



12878 - The Near Edge of Infall into the Virgo Cluster

Cycle: 20, 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) IC-3023	ACS/WFC	1	03-Oct-2012 21:13:09.0	yes
02	(1) IC-3023	ACS/WFC	1	03-Oct-2012 21:13:17.0	yes
03	(2) VCC-0530	ACS/WFC	1	03-Oct-2012 21:13:22.0	yes
04	(2) VCC-0530	ACS/WFC	1	03-Oct-2012 21:13:26.0	yes
05	(3) UGC-07512	ACS/WFC	1	03-Oct-2012 21:13:31.0	yes
06	(3) UGC-07512	ACS/WFC	1	03-Oct-2012 21:13:36.0	yes
07	(4) NGC-4517	ACS/WFC	1	03-Oct-2012 21:13:41.0	yes
08	(4) NGC-4517	ACS/WFC	1	03-Oct-2012 21:13:46.0	yes
09	(5) IC-3583	ACS/WFC	1	03-Oct-2012 21:13:51.0	yes
10	(5) IC-3583	ACS/WFC	1	03-Oct-2012 21:13:58.0	yes
11	(6) VCC-1816	ACS/WFC	1	03-Oct-2012 21:14:03.0	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>
12	(6) VCC-1816	ACS/WFC	1	03-Oct-2012 21:14:07.0	yes
13	(7) NGC-4600	ACS/WFC	1	03-Oct-2012 21:14:12.0	yes
14	(7) NGC-4600	ACS/WFC	1	03-Oct-2012 21:14:16.0	yes
15	(8) VCC-2037	ACS/WFC	1	03-Oct-2012 21:14:21.0	yes
16	(8) VCC-2037	ACS/WFC	1	03-Oct-2012 21:14:25.0	yes
17	(9) LEDA-44055	ACS/WFC	1	03-Oct-2012 21:14:30.0	yes
18	(9) LEDA-44055	ACS/WFC	1	03-Oct-2012 21:14:34.0	yes

18 Total Orbits Used

ABSTRACT

Infall upon a gravitationally collapsed core displays a characteristic S-wave pattern in velocity as a function of distance to an external observer. Foreground galaxies have motions larger than Hubble flow as they fall away; background galaxies have motions smaller than Hubble flow as they fall forward. In the rest frame of the collapsed core there is a zero-velocity surface separating the domains of Hubble expansion and infall. The radius of this surface depends on the mass internal to the surface and on Ω_{Λ} . The infall of galaxies into the Virgo Cluster can provide an interesting test: specifically, galaxies located near the line-of-sight to the cluster at the intersection with the foreground part of the zero-velocity surface. Here, the surface is anticipated to lie about 7 Mpc in front of the Virgo Cluster or about 10 Mpc away from us. Accurate distances can be determined to galaxies near this surface through observations of the Tip of the Red Giant Branch in the resolved stellar populations. An accurate mass can be determined for the region centered on the cluster interior to the targets. If there is an unexpectedly large amount of mass in an extended halo around the cluster then the zero velocity surface is expanded and the test galaxies will be closer to us than anticipated.

OBSERVING DESCRIPTION

We intent to measure distances to 9 galaxies in front of Virgo situated at expected distances around 8-10Mpc from us. The TRGB method is the best way

to determine the distances to nearby galaxies with an accuracy of about 5% independent of their morphology. In an old stellar population of a galaxy

the Tip of the Red Giant Branch will be at $MI = -4.0$, $MV = -2.5$. For a galaxy at 10 Mpc, the TRGB will occur at $I = 26.0$ and $V = 27.5$. The ACS Exposure Time Calculator predicts that exposures of 1600 and 1200 seconds will give S/N of 11 and 12 in V and I bands respectively. Hence adequate data for the determination of distances can be obtained within two orbits. The exposure time will be divided between F814W and F606W filters with 4 frame dithers in each filter.

In most cases the visible galaxy is small enough to be contained within the WFC1 chip, yet large enough that it extends widely across the chip and is centered with the WFC1-FIX aperture. Larger galaxies require the entire ACS/WFC field and are centered with the the WFC-FIX aperture.

A complete visit requires slightly less than 50 minutes including overheads. Galaxy targets are observed for 1200 sec in each of the F814W and F606W filters. The observations in each filter are split into two exposures with a small dither that optimizes the PSF reconstruction. The TRGB is determined from the luminosities of stars in the F814W filter. The F606W filter provides discrimination against young blue stars while retaining coverage of the full width of the RGB.

Proposal 12878 - Visit 01 - The Near Edge of Infall into the Virgo Cluster

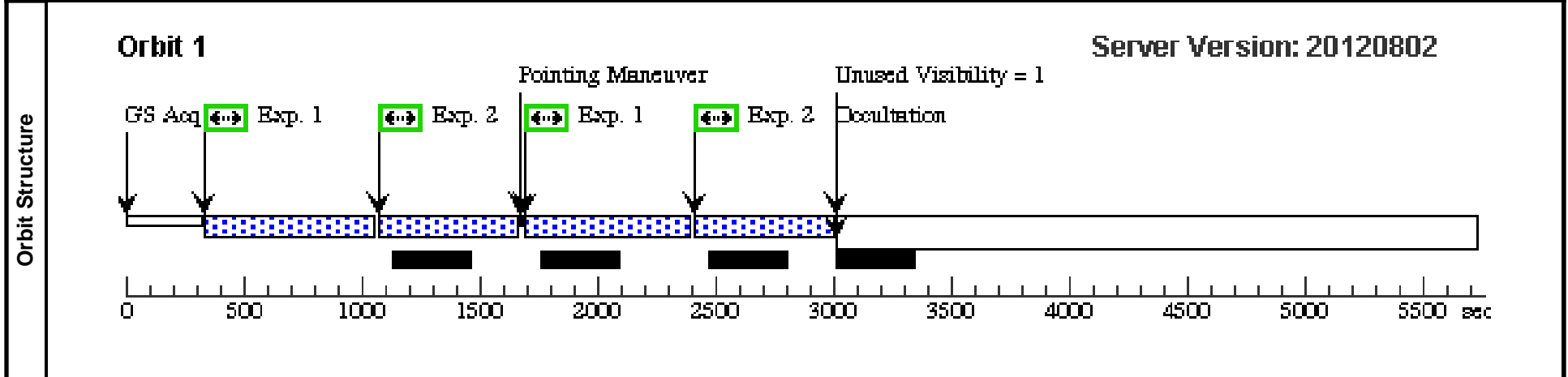
Thu Oct 04 01:14:41 GMT 2012

Visit	Proposal 12878, Visit 01, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; GROUP 01,02 WITHIN 28D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	IC-3023	RA: 12 10 1.7649 (182.5073538d) Dec: +14 22 0.73 (14.36687d) Equinox: J2000		V=15.35	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	IC-3023_F8 14W	(1) IC-3023	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in Visit 01 (1)	519.0 Secs	
										[=>(Pattern 1)] [=>(Pattern 2)]	[1]
2	IC-3023_F6 06W	(1) IC-3023	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in Visit 01 (1)	410.0 Secs		
									[=>(Pattern 1)] [=>(Pattern 2)]	[1]	



