



14636 - TRGB Distances to the Edge Between the Local Sheet and Virgo Infall: Last of the Low Hanging Fruit

Cycle: 24, 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) LEDA-2832100	ACS/WFC	1	29-Jul-2016 14:11:43.0	yes
02	(2) KMK2013-LV-J1217+3231	ACS/WFC	1	29-Jul-2016 14:11:44.0	yes
03	(3) MAPS-NGP-O-171-165792	ACS/WFC	1	29-Jul-2016 14:11:44.0	yes
04	(4) LEDA-166137	ACS/WFC	1	29-Jul-2016 14:11:45.0	yes
05	(5) KDG-218	ACS/WFC	1	29-Jul-2016 14:11:45.0	yes
06	(6) NGC-4455	ACS/WFC	1	29-Jul-2016 14:11:46.0	yes
07	(8) MCG-+07-26-012	ACS/WFC	1	29-Jul-2016 14:11:47.0	yes
08	(10) UGC-07678	ACS/WFC	1	29-Jul-2016 14:11:47.0	yes
09	(11) KUG-1230+336	ACS/WFC	1	29-Jul-2016 14:11:48.0	yes

Proposal 14636 (STScI Edit Number: 2, Created: Friday, July 29, 2016 1:11:55 PM EST) - 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>
10	(12) NGC-4618	ACS/WFC	1	29-Jul-2016 14:11:48.0	yes
11	(13) HKK2009-DJ1243+4127	ACS/WFC	1	29-Jul-2016 14:11:49.0	yes
12	(14) IC-3840	ACS/WFC	1	29-Jul-2016 14:11:50.0	yes
13	(15) UGC-08061	ACS/WFC	1	29-Jul-2016 14:11:50.0	yes
14	(16) GALEXASC-J125956.60-192445.7	ACS/WFC	1	29-Jul-2016 14:11:51.0	yes
15	(17) UGCA-319	ACS/WFC	1	29-Jul-2016 14:11:51.0	yes
16	(18) UGCA-320	ACS/WFC	1	29-Jul-2016 14:11:52.0	yes
17	(19) NGC-5068	ACS/WFC	1	29-Jul-2016 14:11:52.0	yes
18	(20) KK-177	ACS/WFC	1	29-Jul-2016 14:11:53.0	yes
19	(21) NGC-4656	ACS/WFC	1	29-Jul-2016 14:11:54.0	yes
20	(22) LEDA-42120	ACS/WFC	1	29-Jul-2016 14:11:55.0	yes

20 Total Orbits Used

ABSTRACT

There is a gap in an otherwise tremendously successful program with HST to determine the distances and motions of galaxies within 10 Mpc. Nearby galaxies are concentrated to a band stretching toward the Virgo Cluster. Accurate distances from the tip of the red giant branch method have been obtained for a high fraction of nearby galaxies in every direction on the sky EXCEPT in the Local Sheet in the Virgo sector. This region is particularly interesting because it samples the outer extent of the strong influence of the Virgo Cluster: the cluster zero velocity and zero energy surfaces. Details of the velocity field in this region are sensitive to the mass of the cluster out to large radii, information uniquely available because of the proximity of the Virgo Cluster. The existing limited information suggests there is a pronounced velocity shear across the region. Distances can easily be obtained for the targets with single orbit observations.

The observations contribute to an increasingly complete sampling of the resolved stellar populations of nearby galaxies, a compilation of considerable legacy value.

OBSERVING DESCRIPTION

We intent to measure distances to 20 galaxies in the foreground of the Virgo Cluster situated at expected distances around 6-8 Mpc from us. The TRGB method is the best way to determine the distances to nearby galaxies with an accuracy of 5% independent of their morphology. In an old stellar population of a galaxy the Tip of the Red Giant Branch will be at $M_I = -4.0$, $M_V = -2.5$ (Da Costa & Armandroff 1990). For a galaxy at 8 Mpc, the TRGB will occur at $I = 25.5$ and $V = 27$. The ACS Exposure Time Calculator predicts that exposures of 1000 seconds, CR-split, will give S/N of 5 and 9 in V and I bands respectively. Experience has demonstrated these predictions are realistic. Hence adequate data for the determination of a distance to a target can be obtained within a single orbit. The exposure time will be divided between F814W and F606W filters with 2 frame dithers in each filter. We follow procedures demonstrated in past cycles to be optimal for psf reconstruction. The photometry is carried out with the software package DOLPHOT (<http://purcell.as.arizona.edu/dolphot>), the successor to HSTPHOT (Dolphin 2000). The RGB tip is identified with a maximum likelihood method that involves the superposition and recovery of synthetic stars to monitor photometric accuracy and completion (Makarov et al. 2006). The TRGB calibration, including camera and filter issues, obscuration, and zero point, follow Rizzi et al. (2007). Results are stored and made available to the public (Jacobs et al. 2009) at the Extragalactic Distance Database (<http://edd.ifa.hawaii.edu>, select the catalog CMDs/TRGB). We usually produce a color-magnitude diagram of the galaxy within one day of the data being delivered from the archive.

Only the cameras on HST have, simultaneously, sufficient spatial resolution, field of view, and photometric/PSF stability to provide the large numbers of TRGB stars per galaxy needed to accomplish this task at these distances.

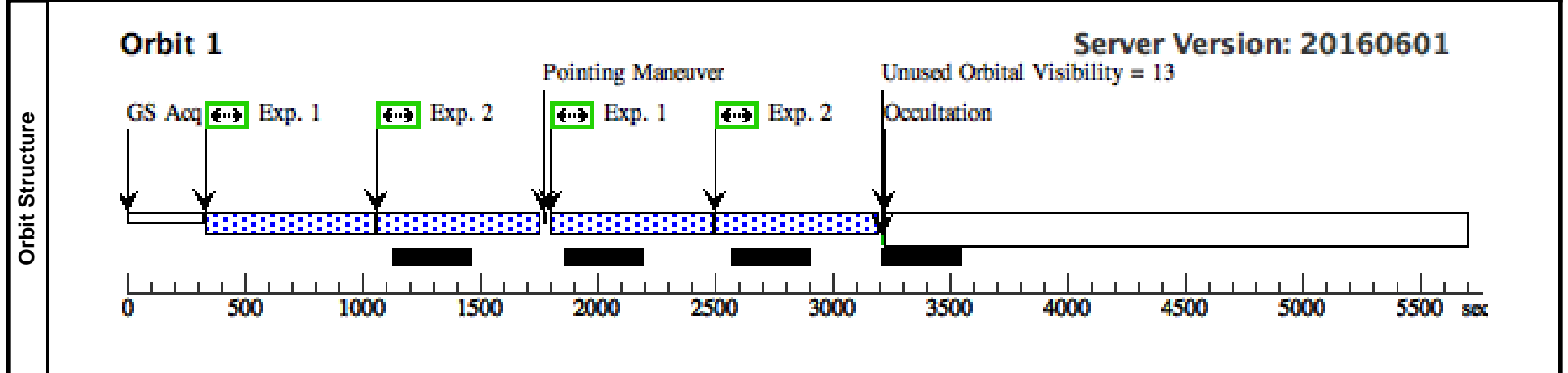
Visit	Proposal 14636, PGC2832100 (01), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	LEDA-2832100	RA: 11 58 44.0800 (179.6836667d) Dec: +27 35 5.70 (27.58492d) Equinox: J2000		V=(?) B=16.5	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(1) LEDA-2832100	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in PGC2832100 (01) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]
2		(1) LEDA-2832100	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in PGC2832100 (01) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



