



13669 - The star-formation histories within clumpy disks at $z \sim 2.2$

Cycle: 22, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) ZC-400528	WFC3/UVIS	4	07-Nov-2014 21:00:35.0	yes
02	(2) ZC-400569	WFC3/UVIS	4	07-Nov-2014 21:00:37.0	yes
03	(3) ZC-405226	WFC3/UVIS	4	07-Nov-2014 21:00:39.0	yes
04	(4) ZC-405501	WFC3/UVIS	4	07-Nov-2014 21:00:40.0	yes
05	(5) ZC-406690	WFC3/UVIS	4	07-Nov-2014 21:00:42.0	yes
06	(6) ZC-407302	WFC3/UVIS	4	07-Nov-2014 21:00:44.0	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>
07	(7) ZC-412369	WFC3/UVIS	4	07-Nov-2014 21:00:46.0	yes
08	(8) Q2343-BX610	ACS/WFC WFC3/UVIS	5	07-Nov-2014 21:00:48.0	yes
09	(9) Q2346-BX482	WFC3/UVIS	4	07-Nov-2014 21:00:50.0	yes
10	(10) D3A-15504	ACS/WFC WFC3/UVIS	5	07-Nov-2014 21:00:53.0	yes
11	(9) Q2346-BX482	ACS/WFC	1	07-Nov-2014 21:00:54.0	yes

43 Total Orbits Used

ABSTRACT

We propose to obtain WFC3 F438W images, sampling the rest-frame FUV ($\sim 1400\text{\AA}$), of 10 clumpy disk galaxies at $z \sim 2.2$. These $10 < \log M/M_{\text{sun}} < 11$ galaxies comprise an ideal sample of rotationally-supported star forming disks at these early epochs, for which we have in hand (i) Adaptive Optics VLT/SINFONI maps of the H α fluxes and kinematics at 0.1 arcsec (~ 1 kpc) resolution, (ii) WFC3 F160W and F110W images that straddle the 4000 \AA break, and (iii) for 7 targets, also ACS F814W images in the rest-NUV (2700 \AA) - we request here also the missing F814W imaging on the 3 remaining galaxies.

These new data will allow us:

(1) to measure the slope of the UV continuum throughout the galaxies to yield, for each galaxy, a two-dimensional reddening map and an extinction-corrected UV-brightness map. The latter will test whether the overall correlation between H α and the UV continuum that is seen in the integrated light of these galaxies is maintained down to kpc scales; and

(2) to break the degeneracy between stellar population age (i.e. star-formation history) and dust extinction, and to obtain spatially-resolved information on the star formation rates in these galaxies on three different timescales: 10^7 yr (H α), 10^8 yr (dust-corrected UV) and 10^9 yr (rest-optical). We will therefore be able to determine the star formation histories of the individual clumps and the interclump regions on kpc scales, as a function of distance from the galaxy centers. Our high-level scientific goals are to measure the lifetime of the clumps, to understand the origin of the disk stars, and to test the idea that the in-spiral of clumps results in the formation of bulges and thick disks.

OBSERVING DESCRIPTION

PROGRAM GOALS:

This WFC3/UVIS program of F438W imaging will map the rest-frame FUV emission of 10 clumpy disk galaxies at redshift $z \sim 2.2$ with available (i) kpc-resolution H α flux and kinematics maps from VLT/SINFONI spectra, and (ii) rest-frame optical stellar mass maps from HST/WFC3 imaging. The new data will break the degeneracy between stellar population ages and dust extinction, enable the comparison on kpc-scales of UV and H α star-formation rates, and constrain the galaxy star formation histories in the bulge, clumps and inter-clumps disk regions. ACS F814W imaging is also acquired within this program for the three targets for which this is not already available.

STRATEGY:

For the F438W observations, we use the UVIS1 aperture to center the target on the UVIS1 detector. We will apply two independent dithering positions per target per orbit, so to obtain a total of 8 shifted positions per each target. This reduces the impact of instrumental artifacts and of cosmic rays. Within each orbit, we use a customized WFC-UVIS-DITHER-LINE dither pattern with a point spacing of 4.359 arcsec, which preserves the sub-integer offsets for an optimum PSF sampling, and dithers over the targets, whose typical extent is up to $\sim 3''$ (i.e. ~ 75 pix). The dither patterns for the 2nd, 3rd, and 4th orbits are similar to the first orbit, but overall they are offset using the POS TARG parameters in the Target Position Requirements so to be offset from the pattern of the 1st orbit by $1/2$, $1/4$, and $1/8$ pixels in both x and y.

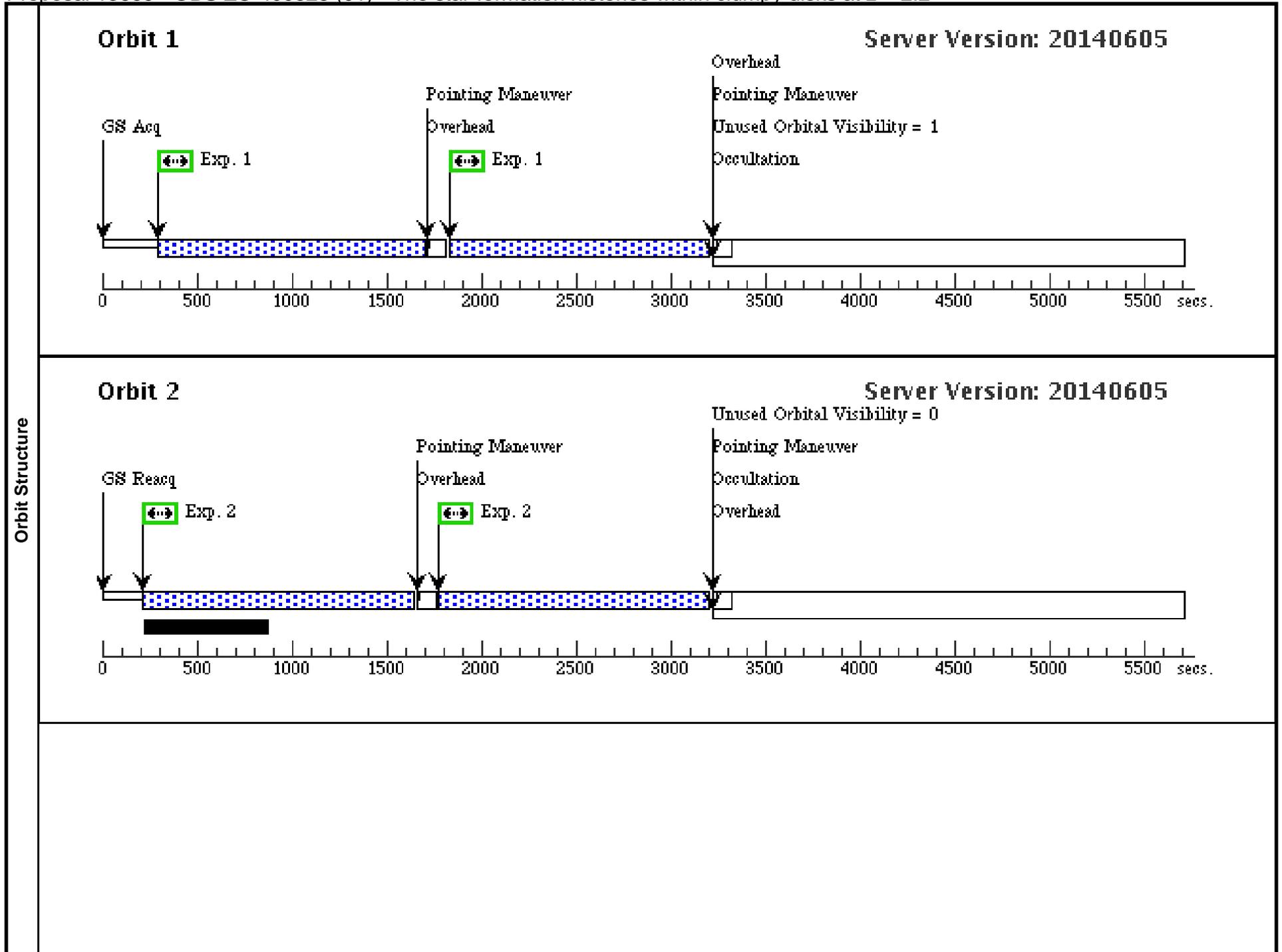
For the ACS/WFC F814W observations, we use the ACS-WFC-DITHER-BOX dither pattern with a point spacing of 5.844 arcsec and a line spacing of 4.124 arcsec, using as the fiducial center the WFC1 aperture.

To keep a flexible scheduling, we do not require special orientation constraints for all visits.

Proposal 13669 - OBS ZC-400528 (01) - The star-formation histories within clumpy disks at z ~ 2.2

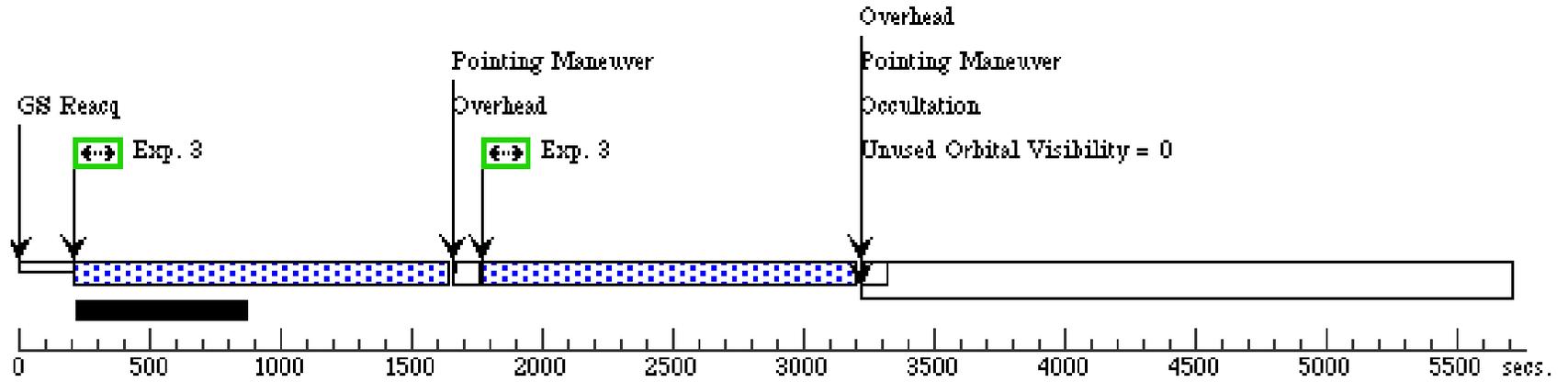
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Visit	Proposal 13669, OBS ZC-400528 (01), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
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	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=4.3594 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1), (2), (3), (4)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	ZC-400528	RA: 09 59 47.5900 (149.9482917d) Dec: +01 44 19.06 (1.73863d) Equinox: J2000	Redshift: 2.39	V=23.3 B_AB = 23.37	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) ZC-400528	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,25	Pattern 1, Exps 1-1 in OBS ZC-400528 (01) (1)	1376 Secs (2752 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(1) ZC-400528	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,25	Pattern 1, Exps 2-2 in OBS ZC-400528 (01) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[2]
	3		(1) ZC-400528	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,15	Pattern 1, Exps 3-3 in OBS ZC-400528 (01) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[3]
	4		(1) ZC-400528	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,15	Pattern 1, Exps 4-4 in OBS ZC-400528 (01) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[4]