Proposal 12878 - Visit 02 - The Near Edge of Infall into the Virgo Cluster

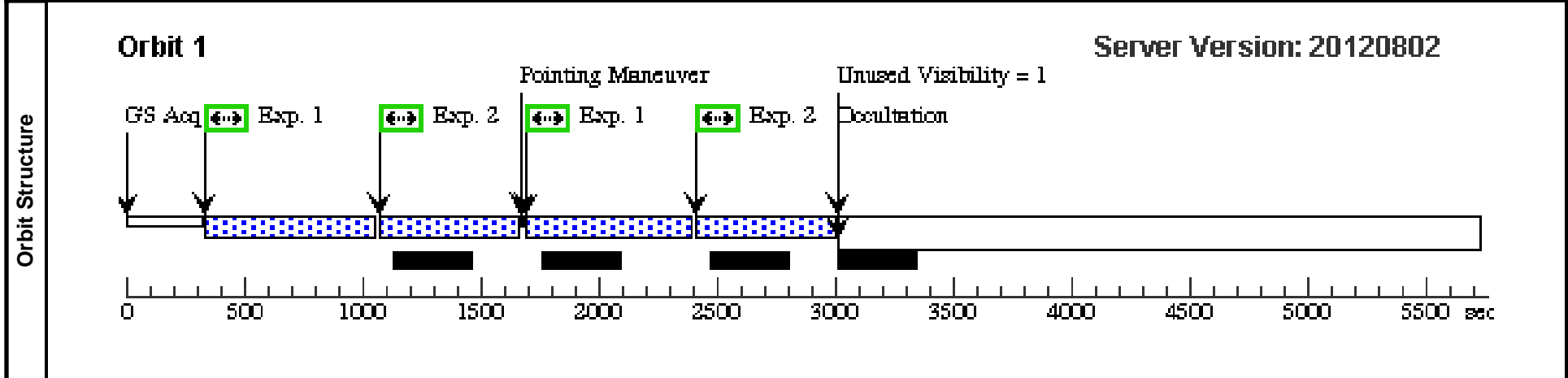
Thu Oct 04 01:14:43 GMT 2012

Visit	Proposal 12878, Visit 02, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; SAME ORIENT AS 01		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(1)	IC-3023	RA: 12 10 1.7649 (182.5073538d) Dec: +14 22 0.73 (14.36687d) Equinox: J2000		V=15.35	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	IC-3023_F8 14W	(1) IC-3023	ACS/WFC, ACCUM, WFC1-FIX	F814W			Pattern 1, Exps 1-2 in Visit 02 (1)	519.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	IC-3023_F6 06W	(1) IC-3023	ACS/WFC, ACCUM, WFC1-FIX	F606W			Pattern 1, Exps 1-2 in Visit 02 (1)	410.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 12878 - Visit 03 - The Near Edge of Infall into the Virgo Cluster

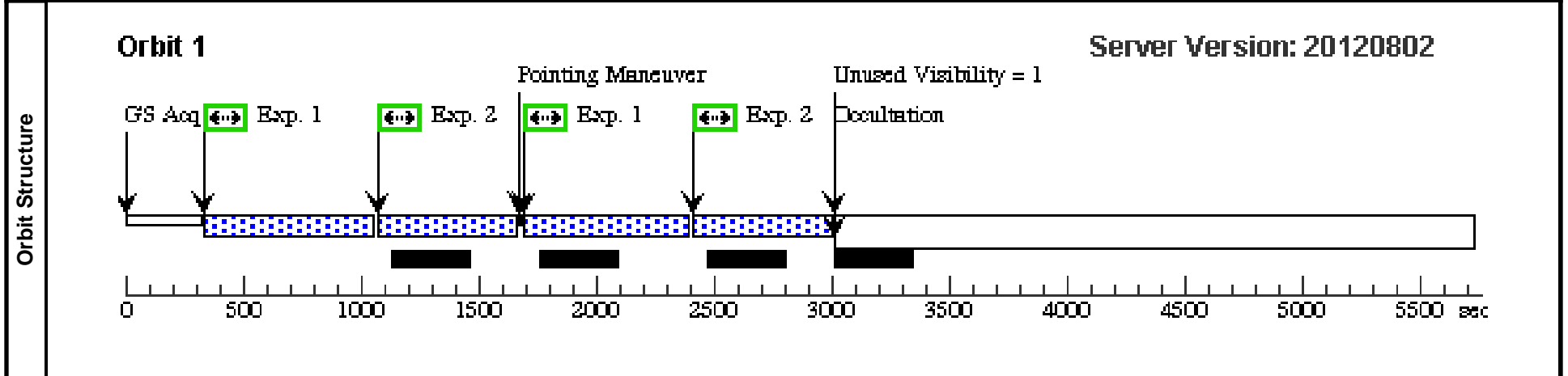
Thu Oct 04 01:14:44 GMT 2012

Visit	Proposal 12878, Visit 03, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; GROUP 03.04 WITHIN 28D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	VCC-0530	RA: 12 22 7.5696 (185.5315400d) Dec: +15 47 56.80 (15.79911d) Equinox: J2000		V=15.95	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	VCC-0530_ F814W	(2) VCC-0530	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in Visit 03 (1)	519.0 Secs	
										[=>(Pattern 1)] [=>(Pattern 2)]	[1]
2	VCC-0530_ F606W	(2) VCC-0530	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in Visit 03 (1)	410.0 Secs		
									[=>(Pattern 1)] [=>(Pattern 2)]	[1]	