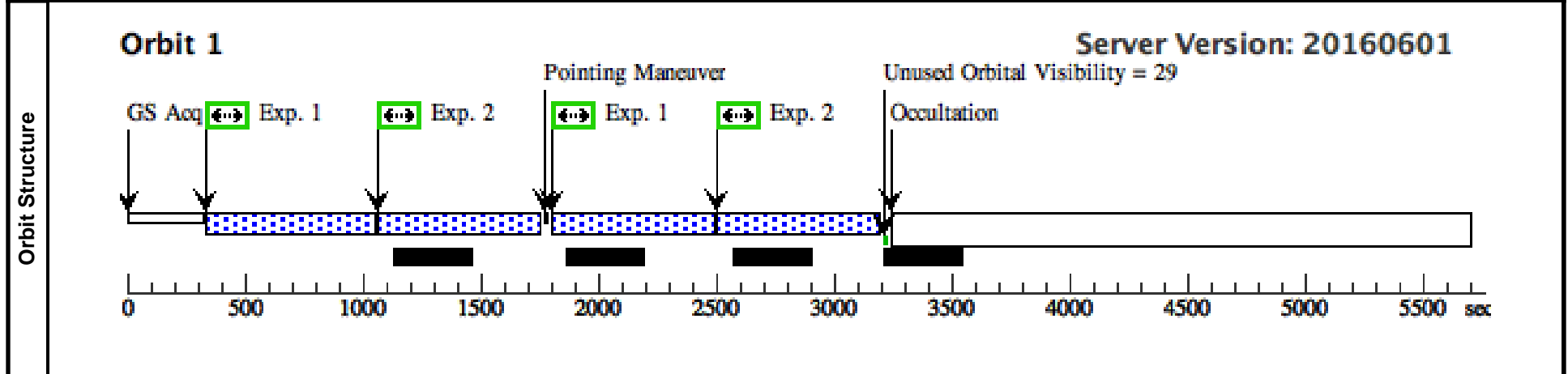
Visit	Proposal 14636, PGC4319966 (02), implementation		
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	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	KMK2013-LV-J1217+3231	RA: 12 17 32.0000 (184.3833333d) Dec: +32 31 57.00 (32.53250d) Equinox: J2000		V=(?) B=18.2	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(2) KMK2013-LV-J1217+3231	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in PGC4319966 (02) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]
2		(2) KMK2013-LV-J1217+3231	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in PGC4319966 (02) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



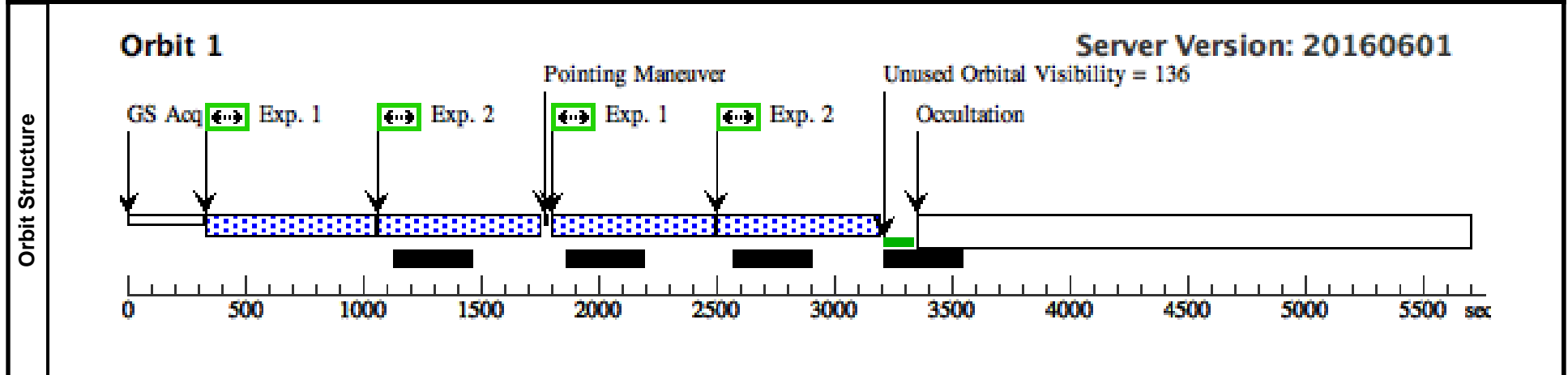
Visit	Proposal 14636, PGC4320422 (03), implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	MAPS-NGP-O-171-165792	RA: 12 18 11.0000 (184.5458333d) Dec: +46 55 1.20 (46.91700d) Equinox: J2000		V=(?) B=16.8	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(3) MAPS-NGP-O-171-165792	ACS/WFC, ACCUM, WFC1-FIX	F606W			Pattern 1, Exps 1-2 in PGC4320422 (03) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(3) MAPS-NGP-O-171-165792	ACS/WFC, ACCUM, WFC1-FIX	F814W			Pattern 1, Exps 1-2 in PGC4320422 (03) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



