12967 - Establishing a Network of DA White Dwarf SED Standards

Cycle: 20, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) SDSS-J010322.19-002047.7 ANY	ACS/WFC WFC3/IR WFC3/UVIS	2	25-Oct-2012 21:02:22.0	yes
02	(3) WD-0408-066 ANY	ACS/WFC WFC3/IR WFC3/UVIS	2	25-Oct-2012 21:02:44.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
03	(5) SDSS-J102430.93-003207.0 ANY	ACS/WFC WFC3/IR WFC3/UVIS	2	25-Oct-2012 21:03:03.0	yes
04	(6) WD-1204+023 ANY	ACS/WFC WFC3/IR WFC3/UVIS	2	25-Oct-2012 21:03:21.0	yes
05	(8) WD-1312-029 ANY	ACS/WFC WFC3/IR WFC3/UVIS	2	25-Oct-2012 21:03:38.0	yes
06	(10) WD-1635+008 ANY	ACS/WFC WFC3/IR WFC3/UVIS	2	25-Oct-2012 21:03:59.0	yes
07	(11) WD-2034-053 ANY	ACS/WFC WFC3/IR WFC3/UVIS	2	25-Oct-2012 21:04:16.0	yes
B9	(15) WD-0554-165 ANY	ACS/WFC WFC3/IR WFC3/UVIS	2	25-Oct-2012 21:04:33.0	yes
08	(13) WD-2327-000 ANY	ACS/WFC WFC3/IR WFC3/UVIS	2	25-Oct-2012 21:04:51.0	yes

18 Total Orbits Used

ABSTRACT

Systematic uncertainties in photometric calibration are the dominant source of error in current type Ia supernova dark energy studies, as well as other forefront cosmology efforts, e.g. photo-redshift determinations for weak lensing mass tomography. Current and next-generation ground-based all-sky surveys require a network of calibration stars with 1) known SEDs (to properly and unambiguously take into account filter differences), and 2) that are on a common photometric zeropoint scale. HST affords us the ability to establish this essential network of faint primary photometric standards, exploiting the well-understood spectral energy distributions of DA white dwarf stars, without the complications of observing through the time-

variable Earth's atmosphere.

We have selected an initial set of equatorial DA targets that will have SNR ~200 in the LSST (and PanSTARRS and Dark Energy Survey) survey images, while avoiding saturation. This places primary photometric standards directly into in the multi-epoch all-sky LSST and other simailar databases. By using ground-based spectra, not

for spectrophotometry, but to obtain the two parameters (temperature and log(g)) that determine the SED, we can use broadband HST photometry to set the overall flux scale for each source, and determine any applicable reddening. Thus calibrated, these standards can then be used as flux standards at wavelengths well beyond the range of HST, and in any arbitrary, but defined passband. This precision photometric heritage from HST will benefit essentially all existing and upcoming survey projects, and directly addresses one of the current barriers to understanding the nature of dark energy.

OBSERVING DESCRIPTION

We originally proposed to observe 15 DA white dwarfs and surrounding fields distributed around the celestial equator with purpose of establishing them as SED standards accessible to telescopes and surveys in both hemispheres. The targets are chosen from SDSS data, which provide an outstanding list of confirmed DA white dwarfs with well considered selection criteria (Prieto et al. 2009). We have adopted two of the sources identified by Prieto et al. (2009) that lie at appropriate declination, supplemented with other confirmed DA's with appropriate temperatures taken from Eisenstein et al. (2006). Our sample is optimal in that it spans a practical range of magnitudes and includes stars with temperatures ranging from 20,000 K to 80,000K. As pointed out in Holberg \& Bergeron (2006) having such a range of temperatures minimizes the possible effects of any temperature-dependent model biases.

In Phase-I we asked for18 orbits based on exposure estimates, and nominal overheads. While constructing Phase-II we have been unable to fit all of the observations in because of the inefficiency introduced by data dumps,

whose consequences were not clear in Phase-I planning. As a consequence, we have chosen 9 (of the original 15) best targets, and prepared the observing plan accordingly for both primary and parallel observations.

We detail the observing descriptions below:

PRIMARY OBSERVATIONS

We will obtain imaging of our targets with WFC3 in 5 select bands: u,g,r,i and H. Our multiple exposures are designed to allow CR rejection in all bands, and have a small positional offset in all of these pass-bands.
This complement of passbands is necessary for our goals. The Stromgren u (F336W) is chosen because it sits entirely shortward of the Balmer Jump (BJ), and so allows a way to measure it. For our targets, the BJ is sensitive to temperature, but in a different way than the Paschen continuum slope. This breaks any degeneracy between reddening and temperature, a critical function for our goal. The specific choice of Sloan g,r,i to measure the Paschen continuum provides a direct measure in bands being used in large surveys today (e.g. SDSS, PanSTARRS) and planned in the future (e.g. Dark Energy Survey with DECam, LSST). The H band anchors
measurements as far longward as HST will allow.

The exposure times chosen allow for S/N better than 200 for each of the targetted white dwarfs, while staying shorter than half of the time to saturation. The arrangements of the various exposures times (with their respective durations) within an orbit have been specially crafted to allow for the most efficient disposition of the data-dumps. Disrupting this sequence will insert "dead time" between exposures that severely compromise efficiency.

The HST/WFC3 system response and CTE corrections needed are regularly monitored by the WFC3 instrument support group (which has Co-I representation on this proposal) to an accuracy of ~ 0.002 mag. We will rely on this to ensure that the observations of our targets are uniform and self-consistent at this level.

Other stars in the file of WFC3 will also be calibrated to the HST standardized Sloan u,g,r and i bands, and the near IR H band. Since the WFC3 state of calibration through the standard calibration programs is accurate to 0.002 mag, these additional stars will serve as secondary standards in this system.

PARALLEL OBSERVATIONS:

In fields adjacent to the WD that the ACS lands on with no prior contraint on ORIENT, we still expect to see several stars brighter than 21, for which S/N better than 100 can be obtained. These will mostly be
K dwarfs, but also some G stars, and an occassional F. The original plan to obtain photometry in the SDSS g,r,i,z passbands has been compromised by the afore-mentioned data-dump overhead limitation, and we have
chosen to proceed with only the g and i bands. Thes eobservations will give as photometry tied to the current calibration of HST (and ACS in

particular), which is based on 3 bright DA white dwarfs. For ground based astronomy concerned about atmospheric extinction effects on measured color, the ACS stars will be observed in the same field, and so simultaneously, as the white dwarfs (ground based FOVs are typically large enough to include the angular separation between WFC3 and ACS).

The ACS ETC shows that our planned expsosures will obtain S/N better than 100 for stars at g=21.7 with spectral classes ranging from F0V through M5V. The HST/ACS system reponse and CTE correction prescription are also monitored by the ACS instrument support group, which again has Co-I representation on this proposal. The photometric stability that can be attained is also $\sim .002$ mag, which will ensure adequate photometric uniformity for our coordinated parallel fields.These measurements will supplement the standardization stars in the primary WFC3 fields. Although now limited only to g and i (due to the data dump issue), the ACS photometry will extend deeper, with S/N ~ 100 to nearly g=22.

Visit

Proposal 12967, T1 (01), implementation Fri Oct 26 01:05:03 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; ORIENT 0D TO 250 D; ORIENT 270D TO 290 D; ORIENT 315D TO 359 D

Comments: ORIENT restrictions are to avoid blooming and cross talk from brighter stars on WFC3.

Fixed Targets

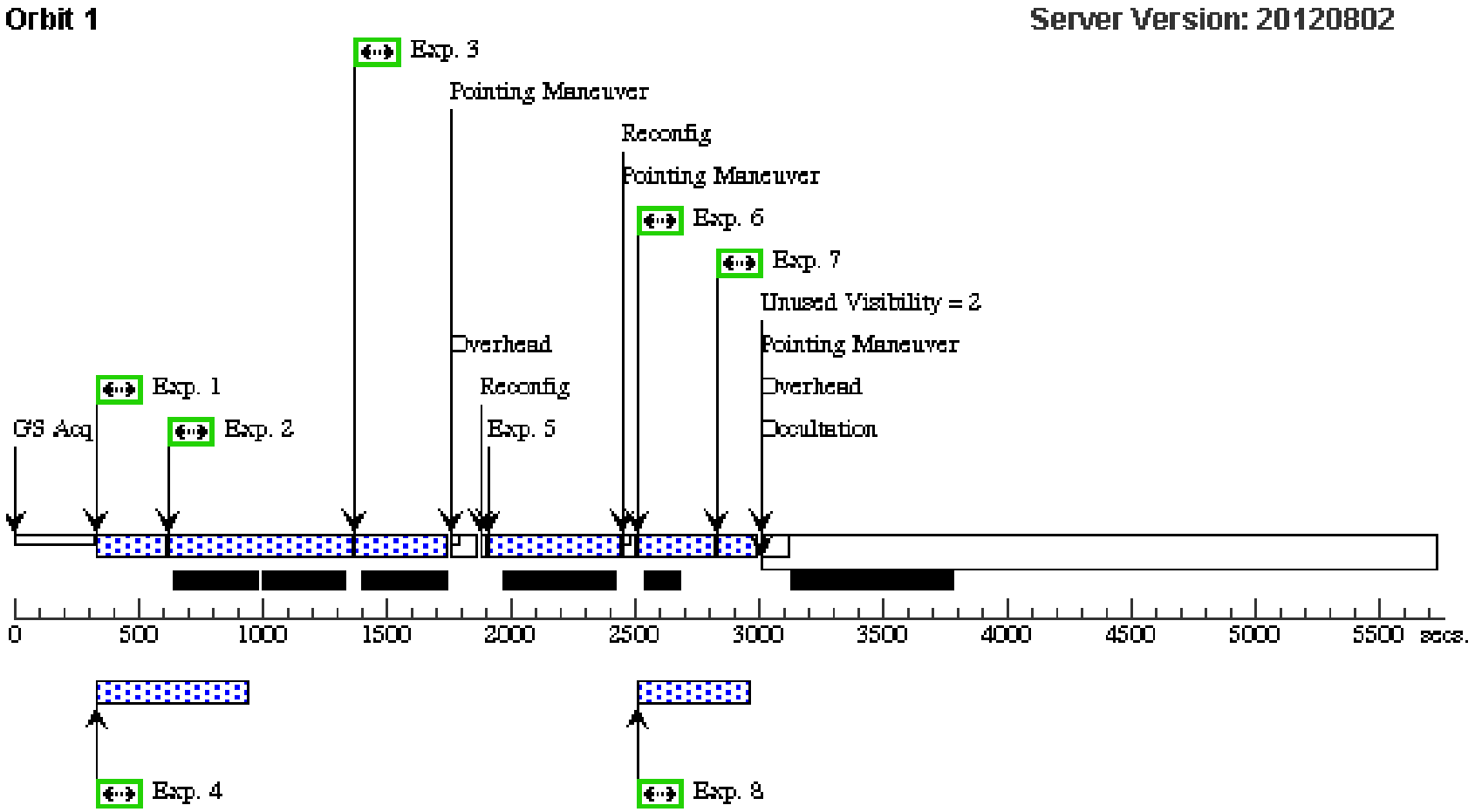
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	SDSS-J010322.19-002047.7	RA: 01 03 22.1910 (15.8424625d) Dec: -00 20 47.73 (-.34659d) Equinox: J2000		V=(?) Sloan g =19.1 +/- .05	Reference Frame: ICRS

