10595 - A Reference Database for Accurate Ages and Metallicities of Globular Clusters in the Magellanic Clouds

Cycle: 14, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

Name	*Institution*	*E-Mail*
Dr. Paul Goudfrooij (PI)	**Space Telescope Science Institute**	**goudfroo@stsci.edu**
Dr. Francesca De Angeli (CoI) (ESA Member)	University of Cambridge	fda@ast.cam.ac.uk
Ms. Vera Platais (CoI)	Space Telescope Science Institute	verap@stsci.edu
Dr. Rupali Chandar (CoI)	Space Telescope Science Institute	rupali@stsci.edu
Dr. Thomas H. Puzia (CoI) (ESA Member)	Space Telescope Science Institute	tpuzia@stsci.edu
Dr. Thomas M. Brown (CoI)	Space Telescope Science Institute	tbrown@stsci.edu

VISITS

Visit	*Targets*	*Configurations*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) ESO056-SC023	ACS/WFC	1	17-Mar-2006 23:32:12.0	yes
02	(2) ESO056-SC004	ACS/WFC	1	17-Mar-2006 23:32:20.0	yes
03	(3) ESO056-SC067	ACS/WFC	1	17-Mar-2006 23:32:30.0	yes
04	(4) ESO056-SC131	ACS/WFC	1	17-Mar-2006 23:32:35.0	yes
05	(5) ESO057-SC033	ACS/WFC	1	17-Mar-2006 23:32:40.0	yes
06	(6) ESO121-SC003	ACS/WFC	1	17-Mar-2006 23:32:45.0	yes
07	(7) ESO085-SC029	ACS/WFC	1	17-Mar-2006 23:32:55.0	yes

Visit	*Targets*	*Configurations*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
08	(8) ESO057-SC075	ACS/WFC	1	17-Mar-2006 23:33:00.0	yes
51	(9) ESO056-SC023-COPY	ACS/WFC	1	17-Mar-2006 23:33:06.0	yes

9 Total Orbits Used

ABSTRACT

We propose to finalize the compilation of a comprehensive database of high-quality ages and metallicities of Simple Stellar Populations (SSPs) in the Milky Way and the Magellanic Clouds. We will acquire new ACS imagery for 8 young and intermediate-age globular clusters in the Magellanic Clouds to create high-quality color-magnitude diagrams (CMDs) to enable accurate measurements of their ages and metallicities. In concert with a similar analysis of CMD data already available in the HST archive for 8 more such GCs, the resulting database will provide a well-sampled coverage of the full range of ages and metallicities known among globular clusters (0.5 <= Age (Gyr) <= 13.5 and -2.3 <= [Fe/H] <= +0.1, respectively). This database will form the crucial basis for our ongoing, comprehensive multi-wavelength program to: (1) establish empirical relations among SSP colors (from the UV [GALEX] through the mid-IR [Spitzer]), line strengths, ages and metallicities, and (2) provide a stringent test of the systemic accuracy of age and metallicity determinations using state-of-the-art population synthesis models.

OBSERVING DESCRIPTION

The target globular clusters younger than an estimated age of about 4 Gyr are observed in F435W, F555W and F814W except for the older cluster ESO 121-SC03, which is observed in F435W, F606W, and F814W (since good CMDs for "old" Galactic clusters straddling the estimated metallicity of ESO 121-SC03 are only available in ACS/WFC F606W, not in F555W), using ACS/WFC. Three filters are used to improve the age estimate (relative to the use of only two filters) and to enable an estimate of the reddening for these clusters. Since the shape and position of the giant branch is used to determine metallicities, it is imperative to involve exposures in each filter that do not saturate the bright giants. On the other hand, an accurate age determination by comparing the CMD with isochrones requires color uncertainties of about 0.1 mag at or slightly beyond the estimated turnoff magnitude, which dictates the need for long exposures as well. Hence, a short exposure is used in each filter to avoid saturation of the brightest giants (and the turn-off stars for the youngest clusters), while two or three longer exposures are used to reach a depth sufficiently beyond the estimated

turnoff magnitude. Two dither positions per cluster are used. The orbit lengths are set to 70 min. This doesn't impede their schedulability at the declination of the Large Magellanic Cloud according to the visit planner.

REAL TIME JUSTIFICATION

As requested in Phase I, we will observe ESO 121-SC03 in the Continuous Viewing Zone. The fact that the Earthshine will be somewhat higher during CVZ orbits than during non-CVZ orbits is not detrimental for the proposed observations, since the limiting factor for S/N ratios in our case is the `background' associated with the crowded star field of the LMC.

Visit

Proposal 10595, Visit 01 Sat Mar 18 04:33:07 GMT 2006

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: VISIBILITY INTERVAL 4730 S

