



# 14622 - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at $z=1.8$

Cycle: 24, Proposal Category: GO

(JWST Initiative)

(Availability Mode: SUPPORTED)

## INVESTIGATORS

<i>Name</i>	<i>Institution</i>	<i>E-Mail</i>
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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>
1A	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:04.0	yes
1B	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:05.0	yes
1C	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:05.0	yes
1D	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:06.0	yes
1E	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:06.0	yes
1F	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:07.0	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>
2A	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:07.0	yes
2B	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:08.0	yes
2C	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:08.0	yes
2D	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:09.0	yes
2E	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:09.0	yes
2F	(1) SDSSJ0851+3331-SGAS	WFC3/IR	1	07-Sep-2016 17:42:10.0	yes

12 Total Orbits Used

### **ABSTRACT**

Using HST imaging from the Sloan Giant Arcs Survey, we have identified a strongly-lensed massive ( $\log M/M_{\text{sun}} = 10.4$ ) red galaxy at  $z=1.8$  that is remarkably compact ( $r \sim 0.7$  kpc). This galaxy, 0851-E, is already structurally similar to quiescent, massive galaxies and appears to be in the process of quenching, with a gas fraction  $< 10\%$ . Using WFC3/G141 grism spectroscopy, we propose to measure age gradients and emission line diagnostics ( $[\text{OIII}]/\text{H}\beta$ ) in the inner 1 kpc and in the outskirts. This spatially resolved study will enable us to distinguish between physical mechanisms that are hypothesized to form and quench star-formation in massive galaxies, leading to the eventual buildup of the red sequence. Resolved spectroscopic studies of compact galaxies are only possible due to the lensing magnification and distortion, which boosts HST's already excellent spatial resolution; these observations will develop necessary analysis tools for the JWST era. This novel HST program will be the first study to spatially resolve the stellar populations and emission line diagnostics of a compact star-forming galaxy that is "running on empty". We will provide strong constraints on the physical mechanisms driving a short-lived but key phase of massive galaxy formation.

### **OBSERVING DESCRIPTION**

The goal of this program is to obtain a deep WFC3/IR grism spectrum of a bright ( $H=20.7$  mag) quadruply lensed compact star-forming galaxy in the Sloan Giant Arcs Survey (08:51:40.03, +33:30:49.86). We will observe this source for a total of 12 orbits at two different orientations, which were selected to minimize contamination of the resulting grism spectrum from neighboring sources. The central coordinates for the observations will be matched to the original HST/GO program 13003 (PI: Gladders; 08:51:38.9810, +33:31:10.83) in which this target was discovered, facilitating ancillary science.

## Proposal 14622 (STScI Edit Number: 0, Created: Wednesday, September 7, 2016 4:42:10 PM EST) - Overview

Our observation strategy is to obtain 6 visits of one orbit at two different orientations. Each visit contains one short pre-image of either F160W or F105W each followed by two long G141 grism exposures to fill the orbit. The six separate visits are dithered following our successful 4-point dithering strategy used for the 3D-HST survey (e.g., Brammer et al. 2012). I.e. we set POS-TARG: (0,0) (1.355,0.424) (0.881,1.212) (-0.474,0.788). The F160W direct image filter is chosen as it both overlaps with the G141 grism to allow calibrations, but will also increase the depth of the existing 1200s F160W image. The F105W direct image filter similarly overlaps the G141 grism at the bluest wavelengths to allow calibrations, and will be adding vital photometric coverage of the 4000 Angstrom break of our target galaxy. The existing HST images in this field include F390W, F814W, F125W and F160W. Adding F105W will cover a key wavelength range for the pixel-by-pixel analysis of the main target, while also satisfying the requirements for a direct image.

We estimate that the spacecraft will leave the earth shadow at the \*end\* of the orbit in Jan/Feb 2017, so we put the direct imaging exposures at the end of the orbit as these are less sensitive to the helium airglow backgrounds observed out of the shadow. This will minimize the impact of background variations on our G141 science exposures. The requirement for the non-interruptible sequence is done to avoid these highest backgrounds at the end of the physical spacecraft orbit.