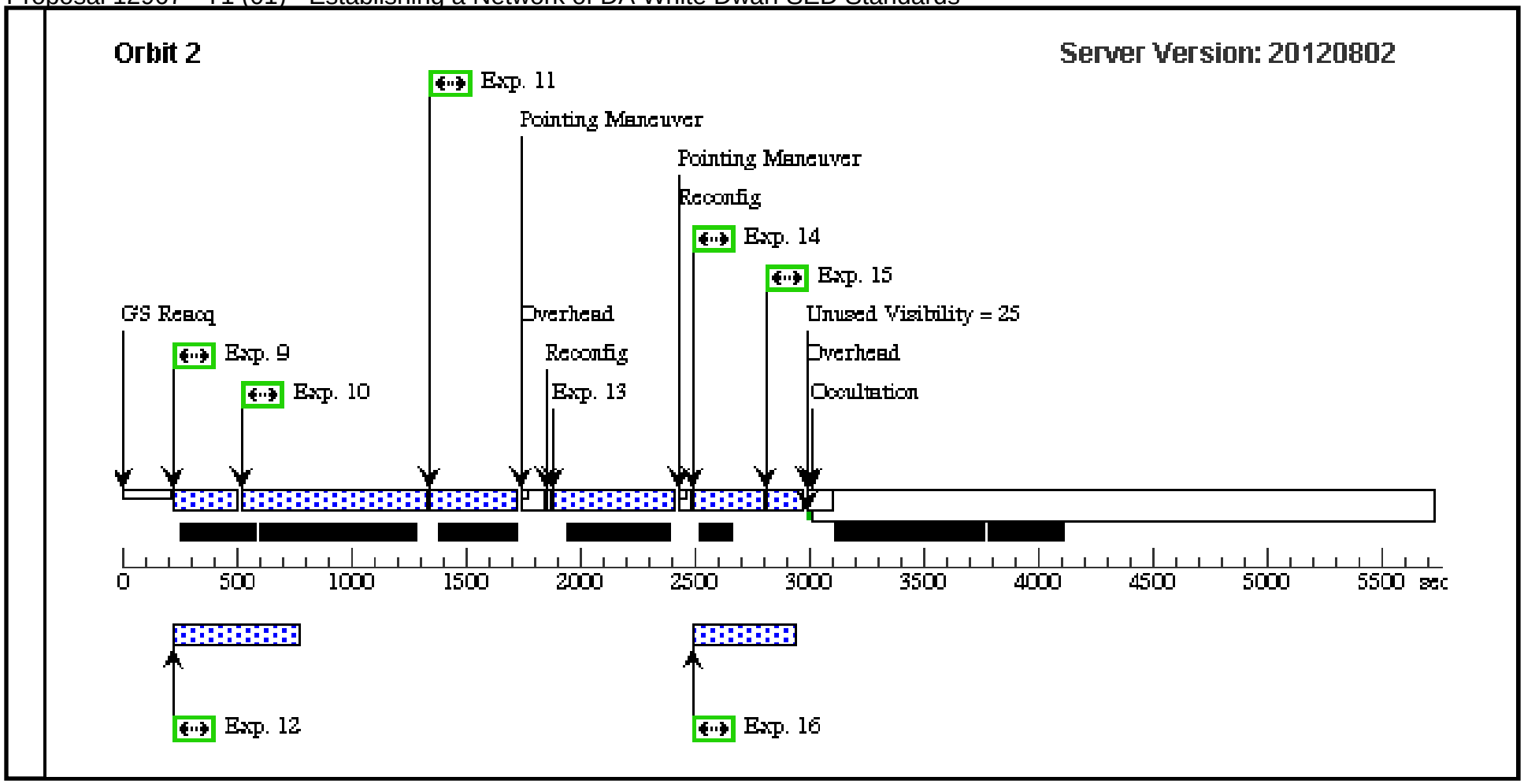
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	T1-g1	(1) SDSS-J010322.19-002047.7	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8		Prime + Parallel Group 1-4 in T1 (01)	120 Secs *[==>]*	***[1]***
2	T1-i1	(1) SDSS-J010322.19-002047.7	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W			Prime + Parallel Group 1-4 in T1 (01)	605 Secs *[==>]*	***[1]***
3	T1-r1	(1) SDSS-J010322.19-002047.7	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W			Prime + Parallel Group 1-4 in T1 (01)	350 Secs *[==>]*	***[1]***
4	T1-par-g1	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 1-4 in T1 (01)	400 Secs *[==>]*	***[1]***
5	T1-H1	(1) SDSS-J010322.19-002047.7	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11			*[==>]*	***[1]***
6	T1-u1a	(1) SDSS-J010322.19-002047.7	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T1 (01)	160 Secs *[==>]*	***[1]***
7	T1-u1b	(1) SDSS-J010322.19-002047.7	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T1 (01)	160 Secs *[==>]*	***[1]***
8	T1-par-i1	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 6-8 in T1 (01)	300 Secs *[==>]*	***[1]***
9	T1-u2	(1) SDSS-J010322.19-002047.7	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12	POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T1 (01)	160 Secs *[==>]*	***[2]***
10	T1-i2	(1) SDSS-J010322.19-002047.7	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T1 (01)	680 Secs *[==>]*	***[2]***
11	T1-r2	(1) SDSS-J010322.19-002047.7	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T1 (01)	355 Secs *[==>]*	***[2]***
12	T1-par-g2	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 9-12 in T1 (01)	400 Secs *[==>]*	***[2]***
13	T1-H2	(1) SDSS-J010322.19-002047.7	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11	POS TARG 1.50,1.50		*[==>]*	***[2]***
14	T1-g2a	(1) SDSS-J010322.19-002047.7	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T1 (01)	160 Secs *[==>]*	***[2]***
15	T1-g2b	(1) SDSS-J010322.19-002047.7	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T1 (01)	160 Secs *[==>]*	***[2]***
16	T1-par-i2	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 14-16 in T1 (01)	300 Secs *[==>]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20120802
Exp. 11
Pointing Maneuver
Pointing Maneuver
Reconfig
Exp. 14
Exp. 15
GS Reacq
Exp. 9
Exp. 10
Overhead
Reconfig
Exp. 13
Unused Visibility = 25
Overhead
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 12
Exp. 16

Visit

Proposal 12967, T3 (02), implementation Fri Oct 26 01:05:06 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; ORIENT 0D TO 10 D; ORIENT 90D TO 190 D; ORIENT 270D TO 359 D

Comments: ORIENT restrictions are to avoid blooming and cross talk from brighter stars on WFC3.

Fixed Targets

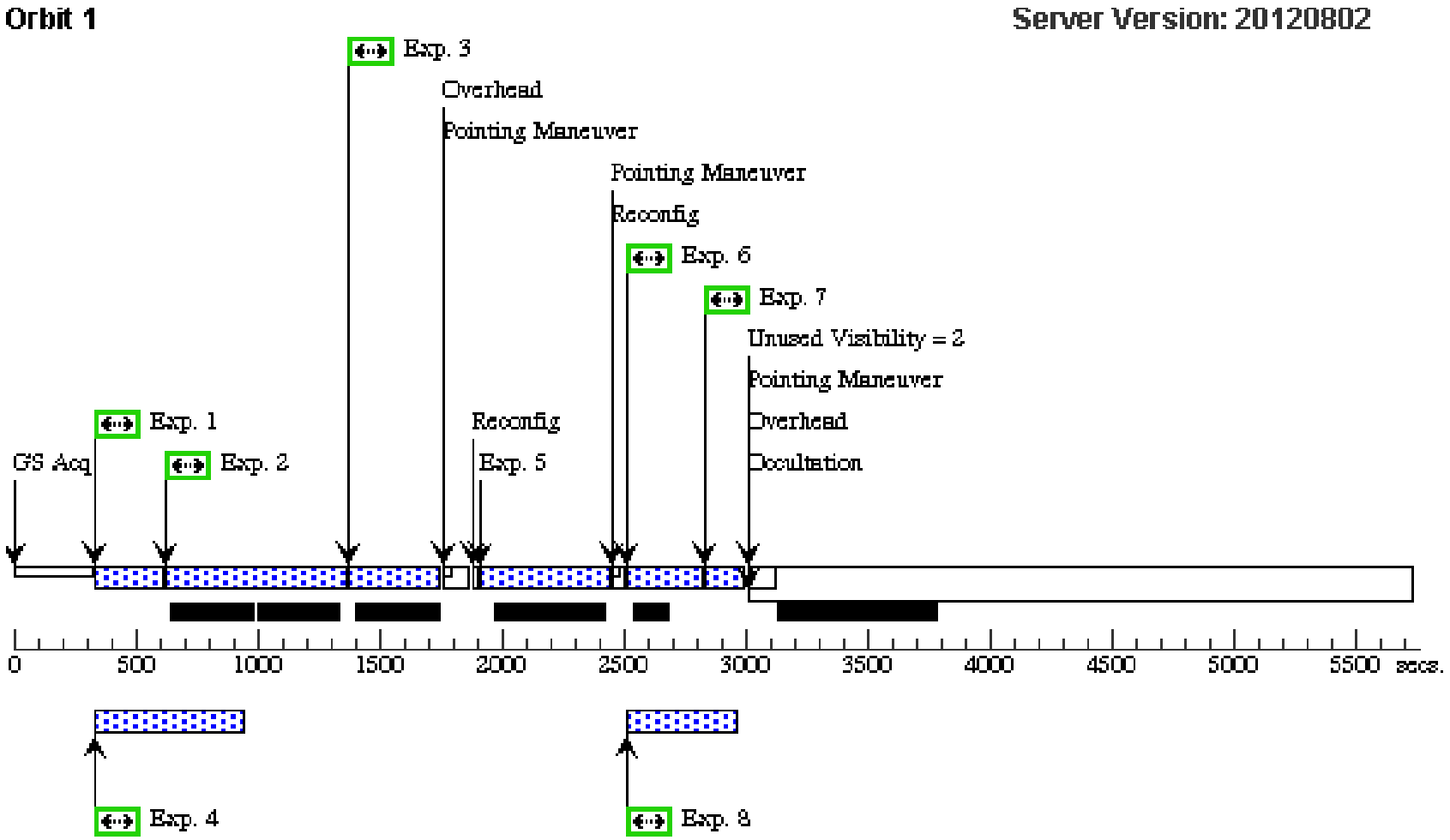
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	WD-0408-066	RA: 04 10 53.6340 (62.7234750d) Dec: -06 30 27.75 (-6.50771d) Equinox: J2000		V=(?) Sloan g =18.9 +/- .05	Reference Frame: ICRS

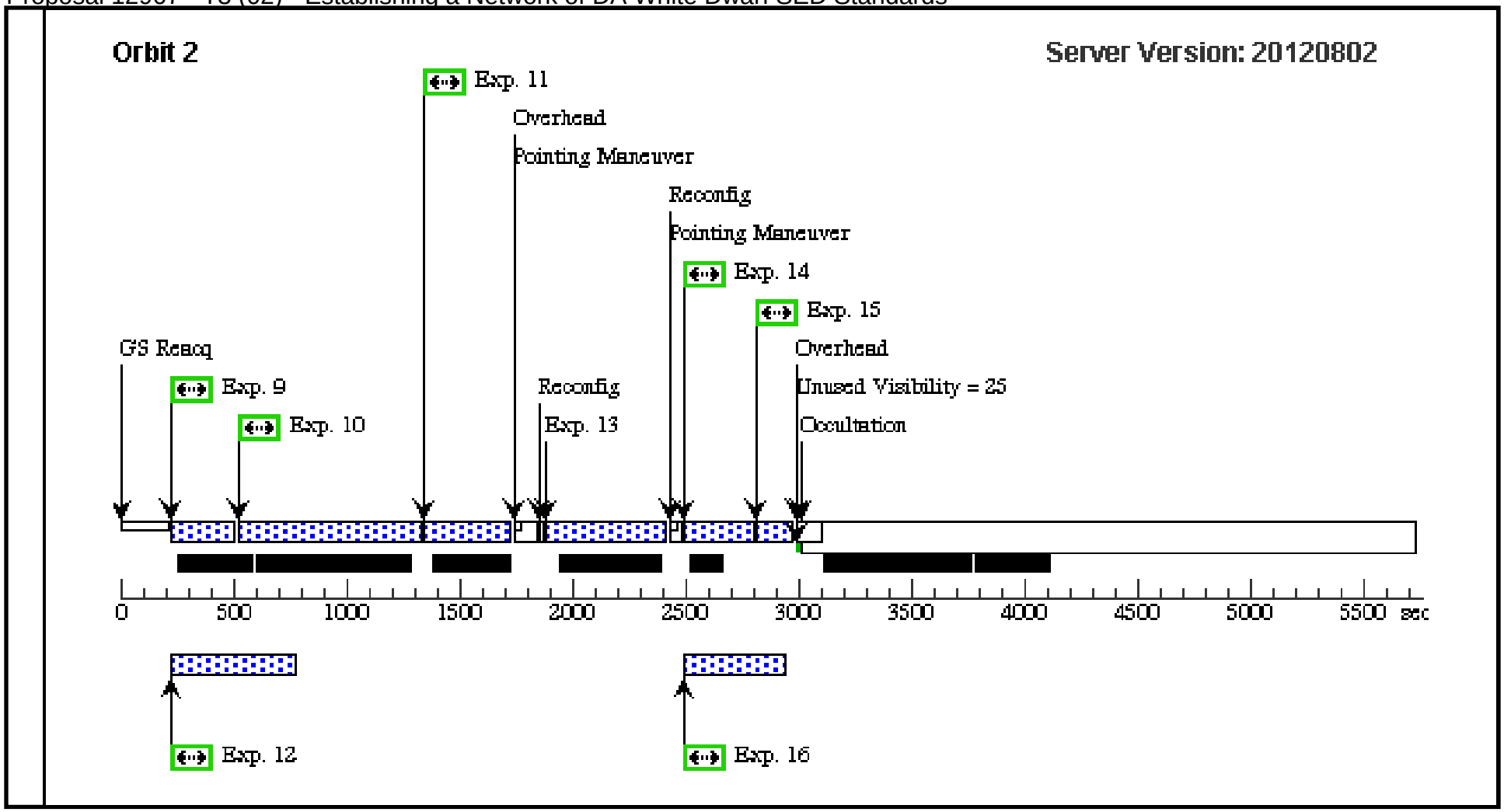
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	T3-g1	(3) WD-0408-066	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8		Prime + Parallel Group 1-4 in T3 (02)	120 Secs	
								[==>]	***[1]***
2	T3-i1	(3) WD-0408-066	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W			Prime + Parallel Group 1-4 in T3 (02)	605 Secs	
								[==>]	***[1]***
3	T3-r1	(3) WD-0408-066	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W			Prime + Parallel Group 1-4 in T3 (02)	350 Secs	
								[==>]	***[1]***
4	T3-par-g1	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 1-4 in T3 (02)	400 Secs	
								[==>]	***[1]***
5	T3-H1	(3) WD-0408-066	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11			*[==>]*	***[1]***
6	T3-u1a	(3) WD-0408-066	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T3 (02)	160 Secs	
								[==>]	***[1]***
7	T3-u1b	(3) WD-0408-066	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T3 (02)	160 Secs	
								[==>]	***[1]***
8	T3-par-i1	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 6-8 in T3 (02)	300 Secs	
								[==>]	***[1]***
9	T3-u2	(3) WD-0408-066	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12	POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T3 (02)	160 Secs	
								[==>]	***[2]***
10	T3-i2	(3) WD-0408-066	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T3 (02)	680 Secs	
								[==>]	***[2]***
11	T3-r2	(3) WD-0408-066	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T3 (02)	355 Secs	
								[==>]	***[2]***
12	T3-par-g2	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 9-12 in T3 (02)	400 Secs	
								[==>]	***[2]***
13	T3-H2	(3) WD-0408-066	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11	POS TARG 1.50,1.50		*[==>]*	***[2]***
14	T3-g2a	(3) WD-0408-066	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T3 (02)	160 Secs	
								[==>]	***[2]***
15	T3-g2b	(3) WD-0408-066	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T3 (02)	160 Secs	
								[==>]	***[2]***
16	T3-par-i2	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 14-16 in T3 (02)	300 Secs	
								[==>]	***[2]***