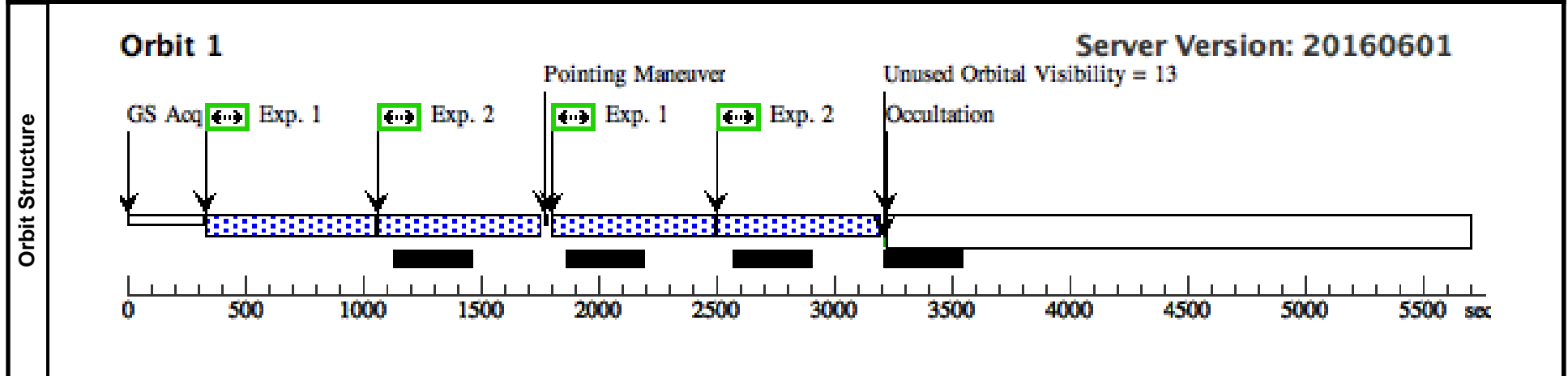
Visit	Proposal 14636, PGC0166137 (04), implementation		
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	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	LEDA-166137	RA: 12 25 27.9000 (186.3662500d) Dec: +28 28 57.00 (28.48250d) Equinox: J2000		V=(?) B=16.5	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(4) LEDA-166137	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in PGC0166137 (04) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]
2		(4) LEDA-166137	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in PGC0166137 (04) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



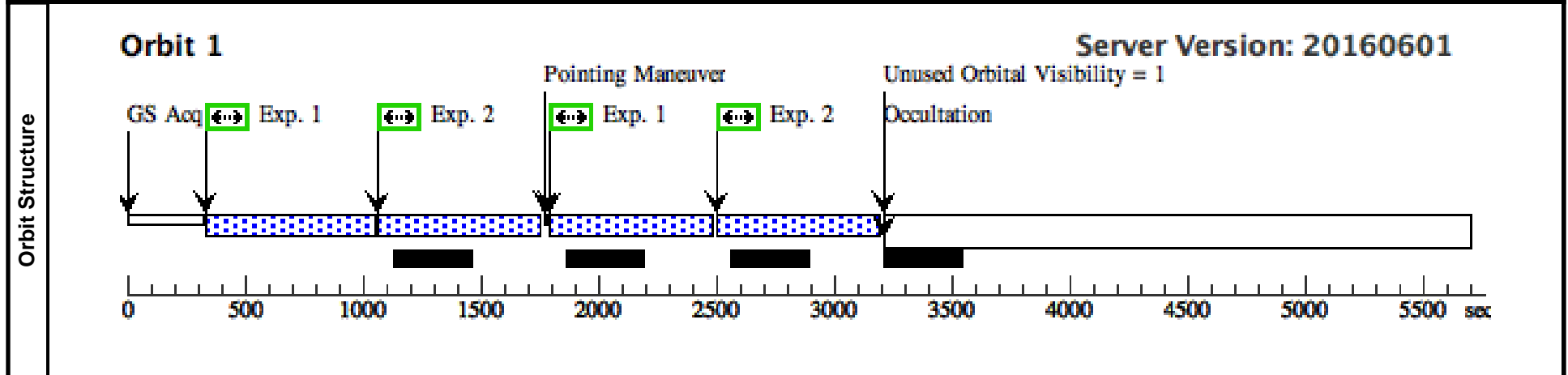
Visit	Proposal 14636, PGC0041066 (05), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: ORIENT 21D TO 267 D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(5)	KDG-218	RA: 13 05 44.0000 (196.4333333d) Dec: -07 45 20.00 (-7.75556d) Equinox: J2000		V=(?) B=16.8	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1	PGC004530 3	(5) KDG-218	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in PGC0041066 (05) (1)	514 Secs (1028 Secs) [=>(Pattern 1)] [=>(Pattern 2)]
2		(5) KDG-218	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in PGC0041066 (05) (1)	514 Secs (1028 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



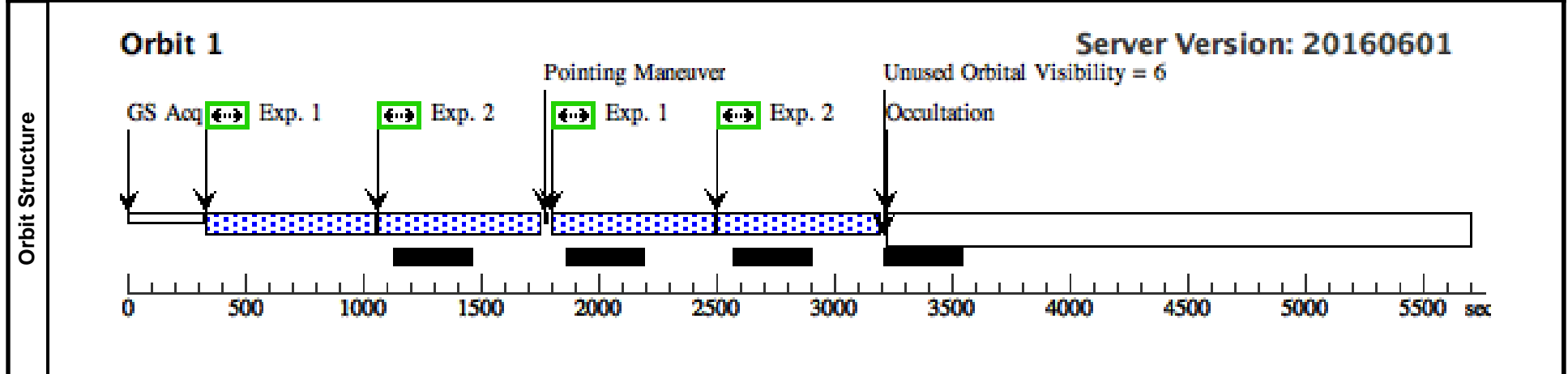
Visit	Proposal 14636, PGC0041066 (06), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: ORIENT 262D TO 351 D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	NGC-4455	RA: 12 28 44.1100 (187.1837917d) Dec: +22 49 13.60 (22.82044d) Equinox: J2000		V=(?) B=12.9	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(6) NGC-4455	ACS/WFC, ACCUM, WFC-FIX	F606W		GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-2 in PGC0041066 (06) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(6) NGC-4455	ACS/WFC, ACCUM, WFC-FIX	F814W			Pattern 1, Exps 1-2 in PGC0041066 (06) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