Comments: NGC1751 visit

Patterns

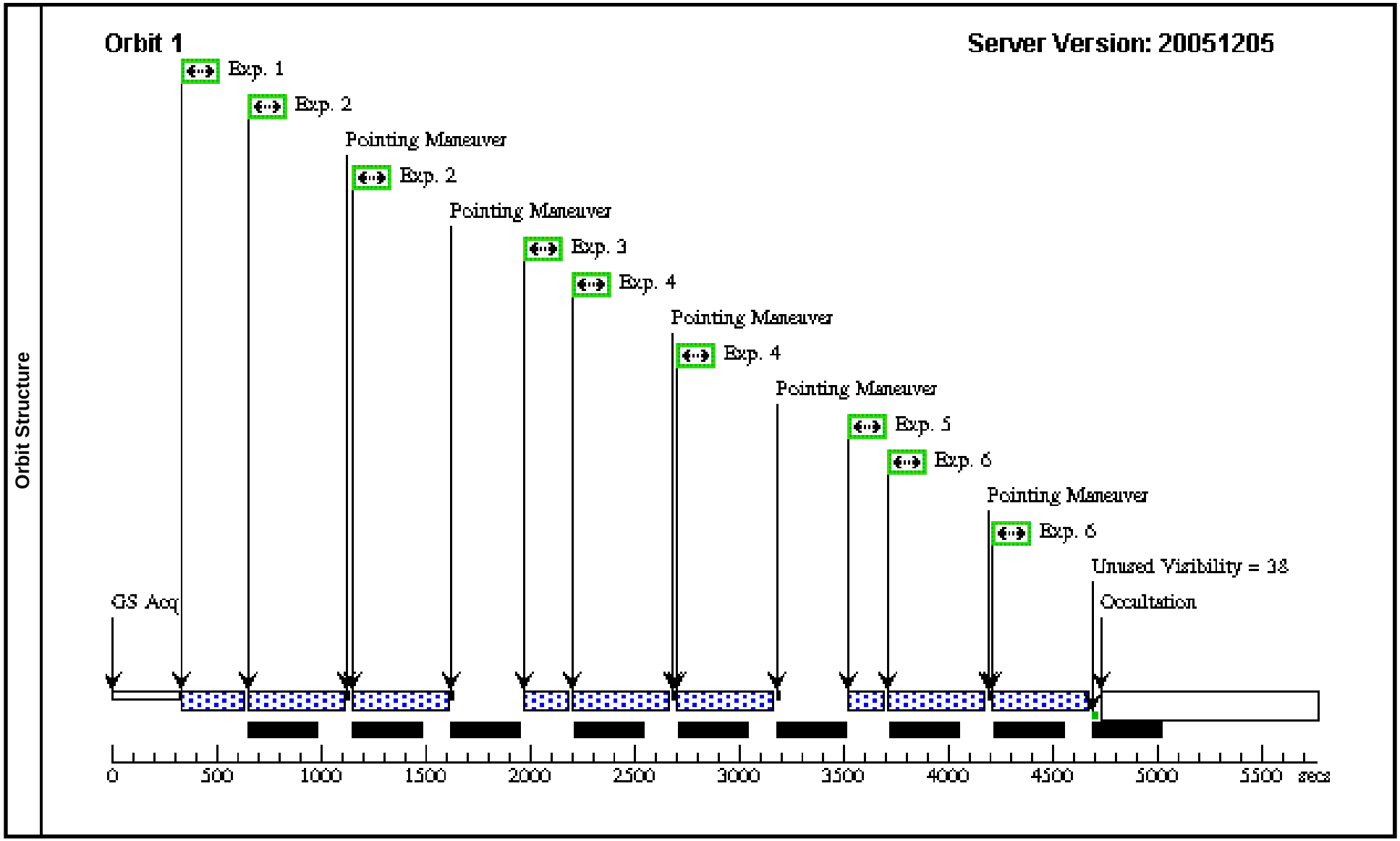
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.3 Angle Between Sides= Center Pattern=false		(2), (4), (6)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	ESO056-SC023 Alt Name1: NGC1751	RA: 04 54 12.0000 (73.5500000d) Dec: -69 48 24.00 (-69.80667d) Equinox: J2000 Plate Id: 05ZW		V=12.11	Coordinate Source: GSC_SURVEY_PLATE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	N1751/F435W/short	(1) ESO056-SC023	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	90.0 Secs *[==>]*	 ***[1]***
2	N1751/F435W/long	(1) ESO056-SC023	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 2-2 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
3	N1751/F555W/short	(1) ESO056-SC023	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	40.0 Secs *[==>]*	 ***[1]***
4	N1751/F555W/long	(1) ESO056-SC023	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 4-4 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***
5	N1751/F814W/short	(1) ESO056-SC023	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	8.0 Secs *[==>]*	 ***[1]***
6	N1751/F814W/long	(1) ESO056-SC023	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 6-6 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	 ***[1]***


Orbit Structure
Orbit 1
Server Version: 20051205
Exp. 1
Exp. 2
Pointing Maneuver
Exp. 2
Pointing Maneuver
Exp. 3
Exp. 4
Pointing Maneuver
Exp. 4
Pointing Maneuver
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 6
Unused Visibility = 38
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs

Visit

Proposal 10595, Visit 02 Sat Mar 18 04:33:08 GMT 2006

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: VISIBILITY INTERVAL 4730 S

Comments: NGC1806 visit

Patterns

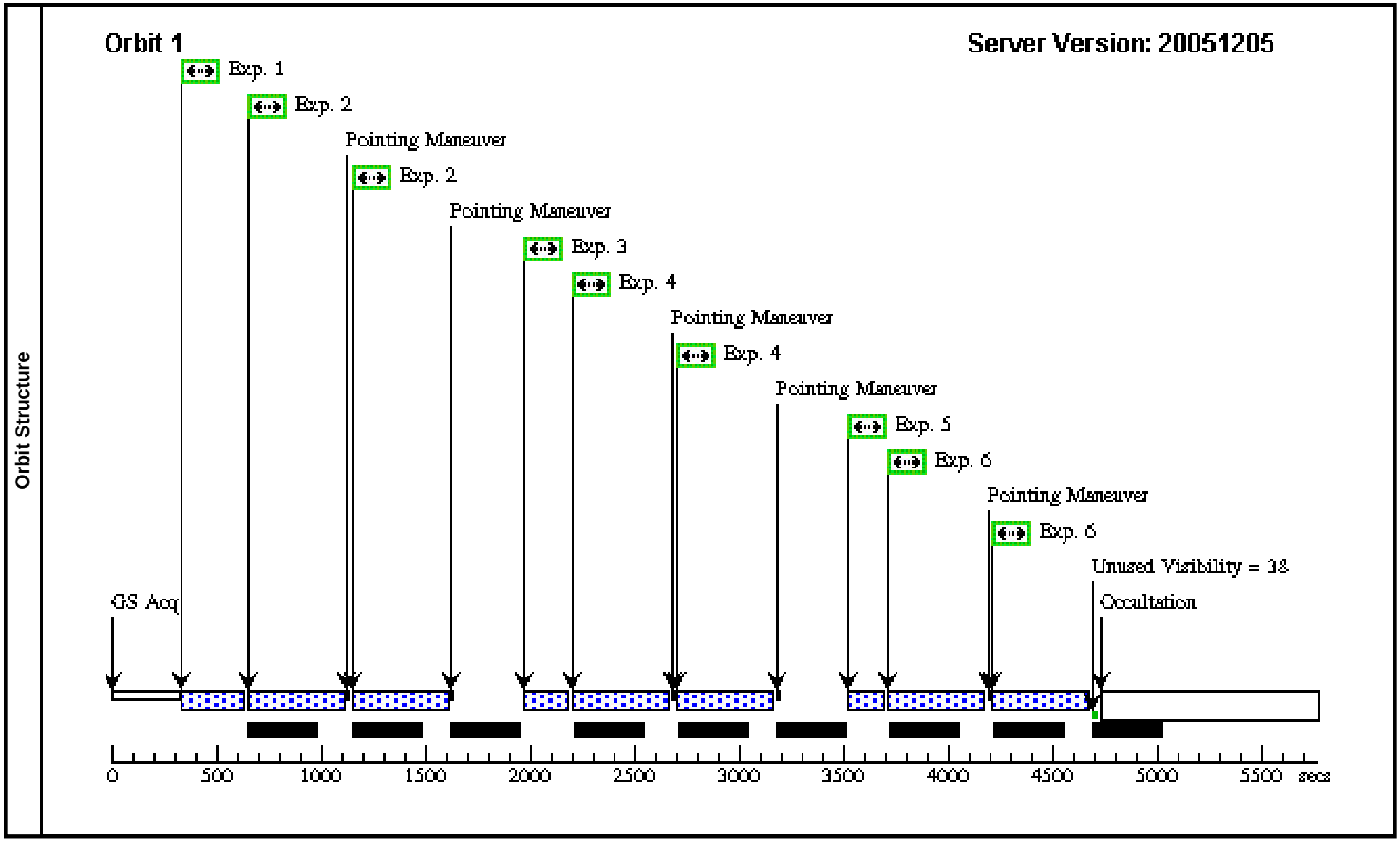
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.3 Angle Between Sides= Center Pattern=false		(2), (4), (6)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	ESO056-SC004 Alt Name1: NGC1806	RA: 05 02 12.2771 (75.5511546d) Dec: -67 59 8.15 (-67.98560d) Equinox: J2000 Plate Id: 05ZW		V=10.5	Coordinate Source: GSC_SURVEY_PLATE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	N1806/F435W/short	(2) ESO056-SC004	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	90.0 Secs *[==>]*	*[1]*
2	N1806/F435W/long	(2) ESO056-SC004	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 2-2 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*
3	N1806/F555W/short	(2) ESO056-SC004	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	40.0 Secs *[==>]*	*[1]*
4	N1806/F555W/long	(2) ESO056-SC004	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 4-4 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*
5	N1806/F814W/short	(2) ESO056-SC004	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	8.0 Secs *[==>]*	*[1]*
6	N1806/F814W/long	(2) ESO056-SC004	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 6-6 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*