The aperture is set to GRISM1024, which uses the same reference pixel and definition for both the direct image and the G141 grism. G141 exposures use SPARS100 sampling with NSAMP=13, and F160W/F105W exposures are taken with SPARS50 with NSAMP=6.

Through simulating the grism observations with the existing F160W imaging, we have identified the best roll angles to be ORIENT = 165 and 171, optimally reducing the contamination from nearby objects. We submit 6 visits of 1 orbit duration. Visit 1A has a constraint between ORIENT=165, with Visits 1B-1F adopting the same ORIENT as Visit 1A. Visits 2A-2F will need to be offset by 6 degrees to control systematics and contamination. We request that Visits 2A-2F are taken at the same orient, offset by 6 degrees from Visits 1A-1F, and we have set the "Same Orient as" special requirement accordingly. We note that allowing the ORIENTs to range between 165 and 171 does not improve the scheduling window, but does reduce the potential data quality. These ORIENT constraints and visit lengths allow a three-week window from 1/25/17-2/16/17 for the observations.

Proposal 14622 - Orient1 (1A) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

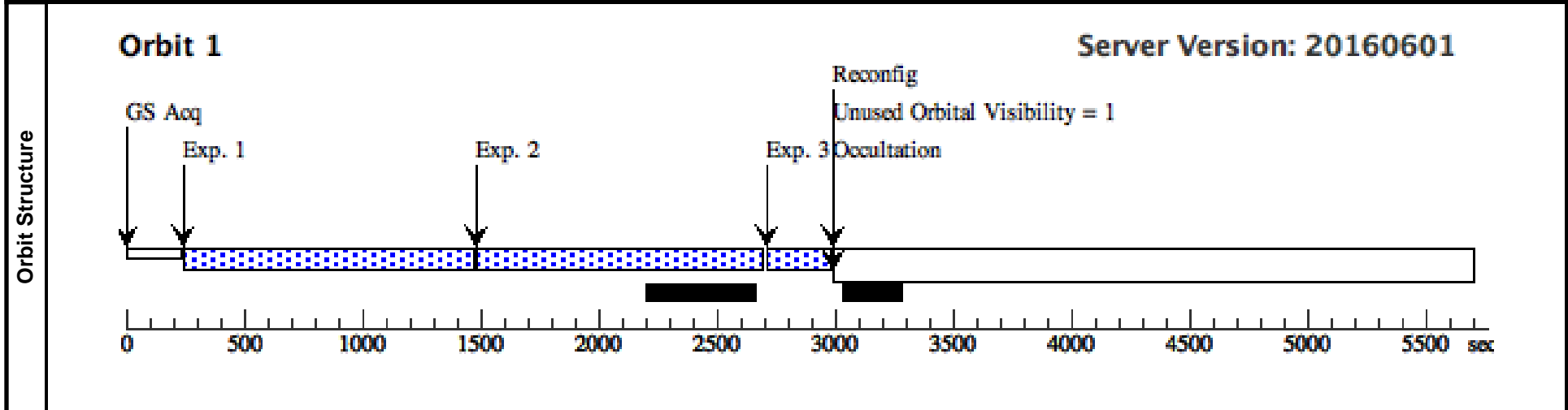
Wed Sep 07 21:42:10 GMT 2016

<b>Visit</b>	<b>Proposal 14622, Orient1 (1A)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; ORIENT 165D TO 165 D
	(Orient1 (1A)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Diagnostics</b>	(Orient1 (1A)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 0.0,0.0	Sequence 1-3 Non-Int in Orient1 (1A)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient1 (1A)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F160W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARIO ONEB1B3	Sequence 1-3 Non-Int in Orient1 (1A)	252.934546 Secs (252.935 Secs) [==>]	[1]



Proposal 14622 - Orient1 (1B) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

