit (12) (2)	652.938154 Secs (2611.753 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]