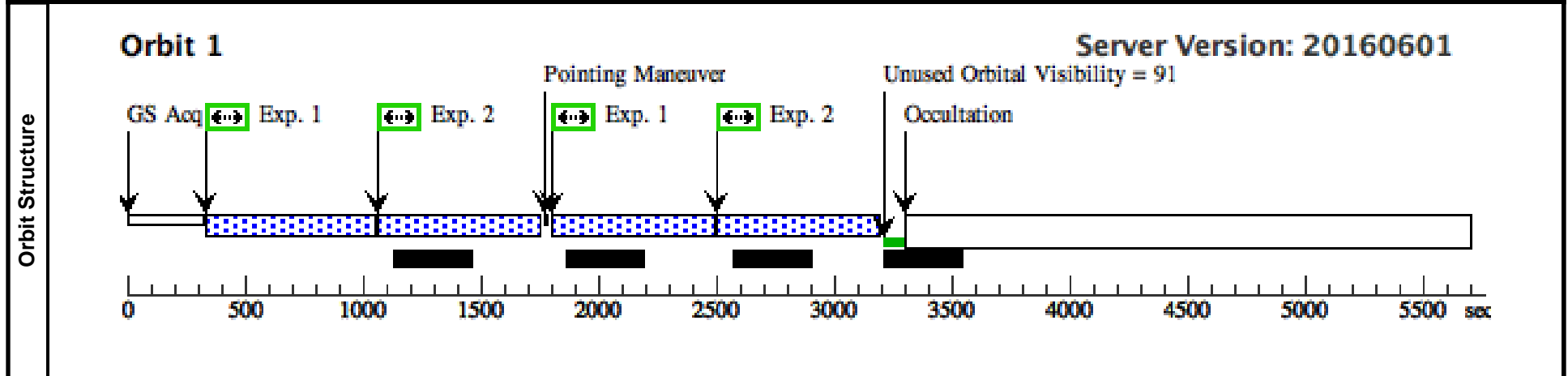
Visit	Proposal 14636, PGC0041314 (07), implementation		
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	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	MCG-+07-26-012	RA: 12 30 23.5704 (187.5982100d) Dec: +42 54 5.69 (42.90158d) Equinox: J2000		V=(?) B=15.8	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit	
	1		(8) MCG-+07-26-012	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in PGC0041314 (07) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(8) MCG-+07-26-012	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in PGC0041314 (07) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



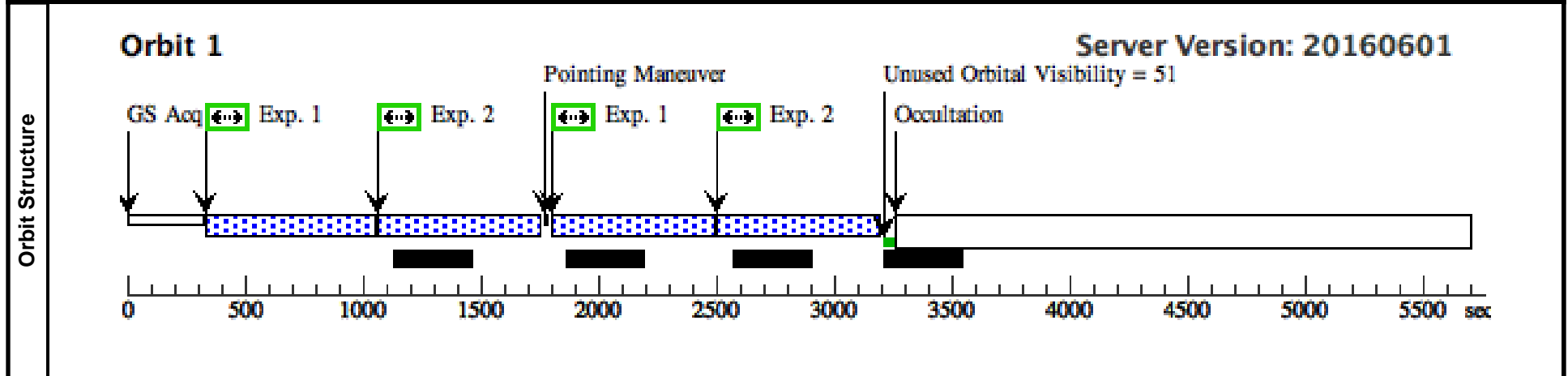
Visit	Proposal 14636, PGC0041522 (08), implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(10)	UGC-07678	RA: 12 32 0.1704 (188.0007100d) Dec: +39 49 57.61 (39.83267d) Equinox: J2000		V=(?) B=16.3	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(10) UGC-07678	ACS/WFC, ACCUM, WFC1-FIX	F606W			Pattern 1, Exps 1-2 in PGC0041522 (08) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(10) UGC-07678	ACS/WFC, ACCUM, WFC1-FIX	F814W			Pattern 1, Exps 1-2 in PGC0041522 (08) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



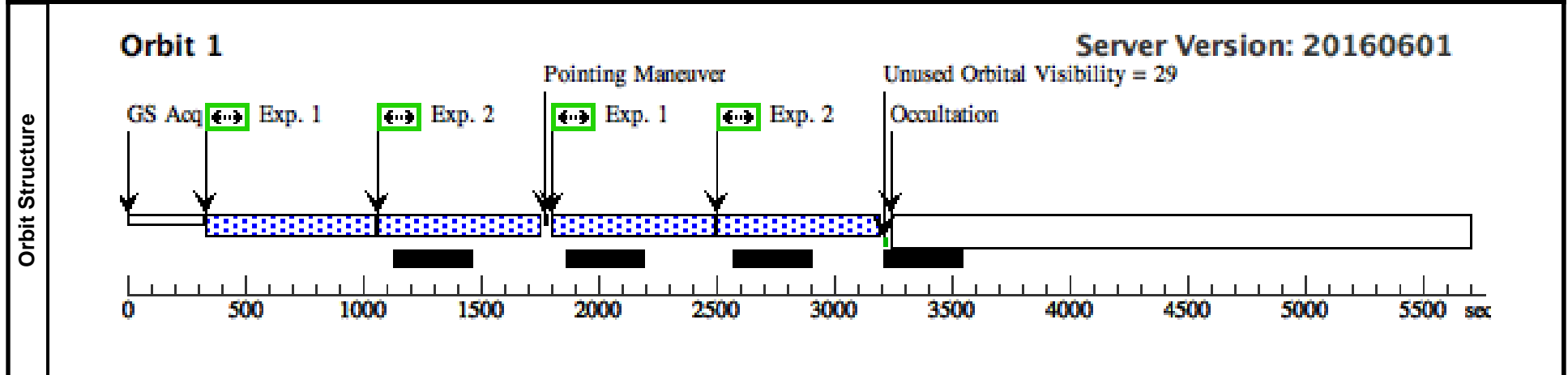
Visit	Proposal 14636, PGC0041701 (09), implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(11)	KUG-1230+336	RA: 12 33 24.8880 (188.3537000d) Dec: +33 21 4.54 (33.35126d) Equinox: J2000		V=(?) B=16.3	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(11) KUG-1230+336	ACS/WFC, ACCUM, WFC1-FIX	F606W			Pattern 1, Exps 1-2 in PGC0041701 (09) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(11) KUG-1230+336	ACS/WFC, ACCUM, WFC1-FIX	F814W			Pattern 1, Exps 1-2 in PGC0041701 (09) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