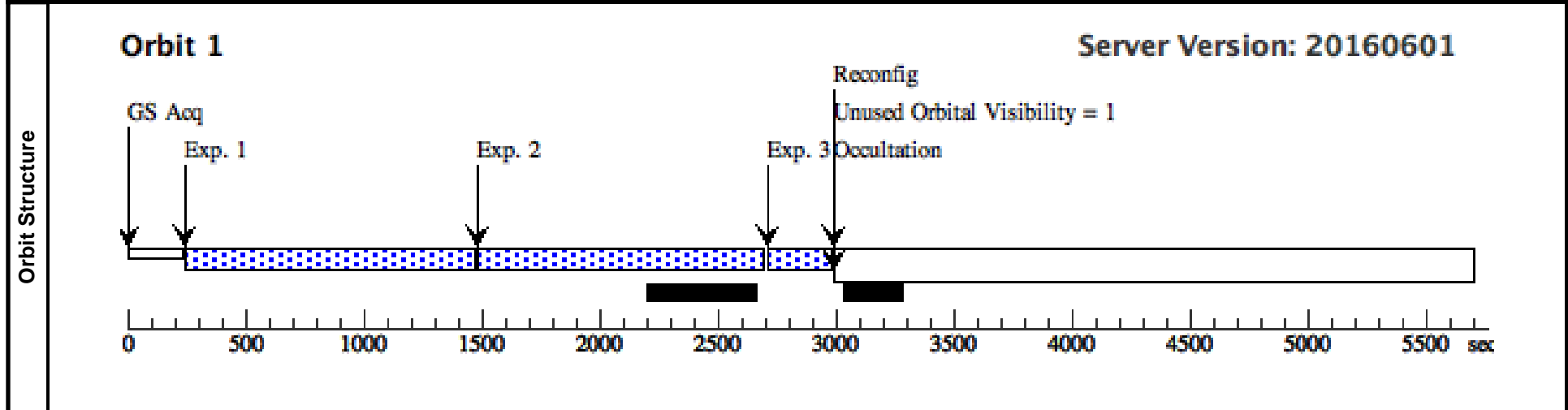
Wed Sep 07 21:42:10 GMT 2016

<b>Visit</b>	<b>Proposal 14622, Orient1 (1B)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; SAME ORIENT AS 1A
	(Orient1 (1B)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Diagnostics</b>	(Orient1 (1B)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG -0.474,0 .788	Sequence 1-3 Non-Int in Orient1 (1B)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient1 (1B)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F160W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARI O ONEB1B3	Sequence 1-3 Non-Int in Orient1 (1B)	252.934546 Secs (252.935 Secs) [==>]	[1]



Proposal 14622 - Orient1 (1C) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