Orbit Structure




Orbit 2
Server Version: 20120802
Exp. 11
Overhead
Pointing Maneuver
Reconfig
Pointing Maneuver
Exp. 14
Exp. 15
GS Reacq
Exp. 9
Exp. 10
Reconfig
Exp. 13
Overhead
Unused Visibility = 25
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 12
Exp. 16

Visit

Proposal 12967, T5 (03), implementation Fri Oct 26 01:05:12 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; ORIENT 0D TO 20 D; ORIENT 80D TO 215 D; ORIENT 275D TO 359 D

Comments: ORIENT restrictions are to avoid blooming and cross talk from brighter stars on WFC3.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	SDSS-J102430.93-003207.0	RA: 10 24 30.9320 (156.1288833d) Dec: -00 32 7.03 (-.53529d) Equinox: J2000		V=(?) Sloan g =18.9 +/- .05	Reference Frame: ICRS

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/[Actual Dur.]	Orbit
1	T5-g1	(5) SDSS-J102430.93-003207.0	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8		Prime + Parallel Group 1-4 in T5 (03)	120 Secs	
								[==>]	***[1]***
2	T5-i1	(5) SDSS-J102430.93-003207.0	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W			Prime + Parallel Group 1-4 in T5 (03)	605 Secs	
								[==>]	***[1]***
3	T5-r1	(5) SDSS-J102430.93-003207.0	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W			Prime + Parallel Group 1-4 in T5 (03)	350 Secs	
								[==>]	***[1]***
4	T5-par-g1	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 1-4 in T5 (03)	400 Secs	
								[==>]	***[1]***
5	T5-H1	(5) SDSS-J102430.93-003207.0	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11			*[==>]*	***[1]***
6	T5-u1a	(5) SDSS-J102430.93-003207.0	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T5 (03)	160 Secs	
								[==>]	***[1]***
7	T5-u1b	(5) SDSS-J102430.93-003207.0	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T5 (03)	160 Secs	
								[==>]	***[1]***
8	T5-par-i1	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 6-8 in T5 (03)	300 Secs	
								[==>]	***[1]***
9	T5-u2	(5) SDSS-J102430.93-003207.0	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12	POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T5 (03)	160 Secs	
								[==>]	***[2]***
10	T5-i2	(5) SDSS-J102430.93-003207.0	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T5 (03)	680 Secs	
								[==>]	***[2]***
11	T5-r2	(5) SDSS-J102430.93-003207.0	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T5 (03)	355 Secs	
								[==>]	***[2]***
12	T5-par-g2	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 9-12 in T5 (03)	400 Secs	
								[==>]	***[2]***
13	T5-H2	(5) SDSS-J102430.93-003207.0	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11	POS TARG 1.50,1.50		*[==>]*	***[2]***
14	T5-g2a	(5) SDSS-J102430.93-003207.0	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T5 (03)	160 Secs	
								[==>]	***[2]***
15	T5-g2b	(5) SDSS-J102430.93-003207.0	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T5 (03)	160 Secs	
								[==>]	***[2]***
16	T5-par-i2	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 14-16 in T5 (03)	300 Secs	
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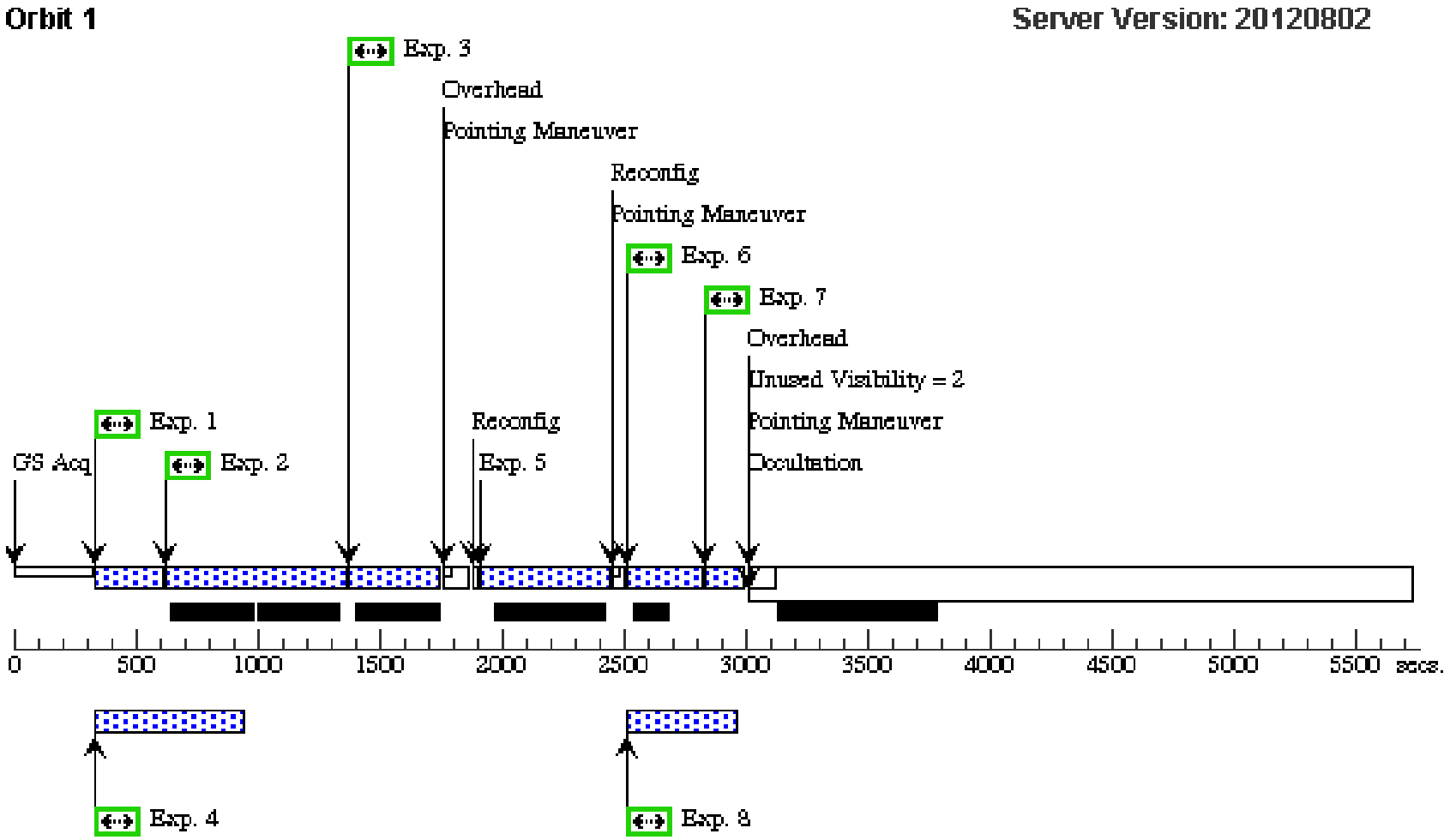
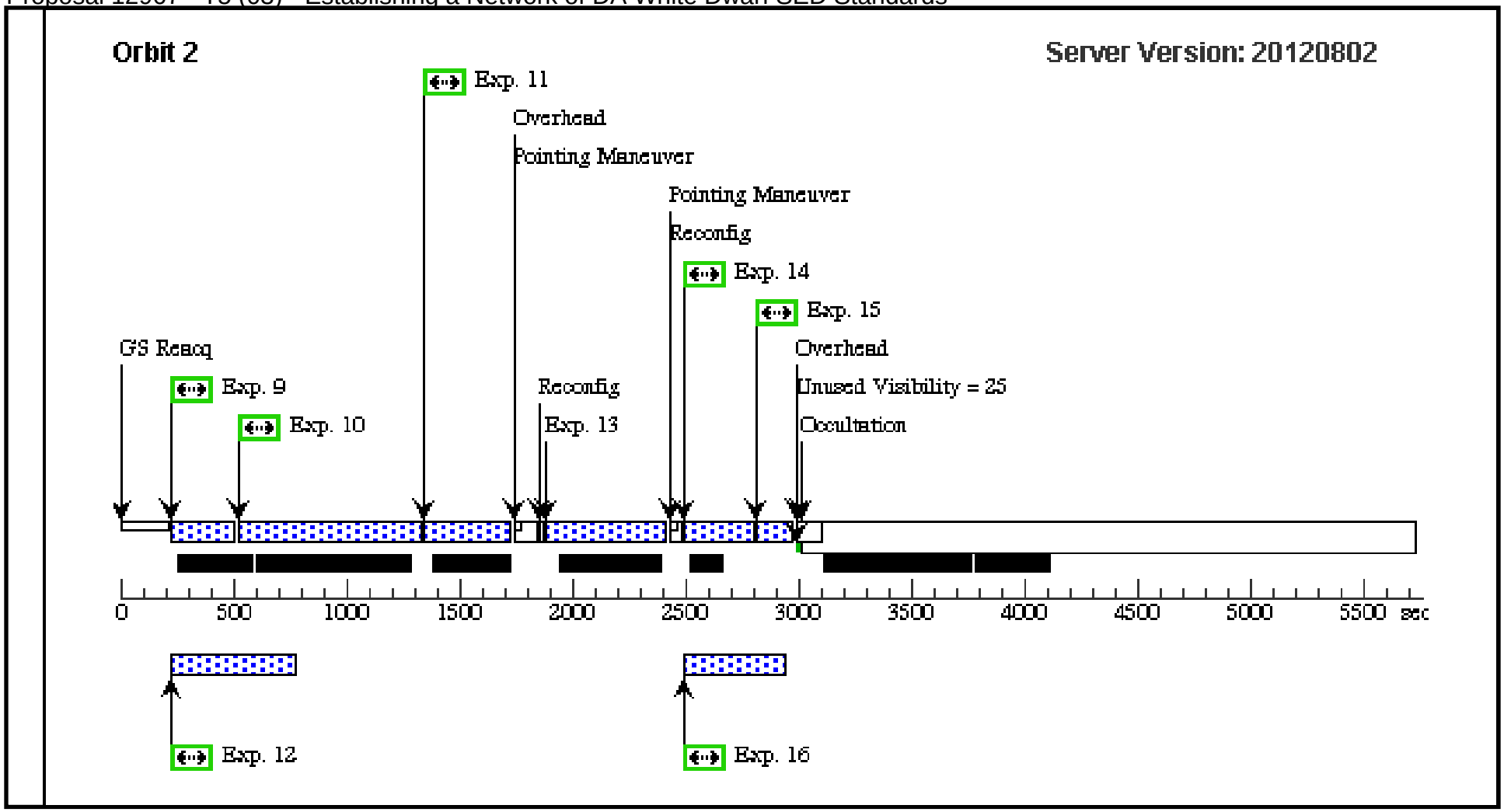
Orbit Structure




Orbit 2
Server Version: 20120802
Exp. 11
Overhead
Pointing Maneuver
Pointing Maneuver
Reconfig
Exp. 14
Exp. 15
GS Reacq
Exp. 9
Exp. 10
Reconfig
Exp. 13
Overhead
Unused Visibility = 25
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 12
Exp. 16

Visit

Proposal 12967, T6 (04), implementation Fri Oct 26 01:05:14 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; ORIENT 0D TO 10 D; ORIENT 30D TO 100 D; ORIENT 110D TO 117 D; ORIENT 126D TO 140 D; ORIENT 165D TO 185 D; ORIENT 240D TO 280 D; ORIENT 315D TO 359 D

Comments: ORIENT restrictions are to avoid blooming and cross talk from brighter stars on WFC3.