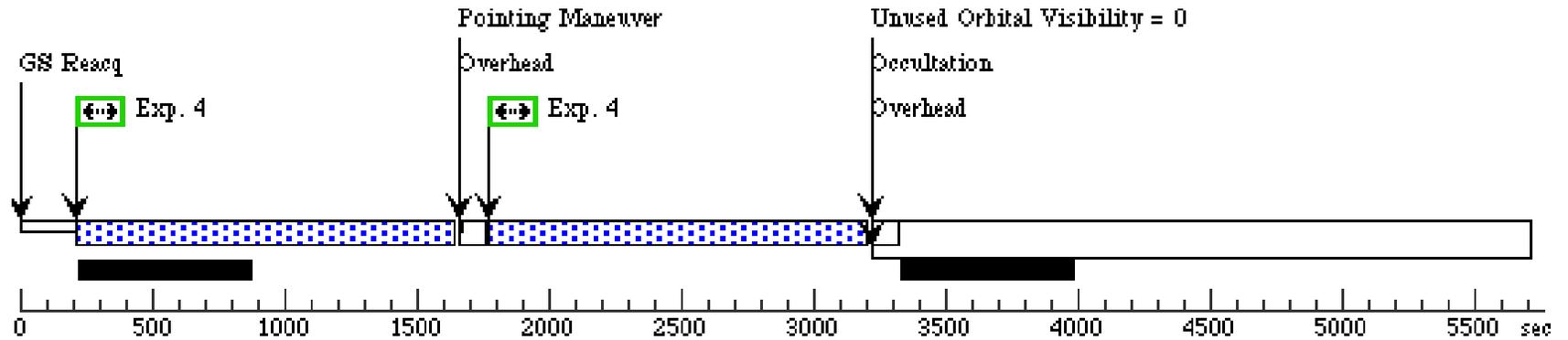
Orbit 3

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Orbit 4

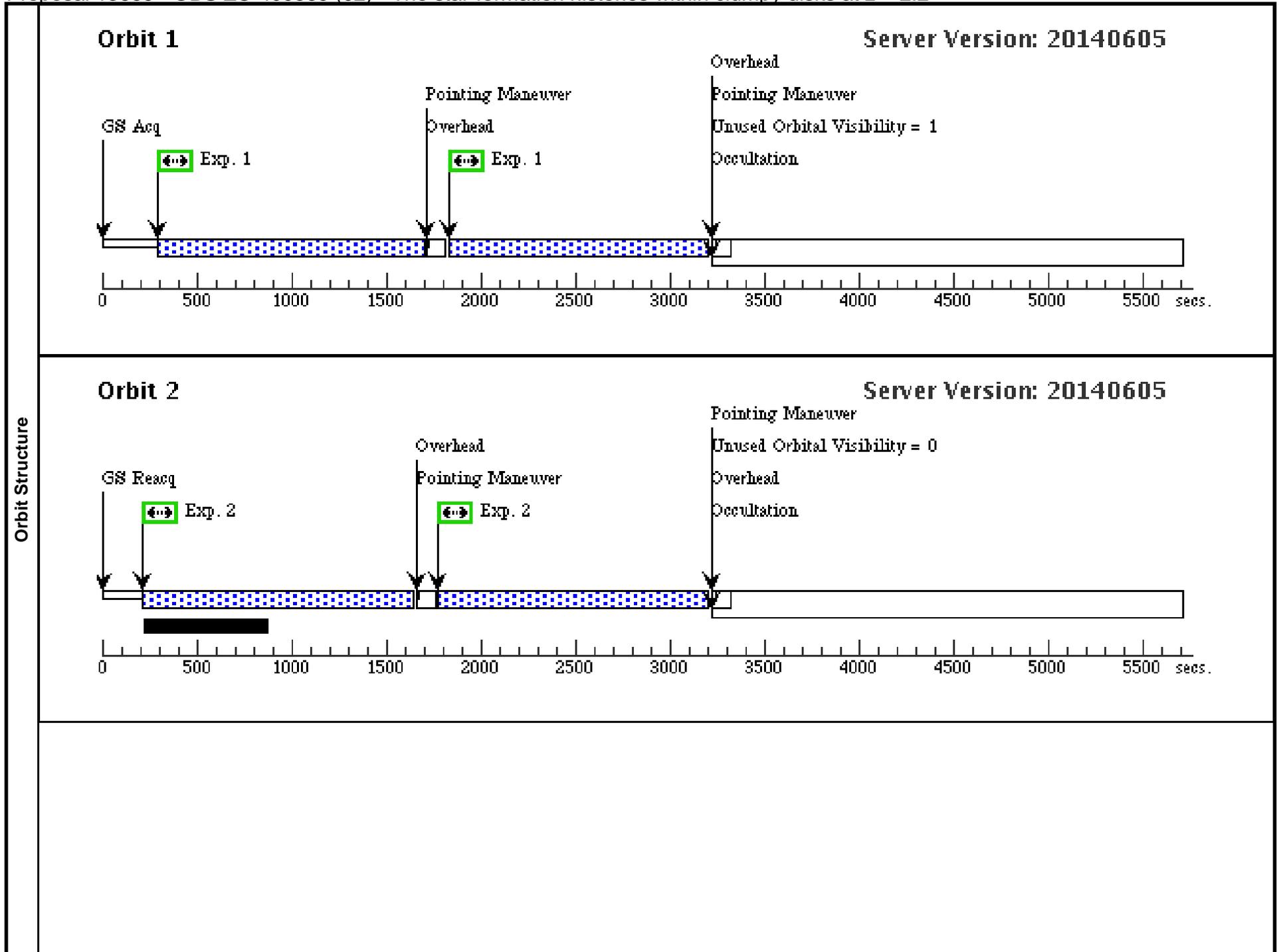
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Proposal 13669 - OBS ZC-400569 (02) - The star-formation histories within clumpy disks at z ~ 2.2

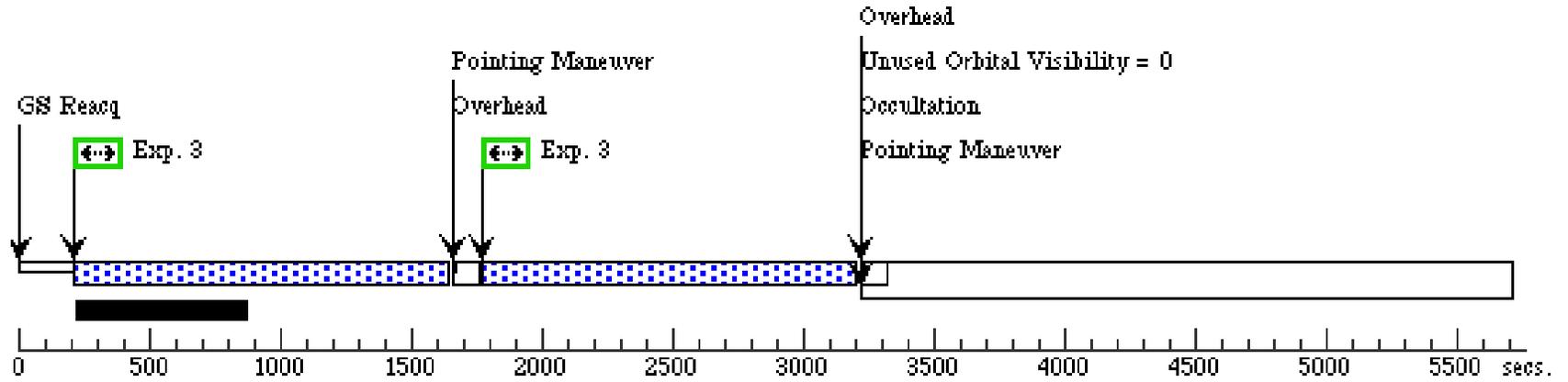
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(2)	ZC-400569	RA: 10 01 8.6940 (150.2862250d) Dec: +01 44 28.23 (1.74118d) Equinox: J2000	Redshift: 2.24	V=23.8 B_AB = 23.97	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) ZC-400569	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,25	Pattern 1, Exps 1-1 in OBS ZC-400569 (02) (1)	1376 Secs (2752 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(2) ZC-400569	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,25	Pattern 1, Exps 2-2 in OBS ZC-400569 (02) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[2]
	3		(2) ZC-400569	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,15	Pattern 1, Exps 3-3 in OBS ZC-400569 (02) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[3]
	4		(2) ZC-400569	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,15	Pattern 1, Exps 4-4 in OBS ZC-400569 (02) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[4]



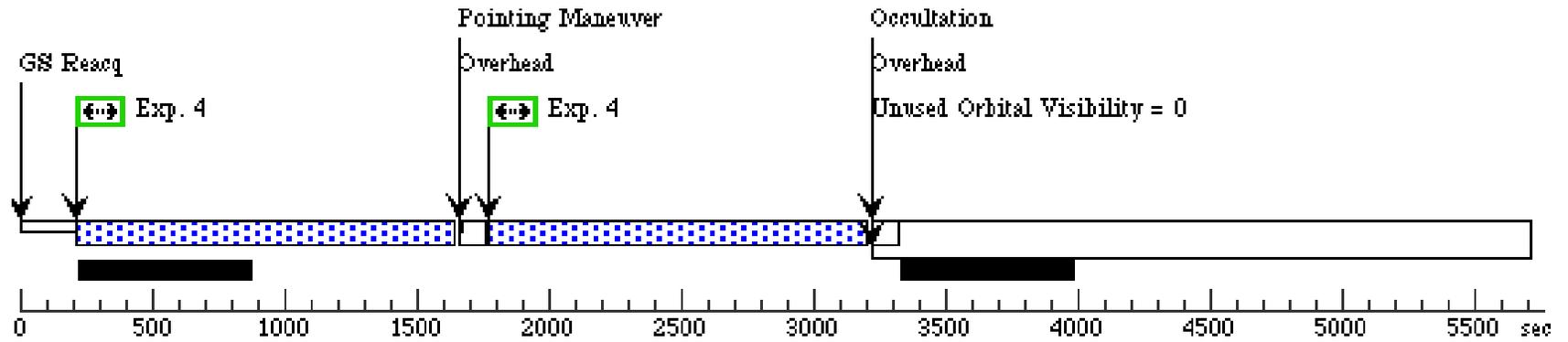
Orbit 3

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Orbit 4

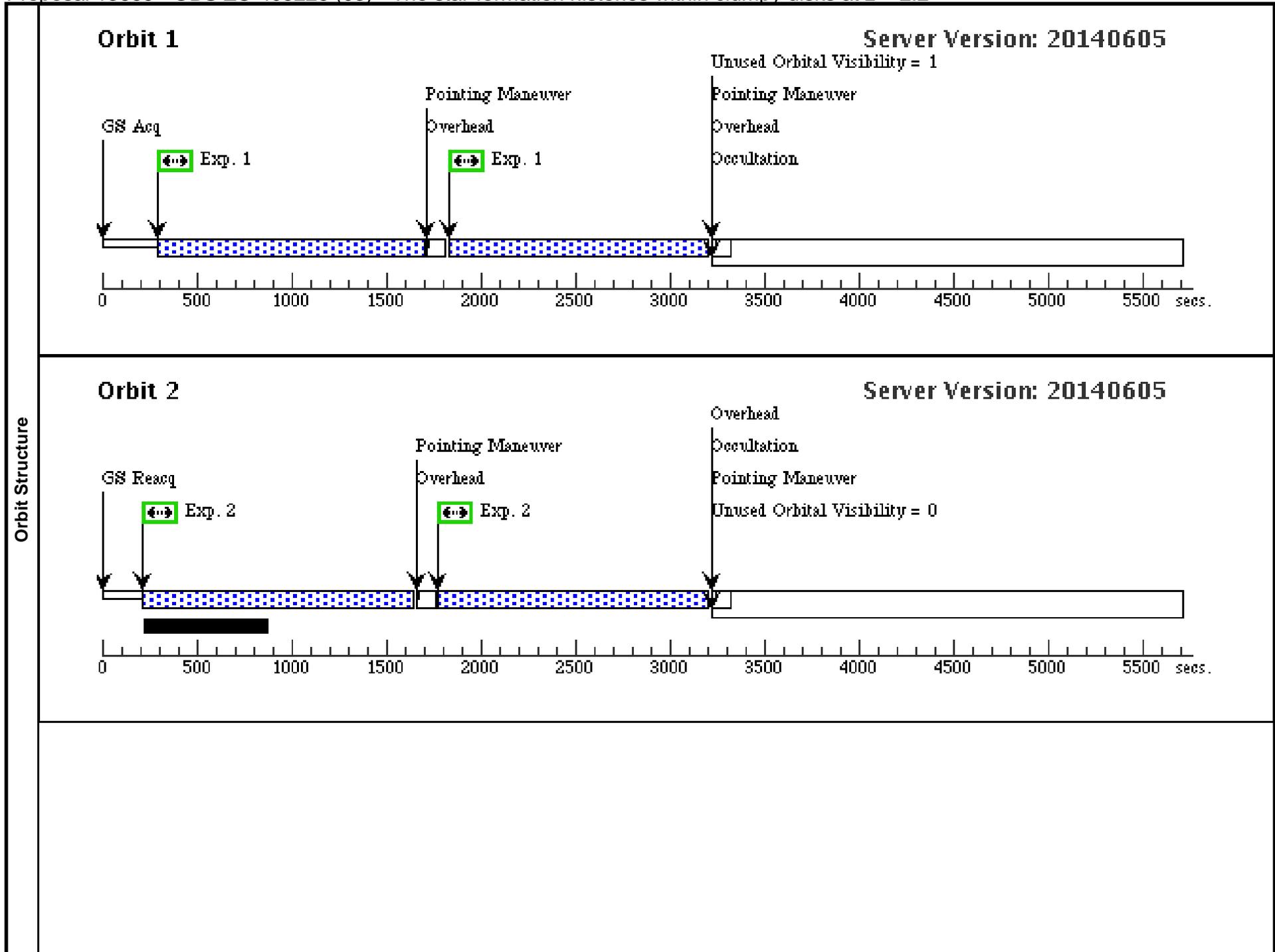
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Proposal 13669 - OBS ZC-405226 (03) - The star-formation histories within clumpy disks at z ~ 2.2