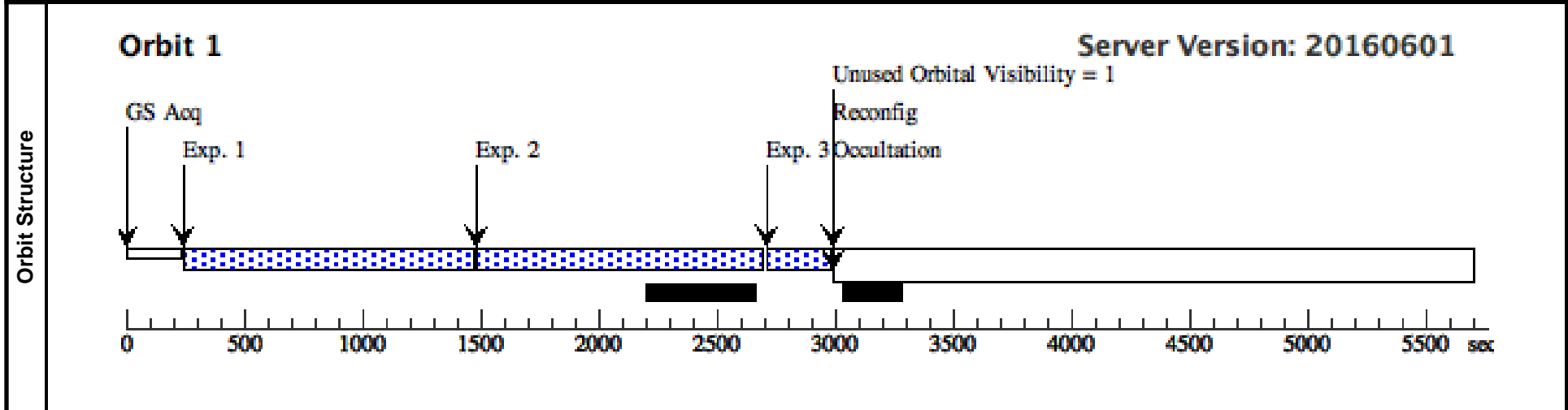
Wed Sep 07 21:42:10 GMT 2016

<b>Visit</b>	<b>Proposal 14622, Orient1 (1C)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; SAME ORIENT AS 1A
	(Orient1 (1C)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Diagnostics</b>	(Orient1 (1C)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 1.355,0.424	Sequence 1-3 Non-Int in Orient1 (1C)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient1 (1C)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F160W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARIO ONEB1B3	Sequence 1-3 Non-Int in Orient1 (1C)	252.934546 Secs (252.935 Secs) [==>]	[1]



Proposal 14622 - Orient1 (1D) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

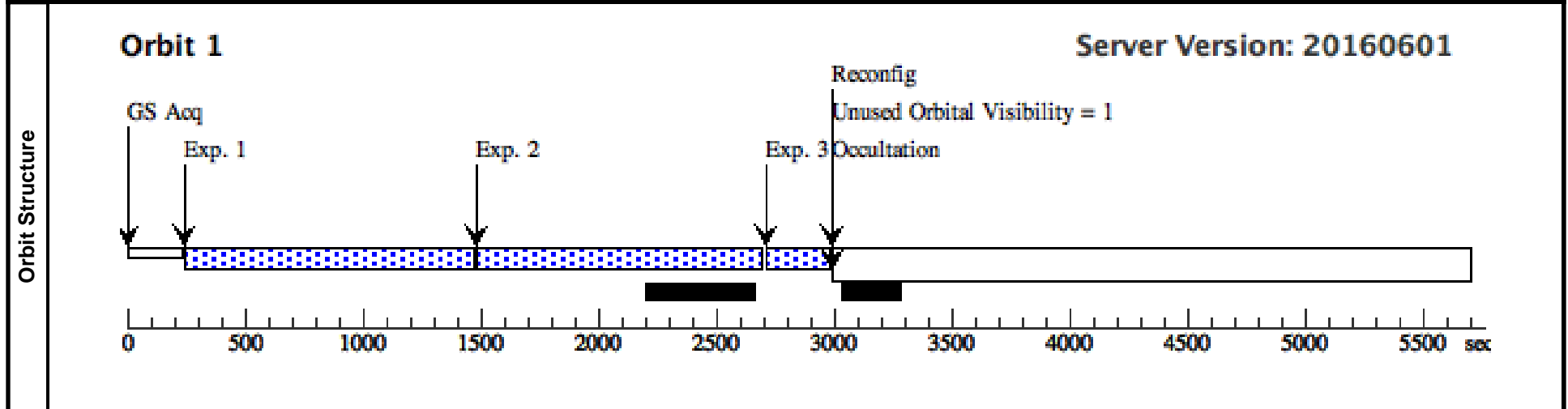
Wed Sep 07 21:42:11 GMT 2016

<b>Visit</b>	<b>Proposal 14622, Orient1 (1D)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; SAME ORIENT AS 1A
	(Orient1 (1D)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Diagnostics</b>	(Orient1 (1D)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 0.881,1.212	Sequence 1-3 Non-Int in Orient1 (1D)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient1 (1D)	1202.936167 Secs (1202.936 Secs) [==>]	[1]	
3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F160W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARIO ONEB1B3	Sequence 1-3 Non-Int in Orient1 (1D)	252.934546 Secs (252.935 Secs) [==>]	[1]	



Proposal 14622 - Orient1 (1E) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