Fixed Targets

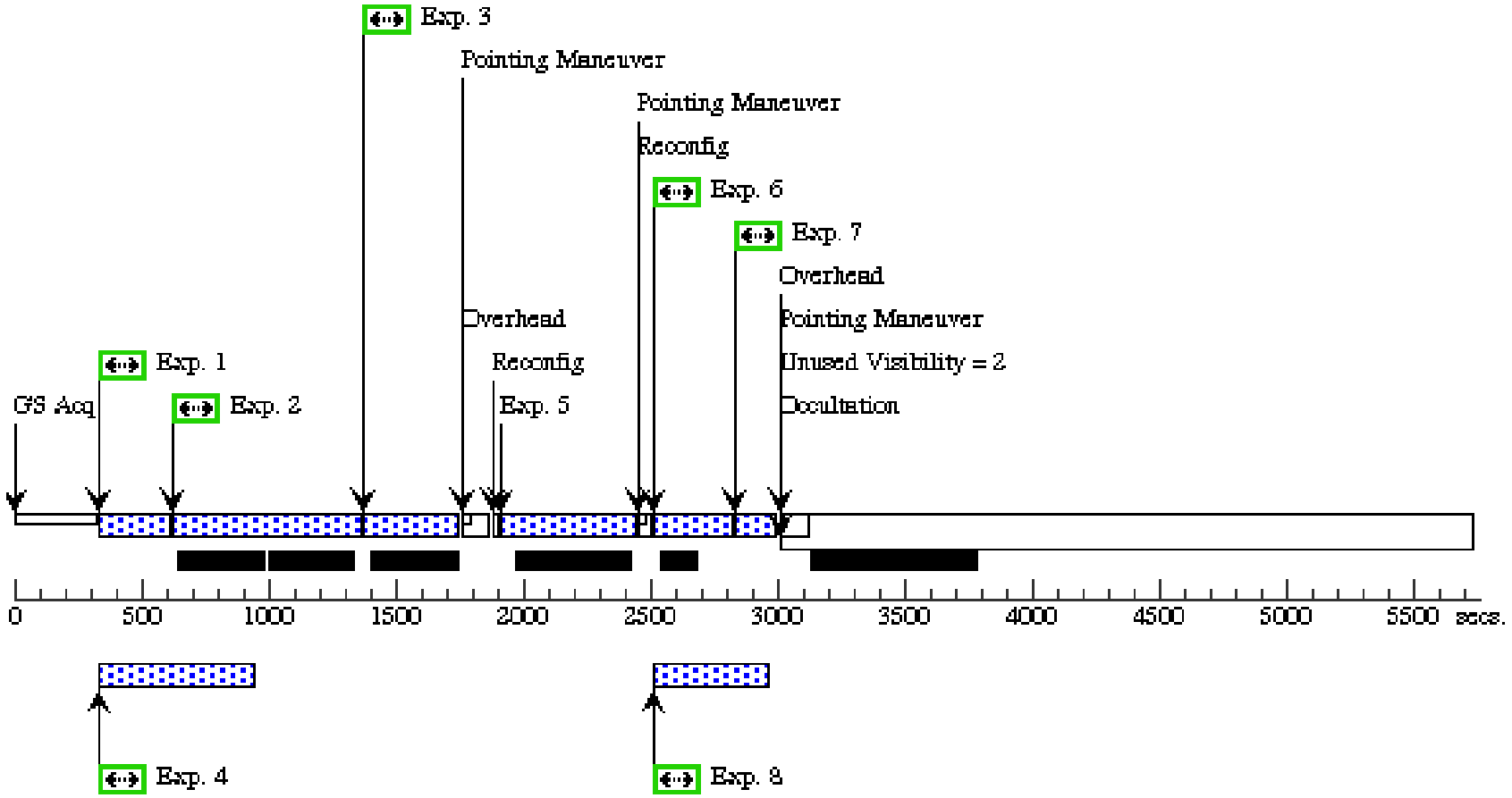
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	WD-1204+023	RA: 12 06 50.4080 (181.7100333d) Dec: +02 01 42.46 (2.02846d) Equinox: J2000		V=(?) Sloan g = 18.7 +/- .05	Reference Frame: ICRS

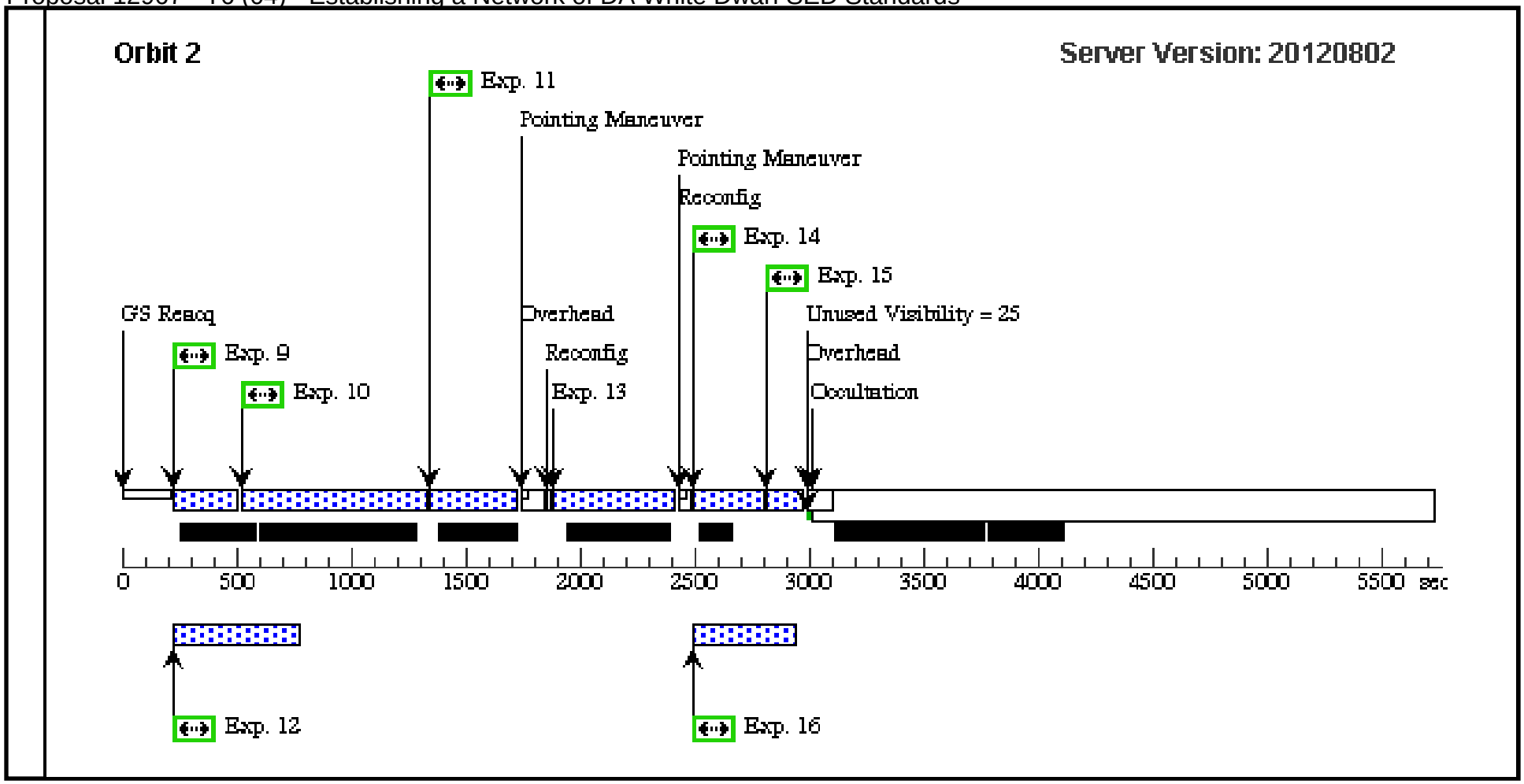
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	T6-g1	(6) WD-1204+023	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8		Prime + Parallel Group 1-4 in T6 (04)	120 Secs	
								[==>]	***[1]***
2	T6-i1	(6) WD-1204+023	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W			Prime + Parallel Group 1-4 in T6 (04)	605 Secs	
								[==>]	***[1]***
3	T6-r1	(6) WD-1204+023	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W			Prime + Parallel Group 1-4 in T6 (04)	350 Secs	
								[==>]	***[1]***
4	T6-par-g1	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 1-4 in T6 (04)	400 Secs	
								[==>]	***[1]***
5	T6-H1	(6) WD-1204+023	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11			*[==>]*	***[1]***
6	T6-u1a	(6) WD-1204+023	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T6 (04)	160 Secs	
								[==>]	***[1]***
7	T6-u1b	(6) WD-1204+023	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T6 (04)	160 Secs	
								[==>]	***[1]***
8	T6-par-i1	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 6-8 in T6 (04)	300 Secs	
								[==>]	***[1]***
9	T6-u2	(6) WD-1204+023	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12	POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T6 (04)	160 Secs	
								[==>]	***[2]***
10	T6-i2	(6) WD-1204+023	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T6 (04)	680 Secs	
								[==>]	***[2]***
11	T6-r2	(6) WD-1204+023	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T6 (04)	355 Secs	
								[==>]	***[2]***
12	T6-par-g2	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 9-12 in T6 (04)	400 Secs	
								[==>]	***[2]***
13	T6-H2	(6) WD-1204+023	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11	POS TARG 1.50,1.50		*[==>]*	***[2]***
14	T6-g2a	(6) WD-1204+023	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T6 (04)	160 Secs	
								[==>]	***[2]***
15	T6-g2b	(6) WD-1204+023	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T6 (04)	160 Secs	
								[==>]	***[2]***
16	T6-par-i2	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 14-16 in T6 (04)	300 Secs	
								[==>]	***[2]***

Orbit Structure




Orbit 2
Server Version: 20120802
Exp. 11
Pointing Maneuver
Pointing Maneuver
Reconfig
Exp. 14
Exp. 15
GS Reacq
Exp. 9
Exp. 10
Overhead
Reconfig
Exp. 13
Unused Visibility = 25
Overhead
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 12
Exp. 16

Visit

Proposal 12967, T8 (05), implementation Fri Oct 26 01:05:17 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; ORIENT 0D TO 20 D; ORIENT 30D TO 90 D; ORIENT 120D TO 125 D; ORIENT 146D TO 160 D; ORIENT 220D TO 250 D; ORIENT 270D TO 280 D; ORIENT 300D TO 320 D; ORIENT 350D TO 359 D

Comments: ORIENT restrictions are to avoid blooming and cross talk from brighter stars on WFC3.