Sat Nov 08 02:00:57 GMT 2014

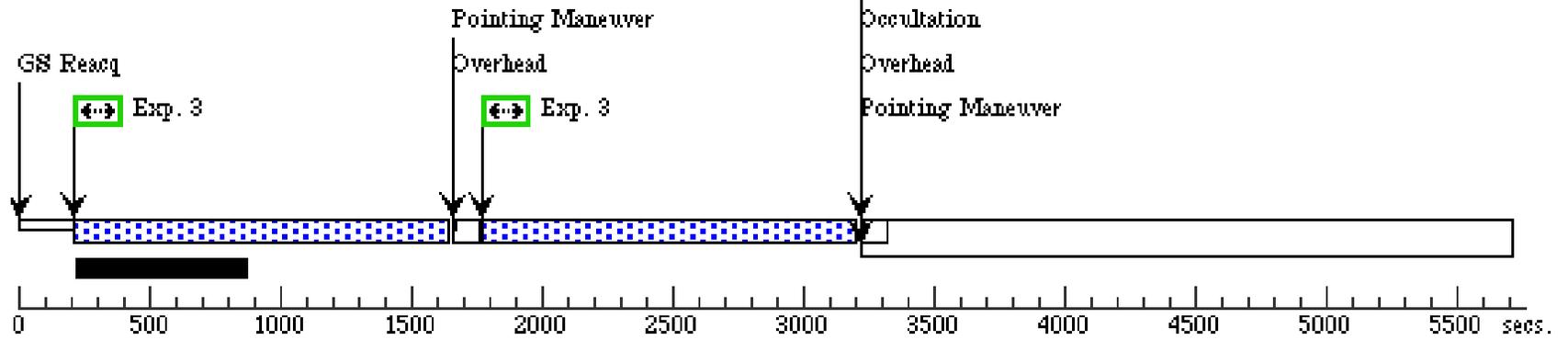
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(3)	ZC-405226	RA: 10 02 19.5200 (150.5813333d) Dec: +02 00 18.10 (2.00503d) Equinox: J2000	Redshift: 2.29	V=23.6 B_AB = 23.76	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(3) ZC-405226	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,25; GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-1 i n OBS ZC-405226 (03) (1)	1376 Secs (2752 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(3) ZC-405226	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,25	Pattern 1, Exps 2-2 i n OBS ZC-405226 (03) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[2]
	3		(3) ZC-405226	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,15	Pattern 1, Exps 3-3 i n OBS ZC-405226 (03) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[3]
	4		(3) ZC-405226	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,15	Pattern 1, Exps 4-4 i n OBS ZC-405226 (03) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[4]



Orbit 3

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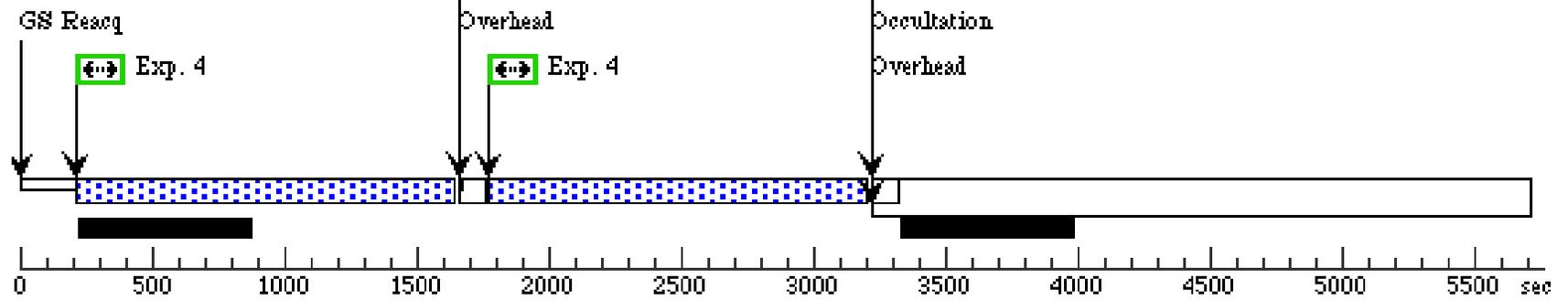
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Orbit 4

Server Version: 20140605

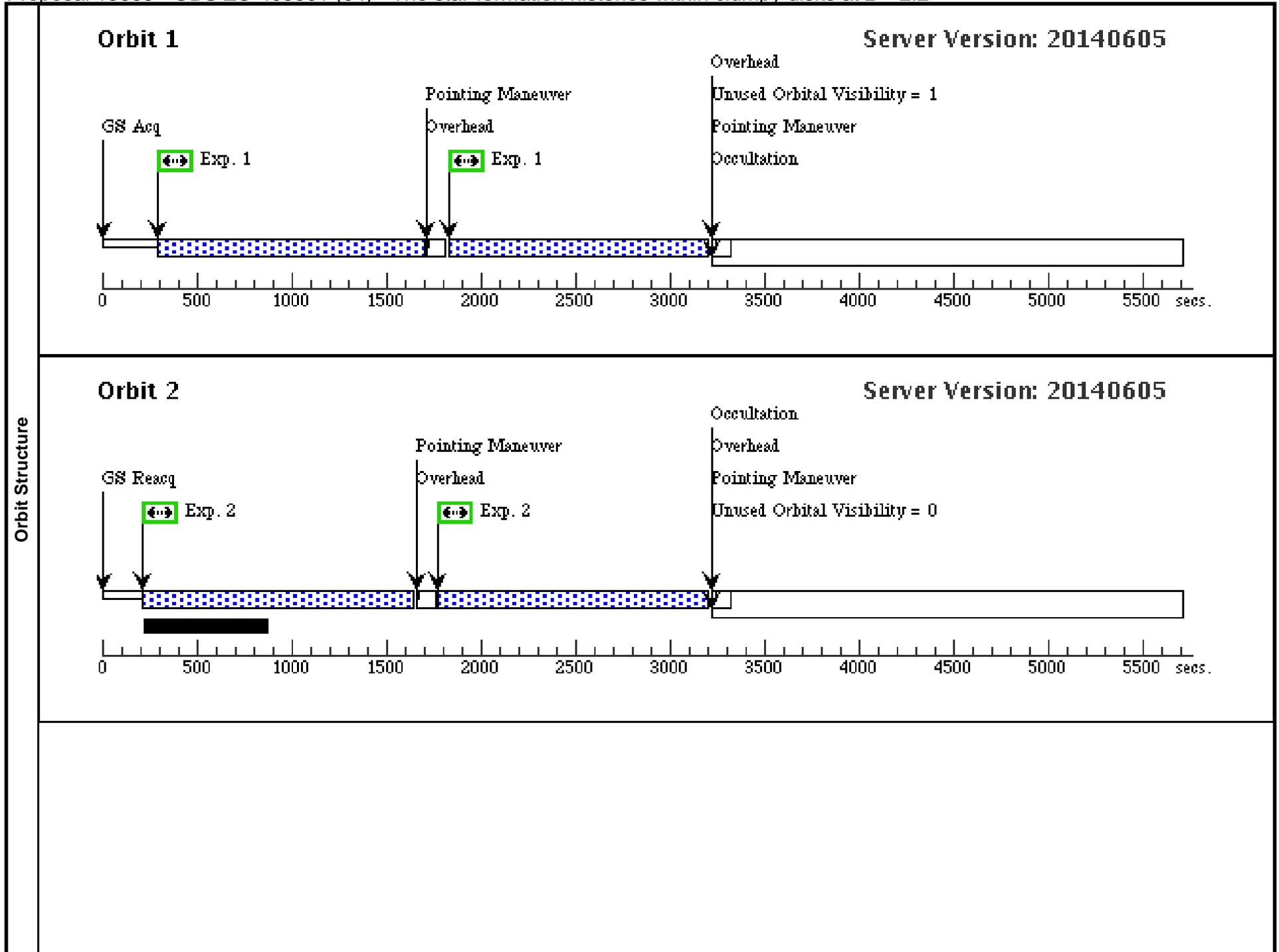
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Proposal 13669 - OBS ZC-405501 (04) - The star-formation histories within clumpy disks at z ~ 2.2

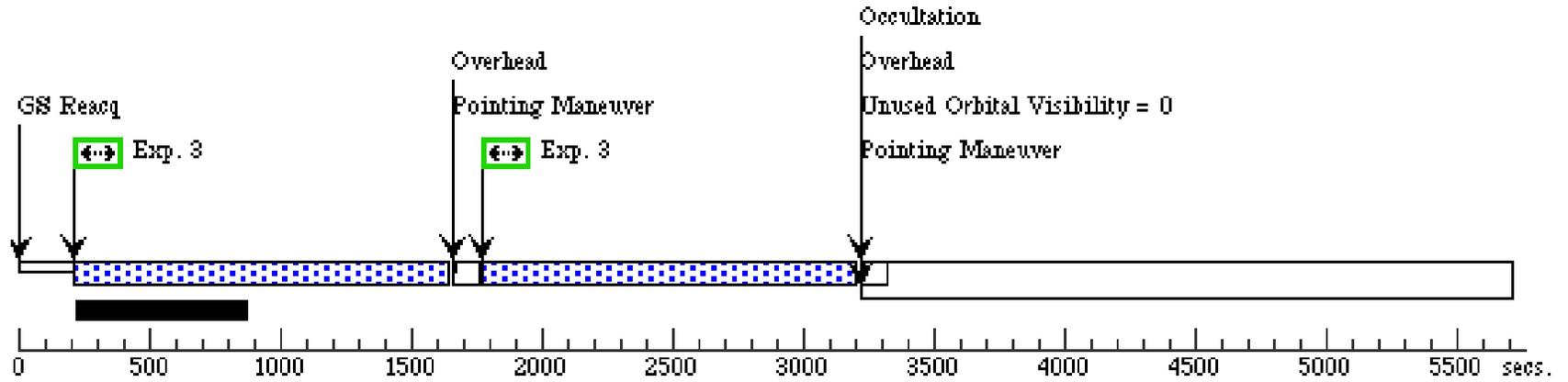
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(4)	ZC-405501	RA: 09 59 53.7420 (149.9739250d) Dec: +02 01 8.89 (2.01914d) Equinox: J2000	Redshift: 2.15	V=23.6 B_AB = 23.90	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(4) ZC-405501	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,25	Pattern 1, Exps 1-1 in OBS ZC-405501 (04) (1)	1376 Secs (2752 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(4) ZC-405501	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,25	Pattern 1, Exps 2-2 in OBS ZC-405501 (04) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[2]
	3		(4) ZC-405501	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,15	Pattern 1, Exps 3-3 in OBS ZC-405501 (04) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[3]
	4		(4) ZC-405501	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,15	Pattern 1, Exps 4-4 in OBS ZC-405501 (04) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[4]