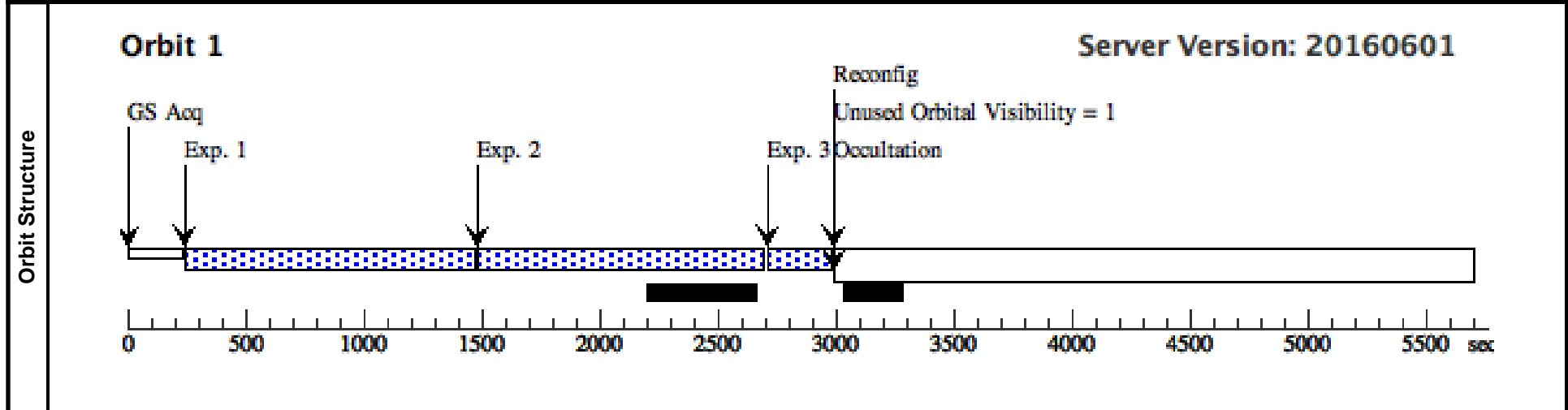
Wed Sep 07 21:42:11 GMT 2016

<b>Visit</b>	<b>Proposal 14622, Orient1 (1E)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; SAME ORIENT AS 1A
	(Orient1 (1E)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Diagnostics</b>	(Orient1 (1E)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 0.0,0.0	Sequence 1-3 Non-Int in Orient1 (1E)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient1 (1E)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARI O ONEB1B3	Sequence 1-3 Non-Int in Orient1 (1E)	252.934546 Secs (252.935 Secs) [==>]	[1]



Proposal 14622 - Orient1 (1F) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

Wed Sep 07 21:42:11 GMT 2016

<b>Visit</b>	<b>Proposal 14622, Orient1 (1F)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; SAME ORIENT AS 1A									
	(Orient1 (1F)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE									
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS				
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG -0.474,0 .788	Sequence 1-3 Non-Int in Orient1 (1F)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient1 (1F)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARI O ONEB1B3	Sequence 1-3 Non-Int in Orient1 (1F)	252.934546 Secs (252.935 Secs) [==>]	[1]
<b>Orbit Structure</b>	<p><b>Orbit 1</b> <span style="float: right;"><b>Server Version: 20160601</b></span></p>									
	<p>Unused Orbital Visibility = 1</p>									

Proposal 14622 - Orient2 (2A) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

Wed Sep 07 21:42:11 GMT 2016

<b>Visit</b>	Proposal 14622, Orient2 (2A) <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; ORIENT 171D TO 171 D									
	(Orient2 (2A)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE									
<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS				
<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 0.0,0.0	Sequence 1-3 Non-Int in Orient2 (2A)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient2 (2A)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARIO ONEB1B3	Sequence 1-3 Non-Int in Orient2 (2A)	252.934546 Secs (252.935 Secs) [==>]	[1]
<b>Orbit Structure</b>	<p><b>Orbit 1</b> <span style="float: right;"><b>Server Version: 20160601</b></span></p> <p>Unused Orbital Visibility = 1</p> <p>GS Acq</p> <p>Exp. 1</p> <p>Exp. 2</p> <p>Exp. 3</p> <p>Reconfig</p> <p>Occultation</p> <p>0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 sec</p>									

Proposal 14622 - Orient2 (2B) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