Fixed Targets

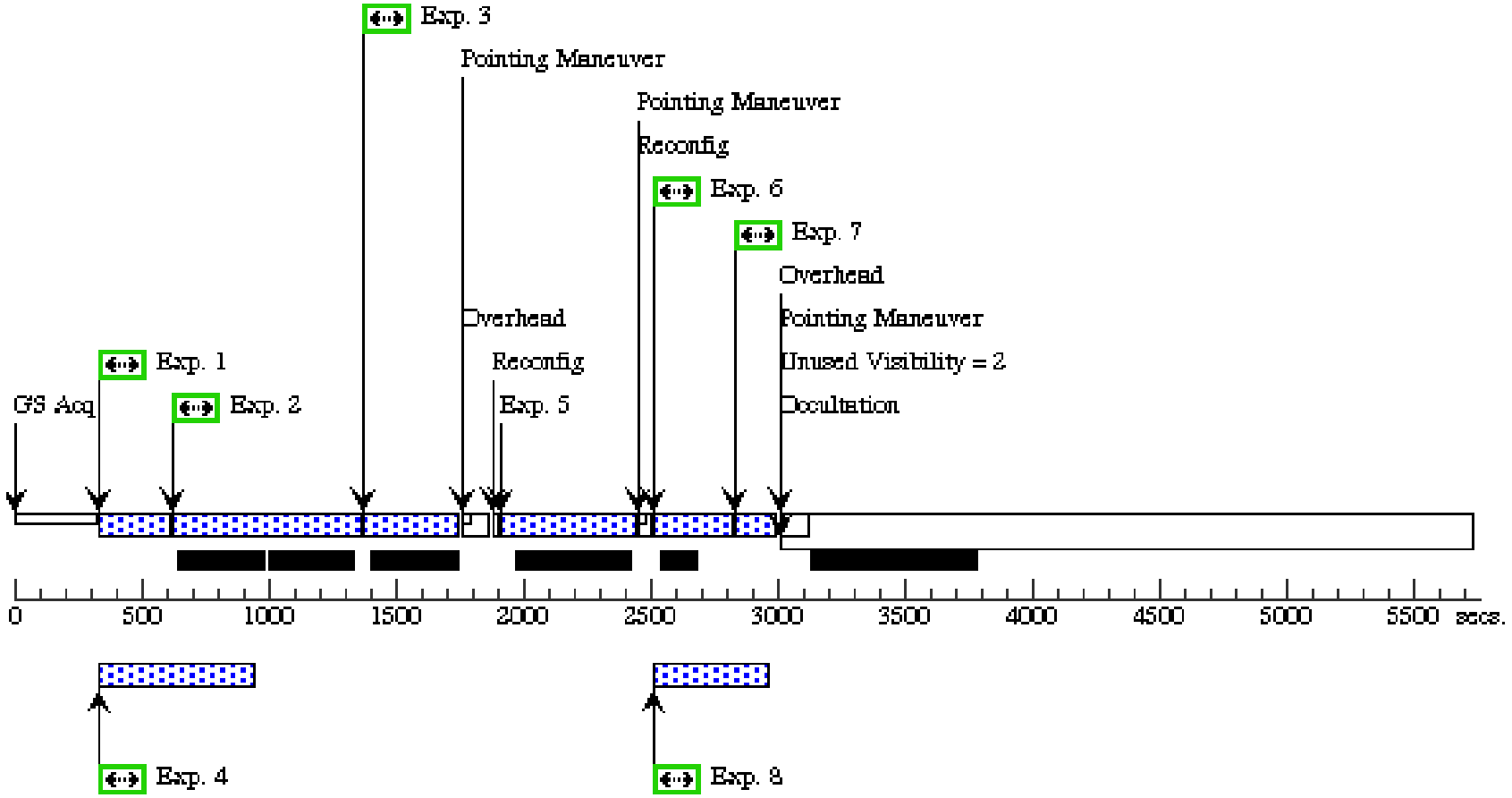
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	WD-1312-029	RA: 13 14 45.0500 (198.6877083d)		V=(?)	Reference Frame: ICRS
		Dec: -03 14 15.64 (-3.23768d)		Sloan g =19.0 +/- .05	
		Equinox: J2000			

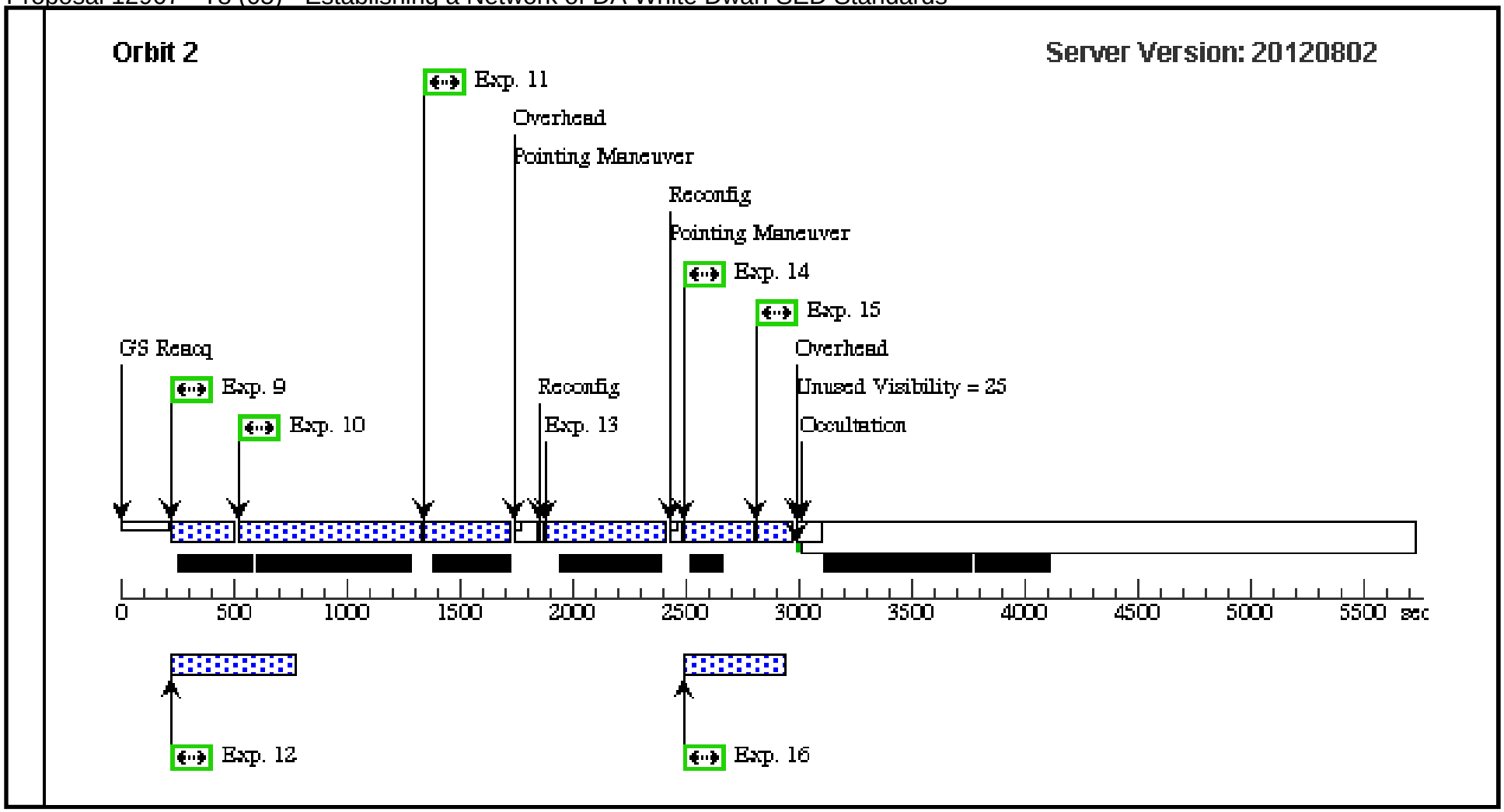
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	T8-g1	(8) WD-1312-029	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8		Prime + Parallel Group 1-4 in T8 (05)	120 Secs	
								[==>]	***[1]***
2	T8-i1	(8) WD-1312-029	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W			Prime + Parallel Group 1-4 in T8 (05)	605 Secs	
								[==>]	***[1]***
3	T8-r1	(8) WD-1312-029	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W			Prime + Parallel Group 1-4 in T8 (05)	350 Secs	
								[==>]	***[1]***
4	T8-par-g1	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 1-4 in T8 (05)	400 Secs	
								[==>]	***[1]***
5	T8-H1	(8) WD-1312-029	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11			*[==>]*	***[1]***
6	T8-u1a	(8) WD-1312-029	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T8 (05)	160 Secs	
								[==>]	***[1]***
7	T8-u1b	(8) WD-1312-029	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T8 (05)	160 Secs	
								[==>]	***[1]***
8	T8-par-i1	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 6-8 in T8 (05)	300 Secs	
								[==>]	***[1]***
9	T8-u2	(8) WD-1312-029	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12	POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T8 (05)	160 Secs	
								[==>]	***[2]***
10	T8-i2	(8) WD-1312-029	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T8 (05)	680 Secs	
								[==>]	***[2]***
11	T8-r2	(8) WD-1312-029	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T8 (05)	355 Secs	
								[==>]	***[2]***
12	T8-par-g2	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 9-12 in T8 (05)	400 Secs	
								[==>]	***[2]***
13	T8-H2	(8) WD-1312-029	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11	POS TARG 1.50,1.50		*[==>]*	***[2]***
14	T8-g2a	(8) WD-1312-029	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T8 (05)	160 Secs	
								[==>]	***[2]***
15	T8-g2b	(8) WD-1312-029	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T8 (05)	160 Secs	
								[==>]	***[2]***
16	T8-par-i2	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 14-16 in T8 (05)	300 Secs	
								[==>]	***[2]***

Orbit Structure




Orbit 2
Server Version: 20120802
Exp. 11
Overhead
Pointing Maneuver
Reconfig
Pointing Maneuver
Exp. 14
Exp. 15
GS Reacq
Exp. 9
Exp. 10
Reconfig
Exp. 13
Overhead
Unused Visibility = 25
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 12
Exp. 16

Visit

Proposal 12967, T10 (06), implementation Fri Oct 26 01:05:19 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; ORIENT 50D TO 70 D; ORIENT 80D TO 100 D; ORIENT 125D TO 150 D; ORIENT 220D TO 320 D

Comments: ORIENT restrictions are to avoid blooming and cross talk from brighter stars on WFC3.

Fixed Targets

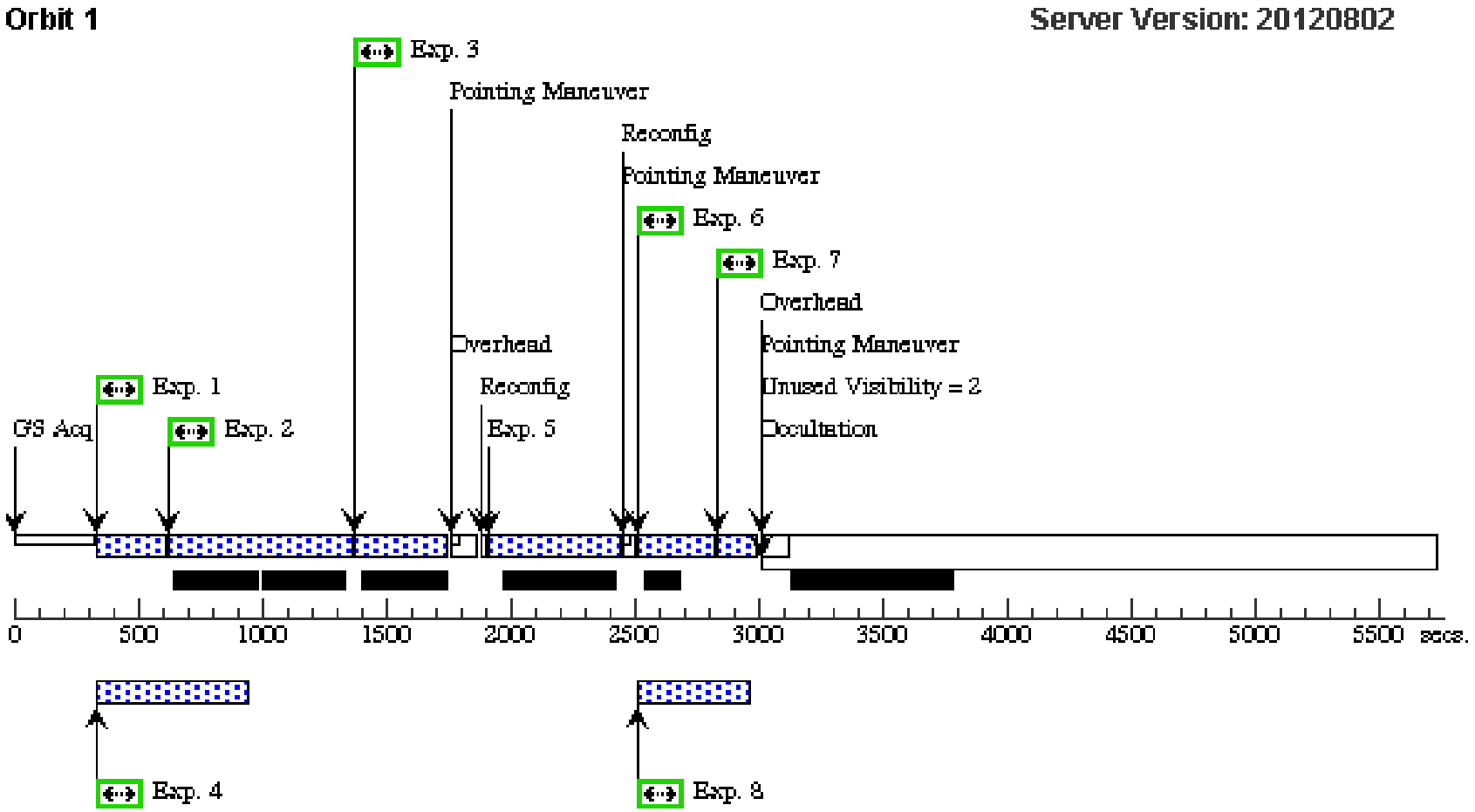
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(10)	WD-1635+008	RA: 16 38 0.3600 (249.5015000d) Dec: +00 47 17.80 (.78828d) Equinox: J2000		V=(?) Sloan g = 18.8 +/- .05	Reference Frame: ICRS