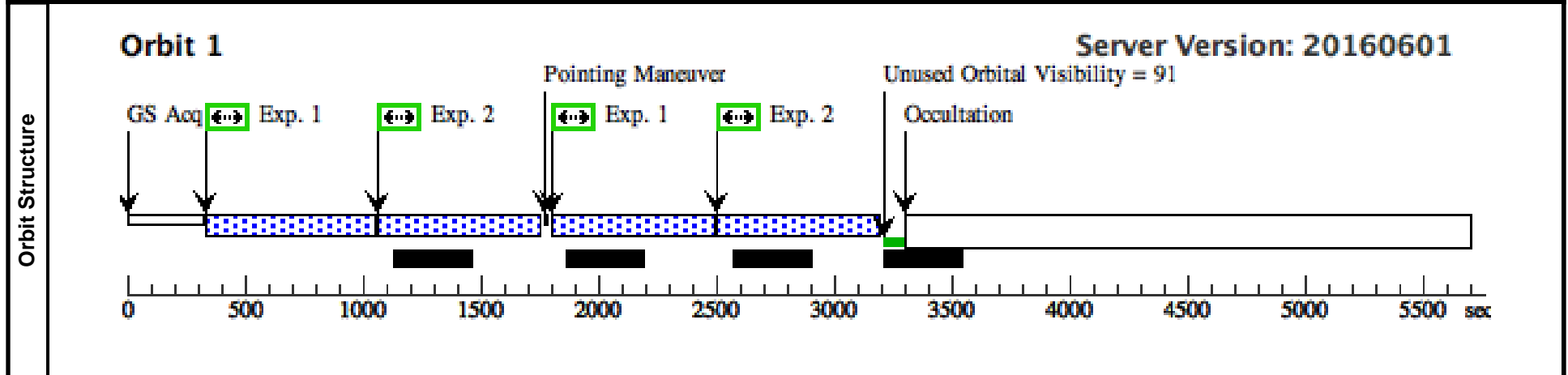
Visit	Proposal 14636, PGC0042575 (10), implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: ORIENT 326D TO 15 D		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(12)	NGC-4618	RA: 12 41 32.8000 (190.3866667d) Dec: +41 09 3.00 (41.15083d) Equinox: J2000		V=(?) B=11.3	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(12) NGC-4618	ACS/WFC, ACCUM, WFC-FIX	F606W			Pattern 1, Exps 1-2 in PGC0042575 (10) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(12) NGC-4618	ACS/WFC, ACCUM, WFC-FIX	F814W			Pattern 1, Exps 1-2 in PGC0042575 (10) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]

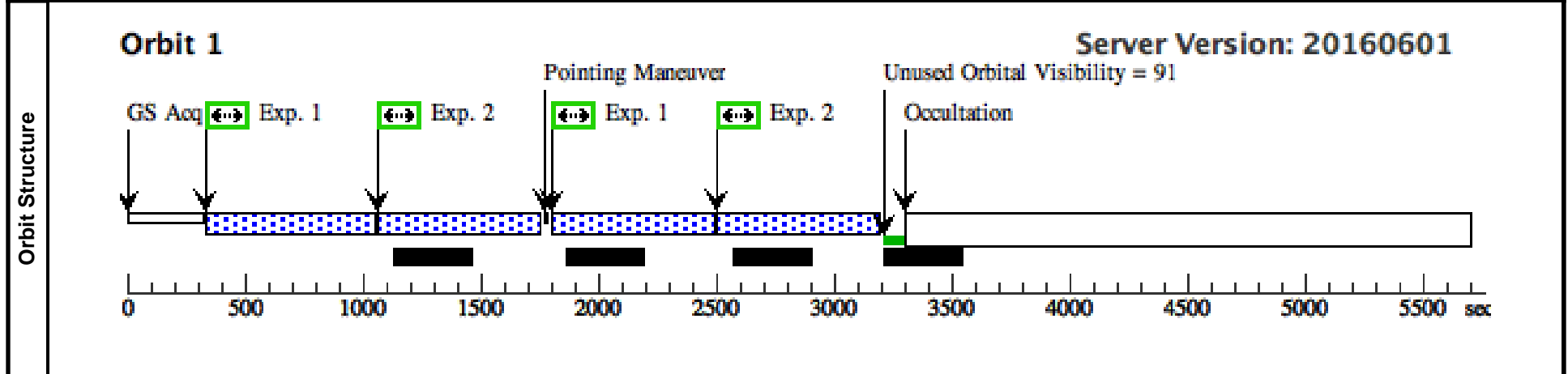


Visit	Proposal 14636, PGC5056993 (11), implementation		
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	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
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Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(13)	HKK2009-DJ1243+4127	RA: 12 43 55.7000 (190.9820833d) Dec: +41 27 25.00 (41.45694d) Equinox: J2000		V=(?) B=17.2	Reference Frame: SIMBAD
	<i>Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.</i>					

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(13) HKK2009-DJ1243+4127	ACS/WFC, ACCUM, WFC1-FIX	F606W			Pattern 1, Exps 1-2 in PGC5056993 (11) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(13) HKK2009-DJ1243+4127	ACS/WFC, ACCUM, WFC1-FIX	F814W			Pattern 1, Exps 1-2 in PGC5056993 (11) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]