Proposal 12878 - Visit 04 - The Near Edge of Infall into the Virgo Cluster

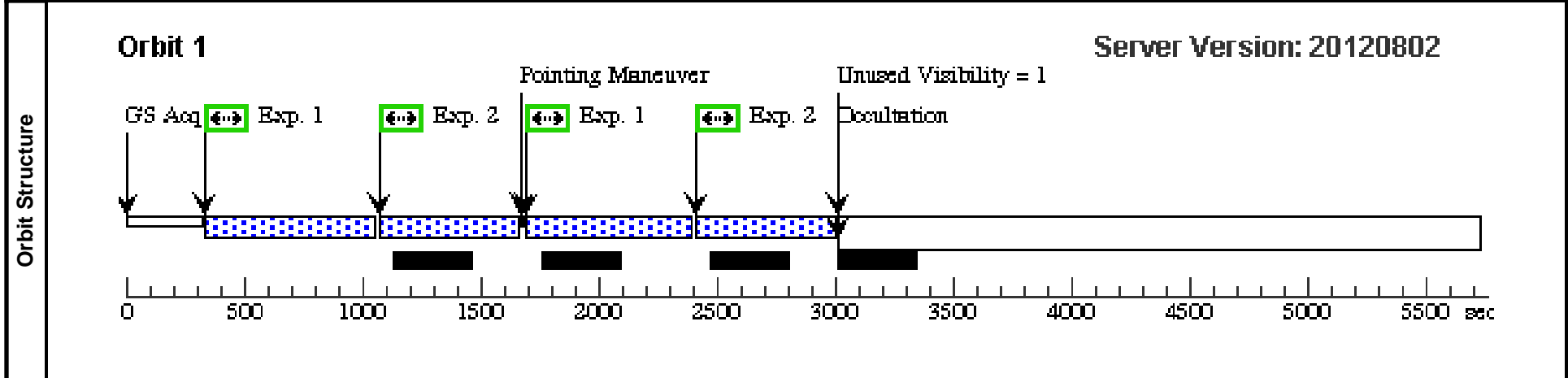
Thu Oct 04 01:14:45 GMT 2012

Visit	Proposal 12878, Visit 04, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: SCHED 100%; SAME ORIENT AS 03		
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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=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(2)	VCC-0530	RA: 12 22 7.5696 (185.5315400d) Dec: +15 47 56.80 (15.79911d) Equinox: J2000		V=15.95	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	VCC-0530_ F814W	(2) VCC-0530	ACS/WFC, ACCUM, WFC1-FIX	F814W			Pattern 1, Exps 1-2 in Visit 04 (1)	519.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	VCC-0530_ F606W	(2) VCC-0530	ACS/WFC, ACCUM, WFC1-FIX	F606W			Pattern 1, Exps 1-2 in Visit 04 (1)	410.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 12878 - Visit 05 - The Near Edge of Infall into the Virgo Cluster

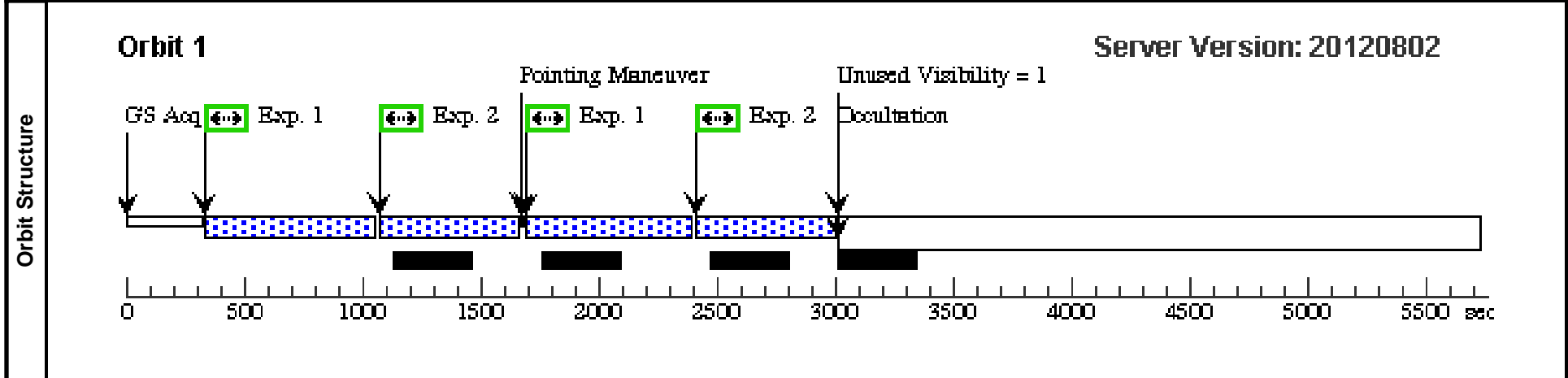
Thu Oct 04 01:14:46 GMT 2012

Visit	Proposal 12878, Visit 05, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; GROUP 05.06 WITHIN 28D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	UGC-07512	RA: 12 25 41.3352 (186.4222300d) Dec: +02 09 32.33 (2.15898d) Equinox: J2000		V=15.2	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	UGC-07512_F814W	(3) UGC-07512	ACS/WFC, ACCUM, WFC1-FIX	F814W			Pattern 1, Exps 1-2 in Visit 05 (1)	519.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	UGC-07512_F606W	(3) UGC-07512	ACS/WFC, ACCUM, WFC1-FIX	F606W			Pattern 1, Exps 1-2 in Visit 05 (1)	410.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 12878 - Visit 06 - The Near Edge of Infall into the Virgo Cluster