Orbit Structure
Orbit 1
Server Version: 20051205
Exp. 1
Exp. 2
Pointing Maneuver
Exp. 2
Pointing Maneuver
Exp. 3
Exp. 4
Pointing Maneuver
Exp. 4
Pointing Maneuver
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 6
Unused Visibility = 38
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs

Visit

Proposal 10595, Visit 03 Sat Mar 18 04:33:09 GMT 2006

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: VISIBILITY INTERVAL 4730 S

Comments: NGC1846 visit

Patterns

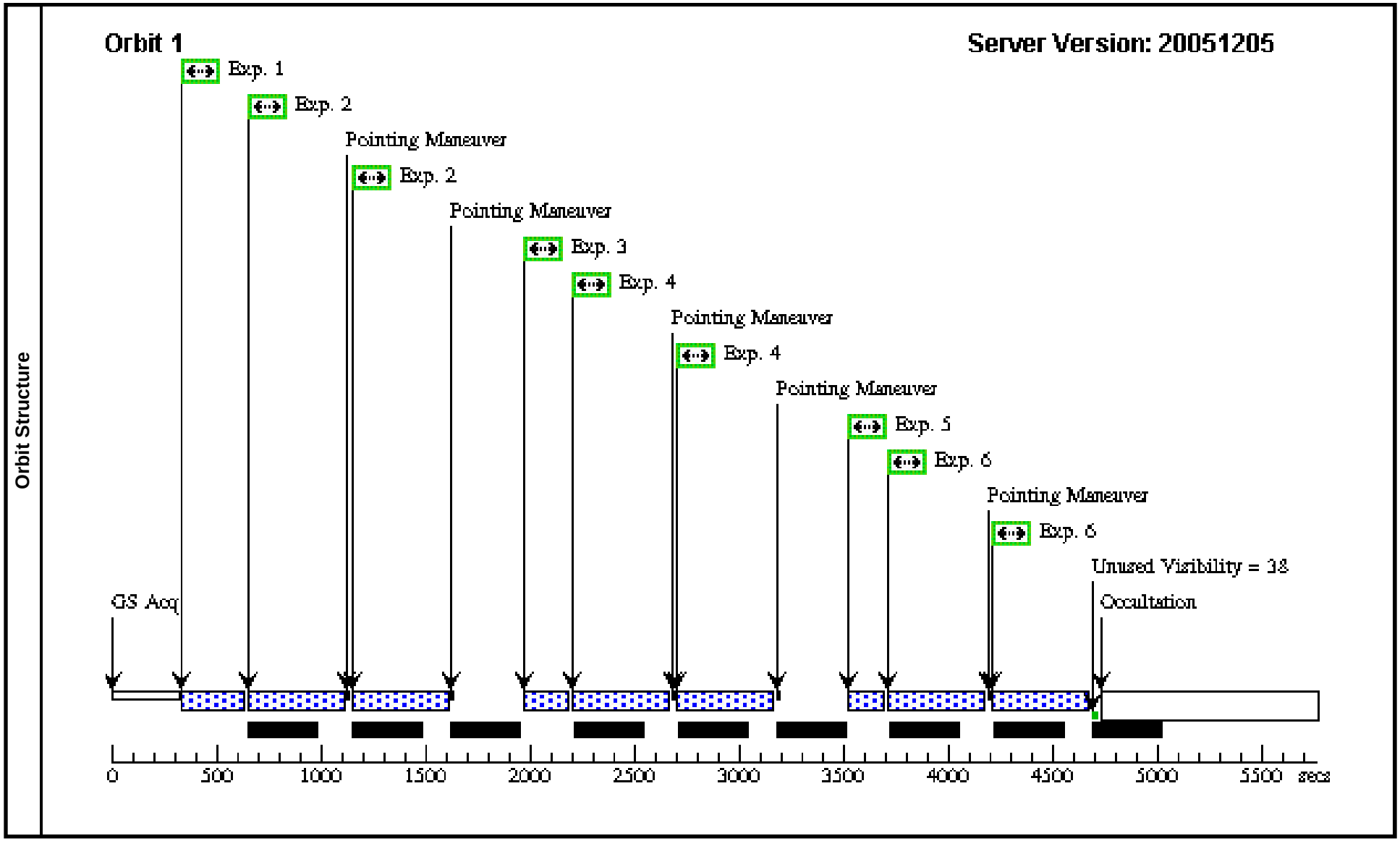
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.3 Angle Between Sides= Center Pattern=false		(2), (4), (6)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	ESO056-SC067 Alt Name1: NGC1846	RA: 05 07 35.0000 (76.8958333d) Dec: -67 27 39.00 (-67.46083d) Equinox: J2000 Plate Id: 06B0		V=11.31	Coordinate Source: GSC_SURVEY_PLATE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	N1846/F435W/short	(3) ESO056-SC067	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	90.0 Secs *[==>]*	***[1]***
2	N1846/F435W/long	(3) ESO056-SC067	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 2-2 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3	N1846/F555W/short	(3) ESO056-SC067	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	40.0 Secs *[==>]*	***[1]***
4	N1846/F555W/long	(3) ESO056-SC067	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 4-4 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5	N1846/F814W/short	(3) ESO056-SC067	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	8.0 Secs *[==>]*	***[1]***
6	N1846/F814W/long	(3) ESO056-SC067	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 6-6 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20051205
Exp. 1
Exp. 2
Pointing Maneuver
Exp. 2
Pointing Maneuver
Exp. 3
Exp. 4
Pointing Maneuver
Exp. 4
Pointing Maneuver
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 6
Unused Visibility = 38
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs

Visit

Proposal 10595, Visit 04 Sat Mar 18 04:33:09 GMT 2006

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: ORIENT 128.0D TO 360.0 D; VISIBILITY INTERVAL 4730 S

Comments: NGC1987 visit; ORIENT range chosen to avoid V < 10 mag star in field.