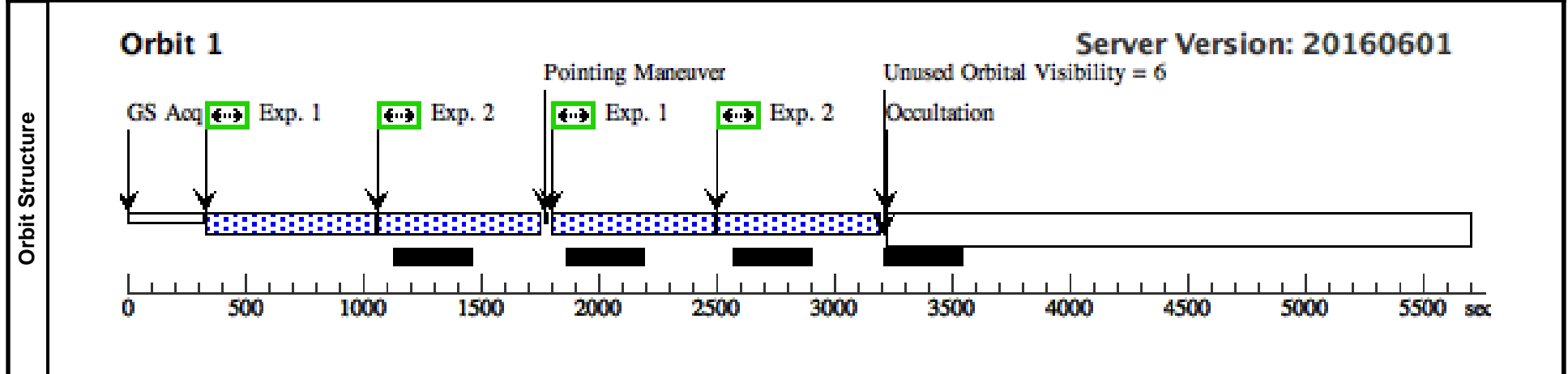


Visit	Proposal 14636, PGC0086644 (12), implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(14)	IC-3840	RA: 12 51 46.1040 (192.9421000d) Dec: +21 44 6.72 (21.73520d) Equinox: J2000		V=(?) B=16.9	Reference Frame: NED
<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>						

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(14) IC-3840	ACS/WFC, ACCUM, WFC1-FIX	F606W		GS ACQ SCENARI O BASE1B3	Pattern 1, Exps 1-2 in PGC0086644 (12) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(14) IC-3840	ACS/WFC, ACCUM, WFC1-FIX	F814W			Pattern 1, Exps 1-2 in PGC0086644 (12) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



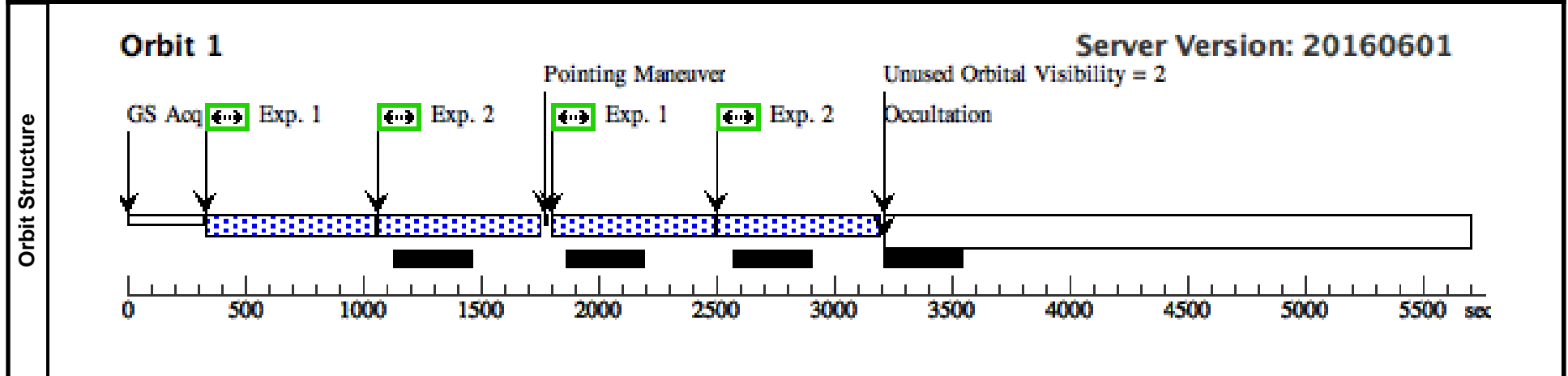
Visit	Proposal 14636, PGC0044170 (13), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(15)	UGC-08061	RA: 12 56 44.0400 (194.1835000d) Dec: +11 55 55.31 (11.93203d) Equinox: J2000		V=(?) B=16.0	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(15) UGC-08061	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in PGC0044170 (13) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]
2		(15) UGC-08061	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in PGC0044170 (13) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



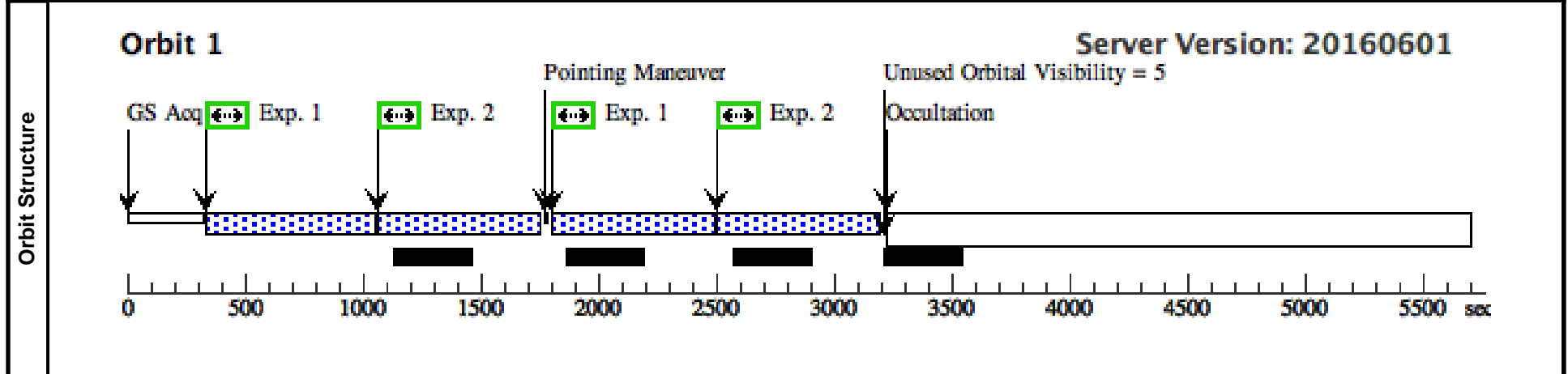
Visit	Proposal 14636, PGC0044681 (14), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(16)	GALEXASC-J125956.60-192445.7	RA: 12 59 56.2992 (194.9845800d) Dec: -19 24 47.02 (-19.41306d) Equinox: J2000		V=(?) B=16.5	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(16) GALEXASC-J125956.60-192445.7	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in PGC0044681 (14) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]
2		(16) GALEXASC-J125956.60-192445.7	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in PGC0044681 (14) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