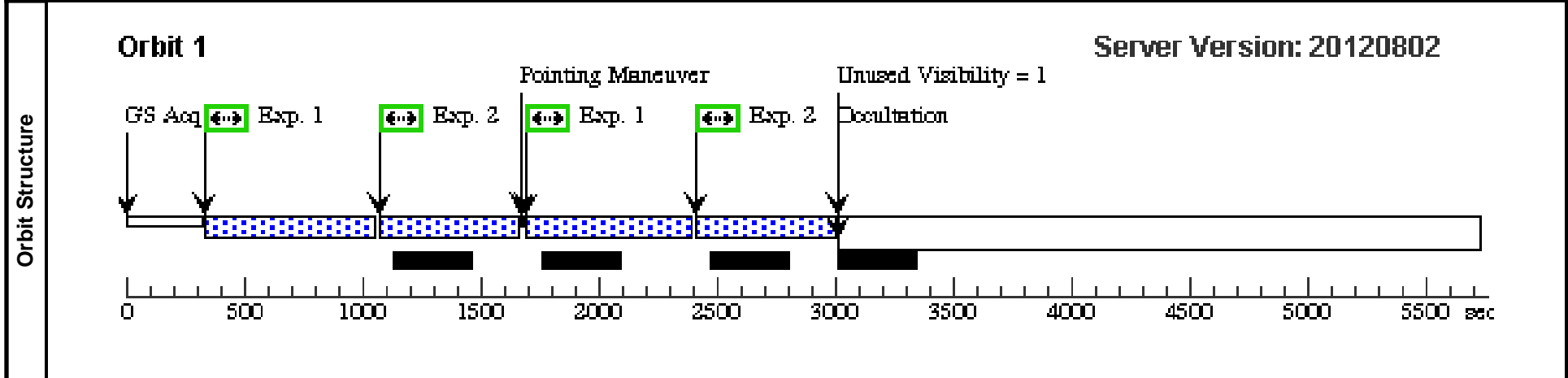
Thu Oct 04 01:14:47 GMT 2012

Visit	Proposal 12878, Visit 06, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; SAME ORIENT AS 05		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(3)	UGC-07512	RA: 12 25 41.3352 (186.4222300d) Dec: +02 09 32.33 (2.15898d) Equinox: J2000		V=15.2	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	UGC-07512_F814W	(3) UGC-07512	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in Visit 06 (1)	519.0 Secs	
										[=>(Pattern 1)] [=>(Pattern 2)]	[1]
2	UGC-07512_F606W	(3) UGC-07512	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in Visit 06 (1)	410.0 Secs		
									[=>(Pattern 1)] [=>(Pattern 2)]	[1]	



Proposal 12878 - Visit 07 - The Near Edge of Infall into the Virgo Cluster

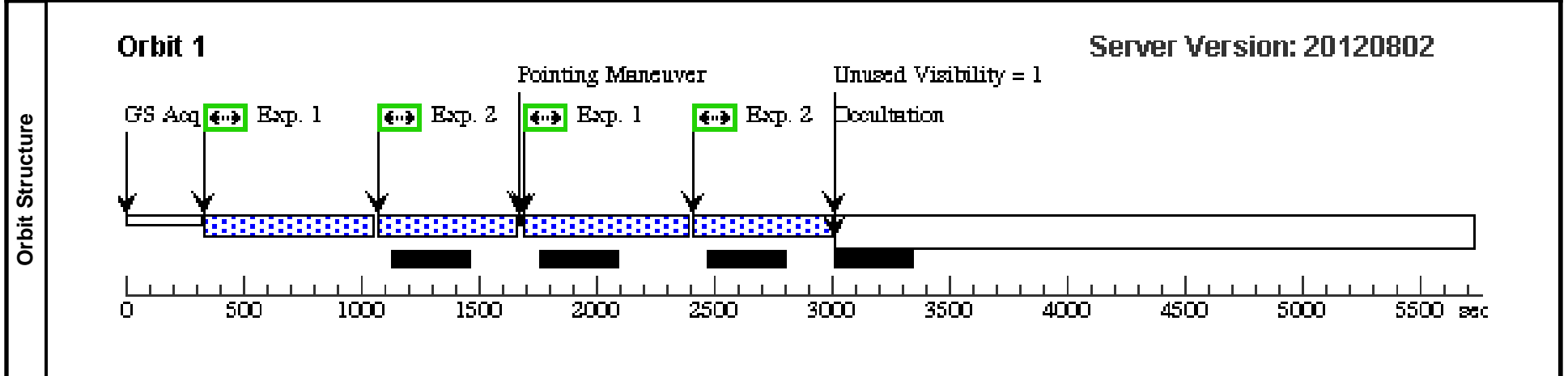
Thu Oct 04 01:14:47 GMT 2012

Visit	Proposal 12878, Visit 07, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: SCHED 100%; ORIENT 85D TO 95 D; ORIENT 265D TO 275 D; GROUP 07.08 WITHIN 28D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	NGC-4517	RA: 12 32 45.9312 (188.1913800d) Dec: +00 05 2.34 (.08398d) Equinox: J2000		V=11.09	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC-4517_ F814W	(4) NGC-4517	ACS/WFC, ACCUM, WFC-FIX	F814W			GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-2 in Visit 07 (1)	519.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]
2	NGC-4517_ F606W	(4) NGC-4517	ACS/WFC, ACCUM, WFC-FIX	F606W				Pattern 1, Exps 1-2 in Visit 07 (1)	410.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 12878 - Visit 08 - The Near Edge of Infall into the Virgo Cluster

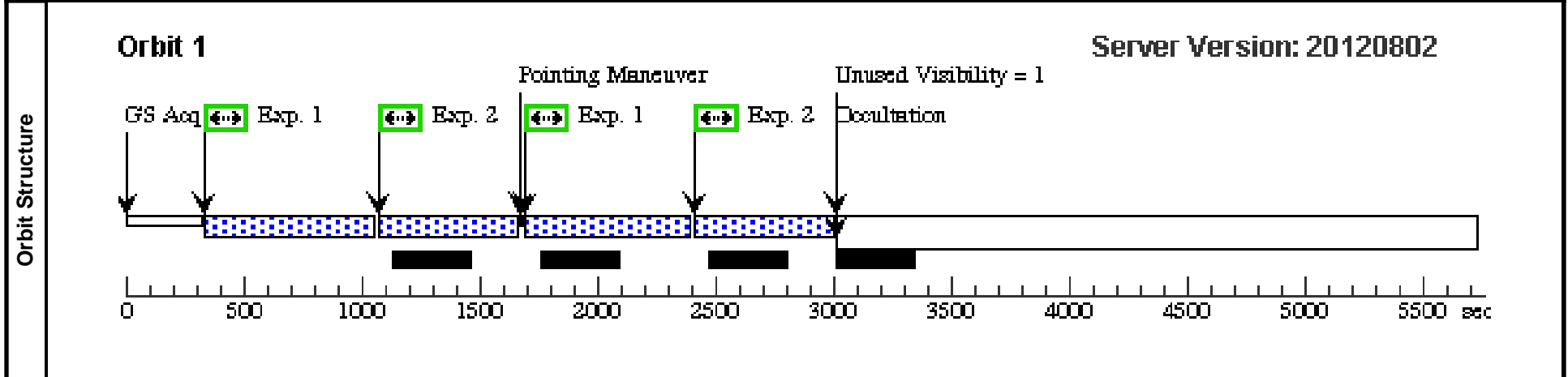
Thu Oct 04 01:14:48 GMT 2012

Visit	Proposal 12878, Visit 08, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; SAME ORIENT AS 07		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(4)	NGC-4517	RA: 12 32 45.9312 (188.1913800d) Dec: +00 05 2.34 (.08398d) Equinox: J2000		V=11.09	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	NGC-4517_ F814W	(4) NGC-4517	ACS/WFC, ACCUM, WFC-FIX	F814W			GS ACQ SCENARIO BASE1B3	Pattern 1, Exps 1-2 in Visit 08 (1)	519.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	NGC-4517_ F606W	(4) NGC-4517	ACS/WFC, ACCUM, WFC-FIX	F606W				Pattern 1, Exps 1-2 in Visit 08 (1)	410.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 12878 - Visit 09 - The Near Edge of Infall into the Virgo Cluster

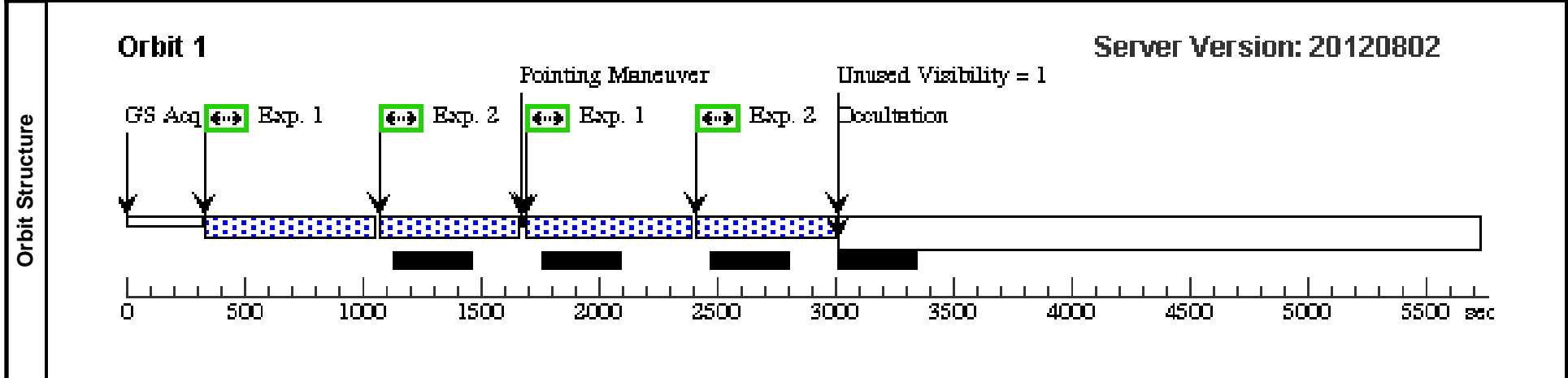
Thu Oct 04 01:14:49 GMT 2012

Visit	Proposal 12878, Visit 09, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; GROUP 09,10 WITHIN 28D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(5)	IC-3583	RA: 12 36 43.8016 (189.1825067d) Dec: +13 15 33.13 (13.25920d) Equinox: J2000		V=13.31	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	IC-3583_F8 14W	(5) IC-3583	ACS/WFC, ACCUM, WFC-FIX	F814W				Pattern 1, Exps 1-2 in Visit 09 (1)	519.0 Secs	
										[=>(Pattern 1)] [=>(Pattern 2)]	[1]
2	IC-3583_F6 06W	(5) IC-3583	ACS/WFC, ACCUM, WFC-FIX	F606W				Pattern 1, Exps 1-2 in Visit 09 (1)	410.0 Secs		
									[=>(Pattern 1)] [=>(Pattern 2)]	[1]	



Proposal 12878 - Visit 10 - The Near Edge of Infall into the Virgo Cluster

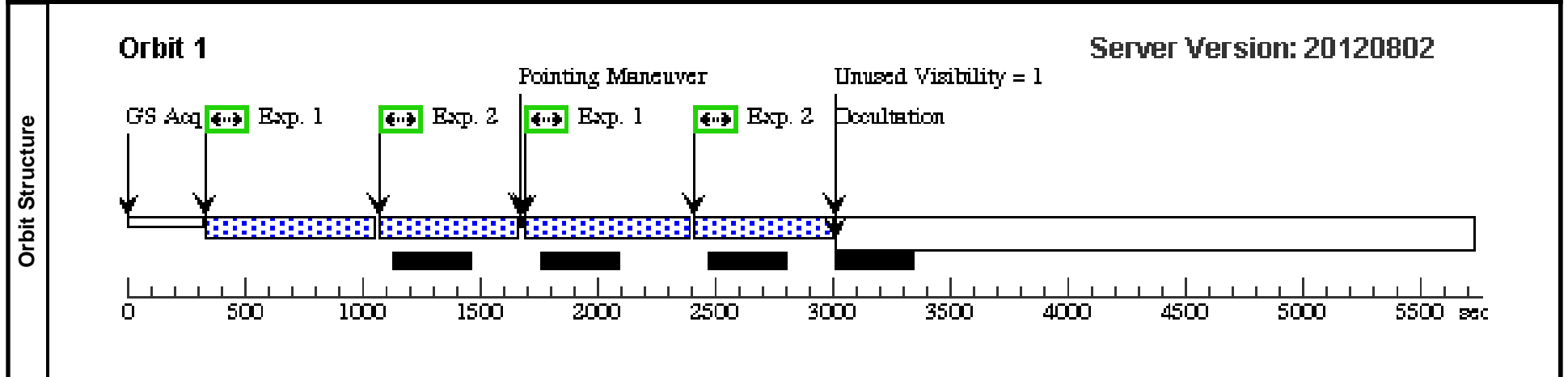
Thu Oct 04 01:14:50 GMT 2012

Visit	Proposal 12878, Visit 10, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: SCHED 100%; SAME ORIENT AS 09		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(5)	IC-3583	RA: 12 36 43.8016 (189.1825067d) Dec: +13 15 33.13 (13.25920d) Equinox: J2000		V=13.31	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	IC-3583_F8 14W	(5) IC-3583	ACS/WFC, ACCUM, WFC-FIX	F814W				Pattern 1, Exps 1-2 in Visit 10 (1)	519.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]
2	IC-3583_F6 06W	(5) IC-3583	ACS/WFC, ACCUM, WFC-FIX	F606W				Pattern 1, Exps 1-2 in Visit 10 (1)	410.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 12878 - Visit 11 - The Near Edge of Infall into the Virgo Cluster