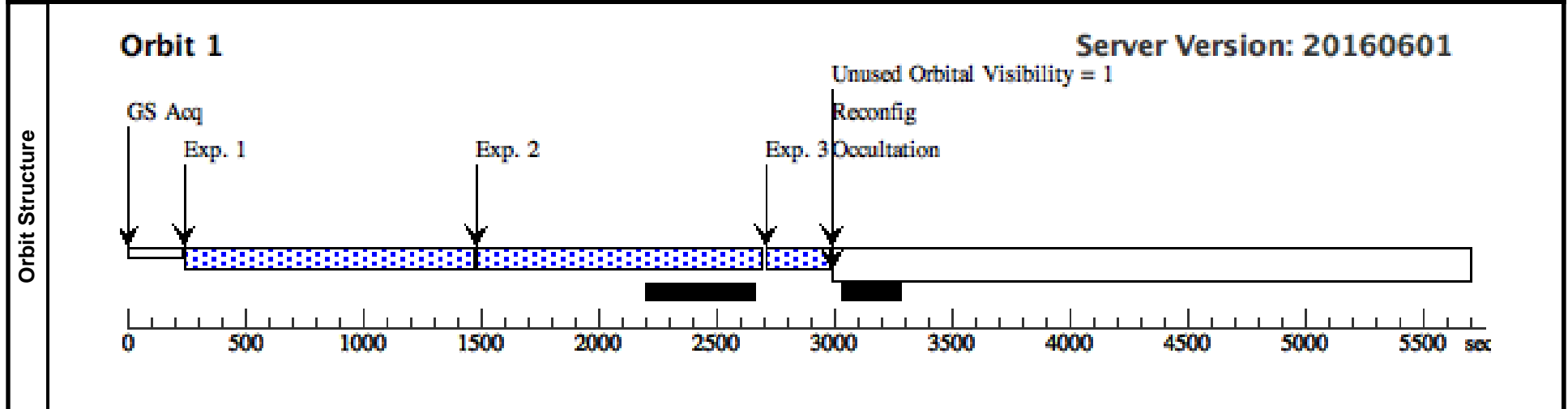
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<b>Visit</b>	<b>Proposal 14622, Orient2 (2B)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; SAME ORIENT AS 2A
	(Orient2 (2B)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Diagnostics</b>	(Orient2 (2B)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG -0.474,0 .788	Sequence 1-3 Non-Int in Orient2 (2B)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient2 (2B)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARI O ONEB1B3	Sequence 1-3 Non-Int in Orient2 (2B)	252.934546 Secs (252.935 Secs) [==>]	[1]



Proposal 14622 - Orient2 (2C) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