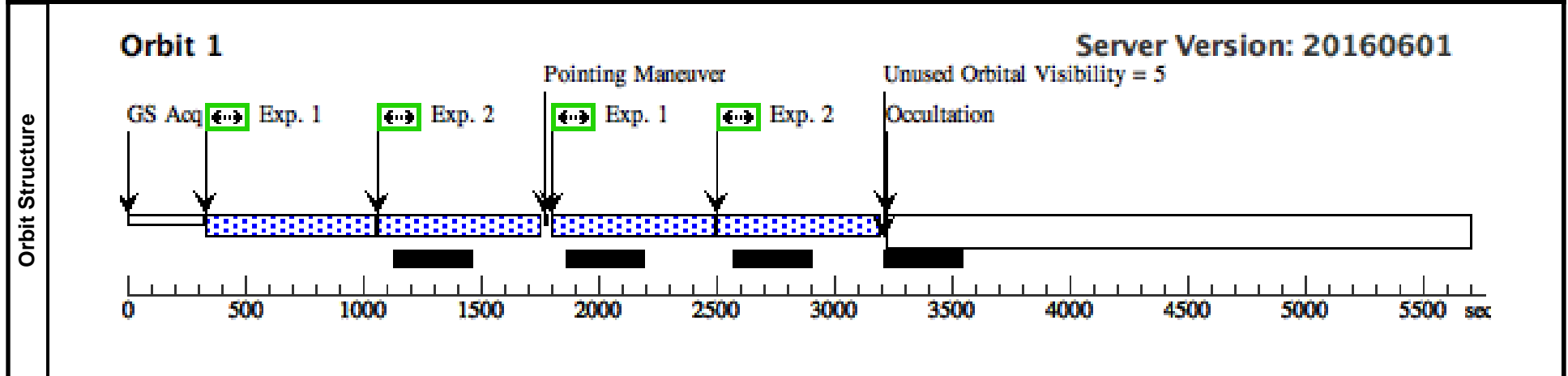
Visit	Proposal 14636, PGC0044982 (15), implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: (none)		
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Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(17)	UGCA-319	RA: 13 02 14.3856 (195.5599400d) Dec: -17 14 15.14 (-17.23754d) Equinox: J2000		V=(?) B=15.1	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(17) UGCA-319	ACS/WFC, ACCUM, WFC2-FIX	F606W			Pattern 1, Exps 1-2 in PGC0044982 (15) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2		(17) UGCA-319	ACS/WFC, ACCUM, WFC2-FIX	F814W			Pattern 1, Exps 1-2 in PGC0044982 (15) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



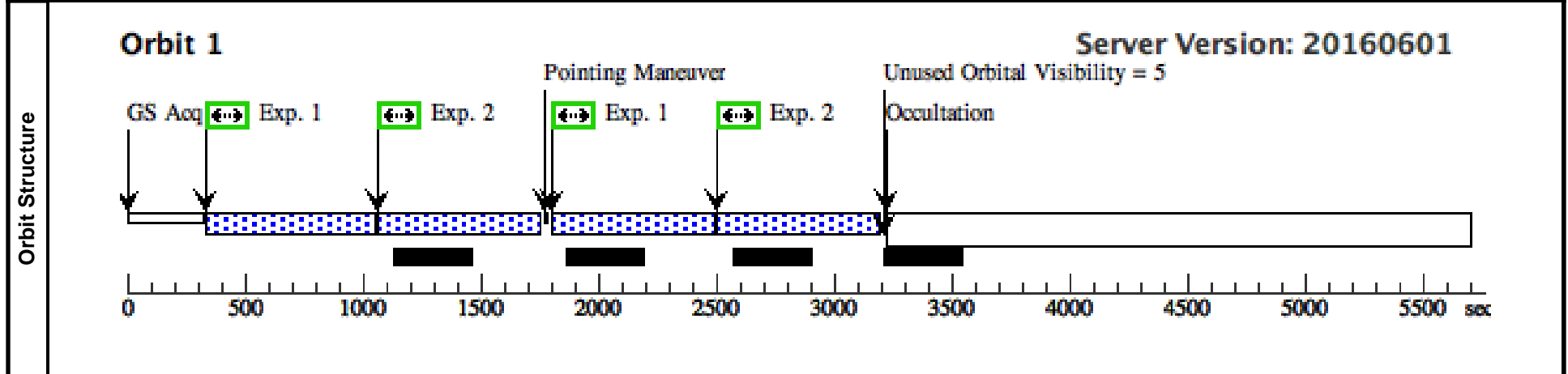
Visit	Proposal 14636, PGC0045084 (16), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: ORIENT 298D TO 32 D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(18)	UGCA-320	RA: 13 03 16.7000 (195.8195833d) Dec: -17 25 23.00 (-17.42306d) Equinox: J2000		V=(?) B=13.5	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(18) UGCA-320	ACS/WFC, ACCUM, WFC-FIX	F606W				Pattern 1, Exps 1-2 in PGC0045084 (16) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]
2		(18) UGCA-320	ACS/WFC, ACCUM, WFC-FIX	F814W				Pattern 1, Exps 1-2 in PGC0045084 (16) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



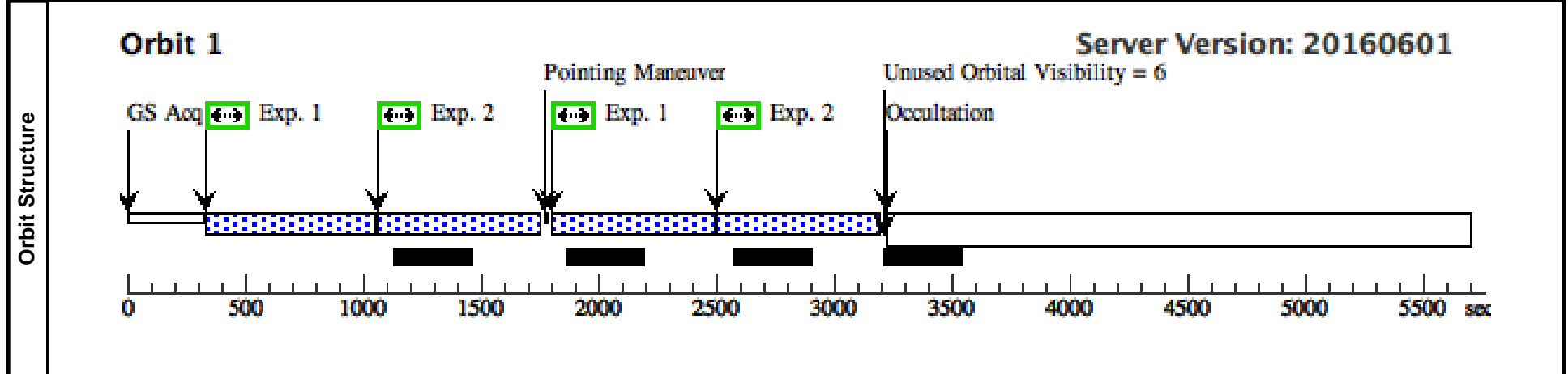
Visit	Proposal 14636, PGC0046400 (17), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(19)	NGC-5068	RA: 13 19 5.5000 (199.7729167d) Dec: -21 04 4.00 (-21.06778d) Equinox: J2000		V=(?) B=10.5	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(19) NGC-5068	ACS/WFC, ACCUM, WFC-FIX	F606W				Pattern 1, Exps 1-2 in PGC0046400 (17) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]
2		(19) NGC-5068	ACS/WFC, ACCUM, WFC-FIX	F814W				Pattern 1, Exps 1-2 in PGC0046400 (17) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