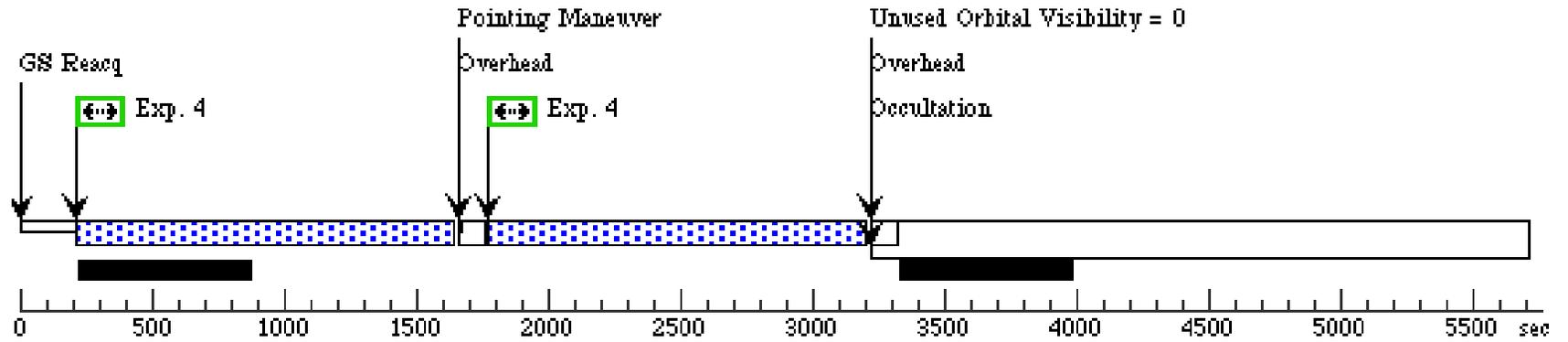
Orbit 3

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Orbit 4

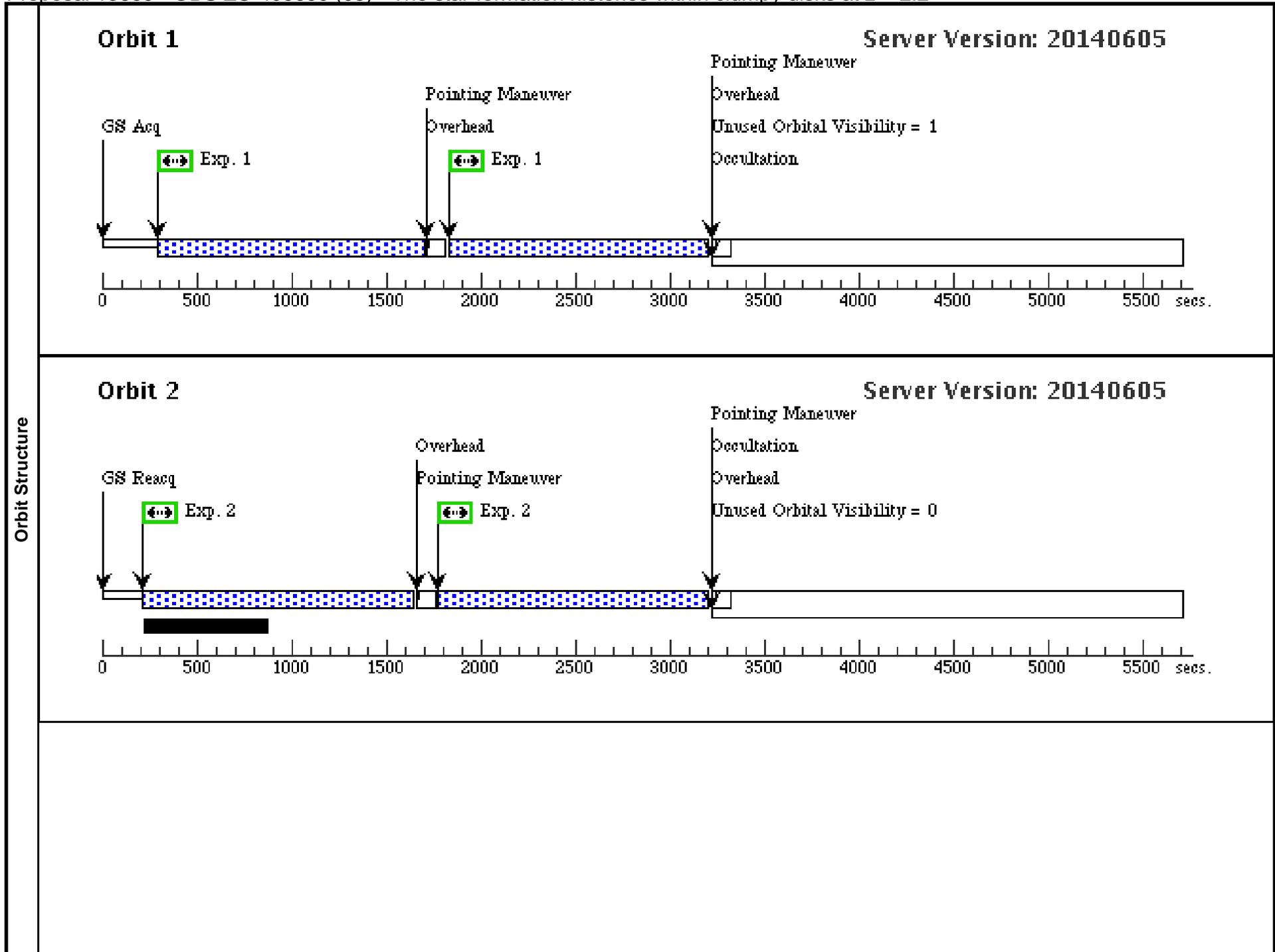
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Proposal 13669 - OBS ZC-406690 (05) - The star-formation histories within clumpy disks at z ~ 2.2

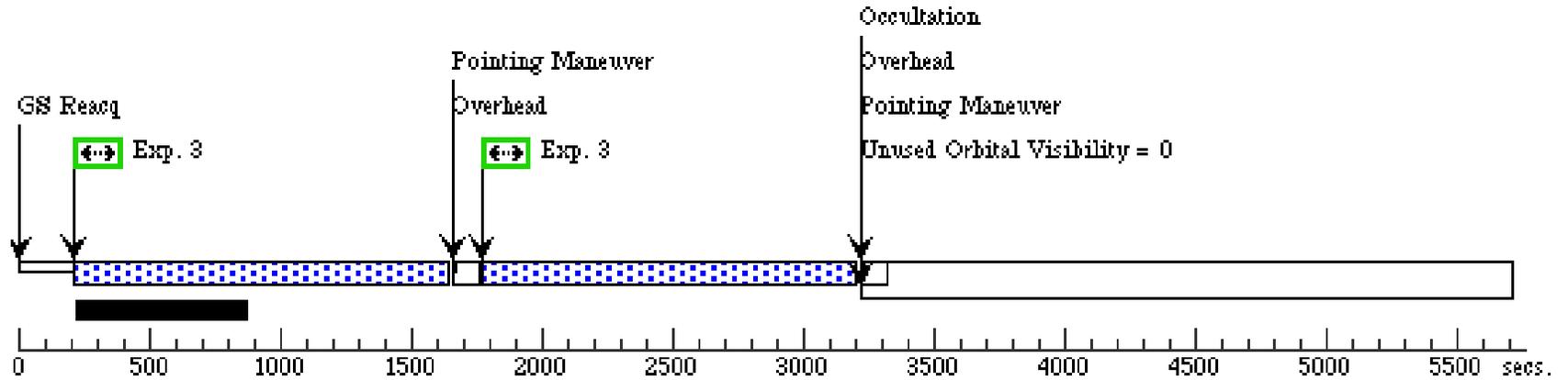
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Visit	Proposal 13669, OBS ZC-406690 (05), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(5)	ZC-406690	RA: 09 58 59.1280 (149.7463667d) Dec: +02 05 4.25 (2.08451d) Equinox: J2000	Redshift: 2.19	V=22.2 B_AB = 22.97	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(5) ZC-406690	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,25	Pattern 1, Exps 1-1 in OBS ZC-406690 (05) (1)	1376 Secs (2752 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(5) ZC-406690	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,25	Pattern 1, Exps 2-2 in OBS ZC-406690 (05) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[2]
	3		(5) ZC-406690	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,15	Pattern 1, Exps 3-3 in OBS ZC-406690 (05) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[3]
	4		(5) ZC-406690	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,15	Pattern 1, Exps 4-4 in OBS ZC-406690 (05) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[4]



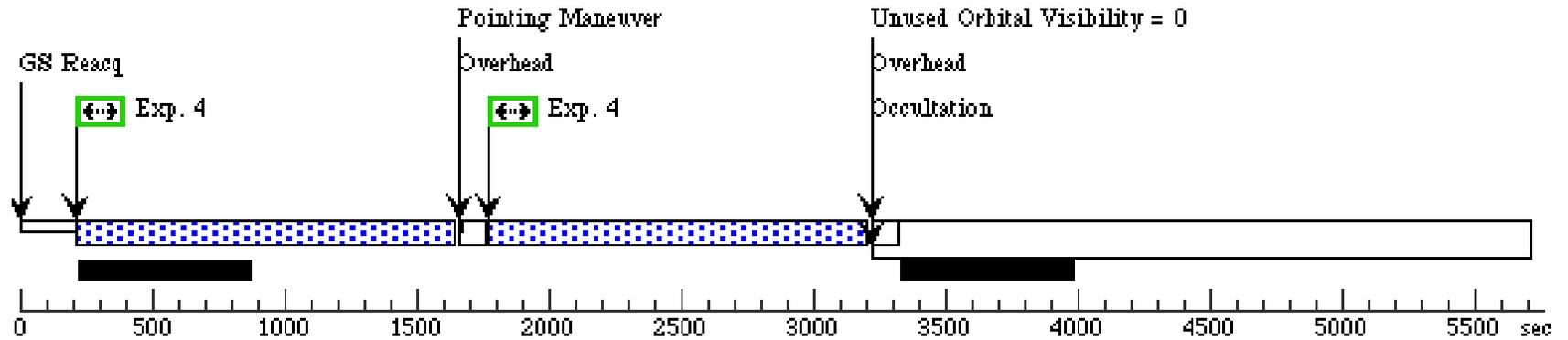
Orbit 3

Server Version: 20140605



Orbit 4

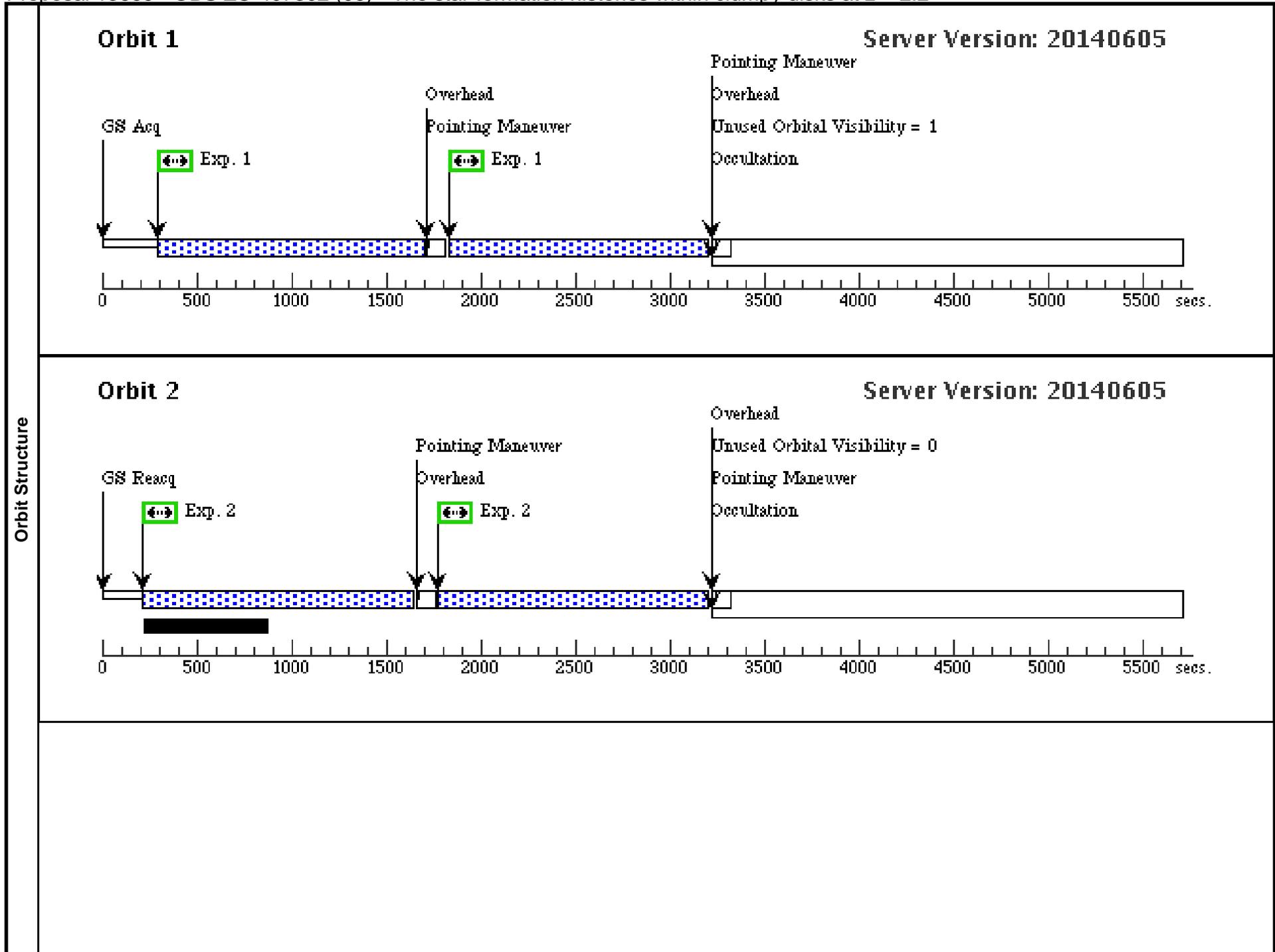
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Proposal 13669 - OBS ZC-407302 (06) - The star-formation histories within clumpy disks at z ~ 2.2