Patterns

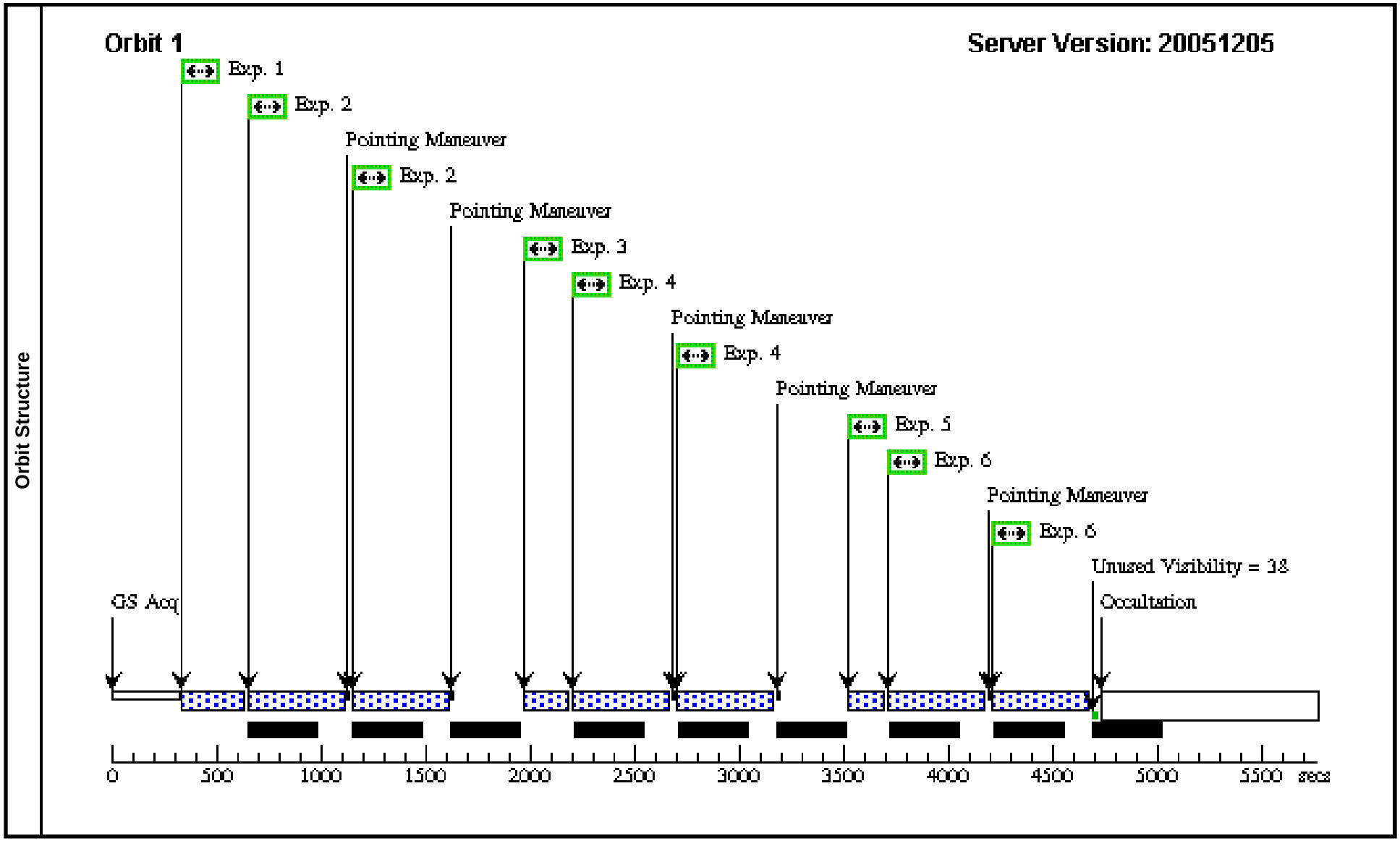
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.3 Angle Between Sides= Center Pattern=false		(2), (4), (6)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	ESO056-SC131 Alt Name1: NGC1987	RA: 05 27 17.0000 (81.8208333d) Dec: -70 44 6.00 (-70.73500d) Equinox: J2000 Plate Id: 05ZW		V=12.08	Coordinate Source: GSC_SURVEY_PLATE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	N1987/F435W/short	(4) ESO056-SC131	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	90.0 Secs *[==>]*	***[1]***
2	N1987/F435W/long	(4) ESO056-SC131	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 2-2 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3	N1987/F555W/short	(4) ESO056-SC131	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	40.0 Secs *[==>]*	***[1]***
4	N1987/F555W/long	(4) ESO056-SC131	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 4-4 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5	N1987/F814W/short	(4) ESO056-SC131	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	8.0 Secs *[==>]*	***[1]***
6	N1987/F814W/long	(4) ESO056-SC131	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 6-6 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20051205
Exp. 1
Exp. 2
Pointing Maneuver
Exp. 2
Pointing Maneuver
Exp. 3
Exp. 4
Pointing Maneuver
Exp. 4
Pointing Maneuver
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 6
Unused Visibility = 38
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs

Visit

Proposal 10595, Visit 05 Sat Mar 18 04:33:10 GMT 2006

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: VISIBILITY INTERVAL 4730 S