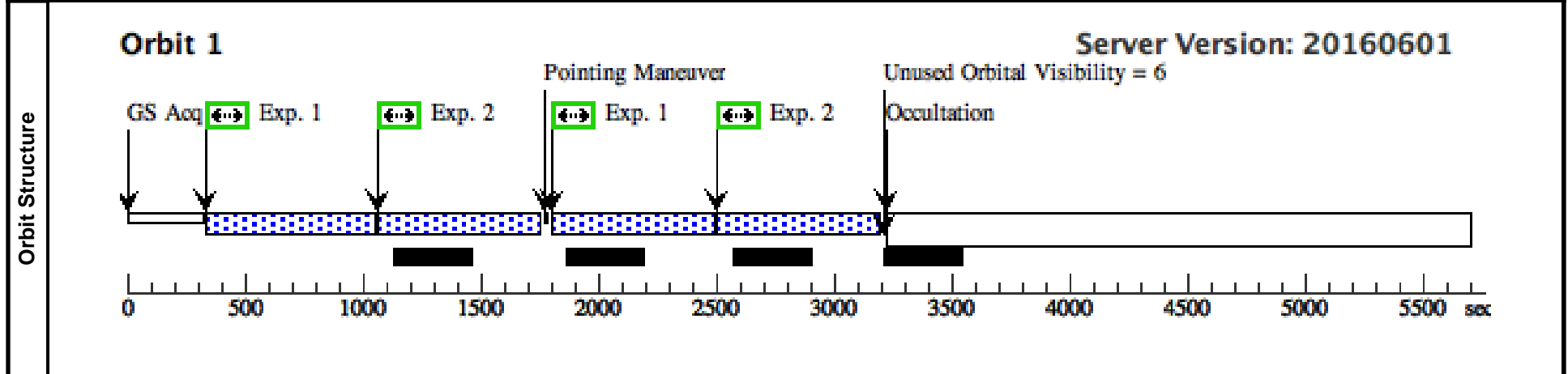
Visit	Proposal 14636, PGC0087149 (18), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(20)	KK-177	RA: 13 02 41.9000 (195.6745833d) Dec: +21 59 51.00 (21.99750d) Equinox: J2000		V=(?) B=17.4	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(20) KK-177	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in PGC0087149 (18) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]
2		(20) KK-177	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in PGC0087149 (18) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



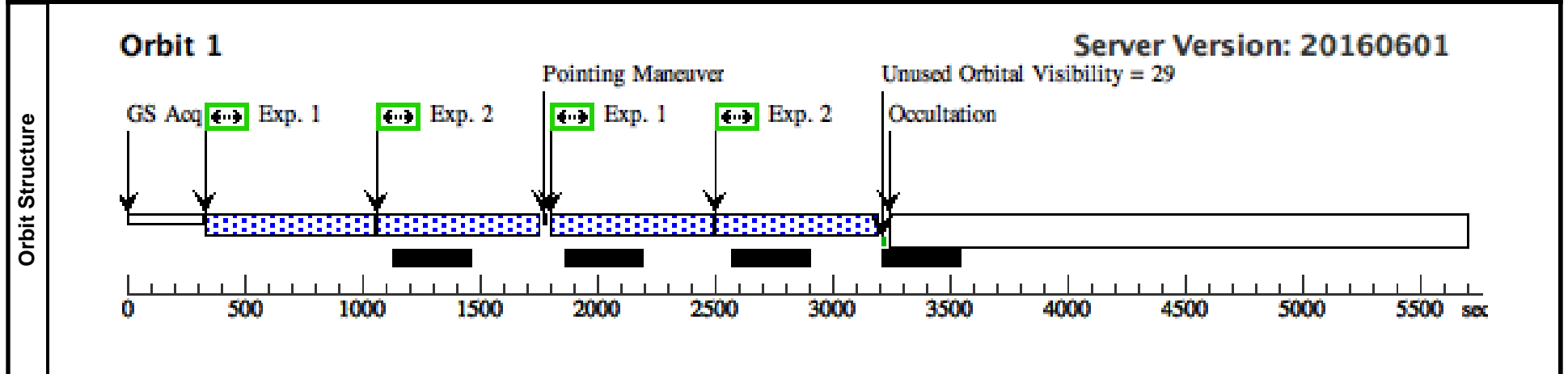
Visit	Proposal 14636, PGC0042863 (19), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(21)	NGC-4656	RA: 12 43 57.7000 (190.9904167d) Dec: +32 10 5.00 (32.16806d) Equinox: J2000		V=(?) B=13.0	Reference Frame: NED

Comments: This object was generated by the targetselector and retrieved from the NED database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(21) NGC-4656	ACS/WFC, ACCUM, WFC-FIX	F606W				Pattern 1, Exps 1-2 in PGC0042863 (19) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]
2		(21) NGC-4656	ACS/WFC, ACCUM, WFC-FIX	F814W				Pattern 1, Exps 1-2 in PGC0042863 (19) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Visit	Proposal 14636, PGC0042120 (20), implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: (none)		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.034 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.29 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(22)	LEDA-42120	RA: 12 37 14.0000 (189.3083333d) Dec: -10 29 51.00 (-10.49750d) Equinox: J2000		V=(?) B=16.5	Reference Frame: SIMBAD

Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time (Total)/[Actual Dur.]	Orbit
	1		(22) LEDA-42120	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in PGC0042120 (20) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]
2		(22) LEDA-42120	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in PGC0042120 (20) (1)	515 Secs (1030 Secs) [=>(Pattern 1)] [=>(Pattern 2)]	[1]