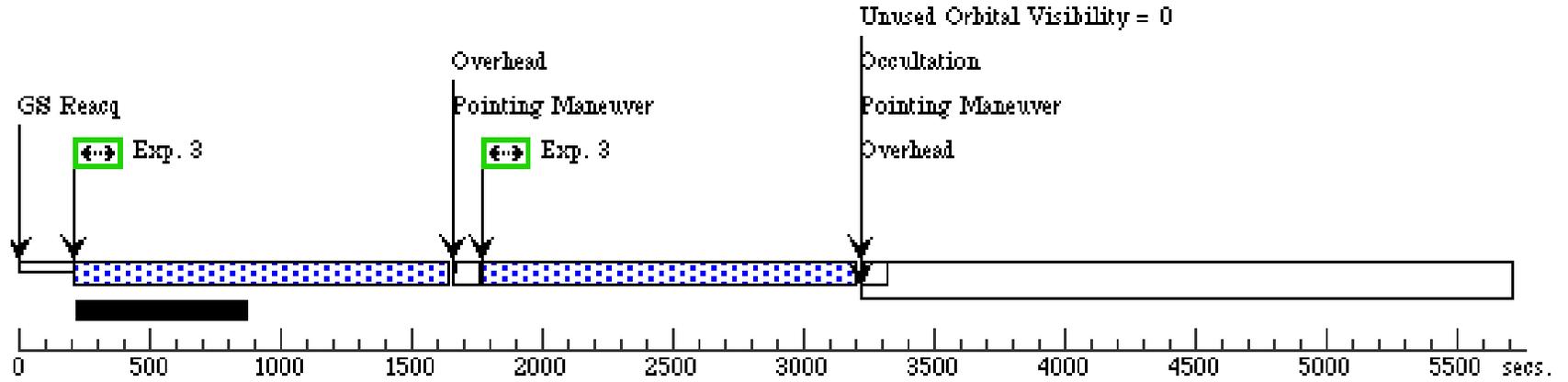
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Visit	Proposal 13669, OBS ZC-407302 (06), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(6)	ZC-407302	RA: 09 59 55.9400 (149.9830833d) Dec: +02 06 51.30 (2.11425d) Equinox: J2000	Redshift: 2.18	V=23.1 B_AB = 23.51	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(6) ZC-407302	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,25; GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-1 i n OBS ZC-407302 (06) (1)	1376 Secs (2752 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	2		(6) ZC-407302	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,25	Pattern 1, Exps 2-2 i n OBS ZC-407302 (06) (1)	1432 Secs (2864 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[2]
	3		(6) ZC-407302	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,15	Pattern 1, Exps 3-3 i n OBS ZC-407302 (06) (1)	1432 Secs (2864 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[3]
	4		(6) ZC-407302	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,15	Pattern 1, Exps 4-4 i n OBS ZC-407302 (06) (1)	1432 Secs (2864 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[4]



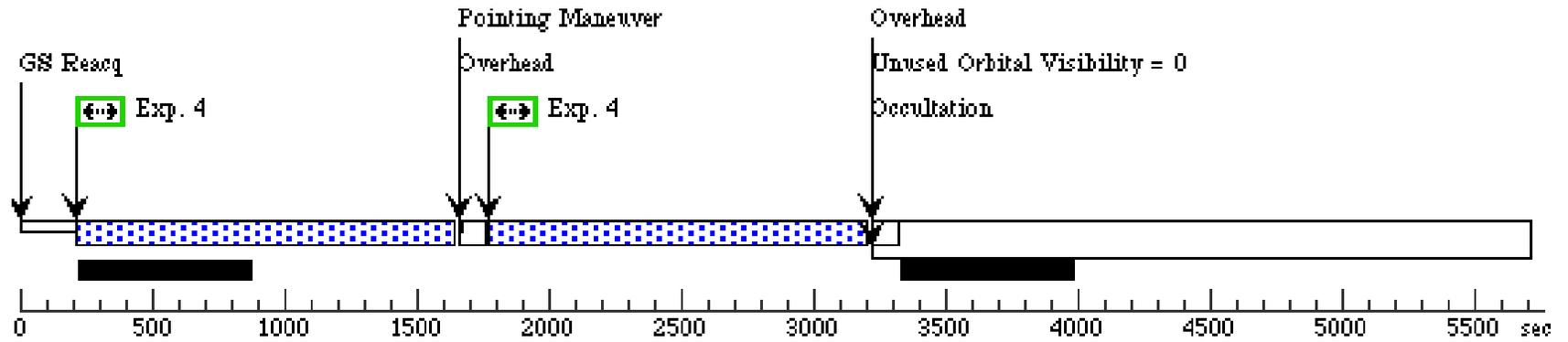
Orbit 3

Server Version: 20140605



Orbit 4

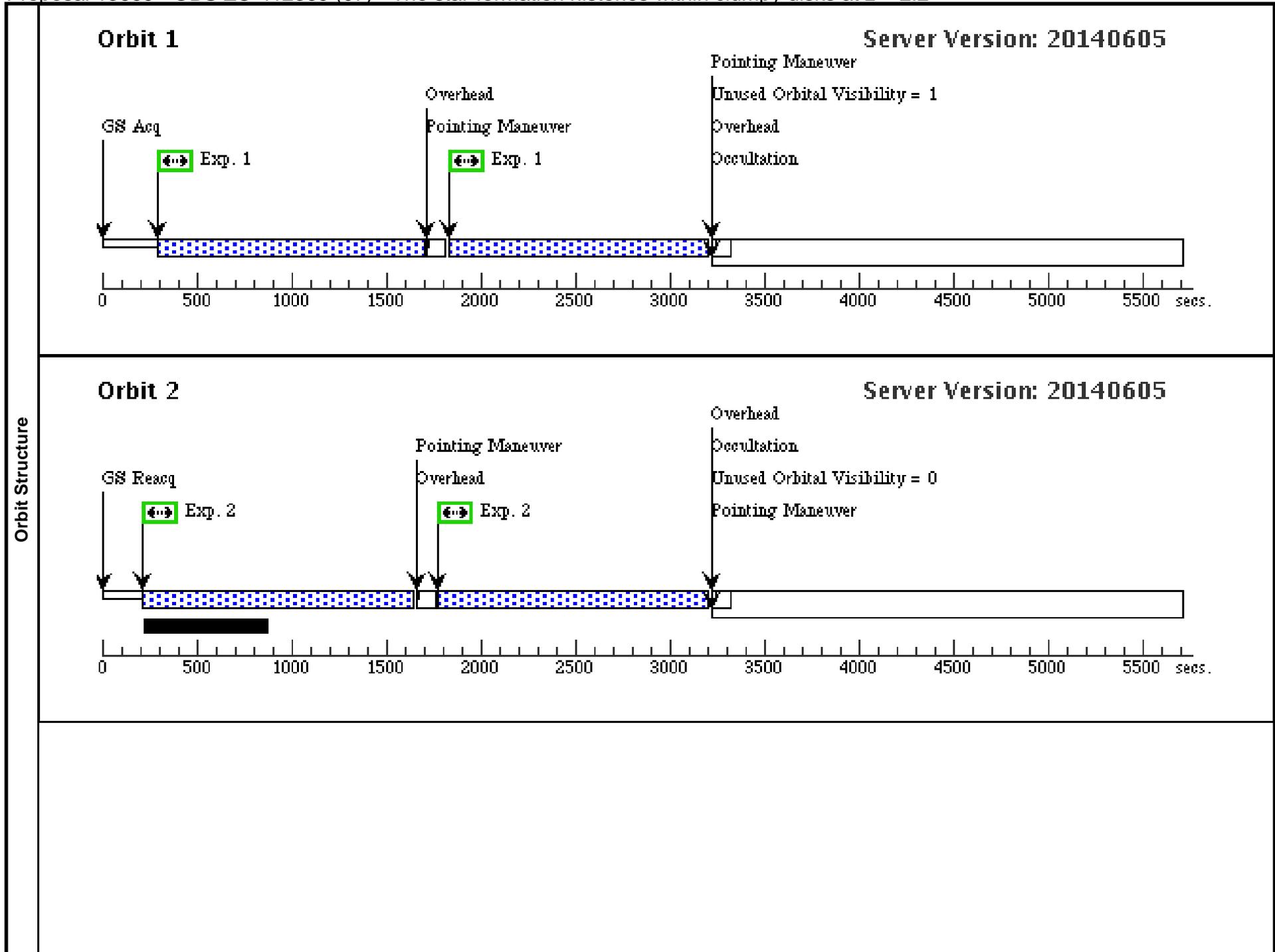
Server Version: 20140605



Proposal 13669 - OBS ZC-412369 (07) - The star-formation histories within clumpy disks at z ~ 2.2

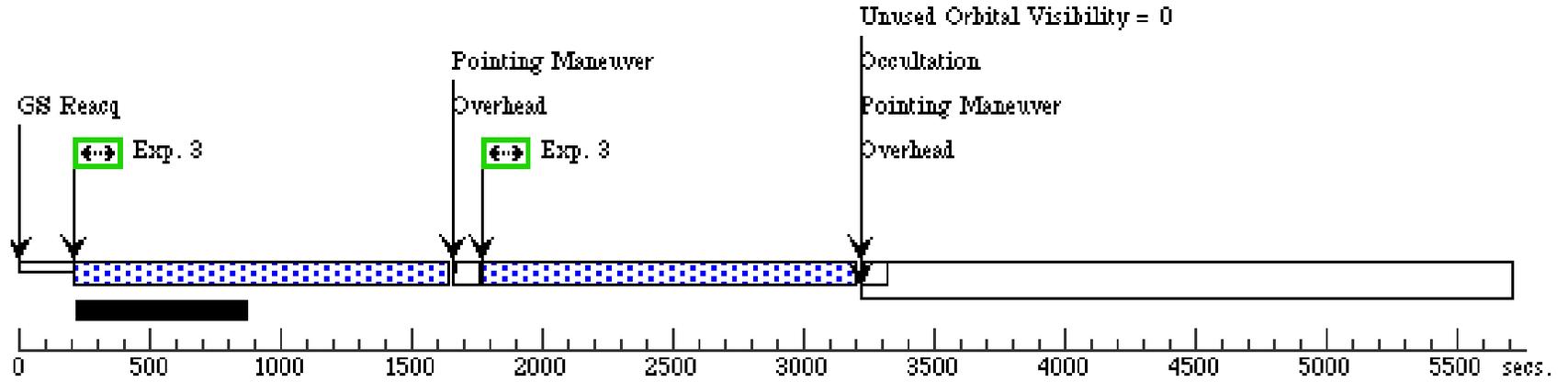
Sat Nov 08 02:00:58 GMT 2014

Visit	Proposal 13669, OBS ZC-412369 (07), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
		(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=4.3594 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1), (2), (3), (4)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(7)	ZC-412369	RA: 10 01 46.9500 (150.4456250d) Dec: +02 23 24.62 (2.39017d) Equinox: J2000	Redshift: 2.02	V=23.4 B_AB = 23.86	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(7) ZC-412369	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,25	Pattern 1, Exps 1-1 in OBS ZC-412369 (07) (1)	1376 Secs (2752 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(7) ZC-412369	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,25	Pattern 1, Exps 2-2 in OBS ZC-412369 (07) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[2]
	3		(7) ZC-412369	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,15	Pattern 1, Exps 3-3 in OBS ZC-412369 (07) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[3]
	4		(7) ZC-412369	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,15	Pattern 1, Exps 4-4 in OBS ZC-412369 (07) (1)	1432 Secs (2864 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[4]



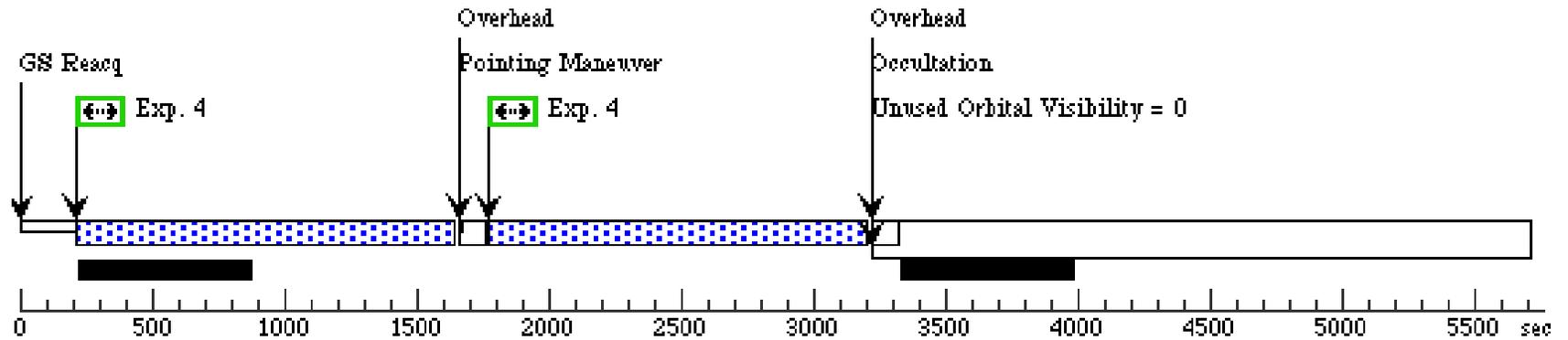
Orbit 3

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Orbit 4

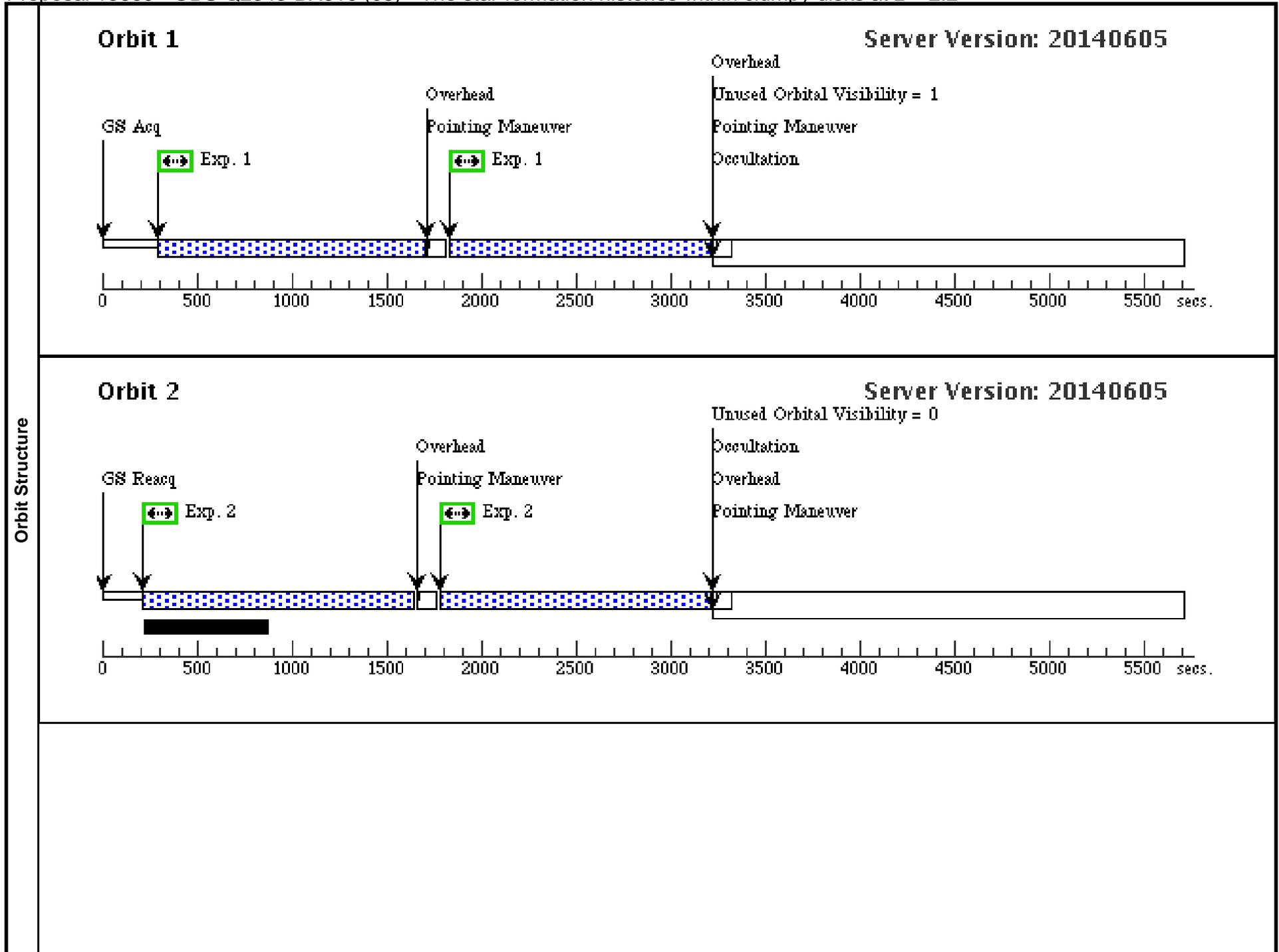
Server Version: 20140605



Proposal 13669 - OBS Q2343-BX610 (08) - The star-formation histories within clumpy disks at z ~ 2.2

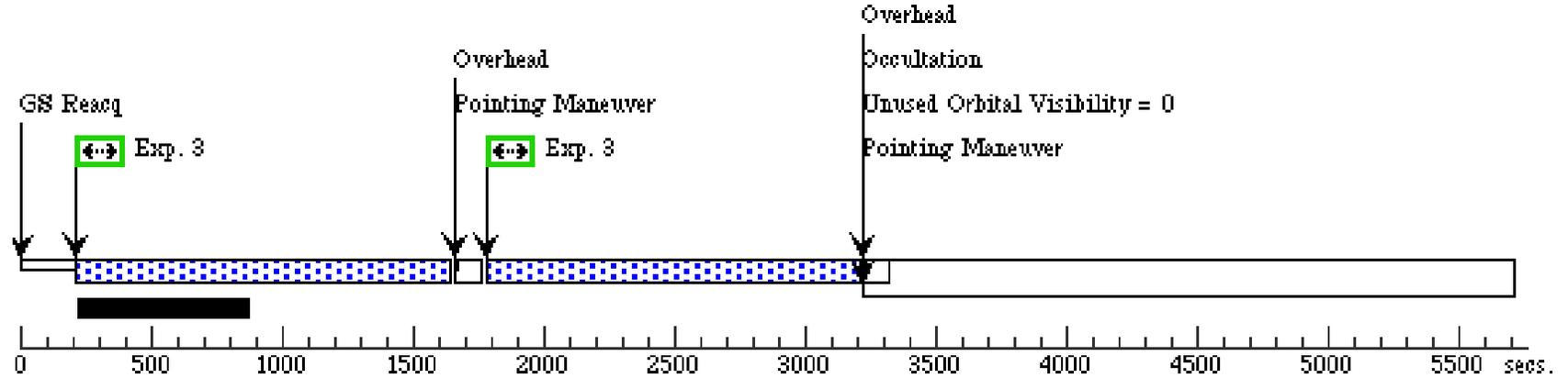
Sat Nov 08 02:00:58 GMT 2014

Visit	Proposal 13669, OBS Q2343-BX610 (08), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)									
	#	Primary Pattern	Secondary Pattern	Exposures						
Patterns	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=4.3594 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1), (2), (3), (4)						
	(2)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=5.844 Line Spacing=4.124 Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false		(5)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(8)	Q2343-BX610	RA: 23 46 9.4280 (356.5392833d) Dec: +12 49 19.21 (12.82200d) Equinox: J2000	Redshift: 2.21	V=(?) G_AB = 23.92	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(8) Q2343-BX610	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,25	Pattern 1, Exps 1-1 in OBS Q2343-BX610 (08) (1)	1378 Secs (2756 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(8) Q2343-BX610	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,25	Pattern 1, Exps 2-2 in OBS Q2343-BX610 (08) (1)	1434 Secs (2868 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[2]
	3		(8) Q2343-BX610	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,15	Pattern 1, Exps 3-3 in OBS Q2343-BX610 (08) (1)	1434 Secs (2868 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[3]
	4		(8) Q2343-BX610	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,15	Pattern 1, Exps 4-4 in OBS Q2343-BX610 (08) (1)	1434 Secs (2868 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[4]
	5		(8) Q2343-BX610	ACS/WFC, ACCUM, WFC1	F814W			Pattern 2, Exps 5-5 in OBS Q2343-BX610 (08) (2)	545 Secs (2180 Secs) [=>(Pattern 1)] [=>(Pattern 2)] [=>(Pattern 3)] [=>(Pattern 4)]	[5]



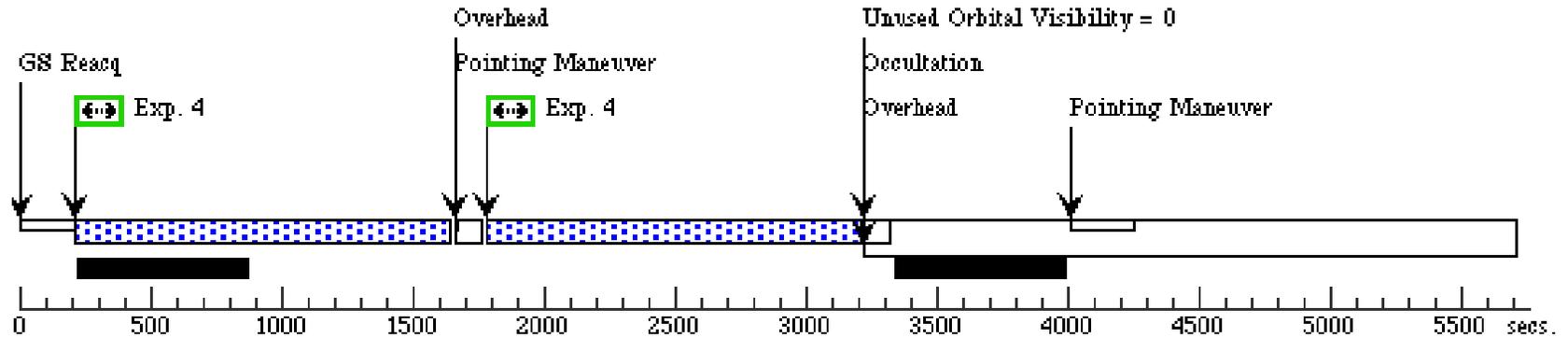
Orbit 3

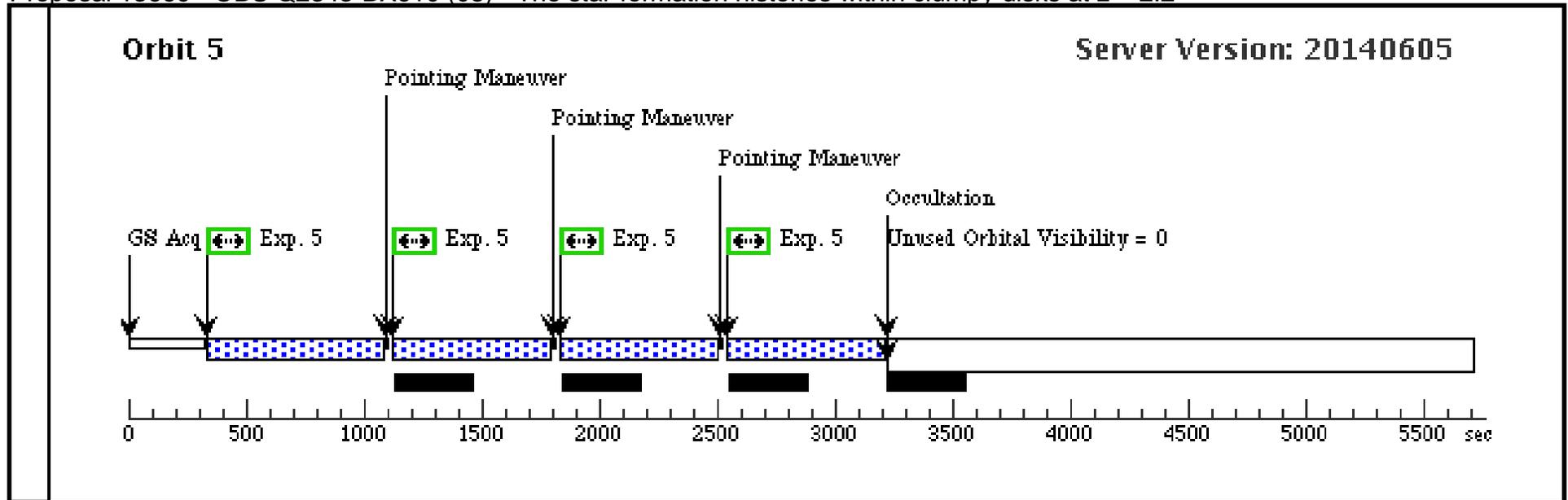
Server Version: 20140605



Orbit 4

Server Version: 20140605

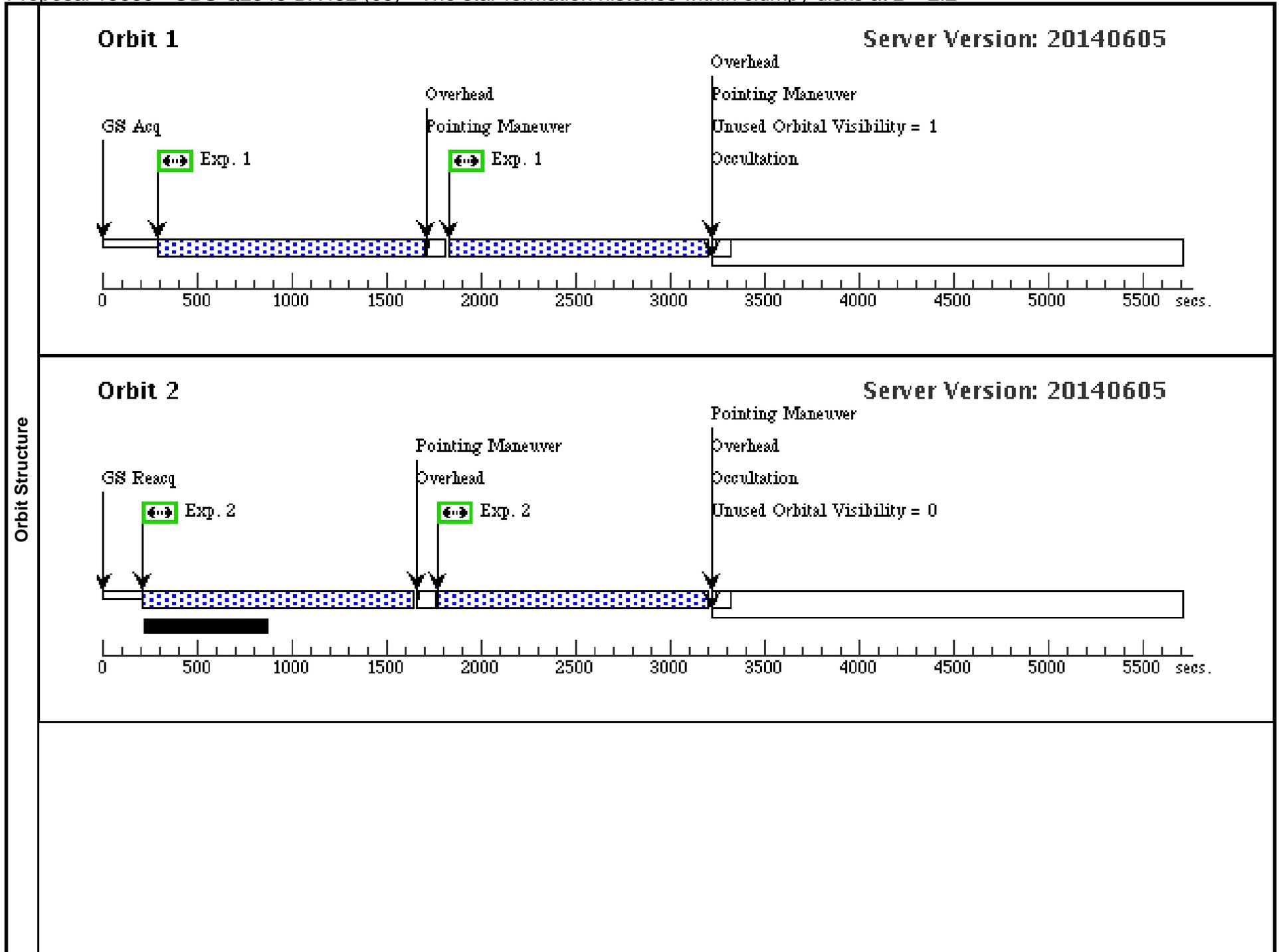




Proposal 13669 - OBS Q2346-BX482 (09) - The star-formation histories within clumpy disks at z ~ 2.2

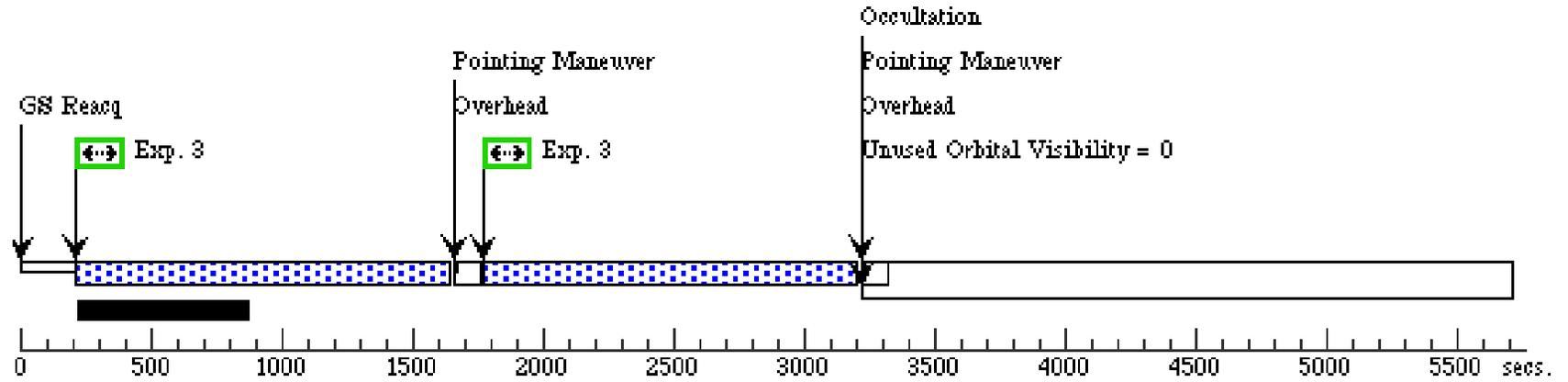
Sat Nov 08 02:00:58 GMT 2014

Visit	Proposal 13669, OBS Q2346-BX482 (09), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS Special Requirements: (none)									
	Patterns	#	Primary Pattern	Secondary Pattern	Exposures					
	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=4.3594 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1), (2), (3), (4)					
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	Q2346-BX482	RA: 23 48 12.9690 (357.0540375d) Dec: +00 25 46.34 (.42954d) Equinox: J2000	Redshift: 2.26	V=(?) G_AB = 23.54	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(9) Q2346-BX482	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,25; GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-1 i n OBS Q2346-BX48 2 (09) (1)	1376 Secs (2752 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	2		(9) Q2346-BX482	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,25	Pattern 1, Exps 2-2 i n OBS Q2346-BX48 2 (09) (1)	1432 Secs (2864 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[2]
	3		(9) Q2346-BX482	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,15	Pattern 1, Exps 3-3 i n OBS Q2346-BX48 2 (09) (1)	1432 Secs (2864 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[3]
	4		(9) Q2346-BX482	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,15	Pattern 1, Exps 4-4 i n OBS Q2346-BX48 2 (09) (1)	1432 Secs (2864 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[4]



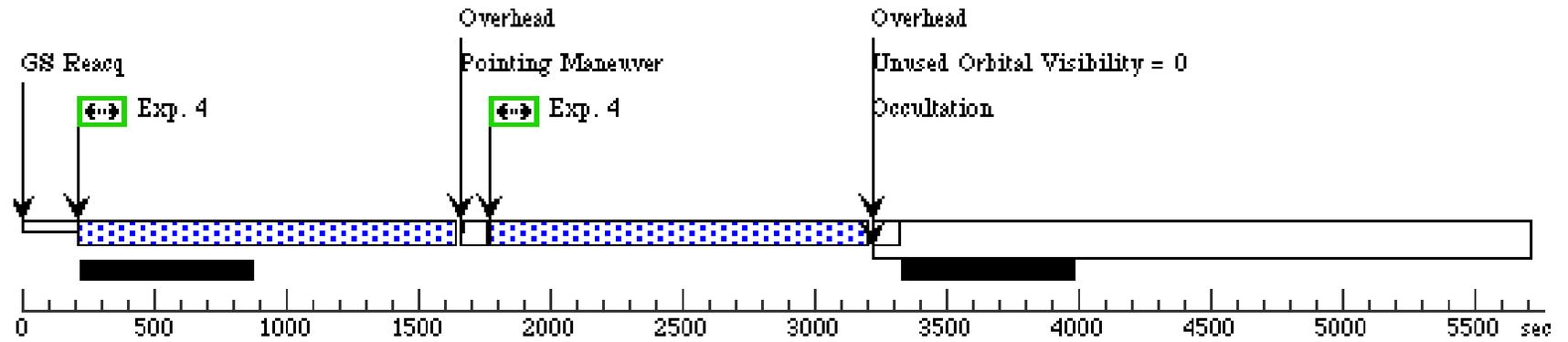
Orbit 3

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Orbit 4

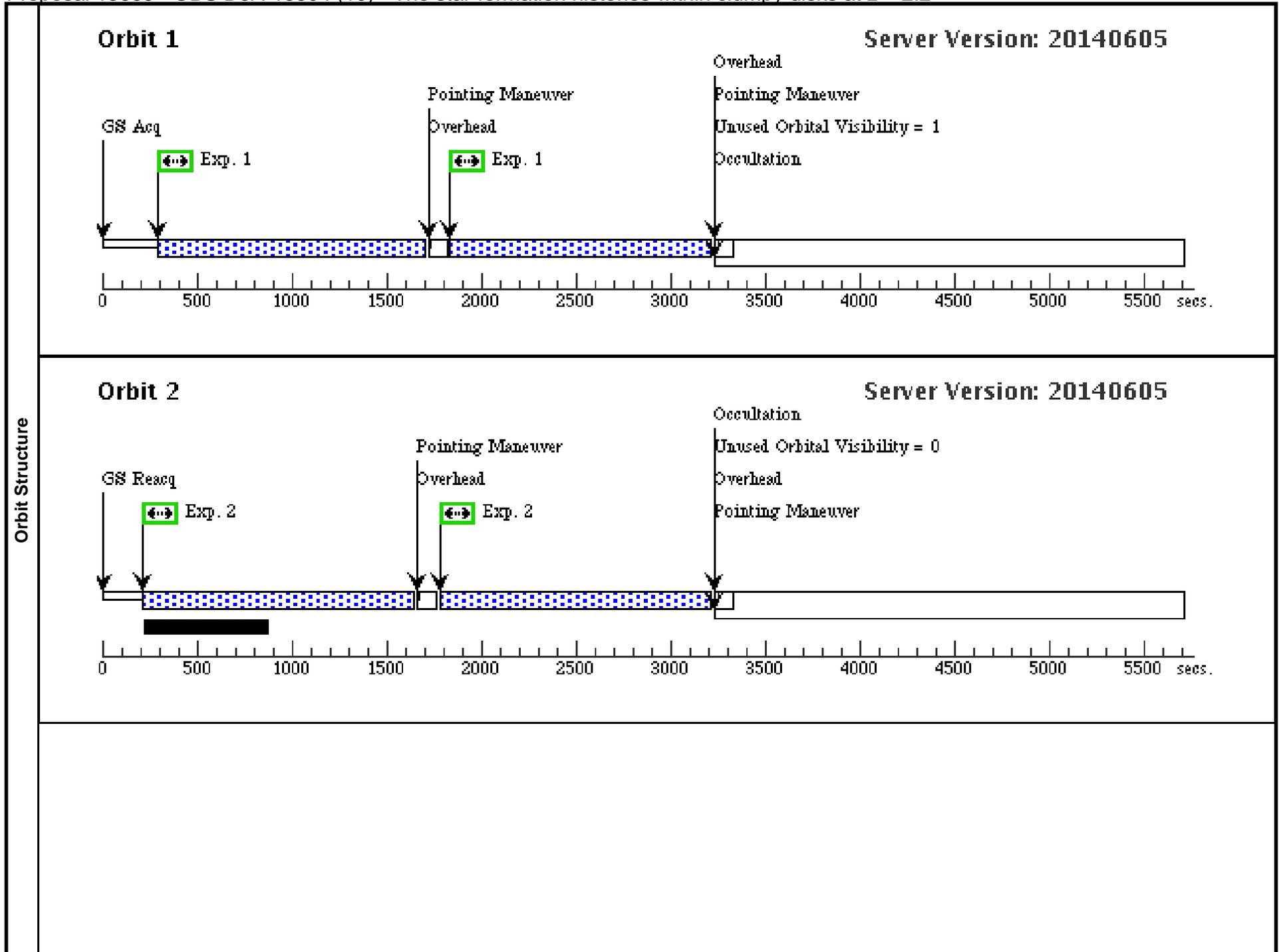
Server Version: 20140605



Proposal 13669 - OBS D3A-15504 (10) - The star-formation histories within clumpy disks at z ~ 2.2

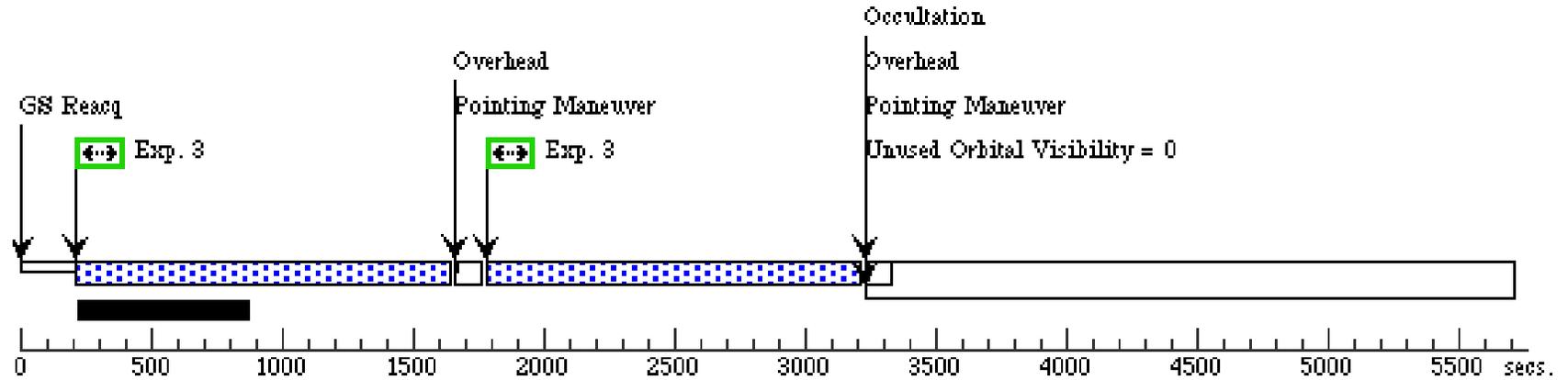
Sat Nov 08 02:00:58 GMT 2014

Visit	Proposal 13669, OBS D3A-15504 (10), implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFC3/UVIS, ACS/WFC Special Requirements: (none)									
	#	Primary Pattern	Secondary Pattern	Exposures						
Patterns	(1)	Pattern Type=WFC3-UVIS-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=4.3594 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=46.84 Angle Between Sides= Center Pattern=false		(1), (2), (3), (4)						
	(2)	Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=5.844 Line Spacing=4.124 Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false		(5)						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(10)	D3A-15504	RA: 11 24 15.6400 (171.0651667d) Dec: -21 39 30.99 (-21.65861d) Equinox: J2000	Redshift: 2.38	V=23.1 B_AB = 23.53	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(10) D3A-15504	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,25	Pattern 1, Exps 1-1 in OBS D3A-15504 (10) (1)	1381 Secs (2762 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[1]
	2		(10) D3A-15504	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,25	Pattern 1, Exps 2-2 in OBS D3A-15504 (10) (1)	1437 Secs (2874 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[2]
	3		(10) D3A-15504	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG -5,15	Pattern 1, Exps 3-3 in OBS D3A-15504 (10) (1)	1437 Secs (2874 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[3]
	4		(10) D3A-15504	WFC3/UVIS, ACCUM, UVIS1	F438W		POS TARG 5,15	Pattern 1, Exps 4-4 in OBS D3A-15504 (10) (1)	1437 Secs (2874 Secs) [==>(Pattern 1)] [==>(Pattern 2)]	[4]
5		(10) D3A-15504	ACS/WFC, ACCUM, WFC1	F814W			Pattern 2, Exps 5-5 in OBS D3A-15504 (10) (2)	546 Secs (2184 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[5]	



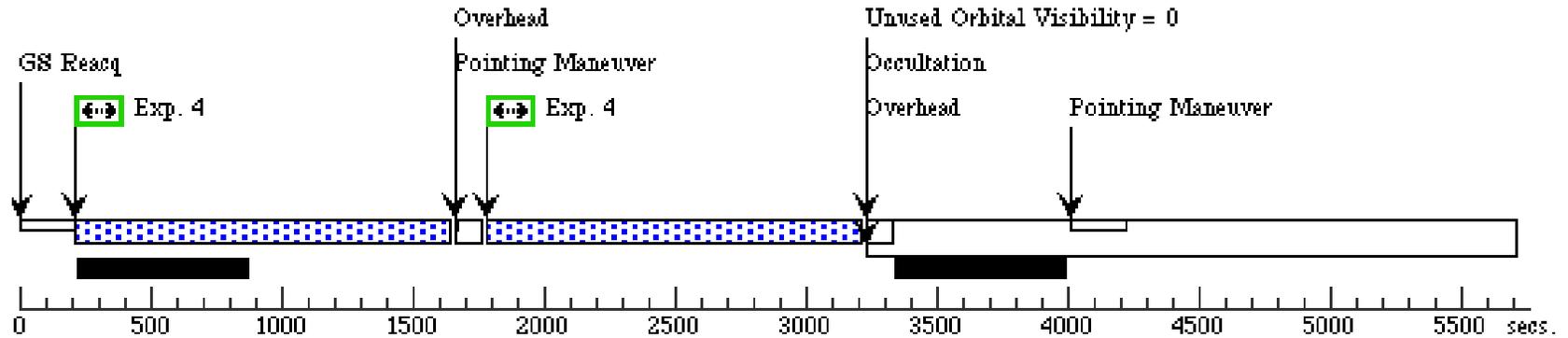
Orbit 3

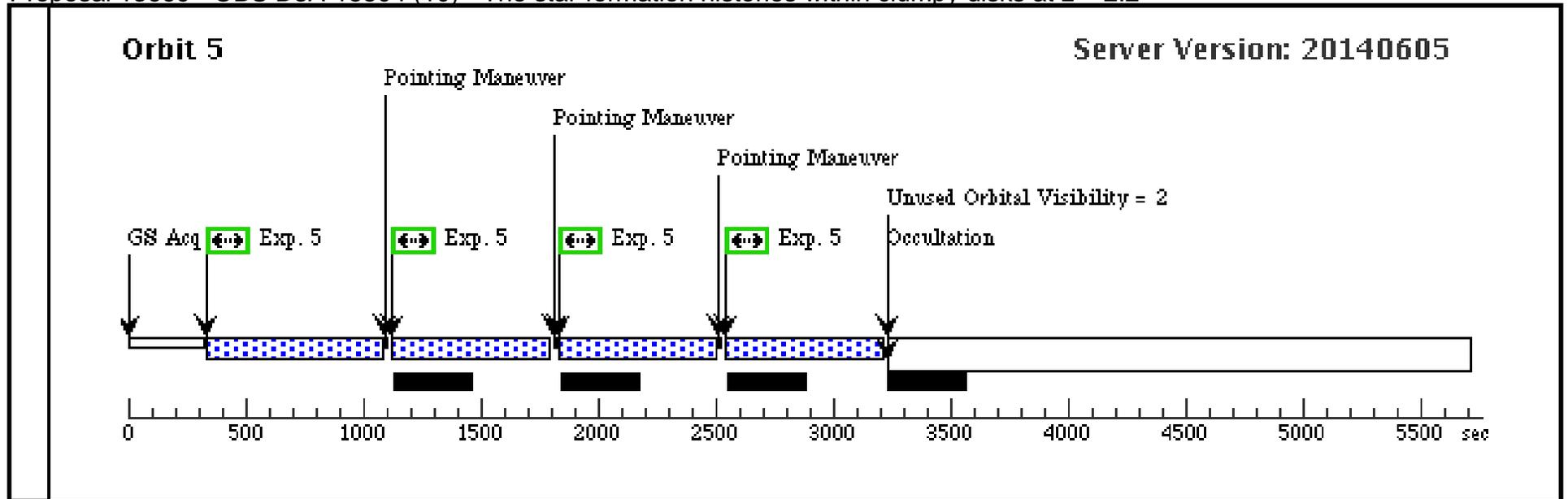
Server Version: 20140605



Orbit 4

Server Version: 20140605





Proposal 13669 - OBS_ACS Q2346-BX482 (11) - The star-formation histories within clumpy disks at z ~ 2.2

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Visit	Proposal 13669, OBS_ACS Q2346-BX482 (11) Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)									
	Patterns	# (2)	Primary Pattern Pattern Type=ACS-WFC-DITHER-BOX Purpose=DITHER Number Of Points=4 Point Spacing=5.844 Line Spacing=4.124	Coordinate Frame=POS-TARG Pattern Orientation=20.67 Angle Between Sides=69.05 Center Pattern=false	Secondary Pattern	Exposures (1)				
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(9)	Q2346-BX482	RA: 23 48 12.9690 (357.0540375d) Dec: +00 25 46.34 (.42954d) Equinox: J2000	Redshift: 2.26	V=(?) G_AB = 23.54	Reference Frame: ICRS				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(9) Q2346-BX482	ACS/WFC, ACCUM, WFC1	F814W		GS ACQ SCENARIO BASE1B3	Pattern 2, Exps 1-1 in OBS_ACS Q2346-BX482 (11) (2)	544 Secs (2176 Secs) [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
Orbit Structure	<div style="display: flex; justify-content: space-between;"> Orbit 1 Server Version: 20140605 </div> <p>The diagram illustrates the orbit structure over a 5500-second period. Key events include:</p> <ul style="list-style-type: none"> GS Acq: Green box with double arrows at approximately 400s. Exp. 1: Four green boxes with double arrows at approximately 1100s, 1800s, 2500s, and 3200s. Pointing Maneuver: Three vertical arrows pointing down at approximately 1100s, 1800s, and 2500s. Occultation: A black bar from approximately 3200s to 3500s. <p>The text "Unused Orbital Visibility = 0" is located below the occultation phase.</p>									