Comments: NGC2108 visit

Patterns

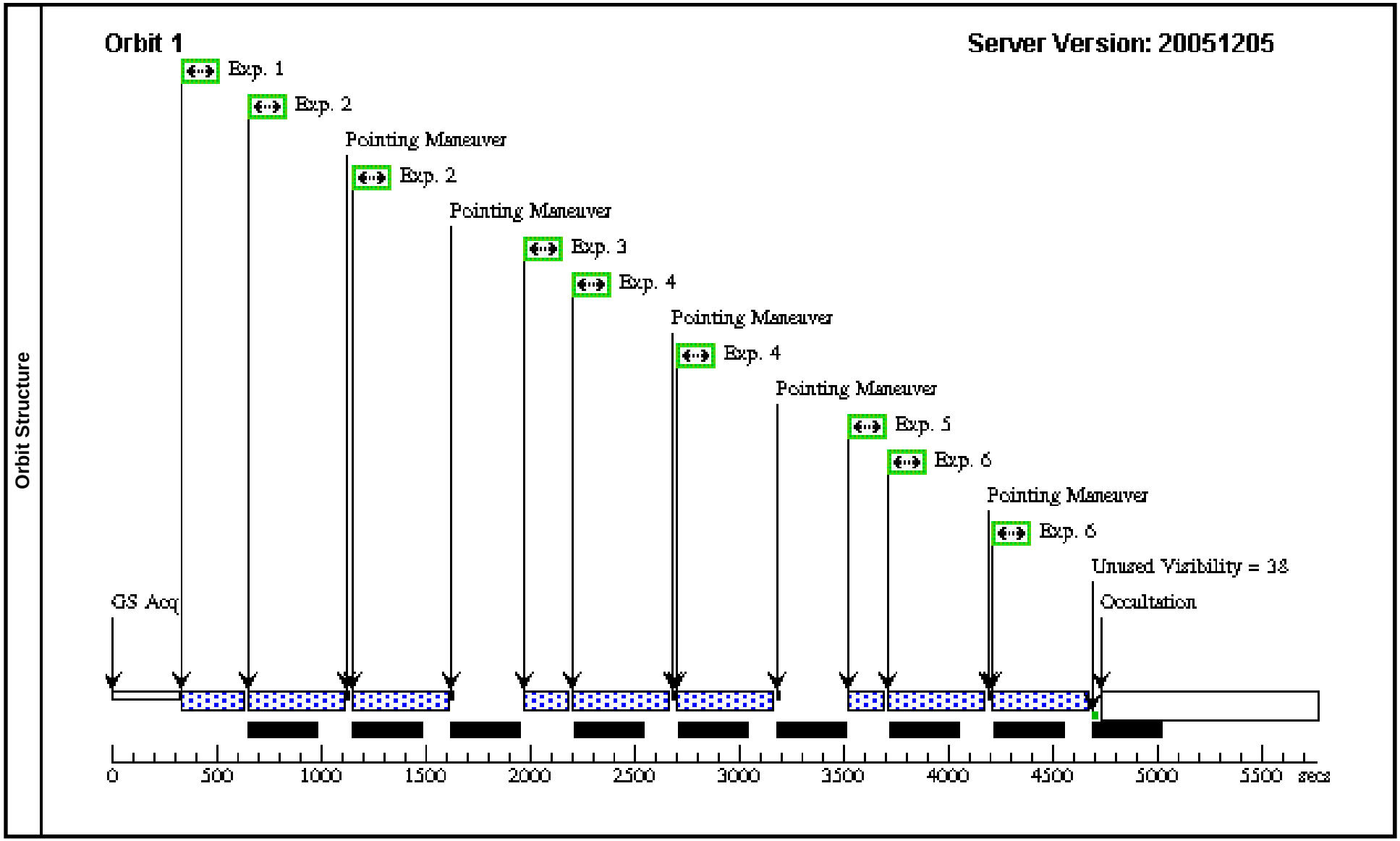
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.3 Angle Between Sides= Center Pattern=false		(2), (4), (6)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	ESO057-SC033 Alt Name1: NGC2108	RA: 05 43 57.0112 (85.9875467d) Dec: -69 10 48.14 (-69.18004d) Equinox: J2000 Plate Id: 06B0		V=12.32	Coordinate Source: GSC_SURVEY_PLATE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	N2108/F435W/short	(5) ESO057-SC033	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	90.0 Secs *[==>]*	***[1]***
2	N2108/F435W/long	(5) ESO057-SC033	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 2-2 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3	N2108/F555W/short	(5) ESO057-SC033	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	40.0 Secs *[==>]*	***[1]***
4	N2108/F555W/long	(5) ESO057-SC033	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 4-4 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5	N2108/F814W/short	(5) ESO057-SC033	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	8.0 Secs *[==>]*	***[1]***
6	N2108/F814W/long	(5) ESO057-SC033	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 6-6 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20051205
Exp. 1
Exp. 2
Pointing Maneuver
Exp. 2
Pointing Maneuver
Exp. 3
Exp. 4
Pointing Maneuver
Exp. 4
Pointing Maneuver
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 6
Unused Visibility = 38
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs

Visit

Proposal 10595, Visit 06 Sat Mar 18 04:33:11 GMT 2006

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: CVZ

Comments: ESO 121-SC03 visit

Patterns

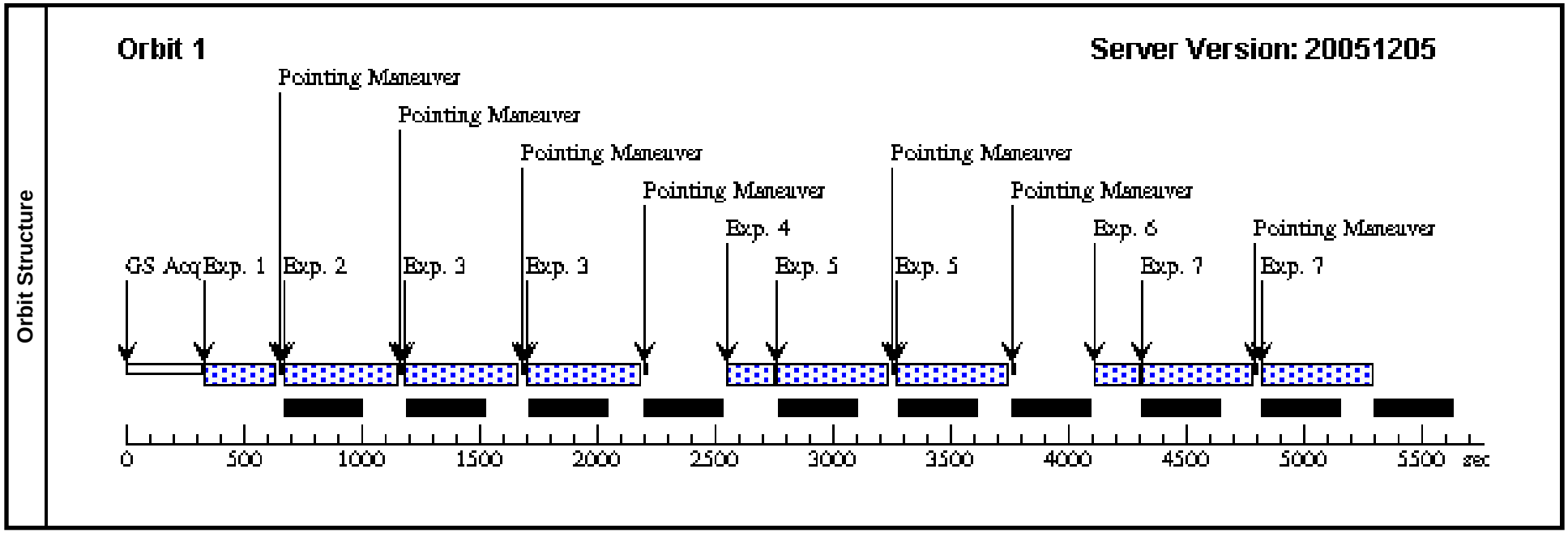
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.3 Angle Between Sides= Center Pattern=false		(3), (5), (7)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	ESO121-SC003	RA: 06 02 2.3478 (90.5097825d) Dec: -60 31 18.42 (-60.52178d) Equinox: J2000 Plate Id: 00ZC		V=14.04	Coordinate Source: GSC_SURVEY_PLATE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	ESO121-SC03/F435W/short	(6) ESO121-SC003	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2	POS TARG 0,0	Sequence 1-7 Non-Int	90.0 Secs *[==>]*	***[1]***
2	ESO121-SC03/F435W/short	(6) ESO121-SC003	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2	POS TARG 0.27335, 0.13375	Sequence 1-7 Non-Int	360.0 Secs *[==>]*	***[1]***
3	ESO121-SC03/F435W/long	(6) ESO121-SC003	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-7 Non-Int Pattern 3-3 (1)	360.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
4	ESO121-SC03/F606W/short	(6) ESO121-SC003	ACS/WFC, ACCUM, WFC1	F606W	CR-SPLIT=NO; GAIN=2		Sequence 1-7 Non-Int	10.0 Secs *[==>]*	***[1]***
5	ESO121-SC03/F606W/long	(6) ESO121-SC003	ACS/WFC, ACCUM, WFC1	F606W	CR-SPLIT=NO; GAIN=2		Sequence 1-7 Non-Int Pattern 5-5 (1)	350.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
6	ESO121-SC03/F814W/short	(6) ESO121-SC003	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-7 Non-Int	8.0 Secs *[==>]*	***[1]***
7	ESO121-SC03/F814W/long	(6) ESO121-SC003	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-7 Non-Int Pattern 7-7 (1)	350.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20051205
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
Pointing Maneuver
GS Acq
Exp. 1
Exp. 2
Exp. 3
Exp. 3
Exp. 4
Exp. 5
Exp. 5
Exp. 6
Exp. 7
Exp. 7
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 10595, Visit 07 Sat Mar 18 04:33:11 GMT 2006

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: VISIBILITY INTERVAL 4730 S

Comments: NGC1783 visit

Patterns

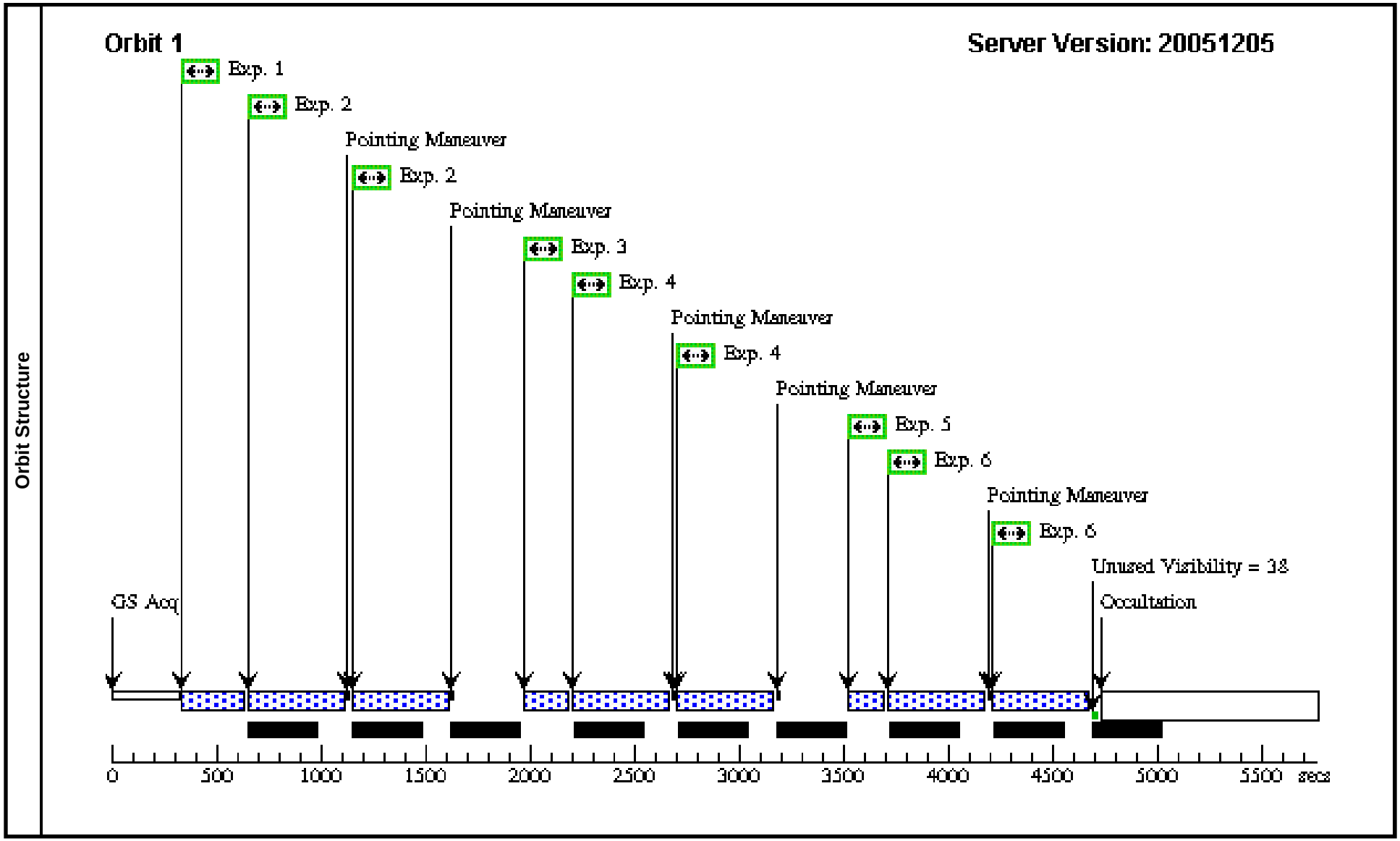
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.3 Angle Between Sides= Center Pattern=false		(2), (4), (6)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	ESO085-SC029 Alt Name1: NGC1783	RA: 04 59 8.9487 (74.7872862d) Dec: -65 59 10.85 (-65.98635d) Equinox: J2000 Plate Id: 06AF		V=10.9	Coordinate Source: GSC_SURVEY_PLATE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	N1783/F435W/short	(7) ESO085-SC029	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	90.0 Secs *[==>]*	*[1]*
2	N1783/F435W/long	(7) ESO085-SC029	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 2-2 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*
3	N1783/F555W/short	(7) ESO085-SC029	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	40.0 Secs *[==>]*	*[1]*
4	N1783/F555W/long	(7) ESO085-SC029	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 4-4 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*
5	N1783/F814W/short	(7) ESO085-SC029	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	8.0 Secs *[==>]*	*[1]*
6	N1783/F814W/long	(7) ESO085-SC029	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 6-6 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*