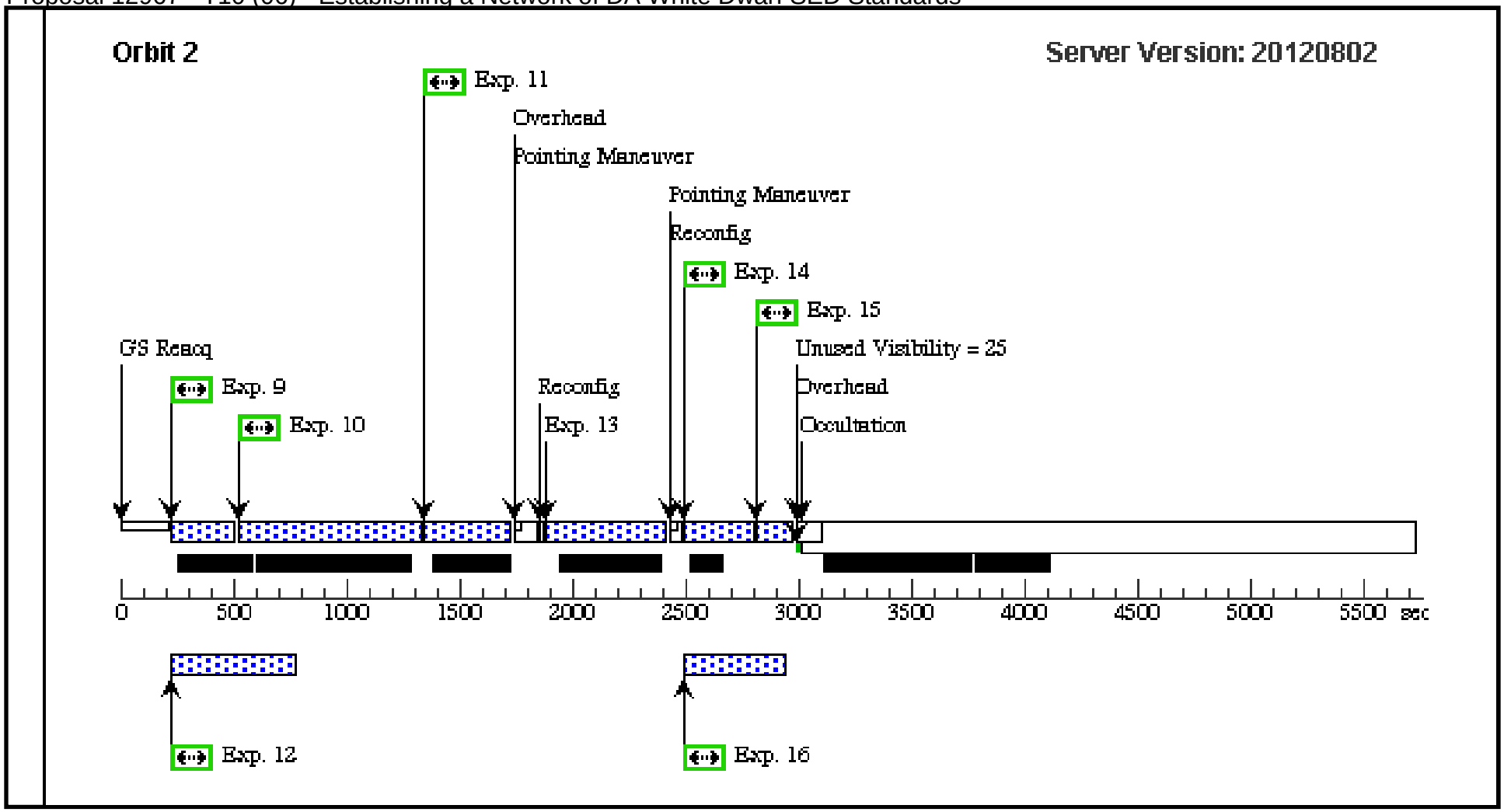
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	T10-g1	(10) WD-1635+008	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8		Prime + Parallel Group 1-4 in T10 (06)	120 Secs	
								[==>]	***[1]***
2	T10-i1	(10) WD-1635+008	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W			Prime + Parallel Group 1-4 in T10 (06)	605 Secs	
								[==>]	***[1]***
3	T10-r1	(10) WD-1635+008	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W			Prime + Parallel Group 1-4 in T10 (06)	350 Secs	
								[==>]	***[1]***
4	T10-par-g1	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 1-4 in T10 (06)	400 Secs	
								[==>]	***[1]***
5	T10-H1	(10) WD-1635+008	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11			*[==>]*	***[1]***
6	T10-u1a	(10) WD-1635+008	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T10 (06)	160 Secs	
								[==>]	***[1]***
7	T10-u1b	(10) WD-1635+008	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T10 (06)	160 Secs	
								[==>]	***[1]***
8	T10-par-i1	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 6-8 in T10 (06)	300 Secs	
								[==>]	***[1]***
9	T10-u2	(10) WD-1635+008	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12	POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T10 (06)	160 Secs	
								[==>]	***[2]***
10	T10-i2	(10) WD-1635+008	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T10 (06)	680 Secs	
								[==>]	***[2]***
11	T10-r2	(10) WD-1635+008	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T10 (06)	355 Secs	
								[==>]	***[2]***
12	T10-par-g2	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 9-12 in T10 (06)	400 Secs	
								[==>]	***[2]***
13	T10-H2	(10) WD-1635+008	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11	POS TARG 1.50,1.50		*[==>]*	***[2]***
14	T10-g2a	(10) WD-1635+008	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T10 (06)	160 Secs	
								[==>]	***[2]***
15	T10-g2b	(10) WD-1635+008	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T10 (06)	160 Secs	
								[==>]	***[2]***
16	T10-par-i2	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 14-16 in T10 (06)	300 Secs	
								[==>]	***[2]***

Orbit Structure




Orbit 2
Server Version: 20120802
Exp. 11
Overhead
Pointing Maneuver
Pointing Maneuver
Reconfig
Exp. 14
Exp. 15
GS Reacq
Unused Visibility = 25
Exp. 9
Reconfig
Overhead
Exp. 10
Exp. 13
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 12
Exp. 16

Visit

Proposal 12967, T11 With Postflash (07), implementation Fri Oct 26 01:05:21 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; ORIENT 60D TO 65 D; ORIENT 80D TO 90 D; ORIENT 140D TO 160 D; ORIENT 230D TO 245 D; ORIENT 330D TO 340 D

Comments: ORIENT restrictions are to avoid blooming and cross talk from brighter stars on WFC3.

Fixed Targets

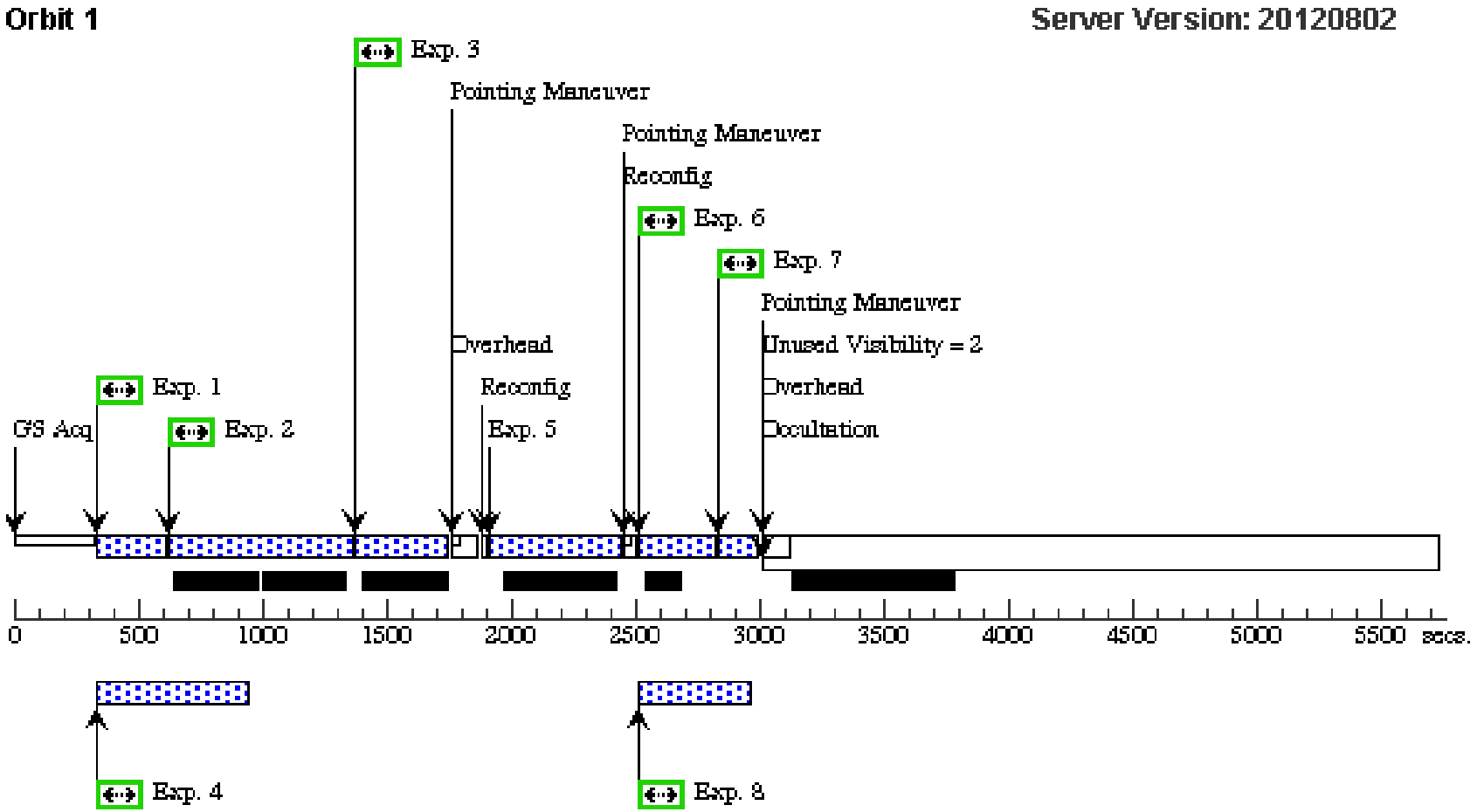
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(11)	WD-2034-053	RA: 20 37 22.1670 (309.3423625d) Dec: -05 13 3.03 (-5.21751d) Equinox: J2000		V=(?) Sloan g =18.9 +/- .05	Reference Frame: ICRS

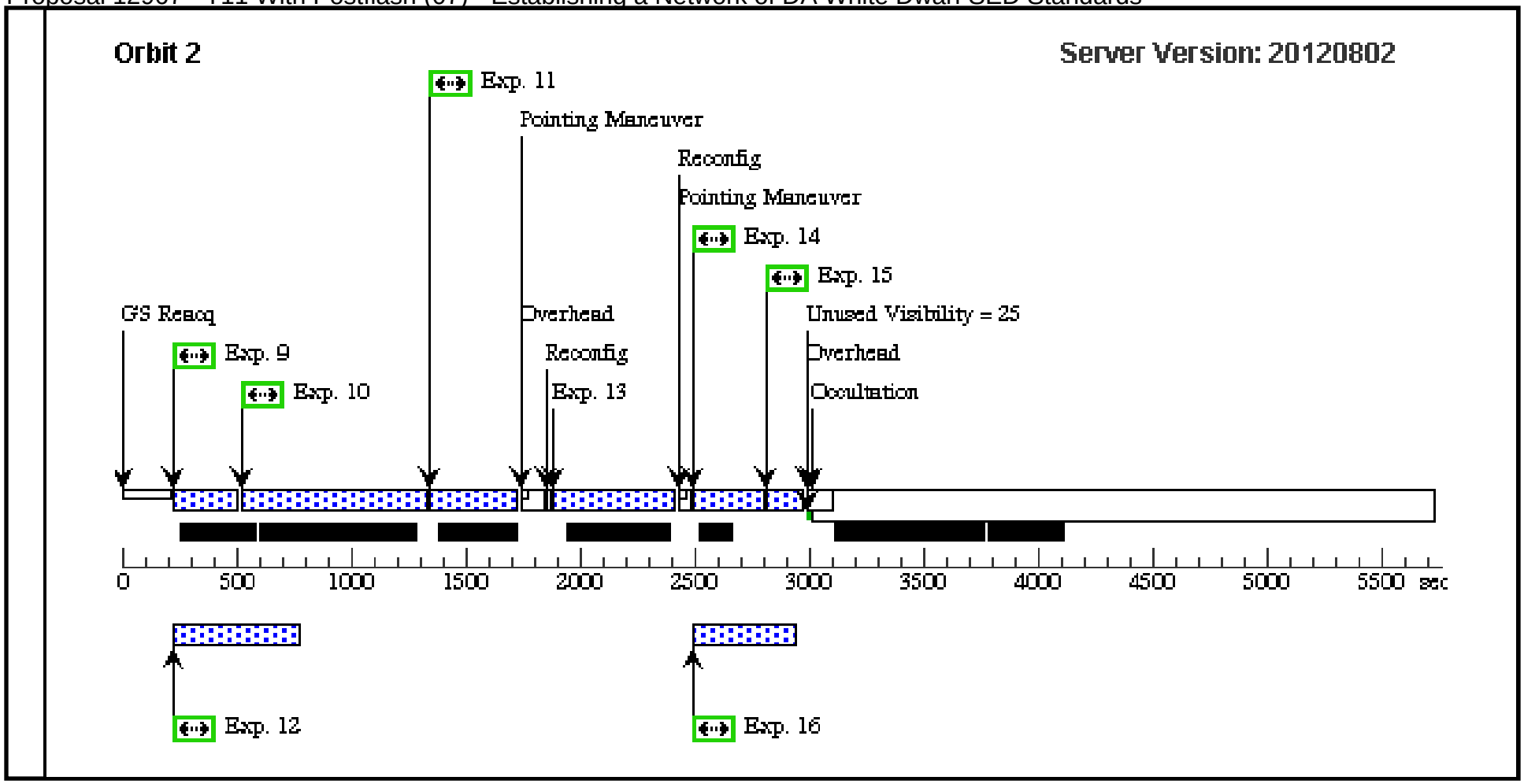
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	T11-g1	(11) WD-2034-053	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8		Prime + Parallel Group 1-4 in T11 With Postflash (07)	120 Secs *[==>]*	***[1]***
2	T11-i1	(11) WD-2034-053	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W			Prime + Parallel Group 1-4 in T11 With Postflash (07)	605 Secs *[==>]*	***[1]***
3	T11-r1	(11) WD-2034-053	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W			Prime + Parallel Group 1-4 in T11 With Postflash (07)	350 Secs *[==>]*	***[1]***
4	T11-par-g1	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 1-4 in T11 With Postflash (07)	400 Secs *[==>]*	***[1]***
5	T11-H1	(11) WD-2034-053	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11			*[==>]*	***[1]***
6	T11-u1a	(11) WD-2034-053	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T11 With Postflash (07)	160 Secs *[==>]*	***[1]***
7	T11-u1b	(11) WD-2034-053	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T11 With Postflash (07)	160 Secs *[==>]*	***[1]***
8	T11-par-i1	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 6-8 in T11 With Postflash (07)	300 Secs *[==>]*	***[1]***
9	T11-u2	(11) WD-2034-053	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12	POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T11 With Postflash (07)	160 Secs *[==>]*	***[2]***
10	T11-i2	(11) WD-2034-053	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T11 With Postflash (07)	680 Secs *[==>]*	***[2]***
11	T11-r2	(11) WD-2034-053	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T11 With Postflash (07)	355 Secs *[==>]*	***[2]***
12	T11-par-g2	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 9-12 in T11 With Postflash (07)	400 Secs *[==>]*	***[2]***
13	T11-H2	(11) WD-2034-053	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11	POS TARG 1.50,1.50		*[==>]*	***[2]***
14	T11-g2a	(11) WD-2034-053	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T11 With Postflash (07)	160 Secs *[==>]*	***[2]***
15	T11-g2b	(11) WD-2034-053	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T11 With Postflash (07)	160 Secs *[==>]*	***[2]***
16	T11-par-i2	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 14-16 in T11 With Postflash (07)	300 Secs *[==>]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20120802
Exp. 11
Pointing Maneuver
Reconfig
Pointing Maneuver
Exp. 14
Exp. 15
GS Reacq
Overhead
Unused Visibility = 25
Exp. 9
Reconfig
Overhead
Exp. 10
Exp. 13
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 12
Exp. 16

Visit

Proposal 12967, T15 Postflash Replaces Visit 09 (B9), implementation Fri Oct 26 01:05:23 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; ORIENT 40D TO 50 D; ORIENT 115D TO 125 D; ORIENT 140D TO 160 D; ORIENT 230D TO 255 D; ORIENT 290D TO 330 D

Comments: ORIENT restrictions are to avoid blooming and cross talk from brighter stars on WFC3.
This visit replaces the original Visit 09. Post flash added to the UV exposures.

Fixed Targets

#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(15)	WD-0554-165	RA: 05 57 1.3000 (89.2554167d) Dec: -16 35 12.00 (-16.58667d) Equinox: J2000		V=18.2+/-0.05	Reference Frame: ICRS

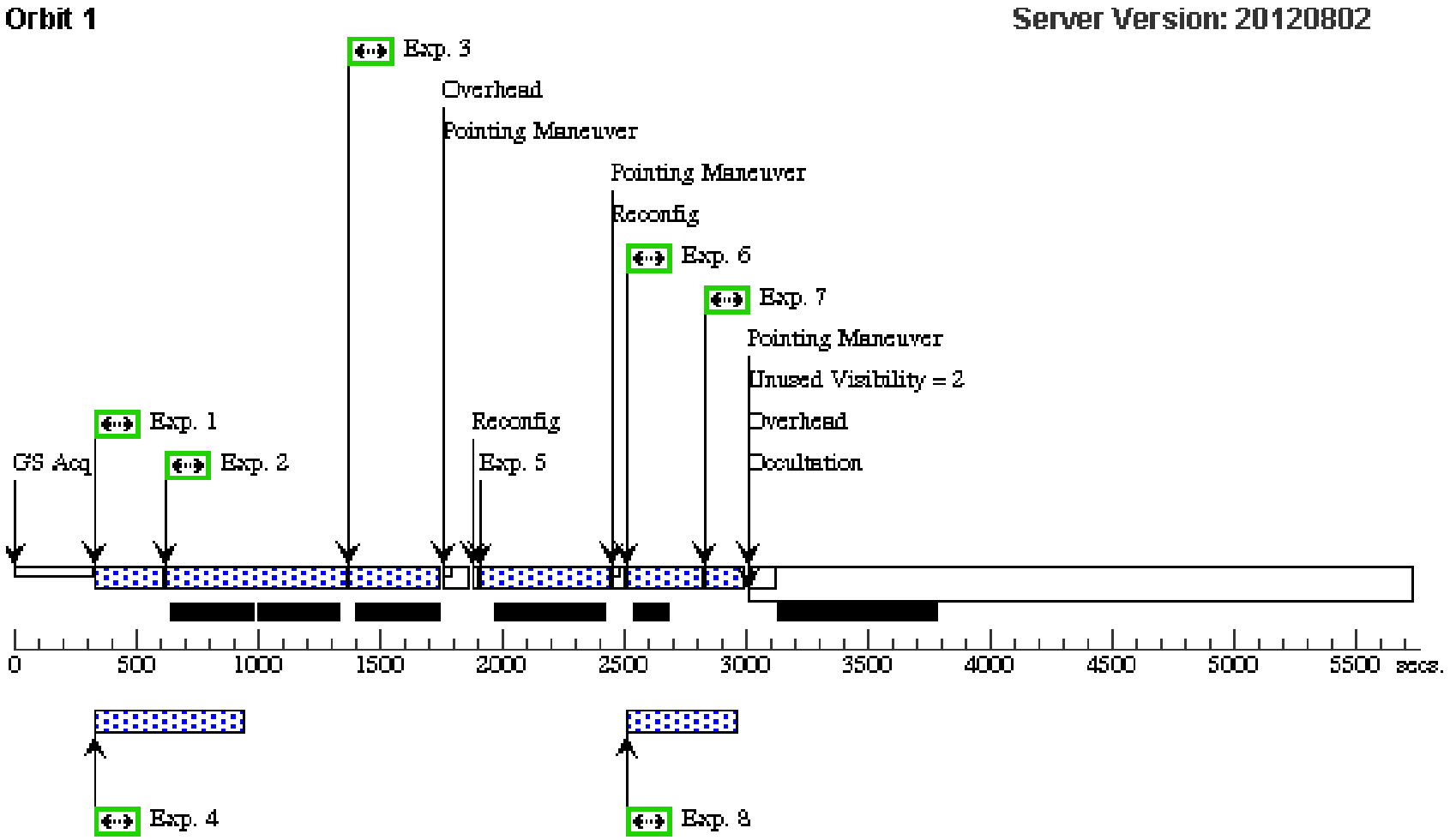
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

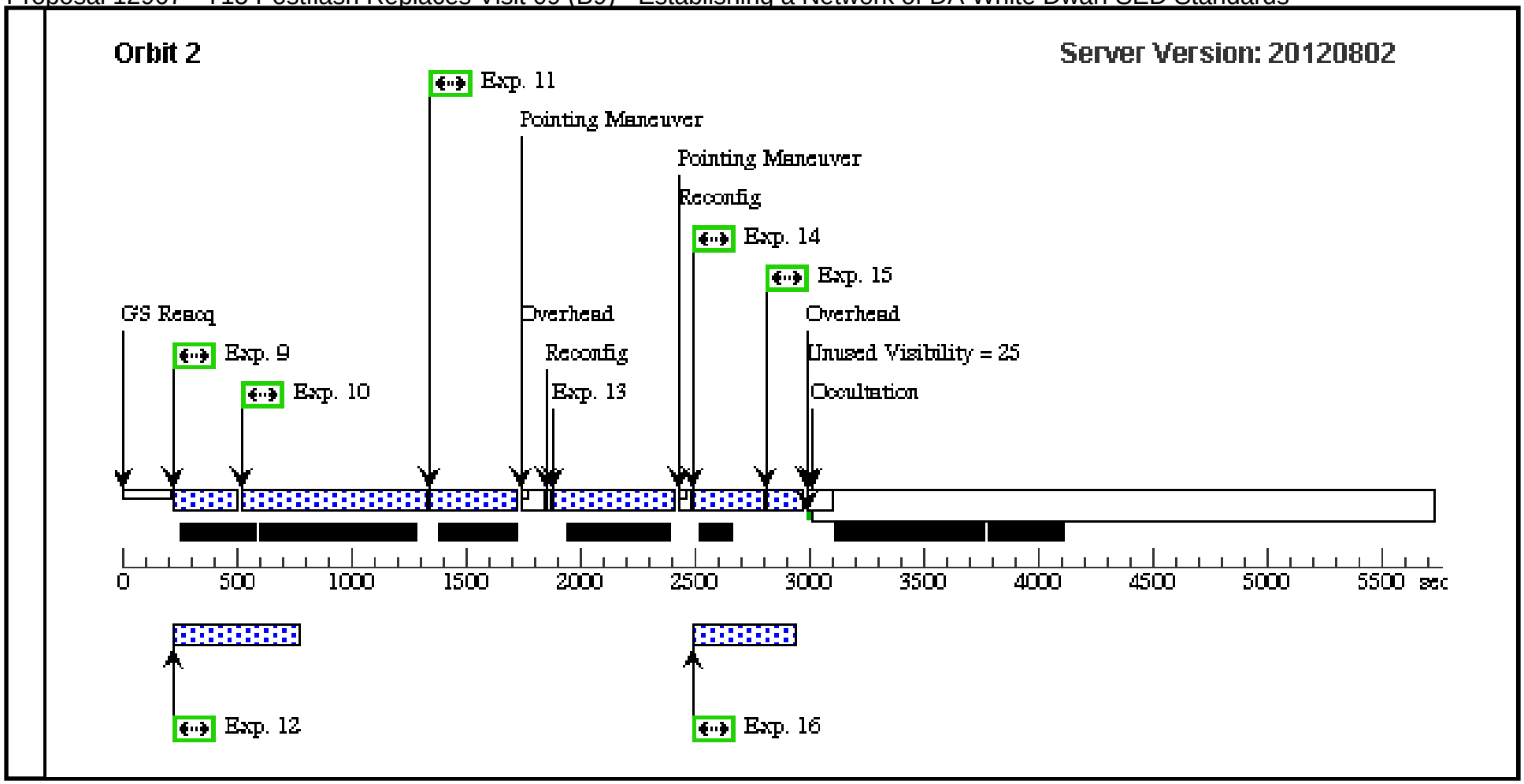
Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	T15-g1	(15) WD-0554-165	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8		Prime + Parallel Group 1-4 in T15 Postflash Replaces Visit 09 (B9)	120 Secs *[==>]*	***[1]***
2	T15-i1	(15) WD-0554-165	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W			Prime + Parallel Group 1-4 in T15 Postflash Replaces Visit 09 (B9)	605 Secs *[==>]*	***[1]***
3	T15-r1	(15) WD-0554-165	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W			Prime + Parallel Group 1-4 in T15 Postflash Replaces Visit 09 (B9)	350 Secs *[==>]*	***[1]***
4	T15-par-g1	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 1-4 in T15 Postflash Replaces Visit 09 (B9)	400 Secs *[==>]*	***[1]***
5	T15-H1	(15) WD-0554-165	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11			*[==>]*	***[1]***
6	T15-u1a	(15) WD-0554-165	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T15 Postflash Replaces Visit 09 (B9)	160 Secs *[==>]*	***[1]***
7	T15-u1b	(15) WD-0554-165	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T15 Postflash Replaces Visit 09 (B9)	160 Secs *[==>]*	***[1]***
8	T15-par-i1	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 6-8 in T15 Postflash Replaces Visit 09 (B9)	300 Secs *[==>]*	***[1]***
9	T15-u2	(15) WD-0554-165	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12	POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T15 Postflash Replaces Visit 09 (B9)	160 Secs *[==>]*	***[2]***
10	T15-i2	(15) WD-0554-165	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T15 Postflash Replaces Visit 09 (B9)	680 Secs *[==>]*	***[2]***
11	T15-r2	(15) WD-0554-165	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T15 Postflash Replaces Visit 09 (B9)	355 Secs *[==>]*	***[2]***
12	T15-par-g2	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 9-12 in T15 Postflash Replaces Visit 09 (B9)	400 Secs *[==>]*	***[2]***
13	T15-H2	(15) WD-0554-165	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11	POS TARG 1.50,1.50		*[==>]*	***[2]***
14	T15-g2a	(15) WD-0554-165	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T15 Postflash Replaces Visit 09 (B9)	160 Secs *[==>]*	***[2]***

	15	T15-g2b	(15) WD-0554-165	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T15 Postflash Replaces Visit 09 (B9)	160 Secs	[==>]	[2]
	16	T15-par-i2	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 14-16 in T15 Postflash Replaces Visit 09 (B9)	300 Secs	[==>]	[2]

Orbit Structure




Orbit 2
Server Version: 20120802
Exp. 11
Pointing Maneuver
Pointing Maneuver
Reconfig
Exp. 14
Exp. 15
GS Reacq
Exp. 9
Exp. 10
Overhead
Reconfig
Exp. 13
Overhead
Unused Visibility = 25
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 12
Exp. 16

Visit

Proposal 12967, T13 (08), implementation Fri Oct 26 01:05:25 GMT 2012

Diagnostic Status: No Diagnostics

Scientific Instruments: WFC3/IR, WFC3/UVIS, ACS/WFC

Special Requirements: SCHED 100%; ORIENT 25D TO 130 D; ORIENT 180D TO 270 D; ORIENT 285D TO 310 D

Comments: ORIENT restrictions are to avoid blooming and cross talk from brighter stars on WFC3.

Fixed Targets

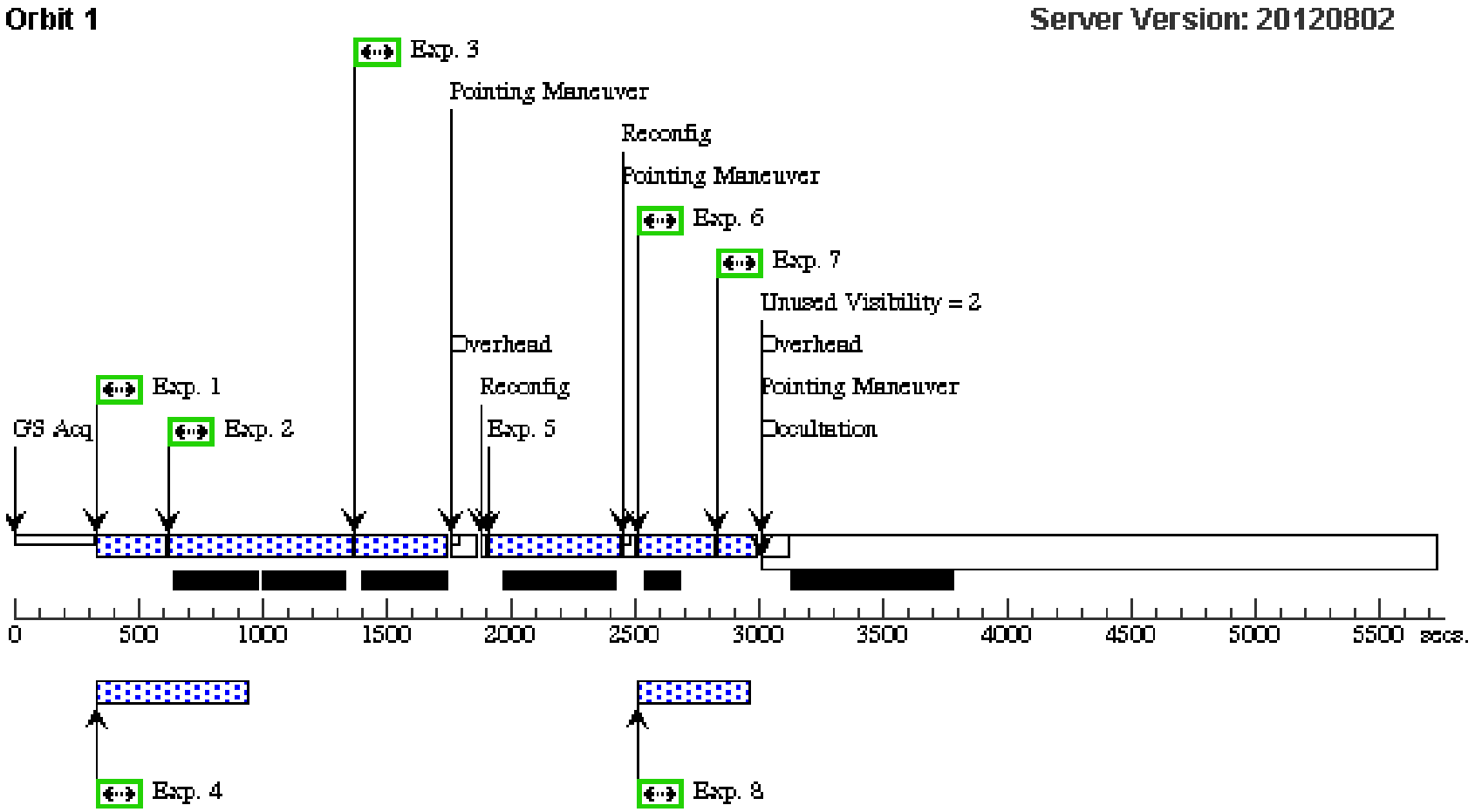
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(13)	WD-2327-000	RA: 23 29 41.3250 (352.4221875d) Dec: +00 11 7.80 (.18550d) Equinox: J2000		V=(?) Sloan g = 18.2 +/- 0.05	Reference Frame: ICRS

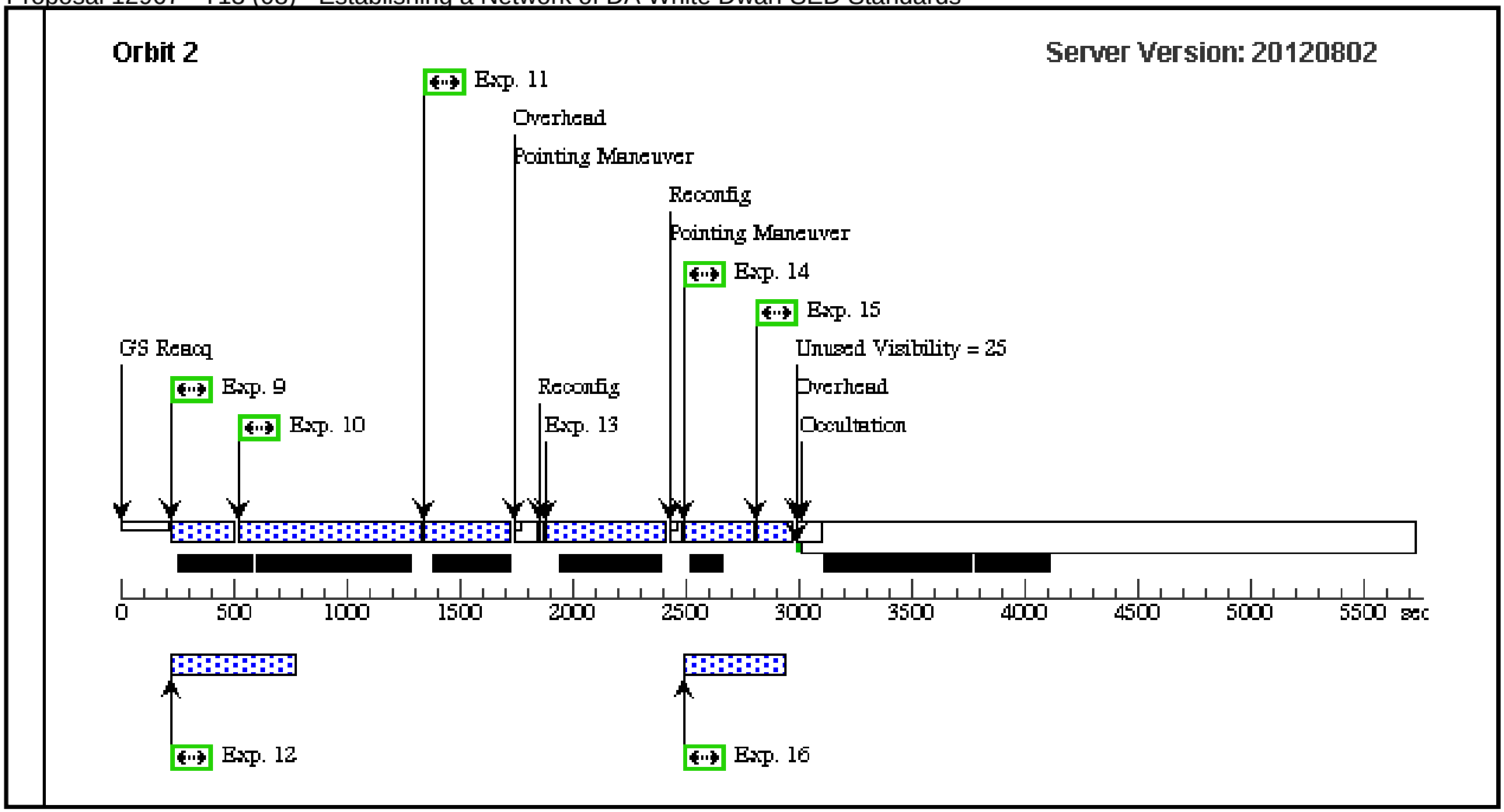
Comments: This object was generated by the targetselector and retrieved from the SIMBAD database.

Exposures

#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	T13-g1	(13) WD-2327-000	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8		Prime + Parallel Group 1-4 in T13 (08)	120 Secs	
								[==>]	***[1]***
2	T13-i1	(13) WD-2327-000	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W			Prime + Parallel Group 1-4 in T13 (08)	605 Secs	
								[==>]	***[1]***
3	T13-r1	(13) WD-2327-000	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W			Prime + Parallel Group 1-4 in T13 (08)	350 Secs	
								[==>]	***[1]***
4	T13-par-g1	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 1-4 in T13 (08)	400 Secs	
								[==>]	***[1]***
5	T13-H1	(13) WD-2327-000	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11			*[==>]*	***[1]***
6	T13-u1a	(13) WD-2327-000	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T13 (08)	160 Secs	
								[==>]	***[1]***
7	T13-u1b	(13) WD-2327-000	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12		Prime + Parallel Group 6-8 in T13 (08)	160 Secs	
								[==>]	***[1]***
8	T13-par-i1	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 6-8 in T13 (08)	300 Secs	
								[==>]	***[1]***
9	T13-u2	(13) WD-2327-000	WFC3/UVIS, ACCUM, UVIS1-FIX	F336W	FLASH=12	POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T13 (08)	160 Secs	
								[==>]	***[2]***
10	T13-i2	(13) WD-2327-000	WFC3/UVIS, ACCUM, UVIS1-FIX	F775W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T13 (08)	680 Secs	
								[==>]	***[2]***
11	T13-r2	(13) WD-2327-000	WFC3/UVIS, ACCUM, UVIS1-FIX	F625W		POS TARG 1.50,1.50	Prime + Parallel Group 9-12 in T13 (08)	355 Secs	
								[==>]	***[2]***
12	T13-par-g2	ANY	ACS/WFC, ACCUM, WFC-FIX	F475W			Prime + Parallel Group 9-12 in T13 (08)	400 Secs	
								[==>]	***[2]***
13	T13-H2	(13) WD-2327-000	WFC3/IR, MULTIACCUM, IR-UVIS-FIX	F160W	SAMP-SEQ=STEP100; NSAMP=11	POS TARG 1.50,1.50		*[==>]*	***[2]***
14	T13-g2a	(13) WD-2327-000	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T13 (08)	160 Secs	
								[==>]	***[2]***
15	T13-g2b	(13) WD-2327-000	WFC3/UVIS, ACCUM, UVIS1-FIX	F475W	FLASH=8	POS TARG 1.50,1.50	Prime + Parallel Group 14-16 in T13 (08)	160 Secs	
								[==>]	***[2]***
16	T13-par-i2	ANY	ACS/WFC, ACCUM, WFC-FIX	F775W			Prime + Parallel Group 14-16 in T13 (08)	300 Secs	
								[==>]	***[2]***

Orbit Structure




Orbit 2
Server Version: 20120802
Exp. 11
Overhead
Pointing Maneuver
Reconfig
Pointing Maneuver
Exp. 14
Exp. 15
GS Reacq
Unused Visibility = 25
Exp. 9
Reconfig
Overhead
Exp. 10
Exp. 13
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec
Exp. 12
Exp. 16