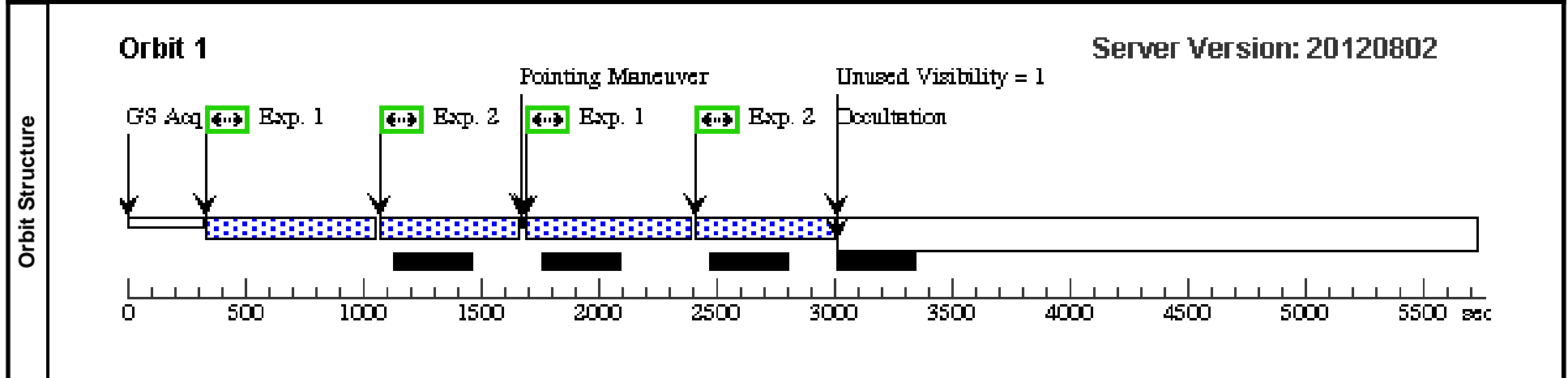
Thu Oct 04 01:14:51 GMT 2012

Visit	Proposal 12878, Visit 11, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; GROUP 11,12 WITHIN 28D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	VCC-1816	RA: 12 39 58.4040 (189.9933500d) Dec: +13 46 59.14 (13.78309d) Equinox: J2000		V=16.36	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	VCC-1816_ F814W	(6) VCC-1816	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in Visit 11 (1)	519.0 Secs	
										[=>(Pattern 1)] [=>(Pattern 2)]	[1]
2	VCC-1816_ F606W	(6) VCC-1816	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in Visit 11 (1)	410.0 Secs		
									[=>(Pattern 1)] [=>(Pattern 2)]	[1]	



Proposal 12878 - Visit 12 - The Near Edge of Infall into the Virgo Cluster

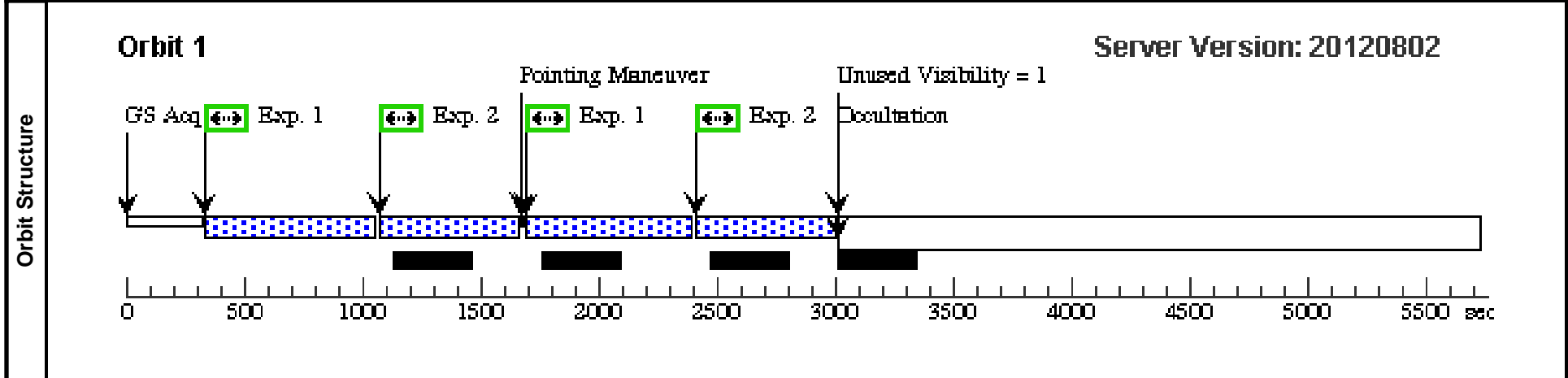
Thu Oct 04 01:14:52 GMT 2012

Visit	Proposal 12878, Visit 12, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: SCHED 100%; SAME ORIENT AS 11		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing= Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false		(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(6)	VCC-1816	RA: 12 39 58.4040 (189.9933500d) Dec: +13 46 59.14 (13.78309d) Equinox: J2000		V=16.36	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	VCC-1816_ F814W	(6) VCC-1816	ACS/WFC, ACCUM, WFC1-FIX	F814W			Pattern 1, Exps 1-2 in Visit 12 (1)	519.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	VCC-1816_ F606W	(6) VCC-1816	ACS/WFC, ACCUM, WFC1-FIX	F606W			Pattern 1, Exps 1-2 in Visit 12 (1)	410.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 12878 - Visit 13 - The Near Edge of Infall into the Virgo Cluster

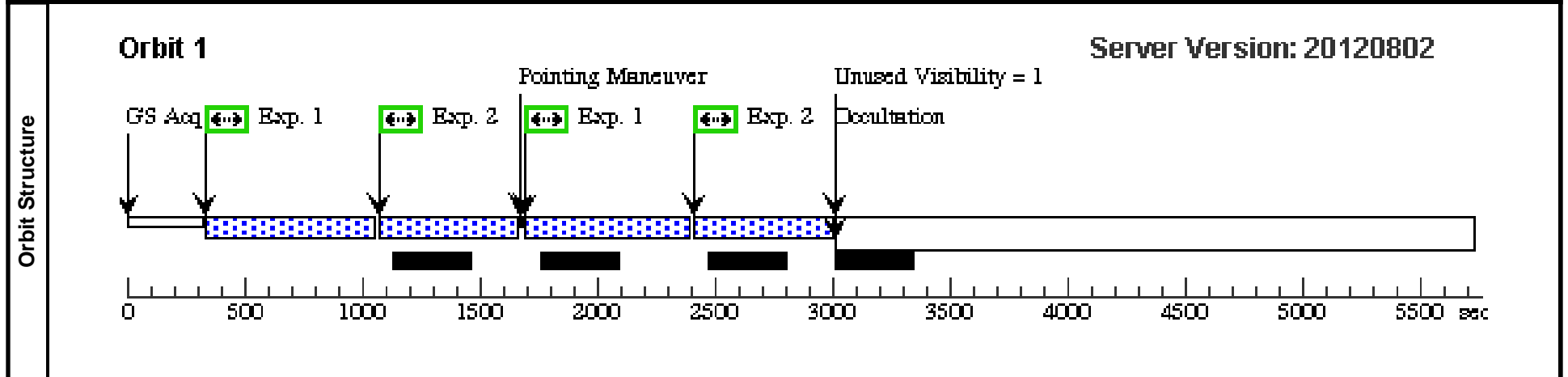
Thu Oct 04 01:14:52 GMT 2012

Visit	Proposal 12878, Visit 13, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; GROUP 13,14 WITHIN 28D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(7)	NGC-4600	RA: 12 40 22.9584 (190.0956600d) Dec: +03 07 3.90 (3.11775d) Equinox: J2000		V=13.73	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	NGC-4600_ F814W	(7) NGC-4600	ACS/WFC, ACCUM, WFC-FIX	F814W			Pattern 1, Exps 1-2 in Visit 13 (1)	519.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	NGC-4600_ F606W	(7) NGC-4600	ACS/WFC, ACCUM, WFC-FIX	F606W			Pattern 1, Exps 1-2 in Visit 13 (1)	410.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 12878 - Visit 14 - The Near Edge of Infall into the Virgo Cluster

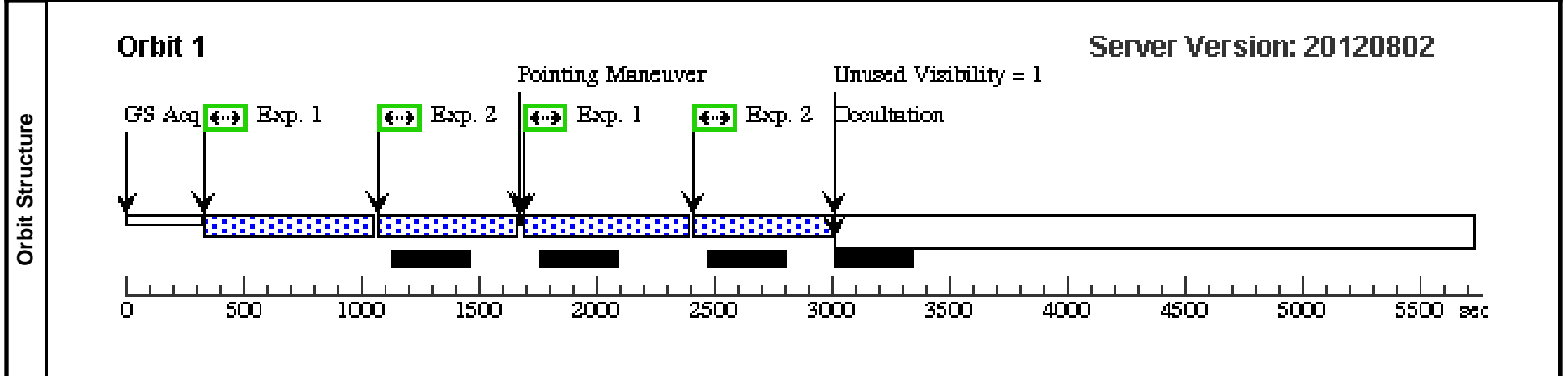
Thu Oct 04 01:14:53 GMT 2012

Visit	Proposal 12878, Visit 14, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; SAME ORIENT AS 13		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(7)	NGC-4600	RA: 12 40 22.9584 (190.0956600d) Dec: +03 07 3.90 (3.11775d) Equinox: J2000		V=13.73	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	NGC-4600_ F814W	(7) NGC-4600	ACS/WFC, ACCUM, WFC-FIX	F814W				Pattern 1, Exps 1-2 in Visit 14 (1)	519.0 Secs	
										[=>(Pattern 1)] [=>(Pattern 2)]	[1]
2	NGC-4600_ F606W	(7) NGC-4600	ACS/WFC, ACCUM, WFC-FIX	F606W				Pattern 1, Exps 1-2 in Visit 14 (1)	410.0 Secs		
									[=>(Pattern 1)] [=>(Pattern 2)]	[1]	



Proposal 12878 - Visit 15 - The Near Edge of Infall into the Virgo Cluster

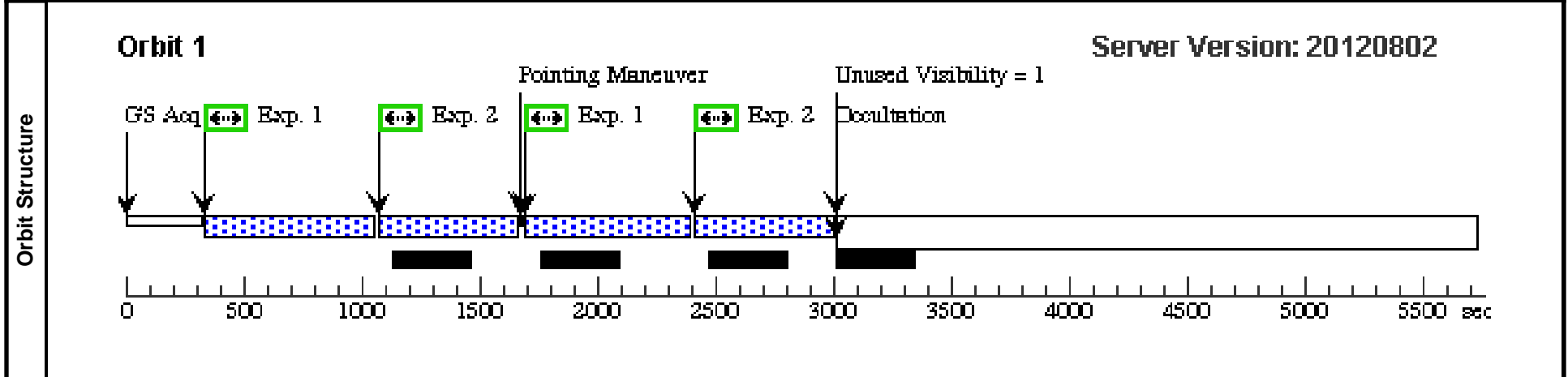
Thu Oct 04 01:14:54 GMT 2012

Visit	Proposal 12878, Visit 15, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; GROUP 15,16 WITHIN 28D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	VCC-2037	RA: 12 46 15.3006 (191.5637525d) Dec: +10 12 26.06 (10.20724d) Equinox: J2000		V=15.8	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	VCC-2037_ F814W	(8) VCC-2037	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in Visit 15 (1)	519.0 Secs	
										[=>(Pattern 1)] [=>(Pattern 2)]	[1]
2	VCC-2037_ F606W	(8) VCC-2037	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in Visit 15 (1)	410.0 Secs		
									[=>(Pattern 1)] [=>(Pattern 2)]	[1]	



Proposal 12878 - Visit 16 - The Near Edge of Infall into the Virgo Cluster

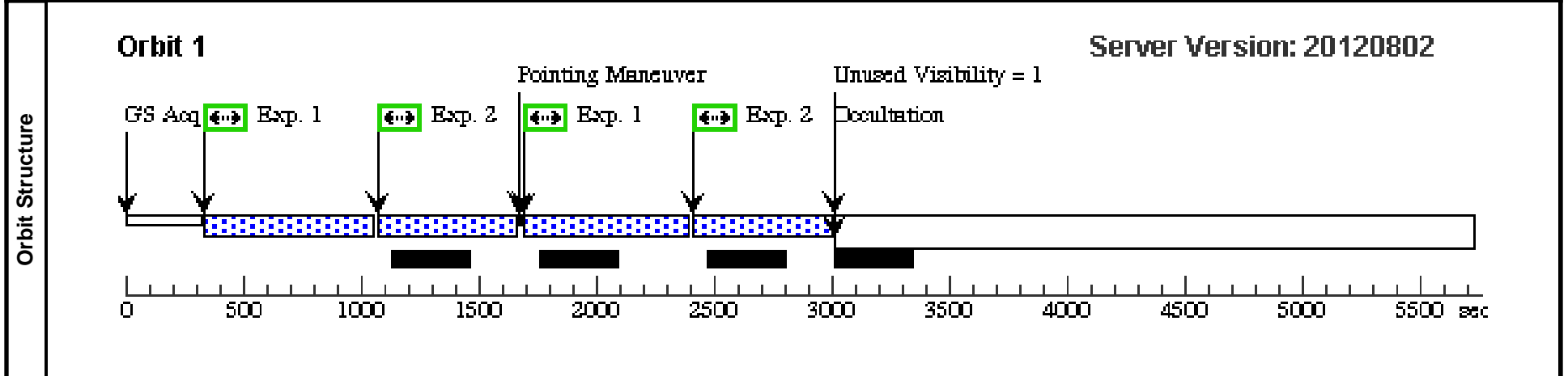
Thu Oct 04 01:14:55 GMT 2012

Visit	Proposal 12878, Visit 16, implementation Diagnostic Status: No Diagnostics Scientific Instruments: ACS/WFC Special Requirements: SCHED 100%; SAME ORIENT AS 15		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(8)	VCC-2037	RA: 12 46 15.3006 (191.5637525d) Dec: +10 12 26.06 (10.20724d) Equinox: J2000		V=15.8	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	VCC-2037_ F814W	(8) VCC-2037	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in Visit 16 (1)	519.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]
2	VCC-2037_ F606W	(8) VCC-2037	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in Visit 16 (1)	410.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 12878 - Visit 17 - The Near Edge of Infall into the Virgo Cluster

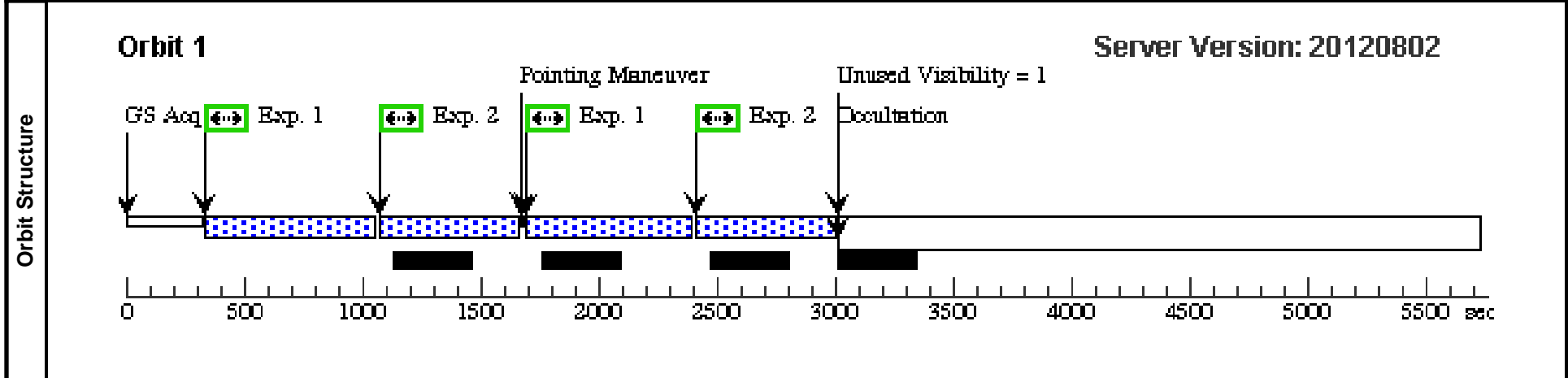
Thu Oct 04 01:14:55 GMT 2012

Visit	Proposal 12878, Visit 17, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; GROUP 17,18 WITHIN 28D		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	(1-2)

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(9)	LEDA-44055	RA: 12 55 40.5000 (193.9187500d) Dec: +19 12 33.00 (19.20917d) Equinox: J2000		V=16.9	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	LEDA-4405 5_F814W	(9) LEDA-44055	ACS/WFC, ACCUM, WFC1-FIX	F814W			Pattern 1, Exps 1-2 in Visit 17 (1)	519.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]
	2	LEDA-4405 5_F606W	(9) LEDA-44055	ACS/WFC, ACCUM, WFC1-FIX	F606W			Pattern 1, Exps 1-2 in Visit 17 (1)	410.0 Secs [=>(Pattern 1)] [=>(Pattern 2)]	[1]



Proposal 12878 - Visit 18 - The Near Edge of Infall into the Virgo Cluster

Thu Oct 04 01:14:56 GMT 2012

Visit	Proposal 12878, Visit 18, implementation		
	Diagnostic Status: No Diagnostics		
	Scientific Instruments: ACS/WFC		
	Special Requirements: SCHED 100%; SAME ORIENT AS 17		

Patterns	#	Primary Pattern	Secondary Pattern	Exposures
	(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.28 Angle Between Sides= Center Pattern=false	

Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
	(9)	LEDA-44055	RA: 12 55 40.5000 (193.9187500d) Dec: +19 12 33.00 (19.20917d) Equinox: J2000		V=16.9	Reference Frame: ICRS

Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit	
	1	LEDA-4405 5_F814W	(9) LEDA-44055	ACS/WFC, ACCUM, WFC1-FIX	F814W				Pattern 1, Exps 1-2 in Visit 18 (1)	519.0 Secs	
										[=>(Pattern 1)] [=>(Pattern 2)]	[1]
2	LEDA-4405 5_F606W	(9) LEDA-44055	ACS/WFC, ACCUM, WFC1-FIX	F606W				Pattern 1, Exps 1-2 in Visit 18 (1)	410.0 Secs		
									[=>(Pattern 1)] [=>(Pattern 2)]	[1]	