Orbit Structure
Orbit 1
Server Version: 20051205
Exp. 1
Exp. 2
Pointing Maneuver
Exp. 2
Pointing Maneuver
Exp. 3
Exp. 4
Pointing Maneuver
Exp. 4
Pointing Maneuver
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 6
Unused Visibility = 38
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs

Visit

Proposal 10595, Visit 08 Sat Mar 18 04:33:11 GMT 2006

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: ORIENT 0.0D TO 277.0 D; ORIENT 308.0D TO 359.9 D; VISIBILITY INTERVAL 4700 S

Comments: LW431 visit. ORIENT range chosen to avoid blooming spike from bright star near target (within FOV).

Patterns

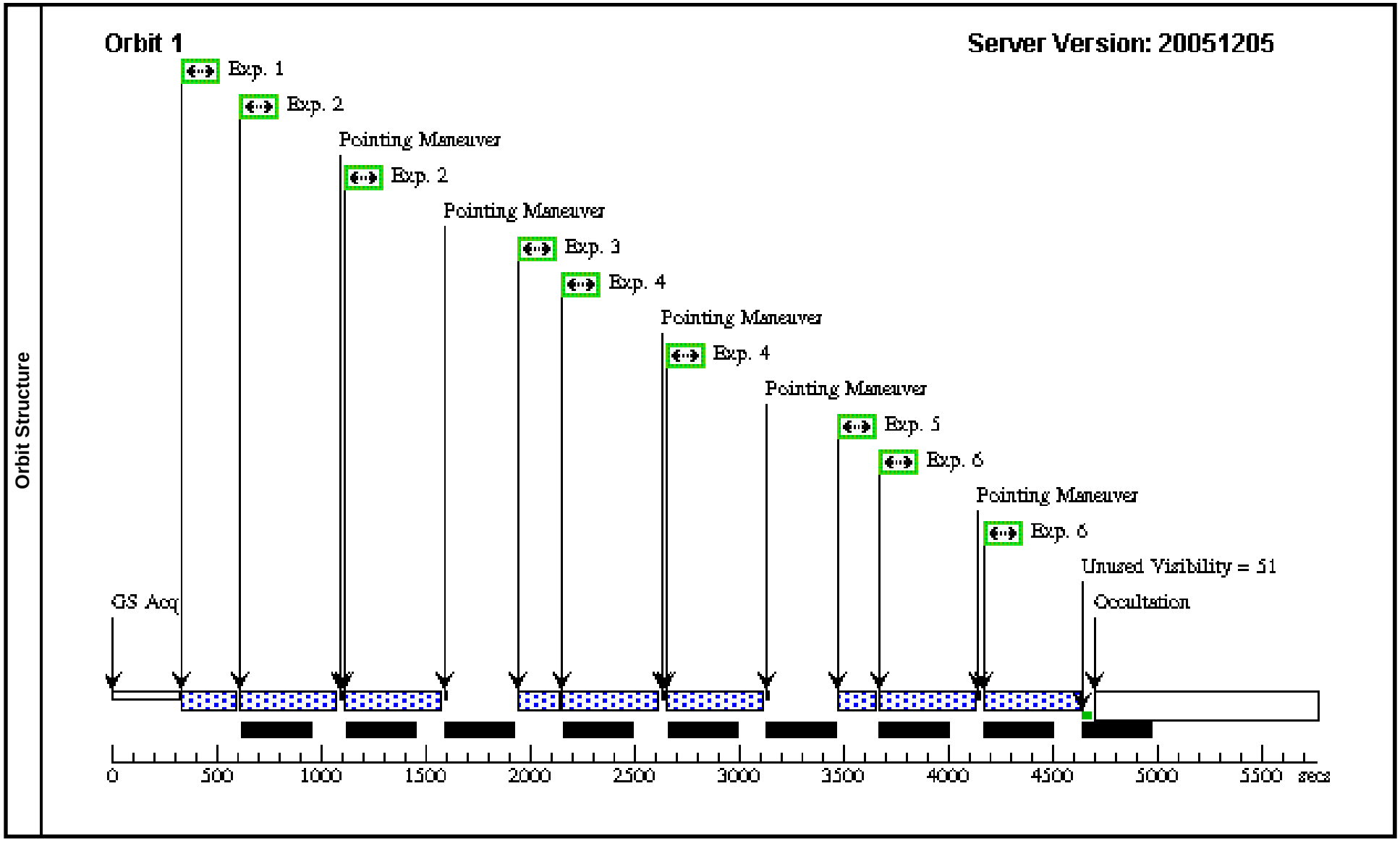
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.3 Angle Between Sides= Center Pattern=false		(2), (4), (6)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	ESO057-SC075 Alt Name1: LW431	RA: 06 13 27.0000 (93.3625000d) Dec: -70 41 43.00 (-70.69528d) Equinox: J2000 Plate Id: 014D		V=13.7	Coordinate Source: GSC_SURVEY_PLATE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	LW431/F435W/short	(8) ESO057-SC075	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	55.0 Secs *[==>]*	*[1]*
2	LW431/F435W/long	(8) ESO057-SC075	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 2-2 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*
3	LW431/F555W/short	(8) ESO057-SC075	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	25.0 Secs *[==>]*	*[1]*
4	LW431/F555W/long	(8) ESO057-SC075	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 4-4 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*
5	LW431/F814W/short	(8) ESO057-SC075	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	15.0 Secs *[==>]*	*[1]*
6	LW431/F814W/long	(8) ESO057-SC075	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 6-6 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	*[1]*