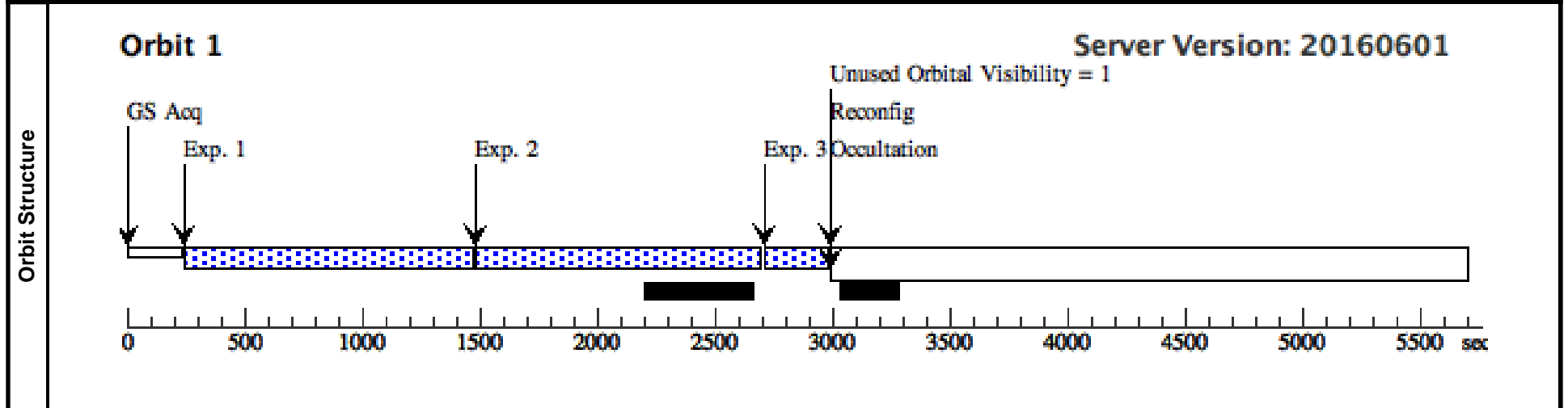
Wed Sep 07 21:42:11 GMT 2016

<b>Visit</b>	Proposal 14622, Orient2 (2C) <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; SAME ORIENT AS 2A
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<b>Diagnostics</b>	(Orient2 (2C)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE
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<b>Fixed Targets</b>	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>SDSSJ0851+3331-SGAS</td> <td>RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000</td> <td></td> <td>V=20 H(F160W) = 20.7 ABmag</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous								
(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS								

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 1.355,0.424	Sequence 1-3 Non-Int in Orient2 (2C)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient2 (2C)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARIO ONEB1B3	Sequence 1-3 Non-Int in Orient2 (2C)	252.934546 Secs (252.935 Secs) [==>]	[1]	



Proposal 14622 - Orient2 (2D) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

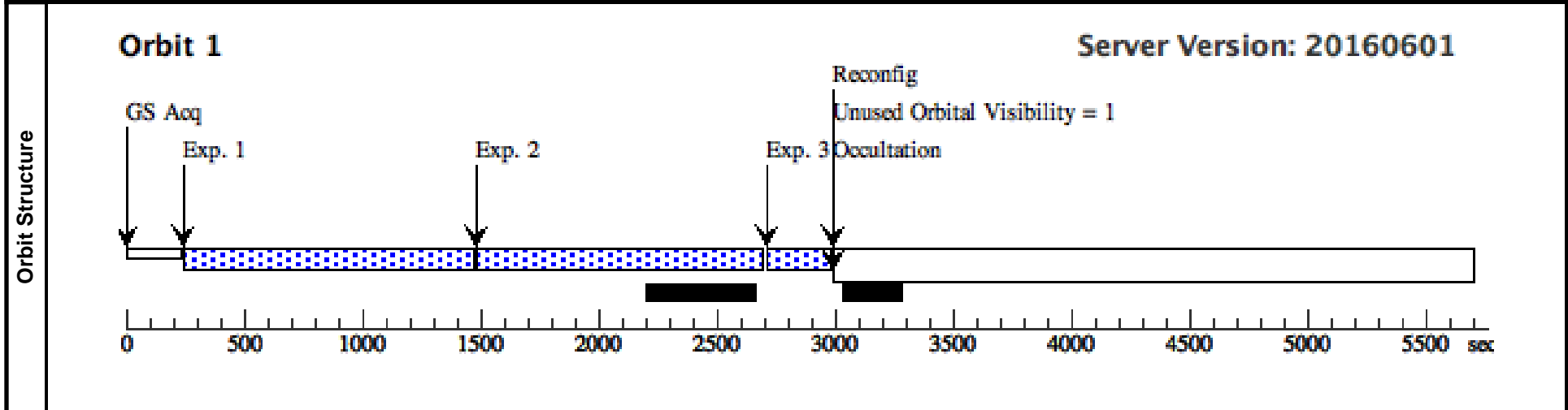
Wed Sep 07 21:42:11 GMT 2016

<b>Visit</b>	<b>Proposal 14622, Orient2 (2D)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; SAME ORIENT AS 2A
	(Orient2 (2D)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Diagnostics</b>	(Orient2 (2D)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 0.881,1.212	Sequence 1-3 Non-Int in Orient2 (2D)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient2 (2D)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F105W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARIO ONEB1B3	Sequence 1-3 Non-Int in Orient2 (2D)	252.934546 Secs (252.935 Secs) [==>]	[1]



Proposal 14622 - Orient2 (2E) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

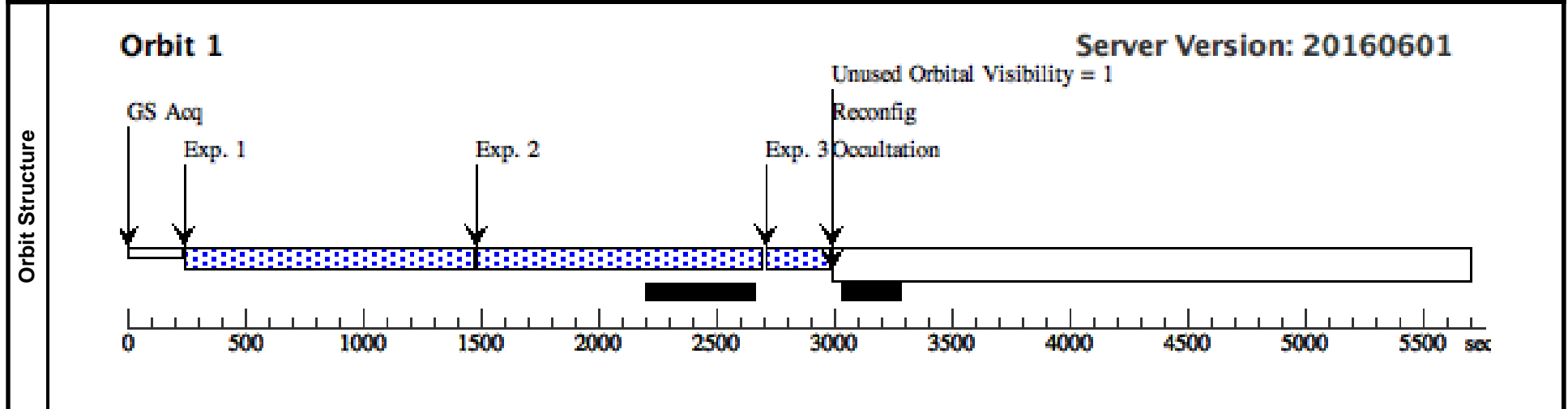
Wed Sep 07 21:42:11 GMT 2016

<b>Visit</b>	<b>Proposal 14622, Orient2 (2E)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; SAME ORIENT AS 2A
	(Orient2 (2E)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Diagnostics</b>	(Orient2 (2E)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG 0.0,0.0	Sequence 1-3 Non-Int in Orient2 (2E)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient2 (2E)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F160W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARIO ONEB1B3	Sequence 1-3 Non-Int in Orient2 (2E)	252.934546 Secs (252.935 Secs) [==>]	[1]



Proposal 14622 - Orient2 (2F) - A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8

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<b>Visit</b>	<b>Proposal 14622, Orient2 (2F)</b> <b>Diagnostic Status: Warning</b> Scientific Instruments: WFC3/IR Special Requirements: SCHED 100%; SAME ORIENT AS 2A
	(Orient2 (2F)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Diagnostics</b>	(Orient2 (2F)) Warning (Orbit Planner): SAME POS MAY NOT BE APPROPRIATE

<b>Fixed Targets</b>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	SDSSJ0851+3331-SGAS	RA: 08 51 38.9810 (132.9124208d) Dec: +33 31 10.83 (33.51967d) Equinox: J2000		V=20 H(F160W) = 20.7 ABmag	Reference Frame: ICRS

<b>Exposures</b>	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	POS TARG -0.474,0 .788	Sequence 1-3 Non-Int in Orient2 (2F)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	2		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	G141	NSAMP=13; SAMP-SEQ=SPAR S100	SAME POS AS 1	Sequence 1-3 Non-Int in Orient2 (2F)	1202.936167 Secs (1202.936 Secs) [==>]	[1]
	3		(1) SDSSJ0851+3331-SGAS	WFC3/IR, MULTIACCUM, GRISM1024	F160W	NSAMP=6; SAMP-SEQ=SPAR S50	SAME POS AS 1; GS ACQ SCENARI O ONEB1B3	Sequence 1-3 Non-Int in Orient2 (2F)	252.934546 Secs (252.935 Secs) [==>]	[1]