Orbit Structure
Orbit 1
Server Version: 20051205
Exp. 1
Exp. 2
Pointing Maneuver
Exp. 2
Pointing Maneuver
Exp. 3
Exp. 4
Pointing Maneuver
Exp. 4
Pointing Maneuver
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 6
Unused Visibility = 51
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs

Visit

Proposal 10595, Visit 51 Sat Mar 18 04:33:12 GMT 2006

Diagnostic Status: No Diagnostics

Scientific Instruments: ACS/WFC

Special Requirements: VISIBILITY INTERVAL 4730 S

Comments: NGC1751 visit

Patterns

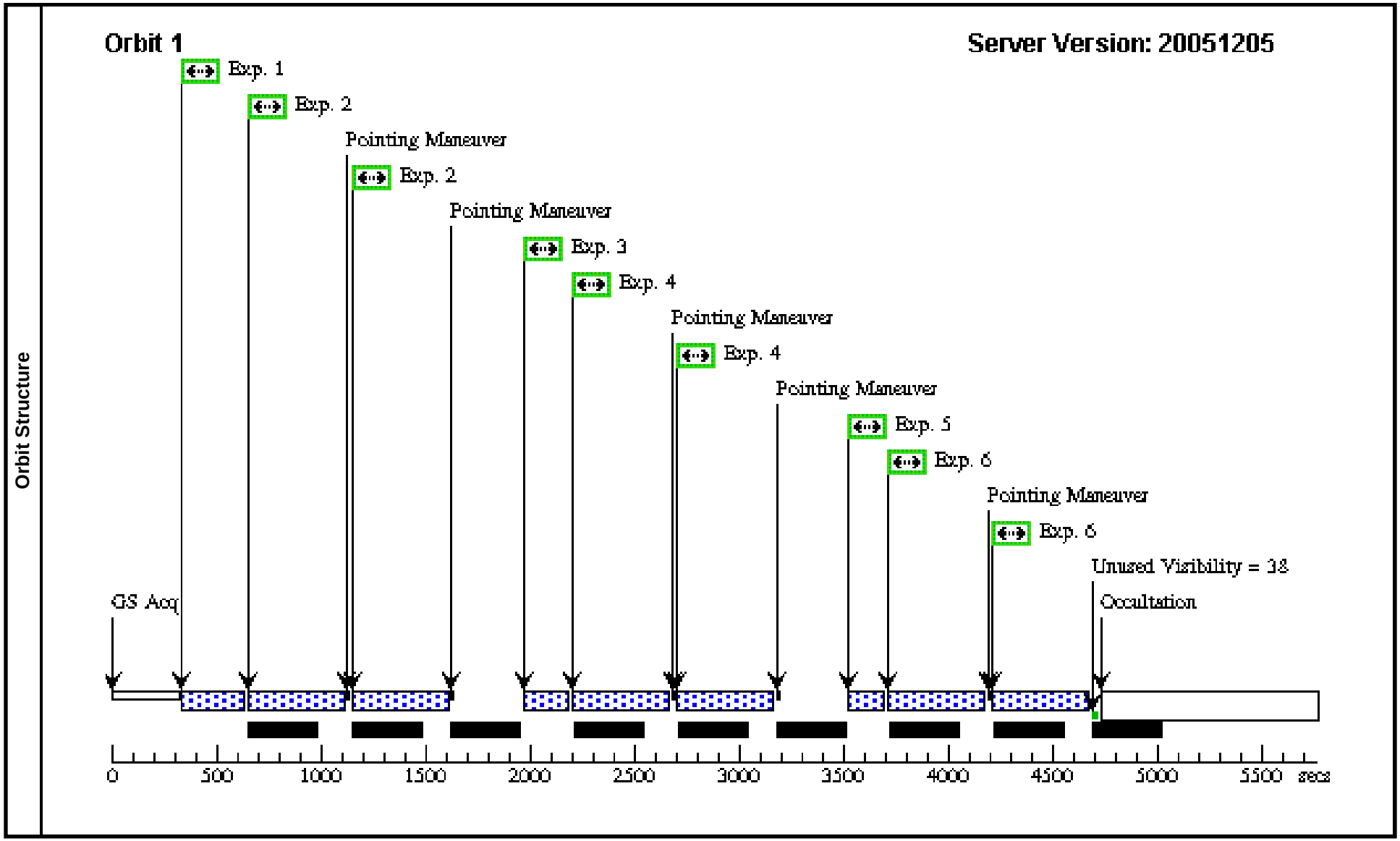
#	Primary Pattern		Secondary Pattern	Exposures
(1)	Pattern Type=ACS-WFC-DITHER-LINE Purpose=DITHER Number Of Points=2 Point Spacing=3.011 Line Spacing=	Coordinate Frame=POS-TARG Pattern Orientation=85.3 Angle Between Sides= Center Pattern=false		(2), (4), (6)

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	ESO056-SC023-COPY Alt Name1: NGC1751	RA: 04 54 12.0000 (73.5500000d) Dec: -69 48 24.00 (-69.80667d) Equinox: J2000 Plate Id: 05ZW		V=12.11	Coordinate Source: GSC_SURVEY_PLATE

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	N1751/F435W/short	(9) ESO056-SC023-COPY	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	90.0 Secs *[==>]*	***[1]***
2	N1751/F435W/long	(9) ESO056-SC023-COPY	ACS/WFC, ACCUM, WFC1	F435W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 2-2 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
3	N1751/F555W/short	(9) ESO056-SC023-COPY	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	40.0 Secs *[==>]*	***[1]***
4	N1751/F555W/long	(9) ESO056-SC023-COPY	ACS/WFC, ACCUM, WFC1	F555W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 4-4 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***
5	N1751/F814W/short	(9) ESO056-SC023-COPY	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int	8.0 Secs *[==>]*	***[1]***
6	N1751/F814W/long	(9) ESO056-SC023-COPY	ACS/WFC, ACCUM, WFC1	F814W	CR-SPLIT=NO; GAIN=2		Sequence 1-6 Non-Int Pattern 6-6 (1)	340.0 Secs *[==>(Pattern 1)]* *[==>(Pattern 2)]*	***[1]***


Orbit Structure
Orbit 1
Server Version: 20051205
Exp. 1
Exp. 2
Pointing Maneuver
Exp. 2
Pointing Maneuver
Exp. 3
Exp. 4
Pointing Maneuver
Exp. 4
Pointing Maneuver
Exp. 5
Exp. 6
Pointing Maneuver
Exp. 6
Unused Visibility = 38
Occultation
GS Acq
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs